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AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System

Amendment No. 2—Issued January 1985

Purpose of Amendment

(i) Incorporate recent Australian Model Uniform Building Code (AMUBC) amendments.

(ii) Update the reference schedule to Standard Codes.

(iii) Make some requested adjustments and improvements to the Regulations.

(iv) Include by-law making power for councils to allow "temporary dwellings" under controlled conditions.

The date of coming into operation is 1 February 1985.

Replacement Instructions

"Title"	Page
"Notice"	Page
Part 1	Pages 1 to 12
Part 4	Pages 1 & 2
Part 6	Pages 1 to 5 (includes new leaf Page 6).
Part 8	Pages 1 to 8
Part 9	Pages 3 and 4.
Part 11	Pages 1 to 8
Part 12	Pages 1 and 2
Part 15	Pages 1 and 2
Part 16	Pages 23 to 33 (includes new leaf Page 34)
Part 17	Pages 3 to 5
Part 18	Pages 1 to 3 (includes new leaf Page 4)
Part 19	Pages 3 to 5 (includes new leaf Page 6)
Part 20	Pages 7 to 20 and discard Page 21
Part 22	Pages 1 and 2
Part 24	Pages 1 to 23 (includes new leaf Page 24)
Part 25	Pages 1 to 4
Part 27	Pages 1 to 10 and discard Page 11
Part 28	Page 1
Part 33	Pages 5 to 14 and discard Page 15
Part 36	Pages 1 to 4 and insert new Page 5
Part 40	Page 1
Part 46	Page 7
Part 47	Pages 1 to 7
Part 48	Page 1
Part 49	Pages 3 and 4
Part 50	Pages 1 to 7 (includes new leaf Page 8)
Part 53	Pages 1 to 9
Part 55	Pages 1 to 4 and insert new Page 5
Part 56	Pages 1 and 2
Part 57	Page 1
Part 58	Page 1
Schedule 7	Pages 1 to 5
Schedule 10	Pages 1 to 4
Forms 5 and 6	

Note that the Statutory Rule number of the amendment [SR 438/84] has been inserted in the margin adjacent to the adjusted part of the page.

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AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System—Issued February 1991

Victoria Building (Thermal Insulation) Regulations 1990

Purpose of Amendment

To prescribe thermal insulation requirements for certain buildings.

The amendment comes into operation on 18 March 1991.

Replacement Instructions

Attached are the following new pages for insertion in the Victoria Building Regulations 1983 in place of the existing pages:

Part 1	Pages 3 and 4
Part 27	Pages 7 and 8 (Correction for previously issued page).
Part 54	Pages 1 to 4
Schedule 10	Pages 3 and 4
Index	Page 17 and 18

Note: That the Statutory Rule number of the amendment (S.R. 383/90) has been inserted in the margin adjacent to the adjusted part of the page.

AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System

Amendment No. 10—Issued 1990

Purpose of Amendment

(i) To insert a new definition of "allotment".

(ii) To enable two or more contiguous allotments to be treated as one allotment in certain circumstances.

The amendment came into operation on 1 May 1990.

Replacement Instructions

Attached are the following new pages for insertion in the Victoria Building Regulations 1983 in place of the existing pages:

Part 1	Page 2
Part 1	Page 5
Part 7	Page 1

Note that the Statutory Rule number of the amendment (S.R. 66/90) has been inserted in the margin adjacent to the amendment part of the page.

*Please not amendment No. 9 not yet published.

AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System

Amendment No. 9—Issued October 1990

Purpose of Amendment

(i) To improve building safety by providing a fast and effective system for addressing building safety infringements.

(ii) To provide for the closure of assembly buildings in hazardous situations.

The amendment comes into operation on 10 December 1990.

Replacement Instructions

Attached are the following new pages for insertion in the Victoria Building Regulations 1983 in place of the existing pages:

Part 1	Pages 3 and 4
Part 6	Pages 5 and 6
Part 24	Pages 7 to 14, 19 and 20
Part 59	Page 1
Part 60	Pages 1 and 2 to be added after Part 59
Part 61	Page 1 to be added after Part 60
Form 4	To replace existing Form 4
Form 12	To be added after Form 11
Form 13	To be added after Form 12

Note that the Statutory Rule number of the amendment (S.R. 263/90) has been inserted in the margin adjacent to the amendment part of the page.

AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System

Amendment No. 6—Issued June 1988

Purpose of Amendment

(i) To amend the definition of "*Certificate of Occupancy*" to accord with amendments to section 24 of the *Building Control Act* 1981.

(ii) To permit private certification of documents submitted for building approval as an option to checking by the municipal building surveyor.

(iii) To restrict access to domestic swimming pools of 15 cubic metres or greater capacity.

(iv) To permit notices to be served on builders as well as owners under Part 3.

(v) To require the owner or builder to notify the building surveyor of changes in name or address.

(vi) To permit extended periods of consent for building approval for very large Class VI buildings.

(vii) To increase the amount of security deposit required for re-erection of dwellings, and to permit the security deposit to be progressively refunded.

(viii) To amend the wording in relation to distance between exits to remove anomalies.

(ix) To adopt AS2918 as the standard for the installation of solid fuel burning appliances instead of Schedule 7.

(x) To improve access to people requiring medical assistance whilst in a confined toilet cubicle.

(xi) To improve procedures dealing with dangerous buildings and to include provisions for ruinous buildings.

(xii) To update a number of items in Schedule 10.

(xiii) To make a number of corrections of errors and to clarify some anomalies, none of which introduce new matter.

The date of coming into operation of items (i) and (ii) is 1 June 1988.

Items (iii) to (xiii) do not come into operation until 1 August 1988.

Replacement Instructions

Attached are the following new pages for insertion in the Victoria Building Regulations 1983 in place of the existing corresponding pages:

Part 1	Pages 3 to 6
Part 1	Pages 11 and 12
Part 3	Pages 1 and 2
Part 6	Pages 3 and 4
Part 8	Pages 1 to 9
Part 9	Pages 3 to 5
Part 11	Pages 5 to 8
Part 24	Pages 19 and 20
Part 24	Pages 23 and 24
Part 24	Pages 29 and 30
Part 25	Pages 1 and 2
Part 26	Pages 1 and 2
Part 46	Pages 7 and 8
Part 47	Pages 1 and 2
Part 47	Pages 5 and 6
Part 53	Pages 1 to 12
Part 55	Pages 1 to 6
Part 57	Pages 1 and 2
Schedule 6	Pages 1 and 2
Schedule 7	Pages 1 to 5 to be removed
Schedule 10	Pages 1 to 5
Form 7	to be added after Form 6
Form 8	to be added after Form 7
Form 9	to be added after Form 8.

Note that the Statutory Rule number of the amendment has been inserted in the margin adjacent to the adjusted part of the page.

STEPHEN KIP

AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System

Building Code of Australia—Issued March 1991

Purpose of Amendment

To make provision for the adoption of the Building Code of Australia.

The amendment comes into operation on 8 April 1991.

Replacement Instructions

Remove the following—

1. Victoria Building Regulations (including schedules, forms and index); and
2. Explanatory Notes.

Insert the attached amendment.

AMENDMENTS TO VICTORIA BUILDING REGULATIONS

Loose-Leaf System—Issued June 1991

Purpose of Amendment

To make amendments to previously issued Building Code of Australia Update.

Replacement Instructions

Attached are the following new pages for insertion in the Victoria Building Regulations 1983 in place of the existing pages.

Part 10	Page 1 & 2
Part 10	Remove page 3
Part 11	Page 5 & 6
Part 61	To be added after Part 60
Form 9	
Form 10	

GROUP I—PRELIMINARY

PART 1—PRELIMINARY

TITLE, COMMENCEMENT, APPLICATION AND REPEALS AND SAVINGS

Title

1.1 (1) These Regulations may be cited as the Victoria Building Regulations 1983[2]. S.R. 26/91.

Commencement

(2) These Regulations shall come into operation on 1 May 1984.

Application

(3) These Regulations shall apply to—

(*a*) any building that can be classified according to use pursuant to Part A3.2 of the *Building Code*; and

(*b*) any temporary dwelling permitted to be constructed in accordance with Part 58.

Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 2 (1).

Builders sheds

(3A) Notwithstanding sub-regulation (3) these Regulations shall not be construed as applying to buildings for use by builders or contractors for other than residential purposes, erected on the *allotment* where *building work* is being or is intended to be carried out which will be removed upon completion of such *building work*.

Sub-reg. (3A) inserted by S.R. No. 438/1984 reg. 2 (2).

Exemption

(4) A *council* may by by-law or local law exempt from all or any of the requirements of these Regulations any Class 10 building which is to be constructed on *farm land* and used for farming purposes.

Sug-reg. (4) amended by S.R. No. 438/1984 reg. 2 (3).

Repeals

(5) The Uniform Building Regulations 1974 are hereby revoked.

Savings

(6) Subject to the *Act* and except as in these Regulations expressly or by necessary implication provided—

(*a*) all persons things and circumstances appointed or created by or under the Uniform Building Regulations 1974 or existing or continuing under those Regulations immediately before the coming into operation of these Regulations shall under and subject to these Regulations continue to have the same status operation and effect as they respectively would have had if these Regulations had not been made; and

(*b*) in particular and without affecting the generality of paragraph (*a*), the revocation of the Uniform Building Regulations 1974 shall not disturb the continuity of status operation or effect of any by-law made by the *council* of a municipality under those Regulations and in force immediately prior to the coming into operation of these Regulations and any such by-law may, so far as it is not inconsistent with or repugnant to the *Act* or these Regulations, be revoked, rescinded, amended or varied as if it were a by-law made under these Regulations and until so revoked or rescinded or until the first anniversary of the day on which these Regulations are made (whichever first occurs) shall, with such alterations modifications and substitutions as are necessary, continue in force and have the like force and effect and be dealt with and enforced as if it were a by-law made under these Regulations.

LIST OF CONTENTS

S.R. 26/91.

1.2 These Regulations are divided into Parts and Groups of Parts as follows:

S.R. 263/1990 Part 61—Closure of Assembly Buildings.

INTERPRETATION

Definitions

S.R. 26/91. **1.3** (1) In these Regulations unless the contrary intention appears—

"Act" means the *Building Control Act* 1981;

S.R. 66/90. **"Allotment"** means any piece of land which can be disposed of separately under section 8A of the *Sale of Land Act* 1962 without being subdivided;

"Approved" means approved by the *building surveyor;*

"Building Code" means the Building Code of Australia 1990 published by the Australian Uniform Building Regulations Co-ordinating Council as that Code is amended from time to time and as amended by the Victoria Appendix 1990 to that Code published by that Council as that Appendix is amended from time to time;

"Certificate of Occupancy" means a certificate of occupancy issued under these Regulations;

"Depth" in relation to an *allotment* means the distance between the middle points of the *frontage* and of the rear boundary;

"Farm land" means farm land defined pursuant to section 254 (1) of the *Local Government Act* 1958.

"Frontage" means the *street alignment* at the front of an *allotment* and in the case of an *allotment* that abuts two or more streets the boundary which when chosen would enable the *allotment* to comply with the provisions of these Regulations;

"Masonry" means stone, brick, terra-cotta-block, concrete-block, or other similar building units, or a combination thereof, assembled together unit by unit;

"Party wall" means a wall used or intended to be used for the separation of adjoining buildings on separate *allotments;*

"Required" means required by or under these Regulations;

"Street alignment" means the line between a *street* and an *allotment* abutting thereon and includes *frontage*;

"Width" in relation to *frontage,* means the shortest distance between the side boundaries of an *allotment* where they abut on the street alignment; and

Words and expressions

(2) Subject to sub-regulation (1), words and expressions used in these Regulations have the same meaning as they have in the *Building Code.*

Victoria

Reprint No. 1

Victoria Building Regulations 1983[1]

Statutory Rule

No. 273/1983

Reprinted 6 December 1989 incorporating amendments up to S.R. No. 220/1989

3773(F1)

GROUP I—PRELIMINARY

PART 1—PRELIMINARY

TITLE, COMMENCEMENT, APPLICATION AND REPEALS AND SAVINGS

Title

1.1 (1) These Regulations may be cited as the Victoria Building Regulations 1983[2].

Commencement

(2) These Regulations shall come into operation on 1 May 1984.

Application

(3) These Regulations shall apply to— Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 2 (1).

(*a*) any building that can be classified according to use pursuant to Part 6; and

(*b*) any temporary dwelling permitted to be constructed in accordance with Part 58.

Builders sheds

(3A) Notwithstanding sub-regulation (3) these Regulations shall not be construed as applying to buildings for use by builders or contractors for other than residential purposes, erected on the *allotment* where *building work* is being or is intended to be carried out which will be removed upon completion of such *building work*. Sub-reg. (3A) inserted by S.R. No. 438/1984 reg. 2 (2).

Exemption

(4) A *council* may by by-law exempt from all or any of the requirements of these Regulations any Class Xb or Xc building which is to be constructed on *farm land* and used for farming purposes. Sug-reg. (4) amended by S.R. No. 438/1984 reg. 2 (3).

Repeals

(5) The Uniform Building Regulations 1974 are hereby revoked.

Savings

(6) Subject to the *Act* and except as in these Regulations expressly or by necessary implication provided—

(*a*) all persons things and circumstances appointed or created by or under the Uniform Building Regulations 1974 or existing or continuing under those Regulations immediately before the coming into operation of these Regulations shall under and subject to these Regulations continue to have the same status operation and effect as they respectively would have had if these Regulations had not been made; and

(*b*) in particular and without affecting the generality of paragraph (*a*), the revocation of the Uniform Building Regulations 1974 shall not disturb the continuity of status operation or effect of any by-law made by the *council* of a municipality under those Regulations and in force immediately prior to the coming into operation of these Regulations and any such by-law may, so far as it is not inconsistent with or repugnant to the *Act* or these Regulations, be revoked, rescinded, amended or varied as if it were a by-law made under these Regulations and until so revoked or rescinded or until the first anniversary of the day on which these Regulations are made (whichever first occurs) shall, with such alterations modifications and substitutions as are necessary, continue in force and have the like force and effect and be dealt with and enforced as if it were a by-law made under these Regulations.

LIST OF CONTENTS

1.2 These Regulations are divided into Parts and Groups of Parts as follows:

Part 5 revoked by S.R. No. 98/1986 reg. 2 (1).

S.R. 66/90

INTERPRETATION

Definitions 1.3

1.3 (1) In these Regulations unless the contrary intention appears—

"Access for disabled persons" means a continuous path of travel to or within a building capable of being negotiated by a

person using a wheelchair or otherwise with limited mobility and not incorporating any *stairway,* turnstile, revolving door, escalator or other impediment to travel;

"Act" means the *Building Control Act* 1981;

"Allotment" ~~means the land contained within the title boundaries of separately of an individual lot;~~ means any piece of land which can be disposed of under section 8A of the Sale of Land Act 1962 without being subdivided.

"Approved" means approved by ~~the~~ *building surveyor;*

"Assembly building" means a building used for—

(*a*) the assembly of persons for civic, political, transit, religious, social, recreational, entertainment, amusement, sporting, theatrical or similar purposes; or

(*b*) the assembly of persons for educational purposes in *schools, children's services centres* or the like;

Definition of "Assembly building" inserted by S.R. No. 98/1986 reg. 3 (1) (a), amended by S.R. No. 220/1989 reg. 7 (1) (a).

"Automatic" means—

(*a*) when applied to a fire door, smoke door or other member required to prevent or restrict the spread of fire or smoke through an opening, designed to close by the operation of an *approved* heat-actuated or smoke-actuated device; and

(*b*) when applied to a smoke-and-heat vent, designed to open by the operation of an *approved* heat-actuated or fire-sensing device; and

(*c*) when applied to a *sprinkler system*, designed to be automatically activated by an *approved* sensing device;

"AS" when followed by a number means an Australian Standard published by the Standards Association of Australia adopted in accordance with the provisions of Regulation 10.4;

"Certificate of occupancy" means a certificate of occupancy issued under these Regulations;

Definition of "Certificate of occupancy" amended by S.R. No. 143/1988 reg. 6.

"Children's room" in a *children's services centre* means any room designed primarily for the use of children.

Definition of "Children's room" inserted by S.R. No. 220/1989 reg. 7 (1) (b).

"Children's services centre" means a *children's services centre* registered or proposed to be registered under the *Health Act* 1958.

Definition of "Children's services centre" inserted by S.R. No. 220/1989 reg. 7 (1) (b).

"Circulation space" means a passageway, corridor, lobby, hallway or ramp providing access between parts of a building;

Definition of "Children's services centre Class I" inserted by S.R. No. 220/1989 reg. 7 (1) (c).

"Children's services centre Class I" means a *children's services centre*—

(*a*) at which children under the age of 6 years may be cared for, educated or minded for a period no longer than 12 hours per day; or

(*b*) at which a pre-school kindergarten or pre-school play centre is carried on by a proprietor who receives a pre-school subsidy from the Department of Community Services.

Definition of "Children's services centre Class II" inserted by S.R. No. 220/1989 reg. 7 (1) (c).

"Children's services centre Class II" means a *children's services centre* at which no child may be cared for, educated or minded for more than 3 hours per day and no more than 10 hours per week but does not include a centre at which a pre-school kindergarten or pre-school play centre is carried on by a proprietor who receives a pre-school subsidy from the Department of Community Services.

"Closet fixture" means a water closet, pan closet or earth closet;

"Combustible" means—

(*a*) when applied to a material, combustible when tested in accordance with AS 1530 Part 1; and

(*b*) when applied to a part of a building, *constructed* wholly or partly of materials that are combustible within the meaning of the Australian Standard referred to in paragraph (*a*);

"Curtain wall" means a non-*loadbearing external wall* that is not a *panel wall*;

"Depth" in relation to an *allotment* means the distance between the middle points of the *frontage* and of the rear boundary;

* * * * * *

Definition of "Early childhood centre" inserted by S.R. No. 98/1986 reg. 3 (1) (b), revoked by S.R. No. 220/1989 reg. 7 (1) (d).

"Entrance floor" means the floor at which the persons using the building normally gain entrance thereto but does not include any basement or utility area;

Definition of "Exit" amended by S.R. No. 75/1984 reg. 3, substituted by S.R. No. 98/1986 reg. 3 (1) (c).

"Exit" means either—

(*a*) (i) an internal or external *stairway*;

(ii) a ramp, either exclusively for the use of pedestrians or incorporating a permanently defined path for the use of pedestrians;

(iii) a *fire-isolated passageway*;

(iv) a doorway opening to a *street* or *open space*; or

(v) any combination of the above—

providing egress from a *storey* or a space in the nature of a *storey* to a *street* or *open space*; or

(*b*) a *horizontal exit* or a *fire-isolated passageway* leading to a *horizontal exit*;

"External wall" means an outer wall of a building but which is not a *party wall*;

"Farm land" means farm land defined pursuant to section 254 (1) of the *Local Government Act* 1958.

"Fire-isolated passageway" means a corridor, hallway or the like, providing egress to or from a *fire-isolated stairway* or *fire-isolated ramp* or to a *street* or *open space* and conforming with Regulation 24.9;

"Fire-isolated ramp" means a ramp within a *fire-resisting* enclosure, providing egress from a *storey* or space in the nature of a *storey* and conforming with Regulation 24.10;

"Fire-isolated stairway" means a *stairway* within a *fire-resisting shaft*, including the floors and top enclosing structure, that complies with the relevant provisions of the appropriate Table in Part 16;

"Fire main" means a water service pipe connected to a water supply and installed within a building or on the *allotment* for fire-fighting purposes;

"Fire-resistance rating" means the fire-resistance grading period determined according to the *Standard Fire Test*;

"Fire-resisting", when applied to a *structural member* or other part of a building, means having the *fire-resistance rating required* for that *structural member* or other part;

"Fire-resisting *construction"* means one of the types of construction of a building referred to in Part 16;

Definition of "Fire-resisting *construction*" amended by S.R. No. 98/1986 reg. 3 (1) (d).

"Fire wall" means an *internal wall* that divides a *storey* or building into parts to resist the spread of fire;

* * * * * *

Definition of "Fire-zone" revoked by S.R. No. 98/1986 reg. 3 (1) (e).

"Flammability Index" means that index number for flammability when determined according to AS 1530 Part 2;

"Floor area" means—

(*a*) with respect to a *storey*—the area of that *storey* measured over the enclosing walls, if any, and such part of the *party wall* as belongs to that building; and

(*b*) with respect to a room—the area of the room and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting;

"Foundation" means the ground which supports the building;

"Frontage" means the *street alignment* at the front of an *allotment* and in the case of an *allotment* that abuts two or more streets the boundary which when chosen would enable the *allotment* to comply with the provisions of these Regulations;

Definition of "Habitable room" amended by S.R. No. 98/1986 reg. 3 (1) (f).

"Habitable room" means a room that is used for activities normally associated with domestic living, and—

(*a*) includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, sunroom; and

(*b*) does not include a bathroom, *laundry*, water closet, food-storage pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for an extended period;

Definition of "Horizontal exit" inserted by S.R. No. 98/1986 reg. 3 (1) (g).

"Horizontal exit" means a *required* doorway between two floor areas which are separated from each other by—

(*a*) a *fire wall*; and

(*b*) *external walls* having *fire-resistance ratings* as required by Part 16;

"Hydrant" means a fire hydrant or plug connected to a *fire main* or to a water main in a public *street*, as the case requires;

Definition of "Institutional building" substituted by S.R. No. 98/1986 reg. 3 (1) (h).

"Institutional health care building" means a building used as a hospital, nursing home, home for sick or disabled persons needing full-time nursing care or used as a similar institution;

"Internal wall" means a wall of a building which is not an *external wall* or a *party wall*;

"Laundry" means a room used for the washing of clothes or other laundering purposes;

"Loadbearing", in relation to a wall, or part thereof, a *shaft*, or any similar member, means intended to support a vertical load in addition to its own weight;

"Masonry" means stone, brick, terra-cotta-block, concrete-block, or other similar building units, or a combination thereof, assembled together unit by unit;

"Mezzanine" means that space within a room which is situated between—

(*a*) an intermediate floor constructed within the room; and

(*b*) the floor level next above, or if there is no floor above, the ceiling or roof above—

and in which the intermediate floor does not extend across the full area of the room;

"Non-combustible" means—

(*a*) when applied to a material, not combustible in accordance with AS 1530 Part 1; and

(*b*) when applied to a part of a building, constructed wholly of materials that are not combustible within the meaning of the Australian Standard referred to in paragraph (*a*);

"Open-deck parking station" means a parking station in which all parts of the parking storeys are cross-ventilated by means of permanent openings in not fewer than two opposite or approximately opposite sides, the openings in each case being not smaller in unobstructed area than half the vertical area of the side concerned;

"Open garage" means—

Definition of "Open garage" substituted by S.R. No. 438/1984 reg. 4, amended by S.R. No. 98/1986 reg. 3 (1) (i).

(*a*) a garage forming part of a Class I, II, III or Xa building; or

(*b*) a detached garage or garage forming part of a Class Xb building—

where two or more sides of the garage are wholly or substantially open—for the purposes of this definition, a side is not open if the space between the roof on it and any adjacent *allotment* boundary or building is less than 600 mm;

"Open space" means a space on the *allotment*, open to the sky and connected directly with a *street;*

"Open spectator stand" means a tiered stand substantially open at the front and primarily used for people to assemble in order to view an open air activity;

Definition of "Open spectator stand" inserted by S.R. No. 98/1986 reg. 3 (1) (j).

"Panel wall" means a non-*loadbearing external wall*, in frame or similar construction, that is wholly supported at each *storey*;

"Partition wall" means—

(*a*) a non-*loadbearing internal wall* that does not extend beyond one *storey* of a building; or

(*b*) a non-*loadbearing* member resembling such a wall,

as the case requires;

"Party wall" means a wall used or intended to be used for the separation of adjoining buildings on separate *allotments;*

"Private garage" means—

(*a*) any garage forming a part of a Class I or X building; or

(*b*) any single storey—

(i) of a building of another class; and

(ii) capable of accommodating not more than three vehicles;

"Public corridor" means a corridor, hallway or the like which—

(*a*) serves as a means of egress from two or more *sole-occupancy units* to a required *exit* from the *storey* concerned; or

(*b*) is required by these Regulations to be provided as a means of egress from any part of a *storey* to a *required exit*;

"Public garage" means a garage which is neither a *private garage* nor used for the servicing of vehicles, other than washing, cleaning or polishing;

"Qualified engineer" means a person who has qualifications and experience acceptable to the Institution of Engineers Australia under its rules for admission to Corporate Membership;

"Required" means required by or under these Regulations;

"Sanitary compartment" means a room containing a *closet fixture* or *urinal*;

"Sarking-type material" means a material such as a reflective foil or other flexible membrane of a type normally used for a purpose such as waterproofing, vapour-proofing or thermal reflectance;

Definition of "School" substituted by S.R. No. 98/1986 reg. 3 (1) (k).

"School" includes a primary school, post-primary school, tertiary education institution or similar establishment used for the purposes of education or instruction;

"Self-closing" when applied to a door or *window* means equipped with an *approved* device designed to bring the door or *window* to the fully closed and latched position immediately after each manual opening;

"Service station" means a garage which is not a *private garage* and which is used for the servicing of vehicles, other than only washing, cleaning or polishing;

"Shaft" means the walls and other parts of a building bounding a well or a vertical chute, duct, or similar passage, but not a chimney or like part of a building intended for the discharge of hot products of combustion;

"Site" means that part of an *allotment* on which a building is situated or is to be *constructed;*

"Smoke-and-heat vent" means a vent located in or near the roof of a building to provide means for the escape of smoke and hot gases if there is an outbreak of fire in the building;

"Smoke-developed Index" means that index number for smoke developed when determined according to AS 1530 Part 3;

"Sole-occupancy unit" means—

(*a*) a part of a building used as a *dwelling*;

(*b*) a room or suite of rooms in a Class III building used for sleeping purposes; or

(*c*) any part of a Class V, VI, VII, VIII or IX building, including a room or suite of rooms, used in separate occupation by one or more persons pursuant to a right or title, whether contractual or proprietary, distinct from the right or title under which adjacent parts are occupied;

"Solid", when applied to a wall, means without cavities, vertical cores or holes, or other voids, except those included within its individual *masonry* units;

"Spread-of-flame Index" means that index number for spread of flame when determined according to AS 1530 Part 3;

"Sprinkler system" means a system of water sprinklers within a building set to discharge *automatically* at a pre-determined temperature;

"Stairway" includes the treads and risers of a flight of stairs and the landings between flights but excludes stepped aisles or the like which form part of spectator viewing areas in Class IXb buildings;

Definition of "Stairway" substituted by S.R. No. 98/1986 reg. 3 (1) (l).

"Standard Fire Test" means the Fire-resistance Test of Structures as set out in AS 1530 Part 4 1985 or with previous corresponding AS Codes AS A30 Part III 1970, AS 1530 Part 1 1984, AS 1530 Part 2 1973, AS 1530 Part 3 1982 with Amendment 1 1982 and Amendment 2 1983 and AS 1530 Part 4 1975;

Definition of "Standard Fire Test" amended by S.R. No. 220/1989 reg. 15 (1).

"Storey" means that space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include—

(*a*) a space which is used for the accommodation of—

(i) a lift *shaft, stairway,* or meter room; or

(ii) a bathroom, shower room, *laundry*, or *sanitary compartment;* or

(iii) not more than three vehicles; or

(*b*) a *mezzanine*;

"Street alignment" means the line between a *street* and an *allotment* abutting thereon and includes *frontage*;

"Structural member" means a part of the structure of a building, and includes a footing, column, pier, wall, *curtain wall*, *panel wall*, spandrel, parapet, *partition wall*, *party wall*, *shaft*, floor, roof, ceiling, *stair*, landing, ramp, or balcony, and any supporting part incorporated therewith;

Definition of "Swimming pool" substituted by S.R. No. 143/1988 reg. 7.

"Swimming pool" means any excavation or structure capable of containing a volume of water greater than 15 cubic metres and primarily used or intended to be used for swimming, wading, paddling or the like;

"Vertical access" means—

(*a*) an internal ramp complying with Schedule 9;

(*b*) a step ramp complying with Schedule 9;

(*c*) a lift designed for the transport of persons; or

(*d*) any combination of paragraphs (*a*), (*b*) and (*c*);

Definition of "Ward area" inserted by S.R. No. 98/1986 reg. 3 (1) (m).

"Ward area" means that part of a *storey* of a Class IXa building designated for the accommodation of residing patients and includes areas associated with the accommodation of those patients such as for sleeping, recreation and sanitary facilities as well as for nurses stations;

"Width" in relation to *frontage*, means the shortest distance between the side boundaries of an *allotment* where they abut on the street alignment; and

"Window"—

(*a*) includes a rooflight, glass panel, glass brick, glass louvre, glazed sash, glazed door, or other device capable of transmitting natural light directly from the exterior of a building to the room concerned; but

(*b*) does not include a door or other device not capable of transmitting natural light from the exterior of a building to the room concerned when in the closed position.

Abbreviations and symbols

(3) The abbreviations and symbols for units and multiples and sub-multiples used in these Regulations shall have the same meaning as they have ascribed to them in AS 1155.

Numerical values

(4) The numerical values prescribed in these Regulations shall be subject to tolerances according to any appropriate code, standard, rule, specification or provision adopted by reference in these Regulations, or normal trade practice, or good practice, as the case requires.

Use of buildings

(5) In these Regulations, unless the context otherwise requires, any reference to the purpose for which a building is used shall extend to include or mean the purpose for which it is intended to be used.

Deemed to comply provisions

(6) Where any provision states that the use of a particular material, method of construction, design or component shall be deemed to comply with the requirement of any Regulation or part thereof, that provision shall not be construed so as to require any persons necessarily to use such material, method of construction, design or component.

Headings forming part of Regulations

(7) Headings to—

(*a*) Groups, Parts or Divisions into which these Regulations are divided; or

(*b*) Schedules to these Regulations—

form part of these Regulations.

Headings and footnotes not forming part of Regulations

(8)[3] No footnote in these Regulations and no heading to a provision of these Regulations (not being a provision referred to in sub-regulation (7)) shall be taken to form part of these Regulations.

Asterisks

(9) * * * * * * Sub-reg. (9) revoked by S.R. No. 98/1986 reg. 3 (2).

GROUP II—GENERAL PROVISIONS

PART 2— * * * * * *

GROUP II—GENERAL PROVISIONS

PART 3—ENFORCEMENT AND INSPECTIONS

INSPECTIONS

General

3.1 (1) For the purpose of enforcing these Regulations, the *building surveyor* shall periodically inspect any *building work* and in the course of such inspection may make or cause to be made such tests as he deems necessary.

Directions at site

(2) Where the *building surveyor* is of the opinion that the *building work* fails to comply with the provisions of these Regulations he may give directions in writing in respect of bringing the *building work* into conformity with these Regulations to the person apparently in charge (if any) at the *site* at which the *building work* is being undertaken.

Notice to be served on owner

(3) Within 7 days thereafter the *building surveyor* shall serve on the *owner* or builder a notice in accordance with Form 1 setting out the particulars in respect of which the *building work* fails to comply with these Regulations.

Sub-reg. (3) amended by S.R. No. 143/1988 reg. 8.

Copy of notice to be available at council's office

(4) A copy of every such notice shall be available to any person authorized by the *owner* at the office of the *council* for inspection without charge during normal office hours.

Inspection of framework

(5) On completion of all timber framework and metal stud framework—

(*a*) notice shall be given to the *building surveyor*;

(*b*) the framework shall remain exposed until it has been inspected and *approved*; and

(*c*) in the case of timber framework the stress grade marks referred to in Regulation 41.2 (2) shall be visible on such timber members as in the opinion of the *building surveyor* are sufficient to satisfy him that the timber members used are of the correct grade.

BUILDINGS IN BREACH OF REGULATIONS

Serving of show cause notice

Sub-reg. (1) amended by S.R. No. 143/1988 reg. 8.

3.2 (1) Where in the opinion of a *council* any *building work* fails to comply with the provisions of these Regulations the *council* shall serve on the *owner* or builder a notice in accordance with Form 2 setting out the particulars in respect of which the building fails to comply with the provisions of these Regulations and requiring the *owner* or builder to show cause, within a period specified in the notice, why the building should not be brought into conformity with the requirements of these Regulations or be demolished or removed.

Copy of notice to be available at council's office

(2) A copy of every such notice shall be available to any person authorized by the *owner* at the office of the *council* for inspection without charge during normal office hours.

Procedure in respect of notice

(3) If within the period specified in the notice the *owner* or builder does not satisfy the *council* that the building should not be so brought into conformity or be demolished or removed—

Para. (a) amended by S.R. No. 143/1988 reg. 8.

(*a*) the *council* may serve a notice in accordance with Form 3 requiring the *owner* or builder within a period specified in the notice, to alter the building so that it conforms to the requirements of these Regulations or to demolish or remove it; or

(*b*) the *council* or person authorized by the *council* may demolish or remove such building and may sell any materials therefrom in such manner and to such persons as the *council* thinks fit.

Application of proceeds of sale

(4) The proceeds of the sale of any materials under paragraph (*b*) of sub-regulation (3) shall be applied—

(*a*) in reimbursing the expenses of the *council* in demolishing or removing the building; and

(*b*) in paying into the municipal or town fund any fees or penalties due by the *owner* thereof.

Remaining money

(5) Any money remaining after the requirements of sub-regulation (4) have been complied with shall be paid to the *owner* or his agent.

GROUP II—GENERAL PROVISIONS

PART 4—PENALTIES

OFFENCES

Persons liable

4.1 (1) Any person who—

(*a*) does or causes to be done any act prohibited by or under these Regulations;

(*b*) fails to do any act required pursuant to these Regulations; or

(*c*) knowingly submits erroneous, inaccurate or misleading information as part of an application for *building approval*; or

(*d*) occupies or permits the occupation of a building for which a *required certificate of occupancy* has not been issued or is not in force in relation to— Para. (d) inserted by S.R. No. 220/1989 reg. 5 (1).

(i) *building work* which has been carried out; or

(ii) a change of use from that of one Class to that of another Class—

shall be guilty of an offence against these Regulations.

Amount of penalties

(2) Except as provided in sub-regulation (3), every person guilty of an offence against these Regulations shall be liable— Sub-reg. (2) amended by S.R. No. 220/1989 reg. 5 (2).

(*a*) to a penalty not exceeding— Para. (a) substituted by S.R. No. 98/1986 reg. 4 (1).

(i) in the case of a *dwelling* and the appurtenances of a *dwelling*—10 penalty units; and

(ii) in the case of all other buildings—100 penalty units—

for any breach of these Regulations;

(*b*) in the case of successive convictions in respect of successive similar breaches of these Regulations, to a penalty—

(i) in the case of a *dwelling* and appurtenances of a *dwelling*—not less than 3 penalty units and not exceeding 10 penalty units; and

(ii) in the case of all other buildings—not less than 30 penalty units and not exceeding 100 penalty units; and

Para (c) substituted by S.R. No. 98/1986 reg. 4 (2).

(*c*) an additional daily penalty not exceeding—

(i) in the case of a *dwelling* and the appurtenances of a *dwelling*—1 penalty unit; and

(ii) in the case of all other buildings—10 penalty units—

for any offence against these Regulations which is continued or repeated after a conviction or order of a court in relation to the offence.

Penalties for illegal occupation of buildings other than dwellings

Sub-reg. (3) inserted by S.R. No. 220/1989 reg. 5 (3).

(3) Every person guilty of an offence under Regulation 4.1 (1) (*d*) in relation to a building other than a *dwelling* or the appurtenances of a *dwelling*, shall be liable—

(*a*) to a penalty of 100 penalty units for each day the building was unlawfuly occupied; and

(*b*) an additional daily penalty not exceeding 100 penalty units if the offence is continued or repeated after a conviction or order of a court in relation to the offence.

PAYMENT OF COSTS, ETC.

4.2 In addition to any penalty that may be imposed under Regulation 4.1, any expenses incurred by a *council* in consequence of a breach of these Regulations or in the carrying out of any work directed by these Regulations to be carried out by any person and not carried out by him shall be paid by the person committing that breach or failing to carry out that work.

ILLEGAL OCCUPATION OF BUILDING

Regulation 4.3 amended by S.R. No. 438/1984 reg. 5.

4.3 Where a *certificate of occupancy* is required, no person shall occupy a building where *building work* has been carried out or a change of occupancy has occurred unless a *certificate of occupancy* has been issued.

OCCUPIER MAY BE REQUIRED TO VACATE PREMISES

4.4 Where it is necessary for the effective carrying out of a requirement of a *council* under these Regulations for the occupier of a building to vacate that building or where after conviction for an offence against Regulation 4.3 a person continues to occupy a building contrary to the provisions of that Regulation, written notice shall be served by or on behalf of a *council* on the occupier requiring him to vacate that building within a period to be specified in the notice.

GROUP II—GENERAL PROVISIONS

PART 5— * * * * * *

Part 5 (Regs. 5.1–5.10) revoked by S.R. No. 98/1986 reg. 5.

GROUP II—GENERAL PROVISIONS

PART 6—CLASSIFICATION OF BUILDINGS

CLASSIFICATION

The classes of buildings

6.1 (1) For the purposes of these Regulations, buildings shall be classified as follows:

(*a*) Class I being a building that is—

(i) Class Ia: a detached *dwelling* but excluding a Class Ib; and

(ii) Class Ib: a detached *dwelling* constructed pursuant to the *Housing Act* 1983. Sub-para. (ii) amended by S.R. No. 98/1986 reg. 6 (1).

(*b*) Class II: A building containing two or more *dwellings*.

(*c*) Class III: A building used for residential purposes and not being a Class I or II building including— Para (c) substituted by S.R. No. 98/1986 reg. 6 (2).

(i) a boarding-house, guest house, hostel and lodging house;

(ii) a special accommodation house, home for the aged, children or the like;

(iii) the residential part of a hotel, motel or the like;

(iv) the residential part of a *school*;

(v) the residential part of an *institutional health care building* accommodating members of staff; and

(vi) a *dwelling* not included in paragraph (*a*), (*b*) or (*d*).

(*d*) Class IV: A *dwelling* in a Class V, VI, VII, VIII or IX building, being the only *dwelling* in the building.

(*e*) Class V: An office building, used for professional or commercial purposes, excluding a Class VI, VII, VIII or IX building.

(*f*) Class VI: A shop or other building for the sale of goods by retail or the supply of services direct to the public, including— Para. (f) substituted by S.R. No. 98/1986 reg. 6 (3).

(i) an eating room, tea room, coffee room, cafe, restaurant and milk and soft-drink bar;

(ii) the non-residential part of a hotel and motel but excluding parts that are discotheques, convention rooms or the like, used for the assembly of persons;

(iii) a hairdresser's and barber's shop, public *laundry*, and undertaker's establishment; and

(iv) a market, sale room, show room, and *service station.*

(*g*) Class VII: A building that is—

(i) a warehouse for the storage of goods only or for the display of goods for sale by wholesale;

(ii) a *public garage*; or

(iii) a fire station.

(*h*) Class VIII: A building that is—

(i) a factory, in which a handicraft or a process in or incidental to the making, assembling, altering, repairing, renovating, preparing, ornamenting, finishing, cleaning, washing, or adapting of goods is carried on for trade, sale, or gain—

(A) that is used for a handicraft or process not mentioned in Schedule 6 being of Class VIIIa; and

(B) that is used for a handicraft or process mentioned in Schedule 6 being of Class VIIIb; and

(ii) a laboratory—

(A) that involves a process not mentioned in Schedule 6 being of Class VIIIa; and

(B) that involves a process mentioned in Schedule 6 being of Class VIIIb.

Para. (i) substituted by S.R. No. 98/1986 reg. 6 (4).

(*i*) Class IX: A building of a public nature that is—

(i) Class IXa: an *institutional health care building*; and

(ii) Class IXb: an *assembly building*—

but excluding parts of such buildings that are—

(A) used as a laboratory, other than a science room in a primary or post-primary *school* or a pathology laboratory in a Class IXa building; or

(B) used as a trade workshop, other than in a primary or post-primary *school.*

Para. (j) amended by S.R. No. 438/1984 reg. 6, substituted by S.R. No. 98/1986 reg. 6 (5).

(*j*) Class X: An outbuilding that is detached from any other class of building and being—

(i) Class Xa: An outbuilding containing one or more *habitable rooms*;

(ii) Class Xb: An outbuilding not containing any *habitable room* and that—

(A) is within 3 m of any *street alignment* and within 9 m from a point of intersection of *street alignments*; or

(B) has a *floor area* greater than 6 m^2 in any other case; and

(iii) Class Xc: A structure in the form of—

(A) any fence, a *required swimming pool* barrier, mast, pole, aerial, antenna, sign or the like that is less than 3 m from any *street alignment* and greater than 1 m in height; Sub-sub-para. (A) amended by S.R. No. 143/1988 reg. 9.

(B) any mast, pole, aerial, antenna or the like that is 3 m or more from any *street alignment* and greater than 8 m in height;

(C) any barbed wire fence *constructed* along a *street alignment* or a boundary adjacent to a public open space;

(D) any fence (other than one within 3 m of a *street alignment*) that is greater than 2 m in height or a *required swimming pool* barrier; Sub-sub-para. (D) amended by S.R. No. 143/1988 reg. 10.

(E) any sign (or the like) that is 3 m or more from any *street alignment*—

(*aa*) that is greater than 8 m in height measured above ground level; or

(*bb*) that has a display area of greater than 6 m^2;

(F) any retaining wall needed in conjunction with *building work* or adjacent to any adjoining *allotment*; and

(G) any *swimming pool.* Sub-sub-para. (G) substituted by S.R. No. 143/1988 reg. 11.

(2) * * * * * * *

Principles of classification

(3) For the purposes of this Regulation the classification of a building is determined by the purpose for which it is to be used.

Multiple classification

(4) Where parts of a building each have different purposes, each such part shall, subject to Regulation 6.7 be separately classified in accordance with this Regulation.

DOUBTFUL CLASSIFICATIONS

6.2 Where there is any doubt or dispute as to the classification of a building for the purposes of Regulation 6.1 that building shall be classified by the *building surveyor* as belonging to the class it most closely resembles.

CERTIFICATE OF OCCUPANCY

Application of Regulation

Sub-reg. (1) substituted by S.R. Nos 438/1984 reg. 7, 98/1986 reg. 7 (1).

6.3 (1) This Regulation shall apply to every building except—

(*a*) any Class X building;

Para. (b) revoked by S.R. No. 143/1988 reg. 12.

(*b*) * * * * *

(*c*) any *alteration* to a Class I building.

Procedure to initiate an inspection

(2) Where a *Co-ordinator* receives notice in writing from a builder that he has completed the construction of a building in the municipal district to a stage where it is suitable for occupation the *Co-ordinator* shall notify the *building surveyor* of the municipality who shall cause an inspection to be made of the building.

Procedure after an inspection

(3) If, after making an inspection under sub-regulation (2) and after making all due inquiries and obtaining all necessary reports, the *building surveyor* is satisfied that the building is suitable for occupation he shall advise the *Co-ordinator* in writing to that effect and the *Co-ordinator* shall then cause—

(*a*) a *certificate of occupancy* to be issued to the *owner* of the building; and

(*b*) a copy of the certificate to be forwarded to the builder.

Time constraints

(4) The inspection of the building shall be made within 7 days of the receipt of the notice in writing under sub-regulation (2) and the *certificate of occupancy* in accordance with Form 4 shall, subject to sub-regulation (5), be issued within 7 days of the inspection of the building.

Where a building is not suitable for occupation

(5) Where the *building surveyor* is not satisfied that the building is suitable for occupation he shall within 7 days of the inspection advise the *Co-ordinator* to that effect, and the *Co-ordinator* shall forthwith give notice to the builder.

Information to be shown on certificate

Sub-reg. (6) substituted by S.R. No. 98/1986 reg. 7 (2).

(6) Every *certificate of occupancy* issued pursuant to this Regulation shall be in accordance with Form 4.

Cancellation of certificate

(7) The *Co-ordinator* may recall and cancel any *certificate of occupancy* if in the opinion of the *building surveyor*—

(*a*) the strength of the building has become less than required to carry the loads indicated on the certificate; or

(*b*) the building is no longer suitable for occupation for the classification named on the certificate—

provided that no *certificate of occupancy* shall be recalled only because the said building fails to comply with a Regulation not in force when the certificate was issued.

Intent of certificate

(8) A *certificate of occupancy* issued under this Regulation is only a certificate to the effect that a building is suitable for occupation and is not and shall not be taken to be a certificate of compliance with the requirements of these Regulations.

(9) A building shall not be occupied unless a *certificate of occupancy* has first been issued under this Regulation. Sub-reg. (9) inserted by S.R. No. 98/1986 reg. 7 (3).

6.4 * * * * * *

CERTIFICATES FOR A BUILDING OCCUPIED IN STAGES

6.5 Where a *certificate of occupancy* has been issued for part of an uncompleted building and the *building surveyor* is satisfied that a further part of the building is suitable for occupation, he shall advise the *Co-ordinator* in writing to that effect and the *Co-ordinator* shall then—

(*a*) revoke that *certificate of occupancy*; and

(*b*) cause the issue of a further *certificate of occupancy* in accordance with Regulation 6.3 covering all parts of the building that the *building surveyor* deems to be suitable for occupation.

CHANGE OF USE

General requirements

6.6 (1) The use of a building shall not be changed from that of one class to that of another class unless— Reg. 6.6 substituted by S.R. No. 438/1984 reg. 8.

(*a*) the building complies with the requirements of these Regulations applicable to the new class; and

(*b*) a *certificate of occupancy* has been issued for the new class.

Council concession in some cases

(2) Notwithstanding sub-regulation (1) (*a*) the *council* may consent to partial compliance with these Regulations as applicable to the new class provided that the safety, health and amenity of persons accommodated in or resorting to the building and the risk of spread of fire to adjacent buildings is not substantially adversely affected. Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 8.

Where building work is to be carried out

(3) Where *building work* is to be carried out no work shall be carried out until a *building approval* has been granted.

4 repealed by S.R. 263/1990.

(4) * * * * * *

CHANGE OF USE WITHIN A CLASS

S.R. 263/1990

6.6.1 The use of a building must not be changed from one use to another use within the same class unless the building complies with the requirements of these Regulations applicable to the new use.

ANCILLARY USE

Less than 90 per cent of the floor area of a storey

6.7 (1) Where part of a *storey*, not being a laboratory, is used for a purpose—

(*a*) for which a different classification applies; but

(*b*) ancillary to a purpose for which not less than 90 per cent of the *floor area* of the *storey* is used—

the *building surveyor* may determine that the classification applying to the major use shall apply to the whole of the *storey*.

Class II or III buildings: whole storey used as public garage

(2) Notwithstanding Regulation 6.1 a building containing one *storey* used as a *public garage* or for some other purpose ancillary to that of the remainder of the building shall for the purpose of Group V of these Regulations be deemed to be entirely a Class II or III building, as the case may be, provided that the remainder of the building contains only—

(*a*) up to 3 *storeys* of Class II; or

(*b*) up to 2 *storeys* of Class III.

GROUP II—GENERAL PROVISIONS

PART 7—UNITED BUILDINGS

BUILDINGS DEEMED TO BE UNITED

7.1 If abutting buildings—

(*a*) are connected through openings in the walls dividing them from one another; and

(*b*) collectively comply with all the requirements of these Regulations as though they were a single building—

they shall, for the purposes of these Regulations, be deemed to be united to form one building.

REQUIREMENTS FOR COMPLIANCE

Alterations to united buildings

7.2 (1) If any *alteration* is made to buildings that are deemed under Regulation 7.1 to have been united to form one building—

(*a*) the united building; or

(*b*) each building being a part of the united building—

shall after the *alteration* comply with all the requirements of these Regulations for a single building.

When united buildings cease to be connected

(2) If any *alteration* is made such that two or more buildings deemed to be united pursuant to Regulation 7.1 cease to be connected through openings in the walls dividing them from one another then each such building shall, after the *alteration*, individually comply with the requirements of these Regulations.

S.R. 66/90

COMBINED ALLOTMENTS

Two or more lots may be united

7.3 (1) The *building surveyor* may by statement in writing determine that two or more contiguous *allotments* should be treated as one *allotment* for the purposes of these Regulations if he or she is of the opinion that the safety, health and amenity of persons accommodated in any building on the *allotments* and the risk of the spread of fire to adjacent buildings will not be substantially adversely affected.

(2) Any contiguous *allotments* to which a statement under sub-regulation (1) applies are to be regarded as one *allotment* for the purposes of these Regulations.

GROUP II—GENERAL PROVISIONS

PART 8—BUILDING APPROVAL

BUILDING APPROVAL REQUIRED

Prior to commencement of building work

8.1 (1) Subject to these Regulations, a person shall not carry out any *building work* unless the *Co-ordinator* has granted *building approval* for the work.

Sub-reg. (1) amended by S.R. No. 436/1984 reg. 9.

Consent or refusal by building surveyor

(2) Except where otherwise provided every application for *building approval* shall be forwarded by the *Co-ordinator* to the *building surveyor* for his consent or refusal of consent to that application.

Building work to comply

(3) Any *building work* required by these Regulations to have *building approval* must be carried out in compliance with these Regulations.

Sub-reg. (3) inserted by S.R. No. 143/1988 reg. 13.

Change of owner or builder

(4) The *owner* or builder must notify the *building surveyor* within 14 days after any change of name or address of *owner* or builder of that change if it occurred at any time between the granting of *building approval* and the completion of *building work*.

Sub-reg. (4) inserted by S.R. No.143/1988 reg. 13.

APPROVAL TO CONSTRUCT A BUILDING

Form of application

8.2 (1) An application for approval to construct a building shall be in accordance with Form 5.

Information that may be required

(2) Without limiting the power of the *Co-ordinator* he may require any or all of the following information to be lodged with an application for approval to construct a building—

(*a*) 3 copies of drawings (together with 2 copies for any *relevant authority* other than the *building surveyor* and the *council*) showing the plan at each floor level, elevations, sections

and dimensions of the proposed building, the sizes and locations of *structural members* to a scale of not less than 1:100, together with such other details as required by the *relevant authority* drawn to a scale of not less than 1:20;

(*b*) 3 copies of specifications (together with 2 copies for any *relevant authority* other than the *building surveyor* and the *council*) describing materials to be used in the construction, and where not indicated on the drawings referred to in paragraph (*a*), such other information as is necessary to show that the building would, if constructed in accordance with the specifications and drawings, comply with these Regulations;

(*c*) 3 copies of an *allotment* plan to scale of not less than 1:500 showing—

(i) the boundaries and dimensions of the *allotment* and any relevant easements;

(ii) whether the *allotment* is at the intersection of *streets* and if not, the location of the *allotment* in relation to the nearest *street* corner;

(iii) the position and dimensions of the proposed building and its relationship to the boundaries of the *allotment* and any existing building on the same *allotment* and adjoining *allotments* with details of the purposes for which the buildings are used or intended to be used;

(iv) the levels of the *allotment* and of the floors of the building in relation to any adjoining *street* channel; and

(v) the method of drainage proposed to be used;

Para. (d) amended by S.R. Nos 438/1984 reg. 10, 98/1986 reg. 9 (1).

(*d*) one copy of computations and reports to demonstrate that the structure would if *constructed* in accordance with the computations and reports comply with these Regulations and in the case of computer prepared computations, such computations shall be in accordance with the "ACADS Code of Practice CP1" issued by the Association for Computer Aided Design Limited;

(*e*) details of any proposed work for the *protection* of property and the public required by Parts 12 and 13;

(*f*) documentary evidence as required by Regulation 10.3;

(*g*) a survey plan of existing conditions prepared by a licensed surveyor;

(*h*) if the *allotment* is under the *Transfer of Land Act* 1958, a copy of the certificate of title of the *allotment*;

Sub-para. (i) substituted by S.R. No. 98/1986 reg. 9 (2).

(*i*) evidence of ownership of the *allotment* or evidence that a contract has been entered into pursuant to section 9AA of the *Sale of Land Act* 1962;

(*j*) except for Class I and X buildings, a certificate from the Electricity Supply Authority stating whether or not an electricity supply substation is required on the *allotment* and if so the required size and location of such substation;

(*k*) where a certificate issued by the Electricity Supply Authority requires the provision of a substation, detailed information of such substation shall be included in the drawings and specifications to be submitted under the requirements of paragraphs (*a*), (*b*) and (*c*); and

(*l*) in the case of a proposed re-erection of a building a statement describing the purposes for which the building has been used and is proposed to be used, together with a certificate issued pursuant to section 206 of the *Health Act* 1958 where the building is to be removed from a place outside the municipal district.

Alteration to an existing building

(3) In the case of a proposed *alteration* to an existing building, colours shall be used on drawings to differentiate between the proposed altered and unaltered parts of the building.

Acceptance of structural designs

(4) If in the opinion of the *building surveyor* the persons providing certificates in accordance with Form 7 and Form 8 are competent to do so the *building surveyor* may consent to an application for *building approval* insofar as it relates to the structural design, without any checking if the application is accompanied by—

Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 9 (3), substituted by S.R. No. 143/1988 reg. 14.

(*a*) a certificate in accordance with Form 7; and

(*b*) a certificate in accordance with Form 8 from a practising structural *qualified engineer* (other than the *qualified engineer* who prepared the structural design) that the structural design has been checked and found to be in compliance with Group VI of these Regulations.

Acceptance of designs other than structural designs

(5) If in the opinion of the *building surveyor* the person providing a certificate in accordance with Form 9 is competent to do so, the *building surveyor* may consent to an application for *building approval*, insofar as it relates to the design or part of the design (other than the structural design) without any checking if the application is accompanied by a certificate from a qualified building surveyor (who did not prepare the design or that part of the design) in accordance with Form 9 that the design or part of the design has been checked and certified to be in compliance with these Regulations.

Sub-reg. (5) inserted by S.R. No. 143/1988 reg. 14.

Qualified building surveyor

Sub-reg. (6) inserted by S.R. No. 143/1988 reg. 14.

(6) For the purposes of sub-regulation (5), a qualified building surveyor means a person with a current certificate of qualification as a building surveyor issued by the Building Qualifications Board under the *Building Control Act* 1981 or the *Local Government Act* 1958.

Building surveyor discretions

Sub-reg. (7) inserted by S.R. No. 143/1988 reg. 14.

(7) Despite sub-regulations (4) and (5), any discretion vested in the *building surveyor* relating to the design or any part of the design must be exercised by the *building surveyor*.

EXTENDED PERIOD OF CONSENT

Formula

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 10.

8.3 (1) Where Class II to IX buildings (inclusive) when constructed would contain more than 4 *storeys* the period of consent or refusal of consent for *building approval* for the whole of the *building work* shall be calculated using the following formula:

21 + 5 (S) days

Interpretation

(2) For the purposes of sub-regulation (1):

"S" represents the sum of the number of *storeys* to be contained in the building, but shall not exceed 30.

Class VI buildings

Sub-reg. (3) inserted by S.R. No. 143/1988 reg. 15.

(3) If Class VI buildings when constructed would contain 4 *storeys* or less and exceed 18 000m² in *floor area* the period of consent or refusal of consent for *building approval* for the whole of the *building work* shall be calculated using the following formula:

21 + 5 (A) days

Interpretation

Sub-reg. (4) inserted by S.R. No. 143/1988 reg. 15.

(4) For the purposes of sub-regulation (3):

"A" represents the nearest whole number arrived at using the following formula, but shall not exceed 10

$$A = \frac{\textit{floor area} - 18\,000}{5000}$$

BUILDING APPROVAL FOR A STAGE OF BUILDING WORK

Form of application

8.4 (1) An application for *building approval* for a stage of *building work* shall be in accordance with Form 5.

When building approval may be granted for a stage

(2) Where a building when constructed would contain more than 4 *storeys* or 1000 m² in *floor area* the *Co-ordinator* may grant *building approval* for a stage of *building work* which shall be as follows:

Sub-reg. (2) amended by S.R. No. 98/1986 reg. 11.

Stage 1—Preliminary *allotment* works, excavations, and *protection.*

Stage 2—Footings, retaining walls, lift overruns and similar work.

Stage 3—Construction of the building with the exception of the items for Stage 4.

Stage 4—The provision or construction of items as provided in sub-regulation (4).

Information that may be required

(3) Without limiting the power of the *Co-ordinator* with every application made under sub-regulation (1) he may require the submission of such information as specified in Regulation 8.2 as he considers necessary.

Information that may not be required until Stage 4

(4) The information required by sub-regulation (3) may not be required to include details of any of the following items which may be submitted at a later date or as separate applications and in either case be *approved* as Stage 4 of a *building approval* as set out in sub-regulation (2):

(*a*) Any of the services and equipment as set out in Part 27.

(*b*) Facings and cladding of the building.

(*c*) Details of fire doors, fire *windows* and fire shutters.

(*d*) Partitions.

(*e*) Verandahs.

(*f*) Sunblinds.

(*g*) Signs.

(*h*) Storage of flammable liquids.

(*i*) Fences and kerbing.

(*j*) Radio and television masts.

(*k*) Artificial lighting.

Period of consent

(5) The period of consent or refusal of consent for *building approval* for a stage of *building work* shall be calculated in accordance with Table 8.4.

TABLE 8.4

EXTENDED PERIOD OF CONSENT FOR BUILDING APPROVALS IN STAGES

Stage	*Maximum Period of Consent or Refusal of Consent*
Stage 1 for excavations 5 metres or more in depth	7 + 3 (D) days
Stage 2	21 + 2 (S) days
Stage 3	21 + 5 (S) days

For the purposes of this Table:

(i) "D" represents the depth of the bulk excavations in metres or part thereof; and

(ii) "S" represents the sum of the number of proposed *storeys* to be contained, but shall not exceed 30 and applies to buildings which when constructed would contain in excess of 4 *storeys*.

Staged building approval for Class VI buildings

Sub-reg. (6) inserted by S.R. No. 143/1988 reg. 16.

(6) If Class VI buildings when constructed would contain 4 *storeys* or less and exceed 18 000m² in *floor area* the maximum period of consent or refusal of consent shall be calculated by substituting the letter "A" for the letter "S" in Table 8.4.

Interpretation

Sub-reg. (7) inserted by S.R. No. 143/1988 reg. 16.

(7) For the purposes of sub-regulation (6):

"A" represents the nearest whole number arrived at using the following formula but shall not exceed 10.

$$A = \frac{floor\ area - 18\,000}{5000}$$

PROVISIONAL BUILDING APPROVAL

Consent subject to conditions

8.5 (1) A *relevant authority* may consent to an application for *building approval* subject to the condition that any aspect of the submitted documents not being in compliance with these Regulations shall be constructed to so comply.

Grant of approval

(2) In the circumstances of sub-regulation (1) a provisional *building approval* shall be granted.

APPROVAL TO DEMOLISH OR REMOVE A BUILDING

Form of application

8.6 (1) An application for approval to demolish or remove a building shall be in accordance with Form 5.

Information that may be required

(2) Without limiting the power of the *Co-ordinator* he may require all or any of the following information to be lodged with an application for approval to demolish or remove a building:

(*a*) an outline and a description of the building or part of the building to be demolished or removed;

(*b*) an *allotment* plan showing the location of the building in relation to the boundaries of the *allotment* and such other features as adjoining buildings or other buildings on the *allotment, streets,* footpaths, crossings;

(*c*) where a part only of the building is to be demolished or removed, computations or other information to show that the remainder of the building will comply with the provisions of these Regulations either as it remains after the proposed demolition or removal takes place or after other works are carried out;

(*d*) information showing the position and description of hoardings, barricades, temporary crossings, protective awnings and outriggers;

(*e*) details of any proposed work for the *protection* of property and the public required by Parts 12 and 13;

(*f*) a written description of the demolition procedure; and

(*g*) with the exception of buildings exempted by Regulation 13.3 evidence that—

(i) the demolisher is in possession of a public liability insurance policy for not less than $1 million in respect of the proposed demolition work and that the policy will not expire during the demolition work; Sub-para. (i) amended by S.R. No. 438/1984 reg. 11.

(ii) * * * * * * Sub-para. (ii) revoked by S.R. No. 98/1986 reg. 12.

(iii) the demolisher has the necessary knowledge, experience, equipment and storage facilities to properly conduct the demolition operations.

COMMENCEMENT AND COMPLETION OF BUILDING WORK

Periods for commencement and completion generally

8.7 (1) Every *building approval* shall be granted subject to the condition that the *building work* authorized by that *building approval*—

(*a*) be commenced within 12 months of the grant of the approval except in the case of the re-erection of a Class I building where the *building work* shall be commenced within 6 months of the grant of the approval; and

(*b*) in the case of *building work* on or in any way associated with a Class I building be completed within 24 months of the grant of the approval except in the case of the re-erection of a Class I building where the *building work* shall be completed within 12 months of the grant of the approval.

Period related to grant of a building approval for a stage of building work

(2) Where under Regulation 8.4 *building approval* for a stage of *building work* is granted the periods specified in sub-regulation (1) shall commence from the date of the grant of *building approval* for the first stage.

Lapse of building approval

(3) Every *building approval* shall be deemed to have lapsed if the *building work* authorized by that approval has not commenced or is not completed within the periods specified in sub-regulation (1).

Extension of period

(4) The period within which any *building work* is required to be commenced or completed may in any particular case be extended from time to time by the *council*.

RETENTION OF DRAWINGS AND SPECIFICATIONS LODGED

Reg. 8.8 amended by S.R. No. 522/1986 reg. 4 (a).

8.8 (1) Where a *building approval* is granted—

(*a*) one copy of the drawings and specifications, together with all documents lodged therewith, shall be retained by the *council* until the building concerned is demolished;

Para. (b) substituted by S.R. No. 438/1984 reg. 12.

(*b*) 2 copies of the drawings and specifications with evidence of approval stamped or endorsed thereon, shall be returned to the applicant who shall ensure that—

(i) for Class I or X buildings where required by the *building surveyor*; and

(ii) for other than Class I or X buildings—

one copy is available for inspection on the *allotment* while the work is in progress;

(*c*) a copy of the *building approval* shall be forwarded by the *Co-ordinator* to every appropriate *relevant authority*;

(*d*) at the request of the applicant, evidence of approval shall be stamped or endorsed by the *Co-ordinator* on additional copies of the drawings and specifications; and

(*e*) the *owner* or his agent or mortgagee of the building, or any person authorized in writing by such *owner* or mortgagee, shall be entitled to inspect the copy of drawings and specifications retained by the *council* at the office of the *council* during normal office hours and make whatever copies he may require.

Sub-reg. (2) inserted by S.R. No. 522/1988 reg. 4 (b).

(2) An owner or the owner's agent or the mortgagee of the building, or any person authorised in writing by the owner or mortgagee, may request the Co-ordinator to provide—

(*a*) details of any building approval granted in respect of the building in the preceding 7 years; and

(*b*) details of any current certificate, notice or report made under the Act in relation to the building.

Sub-reg. (3) inserted by S.R. No. 522/1988 reg. 4 (b).

(3) A person or body recognised under section 28 of the *House Contracts Guarantee Act* 1987 may request the Co-ordinator to provide in respect of a building—

(*a*) the details referred to in sub-regulations (2) (*a*) and (*b*); and

(*b*) the foundation, frame and final inspection approval dates in respect of any building approval granted in the preceding 7 years.

Sub-reg. (4) inserted by S.R. No. 522/1988 reg. 4 (b).

(4) A request under sub-regulation (2) or (3) must—

(*a*) be in the form of Form 10; and

(*b*) be accompanied by the appropriate fee prescribed in Regulation 9.1 (6) (*f*) or (*g*).

VARIATION OF APPROVED DRAWINGS, ETC.

8.9 *Building work* for which *building approval* has been granted shall not be undertaken other than in accordance with that approval and the approved drawings and specifications unless the consent of the *Co-ordinator*, after consultation with the appropriate *relevant authority*, has been obtained.

SUBMISSION FOR PRELIMINARY EXAMINATION AND REPORT

8.10 Notwithstanding anything contained in this Part, the *owner* or his agent may submit to the *Co-ordinator*—

(*a*) preliminary drawings, specifications and if the *allotment* is under the *Transfer of Land Act* 1958, a copy of the certificate of title;

(*b*) structural drawings and computations; or

(*c*) all the documents described in paragraphs (*a*) and (*b*)—

for examination and report as to whether the building would if constructed in accordance with the documents submitted comply with these Regulations.

LAPSE OF APPLICATION FOR BUILDING APPROVAL

8.11 Where further information is required with respect to an application for *building approval* and that information is not submitted within 6 months of the date of the *Co-ordinator* advising the applicant of such requirement, the application shall lapse.

GROUP II—GENERAL PROVISIONS

PART 9—FEES

APPOINTMENT OF FEES

General

9.1 (1) The fees prescribed in this Regulation are the fees which shall be charged and received by the *council* for any *building approval* or for any inspection made or other service provided under the Regulations by any officer of the *council.*

Interpretation

(2) For the purposes of this Regulation—

(*a*) the cost of construction shall mean the contract price and if there is no contract the estimated cost—as determined by the *Co-ordinator* after consultation with the *building surveyor;*

(*b*) "F" shall be determined as the number of *storeys* to be contained in the building in excess of 5;

(*c*) in determining "F", plant-rooms, lift machinery rooms and similar structures constructed above the main roof level of the building shall not be included as a *storey* provided the overall plan area of such structures do not exceed 100 m²; and

(*d*) the fees prescribed in sub-regulation (3) include the fees for the checking of computations.

Fee for an approval to construct a building

(3) The fee to be submitted with an application for an approval to construct a building shall be not less than $20 and shall be as follows:

Class of Building	*Cost of Construction*	*Fee for an Approval to Construct a Building*
(*a*) Class I, II (within the meaning of section 24 of the *Act*) and X buildings	Any amount	$ Cost/400
(*b*) All other buildings	(i) where the cost does not exceed $5000	$ Cost/100
	(ii) where the cost exceeds $5000 but does not exceed $100 000	$ Cost/150+ $20

Class of Building	*Cost of Construction*	*Fee for an Approval to Construct a Building*
	(iii) where the cost exceeds $100 000 but does not exceed $500 000	$ Cost/500 + $500
	(iv) where the cost exceeds $500 000	$ Cost/1 000 + $1000 + $50 (F)[2]

Fee for preliminary examination and report

(4) The fee for preliminary examination and report in accordance with Regulation 8.10 shall be as follows:

(*a*) Where a preliminary examination and report is required excluding checking of structural drawings and computations	25 per cent of fee prescribed for *building approval* to carry out the work described therein and for the purpose of calculating such fee the value of "F" shall be taken as zero
(*b*) Where a preliminary examination of structural drawings and computations is required	50 per cent of the fee prescribed for *building approval* to carry out the work described therein
(*c*) Where a preliminary examination and report including examination of structural drawings and computations is required	75 per cent of the fee prescribed for *building approval* to carry out the work described therein

Fee for inspection of materials or buildings to be relocated

(5) The fee for the inspection of materials or buildings to be relocated shall be as follows:

(*a*) Inspection of buildings to be removed from within the municipal district	$50
(*b*) Inspection of buildings or material outside the municipal district	$50 plus travelling expenses not exceeding $100
(*c*) Inspection of previously used material within the municipal district but not on the *allotment*	$20

Fee for Sundry Permits etc.

(6) The fee for sundry permits, services or inspections not incidental to the carrying out of the work in respect of which other fees are payable shall be as follows:

(*a*)	Exterior illuminations erection of signs or lamps	$ Cost/400 (minimum $20)
(*b*)	Erection of fencing per 15 m or part thereof	$4 (minimum $20)
(*c*)	Erection of sunblind or blind under verandah	$4 per sunblind (minimum $20)
(*d*)	Any service, permit or inspection not otherwise provided for	$50
(*e*)	Installation of fixed heating equipment not otherwise controlled by any Statutory Authority in accordance with Regulations 25.3 and 25.4	$20
(*f*)	Any request for building approval particulars for Class I, II, III, IV or X buildings under Regulation 8.8 (2)	$30
(*g*)	Any request for building approval particulars and inspection approval dates under Regulation 8.8 (3)	$50
(*h*)	Any request for building approval particulars for Class V, VI, VII, VIII or IX buildings under Regulation 8.8 (2)	$100

Para. (f) inserted by S.R. No. 522/1988 reg. 5.

Para. (g) inserted by S.R. No. 522/1988 reg. 5.

Para. (h) inserted by S.R. No. 522/1988 reg. 5.

Fee for an approval to demolish a building

(7) The fee to be submitted with an application for an approval to demolish a building shall be as follows:

(*a*)	For any single *storey* building more than 6 m from the *street alignment*	$20
(*b*)	For any single *storey* building that is less than 6 m in height and located at or within 6 m of the *street alignment*	$40
(*c*)	For any Class I or X building containing more than one *storey*.	$40 per *storey*
(*d*)	For any other building	$200 per *storey*

REDUCTION OF FEE FOR BUILDING APPROVAL

Fee for preliminary examination and report deducted

9.2 (1) The fee prescribed herein for a *building approval* shall be reduced by such part of the fee paid for the preliminary examination and report provided that the design of the building is not substantially altered.

For preliminary examination and report

(2) The fee for a preliminary examination and report shall not be refundable.

For certified designs

Sub-reg. (3) inserted by S.R. No. 98/1986 reg. 13, substituted by S.R. No. 143/1988 reg. 17.

(3) If the *building surveyor* has consented to an application for *building approval* in accordance with Regulation 8.2 (4) or Regulation 8.2 (5)—

(*a*) the fee prescribed for a *building approval* is subject to a reduction of—

(i) 25% if the structural design has been certified in accordance with Forms 7 and 8; or

(ii) 25% if the design other than the structural design has been certified in accordance with Form 9; or

(iii) 50% if the whole of the design as provided for in paragraphs (i) and (ii) has been certified; or

(iv) up to the percentages prescribed in sub-paragraphs (i), (ii) or (iii) at the discretion of the building surveyor, if part only of the structural design, or the design other than the structural design, or of the whole design has been certified; and

(*b*) the fee prescribed for *building approval* must not in any case referred to in paragraph (*a*) be reduced below $250.

SECURITY TO BE LODGED FOR RE-ERECTION OF BUILDINGS

Council may require deposit

9.3 (1) As a condition to the granting of *building approval* for the re-erection of a Class I building, the *council* may require to be deposited with it—

Para. (a) amended by S.R. Nos 438/1984 reg. 13, 143/1988 reg. 18.

(*a*) a sum not exceeding $50 for every 1 m^2 of *floor area;* or

(*b*) an undertaking to pay that sum together with a guarantee by the State Bank or any bank referred to in section 5 (1) of the Act of the Commonwealth known as the *Banking Act* 1959 (as amended from time to time) which carries on business in Victoria for that sum—

to secure the complete and satisfactory carrying out of the work authorized by the *building approval* to be carried out and that that sum or part of that sum shall be forfeited or the person making the undertaking shall be required to pay that sum or part of that sum in the event of it being necessary for the *council* to incur any expenses in consequence of the breach of these Regulations or the failure to carry out the work satisfactorily and completely, and applied to defraying those expenses.

Council may carry out work

(2) The *council* may carry out any work necessary to secure the complete and satisfactory carrying out of any work authorized by a *building approval* to be carried out and to apply any sum or part of any sum held or guaranteed under sub-regulation (1) towards defraying its expenses in so doing.

Progressive refund

(3) A sum required by Regulation 9.3 (1) to be deposited with the *council* may, at the discretion of the *council*, be refunded progressively. Sub-reg. (3) inserted by S.R. No. 143/1988 reg. 19.

REFUNDS

9.4 If an application for a *building approval* is not approved or is withdrawn or lapses before the grant of the *building approval*—

(*a*) the *council* may refund the whole or part of the fee paid thereof; and

(*b*) shall, where any amount has been deposited pursuant to Regulation 9.3 as security in respect of the *building approval*, refund that amount in full.

GROUP II—GENERAL PROVISIONS

PART 10—MATERIALS AND WORKMANSHIP

BUILDINGS TO BE PROPERLY CONSTRUCTED

10.1 For the purposes of these Regulations every building shall be constructed in a good and workmanlike manner.

SUITABILITY OF MATERIALS

Faulty or previously used materials, etc.

10.2 (1) For the purposes of these Regulations a material should not be used in the construction of a building if—

(*a*) it is faulty; or

(*b*)-(*d*) * * * * * *

(*e*) it does not comply with other provisions of these Regulations; or

(*f*) in the case of a material previously used permission has not been granted for its use by the *building surveyor.*

Building surveyor may require testing of materials

(2) The *building surveyor* may require the builder, *owner* or his agent to arrange for the testing, by a testing authority or a person approved by the *building surveyor*, of any material and may prohibit the use of any material which does not meet the requirements of these Regulations or which is otherwise found to be unsuitable or unfit for the purposes for which it is intended.

