VICTORIA

GOVERNMENT GAZETTE.

Published by Authority.

[Registered at the General Post Office, Melbourne, for transmission by post as a newspaper]

No. 316] TUESDAY, NOVEMBER 16. [1937

Department of Public Health, Victoria.

COMMISSION OF PUBLIC HEALTH.

Health Acts.

BUILDING REGULATIONS 1937.

At the Executive Council Chamber, Melbourne, the eighth day of November, 1937.

PRESENT:

His Excellency the Governor of Victoria.

Mr. Lind | Mr. Bailey.
Mr Old | Mr. Mackrell.

UNDER the powers conferred by the Health Acts, and all other powers enabling him in that behalf, His Excellency the Governor of the State of Victoria, with the advice of the Executive Council of the said State, doth hereby make the Regulations following (that is to say):—

1. These Regulations may be cited as the "Building Regulations 1937" and shall come into operation upon publication in the *Government Gazette* and shall be divided into Parts and Divisions as follows:—

Part I.—Introductory.
Part II.—Provisions applicable to public buildings generally.
Division I.—Application for approval of plans and specifications.
Division II.—Fees for examination of plans.
Division III.—Application for permission to open a building.
Division IV.—Sites.
Division V.—Overcrowding.
Division VI.—Exits.
Division VII.—Ventilation.
Division VIII.—Construction.
Division IX.—Closets and Urinals.
Division X.—Drainage.
Part III.—Lighting.
Fire Precautions.
Part IV.—*Special provisions applicable to theatres and cinematograph halls only.*
Division I.—Proscenium wall.
Division II.—Safety curtain and smoke outlet.
Division III.—Construction.
Division IV.—Exits.
Division V.—Fire precautions.
Part V.—General and supplementary.
Schedule A.
Schedule B.
Schedule C.
Schedule D.

PART I.

INTRODUCTORY.

2. All Regulations heretofore made touching the matters herein provided for are hereby repealed.

NOTE.—Schools, tents used as public buildings, public hospitals, and benevolent institutions are subject to separate Regulations supplementary to these Regulations.

INTERPRETATION.

3. In these Regulations unless inconsistent with the context or subject-matter—

"Alteration" includes alteration addition or extension; and "to alter" has a corresponding interpretation;

"Approval" means approval in writing by the Commission or by the Council (as the case may be); and

"Approved" has a corresponding interpretation.

"Building" includes public building theatre and every building used for public entertainment.

"Cinematograph" includes cinematograph biograph bioscope and every picture-projecting appliance of a similar nature.

"Cinematograph Hall" includes every public building where cinematograph views are exhibited.

"Continuous entertainment" for the purposes of these Regulations means any entertainment where exhibitions or performances are produced several times during the day, and where the proprietor does not cause the auditorium to be completely vacated by the public for a period of not less than thirty minutes between each performance or exhibition.

"Door" includes gate; and

"Doorway" includes gateway.

"Electric Supply Authority" means any supplier of electricity for private public or governmental use and includes a council or company.

"Electrical Inspector" means an inspector authorized in that behalf by the Commission.

"Health Acts" means the *Health Act* 1928 (No. 3697) and any amendment thereof.

"New building" means subject to the provisos contained in the definition next following of "Old Building" a building erected at any time after the 16th day of August, 1933.

"Old Building" means a building erected prior to the 16th day of August, 1933. An old building shall be classed as a "New Building" if additions (whether made at one time or not) to the extent in the aggregate of not less than 25 per centum of its floor area used or intended to be used by the public are made subsequently to that date.

"Passage" includes passageway corridor vestibule and lobby.

"Person" shall include a corporation unless there is something repugnant to or inconsistent with that interpretation.

"Premises" means the premises of any building.

"Projector" includes any appliance or apparatus for the projection of cinematograph pictures.

"Proprietor" includes the owner the occupier the lessee the manager the trustees the persons by whose authority the building has been is being or is intended to be erected and any person having the management or control thereof.

"Public Building" includes—

(*a*) any concert music or assembly hall dance hall or skating rink or arena amphitheatre circus building enclosure gallery platform tent or structure whatsoever in around or upon which numbers of people are usually or occasionally assembled (whether in any such case the same is or is not part of or appurtenant to any licensed victualler's premises);

(*b*) any church chapel or meeting house;

(*c*) any building of any kind or class or any particular building declared by proclamation to be a public building within the meaning of the Health Acts and (whether any public building is permanent or temporary) includes any building room or stage forming part of or appurtenant to or used in connexion with such public building.

"Secretary" means secretary of the Commission and includes acting secretary.

"Scenery" in relation to theatres includes wings sky-borders cloths curtains and decorations.

"Theatre" includes opera house and cinematograph hall.

Expressions and terms defined in the Health Acts shall have the same meanings where used in these Regulations unless inconsistent with the context or subject-matter.

APPLICATION.

4. These Regulations, unless inconsistent with the context or subject-matter, shall apply to all new buildings. Old buildings shall be subject only to Part II.—Divisions V. VI. VII. IX. X. Part III. Part IV.—Regulations 128, 135, and 136, and Division V. and to Part V. of these Regulations.

Division VI. of Part II. shall not apply to vestries dressing rooms and other rooms not used by the public nor to rooms of less floor area than 120 square feet.

Regulations Nos. 22, 23, 25, and 29 of Division V. of Part II. of these Regulations shall not be held to be applicable to churches chapels or meeting houses.

PART II.

DIVISION I.—APPLICATION FOR APPROVAL OF PLANS AND SPECIFICATIONS.

5. Every application for the approval of plans and specifications for the erection or alteration of a building shall be in the form Schedule A to these Regulations and shall be lodged with the Secretary at least fourteen days before such erection or alteration is undertaken or begun.

RE-SUBMISSION OF PLANS, ETC., AFTER TWELVE MONTHS.

6. Whenever any building or alteration of a building for which the plans sections and specifications have received the approval of the Commission is not erected or altered within twelve months from the date of such approval or if within such period substantial progress with such erection or alteration has not been made the said plans sections and specifications shall be re-submitted under cover of a fresh application in the form in Schedule A hereto for review by the Commission and the erection or alteration of such building shall not be commenced or proceeded with (as the case may be) without the further approval of the Commission.

Every such fresh application shall be accompanied by the minimum fee prescribed in Division II. of this Part of these Regulations: Provided that should such plans or specifications as originally approved be found to be substantially varied such fee appropriate to the case shall be paid as the Commission shall determine.

CONVERSION OF BUILDING, ETC., TO OTHER USE.

7. Before any existing building or compartment is converted to any use other than that approved the proprietor shall make application in writing for the Commission's approval of such conversion and shall forward with such application such plans as may be necessary to clearly identify the said building or compartment.

If any structural alteration is proposed to be made in connexion with the proposed conversion the proprietor shall make application for approval of such alteration in the form Schedule A to these Regulations.

DIVISION II.—FEES FOR EXAMINATION OF PLANS, ETC.

8. (1) The fees to be paid to the Commission for the examination of plans or sections or specifications required by section 170 of the *Health Act* 1928 to accompany every application for approval of the intended erection or alteration of a building shall be as follows:—

(*a*) When the plans and specifications relate to the erection of a building or of an addition to an existing building (being a building within the meaning of these Regulations) or to the alteration in whole or in part of any existing building (not being a building within the meaning of these Regulations) with a view to making the same a building within such meaning the aggregate floor area of which does not exceed 500 square feet—Five shillings.

For each additional 100 square feet or fraction of 100 square feet of floor area Eighteenpence unless the Council of the municipal district in which the building is or is to be situated shall have previously notified the Commission that such Council undertakes to satisfy itself concerning the structural strength and stability of such building or part thereof in which case such fee shall be computed at the rate of One shilling up to a maximum fee of Five pounds.

(*b*) When the plans and specifications relate to such modification of a building as does not involve increase of the floor area thereof—Ten shillings: Provided that in every case where such modification involves alteration of the provisions for the situation construction exits ventilation or lighting of such building such fee of Ten shillings shall be increased by Two shillings in respect of each such individual provision so involved up to a maximum fee of One pound.

(2) This Division shall apply to all buildings within the meaning of these Regulations.

DIVISION III.—APPLICATION FOR APPROVAL OF COMMISSION (OR COUNCIL AS THE CASE MAY BE) OF THE OPENING OF A BUILDING.

9. Before opening any building or any addition to or extension thereof the proprietor shall make application for the approval of the Commission or of the Council (in any case where the Council has been authorized to give such approval) in the form of Schedule B to these Regulations and except in cases where the Commission has already approved of the plans and specifications of the said building addition or extension shall forward with his application the plans and specifications required by paragraphs (*a*) (*b*) and (*c*) of sub-clause (2) and the information required by sub-clauses (3) (4) and (5) of Schedule A of these Regulations.

DIVISION IV.—SITES.

Site.

10. The site of a new building shall not be any land liable to flooding. It shall be well drained by gravitation into a storm-water drain or channel and shall together with any adjoining land be free from any accumulation of unwholesome or dangerous matter. A damp site shall be drained by means of agricultural drain pipes which shall be properly laid and graded to a suitable outfall. Any depression or hollow and any excavation made and not used for basement or cellar purposes shall be solidly filled in with clean soil or concrete or other approved material.

Street frontages required.

11. The site of any building whether a new building or an old building proposed to be altered wholly or in part shall not be approved by the Commission unless it has a frontage or frontages to streets or thoroughfares of not less than the following width or widths namely:—

Site.	Necessary width in feet of Street or Streets on which Site abuts.
Having one frontage	40
Having two frontages	40 and 20

Frontages to be for full length.

12. Save as otherwise provided in these Regulations all frontages to streets or thoroughfares shall abut for their full length without any intervening premises on such streets or thoroughfares.

13. The erection of lock-up shops or offices as approved by the Commission will be permitted provided such shops or offices are of fire-proof construction throughout and are completely cut off from the building and subject to escapes from all parts of the auditorium being provided in accordance with these Regulations.

Courts.

Two courts for building having one frontage.

14. To a site having one frontage only there shall be provided on sides not bordering on the street two courts running the length of the building each not less than 10 feet wide so that exit may be obtained from three sides of the auditorium and in the case of a stage of a theatre from two opposite sides of such stage.

Courts for building parallel to street and having one frontage.

15. Provided that to a site having one frontage only but a depth so much less than the frontage as to necessitate the length of the auditorium being parallel with that frontage two courts shall be provided viz., one

not less than 10 feet wide running parallel with the frontage and connecting with another court not less than 15 feet wide running as nearly as practicable at right angles to that frontage so that exit shall be obtained from three sides of the auditorium and in the case of a stage of a theatre from two opposite sides of such stage.

Courts for buildings on adjoining sites.

16. In case of buildings erected on adjoining sites having a court in common such court shall in respect of buildings occupying sites as described in Regulation 14 of these Regulations be of a width of not less than 14 feet and in respect of buildings occupying sites as described in Regulation 15 the common court shall be not less than 14 feet wide if parallel to the frontage and not less than 20 feet wide if at right angles to the frontage. (See Appendix A. for diagrams of courts.)

Widths of courts relative to capacity of buildings.

17. (*a*) The widths of the aforesaid courts are for a building the officially estimated capacity of which exceeds 500 but does not exceed 1,500 persons. For a building of a capacity exceeding 1,500 persons the width of each court shall be increased by 1 ft. 8 in. for each additional 500 persons or fraction of 500 persons in excess of 1,500 persons.

Courts for buildings seating under 500 persons.

(*b*) For a building the capacity of which does not exceed 500 persons there shall be provided where required by the Commission a court or courts of widths sufficient to serve as approaches from the external exits of the building to a street or other approved thoroughfare and (in the case of a naturally ventilated building) as sources of fresh air for the building; provided that no such court shall be less than 5 feet wide. (*Re* wooden buildings, see Regulation 83 hereof.)

Courts to extend length and width of auditorium.

18. Every court above required shall extend the full length or width (as the case may be) of the auditorium to the street or thoroughfare and shall be open to the sky except in the case of a passage of fire-proof construction approved by the Commission.

19. In the case of every building provision satisfactory to the Commission shall be made for preventing the spread of fire to such building from any structure erection or material on any adjacent premises.

Commission may accept other site with exit facilities.

20. It is nevertheless hereby provided that any site may be accepted by the Commission which does not wholly comply with the foregoing Regulations as to courts but which in addition to the exits to the frontage to a public street or thoroughfare of the prescribed width has in the Commission's opinion facilities for exit equivalent at least to those afforded by courts as specified in these Regulations.

Courts to be kept free from obstruction.

21. No court shall be used for storage purposes or for any purpose whatsoever except for entrance to and exit from the auditorium and platform or stage and dressing-rooms or retiring-rooms of the building in respect of which it is provided. Every court shall be kept free and clear of any obstruction during performances or entertainments or services and shall at all times be under the complete control of the proprietor of the building.

DIVISION V.—OVERCROWDING.

Seating.

Seating accommodation.

22. (*a*) The seating space assigned for each person shall be not less than 18 inches wide by 32 inches deep. In theatres which are in the opinion of the Commission frequently used as such each seat thereof

shall be clearly defined by means of fixed and rigid arms spaced at clear horizontal distances apart of at least 18 inches and averaging 9 inches in height above the surface of the seat.

(*b*) There shall be a space of at least 12 inches between the extreme front edge or any point of one seat and the extreme back edge or any point of the next seat situated in front thereof as measured between perpendiculars: Provided that in the case of automatic tip-up seats this space may be measured with the seat raised.

23. All seats in the auditorium of every theatre shall be firmly fixed to the floor and in the case of other buildings which are used for different classes of entertainment movable seats in groups of not less than four may with the approval of the Commission be provided. **Seats to be secured to floor or secured together in rows**

24. No alteration of the arrangement of seating as approved by the Commission shall be made without reasonable notice to and the approval of the Commission. **Alteration of seating arrangement.**

25. Regulation 23 shall not apply to any building the aggregate floor area of the auditorium of which is not more than 1,000 square feet. **Certain building exempted from provisions.**

AISLES.

26. Aisles or gangways shall be formed near or at each side of the auditorium and between the doors at the front the side or the rear of the seating in every part of the auditorium and so that no seat of a row shall have more than seven seats intervening in such row between it and an aisle or gangway: **Position of gangways.**

Provided that the Commission may accept an arrangement of seating and gangways with more than seven seats between any one seat and an aisle or gangway—

(*a*) in a grandstand or similar building entirely open at the front; or

(*b*) in a building in which the spaces between rows of seats are not less than 20 inches wide measured between perpendiculars.

26A. Transverse aisles shall be provided where required by the Commission but in no case shall the horizontal distance between any row of seats and a transverse aisle exceed 25 feet nor shall the vertical distance between any seating plat and a transverse aisle in a sloping tier exceed 10 feet. **Transverse aisles.**

27. The aggregate width of aisles and gangways leading to any exit doorway or group of exit doorways shall be as nearly as practicable equal to the required width of such doorway or doorways. No aisle or gangway shall be less than 2 ft. 6 in. wide (*vide* Regulation 48 hereof). **Aisles or gangways.**

28. (*a*) The proprietor shall keep all aisles and gangways throughout every building and all exit doorways passages and vestibules leading therefrom free from obstruction of any kind during public occupation of the building. No person shall occupy stand in or place any obstruction in any aisle gangway or passage during any performance lecture concert or any public assembly on the premises. **Aisles gangway &c. to be kept clear.**

(*b*) Rope barriers across or at the sides of aisles may be used only if secured with spring clips which shall become unfastened when pressure is exerted on the rope.

STANDING SPACE.

Floor area not to be used as standing space without permission.

29. The proprietor shall not cause permit or allow any portion of a floor area to be used by the public as standing space unless with the approval of the Commission nor except to the extent and in such parts of the premises as shall have been shown in plans lodged with and approved by the Commission and the area to be allowed for each person in such space shall average not less than 2 square feet. Where the use of standing space has been so permitted the total widths of the exits as required by Division VI. of this Part of these Regulations shall be increased by 20 lineal inches for every 400 square feet or part thereof of floor area so used or proposed to be so used: Provided that in every case where such space has not been approved by the Commission as seating space the total widths aforesaid in this Regulation shall be increased by 20 lineal inches for every 200 square feet or part thereof of floor area aforesaid.

Police required to prevent overcrowding.

30. Every member of the Police Force and every authorized officer is hereby empowered and required to prevent persons entering any building when there is already within such building a sufficient number of persons to occupy the aggregate area allowed by these Regulations as seating or standing accommodation and to order the removal from the building of any persons present in excess of such number and the removal from aisles gangways exit doorways passages or vestibules of any chairs or other obstructions.

DIVISION VI.—EXITS.

Distribution of exits.

31. Exits shall be provided for each compartment of a building other than a theatre (for which see Regulation No. 145 hereof) and for the building as a whole and shall be placed as far apart as practicable and shall be subject to the following provisions:—

Dimensions of exits.

(1) An exit 3 ft. 4 in. or more wide shall be at least 6 ft. 10 in. high; an exit of smaller width shall be at least 6 ft. 6 in. high;

(2) Every arched exit shall be at least 6 feet in height from sill to springing of arch;

Minimum exit opening.

(3) No opening narrower than 2 ft. 6 in. shall be allowed as an exit;

Obstructed way not allowed as exit.

(4) No opening to which access from the building is obstructed by an altar or communion railing steps platform or stage or other impediment whatsoever and no opening in an interior wall of a vestry retiring-room dressing room or of any other compartment shall be allowed as an exit except with special approval of the Commission;

Exits to increase in width toward thoroughfare.

(5) If the public have to pass from the inside of a building to a public thoroughfare through two or more successive openings differing in width such openings shall be in ascending order of width from the interior of the building to the thoroughfare and for the purposes of these Regulations the width of the narrowest opening shall be taken as that available for exit;

Exits for art-gallery library museum &c.

(6) In determining the total width of the exits required for an art-gallery library museum reading-room or room used for like purposes deductions may with the Commission's approval be allowed from the floor area on account of necessary fixtures;

(7) The width of an exit is to be measured at its narrowest part up to a vertical height of 6 feet above its sill; the width of a doorway (not of the door itself) being therefore measured when the door is open to its full extent; Exits—how measured.

(8) Except where permanent fixed seating is provided the widths and numbers of exits required shall be at least as given in the following table viz.:— How computed

Floor Area—Sq. Ft.	Aggregate Width of Exits.	Number and Width of Exits.
	ft. in.	
Not exceeding 200 ..	2 6	One
201- 300..	3 4	One, or two each 2 ft. 6 in. wide
301- 400..	5 0	One, or two each 2 ft. 6 in. wide
401- 800..	6 8	Two, each 3 ft. 4 in. wide
801- 1,200..	8 4	One 5 feet and one 3 ft. 4 in. wide
1,201- 1,600..	10 0	Two each 5 ft. or three each 3 ft. 4 in. wide
1,601- 2,000..	11 8	One 5 feet and two each 3 ft. 4 in. wide
2,001- 2,400..	13 4	Two each 5 feet and one 3 ft. 4 in. wide, or two each 3 ft. 4 in. and one 6 ft. 8 in. wide
2,401- 2,800..	15 0	Three each 5 feet wide
2,801- 3,200..	16 8	Two each 5 feet and one 6 ft. 8 in. wide, or two each 5 feet and two each 3 ft. 4 in. wide
3,201- 3,600..	18 4	Two each 5 ft. and one 8 ft. 4 in, wide, or three each 5 ft. and one 3 ft. 4 in. wide
3,601- 4,000..	20 0	Four each 5 feet wide
4,001- 5,600..	20 feet, plus 1 ft. 8 in. for each 400 or part of 400 sq. ft. in excess of 4,000 sq. ft.	Four, none being less than 5 feet wide
5,601- 8,000..		Five, none being less than 5 feet wide
8,001-12,000..		Six, none being less than 5 feet wide
Over 12,000 ..	The number and widths of exits shall be determined specially by the Commission in accordance with the circumstances	

In a building having four or more exits two of these totalling not more than half the aggregate width of exit space required may open into a main entrance vestibule subject to the provision of aisles leading thereto in accordance with No. 27 hereof.