AUTHENTICATION OF MATERIAL, METHOD OF CONSTRUCTION, DESIGN OR COMPONENT

Requirement for documentary evidence

10.3 (1) Where it is proposed to use any material, method of construction, design or component—

(*a*) that is required by these Regulations—

(i) to meet a specific performance requirement; or

(ii) to comply with any provision thereof; or

(*b*) not specifically authorized by these Regulations—

the *Co-ordinator* may require that an application for approval to construct a building be accompanied by documentary evidence in respect of the proposed use of that material, method of construction, design or component.

Form of evidence

(2) The documentary evidence referred to in sub-regulation (1) may be in one of the following forms:

(*a*) A report issued by a testing authority approved by the *building surveyor*, showing that the material, method of construction, design or component has been submitted to the tests listed in the report, and setting out the results of those tests and any other relevant information that demonstrates its suitability for use in the building as proposed.

(*b*) A certificate of accreditation—

(i) that has been issued by the Registrar, Building Control Accreditation Authority;

(ii) that relates the properties and performance of a material, method of construction, design or component that is referred to therein to a specific provision of these Regulations, or to specific provisions thereof; and

(iii) that has not been revoked or cancelled by the Building Control Accreditation Authority.

(*c*) Any other form of documentary evidence that, in the opinion of the *building surveyor* satisfactorily describes the properties and performances of the material, method of construction, design or component and satisfactorily demonstrates its suitability for use in the building as proposed.

Evidence of fire-resistance ratings

(3) The provisions of this Regulation do not operate so as to permit the acceptance by the *building surveyor* for the purposes of Regulation 20.1 or 20.2 of any evidence other than the evidence referred to in those Regulations.

ADOPTION OF CODES, ETC.

Parts not included in adoption

10.4 (1) Wherever these Regulations adopt by reference any code, standard, rule, specification or provision, such adoption, unless these Regulations otherwise specify, shall not include the adoption of any provision—

(*a*) specifying or defining the respective rights, responsibilities or obligations as between themselves of any manufacturer, supplier or purchaser; or

(*b*) specifying or defining the responsibilities of any tradesman or other building operative (including any architect and engineer); or

(*c*) requiring the submission for the approval of the *building surveyor* of any material, method of construction, design or component, or details thereof, to any person or body, other than a person or body specifically empowered by the *Act* or by these Regulations to give that approval; or

(*d*) specifying that a material, building component, method of construction, design or component, or details thereof, shall be submitted to the Standards Association of Australia or a committee of the Association for expression of opinion; or

(*e*) permitting a departure from the code, standard, rule, specification or provision at the sole discretion of the manufacturer or purchaser or by arrangement or agreement between the manufacturer and the purchaser.

References to Codes, etc.

(2) Any reference in these Regulations to a code, standard, rule, specification or provision shall be construed as being a reference to—

(*a*) the edition of the title and date, together with amendments, as are mentioned in Schedule 10; and

(*b*) so much only thereof as is relevant in the context in which such code or publication is quoted.

Differences between Code, etc. and Regulations

(3) Notwithstanding section 27 (2) of the *Act* if any difference arises between these Regulations and any code, standard, rule, specification or provision mentioned in Schedule 10 these Regulations shall prevail.

REPORTS TO BE UNABRIDGED

10.5 Wherever in these Regulations a document is required to be submitted to the *Co-ordinator* any copy of that evidence so submitted shall be a complete and unabridged copy of the original document.

GROUP II—GENERAL PROVISIONS

PART 11—SITING REQUIREMENTS

DIVISION 1—ALL BUILDINGS

APPLICATION OF DIVISION AND INTERPRETATION

Application

11.1 (1) Subject to section 29 of the *Act* this Division shall apply to every building.

Interpretation

(2) For the purpose of this Part 'open living space' means a space on the *allotment* open to the sky.

MINIMUM DISTANCES

11.2 Where under this Part a minimum distance from an *allotment* boundary or between buildings is specified, that distance shall be the shortest distance and measured from the outermost point of the building or buildings concerned, except that the following encroachments into the minimum distance may be disregarded:

(*a*) 600 mm in the case of eaves, including eaves fascia and eaves gutter.

(*b*) 400 mm in the case of any *masonry* chimney back. Para. (b) substituted by S.R. No. 438/1984 reg. 14 (1).

(*c*) Any pergola, balustrade, fence, mast, pole, aerial or antenna.

(*d*) Any unroofed terrace, landing, step or ramp not exceeding 1 m in height at any part above ground level.

(*e*) Any rainwater head, gas meter, water meter, electrical meter, light fitting, or retractable sun blind.

(*f*) The wall of any *swimming pool.*

(*g*) 650 mm in the case of any flue, pipe, fuel tank, cooling or heating appliance or other services. Para. (g) inserted by S.R. No. 438/1984 reg. 14 (2).

BUILDING OVER EASEMENTS

Restriction on building location

11.3 (1) A building shall not be constructed over any part of a drainage or sewerage easement without the prior consent of the *council.*

Other legislation

(2) Nothing in sub-regulation (1) affects or derogates from a requirement imposed by or under the *Melbourne and Metropolitan Board of Works Act* 1958 or any other Act to obtain the consent or approval of any person or body to the construction of a building over any part of a drainage or sewerage easement.

MASTS, AERIALS, ETC.

11.4 Except with the consent of the *council*, a mast, pole, aerial, or antenna, chimney flue pipe or other service pipe shall not—

(*a*) when attached to a building, exceed a height of 3 m above the highest point of the roof of the building; or

(*b*) when not attached to a building, exceed a height of 8 m above ground level.

DIVISION 2—CLASS I, II AND X BUILDINGS

APPLICATION OF DIVISION

11.5 Subject to section 29 of the *Act* this Division shall apply to Class I, II and X buildings.

SITING REQUIREMENTS

Council shall make by-laws

11.6 (1) Subject to this Regulation, a *council* shall make by-laws applying in its municipal district or any part thereof—

(*a*) adopting the requirements specified in Columns 1, 2, 3, 4 or 5 of Table 11.6 as the minimum requirements applying to an *allotment* and the *siting* of any Class I, II or X building thereon; or

(*b*) prescribing requirements in excess of those specified in that Table.

Reduced sized allotments

Sub-reg. (1A) inserted by S.R. No. 438/1984 reg. 15 (1).

(1A) Notwithstanding any of the requirements of a by-law made pursuant to sub-regulation (1), the *council* may consent to a reduction in the *width* of *frontage, depth* of *allotment* and area of *allotment* in the case of any *allotment* where the *council* is satisfied that there is unlikely to be any detriment to the public interest.

TABLE 11.6
MINIMUM SITING REQUIREMENTS

	Column 1	*Column* 2	*Column* 3	*Column* 4	*Column* 5
Width of *frontage*	10 m	12 m	15 m	16·5 m	18 m
Depth of *allotment*	18 m	21 m	24 m	27 m	30 m
Area of *allotment*	300 m²	418 m²	530 m²	650 m²	785 m²
Setback from *frontage*	3 m	3 m	3 m	3 m	3 m
Setback from any other *street alignment*	2 m	2 m	2 m	2 m	2 m
Setback from any other boundary	–	1·2 m	1·2 m	1·2 m	1·2 m

Height related to minimum setback

(2) Where any part of an *external wall* measured above the natural ground level exceeds 3·6 m in height, the minimum prescribed distance of that part of the wall from a boundary other than a *street alignment* shall be increased in the proportion of 100 mm for every 300 mm or part thereof by which the height of that part of the wall exceeds 3·6 m unless— Sub-reg. (2) substituted by S.R. No. 438/1984 reg. 15 (2)

(*a*) pursuant to sub-regulation (1) the *council* has adopted column 1 of Table 11.6;

(*b*) the *council* has pursuant to Regulation 11.16 (2) permitted a building to be *constructed* less than the distance prescribed pursuant to sub-regulation (1) from any other boundary other than a *street alignment*; or

(*c*) the *council* approves otherwise, for any other reason.

Concession for Class Xb or Xc buildings

(3) Subject to sub-regulation (5), *construction* onto or to within the distance prescribed pursuant to sub-regulation (1) of a boundary of an *allotment* (other than a *street alignment*) shall be permitted— Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 15 (3), amended by S.R. No. 98/1986 reg. 14 (1) (a)–(c).

(*a*) in the case of—

(i) a Class Xb building;

(ii) a Class Xc building (other than a *swimming pool*); and

(iii) notwithstanding sub-regulation (1), a garage forming part of a Class I, II or Xa building; and

(*b*) if when measured above the natural ground level, no part of the building within 1·2 m of the boundary exceeds—

(i) a maximum height of 3·6 m; and

(ii) except for the roof, an average height of 3 m.

Concession for reclad buildings

(4) Notwithstanding sub-regulation (1), the *external walls* of any Class I or Xa building may be reclad, if the recladding does not reduce the distance of the wall from any boundary of the *allotment* by more than 150 mm.

Sub-reg. (5) substituted by S.R. No. 98/1986 reg. 14 (2).

Fences, garages or Class Xb buildings near windows of habitable rooms

(5) Except with the consent of the *council*, no part of a Class Xb building or a garage forming part of a Class I, II or Xa building or a fence exceeding 2 m in height shall be located at a distance of less than 2·4 m from any existing *window* of any *habitable room* in any building on an adjoining *allotment*.

LIMITATION OF CLASS Ib BUILDINGS

11.7 No Class Ib building shall be *constructed* on an *allotment*—

(*a*) unless the *allotment* is already occupied by a Class Ia building; or

(*b*) which is already occupied by 2 or more Class Ia buildings.

MAXIMUM AREA AND OPEN LIVING SPACE

Maximum area to be covered

11.8 (1) Subject to sub-regulation (4), all buildings required pursuant to these Regulations to have a *building approval* shall be *constructed* in such a way that they together do not occupy more than 50 per cent of the total area of the *allotment*.

(2) In calculating the area occupied by all buildings for the purposes of sub-regulation (1), that area shall exclude—

(*a*) any unroofed *swimming pool*;

(*b*) any unroofed terrace; and

(*c*) 600 mm projection by any eave, including eaves fascia and eaves gutter.

Open living space

(3) Where more than one Class Ia building or any *dwelling* in a Class II building is to be constructed on an *allotment*, the minimum *open living space* at ground level for each such Class Ia building or *dwelling* in a Class II building shall be not less than 28 m² or as adopted by a *council* by by-law made pursuant to Regulation 11.16.

Concession for small allotments

(4) Notwithstanding sub-regulation (1) *allotment* coverage may exceed 50 per cent by 0·1 per cent for every square metre by which the area of the *allotment* is less than 418 m² subject to—

(*a*) *open living space* being provided in not more than 2 areas having a minimum dimension of 2 m and a total area of 0·2A m² (where A = Area of *allotment*); and

(*b*) the *allotment* coverage not exceeding 80 per cent.

NUMBER OF CLASS Ia BUILDINGS ON AN ALLOTMENT

One Class Ia building

11.9 (1) Subject to sub-regulation (2) and Regulation 11.16 not more than one Class Ia building may be *constructed* on any *allotment*.

Two Class Ia buildings

(2) Notwithstanding sub-regulation (1), 2 Class Ia buildings may be *constructed* on any *allotment* which has an area 50 per cent greater than the minimum area and a *width* of *frontage* not less than those prescribed in Column 3 of Table 11.6 or in any higher Column adopted by the *council* pursuant to Regulation 11.6 as applicable in respect of that part of the municipal district in which the *allotment* is situated.

DIVISION 3—BUILDINGS OTHER THAN CLASS I, II AND X

APPLICATION OF DIVISION

11.10 Subject to section 29 of the *Act* this Division shall apply to buildings other than Class I, II and X.

ALLOTMENT DIMENSIONS

11.11 (1) A Class III, V, VI, VII, VIII or IX building shall not be *constructed* on an *allotment* having an area of less than 74 m² and a *frontage* of less than 4·8 m provided that where such a building contains a Class IV part the area of the *allotment* shall be not less than 185 m².

Reg. 11.11 amended by S.R. No. 220/1989 reg. 8 (a).

(2) A *children's services centre Class I* must not be constructed on an *allotment* unless the *allotment* has an area which will allow outdoor space of at least 7 square metres for each child using that space.

Sub-reg. (2) inserted by S.R. No. 220/1989 reg. 8 (b).

(3) In calculating the outdoor space required under sub-regulation (2) any thoroughfare less than 3 metres wide and any storage and ancillary areas must be excluded.

Sub-reg. (3) inserted by S.R. No. 220/1989 reg. 8 (b).

BUILDINGS NEAR CLASS I AND II BUILDINGS

Requirements for certain buildings other than apartment houses

11.12 (1) Where the *allotment* on which a Class III building (other than an apartment house) or a Class V, VI, VII, VIII or IX building is proposed to be *constructed* is adjacent to a Class I or II building, or is

in a locality which, in the opinion of the *council* is used or intended to be used primarily for the *construction* of Class I or II buildings, no part of such building shall be *constructed* closer to the *frontage* or to any other boundary of the *allotment*, or to a greater height than would be permitted by these Regulations, or by a by-law of the municipality thereunder, as if such building was a Class I or II building, provided that—

(*a*) nothing in this Regulation shall require a building to be set back from any part of a boundary other than *frontage* where the wall of a building on the adjoining *allotment* abuts on such part;

(*b*) this Regulation shall not apply in respect of any building on an *allotment* shown as a shop site on a plan of subdivision approved by the *council* and lodged in the Office of Titles prior to the commencement of these Regulations; and

Para. (c) amended by S.R. No. 143/1988 reg. 20.

(*c*) where the *allotment* is not in a locality in the opinion of the *council* used or intended to be used primarily for the *construction* of Class I or II buildings, the *council* may grant a dispensation from the requirements of this Regulation where the outlook from and the natural lighting of any adjacent Class I or II building will not suffer substantial detriment.

Requirements for apartment houses

(2) Every apartment house which is proposed to be *constructed* adjacent to a Class I or II building or in a locality which, in the opinion of the *council*, is used or intended to be used primarily for the *construction* of Class I or II buildings, shall conform to the requirements of this part as if such buildings were a Class II building, except that there shall be provided in respect of every *habitable room open living space* of not less than 60 per cent of that required for every *dwelling* as applicable in respect of that part of the municipal district in which that *allotment* is situated.

CLASS IV: OPEN LIVING SPACE

Requirement for open living space

11.13 (1) Every Class IV building shall be provided with an *open living space.*

Dimensions and location

(2) The *open living space* referred to in sub-regulation (1)—

(*a*) shall be of an area of not less than 28 m^2;

(*b*) shall be provided in not more than 2 areas having a minimum dimension of 2 m; and

(*c*) may be provided in the form of a flat roof at a level higher than that of the floor of the ground *storey*.

REAR ACCESS

11.14 Except with the consent of the *council* every *allotment* on which a Class IV building with the exception of a residence for a caretaker of a Class V, VII, VIII or IX building is proposed to be *constructed*, shall have a boundary other than *frontage* abutting on a *street* not less than 3 m in *width* and access to such *street* shall be provided from the rear of the building.

ALLOTMENTS BELOW MINIMUM AREA REQUIREMENTS

Council consent

11.15 (1) In any case where on the date these Regulations came into force in a municipality any land existed as a separate *allotment* and has not subsequently been reduced in area, the *council* may consent to the *construction* thereon of a Class III, V, VI, VII or VIII building, or a building to which a Class IV building is attached, notwithstanding that the *allotment* has less area, or *width* of *frontage* than specified in Regulation 11.11.

Interpretation of a separate allotment

(2) For the purposes of this Regulation, land shall be deemed to have existed as a separate *allotment*—

(i) if it was shown as a separate *allotment* on any plan of subdivision lodged in the Office of Titles; or

(ii) if the *council* is satisfied that on the relevant date such land existed as a separate *allotment*, whether by ownership, occupation, use or otherwise.

Reduced due to acquisition

(3) The *council* may consent to the *construction* of a building on an *allotment* which, as a result of the acquisition of part thereof by a Government Department, *council* or *public authority* for *street*-widening or any other purpose, the *width* of *frontage*, *depth* or area thereof is reduced to less than that required pursuant to this Part.

DIVISION 4—POWERS CONFERRED ON COUNCIL

BY-LAW MAKING POWERS

Additional by-laws

11.16 (1) The *council* may make by-laws applying to its municipal district or any part thereof—

Para. (a) amended by S.R. No. 75/1984 reg. 5.

(*a*) subject to Regulation 11.9, stipulating the number of Class Ia buildings (in excess of one or two as the case requires) or *dwellings* in Class II buildings or Class Xa buildings that may be *constructed* on an *allotment*;

(*b*) varying the *open living space* requirements of Regulation 11.8;

(*c*) prescribing areas in which off-street accommodation for stationary vehicles in accordance with a schedule to be prescribed in such by-law shall be provided in or within a specified distance of every building thereafter *constructed* within such areas;

(*d*) prescribing areas in which Class II buildings shall not be required to comply with the provisions of Regulations 11.6 and 11.8 provided that—

(i) the *allotment* of any such building shall abut on a *street* not less than 9 m in *width* and shall have an area of not less than 300 m², a *width* of *frontage* of not less than 10 m and a *depth* not less than 18 m; and

(ii) the areas prescribed are within areas used or intended primarily for business purposes; and

(*e*) dispensing with the requirements of Regulation 11.14 in the case of a building on any land forming part of a subdivision approved by the *council* and lodged in the Office of Titles prior to the date of commencement of these Regulations.

Variation of by-laws

Sub-reg. (2) amended by S.R. No. 143/1988 reg. 21.

(2) The *council* may consent to the construction of—

Para. (a) amended by S.R. No. 438/1984 reg. 16.

(*a*) a Class I, II or X building on an *allotment* notwithstanding any of the requirements of a by-law made pursuant to Regulation 11.6 (1); or

Para. (b) amended by S.R. Nos 75/1984 reg. 6.

(*b*) more Class Ia buildings or *dwellings* in Class II buildings or Class Xa buildings on an *allotment* than as permitted in accordance with a by-law made pursuant to sub-regulation (1)—

where the *council* is satisfied that there is unlikely to be any substantial detrimental effect to any *adjoining property*.

GROUP III—PRECAUTIONS DURING CONSTRUCTION OR DEMOLITION

PART 12—PRECAUTIONS DURING CONSTRUCTION

PROTECTION OF ADJOINING PROPERTY AND PUBLIC

Protection to be provided

12.1 (1) Before and during the carrying out of any *building work*—

(*a*) *protection* shall be provided if and when required by the *building surveyor*; and

(*b*) within 3 m of any *street alignment*, precautions shall be taken to ensure the safety of the public using the *street* and particulars of such precautions shall be *approved* before any *building work* is commenced.

When protection may be dispensed with

(2) The requirements of sub-regulation (1) (*a*) shall not apply in the case of *underpinning* if the *building surveyor* is satisfied that the *foundation* of a building on an *adjoining property* consists of hard stable rock.

Notice to adjoining owner

(3) The notice required to be given by the *owner* to the adjoining owner by section 147 (1) of the *Act* shall be in accordance with Form 6 and shall be accompanied by three copies of Form 11.

Sub-reg. (3) amended by S.R. No. 220/1989 reg. 16 (1).

Response from adjoining owner

(4) A notice required to be given by an adjoining owner agreeing or disagreeing with the proposed protection works or requiring more information shall be in accordance with Form 11.

Sub-reg. (4) inserted by S.R. No. 220/1989 reg. 16 (2).

FORMWORK AND FALSEWORK

Reg. 12.2 substituted by S.R. No. 438/1984 reg. 17.

Performance requirement

12.2 (1) All formwork and falsework including toms and the like shall be—

(*a*) designed and *constructed* in accordance with the principles of structural mechanics; and

(*b*) capable of sustaining the most adverse combination of loads to which they will be subjected in accordance with the provisions of these Regulations.

Australian Standard deemed to comply

(2) The requirements of sub-regulation (1) shall be deemed to be complied with when formwork and falsework including toms comply with AS 1509.

Certificate from a qualified engineer

(3) For the purpose of consenting to an application for building approval the *building surveyor* may accept a certificate from a *qualified engineer* stating that the design has been checked and approved as complying with this Regulation.

GUARDING OF EXCAVATIONS

12.3 All excavations shall be fenced or otherwise guarded against being a danger to life or property.

FIRE PROTECTION DURING CONSTRUCTION

12.4 During the *construction* of a building which is to exceed 25 m in height above ground level other than a mast, pole, aerial or similar structure—

(*a*) a *fire main* not less than 100 mm nominal size fully charged with water shall be provided;

(*b*) the *fire main* shall be extended upwards along with the construction and be available for use not more than 2 *storeys* below the highest formed floor level of the building;

(*c*) the *fire main* shall be fitted with a 63 mm *hydrant* and a fire hose reel containing 36 m of 20 mm hose at each *storey* served by the *fire main*;

(*d*) the *fire main* shall be equipped with the necessary valves and connections at ground level for the connection of a fire brigade booster pump;

(*e*) the *fire main* shall be provided with a header tank, pump or other means so that the topmost hose reel shall be capable of operating at an inlet flow pressure to the reel of not less than 70 kPa for a period of at least 15 minutes when it is the only hose reel that is in operaton; and

(*f*) the locations of required *fire mains*, *hydrants* and fire hose reels shall be subject to the approval of the *chief officer*.

GROUP III—PRECAUTIONS DURING CONSTRUCTION OR DEMOLITION

PART 13—DEMOLITION

INTERPRETATION

13.1 For the purposes of these Regulations a demolisher means any person who demolishes or removes or authorizes the demolition or removal of any building or part thereof.

RESPONSIBILITY FOR DEMOLITION

13.2 The demolisher shall be held responsible for the whole of the work referred to in the approval to demolish including any work carried out by sub-contractors.

APPLICATION

13.3 This Part shall apply to demolition works on all buildings except those works which in the opinion of the *building surveyor* are of a minor nature and the demolition of single *storey* Class I or X buildings which are not closer than 6 m to a *street alignment.*

PRECAUTIONS BEFORE AND DURING DEMOLITION

13.4 Precautions before and during demolition shall be as follows:

(*a*) The demolition shall not be commenced until precautionary measures have been inspected and *approved.*

(*b*) Before demolition is commenced and also during the progress of such work all electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected.

(*c*) During the progress of demolition the work shall be under the continuous supervision of the demolisher or of an experienced foreman.

(*d*) Unless otherwise expressly *approved* demolition shall be executed *storey* by *storey* commencing at the roof and working downward.

(*e*) All practicable precautions shall be taken to avoid danger from collapse of a building when any part of a framed or partly framed building is removed.

(*f*) Demolished material shall not be allowed to remain on any floor or structure if the weight of the material exceeds the safe carrying capacity of the floor or structure and such material shall be so piled or stacked that it will not endanger workmen or other persons, and shall be removed as soon as practicable from the *site* unless otherwise authorized by the *building surveyor.*

(*g*) Dust creating material, unless thoroughly dampened shall not be thrown or dropped from the building but shall be lowered by hoisting apparatus or removed by material chutes.

(*h*) Chutes shall be completely enclosed and a danger sign shall be placed at the discharge end of every chute.

(*i*) No part of any *external wall* on or within 3 m of a *street alignment* shall be pulled down except during such hours as the *building surveyor* may direct.

(*j*) No wall, chimney or other structure or part of a structure shall be left unattended or unsupported in such a condition that it may collapse due to wind or vibration or otherwise become dangerous.

(*k*) Protective outriggers shall be installed where necessary to guard against danger to life or property or when required by the *building surveyor.*

GROUP IV—BUILDINGS IN RELATION TO STREETS

PART 14—MAXIMUM HEIGHT AND LIMITATION OF LOCATION

MAXIMUM HEIGHT OF BUILDING

14.1 No building shall exceed a height of 40 m measured from the permanent footpath level at the centre of the *frontage*.

SNOW AREAS

14.2 * * * * * *

Reg. 14.2 revoked by S.R. No. 98/1986 reg. 15.

GROUP IV—BUILDINGS IN RELATION TO STREETS

PART 15—PROJECTIONS BEYOND STREET ALIGNMENT

GENERALLY

15.1 Except where provided in this Part and in Regulation 33.9 no part of a building shall project beyond the *street alignment.*

ARCHITECTURAL FEATURES

15.2 No architectural feature or similar part of a building shall project beyond the *street alignment*—

(*a*) where the *street* is 6 m or less in width except that where no footpath is *constructed,* a kerb or buffer block of not more than 240 mm in height above the *street* level may project not more than 240 mm beyond the *street alignment*;

(*b*) more than 600 mm in any *street* more than 6 m but not exceeding 10 m in width;

(*c*) more than 1·2 m in any *street* more than 10 m in width;

(*d*) at any height less than 2·7 m above the level of the footpath; and

(*e*) unless it is constructed of *non-combustible* material.

WINDOWS AND BALCONIES

Extent and height

15.3 (1) No *window* or balcony shall project beyond the *street alignment*—

(*a*) more than 1 m;

(*b*) in any *street* less than 10 m in width;

(*c*) at any height less than 3 m above the level of the footpath; and

(*d*) nearer than 1·2 m to the side boundary of any adjoining *allotment.*

Width

(2) No projection referred to in sub-regulation (1) shall—

(*a*) exceed one-half of the length of the wall of the building on the level of the floor on which any such projection is made; and

(*b*) exceed 3·7 m in width.

VERANDAHS

Extent and height

15.4 (1) No verandah shall project beyond the *street alignment*—

(*a*) unless it is set back not less than 750 mm from the kerb; and

(*b*) at any height less than 3 m above the level of the footpath.

Lining

Sub-reg. (2) amended by S.R. No. 438/1984 reg. 18.

(2) When required by the *council* the underside of the verandah shall be lined.

SUNBLINDS AND AWNINGS

15.5 No sunblind or canvas awning shall project beyond the *street alignment*—

(*a*) more than 2·4 m; and

(*b*) at any height less than 2·4 m above the level of the footpath.

COUNCIL MAY VARY REQUIREMENTS

Reg. 15.6 amended by S.R. No. 98/1986 reg. 17.

15.6 Notwithstanding Regulations 15.4 (1), 15.5 and 15.9, the *council* may permit or require verandahs, signs, sunblinds or canvas awnings—

(*a*) to be *constructed* at other heights or distances; and

(*b*) to be of different design or materials—

than those specified in this Part.

SERVICE PIPES AND RAINWATER HEADS

15.7 No service pipe or rainwater head shall project beyond the *street alignment*—

(*a*) more than 200 mm in the case of a service pipe;

(*b*) more than 300 mm in the case of a rainwater head; and

(*c*) at any height less than 2·7 m above the level of the footpath.

TIMBER WINDOW SHUTTERS

15.8 Notwithstanding Regulation 15.1, louvred *window* shutters *constructed* in timber shall be permitted provided they project not

more than 50 mm beyond the *street alignment* when in the fully open position.

SIGNS

15.9 No sign or the like shall project beyond the *street alignment*— Reg. 15.9 inserted by S.R. No. 98/1986 reg. 17.

(*a*) unless it is set back not less than 750 mm from the kerb; and

(*b*) at any height less than 2·7 m above the level of the footpath.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 16—FIRE-RESISTING CONSTRUCTION OF BUILDINGS

CERTAIN BUILDINGS TO BE OF SPECIFIC TYPES OF CONSTRUCTION

The buildings and types of construction concerned

16.1 (1) Unless otherwise permitted by these Regulations, Class II to IX buildings inclusive shall be *constructed* in one of the following types of construction:

(*a*) Type 1, in accordance with Regulation 16.7.

(*b*) Type 2, in accordance with Regulation 16.8.

(*c*) Type 3, in accordance with Regulation 16.9.

(*d*) Type 4, in accordance with Regulation 16.10.

(*e*) Type 5, in accordance with Regulation 16.11.

The buildings deemed to be of fire-resisting construction

(2) For the purposes of these Regulations, a building that meets the requirements of this Part for one of the types of construction described in sub-regulation (1) shall be deemed to be a building of *fire-resisting construction.*

Order of fire-resistance of the types of construction

(3) Type 1 construction shall be deemed to be the most fire-resistant and Types 2 to 5 the successively less fire-resistant of the types of *fire-resisting construction.*

TYPE OF CONSTRUCTION IN A PARTICULAR BUILDING

The type required

16.2 The type of *fire-resisting construction required* in a building shall be not less than the least fire-resistant type of construction permissible under Part 17.

Reg. 16.2 substituted by S.R. No. 98/1986 reg. 18.

FIRE-SEPARATED PARTS OF A BUILDING

16.3 Each part of a building that is fire-separated according to Regulation 23.1 from the remainder of the building shall be subject to this Part as though it were itself a building.

FIRE PROTECTION FOR A SUPPORT OF ANOTHER PART

16.4 A part of a building that gives vertical support to another part *required* to have a *fire-resistance rating* shall have a *fire-resistance rating* not less than the greater of—

(*a*) the *fire-resistance rating required* for the part it supports; or

(*b*) the *fire-resistance rating*, if any, *required* for the part itself—

and be *non-combustible* if the part it supports is *required* to be *non-combustible.*

CERTAIN MATERIALS PERMISSIBLE WHERE NON-COMBUSTIBLE MATERIALS ARE REQUIRED

16.5 The following materials may be used wherever these Regulations require a *non-combustible* material:

(*a*) Plasterboard.

(*b*) Perforated gypsum lath with a normal paper finish.

(*c*) Fibrous-plaster sheet conforming to AS 2185.

EXPOSURE TO FIRE-SOURCE FEATURES

Features in relation to a building

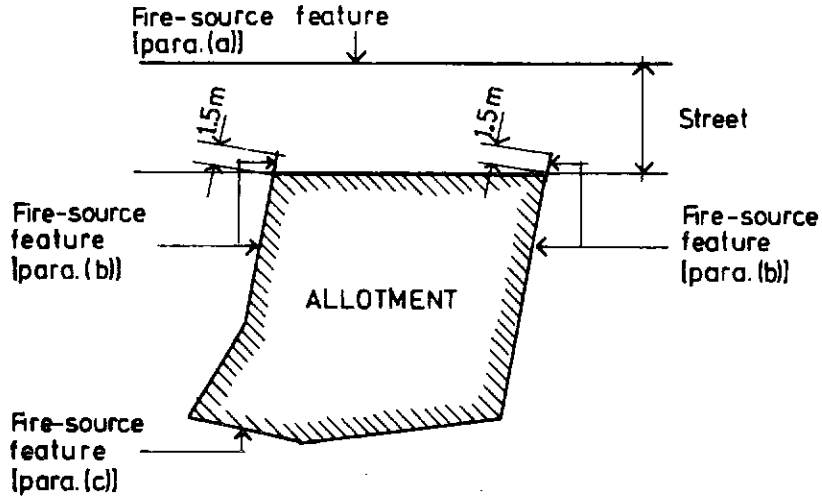
16.6 (1) "Fire-source feature" means, in relation to a building, and as the case requires—

(*a*) the farther boundary of a *street* adjoining the *allotment*;

(*b*) a side boundary of the *allotment*, together with a 1.5 m straight projection of that boundary onto the *street*;

(*c*) a rear boundary of the *allotment*; or

(*d*) an *external wall* of another building, other than a Class I or X building, that stands on the *allotment.*



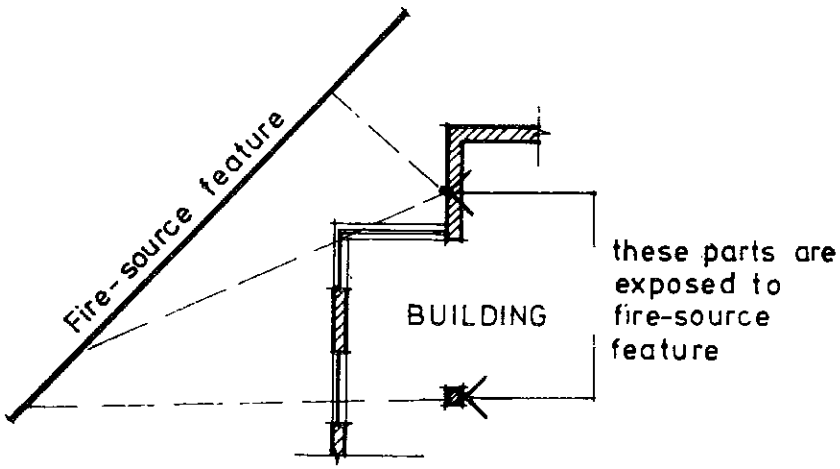
PLAN ILLUSTRATING REGULATION 16.6 (1)

Where exposure is deemed to occur

(2) Except as in sub-regulation (3), a part of a *structural member* shall be deemed to be exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the *fire-source feature*, or a vertical projection thereof, is not obstructed by another part of the building that—

(*a*) has a *fire-resistance rating* of not less than ½ hour; and

(*b*) is neither transparent nor translucent.



PLAN ILLUSTRATING REGULATION 16.6 (2)

Where a fire-source feature is to be neglected

(3) A part of a *structural member* shall not be deemed to be exposed to a *fire-source feature* if—

(*a*) the *fire-source feature* is an *external wall* of another building that stands on the *allotment* and the part concerned is more than 15 m above the highest part of that *external wall*; or

(*b*) the *fire-source feature* is a side or rear boundary of the *allotment* and the part concerned is below the finished ground level at every relevant part of the boundary concerned.

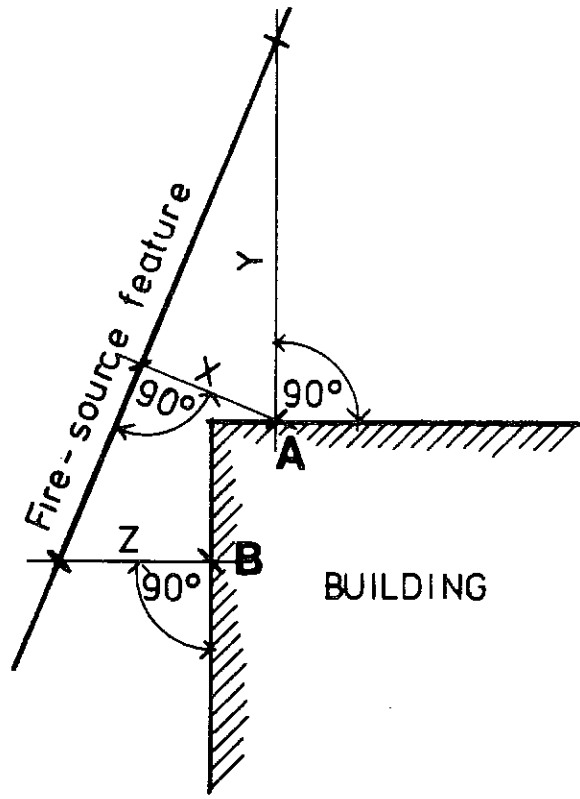
Effective distance and its determination

(4) The "effective distance" between a part of a *structural member* and a *fire-source feature* to which it is exposed means the lesser of—

(*a*) the horizontal distance from that part to the *fire-source feature*, or a vertical projection thereof, measured at right angles to the vertical face of the part; and

(*b*) 3 times the horizontal distance from the *fire-source feature* to that part, measured at right angles to the *fire-source feature* or a vertical projection thereof—

or, if one of these distances cannot be found, (because of the particular geometrical considerations concerned) then the other distance or triple-distance, as applicable.



if *3X* is less than *Y* then *3X* is the effective distance at part **A**.

Z is the effective distance at part **B**

PLAN ILLUSTRATING REGULATION 16.6 (4)

Where various effective distances apply

(5) Where, in terms of this Regulation, various *effective distances* apply for different parts of a *structural member*, that member shall be so *constructed* that—

(*a*) the entire member has the *fire-resistance rating* applicable to that part having the least *effective distance* between itself and the relevant *fire-source feature*; or

(*b*) each such part of the member has the *fire-resistance rating* applicable according to its individual *effective distance* from the relevant *fire-source feature*—

but this provision shall not so operate as to permit exemption from Regulation 16.4.

TYPE 1 CONSTRUCTION

Requirements

16.7 (1) In a building *required* to be of Type 1 construction, each part mentioned in Table 16.7, and any beam or column incorporated in it, shall (subject to the modifications set out in this Regulation, Regulation 16.22 and Regulation 23.2)—

(*a*) be *non-combustible* except where a rating is not listed;

(*b*) have a *fire-resistance rating* not less than that listed in the Table for the particular class of building concerned; and

(*c*) be *constructed* according to sub-regulation (11) or (12) if applicable.

(2) * * * * * * Sub-reg. (2) revoked by S.R. No. 98/1986 reg. 19 (1).

Class II buildings: concession for floors within dwellings

(3) In a Class II building of Type 1 construction, where—

(*a*) a *dwelling* extends through two *storeys*; and

(*b*) all the walls bounding that *dwelling* are *non-combustible* and have a *fire-resistance rating* of not less than 1½ hours,

the floor separating the two *storeys* within the *dwelling* may be combustible and need not have a *fire-resistance rating*.

TABLE 16.7

Table 16.7 substituted by S.R. No. 98/1986 reg. 19 (5), amended by S.R. No. 187/1986 reg. 2.

TYPE 1 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Structural members	*Ratings (in hours)*							
	Class of Building							
	II	III	V	VI	VII	VIIIa	VIIIb	IX
External walls (including beams and columns incorporated in them) and other external structural members where, in terms of Regulation 16.6, the effective distance between the wall or other member and any fire-source feature to which it is exposed is—								
for loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 4·5 m	1½	3	3	3	4	3	4	3
4·5 m to less than 6 m	1½	2	2	3	4	3	4	2
6 m or more	1½	1½	2	3	4	3	4	2
for non-loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 3 m	—	—	3	3	4	3	4	3
External spandrels or other vertical construction required by Regulation 22.3 (2) (*a*) and external slab or other horizontal construction required by Regulation 22.3 (2) (*b*)	1½	1½	2	3	4	3	4	2
Party walls	4	4	4	4	4	4	4	4
Loadbearing internal walls and firewalls (including those bounding public corridors, public hallways, and the like, or between or bounding sole-occupancy units, and those of loadbearing shafts)	1½	1½	2	3	4	3	4	2
Lift shafts and stair shafts required to be fire-resisting that are non-loadbearing.	1½	1½	2	2	2	2	2	2
Ventilating, pipe, garbage, and like shafts neither intended for discharge of hot products of combustion nor loadbearing.	1½	1½	1½	2	2	2	2	1½
Non-loadbearing internal walls (including partition walls)—								
bounding public corridors, public hallways, and the like	1	1	—	—	1	1	1	—
between or bounding sole-occupancy units	1	1	—	—	—	—	—	—
bounding a stairway that is not required to be enclosed by a fire-resisting shaft	1	1	—	—	—	—	—	—
Floors (including floor beams), roofs (including roof beams and trusses), and internal columns	1½	1½	2	3	4	3	4	2

NOTE: Class IV parts—fire-resistance ratings shall be as required by Regulation 17.7.

Concessions for certain floors

(4) In a building *required* to be of Type 1 construction, the following floors need not have a *fire-resistance rating* or be *non-combustible*:

(*a*) A floor laid directly on the ground.

(*b*) Where the building is a Class II, III, V or IX building—a floor, not laid directly on the ground, the space below which is not a *storey* and is not used—

(i) for the accommodation of any motor vehicle;

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*;

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

(*c*) A timber stage floor in a Class IXb building— Para. (c) inserted by S.R. No. 98/1986 reg. 19 (2).

(i) laid directly over a floor having the *required fire-resistance rating*; or

(ii) raised above a floor having the *required fire-resistance rating* where the space below the stage is not used as a store room, dressing room or the like.

Class V or IX buildings: concession according to floor loading

(5) In a Class V or IX building, if any floor is designed for a live load not exceeding 3 kPa, a *fire-resistance rating* of 1½ hours shall apply, as a modification of Table 16.7, for—

(*a*) the floor next above (including any floor beam); or

(*b*) the roof, if that is next above (including any roof beam).

Certain Class VII buildings: concession for certain internal non-loadbearing walls

(6) In a Class VII building having a rise in *storeys* of not more than 6, every non-*loadbearing internal wall* (including any *partition wall*) bounding public corridors, public hallways, and similar spaces may contain *combustible* framing, if the *combustible* material—

(*a*) has not been jointed by means of glue unless it has been laminated or finger jointed and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue; and

(*b*) has a mass per unit length in the aggregate of not more than 45 kg/m of *partition wall* measured horizontally.

Class VII—Open-deck parking stations: modifications for certain parts Heading amended by S.R. No. 75/1984 reg. 7.

(7) For an *open-deck parking station* the following *fire-resistance ratings* shall apply, as modifications for Table 16.7:

(*a*) For a column situated, in terms of Regulation 16.6, at an *effective distance* of less than 4·5 m from a *fire-source feature* to which it is exposed— 3 hours.

(*b*) For any other column— 2 hours.

(*c*) For a *loadbearing internal wall* or *fire wall*—	2 hours.
(*d*) For a floor beam wherever more than half its cross-section is less than 3 m from an edge of a floor—	2 hours.
(*e*) For a floor beam otherwise—	1 hour.
(*f*) For a floor—	1 hour.

Certain buildings of Classes II, III and IX: concession for roof

Sub-reg. (8) amended by S.R. No. 98/1986 reg. 19 (3).

(8) In a Class II, III or IX building (other than an *open spectator stand* or indoor sports stadium) having a rise in *storeys* of not more than 6, the roof need not comply with sub-regulation (1) if—

(*a*) the roof covering is *non-combustible*; and

(*b*) the ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of one hour, as determined in the *Standard Fire Test.*

Certain buildings of Classes V to VIII: concession for roof

(9) In a Class V, VI, VII or VIII building having a rise in *storeys* of not more than 6, the roof need not comply with sub-regulation (1) but if the building has a rise in *storeys* of more than 3—

(*a*) the roof covering shall be *non-combustible*; and

(*b*) the ceiling immediately below the roof shall have a resistance to the incipient spread of fire to the roof space of one hour, as determined in the *Standard Fire Test.*

Internal columns exposed through a window to a fire-source feature

(10) That section of Table 16.7 specifying *fire-resistance ratings* according to *effective distance* extends also to those parts of an internal column that—

(*a*) face and are within 1·5 m of a *window*; and

(*b*) are exposed (in terms of Regulation 16.6) through that *window* to a *fire-source feature.*

Certain internal walls to be constructed in specific ways

(11) Every *internal wall* (including a *partition wall*) *required* by Table 16.7 to have a *fire-resistance rating*—

(*a*) shall extend to—

(i) the underside of the floor, if any, next above; or

(ii) the underside of a roof complying with sub-regulation (1); or

(iii) the roof covering of any other roof; or

(iv) a ceiling immediately below the roof and having a resistance to the incipient spread of fire to the roof

space of one hour, as determined in the *Standard Fire Test*; and

(*b*) shall be so fixed to the floor, roof, or ceiling concerned as to be held by it against overturning in the event of fire.

Certain parts of Type 1 construction to be constructed of specific materials

(12) In a building of Type 1 construction—

(*a*) every *loadbearing internal wall* and *fire wall* (including those that are part of a *loadbearing shaft*) shall be of concrete or *masonry*;

(*b*) every non-*loadbearing*—

(i) lift *shaft* and stair *shaft required* to be *fire-resisting*; and

(ii) ventilating, pipe, garbage, and similar *shaft* that is not intended for discharge of hot products of combustion—

shall be of concrete or *masonry*; and

(*c*) in a Class II or III building, every *internal wall* bounding a *sole-occupancy unit* or separating adjoining *sole-occupancy units* shall be of concrete or *masonry*.

Concessions for certain internal columns and walls

(13) Where, pursuant to sub-regulation (8) or (9), a roof that does not have a *fire-resistance rating* is used in a building having a rise in *storeys* of not more than 6, internal columns (excluding those referred to in sub-regulation (10)) and *loadbearing internal walls* (excluding *fire walls*) in the *storey* immediately below that roof may have the following *fire-resistance ratings* instead of those listed in Table 16.7:

(*a*) Class II and Class III buildings—1 hour.

(*b*) Class V, VI, VII, VIII and IX buildings—1 hour if the building has a rise in *storeys* exceeding 3, but otherwise no rating.

Class IXb—open spectator stands or indoor sports stadiums: modification for certain parts

(14) For an *open spectator stand* or indoor sports stadium the following *structural members* need not have the *fire-resistance ratings* required by Table 16.7: Sub-reg. (14) inserted by S.R. No. 98/1986 reg. 19 (4).

(*a*) The roof, if it is *non-combustible*.

(*b*) Columns and *loadbearing* walls supporting only the roof, if they are *non-combustible*.

(*c*) Any non-*loadbearing* part of an *external wall* situated at an *effective distance* from any *fire-source feature* to which it is exposed of less than 3 m, if it has a *fire-resistance rating* of not less than one hour and is *non-combustible*.

(*d*) Notwithstanding paragraph (*c*), any non-*loadbearing* part of an *external wall* of an *open spectator stand* situated at an *effective distance* of less than 3 m from an *external wall* of another *open spectator stand*, if it is *non-combustible.*

TYPE 2 CONSTRUCTION

Requirements

16.8 (1) In a building *required* to be of Type 2 construction—

(*a*) every *external wall*, *party wall* and any beam or column incorporated in it shall be *non-combustible*; and

(*b*) each part mentioned in Table 16.8, and any beam or column incorporated in it, shall (subject to the modifications set out in this Regulation and Regulation 23.2)—

(i) have a *fire-resistance rating* not less than that listed in the Table for the particular class of building concerned; and

(ii) be *constructed* according to sub-regulation (10) or (11) if applicable.

Certain floor and roof construction deemed to comply

(2) In a building of Type 2 construction, a floor or roof shall be deemed to have a *fire-resistance rating* of one hour if—

(*a*) the ceiling immediately below the floor or roof has a resistance to the incipient spread of fire to the space above itself of one hour, as determined in the *Standard Fire Test*; and

(*b*) in the case of a roof, the roof covering is *non-combustible.*

Concession for certain floors

(3) In a building of Type 2 construction the following floors need not have a *fire-resistance rating*:

(*a*) A floor laid directly on the ground.

(*b*) A floor, not laid directly on the ground, the space below which is not a *storey* and is not used—

(i) for the accommodation of any motor vehicle; or

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*; or

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

Para. (c) inserted by S.R. No. 98/1986 reg. 20 (1).

(*c*) A timber stage floor in a Class IXb building—

(i) laid directly over a floor having the *required fire-resistance rating*; or

(ii) raised above a floor having the *required fire-resistance rating* where the space below the stage is not used as a store room, dressing room or the like.

(4) * * * * * *

Sub-reg. (4) revoked by S.R. No. 98/1986 reg. 20 (2).

Class II buildings: concession for floors within dwellings

(5) In a Class II building of Type 2 construction, a floor separating two *storeys* within a single *dwelling* need not have a *fire-resistance rating* if all the walls bounding that *dwelling* are *non-combustible.*

TABLE 16.8

TYPE 2 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Table 16.8 substituted by S.R. No. 98/1986 reg. 20 (3), amended by S.R. No. 187/1986 reg. 3.

Structural members	*Ratings (in hours)*							
	Class of Building							
	II	III	V	VI	VII	VIIIa	VIIIb	IX
External walls (including beams and columns incorporated in them) and other external structural members where, in terms of Regulation 16·6, the effective distance between the wall or other member and any fire-source feature to which it is exposed is—								
for loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 4·5 m	1½	3	3	3	4	3	4	3
4·5 m to less than 6 m	1½	2	2	3	4	3	4	2
6 m or more	1½	1½	2	3	4	3	4	2
for non-loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 3 m	—	—	3	3	4	3	4	3
External spandrels or other vertical construction required by Regulation 22.3 (2) (*a*) and external slab or other horizontal construction required by Regulation 22.3 (2) (*b*)	1	1	1	1	1	1	1	1
Party walls	4	4	4	4	4	4	4	4
Loadbearing internal walls and fire walls (including those bounding public corridors, public hallways, and the like or between or bounding sole-occupancy units, and those of loadbearing shafts).	1½	1½	2	3	4	3	4	2
Lifts shafts and stair shafts required to be fire-resisting that are non-loadbearing.	1½	1½	2	2	2	2	2	2
Ventilating, pipe, garbage, and the like shafts neither intended for discharge of hot products of combustion nor loadbearing.	1½	1½	1½	2	2	2	2	1½
Non-loadbearing internal walls (including partition walls)—								
bounding public corridors, public hallways, and the like	1	1	—	—	1	1	1	—
between or bounding sole-occupancy units	1	1	—	—	—	—	—	—

TABLE 16.8—*continued*

TYPE 2 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Structural members	*Ratings (in hours)*							
	Class of Building							
	II	III	V	VI	VII	VIIIa	VIIIb	IX
bounding a stairway that is not required to be enclosed by a fire-resisting shaft.	1	1	—	—	—	—	—	—
Floors (including floor beams), roofs (including roof beams and trusses), and internal columns.	1	1	1	1	1	1	1	1

NOTE: Class IV parts—fire-resistance ratings shall be as required by Regulation 17.7.

Concession for certain loadbearing walls

(6) Where the roof of a building and the ceiling immediately below that roof comply with sub-regulation (2), a *fire-resistance rating* of one hour shall apply as a modification of Table 16.8, for a *loadbearing internal wall* (excluding a *fire wall*) in the *storey* immediately below that roof.

Class VII—open-deck parking stations: modifications for certain parts

(7) For an *open-deck parking station* the following *fire-resistance ratings* shall apply, as modifications of Table 16.8:

(*a*) For a column situated, in terms of Regulation 16.6, at an *effective distance* of—

(i) less than 4·5 m from a *fire-source feature* to which it is exposed—2 hours;

(ii) 4·5 m to less than 9 m from such a feature—1½ hours; and

(iii) 9 m or more from such a feature—1 hour.

(*b*) For a *loadbearing internal wall* or *fire wall*—2 hours.

Roofs and certain columns in certain low-rise buildings: concession

(8) In a building of Type 2 construction, the roof and its internal supporting columns (excluding those referred to in sub-regulation (9)) need not comply with sub-regulation (1) if the rise in *storeys* of the building does not exceed two.

Internal columns exposed through a window to a fire-source feature

(9) Those parts of an internal column in a building of Type 2 construction that—

(*a*) face and are within 1·5 m of a *window*; and

(*b*) are exposed (in terms of Regulation 16.6) through that *window* to a *fire-source feature*—

shall, if the *effective distance* between the *fire-source feature* and the part of the column concerned is less than 6 m, have a *fire-resistance rating* of not less than 1½ hours.

Certain partition walls to be constructed in specific ways

(10) A *partition wall required* by Table 16.8 to have a *fire-resistance rating*—

(*a*) shall extend to—

(i) the underside of the floor, if any, next above; or

(ii) the underside of a roof complying with sub-regulation (1); or

(iii) a ceiling as described in sub-regulation (2); and

(*b*) shall—

(i) be so fixed to the floor, roof, or ceiling concerned as to be held by it against overturning in the event of fire; or

(ii) be of concrete or *masonry* carried on a wall of concrete or *masonry* below.

Other parts of Type 2 construction to be constructed in specific ways

(11) In a building of Type 2 construction—

(*a*) every *loadbearing internal wall* and *fire wall* (including those that are part of a *loadbearing* shaft) shall be of concrete or *masonry*;

(*b*) every non-*loadbearing*—

(i) lift *shaft* and stair *shaft required* to be *fire-resisting*; and

(ii) ventilating, pipe, garbage, and similar *shaft* that is not intended for discharge of hot products of combustion—

shall be of concrete or *masonry*; and

(*c*) in a Class II or III building, every *internal wall* bounding a *sole-occupancy unit* or separating adjoining *sole-occupancy units* shall be of concrete or *masonry*.

TYPE 3 CONSTRUCTION

Requirements

16.9 (1) In a building *required* to be of Type 3 construction—

(*a*) every *external wall*, *party wall*, and any beam or column incorporated in it shall be *non-combustible*;

(*b*) every *structural member* mentioned in Table 16.9, and any beam or column incorporated in it, shall (subject to the modifications set out in this Regulation)—

(i) have *fire-resistance rating* not less than that listed in the Table, for the particular class of building concerned; and

(ii) be *constructed* according to sub-regulation (6) or (9) if applicable; and

(*c*) every *structural member* mentioned in sub-regulation (5) shall be *constructed* in the way specified in that sub-regulation.

Concession for Class II buildings not in fire zones

Sub-reg. (2) revoked by S.R. No. 98/1986 reg. 21 (1).

(2) * * * * * *

Concession for certain loadbearing walls

(3) A *loadbearing internal wall* (excluding a *fire wall*) in a *storey* immediately below the roof shall not be required to comply with sub-regulation (1), but in a Class II or III building—

(*a*) shall have a *fire-resistance rating* of not less than one hour if the wall bounds—

(i) a public corridor, public hallway, or the like; or

(ii) a *sole-occupancy unit* ; or

(iii) a *stairway* that is not *required* to be enclosed by a *fire-resisting shaft* ; and

(*b*) shall, if it is a wall referred to in paragraph (*a*), extend—

(i) to the underside of a ceiling having a resistance to the incipient spread of fire to the roof space of not less than one hour, as determined in the *Standard Fire Test*; or

(ii) to the underside of the roof covering if it is *non-combustible*; or

(iii) 450 mm above the adjoining roof covering if it is *combustible*—

and in the case of sub-paragraphs (ii) and (iii) shall not be crossed by any *combustible* material.

Class VII—open-deck parking stations: modifications for certain parts

(4) For an *open-deck parking station* the following *fire-resistance ratings* shall apply, as modification of Table 16.9:

(*a*) For a column situated, in terms of Regulation 16.6, at an *effective distance* of—

(i) less than 6 m from a *fire-source feature* to which it is exposed—1 hour; and

(ii) 6 m or more from such a feature—Nil.

(*b*) For a *loadbearing internal wall* or *fire wall*—2 hours.

TABLE 16.9

TYPE 3 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Table 16.9 substituted by S.R. No. 98/1986 reg. 21 (2), amended by S.R. No. 187/1986 reg. 4

Structural members	*Ratings (in hours)*							
	Class of Building							
	II	III	V	VI	VII	VIIIa	VIIIb	IX
External walls (including beams and columns incorporated in them) and other external structural members where, in terms of Regulation 16.6, the effective distance between the wall or other member and any fire-source feature to which it is exposed is—								
for loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 4·5 m	1½	3	3	3	4	3	4	3
4·5 m to less than 6 m	1½	2	2	3	4	3	4	2
6 m or more	1½	1½	2	3	4	3	4	2
for non-loadbearing parts—								
less than 1·2 m	2	3	3	3	4	3	4	3
1·2 m to less than 3 m	—	—	3	3	4	3	4	3
Party walls	4	4	4	4	4	4	4	4
Loadbearing internal walls and fire walls (including those bounding public corridors, public hallways, and the like, or between or bounding sole-occupancy units, and those of loadbearing shafts)	1½	1½	2	3	4	3	4	2
Lift shafts and stair shafts required to be fire-resisting that are non-loadbearing	1½	1½	2	2	2	2	2	2
Ventilating, pipe, garbage, and like shafts neither intended for discharge of hot products of combustion nor loadbearing	1½	1½	1½	2	2	2	2	1½
Non-loadbearing internal walls (including partition walls)—								
bounding public corridors, public hallways, and the like	1	1	—	—	—	—	—	—
between or bounding sole-occupancy units	1	1	—	—	—	—	—	—
bounding a stairway that is not required to be enclosed by a fire-resisting shaft	1	1	—	—	—	—	—	—

NOTE: Class IV parts—fire-resistance ratings shall be as required by Regulation 17.7.

Certain junctions of floor members and stair shafts to be constructed in a specific way

(5) Where, in a building of Type 3 construction, a stair *shaft* supports any structural part of a floor, the junction of—

(*a*) the stair *shaft*; and

(*b*) the floor—

shall, unless the floor has a *fire-resistance rating* of one hour or more, be so *constructed* that the floor, if sagging or falling as a result of fire, will be free to do so without causing structural damage to the *shaft*.

Extent of certain partition walls

(6) In a Class II or III building of Type 3 construction, a *partition wall required* by Table 16.9 to have a *fire-resistance rating* shall extend—

(*a*) to the underside of the floor, if any, next above; or

(*b*) to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than one hour, as determined in the *Standard Fire Test*; or

(*c*) to the underside of the roof covering if it is *non-combustible*; or

(*d*) 450 mm above the adjoining roof covering if it is *combustible*—

and in the case of paragraphs (*c*) and (*d*) shall not be crossed by any *combustible* material.

Class II or III buildings: Certain ceilings to be constructed in a specific way

(7) In a Class II or III building of Type 3 construction the ceiling of the topmost *storey*, including a building having a rise in *storeys* of one, shall have a resistance to the incipient spread of fire to the space above itself of not less than one hour as determined in the *Standard Fire Test*, except in a *sole-occupancy unit* in that *storey* where all the *internal walls* bounding the *sole-occupancy unit* that are required by this Regulation to have a *fire-resistance rating* extend to the roof covering and the roof covering is *non-combustible*.

Class II, III or IX buildings: Certain parts to be covered with fire-protective material

(8) In a Class II, III or IX building of Type 3 construction, the following, if *combustible* or of metal, shall be covered with a fire-protected material in accordance with Regulation 16.12, unless the *structural member* concerned has a *fire-resistance rating* of not less than ½ hour:

(*a*) The underside of a floor (including the sides and underside of any floor beam) where the floor is above a *storey* or above a space (not being a *storey*) that is used—

(i) for the accommodation of any motor vehicle; or

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*; or

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

(*b*) A column supporting such a floor.

Other parts of Type 3 construction to be constructed in specific ways

(9) In a building of Type 3 construction—

(*a*) every *loadbearing internal wall* and *fire wall* (including those that are part of a *loadbearing shaft*) shall be of concrete or *masonry*;

(*b*) every non-*loadbearing*—

(i) lift *shaft* and stair *shaft required* to be *fire-resisting*; and

(ii) ventilating, pipe, garbage, and similar *shaft* that is not intended for discharge of hot products of combustion—

shall be of concrete, *masonry*, or plaster on metal lath or other material not less hard and dense than plaster on metal lath; and

(*c*) in a Class II or Class III building, *internal walls* bounding a *sole-occupancy unit* or separating adjoining *sole-occupancy units* shall be of concrete or *masonry*.

Class II buildings: concessions for floors and columns

(10) In a Class II building of Type 3 construction a floor separating two *storeys* within a *dwelling* and a column supporting such a floor need not meet the requirements of sub-regulation (8) provided that—

(*a*) the floor system is not connected to or continuous with the floor system of an adjoining *dwelling* or other floor system not within the *dwelling*; and

(*b*) the column does not support any load other than the floor within the subject *dwelling*.

TYPE 4 CONSTRUCTION

Application of Regulation

16.10 (1) In a building of Type 4 construction all parts mentioned in this Regulation shall be *constructed* in accordance with the relevant requirements set out herein.

Certain parts to have fire-resistance ratings

(2) Each part mentioned in Table 16.10, and any beam or column incorporated in it, shall (subject to the modification set out in sub-regulation (3))—

(*a*) be *non-combustible*; and

(*b*) have a *fire-resistance rating* not less than that listed in the Table, for the particular class of building concerned.

Class VII—open-deck parking stations: concession for fire walls

(3) For an *open-deck parking station* a *fire-resistance rating* of 2 hours shall apply, as a modification of Table 16.10, for a *fire wall* (including one that is part of a *shaft*).

Certain external and internal walls

(4) Every *external wall* not mentioned in Table 16.10 and every *loadbearing internal wall* (including those that are part of a *loadbearing shaft*) shall—

(*a*) be of concrete or *masonry* ; or

(*b*) have their main framing (including diagonal bracing) in steel or concrete, and their sheeting, if any, in *non-combustible* material—

except for that part, if any, of an *internal wall* that supports only a roof.

Fire walls

(5) Every *fire wall* in a building of Type 4 construction shall be of concrete or *masonry*.

Internal columns

(6) Every internal column that supports a floor in a building of Type 4 construction shall be of—

(*a*) steel, concrete, or *masonry*; or

(*b*) hardwood having dimensions of not less than 125 mm × 125 mm.

Floors: general requirements

(7) Every floor in a building of Type 4 construction shall (subject to the modification set out in sub-regulation (8))—

(*a*) be *non-combustible*; or

(*b*) have its main framing (including every floor beam and joist) in—

(i) steel or concrete; or

(ii) hardwood having dimensions of not less than 100 mm × 75 mm; or

(iii) timber, other than hardwood, having dimensions of not less than 125 mm × 100 mm.

TABLE 16.10
TYPE 4 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Structural members	*Ratings (in hours)*					
	Class of Building					
	V	VI	VII	VIIIa	VIIIb	IX
External walls (including beams and columns incorporated in them) and other external structural members where, in terms of Regulation 16.6, the effective distance between the wall or other member and any fire-source feature to which it is exposed is—						
less than 1·2m	2	2	2	2	2	2
1·2 to less than 3 m	1	1	1	1	1	1
Party walls	3	3	3	3	3	3
Fire walls	2	3	4	3	4	2

NOTE: Class IV parts—fire-resistance ratings shall be as required by Regulation 17.7 or 18.7.

Concession for certain floors

(8) In a building of Type 4 construction the following floors need not comply with sub-regulation (7):

(*a*) A floor laid directly on the ground.

(*b*) A floor, not laid directly on the ground, the space below which is not a *storey* and is not used—

(i) for the accommodation of any motor vehicle; or

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*; or

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

Class II or III buildings: use of Type 4 construction

(9) A Class II or III building of Type 4 construction shall, in addition to meeting the relevant requirements of this Regulation, comply with the provisions of Regulation 16.11 applicable to a building of the class concerned, regarding, as the case requires—

(*a*) the *fire-resistance rating* and construction of every *internal wall* (including any *partition wall*)—

(i) bounding a public corridor, public hallway and the like; or

(ii) between or bounding *sole-occupancy units*; or

(iii) bounding a *stairway*;

(*b*) the level to which a wall referred to in paragraph (*a*) shall extend;

(*c*) the protection to be afforded to the underside of a floor and its supporting columns, if any; and

(*d*) the construction of the ceiling of the topmost *storey*.

Certain parts to be covered with fire-protective material

(10) In a Class IX building of Type 4 construction the following, if *combustible* or of metal, shall be covered with fire-protective material in accordance with Regulation 16.12, unless the *structural member* concerned has a *fire-resistance rating* of not less than ½ hour:

(*a*) The underside of a floor (including the sides and underside of any floor beam where the floor is above a *storey*, or above a space (not being *storey*) that is used—

(i) for the accommodation of any motor vehicle; or

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*; or

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

(*b*) A column supporting such a floor.

TYPE 5 CONSTRUCTION

Application of Regulation

16.11 (1) In a building *required* to be of Type 5 construction all parts mentioned in this Regulation shall be *constructed* in accordance with the relevant requirements set out herein.

Certain parts to have fire-resistance ratings

(2) Each part mentioned in Table 16.11, and any beam or column incorporated in it, shall (subject to the modifications set out in this Regulation) have a *fire-resistance rating* not less than that listed in Table 16.11, for the particular class of building concerned.

Certain external walls to be non-combustible

(3) An *external wall* (including any beam or column in it) that is required by Table 16.11 to have a *fire-resistance rating* shall, subject to sub-regulation (4), be *non-combustible.*

TABLE 16.11

TYPE 5 CONSTRUCTION: FIRE-RESISTANCE RATINGS OF STRUCTURAL MEMBERS

Structural members	*Ratings (in hours)* *Class of Building*							
	II	III	V	VI	VII	VIIIa	VIIIb	IX
External walls (including beams and columns incorporated in them) and other external structural members where, in terms of Regulation 16.6, the effective distance between the wall or other member and any fire-source feature to which it is exposed is—								
less than 1·2 m	2	2	2	2	2	2	2	2
1·2 m to less than 3 m	—	—	1	1	1	1	1	1
Party walls	3	3	3	3	3	3	3	3
Fire walls	1½	1½	1½	3	3	3	4	1½
Internal Walls (including partition walls)—								
bounding public corridors, public hallways, and the like	1	1	—	—	—	—	—	—
between or bounding sole-occupancy units	1	1	—	—	—	—	—	—
bounding a stairway	1	1	—	—	—	—	—	—

NOTE: Class IV parts—fire-resistance ratings shall be as required by Regulation 17.7.

External walls: outer part may meet certain requirements for the wall

(4) Where an *external wall* is required by sub-regulations (2) and (3) to have a *fire-resistance rating* and be *non-combustible,* those requirements shall be deemed to have been met if the outer part of the wall has the *required fire-resistance rating* and is *non-combustible.*

Class VII or VIIIb buildings: construction of certain other external walls

(5) In a Class VII building of Type 5 construction used for the storage or display of goods referred to in Schedule 6, or in a Class VIIIb building of Type 5 construction, an *external wall*—

(*a*) that faces and is within 7·5 m of a boundary of an adjoining *allotment*; and

(*b*) that is not required by Table 16.11 to have a *fire-resistance rating*—

shall be *non-combustible* or be sheeted externally with *non-combustible* material.

Class II or III buildings: construction for certain internal walls

(6) In a Class II or III building of Type 5 construction, every *internal wall* (including any *partition wall*) bounding a *sole-occupancy unit* or separating adjoining *sole-occupancy units*—

(*a*) need not have a *fire-resistance rating* if—

(i) there is no doorway or other opening therein;

(ii) each *sole-occupancy unit* concerned has direct egress to the ground or to an external balcony providing egress in 2 different directions from the building;

(iii) the sheeting of those walls, if not backed by concrete or *masonry*, is *non-combustible*;

(iv) the building contains not more than 2 *sole occupancy units*; and

(v) the building has a rise in *storeys* of one; or

(*b*) if *required* to have a *fire-resistance rating*, shall be of concrete or *masonry* having the *required fire-resistance rating*.

Fire walls

(7) In a building containing 2 *storeys* and of Type 5 construction, any *fire wall* shall be of concrete or *masonry*.

Extent of certain partition walls

(8) In a Class II or III building a *partition wall required* by Table 16.11 to have a *fire-resistance rating* shall extend—

(*a*) to the underside of the floor, if any, next above; or

(*b*) to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than one hour, as determined in the *Standard Fire Test*; or

(*c*) to the underside of the roof covering if it is *non-combustible*; or

(*d*) 450 mm above the adjoining roof covering if it is *combustible*—

and in the case of paragraphs (*c*) and (*d*) shall not be crossed by timber purlins or other *combustible* material.

Class II or III buildings: certain ceilings to be constructed in a specific way

(9) In a Class II or III building of Type 5 construction the ceiling of the topmost *storey* shall have a resistance to the incipient spread of fire to the space above itself of not less than one hour as determined in the *Standard Fire Test*, except—

(*a*) where Regulation 16.11 (6) exempts all the *internal walls* bounding the *sole-occupancy unit* from the requirements of Table 16.11 the ceiling shall be covered with a fire-protective material in accordance with Regulation 16.12; or

(*b*) in a *sole-occupancy unit* in that *storey* where all the *internal walls* bounding the *sole-occupancy unit* that are required by this Regulation to have a *fire-resistance rating* extend to the roof covering and the roof covering is *non-combustible*.

Class II, III or IX buildings: certain parts to be covered with fire-protective material

(10) In a Class II, III or IX building of Type 5 construction, the following, if *combustible* or of metal, shall be covered with a fire-protective material in accordance with Regulation 16.12, unless the *structural member* concerned has a *fire-resistance rating* of not less than ½ hour:

(*a*) The underside of a floor (including the sides and underside of any floor beam) where the floor is above a *storey*, or above a space (not being a *storey*) that is used—

(i) for the accommodation of any motor vehicle; or

(ii) for the accommodation of any bathroom, shower room, *laundry*, or *sanitary compartment*; or

(iii) as a work area; or

(iv) for storage or any other ancillary purpose.

(*b*) A column supporting such a floor.

Class II buildings: concessions for floors and columns

(11) In a Class II building of Type 5 construction a floor separating 2 *storeys* within a single *dwelling* and a column supporting such a floor need not meet the requirements of sub-regulation (10) provided that—

(*a*) the floor system is not connected to or continuous with the floor system of an adjoining *dwelling* or other floor system not within the *dwelling*; and

(*b*) the column does not support any load other than the floor within the subject *dwelling*.

Class II buildings: allowable encroachments

(12) In a Class II building of Type 5 construction where the *effective distance* between any *external wall* and any *fire-source feature* (as referred to in Regulation 16.6 (1) (*b*) and (*c*)) to which it is exposed is not less than 1·2 m, encroachments within 1·2 m of such *fire-source feature* shall be disregarded if they would be disregarded under Regulation 16.28 (1). Sub-reg. (12) inserted by S.R. No. 98/1986 reg. 22 (2) amended by S.R. No. 187/1986 reg. 5.

Concession for single-storey attached garages

(13) Subject to Regulation 16.4, in a Class II building of Type 5 construction the *external wall* of any single-*storey private garage* forming part of that building shall be deemed to comply with the *required fire-resistance rating* if it is *constructed* of concrete or *masonry* having a thickness of not less than 90 mm. Sub-reg. (13) inserted by S.R. No. 98/1986 reg. 22 (2).

Class IXa buildings: construction of external walls

(14) In any Class IXa building of Type 5 construction, every *external wall* shall be *non-combustible* or be sheeted externally with *non-combustible* material. Sub-reg. (14) inserted by S.R. No. 98/1986 reg. 22 (2).

FIRE-PROTECTIVE COVERING OF CERTAIN MEMBERS IN CLASS II, III AND IX BUILDINGS

16.12 The fire-protective covering or ceiling required by Regulations 16.9 (8), 16.11 (9) and 16.11 (10) for certain parts of a Class II, III or IX building of Type 3 or 5 construction shall be a lining or ceiling of fire-protective grade of—

(*a*) 13 mm plasterboard; or

(*b*) 12 mm asbestos-silica board; or

(*c*) 12 mm mesh-reinforced fibrous plaster in which the mesh is 13 mm by 13 mm by 0·71 mm welded wire located not more than 6 mm from the exposed face; or

(*d*) any other material not less fire-protective than 13 mm plasterboard. S.R. 75/84

CONSTRUCTION OF STAIRS AND LANDINGS

Stairways required to be within fire-resisting shafts

16.13 (1) In *stairways* that are *required* to be within *fire-resisting shafts*—

(*a*) the treads and landings except as provided in paragraph (*c*) shall be *constructed* of—

(i) reinforced or prestressed concrete in no part less than 75 mm thick, measured exclusive of topping;

(ii) precast reinforced concrete, not prestressed, in no part less than 63 mm thick; or

(iii) steel not less than 6 mm thick, and any finish, surface, lining or the like shall comply with the provisions of Regulation 16.19;

Para. (b) amended by S.R. No. 438/1984 reg. 19.

(*b*) *structural members,* if any, supporting stairs or landings shall be *non-combustible* and have a *fire-resistance rating* of not less than ½ hour, except that in the case of stair shafts fitted with an *approved* air-pressurizing system in accordance with Regulation 55.8, steel supporting members need not have a *fire-resistance rating* if—

(i) the members have a ratio of surface area to mass not greater than $25 \times 10^3 mm^2/kg$;

(ii) the members are supported so that thermal expansion under fire exposure does not impose lateral forces on the walls of the *shaft* ; and

(iii) the *stairway* is designed so that any local structural failure of the *stairway* within any one *storey* will not result in collapse of the *stairway* within any other *storey*; and

(*c*) notwithstanding paragraph (*a*) in a building having a rise in *storeys* of not more than 4, the treads and landings may be *constructed* of timber that has—

(i) a finished thickness of not less than 44 mm;

(ii) an average density at a moisture content of 12 per cent of not less than $800 kg/m^3$; and

(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.

Class II buildings: Stairways not required to be within fire-resisting shafts

(2) In a Class II building having a rise in *storeys* of more than 2, the treads and landings and any supporting *structural member* of a *required stairway* that is not *required* to be within a *fire-resisting shaft* shall—

(*a*) be *constructed* according to sub-regulation (1); or

(*b*) be *constructed* of—

(i) reinforced or prestressed concrete; or

(ii) steel in no part less than 6 mm thick; or

(iii) timber that has—

(A) a finished thickness of not less than 44 mm;

(B) an average density at a moisture content of 12 per cent of not less than 800 kg/m³; and

(C) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.

CONSTRUCTION OF RAMPS

16.14 Ramps and their landings, where *required* to be within *fire-resisting shafts*, shall—

(*a*) be *non-combustible* ; and

(*b*) have a *fire-resistance rating* of not less than one hour.

EXTERNAL WALLS ADJACENT TO A FIRE WALL INCORPORATING A HORIZONTAL EXIT

16.14.1 Subject to this Part, where any *external wall* bounds 2 floor areas which are separated from each other by a *fire wall* incorporating a *horizontal exit*, such *external wall* shall provide protection by means of a *fire-resistance rating* of not less than one hour between one floor area and the other for a distance of not less than 6 m measured in a straight line.

Reg. 16.14.1 inserted by S.R. No. 98/1986 reg. 23.

FIRE-RESISTANCE RATINGS OF FIRE WALLS AND FLOORS COMMON TO TWO PARTS OF A BUILDING

When the parts are of different classes

16.15 (1) Where a building has parts of different classes—

(*a*) the *fire-resistance rating* of a *fire wall required* between the parts (including any Class IV part), shall be as follows:

(i) Where the parts are served in any *storey* by the same public corridor, public hallway, or the like—1½ hours in that *storey*.

(ii) In every other case—the *fire-resistance rating* prescribed in this Part for both parts (if those ratings are the same) or for that part for which the greater rating is prescribed (if those ratings are different); and

(*b*) a *fire-resistance rating* that applies according to Table 16.7 or 16.8 for a floor in the lower part (if one part is below the other) shall apply also for the floor between the parts.

Para. (b) amended by S.R. No. 438/1984 reg. 20.

When bounding a plant room

(2) A *fire wall required* to bound a room used for the housing of equipment such as lifts, heating, ventilating, or air-conditioning plant

or transformers, generators, or other electrical equipment, or other special equipment for the servicing of the building, shall have a *fire-resistance rating* not less than the greater of—

(*a*) 2 hours; or

(*b*) the rating for a *fire wall* prescribed in this Part for the particular class of the building in which the room is situated.

MEZZANINE FLOORS

Application of Part

16.16 (1) The provisions of this Part relating to the construction of floors and any supporting column shall, except as otherwise provided in this Regulation, apply to the floor of a *mezzanine* and its supporting column.

Concession for mezzanines of restricted area

(2) Every *mezzanine* floor and any column supporting only that floor need not have a *fire-resistance rating* or be *non-combustible* if the following conditions are met:

(*a*) The area of the *mezzanine* floor shall not exceed 200 m^2 or one-third of the area of the room concerned, whichever is the lesser.

(*b*) If a room includes two or more *mezzanines* and the floors of those *mezzanines* are at or near the same level, the aggregate area of such floors shall not exceed 200 m^2 or one-third of the area of the room concerned, whichever is the lesser.

(*c*) Every wall or column that supports any part of the building except the *mezzanine* floor or floors shall—

(i) if it is at any part within 6 m of the *mezzanine* floor or floors; and

(ii) if it is required elsewhere in this Part to have a *fire-resistance rating*—

have a *fire-resistance rating* increased from that otherwise *required*, such increased rating to be as set out in Column 2 of Table 16.16 (2) (*c*).

TABLE 16.16 (2) (*c*)

INCREASED FIRE-RESISTANCE RATINGS—CONSTRUCTION SURROUNDING MEZZANINES

Ratings otherwise required (*h*) (1)	*Increased rating* (*h*) (2)
½	1
1	1½
1½	2
2	3
3	4
4	4

Class IXb buildings

(3) Sub-regulation (2) shall not apply to a *mezzanine* floor in a Class IXb building which has a spectator viewing area deemed to accommodate more than 100 persons pursuant to Regulation 24.28. Sub-reg. (3) inserted by S.R. No. 98/1986 reg. 24.

CERTAIN PARTS WITHIN DUCTS OR WELLS TO BE SPECIALLY CONSTRUCTED FOR FIRE RESISTANCE

16.17 A beam, column, or other framing member—

(*a*) that passes through a duct or a well within a *shaft* ; and

(*b*) that is *required* to have a *fire-resistance rating*—

shall be of concrete, or be encased in concrete, and have a *fire-resistance rating* of not less than 2 hours.

CLASS II OR III BUILDINGS: CERTAIN CEILINGS AND CEILING SUPPORTS TO BE NON-COMBUSTIBLE

16.18 In a Class II or III building, a ceiling—

(*a*) above a public corridor, public hallway, or the like or above a *stairway* or ramp that is *required* to be bounded by *fire-resisting* walls; and

(*b*) not forming an integral part of the floor, or roof next above, and not being a ceiling with a resistance to the incipient spread of fire to the space above itself of not less than one hour—

shall be *non-combustible*, and, if in a building of Type 1 or 2 construction, shall have only *non-combustible* supports.

MATERIALS GENERALLY

Application

16.19 (1) This Regulation shall apply to every Class II, III, IV, V, VI, VII, VIII or IX building other than a Class II building where— Reg. 16.19 amended by S.R. Nos. 438/1984 reg. 21 (1) (2), 98/1986 reg. 25 (1) (2) (4) (5), 187/1986 reg. 6 (a) (b).

(*a*) no part of any *dwelling* is vertically above any part of another *dwelling*; and

(*b*) every wall between *dwellings* has a *fire-resistance rating* of not less than 3 hours and is carried up to the underside of a *non-combustible* roof covering.

Limitations on use

(1A) Any material used in a building shall have—

(*a*) in the case of a *sarking-type material*, a *Flammability Index* not greater than 5; or

(*b*) otherwise—

(i) a *Smoke-developed Index* not greater than 8 if the *Spread-of-flame Index* is greater than 5; and

(ii) in any case a *Spread-of-flame Index* not greater than 9—

except as provided in sub-regulations (2) and (3).

Special fire tests

(2) A material not complying with sub-regulation (1) may be used in a member or assembly of members if so *constructed* that—

(*a*) when assembled as proposed in a building the material is protected on all sides and edges from exposure to the air;

(*b*) the member or assembly of members, when subjected to the Early Fire Hazard Test in accordance with Schedule 8, shall have a *Smoke-developed Index* and a *Spread-of-flame Index* not exceeding those prescribed in sub-regulation (1); and

Para. (c) amended by S.R. No. 438/1984 reg. 21 (1).

(*c*) the members or assembly of members when subjected to the conditions of the *Standard Fire Test* in accordance with Schedule 8 shall retain the protection in position so that it continues to screen the materials from access to free air for a period of not less than 10 minutes.

Certain construction deemed to comply

(3) A material that, when in place, is completely covered on all faces by concrete or *masonry* not less than 50 mm thick shall be deemed to comply with sub-regulation (1).

Fire-isolated stairways, passageways and ramps

Sub-reg. (4) amended by S.R. No. 98/1986 reg. 25 (2).

(4) In a *fire-isolated stairway*, *fire-isolated passageway* or *fire-isolated ramp* or cinematograph projection room in a building described in sub-regulation (1)—

(*a*) any material, other than a *sarking-type material*, used in a ceiling or as an attachment to or part of an attachment to the *structural member* or as the finish, surface, lining or the like of a *structural member* shall—

(i) have a *Spread-of-flame Index* not greater than 0;

(ii) have a *Smoke-developed Index* not greater than 2; and

(iii) if *combustible* not exceed 1 mm in finished thickness and be attached directly to a *non-combustible* substrate;

(*b*) any *sarking-type material* used in the form of an exposed wall or ceiling, or as a finish or attachment thereto shall have a *Flammability Index* not greater than 0; and

(*c*) sub-regulations (2) and (3) shall not apply to any material used in or as a component of a *structural member.*

Class II or III buildings: public corridors and public hallways

(5) In a Class II building to which this Regulation applies or Class III building, in an internal *public corridor*, internal hallway or the like serving as a means of egress to a *stairway required* to be fire-isolated, or an external *stairway* used in lieu thereof, to a passageway *required* to be fire-isolated or to a ramp *required* to be fire-isolated or in a Class IXa building— Sub-reg. (5) amended by S.R. No. 187/1986 reg. 6 (b).

(*a*) any material, other than a *sarking-type material*, used as the finish, surface, lining or the like or any attachment to or part of an attachment to any wall or ceiling shall— Para. (a) amended by S.R. No. 98/1986 reg. 25 (3) (b).

(i) have a *Spread-of-flame Index* not greater than 0; and

(ii) have a *Smoke-developed Index* not greater than 5;

or if only one surface of that material complies with sub-paragraphs (i) and (ii), have its non-complying surface in continuous and intimate contact with a *non-combustible* substrate; and

(*b*) * * * * * * Para. (b) revoked by S.R. No. 98/1986 reg. 25 (3) (c).

(*c*) sub-regulations (2) and (3) shall not apply to any material used—

(i) in or as a component of a *structural member*; or

(ii) as the finish, surface, lining or the like; or

(iii) as an attachment to or part of an attachment to any wall or ceiling.

(6) * * * * * * Sub-reg. (6) revoked by S.R. No. 98/1986 reg. 25 (4).

(7) * * * * * * Sub-reg. (7) revoked by S.R. No. 98/1986 reg. 25 (4).

Certain finishes deemed to have required indexes

(8) A material being—

(*a*) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or

(*b*) a material referred to in Regulation 16.12—

shall be deemed to comply with sub-regulations (1), (4) and (5).

Fire-retardent paint not acceptable

(9) Paint or the like, formulated specifically to reduce flame spread on *combustible* surfaces shall not be used for the purposes of achieving compliance with a *Spread-of-flame Index* or a *Flammability Index* required by this Regulation.

Exemption of certain building parts and materials

(10) A *Spread-of-flame Index, Smoke-developed Index* and *Flammability Index* required by this Regulation shall not apply to—

(*a*) any timber-framed *window*; or

(*b*) any handrail or skirting having a *Spread-of-flame Index* not exceeding 4; or

(*c*) any timber-faced fire door; or

(*d*) any electrical switch, outlet, cover plate or the like manufactured from materials complying with sub-regulation (1); or

(*e*) any material used for—

(i) roof covering in continuous contact with a substrate; or

(ii) adhesive; or

(iii) damp-proof course, flashing, caulking, sealing, ground moisture barrier or the like; or

Para. (f) amended by S.R. No. 98/1986 reg. 25 (5) (a).

(*f*) any conventional paint, varnish, paint formulated specifically to reduce flame spread, lacquer or similar finish excluding—

(i) nitro-cellulose lacquer; or

(ii) coating commonly known as "high-build" paint; or

Para. (g) inserted by S.R. No. 438/1984 reg. 21 (2), amended by S.R. No. 98/1986 reg. 25 (5) (b)–(d).

(*g*) a clear or translucent rooflight of glassfibre reinforced polyester if—

(i) the roof in which it is installed forms part of a single-storey building *required* to be of Type 5 construction;

(ii) the material is used as part of the roof covering;

(iii) * * * * * *

(iv) when installed it is not within 1·2 m of a roof gutter;

(v) it is not closer than 1·5 m from another such rooflight;

(vi) each rooflight is not more than 14 m^2 in area; and

(vii) the area of rooflights per 70 m^2 of roof surface is not more than 14 m^2; or

(*h*) any other material the use of which does not increase significantly the hazards of fire.

Combustible attachments to non-combustible or fire-resistant member

(11) Unless otherwise expressed in these Regulations, a *combustible* material may be used as a finish, surface, lining or the like, or as an attachment or part of an attachment to, a *structural member required* to have a *fire-resistance rating* or to be *non-combustible* if the *combustible* material or its use, as the case may require, complies with this Regulation.

CONSTRUCTION OF CERTAIN EXTERNAL WALLS AND STEELWORK

Calculation of number of storeys contained

16.20 (1) For the purposes of this Regulation, Regulation 19.1 shall apply in determining the number of *storeys* a building contains.

Constructional concession: one storey

(2) Where, in a building that contains one *storey* only, a steel column is incorporated in an *external wall* that is *required* to have a *fire-resistance rating*, the column need not have a *fire-resistance rating*.

Constructional requirements: more than one storey

(3) Where, in a building that contains more than one *storey*, a steel column that supports a roof truss or beam at an *external wall* has either no *fire-resistance rating* or a rating that is less than that *required* for the wall—

(*a*) the truss or beam and the column shall be so *constructed* that in the event of fire they will not tend to overturn the wall; and

(*b*) the wall shall be so *constructed* that it does not at any time depend upon the column for support.

ANCILLARY CONSTRUCTION AT EXTERNAL WALLS

16.21 In a building *required* to be of Type 1 or 2 construction, any material attached to the outside face of an *external wall* shall be *non-combustible*.

Reg. 16.21 substituted by S.R. No. 98/1986 reg. 26.

ROOFING FELT ON A ROOF REQUIRED TO HAVE A FIRE RATING

16.22 A roof required by Regulation 16.7 to have a *fire-resistance rating* and to be *non-combustible* may be covered with built-up roofing consisting of successive layers of bitumen-impregnated, tar-impregnated, or similar roofing felt.

ROOF SUPERIMPOSED ON CONCRETE SLAB IN TYPES 1 AND 2 CONSTRUCTION

16.23 In a building of Type 1 or 2 construction, a roof, not complying with this Part as to *fire-resisting construction,* may be superimposed on a concrete-slab roof if—

(*a*) the superimposed roof and any construction between it and the concrete-slab roof are *non-combustible* throughout; and

(*b*) the concrete-slab roof complies with this Part as to *fire-resisting construction.*

CONCESSION FOR CERTAIN STRUCTURES SITUATED ON ROOFS

16.24 A *non-combustible* structure situated on a roof and containing one or more of the following need not comply with the other provisions of this Part:

(*a*) Any water tank.

(*b*) Ventilating ductwork.

(*c*) Any ventilating fan and its motor.

(*d*) Any air-conditioning chiller.

(*e*) Window-cleaning equipment.

(*f*) Lift equipment.

(*g*) Any other service unit that is *non-combustible* and does not contain *combustible* fluids.

LINTELS

Where a fire-resistance rating is required

16.25 (1) Every lintel shall have the *fire-resistance rating*, if any, *required* for the part of the building in which it is situated, except as in sub-regulation (2).

Where a fire-resistance rating is not required for the lintel

(2) Any steel angle, plate or bar comprising a lintel that spans an opening—

(*a*) in any wall of a building containing only one *storey*; or

(*b*) in any non-*loadbearing* wall of a Class I, II or X building; or

(*c*) not exceeding 3 m in width, and bridged by non-*loadbearing masonry*; or

(*d*) not exceeding 1·8 m in width, and bridged by *loadbearing masonry*, being part of a solid wall or part of one of the

leaves of a cavity wall, the *masonry* in each case being not more than 150 mm in thickness—

shall not be subject to sub-regulation (1) unless the lintel helps to support any fire door or any fire shutter.

APPURTENANT CONSTRUCTION NOT TO IMPAIR FIRE-RESISTANCE PERFORMANCE

16.26 The design of every method of attachment or installation—

(*a*) of a facing or finish to a part of a building *required* to have a *fire-resistance rating*; or

(*b*) of ducting or any other service to such part—

shall provide for the attachment or installation to proceed without impairing the *required* fire-resistance performance of that part.

BUILDING ABOVE CERTAIN PUBLIC FACILITIES

Facilities concerned

16.27 (1) This Regulation applies to a building *constructed* above a *street*, railway, bus terminal or similar public facility.

Fire ratings required

(2) The *fire-resistance rating* of each *structural member* in, immediately above, or immediately alongside the public facility concerned shall be not less than that determined by the *council*, having regard to—

(*a*) the particular circumstances; and

(*b*) the other provisions of this Part.

Column or floor construction

(3) The *council* may require that any column or floor subject to sub-regulation (2) shall be of reinforced or prestressed concrete, or structural steel encased in concrete.

FIRE PROTECTION REQUIREMENTS FOR CLASS I AND X BUILDINGS

Allowable encroachments

16.28 (1) Where under this Regulation a distance from an *allotment* boundary or between buildings is specified, that distance shall be the shortest distance and measured from the outermost point of the building or buildings concerned, except that the following encroachments into that distance shall be disregarded:

(*a*) 600 mm in the case of eaves, including eaves fascia and eaves gutter.

Para. (b) substituted by S.R. No. 438/1984 reg. 22 (1).

(*b*) 400 mm in the case of any *masonry* chimney back.

(*c*) Any pergola, balustrade, fence, mast, pole, aerial or antenna.

(*d*) Any unroofed terrace, landing, step or ramp not exceeding 1 m in height at any part above ground level.

(*e*) Any rainwater head, gas meter, water meter, electrical meter, light fitting, or retractable sun blind.

Para. (f) inserted by S.R. No. 438/1984 reg. 22 (2).

(*f*) 650 mm in the case of any flue, pipe, fuel tank, cooling or heating appliance or other services.

Class I or Xa buildings

Sub-reg. (2) amended by S.R. No. 438/1984 reg. 22 (3).

(2) Except as set out in sub-regulations (6) and (7), every *external wall* of a Class I or Xa building within 1·2 m of and facing the *allotment* boundary other than a *street alignment* shall—

(*a*) have a *fire-resistance rating* of not less than 2 hours; and

(*b*) be of concrete or *masonry*.

Distance between buildings

Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 22 (4).

(3) A Class I building shall be located not less than 2·4 m from any building on the same *allotment* except for any Class X building appurtenant to that Class I building.

Party walls

(4) Every *party wall* associated with a Class I building shall have a *fire-resistance rating* of not less than 3 hours.

Extent of certain fire-rated walls

Sub-reg. (5) amended by S.R. No. 438/1984 reg. 22 (5), substituted by S.R. No. 98/1986 reg. 27 (1).

(5) Except for the wall of a garage forming part of a Class I or Xa building, every wall of a Class I or Xa building referred to in sub-regulations (2) and (4) shall extend—

(*a*) 400 mm above the roof covering if any part of the roof covering is *combustible* and within 1·2 m of the *allotment* boundary; or

(*b*) in any other case to the underside of the roof covering, if it is *non-combustible*—

and shall not be crossed by timber purlins or other *combustible* material.

Class Xb buildings and garages

Sub-reg. (6) substituted by S.R. Nos. 75/1984 reg. 11, 438/1984 reg. 22 (6).

(6) Except as set out in sub-regulation (7), where there is within 1·2 m of an *allotment* boundary other than a *street alignment* an *external wall*—

(*a*) of a Class Xb building; or

(*b*) of a garage forming part of a Class I or Xa building—

and that wall faces that boundary it shall be of concrete or *masonry* having a thickness of not less than 90 mm.

Exceptions

(7) Sub-regulations (2), (4), (5) and (6) shall not apply to—

(*a*) an *open garage* ; or

(*b*) an *external wall* which has been reclad in accordance with Regulation 11.6 (4).

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 17—TYPE OF CONSTRUCTION REQUIRED

Part 17 heading substituted by S.R. No. 98/1986 reg. 28.

RISE IN STOREYS

Interpretative provision

17.1 (1) For the purpose of these Regulations, the *rise* in *storeys* of a building shall be calculated in accordance with the rules set out in this Regulation.

Determination

(2) The greatest number of *storeys* at any part of the *external walls* of a building, counted above the finished ground level at that part, shall be deemed to be the *rise* in *storeys* of the building.

Calculation where wall abuts a boundary of an adjoining allotment

(3) Where any part of an *external wall* abuts the boundary of an adjoining *allotment*, the natural ground level at the relevant part of the boundary shall be regarded as the finished ground level in reckoning the number of *storeys* at the part of the wall concerned.

Certain levels to be determined by the building surveyor

(4) In applying sub-regulation (3), if there is any doubt as to the natural ground level (because of prior excavation or other cause) this level shall be assessed by the *building surveyor*.

Certain storeys excluded from the reckoning

(5) In counting the number of *storeys* above the finished ground level at any part of an *external wall*, a *storey* shall be excluded from the reckoning if—

(*a*) it is situated at the top of the building and contains only heating, ventilating, lift, or other equipment, water tanks, or similar service units; or

(*b*) it is situated partly below the finished ground level against that part of the wall and extends not more than 1 m above the average level of that finished ground level, the measurements being taken to—

(i) the underside of the ceiling; or

(ii) where there is no ceiling, the underside of the construction at the top of the *storey*—

except that, if the length of that part of the wall exceeds 12 m, the average level of the finished ground level against it, used in the measurement, shall be the average for that 12 m section of its length where the finished ground level is lowest.

Certain mezzanines to be regarded as storeys

(6) In calculating the *rise* in *storeys* of a building which incorporates one or more *mezzanines*—

(*a*) any *mezzanine* having a *floor area* of more than 200 m^2; or

(*b*) two or more *mezzanines* at or near the same level in a room and having an aggregate *floor area* of more than 200 m^2—

shall be regarded as a *storey* in that part of the building in which they are situated.

Certain high storeys to be regarded as two storeys

(7) Any *storey* that has an internal height of more than 5·2 m shall be regarded as—

(*a*) one *storey*, if it is the only *storey* above the finished ground level; or

(*b*) 2 *storeys*, in any other case.

Determination of rise of a fire-separated part

(8) The *rise* in *storeys* of a part of a building that is fire-separated according to Regulation 23.1 from the remainder of the building shall be determined as though the part were itself a building.

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED

Classes concerned

Sub-reg. (1) amended by S.R. No. 75/1984 reg. 12, substituted by S.R. No. 98/1986 reg. 29 (1).

17.2 (1) The type of *fire-resisting construction required* in a Class II, III, V, VI, VII, VIII or IX building except as conceded in—

(*a*) Regulations 17.4, 17.5 and 17.6 for certain Class II buildings;

(*b*) Regulation 17.8 for *open-deck parking stations*; and

(*c*) Regulation 17.9 for *open spectator stands* and indoor sports stadiums—

shall be not less than that stated in the relevant Column of Table 17.2.

Fire-separated parts

(2) A part of a building that is fire-separated according to Regulation 23.1 from the remainder of the building shall be subject to sub-regulation (1) as though the part were itself a building.

Buildings having more than one classification

(3) In a building of mixed classifications, the type of *fire-resisting construction required* shall be that type of construction that is the most *fire-resistant* of the types arising from the application of sub-regulation (1) at each *storey*, based on the assumptions that— Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 23 (1).

(*a*) a classification applying to the particular *storey* applies also to the *storeys* vertically below it; and

(*b*) the particular *storey* and those vertically below it comprise an entire building.

TABLE 17.2

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED

Table 17.2 substituted by S.R. Nos. 438/1984 reg. 23 (2), 98/1986 reg. 29 (2).

Rise in storeys	*II*	*III*	*V*	*VI*	*VII*	*VIII*	*IX*
4 or more	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1	Type 1
3	Type 1	Type 1	Type 2	Type 2	Type 2	Type 2	Type 1
2	Type 2	Type 2	Type 5	Type 5	Type 5	Type 5	Type 2
1	Type 5	Type 5	Type 5	Type 5	Type 5	Type 5	Type 5

NOTE: Class IV parts—fire-resisting construction shall be as required by Regulation 17.7.

LIGHTWEIGHT CONSTRUCTION

Definition

17.3 (1) For the purpose of this Regulation, **"lightweight construction"** means—

(*a*) that variety of *fire-resisting construction* in which the construction affording fire protection—

(i) is not in continuous contact with the principal construction that it fire-protects; or

(ii) is of sheet or board material, plaster, render, sprayed application, or other material similarly susceptible to damage by pressure or abrasion; and

(*b*) that variety of *fire-resisting construction* which incorporates or comprises—

(i) concrete containing pumice, perlite, vermiculite, or other soft material; or

(ii) *masonry* having a thickness of less than 70 mm.

Restrictions on the use of lightweight construction

(2) Subject to sub-regulation (3), in a building having a *rise* in *storeys* exceeding 4, a beam or column, or a wall *required* to have a *fire-resistance rating*, not being a *partition wall*, shall not incorporate or be of *lightweight construction* if it is in—

Para. (a) amended by S.R. No. 98/1986 reg. 30.

(*a*) any Class VI, VII, VIII or IXa part of the building; or

Para. (b) amended by S.R. No. 98/1986 reg. 30.

(*b*) any part, regardless of its classification, that is below the level of a Class VI, VII, VIII or IXa part of the building.

Where the restrictions do not apply

(3) Sub-regulation (2) shall not apply where any Class VI part concerned is used as—

(*a*) a cafe or restaurant; or

(*b*) a tea room, coffee room, or milk or soft-drink bar; or

(*c*) a hairdresser's or barber's shop; or

(*d*) a shop of any other kind, the normal functioning and servicing of which would not, in the opinion of the *building surveyor*, represent undue risk of damage to the *lightweight construction* of any beam, column, or wall.

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED IN CERTAIN CLASS II BUILDINGS

Description and location of buildings

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 31 (1) (2).

17.4 (1) A building that is entirely of Class II shall be subject to sub-regulation (2), instead of Regulation 17.2, if it is so designed that—

(*a*) no part of any *dwelling* is vertically above any part of another *dwelling*; and

(*b*) the floor between each *dwelling* and any *public garage* below is constructed of reinforced or prestressed concrete.

Type of construction required

(2) The type of *fire-resisting construction required* in a building referred to in sub-regulation (1) shall be as follows, according to the greatest number of *storeys* contained in any *dwelling*:

(*a*) For three *storeys* contained— Type 2.

(*b*) For one or two *storeys* contained— Type 5.

Heading and Reg. 17.5 inserted by S.R. No. 98/1986 reg. 32.

TYPE OF FIRE RESISTING CONSTRUCTION REQUIRED IN CERTAIN CLASS II AND III BUILDINGS

17.5 A building having a rise of 2 *storeys* of Class II or Class III may be of Type 5 construction if it complies with Regulation 24.31 (2).

EXISTING BUILDING CONVERTED FROM CLASS I TO CLASS II

Type of construction required

17.6 (1) Where a Class I building is to be converted to a Class II building, the converted building shall be of that type of *fire-resisting construction* stated in the relevant Column of Table 17.2, subject to the concession of Regulation 17.4, if applicable, and the concession for *external walls* set out in sub-regulation (2) of this Regulation.

Sub-reg. (1) amended by S.R. No. 75/1984 reg. 13.

Concession for external walls in certain buildings

(2) The *external walls* of a building described in sub-regulation (1) shall not be *required* to have a *fire-resistance rating* or be *non-combustible* if the building contains not more than 2 *storeys*.

Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 33.

REQUIREMENTS FOR CLASS IV PARTS OF BUILDINGS

17.7 In a Class IV part of a building a *structural member* shall comply with the following:

(*a*) A wall or *partition wall* that separates the Class IV part from the remainder of the building shall have—

(i) that *fire-resistance rating* and construction; or

(ii) other construction permitted by Part 16—

applicable to a Class II part in similar circumstances.

(*b*) A *structural member* not referred to in paragraph (*a*) shall have—

(i) that *fire-resistance rating* and construction; or

(ii) other construction permitted by Part 16—

applicable to a similar member located in the building of which the Class IV part forms part.

CLASS VII—OPEN-DECK PARKING STATIONS

17.8 A building which only contains an *open-deck parking station* need not comply with the other requirements of this Part if—

Reg. 17.8 substituted by S.R. No. 98/1986 reg. 34.

(*a*) the number of *storeys* it contains does not exceed the number stated in Table 17.8, according to the average area across each *storey*, measured to the outside of the building and irrespective of any *internal walls* (including *fire walls*);

(*b*) the area across any *storey* is not less than the area across a *storey* at a higher level; and

(*c*) the building is of Type 4 construction in which—

(i) a floor of concrete or concrete and steel decking is provided at each parking level;

(ii) every floor is structurally continuous across any floor beam, and has a *fire-resistance rating* of not less than ½ hour;

(iii) any floor beam which has any part less than 3 m from the outside of a floor has a *fire-resistance rating* of not less than 1½ hours;

(iv) any other floor beam and any column is of steel or concrete; and

(v) any part of an internal column that—

(A) is exposed, in terms of Regulation 16.6, to a *fire-source feature*; and

(B) has an *effective distance* of less than 9 m between itself and the *fire-source feature*—

has a *fire-resistance rating* of not less than 2 hours.

Table 17.8 inserted by S.R. No. 98/1986 reg. 34.

TABLE 17.8

MAXIMUM PERMISSIBLE NUMBER OF STOREYS ACCORDING TO AVERAGE AREA ACROSS EACH STOREY

In this Table, the area across a storey includes the areas above the ramps that lead down from the storey.

Maximum permissible number of storeys for an average area across each storey (in m²) of—					
Less than 650	650 to less than 900	900 to less than 1300	1300 to less than 1800	1800 to less than 3200	3200 to less than 7400
5	6	7	8	9	10

CLASS IXb—OPEN SPECTATOR STANDS OR INDOOR SPORTS STADIUMS

Reg. 17.9 inserted by S.R. No. 98/1986 reg. 35.

17.9 A building which contains an *open spectator stand* or indoor sports stadium either of which has only changing rooms, sanitary facilities or the like below the tiered seating, need not comply with the other requirements of this Part if it contains not more than one tier of seating and is of Type 4 construction.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 18— * * * * * *

Part 18 amended by S.R. No. 438/1984 reg. 24, revoked by S.R. No. 98/1986 reg. 36.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 19—FLOOR-AREA LIMITATIONS

INTERPRETATIVE PROVISIONS

Certain storeys deemed to be excluded from calculations

19.1 (1) In this Part, the number of *storeys* contained in a building shall be deemed not to include a *storey* situated at the top of the building and containing only heating, ventilating, lift, or other equipment, water tanks, or similar service units, and the *floor area* of such a *storey* shall not be taken into account for the purposes of this Part.

Class VII and Class VIII buildings of partly one and partly two storeys

(2) For the purposes of this Part, a Class VII or VIII building shall be deemed to contain only one *storey* if— Sub-reg. (2) amended by S.R. No. 75/1984 reg. 14.

(*a*) it contains 2 *storeys* in one or more parts and only one *storey* in the remainder of the building; and

(*b*) the sum of the *floor areas* of the *storeys* in the part or parts containing 2 *storeys* does not exceed one-quarter of the *floor area* of the remainder of the building.

GENERAL FLOOR AREA LIMITATIONS

Application of Regulation

19.2 (1) This Regulation applies to Class V, VI, VII, VIII and IX buildings, (other than *open spectator stands*) buildings subject to the exemptions permissible under Regulation 19.3 and 19.4 in regard to certain buildings. Sub-reg. (1) amended by S.R. No. 98/1986 reg. 37 (1).

Limitations on total floor area

(2) In a building to which this Regulation applies, the sum of the *floor areas* of all *storeys* shall not (subject to sub-regulation (3)) exceed the relevant maximum *floor area* set out in Table 19.2.

Limitations to apply to individual storeys in certain cases

(3) In a building containing 2 or more *storeys*, the relevant maximum *floor area* set out in Table 19.2 shall apply to each *storey*, instead of the sum of all *storeys*, if—

(*a*) every floor (including its vertical supports) between the *storeys* has a *fire-resistance rating* of not less than 2 hours;

(*b*) the *storeys* are not interconnected by escalators;

(*c*) every lift well, *stairway* or ramp is bounded by a *shaft* that has a *fire-resistance rating* of not less than 2 hours; and

(*d*) the *external walls*, in a building of Type 4 or 5 construction, are of concrete or *masonry*.

Fire-separated parts of a storey

(4) Where a *storey* is divided into parts by *fire walls*, the following rules shall apply:

(*a*) If the building contains only one *storey*, the relevant maximum *floor area* set out in Table 19.2 shall apply to each such part of the building as though it were a complete building.

(*b*) If the building contains 2 or more *storeys* and complies with sub-regulation (3), the relevant maximum *floor area* set out in Table 19.2 shall apply to each such part of the *storey* as though it were a complete *storey*.

(*c*) If the building contains 2 or more *storeys* and does not comply with sub-regulation (3), the relevant maximum *floor area* set out in Table 19.2 shall apply to each part of the building as though it were a complete building.

Table 19.2 amended by S.R. No. 98/1986 reg. 37 (2).

TABLE 19.2

MAXIMUM FLOOR AREAS ACCORDING TO TYPE OF FIRE-RESISTING CONSTRUCTION, CLASSIFICATION AND WHETHER OR NOT A SPRINKLER SYSTEM IS INSTALLED

(in m²)

	Class V		*Class* VI	
Type of Construction	*Not Sprinklered*	*Sprinklered*	*Not Sprinklered*	*Sprinklered*
(1)	(2)	(3)	(4)	(5)
Type 1	5500	9000	3500	5500
Type 2	5500	9000	3500	5500
Type 3	5500	9000	3500	5500
Type 4	4500	7500	3000	4500
Type 5	2800	4500	2000	2800

Type of Construction	Class VII			
	For storage or display of goods not referred to in Schedule 6		For storage or display of goods referred to in Schedule 6	
	Not Sprinklered	Sprinklered	Not Sprinklered	Sprinklered
(1)	(2)	(3)	(4)	(5)
Type 1	5500	9000	3500	5500
Type 2	5500	9000	3500	5500
Type 3	5500	9000	3500	5500
Type 4	4500	7500	3000	4500
Type 5	2800	4500	2000	2800

Type of Construction	Class VIIIa		Class VIIIb	
	Not Sprinklered	Sprinklered	Not Sprinklered	Sprinklered
(1)	(2)	(3)	(4)	(5)
Type 1	5500	9000	3500	5500
Type 2	5500	9000	3500	5500
Type 3	5500	9000	3500	5500
Type 4	4500	7500	3000	4500
Type 5	2800	4500	2000	2800

Type of Construction	Class IX	
	Not Sprinklered	Sprinklered
(1)	(2)	(3)
Type 1	3500	5500
Type 2	3500	5500
Type 3	3500	5500
Type 4	3000 (2000 for Class IXb buildings used as schools)	4500
Type 5	2000	2800

EXEMPTION FOR SINGLE-STOREY BUILDINGS NOT EXCEEDING 18 000 m² IN AREA

Heading substituted by S.R. No. 438/1984 reg. 25.

General exemption

19.3 (1) A building containing only one *storey* and having a *floor area* not exceeding 18 000 m² shall not be subject to the *floor area* limitations specified in Regulation 19.2 if— Reg. 19.3 substituted by S.R. No. 438/1984 reg. 25.

(*a*) an open space not less than 18 m in width is provided in accordance with Regulation 19.5; or

(*b*) the building is of Type 1, 2 or 3 construction and complies with the following requirements:

(i) The space below the roof is divided into compartments to the satisfaction of the *chief officer*.

(ii) The building is provided with *automatic* smoke-and-heat vents complying with AS 2665.

Two or more buildings

(2) In determining whether sub-regulation (1) is applicable, all Class VI, VII and VIII buildings on the one *allotment* that are within 27 m of each other shall be deemed to be the one building.

Exemption not applicable to schools

Sub-reg. (3) inserted by S.R. No. 98/1986 reg. 38.

(3) Sub-regulation (1) shall not apply to a Class IXb building used as a *school*.

Heading substitute by S.R. No. 438/1984 reg. 26.

EXEMPTION FOR SINGLE-STOREY CLASS VII AND VIII BUILDINGS EXCEEDING 18 000 m² IN AREA

General conditions of exemption

Reg. 19.4 substituted by S.R. No. 438/1984 reg. 26.

19.4 (1) A Class VII or VIII building containing only one *storey* and having a *floor area* exceeding 18 000 m² but not exceeding 36 000 m² shall not be subject to the *floor area* limitations specified in Regulation 19.2 if—

(*a*) an open space not less than 24 m in width is provided in accordance with Regulation 19.5; or

(*b*) the building is of Type 1, 2 or 3 construction and complies with the following requirements:

(i) The space below the roof is divided into compartments to the satisfaction of the *chief officer*.

(ii) The building is provided with *automatic* smoke-and-heat vents complying with AS 2665.

(iii) A *sprinkler system* complying with AS 2118 is installed throughout the building.

Two or more buildings

(2) In determining whether sub-regulation (1) is applicable, all Class VII and VIII buildings on the one *allotment* that are within 27 m of each other shall be deemed to be the one building.

REQUIREMENTS FOR OPEN SPACES AROUND LARGE SINGLE-STOREY BUILDINGS

19.5 An open space required to be provided by this Part—

(*a*) shall not include any part of an adjoining *allotment*;

(*b*) shall be contiguous around the building concerned and shall include any *street*, river, or public place adjoining the *allotment*, but not the farthest 6 m thereof; and

(*c*) shall not in any part be built upon, or designed for the storage or processing of materials, or the like purpose, except that guard houses and service buildings (such as sub-stations and pump houses) may encroach upon the width of the space if the *chief officer* is satisfied that the encroachment will not unduly—

(i) impede fire fighting at any part of the perimeter of the *allotment*; and

(ii) add to the risk of spread of fire to any building on any adjoining *allotment*.

19.6–19.9 * * * * * *

CHANGE OF USE OF EXISTING CLASS VII AND VIII BUILDINGS

Certain uses associated with Class VII buildings

19.10 (1) A Class VII building (*constructed* before or after the commencement of these Regulations) that is not or at any time ceases to be used for the storage or display of—

(*a*) goods referred to in Schedule 6; or

(*b*) *combustible* goods of any kind—

shall not be so used unless the building complies with the relevant requirements of this Part.

Certain uses associated with Class VIII buildings

(2) A Class VIII building (*constructed* before or after the commencement of these Regulations) that is not or at any time ceases to be used for a handicraft or process—

(*a*) referred to in Schedule 6; or

(*b*) in which a principal material of any kind is *combustible*—

shall not be so used unless the building complies with the relevant requirements of this Part.

EXEMPTION OF CERTAIN BUILDINGS FROM REQUIREMENTS OF THIS PART

Certain Class VII and VIII buildings for storage, display or processing of non-combustible materials

19.11 (1) Upon production of a certificate, issued by the *chief officer*, that in respect of a particular existing or proposed Class VII or VIII building he is of the opinion that substantially all of the materials

stored or displayed, or used in a handicraft or process, are *non-combustible*, the building shall not be subject to the requirements of this Part.

Certain Class V, VI, VII and VIII buildings

Sub-reg. (2) amended by S.R. No. 98/1986 reg. 39.

(2) This Part shall not apply to a Class V, VI, VII, VIII or IX building if there is produced a certificate issued by the *chief officer* to the effect that—

(*a*) in respect of a particular existing or proposed building to which sub-regulation (1) does not apply, satisfactory provisions alternative to any or all of the provisions of this Part, and additional to those prescribed in Part 27, have been made to restrict or combat the spread of fire; or

(*b*) in respect of a particular existing building which is proposed to be *altered* there is no necessity to require that the whole of the building as so *altered* shall be brought into conformity with the requirements of this Part.

Conditions in granting exemption under sub-regulation (2)

(3) Any certificate referred to in sub-regulation (2) shall only be granted by the *chief officer* after having had regard to the purposes for which the building is to be used.

Reg. 19.12 revoked by S.R. No. 98/1986

19.12 * * * * * *

COMPARTMENTATION OF CLASS IXa BUILDINGS

Application of Regulation

Reg. 19.13 inserted by S.R. No. 98/1986 reg. 40.

19.13 (1) Notwithstanding Regulation 19.2 this Regulation shall apply to any Class IXa building—

(*a*) containing more than one *storey*; or

(*b*) having a floor area of more than 300 m².

General requirements

(2) Every Class IXa building to which this Regulation applies shall comply with the following requirements:

(*a*) Every *internal wall* bounding a *ward area* shall be a *fire wall.*

(*b*) Every *ward area* shall be divided by a *fire wall* into not less than 2 parts each of which shall not exceed 1400 m² in area.

(*c*) Every part referred to in paragraph (*b*) shall be further divided into not less than 2 areas not exceeding 700 m² by smoke-proof walls complying with sub-regulation (3).

Para. (d) amended by S.R. No. 187/1986 reg. 7.

(*d*) Notwithstanding paragraphs (*b*) and (*c*), where a building contains only one *storey* and has a *ward area* of less than

700 m² such a *storey* shall be divided into not less than 2 areas by smoke-proof walls complying with sub-regulation (3).

(*e*) Every part of a Class IXa building not within a *ward area* shall be divided into areas not exceeding 1400 m² by smoke-proof walls complying with sub-regulation (3).

Smoke-proof walls

(3) Every wall required by sub-regulation (2) to be smoke-proof shall—

(*a*) be *non-combustible*;

(*b*) extend to the underside of the roof covering or the underside of the floor above;

(*c*) only incorporate a doorway in it which—

(i) is fitted with a smoke door complying with Regulation 21.3; and

(ii) does not extend to within—

(A) 800 mm of the underside of the roof covering or the structural floor above; or

(B) 100 mm of a false ceiling—

whichever is the lower; and

(*d*) not incorporate any other opening in it which is not smoke-proof.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 20—FIRE RESISTANCES OF STRUCTURAL MEMBERS

FIRE-RESISTANCE RATINGS

Method of establishment

20.1 Where a *structural member* of a building is *required* to have a *fire-resistance rating*, the *structural member* shall be one that is—

(*a*) deemed, pursuant to Regulation 20.10, to have the *required fire-resistance rating*; or

(*b*) identical with a prototype that has been submitted to—

(i) the *Standard Fire Test*; or

(ii) a test that is similar to the *Standard Fire Test*—

and is shown by documentary evidence in the form of a report, as referred to in Regulation 20.2, to have achieved the *required fire-resistance rating*; or

(*c*) identical with a tested prototype as specified in paragraph (*b*), except for the variations permissible under Regulations 20.3 or 20.4, as the case may be; or

(*d*) approved by the *building surveyor* pursuant to Regulation 20.5.

DOCUMENTARY EVIDENCE OF FIRE-RESISTANCE RATINGS

Form of evidence

20.2 (1) The report referred to in Regulation 20.1 (*b*) shall be as issued by one of the following testing authorities:

(*a*) National Building Technology Centre (formerly the Experimental Building Station), North Ryde, N.S.W.

Para. (a) substituted by S.R. No. 98/1986 reg. 41 (1).

(*b*) Fire Research Station, Building Research Establishment, Department of the Environment, Great Britain.

(*c*) Fire Insurers' Research and Testing Organisation, Great Britain.

(*d*) Warrington Research Centre, Great Britain.

(*e*) National Bureau of Standards, United States of America.

(*f*) Underwriters' Laboratories Incorporated, United States of America.

(*g*) National Research Council, Canada.

(*h*) Underwriters' Laboratories of Canada.

(*i*) Building Research Association of New Zealand.

(*j*) The Broken Hill Proprietary Co. Ltd., Melbourne Research Laboratories provided that the report is dated or amended after 1 January 1982.

Para. (k) inserted by S.R. No. 98/1986 reg. 41 (2).

(*k*) Timber Research and Development Association, Great Britain.

Para. (l) inserted by S.R. No. 98/1986 reg. 41 (2).

(*l*) Fire Research Pty. Ltd., Clayton, Victoria.

Details of report

(2) The report shall fully describe the conditions of test, and the form of construction of the tested prototype.

Conditions of acceptance of report

(3) Where a report issued pursuant to sub-regulation (1) indicates that the tested prototype was subjected to restraints applied by direct compression, or compression forces developed as a result of the inability of the tested prototype to expand thermally because of the nature of its supports and its position during the tests, the following conditions shall apply:

(*a*) In the case of a deck or floor the report shall not be acceptable for the purposes of this Part;

(*b*) In the case of a steel beam, steel open-web joist or steel column the report shall certify that the temperature of the steel in the tested prototype did not exceed—

(i) 538°C average; and

(ii) 649°C maximum.

Variation permitted to method of restraint

(4) The method of restraint may differ from that of the tested prototype, if calculations according to Regulation 20.3 are submitted and *approved.*

Submission of report

(5) A copy of the official report referred to in this Regulation shall, if *required*, be submitted.

VARIATION IN SPAN OF CERTAIN MEMBERS

Conditions of acceptance

20.3 (1) Where the *structural member* referred to in Regulation 20.1 is a floor, roof, or beam of steel or reinforced concrete (other than prestressed concrete), it may be of longer or shorter span than that of

the prototype if evidence is produced to satisfy the *building surveyor* that the following conditions will be met:

(*a*) The calculated stresses at the centre of the span of the *structural member* under the total dead and live load shall not exceed those in the centre of the span of the construction referred to in the official test report;

(*b*) The calculated tensile stress in steel in the *structural member* shall not be greater at the centre of the span under the total dead and live load than—

(i) 100 per cent of the design tensile stress in the steel referred to in the official test report, where the average temperature of the steel measured in accordance with the requirements of the *Standard Fire Test* does not exceed 538°C; or

(ii) 70 per cent of that stress, where the average temperature of the steel so measured is 593°C; or

(iii) between 100 and 70 per cent of that stress, on a proportionally interpolated basis, where the average temperature of the steel so measured is between 538°C and 593°C;

(*c*) A negative bending moment, if any, at either end of the span, if additional to a negative bending moment referred to in the official test report—

(i) may be taken into account in the calculations; but

(ii) shall not be deemed to relieve the central bending moment by more than one-tenth thereof, and two such negative bending moments, one at each end of the span, may be so taken into account in the calculations but collectively shall not be deemed to relieve the central bending moment by more than one-fifth;

(*d*) If the tested prototype contained a feature which produced a negative bending moment during the relevant fire-resistance test, that feature shall be repeated in the *structural member* proposed to be used.

(*e*) If a condition of horizontal restraint was introduced during the relevant fire-resistance test of the tested prototype, the *structural member* proposed to be used shall be designed to compensate for that condition.

Evidence of compliance with conditions

(2) The evidence referred to in sub-regulation (1) shall be in the form of a report and calculations prepared by a *qualified engineer.*

VARIATION IN STEEL COLUMN SIZE

20.4 A steel column, being a *structural member* referred to in Regulation 20.1, may vary from the size of the tested prototype if—

(*a*) its cross-sectional profile is similar to that of the tested prototype; and

(*b*) its slenderness ratio and ratio of surface area to mass per unit of length are not greater than those of the tested prototype.

VARIATIONS FROM TESTED PROTOTYPE GENERALLY

Building surveyor discretion

20.5 (1) Where a *structural member* that is *required* to have a *fire-resistance rating*—

(*a*) is not deemed, pursuant to Regulation 20.10, to have that rating; and

(*b*) departs from the tested prototype but in a manner other than that permissible under Regulation 20.3 or 20.4—

the *building surveyor* may approve its use upon production of a report in accordance with sub-regulation (2).

Reports from specified authorities

(2) For the purposes of sub-regulation (1), the *building surveyor* may accept a report in the following terms from one or other of the authorities indicated, whichever he considers appropriate in the particular case:

(*a*) * * * * * *

(*b*) One of the authorities listed in Regulation 20.2—

(i) certifying that, in the opinion of the authority concerned, the proposed construction would, despite the minor departures from a tested prototype, be capable of achieving the *required fire-resistance rating* if submitted to the *Standard Fire Test*; and

(ii) giving details of materials, construction, and methods of restraint or support which must be complied with to achieve the *required fire-resistance rating.*

20.6 * * * * * *

CERTAIN MATERIALS INTERCHANGEABLE

In concrete and plaster

20.7 (1) A *fire-resistance rating* achieved when using any material of Group A, B, C, D, or E, set out below this sub-regulation, as an ingredient in concrete or plaster, shall be deemed to apply equally when any other material of the same group is used in the same proportions in concrete or plaster—

Group A: Any portland cement.

Group B: Any lime.

Group C: Any dense sand.

Group D: Any dense calcareous aggregate, including any limestone or any calcareous gravel.

Group E: Any dense siliceous aggregate, including any basalt, diorite, dolerite, granite, granodiorite, or trachyte.

Perlite and vermiculite

(2) A *fire-resistance rating* achieved when using gypsum-perlite plaster or gypsum-vermiculite plaster shall be deemed to apply equally for both gypsum-perlite and gypsum-vermiculite plasters.

CERTAIN MATERIALS TO MEET SPECIAL REQUIREMENTS

Application of Regulation

20.8 (1) If a *structural member* is *required* to have a *fire-resistance rating* and it incorporates any of the materials mentioned in this Regulation, their uses shall be subject to such of the requirements herein as the case requires.

Bricks and certain blocks

(2) Bricks, terra-cotta blocks, and concrete blocks shall be laid in cement mortar or composition mortar and such mortars shall comply with the relevant provisions of Part 28.

Gypsum blocks

(3) Gypsum blocks shall be laid in gypsum-sand mortar or lime mortar.

Gypsum-sand mortar and plaster

(4) Gypsum-sand mortar and gypsum-sand plaster—

(*a*) shall consist of not more than 3 parts by volume of sand to 1 part by volume of gypsum; or

(*b*) shall consist of not more than 2½ parts by volume of sand to 1 part by volume of gypsum, if lime putty is added, in which case the lime putty shall not exceed 5 per cent by volume of the mixed ingredients.

Plaster of cement and sand, or cement, lime and sand

(5) Where plaster is prescribed in Table 20.10 the plaster—

(*a*) shall consist of—

(i) cement and sand; or

(ii) cement, lime and sand—

having a thickness not less than that shown in the Table; and

(*b*) may be finished with gypsum, gypsum-sand, gypsum-perlite or gypsum-vermiculite plaster, or with lime putty.

Gypsum-perlite and gypsum-vermiculite plaster

(6) Where gypsum-vermiculite or gypsum-perlite plaster is prescribed in Table 20.10 the plaster—

(*a*) shall have a thickness not less than that shown in the Table, and shall conform with the following:

(i) Where the *required* thickness is less than 25 mm the plaster shall be applied in either one or two coats each consisting of material in the proportion of 1 m^3 of perlite or vermiculite to 640 kg of gypsum.

(ii) Where the *required* thickness is more than 25 mm the plaster shall be applied in two coats, the first of which shall consist of material in the proportions of 1 m^3 of perlite or vermiculite to 800 kg of gypsum and the second of which shall consist of material in the proportions of 1 m^3 of perlite or vermiculite to 530 kg of gypsum.

Gypsum for plaster or mortar

(7) In this Part, "gypsum", in relation to a plaster mix or mortar, means plaster-of-paris or any similar material derived from gypsum and used as an ingredient in plaster or mortar.

Reinforcement

(8) Where expanded metal lath is *required* as a reinforcement for plaster, or as a base for plaster or sprayed application it shall—

(*a*) have a mass per unit area of not less than 1·84 kg/m^2;

(*b*) have not less than 98 meshes/m; and

(*c*) be protected against corrosion by galvanising or other *approved* method.

Plaster reinforcement

(9) Where plaster used as a fire-protective material for walls has a thickness exceeding 19 mm the plaster shall be reinforced with—

(*a*) expanded metal lath complying with sub-regulation (8); or

(*b*) 13 mm × 13 mm × 0·710 mm galvanised steel wire mesh—

the reinforcement being securely fixed to the wall and positioned at a distance from the face of the wall concerned of not less than one-third of the total thickness of the plaster.

COLUMN COVERINGS

Protection against injury generally

20.9 (1) The fire-protective covering of a steel column, if of *lightweight construction* shall be protected by metal or other suitable material, if the column is liable to damage from the movement of vehicles, materials, or equipment, or any like cause.

Protection against indenting of lightweight construction

(2) In addition, where any such covering so subject to injury is not in continuous contact with the column, the voids concerned shall be filled solid, with *approved non-combustible* material, to a height of not less than 1·2 m above each floor.

Sealing at floor level in certain lightweight construction

(3) Where—

(*a*) a steel column extends through two or more *storeys*; and

(*b*) its fire-protective covering is not in continuous contact with it—

a plug of *approved non-combustible* fire-protective material shall be inserted at each floor to seal all voids at those floor levels, including the voids between the column and its fire-protective covering.

CERTAIN STRUCTURAL MEMBERS DEEMED TO HAVE SPECIFIC FIRE-RESISTANCE RATINGS

Reinforced concrete

20.10 (1) A *structural member* of reinforced concrete in which—

(*a*) the cross-sectional dimensions of the member are not less than those given in Appendix B of AS 1480, (according, where relevant, to the loads to be supported by the member); and

(*b*) the types and thicknesses of the fire-protective concrete or other material used therein are in accordance with those given in that Appendix—

shall be deemed to have the relevant *fire-resistance rating* set out in that Appendix.

Prestressed concrete

(2) A *structural member* of prestressed concrete in which—

(*a*) the cross-sectional dimensions of the member are not less than those given in AS 1481, (according, where relevant, to the loads to be supported by the member); and

(*b*) the types and thicknesses of the fire-protective concrete or other material used therein are in accordance with those given in that Standard—

shall be deemed to have the relevant *fire-resistance rating* set out in that Standard.

Other materials

(3) A *structural member* listed in Column 1 of Table 20.10 in which the construction incorporates a material or combination of materials listed opposite thereto in Column 2, shall be deemed to have the *fire-resistance rating* at the head of Column 3, 4, 5, 6, or 7, as the case may be if—

(*a*) the principal material has the thickness, if any, listed in the relevant Column;

(*b*) the construction meets the conditions or requirements set out in the numbered clauses, if any, listed opposite thereto in Column 8 and included in the Annexure to the Table; and

(*c*) the construction meets all other relevant requirements of these Regulations.

Construction not tested or not complying

(4) A blank space in any of Columns 3 to 7 indicates that—

(*a*) the relevant construction has not achieved the particular *fire-resistance rating* concerned; or

(*b*) the relevant construction has not been tested to achieve the particular *fire-resistance rating* concerned.

Fire-resistance rating deemed to comply with lesser requirements

(5) Where a particular type and thickness of construction is deemed to have a particular *fire-resistance rating* that construction shall be deemed to comply with any requirement for a lower *fire-resistance rating.*

TABLE 20.10

FIRE-RESISTANCE RATINGS DEEMED TO APPLY TO CERTAIN STRUCTURAL MEMBERS

Table 20.10 amended by S.R. Nos. 75/1984 reg. 15, 438/1984 reg. 27 (1).

Structural Member	*Construction of Member*		*Thickness of principal material (mm)*					*Annexure Reference clause number*
			1 hr	1½ hr	2 hr	3 hr	4 hr	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
Loadbearing wall whether an— internal wall; or external wall, and a load-bearing or a non-load-bearing party wall	Single leaf wall	Clay bricks— Unplastered	90	110	..	..	230	3, 4
		Plastered 19 mm thick on both sides	..	90	110	..	..	3, 4, 6
		Solid concrete bricks and solid concrete blocks	..	125	150	175	190	4
		Concrete—						
		Unreinforced	..	..	..	175	200	
		Reinforced	Refer to Regulation 20.10 (1)					
		Prestressed	Refer to Regulation 20.10 (2)					
		Ashlar stone masonry	..	..	..	..	300	1
	Cavity wall (excluding width of cavity)	Clay bricks—	..	..	..	..	220	3, 4, 19, 20
		Solid concrete bricks and solid concrete blocks	..	..	180	..	200	4, 19, 20
		Ashlar stone masonry					300	1, 19, 20
Non-loadbearing wall whether an— internal wall or external wall (for a party wall—see loadbearing walls above)	Single leaf wall	Clay bricks—						
		Unplastered	90	110	130	160	190	3, 4
		Plastered 19 mm thick on both sides	..	90	110	140	..	3, 4, 6
		Solid concrete bricks and concrete blocks with—						
		Category A aggregate	..	90	100	120	140	8
		Category B aggregate	90	95	110	135	160	8
		Category C aggregate	90	100	120	150	175	8
		Hollow blocks of concrete with—						
		Category A aggregate	66	83	96	119	142	7, 8
		Category B aggregate	73	93	109	134	157	7, 8
		Category C aggregate	82	101	121	149	172	7, 8
		Concrete—						
		Unreinforced						
		No-fines, plastered 19 mm thick on both sides—	..	..	..	175	200	
		Reinforced	Refer to Regulation 20.10 (1)					
		Prestressed	Refer to Regulation 20.10 (2)					
		Calcium silicate bricks—						
		Unplastered	90	110	125	145	165	3, 4
		Plastered 19 mm thick on both sides	..	..	110	..	..	3, 4, 6
		Terra cotta—						
		Plastered 19 mm thick on one side	150	..	..	..	..	4, 6, 9
		Plastered 19 mm thick on both sides	100	150	..	..	..	4, 6, 9
		Solid gypsum blocks	75	88	100	110	127	

TABLE 20.10—*continued*

FIRE-RESISTANCE RATINGS DEEMED TO APPLY TO CERTAIN STRUCTURAL MEMBERS

Structural Member	*Construction of Member*		*Thickness of principal material (mm)*					*Annexure Reference clause number*
			1 hr	1½ hr	2 hr	3 hr	4 hr	
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
Non-loadbearing wall whether an— internal wall or external wall— *continued*	Single leaf walls	Gypsum-perlite or gypsum-vermiculite plaster on metal lath and channel	..	51	63	..	..	10
		Ashlar stone masonry	..	..	..	..	300	1
	Cavity wall (excluding width of cavity)	Clay bricks	..	..	..	..	180	3, 4, 20
		Solid concrete bricks and solid concrete blocks with—						
		Category A aggregate					152	4, 8, 20
		Category B aggregate					160	4, 8, 20
		Category C aggregate				152	175	4, 8, 20
		Hollow concrete bricks and hollow concrete blocks with—						
		Category A aggregate			110	119	142	7, 8, 20
		Category B aggregate	..	..	110	134	157	7, 8, 20
		Category C aggregate	..	110	121	149	172	7, 8, 20
		Calcium silicate bricks	..	..	..	..	180	3, 4, 20
		One leaf of clay bricks and one leaf of either concrete bricks or blocks or calcium silicate bricks	..	..	..	..	200	3, 4, 5
		Ashlar stone masonry	..	..	..	..	300	1
Steel column including a fabricated column		Column incorporated in, or in contact on one or more sides with solid masonry or concrete wall not less than 100 mm thick, with fire protection of—						
		Solid clay bricks with—						
		column spaces filled	50	50	50	50	63	4, 11, 12
		column spaces not filled	50	50	50	..	..	4, 11
		Solid concrete blocks with—						
		column spaces filled	50	50	50	63	88	4, 11, 12,
		column spaces not filled	50	50	63	..	..	4, 11
		Gypsum blocks laid in gypsum sand mortar with—						
		column spaces filled	..	..	50	63	88	4, 11, 12
		column spaces not filled	..	..	50	..	..	4, 11
		Hollow terra-cotta blocks plastered 13 mm thick with—						
		column spaces filled	..	..	50	63	88	4, 9, 11, 12
		column spaces not filled	..	..	50	..	..	4, 9, 11

TABLE 20.10—*continued*

FIRE-RESISTANCE RATINGS DEEMED TO APPLY TO CERTAIN STRUCTURAL MEMBERS

Structural Member	*Construction of Member*	*Thickness of principal material (mm)*					*Annexure Reference clause number*
		1 hr	1½ hr	2 hr	3 hr	4 hr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Steel column including a fabricated column— *continued*	Structural concrete cast in-situ around mesh or binding and non-loadbearing	25	32	38	51	63	11, 12, 13
	As above, plastered 13 mm thick	..	25	32	38	51	6, 11, 12, 13
	Structural concrete case in-situ around mesh or binding and designed to be loadbearing and incorporating—						
	Category B or C aggregate	25	32	38	57	76	8, 11, 12, 13
	Category A aggregate	25	32	38	51	63	8, 11, 12, 13
	Gypsum cast in-situ	..	..	..	..	48	
	Gypsum-perlite or gypsum-vermiculite plaster—						
	Sprayed on metal lath	19	22	25	35	44	14, 15
	Sprayed to contour	22	25	35	48	57	18
	Column not incorporated in, or not in direct contact with solid masonry or concrete wall not less than 100 mm thick, with fire-protection of—						
	Solid clay bricks with—						
	column spaces filled	50	50	50	63	75	4, 11, 12
	column spaces not filled	50	50	63	..	..	4, 11
	Solid concrete blocks with—						
	column spaces filled	50	50	50	75	100	4, 11, 12
	column spaces not filled	50	50	63	..	..	4, 11
	Gypsum blocks laid in gypsum-sand mortar with—						
	column spaces filled	..	..	50	75	100	4, 11,
	column spaces not filled	..	..	50	..	..	4, 11
	Hollow terra-cotta blocks plastered 13 mm thick with—						
	column spaces filled	..	..	50	75	100	4, 9, 11, 12
	column spaces not filled	..	..	50	..	..	4, 9, 11

TABLE 20.10—*continued*

FIRE-RESISTANCE RATINGS DEEMED TO APPLY TO CERTAIN STRUCTURAL MEMBERS

Structural Member	*Construction of Member*	*Thickness of principal material (mm)*					*Annexure Reference clause number*
		1 hr	1½ hr	2 hr	3 hr	4 hr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Steel column including a fabricated column—*continued*	Structural concrete cast in-situ around mesh or binding and not subjected to any applied loading	25	32	38	51	63	11, 12, 13
	As above, plastered 13 mm thick	..	25	32	38	51	6, 11, 12, 13
	Structural concrete cast in-situ around mesh or binding and designed to be loadbearing and incorporating—						
	Category B or C aggregate	25	38	44	63	89	8, 11, 12, 13
	Category A aggregate	25	32	38	51	70	8, 11, 12, 13
	Gypsum cast in-situ					51	
	Gypsum-perlite or gypsum-vermiculite plaster—						
	sprayed on metal lath	19	22	29	38	48	14,15
	sprayed to contour	25	32	41	54	63	18
Concrete column	Column of Reinforced concrete	Refer to Regulation 20.10(1)					
	Prestressed concrete	Refer to Regulation 20.10(2)					
Steel beam including—open webbed joist, girder, truss and the like	Beam, open-webbed joist, girder, truss and the like in direct contact with solid reinforced concrete slab or hollow-block floor or roof construction, with fire protection of—						
	Structural concrete encasement incorporating—						
	Category B or C aggregate	25	32	38	51	63	8, 16
	Category A aggregate	25	25	32	44	57	8, 16
	Gypsum-perlite or gypsum-vermiculite plaster—						
	Spray on metal lath	19	22	25	35	44	15, 17
	Spray to contour	22	25	35	48	57	18

TABLE 20.10—*continued*

FIRE-RESISTANCE RATINGS DEEMED TO APPLY TO CERTAIN STRUCTURAL MEMBERS

Structural Member	*Construction of Member*	*Thickness of principal material (mm)*					*Annexure Reference clause number*
		1 hr	1½ hr	2 hr	3 hr	4 hr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Steel beam including—open webbed joist, girder, truss and the like—*continued*	Beam, open-webbed joint, girder, truss and the like not in direct contact with solid reinforced concrete slab or hollow-block floor or roof construction, with fire protection of—						
	Structural concrete encasement incorporating—						
	Category B or C aggregate	25	38	44	63	89	8, 16
	Category A aggregate	25	32	38	51	70	8, 16
	Gypsum-perlite or gypsum-vermiculite plaster—						
	Sprayed on metal lath	19	22	29	38	48	15, 17
	Sprayed to contour	25	32	41	54	63	18
Floor, roof, and ceiling	Concrete—						
	Reinforced	Refer to Regulation 20.10(1)					
	Prestressed	Refer to Regulation 20.10(2)					

ANNEXURE TO TABLE 20.10

Ashlar Stone Masonry

1. The ashlar *masonry* used shall be in a part of the building containing not more than 2 *storeys*, and shall not be of—

(*a*) aplite, granite, granodiorite, quartz dacite, quartz diorite, quartz porphyrite or quartz porphyry; or

(*b*) conglomerate, quartzite or sandstone; or

(*c*) chert or flint; or

(*d*) limestone or marble.

Stresses in Loadbearing Masonry

2. The calculated compressive stresses in *loadbearing masonry* less than 150 mm thick shall not exceed 1.1 MPa, the calculations being based on net areas of *masonry* units if these contain cores or similar holes.

Cored or Lattice Bricks

3. The cored or lattice bricks used shall have a net volume, exclusive of cored and similar holes, of not less than 75 per cent of their gross volume, measured on the overall rectangular shape of the bricks.

Manufacturing Dimensions used in Table 20.10

4. The thicknesses refer to manufacturing dimensions being the dimensions adopted for manufacture and to which given tolerances apply, in accordance with Regulation 1.3 (4).

A Non-loadbearing Cavity Wall Having One Leaf of Clay Bricks and One Leaf of Concrete Bricks, Concrete Blocks or Calcium Silicate Bricks

5. A non-*loadbearing* cavity wall having one leaf of clay bricks and one leaf of concrete bricks, concrete blocks or calcium silicate bricks shall be subject to the following:

(*a*) One leaf shall consist of clay bricks having a thickness of not less than 110 mm and, in the case of cored or lattice bricks, a net volume of not less than 75 per cent of the gross volume.

(*b*) The other leaf shall consist of—

(i) concrete bricks having a thickness of not less than 90 mm and, in the case of cored bricks, a net volume of not less than 75 per cent of the gross volume; or

(ii) concrete blocks having a thickness of not less than 90 mm and, in the case of hollow blocks, an equivalent thickness of not less than 68 mm; or

(iii) calcium silicate bricks having a thickness of not less than 90 mm and, in the case of cored bricks, a net volume of not less than 75 per cent of the gross volume.

(*c*) The leaves shall be tied in accordance with AS 1640, except that the wire ties shall be dual limb type having a diameter of not less than 4 mm.

(*d*) The cavity shall be not less than 40 mm wide and not more than 80 mm wide.

Certain Tabulated Thicknesses Exclude Plaster

6. The thickness of plastering used shall be additional to the listed thickness of the principal material.

Thickness of Hollow Concrete Blocks

7. (1) The thickness listed in Table 20.10 shall be calculated by taking the total actual volume of a concrete block, subtracting the volume of all core holes and dividing the resultant figure by the actual area of one vertical exposed face of the block.

(2) Where the blocks are plastered the thickness of the block according to sub-clause (1) may be increased by the amount shown in Table 20.10—7.

TABLE 20.10—7
INCREASE OF THE EQUIVALENT THICKNESS FOR WALLS OF CONCRETE BLOCKS BY APPLICATION OF PLASTER

Table 20.10—7 amended by S.R. No. 438/1984 reg. 27 (2).

Type of Aggregate used in Manufacture of Blocks (see clause 8)	*Type of Plaster and its Location*		
	Cement and sand, or cement, lime and sand in ONE face only	*Cement and sand, or cement, lime and sand on BOTH faces*	*Gypsum or gypsum-perlite, or gypsum-vermiculite on ONE or BOTH faces*
(1)	(2)	(3)	(4)
Category A Aggregate	No concession shall be made	Equivalent thickness of concrete block without plaster plus 25 per cent of total thickness of plaster	Equivalent thickness of concrete block without plaster plus total thickness of plaster
Category B Aggregate	No concession shall be made	Equivalent thickness of concrete block without plaster plus 35 per cent of total thickness of plaster	Equivalent thickness of concrete block without plaster plus 1·1 times the total thickness of plaster
Category C Aggregate	No concession shall be made	Equivalent thickness of concrete block without plaster plus 50 per cent of total thickness of plaster	Equivalent thickness of concrete block without plaster plus 1·25 times the total thickness of plaster

Aggregates for Concrete and Concrete Blocks

8. (1) Category A aggregate shall comply with the following requirements:

(*a*) The aggregate shall consist of particles with a uniformly porous and cellular structure.

(*b*) The aggregate may be—

(i) material prepared by expanding, calcining or sintering such materials as clay, shale, slate, diatomaceous shale, perlite, vermiculite or obsidian;

(ii) expanded blast-furnace slag produced by treating molten blast-furnace slag with water; or

(iii) material from natural deposits of frothed types of lava such as certain pumices and certain scorias, being porous volcanic-glass formations, friable in character

and predominantly light grey in colour for pumice and dark grey for scoria.

(*c*) Aggregate other than pumice or scoria shall not contain more than 65 per cent by weight of silica (SiO_2) when determined by chemical analysis.

(2) Category B aggregate shall be one of the following:

(*a*) Coal or coke cinders.

(*b*) Scorias other than those referred to in sub-clause (1).

(*c*) Unexpanded blast-furnace slag.

(3) Category C aggregate shall comply with the following:

Para. (a) amended by S.R. No. 98/1986 reg. 42.

(*a*) Aggregate shall comply with AS 2758 Part I.

(*b*) Aggregate shall be—

(i) calcareous material;

(ii) river gravel, granite, feldspar, dolerite, diorite, basalt; or

(iii) greywacke or sandstone.

(*c*) Aggregate shall contain not more than 65 per cent by weight of silica (SiO_2), determined by chemical analysis.

(4) Fine aggregate shall comply with the following:

(*a*) Where Category A aggregates are used the fine aggregate shall be of the same material as is used for the coarse aggregate, or if silicious sand is used its total amount shall be not more than 20 per cent of the total weight of all fine and coarse aggregates.

(*b*) Lightweight fine aggregate shall have a density when dry and loose of not more than 1120 kg/m^3.

Hollow Terra-cotta Construction

9. The volume of cored holes in a block shall not exceed—

(*a*) 35 per cent of the gross volume of the block in a block of 75 mm thickness; or

(*b*) 40 per cent of the gross volume of the block in a block of 100 mm thickness; or

(*c*) 50 per cent of the gross volume of the block in a block of 150 mm thickness.

Gypsum-perlite or Gypsum-vermiculite Plaster in Walls

10. The gypsum-perlite or gypsum-vermiculite plaster used shall be applied to each exposed side of steel expanded metal lath, the lath being securely wired to 19 mm × 0·44 kg/m steel channels used as studs and spaced at not more than 380 mm centres.

Protection of Steel Columns including Fabricated Columns

11. (1) Where the principal fire-protective construction of a steel column including a fabricated column is brickwork, blockwork, concrete, or similarly hard construction placed against the steel, the thickness listed for the material of that construction shall be construed to mean the thickness measured from the face of the steel or from the outer part of any rivet or bolt, whichever is the nearer to the outside of the fire-protective construction, subject to the provisions of sub-clause (2).

(2) The following rules shall apply to construction other than terra-cotta blockwork:

(*a*) Where the construction has an overall thickness of not less than 38 mm the measurement may be made disregarding rivet heads.

(*b*) Where the construction has an overall thickness of not less than 50 mm the measurement may be made disregarding any part of a bolt that is not a high-tensile bolt.

(*c*) Where the construction has an overall thickness of not less than 50 mm, any splice plate having no part located in that part of the column that begins 915 mm above the level of a floor, and terminates at the underside of the floor or roof next above, may encroach upon that thickness by not more than one-quarter thereof.

(*d*) Where the construction is in a column intended to have a 4 hour *fire-resistance rating*, the edge of any flange not more than 38 mm thick (measured inclusive of any splice plate) that projects more than 63 mm beyond a web may encroach by 12 mm upon the overall thickness.

(3) Bricks and concrete blocks shall have steel wire or mesh reinforcement laid in alternative courses, lapped at corners, and gypsum blocks and hollow terra-cotta blocks shall be similarly reinforced in every horizontal joint.

Re-entrant and Like Parts of Certain Steel Columns including Fabricated Columns

12. Where steel columns are *required* to have a 3 or 4 hour *fire-resistance rating*, re-entrant parts and parts, if any, between the *required* fire-protective material and the steel shall be filled with concrete or other hard fire-protective material.

Reinforcement of Fire-protective Concrete

13. A steel wire mesh or binding shall be placed approximately 20 mm from the outer surface of the fire-protective concrete used, and the mesh or binding shall include wires—

(*a*) having a diameter of not less than 3·15 mm; and

(*b*) spaced at not more than 100 mm centres vertically—

except that, where the concrete has an overall thickness of not less than 50 mm, wires having a diameter of not less than 5 mm and spaced at not more than 150 mm centres vertically may be used instead.

Column Protection of Gypsum-perlite or Gypsum-vermiculite Plaster on Metal Lath

14. In column protection of gypsum-perlite or gypsum-vermiculite plaster on metal lath as listed—

(*a*) the plaster shall be applied to the lath; and

(*b*) the lath shall be of—

(i) steel expanded metal, not less than 12 mm clear of the column where the plaster has a thickness of 35 mm or more, or not less than 6 mm clear of the column otherwise, and fixed at not more than 610 mm centres vertically to steel furring channels; or

(ii) self-furring steel expanded metal with furring dimples to hold it not less than 10 mm clear of the column.

Material Sprayed on Metal Lath

15. The lath shall be steel expanded metal lath and the thickness of the sprayed material shall be measured from the back of the lath.