Wider or more numerous exits than are set out in the foregoing table may be provided but no exit less than 3 ft. 4 in. wide in a building having a floor area in excess of 1,600 square feet shall be accepted as contributing to the required aggregate width of exits.

(9) Where permanent fixed seating is provided or required to be provided the aggregate widths of exits required may be based on the actual seating accommodation that is to say on the number of seats where these are divided and allowing not less than 18 lineal inches clear width of seat for each person where seating is continuous. For 100 persons accommodated on this basis exit space to the amount of 5 feet shall be provided and for every additional 100 persons or part thereof additional exit space of 20 inches shall be provided subject to the number and widths of exits being as required by the foregoing table. When width of exits may be determined from seating provided.

Exits from stage &c.

32. Whenever a platform or stage is more than 3 feet above the floor level of the auditorium or contains 400 or more superficial feet of floor area separate means of exit directly to the courts or public thoroughfare from the said platform or stage shall be provided.

Exits to be marked.

33. (1) All exits shall be as conspicuous as possible to the occupants of the building and the word "**EXIT**" shall (except in the case of churches and schools) be marked immediately over the inner side of each exit in permanent easily visible block letters at least 5 inches high. The words "**NO EXIT**" shall be similarly marked in letters as aforesaid immediately over all doorways or other openings in the building accessible to the public assembled therein but not approved as exits under the provisions of these Regulations. Provided that letters not less than 3 inches high may be accepted in any building (not being a theatre or cinematograph hall) the auditorium of which does not exceed 60 feet in length nor in width.

(2) The use of the words "NO EXIT" or of similar expression or of any means designed or likely to prevent public use of exits required under the provisions of these Regulations to be made available for such use is hereby prohibited.

(3) No window of the building shall be barred so as to preclude its use as a supernumerary means of escape from the building in case of emergency.

DOORS.

Doors in fence to open outwards.

34. Unless sufficient space is in the opinion of the Commission permanently available for the accommodation of the public between the building and the boundary fence of the premises the exit doors in such fence shall be hung to open freely outwards at least.

Approaches from building to fence.

35. Approaches of sufficient width conducting from the external exits of the building to doors in such fence shall be provided.

All exits to be available.

36. The proprietor shall allow the public to leave by all exit doors at the conclusion of the performance or entertainment.

Exit doors.

37. Every door of an exit whether internal or external shall open freely outwards towards the nearest passage court or street or both inwards and outwards.

Certain doors to open both ways.

38. Every exit door adjoining a public street shall be hung to open freely both ways but shall not be permitted to encroach on the highway.

Accordion or collapsible doors.

Provided that the use of accordion or other collapsible doors may be allowed at entrance doorways subject to the following conditions:—

(*a*) that they are so constructed and fixed that when in the full open or collapsed position they are recessed so as to be clear of the exit way;

(*b*) that when so recessed they become automatically locked in such a way as to necessitate the use of a key to unfasten them; and

(*c*) that they are so recessed during public occupation of the building.

Doors not to open on to steps.

39. No exit door shall be hung so as to open immediately on to a flight of steps having more than three rises nor to obstruct when open any exit doorway passage stairway or landing and no door or other barrier shall be placed across any exit stairway or steps nor within 3 feet of the lowest step of any flight in the course of a public exit.

Door Fastenings.

40. A single-leaf door shall be allowed as an exit only when the fastening for such door is an approved fastening which will allow the door to be opened instantly from the inside of the room of which it is an exit without a key. A catch-pin to keep the door locked shall not be provided. Single-leaf doors.

41. Doors constructed in two leaves may be fitted with any approved fastening. Two-leaf doors

42. The following fastenings may be used on exit doors (except public exit doors of theatres, for which see Regulation No. 147 hereof) and shall be deemed to be approved fastenings within the meaning of these Regulations:— Approved fastenings.

(a) Espagnolette or central-handle bolts provided with handles which afford effective means for gripping and releasing them and which are securely attached and placed not less than 2½ and not more than 4 feet above the floor level;

(b) monkey-tail or similar approved bolts provided they have handles which afford easy and effective means for instantly gripping and releasing them; that the handle of the lower bolt is not less than 2 nor more than 2½ feet above the floor level; that the handle of the upper bolt is not less than 4 feet nor more than 5 feet above the floor level; and that there is no shoulder or projection or similar locking contrivance on the bolt;

(c) horizontal bolts placed not less than 2½ feet and not more than 4 feet above the floor each bolt being not less than 6 and not more than 9 inches long and being provided with a securely-attached knob or handle measuring at least 1¼ inch by 1¼ inch;

(d) save as otherwise provided in this regulation locks other than padlocks only in the case of a door formed in two leaves;

(e) to a single-leaf door a draw-back lock or a Yale type lock without a catch-pin capable of holding the locking-bolt in the forward or locked position or approved bolts may be fitted;

(f) automatic panic bolts or other fastenings that may from time to time be approved by the Commission.

43. The following fastenings shall not be used on doors, viz.:— Prohibited fastenings.

(a) short bolts at top or bottom of a door;

(b) locking or swivel bars or cross bars;

(c) padlocks ordinary spring bolts door-chains or bolts connected with chains;

(d) any lock on a single-leaf door except a draw-back lock or Yale type lock (without a catch-pin) which can be instantly opened from inside the building without a key;

(e) monkey-tail or other bolts having shoulder or projection or similar locking contrivances thereon or not provided with handles admitting of their being instantly and effectually gripped or released;

(f) fastenings of any kind on the outside of porch doors or of similar doors unless they are so fixed on such doors as to

allow the latter to be instantly opened from inside without a key or other unapproved appliance:

Provided that an approved fastening (other than a padlock) is permitted on the outside of a door if the latter is in two leaves.

Fastenings on doors across passages.

44. No fastening shall be used on a door across a passage except such as will allow the door to be instantly opened from either side without a key or other unapproved appliance.

No fastenings on inner doors.

45. No fastening whatever shall be used on the inner of two doors hung in the same doorway archway or other opening.

Fastenings to be in order.

46. Knobs of drawback and other locks and of bolts shall be securely riveted and all fastenings shall be maintained in good working order and state of repair.

Prohibition of obstructions on doors.

47. No door guard lock or catch or handle or door pull or any similar appliances shall be affixed to the door of any exit so that when such door is opened to its full extent such appliance projects and to any extent obstructs the exit.

PASSAGES.

Passage dimensions.

48. No passage or lobby walled in or otherwise enclosed on each side shall be less than 3 ft. 6 in wide and 8 feet high in the clear.

Inclines in lieu of steps in passages &c.

49. Wherever possible inclines shall be provided instead of steps in every passage or other compartment used by the public but so that no such incline shall have a steeper gradient than 1 vertical to 8 horizontal or have any perpendicular rises.

Prohibition of projections in passages &c.

50. There shall be no recesses or projections in the walls of such passage within a vertical distance of 5 feet of the floor surface save for accommodation of approved doors: Provided that all ticket and check takers' boxes shall be fixed in recesses flush with a wall or in such other manner as shall cause no obstruction to exit or entrance.

Curtains drapery &c. in exits.

51. Save with the approval of the Commission the proprietor shall not cause suffer or permit any drapery curtains decorations or other articles or materials to be placed in any entrance or exit passage at an elevation of less than 8 feet above the floor.

Curtains across exits.

52. (1) No curtain shall be hung across any exit doorway in which a door is hung nor across any exit corridor or passage or any stairway or landing.

(2) The Commission may permit curtains to be hung across a doorway where in the opinion of the Commission it would be undesirable to hang a door.

(3) In every case where such permission is given the curtain or curtains shall be of wool or other approved material and shall be hung clear of the floor and on a rod or rods hinged to open outwards.

Passage &c. not to be used as cloak-room.

53. No passage shall be used as a cloakroom and no peg-rack rail or stand shall be provided therein

STAIRS.

Stairways.

54. Separate exit shall be provided for each stairway from each and every floor of the building and shall lead to the requisite thoroughfare or court in the most direct manner possible. Every such exit stairway

shall be separated and fire-isolated from every other stairway and shall not communicate with or serve as a means of entrance to or exit from any other premises or any portion of the same premises which is used for any purpose other than as a building within the meaning of these Regulations: Provided that a stairway or stairways having a total width not exceeding one-half of the required width of exits from the first tier may open into a main vestibule serving the main floor if the width of such vestibule and of the exits therefrom are each at least equal to the sum of the widths of the doorways and stairways leading to the said vestibule. (For theatre vestibules *vide* Regulation 144.)

Stairways &c. to equal exits.

55. Where stairways or stepped or ramped or otherwise inclined ways form the means of exit from any floor or building they shall be equal in their numbers and aggregate width to the exits required by the table in Regulation 31 or 145 hereof as the case may be.

Handrail not a reduction of width.

56. Projection of a wall-handrail to the extent of not more than 4 inches shall not be considered a reduction of the effective width of a stairway or passage provided the handrail is fixed in the position prescribed by these Regulations.

Stairs and landings to be fire-resisting.

57. Stairs from balconies or galleries shall not communicate with any basement or cellar. Every staircase stairway and landing shall be constructed of fire-resisting materials among which may be included redgum jarrah ironbark or other approved hardwood timber not less than 2 inches (nominal) thick. The lining (if any) of the spandrels and of the underside of stairs and landings shall be also constructed of fire-resisting materials.

Flights and landings.

58. All stairs shall be in straight flights shall have half-space or quarter-space landings at intervals of not more than sixteen and not fewer than three rises and shall have *on each side* a continuous handrail at a vertical height of 2 ft. 10 in. above the nosing of the tread and not less than 3 feet above the landing with sufficient balusters or mid-rails.

Provided that a wall handrail may be omitted from a stair less than 3 ft. 4 in. wide which abuts on a wall on at least one side.

Turns in stairs.

59. No stairway shall have more than thirty-two successive rises (whether in two or more flights) without a change of direction through at least sixty degrees.

Handrails to stairs.

60. A central and continuous handrail shall be fixed on every stairway 6 ft. 8 in or more in width in which case the newel at the head of the flight shall be at least 5 feet in height and securely fixed. This provision shall not apply when the tread of the top step of a flight is less than 2 feet above the level of the landing or floor or other traffic surface at the foot of such flight.

61. Handrails shall be properly ramped to newels.

Internal height of stairway.

62. Every stairway shall throughout have a clear vertical height internally above every tread of not less than 7 feet.

Treads and rises.

63. The steps of every stairway required to be provided for public use shall be securely supported and of uniform dimensions throughout

and shall have dimensions corresponding with any one combination only of those set out in the following table:—

Width in inches of Tread exclusive of Nosing.	Height in inches of Rise.
(a) 11	6½
(b) 12	6
(c) 13	5½
(d) 14	5

Circular or winding stairs or stairs having winders in any part of their courses shall in no case be provided for the use of the public.

Geometric stairs.

Provided that the Commission may allow the use of geometric stairs on condition that—

(a) the centre of curvature is outside the outer string and at a minimum distance therefrom equal to at least two-thirds of the width of the stair; and

(b) the width of treads exclusive of nosing or overhang is 11 inches measured at a distance of 20 inches from the outer string.

Hanging steps.

64. Hanging steps (steps fixed at one end only) shall not be used.

Prohibition of projections.

65. There shall be no recesses or projections in the walls of any staircase within a vertical distance of 5 feet from the nearest step or landing.

STEPS OR INCLINES AT DOORWAYS.

Passage levels at front entrance.

66. The level of any passage at or to the front entrance to the building shall not be more than 7 inches above the level of the adjacent footway unless provision for ascent from the said footway to the said passage is afforded by means of an incline or steps (as the case may be) as heretofore provided for.

Steps from external doorways.

67. (1) Steps at least 6 inches longer than the width of the exit and centrally placed with treads and rises as prescribed in these Regulations or inclines complying with Regulation 49 hereof shall be provided outside every exit the sill of which is more than 9 inches above the adjoining ground level.

(2) If the sill is more than 20 inches above the adjoining ground level a landing extending at least 3 inches beyond each side of the exit and at least 3 feet in forward measurement and situated between the exit and the first step or the incline (as the case may be) shall be provided. Such steps (or inclines) and landings shall be provided with handrails as required by Regulations 58 and 60 hereof.

(3) The width of every landing from which steps return along the side of the building shall be not less than that required for the steps as prescribed in these Regulations and where such landing is common to two flights of stairs going in opposite directions its clear width as also that of each flight shall not be less than two-thirds of the width of the exit doorway leading to such landing.

STEPS IN AISLES.

Steps between plats.

67A. (1) Where the difference in level between any two consecutive plats in a stepped tier or floor exceeds 9 inches steps shall be provided in the aisles and shall divide the rise into two equal parts when it does not exceed 14 inches and into three equal parts when it exceeds 14 inches.

(2) The tread widths shall be such as to give as nearly as practicable equal treads throughout the length of any aisle: Provided that no tread shall be less than 10 inches wide exclusive of the nosing. Width of treads.

(3) The difference in level between any two consecutive plats shall not exceed 24 inches.

DIVISION VII.—VENTILATION.

Space and Ventilation under Wood Floors.

68. If so required by the Commission every part of the finished surface of the ground under a building shall be at least 3 inches above the level of the adjoining ground and the aforesaid ground at that level shall be covered with a layer or layers of properly rendered good Portland cement concrete natural asphalt or other approved impervious material. Ventilation: formation level under building.

69. Every person who shall erect a new building shall so construct it that there shall be a clear space of at least 3 inches between every joist and bearer carrying a boarded floor and the surface of the ground or (where such is provided) of the concrete or asphalt covering the ground. Height of floor above ground.

Such person shall cause the said space to be ventilated by suitable air-gratings or by other approved method so that at least ½ square foot of clear net opening shall be provided in sub-floor ventilators for each 20 feet run of external walls and for each 10 feet run of cross walls. Ventilation of spaces under floors.

Natural Ventilation.

70. Every compartment of the building shall be adequately ventilated and where natural ventilation is provided every such compartment shall be separately ventilated. Compartments to be separately ventilated.

71. If an approved system of mechanical ventilation is not provided by the proprietor nor required by the Commission to be provided the following provision shall be made and properly utilized for the ventilation of the building:— Ventilation by natural means.

(1) Inlet ventilators in the form of ducts shafts or hoppers opening slantingly upwards but otherwise as directly as possible into the compartment through the external walls (either through the walls themselves or through the windows in the walls) shall be provided. They shall as far as practicable be equally distributed along the external walls of each compartment. The upper edges of their external openings shall be below the lower edges of their internal openings for the fully open position of the latter and the lower edges of the internal openings shall be from 6 ft. 6 in. to 7 feet above the level of the adjacent floor of the compartment to be ventilated. Inlet ducts.

(2) Outlet ventilators save as otherwise provided in this regulation shall be provided in the form of flues shafts or tubes extending vertically without avoidable bends or angles from the ceiling line into through and above the roof space and shall have their lower portions formed as bell mouths gradually tapered upwards and their upper ends so constructed and so protected by cowls as to prevent entry of rain. Each bell mouth shall present an opening of double Outlet flues

the area required at the outlet of the shaft or tube or flue and the upper end of each flue shaft or tube shall not be lower than the level of the ridge except with the special permission of the Commission.

Proviso.

Alternative means of ventilating.

Provided that—

(a) for a building consisting only of one floor (the ground floor); and

(b) for the uppermost story of any building consisting of more than the ground floor—

one-third of the total requisite area of the outlet opening may be provided by means of openings situated immediately below the wall-plates and extending through the external walls and properly shielded outside (provided the least distance between the inner face of the shield and of the nearest opposite surface is 2 inches); and

(c) for each floor below the uppermost floor of a building consisting of more than the ground floor—

the outlets may be entirely provided by means of such openings immediately below the wall-plates.

(3) In a building which is unceiled or in which the ceiling or roof-lining is attached to the purlins or rafters and continued up to the apex of the roof approved ridge-ventilators may be substituted for flues tubes or shafts as required by this Regulation.

Dimensions of inlets and outlets.

(4) The clear opening for any one inlet may not exceed 70 nor of any one outlet 170 square inches.

Situation and construction of air flues &c.

72. All air flues ducts shafts tubes and openings whether for inlet or outlet of air shall be constructed so as to be capable of being readily cleaned out and shall not communicate with any cavity or space in the thickness of the wall nor with the space intervening between the ceiling and any floor or roof covering (as the case may be) over such ceiling. Sheet metal used in the construction of any flue duct shaft tube or hopper shall not be thinner than No. 24 B.W.G. Whenever required by the Commission the inlets and the outlets shall be fitted with regulating valves and appliances suitable for opening and closing them in varying degrees.

Airway in relation to floor area.

73. The clear opening (i.e. the sectional area of the most contracted part of the ventilators grating-bars and such obstructions being therefore excluded) shall be for inlets at least 1 square inch and for outlets 1 square inch for every 2 square feet of floor area except as regards cloak-rooms dressing-rooms offices and other accessory compartments in which the amounts of inlet and of outlet ventilation may be reduced to not less than half the amounts above required.

Gratings for vents.

74. Perforated zinc or mesh or network finer than corresponds to three meshes per lineal inch shall not be fixed to either inlet or outlet vents.

Provided that where all other openings into the building are fly-proof the vents may be fitted with faces of woven wire of mesh not finer than 18 meshes per lineal inch if the gross area of such vents is made sufficient to provide the required net area after deducting for the wire and if the woven wire over outlet vents at least is fixed to frames which shall be readily removable for cleaning purposes.

75. No opening into the roof-space nor into the space between the ceiling and the floor above such ceiling nor into any wall cavity and supplying means of aerial communication between such space and the interior of the auditorium shall be allowed. **Openings to roof and ceiling spaces forbidden.**

MECHANICAL VENTILATION.

76. In the case of every new building capable of accommodating in any one room more than 1,000 persons and of every existing building proposed to be altered so as to increase its capacity to more than 1,000 persons or to be rebuilt or in any building where in the opinion of the Commission the standard of purity of air prescribed below cannot be attained by natural ventilation mechanical ventilation shall be adopted and properly used. Mechanical ventilation may with the approval of the Commission be provided in addition to natural ventilation or *vice versâ*. **Ventilation—mechanical.**

77. Where mechanical ventilation is adopted the following provisions shall apply:—

(1) The temperature of the air shall be maintained at not less than 60° Fahr. nor more than 75° Fahr. during the whole time the public are in occupation of the building. **Temperature.**

(2) The inlet air shall be introduced into the building in such a manner that it will be distributed evenly over the floor space at breathing line without causing uncomfortable draughts. **Distribution of inlet air.**

(3) Outlets shall be provided of such area that the velocity of the air in the outlet shaft shall not exceed 20 feet per second except with the special approval of the Commission. **Outlets.**

(4) All ventilating air introduced into the building shall whenever required by the Commission be efficiently filtered. The filtering medium shall be kept clean and in good order to the satisfaction of the Commission. **Filtration of inlet air.**

(5) Every motor operating ventilating machinery shall be provided with an approved device located in an approved position for the purpose of enabling the supply of current to be cut off in the event of fire and such device and motor shall be maintained in good order and condition. **Means of stopping machinery in case of fire.**

(6) The ventilating machinery shall be kept working during the whole period of occupation of the building by the public. Provided that in any case of outbreak of fire in the building during public occupation of the latter the ventilating machinery shall be stopped if the stoppage thereof be calculated to prevent spread of fire or access of injurious gases or vapours to the public on the premises or otherwise to safeguard such persons.