Protection of Steel Open-webbed Joists, Girders, Trusses and the Like

16. Where the principal fire-protective material of a steel open-webbed joist, girder, truss or the like is structural concrete encasement—

(*a*) the thickness of such encasement listed shall be construed to mean the minimum thickness measured from the face of the steel or from the outer part of any rivet or bolt, whichever is the nearer to the outside of the encasement, except that—

(i) where the encasement has an overall thickness of not less than 38 mm the measurement may be made disregarding rivet heads; and

(ii) where the encasement has an overall thickness of not less than 50 mm the measurement may be made disregarding any part of a bolt that is not a high-tensile bolt;

(*b*) a steel wire mesh or binding shall be placed in the encasement approximately 20 mm from the outer surface thereof, and the mesh or binding shall include wires—

(i) having a diameter of not less than 3·15 mm; and

(ii) spaced at not more than 100 mm centres horizontally, except that, where the concrete has an overall thickness of not less than 50 mm, wires having a diameter of not

less than 5 mm and spaced at not more than 150 mm centres horizontally may be used instead; and

(*c*) where the encasement, being on the soffit of an open-webbed joist, girder, truss, or the like has a thickness of less than 38 mm plus one-twelfth the width of that soffit, it shall be mechanically vibrated into position.

Gypsum-perlite Plaster, or Gypsum-vermiculite Plaster as Protection for Steel Open-webbed Joists, Girders, Trusses and the Like

17. Where the protection is applied to a steel-webbed joist, girder, truss or the like the lath shall be spaced not less than 20 mm clear from the steel, using steel furring channels at not more than 610 mm centres.

Gypsum-perlite or Gypsum-vermiculite Plaster Sprayed to Contour

18. (1) The plaster shall be integrally reinforced as follows:

(*a*) Reinforcement shall be used when the member or the part of the member to be protected falls within the limits of Table 20.10—18.

(*b*) Reinforcement shall be in—

(i) expanded metal lath complying with Regulation 20.8 (8); or

(ii) 13 mm × 13 mm × 0·710 mm galvanised steel wire mesh—

the reinforcement being placed at a distance from the face of the plaster of not less than one-third of the thickness of the plaster.

(*c*) Reinforcement shall be permanently fixed in accordance with the relevant requirements of Table 20.10—18.

(2) For the purposes of Table 20.10—18—

(*a*) 'Vertical' refers to a member or part of a member whose angle to the true vertical is not more than 10°;

(*b*) 'Horizontal' refers to a member or part of a member whose angle to the true horizontal is not more than 10°;

(*c*) 'Underside' of a member includes those surfaces designated 'underside' in Diagram 20.10—18.

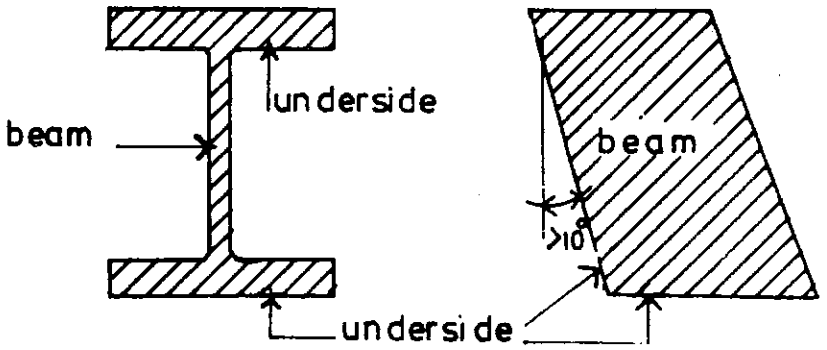


DIAGRAM 20.10—18

TABLE 20.10—18

LOCATION OF REINFORCEMENT AND ITS FIXING

Member or part of member to be protected (1)	*Reinforcement required if surface of member or part exceeds—* (mm) (2)	*Spacing for fixing of mesh to base material* (mm *centres*) (3)
'H' or 'I' section shapes—		
Vertical	450	450
Non-vertical	300	300
Underside	300	300
Upper side of horizontal	Not required	—
Other shapes—		
Vertical	Any size	450
Non-vertical	Any size	300
Underside	Any size	300
Upper side of horizontal	Not required	—

Loadbearing Cavity Wall

19. For the purposes of this Part a cavity wall shall be deemed to be *loadbearing* if—

(*a*) either leaf is intended to support a vertical load in addition to its own weight; or

(*b*) both leaves are intended to support a vertical load in addition to their own weight.

Thickness of Leaves in a Cavity Wall

20. The leaves of a cavity wall need not have the same thickness but each leaf shall have a thickness of not less than—

(*a*) 90 mm in the case of a *loadbearing* wall; or

(*b*) 76 mm in the case of a non-*loadbearing* wall.

21. * * * * * *

Annexure 21 revoked by S.R. No. 438/1984 reg. 27 (3).

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 21—FIRE DOORS, SMOKE DOORS, FIRE WINDOWS, AND FIRE SHUTTERS— CONSTRUCTION REQUIREMENTS

FIRE DOORS

General requirements

21.1 (1) Every *required* fire door shall—

(*a*) comprise a complete doorset as described in AS 1905 Part 1;

(*b*) comply with the relevant provisions of that Standard; and

(*c*) subject to the variations permissible under that Standard, be identical with a tested prototype which—

(i) has achieved the *required fire-resistance rating*; and

(ii) during the first 30 minutes after the commencement of the fire test, did not have a rise in temperature on the side remote from the furnace of more than 140°C except in any glazed part thereof.

To be openable at all times

(2) Notwithstanding clause 5 of AS 1905 Part 1, fire doors shall be openable at all times from either side without the use of a key except as provided in sub-regulations (3) and (4).

Fire doors opening to a street may be locked

(3) A fire door which opens directly from a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* to a *street* or *open space* may be locked provided that it is openable from within the fire-isolated enclosure without the use of a key.

Certain fire doors may be locked

(4) A fire door which opens into a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* and which is not located at the level of egress to a *street* or *open space* may be locked provided that—

(*a*) the door is openable from outside the fire-isolated enclosure without the use of a key; and

(*b*) there is installed adjacent to the latch set on each alternative floor in the fire-isolated enclosure a fail-safe strike release mechanism that will enable the door to be opened without

the use of the key when the mechanism is activated by means of a lever, button, knob or similar device.

Sign to be provided regarding activating device

(5) A sign stating the purpose and method of opening of an activating device referred to in paragraph (*b*) of sub-regulation (4) shall be exhibited adjacent to the device.

Device may be in box with glass panel

(6) The activating device referred to in sub-regulation (4) may be located in a box with a breakable glass panel of adequate size to enable easy operation of the device.

GLAZING IN FIRE DOORS

21.2 Notwithstanding the provisions of AS 1905 Part 1, a *required* fire door—

(*a*) shall not incorporate glazing if it protects an opening in a *fire wall*; and

(*b*) shall not incorporate glazing in excess of $64.6 \times 10^3 mm^2$ in any other case.

SMOKE DOORS

21.3 Every *required* smoke door shall—

(*a*) comprise one door-leaf or 2 door leaves;

(*b*) be side-hung;

(*c*) inhibit the penetration of smoke, at every part, through the doorway to which it is fitted; and

(*d*) be fitted with an *approved* self-closing device.

FIRE WINDOWS: ALTERNATIVE CONSTRUCTION

21.4 Every *required* one-hour fire *window* shall be—

(*a*) a *window* that is—

(i) identical in construction with a prototype thereof that has been subjected to the *Standard Fire Test* and in that test has demonstrated its ability, for one hour, to prevent the spread of flames and hot gases through the *window* opening;

(ii) installed in the same manner as was the tested prototype referred to in sub-paragraph (i); and

(iii) not used in an opening that is greater in height or width than the opening in which the prototype was tested under the *Standard Fire Test*; or

(*b*) a *window* of wired glass in framing of galvanised steel, complying as to maximum dimensions, construction, and installation with Schedule 1; or

(*c*) a glass-block *window* panel, complying as to maximum dimensions, construction, and installation with Schedule 2.

FIRE SHUTTERS: ALTERNATIVE CONSTRUCTION

Reg. 21.5 substituted by S.R. No. 98/1986 reg. 43.

21.5 A *required* fire shutter shall be—

(*a*) a shutter that—

(i) is identical with a tested prototype which has achieved the *required fire-resistance rating;*

(ii) is installed in the same manner as was the tested prototype and not used in an opening that is greater in height or width than was used in the test; and

(iii) is identical with a tested prototype which during the first 30 minutes after the commencement of the fire test, did not have a rise in temperature on the side remote from the furnace of more than 140°C; or

(*b*) where a metallic fire shutter is not prohibited by these Regulations, a steel shutter complying with AS 1905, Part 2.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 22—LOCATION AND PROTECTION OF OPENINGS

APPLICATION

22.1 This Part shall apply to every building except a Class Xb or Class Xc building or a garage forming part of a Class I or Xa building.

Reg. 22.1 amended by S.R. No. 438/1984 reg. 28.

OPENING DEFINED

22.2 For the purposes of this Part, an "opening" in an *external wall* includes—

(*a*) a doorway;

(*b*) a *window* or other glazed area, whether fixed or openable; and

(*c*) any part of the wall, such as a panel-filled part that does not have the relevant *fire-resistance rating* specified by Part 16 for the structural parts of the wall.

VERTICAL SEPARATION OF OPENINGS IN EXTERNAL WALLS

Application of Regulation

22.3 (1) This Regulation shall apply to buildings of Type 1 and 2 construction, but shall not extend to—

(*a*) a building or part of a building used as an *open-deck parking station;*

Para. (a) amended by S.R. No. 98/1986 reg. 44 (1).

(*b*) *openings* above one another within a *stairway*; or

Para. (b) amended by S.R. No. 98/1986 reg. 44 (2).

(*c*) a building used as an *open spectator stand.*

Para. (c) inserted by S.R. No. 98/1986 reg. 44 (3).

Alternative methods of separation

(2) Where any part of an *opening* in an *external wall* is situated vertically above another *opening* in the *storey* next below, there shall be provided between those *openings*—

(*a*) a spandrel or other vertical construction not less than 900 mm in height and complying with the following conditions:

(i) The construction shall extend not less than 600 mm above the upper surface of the intervening floor.

Sub-para. (ii) amended by S.R. No. 98/1986 reg. 44 (4).

(ii) The construction shall comprise non-*combustible* material having the relevant *fire-resistance rating* prescribed in Table 16.7 (in the case of Type 1 construction) or Table 16.8 (in the case of Type 2 construction).

(iii) There shall be no voids between the edge of the floor and the inside face of the spandrel or other vertical construction, as the case may be; or

(*b*) a slab or other horizontal construction that—

(i) projects outwards from the face of the wall for a distance of not less than 1·1 m;

(ii) extends along the wall not less than 450 mm beyond the lateral limits of the *openings* concerned; and

Sub-para. (iii) amended by S.R. No. 98/1986 reg. 44 (5).

(iii) is non-*combustible* and has a *fire-resistance rating* prescribed in Table 16.7 (in the case of Type 1 construction) or Table 16.8 (in the case of Type 2 construction).

PROTECTION OF OPENINGS IN EXTERNAL WALLS

Where protection required

Sub-reg. (1) substituted by S.R. No. 98/1986 reg. 45 (1), amended by S.R. No. 187/1986 reg. 8.

22.4 (1) An *opening* in an *external wall* which—

(*a*) faces and is closer than 3 m to a *fire-source feature*; and

(*b*) is required by Part 16 to have a *fire-resistance rating*—

shall be protected in accordance with sub-regulation (2).

Sub-reg. (1A) revoked by S.R. No. 98/1986 reg. 45 (2).

(1A) * * * * * *

Protection required

Sub-reg. (2) amended by S.R. No. 98/1986 reg. 45 (3).

(2) The protection referred to in sub-regulation (1) shall be as follows:

(*a*) Doorways—one-hour fire doors (self-closing or *automatic*).

(*b*) Windows and other glazed areas—one hour fire *windows* (*automatic* or permanently fixed in closed position) or one hour *automatic* fire shutters.

(*c*) Other *openings*—construction shall have a *fire-resistance rating* of not less than one hour.

LIMITATIONS OF OPENINGS IN EXTERNAL WALLS

Reg. 22.5 amended by S.R. No. 98/1986 reg. 46.

22.5 Except in a Class IXb building used as an *open spectator stand*, *openings* between successive floors in an *external wall* referred to in Regulation 22.4 shall not occupy more than one-third of the area of the wall between those floors, except where the *openings* face a *street* and are located in a *storey* at ground level.

OPENINGS IN FIRE WALLS

Permissible openings

22.6 (1) No *opening* shall be permitted in a *fire-wall* except—

(*a*) any doorway protected in accordance with this Regulation; or

(*b*) any *opening* for services installed or protected in accordance with Regulation 22.13.

Protection of doorways

(2) A doorway, other than a *horizontal exit*, in a *fire-wall* shall be protected by one of the following: Sub-reg. (2) amended by S.R. No. 98/1986 reg. 47 (1).

(*a*) 2 fire doors or fire shutters, one on each side of the doorway, each of which shall—

(i) have a *fire-resistance rating* of not less than half that required by Part 16 for the *fire wall*; and

(ii) be self-closing, or *automatic* if the *automatic* closing device is so designed as to operate in the event of fire in the building on either side of the *fire wall.*

(*b*) A fire door on one side and a fire shutter on the other side of the doorway, each of which shall comply with sub-paragraphs (i) and (ii) of paragraph (*a*).

(*c*) A single fire door or fire shutter (not being a metallic fire shutter) which— Para. (c) amended by S.R. No. 98/1986 reg. 47 (2).

(i) has a *fire-resistance rating* of not less than that required by Part 16 for the *fire wall*; and

(ii) is self-closing, or *automatic* if the *automatic* closing device is so designed as to operate in the event of fire in the building on either side of the *fire wall.*

Limitation on doorway openings

(3) The aggregate width of *openings* for doorways in a *fire wall* shall not exceed one-half of the length of the *fire wall* concerned.

Protection of doorways being horizontal exits

(4) A doorway which is a *horizontal exit* shall be protected by one of the following: Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 47 (3).

(*a*) A single fire door which—

(i) has a *fire-resistance rating* of not less than that required by Part 16 for the *fire wall*; and

(ii) is *self-closing*, or *automatic* if the *automatic* closing device is so designed as to operate in the event of smoke on either side of the *fire wall.*

(*b*) In a Class VII or VIII building 2 fire doors one on each side of the doorway, each of which shall—

(i) have a *fire-resistance rating* of not less than half that required by Part 16 for the *fire wall*; and

(ii) be *self-closing*, or *automatic* if the *automatic* closing device is so designed as to operate in the event of smoke on either side of the *fire wall*.

DOORWAYS IN FIRE-ISOLATED STAIRWAYS, PASSAGEWAYS AND RAMPS

22.7 Every doorway that opens to a *fire-isolated stairway, fire-isolated passageway,* or *fire-isolated ramp* (not being a doorway opening to a *street* or *open space*) shall be protected by—

(*a*) a self-closing two-hour fire door; or

(*b*) a self-closing fire door having at least the rating *required* for the wall in which it is located—

whichever is the lesser.

OPENINGS IN FIRE-ISOLATED LIFT SHAFTS

Doorways

22.8 (1) Where, pursuant to Part 23, a lift *shaft* is *required* to be fire-isolated, every entrance doorway to that *shaft* shall be protected by a one-hour fire door that—

(*a*) complies with the provisions of AS 1735 Part 11; and

(*b*) is set to remain in the closed position at all times except where it is *required* to be open for the reception or discharge of passengers, goods or vehicles.

Lift indicator panels, etc.

(2) Lift call panels, indicator panels and other panels in the walls of a fire-isolated lift *shaft* shall, if they exceed 32.5×10^3 mm^2 in area, be backed by construction having a *fire-resistance rating* of not less than one hour.

DOORWAYS IN CLASS II AND III BUILDINGS

Doorways to public corridors, etc.

22.9 (1) In a Class II or III building, every doorway providing access from a *sole-occupancy unit* or a room not within a *sole-occupancy unit* to—

(*a*) a public corridor, public hallway, or the like; or

(*b*) the landing of an internal non-*fire-isolated stairway* serving as a *required exit*—

shall be protected in accordance with sub-regulation (3).

Doorways between sole-occupancy units, etc.

(2) In a Class II or III building a doorway providing access from a *sole-occupancy unit* to another *sole-occupancy unit* or to a room not within a *sole-occupancy unit* shall be protected in accordance with sub-regulation (3).

Protection required

(3) The protection *required* by sub-regulations (1) and (2) shall be not less than as follows:

(*a*) In a building of Type 1 or 2 construction—a self-closing one-hour fire door.

(*b*) In a building of Type 3, 4 or 5 construction—a self-closing, tight-fitting, solid core door, not less than 35 mm thick.

ENTRANCE DOORWAYS OF CLASS IV BUILDINGS

22.10 The doorway of a Class IV part of a building providing access to any internal part of the building not within the Class IV part shall be protected by not less than as follows:

(*a*) In a building of Type 1 or 2 construction—a self-closing one-hour fire door.

(*b*) In a building of Type 3, 4 or 5 construction—a self-closing, tight-fitting, solid core door, not less than 35 mm thick.

OPENINGS IN FLOORS FOR CERTAIN SERVICES

Metal pipes, etc.

22.11 (1) In a building of Type 1 or 2 construction, services associated with the functioning of a building and passing through a floor shall either be in individual metal pipes, metal conduits, metal ducts or the like, or be installed in *shafts* complying with Part 16.

PVC pipes, etc. in certain cases

(2) Notwithstanding sub-regulation (1), in a building of Type 1 or 2 construction, plumbing services associated with the functioning of the building and passing through a floor may be in polyvinyl chloride pipes and fittings if—

(*a*) the building contains not more than 2 *storeys* and complies with the provisions of Part 19; or

(*b*) the floors passed through are those between *sanitary compartments* which—

(i) are separated from other parts of the building as though they were ventilating, pipe, garbage, or like *shafts*, not intended for the discharge of hot products of combustion; and

(ii) have every doorway opening therefrom protected by a self-closing fire door, having a *fire-resistance rating* of not less than one hour, and if any *opening* for those polyvinyl chloride pipes and fittings complies with the provisions of Regulation 22.13 relating to *openings* for metal pipes, metal conduits, or the like.

OPENINGS TO SHAFTS, ETC.

Protection in Type 1 and 2 construction

22.12 (1) In a building of Type 1 or 2 construction an *opening* in a wall providing access to a ventilating, pipe, garbage or other service *shaft* shall, except as conceded in sub-regulation (2), be protected by—

(*a*) a self-closing fire door having a *fire-resistance rating* of not less than one hour; or

(*b*) an access panel having a *fire-resistance rating* of not less than one hour; or

(*c*) one of the devices referred to in paragraphs (*a*) and (*b*) or by a door or hopper of *non-combustible* construction if the *shaft* is a garbage *shaft*.

In sanitary compartments

(2) An *opening* referred to in sub-regulation (1) shall not be subject to that sub-regulation if it is—

(*a*) located within a *sanitary compartment*; and

(*b*) provided with a door or panel which, together with its frame, is *non-combustible* or has a *fire-resistance rating* of not less than ½ hour.

OPENINGS FOR SERVICE INSTALLATIONS

Application of Regulation

22.13 (1) This Regulation shall apply to *openings* in a wall, floor, or ceiling that is *required* to have a *fire-resistance rating* or a resistance to the incipient spread of fire.

Pipes and conduits

(2) Individual *openings* for metal pipes, metal conduits, or the like, conveying—

(*a*) wires or cables for electrical or telephone services; or

(*b*) gas, including liquefied petroleum gas; or

(*c*) other services not included in sub-regulation (6) and associated with the functioning of the building—

shall be no larger than is necessary to permit their installation and all gaps around them shall be packed or otherwise treated to the full thickness of the wall, floor, or ceiling, as the case requires, so that its *fire-resisting* performance will not be impaired.

Wiring not in pipes, etc.

(3) Wires or cables for electrical, telephone, or other services that—

(*a*) are not enclosed in metal pipes, metal conduits, or other *non-combustible* material; and

(*b*) are installed within or pass through a wall, floor, or ceiling—

shall be installed according to Part 55, including any relevant provisions of that Part for the protection of *openings* made for those services.

Wall openings for air-handling systems

(4) Except as provided by sub-regulation (5), *openings* for ventilating or air-conditioning ducts or other equipment shall—

(*a*) where forming part of an air-handling system referred to in Rule 1.3 (*a*) of AS 1668 Part 1; or

(*b*) where not forming part of an air-handling system referred to in paragraph (*a*), but where made in a wall *required* to have a *fire-resistance rating* to resist the lateral spread of fire—

be protected by fire dampers complying with AS 1682.

Fire dampers—where not required or prohibited

(5) Fire dampers—

(*a*) are not *required* to be fitted to an *opening* referred to in sub-regulation (4) if the *opening* is of a kind referred to in Rule 4.1.4 of AS 1668 Part 1; and

(*b*) shall not be fitted to an *opening* referred to in sub-regulation (4) if the *opening* is of a kind referred to in Rule 4.1.5 of AS 1668 Part 1.

Air ducts which pass through one or more floors

(6) An air duct which passes through one or more floors *required* to have a *fire-resistance rating* shall be enclosed in a *shaft* which—

(*a*) has the *fire-resistance rating* not less than that required for a ventilating *shaft* by Part 16; and

(*b*) is enclosed at the top and bottom with construction having the same *fire-resistance rating* as that *required* for the walls of the *shaft*, except that the enclosure at the top of the *shaft*

may be omitted where the top of the *shaft* opens outside the building in which the duct is installed or *constructed.*

Other services

(7) *Openings* for other services not mentioned in sub-regulations (2), (3), (4) or (6) shall be protected in an *approved* manner.

CLASS IXa—DISTANCE BETWEEN OPENINGS IN SEPARATE COMPARTMENTS

Reg. 22.14 inserted by S.R. No. 98/1986 reg. 48.

22.14 Unless openings are protected in accordance with Regulation 22.4 (2), the distance between them in *ward areas* separated by a *fire wall* within a Class IXa building shall be not less than as set out in Table 22.14.

Table 22.14

Angle between Two Planes Containing Openings	*Minimum Distance between Openings*
0° (opposite planes)	6 m
0°–45°	5 m
more than 45°–90°	4 m
more than 90°–135°	3 m
more than 135°–180°	2 m

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 23—SEPARATION OF A BUILDING BY FIRE-RESISTING CONSTRUCTION

SEPARATION BY FIRE WALLS

When part regarded as a separate building

23.1 (1) A part of a building that is fire-separated from the remainder of the building by a *fire wall* in accordance with this Regulation shall be subject to the provisions of these Regulations as though it were a separate building.

Fire wall to extend through all storeys

(2) A *fire wall* shall extend to the underside of the roof covering except as provided in sub-regulation (3).

Where parts have roofs at different levels

(3) If the roof of one of the adjoining parts is lower than the roof of the other part, the *fire wall*—

(*a*) shall be carried through to the underside of the covering of the lower roof; and

(*b*) shall have a wall *constructed* on top of it which—

(i) extends to—

(A) the underside of the covering of the higher roof; or

(B) a level 6 m above the lower roof—

whichever is the lesser; and

(ii) has a *fire-resistance rating* not less than that *required* for the *fire wall*; and

(iii) has any *openings* in it protected as follows:

(A) Doorways—*approved* external *automatic* sprinklers; or *approved* external *automatic* drenchers; or one-hour fire doors (self-closing or *automatic*).

(B) *Windows* and other glazed areas—*approved* external *automatic* sprinklers; or *approved* external *automatic* drenchers; or one-hour fire *windows* (*automatic* or permanently fixed in closed position); or one-hour *automatic* fire shutters.

(C) Other *openings*—*approved* external *automatic* sprinklers; or *approved* external *automatic*

drenchers; or construction having a *fire-resistance rating* of not less than one hour.

Conditions when certain requirements do not apply

(4) Notwithstanding anything to the contrary in this Regulation, any or all of the requirements of sub-regulation (3) (*b*) shall not apply if the *building surveyor* is satisfied that, by reason of the design of the lower roof or the design or proposed use of the building housed under the lower roof, the spread of fire from the lower part to the higher part of the building would be resisted either better or as effectively.

Combustible materials not to cross fire wall

(5) Timber purlins or other *combustible* material shall not pass through or cross the *fire wall.*

Fire-resistance rating of fire wall

(6) The *fire wall* shall have the relevant *fire-resistance rating* prescribed by Part 16, according to the type of *fire-resisting construction required* for each of the adjoining parts and where these are different the greater rating shall apply.

SEPARATION BETWEEN PARTS OF DIFFERENT CLASSIFICATIONS

When required

23.2 (1) Where, in terms of Part 6, a building has parts of different classification, those parts shall be separated from one another by fire-protective or *fire-resisting construction* in accordance with this Regulation, except as conceded in Regulation 23.4.

Within the same storey

(2) If the parts of different classification are alongside one another in the same *storey*, they shall be separated in that *storey* by a *fire wall*, the *fire-resistance rating* of which shall be not less than that determined according to Regulation 16.15 (1) (*a*).

Within different storeys

(3) If the parts of different classification are situated one above the other in adjoining *storeys* they shall be separated as follows according to the *required* type of construction of the building:

(*a*) Type 1 and 2 construction—the floor between the adjoining parts shall have a *fire-resistance rating* not less than that listed for a floor under Table 16.7 (if Type 1 construction is *required*) or Table 16.8 (if Type 2 construction is *required*) for the classification of the lower of the 2 adjoining *storeys* concerned.

(*b*) Type 3, 4 or 5 construction (applicable only if one of the adjoining parts is of Class II, III or IV) the underside of the floor (including the sides and underside of the floor beams, if any) shall be protected by a material of fire-protective grade of— Para. (b) amended by S.R. No. 98/1986 reg. 49.

(i) 13 mm plasterboard; or

(ii) 12 mm asbestos-silicia board; or

(iii) 12 mm mesh-reinforced fibrous plaster in which the mesh is one of 13 mm × 13 mm × 0·710 mm welded wire located not more than 6 mm from the exposed face; or

(iv) any other material not less fire-protective than 13 mm plasterboard.

23.3 * * * * * *

EXEMPTION FROM SEPARATION WITHIN SAME STOREY

23.4 It shall not be necessary to provide a *fire-wall* between parts having different classifications that are alongside one another in the same *storey* if each of the *structural members* throughout the *storey* has a *fire-resistance rating* as follows:

(*a*) Where Part 16 specifies the same rating for that member for each of the classifications concerned—the rating so specified.

(*b*) Where Part 16 specifies different ratings for that member for any of the classifications concerned—the greater of the ratings so specified.

SEPARATION OF LIFTS FROM REMAINDER OF BUILDING

When required

23.5 (1) In a building *required* to be of Type 1, 2, or 3 construction, lifts connecting more than 2 *storeys* shall be separated from the remainder of the building by way of enclosure in a *fire-resisting shaft* in which—

(*a*) the walls have the relevant *fire-resistance ratings* not less than those prescribed by Part 16; and

(*b*) *openings* for lift landing doors and services are protected in accordance with Part 22.

Stairways and lifts in the one shaft

(2) A *stairway* and lift shall not be incorporated in the one *shaft* if either the *stairway* or the lift is *required* to be in a *fire-resisting shaft*.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 24—MEANS OF EGRESS

DIVISION 1—INTRODUCTORY

DIVISIONS OF PART 24

24.1 This Part comprises the following Divisions:

DIVISION 1—INTRODUCTORY

DIVISION 2—GENERAL PROVISIONS

DIVISION 3—CLASS II AND III BUILDINGS

DIVISION 4—CLASS V, VI, VII AND VIII BUILDINGS

DIVISION 5—CLASS IX BUILDINGS

Div. 5 inserted by S.R. No. 98/1986 reg. 50.

APPLICATION OF PART

24.2 This Part shall not apply to any Class I or X building or within any *sole-occupancy unit* of a Class II or III building.

New reg. 24.2 inserted by S.R. No. 438/1984 reg. 29, amended by S.R. No. 98/1986 reg. 51.

EXITS AND PATHS OF TRAVEL TO COMPLY WITH THIS PART

24.3 The *exits* and paths of travel to *exits* in a building, shall comply with the provisions of this Part.

24.4 * * * * * *

DIVISION 2—GENERAL PROVISIONS

24.5 * * * * * *

Reg. 24.5 revoked by S.R. No. 438/1984 reg. 30.

ALTERATIONS TO EXISTING BUILDINGS

24.6 Where any *alteration* is proposed in respect of an existing building, and where such *alteration* would adversely affect any *exit* or path of travel to an *exit*, the *council* may require that the building shall comply with this Part or such of the provisions of this Part as it considers necessary.

PROTECTION OF OPENINGS IN EXITS AND PATHS OF TRAVEL

24.7 Every doorway serving as an *exit* to a *street* or *open space*, and every doorway and other *opening* in the enclosing walls, floors and ceilings of *exits* or public corridors, hallways, or the like, shall be protected in accordance with Part 22.

DIRECT ACCESS TO ROOMS FROM CERTAIN EXITS

24.8 No doorway from any room, other than—

(*a*) a *sole-occupancy* unit occupying the whole of a *storey*; and

(*b*) a *sanitary compartment*—

shall open directly into a *stairway*, passageway, or ramp that is to be fire-isolated.

FIRE-ISOLATED PASSAGEWAYS: CONSTRUCTION

Serving fire-isolated stairs or ramps

24.9 (1) A *fire-isolated passageway* that serves as a means of egress from a *required fire-isolated stairway* or *fire-isolated ramp* to a *street* or *open space* shall have the same *construction* enclosing the passageway as *required* for a *fire-isolated ramp.*

Not serving fire-isolated stairs or ramps

(2) A *fire-isolated passageway* that does not serve as a means of egress from a *required fire-isolated stairway* or *fire-isolated ramp* to a *street* or *open space* shall be enclosed by walls, floors, and ceilings of *non-combustible* construction having a *fire-resistance rating* of not less than one hour.

FIRE-ISOLATED RAMPS: CONSTRUCTION

24.10 A *fire-isolated ramp* may be substituted for a *fire-isolated stairway* if the construction enclosing the ramp complies with Part 16 for the *shaft* of a *fire-isolated stairway.*

HORIZONTAL EXITS

Proportion of required exits

24.10.1 (1) *Horizontal exits* shall not comprise more than 50 per cent of the number of *required exits* from any part of a *storey* which has been divided by a *fire wall.*

Reg. 24.10.1 inserted by S.R. No. 98/1986 reg. 52.

Areas on each side of horizontal exit

(2) Where a *horizontal exit* is provided, the part of the *storey* on each side of the *fire wall* shall have a clear area of not less than—

(*a*) 2·5 m² per patient in a Class IXa building; and

(*b*) 0·5 m² per person in any other case—

to accommodate the total number of persons (calculated pursuant to Regulation 24.28) from both parts of the *storey*.

Where not permitted

(3) A *horizontal exit* shall not be permitted—

(*a*) between *sole-occupancy units;* or

(*b*) in a Class IXb building used as a primary or post-primary *school.*

EXTERNAL STAIRWAYS IN LIEU OF FIRE-ISOLATED STAIRWAYS

Where permissible

24.11 (1) An external *stairway* may serve as a *required exit* in lieu of a *fire-isolated stairway,* subject to this Regulation.

Construction

(2) The *stairway* (including connecting bridges, if any) shall be of *non-combustible* construction throughout.

Enclosure under certain conditions

(3) If any part of the *stairway* is less than 6 m from a *window* or doorway or other opening in an *external wall* of the building from which the *stairway* serves as a *required exit*—

(*a*) the *stairway* shall be enclosed for its full height above the lowest level of the *window* or doorway or other opening by *non-combustible* construction having a *fire-resistance rating* of not less than one hour; and

(*b*) no *window* or other glazed part in the enclosing walls of the *stairway* shall be within 6 m of any *window* or doorway or other opening in the *external walls* of the building.

Exemption from enclosure

(4) Sub-regulation (3) shall not apply if—

(*a*) every *window* is more than 3 m from any part of the *stairway;* and

(*b*) the following are protected as shown:

(i) Any *window* 3 to 6 m from *stairway*—by a one-hour *automatic* fire shutter, or a one-hour fire *window* (*automatic* or permanently fixed in closed position).

(ii) Any doorway less than 3 m from *stairway*—by a one-hour self-closing fire door.

(iii) Any doorway 3 to 6 m from *stairway*—by a one-hour self-closing fire door, or a one-hour *automatic* fire shutter.

Sub-para. (iv) amended by S.R. No. 438/1984 reg. 31.

(iv) Any other opening less than 6 m from *stairway*—by a one-hour self-closing fire door, or a one-hour *automatic* fire shutter or other *approved* means.

ESCALATORS AND NON-REQUIRED STAIRWAYS

Number of storeys served

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 53 (1).

24.12 (1) Escalators and non-*required* non-*fire-isolated stairways* and non-*fire-isolated ramps* shall not connect more than—

(*a*) 3 consecutive *storeys* where each of those *storeys* is provided with an *approved sprinkler system* throughout; or

(*b*) 2 consecutive *storeys*—

and one of those *storeys* shall be situated at a level at which egress to a *street* or *open space* is provided.

Exemptions

Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 53 (2).

(2) Sub-regulation (1) shall not apply to an escalator, *stairway or ramp* that is—

(*a*) an external escalator, *stairway* or ramp, irrespective of the classification of building; or

(*b*) within a Class IXb building used as an *open spectator stand* or indoor sports stadium.

Class IXa buildings

Sub-reg. (3) inserted by S.R. No. 98/1986 reg. 53 (3).

(3) Notwithstanding sub-regulation (1), escalators and non-*required* non-*fire-isolated stairways* and non-*fire-isolated ramps* shall not be permitted within any *ward area* in a Class IXa building.

TRAVEL VIA NON-FIRE-ISOLATED STAIRWAYS

24.13 A non-*fire-isolated stairway* serving as a *required exit* shall provide a continuous means of travel via its own flights of stairs and landings from every *storey* served to the level at which egress to a *street* or *open space* is provided.

DISCHARGE OF FIRE-ISOLATED STAIRWAYS AND RAMPS

To street or open space

24.14 (1) Every *fire-isolated stairway* and *fire-isolated ramp* shall lead directly or by way of a *fire-isolated passageway* to a *street* or *open space*, except as conceded in sub-regulation (2).

To space in building that is not fully enclosed

(2) In a Class V, VI, VII, VIII or IX building, a *fire-isolated stairway* or *fire-isolated ramp* discharging into a *storey* or similar space within the confines of the building shall not be subject to sub-regulation (1) if— Sub-reg. (2) amended by S.R. No. 98/1986 reg. 54.

(*a*) that *storey* or space is at a level at which egress to a *street* or *open space* is provided;

(*b*) that *storey* or space is unenclosed or only partly enclosed; and

(*c*) any walls, columns, piers, glazing or other construction at the periphery of that *storey* or similar space do not occupy, in total, more than one-third of its perimeter.

SEPARATION OF RISING AND DESCENDING STAIR FLIGHTS

No direct connection

24.15 (1) Where a *stairway* serving as an *exit* is *required* to be fire-isolated, there shall be no direct connection between—

(*a*) a flight of stairs rising from a *storey* below the lowest level of access to a *street* or *open space* ; and

(*b*) a flight of stairs descending from a *storey* above that level.

Construction separating flights

(2) Any construction that is common to or separates rising and descending flights of stairs, as referred to in sub-regulation (1), shall be *non-combustible* and have a *fire-resistance rating* of not less than one hour.

DISCHARGE OF NON-FIRE-ISOLATED STAIRWAYS AND RAMPS IN CLASS VI BUILDINGS

24.16 In a Class VI or IXb building, a non-*fire-isolated stairway* or *ramp* shall discharge at a point not more than— Reg. 24.16 amended by S.R. No. 98/1986 reg. 55.

(*a*) 18 m from a doorway providing egress to a *street* or *open space* or from a *fire-isolated passageway* leading to a *street* or *open space* ; or

(*b*) 30 m from one of 2 such doorways or passageways where travel to each of them from the *stairway* or ramp is in opposite or approximately opposite directions.

INSTALLATIONS IN EXITS AND PATHS OF TRAVEL

Gas meters

24.17 (1) No gas meter shall be installed in an *exit* or in any corridor, hallway, lobby or the like leading to an *exit*.

Gas pipes

(2) No gas pipe or other fuel pipe shall be installed in an *exit*.

Telephone switches

(3) No telephone switchboard shall be installed in any *fire-isolated stairway*, *fire-isolated ramp*, or *fire-isolated passageway*.

Other services

(4) The following services and equipment shall not be installed in an *exit* or in any corridor, hallway, lobby, or the like leading to an *exit* unless enclosed by *non-combustible* construction or a material listed in Regulation 16.12:

(*a*) Any electricity meter or duct.

(*b*) Any electrical motor or other motor serving equipment in the building.

OPENINGS TO CHUTES FOR HOT PRODUCTS OF COMBUSTION

24.18 An opening to any chute or duct intended for conveying the hot products of combustion shall not be located in any part of an *exit* or any corridor, hallway, lobby, or the like leading to an *exit*.

ENCLOSURE OF SPACE UNDER STAIRS

Fire-isolated stairways

24.19 (1) The space below a flight of stairs of a *fire-isolated stairway*, if such space is within the fire-isolated *shaft*, shall not be enclosed to form a cupboard or similar enclosed space.

Non-fire-isolated stairways

(2) The space below a flight of stairs of a non-*fire-isolated stairway* (including an external *stairway*) serving as an *exit* shall not be enclosed to form a cupboard or other enclosed space unless—

(*a*) the enclosing walls and ceilings have a *fire-resistance rating* of not less than one hour; and

(*b*) any access doorway to the enclosed space is fitted with a self-closing fire door having a *fire-resistance rating* of not less than one hour.

DOORWAYS AND DOORS

Application of Regulation

24.20 (1) This Regulation shall apply to every doorway and door—

(*a*) serving as an *exit*; or

(*b*) forming part of an *exit*.

Para. (b) substituted by S.R. No. 75/1984 reg. 16.

Revolving doors and roller shutters

(2) A revolving door or roller shutter shall not be fitted to a doorway referred to in sub-regulation (1).

Sliding doors

(3) A sliding door shall comply with the following requirements:

(*a*) It shall not be fitted to a doorway referred to in sub-regulation (1), other than one leading to a *street* or *open space*.

Para. (a) amended by S.R. Nos. 98/1986 reg. 56 (1), 300/1986 reg. 2.

(*b*) If it is power operated the sliding door shall be so constructed that—

(i) a 'fail-safe' mechanism is installed so that the door requires power to close; and

(ii) in the event of a power failure, the door will automatically open except that a locking device in the form of a snib or lever provided to the door to hold it in the closed position may be confined to—

(A) the meeting stiles for double doors; and

(B) the meeting stile and jamb for a single door.

(*c*) The snib or lever referred to in paragraph (*b*) (ii) shall—

(i) be clearly marked;

(ii) be designed in such a manner that it may be operated without a key or any other device; and

(iii) when operated, allow the doors to open automatically in the normal fashion.

Swinging doors: encroachment

(4) A swinging door fitted to a doorway referred to in sub-regulation (1)—

(*a*) shall not, at any part of its swing, encroach by more than 500 mm on the *required* width of a *required stairway* or ramp, including the landings thereof; and

Para. (a) amended by S.R. No. 98/1986 reg. 56 (2).

(*b*) shall not, when fully open, encroach by more than 100 mm on the *required* width of a *required exit*—

the measurement of encroachment in each case to include door handles or other furniture or attachments to the door.

Direction of swing

(5) A swinging door fitted to a doorway referred to in sub-regulation (1) shall swing in the direction of egress except in the case of—

(*a*) a doorway opening into a *sanitary compartment* ; and

Para. (b) substituted by S.R. No. 98/1986 reg. 56 (3).

(*b*) a doorway that serves—

(i) a building deemed pursuant to Regulation 24.28 to accommodate less than 50 persons and opening to a *street, open space* or external balcony, in which case the door may swing against the direction of egress if fitted with an *approved* means of fixing it readily in the fully open position; or

(ii) as a *horizontal exit* where that doorway serves an area deemed pursuant to Regulation 24.28 to accommodate less than 50 persons.

Swing of doors in Class IXa buildings in areas used by patients

Sub-reg. (5A) inserted by S.R. No. 98/1986 reg. 56 (4).

(5A) The concessions allowable pursuant to sub-regulation (5) shall not apply to a doorway in a Class IXa building in *ward areas* and patient treatment areas.

Swing of doors of fire-isolated stairways, etc.

(6) The concession allowable pursuant to sub-regulation (5)(*b*) shall not apply to a doorway of a *required fire-isolated stairway, fire-isolated ramp,* or *fire-isolated passageway.*

Operation of latch

(7) Except as provided in Regulation 21 . 1 a door referred to in sub-regulation (1) shall be readily openable without a key by a single-handed action, from the side that would face any person seeking egress from the building.

DOORS IN PATH OF TRAVEL

Operation of latch

S.R. 263/1990.

24.20.1 (1) A door, shutter, grille, or the like which is installed in the path of travel to a *required exit* must be readily openable from the side that would face a person seeking egress from the building—

(*a*) without the use of a key; and

(*b*) by a single hand action on a single device which—

(i) is located between 900 mm and 1·2 m above the floor; and

(ii) does not comprise a bolt or padlock or a separately operated deadlock.

Exemptions

(2) Sub-regulation (1) does not apply to any door, shutter, grille, or the like which—

(*a*) serves a vault, strongroom or the like;

(*b*) serves a *sole-occupancy unit* in a Class II, III or IV building;

(*c*) serves a *sole-occupancy unit* in a Class V, VI, VII or VIII building with a *floor area* of not more than 200 m^2.

THRESHOLDS

Incorporation of steps or ramps

24.21 (1) The threshold of a doorway serving as an *exit* or forming part of an *exit* shall not, except as in sub-regulation (2), incorporate a step or ramp at any point closer to the doorway than the width of the door.

Doorways opening to exterior of building

(2) A doorway opening to a *street, open space*, or external balcony shall not be subject to sub-regulation (1) if the door sill is not more than 190 mm above the finished surface of the ground, landing, balcony, or the like, to which the doorway opens.

EGRESS TO OPEN SPACE AND STREET

Width from open space to street

24.22 (1) Where a *required exit* leads to an *open space*, a path of travel to the *street* shall have an unobstructed width throughout of— Reg. 24.22 substituted by S.R. No. 98/1986 reg. 57.

(*a*) in Class IX buildings, not less than the minimum width of the *required exit*; or

(*b*) not less than 1 m in all other cases.

Open space at different level to street

(2) Where a *required exit* leads to an *open space* that is at a different level to the *street* to which it is connected, the path of travel to the *street* shall be by way of—

(*a*) a ramp or other incline having a gradient not greater than 1 in 8 at any part; or

(*b*) a *stairway* complying with the relevant provisions of this Part.

WIDTHS OF STAIRWAYS

To be measured clear of obstructions

24.23 (1) The width of a *stairway* (as represented by the letter "W" in Figure 24.23) shall be measured clear of all obstructions, such as handrails, projecting parts of balustrades, and the like, and shall remain constant without interruption, except for ceiling cornices, to a height not less than 2·03 m vertically above a line along the nosings of the treads and the floor of the landing.

Exceeding 2 m

(2) A *stairway* that exceeds 2 m in unobstructed width shall be deemed to have a width of 2 m, unless—

(*a*) it is divided by a balustrade or handrail continuous between landings; and

(*b*) each such division is not less than 1 m in width, in which case the full unobstructed width of the *stairway* may be counted for the purposes of this Part.

LANDINGS

Between flights

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 58 (1).

24.24 (1) Every *stairway* shall be provided with landings, where necessary, to limit the number of risers in a flight of stairs to 18.

Length

(2) The length of travel along a landing measured 500 mm from the inside edge of the landing (as represented by the letter "L" in Figure 24.23) shall be not less than 750 mm.

Surface

(3) Landings shall be provided with a non-slip finish throughout or with an *approved* non-skid strip near the edge of the landing where it leads to a flight of stairs below.

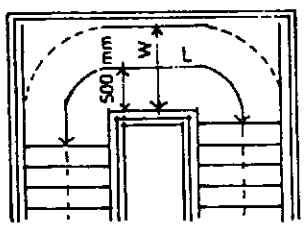
Class IXa buildings—Area

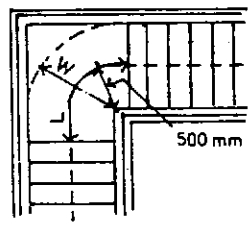
Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 58 (2).

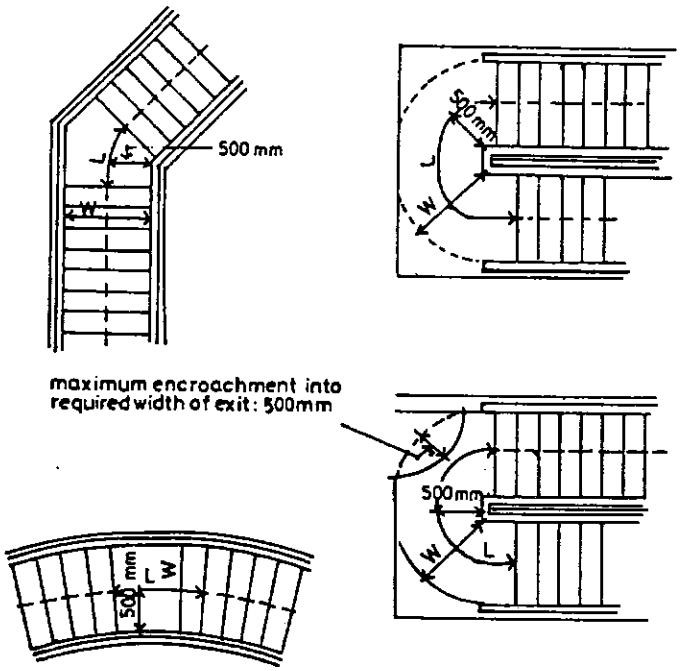
(4) In a Class IXa building the area of any landing shall comply as follows:

(*a*) The area shall be not less than that required to move at an angle not greater than the slope of the stairs a stretcher contained within a rectangle 2·3 m long by 585 mm wide with at least one end of the stretcher being on the landing while changing direction between two flights.

(*b*) The requirements of paragraph (*a*) shall be deemed to be complied with when the stair has a change of direction of 180°, and the landing has a clear width of not less than 1·6 m and a clear length of not less than 2·7 m.







STAIRWAY REQUIREMENTS
FIGURE 24.23

TREADS AND RISERS (NOT CLASS IX)

Number in a flight

24.25 (1) The flight of a *stairway* shall have not more than 18 risers.

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 59.

Going and riser height

(2) The going and riser height of a flight of stairs in a *stairway* shall be constant throughout that flight.

Construction of treads

(3) The treads of a flight of stairs in a *stairway* shall—

(*a*) be *constructed* within the limits of shape and size illustrated in Figure 24.25 and specified in Table 24.25; and

(*b*) be provided with a non-slip finish throughout or with an *approved* non-skid strip near the edge of the nosings.

Construction of risers

(4) The risers of a flight of stairs in a *stairway* shall be *constructed* within the limits of shape and size illustrated in Figure 24.25 and Table 24.25.

Risers may be open

(5) Nothing in this Regulation shall be deemed to prevent the space between the treads of a *stairway* from being completely open.

TABLE 24.25

LIMITS OF RISER HEIGHT AND GOING

Shape of Treads in Plan (1)	*RiserHeight— R in mm*		*Going— G in mm*		*Limits of 2R + G*			
	Max (2)	*Min* (3)	*Max* (4)	*Min* (5)	*Max* (6)		*Min* (7)	
Rectangular	190	115	395	250	630		585	
			Wide End of Tread	*Narrow End of Tread*	*Wide End of Tread*		*Narrow End of Tread*	
					Max.	*Min.*	*Max.*	*Min.*
Tapered as in a curved stairway	190	115	445	205	675	625	590	545

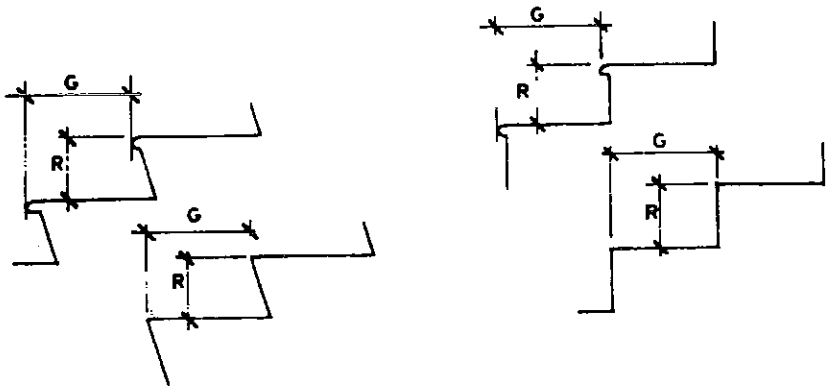


FIGURE 24.25 DIMENSIONS OF TREADS AND RISERS

RAMPS: GENERAL REQUIREMENTS

Measurement of width

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 60 (1).

24.26 (1) The width of a ramp shall be measured clear of all obstructions, such as handrails, projecting parts of balustrades, and the like, and shall remain constant without interruption, except for ceiling cornices, to a height of not less than 2·03 m vertically above the floor surface of the ramp.

Gradient for exits

Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 60 (2).

(2) A ramp, either exclusively for the use of pedestrians or incorporating a permanently defined path for the use of pedestrians shall have a gradient not greater than 1 in 8.

Surface finish

(3) The floor surface of a ramp shall have a non-slip finish.

Sub-reg. (3) substituted by S.R. No. 98/1986 reg. 60 (3).

Class IXa buildings

(4) Notwithstanding sub-regulation (2) in every Class IXa building in areas used by patients every ramp shall have a gradient not greater than 1 in 12.

Sub-reg. (4) substituted by S.R. No. 98/1986 reg. 60 (3).

HANDRAILS AND BALUSTRADES

Balustrades

24.27 (1) A balustrade shall be—

(*a*) provided along every side of any *stairway* or ramp and any corridor, hallway, external access balcony, bridge, or the like, wherever the side is not bounded by a wall and is more than 600 mm (or 3 risers in the case of a *stairway*) above the finished surface of the adjoining floor or ground, as the case may be;

Sub-reg. (1) substituted by S.R. No. 438/1984 reg. 32, amended by S.R. No. 98/1986 reg. 61 (1)–(3).

(*b*) except in Class VII or VIII buildings, *constructed* so that the distance between rails or balusters or the like, and between a bottom rail or the like and the floor surface or a line connecting the nosings of the stair treads shall not exceed 200 mm; and

(*c*) *constructed* to a vertical height of—

(i) not less than 865 mm above the nosings of stair treads; and

(ii) not less than 1 m above the floor surface of ramps, landings, corridors, hallways, external balconies, bridges and the like.

Number of handrails

(2) A handrail shall be provided along at least one side of every flight of stairs in a *stairway* and where the flight is—

Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 61 (4).

(*a*) 1 m or more in width in the case of a Class IXb building; and

(*b*) 1·5 m or more in width in any other case—

a handrail shall be provided along each side.

Height, etc. of handrails

(3) Every handrail shall be at a vertical height of not less than 865 mm above—

Sub-reg. (3) amended by S.R. No. 75/1984 reg. 17.

(*a*) the nosings of stair treads; and

(*b*) the floor surface of ramps, landings, corridors, hallways, external access balconies, bridges and the like—

and shall be so *constructed* that there will be no obstruction on or above it that will tend to break a hand hold, newel posts excepted.

Handrails to be continuous between landings

(4) Every *required* handrail shall be continuous between stair flight landings.

In primary schools

Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 61 (5).

(5) In addition to the requirements of sub-regulation (3), on every flight of stairs in a Class IXb building used as a primary *school*, a handrail shall be provided at a vertical height of not more than 700 mm above the nosings of stair treads.

In Class IXb mezzanines

Sub-reg. (6) inserted by S.R. No. 98/1986 reg. 61 (5).

(6) Notwithstanding sub-regulation (1) (*c*), in a Class IXb building provided with *mezzanines* containing fixed seating, the vertical height of a balustrade which is directly in front of the fixed seating may be reduced to 700 mm provided that a horizontal projection extends for a distance of not less than 1 m outwards from the face of the top of the balustrade along the length of that part of the balustrade.

WIDTHS OF EXITS ACCORDING TO NUMBER OF PERSONS

Application of Regulation

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 62 (1).

24.28 (1) This Regulation shall apply wherever this Part stipulates the minimum width of a *required exit* or doorway leading to a *required exit* according to the number of persons accommodated in a *storey* or *mezzanine.*

Calculation of number accommodated

(2) The number of persons deemed to be accommodated in a *storey* shall be the sum of the numbers obtained by dividing the *floor area* of each part of the *storey* by the relevant number of square metres per person listed in Table 24.28, according to the use or proposed use of that part.

Use not listed

(3) Where a particular use of part of a *storey* is not listed in Table 24.28, the number of square metres per person to be used in the calculation shall be as determined by the *building surveyor.*

Calculation of floor area

(4) In this Regulation, the *floor area* of a *storey* or part of a *storey* shall exclude spaces set aside for—

Para. (a) amended by S.R. No. 98/1986 reg. 62 (2).

(*a*) lifts, stairs, ramps and escalators;

(*b*) corridors, hallways, lobbies, and the like;

(*c*) service ducts and the like; and

(*d*) *sanitary compartments* or other ancillary uses.

Open spectator stands

Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 62 (3).

(5) Notwithstanding sub-regulation (2), in a Class IXb building used as an *open spectator stand* the number of persons deemed to be

accommodated shall be limited to the number of spectator viewing positions provided.

Class IXb buildings: notice indicating number of persons

(6) Before occupation of any Class IXb building other than an *open spectator stand*, any auditorium or compartment deemed according to this Regulation to accommodate more than 50 persons shall— Sub-reg. (6) inserted by S.R. No. 98/1986 reg. 62 (3).

(*a*) have a notice conspicuously and permanently affixed thereto indicating the maximum number of persons deemed to be accommodated for the purposes of providing *exits* and sanitary facilities in such auditorium or compartment; and

(*b*) have the lettering of such notice embossed or cast into a tablet not less than 230 mm square and located not less than 1 m above floor level.

TABLE 24.28

AREAS PER PERSON ACCORDING TO USE

Table 24.28 amended by S.R. No. 438/1984 reg. 33, substituted by S.R. No. 98/1986 reg. 62 (4), amended by S.R. No. 220/1989 reg. 7 (2) (a) (i)–(iv).

Type of Use (1)	*Square metres per person* (2)
Art gallery	4
Bar	1
Board Room	2
Boarding House	15
Cafe	1
Cafeteria	1
Children's Services Centre	3·3
Church	0·6 or the number of fixed seats proposed
Computer Room (main frame)	25
Court rooms—	
judicial area	10
public seating	0·6 or the number of fixed seats proposed
Dance Floor	0·5
Dining Room	1
Dormitory—	
child	4·5
adult	6
Exhibition	4
Exposition	2·5
Factory—	
(*a*) a machine shop, fitting shop, or like place for cutting, guarding, finishing or fitting of metals or glass, except in the fabrication of structural steelwork or manufacture of vehicles or bulky products	5
(*b*) areas used for fabrication and processing other than those in (*a*)	50

TABLE 24.28—*continued*

AREAS PER PERSON ACCORDING TO USE

Type of Use (1)	*Square metres per person* (2)
(*c*) a space in which the layout and natural use of fixed plant or equipment determine the number of persons which will occupy the space during working hours	The area per person determined by the natural use of the fixed plant or equipment and as approved by the building surveyor
Garage—public	30
Guest House	15
Gymnasium	3
Hospital ward	30 per patient
Hostel	15
Hotel	15
Indoor Sporting Venue, activities area	10
Kiosk	1
Kitchen	10
Laboratory	10
Laundry	10
Library—	
reading space	2
storage space	30
Museum	4
Office, including one for typewriting or document copying	10
Plant Room for—	
ventilation, electrical or other service units	30
boilers or power plant	50
Reading Room	2
Restaurant	1
Schools—	
general purpose classrooms	2
trade and practical areas—	
primary	4
post primary	As for related trade
multi-purpose halls	1
Seated viewing of performing arts, sporting or recreational activities	0·6 or the number of fixed seats proposed or 460 mm per person where bench seating proposed
Shop—space for sale of goods—	
(*a*) at a level entered directly from the open air or any lower level	2·5
(*b*) all other levels	5·5
Showroom—display area	5
Skating rink, based on rink area	1·5

TABLE 24.28—*continued*
AREAS PER PERSON ACCORDING TO USE

Type of Use (1)	*Square metres per person* (2)
Staff Room	10
Stage	1·5
Standing viewing of performing arts, sporting or recreational activities	0·3
Storage Space	30
Switch Room	30
Swimming Pool, based on pool area	1·5
Telephone exchange—private	30
Theatre dressing rooms	4
Transformer Room	30
Transport terminal	2
Workshop—	
for maintenance staff	30
for manufacturing processes	As for 'Factory'

EXIT SIGNS

24.29 Exit signs shall be provided in accordance with the following:

(*a*) Exit signs shall be *required* in—

(i) a Class II building having a rise in *storeys* of 4 or more;

(ii) a Class III or V building having a rise in *storeys* of 3 or more;

(iii) a Class VI, VII, VIII or IX building having a rise in *storeys* of 2 or more with a total *floor area* of 300 m² or more; Sub-para. (iii) amended by S.R. No. 98/1986 reg. 63 (1).

(iv) any area where emergency lighting is *required*; or Sub-para. (iv) substituted by S.R. No. 98/1986 reg. 63 (2).

(v) all parts of a Class IXb building where any area is occupied by the public and has lighting dimmed or extinguished during public occupation. Sub-para. (v) inserted by S.R. No. 98/1986 reg. 63 (3).

(*b*) A *required* exit sign shall be provided above or adjacent to—

(i) every *required exit* leading directly to a *street* or *open space*; Sub-para. (i) substituted by S.R. No. 98/1986 reg. 63 (4).

(ii) every door leading directly into an enclosed stair or ramp;

(iii) every door leading directly into a *fire-isolated passageway*; Sub-para. (iii) amended by S.R. No. 98/1986 reg. 63 (5).

Sub-para. (iv) amended by S.R. No. 98/1986 reg. 63 (6).

(iv) every door or landing leading directly to an external stair; and

Sub-para. (v) inserted by S.R. No. 98/1986 reg. 63 (7).

(v) every door forming a *horizontal exit.*

(*c*) Except as provided in paragraph (*d*), every exit sign shall be clearly visible from the approach to such *exit* in the direction of *exit* travel.

(*d*) Where an exit sign is not clearly visible as *required* by paragraph (*c*), a directional sign shall be provided and placed so that a person is directed towards an *exit.*

(*e*) Directional signs shall bear the word "EXIT", together with an arrow which shall form part of the sign or be placed adjacent to it.

(*f*) Every exit sign *required* by this Regulation shall be installed in accordance with the relevant provisions of AS 2293 Part 1.

EXITS FROM PLANT ROOMS AND LIFT MOTOR ROOMS

General requirements

24.29.1 (1) Notwithstanding Division 3 or 4, every plant room and lift motor room shall have direct access to at least two alternative *exits,* one of which shall be fire-isolated except that—

(*a*) where the total area of such room or rooms at any level does not exceed 100 m^2 the alternative means of egress other than the fire-isolated *exit* may be in the form of a rung-type ladder or step-type ladder providing access to a *required exit*;

(*b*) where the total area of such room or rooms at any level does not exceed 50 m^2 both *exits* may be non-fire-isolated, one of which may be in the form of a rung-type ladder or step-type ladder providing access to a *required exit*; and

(*c*) where the total area of such room or rooms at any level does not exceed 25 m^2 a single *exit* may be provided which may be in the form of a rung-type ladder or step-type ladder providing access to a *required exit.*

Ladders

(2) Where a rung-type ladder or a step-type ladder is permitted under sub-regulation (1), the rung-type ladder shall have a rise not more than

1·5 m from the level below, and together with the step-type ladder shall be constructed in accordance with AS 1657.

MAINTENANCE OF EXITS

24.29.2 All *exits* must be maintained in an efficient condition and must be kept readily accessible and clear of obstructions. S.R. 263/1990.

DIVISION 3—CLASS II AND III BUILDINGS

APPLICATION OF DIVISION

24.30 This Division, in addition to Division 1 and Division 2, shall apply to Class II and III buildings. Reg. 24.30 substituted by S.R. No. 98/1986 reg. 64.

NUMBER OF EXITS

Buildings not more than 4 storeys in rise

24.31 (1) In a building having a rise of not more than 4 *storeys*, one *exit* only, in addition to any *horizontal exit*, shall be *required* except where— Sub-reg. (1) amended by S.R. No. 98/1986 reg. 65 (1).

(*a*) the building is subject to sub-regulation (2); or

(*b*) the requirements of Regulation 24.32 cannot be met by the provision of a single *exit*.

Buildings of Type 4 or 5 construction and 2 storeys in rise

(2) In a building of Type 4 or Type 5 construction having a rise of 2 *storeys* as permitted by Regulation 17.5— Sub-reg. (2) substituted by S.R. No. 98/1986 reg. 65 (2).

(*a*) each *sole-occupancy unit* shall have its own direct egress to a *street* or *open space*; or

(*b*) at least 2 *exits* in addition to any *horizontal exit* shall be provided.

Buildings more than 4 storeys in rise

(3) In a building having a rise of more than 4 *storeys*, at least two *exits*, in addition to any *horizontal exit*, shall be provided. Sub-reg. (3) amended by S.R. No. 98/1986 reg. 65 (3).

SITUATION OF SOLE-OCCUPANCY UNITS, ETC.

Where one exit is permissible

24.32 (1) Where only one *exit* is *required* in a Class II or III building—

(*a*) the entrance doorway of a *sole-occupancy unit* shall be not more than 5·5 m from that *exit*; and

(*b*) no point on the floor of a room, not being a room in a *sole-occupancy unit*, shall be more than 15 m from that *exit*.

Where two or more exits are required

(2) Where two or more *exits* are *required* in a Class II or III building, except where the *sole-occupancy unit* or room has its own direct egress to a *street* or *open space*— Sub-reg. (2) substituted by S.R. No. 438/1984 reg. 34, amended by S.R. No. 98/1986 reg. 66.

(*a*) the entrance doorway of a *sole-occupancy unit* shall be not more than 5·5 m from a point from which travel in different directions to 2 of those *exits* is available; and

(*b*) no point on the floor of a room, not being a room in a *sole-occupancy unit*, shall be more than 15 m from a point from which travel in different directions to 2 of those *exits* is available.

SEPARATION OF EXITS

Distribution

Reg. 24.33 substituted by S.R. No. 143/1988 reg. 22.

24.33 (1) *Exits* that are *required* as alternative means of egress must be distributed as uniformly as practicable within or around the *storey* served.

Distance

(2) If 2 *exits* are *required* as alternative means of egress in relation to any point on the floor of a *storey*, the distance between them must be—

(*a*) not less than 9 m; and

(*b*) not more than 45 m.

MEASUREMENT OF DISTANCES

"Nearest part of an exit" defined

24.34 (1) In this Regulation, the "nearest part of an *exit*" shall mean—

(*a*) in the case of a *fire-isolated stairway*, *fire-isolated passageway*, or *fire-isolated ramp*, the nearest part of the doorway providing access thereto;

(*b*) in the case of a non-*fire-isolated stairway*, the nearest part of the nearest riser;

Para. (c) amended by S.R. No. 98/1986 reg. 67 (1).

(*c*) in the case of a non-*fire-isolated ramp*, the nearest part of the junction of the floor of the ramp and the floor of the *storey* concerned;

Para. (d) amended by S.R. No. 98/1986 reg. 67 (2).

(*d*) in the case of a doorway opening to a *street* or *open space*, the nearest part of that doorway; and

Para. (e) inserted by S.R. No. 98/1986 reg. 67 (3).

(*e*) in the case of a *horizontal exit* the nearest part of the doorway.

Methods of measurement

(2) In measuring the distances referred to in Regulations 24.32 and 24.33, the following rules shall apply:

(*a*) In the case of a room, not being a *sole-occupancy unit*, the distance shall include the straight-line measurement from

any point on the floor of the room to the nearest part of a doorway leading therefrom, together with the distance from such part of the doorway to the single *required exit* or point from which travel in different directions to 2 *required exits* is available, as the case requires.

(*b*) The distance from the doorway of a room or *sole-occupancy unit* shall, subject to paragraph (*d*), be measured in a straight line to the nearest part of the *required* single *exit* or point from which travel in different directions to 2 *required exits* is available, as the case requires. Para. (b) amended by S.R. No. 98/1986 reg. 67 (4).

(*c*) The distance between 2 *required exits* shall, subject to paragraph (*d*), be measured in a straight line between the nearest parts of those *exits*.

(*d*) Where a corridor, hallway, external balcony, or other path of travel leading to a *required exit* or connecting 2 *required exits*, includes a curve or change of direction, the distance shall include the shortest measurement along the corridor or other path of travel, whether by curves, or straight lines, or a combination of both.

ALTERNATIVE EXITS TO DISCHARGE SEPARATELY

24.35 Where 2 or more *exits* are *required* in a Class II or III building, they shall provide separate egress to a *street* or *open space* and at the level of discharge shall not be connected by any corridor, hallway, lobby, or the like (other than a *fire-isolated passageway*) that is common to two or more of them.

REQUIRED STAIRWAYS IN CLASS II BUILDINGS

Where stairways must be fire-isolated

24.36 (1) In a Class II building every *required stairway* shall be a *fire-isolated stairway*, except as conceded in sub-regulation (2).

Where non-fire-isolated stairways are permissible

(2) Non-*fire-isolated stairways* may serve as *required exits* in Class II buildings where—

(*a*) such *stairways* connect not more than 3 *storeys*, or not more than 4 *storeys* if at least one *storey* is set aside solely for the accommodation of motor vehicles or other ancillary purposes; and

(*b*) the provisions of Regulation 24.38 are met.

REQUIRED STAIRWAYS IN CLASS III BUILDINGS

Where stairways must be fire-isolated

24.37 (1) In a Class III building every *required stairway* shall be a *fire-isolated stairway*, except as conceded in sub-regulation (2).

Where non-fire-isolated stairways are permissible

(2) Non-*fire-isolated stairways* may serve as *required exits* in Class III buildings where—

(*a*) such *stairways* connect not more than 2 *storeys*, or not more than 3 *storeys* if at least one *storey* is set aside solely for the accommodation of motor vehicles or other ancillary purposes; and

(*b*) the provisions of Regulation 24.38 are met.

NON-FIRE-ISOLATED STAIRWAYS: CONDITIONS TO BE MET

Travel distance to street or open space

24.38 (1) The distance between the doorway of a room or *sole-occupancy unit* and the point of egress to a *street* or *open space* by way of any *stairway* that is non-fire-isolated and is *required* to serve that room or *sole-occupancy unit* shall not exceed—

(*a*) 30 m in a building of Type 4 or 5 construction: and

(*b*) 60 m in all other cases.

Measurement of travel distance

(2) For the purposes of sub-regulation (1), the distance to a *stairway* shall be measured in accordance with Regulation 24.34, the remainder of the distance being measured—

(*a*) along the shortest line of travel to the *street* or open *space*; and

(*b*) in the case of the treads and risers of a stair, along a line connecting the nosings of the treads.

DIMENSIONS OF DOORWAYS, EXITS AND PATHS OF TRAVEL

Doorways

Sub-reg. (1) amended by S.R. No. 438/1984 reg. 35.

24.39 (1) In a Class II or III building, every doorway (except any doorway opening into a *sanitary compartment*)—

(*a*) serving as an *exit* from a *storey*; or

(*b*) leading to or forming part of an *exit* or path of travel to an *exit*—

shall have a clear opening of not less than 1·98 m in height and not less than 750 mm in width.

Exits and paths of travel

(2) In a Class II or III building, every *exit* and path of travel to an *exit* shall, except for doorways, have a minimum unobstructed vertical clearance throughout of 2·03 m and a minimum unobstructed width throughout of 1 m.

DIVISION 4—CLASS IV, V, VI, VII AND VIII BUILDINGS

APPLICATION OF DIVISION

24.40 This Division, in addition to Division 1 and Division 2, shall apply to Class V, VI, VII and VIII buildings and any Class IV part thereof.

NUMBER OF EXITS REQUIRED

Buildings not more than 4 storeys in rise

24.41 (1) In a building having a rise of not more than 4 *storeys*, one *exit* only, in addition to any *horizontal exit*, shall be *required* except where— Sub-reg. (1) amended by S.R. No. 98/1986 reg. 68 (1).

(*a*) the building is subject to sub-regulation (2); or

(*b*) the requirements of Regulation 24.42 (1) cannot be met by the provision of a single *exit*.

Certain storeys below egress level to have two exits

(2) Where egress from a *storey* would involve a vertical rise within the building of more than 1·5 m, at least 2 *exits*, in addition to any *horizontal exit*, shall be provided from that *storey*. Sub-reg. (2) amended by S.R. No. 98/1986 reg. 68 (2).

Buildings more than 4 storeys in rise

(3) In a building having a rise of more than 4 *storeys* at least 2 *exits*, in addition to any *horizontal exit*, shall be provided. Sub-reg. (3) amended by S.R. No. 98/1986 reg. 68 (3).

SITUATION OF PARTS OF BUILDING IN RELATION TO EXITS

Where one exit is permissible

24.42 (1) Where only one *exit* is provided in a Class V, VI, VII or VIII building, no point on a floor shall be more than 18 m from that *exit*. Sub-reg. (1) amended by S.R. No. 438/1984 reg. 36 (1).

Where 2 or more exits are required

(2) Where 2 or more *exits* are provided, no point on a floor shall be more than 18 m from— Sub-reg. (2) substituted by S.R. No. 438/1984 reg. 36 (2).

(*a*) one of those *exits*; or

(*b*) a point from which travel in different directions to 2 of those *exits* is available, in which case the maximum distance to one of those *exits* shall not exceed 40 m from the starting point.

Sub-reg. (3) revoked by S.R. No. 438/1984 reg. 36 (3).

(3) * * * * * *

Class IV parts of buildings—distance to exits, etc.

(4) The entrance doorway to a Class IV part of a building shall be situated at a distance of not more than 5·5 m from—

(*a*) an *exit*; or

Para. (b) amended by S.R. No. 438/1984 reg. 36 (4).

(*b*) a point from which travel in different directions to 2 *exits* is available.

SEPARATION OF EXITS

Distribution

Reg. 24.43 substituted by S.R. No. 143/1988 reg. 23.

24.43 (1) *Exits* that are *required* as alternative means of egress must be distributed as uniformly as practicable within or around the *storey* served.

Distance

(2) If 2 *exits* are *required* as alternative means of egress in relation to any point on the floor of a *storey*, the distance between them must be—

(*a*) not less than 9 m; and

(*b*) not more than 60 m.

MEASUREMENT OF DISTANCES

Nearest part of an exit

24.44 (1) In this Regulation, the "nearest part of an *exit*" shall have the meaning ascribed to it by Regulation 24.34 (1).

Methods of measurement

(2) In measuring the distances referred to in Regulations 24.42 and 24.43, the following rules shall apply:

(*a*) In the case of a room, the distance shall include the straight-line measurement from any point on the floor of the room to the nearest part of a doorway leading therefrom, together with the distance from that part of the doorway to—

(i) the nearest part of a *required exit*; or

(ii) a point from which travel in different directions to 2 *required exits* is available—

as the case requires.

(*b*) The distance from the doorway of a room, or of a Class IV part of the building, or from a point on the floor not within a room shall, subject to paragraphs (*d*), (*e*) and (*f*), be measured in a straight line to—

(i) the nearest part of a *required exit*; or

(ii) a point from which travel in different directions to 2 *required exits* is available—

as the case requires.

(*c*) The distance between 2 *required exits* shall, subject to paragraphs (*d*), (*e*), and (*f*), be measured in a straight line between the nearest parts of those *exits*.

(*d*) Where a corridor, hallway, external balcony, or other path of travel leading to a *required exit* or connecting 2 *required exits*, includes a curve or change of direction, the distance shall include the shortest measurement along the corridor or other path of travel, whether by curves, or straight lines, or a combination of both.

(*e*) Where more than one corridor, hallway, or other internal path of travel connects 2 *required exits*, the measurement shall be along that path of travel producing the greatest distance.

(*f*) Where a wall (including a demountable *partition wall*) that does not bound—

(i) a room; or

(ii) a corridor, hallway, or the like—

necessitates a change of direction in proceeding to a *required exit*, the distance shall be measured along the line of travel past that wall or partition.

TYPES OF STAIRWAYS REQUIRED

24.45 In a Class V, VI, VII or VIII building, *required stairways*—

(*a*) may be non-fire-isolated if the building contains not more than 2 *storeys*; and

(*b*) shall be fire-isolated in all other cases.