(7) There shall be provided and maintained in front of all air-inlet openings in the auditorium streamers or other approved devices readily visible to the audience which shall show clearly whether or not air is being supplied to the auditorium by the ventilating machinery. **Devices to show whether machinery is operating.**

Standard of purity of air.

78. At any time during public occupation of a building—

(a) the amount of carbon dioxide in the air of the room shall not exceed 0.12 per cent. by volume; and

(b) the moisture contents of the air of the room shall not exceed the moisture content of the external air by more than 0.5 per cent. in weight.

VACATION OF "CONTINUOUS SHOW" THEATRES.

79. The proprietor of every building which is used for continuous cinematograph, vaudeville, or other entertainments, and in which an approved system of mechanical ventilation is not provided shall cause the auditorium thereof to be—

(a) completely vacated by the public from 6.30 p.m. to 7.30 p.m.; and

(b) thoroughly flushed with fresh air during such period by opening all doors and windows.

DIVISION VIII.—CONSTRUCTION.

80. (1) No building shall be constructed so as to have more than three tiers or floors intended for public occupation nor shall any floor room or compartment above the second floor be used as a building within the meaning of these Regulations: Provided that if the whole of the walls floors stairs and roof of a building are constructed of fireproof material the Commission may approve of such use of floors rooms or compartments above the second but not above the fourth floor.

(2) The slope of a tier shall not exceed 30° measured from the horizontal plane, except with the special approval of the Commission.

Building to be fire-isolated.

81. Every building shall be fire-isolated from other premises to the Commission's approval and no part of such building shall overlook or overhang any portion of adjoining premises in such a manner as to facilitate communication to it of fire from such premises.

Minimum internal height.

82. Where not otherwise specified in these Regulations the internal heights of the various parts of a building shall not be less than the following, viz.:—

(a) For the main compartments an average of 12 feet with a minimum of 10 feet at any point;

(b) under or over any dress circle balcony or gallery a minimum of 8 feet;

(c) for supper-rooms lounges and other accessory compartments used by the public an average of 10 feet with a minimum of 8 feet at any point; and

(d) for dressing-rooms and other compartments not used by the public and for porches corridors and passages 8 feet.

WOODEN BUILDINGS.

Isolation of wooden building.

83. Every building that may under the provisions of any extant by-law or regulation be constructed wholly or in part as to the walls thereof of wood shall be distant from the boundaries of the allotment of land on which it stands at least 10 feet.

NOTE.—The theoretical minimum quantity of fresh air needed to comply with Regulation 78 (a) is 13 cubic feet per person per minute, but when allowance is made for losses and imperfect distribution, a mechanical ventilation system with a capacity of less than 20 cubic feet per person per minute is unlikely to be satisfactory.

84. No wooden building of more than one (the ground floor) story shall be used as a public building neither shall any wooden building in which the width of the auditorium including any annexes at the sides thereof exceeds 40 feet be so used. **Restriction on wooden buildings.**

85. The interior lining of all walls and ceilings of wooden buildings shall be metal fibro-cement plaster or other approved non-inflammable material but the Commission may allow a wooden dado not exceeding 6 feet in height. **Linings of wooden buildings.**

The undersides of rafters in skillion roofs may be lined with wood.

Ceilings, Soffits, and Fire-isolation.

86. The ceilings of all compartments of a building (except those on the uppermost floor) and the soffits of all tiers above the ground floor shall be lined with fire-resisting material unless the floor above such ceiling or soffit is of concrete or other fire-proof material. **Ceilings of lower stories to be fire-resisting.**

87. No building shall have a wood shingle roof nor shall the walls or ceilings thereof be lined with scrim hessian canvas or similar material whether the same is treated with chemicals or not and no inflammable curtain hangings or decorations shall be placed in the auditorium within 8 feet of the floor. **Roofs linings &c.**

Provided that hangings for acoustic purposes may be allowed if of wool or other approved material.

88. No premises shall be used as a building within the meaning of these Regulations if situated above or below or immediately adjoining any compartment used as a residence kitchen laundry shop store or for a steam boiler or engine or for the storage of inflammable material unless separated from such compartment by an approved fire-proof construction. **Public buildings not to adjoin certain premises.**

Dressing Rooms.

89. Whenever so required by the Commission adequate dressing-room accommodation properly separated for the sexes shall be provided in approved positions for the use of artists musicians and other performers. Subject to the provisions of Regulation 140 hereof such rooms shall not be placed under a platform or stage nor under the auditorium and shall be connected with exits independent of those serving the auditorium. No dressing-room shall have a floor area less than 60 square feet. All decoration in such dressing-rooms shall be rendered fire-resisting. The exit doors from a dressing-room block shall be fitted with approved fastenings only.

General Structural Provisions.

90. In connexion with the erection or alteration of any building—

(*a*) the materials and methods of construction employed;
(*b*) the methods of calculating and testing; and
(*c*) all work done—

shall be in accordance with the requirements contained in Schedule C to these Regulations so far as such requirements may be applicable.

DIVISION IX.—CLOSETS AND URINALS.

Sanitary conveniences.

91. (1) Closets and urinals suitably situated properly separated and designated for the sexes and decently screened shall be supplied in numbers at least as follow:—

Total Number of Persons of both Sexes.	For Theatres and Cinematograph Halls.			For Other Public Buildings.		
	For Males.		For Females.	For Males.		For Females.
	Closets.	Urinals.	Closets.	Closets.	Urinals.	Closets.
Not exceeding 100	1	1	1	1	1	1
Exceeding 100 but not exceeding 200	1	2	1	1	2	1
" 200 " " 400	1	5	2	1	4	2
" 400 " " 600	1	8	3	1	6	2
" 600 " " 800	2	12	3	2	8	3
" 800 " " 1,000	2	15	4	2	10	3
" 1,000 " " 1,200	2	18	4	2	12	3
" 1,200 " " 1,400	3	21	5	3	14	4
" 1,400 " " 1,600	3	24	5	3	16	4
" 1,600 " " 1,800	3	27	6	3	18	4
" 1,800 " " 2,000	4	30	6	3	20	5

For more than 2,000.

(2) For a greater number of persons than 2,000 the requisite numbers of conveniences shall be reckoned to the nearest whole number *pro rata* with those set out above for 2,000 persons.

Sexes assumed to be equal in number.

(3) The foregoing table is based on the assumption that the sexes are approximately equal in number; and in any case where a building is used wholly or predominately by persons of one sex the Commission may vary the numbers of conveniences required for males and females accordingly.

"Urinal" defined.

(4) In this Part "urinal" means a crock bowl or stall capable of accommodating one individual user at a time: Provided that where conveniences in the form of continuous slabs or troughs are permitted every complete 24 inches of available clear length thereof shall be deemed to be one urinal.

(5) Where in the case of any building the Commission is satisfied that the provision of sanitary conveniences is insufficient under the actual conditions of use thereof the Commission may require the provision of additional conveniences over and above the numbers set out in the foregoing table.

(6) In the case of a building used only as a church or Sunday school and having accommodation for more than 200 persons the Commission may accept a less number of conveniences than set out in the foregoing table but not less than one closet for females and one closet and two urinals for males.

Situation of closets and urinals.

92. In any building not being a church or Sunday school and having accommodation for more than 500 persons and served by a water-carried sewerage system the closets and urinals shall be so placed as to be conveniently accessible under cover from the main entrance and in any such building having more than one floor or tier there shall be closet and urinal accommodation on the level of each such floor or tier

and proportioned to the number of persons accommodated therein: Provided that the foregoing requirement shall not apply to an upper floor or tier accommodating less than 100 persons.

93. (1) Closets and urinals where connected with a public sewerage system shall be situated constructed lighted and ventilated in accordance with the By-laws of the Sewerage Authority for the locality and where connected with a septic tank system shall be situated constructed lighted and ventilated in accordance with the Commission's Septic Tank Regulations 1932. Construction of closets and urinals.

Provided that whether so required by such By-laws or Regulations or not the whole of the floor of every airlock closet and internal urinal compartment shall be constucted of or covered with durable impervious material.

(2) Pan-closets shall comply with the Commission's General Sanitary Regulations 1931 and when entered from within the building shall be separated from it by a disconnecting passage at least 5 feet long and having both of its side walls open to the air and formed to the extent of at least one-fourth of their areas of fixed louvres.

(3) Unsewered urinals shall not be in communication with the interior of the building and shall comply with the Commission's General Sanitary Regulations 1931.

(4) Detached closets and urinals shall not (except with the special approval of the Commission) be more than 100 feet from the building or buildings which they serve shall be approached by pathways suitable for use in all weather and shall be together with their pathways kept lighted at night during use of the building or buildings.

(5) The proprietor of every building shall cause all closets and urinals appurtenant thereto to be maintained at all times in a clean and sanitary condition. Closets and urinals to be kept clean.

DIVISION X.—DRAINAGE.

94. Drains shall be provided for carrying off all rainwater drainage and other liquid and (where not required to comply with the By-laws or Regulations of a Sewerage Authority) shall be subject to the following provisions:— General provisions.

(1) They shall be firmly founded and laid with sufficient fall present smooth impervious surfaces where these are liable to come into contact with liquid and have watertight joints; Foundation and surfaces.

(2) every underground drain shall be laid in straight lines and have an access or inspection opening fitted with a suitable cover at every change in the direction of its course and if more than 100 feet in length and conveying foul water or if discharging into a covered sewer it shall be efficiently ventilated; Underground drains.

(3) no drain shall be constructed or remain under any building unless absolutely necessary to secure proper drainage. Where the use of such a drain is unavoidable— Drains under buildings.

(a) every drain laid on or in the ground shall be of cast-iron pipes with caulked lead joints or of

glazed stoneware or cement pipes with cement joints and surrounded on all sides with 4 inches of cement concrete; and

(b) every drain or wastepipe fixed clear of the ground shall be of cast-iron pipes with caulked lead joints or of wrought-iron pipes with screwed joints.

Rain-water and waste pipes.

(4) All rainwater pipes and all waste and overflow pipes from baths lavatories sinks water tanks and like fittings shall be air-disconnected from any closed drain receiving foul water, or sewage either by being made to discharge over a water-tight channel 12 to 18 inches long leading to a trapped drain inlet or by some other approved method; and with the exception of the aforesaid rainwater pipes they shall also be provided with accessible and self-cleansing traps and if more than 12 feet long be ventilated by pipes consisting of impervious material with air-tight joints and having no abrupt turns or angles;

Inlets.

(5) inlets to drains such as yard-gullies shall be properly trapped and fitted with iron gratings;

Inspection chambers.

(6) in every inspection or other chamber the floor shall not be lower than the outlet and the interior angles shall be well rounded out;

Prohibition of certain drains.

(7) open foul-water drains near the doorways windows ventilators or other openings in a public building are hereby prohibited.

Vide Schedule C hereof Part IV. clause 31.

PART III.

LIGHTING.

Natural Lighting.

95. Where a building or any compartment thereof is used for public purposes in the day-time such building or compartment shall—

(a) have glazed windows presenting a total area of clear glass equal to at least one-tenth of the floor area of such building or compartment and distributed so as to effectually light the whole floor of the building or compartment; or

(b) be effectually lighted by artificial means whenever it is so used.

Provided that in a church which is used for that purpose only the Commission may accept a smaller proportion of glass area to floor area.

Lighting of Exits and Passages.

96. Every compartment of the building together with all exits passages and other ways shall be kept properly and continuously lighted so as to render all exits and passages or other ways therein and therefrom to the available public thoroughfare or thoroughfares at all times readily visible during the whole time the public are on the premises. Any darkening even momentarily for any purpose whatsoever of any portion

of the building used by the public so as to render any exit and passage or other way from such exit to the available public thoroughfare or thoroughfares not readily visible by the public in the building at the time is hereby prohibited.

PLANS ETC. OF PROPOSED INSTALLATIONS OR ALTERATIONS TO BE APPROVED BY COMMISSION.

97. (1) Before the installation in any building of any system of lighting or warming therefor or of power installation therein or of any work or apparatus in connexion therewith and before any alterations to an existing installation are commenced the approval of the Commission for what is proposed to be done shall be obtained.

For this purpose plans and specifications together with full particulars of the work it is proposed to carry out including drawings of proposed switchboards shall be forwarded to the Secretary to whom also record copies of the drawings as approved shall on demand be supplied on completion of the work.

DRAWING OF WIRING SYSTEMS TO BE EXHIBITED.

(2) A copy of the approved drawings showing the arrangement of all switchboards and a key to the layout of the wiring and the positions of all switchboards shall be posted as soon as practicable after approval in a prominent and approved position on such premises and kept therein in good order and condition.

TEMPORARY LIGHTING.

(3) In all cases in which it is intended to install temporary lighting sufficient notice in writing of such intention shall be given to the Commission and its approval shall be obtained before the work of installation is commenced.

ELECTRIC LIGHTING AND POWER INSTALLATION.

98. The proprietor of every building in which electric light is installed or proposed to be installed shall also cause the provisions of Regulations 99 to 113 inclusive hereof to be complied with so far as the same are applicable.

99. The extant Wiring Regulations of the State Electricity Commission of Victoria where not inconsistent herewith are deemed to be incorporated herein.

CERTIFICATE OF APPROVAL.

100. (1) No electric installation in such premises shall be used unless and until a properly qualified and competent electrical engineer has certified in writing on behalf of the proprietor that the installation is in proper working order nor until the Commission has signified approval of such installation being used.

TESTS.

(2) Tests of electrical installations or of any parts thereof may be made by the Commission from time to time.

SERVICE MAINS AND FUSES.

101. (1) The service mains and fuses in any public building shall not be used for the supply of current to any other electric installation whatever.

INDEPENDENT SERVICE FUSES.

(2) Every such building when lighted by electric light shall when required by the Commission be provided with not less than three separate sets of service fuses:—

A for the stage and power purposes

B and C for the auditorium passages exits and all parts of the premises open to the public and each of the groups of circuits for A B and C respectively shall be kept separate and distinct throughout the installaton.

Where a three-wire or four-wire service is given the groups of circuits A B and C shall be balanced to the satisfaction of the Commission and the Electric Supply Authority.

CONNECTION TO SUPPLY MAINS.

(3) Each group of circuits under clause (2) hereof shall be supplied from a separate fuse box or boxes and where practicable from a separate set of mains. Such fuse box or boxes shall be effectually sealed and such seals shall be broken only by an authorized officer of the supply authority.

MAIN CIRCUITS B AND C.

(4) The groups of circuits B and C shall be so arranged that approximately half the lights in each division of the auditorium and half those in each passage exit and other place open to the public shall be connected to circuits of group B and the other half to circuits of group C and as far as practicable the lights shall be connected on circuits of group B and group C alternately. In no case shall any portion of one group be combined in one fitting with or enclosed in the same box conduit casing or other enclosure as any portion of another group.

SWITCHBOARDS.

MAIN SWITCHBOARDS.

102. (1) Main switchboards shall be placed in approved positions. Every theatre switchboard shall be installed in a compartment of fire-resisting construction which shall be properly lighted and ventilated and used solely for that purpose.

CHANGEOVER SWITCHES.

(2) Changeover switches shall be used only if approved for the purpose.

ALL SWITCHBOARDS.

(3) Switchboards shall be fixed in readily accessible positions but so as not to obstruct passage ways or exit ways. Where a switchboard is placed in an exposed position it shall be wholly enclosed in a fire-resisting lock-up case.

Each switch and fuse shall be permanently labelled in an approved manner or identified by figuring or lettering painted in an approved manner on the board to show the circuit controlled thereby.

The switchboard used for the control of signal-light or other circuits shall be kept clear of bells telephones and similar apparatus.

CONTROL OF GROUPS A, B, AND C.

(4) The groups A B and C shall be controlled by separate main switches and fuses.

Sub-Circuits.

103. (1) Circuits for power or heating purposes shall be kept distinct and separate from lighting circuits.

(2) Exit and entrance lighting circuits shall be controlled solely at the main switchboard.

(3) The general lighting of the auditorium shall under no circumstances be controlled solely from within any cinematograph cabin. Where switches to control the whole of the auditorium lighting are placed in any such cabin the switches controlling a sufficient number of lights to illuminate effectively the whole of each division of the auditorium shall be wired in parallel with switches on the main switchboard or on a switchboard in an approved position near the main entrance door to the stalls.

(4) For the purposes of these Regulations "sub-circuit" means a branch circuit beyond a final distribution board to which sub-circuit lamps and/or other consuming devices are connected.

Conductors and Insulation.

104. (1) The approval of the Commission shall be obtained for the use of any means of insulation of conductors other than that permitted under the Wiring Regulations of the State Electricity Commission of Victoria.

(2) Flexible conductors shall be insulated with pure and vulcanized indiarubber and shall be protected on the outside by a stout braiding and rubber tube where necessary or they shall be protected by means of tough rubber compound or other suitable covering which will resist abrasion or other injury.

(3) No joints shall be made between flexible conductors.

Conductors—Fixing, Supporting, and Protection.

(4) Where necessary special precautions shall be taken to protect conductors from chemical and other injury.

(5) Conductors and cables covered with lead tough rubber or other soft or easily fused material shall not be used unless protected by external armour of iron or steel or enclosed in substantial iron or steel tubing or other approved covering up to a height of not less than 8 feet from the floor.

(6) Approval shall be obtained from the Commission for the use of any means of fixing or protecting conductors which is not permitted under the Wiring Regulations of the State Electricity Commission of Victoria.

(7) Wood casing shall not be used without the special approval of the Commission. If wood casing or wood troughing be used it shall be constructed of jarrah or other approved hardwood and shall be run in such a manner that it is open to view throughout its entire length. Conductors contained therein shall be always accessible.

In no circumstances shall conductors of opposite polarity be laid in the same groove in wood troughing, nor shall the conductors of the same polarity belonging to the different groups of circuits A B and C be laid in the same groove of wood casing or wood troughing.

(8) Except where sanction in writing has been obtained from the Commission to run open conductors on insulators external to buildings all conductors external to buildings (other than underground cables) shall be enclosed in iron piping or steel conduit, protected where necessary from mechanical injury and securely fixed and supported. Such conduit shall be run in such a manner that any condensation will automatically drain therefrom.

(9) Underground wiring shall consist of stranded cables and shall be carried out in accordance with the requirements of the Wiring Regulations of the State Electricity Commission of Victoria.

STAGE LIGHTING.

105. (1) Every theatre stage shall where practicable be lighted by electric light only.

Switchboard.

(2) A switchboard fitted with all switches fuses and other fittings necessary for the control and regulation of the stage lighting shall be fixed in an approved position from which the operator can overlook the stage or in some other approved position provided that the controls are so placed that the operator can see all parts of the stage. The switchboard shall be so arranged that a fire occurring on it cannot readily spread therefrom.

(3) The stage lighting final sub-circuits shall be controlled solely by the apparatus on this switchboard.

(4) A metal hood extending the full length of the board shall be fitted at the top of the switchboard to protect it effectively from falling objects.

Switchboard Platform.

(5) Except where remote control is used a platform with suitable means of access to the switchboard shall be provided for the switchboard operator. The platform shall be of fire-resisting material with a hardwood or other non-conductive floor. The handrail of the platform shall be constructed of jarrah or other approved hardwood. During public occupation of the premises the switchboard shall be under the immediate control of a person duly licensed as the holder of either an A or B Grade Wireman's Licence under the Rules made for the Licensing of Wiremen pursuant to the powers contained in the State Electricity Commission Acts or any amendment thereof.

Remote Control.

(6) Where the stage lighting is controlled from any position other than the stage lighting switchboard the control panel shall be in an approved position and accessible only to authorized persons.

Control of Auditorium Lighting.