DIMENSIONS OF DOORWAYS

Generally

24.46 (1) Every doorway (except any doorway opening into a *sanitary compartment*)— Sub-reg. (1) amended by S.R. No. 438/1984 reg. 37.

(*a*) serving as an *exit* from a *storey*; or

(*b*) leading to or forming part of an *exit* or path of travel to an *exit*—

shall have a minimum clear opening of not less than 1·98 m in height and not less than 750 mm in width, this width to be increased, where necessary, to comply with sub-regulation (2) or (3) as the case may be.

Leading to street, etc., from storeys with large populations

(2) Where, pursuant to Regulation 24.28, a *storey* at the level of access to a *street* or *open space* is deemed to accommodate more than 100 persons—

(*a*) the width of a doorway serving as the only *exit* from that *storey*; and

(*b*) the sum of the widths of two or more doorways serving as *required exits* from that *storey*—

shall be not less than 750 mm plus 250 mm for every 25 persons (or part of 25 persons) in excess of 100.

Leading to or from stairway or ramp

(3) Where, pursuant to Regulation 24.48, a *stairway* or ramp is required to be more than 1 m in width at any level, the following doorways leading to or from the *stairway* or ramp shall have not less than the widths listed:

(*a*) A doorway providing direct access from a *storey*—250 mm less than the *required* width of the *stairway* or ramp at that *storey* level.

(*b*) A doorway providing direct access from the *stairway* or ramp at the level of access to a *street* or *open space*—250 mm less than the *required width* of the *stairway* or ramp at that level.

DIMENSIONS OF PATHS OF TRAVEL

24.47 Every path of travel to an *exit* shall, except for doorways, have an unobstructed vertical clearance throughout of not less than 2·03 m and an unobstructed width throughout of not less than 1 m.

DIMENSION OF EXITS

Vertical clearance

24.48 (1) Every *exit* shall, except for doorways, have an unobstructed vertical clearance throughout of not less than 2·03 m.

Minimum widths

(2) Every *exit* shall, except for doorways, have an unobstructed width throughout of not less than 1 m and this width shall be increased, if necessary, to meet the provisions of sub-regulation (3).

Width to be sufficient to accommodate all persons in a storey

(3) Where, pursuant to sub-regulation 24.28, a *storey* is deemed to accommodate more than 100 persons and not more than 200 persons—

(*a*) the width of a single *stairway* or ramp serving that *storey* (if only one such *exit* is *required*); or

(*b*) the sum of the widths of 2 or more *stairways* or ramps *required* to serve that *storey*—

shall, at the level of entry from the *storey* concerned, be not less than the relevant dimensions set out in Table 24.48, according to the number of persons deemed to be accommodated in that *storey*, and where the number of persons deemed to be accommodated exceeds 200, the relevant width shall be 2 m plus 250 mm for every 25 persons (or part thereof) in excess of 200.

Width not to diminish in direction of travel

(4) The *required* width of a *required stairway* or ramp shall not diminish in the direction of travel to a *street* or *open space.*

TABLE 24.48

WIDTHS OF STAIRWAYS OR RAMPS ACCORDING TO NUMBER OF PERSONS ACCOMMODATED IN A STOREY

Number of Persons Accommodated according to Regulation 24.28		*Aggregate width in metres*
Exceeding (1)	*Not Exceeding* (2)	(3)
—	100	1·00
100	125	1·25
125	150	1·50
150	175	1·75
175	200	2·00

DIVISION 5—CLASS IX BUILDINGS

Division 5 inserted by S.R. No. 98/1986 reg. 69. Regs 24.49–24.67 inserted by S.R. No. 98/1986 reg. 69.

APPLICATION OF DIVISION

24.49 This Division, in addition to Divisions 1 and 2 other than Regulations 24.23 and 24.25 (1), shall apply to Class IX buildings and any Class IV part thereof.

WIDTHS OF STAIRWAYS

To be measured clear of obstructions

24.50 (1) The width of a *stairway* (as represented by the letter "W" in Figure 24.23) shall be measured clear of all obstructions, such as

handrails, projecting parts of balustrades, and the like, and shall remain constant without interruption, except for ceiling cornices, to a height not less than 2·03 m vertically above a line along the nosings of the treads and the floor of the landing.

Exceeding 2 m

(2) Every *stairway* of more than 3 risers that exceeds 2 m in unobstructed width shall be divided by a handrail continuous between landings into divisions not more than 2 m in width.

TREADS AND RISERS

Number in a flight

24.51 The flight of a *stairway* shall have—

(*a*) not more than 18 risers;

(*b*) not fewer than 3 risers; and

(*c*) not more than 36 successive risers without a change of direction through at least 60 degrees.

NUMBER OF EXITS REQUIRED

Buildings not more than 4 storeys in rise

24.52 (1) In a building having a rise of not more than 4 *storeys*, one *exit* only, in addition to any *horizontal exit* shall be *required* except where—

(*a*) the building is subject to sub-regulation (2), (4) or (5);

(*b*) the building is subject to Regulation 24.53; or

(*c*) the requirements of Regulation 24.54 cannot be met by the provision of a single *exit*.

Certain storeys below egress level to have 2 exits

(2) In a *storey* which is more than 1·5 m below the level of egress to a *street* or *open space*, at least 2 *exits* in addition to any *horizontal exit*, shall be provided from that *storey*.

Buildings more than 4 storeys in rise

(3) In a building having a *rise* of more than 4 *storeys* at least 2 *exits* in addition to any *horizontal exit*, shall be provided.

Schools

(4) In any Class IXb building used as a primary or post-primary *school*, at least 2 *exits* shall be provided from every *storey*.

Storeys accommodating more than 50 persons

(5) Where the number of persons deemed to be accommodated in a *storey* or *mezzanine* exceeds 50, at least 2 *exits* in addition to any *horizontal exit* shall be provided from that *storey* or *mezzanine*.

CLASS IXa BUILDING

NUMBER OF EXITS REQUIRED

Storeys including ward areas

24.53 (1) In any Class IXa building, every *storey* which includes *ward areas* shall be provided with at least 2 *exits*, in addition to any *horizontal exit*.

Divided storeys

(2) In any Class IXa building, at least 1 *exit* shall be provided from every part of a *storey* which has been divided in accordance with Regulation 19.13.

OPEN SPECTATOR STAND

24.54 Notwithstanding Regulation 24.52, in any *open spectator stand* containing more than one tier of seating, every tier of seating shall be provided with at least 2 *stairways* or ramps each forming part of the path of travel to at least 2 *exits*.

SITUATION OF PARTS OF BUILDING IN RELATION TO EXITS

Class IX buildings—generally

24.55 (1) Except in every *storey* of a Class IXa building which includes *ward areas* and in a Class IXb building being an *open spectator stand* the distance of travel to an *exit* in a Class IX building shall comply with the following:

(*a*) Where only one *exit* is provided no point on a floor shall be more than 18 m from that *exit*.

(*b*) Where 2 or more *exits* are provided no point on a floor shall be more than 18 m from—

(i) one of those *exits*; or

(ii) a point from which travel in different directions to 2 of those *exits* is available, in which case the maximum distance to one of those *exits* shall not exceed 40 m from the starting point.

(*c*) Notwithstanding paragraph (*b*), in a Class IXb building used as an *assembly building* other than in a *school, early*

childhood centre or the like where 2 or more *exits* in addition to any *horizontal exit* are provided, the maximum distance to one of those *exits*, may be increased from 40 m to 60 m from the starting point provided that—

(i) the path of travel from the room to that *exit* is through another area which is a *circulation space*;

(ii) the room is smoke-separated from the *circulation space* by construction having a *fire-resistance rating* of not less than 1 hour with every doorway therein protected by a tight-fitting *self-closing* solid core door not less than 35 mm thick; and

(iii) the maximum distance of travel does not exceed—

(A) 40 m within the room to a doorway described in sub-paragraph (ii); and

(B) 20 m from that doorway through the *circulation* space to an *exit*.

(*d*) The entrance doorway to a Class IV part of a building shall be situated at a distance of not more than 5·5 m from—

(i) an *exit*; or

(ii) a point from which travel in different directions to 2 *exits* is available.

Class IXa buildings

(2) The distance of travel to an *exit* in every *storey* of a Class IXa building which includes *ward areas* shall comply with the following:

(*a*) No point on a floor shall be more than 12 m from a point from which travel in different directions to 2 of the *required exits* is available.

(*b*) The maximum distance to one of those *exits* shall not exceed 30 m from the starting point.

Class IXb buildings—open spectator stands

(3) The distance of travel to an *exit* in a Class IXb building used as an *open spectator stand* shall not be more than 55 m.

SEPARATION OF EXITS

Distribution

Reg. 24.56 substituted by S.R. No. 143/1988 reg. 24.

24.56 (1) *Exits* that are *required* as alternative means of egress must be distributed as uniformly as practicable within or around the *storey* served.

Distance

(2) If 2 *exits* are *required* as alternative means of egress in relation to any point on the floor of a *storey*, the distance between them must be—

(*a*) not less than 9 m;

(*b*) not more than 45 m in a *storey* of a Class IXa building which includes a *ward area;* and

(*c*) not more than 60 m in all other cases.

MEASUREMENT OF DISTANCES

Nearest part of an exit

24.57 (1) In this Regulation, the expression "nearest part of an *exit*" shall have the meaning ascribed to it by Regulation 24.34 (1).

Methods of measurement

(2) In measuring the distances referred to in Regulations 24.55 and 24.56 the following methods of measurement shall apply:

(*a*) The distance shall be determined in accordance with the rules set out in Regulation 24.44 (2).

(*b*) Where permanent fixed seating is provided, the distance shall include the distance measured along the line of travel between rows of seating.

(*c*) In the case of the treads and risers of a stair, the distance shall be measured along a line connecting the nosings of the treads.

TYPES OF STAIRWAYS REQUIRED

Where a stairway must be fire-isolated

24.58 (1) Subject to sub-regulation (2) in a Class IX building, every *required stairway* shall be a *fire-isolated stairway.*

Where non-fire-isolated stairways are permissible

(2) Except in *ward areas* in Class IXa buildings non-*fire-isolated stairways* or non-*fire-isolated ramps* may serve as *required exits* where such *stairways* or ramps—

(*a*) allow connection between not more than 2 *storeys;* or

(*b*) form part of an *open spectator stand* in a Class IXb building and are not available for use as a spectator viewing area.

DISCHARGE OF STAIRWAYS AND RAMPS IN OPEN SPECTATOR STANDS

24.59 In a Class IXb building being an *open spectator stand* deemed pursuant to Regulation 24.28 to accommodate more than 400 persons— Reg. 24.59 amended by S.R. No. 187/1986 reg. 9.

(*a*) no *required stairway* or *required* ramp shall discharge to the ground in front of such *open spectator stand*; and

(*b*) not less than one third of the *required* width of *exits* shall be located in the upper third of the *open spectator stand.*

DISCHARGE OF EXITS IN AUDITORIUMS

24.60 In a Class IXb building containing an auditorium deemed pursuant Regulation 24.28 to accommodate more than 500 persons not more than two thirds of the *required* width of *exits* shall be located in the main entrance foyer.

DIMENSIONS OF DOORWAYS

Vertical clearance

24.61 (1) Every doorway (except any doorway opening into a *sanitary compartment* or bathroom)—

(*a*) serving as an *exit*; or

(*b*) leading to or forming part of an *exit* or path of travel to an *exit*—

shall have a minimum clear opening of not less than 1·98 m in height.

Minimum widths

(2) Every doorway referred to in sub-regulation (1) shall have a clear width of not less than—

(*a*) (i) 870 mm in a Class IXb building used as a *school* in areas used by students; and

(ii) 750 mm in all other cases;

(*b*) notwithstanding paragraph (*a*), in *ward areas* in a Class IXa building—

(i) 1·6 m where such doorway is in the path of travel to a *required exit* along a passageway; and

(ii) 1·25 m where such doorway is a *horizontal exit*; and

(*c*) that obtained by subtracting 250 mm from the width of *exit* required pursuant to Regulation 24.63.

DIMENSIONS OF PATHS OF TRAVEL

24.62 Every path of travel to an *exit* shall, except for doorways, have an unobstructed width throughout of not less than—

(*a*) in passageways forming part of the path of travel to a *required exit* from rooms used as sleeping accommodation in a Class IXa building or from classrooms in a Class IXb building used as a *school*, 2·1 m;

(*b*) in areas provided with fixed seating for viewing of performing arts, sporting or recreational activities, between the extreme front point of one seat and the extreme back

point of the seat in front (with, in the case of tip-up seats this width being measured with the seat raised)—

(i) where the distance to an aisle is not more than 3·5 m, 300 mm; or

(ii) where the distance to an aisle exceeds 3·5 m, 500 mm; and

(*c*) in all other cases not less than 1 m.

DIMENSION OF EXITS

Vertical clearance

24.63 (1) Every *exit* shall, except for doorways, have an unobstructed vertical clearance throughout of not less than 2·03 m.

Minimum widths

(2) Every *exit* shall, except for doorways, have an unobstructed width throughout of not less than 1 m and this width shall be increased, if necessary, to meet the requirements of sub-regulation (3).

Width to be sufficient to accommodate all persons in a storey or mezzanine

(3) Where, pursuant to Regulation 24.28, a *storey* or *mezzanine* is deemed to accommodate more than 100 persons and not more than 200 persons the sum of the widths of 2 or more *exits required* to serve that *storey* or *mezzanine* shall be not less than the relevant dimensions set out in Table 24.48, according to the number of persons deemed to be accommodated in that *storey* or *mezzanine*.

Storeys accommodating more than 200 persons

(4) Where pursuant to Regulation 24.28, a *storey* or *mezzanine* is deemed to accommodate more than 200 persons the width of *required exits* shall be not less than 2 m plus—

(*a*) 500 mm for every 60 persons (or part of 60 persons) in excess of 200 persons where an *exit* involves a change in floor level by a *stairway* or ramp having a gradient of more than 1 in 12; or

(*b*) 500 mm for every 75 persons (or part of 75 persons) in excess of 200 persons in any other case.

Open spectator stands

(5) Notwithstanding sub-regulation (4), every Class IXb building being an *open spectator stand* deemed to accommodate more than 2000 persons shall be provided with a total width of *exit* of not less than 17 m

plus an additional width for the number of spectators exceeding 2000 persons determined in accordance with the following formula:

$$\text{Additional exit width (in metres)} = \frac{\text{Number of Spectators in excess of 2000}}{600}$$

Width not to diminish in direction of travel

(6) The *required* width of a *required stairway* or *required* ramp shall not diminish in the direction of travel to a *street* or *open space.*

SEATING AREA IN CLASS IXb BUILDINGS

24.64 In every seating area in a Class IXb building—

(*a*) the slope of the floor surface shall not exceed 1 in 8;

(*b*) where the requirements of paragraph (*a*) cannot be complied with, the floor shall be stepped so that—

(i) when a straight line joins the nosings of successive steps, it shall not exceed an angle of 30 degrees to the horizontal;

(ii) it shall have a riser height not exceeding 600 mm; and

(iii) it shall have a height of any opening in a riser not exceeding 150 mm; and

(*c*) where an aisle divides seating that is stepped—

(i) where the difference in level between any two consecutive steps in a stepped floor exceeds 230 mm but does not exceed 400 mm, an intermediate step shall be provided in the aisles which divides the difference in level into two equal parts;

(ii) where the difference in level between any two consecutive steps in a stepped floor exceeds 400 mm, two intermediate steps shall be provided in the aisles which divide the difference in level into three equal parts; and

(iii) the going of any intermediate step referred to in sub-paragraphs (i) and (ii) shall be—

(A) not less than 270 mm; and

(B) such as to provide as nearly as practicable equal treads throughout the length of the aisle.

CHANGE OF LEVEL IN FIRE-ISOLATED PASSAGEWAY

24.65 Where there is a change of level of less than 600 mm within a *fire-isolated passageway* a ramp shall be provided.

EXITS FROM STAGE OR BACKSTAGE

Stage

24.66 (1) In a Class IXb building—

(*a*) where the area of a stage which is *required* to be provided with a proscenium wall exceeds 40 m^2, the path of travel to an *exit* from the stage shall not pass through the proscenium wall; and

(*b*) *required exits* from backstage and under-stage areas shall be independent of those provided for the audience area.

STAIRWAYS TO PLATFORMS OR THE LIKE

24.67 Every *stairway* in a Class IXb building which provides access to a service platform, rigging loft or the like, shall comply with AS 1657.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 25—CHIMNEYS, FLUES, FIREPLACES, STOVES AND SIMILAR FEATURES

APPLICATION OF PART

25.1 Every chimney, flue, fireplace, stove, heating appliance, and similar feature that is situated within or forms part of a building shall comply with such of the provisions of this Part as are applicable thereto.

25.2 * * * * * *

DOMESTIC-TYPE OIL-HEATERS

25.3 A domestic-type oil-heating appliance shall be provided with a flue and the appliance, together with its flue and other associated fittings, shall be installed in accordance with AS 1691.

DOMESTIC-TYPE SOLID-FUEL BURNING APPLIANCES

Performance requirement

25.4 (1) A domestic-type solid-fuel burning appliance together with its flue shall be installed in such a manner that it does not constitute a risk of fire to nearby *combustible* parts of the building.

Deemed to comply

(2) An appliance together with its flue shall be deemed to comply with sub-regulation (1) if it is installed in accordance with AS 2918.

Sub-reg. (2) amended by S.R. No. 143/1988 reg. 25.

BOILERS

25.5 A boiler together with its flue, if any, and other associated fittings, shall be installed in accordance with AS 1200.

OPEN FIREPLACE HEARTHS

When to be provided

25.6 (1) Every open fireplace shall be provided with a hearth.

Construction

(2) A *required* hearth for an open fireplace shall be of stone, concrete, *masonry* or other similar *non-combustible* material and be so *constructed* that—

(*a*) its upper surface does not slope away from the grate; and

(*b*) *combustible* material situated below the hearth shall not be nearer than—

(i) 155 mm from the upper surface of the hearth, located within the fireplace opening; and

(ii) 75 mm from the upper surface of the hearth which is *required* to extend beyond the fireplace opening, or the limits of the fireplace, as the case requires.

Limits of hearth

(3) A *required* hearth for an open fireplace shall extend not less than 350 mm beyond the front of the fireplace opening and not less than 150 mm beyond each side of that opening.

CHIMNEYS

Position of terminal—performance requirement

25.7 (1) A chimney shall not terminate in such a position as to constitute—

(*a*) a risk of fire to nearby *combustible* parts of a building; or

(*b*) a risk of penetration of the hot products of combustion through nearby *windows* or other openings, fresh air inlets, mechanical ventilation inlets or exhausts or the like.

Position of terminal—deemed to comply

(2) In a Class I or X building, a chimney *constructed* as follows shall be deemed to comply with sub-regulation (1) if it—

(*a*) is carried up at least 300 mm higher than any part of the roof structure within a horizontal distance of 3·6 m; and

(*b*) has a height, measured from the highest point at which the chimney penetrates the roof covering, of not more than 6 times the least width of the chimney.

Flues to extend for full height

(3) Where a chimney contains more than one flue, each flue shall extend throughout the full height of the chimney.

Fire-resistance of open fire-places and chimneys—performance requirement

Sub-reg. (4) substituted by S.R. No. 438/1984 reg. 38 (1).

(4) An open fire-place and chimney connected thereto shall be so *constructed* that—

(*a*) they are capable of withstanding the temperatures likely to be generated;

(*b*) the temperature of the exposed faces will not exceed a level that would cause damage to nearby parts of the building; and

(*c*) the hot products of combustion will not escape through the walls of the chimney.

Certain open fire-places and chimneys in Class I and X buildings deemed to comply with sub-regulation (4)

(5) In a Class I or X building any open fireplace and a chimney connected thereto that is constructed according to the requirements of this sub-regulation shall be deemed to comply with sub-regulation (4): Sub-reg. (5) amended by S.R. No. 438/1984 reg. 38 (2).

(*a*) Up to a height of not less than 300 mm above the underside of the arch or lintel, the walls forming the sides and back of the fireplace shall be *constructed* in two separate leaves of solid *masonry* having a total thickness, exclusive of any cavity, of not less than 180 mm.

(*b*) Concrete *masonry* shall not be used in the construction of the inner leaf of the *masonry* referred to in paragraph (*a*).

(*c*) The walls of the fireplace and chimney above the level referred to in paragraph (*a*) shall be *constructed* of *masonry* units having a net volume, exclusive of cored and similar holes, of not less than 75 per cent of their gross volume, measured on the overall rectangular shape of the units, and having an actual thickness of not less than 90 mm.

(*d*) The chimney shall have its flue lined internally to a thickness of not less than 12 mm with rendering consisting of cement, lime, and sand in the proportions of 1 part cement, 3 parts lime, and 10 parts sand by volume, or other *approved* material.

(*e*) Where the chimney is inclined at an angle of less than 45° with the horizontal—

(i) soot doors of an area not less than 25 000 mm^2 shall be provided and positioned not less than 380 mm from any *combustible* material; and

(ii) the thickness of the upper side shall be not less than 230 mm.

Combustible material near chimneys or fireplace openings

(6) *Combustible* parts of a building shall not be situated nearer to the inner face of a chimney or fireplace opening than 190 mm.

Damp-proof course and flashing

(7) A chimney shall be constructed with damp-proof courses and flashings so arranged as to prevent the penetration of rain-water to any part of the interior of the building.

INCINERATOR ROOMS

Construction

25.8 (1) Where an incinerator is installed in a separate room within a building that room shall be separated from other parts of the building by construction having a *fire-resistance rating* of not less than 1 hour.

Construction of chimneys and flues

(2) The chimney or flue of an incinerator, except an incinerator not forming part of a building, shall comply with the relevant provisions of Regulation 25.7.

Hopper in charging chute

(3) A hopper giving access to a charging chute of an incinerator within or forming part of a building—

(*a*) shall be *non-combustible*;

(*b*) shall be gastight when closed;

(*c*) shall be so designed as to return to the closed position automatically after use;

(*d*) shall not be attached to a chute that connects directly to a flue except where the hopper is located in the open air; and

(*e*) shall not be located in a *required* exit.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

Group V and heading inserted by S.R. No. 98/1986 reg. 70. Part 26 (Regs 26.1 to 26.4) inserted by S.R. No. 98/1986 reg. 70.

PART 26—SPECIAL FIRE PROTECTION PROVISIONS IN CLASS IX BUILDINGS

APPLICATION

26.1 This Part shall apply to every Class IXb building which—

(*a*) contains a stage and backstage area having an area of more than 100 m²; or

(*b*) contains a stage which has an associated rigging loft.

PROSCENIUM WALL

Where required

26.2 (1) Every stage, backstage area and accessible under-stage area shall be fire-separated from the audience by a proscenium wall in accordance with this Regulation.

Construction requirements

(2) A proscenium wall shall—

(*a*) extend to the underside of the roof covering or underside of the structural floor next above;

(*b*) have a *fire-resistance rating* of not less than one hour; and

(*c*) be of concrete or *masonry*.

Combustible materials not to cross proscenium wall

(3) Timber purlins or other *combustible* material shall not pass through or cross any proscenium wall.

OPENINGS IN PROSCENIUM WALL

Protection of principal opening in proscenium wall

26.3 (1) Every proscenium opening shall be protected by a curtain which shall be—

(*a*) capable of closing the proscenium opening within 35 seconds either by gravity slide or motor assisted mechanisms; and

(*b*) operated by a system—

(i) of *automatic* heat activated devices;

(ii) of manually operated devices or push button emergency devices; and

(iii) able to be operated from either the stage side or the audience side of the curtain.

Proscenium curtain

(2) Every curtain required by sub-regulation (1) shall be—

(*a*) a fire safety curtain—

(i) *constructed* of *non-combustible* material;

(ii) capable of withstanding a uniformly distributed pressure of 0·5 kPa over its entire surface area;

(iii) able to resist collapse and passage of flame from the stage side for a period of one hour; and

(iv) so fitted that when fully lowered it inhibits the penetration of smoke around the perimeter of the opening, from the stage; or

(*b*) a curtain—

Sub-para. (i) substituted by S.R. No. 143/1988 reg. 26.

(i) having a *Smoke-developed Index* not greater than 3 and a *Spread of flame Index* not greater than 0; and

(ii) protected by a deluge system of open sprinklers installed along the full width of the curtain all to the approval of the *chief officer*.

Protection of doorways

(3) Any doorway in a proscenium wall shall be protected by a *self-closing* door having a *fire-resistance rating* of not less than 1 hour.

STAGE AND BACKSTAGE AREAS

26.4 Every stage area and backstage area shall comply with the following requirements:

(*a*) An *approved sprinkler system* shall be installed in every stage and backstage area.

(*b*) Every stage area shall be provided with a system of mechanical ventilation with sufficient capacity to exhaust an amount of air whichever is the greater of—

(i) 5000 L/s; or

(ii) the sum of—

(A) 10 L/s.m^2 of the performing area of the stage;

(B) 20 L/s.m^2 of the remainder of the area of the stage; and

(C) 20 L/s.m^2 of the area of the rigging loft.

(*c*) Where no rigging loft is provided and the floor area of the stage and backstage area is less than 200 m^2 *automatic*

smoke-and-heat vents complying with AS 2665 may be provided to the stage area as an alternative to the requirements of paragraph (*b*).

(*d*) Dressing rooms, scene docks, property rooms, workshops, associated store rooms and other ancillary areas shall be—

(i) located on the stage side of any proscenium wall; and

(ii) separated from corridors and the like by *construction* having a *fire-resistance rating* of not less than 1 hour.

(*e*) Except for the proscenium opening the stage shall be separated from other parts of the building by concrete or *masonry construction* having a *fire-resistance rating* of not less than 1 hour.

(*f*) Any doorway in *construction* referred to in paragraphs (*d*) and (*e*) shall be protected by a *self-closing* one-hour fire door.

(*g*) A path of travel to an *exit* from any dressing room shall not be via the stage.

(*h*) Platforms and access ways to every rigging loft, fly gallery, grid or similar *construction* shall—

(i) be *non-combustible*; and

(ii) comply with AS 1657 where applicable.

GROUP V—FIRE SAFETY AND FIRE RESISTANCE

PART 27—FIRE FIGHTING SERVICES AND APPLIANCES

CERTAIN MEZZANINES TO BE REGARDED AS STOREYS

27.1 For the purposes of this Part—

(*a*) any *mezzanine* having a *floor area* of more than 200 m^2; or

(*b*) 2 or more *mezzanines* at or near the same level in a room and having a total *floor area* of more than 200 m^2—

shall be regarded as a *storey* in that part of the building in which they are situated.

PROVISION OF FIRE HOSE REELS

When required

27.2 (1) Fire hose reels shall be provided in every *storey* of a building specified in Table 27.2 as requiring the provision of fire hose reels except in the case of a building that is entirely of Class II and is so designed that— Sub-reg. (1) substituted by S.R. No. 438/1984 reg. 39.

(*a*) it does not contain more than 2 *storeys*;

(*b*) no part of any *dwelling* is vertically above any part of another *dwelling*;

(*c*) the floor between each *dwelling* and any garage below is *constructed* of reinforced or prestressed concrete; and

(*d*) an external doorway to each dwelling is located not more than 90 m in actual distance of travel from a hydrant.

Buildings having more than one classification

(2) Where a building has more than one classification it shall, for the purpose of this Regulation, be regarded as an entire building of such one of those classifications as will require the most stringent requirements when Table 27.2 is applied to it.

Table 27.2 amended by S.R. No. 98/1986 reg. 71 (1) (2).

TABLE 27.2

BUILDINGS IN WHICH FIRE HOSE REELS ARE REQUIRED

Class of Building (1)	*Conditions Requiring Provision of Fire Hose Reels* (2)	
II III V	(*a*)	If the total floor area of the building exceeds 500 m²; or
	(*c*)	If the building contains more than 2 storeys.
VI VII VIII IX	(*a*) (*b*)	If the total floor area of the building exceeds 300 m²; or If the building contains more than 2 storeys.

Installation

(3) In a building in which fire hose reels are *required* pursuant to sub-regulation (1)—

(*a*) every fire hose reel shall be provided with a length of hose between 18 m and 36 m;

(*b*) every fire hose reel shall be installed in a part of the *storey* that is accessible to all occupants of that *storey*;

(*c*) sufficient fire hose reels shall be provided in each *storey* so that no point on the floor of that *storey* shall be beyond an arc formed by a radius of two-thirds of the length of the installed hose measured from the hose reel concerned; and

(*d*) every *required* fire hose reel shall be located in a position approved by the *chief officer*.

Construction

(4) Every *required* fire hose reel shall—

(*a*) be connected to a *fire main*;

(*b*) comply with the provisions of AS 1221; and

(*c*) be installed in accordance with the relevant provisions of AS 2441.

PROVISION OF HYDRANTS

When required

27.3 (1) *Hydrants* shall be provided in every *storey* of a building specified in Table 27.3 as requiring the provision of *hydrants*.

Buildings having more than one classification

(2) Where a building has more than one classification it shall, for the purpose of this Regulation, be regarded as an entire building of such one of those classifications as will require the most stringent requirements when Table 27.3 is applied to it.

TABLE 27.3

BUILDINGS IN WHICH HYDRANTS ARE REQUIRED

Table 27.3 amended by S.R. No. 98/1986 reg. 72 (1).

Class of Building (1)		*Conditions Requiring Provision of Hydrants* (2)
II III		If the building contains more than 3 storeys.
V	(*a*)	If the total floor area of the building exceeds 1000 m²; or
	(*b*)	If the building contains more than 3 storeys.
VI VII VIII IX	(*a*)	If the total floor area of the building exceeds 600 m²; or
	(*b*)	If the building contains more than 3 storeys.

When required to be equipped

(3) In the following buildings, every *hydrant required* pursuant to sub-regulation (1) shall have a 63 mm outlet and shall be equipped with a 38 mm hose, a 12 mm nozzle and appropriate fittings:

(*a*) Class II, III or V buildings containing more than 4 *storeys*.

(*b*) Class VI, VII, VIII or IX buildings.

Para. (b) substituted by S.R. No. 98/1986 reg. 72 (2).

Length of hose

(4) Where a *hydrant* is *required* to be equipped in accordance with sub-regulation (3), the length of hose shall be to the satisfaction of the *chief officer* but in no case shall exceed 30 m.

Distance from hydrants in a building

(5) In a building where *hydrants* are *required* under sub-regulation (1) no point on the floor of a *storey* shall be more than 36 m from a *hydrant*.

Hydrants at roof level of certain buildings

(6) In a building (other than an *open spectator stand*) more than 25 m in height measured above the floor of the lowest *storey* providing egress to a *street* or *open space*, in addition to complying with sub-

Sub-reg. (6) amended by S.R. No. 98/1986 reg. 72 (3).

regulation (1), one or more *hydrants* shall be provided at the level of the roof except—

(*a*) a roof having a pitch of more than 10 degrees; or

(*b*) a roof of a plant room or other subsidiary structure *constructed* on or above the level of the main roof of the building—

and the *hydrants* shall be so located that no point on the roof shall be more than 36 m from a *hydrant* at the level of the roof.

External hydrants for Class IXb buildings used as a school

Sub-reg. (6A) inserted by S.R. No. 98/1986 reg. 72 (4).

(6A) External *hydrants* complying with sub-regulation (6B) shall be installed within the grounds of every Class IXb building used as a *school* where—

(*a*) the total floor area of the building or buildings exceeds 600 m^2; or

(*b*) the building or buildings contain more than one *storey.*

External hydrants: requirements

Sub-reg. (6B) inserted by S.R. No. 98/1986 reg. 72 (4).

(6B) In any building where *hydrants* are required by sub-regulation (6A)—

(*a*) no part of an *external wall* of any building shall be more than 60 m in actual distance of travel from a *hydrant*;

(*b*) no part of a timber-framed *external wall* of a building shall be less than 6 m from a *hydrant*;

(*c*) no *hydrant* shall be located against or mounted on a wall of a building unless—

(i) such wall has a *fire-resistance rating* of not less than 2 hours; and

(ii) the *hydrant* is not less than 3 m from any *opening* in the wall;

(*d*) every *hydrant* shall be—

(i) of a type approved by the *chief officer*; and

(ii) when required to be equipped by the *chief officer*, equipped to his satisfaction; and

(*e*) notwithstanding sub-regulation (1), *hydrants* need not be provided in the lowest floor providing egress to a *street* or *open space.*

Installation

(7) Every *required hydrant* shall be—

(*a*) connected to a *fire main*;

(*b*) suitable for connection to the fire hoses of the fire brigade serving the locality; and

(*c*) positioned and housed to the approval of the *chief officer.*

FIRE MAIN REQUIREMENTS

Interpretation

27.4 (1) For the purpose of this Regulation "design pressure" means the water pressure in the *street* water main at the point of discharge to the *fire main* which the relevant water supply authority nominates in writing—

(*a*) that it considers can be maintained for 95 per cent of the time; or

(*b*) as being the greatest of the following:

(i) Water supply authority nominated minimum water pressure.

(ii) If the Melbourne and Metropolitan Board of Works is the relevant water supply authority, 67 per cent of the maximum static water pressure.

(iii) If the Melbourne and Metropolitan Board of Works is not the relevant water supply authority, 50 per cent of the maximum static water pressure.

When required

(2) Pursuant to these Regulations, where—

(i) any fire hose reel is *required;* or

(ii) any *hydrant* is *required*—

at least one *fire main* shall be provided to serve such fire hose reel or *hydrant.*

Pressures

(3) Every fire main shall meet the following requirements with respect to discharge pressure when the *street* water main is at the design pressure:

(*a*) Where any fire hose reel is installed the discharge pressure at the nozzle end of each hose shall not be less than 200 kPa and shall not exceed 650 kPa unless otherwise approved by the *chief officer.* Para. (a) amended by S.R. No. 98/1986 reg. 73.

(*b*) Where any *hydrant* is installed the discharge pressure at the nozzle end of each fully extended hose shall not be less than 275 kPa and shall not exceed 650 kPa unless otherwise approved by the *chief officer.* Para. (b) amended by S.R. No. 98/1986 reg. 73.

Application of sub-regulation (3)

(4) The requirements of sub-regulation (3) shall be based on only one fire hose reel or one *hydrant* being tested at any one time.

Minimum size

(5) As well as meeting the requirements of sub-regulation (3), every *fire main* or part thereof—

(*a*) which only serves fire hose reels shall—

(i) if copper piping is used, have a nominal diameter of not less than 50 mm; and

(ii) in any other case, have a nominal diameter of not less than 80 mm; and

Para. (b) amended by S.R. No. 438/1984 reg. 40.

(*b*) shall have a nominal diameter of not less than that set out in Column 2 of Table 27.4 depending on the number of *hydrants* served by the *fire main* or branch of the *fire main*.

TABLE 27.4

MINIMUM SIZE OF FIRE MAIN SERVING HYDRANTS

Number of Hydrants	*Nominal Diameter of Fire Main*
(1)	(2)
1 to 3	80 mm
4 to 6	100 mm
7 or more	150 mm

Fire main equipment

(6) The *chief officer* may require that the *fire main* shall be equipped with the necessary valves and connections at a location at ground level approved by him for the connection of a fire brigade booster pump.

Additional requirements

(7) Where the *chief officer* so directs—

(*a*) additional valves shall be provided for isolating purposes and every such isolation valve shall be strapped and locked in the open position and marked "Fire Service Isolation Valve"; and

(*b*) supervisory circuits shall be provided on the valves and every such valve shall be connected to an alarm system.

EQUIPMENT WHERE PUBLIC WATER SUPPLY IS NOT AVAILABLE OR IS INADEQUATE

Interpretation

27.5 (1) For the purposes of this Regulation 'static water storage supply' means a source of water supply which meets the requirements

of Clauses 4.8 and 4.9 of AS 2118 except that the minimum effective capacity shall be as specified in these Regulations.

When required for fire hose reels

(2) Static water storage supply for *required* fire hose reels shall be provided in accordance with sub-regulation (3) where the water supply from a water supply authority—

(*a*) is not available or the discharge pressure at the nozzle end of any fire hose is inadequate to satisfy the requirements of Regulation 27.4 (3) (*a*); or

(*b*) has a minimum free flow rate in the *street* water main (at zero residual pressure) as supplied in writing from the water supply authority of less than—

(i) 1 litre/sec. for every fire hose reel *required* in the building; or

(ii) 9 litres/sec.—

whichever is the lesser.

Size required for fire hose reels

(3) Static water storage supply *required* for fire hose reels shall comply with the following:

(*a*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is less than 1 litre/sec. be not less than that calculated from the equation—

static water storage supply = N × 4150 litres where—

N is the number of fire hose reels *required* to be provided in the building.

(*b*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is 1 litre/sec. or greater but is less than 9 litres/sec. be not less than that calculated from the equation—

static water storage supply = (N − 0·9F) 4150 litres where—

F is the minimum free flow rate in litres/sec. (at zero residual pressure); and

N is the number of fire hose reels *required* to be provided in the building.

(*c*) Be not less than 4150 litres or not be *required* to be greater than 25 000 litres.

When required for hydrants

(4) Static water storage supply for *required hydrants* shall be provided in accordance with sub-regulation (5) where the water supply from a water supply authority—

(*a*) is not available or the discharge pressure at the nozzle end of any fully extended hose is inadequate to satisfy the requirements of Regulation 27.4 (3) (*b*); or

(*b*) has a minimum free flow rate in the *street* water main (at zero residual pressure) as supplied in writing from the water supply authority of less than—

(i) 3 litres/sec. for every *hydrant required* in the building; or

(ii) 27 litres/sec.—

whichever is the lesser.

Size required for hydrants

(5) The static water storage supply *required* for *hydrants* shall comply with the following:

(*a*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is less than 3 litres/sec. be not less than that calculated from the equation—

static water storage supply = H × 8600 litres where—

H is the number of *hydrants required* to be provided in the building.

(*b*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is 3 litres/sec. or greater but is less than 27 litres/sec. be not less than that calculated from the equation—

static water storage supply = (H − 0·3F) 8600 litres where—

F is the minimum free flow rate in litres/sec. (at zero residual pressure); and

H is the number of *hydrants required* to be provided in the building.

(*c*) Be not less than 8600 litres or not be *required* to be greater than 172 000 litres.

Size required for buildings more than 25 m in height

(6) Notwithstanding sub-regulations (2) and (4) in the case of a building more than 25 m in height, measured above the floor of the lowest storey providing egress to a *street* or *open space*, the static water storage supply shall be not less than—

(i) 45 000 litres when fed by more than one town supply; or

(ii) 90 000 litres when fed by a single town supply.

Which size static water storage is to be installed

(7) Where fire hose reels and *hydrants* are installed in a building the static water storage supply for fire fighting purposes *required* under this

of Clauses 4.8 and 4.9 of AS 2118 except that the minimum effective capacity shall be as specified in these Regulations.

When required for fire hose reels

(2) Static water storage supply for *required* fire hose reels shall be provided in accordance with sub-regulation (3) where the water supply from a water supply authority—

(*a*) is not available or the discharge pressure at the nozzle end of any fire hose is inadequate to satisfy the requirements of Regulation 27.4 (3) (*a*); or

(*b*) has a minimum free flow rate in the *street* water main (at zero residual pressure) as supplied in writing from the water supply authority of less than—

(i) 1 litre/sec. for every fire hose reel *required* in the building; or

(ii) 9 litres/sec.—

whichever is the lesser.

Size required for fire hose reels

(3) Static water storage supply *required* for fire hose reels shall comply with the following:

(*a*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is less than 1 litre/sec. be not less than that calculated from the equation—

static water storage supply = N × 4150 litres where—

N is the number of fire hose reels *required* to be provided in the building.

(*b*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is 1 litre/sec. or greater but is less than 9 litres/sec. be not less than that calculated from the equation—

static water storage supply = (N − 0·9F) 4150 litres where—

F is the minimum free flow rate in litres/sec. (at zero residual pressure); and

N is the number of fire hose reels *required* to be provided in the building.

(*c*) Be not less than 4150 litres or not be *required* to be greater than 25 000 litres.

When required for hydrants

(4) Static water storage supply for *required hydrants* shall be provided in accordance with sub-regulation (5) where the water supply from a water supply authority—

(*a*) is not available or the discharge pressure at the nozzle end of any fully extended hose is inadequate to satisfy the requirements of Regulation 27.4 (3) (*b*); or

(*b*) has a minimum free flow rate in the *street* water main (at zero residual pressure) as supplied in writing from the water supply authority of less than—

(i) 3 litres/sec. for every *hydrant required* in the building; or

(ii) 27 litres/sec.—

whichever is the lesser.

Size required for hydrants

(5) The static water storage supply *required* for *hydrants* shall comply with the following:

(*a*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is 3 litres/sec. or greater but is less than 27 litres/sec. be not less than that calculated from the equation—

static water storage supply = H × 8600 litres where—

H is the number of *hydrants required* to be provided in the building.

(*b*) Where the minimum free flow rate in the *street* water main (at zero residual pressure) is 3 litres/sec. or greater but is less than 27 litres/sec. be not less than that calculated from the equation—

static water storage supply = (H − 0·3F) 8600 litres where—

F is the minimum free flow rate in litres/sec. (at zero residual pressure); and

H is the number of *hydrants required* to be provided in the building.

(*c*) Be not less than 8600 litres or not be *required* to be greater than 172 000 litres.

Size required for buildings more than 25 m in height

(6) Notwithstanding sub-regulations (2) and (4) in the case of a building more than 25 m in height, measured above the floor of the lowest storey providing egress to a *street* or *open space*, the static water storage supply shall be not less than—

(i) 45 000 litres when fed by more than one town supply; or

(ii) 90 000 litres when fed by a single town supply.

Which size static water storage is to be installed

(7) Where fire hose reels and *hydrants* are installed in a building the static water storage supply for fire fighting purposes *required* under this

Regulation shall need to satisfy only the largest static water storage supply *required* by sub-regulations (3), (5) or (6).

Means of providing required pressure

(8) The means of providing the *required* pressure from the static water storage supply shall be to the approval of the *chief officer*.

PROVISION FOR SPECIAL HAZARDS

27.6 Where in the opinion of the *chief officer* special fire hazards may exist in any building (including any storage yard) by reason of its construction, the nature of its contents or any other special circumstances, such building shall be provided with a water supply service and the necessary equipment for fire detection and fire extinction purposes to the approval of the *chief officer*.

MATERIALS AND SIZES OF PIPEWORK USED IN FIRE SERVICE INSTALLATIONS

Materials, etc. to comply with British and Australian Standards

27.7 (1) Subject to the provisions of sub-regulation (2), all pipes and pipe fittings used in fire service installations shall comply with whichever of the following British and Australian Standards is appropriate:

(*a*) AS 1074.
(*b*) AS 1159.
(*c*) AS 1432.
(*d*) AS 1477 Parts 1 to 6 (inclusive).
(*e*) AS 1567.
(*f*) AS 1579.
(*g*) AS 1711.
(*h*) AS 1769.
(*i*) AS 1835.
(*j*) AS 1836.
(*k*) AS 2544.
(*l*) BS 4772.

Use of polythene and UPVC restricted

(2) Polyethylene (Polythene) and unplasticised PVC (UPVC) pipes and fittings shall be used only below ground and shall not pass through any part of a building or be located within any building.

PROVISION OF PORTABLE FIRE EXTINGUISHERS

To comply with Australian Standards

27.8 (1) Portable fire extinguishers required by this Regulation shall comply with the Australian Standard applicable to the type of fire extinguisher to be used.

When required

Sub-reg. (2) amended by S.R. No. 98/1986 reg. 74.

(2) In every Class III, V, VI, VII, VIII or IX building where fire hose reels are not *required*, the *chief officer* may require the provision of such number, type and location of portable fire extinguishers as he considers necessary and approves but not less than one such fire extinguisher shall be provided for every 200 m^2 or part thereof of *floor area.*

Special risks

(3) In every building where fire hose reels are required pursuant to Regulation 27.2, fire extinguishers shall be provided in areas of special risk including electrical switchboards and areas used for the storage of flammable liquids. The number, type and position of fire extinguishers shall be to the approval of the *chief officer.*

Installation

(4) Every portable fire extinguisher shall be installed in accordance with the relevant provisions of AS 1851 Part 1.

SPRINKLER INSTALLATIONS

When required—generally

27.9 (1) A *sprinkler system* shall be installed in every building more than 25 m in height measured above the floor of the lowest *storey* providing egress to a *street* or *open space.*

When required—public garages

(2) A *sprinkler system* shall be installed in that *storey* in which space is provided for the parking or storage of more than 40 motor vehicles.

When not required

(3) Notwithstanding sub-regulation (2), in a building that is measured in accordance with sub-regulation (1) as being 25 m or less in height a *sprinkler system* is not required to be installed in any *storey* that is wholly used for the parking or storage of motor vehicles provided that—

(*a*) more than 40 per cent of the area of the enclosing walls of that *storey* are permanent openings and every opening shall

be located not less than 6 m from another building or from a boundary other than a *street alignment* unless it is shielded from the other building or boundary other than a *street alignment* by a wall having a *fire-resistance rating* of not less than 4 hours;

(*b*) the floor is *constructed* of concrete and the supporting beams and columns are *constructed* of *non-combustible* material; and

(*c*) the surface of the floor is graded to an *approved* drainage system.

Class IXa buildings

(4) An *approved sprinkler system* shall be installed in every Class IXa building containing more than one *storey* unless the building contains two *storeys* where only the lower *storey* contains *ward areas* or patient treatment areas. Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 75.

Class IXb buildings

(5) An *approved sprinkler system* shall be installed in every Class IXb building— Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 75.

(*a*) containing a stage predominantly encircled by the audience; and

(*b*) which pursuant to Regulation 24.28 accommodates more than 100 persons viewing that stage.

INSTALLATION OF SPRINKLER SYSTEMS

Design and construction

27.10 (1) The design and construction of any *sprinkler system* installed in a building shall comply with the requirements of AS 2118. Reg. 27.10 amended by S.R. No. 98/1986 reg. 76 (1).

(2) Notwithstanding sub-regulation (1) in the case of *alterations* to a building requiring the installation of a *sprinkler system* and in which a *sprinkler system* is already installed, the design and construction of such a system need not comply with the requirements of AS 2118 provided that the system is approved by the *chief officer.*

(3) Any *sprinkler system* installed in an operating theatre in a Class IXa building shall be a pre-action system installed in accordance with AS 2118. Sub-reg. (3) inserted by S.R. No. 98/1986 reg. 76 (2).

To protect proscenium openings

(4) Notwithstanding sub-regulation (1) in the case of a Class IXb building *required* to be provided with a proscenium wall, the design Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 76 (2).

and construction of the *sprinkler system* required by Regulation 26.4(*a*) to be installed to protect the proscenium opening and backstage area need not comply with the requirements of AS 2118 with respect to partial sprinklering of a building provided that smoke detectors or thermal detectors are provided throughout the remainder of the building to the approval of the *chief officer*.

FIRE ALARM SYSTEMS

When required

Reg. 27.11 inserted by S.R. No. 98/1986 Reg. 78.

27.11 (1) The following buildings shall be protected in accordance with sub-regulations (2) and (3):

(*a*) Every Class IXa building.

(*b*) Every Class III building used as—

(i) a special accommodation house, home for the aged, children or the like; and

(ii) the residential part of a *school*.

Installation

(2) In every building referred to in sub-regulation (1) designed to accommodate more than 20 patients or residents fire alarm systems shall be installed as follows:

Para. (a) amended by S.R. No. 187/1986 reg. 10.

(*a*) An automatic fire alarm system complying with AS 1670 shall be installed and connected to a fire station nominated by the *chief officer*.

Para. (b) amended by S.R. No. 187/1986 reg. 10.

(*b*) The type and location of any automatic fire alarm system required by paragraph (*a*) shall be to the approval of the *chief officer*.

Fire alarm call points

(3) In every building referred to in sub-regulation (1) manually operated fire alarm call points shall be installed to the approval of the *chief officer*.

EMERGENCY WARNING AND INTERCOMMUNICATION SYSTEM

Reg. 27.12 inserted by S.R. No. 98/1986 reg. 78.

27.12 An emergency warning and intercommunication system complying with AS 2220 (including Appendix A) shall be installed in—

(*a*) every Class III building used as a special accommodation house, home for the aged, children or the like and the residential part of a *school*;

(*b*) every Class IXa building having a floor area of more than 300 m^2; and

(*c*) every Class IXb building used as a *school* and having a rise of more than one *storey*.

APPROVAL OF INSTALLATIONS

Reg. 27.11 re-numbered 27.13 by S.R. No. 98/1986 reg. 77.

27.13 Where a building is *required* pursuant to these Regulations to be provided with fire detection or suppression equipment the following shall apply:

(*a*) All fire detection and suppression equipment shall be inspected and tested when installation is completed.

(*b*) The builder shall cause the equipment to be inspected and tested in a manner approved by the *chief officer.*

(*c*) On completion of the inspections and tests the builder shall submit to the *chief officer* a report in writing including evidence of such inspections and tests and the results thereof.

(*d*) If the *chief officer*, after having assessed the report submitted, is—

(i) satisfied with it he shall issue a certificate to that effect to the builder; or

(ii) not satisfied with it, he shall give notice specifying what work or equipment is necessary to comply with these Regulations.

(*e*) The builder shall submit a copy of the certificate provided under paragraph (*d*) to the *Co-ordinator.*

(*f*) Where a *certificate of occupancy* is *required* to be issued, the *Co-ordinator* shall not cause the issue of the *certificate of occupancy* prior to receiving from the builder the certificate as provided in paragraph (*d*).

GROUP VI—STRUCTURAL PROVISIONS

PART 28—MATERIALS

MATERIALS NOT CONSIDERED FAULTY

28.1 Where any material listed in Column 1 of Table 28.1 complies with the relevant provisions of the Australian Standard indicated in respect of that material in Column 2, it shall not be considered faulty for the purposes of Regulation 10.2 (1) (*a*).

TABLE 28.1

Table 28.1 amended by S.R. Nos 438/1984 reg. 41, 98/1986 reg. 79

Material (1)	*Australian Standard* (2)
Bricks—burnt clay and shale	AS 1225.
Bricks—calcium silicate	AS 1653.
Concrete Masonry Units	AS 2733.
Concrete—plain	AS 1480.
Concrete—prestressed	AS 1481.
Concrete—reinforced	AS 1480.
Metal Sheet Roofing—corrugated	AS 1445.
Metal Sheet Roofing—without transverse laps	AS 1562.
Mortar—masonry (brickwork)	Appendix A of AS 1640.
Mortar—masonry (other)	AS A123.
Particleboard flooring	AS 1859.

CONCESSION FOR MORTAR IN CERTAIN BUILDINGS

Proportions by volume

28.2 (1) Further to Table 28.1 mortar used in any building containing not more than 2 *storeys* shall not be considered faulty for the purposes of Regulation 10.2 (1) (*a*) if the mortar mix is no weaker than the ratio of 1 part portland cement to 1 part hydrated lime or lime putty to 10 parts fine aggregate volume batched.

Reg. 28.2 inserted by S.R. No. 98/1986 reg. 80.

Deemed to comply

(2) Mortar shall be deemed to comply with sub-regulation (1) if when—

(*a*) sampled in accordance with AS 2701.2; and

(*b*) tested in accordance with AS 2701.10—

the total percentage by mass of calcium oxide plus soluble silica dioxide is not less than 8.5.

28.3—28.6 * * * * *

OTHER MATERIALS

28.7 Where it is proposed to use in a building for structural purposes any material not otherwise provided for in these Regulations the *Co-ordinator* may call for evidence in a form prescribed by Regulation 10.3 (2) that the material proposed to be used is not prohibited by Regulation 10.2 (1).

GROUP VI—STRUCTURAL PROVISIONS

PART 29—STRESSES AND LOAD FACTORS

STRESSES DEFLECTIONS AND LOAD FACTORS ON SPECIAL MATERIALS

29.1 The working stresses, deflections and load factors used for materials or forms of construction for which specific provision is not made in these Regulations shall be subject to the approval of the *building surveyor*.

LOADING NOTICE PLATES

When required

29.2 (1) On completion of any Class V, VI, VII or VIII building *constructed* after the commencement of these Regulations and before occupation of any such building, any floor or part of a floor which has been designed to sustain a uniformly distributed live load exceeding 5 kPa shall have a notice conspicuously and permanently posted adjacent thereto in the form shown following indicating the actual loadings for which the floor or part of the floor has been structurally designed.

DESIGNED FLOOR LOADING

Distributed . . . . . kg/m²

Concentrated . . . . . kg

Design and position of notice plates

(2) The lettering of such notice shall be embossed or cast into a metal tablet not less than 230 mm square and located not less than 1m above floor level.

GROUP VI—STRUCTURAL PROVISIONS

PART 30—DESIGN FOR DEAD AND OTHER LOADS

LOADS

To be applied

30.1 (1) The design of every building unless exempted by sub-regulation (2) shall comply with the following provisions of AS 1170—

(*a*) Part 1, except rule 1.5 thereof; and

(*b*) Part 2.

Conditions when certain requirements do not apply

(2) Notwithstanding sub-regulation (1), any provision of these Regulations relating to structural design for dead and other loads shall not apply if—

(*a*) the structural member is in a part of the building containing not more than 3 *storeys*; and

(*b*) the *building surveyor* is satisfied by reasons of experience or knowledge of local or traditional building construction practices that the building will be structurally sound.

Considerations in determining non-applicability

(3) Without in any way limiting the generality of sub-regulation (2), in determining whether a building will be structurally sound the *building surveyor* may deem that any provision of these Regulations relating to structural design for dead and other loads shall not apply if the building is *constructed*—

(*a*) in accordance with AS 1684;

(*b*) of *masonry* veneer in accordance with AS 1684 and having the outer *masonry* veneer—

(i) laid conventionally using stretcher, English or Flemish bond; and

(ii) of height not exceeding 7.2 m, excluding any gable, measured from the top of the support prescribed in sub-regulation (4) to the highest point at which the wall abuts the ceiling of the topmost *storey*, or the level of the bottom of the highest wall plate, whichever is the lower; or

(*c*) of *masonry* having walls of height not exceeding 10 m, excluding any gable, measured from the top of the support

prescribed in sub-regulation (4) to the highest point at which the wall abuts the ceiling of the topmost *storey*, or the level of the bottom of the highest wall plate, whichever is the lower.

Masonry—Conditions for special exemptions

(4) The *masonry* referred to in paragraphs (*b*) and (*c*) of sub-regulation (3) shall be *constructed* with its base course supported on solid rock or on footings of concrete, brickwork, *masonry* or the like.

GROUP VI—STRUCTURAL PROVISIONS

PART 31—EXCAVATION, EARTHWORK AND RETAINING WALLS

EXCAVATIONS AND BACKFILLING: SAFETY

31.1 All excavations and backfilling shall be executed in a safe and workmanlike manner.

WATER REMOVAL OR DIVERSION

31.2 The *building surveyor* may require water to be removed or diverted from excavations before, during, or after concrete or any other building materials are deposited therein.

RETAINING WALLS

31.3 Wherever the soil conditions so require, retaining walls or any other *approved* methods of preventing movement of the soil shall be provided and adequate provision made for drainage.

INSPECTION OF FOUNDATION EXCAVATIONS

31.4 Notice shall be given to the *building surveyor* when excavations for footings are ready for inspection, and no footing shall be placed in position until the excavation for it has been inspected and approved by the *building surveyor.*

GROUP VI—STRUCTURAL PROVISIONS

PART 32—FOUNDATIONS

32.1 * * * * *

FOUNDATIONS: ASSESSMENT OF ADEQUACY

32.2 The adequacy of *foundations* shall be based on *approved*—

(*a*) well established and relevant local knowledge and experience of *foundation* conditions in the vicinity of the proposed building; or

(*b*) tests on the *foundation* materials.

32.3 * * * * *

ALLOWABLE BEARING PRESSURES—GENERAL

32.4 The bearing pressure on the *foundation* of a building shall not exceed the values given in Regulation 32.5 unless—

(*a*) an investigation of the *foundations* has been conducted and the *building surveyor* is satisfied in the light of the report on that investigation, that higher bearing pressures are justified; or

(*b*) an investigation of the *site* has been conducted under AS 1726 and the bearing pressures are based on the information obtained from that investigation.

ALLOWABLE BEARING PRESSURES

Application of Regulation

32.5 (1) This Regulation shall only apply where the class and description of the soil or rock adopted for the purposes of this Regulation and the allowable bearing pressures adopted for the purposes of this Regulation are stated on the plans submitted for a *building approval.*

Reference to Tables

(2) The allowable bearing pressures for use pursuant to this Regulation shall be those prescribed in—

(*a*) Table 32.5A;

(*b*) Table 32.5B; or

(*c*) Table 32.5C—

as *required* to be construed in accordance with the Notes to those Tables.

Determination of soil description

(3) In determining an appropriate soil description for use pursuant to this Regulation, the designer shall take account of seasonal moisture conditions.

Pad or strip footings near boundaries

(4) Where any pad or strip footing is on or within 1 m of the boundary of the *allotment* other than a *street alignment*, the allowable bearing pressure shall be two-thirds of the value otherwise prescribed in this Regulation.

TABLE 32.5A

FOOTINGS ON COHESIVE SOIL

Description	*Maximum Allowable Bearing Pressures for Footings at Ground Surface (kPa)*	
	Strip Footings	*Pad Footings (Square or Circular)*
(1)	(2)	(3)
Very soft clay and silt	20	30
Soft clay and silt	40	60
Firm clay	95	110
Stiff clay	180	210
Very stiff clay	350	430
Hard clay	520	650

Notes:

A. Rectangular footings with width to length proportions in the ratio 1 : 5 or greater shall be deemed to be strip footings.

B. For rectangular footings with a width to length ratio between 1 : 1 and 1 : 5 the allowable bearing pressure may be interpolated between those prescribed for strip footings and pad footings.

C. Where a footing is located below ground surface the allowable bearing pressure may be increased by 5 kPa for each 300 mm in distance which the base of the footing is below the ground surface.

D. (1) For the purposes of this Table the following interpretations shall apply:

(*a*) 'Very soft clay and very soft silt' means soil which may be readily penetrated to a depth of 100 mm by the clenched fist.

(*b*) 'Soft clay and soft silt' means soil which may be easily penetrated to a depth of 50 mm by the thumb.

(*c*) 'Firm clay' means soil which may with moderate effort be penetrated to a depth of 50 mm by the thumb.

(*d*) 'Stiff clay' means soil which may readily be indented by the thumb, but penetrated by the thumb only with great effort.

(*e*) 'Very stiff clay' means soil which may be readily indented by the thumbnail.

(*f*) 'Hard clay' means soil which may be indented by the thumbnail but only with great difficulty.

(2) For the purposes of these interpretations clay shall include silty or sandy clays.

TABLE 32.5B

FOOTINGS ON NON-COHESIVE SOILS

Description	*Allowable Bearing Pressure in kPa for a Footing located at Ground Surface*	*Increase in Allowable Bearing Pressure in kPa for every 300 mm of Depth of Base of Footing Below Ground Surface*	*Maximum Allowable Bearing Pressure in kPa Under any Conditions*
(1)	(2)	(3)	(4)
Loose sand or gravel	50w	15	100
Medium sand or gravel	150w	40	250
Dense sand or gravel	350w	100	550
Very dense sand or gravel	600w	150	700

Notes:

A. For the purpose of this Table, w is the least plan dimension of the footing in metres.

B. If, in the opinion of the building surveyor, the water table is likely to rise to a level the distance of which below the base of the footing is not more than w, the allowable bearing pressure and maximum allowable bearing pressure shall be one half of that otherwise prescribed.

C. For the purposes of this Table, the following interpretations shall apply:

(*a*) 'Loose sand or gravel' means sand deposits readily removable by shovelling only and into which a sharp pointed wooden post 50 mm square can easily be driven with a hammer not exceeding 5 kg.

(*b*) 'Medium sand or gravel' means sand or gravel deposits removable by vigorous shovelling and into which a sharp pointed wooden post 50 mm square can be driven with a hammer not exceeding 5 kg with some difficulty.

(*c*) 'Dense sand or gravel' means sand or gravel deposits requiring picking for removal, and offering high resistance to penetration by excavating tools.

(*d*) 'Very dense sand or gravel' means gravel deposits requiring hard picking for removal, and offering hard resistance to disturbance by excavating tools.

TABLE 32.5C

FOOTINGS ON ROCK

Description	*Maximum Allowable Bearing Pressures for Rock Foundations in Various Conditions of Weathering in kPa*		
	Highly Weathered	*Moderately Weathered*	*Fresh to Slightly Weathered*
(1)	(2)	(3)	(4)
Soft limestone and similar porous rocks	100 to 400	300 to 1000	800 to 1500
Sandstone, mudstone and similar sedimentary rocks	200 to 600	500 to 1500	1200 to 2000
Slate, schist and similar metamorphic rocks	200 to 600	600 to 2000	1500 to 3000
Basalt, granite and similar igneous rocks	200 to 600	500 to 2000	1500 to 4500

Notes:

A. (*a*) The lower end of each range shall be used for rock foundations of the category to which the range applies and which are highly jointed or contain obvious defects.

(*b*) The upper end of each range shall be used for massive and consistent rock foundations of the category to which the range applies.

B. A bearing pressure greater than 600 kPa shall not be imposed by a footing resting on a basalt rock foundation unless a qualified engineer—

(*a*) establishes the condition of the basalt rock foundation to a depth of not less than 1½ times the width or diameter of the footings; and

(*b*) decides in accordance with good engineering practice and the condition of the basalt rock foundation that it is safe to rest the footing on that foundation.

C. For the purposes of this Table:

(*a*) 'Highly Weathered Rock' means rock of predominantly earthy colours (particularly yellows, reds and browns) with numerous clay seams and pieces of which can generally be broken by hand.

(*b*) 'Moderately Weathered Rock' means rock showing some earthy colour predominantly surrounding the joints with some clay seams and pieces of which can generally be broken by hand;

(*c*) 'Fresh to Slightly Weathered Rock' means rock predominantly of a mineral colour or lustre with only minor discolouration adjacent to joints and pieces of which can only be broken with difficulty using hand tools.

D. Where rock is in an extremely weathered form so that, although rock texture and appearance are mainly preserved, the rock substance has the strength properties of soil and may be readily disintegrated by gentle agitation in water, it shall be deemed to be soil for the purposes of this Regulation and classified in accordance with interpretations contained in Tables 32.5A and 32.5B.

GROUP VI—STRUCTURAL PROVISIONS

PART 33—FOOTINGS NOT ON PILING OR CAISSONS

PROVISION OF FOOTINGS

33.1 Suitable footings shall be provided where necessary to reduce the intensity of the pressure of the building on the *foundations*.

DESIGN OF FOOTINGS

33.2 Footings, including slab-on-ground footings, shall be designed and *constructed* so that any relative movements of separate footings and of different parts of any one footing under loading, or of a footing and any other element of the substructure will not impair the stability of or cause significant structural damage to the superstructure.

DEEMED TO COMPLY

Scope

33.3 (1) This Regulation shall apply to concrete strip or pad footings where—

(*a*) the building does not contain more than 4 *storeys*;

(*b*) the area of any *storey* of the building is not greater than 600 m^2; and

(*c*) the bearing pressure exerted by the footing does not exceed the value prescribed in Regulation 32.4.

Construction and proportions of footings designed by prescribed allowable bearing pressure

(2) A footing designed and *constructed* in accordance with this Regulation shall be deemed to comply with Regulation 33.2 if it—

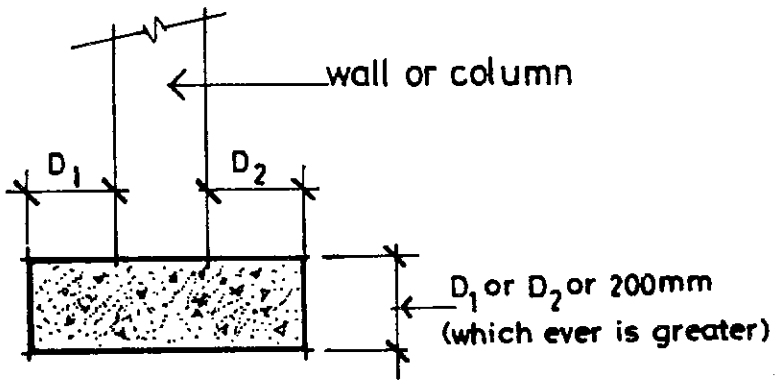
(*a*) is of reinforced concrete *constructed* having a compressive strength at 28 days of not less than 20 MPa, as determined in accordance with AS 1480;

(*b*) has a depth of not less than—

(i) the horizontal projection of the footing at right angles to the face of the wall or the column it supports (as illustrated in Figure 33.3); or

(ii) 200 mm—

whichever is the greater;



Horizontal Projection of footing

FIGURE 33.3

(*c*) in the case of a pad footing, contains not less than 0·15 per cent of the cross-sectional area of the footing, as designed, as reinforcement in each direction near the bottom face of the footing, with a minimum cover of 50 mm;

(*d*) in the case of a strip footing, contains not less than 0·15 per cent of the cross sectional area of the footing as designed as longitudinal reinforcement with a minimum cover of 50 mm, half of which shall be placed in the top third and half in the bottom third of the footing; and

(*e*) has reinforcement in strip footings and pad footings lapped for continuity—

(i) at splices—for a distance of not less than 500 mm;

(ii) at T intersections—for the full width of the layer;

(iii) at corners where fabric strips are used as reinforcement—for the full width of the fabric layer; and

(iv) at corners where bars are used as reinforcement—by a bent lap bar of 500 mm each leg, placed in each layer of reinforcement near the outer face of the corner.

DEEMED TO COMPLY

Application of Regulation

33.4 (1) Any footing of a Class I building or a building of another class which has a uniformly distributed live load not exceeding 3 kPa when calculated in accordance with AS 1170 which is *constructed* in accordance with the relevant provisions of this Regulation and

Regulations 33.5 to 33.9 shall be deemed to comply with the requirements of Regulation 33.2 except where—

(*a*) by reason of—

(i) the nature of the *foundation*; or

(ii) the design of the building; or

(iii) any other relevant considerations—

the *building surveyor* is of the opinion that any such footing would not be adequate in the particular case; or

(*b*) the building—

(i) contains more than 2 *storeys*; or

(ii) has a wall, which, excluding any gable, exceeds 7·2 m in height; or

(iii) will contain a concrete floor other than a slab-on-ground or footing slab.

Sub-para. (iii) amended by S.R. No. 98/1986 reg. 81.

Concrete strength

(2) Concrete used in footings shall have a compressive strength at 28 days of not less than 20 MPa, determined in accordance with AS 1480.

Foundation classification

(3) The classification of the *foundation* of any *site* on which footings are to be *constructed* shall be in accordance with the "Classification of Expansive Behaviour of Melbourne Soils for Domestic Construction" published by CSIRO and AEBIRA.

Areas not covered by publication

(4) In areas outside those shown in Figure 3 of the publication referred to in sub-regulation (3) the *site* on which footings are proposed to be *constructed* shall be similarly classified by adopting, where practicable, the principles stated in that publication and taking into account experience or knowledge of local or traditional building construction practices.

Drawings to include foundation classification

(5) The drawings referred to in Regulation 8.2 (2) shall include the *foundation* classification adopted pursuant to this Regulation and shall be confirmed to the satisfaction of the *building surveyor* on the *site* on which the footings are proposed to be *constructed.*

FOOTINGS FOR STUMPS

General requirements

33.5 (1) Every footing for stumps shall comply with the following:

(*a*) The size of concrete footings for stumps shall be in accordance with AS 1684.

(*b*) The bearing areas of footings for stumps which support a wall sheathed with cement-sand facing tiles, shall be double those prescribed for a timber-framed wall in AS 1684.

(*c*) The footings shall be founded at a depth of—

Sub-para. (i) amended by S.R. No. 75/1984 reg. 19.

(i) in the case of sites classified as stable in accordance with Regulation 33.4, not less than 450 mm; or

Sub-para. (ii) amended by S.R. No. 75/1984 reg. 19.

(ii) in the case of sites classified as intermediate in accordance with Regulation 33.4, not less than 700 mm; or

Sub-para. (iii) amended by S.R. No. 75/1984 reg. 19.

(iii) in the case of sites classified as unstable in accordance with Regulation 33.4, not less than 1 m.

Concession

(2) Notwithstanding paragraph (*c*) of sub-regulation (1), the *building surveyor* may permit the footings for stumps to be founded at a depth of less than 450 mm if he is satisfied by reason of experience or local knowledge that such a depth would be adequate for the structural stability of the building in the case of—

(i) the re-stumping of or *alterations* to an existing building;

(ii) rock *foundations*; or

(iii) a building in which walls of stud-framed and sheeted construction are supported on stumps.

Excavations

(3) Excavations for footings for stumps shall be—

(*a*) properly backfilled with *approved* material; and

(*b*) compacted in an *approved* manner.

STRIP FOOTINGS

Reinforcement

33.6 (1) Reinforcement in strip footings shall—

(*a*) be equally distributed in two layers, one near the top and one near the bottom of the footing;

(*b*) have a concrete cover of not less than 50 mm at any part; and

(*c*) be laid continuously, each layer being lapped—

(i) at intersections—for its full width;

(ii) at splices—for not less than 500 mm;

(iii) at corners where fabric strips are used as reinforcement—for the full width of the fabric layer;

(iv) at corners where bars are used as reinforcement—by a bent lap bar of 500 mm each leg, placed in each layer of reinforcement near the outer face of the corner; and

(v) at steppings, as shown in Figure 33.6.

Design generally

(2) Strip footings constructed of concrete shall—

(*a*) have a width and depth in accordance with Table 33.6;

(*b*) if stepping is necessary, comply with one or more of the methods shown in Figure 33.6 and have level bottoms between steppings;

(*c*) be reinforced in accordance with Table 33.6 and Figure 33.6; and

(*d*) be founded on soil or rock having an allowable bearing pressure of not less than 100 kPa.

Reduced footing depth permissible

(3) Where a strip footing designed and *constructed* pursuant to this Regulation is to rest wholly or partly on a floater or rock outcrop, the depth of the strip footing in the vicinity of the floater or rock outcrop may, subject to sub-regulation (4) be reduced to not less than two-thirds of the depth otherwise prescribed by this Regulation.

Reinforcement in reduced footing depth

(4) Where the depth of a strip footing is reduced pursuant to sub-regulation (3), the reinforcement in the section of the strip footing of reduced depth—

(*a*) shall be double the amount of that prescribed by Table 33.6; and

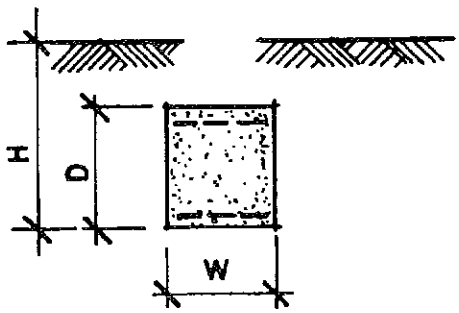
(*b*) shall extend at least 500 mm beyond the section of strip footing of reduced depth.

Table 33.6 amended by S.R. No. 438/1984 reg. 42.

TABLE 33.6
MINIMUM DIMENSIONS AND REINFORCEMENT FOR STRIP FOOTINGS FOR DIFFERENT TYPES OF CONSTRUCTION

Foundation Classification	*Number of Storeys*	*Footings*		*Excavated Depth to Base of Footings Below Ground Surface*	*Alternative Reinforcement*	
		Width	*Depth*		*Number of C12, S16 or Y12 Bars or Main Wires of F11TM at Top and Bottom*	*Number of Main Wires of F8TM at Top and Bottom*
		W (mm)	*D (mm)*	*H (mm)*		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
MASONRY VENEER, TIMBER FRAMED, METAL FRAMED OR SINGLE LEAF MASONRY WALLS						
Stable	One	300	375	450	2	3
	Two	375	375	450	3	4*
Intermediate	One	300	525	600	3	6*
	Two	375	525	600	3	6*
Unstable	One	300	675	750	3	6*
	Two	375	675	750	3	6*
CAVITY OR DOUBLE LEAF MASONRY WALLS						
Stable	One	350	375	450	2	3
	Two	450	375	450	3	6*
Intermediate	One	350	525	600	3	6*
	Two	450	525	600	4	8*
Unstable	One	350	675	750	3	6*
	Two	450	675	750	4	8*

*Reinforcement is to be provided in two equal layers.