(7) The circuits for the auditorium lighting shall be so arranged that it is not possible to control the whole of the auditorium lighting solely from the switchboard platform or control panel referred to in clauses (5) and (6) above.

FIRE-EXTINCTION APPLIANCES.

(8) At least one pair of rubber gloves and one bucket kept filled with dry sand and a scoop with an insulated handle and at least one tetra-chloride of carbon fire-extinguisher of 1-quart capacity and as approved by the Fire Underwriters Association shall be kept on the said platform in readiness for use in extinguishing an electric fire.

LAMP GUARDS.

(9) Lamps on footlights or battens proscenium lights and when required by the Commission other lamps shall be protected by stiff wire guards so arranged that no inflammable material can come in contact with any such lamp or light. No readily combustible material shall be placed in such proximity to any lamp as to entail risk of such material becoming ignited.

HIGH WATTAGE LAMPS.

(10) Every lamp consuming more than 200 watts shall when used for stage lighting be properly supported in a suitable non-combustible fitting attached to a properly secured metallic fixture.

TEMPORARY STAGE LIGHTING.

(11) In the case of any temporary installation used for stage purposes all connexions with the permanent installation shall be removed immediately after each performance unless the Commission's permission for their retention has first been obtained.

STAGE SOCKETS OR WELLS.

(12) (i) Stage sockets or wells shall be of approved type and shall be substantially constructed of marble slate hardwood or other approved material and shall each be protected by a pair of cut-outs having a maximum capacity of 20 amperes.

(ii) Stage sockets or wells shall be installed in such a manner that dirt and dust cannot accumulate in the socket or well and so that the contact surfaces cannot readily be short-circuited.

PLUGGING BOXES.

(13) Plugging boxes shall be constructed of hardwood or other approved material and shall be so used that no live metal is exposed.

GUARDING OF CONDUCTORS AT JUNCTIONS WITH BUNCH, ETC., LIGHTS, BATTENS, AND SIMILAR FITTINGS.

(14) The conductors to bunch lights portable arc lamps battens movable lengths or portable strips shall be suitably insulated and protected particularly at the points where they adjoin the fittings.

Sufficient length shall be allowed to prevent the conductors receiving any injury through movement of the fittings and all conductors shall be protected from mechanical injury by means of leather or stout waterproof canvas hose or other approved covering.

CABLES FOR SUSPENDED BATTENS.

(15) Cables connecting suspended battens shall be of one of the following classes of cable, namely:—

(*a*) Flexible cables covered with tough rubber compound;

(*b*) Vulcanized rubber insulated cables containing not less than seven strands for each conductor and enclosed in canvas hose;

(*c*) Insulated flexible cables covered with slow-burning braiding;

(*d*) Insulated flexible cables covered with asbestos or fire-resisting braiding;

(*e*) Insulated flexible cables covered with hard cord braiding.

SUSPENSION.

(16) (*a*) Cables connecting suspended battens shall be supported in such a manner that no pull can be applied by the conductors to any terminals to which they are connected.

(*b*) Each batten shall be suspended by means of wire ropes attached to insulators on the battens to the satisfaction of the Commission.

LOADING OF CIRCUITS.

(17) Incandescent stage lighting including footlights border lights and proscenium side lights shall be so wired that the maximum current on each circuit does not exceed the limits laid down in the Wiring Regulations of the State Electricity Commission of Victoria.

ARRANGEMENT OF FITTINGS.

(18) No electric fitting apparatus or appliance of any description shall be so fixed or arranged that it can under any circumstances become damaged by the lowering of the proscenial curtain or of the safety curtain of the proscenium opening of the stage.

ARC LAMPS.

106. (1) Arc lamps shall not be used without special permission of the Commission.

Where an arc lamp is used it shall be—

(*a*) provided with an approved double-pole switch placed within easy reach of the operator and the conductors for a distance of 2 feet from the lamp shall be covered with a fire-resisting material. In no case shall such a lamp be suspended by the conductors;

(*b*) enclosed in a suitable cover or box which shall be substantially constructed of metal of not less than 20 gauge (0.036 inch) so designed as to provide proper ventilation and prevent sparks or heated particles of carbon being emitted therefrom and so arranged that live parts of the lamp cannot come into contact therewith.

(2) Every frame for holding a coloured medium and every masking shutter shall be of metal.

(3) Not more than two arc lamps shall be under the control of any one operator and they shall not be more than 10 feet apart.

RESISTANCES AND CHOKE COILS.

107. (1) Resistances and choke coils for regulating the pressure for lights or motors or for other purposes shall be mounted on incombustible bases. They shall be so protected and placed at such a distance from any combustible material that no part of the resistance or choke coil if broken can fall on such material or vice versa.

(2) Resistance shall be so designed and arranged that the maximum temperature of any part does not exceed 212° F. (100° C.).

(3) Resistances for arc lamps shall be placed in approved permanent positions and wired with their connecting terminals on the under side.

(4) Liquid resistances shall be placed in a fire-proof room reserved for the purpose. Liquid resistances with side or bottom connexions shall be mounted on frames and shall be provided with effective trays.

(5) In general all dimmer resistances shall be connected in the active conductor of the circuit and a suitable control switch for interrupting the current shall be connected on the supply side of the dimmer. All dimmers shall be suitably insulated, and where two or more dimmers are installed in close proximity on different active conductors they shall be of the all-insulated type or shall have all exposed metal parts bonded together and connected to earth.

Where however the previous consent in writing of the Commission has been obtained dimmers may be installed in the neutral conductor of the circuit provided that such dimmers are of a type which will not open the circuit and a double-pole switch is inserted in the conductors of the circuit on the supply side of and in close proximity to the dimmers.

All metal work of dimmer frames shall be effectively connected to earth.

Switches.

108. (1) The minimum distance between live metal parts of opposite polarity shall be 2¼ inches unless such parts are separated and screened by insulating material to the Commission's satisfaction.

(2) All switch covers and handles shall be insulated.

Cut-outs or Fuses.

109. (1) Supplies of spare wedges or containers ready wired shall be kept available for replacement purposes.

(2) Temporary bridging of terminals is hereby prohibited.

Fittings.

110. All electric fittings shall be suspended or fixed in an approved manner.

Transformers.

111. Transformers shall be placed only in positions approved by the Commission.

Generating Plant.

112. (1) Where the supply of current is or is intended to be derived from special generating plant on the premises or otherwise under the control of the proprietor use of such plant together with the switchboard and its fittings shall in all cases be subject to the Commission's approval.

(2) Boilers steam-engines gas-engines dynamos motor generators and converters when used for the supply of electricity to such premises shall be placed in such position only as shall be approved by the Commission.

(3) No other premises shall be supplied with electricity from any part of the installation of a public building.

ENGINE-ROOMS.

(4) All necessary provision shall be made for keeping the temperature of the engine-rooms within proper limits. Cotton and oily waste and similar inflammable material must be kept in suitable metal receptacles which when not required to be open shall be kept closed.

(5) No engine-room switchboard-room or machine-room shall be used for any other purpose unless approved by the Commission.

(6) Gas or petrol engines shall be placed in rooms so adequately and continuously ventilated that no explosive mixture of gas or vapour and air can accumulate in such rooms.

Exhaust gases shall be conducted as directly as possible to the outer air through a pipe or duct of approved size arrangement and construction.

ACCUMULATORS, ETC.

(7) Rooms in which accumulators or primary batteries are placed shall be adequately ventilated to the outside air to the satisfaction of the Commission.

(8) Such rooms shall be of approved fire-resisting construction and shall be used for no other purpose whatever.

(9) All batteries shall be well insulated and the floors of such rooms shall be covered with sheet lead or alternatively lead trays shall be placed under the batteries or accumulators.

SUPERVISION.

113. (1) The generating plant and switching gear shall be under the control of a thoroughly competent person. The engine-room if any shall be inaccessible to the public and where possible such room shall have an external entrance independent from any other entrance to or exit from the main building.

(2) The electric installation must be in charge of a person duly licensed as the holder of an A or B Grade Licence under the Rules for the Licensing of Wiremen made pursuant to the powers contained in the State Electricity Commission Acts or any amendment thereof.

FIRE PRECAUTIONS.

OIL AND GAS LIGHTING.

114. Oil lamps shall have metal fonts or receivers supported on metal brackets or suspended by metal chains or metal rods. Gas brackets and oil lamp brackets shall not have movable joints. Any inflammable material if within 4 feet vertically or 2 feet horizontally of any gas or oil light must be protected by the intervention in the former case of a hanging and in the latter of a fixed metal shield. Every fixed shield must have an open air-space behind it. Gas oil and electric light fittings shall be at least 6 ft. 8 in. above floor level. All burners within reach of the audience shall be fitted with secret taps and shall be protected by glass or wire globes.

115. Where gas is used in any building it shall be generated and stored at a pressure sufficient only for forcing it through the burner; the pressure shall not exceed 20 inches in the generator nor 5 inches in the holder or service pipe.

Such gas shall not be mixed with oxygen nor with atmospheric air before it reaches the burner.

116. A stop-cock securely placed shall be attached to every gas main so that the gas supply may be instantly shut off.

Gas-pipes shall not be of compo nor of lead except pipes for the conveyance of acetylene and these shall be effectively protected against injury where they are within 8 feet of the floor.

ACETYLENE.

117. No apparatus used for generating or storing acetylene gas shall be used unless it has been approved by the Commission after it has been tested and passed by an expert and shall be subject to examination by an authorized officer.

Every such apparatus shall be placed in a building outside the building in which the gas is used; such outbuilding being separated as far as practicable from any inhabited building and kept well ventilated. The generator shall be charged during daylight only. No matches or other artificial light or heat shall be used dangerously close to either the generator or the place where carbide of calcium is stored. All necessary precautions shall be taken to prevent escape of the gas and ignition of the same in the generating room.

118. A person experienced in the design and use of such gas-generating apparatus shall be placed in charge of such apparatus.

119. Acetylene gas shall not be allowed to come into contact with copper or copper alloys or silver either in the generator or storage vessels or in the pipes or fittings.

120. The proprietor of a building shall not cause permit or allow any compressed or liquefied acetylene to be brought into or remain within such building nor shall he permit any other than an approved apparatus for and an approved method of generating acetylene gas to be used on the premises.

He shall not cause permit or allow any carbide of calcium to be stored on the premises unless it is in a dry condition and enclosed in air-tight metal cases and stored in an air-tight covered iron container painted red externally and bearing thereon in plainly visible white letters the words CARBIDE OF CALCIUM such container being protected from access of damp and so placed as to be freely ventilated all round. In no case shall more than 1 cwt. of carbide of calcium be stored at any one time on the premises.

MINERAL SPIRIT AND HOLLOW WIRE DISTRIBUTION AND VAPORIZED KEROSENE LIGHTING SYSTEMS.

121. The installation of mineral spirit and hollow-wire distribution systems and of vaporized kerosene or similar lighting systems shall be permitted only on condition that the rules of the Fire Underwriters' Association of Victoria for the time being are complied with and that such further requirements as the Commission may see fit to impose under the particular circumstances and conditions of each individual case are fulfilled.

LIQUID FUEL.

122. Liquid fuel for furnaces or internal combustion engines shall be stored and used in accordance with the rules of the Fire Underwriters Association of Victoria.

INFLAMMABLE FLUIDS NOT TO BE STORED.

123. No proprietor shall cause permit or allow any benzine naphtha turpentine or any other fluid whatsoever having a flash point of less than 102 degrees Fahrenheit nor any inflammable paints oils oily waste or any other substance liable to ignition by spontaneous combustion to be kept stored or placed in any building.

ACCUMULATION OF INFLAMMABLE MATERIAL, ETC., FORBIDDEN.

124. No proprietor shall cause suffer or permit accumulation or storage of articles or material of an inflammable character on over or under the stage or platform or in under or over the auditorium or any room or compartment having at any time direct aerial communication with the auditorium or with any passageway leading directly or indirectly from the auditorium to the street. He shall cause all scenic properties or decorations to be kept free from accumulations of dust or rubbish.

INFLAMMABLE DECORATIONS.

124A. No inflammable decorations shall be attached directly to any conductor pipe chain wire or rod supporting any light fitting nor shall such decorations be placed within one foot horizontally or downward from or two feet above any incandescent electric lamp nor within four feet of any electric radiator or arc-lamp. (For distance from oil or gas lamps *vide* Regulation 114.)

INTRODUCTION OF EXPLOSIVES.

125. No proprietor shall cause permit or allow any explosives within the meaning of the *Explosives Act* 1928 to be kept or stored or brought on to the premises of any building unless in a fire-proof safe.

PART IV.

SPECIAL PROVISIONS APPLICABLE TO THEATRES AND CINEMATOGRAPH HALLS ONLY.

126. The provisions of this Part shall, unless inconsistent with the context or subject-matter hereof, be applicable only to theatres and cinematograph halls:

Provided that in the case of any cinematograph hall which is used as such less frequently than once a week, the Commission may exempt the proprietor from compliance with Regulations 145, 147, and 153 to 160 inclusive. Where such exemption has been given the relevant provisions of the Fire Prevention Regulations shall apply to the building.

127. No building which is not in customary use as a theatre at the time of coming into operation of these Regulations shall be used as a theatre unless it complies with the requirements hereof.

COPIES OF REGULATIONS TO BE AVAILABLE.

128. The proprietor of every theatre shall cause a copy of these Regulations to be always available for inspection on demand by an authorized officer.

Restriction of Use of Premises.

129. No theatre shall be constructed underneath or over any part of any other building except with special approval which approval shall not be granted unless approved fire-proof construction has been adopted throughout and the buildings are fire-isolated from each other and are provided with separate entrances and exits to the Commission's approval.

In no case shall living rooms be allowed in licensed theatres nor in any buildings in communication therewith.

Floor Level.

130. Unless under exceptional conditions of configuration of site (of which conditions the Commission shall be sole judge) the Commission otherwise directs in every theatre the level of the floor of the stalls at the principal entrance thereto shall not be more than 3 feet above the level of the street at the entrance to the main vestibule and the level of the lowest part of the floor of the stalls shall not be lower than the level at which such floor can be effectually drained by gravitation into an available public sewer nor more than 12 feet below the mean level of the footpath of the street at the front of the theatre.

Staff Rooms.

130A. In every theatre the proprietor shall provide to the satisfaction of the Commission adequate and suitably-situated changing rooms for male and female staff.

DIVISION I.—PROSCENIUM WALL.

131. (1) Subject in other respects to the provisions contained in Schedule C, Part V. (3), in the case of every theatre where a stage with a proscenium is erected such stage shall be separated from the auditorium by a proscenium wall not less than 13½ inches in thickness if of brick or if of other approved fire-proof material of such thickness as the Commission shall in each case decide. Such wall shall be carried from a solid foundation below the stage and upwards of the full thickness aforesaid to a height above the proscenium opening that will allow of the free working of the safety curtain hereinafter required and of all scenes being raised above the top of the proscenium opening in one piece and without rolling.

(2) Such wall shall be carried up the full thickness aforesaid to a height of at least 3 feet above the roof of the auditorium, such height being measured at right angles to the slope of such roof.

(3) Not more than four openings (exclusive of the proscenium opening) shall be formed in the proscenium wall and not more than two of such openings shall be at or above the level of the stage and no such opening shall exceed 21 square feet in superficial area.

Provided that this clause shall not prohibit the use of openings in the proscenium wall which communicate only with ventilating or other ducts or chambers which are fire-isolated from the stage and its accessory compartments.

(4) Every opening through the proscenium wall other than the proscenium opening shall be fitted with a quietly self-closing and fire-proof door of such construction as shall be approved and such door shall when closed overlap the opening by at least 3 inches all round the opening on the stage side thereof and shall bear in block letters on the

face thereof the words "KEEP THIS DOOR SHUT" and it shall be the proprietor's responsibility that such doors are not hindered from closing while the building is occupied by the public.

(5) No opening formed in the proscenium wall shall at the lowest part be at a higher level than 3 feet above the floor of the stage.

(6) All decorations around the proscenium opening on the auditorium side of the safety curtain shall be constructed of non-inflammable material. (*Re* decorations on the stage *vide* Regulation 135.)

DIVISION II.—SAFETY CURTAIN AND SMOKE OUTLET.

SAFETY CURTAIN.

132. (1) The proscenium opening shall be provided with a rigid fire-resisting drop safety curtain or screen which shall be faced with sheet metal on the auditorium face and with approved wire-woven asbestos cloth on the stage face and which shall on the stage side overlap the said opening at least 12 inches at each side and 24 inches at the top and shall run in steel guides at the sides.

(2) The safety curtain shall be so fitted and adjusted in relation to the proscenium opening as to secure in the event of a fire occurring on the stage an efficient smoke seal at all parts of the proscenium opening when the said curtain is fully lowered. It shall close the proscenium opening without concussion. The curtain shall be designed so that it shall be capable of withstanding a pressure of approximately 10 lb. per square foot over its entire surface without undergoing sufficient flexure to interfere with its proper freedom of movement in the aforesaid side guides.

(3) Every safety curtain shall when lowered be at least 3 feet distant from the footlights at the nearest point.

(4) The safety curtain shall be hung with steel cables attached to at least four points thereof and to counterbalance weights and shall be operated by hydraulic electric or other power approved.

Such cables shall be frequently tested and when defective shall be renewed. Splicing or other modes of uniting cables shall not be used without the Commission's express approval.

In addition to the regular controlling mechanism there shall be an emergency device that will permit of lowering the safety curtain from either the "Prompt" or from the "Opposite Prompt" side of the stage.

(5) The counterbalance weights of the safety curtain shall be fitted with approved guides and the spaces vertically below the said weights shall be enclosed in a substantial manner with fire-resisting material from the stage floor to a height of 8 feet above such floor so that it shall be impossible for any person to stand beneath a descending counterbalance weight.

(6) There shall be provided in accordance with the rules for the time being of the Fire Underwriters Association of Victoria means for the application of water to the whole of the surface of the safety curtain next to the stage.

(7) In any case where a temporary proscenium is required to be used and in any case where the stage is in the opinion of the Commission infrequently used for theatrical purposes the Commission may in its discretion allow the safety curtain to be formed of heavy woollen fabric or of thick asbestos sheeting fitted to a roller of steel or iron

tubing or hardwood or of other timber encased in sheet iron and equipped with approved gear for raising and lowering the curtain at will together with a sprinkler system for the automatic spraying of the curtain next to the stage with water in case of outbreak of fire.

(8) Detail drawings drawn in ink or prints to a scale of not more than 2 feet per inch and setting forth the design, construction, and operation of the safety curtain shall be submitted for approval.

Smoke Outlet.

133. (1) The stage shall be provided at the back portion of the roof with a smoke outlet opening or openings aggregating at least one-tenth of the floor area of such stage and unless otherwise specially approved in the form of a lantern-light.

(2) Such smoke outlet shall be so arranged as to open automatically and instantly after outbreak of fire with the cutting or burning of a cord or by the use of fusible metal links fitted at high and low levels.

(3) Manual control of such smoke outlet shall also be provided by means of a cord running down to the stage at two points, viz., one on each side of the stage.

(4) Independent openings in number and area as prescribed in Part II., Division VII., hereof shall be provided for the ordinary ventilation of the stage.

(5) Detail drawings of the roof and smoke outlet in ink or prints to a scale of 4 feet per inch shall be submitted in duplicate for approval one set of such drawings or prints as approved with or without modifications or conditions being retained by the Commission for purposes of record.

(6) In any case where the stage is in the opinion of the Commission infrequently used for theatrical entertainments the smoke outlet opening or openings may be reduced to one-twentieth of the stage floor area.

DIVISION III.—CONSTRUCTION.

Stage Construction.

134. The stage floor shall be of hardwood not less than $1\frac{1}{8}$ inch thick with hardwood or fire-resisting supports or of reinforced concrete or other fire-proof construction having a wood floor laid thereon without air space.

Woodwork, etc., of Stage to be Rendered Uninflammable.

135. (1) All woodwork of the stage and accessory compartments and all scenery and properties whether on the stage or in the aforesaid compartments and consisting of inflammable material shall be painted or saturated with some approved fire-resisting solution so as to be rendered uninflammable and shall be maintained in such condition.

(2) For the purpose of ascertaining whether any of the aforesaid woodwork scenery or properties is uninflammable any authorized officer of the Commission (after notifying the manager and when the building is not occupied by the public) may carry out such tests as are necessary for that purpose.

(3) This Regulation shall not apply where the compartment concerned is equipped with an automatic wet-pipe sprinkler system complying with the rules for the time being of the Fire Underwriters Association of Victoria.

PROTECTION OF COUNTERWEIGHTS FOR SCENERY.

136. Counterbalance weights for scenery light-battens and other fittings suspended above the stage shall be hung close to the side walls thereof and shall be either—

(a) fitted with approved locking devices which will effectually prevent the accidental displacement of any of the individual weights from their frames; or

(b) protected by guards of stout woven wire or other approved material extending from not more than 7 feet above the stage floor to the upper limit of travel of the weights. Where a fly-gallery is provided the said guards may be omitted from the space extending from the floor of such fly-gallery to not more than 7 feet above such floor.

CONSTRUCTIONAL METALWORK.

137. All constructional metalwork of a theatre which supports any wall or any floor of fire-resisting construction shall be encased in concrete brick or terra-cotta of the thicknesses specified in Schedule C of these Regulations.

FLY GALLERIES, GRIDIRONS, LIGHT PERCHES, ETC.

138. Fly galleries bridges gridirons rigging lofts tie galleries and electric light perches shall be of fire-resisting construction and designed to safely bear a live load of not less than 75 lb. per square foot.

An approved guard-rail and midrail shall be provided along every open side of any such structure and where the floor of the said structure is not close-jointed the spaces between battens or boards shall not exceed two inches wide.

Exits from fly galleries shall be so placed and arranged that escape can be made from each side of the stage without crossing the latter.

Approved means of escape from the gridiron or rigging loft shall be provided.

FIRE ISOLATION OF WORKSHOPS, STOREROOMS, ETC.

139. All workshops storerooms scene-docks property-rooms wardrobe or painting rooms in connexion with a theatre shall be placed in approved positions and shall be fire-isolated from the stage and auditorium and from each other.

All openings in such walls shall be provided with approved self-closing fire-proof doors so arranged and fitted as when closed to prevent the passage of fire or smoke through such openings. The floors and ceilings of such rooms shall be fire-proof.

The storage of scenery or properties in other than approved storerooms or scene-docks is hereby prohibited.

SITUATION OF DRESSING-ROOMS FOR ARTISTS AND MUSICIANS.

140. In no theatre shall any dressing-room be situated under the stage or auditorium except with the approval of the Commission. Every such dressing-room shall be placed only in a block separated from the stage and auditorium by fire-proof party walls and have only such means of communication therewith as may be approved. All such dressing-rooms shall be constructed of fire-proof materials and connected with exits independent of those provided for the auditorium and leading to a thoroughfare.

All dressing-rooms shall be provided with movable windows placed in the external walls thereof and formed of steel or iron sashes glazed with wired glass in accordance with the specification of the Fire Underwriters Association of Victoria and operating in steel or iron frames.

Such windows shall not be obstructed by iron or other bars or other hindrance to the use of the window openings as supernumerary means of access for purposes of escape or rescue.

FLOORS OF BALCONIES, ETC., TO BE OF HARDWOOD IN CERTAIN CASES.

141. In any case in which the floor of any balcony gallery circle or box is formed of wood not laid on a solid foundation such floor shall be laid with tongued and grooved boards of seasoned hardwood not less than ⅞-inch thick.

BALUSTRADES AND HANDRAILS TO BE PROVIDED TO BALCONIES WHEN REQUIRED.

142. In the case of every theatre where balconies galleries (other than fly and tie galleries) circles or boxes are provided a parapet balustrading and handrail of approved design shall be provided along the open side or sides thereof and the height of such handrail above the level of the adjacent floor of such balcony gallery circle or box shall be in no case less than 2 ft. 3 in. and when the slope of the tier exceeds 20 degrees the said height shall be increased to 3 feet where opposite the lower end of an aisle or gangway.

Balustrading or guard-railing not less than 2 feet high shall be provided along the forward edge of any cross-gangway where the backs of the seats on the next lower plat do not rise more than 18 inches above the level of the said cross-gangway and such balustrading or handrailing shall be returned down each side of each longitudinal gangway as far as the forward extremities of the seats on the next lower plat.

Similar balustrading or guard-railing shall be provided along the forward edge of the seating plat next above every cross-gangway when the rise from gangway to plat exceeds 12 inches.

INTERNAL STAIRCASES TO BE PLACED NEXT TO EXTERNAL WALLS WHERE PRACTICABLE.

143. In the case of every theatre every internal staircase shall where practicable be placed next to an outer wall of the theatre and shall be effectually supplied with daylight and fresh air by means of windows in such outer wall or in exceptional cases by other approved means.

DIVISION IV.—EXITS.

DIMENSIONS OF VESTIBULES.

144. In the case of every theatre where vestibules or entrance halls are provided the united widths of all the doorways or other exit openings that lead from a vestibule or entrance hall towards a thoroughfare or way shall be at least one-third greater than the aggregate width of all exits leading thereto.

The interior height of every vestibule or entrance hall shall be not less than 10 feet.

EXITS—NUMBERS AND WIDTHS.

145. (1) In every theatre exits for each compartment of the building and for the building as a whole and placed as far apart as

0

practicable shall be provided and be of at least the number and widths set forth in the following table, viz.:—

Number of Persons to be Accommodated.	Total Width of Exits Required.	Subdivision of Exit Widths.
200 or less	6 ft. 8 in.	Two exits, each 3 ft. 4 in. wide
201– 300	10 feet	Two „ 5 feet wide
301– 600	15 „	Three „ 5 „
601– 900	20 „	Four „ 5 „
901–1,200	25 „	Five „ 5 „
1,201–1,500	30 „	Six „ 5 „
1,501–1,800	35 „	Seven „ 5 „
1 801–2,000	40 „	Eight „ 5 „

For any theatre or any floor or tier accommodating more than 2,000 persons one additional exit 5 feet wide shall be provided for each 200 persons or portion thereof in excess of 2,000.

(2) From a floor or tier having not less than four exits two of these may open into a main entrance vestibule and from a floor or tier having not less than seven exits three of these may so open subject to the provision of aisles in accordance with Regulation No. 27 hereof.

(3) If any floor be divided into two or more parts exits as set out in the above table shall be provided for each of such parts.

(4) Subject to proper distribution of the exits the Commission may permit the replacement of 5-ft. exits as required in the above table by exits not less than 3 ft. 4 in. wide in which case two of such exits shall be deemed to be equivalent to one exit 5 feet wide and three of such exits shall be deemed to be equivalent to two exits each 5 feet wide.

Exits from Stage and Dressing-rooms.

146. Exits from the opposite sides of the stage and two exits from the dressing-room block of a theatre arranged so far as practicable as to afford alternative means of escape from those parts of the theatre and of widths determined in accordance with the foregoing table of exits shall be provided and arranged so as to communicate directly with courts or thoroughfares.

Provided that in the case of a dressing-room block of fire-proof construction throughout and consisting of not more than two floors above the ground floor and having not more than two dressing-rooms on any floor the Commission may accept one central fire-proof stair as sufficient means of exit from the block.

Door Fastenings.

147. The public exit doors of any theatre erected after the 16th day of August, 1933, or altered after that date so as to become a "New Building" as defined in these Regulations and of such other theatres as the Commission may direct shall be fastened only by means of approved automatic panic bolts and all doors so fastened shall have the words "Push Bar to Open" or other appropriate notice painted on them in block letters at least 2 inches high.

Provided that on the external doors of the main entrance from the street to any floor or tier bolts complying with Regulation 42(*b*) hereof and fitted at the bottom of the doors only may be used instead of automatic panic-bolts.

DIVISION V.—FIRE PRECAUTIONS.

Artificial Lighting.

148. Wherever practicable the lighting of all such premises and of the exits connected therewith shall except where otherwise required by these Regulations be effected by means of electricity.

Safety Lights.

149. (1) In every portion of the auditorium where the floor is stepped or is at an inclination steeper than 1 in 12 the proprietor shall provide aisle lights fitted to the ends of the rows of seats at such levels and so spaced and hooded as to effectively illuminate the whole length of each aisle and the tread of each step therein; and he shall cause such lights to be illuminated during the whole time that the theatre is occupied by the public and the auditorium lights are dimmed or extinguished.

Provided that the Commission may require aisle lights in other parts of the auditorium if (in the opinion of the Commission) the illumination thereof during public occupation of the auditorium is inadequate.

(2) The proprietor shall also take all needful measures to ensure that during the whole time any of the public are on the premises auxiliary or safety lamps burning only vegetable or animal oil or candles all properly protected against liability to flare and showing a distinct red light are properly secured to incombustible bases and placed over the inner face of every exit and are kept lighted so as to render visible to the audience the word "EXIT" hereinbefore required to be marked in plain block letters not less than 5 inches high over each exit on the interior side thereof.

(3) He shall cause all trimming and filling of lamps on the premises to be done in daylight and before the assembling of the public on the premises.

Provided that such auxiliary or safety lamps may if approved be electric lamps equipped with independent self-contained battery current supply.

150. The proprietor shall cause auxiliary or safety lamps as required by Regulation No. 149 but showing a white light to be provided over each stairway in such positions as to render the whole of the stairway clearly visible in event of failure of the usual lighting system and shall cause such lamps to be kept lighted during the whole time that any of the public are in the building.

Heating Apparatus, Gas-generating Appliances, etc.

151. The proprietor shall not cause permit or allow any heating apparatus gas generator retort producer gas holder oil supply tank or reservoir gas-meter steam-boiler steam-pipe or steam or other engine to be located within any theatre nor elsewhere upon the premises except in an approved position.

No fireplaces or stoves shall be allowed within the main walls of the auditorium or stage and all fireplaces in other portions of the premises shall be fitted with approved fenders and wire guards of mesh not exceeding 1½ inch fixed in position except where necessary openings to afford access to the fireplace are required.

USE OF FIREWORKS.

152. Every proprietor shall take all necessary measures to ensure that no fireworks or pistol or other shots shall be used on the premises unless and until Regulations numbered 153 to 159 inclusive hereof shall have been obeyed and that for the plugging of cartridges or other containers of the explosive used for causing such shots only wads of cow-hair or other approved material shall be used and that no preparation of fireworks shall take place on the premises.

FIRE ALARM.

153. The proprietor of a theatre shall cause the same to be connected with the nearest fire brigade station by telephone alarm or other approved system whenever possible. The positions and number of such alarms shall be determined by the Chief Officer of such brigade or by some officer authorized by him or by an officer authorized by the Commission in that behalf. The installation shall be inspected and approved by such officer.

FIRE APPLIANCES.

154. Every proprietor of a theatre shall provide and keep provided on each side of the stage and in the flies in conspicuous positions and for use for the purpose of taking down hanging scenery in case of fire a sharp-edged fire hatchet and a sharp-edged steel fire hook affixed to a pole long enough to admit of the uppermost portions of scenery being reached by such hook such hatchet and hook being when not in use suspended at a convenient height above the stage floor and in the flies respectively.

FIRE-EXTINGUISHING APPLIANCES.

155. (1) All theatres shall wherever practicable be provided with such number of hydrants of approved pattern each of a diameter of not less than 2½ inches as the Commission shall require and connected by a rising main of at least 3 inches diameter with a street or other public water-main at least 4 inches in diameter. Where placed in corridors passageways or on stairways they shall be recessed into the walls and the recesses shall be fitted with glazed doors hinged to fall down completely.

A stop-valve shall be provided on every fire-service pipe of a type and in a position approved by the Chief Officer of the Fire Brigade in charge of the district.

A water pressure of at least 30 lb. per square inch shall be maintained in the hydrants in the flies and in the upper tiers of such buildings.

Each such hydrant shall be provided with at least a 30-ft. length of sound hose in good order attached thereto and provided with fittings of pattern approved by the duly constituted Fire Brigade Board in charge of the District for the time being and properly supported in metal swinging brackets or in the form of a figure 8 on bollards.

(2) Three hand fire-buckets of strong make painted red each of about 2 imperial gallons capacity provided with securely attached handles and having convex bottoms and filled with water or one chemical fire extinguisher of 2 Imperial gallons capacity as approved by the Fire Underwriters' Association of Victoria shall be kept in fixed stands or suspended from fixed brackets or rails placed near each hydrant and in such other positions as the Commission may require.

Such hydrants and buckets or chemical fire-extinguishers shall be in approved positions.

(3) In all theatre premises where there is no constant supply of water or where the water-main available has not sufficient discharging capacity

or does not contain water at sufficient pressure there shall be provided in approved positions tanks or cisterns kept filled with water supplied by means of an approved service pipe and fitted with a ball-cock and conducting water from the street main or by some other method approved.

Such tanks or cisterns shall be capable of containing at least 250 gallons of water for every 100 persons the theatre is capable of accommodating and shall be properly protected and maintained in good order and condition.

Water-pipes not less than 3 inches in diameter shall be connected with such tanks or cisterns and have attached to them hydrants in such positions and in such manner as shall be approved.

(4) Woollen blankets or woollen rugs and chemical fire-extinguishers or hand fire-buckets as previously herein described in such numbers and positions as shall be approved shall be kept on the stage in the flies scene-stores property-rooms and in the passageways of immediate approach to the dressing-rooms of such premises and attention shall be directed to them by placards legibly printed or painted and kept fixed immediately above them.

Automatic Sprinkler System.

156. In every new theatre and in every theatre which is hereafter extended so as to become a new building within the meaning of these Regulations or is remodelled the proprietor shall provide an automatic sprinkler system complying with the rules for the time being of the Fire Underwriters' Association of Victoria. Such sprinkler system shall serve the whole or any specified portion or portions of the theatre as the Commission may direct.

Maintenance of Fire-extinguishing Appliances and Life-saving Apparatus in Proper Condition.

157. The proprietor shall be held responsible for the blankets or rugs and for the various appliances required by these Regulations to be provided for controlling and extinguishing fires and for the saving of life at fires being so provided and kept ready and fit for instant use. He shall also arrange with the Chief Officer of the Fire Brigade in charge of the district for the periodical inspection and testing of all fire-extinguishing appliances and in event of any such appliance being found by the inspecting officer of the Fire Brigade to be defective shall on receipt of a report to that effect immediately cause the defect to be rectified.

Employment of Firemen.

158. Every proprietor shall on every occasion and during the whole time the theatre is open or occupied by the public cause a fireman or firemen as the case may require in accordance with the following scale to be in attendance on the premises, viz.:—

Capacity of Theatre.	Least Number of Firemen Required to be in Attendance as Aforesaid.
(*a*) More than 500 and not exceeding 1,000 persons	One fireman
(*b*) More than 1,000 and not exceeding 2,000 persons	Two firemen
(*c*) More than 2,000 and not exceeding 3,000 persons	Three firemen
(*d*) More than 3,000 persons	As shall be specially determined by the Commission in each case

Provided that—

(a) In any theatre (not being in that part of the City of Melbourne bounded by Latrobe, Spring, Flinders, and Spencer streets) in which no entertainment of the stage involving the use of movable or inflammable scenery is held a fireman or firemen need be employed only during evening sessions and during day sessions on Saturdays and public holidays; and

(b) In any such treatre wherever situated having a capacity in excess of 1,000 persons the numbers of firemen required by the above table may be reduced by one; and

(c) In any case where in the opinion of the Commission the circumstances so require the number of firemen in attendance shall be increased or decreased by the proprietor accordingly.

STANDING AND DUTIES OF FIREMEN.

159. Every such fireman aforesaid shall be a skilled fireman and a member of a "Brigade" within the meaning of the *Fire Brigades Act* 1928 or a person thereto authorized whether generally or specifically by a "chief officer" within the meaning of that Act. It shall be the primary duty of each and every fireman employed as aforesaid to as far as practicable prevent outbreak of fire on the theatre premises and in the case of such outbreak to take prompt and effective action to control such outbreak.

It shall also be the duty of each and every such fireman to promptly report in writing to the Secretary of the Commission the occurrence on the premises of any fire however slight and of any alarm of fire with particulars relevant to such occurrence so far as such particulars tend to afford information as to the immediate cause of the occurrence and the means used successfully or unsuccessfully for suppressing such occurrence.

EMPLOYMENT OF FIREMEN ON OTHER THAN THEATRE PREMISES.

160. Notwithstanding anything elsewhere contained in these Regulations the Commission may if in its opinion the circumstances of the case shall warrant such action require the owner of any building to cause a skilled fireman or firemen to be in attendance and fulfil the duties hereinbefore described and the foregoing Regulations concerning such attendance and duties shall *mutatis mutandis* be held to apply in such case.

DISCIPLINE AND CLEANLINESS OF PREMISES TO BE ENFORCED.

161. The proprietor shall be held responsible for maintaining discipline upon the premises and shall at all times cause the premises to be maintained in a proper state of cleanliness. He shall cause all hay straw or other combustible properties required for a performance to be when not in actual use for the purposes of such performance either removed from the premises or placed in a closed fireproof receptacle. He shall not cause permit or allow shavings waste paper or other rubbish to accumulate but shall cause the same to be removed from the premises daily and at least one hour before the public begins to assemble in the auditorium of the building.

CONSTRUCTION, ETC., OF PROJECTOR.

162. The proprietor of any building shall not use and no person shall use therein any projector unless the following conditions are complied with:—

(1) The projector shall be so constructed and designed as to eliminate as far as possible danger of fire or explosion.

(2) The lantern the body of which shall be constructed of metal shall be enclosed in such a manner as to prevent the escape of pieces of incandescent carbon.

(3) Every projector shall be placed on firm supports of fire-resisting construction and shall be fitted with an approved device which shall operate instantly and automatically to protect the film from ignition by heat rays from the illuminant in the event of breakage or stoppage or bunching or looping of the film: Provided that no such device shall be required with respect to any projector in which the source of illumination is an incandescent metal filament lamp of not more than 1,000 watts.

(4) The film gate shall be of substantial fire-resisting construction and provided with ample heat radiation surface and the passageway for the film shall be sufficiently narrow to prevent flame travelling upwards or downwards from the light opening. The said gate shall be so protected as to prevent the heat from the illuminant being concentrated upon any other portion of the film than that exposed in the aperture.

(5) Film passing through the projector shall be wound as fast as it emerges from the projector leaving only the shortest possible portion of film exposed to the light.

The running of overloaded spools the running of film on the floor of the cabin and the showing in public of film having torn sprocket-holes are hereby prohibited.

(6) The frame discs of spools containing film shall be formed of incombustible material and shall together with the whole length of film other than the portions necessarily exposed be entirely enclosed in boxes or cases made of incombustible material without the use of solder and of substantial construction with an internal diameter not exceeding that necessary for accommodation of 2,000 lineal feet of film and fitted with a fire-trap or other apparatus which shall effectually prevent ignition of the film contained therein.

(7) Every such projector shall be maintained in a safe working condition and the person using it shall when requested so to do by the proprietor furnish him with a written report as to the working condition thereof at the time and such report shall be shown on demand to any officer of the Commission.

PROJECTOR TO BE IN A FIRE-PROOF CABIN.