STRIP FOOTING
ILLUSTRATION TO TABLE 33.6

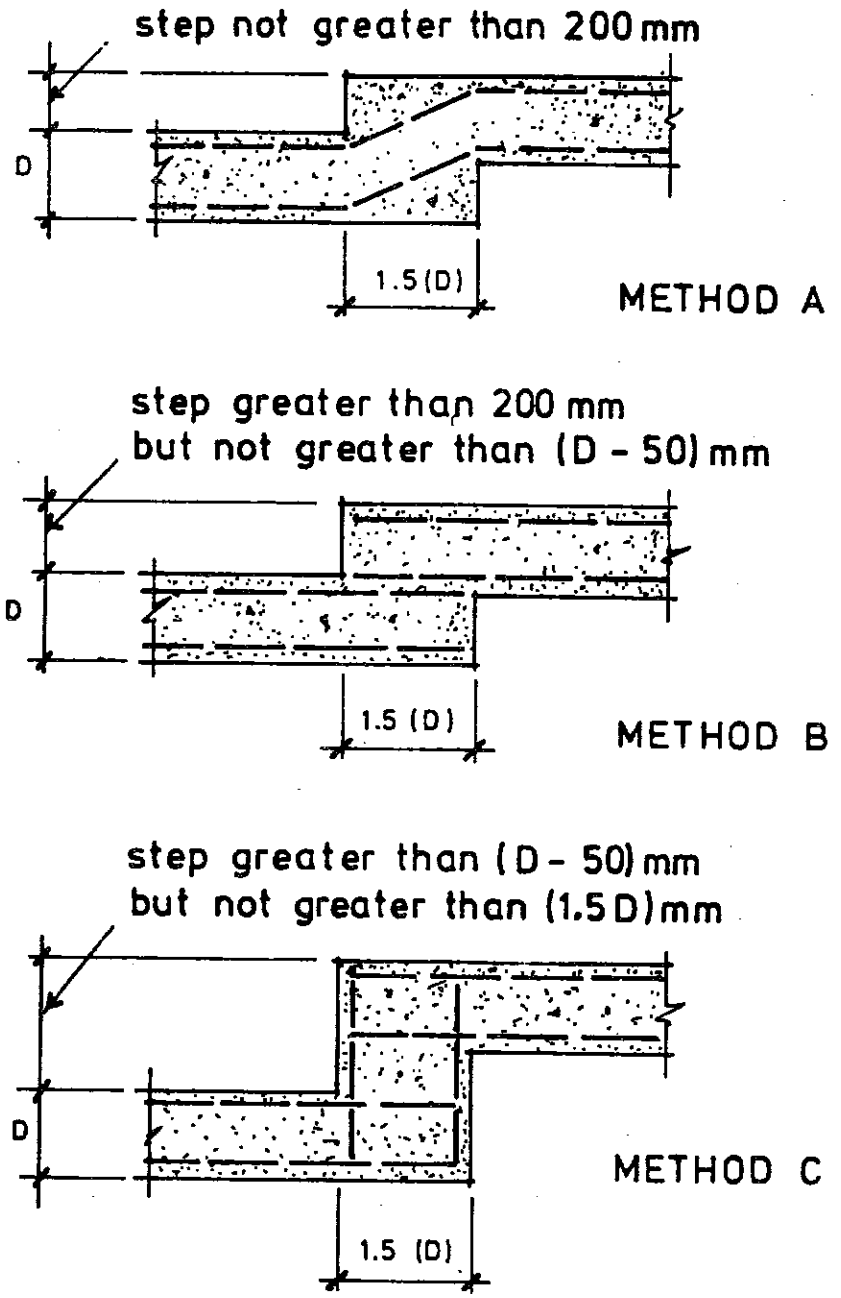


FIGURE 33.6 STEPPED FOOTINGS

SLAB-ON-GROUND[4]

Reinforcement in the slab-on-ground beams

33.7 (1) Reinforcement in the beams in slab-on-ground shall—

(*a*) be placed near the bottom of each beam;

(*b*) have a concrete cover of not less than 50 mm at any part; and

(*c*) be lapped—

(i) at intersections—for its full width;

(ii) at splices—for not less than 500 mm;

(iii) at corners where fabric strips are used as reinforcement—for the full width of the fabric layer;

(iv) at corners where bars are used as reinforcement—by a bent lap bar of 500 mm each leg, placed in each layer of reinforcement near the outer face of the corner; and

(v) at steppings—as shown in Figure 33.6.

Reinforcement fabric in slab-on-ground

(2) Reinforcement fabric in slab-on-ground shall—

(*a*) be placed in the upper half of the slab, with a concrete cover of not less than 25 mm at any part;

(*b*) be lapped for a distance of not less than 225 mm; and

(*c*) be supported by bar chairs at spacings of not more than 1·2 m in either direction.

Requirements generally

(3) Every slab-on-ground shall comply with the following:

(*a*) Top-soil containing significant amounts of organic matter shall be removed from the area on which the slab is to rest.

(*b*) Edge beams of the slab shall be founded on soil or rock having an allowable bearing pressure of not less than 100 kPa.

(*c*) The slab shall be founded on soil or rock having an allowable bearing pressure of not less than 30 kPa.

(*d*) * * * * * *

Para. (d) revoked by S.R. No. 438/1984 reg. 43 (1).

(*e*) The dimensions and reinforcement of the edge beams shall be not less than those prescribed in Table 33.7A and as illustrated in Figure 33.7A.

(*f*) Edge recesses shall be provided for a *masonry* cavity wall or *masonry* veneer construction and shall—

(i) have a depth of not less than 50 mm and any part of the edge beam below any such recess shall have a depth of not less than 150 mm; and

(ii) be *constructed* in the manner illustrated in Figure 33.7A.

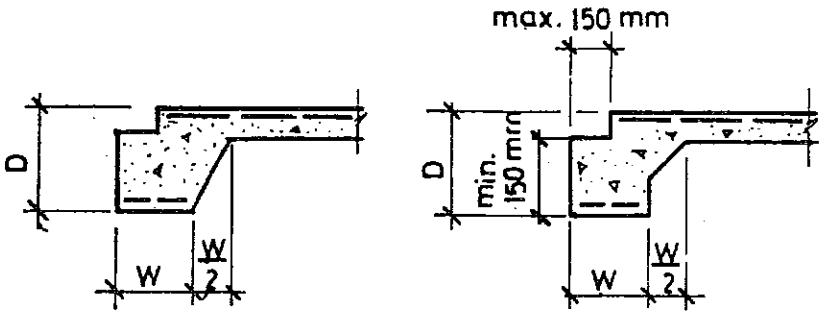


FIGURE 33.7A

TABLE 33.7A
MINIMUM DIMENSIONS AND REINFORCEMENT OF EDGE BEAMS

Foundation Classification and Building Height	*Size (W × D) in mm*	*Alternative Bottom Reinforcement*	
		Number of C12, S16 or Y12 Bars or Main Wires of F11TM Fabric	*Number of Main Wires of F8TM Fabric*
(1)	(2)	(3)	(4)
Stable			
—one storey	300 × 300	2	3
—two storeys	400 × 400	3	4
Intermediate			
—one storey	300 × 400	3	6*
—two storeys	400 × 400	4	8*
Unstable			
—one storey	300 × 600	3	6*
—two storeys	400 × 600	4	8*

* Reinforcement is to be provided in two equal layers.

(*g*) On completion of the building the top surface of the slab shall be at a height above the adjoining ground level of—

(i) 75 mm, in the case of a slab located adjacent to a drained and paved area;

(ii) 100 mm, in the case of a slab located on a sandy, well drained *site*; or

(iii) 150 mm, in any other case.

(*h*) Stiffening beams shall—

(i) be *constructed* in accordance with the dimensions prescribed in Table 33.7B and in the manner illustrated in Figure 33.7B;

(ii) be reinforced in accordance with the provisions of Table 33.7B; and

(iii) be founded on soil or rock having an allowable bearing pressure of not less than 30 kPa;

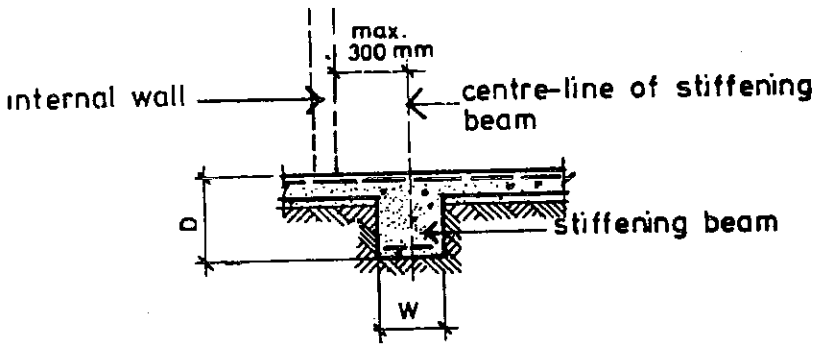


FIGURE 33.7B

TABLE 33.7B

MINIMUM SIZE, SPACING AND REINFORCEMENT OF STIFFENING BEAMS

Foundation Classification	*Beam Size (W × D)*	*Alternative Bottom Reinforcement*		*Maximum Spacing of Stiffening Beams from Edge Beams or other Stiffening Beams in any direction in metres*	
		Number of C12, S16 or Y12 Bars or Main Wires of F11TM Fabric	*Number of Main Wires of F8TM Fabric*	*Timber or Metal Framed Internal Walls*	*Masonry Internal Walls*
(1)	(2)	(3)	(4)	(5)	(6)
Intermediate	300 × 400	3	6*	4·5	3·5
Unstable	300 × 600	3	6*	4	3

* Reinforcement is to be provided in two equal layers.

(*i*) A support shall be provided under any *internal wall* in the manner prescribed by Part 1 of Table 33.7C if the wall is

not located within 300 mm of the centre-line of a stiffening beam.

(*j*) A beam providing support for an *internal wall* in accordance with Part 1 of Table 33.7C shall be—

(i) *constructed* in accordance with Part 2 of Table 33.7C and in the manner illustrated in Figure 33.7B; Sub-para. (i) amended by S.R. No. 438/1984 reg. 43(2).

(ii) if the wall is a *loadbearing* wall, be founded on soil or rock having an allowable bearing pressure of not less than 100 kPa; and

(iii) if the wall is a non-*loadbearing* wall, be founded on soil or rock having an allowable bearing pressure of not less than 30 kPa.

TABLE 33.7C

PART 1—SUPPORTS FOR VARIOUS TYPES OF INTERNAL WALL CONSTRUCTION

Number of Storeys	*Type of Wall Construction*	*Internal Wall*	
		Loadbearing	*Non-loadbearing*
(1)	(2)	(3)	(4)
one	timber or metal	no requirement	no requirement
two	timber or metal	beam required	additional slab reinforcement required
one	masonry	additional slab reinforcement required	no requirement
two	masonry	beam required	beam required

PART 2—MINIMUM SIZE AND REINFORCEMENT OF INTERNAL WALL SUPPORT BEAMS

Foundation Classification	*Beam Size (W × D)*	*Alternative Bottom Reinforcement*	
		Number of C12, S16 or Y12 Bars or Main Wires of F11TM Fabric	*Number of Main Wires of F8TM Fabric*
(1)	(2)	(3)	(4)
Stable	300 × 300	2	3
Intermediate	300 × 400	3	6*
Unstable	300 × 600	3	6*

*Reinforcement is to be provided in two equal layers.

(*k*) additional slab reinforcement providing support for an *internal wall* in accordance with Part 1 of Table 33.7C shall—

(i) be not less than 800 mm wide;

(ii) be positioned centrally under the wall in the lower part of the slab with a concrete cover of not less than 30 mm;

(iii) be placed in the manner illustrated in Figure 33.7c; and

(iv) comply with the provisions of paragraph (*l*);

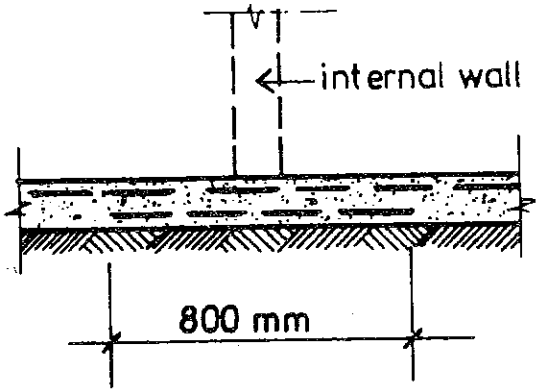


FIGURE 33.7c

(*l*) every slab shall—

(i) in the case of a slab resting on soil classified in accordance with Regulation 33.4 as stable, be reinforced with F72 mesh or bars of equivalent strength; or

(ii) in any other case, be reinforced with F82 mesh or bars of equivalent strength;

(*m*) A slab shall be not less than 100 mm thick.

(*n*) Pipes providing heat to a slab shall not be embedded in a slab less than 125 mm thick.

(*o*) Where pipes are to be embedded or recesses provided in the slab, the slab shall be thickened in an *approved* manner to ensure that there is no loss of strength.

Reduced footing depth permissible

(4) Where a beam of a slab-on-ground, designed and *constructed* pursuant to this Regulation, is to rest wholly or partly on a floater or rock outcrop, the depth of the beam in the vicinity of the floater or rock outcrop may, subject to sub-regulation (5), be reduced to not less than two-thirds of the depth otherwise prescribed by this Regulation.

Reinforcement in reduced footing depth

(5) Where the depth of a beam is reduced pursuant to sub-regulation (4), the reinforcement in the section of the beam of reduced depth—

(*a*) shall be double the amount of that prescribed by this Regulation; and

(*b*) shall extend at least 500 mm beyond the section of strip footing or beam of reduced depth.

FOOTING SLABS

33.8 A footing slab system designed and *constructed* pursuant to this Regulation shall comply with the following:

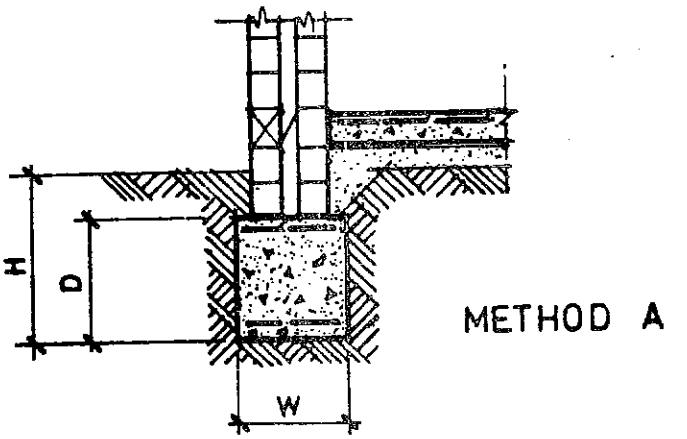
(*a*) Except where by reason of experience or local knowledge the *building surveyor* permits otherwise, the footing slab shall be founded on a *site* classified in accordance with Regulation 33.4 as stable.

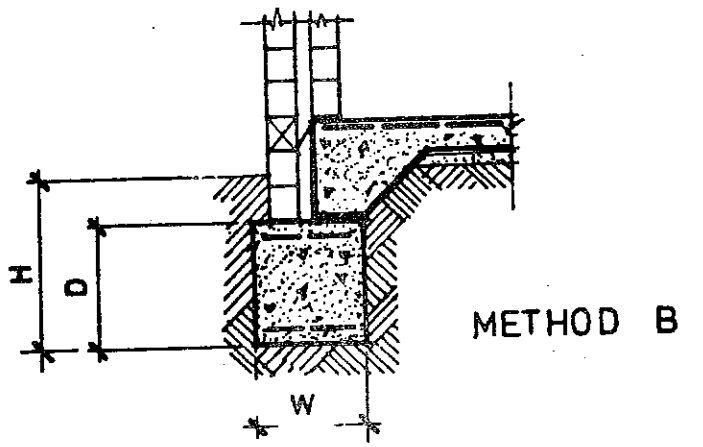
Para. (a) amended by S.R. No. 75/1984 reg. 22.

(*b*) The configuration of the system shall conform with—

(i) one of the methods illustrated in Figure 33.8; or

(ii) any other method not less effective than the methods so illustrated;





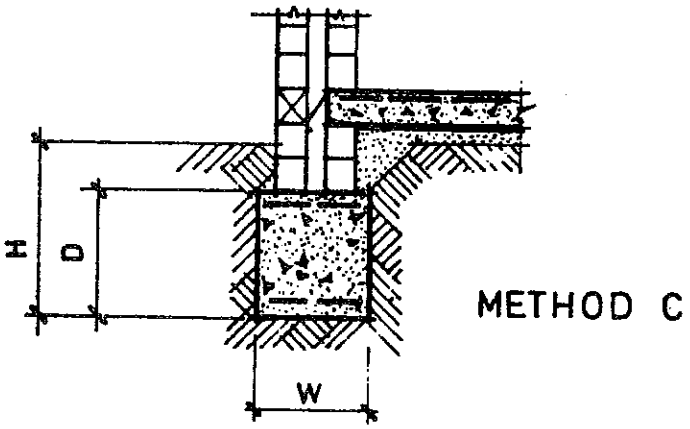


FIGURE 33.8

(*c*) The footing part of the system shall comply with the provisions of Regulation 33.6 as if it were a strip footing.

(*d*) The slab part of the system shall comply with the provisions of Regulation 33.7 (3) (other than paragraphs (*b*), (*d*) (iii), (*e*) and (*f*)) as if it were a slab-on-ground.

(*e*) Where, in the design and *construction* of a footing slab system, filling is restrained by an *external wall* and the filling is greater than 600 mm in depth, the *external wall* shall be designed by a *qualified engineer* and *constructed* in accordance with that design.

FOOTINGS ADJOINING BOUNDARIES: PERMISSIBLE PROJECTIONS

33.9 Notwithstanding anything in Part 15, a footing may—

(*a*) support a *party wall*; and

(*b*) extend beyond the boundaries of a *street alignment*—

(i) to a distance of not more than 300 mm where the highest projecting part of the footing is at a depth of not less than 450 mm but is less than 3 m below the ground level; or

(ii) to a distance of not more than 1 m where the highest projecting part of the footing is at a depth of 3 m or more below the ground level.

GROUP VI—STRUCTURAL PROVISIONS

PART 34—PILING AND CAISSONS

PART NOT TO APPLY IN SOME CASES

34.1 This Part shall not apply to piers or stumps used as a substructure above ground level in which such piers or stumps are designed to transmit the loads of the superstructure to the footings or *foundation.*

DESIGN AND CONSTRUCTION

34.2 Substructures wholly or partly of piling or caissons shall be so designed and *constructed* that any relative movements of the substructure or of separate parts of the substructure will not impair the stability of or cause significant structural damage to the superstructure.

PILES—REQUIREMENTS

34.3 Piles shall be—

(*a*) designed and *constructed* to resist the forces involved in handling and driving and in supporting all loads superimposed on the piles; and

(*b*) of timber, concrete, steel or other *approved* material or any *approved* combination thereof.

PILES—DEEMED TO COMPLY

34.4 Piles designed and installed in accordance with the relevant provisions of AS 2159 shall be deemed to comply with the requirements of this Part.

RECORD OF PILE DRIVING

34.5 Any person constructing piles shall—

(*a*) keep a record of all pile-driving operations undertaken during the construction including any determination of allowable loadings;

(*b*) make the records available for inspection by the *building surveyor* during the progress of the pile-driving operations; and

(*c*) within 14 days of the completion of the pile-driving operations forward the complete records of the pile-driving operations to the *building surveyor.*

GROUP VI—STRUCTURAL PROVISIONS

PART 35—WALLS—GENERAL REQUIREMENTS

LOADBEARING WALL CONSTRUCTION

Definition

35.1 (1) For the purposes of this Regulation "*loadbearing* wall construction", means that type of construction in which *loadbearing* walls are designed as the principal means of transmitting loads downwards through the building.

Application

(2) This Regulation shall apply to every building of *loadbearing* wall construction in which the level of the floor of the topmost *storey* is more than 11m above the lowest level of the finished ground adjacent to the building.

Structural design—alternatives

(3) Every building to which this Regulation applies shall comply with one of the following:

(*a*) The building shall be provided with horizontal continuity at every floor level by means of—

(i) a concrete floor cast *in situ* capable of resisting all the negative bending moments specified for such a floor by AS 1480; or

(ii) a floor comprising precast concrete units connected in such manner as to be capable of resisting all the negative bending moments specified by AS 1480 for a reinforced concrete floor cast *in situ*.

(*b*) Every floor, together with every *loadbearing* wall, shall be capable of resisting bending moments which are equivalent, in their effect, to the negative bending moments specified by AS 1480 for a reinforced concrete floor cast *in situ*.

(*c*) If any part of a *loadbearing* wall, 6 m or greater in length and not exceeding in height the height of the *storey* in which it is located is removed or displaced by any cause whatsoever, the stresses developed in the remaining parts of the wall shall not exceed normal working stresses by more than 25 per cent and the remaining structural parts of the building shall be held in place.

FACINGS

Materials

35.2 (1) Facings shall consist of—

(*a*) stone or synthetic stone not less than 50 mm thick;

(*b*) terra cotta blocks not less than 90 mm thick;

(*c*) ceramic veneer not less than 25 mm thick;

(*d*) flat tiles not less than 25 mm thick; or

(*e*) other *approved* materials.

On reinforced concrete and masonry walls

(2) Facings may be used on the outer face of reinforced concrete or *masonry* walls, provided that each unit of the facing shall be tied to the structural walling with substantial non-corrosive metal wall ties.

90 mm thick

(3) Facings *required* to contribute to the strength of a wall shall be not less than 90 mm in thickness in every part and shall be built concurrently with the wall and bonded into the backing for not less than 90 mm at every third course.

50 mm or less

(4) Facings 50 mm or less in thickness shall be—

(*a*) provided with horizontal chases at not more than 450 mm centres in the structural walling;

(*b*) provided with vertical steel rods not more than 400 mm apart secured to non-corrosive metal anchors built into the walling; and

(*c*) filled in solid at back with cement mortar.

Terra cotta

(5) Terra cotta blocks shall be used only in conjunction with brick walling and shall be bonded to such walling by setting the brickwork into the interstices of the terra cotta blocks.

Less than 25 mm

(6) Tiles having a thickness of less than 25 mm shall not be—

(*a*) fixed in accordance with the provisions of sub-regulations (2) and (4); and

(*b*) used above a verandah, or if there is no verandah, at any height exceeding 3·6 m above the level of the footpath except where such tiles are incorporated in precast vibrated reinforced concrete panels during the manufacture of such panels.

Tiles on reinforced concrete

(7) Tile facing on reinforced concrete walls shall be provided with open or mastic joints at intervals of not greater than 1·5 m horizontally and vertically.

Building surveyor approval

(8) All facings shall be supported by fixings in an *approved* manner.

GROUP VI—STRUCTURAL PROVISIONS

PART 36—WALLING OF MASONRY

EXTERNAL WALL THICKNESS

Cavity Walls

36.1 (1) For the purposes of this Part the combined thickness of the inner and outer leaves of a cavity wall shall be deemed to be the thickness of the wall.

Minimum thickness of external walls

(2) The *external walls* of a building, if *constructed* of *masonry* shall be designed and *constructed* in accordance with the relevant provisions of this Part and shall be not less than 200 mm in thickness except—

(*a*) in the case of Class VII or VIII buildings where the *building surveyor* permits the use of *external walls* having a thickness of less than 200 mm; or

(*b*) in the case of single *storey* buildings or the topmost *storey* of multi-*storey* buildings where cavity wall construction is used and the thickness of the wall is not less than 190 mm; or

(*c*) in the case of Class Xb or Xc buildings or of garages, *laundries*, tool sheds, and the like forming part of a building used for other purposes.

Walls less than 200 mm in thickness

(3) The *building surveyor* may require a certificate from a *qualified engineer* as to the structural adequacy of any wall less than 200 mm in thickness if—

(*a*) the wall does not comply with the provisions of sub-regulation (4); or

Para. (a) substituted by S.R. No. 438/1984 reg. 44 (1).

(*b*) the *building surveyor* is unable for any reason to satisfy himself that the wall will be structurally adequate.

Class Xb buildings

(4) A Class Xb building containing not more than one *storey* may be enclosed with *external walls* not less than 110 mm in thickness, provided that—

Sub-reg. (4) inserted by S.R. No. 438/1984 reg. 44 (2).

(*a*) the width of the building measured in the direction of the span of the roof does not exceed 9 m and the height of the wall does not exceed 3 m;

(*b*) piers are formed which are not less than 230 mm wide, project not less than 120 mm and are spaced at not more than 3 m centres;

(*c*) the roof is so *constructed* that the walls are not subject to any thrust therefrom;

(*d*) such walls shall not be required to support any load other than the distributed load of the roof;

(*e*) cross walls or equivalent buttresses are *constructed* at not more than 9 m centres; and

(*f*) the mortar mix used is no weaker than the ratio of 1 part cement to 1 part lime to 6 parts fine aggregate volume batched.

BRICKWORK MASONRY

Structural requirement

Sub-reg. (1) amended by S.R. No. 438/1984 reg. 45.

36.2 (1) Subject to Regulation 36.1 (4), *masonry* of—

(*a*) burnt clay and shale bricks;

(*b*) calcium silicate bricks; and

(*c*) concrete bricks—

shall be designed and *constructed* in accordance with AS 1640.

AS 1640—Strength of bricks

(2) In addition to the requirements of sub-regulation (1) the following provisions shall apply:

(*a*) The compressive strength used in the design calculations shall be based on the compressive strength of the type of bricks to be used in the walls.

(*b*) Where the compressive strength of the type of bricks exceeds 48 MPa, the design calculations shall be based on a maximum of 48 MPa.

(*c*) Bricks shall comply with the following transverse strength requirements, according to the design calculations for the compressive strength of the bricks:

(i) Compressive strength not exceeding 24 MPa—no brick shall have a transverse strength of less than 1·7 MPa and the average transverse strength of the bricks shall be not less than 2·0 MPa.

(ii) Compressive strength exceeding 24 MPa—no brick shall have a transverse strength of less than 1·9 MPa and the average transverse strength of the bricks shall be not less than 2·7 MPa.

Certain provisions of AS 1640 not to apply

(3) For the purposes of this Regulation the provisions of AS 1640 shall be modified as follows:

(*a*) * * * * * * Para. (a) revoked by S.R. No. 98/1986 reg. 82.

(*b*) * * * * * * Para. (b) revoked by S.R. No. 98/1986 reg. 82.

(*c*) * * * * * *

(*d*) Rule 2.3—"Damp-proof Courses, Flashings and Weatherings" shall not apply.

(*e*) Rule 3.7—"Prevention of Moisture Penetration" shall not apply.

(*f*) The second paragraph of rule 5.1—"Supervision" shall not apply.

(*g*) Rule 6.4—"Determination of Minimum Compressive Strength of Bricks" shall not apply.

(*h*) Rule 6.5—"Determination of Initial Rate of Absorption of Bricks" shall not apply.

(*i*) Rule 6.9—"Sound Insulation Tests" shall not apply.

(*j*) For Table 5.1 there shall be substituted Table 36.2.

TABLE 36.2

TOLERANCES IN BRICKWORK

Item (1)	*Tolerance* (2)
(*a*) Deviation from the horizontal position specified or shown on plan of any masonry building	15 mm
(*b*) Deviation from vertical within a storey	the lesser of— (i) 10 mm per 3 m of height; or (ii) 0·05 × wall thickness
(*c*) Deviation from vertical in total height of building	25 mm
(*d*) Relative displacement between loadbearing walls in adjacent storeys intended to be in vertical alignment	10 mm
(*e*) Deviation (bow) from line in plan in any length up to 10 m	10 mm
(*f*) Deviation of bed joint from horizontal or from the level specified or shown on elevation	
(i) in any length up to 10 m	10 mm
(ii) in any length in excess of 10 m	15 mm
(*g*) Thickness of bed joint, cross joint or perpend	3 mm on thickness specified

36.3 * * * * * *

CONCRETE BLOCK MASONRY

Generally—unreinforced, design and construction

36.4 (1) Unreinforced concrete block *masonry* shall be designed and *constructed* in accordance with AS 1475 Part 1.

Free standing walls—unreinforced, design and construction

(2) In addition to complying with the requirements of sub-regulation (1) a free standing wall shall be designed so as to have a height to thickness ratio of not more than 8:1 except where—

(*a*) a membrane type damp-proof course is inserted near the base in which case such ratio shall be not more than 5:1; or

(*b*) it is in the nature of a parapet in which case such ratio shall be not more than 3:1.

Free standing walls—interpretation

(3) For the purposes of this Regulation a "free standing wall" shall mean a wall not subject to any superimposed load other than wind load and having no effective lateral support.

SPECIAL MASONRY

Where permitted

36.5 (1) The *building surveyor* may permit the *construction* of a building of *masonry* in which—

(*a*) the walls are less than the minimum thickness prescribed in Regulations 36.1, 36.2 or 36.4; or

(*b*) the *masonry* is not built of—

(i) burnt clay and shale bricks;

(ii) concrete bricks;

(iii) calcium silicate bricks; or

(iv) concrete blocks—

if the building is *constructed* in accordance with the requirements of this Regulation.

Requirements

(2) If the *masonry* described in sub-regulation (1) is—

(*a*) *loadbearing*—the building shall not contain more than 2 *storeys*;

(*b*) non-*loadbearing*—the *masonry* shall be fully supported at the level of every floor by—

(i) frame construction;

(ii) rigid construction functioning as frame construction;

(iii) brickwork *masonry* complying with Regulation 36.2; or

(iv) concrete block *masonry* complying with Regulation 36.4.

GROUP VI—STRUCTURAL PROVISIONS

PARTS 37—39 * * * * * *

GROUP VI—STRUCTURAL PROVISIONS

PART 40—STRUCTURAL CONCRETE AND STEELWORK

DESIGN AND CONSTRUCTION

Structures of concrete or steel

40.1 (1) Every structure and member of concrete or steel shall be—

(*a*) designed and *constructed* in accordance with the principles of structural mechanics; and

(*b*) capable of sustaining the most adverse combination of loads to which it will be subjected in accordance with the provisions of these Regulations.

Australian Standards deemed to comply

(2) The requirements of sub-regulation (1) shall be deemed to be complied with when structures and members of—

(*a*) unreinforced concrete, reinforced concrete or composite steel-concrete comply with AS 1480;

(*b*) prestressed concrete comply with AS 1481; and

(*c*) steel comply with AS 1250 or AS 1538, whichever is applicable.

Concrete stumps deemed to comply

(3) The requirement of sub-regulation (1) shall be deemed to be complied with when the size and reinforcement of concrete stumps is in accordance with Table 40.1 including the Notes to the Table.

Sub-reg. (3) inserted by S.R. No. 438/1984 reg. 46.

TABLE 40.1

CONCRETE STUMPS—SIZES AND REINFORCEMENT

Table 40.1 inserted by S.R. No. 438/1984 reg. 46.

Length of Stumps in mm	*Minimum Sizes in mm*	*Reinforcement*
0–1400	100×100 or 110 diameter	5 mm hard drawn wire
1401–1800	100×100 or 110 diameter	two 5 mm hard drawn wires
1801–3000	125×125 or 140 diameter	two 5 mm hard drawn wires

NOTES:

1. Concrete used shall have a minimum of Grade 20 as defined in AS 1480.

2. Stumps which project above ground level more than 12 times the width of their smaller face or least diameter shall be securely braced.

GROUP VI—STRUCTURAL PROVISIONS

PART 41—TIMBER CONSTRUCTION

DESIGN AND CONSTRUCTION

Structures of timber

41.1 (1) Every structure and member of timber shall be—

(*a*) designed and *constructed* in accordance with the principles of structural mechanics; and

(*b*) capable of sustaining the most adverse combination of loads to which it will be subjected in accordance with the provisions of these Regulations.

Australian Standards deemed to comply

(2) The requirements of sub-regulation (1) shall be deemed to be complied with when structures and members of timber comply with—

(*a*) the relevant provisions of—

(i) AS 1684; or

(ii) AS 1720;

(*b*) in a Class X building having a *floor area* not more than 60 m^2—

(i) Sections I to V and the tables of CSIRO Division of Building Research Special Report, "Low-rise Domestic and Similar Framed Structures, Part 4, Supplementary Domestic Buildings for Built-up Areas"; and

(ii) AS 1684, except for the requirements referred to in sub-paragraph (i);

(*c*) in areas where the "design wind velocity" exceeds 33 m/s, but is not greater than 42 m/s, the relevant provisions of "Timber Frame Construction in High Wind Areas—Victoria" published by the Timber Promotion Council; and

(*d*) CSIRO Division of Building Research Special Report, "Low-rise Domestic and Similar Framed Structures, Part 5, Supplementary design information (including notes on the technical interpretation of some Light Timber Framing Code rules)".

"Design Wind Velocity" definition

(3) For the purposes of paragraph (*c*) of sub-regulation (2), "design wind velocity" means the wind velocity based on all appropriate factors

applied to the regional basic design wind velocity as set out in rule 6.2 of AS 1170 Part 2.

BRANDING OF TIMBER

Exceptions

41.2 (1) Nothing in this Regulation shall apply to timber—

(*a*) to be used as a stump, sole plate or as fencing material;

(*b*) having a dimension of 25 mm or less;

(*c*) comprising part of a manufactured component which complies with the relevant provisions of AS 1720; or

(*d*) which has been previously used, but which in the opinion of the *building surveyor* is suitable to be used for structural purposes.

General requirement for branding

(2) Notwithstanding Regulation 41.1, every piece of timber to be used for structural purposes shall be—

Para. (a) amended by S.R. No. 98/1986 reg. 83.

(*a*) stress graded in accordance with the Australian Standard applicable to the species of timber being used; and

(*b*) marked at least once in a position not less than 400 mm from one end with—

(i) identification of the source of grading as recorded in the register held by the Timber Promotion Council, Victoria;

(ii) the word "seasoned" or the letter "S" if seasoned in accordance with the Australian Standard applicable to the species of timber being used; and

(iii) the stress grade symbol or the stress grade as indicated by marking the requirements of sub-paragraphs (i) and (ii) with the prescribed colour in accordance with Table 41.2.

TABLE 41.2

COLOUR MARKING FOR TIMBER MEMBERS

Stress Grade Symbol	*Prescribed Colour for Marking Stress Grade*
F4	Red
F5	Black
F7	Blue
F8	Green
F11	Purple
F14	Orange
F17	Yellow
F22	White

GROUP VI—STRUCTURAL PROVISIONS

PART 42—BRICK VENEER CONSTRUCTION

WALL TIES

42.1 The outer veneer shall be tied to the framework with metal wall ties complying with AS 2699 and be spaced not further apart than— Reg. 42.1 amended by S.R. No. 98/1986 reg. 84.

(*a*) 460 mm horizontally and 610 mm vertically; or

(*b*) 610 mm horizontally and 460 mm vertically.

WIDTH OF CAVITY

42.2 Every external brick veneer wall shall be so *constructed* as to leave a clear space of not less than 25 mm or more than 110 mm between the veneer and framework of the *external wall.*

BASE STRUCTURES

Deemed to comply

42.3 (1) Any *masonry* base structure when *constructed* in accordance with this Regulation shall be deemed to comply with the requirements of Part 36.

Clearance not exceeding 1·4 m

(2) Where the height of the base structure from the top of the footings to the underside of the bearers does not exceed 1·4 m, the base structure shall be not less than 90 mm in thickness with 190 mm wide *masonry* piers projecting not less than 100 mm and spaced at not more than 1·8 m centres.

Clearance exceeding 1·4 m

(3) Where the height of the base structure from the top of the footings to the underside of the bearers exceeds 1·4 m, the base structure shall be not less than 190 mm in thickness to within 1·4 m of the underside of the bearers and the remainder not less than 90 mm in thickness with 190 mm wide *masonry* piers projecting not less than 100 mm and spaced at not more than 1·8 m centres.

Retaining wall

(4) When acting as a retaining wall the base structure shall be designed to withstand lateral pressures acting on it, and in no case shall the base structure be less than 190 mm in thickness.

GROUP VI—STRUCTURAL PROVISIONS

PART 43—OTHER KINDS OF CONSTRUCTION

DESIGN AND CONSTRUCTION

Performance requirement

43.1 (1) Where a form of construction is proposed for which no specific provision is made in Group VI of these Regulations a building may be *constructed* using that form of construction if every structure and member is—

(*a*) designed and *constructed* in accordance with the principles of structural mechanics; and

(*b*) capable of sustaining the most adverse combination of loads to which it will be subjected in accordance with the provisions of these Regulations.

Australian Standard deemed to comply

(2) The requirements of sub-regulation (1) shall be deemed to be complied with when structures and members of aluminium comply with AS 1664.

GROUP VII—HEALTH AND AMENITY

PART 44—DRAINAGE OF BUILDING AND ALLOTMENT

ROOF DRAINAGE

Provision of drainage system

44.1 (1) The roof of every building shall be provided with a complete drainage system.

Design of roof drainage system

(2) The design and *construction* of every roof drainage system shall not—

(*a*) result in the entry of water into any building; or

(*b*) unduly affect the stability of any building; or

(*c*) create any unhealthy or dangerous condition.

Conditions when roof drainage system may not be required

(3) Notwithstanding sub-regulation (1), a system of drainage from the whole or part of a roof may not be required if the *building surveyor* is satisfied that such omission will not result in or create any of the conditions referred to in sub-regulation (2).

Design of stormwater drains

(4) The design *construction* and discharge of every stormwater drainage system shall be to the satisfaction of the *building surveyor.*

BUILDING ON LAND SUBJECT TO DAMPNESS

44.2 Where, in the opinion of the *building surveyor,* the dampness of the *site* so warrants, the *building surveyor* may require that one or all of the following measures shall be carried out:

(*a*) The subsoil shall be effectually drained.

(*b*) The surface of the ground beneath the building shall be regraded or filled and provided with adequate outlets to prevent any accumulation of water beneath the building.

(*c*) The surface of the ground beneath the building shall be covered with an *approved* damp-resisting material.

DRAINAGE OF LAND EXTERNAL TO BUILDING

44.3 If paving, excavation, or any other work on the natural surface of the *allotment* will cause undue interference with the existing drainage

of rainwater falling on any part of the *allotment* external to the building, whether the existing drainage is natural or otherwise, the *building surveyor* may require details of an *approved* system of drainage before approving the *building work.*

DISPOSAL OF WATERBORNE WASTES IN UNSEWERED AREAS

Application

44.4 (1) In an unsewered area a system shall be provided for the disposal from every building of all waterborne wastes.

Design of disposal system for waterborne wastes

(2) The design and *construction* of every system for the disposal of waterborne wastes in an unsewered area shall not—

(*a*) result in such waste-water lying against or entering into any building;

(*b*) unduly affect the stability of any building; or

(*c*) create any unhealthy or dangerous condition.

Heading substituted by S.R. No. 75/1984 reg. 23.

CONSTRUCTION OF BUILDINGS ON LAND IN AN AREA LIABLE TO FLOODING

Interpretation

44.5 (1) For the purposes of this Regulation—

"Designated flood level" in relation to an area of land means the flood level designated in relation to that area pursuant to section 27B of the *Dandenong Valley Authority Act* 1963 or section 37A of the *Drainage of Land Act* 1975 (as the case requires).

"Drainage Authority" means the appropriate drainage authority under the *Drainage of Land Act* 1975, or in relation to land within its district, the Dandenong Valley Authority established under the *Dandenong Valley Authority Act* 1963.

"River" includes any creek, stream or watercourse flowing in a natural or artificial channel and all the tributaries and effluent courses thereof.

"Watercourse" includes any land upon which water concentrates or upon or over which surface water usually or occasionally flows whether in a defined channel or otherwise.

Exclusions

(2) This Regulation shall not apply to—

(*a*) any Class Xb or Xc building;

(*b*) any garage attached to a Class I, II or III building;

(*c*) any *alteration* to an existing building where the area of the building is not increased by more than 20 m^2; or

(*d*) any unenclosed area of a building.

Land liable to flooding

(3) For the purposes of this Regulation land shall be in an area liable to flooding if— Sub-reg. (3) amended by S.R. No. 75/1984 reg. 24.

(*a*) by or under the *Drainage of Land Act* 1975, the *Dandenong Valley Authority Act* 1963 or the *Town and Country Planning Act* 1961 it is determined as being liable to flooding, howsoever expressed;

(*b*) it is described on a sealed plan of subdivision or plan of strata subdivision or plan of cluster subdivision (as the case requires) as being liable to flooding, howsoever expressed; or

(*c*) in the opinion of the municipal engineer it is likely to be flooded by waters from any river, lake, lagoon, swamp, marsh, or the sea.

Application process

(4) Where an application for *building approval* is lodged with the *Co-ordinator* and the *site* is land in an area liable to flooding— Sub-reg. (4) amended by S.R. No. 75/1984 reg. 25.

(*a*) the *Co-ordinator* shall forthwith forward a copy of the application to the drainage authority for its information; and

(*b*) the municipal engineer shall as soon as practicable determine a flood level for that part (in this Regulation referred to as the "specified flood level").

Determination of specified flood level

(5) In determining the specified flood level the municipal engineer shall—

(*a*) consult with the drainage authority; and

(*b*) not determine a level lower than can be calculated from any appropriate designated flood levels without the consent of the drainage authority.

Drainage authority advised of specified flood level

(6) The municipal engineer shall forthwith advise the drainage authority and the appropriate sewerage authority of the level so determined.

Council consent

(7) The *council* shall have the power to consent in respect of an application for *building approval* under this Regulation where—

(*a*) the level of the surface of the lowest floor of the building is to be 300 mm or more above the specified flood level; or

(*b*) the *council* and drainage authority have so agreed in any other case.

Drainage authority consent

(8) The drainage authority shall have the power to consent in respect of an application for *building approval* under this Regulation to which sub-regulation (7) does not apply.

Reasons for refusal

(9) A *council* or drainage authority (as the case requires) shall not give consent under this Regulation if it is of the opinion that there is likely to be a danger to the life, health or safety of the occupants of the building if the *site* should be flooded.

Consent with conditions

(10) Any consent by a *council* or drainage authority (as the case requires) under this Regulation may include conditions with respect to—

(*a*) the level of the surface of the lowest floor of the building;

(*b*) preventing the retention of floodwaters or flood debris beneath the building;

(*c*) the carrying out of flood-proofing works to the building;

(*d*) preventing the concentration of floodwater by the building;

(*e*) providing for the diversion of floodwater around the building;

(*f*) preventing damage to the building as a result of the *allotment* being flooded; and

(*g*) access, safety and services to the building should the *allotment* be flooded.

Heading inserted by S.R. No. 75/1984 reg. 26.

CERTIFICATE FOR FLOOD LEVELS

Reg. 44.6 inserted by S.R. No. 75/1984 reg. 26, revoked by S.R. No. 98/1986 reg. 85.

New Reg. 44.6 inserted by S.R. No. 187/1986 reg. 11.

44.6 (1) Any person may upon payment of $5 make application to the municipal clerk of any *council* for a certificate specifying in respect of any land—

(*a*) the specified flood level (if any);

(*b*) whether an approval to construct as described in Regulation 44.5 (7) or 44.5 (8) or sub-clause (*g*) or (*h*) of clause 1701 of the Uniform Building Regulations 1974 has been granted

in respect of that land and any condition pursuant to Regulation 44.5 or clause 1701 of the Uniform Building Regulations 1974 applicable to that approval; and

(*c*) any relevant flood levels designated pursuant to section 27B of the *Dandenong Valley Authority Act* 1963 or section 37A of the *Drainage of Land Act* 1975.

(2) Every application under sub-regulation (1) shall be in writing stating the name and address of the person making the application and the particulars of the land in respect of which the application is made.

(3) Upon receipt of an application under sub-regulation (1) and payment of the fee prescribed under sub-regulation (1) the municipal clerk or some other person authorized by the *council* in that behalf shall forthwith procure and give to or send by post to the person so applying a certificate signed by him.

GROUP VII—HEALTH AND AMENITY

PART 45 * * * * * *

GROUP VII—HEALTH AND AMENITY

PART 46—PROVISION OF SANITARY AND OTHER FACILITIES

46.1 * * * * * *

INTERPRETATION

46.1.1 For the purpose of this Part "urinal" shall mean—

(*a*) every stall or wall-hung type urinal; or

(*b*) every length of 600 mm of a continuous slab-type urinal.

CERTAIN COMBINED FACILITIES PERMISSIBLE

46.2 In a Class I, II, or IV building, a bathroom or shower room may include laundry facilities, or a *closet fixture*, or both, if the *floor area* is increased in accordance with Part 49.

COMBINED LAUNDRIES AND KITCHENS PROHIBITED

46.3 Laundry facilities shall not be installed in a kitchen or in any room used for the preparation, cooking, or consumption of food.

CLASS I BUILDINGS

Facilities to be provided

46.4 (1) Every Class I building shall be provided with—

(*a*) facilities for the preparation and cooking of food and a sink;

(*b*) sanitary facilities including—

(i) a bath or shower;

(ii) a wash basin; and

(iii) a *closet fixture*; and

(*c*) laundry facilities, comprising one laundry trough and space for the installation of a washing machine or wash copper.

Facilities detached from main building

(2) Where any of the facilities referred to in sub-regulation (1) are not included in the main building but are provided elsewhere, they shall be set aside for the exclusive use of the occupants of the Class I building.

Class Ib buildings: laundry facilities

(3) Notwithstanding sub-regulation (1), it shall not be necessary to provide a Class Ib building with laundry facilities.

CLASS II BUILDINGS

Facilities for each dwelling

46.5 (1) Every dwelling in a Class II building shall be provided with—

(*a*) facilities for the preparation and cooking of food and a sink; and

(*b*) sanitary facilities including—

(i) a bath or shower;

(ii) a wash basin; and

(iii) a *closet fixture*—

and these facilities shall be provided within the *dwelling*.

Common laundries—number required

(2) In a Class II building, a separate *laundry* shall be provided for every 4 dwellings or part thereof and every such laundry shall be provided with at least one laundry trough and space for the installation of a washing machine or wash copper.

Common laundries—exclusions from calculations

(3) For the purposes of sub-regulation (2) it shall not be necessary to take into account any *dwelling* that is provided with its own laundry facilities in accordance with sub-regulation (4).

Individual laundry facilities

(4) A *dwelling* in a Class II building may be provided with its own laundry facilities, comprising at least one laundry trough and space within the same room for the installation of a washing machine or wash copper, and where these facilities are not installed within the *dwelling* they shall be installed in a *laundry* that is set aside for the exclusive use of the occupants of the dwelling concerned.

Clothes drying facilities—types required

(5) Every Class II building shall be provided with—

(*a*) clothes lines comprising 7·5 m of line per *dwelling* in the building; or

(*b*) one clothes dryer for every 4 *dwellings* or part thereof.

Clothes drying facilities—exclusions from calculations

(6) For the purpose of sub-regulation (5) it shall not be necessary to take into account any *dwelling* that is provided with a clothes dryer for the exclusive use of the occupants of that *dwelling.*

Closet fixtures for employees

(7) In addition to complying with sub-regulation (1)—

(*a*) every Class II building containing more than 10 *dwellings;* or

(*b*) every group of Class II buildings which are *constructed* on the one *allotment* and contain, in aggregate, more than 10 *dwellings*—

shall be provided with at least one *closet fixture* and that *closet fixture* shall be installed in a compartment or room that is located at or about ground level and is accessible without entering a *dwelling.*

CLASS III BUILDINGS

Facilities for residents

46.6 (1) In every Class III building or group of Class III buildings there shall be provided for the use of persons for whom bedroom or dormitory accommodation is provided— Sub-reg. (1) substituted by S.R. No. 98/1986 reg. 86.

(*a*) one bath or shower, one *closet fixture,* and one wash basin for every 8 persons or part thereof; and

(*b*) one *urinal* for any number of males up to 8 and one additional *urinal* for every subsequent 16 males or part thereof.

Situation of facilities

(2) It shall not be necessary for the facilities referred to in sub-regulation (1) to be situated within the building.

Exclusions from calculations

(3) For the purposes of sub-regulation (1), it shall not be necessary to take into account the number of persons to be accommodated in a bedroom to which is attached—

(*a*) a bath or shower;

(*b*) a *closet fixture*; or

(*c*) a wash basin—

as the case may be, for the exclusive use of the occupants of that bedroom.

Water closet instead of urinal

(4) For the purposes of sub-regulation (1), where the building is sewered a water closet may be used instead of a *urinal.*

CLASS IV BUILDINGS: FACILITIES TO BE PROVIDED

46.7 Every Class IV building shall be provided with—

(*a*) facilities for the preparation and cooking of food and a sink;

(*b*) sanitary facilities including—

(i) a bath or shower;

(ii) a wash basin; and

(iii) a *closet fixture*; and

(*c*) laundry facilities, comprising one laundry trough and space for the installation of a washing machine or wash copper.

Heading substituted by S.R. No. 98/1986 reg. 87.

CLASS III, V, VI, VII, VIII and IX BUILDINGS

General requirements

Reg. 46.8 substituted by S.R. No. 98/1986 reg. 87.

46.8 (1) In a Class III, V, VI, VII, VIII or IX building sanitary facilities shall be provided as required by Table 46.8, including the Notes to the Table, based on the number of persons deemed to be accommodated according to Regulation 24.28 unless stated otherwise.

Proportion to be provided for each sex

(2) Sanitary facilities for patrons shall be provided for each sex on the basis of equal numbers of males and females or when the building is to be used wholly or predominantly by one sex the *building surveyor* may permit the proportion of facilities provided for each sex to be varied.

Concessions

(3) Notwithstanding sub-regulation (1)—

(*a*) sanitary facilities for patrons shall not be *required* in any Class VI building where the number of persons deemed to be accommodated is less than 600 unless the building contains a cafe, restaurant or the like which provides seating for more than 15 persons;

(*b*) a single *closet fixture* and wash basin may be provided where the total number of employees does not exceed 6;

Para. (c) amended by S.R. No. 220/1989 reg. 7 (2) (b) (i).

(*c*) in a Class IXb building other than a *school* or *children's services centre*, separate sanitary facilities for employees, except where those employees are preparing food, shall not be *required*; and

(*d*) in a Class VI or IXb building no urinal is required for patrons where the total number of persons deemed to be accommodated is less than 50.

TABLE 46-8

Class of Building	Facility User	Max. Number of Males Served by								Max. Number Females Served by						Max. Number of Persons Served by	
		Closet Fixture(s)			Urinal(s)			Wash Basin(s)		Closet Fixture(s)			Wash Basin(s)			1 Closet Fixture(s) and Wash Basin(s)	Bath or Shower
		1	2	Each Extra	1	2	Each Extra	1	2 Each Extra	1	2	Each Extra	1	2	Each Extra	1 2 Each Extra	1 Each Extra
III, V, VI, VII, VIII, IX	Employees (as stated by applicant	20	40	20	25	50	50	15	30 15	15	30	15	15	30	15	.. .. ..	†20 †20
VI (General)	Patrons	1200	2400	1200	600	1200	1200	..	1200 1200	300	600	1200	..	1200	1200	.. .. ..	.. ..
VI and IXb—Restaurants and the like; theatres, cinemas and the like; multi-purpose halls, dance halls and the like	Patrons	100	300	300	50	100	*50	50	200 200	25	50	**50	50	150	200	.. .. ..	.. ..
IXb—Schools	Students	30	70	70	..	30	30	10	30 30	10	20	20	10	30	30	.. .. ..	.. ..
IXb—Children's services centres	Children	..	..	..	..	..	..	..	.. ..	..	..	..	..	..	..	.. 30 15	.. ..
IXb—Sporting—Both spectator and participant venues	Patrons	..	500	500	100	200	100	..	200 200	..	200	100	..	200	200	.. .. ..	.. ..
IXb—Religious worship, art galleries, museums and the like	Patrons	300	800	500	200	400	200	150	300 200	150	300	150	150	300	200	.. .. ..	.. ..

Notes:

* Where the number of male patrons exceeds 250 not less than 5 urinals shall be provided plus one additional urinal for every additional 100 males in excess of 250.

** Where the number of female patrons exceeds 250 not less than 6 closet fixtures shall be provided plus one additional closet fixture for every 100 females in excess of 250.

† Applies to Class IXa buildings only.

Table 46.8 inserted by S.R. No. 98/1986 reg. 87, amended by S.R. Nos 187/1986 reg. 12, 220/1989 reg. 7 (2) (b) (ii).

REQUIREMENTS FOR DISABLED PERSONS

Application

46.9 (1) This Regulation shall apply—

(*a*) to every new Class III building; and

Para. (b) substituted by S.R. No. 98/1986 reg. 88 (1).

(*b*) to every—

(i) new Class V or VI building where the area of the *entrance floor* exceeds 500 m^2;

(ii) new Class VII building where the total floor area of the building exceeds 3000 m^2;

(iii) new Class VIII building where the total floor area of the building exceeds 1000 m^2; and

(iv) Class IX building.

Class III buildings: sole-occupancy units

(2) Subject to sub-regulation (3), every *sole-occupancy unit* in a Class III building to which *access for disabled persons* is required by Regulation 53.5 shall contain not less than one *closet fixture* and shower for use by disabled persons.

Class III buildings: other than sole-occupancy units

(3) Notwithstanding sub-regulation (2), where *closet fixtures* and showers are to be provided in a Class III building other than in a *sole-occupancy unit*—

(i) *closet fixtures* shall be provided in accordance with Table 46.9; and

(ii) for every 10 showers or part thereof, at least one shower for use by disabled persons shall be provided.

Number of closet fixtures required

(4) Except as provided in sub-regulations (2) and (3), in every building to which *access for disabled persons* is required by Regulation 53.5 *closet fixtures* for use by disabled persons—

(*a*) shall be provided in accordance with Table 46.9;

(*b*) shall comply with the requirements specified in Schedule 9; and

(*c*) may form part of the requirements of Column 1 of Table 46.9.

Class IX buildings: showers required

Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 88 (2).

(5) In every Class IXb building to which *access for disabled persons* is required by Regulation 53.5 and showers are provided, at least one

shower in a building deemed to accommodate more than 200 persons shall be for use by disabled persons.

TABLE 46.9—CLOSET FIXTURES FOR DISABLED PERSONS

Number of closet fixtures required to be provided in building pursuant to these Regulations or any other enactment (1)	*Of Column 1—minimum number for use by disabled persons* (2)
1 to 100	(i) one for use by both males and females; or (ii) one for use by males only and one for use by females only
101 to 200	(i) two for use by both males and females; or (ii) one for use by both males and females, and one for use by males only and one for use by females only
More than 200	(i) as for 101 to 200; together with (ii) one *closet fixture* for use by both males and females for each additional 100 *closet fixtures* or part thereof in excess of 100 *closet fixtures*.

TOILETS FOR WAITING ROOMS

46.10 Toilet facilities shall be readily accessible for use by patients attending medical or dental surgeries or consulting rooms.

46.11 * * * * * * Reg. 46.11 revoked by S.R. No. 98/1986 reg. 89.

GENERAL PROVISIONS FOR CONVENIENCES

Partitions separating closet fixtures

46.12 (1) *Closet fixtures constructed* in a group, other than those in *children's services centres*, shall be separated from one another by means of partitions extending to a height of— Sub-reg. (1) substituted by S.R. No. 98/1986 reg. 90 (1), amended by S.R. No. 220/1989 reg. 7 (2) (c).

(*a*) not less than 1·5 m above floor level where primary *school* children are the principal users; or

(*b*) not less than 1·8 m above floor level in all other cases—

and shall be provided with doors.

Partitions in children's services centres Class I

(1A) *Closet fixtures* constructed in a group in a *children's services centre Class I* must be separated from one another by means of partitions extending from between 150 mm to 250 mm above the floor to a height of not less than 900 mm or more than 1·5 metres. Sub-reg. (1A) inserted by S.R. No. 220/1989 reg. 9.

Emergency access to toilets

Sub-reg. (2) revoked by S.R. No. 98/1986 reg. 90 (2). New sub-reg. (2) inserted by S.R. No. 143/1988 reg. 27.

(2) Every fully enclosed *closet fixture* which has a floor area less than 1·7 m², and every combined shower and *closet fixture* which is fully enclosed and has a floor area less than 2·5 m², must have—

(i) a door which can be readily opened from outside, in the case of a sliding door; or

(ii) a door which swings outward, or is readily removable from the outside, in the case of a door which swings inward.

Location and designation

(3) All *closet fixtures* and urinals shall be conveniently situated and, where separate *closet fixture* accommodation is provided for the sexes, shall be suitably separated and properly designated.

CLASS Xa BUILDINGS

46.13 A Class Xa building shall not contain more than 2 of the following facilities :

(*a*) Facilities for the preparation and cooking of food and a sink.

(*b*) A bath or shower.

Para. (c) revoked by S.R. No. 438/1984 reg. 47.

(*c*) * * * * * *

(*d*) A *closet fixture*.

(*e*) Laundry facilities.

FIRST AID ROOMS

Reg. 46.14 inserted by S.R. No. 220/1989 reg. 6.

46.14 (1) If the total accommodation of *assembly buildings* or *open spectator stands* exceeds 5000 spectators at an arena, sportsground, showground, racecourse, cricket ground, football ground, coursing ground, motor racing arena or the like, a suitable room or rooms must be provided in accordance with Table 46.14, for use by para-medical attendants for first aid purposes.

TABLE 46.14

Spectator Capacity	*Number of Rooms*
5001–10 000	1
10 001–15 000	2
15 001–30 000	3
30 001–45 000	4
45 001–60 000	5
60 001–75 000	6
75 001–90 000	7
90 001–105 000	8

Conditions

(2) The first aid rooms required by sub-regulation (1) must be—

(*a*) distributed as uniformly as possible throughout the building or stand; and

(*b*) convenient to a public *street*; and

(*c*) readily accessible from within and outside the arena or ground; and

(*d*) not less than 24 square metres in area; and

(*e*) provided with a suitable wash basin or sink.

GROUP VII—HEALTH AND AMENITY

PART 47—WEATHERPROOFING, DAMP-PROOFING AND FLASHING

ROOFS AND WALLS

Roofs to be waterproof

47.1 (1) Every roof shall be so *constructed* as to prevent the penetration of rain or other water to the inner parts of a building.

External walls to be waterproof

(2) Every *external wall* (including the junction between such wall and any *window* or door) shall be so *constructed* as to prevent the penetration of rain or other water to the inner parts of a building.

Conditions when waterproofing requirements shall not apply

(3) Sub-regulations (1) and (2) shall not apply to— Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 48.

(*a*) a Class VII or VIII building or *open spectator stand* where the *building surveyor* is satisfied in the particular case that there is no necessity to require compliance; and Para. (a) amended by S.R. No. 98/1986 reg. 91.

(*b*) any Class Xb building or a garage, tool shed, or the like, forming part of a building used for other purposes.

CONCRETE ROOFING TILES

With weathering check

47.2 (1) A roof that is covered with concrete roofing tiles with weathering checks shall be deemed to comply with Regulation 47.1 (1) if the tiles—

(*a*) comply with AS 1759; and

(*b*) are fixed in accordance with AS 1760 except clause 11 of that Code. Para. (b) amended by S.R. No. 438/1984 reg. 49.

Without weathering check

(2) A roof that is covered with concrete roofing tiles without weathering checks shall be deemed to comply with Regulation 47.1 (1) if the tiles—

(*a*) comply with AS 1757; and

(*b*) are fixed in accordance with AS 1758.

TERRA-COTTA ROOFING TILES

47.3 A roof that is covered with terra-cotta roofing tiles shall be deemed to comply with Regulation 47.1 (1) if the tiles—

(*a*) comply with AS 2049; and

(*b*) are fixed in accordance with AS 2050.

CORRUGATED FIBRE-CEMENT ROOF

47.4 A roof that is covered with corrugated fibre-cement sheeting shall be deemed to comply with Regulation 47.1 (1) if the sheeting—

Para. (a) amended by S.R. No. 143/1988 reg. 28.

(*a*) complies with AS 2908; and

(*b*) is fixed in accordance with AS 1639.

METAL SHEET ROOFING

Without transverse laps

47.5 Where metal sheet roofing without transverse laps is designed and installed in accordance with the relevant provisions of AS 1562, it shall be deemed to comply with Regulation 47.1 (1).

PLIABLE ROOF SARKING

Standards

47.6 (1) Pliable roof sarking used under roof or wall coverings shall comply and be fixed in accordance with—

(*a*) AS 1736; or

(*b*) AS 1903 and AS 1904—

whichever is applicable.

Flammability indexes

(2) The *Flammability Indexes* prescribed in the Australian Standards referred to in sub-regulation (1) shall not apply but the required *Flammability Index* shall be as prescribed in Part 16.

STEEL SUPPORTING MASONRY OVER OPENINGS

47.7 Steel members supporting *masonry* over openings in *external walls*, and which, in the opinion of the *building surveyor* are exposed to a salt-laden atmosphere, shall where necessary be protected against corrosion by—

(*a*) hot-dip galvanising not less than 0·127 mm in thickness;

(*b*) encasing in concrete; or

(*c*) other means not less effective than galvanising as specified in paragraph (*a*).

DAMP-PROOFING OF CERTAIN ROOMS

Floors of certain rooms—performance

47.8 (1) The floor surface or the substrate to the floor surface of every bathroom, shower room *laundry*, and *sanitary compartment* shall be impervious to moisture and the junction of the floor thereof with the wall shall be so *constructed* as to prevent the penetration of moisture into the walls.

Floors of certain rooms—deemed to comply

(1A) The following flooring systems shall be deemed to comply with the requirements of sub-regulation (1):

(*a*) Ceramic tiles bonded to cement sheet sealed at the joints.

(*b*) Vinyl tiles, sheet vinyl, sheet rubber, or linoleum on either cement sheet or standard hardboard, type RD complying with AS 2458 sealed at the joints.

Para. (b) amended by S.R. No. 98/1986 reg. 92.

Walls adjoining showers and baths

(2) The walls—

(*a*) of a shower compartment; or

(*b*) immediately about a shower fitting, where a shower is located other than in a shower compartment; and

(*c*) immediately about a bath—

shall be finished with fully compressed fibre-cement, waterproof cement render, ceramic tiles or other impervious finish to a height of not less than 1·8 m above the lowest point of the shower base or the bottom of the bath in the case of paragraphs (*a*) and (*b*) and 300 mm above the rim of the bath in the case of paragraph (*c*).

Walls of sanitary compartments

(3) Except in a Class I, II, IV or X building the walls of *sanitary compartments* shall be finished internally to a height of not less than 1·8 m above the floor with a wall finish of material as required by sub-regulation (2).

Flashings for sanitary fixtures—performance

(4) Every sanitary fixture except a *closet fixture* or a bidet which is installed closer than 75 mm to a wall surface shall be installed such that—

(*a*) any wall surface within the projection limits of the fixture; and

(*b*) any non-impervious wall surface directly above the fixture and within a height of 50 mm above the spill level of the fixture—

shall be kept in a dry condition.

Flashing for sanitary fixtures—deemed to comply

(5) A sanitary fixture installation shall be deemed to comply with the requirements of sub-regulation (4) where—

(*a*) the fixture wherever it abuts a wall is provided with an impervious upstand rising to a height of not less than 50 mm above the spill level of the fixture and such upstand is either integrally formed with the fixture or is secured to the fixture with a waterproof joint;

Para. (b) amended by S.R. No. 75/1984 reg. 27.

(*b*) a wall finish of material as required by sub-regulation (2) or impervious flashing strip is brought down from above the fixture to overlap the fixture rim or fixture flashing upstand by not less than 6 mm and such wall finish or flashing strip extends to a height of not less than 50 mm above the spill level of the fixture (wherever it abuts a wall); and

(*c*) in the case of a flat-backed wash basin not having an upstand specified in paragraph (*a*), a wall finish of material as required by sub-regulation (2) is provided extending from the floor to a height of not less than 50 mm above the fixture and to the extent of not less than 75 mm beyond each side of the fixture and mastic compound is inserted between all contacting surfaces of the fixture with the wall.

Baths constructed in situ

(6) Every bath constructed *in situ* shall comply with the following:

(*a*) Where the bath is constructed as part of a concrete slab it shall—

(i) be cast monolithic with the floor slab except that the bath walls may be separately cast if they are poured on to a bonding agent covering the whole area of the interface;

(ii) have a base not less than 100 mm thick; and

(iii) be so constructed that the adjacent floor slab reinforcement is extended continuously through the concrete base slab of the bath.

(*b*) Where the bath is not constructed as part of a concrete floor slab it shall—

(i) be constructed of concrete not less than 100 mm thick with integral walls; and

(ii) be separate from and not bonded to the building.

(*c*) The bath shall be provided with a waste outlet.

(*d*) The floor of the bath shall be graded at not less than 1 in 60 towards the waste outlet.

Shower bases constructed in situ

(7) Every shower base constructed *in situ* shall comply with the following:

(*a*) Where the base is constructed as part of a concrete floor slab it shall—

(i) be cast monolithic with the floor slab, except that any projecting kerb may be separately cast if it is poured on to a bonding agent covering the whole area of the interface;

(ii) have a base slab not less than 100 mm thick;

(iii) be so constructed that the adjacent floor slab reinforcement is extended continuously through the concrete base slab of the shower base; and

(iv) have the point of entry into the shower not less than 25 mm above the highest point of the floor of the base.

(*b*) Where the base is not constructed as part of a concrete floor slab it shall—

(i) be constructed of concrete not less than 100 mm thick, with integral kerbs; and

(ii) be separate from and not bonded to the building.

(*c*) The base shall be provided with a waste outlet not less than 50 mm below the adjacent floor level or, where a kerb is provided at the entry to the shower, not less than 50 mm below the top of such kerb.

(*d*) The base shall be graded at not less than 1 in 60 towards the waste outlet.

(*e*) The base shall be provided on every side, other than at the entry into the shower, with a kerb not less than 50 mm in thickness and 75 mm in height and not less than 25 mm above the floor level at the entry into the shower.

(*f*) Where an impervious wall sheeting is to be used, every kerb of the base shall be rebated to provide an overlap of the sheeting of not less than 19 mm.

DAMP-PROOF COURSES

Requirement in masonry walls and piers

47.9 (1) Except in a building not required to comply with the provisions of Regulation 47.1 (2) pursuant to Regulation 47.1 (3), damp-proof courses shall be laid in *masonry* walls and piers in such a manner that moisture from the ground shall be prevented from reaching—

(*a*) the lowest floor timbers and the walls above the lowest floor joists;

(*b*) the walls above the damp-proof course; and

(*c*) in the case of any suspended floor constructed of a material other than timber, the underside of such floor or the supporting beams or girders thereof.

Use of termite shields and damp-proof courses

(3) Notwithstanding anything to the contrary in this Part, where *approved* termite shields are used on piers a damp-proof course shall not be required in such piers.

Overlap of damp-proof courses

(4) Where, pursuant to sub-regulation (1), a damp-proof course is used it shall be overlapped for not less than 100 mm at every joint.

MATERIALS FOR DAMP-PROOF COURSES

47.10 The materials for use in damp-proof courses may include—

(*a*) uncovered annealed lead, having a mass of not less than 9·7 kg/m^2;

(*b*) uncovered copper having a mass of not less than 2·8 kg/m^2 and having an average thickness of not less than 0·314 mm;

(*c*) in the case of walls not higher than 7·8 m above the level of the damp-proofing course, felt-based bituminous asphalt not less than 2·54 mm nor more than 3·05 mm thick;

(*d*) polyethylene film not less than 0·254 mm thick;

(*e*) annealed sheet aluminium not less than 0·101 mm thick with a bitumen coat and sheeted with polyethylene film;

Para. (f) substituted by S.R. No. 143/1988 reg. 29.

(*f*) bituminous-coated metal or fibre felt complying with AS 2904.

Para. (g) revoked by S.R. No. 143/1988 reg. 30.

(*g*) * * * * * *

DAMP-PROOFING OF FLOORS ON THE GROUND

Requirement under slabs or paving

Sub-reg. (1) amended by S.R. No. 438/1984 reg. 50 (1).

47.11 (1) Where in any building a concrete slab or paved floor is laid on the ground, moisture from the ground shall be prevented from reaching the upper surface of the slab or paving and every adjacent wall by the insertion under the slab or paving of damp-proofing material.

Heading amended by S.R. No. 75/1984 reg. 28.

Conditions when damp-proofing requirements shall not apply

(2) Sub-regulation (1) shall not apply to—

Para. (a) amended by S.R. No. 438/1984 reg. 50 (2).

(*a*) any Class VII or VIII building where the *building surveyor* is satisfied in the particular case that there is no necessity to prevent moisture from reaching the upper surface of the floor slab or paving and adjacent walls;

(*b*) any Class Xb building or any garage, tool shed, or the like, forming part of a building used for other purposes; Para. (b) amended by S.R. No. 438/1984 reg. 50 (3).

(*c*) any building if the *building surveyor* is satisfied that the conditions of the subsoil or the construction of the floor is such that moisture will be prevented from reaching the upper surfaces of the floor or walls without the insertion of damp-proof courses; and

(*d*) the base of any stair, lift or like *shaft* which is satisfactorily drained by gravitational or mechanical means.

Damp-proofing of slabs—deemed to comply

(3) The requirements of sub-regulation (1) shall be deemed to be complied with if a slab-on-ground is provided with a vapour barrier which— Sub-reg. (3) inserted by S.R. No. 438/1984 reg. 50 (4).

(*a*) consists of a sheet of polyethylene not less than 0·2 mm in thickness;

(*b*) is placed beneath the slab so that the bottom surface of the slab is entirely underlaid;

(*c*) is continued around the edge beams to at least ground level or to the bottom of the edge recess, whichever is the lower;

(*d*) is lapped at all joints for a distance of not less than 200 mm; and

(*e*) is taped around pipes which penetrate the slab.

GROUP VII—HEALTH AND AMENITY

PART 48—PROTECTION FROM TERMITES AND RODENTS

PROTECTION FROM TERMITES

Performance requirement

48.1 (1) In areas considered by the *council* to be subject to infestation by termites, buildings other than Class Xb or Xc shall be protected against such infestation.

Sub-reg. (1) amended by S.R. No. 438/1984 reg. 51.

Australian Standards deemed to comply

(2) The requirements of sub-regulation (1) shall be deemed to be complied with if buildings are protected against such infestation in accordance with whichever of the following is applicable:

(*a*) AS 1694.

(*b*) AS 2057.

GROUP VII—HEALTH AND AMENITY

PART 49—ROOM SIZES AND HEIGHTS

49.1 * * * * *

SIZES OF HABITABLE ROOMS IN RESIDENTIAL BUILDINGS

Kitchens excluded

49.2 (1) The minimum *floor areas* prescribed by this Regulation shall not apply to any fully-enclosed kitchen.

Basic minimum area

(2) Every *habitable room* in a Class I, II, III, IV or Xa building shall have a *floor area* of not less than 7·5 m².

One-room dwellings

(3) In a *dwelling* containing only one *habitable room*, such room shall have a *floor area* of not less than 18·5 m².

Dwellings containing more than one habitable room

(4) In a *dwelling* containing more than one *habitable room*—

(*a*) one *habitable room* shall have a *floor area* of not less than 14 m²; and

(*b*) one other *habitable room* shall have a *floor area* of not less than 11 m².

Habitable rooms incorporating cooking facilities

(5) Where, in lieu of a fully-enclosed kitchen, an alcove or other space within a *habitable room* is provided for the preparation and cooking of food, the minimum *floor area* of that room shall be increased by 3 m².

Habitable rooms in Class Ib buildings

(6) Notwithstanding sub-regulations (3) and (4), in a Class Ib building—

(*a*) containing only one *habitable room*, that room shall have a *floor area* of not less than 16·5 m²; and

(*b*) containing more than one *habitable room* at least—

(i) one such room shall have a *floor area* of not less than 10 m^2; and

(ii) one other such room shall have a *floor area* of not less than 9 m^2.

SIZES OF BATHROOMS AND SHOWER ROOMS IN RESIDENTIAL BUILDINGS

Basic minimum areas

49.3 (1) A bathroom or shower room in a Class I, II, III, IV or X building shall have a minimum *floor area* as follows:

(*a*) Bathroom—2·2 m^2.

(*b*) Bathroom provided with a bath and a shower that is not located above the bath—2·8 m^2.

(*c*) Shower room—1·1 m^2.

Additional facilities installed

(2) Where a bathroom or shower room is designed to accommodate a *closet fixture* or laundry facilities, the minimum *floor areas* prescribed by sub-regulation (1) shall be increased for each such facility as follows:

(*a*) Closet fixture—0·7 m^2.