163. The proprietor shall cause the said projector when in use to stand in a compartment cabin room booth or box (hereinafter called a cabin) of fire-resisting construction and except where the use of a temporary portable cabin is approved such cabin shall be of a permanent character and fixed in position.

CONSTRUCTION OF CABIN.

164. The proprietor shall cause every permanent cabin to be of the dimensions and to be constructed ventilated and equipped as follows, viz.:—

(1) Such cabin shall be so located and constructed as to allow the operator at all times safe and convenient means of ingress and egress and to permit of the safe and expeditious use of the fire-extinguishing apparatus either from inside or outside the cabin in case of fire or accident involving risk of fire.

(2) Such cabin shall have an internal height of not less than 7 feet 6 inches and a floor space and horizontal sectional area according to the number of picture-projecting appliances accommodated therein as follows, viz.:—

Cabin No.	Number of Projectors Accommodated in the Cabin.	Minimum Horizontal Internal Dimensions of such Cabin.
1	1	6 feet wide by 8 feet deep
2	2	9 " 8 "
3	2 and 1 stereopticon ..	12 " 8 "

Provided that when any re-winding bench battery gramophone or other appliance is installed or to be installed in a cabin the size of the cabin shall be increased to the satisfaction of the Commission and that there shall be provided and maintained in every cabin from the operator's working position at each projector to the cabin doorway a passageway with a clear width of at least 2 feet at all points.

(3) The walls and ceiling of such cabin shall be constructed of or lined with approved fire-resisting material and the floor shall be of tongued and grooved boards of jarrah or redgum not less than $\frac{7}{8}$ of an inch thick or of approved hardwood not less than $1\frac{1}{8}$ inch thick or of concrete with insulating mats alongside each projector and in front of the switchboard.

If fibro-cement sheets are used for lining the walls of the cabin they must be fixed on a continuous backing of hardwood boarding at least $\frac{1}{2}$ inch thick up to a height of at least 5 feet above the floor.

(4) Every such cabin shall be provided with one or more doorways affording means of exit from the cabin. Each such doorway shall be fitted with a door which shall open outwards and be fire-resisting self-closing and smokeproof and which shall except during its actual use in entering or leaving the cabin be kept closed while the building is in public occupation.

No such doorway shall be less than 2 feet wide and 6 feet high or more than 2 feet 9 inches wide and 7 feet high.

Provided that in any cabin used or adapted or intended to contain more than one projector and a re-winding bench there shall be two such doorways as far apart as practicable.

(5) Every exit door from a cabin shall be secured only with a fastening capable of being operated from within the cabin without the use of a key.

(6) When the sill of an exit doorway of any cabin is more than 21 inches above the floor or ground outside it a landing at least 3 feet square and having a guard rail on all its unprotected sides and a stair or a fixed ladder from the said landing to the floor or ground beneath shall be provided:

Provided that the Commission may approve of the use of a movable ladder on being satisfied that the cabin is used infrequently.

(7) Every such cabin shall have at least one external wall the outer surface of which shall be in complete contact with the outer atmosphere. Either in the floor or in one of the external walls at a level not more than 2½ inches above the cabin floor a fresh air opening or openings aggregating the following areas shall be formed, viz.:—

	Square inches
No. 1 cabin (see table in clause 2 hereof) ..	150
„ 2 „ „ „ „ „ ..	180
„ 3 „ „ „ „ „ ..	210

Such opening or openings shall be connected by the shortest or most direct course with the external atmosphere by means of properly graded flues formed of galvanized iron or other approved incombustible material. The external entrance to each such flue shall be guarded with a shield or wind baffle and the inner entrance thereto shall be protected with wire mesh firmly secured and formed of wire of No. 19 B.W.G. galvanized tinned or sheradized and showing a uniform mesh of 9 per linear inch and finished with an adjustable damper admitting of the opening being regulated to any extent desired.

Provided that the Commission may approve of the construction of a cabin without an external wall on condition that the safety of the operator is provided for and the cabin is fitted with an independent system of mechanical or mechanically assisted ventilation to the satisfaction of the Commission.

(8) In the ceiling of every such cabin there shall be one or more circular openings of sizes not less than those set out in the following table each such opening being connected by a metal bell-mouth to an upcast outlet ventilation flue of appropriate size and constructed of galvanized iron or other approved incombustible material and extended upwards without bends or angles to the outer atmosphere and fitted at its upper end with a cowl.

Where one such opening is provided it shall be at or near the centre of the ceiling and where two are provided one shall be above each projector.

—	One Opening Provided.		Two Openings Provided.	
	Diameter of Opening.	Diameter of Flue.	Diameter of Opening.	Diameter of Flue.
	inches.	inches.	inches.	inches.
Cabin No. 1 (see Table in Clause 2 hereof) ..	13	9	..	..
Cabin No, 2 (see Table in Clause 2 hereof) ..	..	..	10	7
Cabin No, 3 (see Table in Clause 2 hereof) ..	..	..	12	8

To assist the ventilation of the cabin the lantern of each projector shall (except when an incandescent filament lamp machine is used) be fitted with a metal flue of not less than 3 inches diameter leading into the bell-mouth of an outlet ventilation flue.

Whenever required by the Commission the said outlet ventilation flues shall be fitted with electric exhaust fans.

(9) Openings in the front wall of the cabin shall not be larger nor more numerous than necessary and shall not in ordinary circumstances exceed 70 square inches each in area for observation openings and 180 square inches each for projection openings.

Provided that the Commission (if convinced of the necessity therefor) may allow openings in excess of the latter size to be formed on condition that they are fitted with approved fire-shutters.

(10) Every such opening (when not fitted with an approved fire-shutter) shall be fitted with a shutter of sheet iron of not less than No. 16 B.W.G. thickness sliding vertically in metal guides extending to a height at least equal to that of the shutter above the top of the opening and closely and securely attached to the inner face of the wall and with a solid sill or stop between the guides and ½ inch or more below the lower edge of the opening.

All such shutters in any cabin shall be linked up to an approved tripping device capable of being actuated from the right hand side of each projector and from the cabin doorway and which when operated shall instantly and simultaneously release the whole of the shutters so that the same will fall and completely close and overlap the said openings and prevent the escape thereby from the cabin of fire or smoke.

(11) There shall be no exposed wooden rafters ceiling joists or cover strips in any cabin and all necessary stands benches tables shelves or cabinets shall be constructed of or covered with fire-resisting material.

Construction of Portable Cabin.

165. The proprietor shall not use and no person shall use any temporary portable cabin in any building without the written approval of the Commission nor unless it complies with the following requirements, viz.:—

(1) Such a cabin shall not be less than 6 feet wide by 6 feet deep by 7 feet high and shall contain one projector only.

(2) The walls and ceiling of such cabin shall be sheeted with galvanized sheet-iron fibro cement or other approved fire-resisting material so that no portion of any wood framework is exposed within the cabin and so that all joints are flame-proof.

(3) The floor shall be of tongued and grooved jarrah redgum or hardwood boarding as required by Regulation No. 164 (3) hereof or of a sheet of galvanized iron 6 inches longer and wider than the cabin and on which the cabin shall be centrally placed.

(4) The inlet vent shall be as required by Regulation No. 164 (7) hereof and the outlet vent shall be an opening in the centre of the ceiling of the same area as the inlet vent and shall be covered with wire mesh as set out in Regulation No. 164 (7) hereof.

(5) In all other respects the cabin shall comply with the provisions of Regulation No. 164 hereof.

(6) The cabin shall be so placed that it does not obstruct any aisle gangway exit doorway passage or vestibule.

Rewinding and Storage of Film.

166. The proprietor or any person shall not rewind or store film in any building during public occupation thereof except under the following conditions, viz.:—

(1) Film shall not be rewound in the cabin unless the rewinding bench is screened from the projectors by a fire-resisting partition extending from floor to ceiling and of sufficient length to prevent effectively the ignition of film on the bench from burning film on the projector and vice versa and unless the dimensions of the cabin exclusive of the portion thus screened off are at least as great as set out in Regulation No. 164 (2) hereof and unless inlet and outlet ventilators as set out in the next succeeding clause are provided for the portion of the cabin so screened off.

(2) If rewinding of film is done elsewhere on the premises than in the cabin it shall be done in a room of fire-resisting construction, which shall comply with Regulation No. 164 (4), (5), (6), (7), and (8) hereof except that the minimum area for the inlet ventilator shall be 100 square inches and the minima diameters of the opening in the ceiling and of the outlet ventilation flue shall be 12 inches and 8 inches respectively.

(3) All film on the premises (including all pieces and cuttings of film) not actually in use and not stored in a cabinet or vault as described in the next following clause shall be kept in a fireproof container having a fireproof lid or door which shall be self-closing.

(4) If a greater quantity of film than is required for one complete programme is kept in any building it shall be stored in cabinets or vaults complying with the Rules of the Fire Underwriters' Association of Victoria for the time being.

167. The proprietor shall cause the following precautions to be observed in any such cabin rewinding room or battery room, viz.:—

OPERATORS—NUMBERS AND DUTIES.

(1) Not less than one or more than three operators shall be within the said cabin at any one and the same time whilst the theatre is occupied by the public. Each such operator shall give adequate attention to the cleanliness and detailed inspection of the projector and its cabin and shall take charge of the film after it has passed through the said projector.

Such projector shall be constantly attended by a licensed operator during the exhibition of film.

No unauthorized person shall be allowed to be within the cabin whilst the theatre is occupied by the public.

ELECTRIC LIGHT AND POWER.

(2) Except with the special approval of the Commission and subject to such conditions as the Commission may impose no illuminant other than electric light may be used for the projector or for the cabin rewinding room or battery room.

(3) Except with the approval of the Commission an electrical resistance shall not be placed within any cabin but in an approved position outside the same.

Resistances shall be so designed and arranged that the maximum temperature of any part does not exceed 212° F. (100° C.).

They shall be so arranged that the heat radiated shall not injuriously or inconveniently affect the operator.

(4) The general lighting of the auditorium shall not under any circumstances be controlled solely from a cinematograph cabin.

Switches controlling auditorium lighting may be placed in the cinematograph cabin provided that where the whole of the auditorium lighting is controlled by switches in such cabin the switches controlling a sufficient number of lights to illuminate effectively the whole of each division of the auditorium shall be wired in parallel with switches on the main switchboard or on a switchboard in an approved position near the main entrance door to the stalls.

No switches or cutouts except those required by the operator during a performance shall be installed within a cinematograph cabin.

(5) Every switchboard control circuit-breaker motor generator and rotary converter installed in a cinematograph cabin shall be so safeguarded as to protect effectively the projector and the film from the effects of short circuits electrical earths and other electrical faults.

(6) Every electric fan used exclusively for ventilating a cinematograph cabin shall be controlled by a switch placed within the cinematograph cabin and near the entrance door thereof.

(7) All cables in a cinematograph cabin shall be enclosed in steel conduit. Such conduit shall not be laid across the floor of the cabin.

(8) The main conductors supplying electricity for cinematograph projectors and accessories shall be taken as a separate circuit from the motor generator rotary converter or transformer terminals or from some other suitable source of supply. Switches and cutouts suitable for controlling and protecting such circuit shall be inserted at the point from which the supply is taken and in addition a double pole switch shall be fitted in the circuit within the cinematograph cabin.

(9) Each final sub-circuit supplying a motor driving any portion of the cinematograph apparatus shall be protected by the cutouts or other apparatus required under the Wiring Regulations of the State Electricity Commission of Victoria for the protection of similar circuits.

(10) Portable lamps on flexible cords shall not be used in any cinematograph cabin.

(11) Lampholders on pendant flexible conductors shall be of the all-insulated pattern.

(12) A metal receptacle for carbon ends which are removed from the lamps shall be provided and shall be so constructed as to prevent heated carbon from coming into contact with any inflammable material.

PRECAUTIONS AGAINST FIRE.

(13) No person while the building is open to the public shall smoke a pipe cigar cigarette or like article in the said cabin rewinding room or battery room or shall introduce into or use in the said cabin or rooms any matches or any naked flame.

Conspicuous notice comprising the words "SMOKING PROHIBITED" shall be posted and kept posted in every such cabin rewinding room and battery room.

(14) During the whole time a building is in public occupation there shall be kept inside the said cabin and hanging on a wall thereof in a position conveniently accessible from the projectors for use only in case of fire two pieces of blanket manufactured wholly from wool measuring 3 feet by 3 feet apiece and also for every projector accommodated in such cabin at least one carbon tetrachloride fire-extinguisher of 1-quart size and approved by the Fire Underwriters Association of Victoria hanging as aforesaid; and in the said cabin there shall also be provided and kept for use in case of fire a 2-gallon bucket full of clean dry sand furnished with a scoop (having an insulated handle) for the throwing of such sand; and a similar fire-extinguisher and a bucket of sand and a scoop shall be kept in the rewinding room or the portion of the cabin screened off for rewinding film.

"JUNIOR" PROJECTORS.

168. Regulations 162 to 166 and 167 (2) to (14) hereof shall not apply to the use in churches lecture-halls schools and similar public buildings of "junior" projectors of the type of the Graphoscope Junior the De Vry the Pathe Home and similar projectors approved by the Commission but the proprietor shall cause the following precautions to be observed where such a projector is used:—

(1) The spool-boxes and spools shall be of an internal diameter not exceeding that necessary to accommodate 1,000 lineal feet of film and shall be constructed otherwise in accordance with Regulation 162 (6) hereof.

(2) A fireproof receptacle shall be provided for spare spools of film.

(3) A carbon tetrachloride fire-extinguisher as described in Regulation 167 (14) hereof shall be kept close to the apparatus when in use for fire-extinction purposes.

(4) The lamp used to illuminate the film shall be of the incandescent metal filament type of not more than 1,000 watts.

(5) Winding of film shall not be allowed in the hall during public occupation.

(6) No unauthorized person shall be allowed within 5 feet of the projector.

(7) The projector shall be so placed that it shall not obstruct any aisle gangway exit doorway passage or vestibule.

ADVERTISEMENT OF USE OF SAFETY CURTAIN.

169. Every proprietor of a theatre that is provided with a fire-resisting safety curtain at the proscenium opening shall cause to be exhibited on such curtain the words "SAFETY CURTAIN" in letters sufficiently large and so placed as to be legible from every part of the auditorium.

He shall cause such curtain to be lowered at the first interval of every performance in the presence of the audience and all programmes and playbills to contain printed therein intimation that such lowering is done to advertise the fact of the curtain and its equipment being in proper working order for use in instantly cutting off the stage from the auditorium in case of outbreak of fire on the stage. He shall cause that simultaneously with the lowering at any time of the said curtain all lights in the auditorium not controlled from the stage switchboard shall be lighted and that no wires or other fittings or fixtures provided or used in connexion with gymnastic or other displays nor other apparatus or thing whatsoever shall be allowed to interfere in any way with either the lowering or the raising of the said curtain. He shall cause each and every failure of the working of such curtain to be forthwith reported to the Commission.

ADVERTISEMENT OF POSITIONS OF EXITS.

170. Every proprietor of a theatre shall cause to be depicted or projected upon the said safety curtain for a period of fully five minutes immediately before the curtain is raised at the beginning of every performance and to be printed on all programmes a diagram showing in bold outline the relative positions of the stage and the stalls

floor and circle and gallery and numbered in progressive serial order the positions of the various exits leading from the building at each such floor level with a brief note of the names of the public thoroughfares to which such exits respectively lead and with a prominent intimation that "RED LIGHTS INDICATE EXITS" over the words of advice "OBSERVE NOW THE EXIT NEAREST TO YOUR SEAT."

PART V.

GENERAL AND SUPPLEMENTARY.

171. The proprietor of every building shall cause the premises to be maintained at all times in a proper state of cleanliness.

Inflammable material not to be stored under building.

172. No space under or over or immediately adjacent to any part of any building shall be used for the storage of inflammable material.

Restriction on use of public building.

173. Use of any part of the building for the purpose of a living or sleeping room or rooms without special approval is hereby prohibited.

Responsibility of proprietor.

174. The proprietor of any public building in which there is a contravention of any prohibition made under these Regulations shall be deemed to be guilty of an offence against these Regulations.

Penalties.

175. Any person doing any act forbidden to be done or failing to do any act directed to be done by these Regulations shall be guilty of an offence against these Regulations and every person guilty of an offence against these Regulations shall be liable to a penalty of not more than One hundred pounds and in the case of a continuing offence a further daily penalty of not more than Ten pounds.

176. In the case of any building in regard to which the Commission has decided that the issue of a Closing Order as provided for in the Health Acts is necessary the Commission on or after the service of such Closing Order may—

(*a*) cause to be affixed to the main entrance door of the building ordered to be closed a notice in accordance with Schedule D of these Regulations; and

(*b*) cause the main entrance door of the building and such other doors as the Commission directs to be sealed; and

(*c*) require any authorized officer or any member of the Police Force to affix such notice and to seal such door or doors.

177. Any person who without the written authority of the Commission—

(*a*) removes or defaces or causes or permits to be removed or defaced any notice which has been affixed by the direction of the Commission to the door of a building; or

(*b*) breaks or removes or causes or permits to be broken or removed any seal affixed by the direction of the Commission to the main entrance door or any other door of a building; or

(*c*) uses or causes or permits to be used as a public building within the meaning of the Health Acts any building in regard to which a Closing Order is in force—

shall be guilty of an offence against these Regulations.

Health Acts.

BUILDING REGULATIONS 1937.

Regulation 5.

SCHEDULE A.

Application for the Approval of the Commission of Plans and Specifications for the Erection or Alteration† of a Building.*

To the Commission of Public Health,
295 Queen-street, Melbourne.

(a) Here describe the building which it is intended to erect or alter.

(b) Applicant must be the person or body responsible under the Health Acts for the erection or alteration of the building.

(c) Strike out word not applicable.

I, the undersigned, hereby apply for the Commission's approval of the attached plans and specifications of(a)
as described in the said plans and specifications.

Full name of applicant(b)
Estate or interest of applicant in premises
Situation of premises

I also lodge herewith the block plan, plans and sections, and specifications referred to in the extract hereunder from the Building Regulations 1937, and I hereby undertake to forthwith notify the Municipal Council that I have made this application.

The full name and postal address of the person or party responsible for the supervision of the (c) erection / alteration of the aforesaid building are:—

The full names of the Trustees or members of the Committee or other body having the management or control of the building are:—

Signature of applicant(b)
Postal address
Date

Back of Form.

Extract from the Building Regulations 1937.

(2) With such application shall be lodged—

Block plan.

(*a*) A block plan showing the position of such building in relation to the boundaries of the site to any existing buildings of whatsoever kind on or adjacent thereto and to the thoroughfares upon which the site of such building abuts, the general character of the premises adjacent thereto, the names and widths of such thoroughfares marked thereon, such plan being drawn in ink to a scale not smaller than 1 inch to 20 feet and having such scale and the cardinal points marked thereon;

Plans and sections.

(*b*) plans and sections of each floor of the building (drawn in ink to a scale of 1 inch to 8 feet) and such detail drawings drawn in ink to a scale of 1 inch to 2 feet as the Commission may from time to time require;

Specifications.

(*c*) a paged specification written in ink or typewritten giving details of the materials and mode of construction including the sizes and spacings of all members of framed or reinforced structures.

(3) On the said plans and sections (as the case may be) shall be shown the—

What plans and section to show.

(*a*) Internal dimensions in figures (that is to say the length width and height to wall-plate and ceiling respectively) of each story and of each compartment of each story;

(*b*) proposed use of the several compartments of the building and whether these are situated below on or above the ground floor and the uses to which any other building or rooms which are or are proposed to be placed above or below or laterally communicating with or adjacent to such public building will be put;

(*c*) position of each internal and external exit;

(*d*) width and height in figures of each exit and the height of each exit sill above the level of the ground beneath and adjoining the building;

(*e*) position and width and height of each passage;

(*f*) position length and depth of platform or stage and its rise or height above the level of the immediately adjacent portion of the floor of the auditorium;

* "Erection" includes erection, building, re-building, re-erection, and removal and re-erection on another site.