(*b*) Washing machine without laundry trough (where this is additional to the provision elsewhere of the laundry facilities required by Part 46)—0·7 m^2.

(*c*) Washing machine and laundry trough—1·1 m^2.

(*d*) Wash copper and laundry trough—1·1 m^2.

(*e*) Clothes dryer—0·5 m^2.

AREA AND WIDTH OF SANITARY COMPARTMENT

49.4 Every *sanitary compartment* shall have a *floor area* of not less than 1·1 m^2 and a width of not less than 800 mm measured within the finished surfaces of the walls.

HEIGHT OF HABITABLE ROOMS

Minimum height

49.5 (1) Every *habitable room* in a Class I, II, III, IV or Xa building shall have a height of not less than 2·4 m over two-thirds of the *floor area* thereof.

Reduced height permissible

(2) No part of a *habitable room* shall be less than 2·1 m in height unless the *building surveyor* is satisfied that there will be no undue interference with the use of the room for habitable purposes.

Exclusion of parts of habitable rooms from floor area

(3) Where any part of a *habitable room* is less than 1·5 m in height, such part shall not be counted—

(*a*) as *floor area* for the purposes of Regulation 49 . 2; and

(*b*) as *floor area* in calculating, for the purposes of sub-regulation (1), the proportion of the area of the floor that is less than 2·4 m in height.

HEIGHT OF BATHROOMS, ETC

Minimum height

49.6 (1) Except as permitted by sub-regulation (2), in a Class I, II, III, IV or X building every—

(*a*) bathroom;

(*b*) *sanitary compartment* ; and

(*c*) *laundry*—

shall have a height of not less than 2·1 m over two-thirds of the *floor area* thereof.

Reduced height permissible

(2) No part of a room mentioned in sub-regulation (1) shall be less than 2·1 m in height unless the *building surveyor* is satisfied that there will be no undue interference with the intended functioning of the room.

Exclusion of parts of bathrooms, etc.

(3) Where any part of a room mentioned in sub-regulation (1) is less than 1·5 m in height, such part shall not be counted—

(*a*) as *floor area* for the purposes of Regulation 49 . 2; and

(*b*) as *floor area* in calculating, for the purposes of sub-regulation (1), the proportion of the area of the floor that is less than 2·1 m in height.

MINIMUM HEIGHT OF ROOMS IN CLASS V, VI, VII, VIII AND IX BUILDINGS

Application

49.7 (1) This Regulation shall apply to Class V, VI, VII, VIII and IX buildings.

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 93 (1).

Minimum height generally

(2) The height of any room shall—

(*a*) average not less than 2·7 m;

(*b*) be not less than 2·4 m at any part; and

(*c*) be measured from the floor—

(i) to the underside of the ceiling; or

(ii) to not less than 25 mm below the underside of every ceiling joist or rafter where there is no ceiling.

Permissible projections and lower ceilings

Sub-reg. (3) amended by S.R. No. 98/1986 reg. 93 (2).

(3) Notwithstanding sub-regulations (2) and (5)—

(*a*) any beam, service pipe or duct may project below the minimum ceiling height prescribed to not less than 2·1 m above the floor provided that the total area in plan of every such projection does not exceed 20 per cent of the *floor area* of the room; and

(*b*) the height of the ceiling above the floor shall be not less than—

(i) 2·1 m in any airlock or *sanitary compartment*; and

(ii) 2·2 m in any corridor, passageway and any area such as a tea preparation room, store or cashier counter; and

(*c*) notwithstanding paragraph (*a*), in any part of a building used principally for the parking of vehicles other than any area set aside as loading space, the height at any part including the underside of ceilings, beams, ducts, sprinkler heads, service pipes, lighting fixtures and the like shall be not less than 2·1 m above the floor;

Para. (d) inserted by S.R. No. 438/1984 reg. 52.

(*d*) the height from the ceiling beneath any *mezzanine* floor to the main floor level and from the ceiling above every *mezzanine* floor to the *mezzanine* floor level shall be not less than 2·3 m in every part provided that the *mezzanine* does not have a *floor area* of more than 200 m².

Class VIII buildings

(4) Notwithstanding sub-regulation (2), the following requirements apply to Class VIII buildings:

(*a*) In those parts used as bakehouses or as butchers' smallgoods houses, or for ham and bacon curing, fish curing, meat preserving, jam making, fruit preserving, dairy produce manufacturing and similar trades, the height shall be not less than 3·6 m.

(*b*) The *building surveyor* may after consultation with the Chief Inspector of Factories, vary any of the requirements of this Regulation where the circumstances so warrant.

Class IX buildings

(5) Notwithstanding sub-regulation (2), the following requirements apply to Class IX buildings: Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 93 (3).

(*a*) In any part of a Class IXa building—

(i) used as a *ward area* or treatment room, the height shall not be less than 2·7 m; and

(ii) used as an operating theatre or delivery room, the height shall not be less than 3 m.

(*b*) In any part of a Class IXb building used as a cinematograph projection room, the height shall not be less than 2·3 m.

Size of children's rooms in a children's services centre Class I

49.8 (1) *A children's room* in a *children's services centre Class I* must have a floor area allowing a clear space of at least 3·3 square metres for each child using that room. Reg. 49.8 inserted by S.R. No. 220/1989 reg. 10.

Method of calculation

(2) In calculating the space required under sub-regulation (1) the following must be excluded:

(*a*) any passageway, hallway, corridor or the like less than 3 metres wide; and

(*b*) any kitchen, *sanitary compartment*, shower area, or storage area; and

(*c*) any other ancillary areas.

GROUP VII—HEALTH AND AMENITY

PART 50—LIGHT AND VENTILATION

50.1 * * * * * *

APPLICATION OF PART

50.1.1 * * * * * * Reg. 50.1.1 revoked by S.R. No. 98/1986 reg. 94.

DIVISION 1—LIGHTING

PROVISION OF NATURAL LIGHT

Application of Regulation

50.2 (1) Natural lighting shall be provided in the following buildings, to the rooms indicated:

(*a*) Class I, II, IV and Xa buildings—all *habitable rooms*.

(*b*) Class III and IXa buildings—all rooms used for sleeping accommodation. Para. (b) substituted by S.R. No. 98/1986 reg. 95 (1).

(*c*) Class IXb buildings—all general purpose classrooms in primary or post-primary *schools* and all *children's rooms* in *children's services centres*. Para. (c) inserted by S.R. No. 98/1986 reg. 95 (2), amended by S.R. No. 220/1989 reg. 7 (2) (c), (3).

Methods and required extent of natural lighting

(2) Natural lighting required by sub-regulation (1) shall be provided by means of *windows* having an aggregate light transmitting area of not less than 10 per cent of the *floor area* of the room concerned.

Measurement of areas of windows

(3) The light transmitting areas of *windows* shall be measured exclusive of framing members, glazing bars and other obstructions.

Required extent of natural lighting in classrooms

(4) Notwithstanding sub-regulation (2), natural lighting required by sub-regulation (1) (*c*) shall be provided, by means of *windows*, not being rooflights, having an aggregate light transmitting area of not less than 15 per cent of the *floor area* of the room concerned. Sub-reg. (4) inserted by S.R. No. 98/1986 reg. 95 (3).

SITUATION OF WINDOWS

Generally

50.3 (1) The *required windows* in a room shall face—

(*a*) a court or space open to the sky; or

(*b*) an open verandah, *open garage* or the like.

Windows in Class I or Xa buildings

(2) In a Class I or Xa building a *required window* facing the boundary of an adjoining *allotment* shall be separated from that boundary by a distance of not less than 1·2 m.

Windows in Class II, III or IV buildings

(3) In a Class II, III or IV building a *required window* facing an adjoining *allotment* or a wall of the same building or another building on the *allotment* shall be separated from that boundary or wall by a distance of not less than—

(*a*) 1·2 m; or

(*b*) 50 per cent of the square root of the height of the wall in which the *window* is located, measured from its sill—

whichever is the greater.

Building surveyor may allow concession

(4) Where the *building surveyor* is satisfied that compliance with sub-regulation (3) would create undue problems in the design of a building he may permit a lesser distance (which shall not in any case be less than 1·2 m) between a *required window* and the boundary or wall facing it if he is satisfied that the objects of that sub-regulation will be attained either better or as effectually.

Windows in wards in Class IXa buildings

Sub-reg. (5) inserted by S.R. No. 98/1986 reg. 96.

(5) In a room used for sleeping accommodation in a Class IXa building a *required* window facing an adjoining *allotment* or a wall of the same building or another building on the *allotment* shall be separated from that boundary or wall by a distance of not less than 3 m.

Windows in children's services centres Class I

Sub-reg. (6) inserted by S.R. No. 220/1989 reg. 11.

(6) In a *children's room* in a *children's services centre Class I*, the light transmitting area of 50 per cent of the *windows* required by Regulation 50.2 (4) must commence not more than 900 mm from the floor.

ARTIFICIAL LIGHTING

Required in certain rooms

50.4 (1) Where in any room not mentioned in Regulation 50.2 (1) natural lighting by means of *windows* is not provided to a standard equivalent to that required by Regulation 50.2 for rooms mentioned therein, a system of artificial lighting shall be provided to the rooms indicated in the following buildings:

(*a*) Class I, IV and Xa buildings—*sanitary compartments*, bathrooms, shower rooms, airlocks and *laundries*.

(*b*) Class II buildings—*sanitary compartments*, bathrooms, shower rooms, airlocks, *laundries*, common *stairways* and other spaces designed for the common use of the occupants of the building.

(*c*) Class III, V, VI, VII, VIII, IX and Xb buildings—all rooms intended to be occupied by any person for any purpose and all corridors, lobbies, internal *stairways* and other spaces intended for internal movement or egress. Para. (c) amended by S.R. No. 98/1986 reg. 97.

Conditions when artificial lighting requirements shall not apply

(2) Sub-regulation (1) shall not apply to a room where the *building surveyor* is satisfied that by reason of—

(*a*) the nature of the use of the room; or

(*b*) the periods of occupation—

there will be no undue hazard to occupants seeking egress in an emergency.

ARTIFICIAL LIGHTING OF STAIRWAYS AND RAMPS

50.5 *Required stairways* and ramps shall be provided with artificial lighting by means of separate electrical wiring circuits from the main switchboard for the exclusive use of the *stairway* or ramp.

NATURAL LIGHTING FROM ADJOINING ROOMS

Conditions

50.6 (1) Notwithstanding Regulation 50.2 a room in a Class I, II, IV or Xa building or in a *sole-occupancy unit* of a Class III building may be lighted by way of a glazed area or other opening facing directly into an adjoining room (including an enclosed verandah) subject to the following conditions:

(*a*) Such glazed area or other clear opening shall be not less than 10 per cent of the *floor area* of the room concerned.

(*b*) The adjoining room shall be provided with *windows* having an aggregate light transmitting area of not less than 10 per cent of the combined *floor areas* of the rooms concerned.

(*c*) In a Class II, III or IV building every adjoining room shall be within the same *sole-occupancy unit.*

Reduction in size of glazed areas

(2) The areas specified in paragraphs (*a*) and (*b*) of sub-regulation (1) may be reduced by the area of any *window* in the first-mentioned room transmitting natural light directly to that room.

DIVISION 2—VENTILATION

PROVISION OF VENTILATION

Where required

50.7 (1) Every *habitable room*, office, shop, factory, workroom, *sanitary compartment*, bathroom, shower room, *laundry* and any other room designed to be occupied by any person for any purpose shall be provided with either—

Para. (a) amended by S.R. No. 98/1986 reg. 98 (1).

(*a*) natural ventilation complying with Regulation 50.8;

Para. (b) amended by S.R. No. 98/1986 reg. 98 (2).

(*b*) a mechanical ventilation or air-conditioning system complying with Regulation 55.7; or

Para. (c) inserted by S.R. No. 98/1986 reg. 98 (3).

(*c*) in the case of a *sanitary compartment* in a Class I or II building, a fan extracting air through a water closet and cistern at a rate of not less than 10 m^3/h.

Conditions when ventilation requirements shall not apply

(2) Sub-regulation (1) shall not apply to a room where the *building surveyor* is satisfied that such exemption will not result in conditions that are detrimental to the health of the occupants of the room.

NATURAL VENTILATION

Methods and required extent of natural ventilation

Sub-reg. (1) amended by S.R. No. 220/1989 reg. 12 (a).

50.8 (1) Except in the case of a *children's services centre* natural ventilation required by Regulation 50.7 shall be provided by means of permanent openings or *windows*, doors or other devices which are capable of being opened and shall comply with the following:

Para. (a) amended by S.R. No. 438/1984 reg. 53 (1).

(*a*) Subject to sub-regulation (9) the aggregate opening or openable size shall be not less than 5 per cent of the *floor area* of the room *required* to be ventilated.

(*b*) The opening or openable size shall be the net area available for the passage of air—

(i) through a permanent opening; or

(ii) through *windows,* doors or other openable devices when opened to their designed maximum extent.

Situation of natural ventilation devices

(2) Unless otherwise stated in these Regulations, *required* natural ventilation devices shall open to—

(*a*) a court, vent shaft, or space open to the sky; or

(*b*) an open verandah, *open garage* or the like.

Construction of vent shafts

(3) A vent shaft or enclosed court serving as the source of *required* natural ventilation to a room shall comply with the following requirements:

(*a*) The top shall be open to the sky.

(*b*) If it has a cross-sectional area of less than 18 m^2 it shall be provided with permanent ventilation openings comprising one or more horizontal air intakes or passages which—

(i) connect with a *street* or *open space* ;

(ii) are situated at or below the level of the lowest required natural ventilation device serviced by such vent shaft or enclosed court;

(iii) have an aggregate cross-sectional area of not less than 0·5 m^2 or 5 per cent of the horizontal cross-sectional area of the shaft, whichever is the greater; and

(iv) are not less than 0·1 m^2 in cross-sectional area in any one such air intake or passage.

(*c*) It shall have—

(i) an internal horizontal dimension of not less than 1·2 m; and

(ii) a cross-sectional area of not less than 1·5 m^2.

Natural ventilation of certain rooms in Class I, II, III, IV or Xa buildings

(4) Notwithstanding sub-regulation (1), a room (other than a *sanitary compartment*) in a Class I, II, IV or Xa building or in a *sole-occupancy unit* of a Class III building may be ventilated by way of a clear opening or a *window,* door or other device capable of being opened, which faces directly into an adjoining room (including an enclosed verandah) subject to the following conditions:

Sub-reg. (4) amended by S.R. No. 98/1986 reg. 99 (1).

(*a*) Such clear opening, *window,* door or other device shall have a ventilating area of not less than 5 per cent of the *floor area* of the room concerned.

(*b*) The adjoining room shall be provided with a clear opening or a *window*, door or other device having a ventilating area of not less than 5 per cent of the combined *floor areas* of the rooms concerned.

(*c*) In the case of a Class II, III or IV building the adjoining rooms shall be within the same *sole-occupancy unit.*

Reduction of size of ventilating areas

(5) The ventilating areas specified in paragraphs (*a*) and (*b*) of sub-regulation (4) may be reduced by the ventilating area of any clear opening, *window*, door or other device capable of being opened in the first mentioned room which opens directly to the exterior of the building.

Ventilation of partitioned spaces and rooms in certain buildings

(6) Notwithstanding sub-regulation (1), a partitioned space or room in Class V, VI, VII or VIII building may be ventilated by way of a clear opening or openable device (excluding a door) which faces into another room that is ventilated in accordance with sub-regulations (1) and (2), subject to the following conditions:

(*a*) The opening or openable device shall have an airway of not less than 10 per cent of the *floor area* of the partitioned space or room.

(*b*) In measuring the area of the opening or openable device for the purposes of this sub-regulation, any part thereof that is more than 3·6 m above the level of the floor shall be excluded from the calculations.

Restrictions on location of sanitary compartments

Sub-reg. (7) substituted by S.R. No. 98/1986 reg. 99 (2).

(7) A *sanitary compartment* shall not open directly into—

(*a*) a kitchen;

(*b*) a room used for public assembly in a Class IX building except in a building used as an *open spectator stand*;

(*c*) a room for storage or the consumption of food, except in a Class I, IV, IXa or Xa building or in a *sole-occupancy unit* of a Class II or III building;

(*d*) a dormitory; or

(*e*) a workplace other than a room normally occupied by not more than one person in a Class V, VI, VII or VIII building.

Self-closing doors

Sub-reg. (8) amended by S.R. Nos 98/1986 reg. 99 (3), 220/1989 reg. 7 (2) (c).

(8) Further to sub-regulation (7) in the case of Class V, VI, VII, VIII and IXb buildings other than primary *schools* and *children's services centres*, access doorways to a *sanitary compartment* or group of *sanitary compartments* shall be fitted with self-closing doors.

Ventilation of bathrooms, sanitary compartments etc.

(9) Notwithstanding sub-regulation (1), ventilation to a bathroom, shower room, *sanitary compartment* or *laundry* in a Class I, II, III, IV or X building may be provided through a rooflight in which case— Sub-reg. (9) inserted by S.R. No. 438/1984 reg. 53 (2).

(*a*) the rooflight shall have an effective airway of not less than 40 000 mm²; and

(*b*) fixed inlet ventilation of not less than 8000 mm² shall be provided at a low level through a door or *external wall.*

Children's services centre

(10) In a *children's services centre*, the natural ventilation required by Regulation 50.7 must be provided by means of *windows* (excluding glazed doors) which are capable of being opened and the aggregate openable size of those *windows* must be not less than 5 per cent of the *floor area* of the room *required* to be ventilated. Sub-reg. (10) inserted by S.R. No. 220/1989 reg. 12 (b).

Calculation of openable size of windows

(11) For the purposes of sub-regulation (10) the openable size is the net area available for the passage of air through *windows* when opened to their designed maximum extent. Sub-reg. (11) inserted by S.R. No. 220/1989 reg. 12 (b).

ARCADE VENTILATION

50.9 Any shop, room or space opening to an arcade may not be required to comply with the requirements of this Division subject to such conditions as the *building surveyor* considers desirable.

SUB-FLOOR VENTILATION

Requirements

50.10 (1) Where the lowest floor of a building is *constructed* of timber, a space shall be provided between the underside of every timber member and the ground surface, and that space shall be— Sub-reg. (1) amended by S.R. No. 98/1986 reg. 100 (1).

(*a*) ventilated and cross-ventilated by means of evenly distributed openings in the *external walls* having an unobstructed area of not less than 7300 mm²/m of *external wall*; and

(*b*) not less than 150 mm in depth in every part.

Reduction or increase in requirements

(2) Notwithstanding sub-regulation (1), the *building surveyor* may—

(*a*) approve a reduction of the area of the openings or the depth of the space referred to in sub-regulation (1), or both, if he is satisfied in the particular case that by reason of—

(i) the nature of the *site* ;

(ii) the design of the building;

(iii) the provision of an impervious cover over the ground surface beneath the building; or

(iv) a combination of the factors referred to in sub-paragraphs (i), (ii) and (iii)—

undue deterioration of the floor timbers will not occur as a result of such reduction; or

(*b*) require an increase in the area of such openings where he considers in the particular case that by reason of the—

(i) nature of the *site*; or

(ii) design of the building—

such increase is necessary to prevent undue deterioration of the floor timbers.

Position of sub-floor ventilation openings in cavity walls

(3) In cavity wall construction the openings specified in paragraph (*a*) of sub-regulation (1) shall be provided in the outer leaf of the wall, and openings of the same area shall be provided in the inner leaf in positions as near as possible to those in the outer leaf.

Openings in internal walls

(4) *Internal walls* constructed in the under-floor space referred to in sub-regulation (1) shall be provided with openings having an aggregate area of not less than 22 000 mm²/m run of wall concerned, and such openings shall be evenly spaced.

Sub-reg. (5) revoked by S.R. No. 98/1986 reg. 100 (2).

(5) * * * * * *

PUBLIC GARAGES AND PARKING STATIONS

50.11 Every *storey* of a *public garage* shall be provided with either—

(*a*) a mechanical ventilation or air-conditioning system complying with Regulation 55.7; or

(*b*) an *approved* system of permanent natural ventilation.

GROUP VIII—ANCILLARY PROVISIONS

PARTS 51 and 52 * * * * * *

GROUP VIII—ANCILLARY PROVISIONS

PART 53—SPECIAL REQUIREMENTS FOR CERTAIN BUILDINGS AND COMPONENTS

DIVISION 1—GENERAL

SWIMMING POOLS AND SWIMMING POOL BARRIERS

Cleanliness and drainage

53.1 (1) Every *swimming pool* must be—

Reg. 53.1 substituted by S.R. No. 143/1988 reg. 31.

(*a*) provided with an apparatus designed to clarify and disinfect the water in the *swimming pool*; and

(*b*) subject to any conditions imposed by the *building surveyor* for drainage of the *swimming pool*.

Swimming pool barriers

(2) A *swimming pool* associated with a Class I, II or III building must be provided with adequate barriers to restrict access by young children.

Certain barriers deemed to comply—Class I

(3) If the *swimming pool* is associated with a Class I building the requirements of sub-regulation (2) are deemed to be complied with if the *allotment* or portion of the *allotment* containing the *swimming pool* is provided with—

(i) a continuous barrier not less than 1650 mm high which may incorporate fences or walls of buildings and which has gates and fittings complying with AS 1926; or

(ii) fences, gates and fittings complying with AS 1926.

Certain barriers deemed to comply—Class II or III

(4) If the *swimming pool* is associated with a Class II or III building the requirements of sub-regulation (2) are deemed to be complied with if the immediate pool site is provided with fences, gates and fittings complying with AS 1926.

REFRIGERATED AND COOLING CHAMBERS

Safety devices

53.2 (1) Refrigerated and cooling chambers forming part of a building which are of sufficient size to permit the entry of a person shall be provided with—

(*a*) a door which can at all times be opened from inside without a key; and

(*b*) an *approved* alarm device located outside, but controllable only from within the chamber.

Door widths

(2) The door referred to in paragraph (*a*) of sub-regulation (1) shall be set in an opening having a clear width of not less than 600 mm.

STRONG ROOMS

53.3 Any strong room in a building shall be provided with—

(*a*) lighting controllable only from within the room;

(*b*) a pilot light located outside the room but controllable only by the switch for the lighting referred to in paragraph (*a*); and

(*c*) an *approved* alarm device located outside but controllable only from within the room.

GLASS

Installation in buildings

53.4 (1) Glass used in a building shall be installed in accordance with the relevant provisions of AS 1288.

Safety Glass—identification

(2) In addition to the requirements of sub-regulation (1) fully toughened safety glass shall be permanently marked with the words "Safety Glass" or "Toughened Safety Glass" or other words which afford a ready means of identifying the safety characteristics of the glass.

Sub-reg. (3) inserted by S.R. No. 220/1989 reg. 13.

(3) In a *children's services centre* any glass panel below 750 mm from the floor must be of safety glazing material as defined in AS 1288.

ACCESS REQUIREMENTS FOR DISABLED PERSONS

Application

53.5 (1) This Regulation shall apply—

(*a*) to every new Class III, V, VI, VII and VIII building constructed after 1 December, 1981; and

(*b*) to every Class IX building—

notwithstanding any other provision in these Regulations.

Para. (b) substituted by S.R. No. 98/1986 reg. 101 (1).

Access to a building

(2) Where *access for disabled persons* is required by this Regulation to be provided to a building that access shall be by means of a pathway or a step ramp or a lift for the transport of persons or any combination thereof, and shall commence at—

(*a*) the *street alignment* in respect of the *allotment* on which the building is located;

(*b*) any car parking area on the same *allotment* (whether within or outside the building) which is specifically set aside for persons using that building; or

(*c*) another building to which wheelchair access is provided in accordance with this Regulation.

Access within a building

(3) Where *access for disabled persons* is required by this Regulation to be provided within a building that access shall extend—

(*a*) from the doorway referred to in clause 4 of Schedule 9 to any *vertical access* within the building;

(*b*) from the doorway referred to in clause 4 of Schedule 9 and from any *vertical access* along all *circulation spaces*;

Para. (b) amended by S.R. No. 98/1986 reg. 101 (2) (a).

(*c*) from *circulation spaces* to the facilities required by Part 46; and

Para. (c) amended by S.R. No. 98/1986 reg. 101 (2) (b).

(*d*) from *circulation spaces* to the areas nominated in Table 53.5.

Para. (d) inserted by S.R. No. 98/1986 reg. 101 (2) (c).

Extent of application

(4) *Access for disabled persons* to and within every building to which this Regulation applies shall be provided in accordance with Table 53.5 and shall comply with the requirements specified in Schedule 9.

TABLE 53.5

ACCESS FOR DISABLED PERSONS TO AND WITHIN BUILDINGS

Table 53.5 amended by S.R. Nos 98/1986 reg. 101 (3), 220/1989 reg. 7 (2) (d).

Classification of Building (1)	*Provision for Access for Disabled Persons* (2)
III	To and within— (i) one *sole-occupancy unit* for every 49 such units, or part thereof; (ii) 2 *sole-occupancy units* where the number of such units exceeds 49 but does not exceed 99; or

TABLE 53.5—*continued*

ACCESS FOR DISABLED PERSONS TO AND WITHIN BUILDINGS

Classification of Building (1)	*Provision for Access for Disabled Persons* (2)
III (*cont.*)	(iii) 3 *sole-occupancy units* where the number of such units exceeds 99— in every such building. Where accommodation is provided (whether wholly or in part) in other than *sole-occupancy units*, to— (i) 2 beds for every 49 beds, or part thereof; (ii) 4 beds where the number of beds exceeds 49 but does not exceed 99; or (iii) 6 beds where the number of beds exceeds 99— in every such building. Within the *entrance floor* and to all public areas on every floor to which *access for disabled persons* is provided pursuant to this table.
V and VI	To and within the *entrance floor* where the area of that floor exceeds 500 m². To and within any floor where, irrespective of the *floor area* thereof, that floor is not more than 215 mm at any part above or below— (i) the level of the *street* (in any case where the building abuts the *street alignment*); or (ii) the adjacent finished ground level (in any other case). Within any other floor to which *vertical access* is provided.
VII	To and within the *entrance floor* where the total *floor area* of the building exceeds 3000 m². To and within any floor where, irrespective of the *floor area* thereof, that floor is not more than 215 mm at any part above or below— (i) the level of the *street* (in any case where the building abuts the *street alignment*); or (ii) the adjacent finished ground level (in any other case). Within any other floor to which *vertical access* is provided.
VIII	To and within the *entrance floor* where the total *floor area* of the building exceeds 1000 m². To and within any floor where, irrespective of the *floor area* thereof, that floor is not more than 215 mm at any part above or below— (i) the level of the *street* (in any case where the building abuts the *street alignment*); or (ii) the adjacent finished ground level (in any other case). Within any other floor to which *vertical access* is provided.
IXa	To all areas (other than service areas) normally accessible to the public or to patients or the staff.

TABLE 53.5—*continued*

ACCESS FOR DISABLED PERSONS TO AND WITHIN BUILDINGS

Classification of Building (1)	*Provision for Access for Disabled Persons* (2)
IXb	In every building with fixed seating arrangements used for civic, political, transit, religious, social, recreational, entertainment, amusement, sporting, theatrical or similar purposes, to viewing positions which shall be provided in the proportion of 1 wheelchair space for every 200 seats or part thereof with a minimum of 2 wheelchair spaces. To every room— used for educational purposes in a *school* where no alternative similar facilities to those provided in that room are provided elsewhere in that *school*; for the use of children in a *children's services centre*. To every other area (other than service areas) normally accessible to the public or the staff.

Signs and symbols

(5) The location and identification of all lifts, all entrances and, except in the case of a *sole-occupancy unit* in a Class III building, toilet facilities for use by disabled persons shall be indicated by signs and symbols complying with the requirements specified in Schedule 9.

CLASS X BUILDINGS

Fences near intersections

53.6 (1) Except with the consent of the *council* a fence that is within 9 m of a point of intersection of *street alignments* shall not exceed a height of 1 m above the footpath.

Reg. 53.6 substituted by S.R. No. 98/1986 reg. 102.

Barbed wire fences

(2) The barbed wire part of any barbed wire fence required to comply with these Regulations shall be set back not less than 150 mm from any *street alignment* or boundary adjacent to a public open space and shall be at a height of at least 2 m above the level of the *street*, or public open space as the case may be.

Required to be on same allotment

(3) Every Class X building shall be on the same *allotment* as any building to which it is appurtenant however the *council* may waive this requirement in respect of a Class Xb or Xc building.

Children's services centre

Sub-reg. (4) inserted by S.R. No. 220/1989 reg. 14.

(4) Outdoor play space in a *children's services centre* must be enclosed on all sides with fences or barriers at least 1·5 m high measured from ground level, with a self-closing gate of at least the same height fitted with bolts and catches to ensure safety.

Division 2 Heading substituted by S.R. No. 98/1986 reg. 103.

DIVISION 2—STAIRWAYS, BALUSTRADES AND HANDRAILS IN CLASS I AND Xa BUILDINGS AND WITHIN CERTAIN SOLE-OCCUPANCY UNITS

APPLICATION OF DIVISION

Class I and Xa buildings and within certain sole-occupancy units

Sub-reg. (1) substituted by S.R. No. 438/1984 reg. 54.

53.7 (1) This Division shall only apply to Class I and Xa buildings and within any *sole-occupancy unit* of a Class II or III building.

At a change of levels

(2) Wherever there is a change of levels in a building, a *stairway* or ramp shall be provided meeting the requirements of this Division as the case requires.

THRESHOLDS

Incorporation of steps or ramps

53.8 (1) Except as provided in sub-regulation (2), the threshold of a doorway where the sill is more than 570 mm above the finished surface of the ground, landing, balcony, or the like shall not incorporate a step or ramp at any point closer to the doorway than the width of the door.

Doorways opening to exterior of building

(2) Further to sub-regulation (1), an external doorway may be constructed with a threshold which is not more than 190 mm above the finished surface of the ground, landing, balcony, or the like, to which the doorway opens.

STAIRWAYS

Widths of stairways to be measured clear of obstructions

53.9 (1) The width of a *stairway* measured clear of all obstructions, such as handrails, projecting parts of balustrades, and the like shall not be less than 750 mm wide and shall remain constant without interruption, except for ceiling cornices, to a height of not less than 2·03 m vertically above a line along the nosings of the treads and the floor of the landing.

Landings

(2) Landings shall comply with the following requirements:

(*a*) Every *stairway* shall be provided with landings, where necessary, to limit the number of risers in a flight of stairs to 18.

(*b*) A landing shall have a clear width of not less than 750 mm and a clear length of not less than 750 mm.

Para. (b) amended by S.R. No. 438/1984 reg. 55 (1).

Design of stairs

(3) Treads and risers shall comply with the following requirements:

Sub-reg. (3) substituted by S.R. No. 438/1984 reg. 55 (2).

(*a*) The going and riser height of stairs in a *stairway* shall be constant throughout every flight unless otherwise approved by the *building surveyor*.

(*b*) Treads shall have a going of not less than 240 mm and risers shall have a height of not more than 190 mm.

(*c*) *Stairways* curved in plan shall be permitted provided that—

(i) the balustrade of a curved *stairway* nearest to the centre of curvature of the *stairway* at any point shall be a distance measured from the centre of curvature of not less than ⅔ of the width of the *stairway*; and

(ii) the going and riser height referred to in paragraph (*b*) are complied with when measured at a distance of 400 mm from the balustrade which is closer to the centre of curvature.

(*d*) Spiral *stairways* and winders shall be permitted provided that the going and riser height referred to in paragraph (*b*) are complied with when measured at a distance of 600 mm from the centre of curvature.

(*e*) Nothing in this sub-regulation shall be construed so as to prevent the space between the treads of a *stairway* from being completely open.

RAMPS

Measurement of ramp width

53.10 (1) The width of a ramp measured clear of all obstructions, handrails, projecting parts of balustrades, and the like shall be not less than 750 mm wide and shall remain constant without interruption, except for ceiling cornices, to a height of not less than 2·03 m vertically above the floor surface of the ramp.

Gradient

(2) The slope of a ramp shall have grade of not more than 1 in 8 in any part.

HANDRAILS AND BALUSTRADES

Balustrades—when required

Sub-reg. (1) substituted by S.R. No. 438/1984 reg. 56 (1).

53.11 (1) A balustrade shall be—

Para. (a) amended by S.R. No. 98/1986 reg. 104 (1).

(*a*) provided along every side of any *stairway* or ramp and any corridor, hallway, external access balcony, bridge, or the like, wherever the side is not bounded by a wall and is more than 600 mm (or 3 risers in the case of a *stairway*) above the finished surface of the adjoining floor or ground, as the case may be;

Para. (b) amended by S.R. No. 98/1986 reg. 104 (2).

(*b*) *constructed* so that the distance between rails or balusters or the like, and between a bottom rail or the like and the floor surface or a line connecting the nosings of the stair treads shall not exceed 200 mm; and

Para. (c) inserted by S.R. No. 98/1986 reg. 104 (3).

(*c*) *constructed* to a vertical height of—

(i) not less than 865 mm above the nosings of stair treads; and

(ii) not less than 1 m above the floor surface of ramps, landings, corridors, hallways, external balconies, bridges and the like.

Handrails—when required

Sub-reg. (2) substituted by S.R. No. 438/1984 reg. 56 (2).

(2) A handrail shall be provided where the *stairway* connects two levels having a difference in level of greater than 600 mm—

(*a*) on at least one side of a *stairway* 1 m or less in width; and

(*b*) on both sides of a *stairway* in excess of 1 m in width.

Height, etc. of handrails

Sub-reg. (3) amended by S.R. No. 98/1986 reg. 104 (4).

(3) Handrails shall be at a vertical height of not less than 865 mm above—

(*a*) the nosings of stair treads; and

(*b*) the floor surface of ramps, landings, corridors, hallways, external access balconies, bridges and the like.

53.12–53.20 * * * * *

DIVISION 3—DANGEROUS BUSINESSES AND STORAGE OF FLAMMABLE LIQUIDS AND NITRO CELLULOSE PRODUCTS

INTERPRETATION

53.21 For the purpose of this Division—

'*dangerous business*' means the manufacture of gunpowders or

any detonating or explosive powders or of matches ignitable by friction or any other substance liable to sudden explosion, inflammation or ignition, or of turpentine, vitriol, naphtha, varnish, fireworks or painted covers or oil cloths, or any other manufactures liable by reason of the nature or quality of the materials employed therein to cause sudden fire or explosion;

'*dry cleaning*' means the process of removing dirt, grease, paints and other stains from wearing apparel, textiles, fabrics, rugs, and the like, by the use of nonaqueous flammable solvents; and

'*flammable liquid*' means any liquid having a flash point below 94°C and a vapour pressure not exceeding 275 kPa absolute at 38°C.

SITING

53.22 Any building used for any *dangerous business* shall be situated at a distance greater than—

12 m from any *street* or any land not in the same occupation; and

15 m from any other building.

APPROVAL OF BUILDING SURVEYOR REQUIRED IN ALL CASES

53.23 A building shall not be used for any *dangerous business* or for the purpose of manufacture, repair or storage, of any *flammable liquid* or of any nitro-cellulose product without the approval of the *building surveyor.*

DRY CLEANING BY THE USE OF FLAMMABLE LIQUIDS

Type of construction

53.24 (1) Every building where *flammable liquids* having a flash point of less than 23°C are used in *dry cleaning* machinery shall be of Type 1 construction with adequate openings away from boundaries for explosion venting.

Specific requirements

(2) That part of a building used for *dry cleaning*, and the removal of spots by hand, in which *flammable liquids* are used shall—

(*a*) be single *storey* and have *non-combustible* roof or ceiling construction;

(*b*) have a concrete floor;

(*c*) provide protection to other buildings or any part of the building in another occupation by means of a *fire-resistance rating* of not less than 3 hours;

(*d*) have internal non-*loadbearing partition walls* having a *fire-resistance* rating of not less than 2 hours to separate it from operations such as sorting, laundering, scouring, scrubbing, dyeing, pressing, and ironing;

(*e*) have every doorway in any internal non-*loadbearing partition wall*—

(i) constructed with a ramp or sill at least 150 mm above the floor in that part of the building; and

(ii) fitted with a self-closing fire door having a *fire-resistance rating* of not less than 2 hours;

(*f*) have alternative means of escape in accordance with Regulations 24.43 and 24.44 neither of which may lead directly into a boiler room or area containing a naked flame or any other source of ignition;

(*g*) have a continuous mechanical ventilation system which will—

(i) operate automatically while the dry cleaning equipment is in use; and

(ii) provide a complete change of air every five minutes with the exhaust being ducted from a height of not more than 180 mm above floor level and discharging at a height of not less than 1·8 m above the highest part of the roof, the outlet being not less than 3 m in any direction from any chimney, ventilator or opening in the same or adjacent building;

(*h*) have the bulk storage of *flammable liquid* underground but quantities of less than 240 litres in individual containers of not more than 60 litres may be stored in fireproof cabinets;

(*i*) where steam is available—

(i) have each machine using *flammable liquid* equipped with a steam line; and

(ii) be so arranged that an adequate supply of steam will be automatically released inside the machine should fire or an explosion occur; and

(*j*) have all machines effectively earthed to dissipate static electricity;

Drying rooms

(3) Every drying room shall—

(*a*) be constructed with walls, partitions and ceilings having a *fire-resistance rating* of not less than 2 hours;

(*b*) have self-closing fire doors having a *fire-resistance rating* of not less than 2 hours; and

(*c*) be connected to the mechanical ventilation system referred to in paragraph (*g*) of sub-regulation (2).

Concessions

(4) Where the removal of spots by hand is undertaken or a *dry cleaning* plant is established in a building, the provisions of Regulation 53.22 and paragraph (*a*) of sub-regulation (2) shall not apply provided that the upper storey shall be separated from the ground floor by a floor having a *fire-resistance rating* of not less than 3 hours and have alternative means of escape both of which shall be completely isolated from the ground floor by concrete or *masonry* having a *fire-resistance rating* of not less than 3 hours.

CINEMATOGRAPH PROJECTION ROOMS

When required

53.25 (1) A cinematograph projection room shall be provided in every building which provides fixed cinematograph viewing facilities.

Reg. 53.25 inserted by S.R. No. 98/1986 reg. 105.

Construction

(2) A cinematograph projection room shall be separated from the rest of the building by *non-combustible construction.*

Materials used

(3) Any material used in the *construction* of a cinematograph projection room shall in the case of—

(*a*) any material, other than a *sarking-type material,* used in a ceiling or as an attachment to or part of an attachment to the *structural member* or as the finish, surface, lining or the like of a *structural member*—

(i) have a *Spread-of-flame Index* not greater than 0;

(ii) have a *Smoke-developed Index* not greater than 2; and

(iii) if *combustible,* not exceed 1 mm in finished thickness and be attached directly to a *non-combustible* substrate; and

(*b*) any *sarking-type material* used in the form of an exposed wall or ceiling, or as a finish or attachment thereto, have a *Flammability Index* not greater than 0.

Openings

(4) Openings in a cinematograph projection room enclosure shall be protected as follows:

(*a*) Every doorway shall—

(i) be protected by a *self-closing*, tight-fitting, solid core door, not less than 35 mm thick;

(ii) open outwards; and

(iii) not open directly into an auditorium, public lobby, public foyer or similar public space within the building.

(*b*) Openings for the operation of cinematograph projection equipment shall not exceed ten per cent of the area of the wall between the projection room and the public viewing room and shall be fitted with a metal shutter not less than 1·6 mm thick which shall—

(i) inhibit the penetration of smoke at every part through the opening to which it is fitted; and

(ii) be fitted with an *approved* smoke-activated *self-closing* device.

Ventilation

(5) Every cinematograph projection room shall be provided with an independent mechanical ventilation system in accordance with AS 1668 Part 2.

53.26–53.29 * * * * * *

Division 4 Regs. 53.30–53.45) Inserted by S.R. No. 98/1986 reg. 106.

DIVISION 4—BUILDING IN SNOW AREAS

APPLICATION OF DIVISION

53.30 Notwithstanding any other provision in these Regulations, this Division shall apply to any building *constructed* on land which is situated 1200 m or more above the Australian Height Datum or which in the opinion of the *council* is likely to be subject to significant snowfalls.

COMMENCEMENT AND COMPLETION OF BUILDING WORK

53.31 Notwithstanding Regulation 8.7, the date of commencement and completion of any *building work* shall be to the approval of the *council*.

WALLS BOUNDING OR SEPARATING SOLE-OCCUPANCY UNITS IN CLASS II OR III BUILDINGS

53.32 Notwithstanding Regulation 16.11 (6) (*b*), in a Class II or III building of Type 5 construction any internal wall bounding a *sole-occupancy unit* or separating adjoining *sole-occupancy units* need not be of concrete or *masonry*.

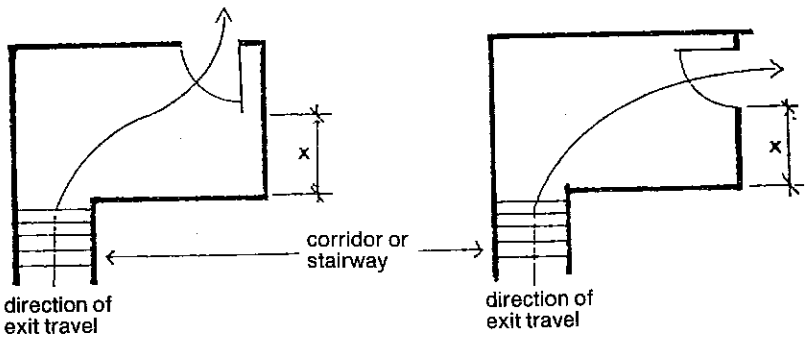
EXTERNAL DOORWAYS

53.33 Notwithstanding Regulation 24.20, a door fitted to an external doorway which may be subject to the build-up of snow shall—

(*a*) only be capable of opening inwards against the direction of *exit* travel;

(*b*) be marked "OPEN INWARDS" in 75 mm high block lettering of contrasting colour; and

(*c*) where serving a corridor or *stairway*, be positioned such that the dimension measured from its swing at the point of nearest approach to any part of such corridor or *stairway* is not less than the minimum *required* width of that doorway.



Dimension "x" shall be not less than the required exit width

PLANS ILLUSTRATING REGULATION 53.33

EMERGENCY LIGHTING

Installation and location

53.34 (1) In every Class II to IX building a system of emergency lighting shall be installed in accordance with AS 2293 Part 1—

(*a*) in every *stairway* (other than those within a *sole-occupancy unit*);

(*b*) in every *public corridor*, public hallway or the like leading to an *exit*; and

(*c*) externally above every doorway opening to a *street* or *open space*.

Special locations

(2) The *building surveyor* may require the installation of additional emergency lighting in any *storey* of any of the buildings referred to in sub-regulation (1) where he considers that illumination sufficient for safe egress will not be available under conditions of emergency.

EXIT SIGNS

53.35 Exit signs shall be provided in every Class II to IX building in accordance with Regulation 24.29 (*b*)–(*f*).

EXTERNAL RAMPS

53.36 Notwithstanding Regulation 24.26 (2), an external ramp serving as an *exit* shall have a gradient not greater than 1 in 12.

DEPOSITS OF SNOW OR ICE: PERFORMANCE

53.37 Every building shall be so *constructed* that snow or ice is not deposited on the *allotment*, any adjoining *allotment* or *street* or public open space so as to—

(*a*) significantly obstruct a means of egress from any building to a *street*; or

(*b*) cause a danger to people.

SETBACKS—DEEMED TO COMPLY

Generally

53.38 (1) A building complying with this Regulation shall be deemed to comply with Regulation 53.37.

Allowable encroachments

(2) Where under this Regulation a distance from an *allotment* boundary or between buildings is specified, that distance shall be the shortest distance and measured from the outermost point of the building or buildings concerned, except that the following encroachments into that distance shall be disregarded:

(*a*) 1 m in the case of eaves, including eaves fascia and eaves gutter;

(*b*) 400 mm in the case of any *masonry* chimney back;

(*c*) Any pergola, balustrade, fence, mast, pole, aerial or antenna;

(*d*) Any unroofed terrace, landing, step or ramp not exceeding 1 m in height at any part above ground level;

(*e*) Any rainwater head, gas meter, water meter, electrical meter, light fitting, or retractable sun blind;

(*f*) 650 mm in the case of any flue, pipe, fuel tank, cooling or heating appliance or other services.

Setback requirements

(3) Subject to any by-law made pursuant to Regulation 11.6 (1) the *external wall* of a building shall not be *constructed*—

(*a*) less than 4·5 m from a *street alignment*;

(*b*) less than 3 m from any boundary of an *allotment* other than a *street alignment*; or

(*c*) less than 6 m from any building on the *allotment*.

Height related to minimum setback

(4) Where any part of an *external wall* measured above the natural ground level exceeds 3·6 m in height, the minimum prescribed distance of that part of the wall from a boundary other than a *street alignment* shall be increased in the proportion of 100 mm for every 300 mm or part thereof by which the height of that part of the wall exceeds 3·6 m.

Courts

(5) In the case of an *exit* doorway which discharges into a court between wings of a building, the wings shall be not less than 6 m apart.

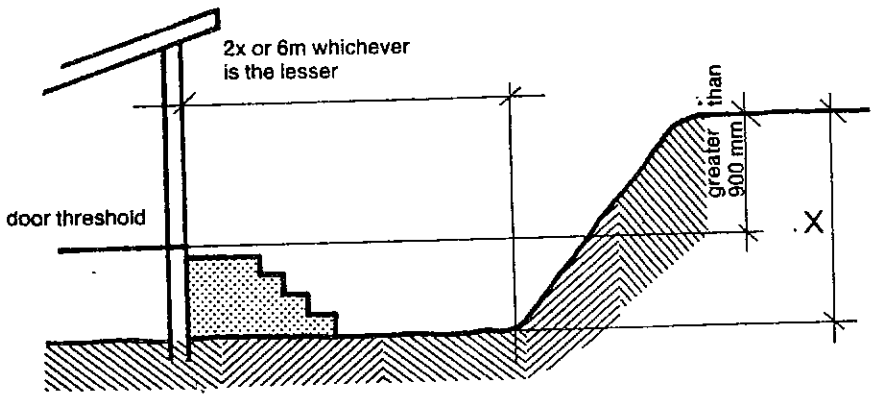
Barriers

(6) In the case of an *exit* doorway which is opposite a barrier exceeding a vertical height of 900 mm above the threshold of the doorway, the threshold shall be at a distance from that barrier of not less than—

(*a*) twice the height of the barrier; or

(*b*) 6 m—

whichever is the lesser.



SECTION ILLUSTRATING REGULATION 53.38

SAFETY OF TRAFFICABLE STRUCTURES

53.39 The floor surface of any external *stairway*, ramp, bridge or other trafficable structure used as a means of egress shall consist of metal open mesh or other *approved* material.

BALUSTRADES

53.40 Every balustrade to an external trafficable structure shall be designed and constructed so that its sides are not less than 80 per cent open.

HEIGHT OF THRESHOLD ABOVE GROUND

53.41 Every threshold of an external doorway shall be at a vertical height of not less than 900 mm above the finished ground level adjacent to the doorway.

MANUAL FIRE ALARMS

53.42 In every Class II to IX building a manually operated fire alarm system with call-points complying with AS 1670 shall be provided to the approval of the *chief officer*.

FIRE ORDERS

Display locations

53.43 (1) In every Class II to IX building clearly marked "Fire Orders" notices shall be displayed near the main entrance to the building and on each *storey* in locations approved by the *building surveyor* after consultation with the *chief officer*.

Information to be shown

(2) Fire Orders notices shall show—

(*a*) the method of operation of the fire alarm system and the location of all call-points;

(*b*) the location and methods of operation of all fire-fighting equipment;

(*c*) the location of all *exits*; and

(*d*) the procedure for evacuation of the building.

PROVISION OF FIRE HOSE REELS AND HYDRANTS

53.44 Notwithstanding Regulations 27.2 and 27.3, in every Class II to IX building fire hose reels and *hydrants* shall be installed to the approval of the *chief officer*.

LOADING

53.45 Unless otherwise approved by the *building surveyor*, for the purpose of Group VI the snow loads on a roof of a building shall be calculated in accordance with the following:

(*a*) Where the slope of the roof is less than 22° to the horizontal—not less than 5 kPa.

(*b*) Where the slope of the roof is 22° or greater to the horizontal—not less than 3 kPa.

GROUP VIII—ANCILLARY PROVISIONS

PART 54— * * * * * *

GROUP VIII—ANCILLARY PROVISIONS

S.R. No. 383/1990.

PART 54—THERMAL INSULATION

54.1 APPLICATION

This Part applies to Class I, II, III and Xa buildings.

54.2 PROVISION OF THERMAL INSULATION

R values

(1) In this Regulation "R" or "R value" means the thermal resistance of an element of the building measured in m^2 K/W.

Performance requirement

(2) Buildings must have a reasonable level of thermal insulation to conserve energy used for heating and cooling the interior of the building.

Deemed-to-comply provisions

(3) Compliance with all elements of option A or all elements of option B of Table 54.1 is deemed-to-satisfy the requirements of sub-regulation (2).

Table 54.1

MINIMUM OVERALL R VALUE

Element	*Option A*	*Option B*
Roof or ceiling	R2.2	R2.2
External walls	R1.3	R1.7
Ground Floor	R1.0	R0.4

Deemed "R Values"

(4) For the purpose of this Regulation, an element described in column 1 of Table 54.2 is deemed to have the R Value adjacent to it in column 2.

TABLE 54.2

R VALUES FOR COMMON ELEMENTS

Description of Element column 1	*R Value column 2*
Roofs or ceilings	
Tiled pitched roof, R2.5 bulk insulation between ceiling joists, lined ceiling	R2.4
Tiled pitched roof, foil sarking over rafters, R2.0 bulk insulation between ceiling joists, lined ceiling	R2.2
Metal deck roof, foil sarking, 20 mm air gap, R2.0 bulk insulation installed between joists/beams, ceiling lining on underside of joists/ beams	R2.2
External walls	
Brick/masonry veneer with double sided reflective foil laminate fixed to external face of studs, lined internally	R1.3
Brick/masonry veneer with R1.5 bulk insulation between the studs, lined internally	R1.7
Brick/masonry veneer with R1.0 foam board fixed over the face of the studs, lined internally	R1.7
Weatherboard/fibre cement, double sided reflective foil laminate dished between studs lined internally	R1.3
Weatherboard/fibre cement cladding, R1.5 bulk insulation between studs, lined internally	R1.7
Cavity brick with R1.0 foam board in cavity	R1.7
Floors	
Concrete/masonry on ground	R1.5
Timber framed floor open around perimeter	R0.4
Timber framed floor, enclosed perimeter reflective foil laminate dished between joists	R1.0

Exemptions

(5) This Regulation does not apply to—

(*a*) cavity brick, earthwall construction, ashlar stone or other masonry walls which have a thickness (excluding any cavity) of not less than 180 mm if the floor of the building is concrete or masonry in direct contact with the ground;

(*b*) windows, vents and other similar openings in walls, roofs and ceilings;

(*c*) a garage forming part of a Class I, II, III, or Xa building which is separated from the *habitable rooms* of the building by a wall complying with the requirements for an external wall in Table 54.1.

54.3 CHIMNEYS AND FLUES

Chimneys and flues from open solid fuel burning appliances must be provided with a damper or flap.

54.4 INSTALLATION OF REFLECTIVE FOIL LAMINATE

Installation of reflective foil laminate must comply with AS1904–1976 Code of Practice for Installation of Reflective Foil Laminate in Buildings.

GROUP VIII—ANCILLARY PROVISIONS

PART 55—GENERAL SERVICES AND EQUIPMENT

55.1–55.4 * * * * * *

OPENINGS IN FIRE-RESISTING CONSTRUCTION

Wires and cables

55.5 (1) Wires or cables for electrical, telephone or other services that—

(*a*) are not enclosed in metal pipes, metal conduits or other *non-combustible* materials; and

(*b*) pass through a wall, floor or ceiling *required* to have a *fire-resistance rating*—

shall comply with sub-regulations (2) and (3).

Packing of holes

(2) The space between any wire or cable referred to in sub-regulation (1) and the inside faces of the holes in the walls, floors or ceilings through which they pass, including the inside faces of sleeves or the like that may be inserted to carry them, shall be packed solid with gypsum vermiculite plaster, or other *approved non-combustible* material.

Areas of holes limited

(3) The total area of any holes for the accommodation of wires or cables referred to in sub-regulation (1) in any 10 m^2 part of a floor or ceiling required to have a *fire-resistance rating* shall not exceed 7×10^3 mm^2.

55.6 * * * * * * *

AIR HANDLING SYSTEMS—INSTALLATION

55.7 Where a system of mechanical ventilation or air conditioning is installed pursuant to any requirements of these Regulations, that installation shall comply with AS 1668, Part 1 and AS 1668, Part 2 including Note 7 of the Notes to Tables 3.1 and 3.2.

Reg. 55.7 amended by S.R. No. 438/1984 reg. 57.

Heading inserted by S.R. No. 438/1984 reg. 56.

EXCLUSION OF SMOKE FROM FIRE-ISOLATED STAIRWAYS, RAMPS AND PASSAGEWAYS

In buildings of 7 or more storeys

New Reg. 55.8 inserted by S.R. No. 438/1984 reg. 56.

55.8 (1) Every *required fire-isolated stairway* and *fire-isolated ramp* that serves 7 or more *storeys* and every *fire-isolated passageway* that leads to or from such *fire-isolated stairway* or *fire-isolated ramp* shall be protected from the entry of smoke in accordance with sub-regulation (3) or (4).

Serving below ground storeys

(2) Every *required fire-isolated stairway, fire-isolated ramp* and *fire-isolated passageway* that serves 3 or more *storeys* from which egress would involve a vertical rise within the building of more than 1·5 m shall be protected from the entry of smoke in accordance with sub-regulation (3).

Pressurization

(3) (*a*) The *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* shall be positively pressurized by means of a pressurizing system designed to operate in the event of a fire on any *storey* in accordance with AS 1668, Part 1.

(*b*) * * * * * *

(*c*) No openable *window* or other openable device (other than necessary doorways, pressure-controlled relief louvres and *windows* openable by a key) shall be *constructed* in the *stairway, ramp* or *passageway.*

Para. (d) repealed by S.R. No. 143/1988 reg. 32.

(*d*) * * * * * *

Balcony access—alternative

(4) Every means of access from within a building having a rise of more than 6 *storeys* to a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* shall be by way of an open access ramp or balcony complying with the following requirements:

(*a*) It shall have an unobstructed ventilation opening to the outside air—

(i) of area not less than the *floor area* of the ramp or balcony; and

(ii) which is evenly distributed along the open sides of the ramp or balcony.

(*b*) It shall not be enclosed on its open sides above a height of 1070 mm except by an open grille or the like having a free air space of not less than 75 per cent of its area.

CLASS IXa BUILDINGS: EMERGENCY LIFTS

When required

55.9 (1) In a Class IXa building any floor— Reg. 55.9 inserted by S.R. No. 98/1988 reg. 107.

(*a*) which contains a *ward area* or patient treatment area; and

(*b*) which does not provide direct egress to a *street* or *open space*—

shall contain at least one lift capable of becoming an emergency lift to serve all areas on such a floor.

Remote control facility

(2) For the purposes of this Regulation an emergency lift shall mean a lift which has its operating controls so installed that it may be removed from normal automatic operation by means of a keyed switch located in the lift lobby of the main entrance *storey* of the building, or other approved location.

Capacity

(3) An emergency lift shall be capable of accommodating not less than one ward bed and two attendants.

55.10 * * * * * *

WARNING AGAINST USE OF LIFTS IN FIRE

Signs to be displayed

55.11 (1) A warning sign conforming with the requirements of this Regulation shall be displayed in a conspicuous position near every call button for a lift or group of lifts throughout a building.

Details of sign

(2) The warning sign shall—

(*a*) have the wording "in case of fire do not use lifts" which shall be—

(i) incised, inlaid or embossed on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or

(ii) incised or inlaid directly into the surface of the material forming the wall; and

(*b*) have legible lettering in capitals or lower case which shall have—

(i) a thickness of stroke of not less than 1·5 mm and a height of not less than 8 mm as shown in Figure 55.11; and

(ii) a colour clearly contrasting with the background.

FIGURE 55.11

Exception for certain small lifts

(3) It shall not be necessary to install a warning sign for a small lift such as a dumb-waiter that is intended for the transport of goods only.

EMERGENCY LIGHTING

Location

Sub-reg. (1) amended by S.R. No. 98/1986 reg. 108 (1).

55.12 (1) A system of emergency lighting complying with the provisions of this Regulation shall be installed in the following locations:

Para. (a) amended by S.R. No. 98/1986 reg. 108 (2) (3).

(*a*) In a Class II, III or IXa building in which any *stairway* is *required* to be fire isolated—

(i) in every *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway*;

(ii) in every corridor, hallway or the like having a length of more than 5·5 m from the entrance doorway of any *sole-occupancy unit* to the nearest doorway opening directly—

(A) into a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* ; or

(B) to an external *stairway* serving in lieu of a *fire-isolated stairway* pursuant to Regulation 24.11; or

(C) onto an external access balcony leading to a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway*; or

(D) onto a *street* or *open space*; and.

(iii) in every corridor, hallway or the like in a Class IXa building in *ward areas* and patient treatment areas.

Para. (b) amended by S.R. Nos 438/1984 reg. 59 (1), 98/1986 reg 108 (4).

(*b*) In every Class V, VI, VII, VIII or IXb building in which any *stairway* is *required* to be fire isolated—

(i) in every *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway*; and

(ii) in every corridor, hallway or path of travel within the building having a length of more than 5·5 m from the entrance doorway of a Class IV building incorporated therein to the nearest doorway opening directly—

(A) into a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway* ; or

(B) to an external *stairway* serving in lieu of a *fire-isolated stairway* pursuant to Regulation 24.11; or

(C) onto an external access balcony leading to a *fire-isolated stairway, fire-isolated ramp* or *fire-isolated passageway*; or

(D) onto a *street* or *open space.*

Para. (c) amended by S.R. Nos 438/1984 reg. 59 (2), 98/1986 reg. 108 (5).

(*c*) In every *storey* in a Class V, VI, VII, VIII or IXb building where—

(i) the *floor area* of that *storey*, calculated according to the provisions of Regulation 24.28, is more than 300 m^2; or

(ii) any point on the floor of that *storey* is more than 18 m from the nearest doorway opening directly to a *stairway*, ramp, passageway, *street* or *open space*; or

(iii) egress from that *storey* involves—

(A) a vertical rise within the building of more than 1·5 m; or

(B) any vertical rise and the *storey* concerned is not equipped with sufficient means of admitting light; or

(iv) that *storey* provides a path of travel from any other *storey* required by sub-paragraphs (i), (ii), and (iii) to have emergency lighting.

Special locations

(2) The *building surveyor* may require the installation of additional emergency lighting in any *storey* of any of the buildings referred to in sub-regulation (1) where he considers that illumination sufficient for safe egress will not be available under conditions of emergency.

Measurement of distance

(3) The distances, other than vertical rise referred to in sub-regulation (1) shall be the shortest measurement along the corridor or other path of travel whether by straight lines, curves or a combination of both.

Installation

(4) Every system of emergency lighting required by this Regulation shall be installed in accordance with the relevant provisions of AS 2293 Part 1.

AISLE LIGHTS IN THEATRES

Reg. 55.13 inserted by S.R. No. 98/1986 reg. 109.

55.13 In every Class IXb building where in any part of the auditorium the general lighting is dimmed or extinguished during public occupation and the floor is stepped or is inclined at a slope greater than 1 in 12, aisle lights which illuminate the full length of aisles and the tread of each step therein shall be provided.

SANITARY PLUMBING IN UNSEWERED AREAS

55.14 In unsewered areas, all sanitary plumbing fixtures shall be connected to waste pipes and drains of *approved* material so as to discharge in a manner which shall not cause any nuisance, danger to health, detriment, or pollution to any river, stream, watercourse, lake, lagoon, swamp or any other land in a manner approved by *council.*

GROUP VIII—ANCILLARY PROVISIONS

PART 56—REPAIR, ALTERATION, RESTORATION AND RE-ERECTION

REPAIRS TO EXTERNAL WALLS

56.1 Where for the repair of an *external wall* more than half its area must be renewed (whether because this part has fallen or must be taken down for any reason), the whole wall shall be brought into conformity with these Regulations.

ALTERATIONS TO EXISTING BUILDINGS

Application of Regulation

56.2 (1) This Regulation shall apply wherever structural *alterations* are proposed for an existing building.

Council may require entire building to conform in some cases

(2) The *council* may require that the entire building shall be brought into partial or complete conformity with these Regulations if— Sub-reg. (2) amended by S.R. No. 438/1984 reg. 60.

(*a*) the proposed *alterations*, together with any other structural *alterations* completed or approved within the previous 3 years, represent more than half the total volume of the original building, measured over the roof and the *external walls;* or

(*b*) it considers that the safety, health and amenity of persons accommodated in or resorting to the building and the risk of spread of fire to adjacent buildings is substantially adversely affected. Para. (b) substituted by S.R. No. 98/1986 reg. 110, amended by S.R. No. 187/1986 reg. 13.

Alterations associated with a change of use

(3) If structural *alterations* to a building are associated with change of use from that of one class to that of another, Regulation 6.6 shall apply. Sub-reg. (4) re-numbered sub-reg. (3) by S.R. No. 75/1984 reg. 29.

REPAIRS

56.3 Any repair in order to reconstruct or renew any part of an existing building for the purposes of its maintenance and using similar materials to those being replaced may be undertaken without the need to apply for *building approval* pursuant to Part 8 but shall not be undertaken in such a manner as to make the building structurally unsound.

RE-ERECTION OF BUILDINGS

56.4 Subject to these Regulations, every existing Class I and Xa building removed from one *allotment* for re-erection on another *allotment* shall when re-erected, comply with Parts 11, 16, 44, 46 and 47, Regulation 55.7 and Group VI.

HISTORIC AND SPECIAL BUILDINGS

Reg. 56.5 amended by S.R. Nos 438/1984 reg. 61, 98/1986 reg. 111.

56.5 Where it is proposed to *alter* any existing building which—

(*a*) is on the register of historic buildings under the *Historic Buildings Act* 1981; or

(*b*) in the opinion of the *council* is of special interest by nature of its design, appearance, location, use or environment—

the *council* may permit such *alterations* in similar style to the existing building if they comply with Parts 16–27, 44, and 47 and will not make the building structurally unsound.

GROUP VIII—ANCILLARY PROVISIONS

PART 57—DANGEROUS OR RUINOUS BUILDINGS

Part 57 Heading substituted by S.R. No. 143/1988 reg. 33.

PROCEDURE FOR DANGEROUS BUILDINGS

Initial action by building surveyor

57.1 (1) If after inspection it appears to the *building surveyor* that any building is dangerous the *building surveyor* may serve a notice on the *owner* requiring the *owner* to do all or any of the following:

Reg. 57.1 substituted by S.R. No. 143/1988 reg. 34.

(*a*) Erect a proper hoarding or fence or props for the protection of the public and of the occupiers;

(*b*) Properly shore up the building;

(*c*) Properly shore up any *adjoining property* as necessary in the opinion of the *building surveyor*.

Alternative

(2) If it is impractical to serve a notice on the *owner* as provided in sub-regulation (1), or the *owner* fails or refuses to carry out the necessary work within the time specified by the notice, the *building surveyor* may cause the necessary work to be carried out.

DANGEROUS BUILDINGS

Notice to owner

57.2 (1) Despite Regulation 57.1, the *building surveyor* may serve a notice on the *owner* of a dangerous building, requiring the *owner* within a time to be specified in such notice to carry out any work necessary to ensure that the building is—

Reg. 57.2 substituted by S.R. No. 143/1988 reg. 35.

(*a*) made secure; or

(*b*) repaired; or

(*c*) demolished; or

(*d*) made secure and repaired; or

(*e*) made secure and demolished.

Alternative—building surveyor action

(2) If it is impractical to serve notice on the *owner* as provided in sub-regulation (1), or the *owner* fails or refuses to carry out the necessary

work within the time specified by the notice, the *building surveyor* may cause the necessary work to be carried out.

RUINOUS BUILDINGS

Report and recommendation to council

Reg. 57.3 inserted by S.R. No. 143/1988 reg. 36.

57.3 (1) If after inspection it appears to the *building surveyor* that any building is in a ruinous state, the *building surveyor* may make a report and recommendation to *council.*

Notice to owner

(2) On receipt of a report and recommendation by the *building surveyor,* the *council* must, if in its opinion the circumstances so warrant, serve a notice on the *owner* of the building, requiring the *owner* within a time to be specified in the notice to carry out the work set out in a report under sub-regulation (1) or any other work as may be approved by the *council.*

Alternative—council action

(3) If it is impractical to serve notice on the *owner* as provided in sub-regulation (2), or the *owner* fails or refuses to carry out the necessary work within the time specified by the notice, the *council* may cause the necessary work to be carried out.

COSTS TO OWNER

Reg. 57.4 inserted by S.R. No. 143/1988 reg. 36.

57.4 Any work which is required by this Part to be carried out, whether by the *owner* or as caused to be carried out by the *building surveyor* or *council,* must be carried out at the expense of the *owner.*

GROUP VIII—ANCILLARY PROVISIONS

PART 58—TEMPORARY AND SPECIAL STRUCTURES

Heading and Part 58 inserted by S.R. No. 438/1984 reg. 62.

ADOPTION OF PART BY BY-LAW

58.1 The *council* may make a by-law applying to its municipal district or any part thereof adopting the provisions of this Part.

INTERPRETATION

58.2 For the purpose of this Part a *temporary dwelling* means a building used for residential purposes prior to and during the *construction* of a Class Ia building.

NON-COMPLIANCE WITH THESE REGULATIONS

58.3 Subject to this Part a *temporary dwelling* shall not be required to comply with the provisions of these Regulations.

COUNCIL PERMISSION

58.4 No *temporary dwelling* shall be *constructed*—

(*a*) without the written permission of the *council*; and

(*b*) without complying with conditions imposed by the *council*.

NATURE OF CONDITIONS

58.5 The conditions referred to in Regulation 58.4 (*b*)—

(*a*) shall limit the time that a *temporary dwelling* may remain in place to not more than 4 years;

(*b*) may relate to the progress of the *construction* of the Class Ia building; and

(*c*) may relate to siting and the facilities to be provided.

REVOCATION OF PERMISSION

58.6 A *council* may at any time revoke the permission given pursuant to Regulation 58.4.

EXPIRY OF TIME LIMIT

58.7 Upon expiry of the time limit imposed by the *council* or upon revocation of permission pursuant to Regulation 58.6 the *temporary dwelling* shall be demolished unless an application for *building approval* has been lodged to retain the building.

GROUP VIII—ANCILLARY PROVISIONS

PART 59—MAINTENANCE OF FIRE AND OTHER SAFETY MEASURES

APPLICATION

59.1 This Part shall apply to any Class II, III, V, VI, VII, VIII or IX building that has been— Reg. 59.1 amended by S.R. No. 98/1986 reg. 112.

(*a*) *constructed* in accordance with these Regulations; and

(*b*) required to comply with these Regulations in any part of any existing building that has been *altered.*

MAINTENANCE REQUIREMENTS

59.2 Every item required by these Regulations and listed in Column 1 of Table 59.2 shall be maintained in accordance with the relevant Australian Standards as listed in Column 2 of that Table.

TABLE 59.2

Item to be maintained (1)	*Australian Standard* (2)
Portable fire extinguisher	AS 1851 Part 1
Fire hose reel	AS 1851 Part 2
Sprinkler system	AS 1851 Part 3
Exit sign	AS 2293 Part 2
Emergency lighting	AS 2293 Part 2

MAINTENANCE OF SAFETY EQUIPMENT AND FITTINGS

59.3 All safety equipment and fittings *required* under the *Act* or Regulations— S.R. 263/1990.

(*a*) must be maintained in a state which enables the equipment or fitting to fulfil its purpose; and

(*b*) must not be removed from its *approved* location except—

(i) for the purpose of maintenance; or

(ii) in accordance with these Regulations.

GROUP VIII—ANCILLARY PROVISIONS

S.R. 263/1990.

PART 60—BUILDING INFRINGEMENTS

APPLICATION

60.1 This Part applies to Class II, III, IV, V, VI, VII, VIII or IX buildings whenever *constructed.*

AUTHORISED OFFICERS

60.2 The office or class of offices for the purposes of the definition of *authorised officer* in section 178A of the *Act* is the office of *building surveyor.*

INFRINGEMENT NOTICES

60.3 (1) An infringement notice must contain in addition to the requirements of section 178A (3) of the *Act*—

(*a*) the name, business address and signature of the *authorised officer*;

(*b*) the name of the *owner* or occupier on whom the notice is served;

(*c*) the address of, or information required to identify, the building where the offence occurred;

(*d*) the date of issue of the infringement notice;

(*e*) the time for payment of the penalty;

(*f*) a statement to the effect that if the penalty is paid within the specified time the matter will not be brought to court;

(*g*) the required manner and place of payment of the penalty.

(2) An infringement notice must be in the form of Form 12.

PAYMENT OF PENALTY

60.4 Payment of a penalty must be made to the *council*—

(*a*) by post; or

(*b*) at the municipal offices during office hours.

OFFENCES AND PENALTIES

60.5 (1) The prescribed offences for the purposes of section 178A of the *Act* are offences against the Regulations listed in columns 2 and 3 of Table 60.5.

(2) The penalty for each offence is listed in column 4 of Table 60.5.

TABLE 60.5

Column 1 *Item*	*Column* 2 *Offence Against Regulations*	*Column* 3 *Offence Against UBR**	*Column* 4 *Penalty Units*
	Storage of Materials		
1	53.23	3702	10
	Means of Egress		
2	24.29.2	2724	5
	Maintenance of Equipment		
3	59.3	3210 (*c*)	5
	Doors		
4	21.1, 21.3	1407, 1407A	2
	22.9	2806	
	Exit Signs and Emergency Lighting		
5	24.29, 55.12	1133A, 2726	1

* Uniform Building Regulations 1974 S.R. No. 348/73 as amended by S.R. Nos 424/74, 481/74, 107/75, 113/76, 156/76, 226/76, 303/77, 363/78, 198/80, 285/81, 300/81, 392/81, 434/81, 179/82, 223/82, 228/82 and 224/83.

GROUP VIII—ANCILLARY PROVISIONS

S.R. 263/1990.

PART 61—CLOSURE OF ASSEMBLY BUILDINGS

AUTHORISED OFFICER

61.1 The office or class of offices for the purposes of the definition of *authorised officer* in section 142A of the *Act* is the office of *building surveyor*.

PRESCRIBED FORM

61.2 An order prohibiting the occupation or use of an *assembly building* under section 142A of the *Act* must be in the form of Form 13.

SCHEDULE 1

Regulation 21·4

FIRE WINDOWS

SCOPE

1. This Schedule relates to the construction and installation of windows of wired glass, in framing of galvanized steel, in window openings required by Part 22 to be protected by one-hour fire windows.

DIMENSIONS

2. (1) An opening in which a fire window referred to in this Schedule is to be installed shall not exceed—

(*a*) 5·2 m² in area; and

(*b*) 2·95 m in height or width—

the measurements being taken between the jambs and between the sill and the lintel of the opening.

(2) The overall dimensions of a window, measured over the outer frame but not any part of an anchoring lug, shall be 12 mm less in both width and height than the intended inside dimensions of the opening in which it is to be installed.

MAKE-UP OF WINDOWS

3. Each window shall comprise principally—

(*a*) an outer frame, and, in the case of a window having an openable sash—

(i) a moveable frame as part of that sash; and

(ii) a supplementary frame, housing the moveable frame and held to a fixed position within the window;

(*b*) glazing bars, if required under the limitations of this Schedule on sizes of panes of glass, or to support a supplementary frame;

(*c*) glazing beads; and

(*d*) a pane or panes of glass—

(i) cut to size and shape;

(ii) located within the frame or frames, or between the frame and any glazing bars;

(iii) held (by way of glazing compound) by the glazing beads; and

(iv) sealed at all edges by glazing compound.

OPENABLE SASHES

4. An openable sash may be incorporated in a window if—

(*a*) the sash is the only one in the window;

(*b*) it is horizontally pivoted 76 mm above the level of its centre;

(*c*) it is designed to close under its own weight, unassisted by any other agency; and

(*d*) the overall dimensions of its frame do not exceed—

(i) 1 m in width; and

(ii) 1·305 m in height.

SCHEDULE 1—*continued*

MAKE-UP OF OPENABLE SASHES

5. An openable sash shall include—
   (*a*) the moveable frame together with its particular parts of the pivots;
   (*b*) glazing bars, if required under the limitations of this Schedule on sizes of panes of glass;
   (*c*) glazing beads;
   (*d*) the particular parts of a latching mechanism and a hold-open device, each in accordance with this Schedule, that are appropriate to the moveable frame; and
   (*e*) a pane or panes of glass—
      (i) cut to size and shape;
      (ii) located within the frame, or between the frame and any glazing bars;
      (iii) held (by way of glazing compound) by the glazing beads; and
      (iv) sealed at all edges by glazing compound.

MAKE-UP OF SUPPLEMENTARY FRAMES

6. A supplementary frame shall consist of the frame together with its particular parts of the pivots and other mechanical devices.

MAXIMUM CLEAR SPANS OF PANES

7. Neither the width nor the height of a pane shall exceed—
   (*a*) 610 mm, if the pane is in an openable sash; or
   (*b*) 760 mm, otherwise—

the measurements being between the nearer edges of the supporting steel members.

GLASS

8. The glass in the panes shall—
   (*a*) have a thickness of 6 mm;
   (*b*) weigh not less than 17 kg/m^2; and
   (*c*) be reinforced, near the centre of its thickness, with steel wire not thinner than 0·45 mm and in one of the following forms:
      (i) A square mesh, in which the wires are not more than 20 mm apart and are electrically welded at each intersection (the glass then being commonly known as "Georgian Wired").
      (ii) A hexagonal mesh, in which the average width of hexagon is not more than 23 mm and the wires are intertwined in one direction at their intersections (the glass then being commonly known as "Hexagonal Wired").
      (iii) A diamond mesh, in which the sides of the diamonds are not longer than 20 mm and the wires are electrically welded at each intersection (the glass then being commonly known as "Diamond Wired").

STEEL

9. Frames, glazing bars, and glazing beads shall be of approximately uniform thickness and of solid rolled mild steel in conformity with the following:
   (*a*) In the outer frames, the steel shall be of modified T cross-section in which—
      (i) the top of the T is off-centre by 4·7 mm;

SCHEDULE 1—*continued*

(ii) the bottom of the T is extended to one side, to form a flange not less than 11 mm wide, parallel to the top of the T and off-centre in the same direction;

(iii) the T has a height of 34·9 mm;

(iv) the top of the T has a width of 33·3 mm; and

(v) the area of the T is such that the steel section has a nominal weight of not less than 1·9 kg/m.

(*b*) In moveable frames and supplementary frames, above the pivot points in each case, the steel shall be of modified L cross-section in which—

(i) the top of the L is extended to each side, to form a flange 17·4 mm wide, parallel to the bottom of the L and widening the L by 9·5 mm;

(ii) the L has a height of 31·7 mm;

(iii) the bottom of the L has a width of 23·8 mm; and

(iv) the area of the L is such that the steel section has a nominal weight of not less than 2·3 kg/m;

(*c*) In moveable frames and supplementary frames, below the pivot points in each case, the steel shall be of modified asymmetrical channel cross-section in which—

(i) the top flange of the channel is 23·8 mm wide and the bottom flange not less than 7·9 mm wide;

(ii) a secondary top flange extends 9·5 mm backwards from the back of the channel, 4·7 mm below the main top flange;

(iii) the channel has a height of 31·7 mm; and

(iv) the area of the channel is such that the steel section has a nominal weight of not less than 2·3 kg/m;

(*d*) In glazing bars that are not in openable sashes, the steel shall be of T cross-section in which—

(i) the T has a height of 34·9 mm;

(ii) the top of the T has a width of 22 mm; and

(iii) the area of the T is such that the steel section has a nominal weight of not less than 1·6 kg/m;

(*e*) In glazing bars that are in openable sashes, the steel shall be of T cross-section in which—

(i) the T has a height of 26·9 mm;

(ii) the top of the T has a width of 22 mm; and

(iii) the area of the T is such that the steel section has a nominal weight of not less than 1·1 kg/m.

(*f*) In glazing beads, the steel shall be of 9·5 mm square cross-section.

FABRICATION OF STEEL

10. The steel shall be fabricated as follows:

(*a*) In all frames—

(i) the steel members shall be mitred and flash-butt-welded at all corners;

(ii) glazing bars, if any, shall be tenoned into mortises in the frame, the ends of the tenons being extended through the frame members and expanded and secured by pressure-weld riveting; and

SCHEDULE 1—*continued*

(iii) all holes to be punched, drilled, or drilled and countersunk, but not to be tapped, shall be run through.

(*b*) In moveable frames and supplementary frames:

(i) the upper and the lower side members shall be flash-butt-welded at each pivot point, the meeting faces of the moveable and the supplementary frames being so aligned as to ensure their close fitting when in service; and

(ii) the frames shall be notched to receive the pivots.

(*c*) Where glazing bars intersect—

(i) one glazing bar shall be passed through a deformed mortise in the other; and

(ii) the two bars shall be pressed together to reform the mortise and form a joint that tightly locks.

(*d*) Glazing beads shall be drilled and countersunk for their fixing screws.

GALVANIZING OF STEEL

11. All steel shall be galvanized by hot-dipping after fabrication.

PIVOTS

12. Each pivot shall consist of two brass cups, 3 mm thick, and one working inside the other—

(*a*) the outer cup having an inside diameter of not more than 44·5 mm and an inside depth of not less than 9·5 mm and being riveted to the supplementary frame; and

(*b*) the inner cup having an inside depth of approximately 12·5 mm, and being riveted to the moveable frame—

the rivets being of cadmium-plated steel and not fewer than two to a cup.

FIXING OF SUPPLEMENTARY FRAMES

13. Supplementary frames shall be fixed, within the window, to—

(*a*) a glazing bar; or

(*b*) a member of the outer frame—

by M6 galvanized or cadmium-plated screws along each edge, at points not more than 75 mm from a corner and elsewhere not more than 230 mm apart.

FIXING OF GLAZING BEADS

14. Glazing beads shall be fixed to frames and glazing bars by countersunk M5 galvanized or cadmium-plated screws, at points not more than 100 mm from an end and elsewhere not more than 400 mm apart.

GLAZING COMPOUND

15. All glazing compound shall be a non-setting mastic that does not harden except at a surface exposed to the air.

SCHEDULE 1—*continued*

TOLERANCES ON SIZES OF PANES

16. After selvage is removed, each pane shall fit the rebates of the supporting steel with a clearance of—

(*a*) not more than 2·5 mm; and

(*b*) not less than 1·5 mm—

at every point on its perimeter.

LATCHING MECHANISM

17. The latching mechanism shall—

(*a*) be located at the top of the openable sash concerned;

(*b*) incorporate latchbolts located not more than 150 mm from each side thereof;

(*c*) have keeps that will engage the latchbolts by not less than 9·5 mm;

(*d*) be self-latching in a manner that will ensure it will remain fully latched if there is any mechanical failure at any time; and

(*e*) be of stainless steel or nickel-silver.

HOLD-OPEN DEVICE

18. The hold-open device—

(*a*) shall incorporate a thermal-release unit—

(i) actuated by fusing, shattering, or burning; and

(ii) capable of meeting the relevant requirements of AS 1905;

(*b*) shall on operation of that unit allow the openable sash to close itself;

(*c*) shall not provide for the openable sash to be held at less than 30 degrees off vertical;

(*d*) shall be located in a position near the top of the sash; and

(*e*) shall not be accompanied by any other device that can be made to hold the sash open.

ANCHORING OF OUTER FRAME

19. The outer frame shall be anchored within its opening in the wall by either Method A as set out in clause 20 or Method B as set out in clause 21, the points of anchoring being—

(*a*) along each edge of the frame; and

(*b*) not more than 175 mm from a corner thereof and elsewhere not more than 610 mm apart, but not more than 100 mm on one or other side of a glazing bar that supports the supplementary frame around an openable sash.

METHOD A

20. The construction around the opening shall be—

(*a*) drilled; and

(*b*) fitted with all-metal masonry anchors, but not incorporating any aluminium, lead, or tin—

and the frame shall be screwed towards the anchors, using M6 galvanized or cadmium-plated screws, until the anchors and frame are all firmly locked.

SCHEDULE 1—*continued*

METHOD B

21. Lugs of—

(*a*) galvanized 25 mm × 6 mm steel flat not less than 225 mm long and bent sideways by 20 mm at one end for screwing to the frame; or

(*b*) galvanized deformed 16 mm reinforcing bar, not less than 230 mm long and drilled endwise at one end and tapped for screwing to the frame—

shall be screwed thereto, using M8 galvanized or cadmium-plated screws, and built into the construction around the opening.

MORTAR PACKING AROUND OUTER FRAME

22. The whole of the space between the outer frame and the construction around its perimeter shall be packed with cement or composition mortar.

SCHEDULE 2

Regulation 21 . 4

HOLLOW GLASS-BLOCK WINDOW PANELS

SCOPE

1. This Schedule relates to the construction and installation of window panels of hollow glass blocks in window openings required by Part 22 to be protected by one-hour fire windows.

DIMENSIONS

2. An opening in which a glass-block window panel referred to in this Schedule is to be installed shall not exceed—

(*a*) 5·2 m^2 in area;

(*b*) 2·415 m in height; and

(*c*) 2·375 m in width.

FORM OF WINDOW PANEL

3. Each window panel shall—

(*a*) be constructed of glass blocks, jointing mortar, and joint reinforcement; and

(*b*) have an expansion joint, across its top and down its sides, in recesses in the wall at these positions.

GLASS BLOCKS

4. The hollow glass blocks shall—

(*a*) not support any load additional to their own weight;

(*b*) be not more than 197 mm wide and 197 mm high;

(*c*) be not less than 98 mm thick;

(*d*) have face shells of which the average thickness is not less than 6·3 mm;

(*e*) have a sanded finish, to provide a key for mortar, on each of the side and top and bottom faces; and

(*f*) be manufactured by casting two half-blocks and fusing these together to form a unit—

(i) seamless at the back and front; and

(ii) partially evacuated of air.

JOINTING MORTAR

5. The jointing mortar shall be a mortar obtained by mixing portland cement, hydrated lime, and well graded clean sand in the proportions of—

(*a*) 1 m^3 of cement weighing not less than 1505 kg;

(*b*) 1 m^3 of hydrated lime weighing not less than 560 kg; and

(*c*) 4 m^3 of sand—

no part of the mixture containing any ingredient detrimental to the strength or setting of the whole.

JOINT REINFORCEMENT

6. The joint reinforcement shall be strips of galvanized steel-wire mesh—

(*a*) 63 mm wide; and

SCHEDULE 2—*continued*

(*b*) of wires not thinner than 2 mm and not more than 13 mm apart, both parallel and perpendicular to the length of the strip.

EXPANSION-JOINT INFILLING

7. All expansion-joint infilling shall be—

(*a*) a non-hardening material incapable of resisting sustained loading; and

(*b*) 25 mm thick when ready to be placed in position.

GLAZING COMPOUND FOR EXPANSION JOINTS

8. All glazing compound for expansion joints shall be a non-setting mastic that does not harden except at a surface exposed to the air.

RECESSES IN WALL

9. The jambs and the lintel of the opening for the window panel shall be recessed—

(*a*) 57 mm deep; and

(*b*) to a width of 22 mm more than the thickness of the glass bricks—

to accept the sides and top of the panel, the expansion-joint filling, and the asbestos-rope edge-sealing concerned.

COATING OF SILL

10. Before the first course of glass blocks is laid, the sill concerned shall be coated with a bituminous emulsion, or with a like material.

CONSTRUCTION OF WINDOW PANEL

11. The construction of the window panel shall be in conformity with the following:

(*a*) Bedding joints, including that of the first course, shall be of jointing mortar 6 mm thick.

(*b*) Perpends shall be 6 mm wide and filled with jointing mortar.

(*c*) Every third bedding joint shall incorporate a strip of joint reinforcement—

(i) extending the whole length of the joint; and

(ii) secured lengthwise at each end to the adjacent part of the wall, by either—

(A) being carried not less than 230 mm into that part, at the same or a slightly higher level; or

(B) being spliced by an overlap of 230 mm, in the window panel, to a strip of joint reinforcement so carried into that part.

(*d*) The top and the two edges of the panel shall be finished short of the surrounding construction by 25 mm, except for the joint reinforcement.

(*e*) The gaps so left between the panel and the parts of the wall in which it stands shall be—

(i) filled with expansion-joint infilling;

(ii) caulked at each edge with 12 mm asbestos rope; and

(iii) sealed outside the rope with glazing compound.

Schedule 3—5 * * * * * *

SCHEDULE 6

Regulation 6.1 (1) (*h*)

BUILDINGS AND SPACES OF ABNORMAL FIRE HAZARD

1. Any building or space within a building that is used for—

(a) the storage of goods only, or the display of goods for sale by wholesale; or

(b) a handicraft; or

(c) a process in or incidental to the making, assembling, altering, repairing, renovating, preparing, ornamenting, finishing, cleaning, washing, or adapting of goods; or

(d) a process in a laboratory—

and in which a principal material concerned is one of the following:

(i) Bitumen, tar, or any product thereof, including—

(A) asphalt;

(B) caulking and sealing compounds; and

(C) surfacing materials;

(ii) Cork;

(iii) Enamel, lacquer, paint, or varnish;

(iv) Explosives, fireworks, or matches;

(v) Fibre or any fibrous product, including—

(A) bristles, cloth, cord, felt, fur, raw fibres, straw, and thread; and

(B) made-up products of cotton, flax, hemp, jute, silk, synthetic fibres, or wool, including bedding, carpets, and upholstery;

(vi) Flammable gas or flammable liquid, including—

(A) liquefied petroleum gas;

(B) natural gas and coal gas; and

(C) hydrogen;

(vii) Fodder or any foodstuff—

(A) including grain and kernels (whether as cereal or crushed and milled); but

(B) excluding fresh food such as fish, fruit, meat and vegetables;

(viii) Gum, polish, resin, or wax, or any product thereof, including linoleum, oilcloth, and tarpaulin;

(ix) Inorganic chemical such as—

(A) calcium carbide, potassium nitrate, and sodium nitrate;

(B) metallic sodium and phosphorus; and

(C) finely powdered metal;

(x) Leather, skin, or any product thereof, including boots, shoes, furs, and clothing;

(xi) Oil (animal, mineral, or vegetable), including animal fats and refined oils, or any product thereof;

(xii) Organic chemical comprising—

(A) alcohol or any alcoholic liquor;

(B) any industrial solvent;

(C) any synthetic resin;

(D) any cellulose product;

(E) any peroxide; or

(F) any like material;

SCHEDULE 6—*continued*

(xiii) Paper or any paper product, including—

(A) books, cardboard and fibre containers; and

(B) newsprint.

(xiv) Plastic or any plastic product, including cellulose acetate and nitro-cellulose (such as celluloid or pyroxlyn);

(xv) Rubber (natural or synthetic) or any product thereof, including motor tyres, foamed rubber, and garments; or

(xvi) Timber or any timber product, including fibreboard, particleboard, and plywood.

2. Any building or space within a building in which, in the opinion of the building surveyor after consultation with the chief officer the potential severity of combustion—

(a) that may occur (if there is an outbreak of fire) in stored or displayed goods or in connection with a handicraft or process described in clause 1; or

(b) that may arise (if there is an outbreak of fire) from the storage in the space of materials in connection with such a handicraft or process—

equals or exceeds that for a storage, display, handicraft, or process of clause 1.

Schedule 7 * * * * * *

Sch. 7 amended by S.R. No. 438/1984 reg. 63 (1)-(4), revoked by S.R. No. 143/1988 reg. 37.

SCHEDULE 8

Regulation 16.19 (2)

SPECIAL FIRE TESTS

SCOPE

1. This Schedule relates to the tests and conditions relating to members and assemblies of members referred to in Regulation 16.19 (2).

TESTS REQUIRED

Cl. 2 amended by S.R. No. 220/1989 reg. 15 (3) (a).

2. Tests shall be carried out in accordance with the *Standard Fire Test.*

JOINTS, PERFORMANCES AND RECESSES

3. Test specimens shall incorporate—

(*a*) all types of joints; and

(*b*) all types of perforations, recesses or the like for pipes, light switches and other fittings—

which are proposed to be used for the member or assembly of members in the building.

EXCEPTIONS

4. The conditions of clause 3 may be waived where joints, perforations, recesses or the like that are larger than those in the proposed application have already been tested in the particular form of construction concerned and found to comply with the conditions of test.

SMALLER SPECIMEN PERMITTED

Cl. 5 amended by S.R. No. 220/1989 reg. 15 (3) (b).

5. For the purposes of clause 2, if in the opinion of the building surveyor after taking into account the opinion of the testing authority, the proposed construction in any building is such that a specimen not less than 900 mm × 900 mm will adequately represent that construction, the laboratory may carry out the test at pilot scale, but the results of that test shall not apply to construction larger than limits defined by the laboratory conducting the pilot examination.

SCHEDULE 9

Regulations 46.9 and 53.5

ACCESS AND FACILITIES FOR DISABLED PERSONS

SCOPE

1. (1) This Schedule contains design requirements relating to—

(*a*) access for disabled persons to and within buildings; and

(*b*) toilet facilities for disabled persons.

(2) Except where otherwise provided, the dimensions prescribed in this Schedule, including those in any Figure or Table shall not be reduced by any stairway, door-stop, architrave, skirting, kerb, handrail or other fixture.

PATHWAYS AND INTERNAL RAMPS

2. (1) Every pathway and every internal ramp forming part of access for disabled persons shall—

(*a*) in the case of a pathway, have a width at every part of not less than 950 mm;

(*b*) in the case of an internal ramp, have a width at every part of not less than 1 m;

(*c*) in no part have a gradient steeper than 1 in 12;

(*d*) if it has a gradient at any part steeper than 1 in 33, be provided with rest areas not less than 1·2 m in length at intervals of not more than 18 m, measured clear of any rest area, along the length of that part;

(*e*) if it has a gradient at any part steeper than 1 in 20—

(i) have a width of not less than 1 m;

(ii) be provided with rest areas not less than 1·2 m in length at intervals of not more than 9 m, measured clear of any rest areas; and

(iii) be provided on each side thereof with a handrail, which shall be attached to an adjacent wall or a balustrade—

along the length of that part; and

(*f*) be provided with a rest area, not less than 1·2 m in length, at each change of direction of 45 degrees or more.

(2) The surface of any such pathway and internal ramp shall not slope from the horizontal more than 1 in 100 in cross-section.

STEP RAMPS

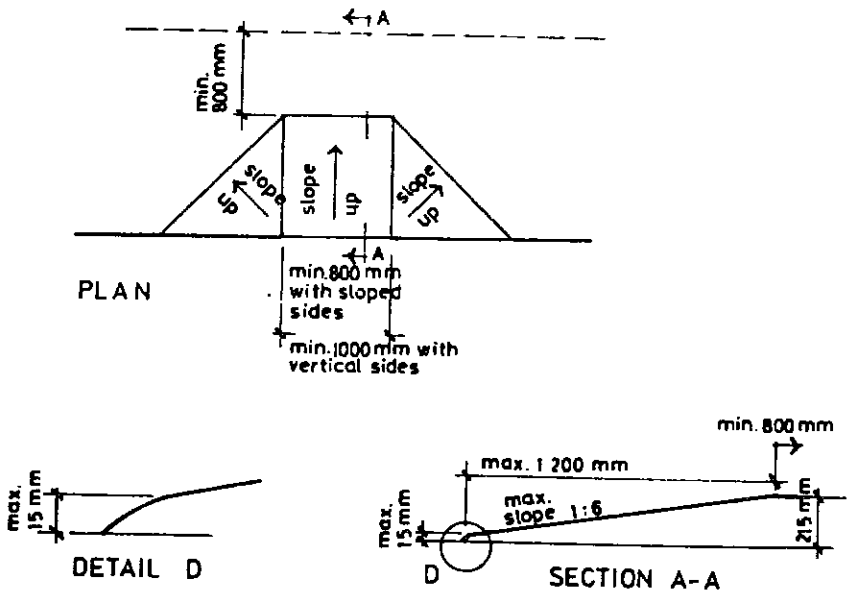
3. (1) Where—

(*a*) the entrance floor or any other floor is not more than 215 mm above or below the adjacent street or finished ground level; or

SCHEDULE 9—*continued*

(*b*) there is a change of level of not more than 215 mm within a building—

a step ramp, constructed in accordance with Figure 3.1 may be provided in place of a pathway or an internal ramp.



STEP RAMP

Figure 3.1

(2) The ramp shall begin at a level not more than 15 mm above the adjacent street or finished ground or floor level (as the case requires).

ENTRANCES TO BUILDINGS

Cl. 4 substituted by S.R. No. 98/1986 reg. 113.

4. Every building to which this Schedule applies shall contain at least one doorway at the entrance floor which provides access for disabled persons into that building and which is also intended for use by the general public seeking access to that building.

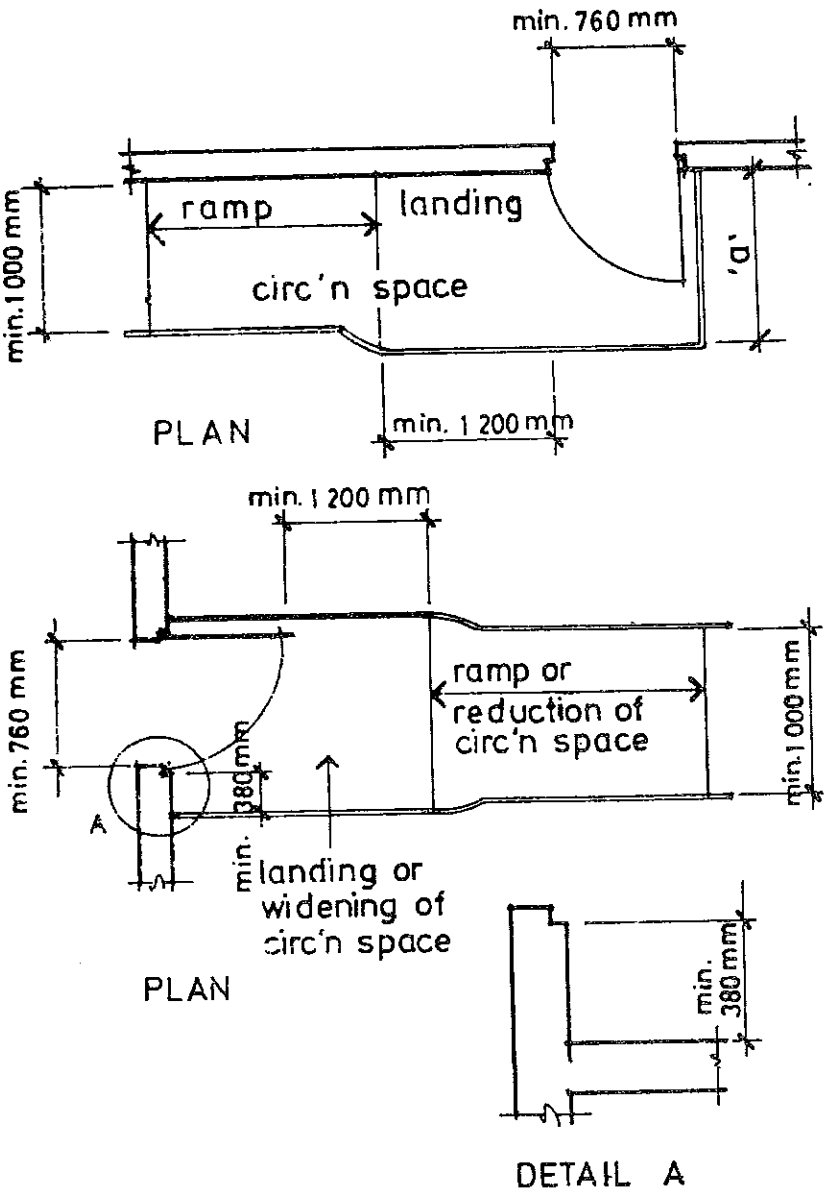
DOORS AND DOORWAYS

5. Doorways and doors forming part of access for disabled persons shall comply with the following requirements:

(*a*) Every doorway shall have an opening of not less than 760 mm.

(*b*) Where a door opens towards access for disabled persons the circulation space shall be of dimensions not less than those shown in Figures 5.1, including the note thereto.

SCHEDULE 9—*continued*



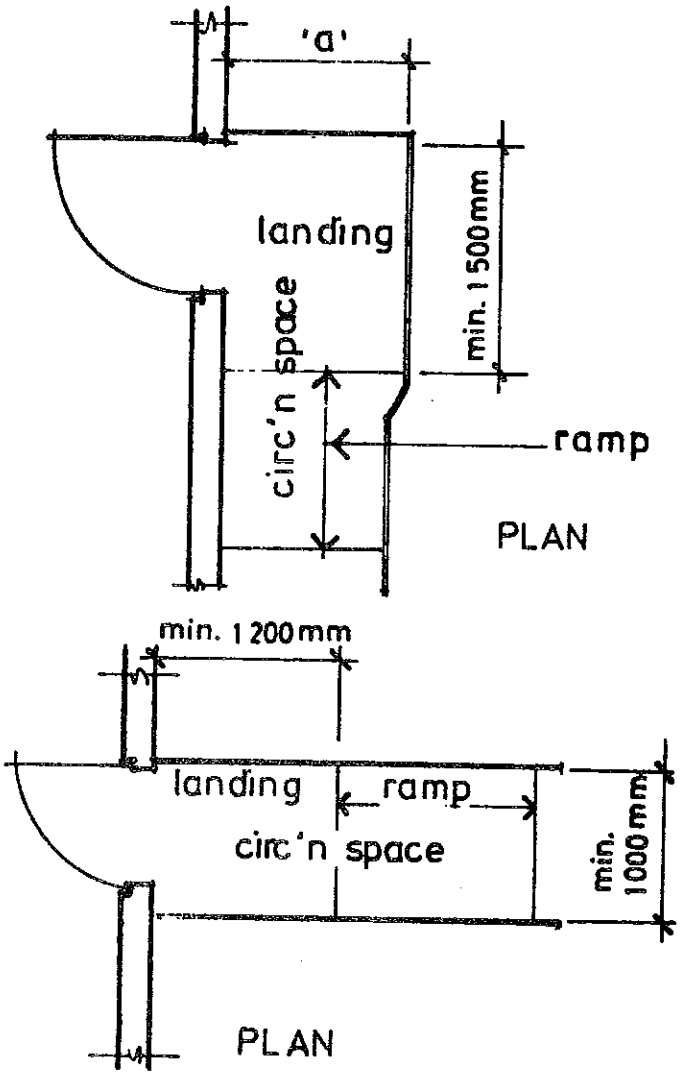
Note : "a" dependent on door opening width—see Table to Figures 6.1.

DOOR OPENING TOWARDS ACCESS FOR DISABLED PERSONS

Figures 5.1

SCHEDULE 9—*continued*

(*c*) Where a door opens other than towards access for disabled persons the circulation space shall have dimensions not less than those shown in Figures 5.2, including the note thereto.



Note: "a" dependent on door opening width—see Table to Figures 6.1.

DOOR OPENING OTHER THAN TOWARDS ACCESS FOR DISABLED PERSONS
Figures 5.2

SCHEDULE 9—*continued*

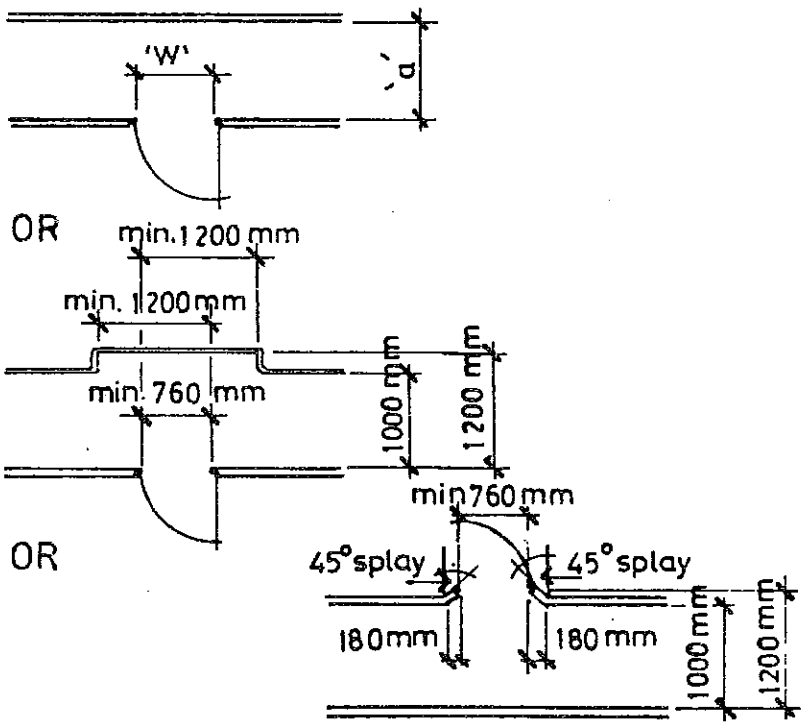
CIRCULATION SPACES

6. (1) Every circulation space other than a step ramp complying with clause 3 forming part of access for disabled persons shall have a clear width at every part of not less than 1 m.

(2) A circulation space, other than a step ramp complying with clause 3, shall not include any vertical change of level of more than 10 mm.

(3) The minimum distances between the doorways in a straight line forming part of access for disabled persons shall be the width of the widest door encroaching into the circulation space together with 1·2 m or 2 m whichever is the greater.

(4) Where access for disabled persons involves a change of direction to gain entry to an area off a circulation space the circulation space shall have dimensions not less than those shown in one of the alternatives in Figures 6.1, including the Table thereto.



SCHEDULE 9—*continued*

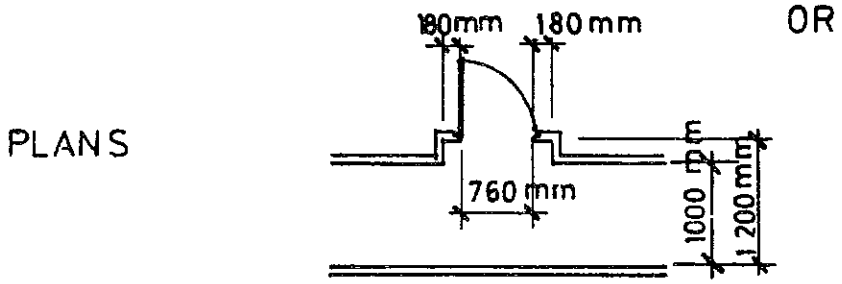
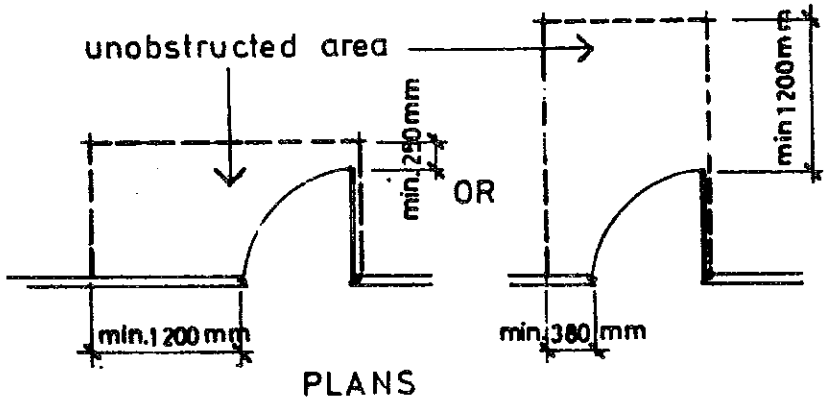


TABLE FOR FIGS. 6.1 DIMENSIONS

Clear door opening width 'W'	minimum circulation space width '*a*'
760–860 mm	1·2 m
greater than 860 mm	1 m

DOORWAYS AND CIRCULATION SPACES
Figures 6.1

(5) The unobstructed space to be provided in an area leading off a circulation space shall be in accordance with either of the alternatives in Figures 6.2.



AREAS OFF CIRCULATION SPACES
Figures 6.2

HANDRAILS

7. Every handrail required pursuant to clause 2, or on stairways serving any floor to which access for disabled persons is required by Regulation 53.5, shall be—

(*a*) not less than 865 mm nor more than 900 mm above the pathway or internal ramp, landing or nosing of the stairway (as the case requires), and extended in the case of a ramp or stairway as shown in Figures 7.1 including the note thereto; and

(*b*) not less than 40 mm nor more than 60 mm wide; and

SCHEDULE 9—*continued*

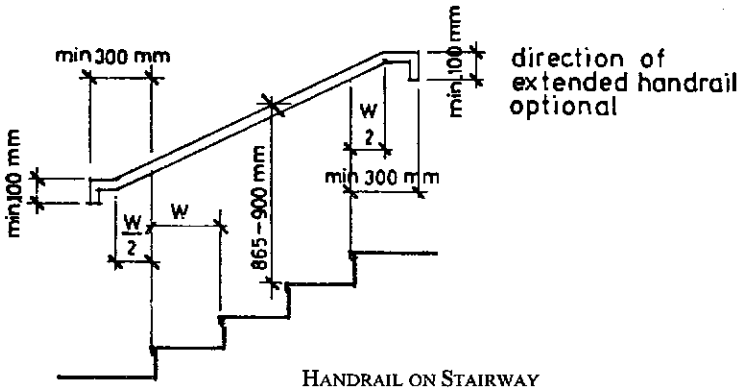
(*c*) fixed with the ends thereof turned away or turned downwards, for not less than 100 mm; and

(*d*) so fixed that there is no obstruction to the passage of the hand along the grip; and

(*e*) fixed not less than 50 mm from any adjacent wall; and

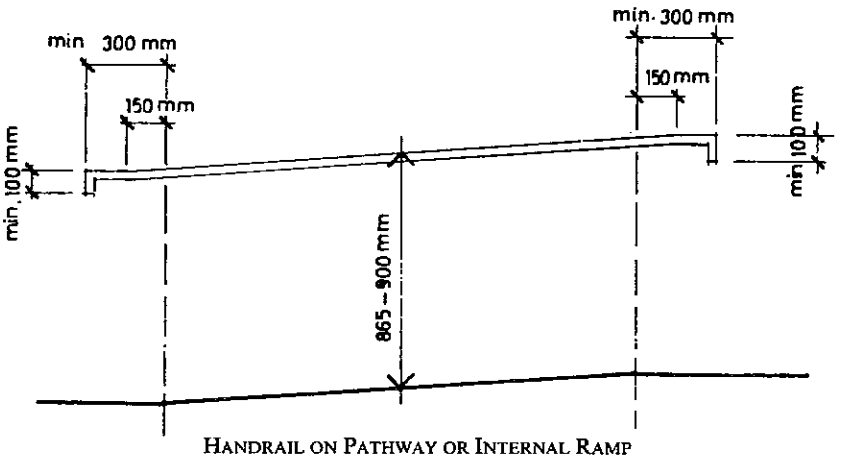
(*f*) extended for not less than 300 mm beyond the top and bottom riser of the stairway or the end of the pathway or internal ramp (as the case requires) as shown in Figures 7.1; and

(*g*) continued unbroken, if practicable, throughout each flight of stairs or along each pathway or internal ramp and around landings.



HANDRAIL ON STAIRWAY

NOTE: "w" is the dimension from one nosing to the next.



HANDRAIL ON PATHWAY OR INTERNAL RAMP

HEIGHT OF HANDRAILS

Figures 7.1

TOILET FACILITIES

8. (1) In every building required by Regulation 46.9 to be provided with closet fixtures for the use by disabled persons, each closet fixture shall be accompanied by an

SCHEDULE 9—*continued*

unobstructed area having dimensions not less than those shown in Figures 8.1 but the layout of the closet fixture and unobstructed area may be reversed in plan.

(2) Where two or more closet fixtures are provided for disabled persons in the same building, at least one such closet fixture and accompanying unobstructed area shall be reversed in plan to the other closet fixture or closet fixtures.

(3) Every door to a room containing a closet fixture shall—

(*a*) be capable of being opened at any time from the outside thereof; and

(*b*) be provided with a lever-action type indicator bolt attached to the inside thereof; and

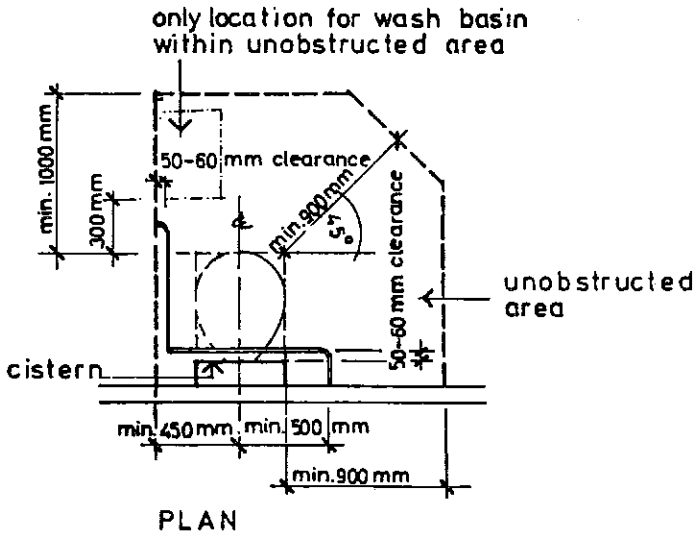
(*c*) if it is a hinged door, open out from the sanitary compartment.

(4) Every room containing a closet fixture shall contain a grabrail which shall have a diameter of not less than 30 mm nor more than 40 mm and be located as shown in Figures 8.1.

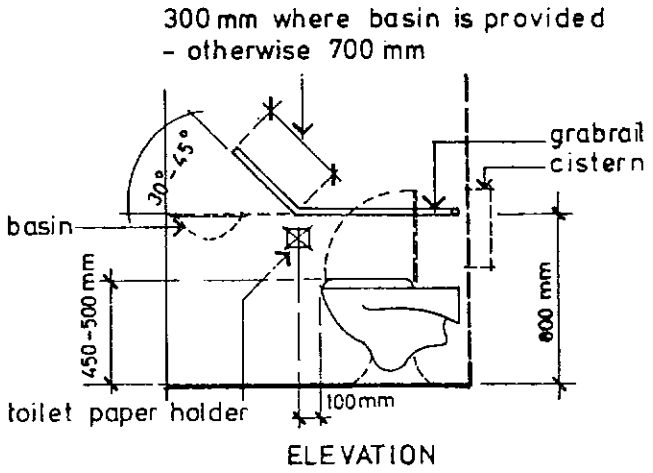
(5) The flushing control for the closet fixture shall be located not higher than 1·2 m above the floor level and be activated by a downward operating lever or knob.

(6) A toilet paper holder shall be provided with each closet fixture and shall be located as shown in Figures 8.1.

(7) Every wash basin provided within the unobstructed area shall be located as shown in Figures 8.1.



SCHEDULE 9—*continued*



CLOSET FIXTURES
Figures 8.1

SHOWER FACILITIES

9. (1) In every building required by Regulation 46.9 to provide showers for use by disabled persons, each shower shall be accompanied by an unobstructed area having dimensions not less than those shown in Figures 9.1, but the layout of the shower and the unobstructed area may be reversed in plan.

(2) The shower recess shall not be separated by a door from the unobstructed area.

(3) The floor of the shower recess shall be a continuation of the floor of the unobstructed area.

(4) A self-draining seat shall be provided in the shower recess at a height of not less than 450 mm nor more than 500 mm above the floor level.

(5) Grabrails having a diameter of not less than 30 mm nor more than 40 mm shall be fixed to the wall of the shower recess in accordance with Figures 9.1.

(6) A soap holder shall be fully recessed into a wall of the shower recess and be located not less than 1 m nor more than 1·2 m above the floor level.

(7) The shower controls and fittings shall be located not less than 1 m nor more than 1·2 m above the floor level.

(8) A portable shower head, attached to a flexible hose not less than 1·5 m in length, shall be installed in the shower recess and a fitting shall be provided to which the shower head can be attached at varying angles between 900 mm and 1·9 m above the floor level.

(9) If a pole is used in conjunction with the portable shower head, the pole shall be so constructed and installed as to be capable of being used as a vertical grabrail and in such case a vertical grabrail need not be installed.

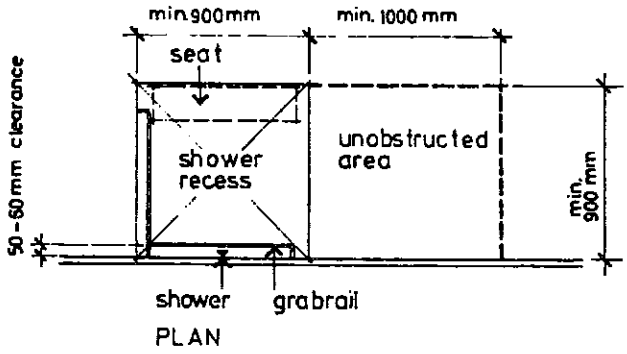
(10) Where two or more showers are provided for disabled persons in the same building, at least one shall be reversed in plan to the other shower or showers.

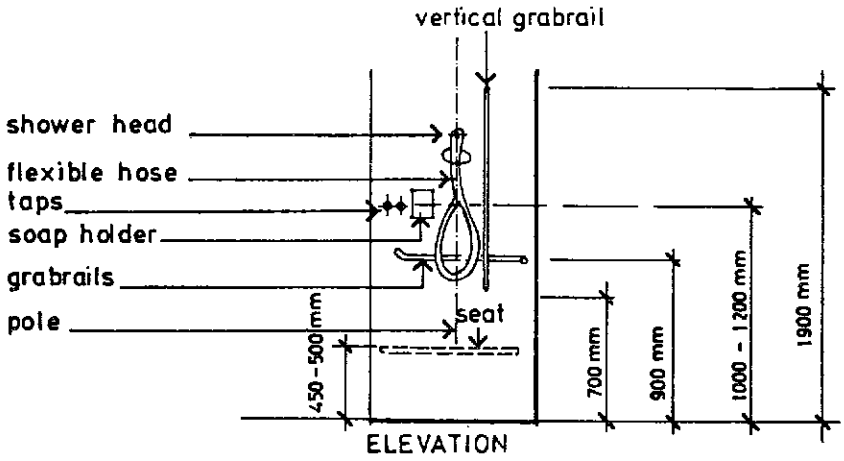
SCHEDULE 9—*continued*

(11) Every door to a room containing such a shower shall be—

(*a*) capable of being opened at any time from the outside thereof; and

(*b*) provided with a lever-action type indicator bolt attached to the inside thereof.





SHOWER FACILITIES
Figures 9.1

WASH BASINS AND OTHER FACILITIES

10. (1) Except as provided in clause 8.1 every wash basin provided for use by disabled persons shall be in accordance with Figure 10.1.

(2) Every soap dispenser, sanitary disposal unit and towel dispenser provided together with the facilities referred to in clause 8 or 9 or sub-clause (1) of this clause shall be located not less than 900 mm nor more than 1·2 m above the floor level.

SCHEDULE 9—*continued*

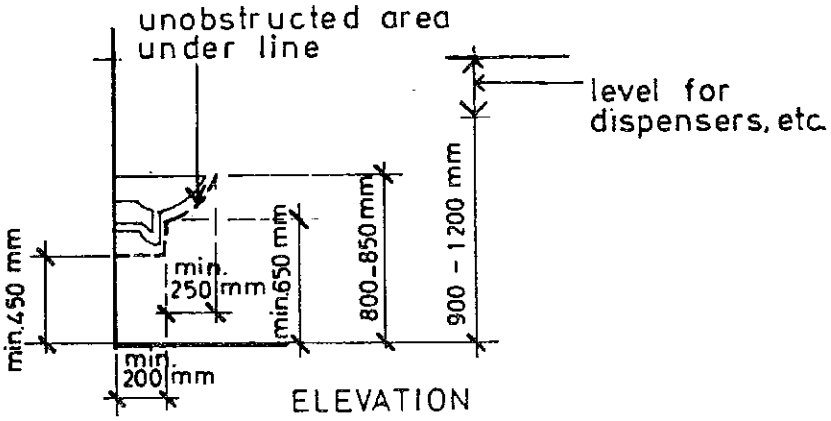
(3) The heights referred to in sub-clause (2) shall be measured as shown in Table 10.1—

TABLE 10.1

Facility	*Point from which measurement to be made*
Soap Dispenser or Towel Dispenser	The discharge outlet of the dispenser
Sanitary Disposal Unit	The opening of the fitting

(4) Where a mirror is provided together with the facilities referred to in clause 8 or 9 or sub-clause (1) of this clause the base of the mirror shall be located not more than 1 m above the floor level.

(5) Where a clothes hanging device is provided together with the facilities referred to in clause 8 or 9 or sub-clause (1) of this clause the device shall be located not less than 1·4 m nor more than 1·5 m above the floor level.



LOCATION OF WASH BASINS AND OTHER FACILITIES
Figure 10.1

DOOR HANDLES

11. Where handles on doors for use by disabled persons are provided they shall be mounted not less than 900 mm nor more than 1·2 m above the floor level and shall be horizontally aligned with any adjacent light switches.

SIGNS AND SYMBOLS

12. (1) The symbol for access for disabled persons shall consist of a figure in a wheelchair on a plain square background as shown in Figure 12.1; and

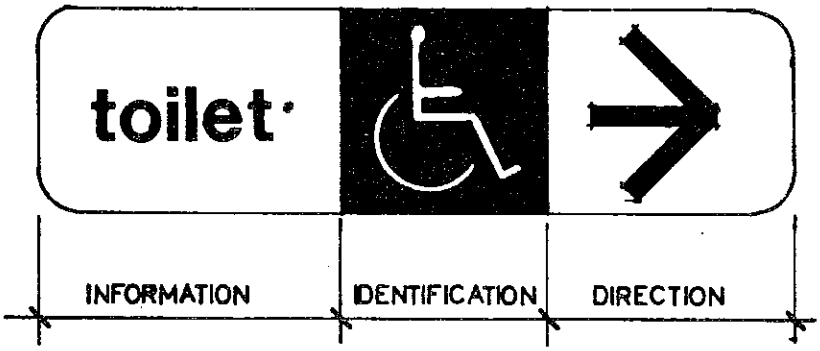
(2) For signs identifying a facility for disabled persons the symbol for access shall face to the right; and

(3) For signs indicating the direction to a facility, the symbol for access for disabled persons shall face the direction to be indicated and shall incorporate the name of the facility and an arrow as shown in Figure 12.1; and

(4) The colour of the symbol for access for disabled persons shall be white on a royal blue background; and

(5) Lower case lettering shall be used.

SCHEDULE 9—*continued*



SIGN AND SYMBOL
Figure 12.1

SCHEDULE 10

Sch. 10 substituted by S.R. Nos 438/1984 reg. 64, 98/1986 reg. 114, amended by S.R. No. 143/1988 reg. 38 (1)–(19).

Regulation 10.4 (2)

CODES, STANDARDS, RULES, SPECIFICATIONS AND PROVISIONS TO WHICH SPECIFIC REFERENCE IS MADE IN THESE REGULATIONS

A. Standards Association of Australia Codes

Item No.	*Code No. and Date*	*Title*	*Regulation*
1	AS 1074–1980	Steel Tubes and Tubulars Threaded with Pipe, Threads or Whitworth Form	27.7
2	AS 1155–1974 Am 1, 1979	Metric Units for use in the Construction Industry	1.3
3	AS 1159–1979	Polyethylene (Polythene) Pipes for Pressure Applications	27.7
4	AS 1170— Part 1–1981 Part 2–1983 Am 1	SAA Loading Code —Dead and Live Loads —Wind Forces	 30.1, 33.4 30.1, 41.1
5	AS 1200–1981	SAA Boiler Code	25.5
6	AS 1221–1983	Fire Hose Reels	27.2
7	AS 1225–1984	Clay building bricks	28.1, 36.2
8	AS 1250–1981 Am 1, 1982 Am 2, 1984	The Use of Steel in Structures	40.1
9	AS 1288— Parts 1 to 3–1979	SAA Glass Installation Code	53.4
10	AS 1432–1983	Copper Tubes for Water, Gas and Sanitation	27.7
11	AS 1445–1986	Hot-dipped Zinc-coated or Aluminium Zinc-coated Steel Sheet—76 mm Pitch Corrugated	28.1
12	AS 1475— Part 1–1977 Am 1, 1983 Am 2, 1986	SAA Blockwork Code Unreinforced Blockwork	36.4
13	AS 1477— Parts 1 to 6–1973, Am 1, 2 and 3	Unplasticized PVC (UPVC) Pipes and Fittings for Pressure Application (Metric Units): Part 1—UPVC pipes for Pressure Applications, Part 2—Moulded UPVC Fittings for Pressure Applications, Part 3—Fabricated UPVC Fittings for Pressure Applications, Part 4—Post-formed UPVC Bends for Pressure Applications, Part 5—Solvent-welding Joints for UPVC Pressure Pipes and Fittings, and Part 6—Rubber Ring Joints for UPVC Pressure Pipes and Fittings	27.7
14	AS 1480–1982	SAA Concrete Structures Code	20.10, 28.1, 33.3, 35.1, 40.1
15	AS 1481–1978	SAA Prestressed Concrete Code	20.10, 28.1, 40.1

SCHEDULE 10—*continued*

Item No.	*Code No. and Date*	*Title*	*Regulation*	
16	AS 1509–1974, Corrig.	SAA Formwork Code	12.2	
17	AS 1530—	Methods for Fire Tests on Building Materials and Structures		
	Part 1–1984	—Combustibility test for Materials	1.3	
	Part 2–1973	—Test for Flammability of Materials	1.3	
	Part 3–1982	—Test for Early Fire Hazard Properties of Materials	1.3, Schedule 8	
	Am 1, 1982			
	Am 2, 1983			
	Part 4–1985	—Fire-resistance Tests of Elements of Building Construction	1.3, Schedule 8	
	Part 4–1975, Am 1 and 2	—Fire-resistance Test of Structures	1.3, Schedule 8	
17A	AS 1530 Part 4–1975 Am 1 and 2	—Fire-resistance Test of Structures	1.3, Schedule 8	Item 17A inserted by S.R. No. 220/1989 reg. 15(2).
17B	AS 30 Part III–1970	—Test for Early Fire Hazard Properties of Materials	1.3, Schedule 8	Item 17B inserted by S.R. No. 220/1989 reg. 15(2).
18	AS 1538–1974 Am 1	SAA Cold-formed Steel Structures Code	40.1	
19	AS 1562–1980	Design and Installation of Metal Roofing	28.1, 47.5	
20	AS 1567–1985	Copper and Copper Alloys Wrought Rods, Bars and Sections	27.7	
21	AS 1579–1973	Arc Welded Steel Pipes for Water and Gas	27.7	
22	* *	* * * *	* *	
23	AS 1639–1974 Am 1, 1974	Design and Installation of Corrugated Asbestos Cement Roofing	47.4	
24	AS 1640–1974	SAA Brickwork Code—Metric	20.10, 28.1, 36.2	
25	AS 1653–1985	Calcium Silicate Building Bricks	28.1	
26	AS 1657–1985	SAA Code for Fixed Platforms, Walkways, Stairways and Ladders	24.29.1, 24.67, 26.4	
27	AS 1664–1979, Corrig.	SAA Aluminium Structures Code	43.1	
28	AS 1668—	SAA Mechanical Ventilation and Airconditioning Code		
	Part 1–1979 Am 1, 1979	—Fire Precautions in Buildings with Air-handling Systems	22.13, 55.7, 55.8	
	Part 2–1980	—Ventilation Requirements	53.25, 55.7	
29	AS 1670–1986, Am 1, 1987	Automatic Fire Detection and Alarm Systems—System Design, Installation and Commissioning	27.11, 53.42	
30	AS 1682–1979	Fire dampers	22.13	
31	AS 1684–1979 Supps. 1 to 22 Am 1, 1981 Am 2, 1981	SAA Timber Framing Code	30.1, 33.5, 41.1	
32	AS 1691–1985	SAA Domestic Oil-fired Appliances Installation Code	25.3	
33	AS 1694–1974	Physical Barriers used in the Protection of Buildings against Subterranean Termites	48.1	

SCHEDULE 10—*continued*

Item No.	*Code No. and Date*	*Title*	*Regulation*	
34	AS 1711–1975	Asbestos Cement Pressure Pipes	27.7	
35	AS 1720–1975 Am 1, 1981	SAA Timber Engineering Code	41.1	
36	AS 1726–1981	SAA Site Investigation Code	32.3	
37	AS 1735— Part 11–1986	Lifts, Escalators and Moving Walks —Fire-rated Landing Doors	22.8	
38	AS 1736–1975	Code of Practice for Pliable Roof Sarking	47.6	
39	AS 1757–1975	Concrete Interlocking Roofing Tiles (Without Weathering Check)	47.2	
40	AS 1758–1975	Code of Practice for Fixing of Concrete Interlocking Roofing Tiles (Without Weathering Check)	47.2	
41	AS 1759–1975	Concrete Interlocking Roofing Tiles (With Weathering Check)	47.2	
42	AS 1760–1975	Code of Practice for Fixing of Concrete Interlocking Roofing Tiles (With Weathering Check)	47.2	
43	AS 1769–1975	Welded Stainless Steel Tubes for Plumbing Applications	27.7	
44	AS 1835–1983 Am 1	Seamless Steel Tubes for Pressure Purposes	27.7	
45	AS 1836–1983	Welded Steel Tubes for Pressure Purposes	27.7	
46	AS 1841–1985	Portable Fire Extinguishers—Water (Gas Container) Type	27.8	
47	AS 1842–1985	Portable Fire Extinguishers—Water (Stored Pressure) Type	27.8	
48	AS 1844–1985	Portable Fire Extinguishers—Foam (Gas Container) Type	27.8	
49	AS 1845–1985	Portable Fire Extinguishers—Foam (Store Pressure) Type	27.8	
50	AS 1846–1985 Am 1, 1986	Portable Fire Extinguishers—Powder Type	27.8	
51	AS 1847–1985	Carbon Dioxide Type Portable Fire Extinguishers	27.8	
52	AS 1848–1985 Am 1, 1986	Portable Fire Extinguishers—Halon type	27.8	
53	AS 1851—	Maintenance of Fire Protection Equipment		
	Part 1–1985 Am 1 and 2	—Portable Fire Extinguishers	27.8, 59.2	
	Part 2–1981	—Fire Hose Reels	59.2	
	Part 3–1985	—Automatic Fire Sprinkler Systems	59.2	
54	AS 1859–1980	Flat Pressed Particleboard	28.1	
55	AS 1903–1976 Am 1, 1979	Reflective Foil Laminate	47.6	
56	AS 1904–1976 Corrig. Am 1, 1979	Installation of Reflective Foil Laminate in Buildings	47.6, 54.4	S.R. No. 383/1990.
57	AS 1905—	SAA Fire Door Code		
	Part 1–1984 Am 1, 1984 Am 2, 1984 Am 3, 1985 Am 4, 1986	—Fire-Resistant Doorsets	21.1, 21.2, Schedule 1	

SCHEDULE 10—*continued*

Item No.	*Code No. and Date*	*Title*	*Regulation*
	Part 2–1984	—Fire-Resistant Roller Shutters	21.5
57A	AS 1926–1986	Fences and Gates for Private Swimming Pools	53.1
58	AS 2049–1977	Terra Cotta Roofing Tiles	47.3
59	AS 2050–1977	Code of Practice for Fixing of Terra Cotta Roofing Tiles	47.3
60	AS 2057–1986	Protection of Buildings from Subterranean Termites—Chemical Treatment of Soil for Buildings under Construction	48.1
61	AS 2118–1982 Am 1 and 2	Rules for Automatic Fire Sprinkler Systems	27.5, 27.10
62	AS 2159–1978	SAA Piling Code	34.4
63	AS 2185–1978	Fibrous Plaster Products	16.5
64	AS 2220–1978	Rules for Emergency Warning and Intercommunication Systems for Buildings	27.12
65	AS 2293—	Emergency Evacuation Lighting in Buildings	
	Part 1–1983	—Installation Requirements	24.29, 53.42, 55.12
	Part 2–1982	—Maintenance Procedures	59.2
66	AS 2441–1981	Installation of Fire Hose Reels	27.2
67	AS 2458–1982 Am 1	Hardboard	47.8
68	AS 2544–1982	Grey Iron Pressure Pipes and Fittings	27.7
69	AS 2665–1983	Smoke/Heat Venting Systems—Design, Installation and Commissioning	19.3, 19.4
70	AS 2699–1984 Am 1, 1984 Am 2, 1986	Wall Ties for Masonry Construction	42.1
71	AS 2701—	Methods of Sampling and Testing Mortar for Masonry Construction	
	Part 2–1984	Methods of Sampling	28.2
	Part 10–1984	Methods for Analysis of Mortars	28.2
72	AS 2733–1984	Concrete Masonry Units	28.1
73	AS 2758—	Aggregates and Rock for Engineering Purposes	
	Part 1–1985	Concrete Aggregates	20.10
74	AS 2904–1986	Damp-proof Courses and Flashings	47.10
75	AS 2908–1987	Cellulose Cement Products—Corrugated Sheets for Roofing and Cladding	47.4
76	AS 2918–1987	Domestic Solid Fuel Burning Appliances —Installation	25.4
76A	AS A123–1963	Mortar for Masonry Construction	28.1
B. *Codes, Standards, Rules, Specifications and Provisions Other than Standards Association of Australia Codes*			
77	ACADS Code of Practice CP1	Code of Practice for the Documentation and Checking of Computer Aided Engineering and other Technical Computations	8.2
78	BS 4772–1980	Specification for Ductile Iron Pipes and Fittings	27.7

SCHEDULE 10—*continued*

Item No.	*Code No. and Date*	*Title*	*Regulation*
79	CSIRO/AEBIRA	The Classification of Expansive Behaviour of Melbourne Soils for Domestic Construction 1976	33.4
80	CSIRO	Low-rise Domestic and Similar Framed Structures, Part 5—Supplementary Domestic Buildings for Built-up Areas	41.1
81	CSIRO	Low-rise Domestic and Similar Framed Structures, Part 5—Supplementary Design Information (including notes on the technical interpretation of some Light Timber Framing Code Rules)	41.1
82	TPC	Timber Frame Construction in High Wind Areas—Victoria	41.1

ACADS: The Association for Computer Aided Design Limited, Melbourne
BS: British Standards Institution
CSIRO/AEBIRA: Commonwealth Scientific and Industrial Research Organization and Australian Engineering and Building Industry Research Association
TPC: Timber Promotion Council, Victoria

S.R. 273

Form 1

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 3.1 (3)

INSPECTION NOTICE

Municipality

Location :

Nature of Building Work :

Date of Inspection :

Particulars in respect of which building work fails to comply with these Regulations :

The owner/or agent of owner is hereby ordered

Building Surveyor.

Received by me this day

/ / .

Owner,

Agent of Owner

Issued / / .

Form 1

Form 2

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 3.2 (1)

SHOW CAUSE NOTICE

Municipality

Location :

Nature of Building Work :

Date of Inspection :

Particulars in respect of which the building work fails to comply with the provisions of these Regulations :

The *owner or agent of owner is hereby ordered to show cause by .....(date) why the building should not be brought into conformity with the requirements of the Regulations or be demolished or removed.

Received by me this day

/ / .

*Owner

Agent of owner

Issued / / .

*Strike out words which are inapplicable

Form 3

Building Control Act 1981
VICTORIA BUILDING REGULATIONS 1983
Regulation 3.2 (3)

BUILDING IN BREACH NOTICE

Municipality

Location:

Nature of Building Work:

Date of Inspection:

Pursuant to the issue of Form 2 on.....(date) in respect of the above-mentioned building work and as within the period specified in that Form the council has not been satisfied that the building work should not be brought into conformity with these Regulations or be demolished or removed notice is hereby given that unless by.....(date)—

(*a*) the following work has been carried out to alter the building so that it conforms to the requirements of these Regulations:—

.....
.....; or

(*b*) the building has been demolished; or

(*c*) the building has been removed—

the council or person authorized by the council may demolish or remove the building and sell any materials therefrom in such a manner and to such persons as the council thinks fit.

Form 4

S.R. 263/1990.

Building Control Act 1981
Victoria Building Regulations 1983
Regulation 6.3

CERTIFICATE OF OCCUPANCY

No. Municipality

To:
(name and address of owner)

The building/part of building situated at
is suitable for occupation.

Description of building or part of building

Class of building or part of building

Use of building or part of building

Persons deemed to be accommodated (regulation 24.28)

Abnormal fire hazard (Schedule 6) yes/no

Maximum permissible live load kPa

The use of part of the building for—
another classification; or
another use of the same classification for which the Regulations impose different requirements (unless the requirements are complied with)—
is an offence against these Regulations

Co-ordinator
Dated

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulations 8.2 (1), 8.4 (1) and 8.6 (1)

APPLICATION FOR BUILDING APPROVAL

Form 5

Form 5 substituted by S.R. No. 75/1984 reg. 30, amended by S.R. Nos 38/1984 reg. 65 (1) (2), 522/1988 reg. 6.

Municipality

To the Development Approvals Co-ordinator

*City
Town
Borough of
Shire

I,† hereby apply for an approval

*to construct
to demolish
to remove
for a stage of
building work on

a building on Street *Allotment No. in Street

Nature of Construction—*new building, alteration, addition, repair.

Owner of Land { Name / Address

Superintending Architect and/or Engineer { Name / Address

Builder { Name / Address

Purpose for which building is to be used

If purpose is for a Dwelling-house—

Attached herewith is Certificate of Guarantee Status of Domestic Building Work issued by the Housing Guarantee Fund Limited under the House Contracts Guarantee Regulations 1988.

Estimated cost of building work

I hereby undertake that the *construction, demolition, or removal will be carried out in conformity with the requirements of the Victoria Building Regulations 1983 and of the by-laws of the municipality.

Dated day of 19

Signature

*Owner
Agent of Owner

Fee
Building Approval { Number / Date granted.

* Strike out words which are inapplicable.
† Insert name of applicant

NOTE: Pursuant to section 20 (22) of the *Building Control Act* 1981 a person shall not act as the agent of an owner unless he is authorized in writing by the owner to do so.

Form 6 substituted by S.R. No. 220/1989 reg. 16 (3).

Form 6

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 12.1 (3)

NOTICE OF INTENTION FROM OWNER OF LAND WHO IS REQUIRED TO PROVIDE PROTECTION FOR AN ADJOINING PROPERTY

(This notice must be served on the owner of the adjoining property and on the building surveyor.)

TO: Adjoining owner/building surveyor*

1. Pursuant to section 147 (1) of the *Building Control Act* 1981 I give notice of my intention to carry out building work on my land and request your agreement to the proposed protection works.

2. Owner of Property

Location of proposed building work:

Address:

Title particulars:

Municipality:

Owner's name:

Address for correspondence:

Contact person: Phone No:

3. Adjoining Owner's property

Location of property required to be protected:

Address:

Title particulars

Adjoining owner's name:

4. Details and Documents:

(*a*) Details of the proposed building works at the date of this notice are as follows:

(*b*) Details of the proposed protection works setting out the nature, location, time and duration of the protection works are as follows:

5. Signed Owner.

Dated:

6. Notes:

(i) An adjoining owner shall be deemed to have agreed to the proposed protection works if he/she has not responded with Form 11 within 14 days.

(ii) An adjoining owner may disagree with the proposed protection works or request further information by responding with Form 11 within 14 days.

(iii) Agreement to these protection works does not prejudice an adjoining owner's rights under sections 149 to 159 of the *Building Control Act* 1981.

Form 7

Form 7 inserted by S.R. No. 143/1988 reg. 39.

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 8.2 (4)

CERTIFICATE AS TO PREPARATION OF STRUCTURAL DESIGN

I (insert name)

of (insert address) hereby certify as follows:

1. I am a Qualified Engineer as defined in the Victoria Building Regulations 1983 and a director/principal of (insert name of company/firm), which has been engaged to prepare the structural design for the above project.

2. The structural design for the above project:

(i) comprises the following

Drawing Ref. Nos:
Engineering Specifications Ref. Nos:

(ii) has been prepared by me/under my supervision and control.

Dated this day of 19

Signed

Form 8 inserted by S.R. No. 143/1988 reg. 40.

Form 8

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 8.2 (4)

CERTIFICATE AS TO COMPLIANCE OF THE STRUCTURAL DESIGN WITH THE PROVISIONS OF GROUP VI OF THE VICTORIA BUILDING REGULATIONS 1983

Project:

Project Address:

Building Work for which Application for Building Approval is Lodged:

Stage 1/2/3/4; or

Other building work as follows:

I
(insert name of structural checker) of (insert structural checker's address).

Hereby Certify as follows:

1. I am a Qualified Engineer as defined in the Victoria Building Regulations 1983.

2. I am presently practising as a structural engineer with the following firm or company of which I am a director/principal/employee:

(insert name of firm or company).

3. The structural design comprising the drawings, specifications and documents specified hereunder has been checked to determine whether the structural building work will comply with the provisions of Group VI of the Victoria Building Regulations 1983.

Drawings, Specifications and Documents Comprising the Structural Design of the Structural Building Work

(insert)

4. The structural building work, if carried out in accordance with the structural design, will comply with the provisions of Group VI of the Victoria Building Regulations 1983.

5. I did not prepare the structural design.

Annexed to this certificate is a copy of:

- my current certificate of membership of the Institution of Engineers, Australia; or
- a letter from the Institution of Engineers, Australia stating that under its rules for admission to corporate membership my qualifications and experience are acceptable to that Institution;
- other documents—if any, please list.

Dated this day of 19

Signed

Form 9

Form 9 inserted by S.R. No. 143/1988 reg. 41.

Building Control Act 1981

VICTORIA BUILDING REGULATIONS 1983

Regulation 8.2 (5)

CERTIFICATE AS TO COMPLIANCE OF THE DESIGN WITH THE PROVISIONS OF THE VICTORIA BUILDING REGULATIONS 1983

Project:

Project Address:

Building Work for which Application for Building Approval is Lodged:
(Referred to in this Certificate as "the Building Work")

Stage 1/2/3/4; or

Other building work as follows:

I (insert name) of
(insert address)

Hereby Certify as follows:

1. I am a qualified building surveyor as defined in Regulation 8.2 (6) of the Victoria Building Regulations 1983. I am a director/principal/employee of (insert name of company/firm).

2. (*a*) The design/that part of the design comprising the drawings, specifications and documents specified hereunder, has been checked to determine whether the Building Work the subject of those drawings, specifications and documents ("Relevant Building Work") will comply with the provisions of the Victoria Building Regulations 1983.

Drawings, Specifications and Documents Comprising the Design of the Relevant Building Work:

(insert)

The Relevant Building Work, if carried out in accordance with the drawings specifications and documents referred to in paragraph 2 (*a*) above will comply with the provisions of the Victoria Building Regulations 1983.

(*c*) I did not prepare the design of the Relevant Building Work.

Annexed to this Certificate is:

(i) a copy of my current certificate of qualification for the purposes of Regulation 8.2 (6) issued by (insert);

(ii) other documents (please specify).

Dated this day of 19

Signed

Form 10 inserted by S.R. No. 522/1988 reg. 7.

Building Control Act 1981 Form 10

VICTORIA BUILDING REGULATIONS 1983

Regulations 8.8 (2) and (3)

REQUEST FOR BUILDING APPROVAL PARTICULARS

I *Applicant's name

of *Company name

address for correspondence

telephone contact person

*being/not being a recognised person or body under section 28 of the *House Contracts Guarantee Act* 1987, request the particulars of any building approval granted in the preceding 7 years and any current certificate, notice or report made under the Act on the following property:

ADDRESS:

Number in *Street/Road

*City/Town/Suburb/Locality

TITLE DETAILS:

Volume Folio

Lot No. Lodged Plan

Crown Allotment Section Parish

Registered Owner

Signed

*Owner or Agent

PARTICULARS REQUESTED:

Building Approval Numbers	Dates Issued	Brief description of works Has final inspection been approved? Certificate of Occupancy number and date †Foundation, frame and final inspection approval dates Current certificates, notices or reports made under the *Building Control Act* 1981 Has a flood level certificate been issued under Regulation 44.6?

AGENTS

A person shall not act as the agent of an owner or other person having an equity in the property unless he/she is authorised in writing by the owner to do so.

INFORMATION supplied by (Co-ordinator)

Date

Fee received/receipt No.

* Strike out words which are inapplicable

† for applicants under Regulation 8.8 (3) only

Building Control Act 1981 Form 11
VICTORIA BUILDING REGULATIONS 1983
Regulation 12.1 (4)

Form 11 inserted by S.R. No. 220/1989 reg. 16 (4).

NOTICE OF AGREEMENT, DISAGREEMENT OR REQUEST FOR FURTHER INFORMATION ON PROTECTION WORK FROM AN ADJOINING OWNER.

TO: Owner/building surveyor*

1. Pursuant to section 147 (2) of the *Building Control Act* 1981 I hereby respond to the Form 6 notice served on me on (date).

2. Owner's Property

Location of proposed building work:

Address:

Title particulars:

Municipality:

Owner's name:

Address for correspondence:

Contact person: Phone No.:

3. Adjoining Owner's property

Location of property required to be provided with protection.

Address:

Title particulars:

Adjoining owner's name:

Address for correspondence:

Contact person: Phone No.:

4. I hereby

A Agree to the proposed protection works*.

or

B Disagree with the proposed protection works for the following reasons*.

or

C Request the following further information*.

Signed:

Dated:

* (Strike out whichever is inapplicable)

5. Notes:

(i) Where the adjoining owner has agreed to the protection works he/she may serve this notice on the owner within 14 days.

(ii) Where the adjoining owner has not agreed to the protection works, or has requested further information this notice must be served on the owner and the building surveyor within 14 days and the building surveyor shall determine the matter.

(iii) An adjoining owner shall be deemed to have agreed to the proposed protection works if he/she has not responded with this form within 14 days.

Form 12

S.R. 262/1990.

Building Control Act 1981

Victoria Building Regulations 1983

Regulation 60.3 (2)

INFRINGEMENT NOTICE

TO

Name and address of *owner* or occupier of building who is alleged to have committed an offence:

ADDRESS.OF BUILDING

Address of building or information required to identify the building where the offence occurred:

NATURE OF ALLEGED OFFFENCE AND PENALTY

PAYMENT OF PENALTY

The penalty should be paid to the *council* either—

by post; or

at the municipal offices during office hours.

The specified time for payment is

IF PAYMENT IS MADE

If payment is made by then the matter will not be brought to court and no conviction will be recorded.

AUTHORISED OFFICER

Name:

Office Address:

Signature:

Date:

Form 13

S.R. 263/1990.

Building Control Act 1981

Victoria Building Regulations 1983

Regulation 61.2

CLOSURE ORDER

TO

Name of *owner* of building or person apparently in charge of the building:

ADDRESS OF BUILDING

MATTERS TO BE RECTIFIED

PERIOD FOR OPERATION OF ORDER UNDER SECTION 142 A (3) (*d*) OF ACT

This building must be closed until or the *authorised officer* is satisfied that the matters have been rectified and has revoked this order.

Note: Any person occupying or using the building while this order is in force is guilty of an offence and is liable to a penalty of not more than 100 penalty units and a further penalty of not more than 10 penalty units for each day on which the occupation or use is continued.

AUTHORISED OFFICER:

Name:

Office address:

Signature:

Date of Issue:

NOTES

1. The Victoria Building Regulations 1983 were made under the *Building Control Act* 1981 by the Governor in Council on 11 October 1983.

2. This reprint incorporates amendments made to the Victoria Building Regulations 1983 by S.R. Nos 75/1984, 438/1984, 98/1986, 187/1986, 300/1986, 143/1988, 522/1988 and 220/1989.

3. Footnote from Part 1.

   FOOTNOTE:

   Defined terms

   With the exception of references to the *Government Gazette* or other legislation and to column headings in Tables, words printed in italics in the text of these Regulations have defined meanings, the definitions appearing in—

   (*a*) Regulation 1.3 (1);

   (*b*) near the beginning of each Part; or

   (*c*) the *Building Control Act* 1981.

4. FOOTNOTE: Regulation 33.7:

   Vapour barrier to slab-on-ground

   Every slab-on-ground shall be provided with a vapour barrier complying with the requirements of regulation 47.11.

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