† "Alteration" includes alteration, addition, or extension.

(g) where permanent fixed seating is provided or required under the provisions of these Regulations to be provided the intended or actual position and number in figures in serial order of all seats;

(h) position and minimum width of each gangway and aisle;

(i) minimum width and headway of each stairway or flight of steps and the width of treads and height of rises;

(j) structural connexion (if any) with any other building;

(k) ground-line;

(l) depth of foundation below the ground surface and heights of walls of proscenium and staircases above the auditorium and other adjacent roofs;

(m) thickness of each wall;

(n) positions of floor-bearers beams girders bressummers trusses or cantilevers; and

(o) form and pitch of roof with height of collar-tie above wall-plates.

(4) With the aforesaid plans and specifications there shall also in the case of every design of a reinforced concrete or metal frame building be submitted the data and calculations upon which such design is based and in any other case as may be specially required by the Commission.

Concrete or metal frame buildings.

(5) The name and address of the architect or engineer shall be endorsed on every such block plan plan section detail drawing and specification and in case an architect or engineer is not to superintend the erection of the building the name and address of the person responsible for the supervision of its erection shall be furnished with the said plans sections and specifications.

Name of architect or engineer, &c., to be endorsed.

Health Acts.

BUILDING REGULATIONS 1937.

Regulation 9.

SCHEDULE B.

Application for the Commission's Approval of the Opening of a Building or of the Opening of an Extension of a Building.

To the Commission of Public Health,
295 Queen-street, Melbourne.

I, the undersigned, hereby apply for the Commission's approval of the opening of the building (or of an extension of the building) hereunder described, the (a) erection/alteration of which has been duly completed.

Name of building
Full name of applicant(b)
Estate or interest of applicant in premises
Situation of premises

After having made due inquiry of the person or party responsible for the supervision of the (a) erection/alteration of the aforesaid building, and being aware that any person making any false or misleading statement in any application under the Health Acts shall be held guilty of an offence against those Acts, I hereby declare that in the work of effecting the aforesaid (a) erection/alteration the requirements of the Commission and of the Council have been duly fulfilled.

Signature of applicant(b)
Date
Postal address

(a) Strike out word not applicable.

(b) Applicant must be the person or bod responsible under the Health Acts for the erection or alteration of the building.

NOTE.—Except in a case where the Commission has already approved of the plans and specifications of the erection or alteration of the building, there shall be attached to this application the plans, particulars, and information required by Schedule A of the Building Regulations 1937.

Extract from the Health Act 1928 (No. 3697).

383. Every person who—

(a) knowingly makes any false or misleading statement in any application notice or report under this Act—

shall be guilty of an offence against this Act.

Health Acts.

BUILDING REGULATIONS 1937.

Regulation 90.

SCHEDULE C.

PART I.

Definitions

1. In this Schedule unless inconsistent with the context or subject-matter—

"Area." "Area" applied to a building means the superficies of a horizontal section thereof made at the point of its greatest surface inclusive of the external walls and of such portions of the party walls as belong to the building.

"Base." "Base" applied to a wall means the underside of the course immediately above the footings if any or in the case of a wall carried by a bressummer above such bressummer.

"Basement story." "Basement" means any floor of a building which is under the ground floor.

"Building line." "Building line" means a line beyond which property owners or others have no legal or vested right to extend a building or any part thereof without the Council's approval.

"B.W.G." means Birmingham Wire Gauge.

"Cross wall." "Cross wall" means any internal wall of a building and built in connexion with any external or party walls and binding them together and not being less than 9 inches in thickness.

"External wall." "External wall" means an outer wall or vertical enclosure of any building not being a party wall.

"Factor of safety." "Factor of safety" means the ratio of breaking load to safe load.

"Fireproof." "Fireproof" used with reference to materials includes:—

(*a*) For general purposes—

Brickwork constructed of bricks well burnt hard and sound or of other approved manufacture and properly bonded and solidly put together with mortar compounded of lime or cement and clean sand.

Granite and other stone approved of as being suitable for building purposes by reason of its solidity and durability.

Slate tile brick and tera cotta when used for coverings or corbels.

Flagstones when used for floors over arches and not exposed on the underside nor supported at the ends only.

Concrete composed of broken brick tile stone pumice with sand and cement or calcined gypsum in approved proportions.

Reinforced concrete.

(*b*) For special purposes—

In the case of doors and shutters tin-clad steel-clad or iron doors or shutters complying with the specification for the time being of the Fire Underwriters' Association of Victoria.

In the case of stairs and landings jarrah redgum or other hard timber the treads risers strings and bearers being not less than 2 inches (nominal) thick and the ceilings and soffits (if any) being of plaster or cement approved asbestos sheeting tongued and grooved jarrah or other approved hardwood not less than seven-eighths of an inch thick (actual) or iron not thinner than Number twenty-six (26) B.W.G.

Jarrah redgum and other approved hardwood when used for beams or posts or in combination with iron or steel the iron or steel (if any) being protected by plastering or other incombustible or non-conducting external coating not less than 2 inches in thickness.

In the case of floors brick tile terra-cotta or concrete not less than 4½ inches thick in combination with iron or steel; or reinforced concrete not less than 4 inches thick.

In the case of roofs brick concrete terra-cotta or reinforced concrete.

In the case of verandahs outside landings the treads strings and risers of outside stairs outside steps and porches jarrah redgum or other hard timber not less than 2 inches thick (nominal).

In the case of internal partitions forming party structures enclosing walls to lifts staircases and passages reinforced concrete not less than 4 inches thick terra-cotta not less than 6 inches thick brickwork concrete or other approved incombustible material not less than 9 inches thick.

In the case of glazing for vertical party structures and fixed borrowed lights in partitions of fire-proof construction two thicknesses of wired glass each not less than one-fourth of an inch in thickness fixed not less

than 2 inches apart in panels not exceeding 30 inches by 24 inches the panels being secured in approved metal frames. In the case of glazing for horizontal party structures floor lights of glass not less than three-quarters of an inch in thickness or more than 4 inches square set in approved metal or other incombustible frames—this shall only apply to floors of passages.

(c) Any material from time to time approved.

"Fire resisting" includes any of the materials specified under "fire-proof" and also:— "Fire resisting."

(a) For general purposes—

Iron steel or copper sheets not thinner than No. 26 B.W.G. Asbestos-cement sheets not less than 5-32 inch thick with fire-resisting cover-strips over joints and (where liable to mechanical injury) fixed over a continuous rigid backing.

(b) For special purposes—

In the case of floors tongued and grooved boarding of jarrah or red-gum not less than ⅞ inch (nominal) thick or of other approved hardwood not less than 1⅛ inch (nominal) thick.

In the case of doors and shutters jarrah redgum or other approved hardwood not less than 1½ inch (nominal) thick; or other timber of the same thickness presenting a flush face towards the fire risk and sheeted on that face and on all edges with sheet metal of not less than No. 26 B.W.G. the frames being also fire-resisting and bedded solidly to the walls or partitions.

(c) Any material from time to time approved.

"First floor" of a building means that floor which is next above the ground floor the successive floors above the first floor being the second floor the third floor and so on to the topmost floor. "First floor."

"Foundation" applied to a wall means the solid ground or the artificially-formed support of such wall. "Foundation."

"Frame construction" means a form of construction in which the design provides that the vertical forces due to the weight of the structure itself and of the loading are carried down to the foundations by means of columns in such manner that the walls are not required to assist in supporting such forces. "Frame construction."

"Ground floor" of a building means the floor to which there is an entrance from the outside on or near the level of the ground adjacent and where there are two such floors then the lower of the two: Provided that no floor of which the upper surface is more than 3½ feet below the level of the adjoining ground or pavement shall be deemed to be the ground floor. "Ground floor."

"Height" in relation to any building as a whole means vertical measurement taken from the level of the footway (if any) immediately in front of the centre of the face of the building or (where there is no such footway) from the level of the ground before excavation to the level of the top of the parapet or eaves. "Height."

"Heights" in relation to floors shall mean:—

(a) In the case of the topmost floor the vertical measurement between the floor and the ceiling thereof or between the floor and the under surface of the tie member of the roof or if there is no tie member then up to the level of half the vertical height of the rafters or other support of the roof.

(b) In the case of every floor other than the topmost the vertical measurement between its floor and the floor next above.

"Level of the ground" means the mean level of the ground as determined by the Surveyor or Engineer of the local Council. "Level of the ground."

"Party wall" means a wall forming part of a building and used or constructed to be used for separation of adjoining buildings or a wall forming part of a building built upon the dividing line between adjoining premises for common use by the occupants of such premises. "Party wall."

"Party structure" means any partition wall or any partition floor separating vertically or horizontally stories or rooms in separate occupation and approached by distinct staircases or separate entrances from without or separating a shop from the remaining portion of a building or separating a building from a public way leading to premises in other occupation. An external fire escape stairs shall not be deemed a separate entrance when doors opening on to such stairs are capable of being opened from the inside only. "Party structure."

"Pillar." "Pillar" shall include all columns and stanchions or an assemblage of such columns or stanchions properly riveted or bolted together.

"Reinforced concrete." "Reinforced concrete" means a concrete in which steel is embodied in such a manner that the two act in unison in resisting stress.

"Square." "Square" applied to the measurement of any area means the space of 100 square feet.

"Surveyor." "Surveyor" means the surveyor or engineer of the Council in whose district the building is situated.

PART II.

Demolition of Buildings.

Method of demolition. 2. In carrying out the work of demolition of any building story after story shall be successively and completely removed. No material shall be placed upon the floor of such building in course of demolition; but the bricks timbers and other structural parts of each story shall be lowered to the ground immediately upon displacement and removed except special permission to the contrary is granted by the Surveyor.

Nuisance to be avoided. 3. Provision shall be made for avoidance of all nuisance from dust or falling refuse by playing water on same by means of a rose or by other approved method.

PART III.

(1) *Materials.*

Surveyor may object to materials. 4. All materials shall be of good quality, and no materials shall be used in the construction of any building or any addition to or alteration of any building if the same have been disapproved by the Surveyor on the ground of their not being of good quality. Any materials so disapproved of shall be immediately and permanently removed from the site of the work by the builder.

Brick. 5. *Bricks* whether new or old used in all buildings shall be whole good hard well-shaped well-burnt and clean bricks free from all defects. When old bricks are used in any wall they shall be thoroughly cleaned before being used. All bricks shall be thoroughly soaked in water before being used.

Sand. 6. *Sand* used for mortar in all buildings shall be clean grit sand free from vegetable earthly saline or other foreign matter.

Lime and lime mortar. 7. *Lime mortar* shall be made of one part lime and not more than three parts of sand measured dry. All lime used for mortar shall be thoroughly and freshly burnt of good quality and unless ground properly slaked with clean fresh water before it is mixed with the sand.

Portland cement. 8. *Portland cement* shall be of approved brand and delivered in original packages. It shall be subject to all requirements prescribed by the British Engineering Standard Committee's Specifications and all subsequent amendments thereof, or prescribed by any other approved Standards Specifications and all subsequent amendments thereof.

Cement mortar. 9. *Cement mortar* shall be made of cement and sand in the proportion of one part of cement and not more than three parts of sand and shall be used before setting has begun. The cement and sand shall be measured and thoroughly mixed on a clean platform before adding water which latter shall be clean and fresh and applied through a rose.

Cement concrete. 10. *Concrete* shall be made of Portland cement clean sand and clean broken stone clinker broken well-burnt brick or terra-cotta.

(*a*) Concrete for foundations and for solid walls shall be composed of one part Portland cement and not more than three parts of sand and five parts of broken stone well-burnt brick or approved clinker of gauge not exceeding 2 inches.

(*b*) Concrete for hollow blocks floors backing of ashlar and reinforced concrete shall be composed of one part of Portland cement two parts of sand and four parts of broken stone or other approved aggregate of gauge not exceeding three-quarters of an inch.

(*c*) *Concrete for fireproofing* shall be composed of broken stone brick terra-cotta or (except in combination with steel) clinker mixed in the proportion of one part of Portland cement two parts of sand and four parts of broken stone brick terra-cotta or clinker of gauge not exceeding three-quarters of an inch.

Timber. 11. *Structural timber work* used in any building shall be of good sound well-seasoned dry material free from rot large or loose knots sap shakes or any imperfection whereby the strength may be impaired and shall be of such dimensions as the purposes for which the building is intended require.

12. *Wrought iron* shall be uniform and fibrous. It shall have an ultimate tensile resistance of not less than 42,000 pounds per square inch and an elongation of 18 per centum in 8 inches when tested in small test-pieces. **Wrought iron.**

13. *Structural steel* used in buildings shall be free from seams flaws cracks defective edges or other defects and shall have a smooth uniform finish. **Steel.**

14. All structural steel used in beams and columns and in other large members shall comply with the Specification for the time being of the British Engineering Standard Committee or the Australian Commonwealth Engineering Standard specification for mild steel, and the working stresses adopted shall be as hereinafter provided for buildings of steel frame construction. **Structural steel in beams and columns.**

15. *Rivet steel* shall have an ultimate resistance of from 48,000 pounds to 58,000 pounds per square inch an elastic limit not less than one-half of its ultimate strength and a percentage of elongation in 8 inches equal to 26 and shall be capable of being bent cold double on itself without fracture on the outside of the bent portion. **Rivet steel.**

16. *Test bars* of wrought iron and steel shall have a sectional area of not less than one-half of 1 square inch. **Test bars.**

17. All *steel castings* shall be solid free from flaws and be annealed. **Cast steel.**

18. All cast-iron castings shall be made of clean tough gray iron. They shall be free from injurious blow-holes cold-shuts and cinder spots. Sample bars 1 inch square cast in sand moulds in a span of 12 inches shall bear a central load of 2,000 pounds. **Cast iron.**

19. Except where otherwise provided for herein the cost of all tests of materials required under this Schedule shall be borne by the builder. **Test of materials.**

(2) *Strength of Materials, &c.*

20. The *factor of safety* where the unit stress for any material is not prescribed in this Schedule shall be as four to one for metals (except cast iron) subjected to tension or transverse stress as six to one for timber as ten to one for natural or artificial stones and brick or stone masonry in columns except where working stresses are otherwise prescribed in this Schedule varying the factors of safety here given. The factor for cast-iron columns shall be as eight to one. **Factor of safety.**

21. The *safe bearing load* for *brick*-work shall be taken at eight tons per square foot when lime mortar and fifteen tons per square foot when cement mortar is used. The safe bearing load for *ashlar* masonry shall be taken at eight tons per square foot when lime mortar and fifteen tons per square foot when Portland cement mortar is used. **Safe loads for brick and masonry work.**

22. The safe bearing load for *concrete* when Portland cement is used shall be taken at twelve tons per square foot. The safe bearing load for such concrete may be taken as sixteen tons per square foot when the proportions are—one part of cement two parts of sand and four parts of broken stone well-burnt brick or approved clinker of gauged dimensions not more than 2 inches. **Concrete.**

23. Notwithstanding anything to the contrary herein contained the dimensions of each structural member or combination of materials required for the construction of the building shall be ascertained by computation according to modern engineering practice. **Computation for strength of materials.**

24. The Commission may permit use of any other materials or methods of construction as being equal to or superior to those provided for in this Schedule. **New materials and methods of construction.**

The applicants for such permission shall pay all expenses in connexion with any tests that may be required. **Cost of tests.**

PART IV.

Excavations, Foundations, and Footings.

25. All *excavations* for footings shall be taken down to a solid foundation to be approved by the Surveyor except in the case of construction of artificial foundation approved by the Surveyor. The placing of any footing in position shall not be begun until at least 24 hours' notice has been given to the Surveyor that the trenches are ready for inspection. **Excavations. Footing. Inspection of trenches.**

26. Every building shall have *foundations* of solid ground or artificial foundations of hardwood brick stone concrete reinforced concrete steel or iron grillage encased in concrete or piles. Artificial foundations shall be designed so as to reduce the pressure per square foot to the safe bearing capacity of the soil. All foundations must be approved by the Surveyor before the commencement of any erection thereon. **Foundations.**

Bearing capacity of soil.

27. Where no test of the sustaining power of the soil has been made the load per square foot on the soil shall not exceed the following, viz.:—

Firm clay	Three tons
Hard clay	Four tons
Firm dry sand	Three tons
Compact sand	Four tons
Sound shale rock not exposed	Nine tons
Hard rock	One-tenth of the crushing strength

The Surveyor shall have power to require the builder to test the bearing capacity of the soil and the Surveyor's decision as to such bearing capacity shall be final.

Pile foundations.

28. If pile foundations are used borings of the soil shall first be made at the expense of the proprietor to determine the position of a suitable underlying stratum of hard material and the piles shall be driven to reach such stratum when practicable. When piles are not driven to refusal the safe sustaining powers shall be determined by the formula:—

Safe bearing power of pile:—

$$P = \frac{2\ WH}{S + 1}$$

Where P = *safe* load on pile in tons under a factor of safety of 6
W = weight of ram in tons
H = fall of ram in feet at last stroke
S = penetration in *inches* at last stroke.

29. The heads of all piles shall be protected against splitting whilst being driven. After having been driven the piles shall be cut off to a uniform level and covered with a grillage of hardwood timber concrete concrete and steel or iron or stone. The iron or steel shall be thoroughly encased in concrete to prevent rust.

Width and height of footings.

30. Unless with the consent in writing of the Commission every wall other than a wall carried on a bressummer or founded on approved solid rock shall have footings:—The projection of the bottom of the brick footing of every wall on each side of the wall shall be not less than one-half the thickness of the wall at its base unless an adjoining wall interferes in which case the projection may be omitted where that wall adjoins. The diminution of the footing of every wall shall be formed in regular offsets and the height from the bottom of such footing to the base of the wall shall be at least equal to two-thirds of the thickness of the wall at its base. Provided that concrete may be substituted for such footings subject to the sectional area and depth of such concrete being not less than the sectional area and depth required for footings in regular offsets.

Level of lowest story.

31. The lowest story of any building shall be constructed at such level as will permit of the drainage of the said building being connected to the sewer directly or by pumps or other effective means and having at all times an effective flow to such sewer.

Damp course.

32. Every wall of a new building shall have a proper damp course of sheet lead bituminous asphalt or slates laid in cement or of other durable material impervious to moisture extending throughout its whole thickness beneath the level of the lowest floor and at a height of not less than 6 inches above the surface of the ground adjoining such wall. A vertical damp course or courses shall be provided wherever required by the Commission as also shall damp courses in parapet walls.

Floor below surface of ground.

33. Provided that where any part of a floor of the lowest story of such building not being a cellar is intended to be below the level of the surface of the ground immediately adjoining the exterior of such story and so that the ground shall be in contact with the exterior of such wall such story or such part thereof as will be so in contact shall be enclosed with walls impervious to moisture or with hollow walls having an intervening cavity between such walls of a width of 2 inches and extending from the base of such walls to a height of 6 inches above the surface of the ground immediately adjoining the exterior of such story. A proper damp course of sheet lead mineral asphalt or slates laid in cement or of other durable material impervious to moisture shall be inserted in every such hollow wall at the base of such wall and likewise at the level of the top of the cavity and such hollow wall shall together with its cavity be drained to the satisfaction of the Commission or such cavity may be filled solid with bituminous asphalt.

Dampness of site.

34. Where necessary in the opinion of the Surveyor and in the case of every basement and cellar the ground surface of the site shall be properly asphalted or covered with a layer of cement concrete at least 4 inches thick or other approved damp-resisting covering properly graded for drainage at an approved outlet.

PART V.

(1) *Loads.*

35. The *dead load* of a building shall consist of the actual weight of walls floors roof partitions and all permanent construction. **Dead loads.**

36. The *live or superimposed load* shall consist of all loads other than the dead load. **Live loads.**

37. For the purpose of calculating the loads on pillars floor systems and foundations in buildings the live load on floors shall be estimated as not less than the following dead loads:— **Calculation of loads.**

(*a*) Where not otherwise prescribed one hundredweight and a quarter per square foot.

(*b*) For buildings subject to heavy shocks the loads shall be determined by calculation.

(*c*) For portions of buildings having fixed seating arranged in accordance with these Regulations one hundredweight per square foot.

(*d*) For school classrooms and similar rooms and for hospital wards and staff rooms one-half of a hundredweight per square foot.

38. The live load on *pitched* roofs shall be estimated in accordance with the circumstances of the case and with the following rules viz.:—

The pressure of wind on a vertical surface shall be taken as the equivalent of 40 lbs. weight per square foot of such surface. (Note.—For wind pressure on walls see clauses 134 and 135 of this Schedule.)

The percentage of such pressure acting normally to a pitched roof shall be derived from one or other of the following formulæ according as the roof is or is not supported by walls namely—

(i) Where the roof is supported by walls
$y = 2.2x$;

(ii) Where the roof is not supported by walls
$y = x + 58$.

Where y = the said percentage and
x = the number of degrees of angle in the roof pitch in excess of 20°.

Provided that in no case shall the pressure acting normally to a pitched roof be reckoned as being less than the equivalent of 10 lbs. weight per square foot of roof surface:

Calculations for wind pressure shall be shown in the case of every tower turret or spire and of every roof the plane of the surface of which inclines from the external or party walls upwards at a greater angle than 45 degrees with the horizon.

The live load on *flat* roofs used as roofs only shall be estimated at five-eighths of a hundredweight per square foot.

39. For the purpose of determining the extreme load to be carried on pillars and foundations in buildings of more than two stories in height a reduction of the live loads shall be allowed as follows:— **Loads on pillars &c.**

For the roof and top story the live load shall be calculated in full;

For the next succeeding lower story a reduction of 5 per centum from the live load fixed by this Division of this Part of this Schedule;

For the next succeeding lower story a reduction of 10 per centum;

For each succeeding lower story the amount of the reduction shall be 5 per centum more than for the story immediately above.

(2) *Thickness of External and Party Walls for all Brick Stone or Concrete Buildings.*

40. Every building unless otherwise provided by this Schedule shall be enclosed with walls constructed of brick stone or other hard and incombustible substances and the footings shall rest on solid ground or upon concrete or upon other approved solid substructure. **Structure of buildings.**

41. Every wall constructed of brick stone or other similar substance shall be properly bonded and solidly put together with mortar and no part of such wall shall overhang any other part except to the extent of 9 inches and as approved by the Surveyor and provided that the projection is well and solidly corbelled out and that the inside of the wall carrying such corbelling is carried up vertically in continuation of the lower face thereof. All return walls shall be properly bonded together. **Construction of walls of brick stone &c.**

Facing to walls.

42. Ashlar facing shall not be less than 4 inches thick and shall be securely anchored or bonded to the backing of concrete or brick as the case may be; the thickness prescribed for walls shall be inclusive of facing provided such facing is constructed to bond in not less than half-brick thickness.

Hollow walls.

43. External walls of buildings may be considered as hollow walls in accordance with the following rules but not otherwise :—

(a) The inner and outer parts of the wall shall be separated by a cavity which shall throughout be of a width not exceeding 2 inches.

(b) The inner and outer parts of the wall shall be securely tied together with suitable bonding ties of adequate strength formed of galvanized iron glazed stoneware or other approved material. Such ties shall be placed at distances apart not exceeding 27 inches horizontally and 13½ inches vertically.

(c) The thickness of each part of the wall shall throughout be not less than 4½ inches.

(d) The aggregate thickness of the two parts excluding the width of the cavity shall throughout be not less than the minimum thickness prescribed for solid walls of the same height and length.

(e) Provided that nothing herein contained shall prevent a cavity of not more than 1 inch across being filled in with approved material impervious to moisture in which case the bonding ties may be omitted provided no portion of the wall is less than 9 inches thick.

Hollow concrete blocks.

44. Hollow concrete blocks may be used for the construction of walls of buildings for one floor provided the thickness for walls required by this Schedule does not exceed 9 inches.

The concrete at face and back of such blocks shall be not less than 2½ inches thick and the intervening cavity at least 2 inches wide and the thickness of the cross ties shall be not less than 2 inches for the full height of the block.

Ties shall be spaced not more than 9 inches apart. Blocks requiring to be built up of special sections shall be rebated dovetailed or tongued together to the satisfaction of the Commission.

Concrete blocks shall not be used green and unless special permission is obtained no block shall be used within fourteen days from date of construction thereof. The blocks shall be bedded and jointed in cement mortar.

Joists and beams shall not be let into hollow concrete walls.

Length of walls

45. Walls are deemed to be divided into distinct lengths by return walls and the length of every wall shall be measured from the face of one return wall to the face of the next provided that such return walls are external party or cross walls of the thickness required by this Schedule and are bonded into the walls so deemed to be divided.

Underpinning.

46. The underpinning of walls and chimneys shall be built with brick or stone bedded in cement to the full thickness and length of the old wall or work or to an additional thickness if the increased height of the wall so requires and shall rest on the solid ground or solid substructure as a foundation and the whole shall be executed to the satisfaction of the Surveyor.

Thickening existing walls.

47. A wall shall not be thickened except after notice served on the Surveyor of the intention to thicken and the thickening shall be executed with brick or stone work in cement properly bonded to the old work to the satisfaction of the Surveyor.

Thickness of external and party walls.

48. The external and party walls of buildings such walls being built of bricks of a length of not less than 8¾ inches or of stone or other blocks of hard and incombustible substance the beds or courses thereof being horizontal shall be made of not less thickness at the base than the thickness specified in the table following :—

Height in Feet not exceeding.	Length in Feet not exceeding.	Thickness at Base in Inches.	Length in Feet not exceeding.	Thickness at Base in Inches.	Length Unlimited.	Thickness at Base in Inches.
100	55	27	70	31½	Length unlimited	36
90	60	27	70	31½	,, ,,	36
80	45	22½	60	27	,, ,,	31½
70	30	18	45	22½	,, ,,	27
60	35	18	50	22½	,, ,,	27
50	40	18	70	22½	,, ,,	27
40	30	13½	60	18	,, ,,	22½
30	45	13½	..	..	,, ,,	18
25	..	..	..	..	,, ,,	13½
12	20	9				

49. Walls under 70 feet in length and under 12 feet in height may be constructed 9 inches thick provided they are strengthened with 4½-in. piers equally spaced of which the collective widths amount to at least one-fifth part of the length of the wall. **Single-story buildings.**

50. Where any building is constructed of bricks laid in cement mortar as defined in this Schedule the following reductions in thicknesses of walls will be permitted:— **Walls built in cement mortar.**

(a) When the required thickness as set out in the foregoing table is 18 inches or over the said thickness may be reduced by 4½ inches;

(b) When the required thickness is 13½ inches this may be reduced to 9 inches subject to the provision of piers as described in the last preceding clause;

(c) When the required thickness is 9 inches no reduction in such thickness is allowed but the height may be increased to 13½ feet or when the height does not exceed 12 feet the length may be increased to not more than 30 feet.

51. Walls over 70 feet in length and over 100 feet in height shall have such thicknesses as shall be determined by the Commission in each case. **Walls over 70 feet in length.**

(3) *General Provision in respect to Walls.*

52. The thickness of a cross-wall shall be not less than two-thirds of the thickness hereinbefore required for an external or party wall of the same dimensions but never less than 9 inches and no wall subdividing shall be deemed to be a cross-wall unless it is carried up to the plate level of the topmost story and unless in each story the aggregate extent of the vertical faces or elevations of all the recesses and that of all the openings therein taken together does not exceed one-half of the whole extent of the vertical face or elevation of the wall. If a cross-wall is carried on a girder across the ground story and is supported by piers to the satisfaction of the Surveyor it shall be deemed to be a cross-wall in accordance with this clause. **Cross walls.**

53. Wherever a cross-wall becomes in any part an external wall the external portion of such cross-wall shall be of the thickness required for an external wall of the same height and length but no portion of such cross-wall shall be of less thickness than is required for the external portion thereof.

54. All internal bearing walls and partition walls and foundations thereto shall be constructed in such manner as may be approved by the Commission. **Internal walls and partitions.**

55. Walls in basements shall be of sufficient strength to act as retaining walls where necessary.

56. No isolated brick or stone pier shall exceed in height eight times the least dimension of same if built with lime mortar nor twelve times if built with cement mortar. **Brick or stone piers.**

Part VI.

Buildings wholly or partly in Wood including Removal and Re-erection of such Buildings.

57. Subject to the provisions of this Schedule and to those of the *Local Government Act* 1928 and any amendments thereof buildings and structures may be built or erected in wood or partly in wood and partly in other materials: **Streets in which wooden buildings may be erected.**

Provided that—

(a) The external walls of such buildings and structures shall not exceed in height 27 feet measured from the floor level to the top of the wall-plates. **Height of external walls.**

(b) Every such building shall be wholly in one occupation or be constructed or adapted so to be. **Buildings to be wholly in one occupation.**

58. Wooden buildings erected prior to the twenty-ninth day of October 1924 may be added to in wood subject to the conditions and limitations contained in this Schedule. **Additions to wooden buildings previously erected.**

59. Buildings transported or removed either in whole or in part into a municipal district or from one part of a municipal district to another part shall when completed comply with all the provisions of this Schedule in regard to the erection of new buidings and such buildings either whole or in sections shall not be brought into a municipal district until the same have been inspected and approved by the Surveyor. **Removal and re-erection of wooden buildings.**

Roofs and eaves.

60. Roofs shall be covered with slates tiles metal or other fire-resisting materials approved by the Commission.

Vermin plates.

61. In the construction of all wooden buildings vermin plates shall be used.

Stucco and rough cast.

62. Stucco or rough cast shall be applied to expanded metal lathing not less than No. 22 B.W.G. The first or scratch coat shall be lime mortar gauged with cement and mixed with sufficient long and strong hair to thoroughly bind it. The second coat shall be cement mortar. Final coat shall consist of one part cement one part lime and three parts crushed coke stone or gravel.

PART VII.

(1) *Details of Construction of Buildings.*

United building ceasing to be in one occupation.

63. Whenever any buildings which have been united cease to be in one occupation all openings made for the purpose of uniting the same in any party wall between the buildings or in any external wall shall be built up to the satisfaction of the Commission.

Buildings deemed to be united.

64. Buildings shall be deemed to be united when any opening door is made in the party wall or the external walls dividing such buildings or when such buildings are so connected that there is access from one building to the other without passing into the open air.

Party walls.

65. Every party wall shall be carried up a thickness equal to the thickness of such wall in the topmost story but in no case need it be more than 14 inches thick.

Height of party walls above roof.

66. Every party wall shall be carried up of the thickness aforesaid above any dormer lantern-light skylight or other erection of combustible materials fixed upon the roof or flat of any building within 4 feet from such party wall and shall extend at the least 12 inches higher and wider on each side than such erection and every party wall shall be carried up above any part of any roof opposite thereto and within 5 feet therefrom.

Cornices &c.

67. Every cornice balconette or other projection shall be tailed into the wall of the building and weighted or tied down to the satisfaction of the Commission.

(2) *Bressummers, &c.*

Timber in party walls.

68. A bond timber or wood plate shall not be built into any party wall and the ends of any wooden beam or joist bearing on such walls shall be at least 1½ inch distant from the centre line of the party walls and not less than 4½ inches laterally from beams or joists on the opposite side of the walls. Where the beams or joists are not within 4½ inches of the centre of the party wall no lateral separation shall be necessary.

The end of any timber not permitted to be placed in or to have a bearing on a party wall may be carried on a corbel or template tailed into the wall at least 4½ inches but in no case less than the amount of the projection or otherwise supported to the satisfaction of the Commission.

69. Single joists having a span greater than 10 feet shall be stiffened with herringbone strutting or with cross bridging and the distance between bridgings and bridging and walls shall not exceed 10 feet. Solid bridging not less than 1½ inch thick shall be placed between joists over all girders. All such strutting or bridging shall as far as practicable be ranged in straight lines from joist to joist.

Trimmer joist.

70. Every trimmer receiving or carrying more than four common joists and every trimmer joist receiving or carrying such trimmer at a distance greater than 3 feet from the bearing of such trimmer joist on the wall shall be increased at least 1½ inch in thickness.

Every trimmer over 6 feet in length shall be hung in stirrup irons of strength sufficient to safely carry the same.

Flooring.

71. Floor joists shall be covered with softwood flooring boards at least 1⅛ inch thick or with hardwood flooring boards at least ⅞ inch thick as may be required by the Commission.

Girders and stanchions.

72. Every girder shall have a bearing in the direction of its length of 4½ inches at least at each end upon a wall and the Commission may require that every girder shall be supported by such iron columns stanchions or piers of brick or stone or corbels as may be necessary to insure the stability of the superstructure. All metal girders and columns or stanchions supporting a wall floor or roof of fire-resisting construction shall be protected from fire as prescribed hereinafter of buildings of "Frame Construction." This shall not prohibit the bearing of wood joists upon a girder supporting a wall.

At each end of every girder a space shall be left equal to ¼ inch for every 10 feet and for any fractional part of 10 feet of the length of such girder to allow for expansion.

Every girder bearing upon a wall shall be borne by a template or corbel of stone or iron tailed through at least half the thickness of the wall and of the full breadth of the girder.

Arches and lintels.

73. Openings for doors and windows in all brick or stone or concrete buildings shall have good and sufficient external arches of brick stone concrete or terra-cotta well built and with good and sufficient abutments or the openings shall have lintels formed of stone iron steel or reinforced concrete of sufficient strength and having a bearing at each end of not less than 4½ inches on the wall. On the inside of all openings in which lintels are less than the thickness of the wall to be supported there shall be timber lintels with ends cut to camber of arch and which shall rest at each end not less than 3 inches on any wall and shall have a suitable internal arch turned over the timber lintels; or the inside lintels may be of cast iron wrought iron or steel and in such case templates shall not be required at the ends where the lintel rests on the walls provided the opening is not more than 8 feet in width. Tie rods shall be used where necessary to secure stability to the approval of Commission.

Construction of fireproof floors.

74. Every floor of fireproof construction shall be formed of brick stone concrete or other incombustible material approved by the Commission.

Arches of brick or stone.

75. If an arch of brick or stone is used it shall—

(a) Where its span does not exceed 10 feet be of a thickness of 9 inches at least;

(b) where its span exceeds 10 feet be of such thickness as may be approved by the Commission.

The centre of such arch shall be higher than the springing at the rate of 1 inch at least for every foot and also for any fractional part of a foot of span.

Arches and floors of other incombustible material.

76. If an arch or floor of other incombustible material is used it shall be constructed in such manner as may be approved by the Commission.

Use of floor boards.

Nothing herein contained shall prevent the use of wood or other approved combustible flooring to cover floors of fireproof materials provided that every void or hollow space between the combustible and the incombustible materials is filled up with materials of an incombustible nature.

(3) *Flats and Roofs.*

Construction of roofs.

77. The flat gutter and roof of every building and every turret spire dormer lantern-light skylight or other erection placed on the flat or roof thereof shall be externally covered with slates, tile metal or other incombustible materials.

Tested and approved non-inflammable bituminous compositions may be used on flat wood boarded roofs and on all roofs of fireproof construction.

(4) *Alterations, Additions, &c.*

Rebuilding of party or external walls taken down &c.

78. Unless in any case the Surveyor otherwise allows where a party or cross or external wall not in conformity with this Schedule has been taken down burnt or destroyed to the superficial extent of at least one-quarter thereof every remaining portion of the old wall not in conformity with this Schedule shall either be made to conform therewith or be taken down before the rebuilding of such party or cross or external wall.

Additions and alterations to conform to Regulations.

79. Every addition to or alteration of a building and any other work made or done for any purpose in to or upon a building (except that of necessary repairs not affecting the construction of any external cross or party wall) shall so far as regards such addition or alteration or other work be subject to the provisions of this Schedule relating to new buildings.

On flat roofs.

80. Every closet built on a flat roof shall be built of brick walls 9 inches thick or reinforced concrete 4 inches thick with roof coverings as provided for other buildings and whether already built or hereafter to be built shall have a door and be properly enclosed screened and fenced from public view.

Position of detached closets and urinals.

81. No closet or urinal shall be erected or remain in front of any building facing a public highway or at a less distance than 10 feet from any street or from the door or window of any dwelling.

Nothing in this Schedule shall apply to any closet or urinal forming part of a main building and connected to an underground sewerage system.

Plumbing and drainage.

82. All sanitary plumbing and drainage other than drainage for stormwater shall be carried out to the satisfaction of the Commission unless provision for supervision of such work is already made in accordance with the provisions of some Act in force in Victoria dealing with such matters. All stormwater led through or under a building shall be carried in cast-iron pipes with lead joints properly caulked or stoneware pipes properly caulked with gasket and cement mortar and surrounded with concrete not less than 6 inches thick.

Rainwater pipes and gutters.

83. The roof flat or gutter of every building and every balcony verandah or other similar projection or projecting window shall be so arranged and constructed and so supplied with gutters and pipes properly maintained as to prevent the water therefrom from causing dampness in any part of any wall or foundation. Gutters and pipes shall be of metal or other approved material of suitable thickness.

Tanks.

84. Tanks containing more than five hundred gallons of water or other liquid placed on the roof or above the roof of any building shall be supported on iron steel or reinforced concrete beams and the beams shall rest at both their ends on brick walls or on iron steel or reinforced concrete girders or iron or steel columns or piers of brickwork masonry or reinforced concrete. Underneath every such water tank or on a side near the bottom thereof unless the same is used in connexion with fire-sprinkler or spraying installations there shall be a short pipe or outlet not less than 3 inches in diameter fitted with a suitable and easily accessible valve having a lever or wheel handle to the same so that the contents can readily be discharged. Covers on top of water tanks placed as aforesaid if of wood shall be entirely covered with approved metal such as galvanized sheet iron. Tanks shall be of approved construction and securely fixed.

(5) *Chimneys, Flues, Fireplaces, and Heating Apparatus.*

Foundations footings &c.

85. Chimneys shall be built on solid foundations and with footings similar to the footings of the wall against which they are built unless they are carried on iron girders with direct bearings upon party external or cross-walls to the satisfaction of the Commission or on corbels of brick stone or other incombustible material if the work so corbelled out does not project from the wall more than the thickness of the wall measured immediately below the corbel. Chimneys may be corbelled out 14 inches from walls 9 inches in thickness on corbels of stone or other incombustible material not less than 10 inches in depth and of the full width of the jambs.

Chimneys &c. with soot door.

86. Chimneys and flues having proper soot doors of not less than 40 square inches may be constructed at such angle as is approved by the Surveyor but in no other case shall any flue be inclined at a less angle than 45 degrees to the horizontal and every internal angle of every chimney and flue shall be properly rounded.

Position of soot doors.

87. All soot doors shall be distant at least 15 inches from any woodwork.

Arches.

88. An arch of brick or stone of sufficient strength shall be built over the opening of every chimney to support the breast thereof. Every camber arch shall have the abutments tied in by an iron bar or bars of sufficient strength turned up or down at the ends and built into the jamb for at least 4½ inches on each side.

Flues.

89. A flue shall not be adapted to or used for any new oven furnace steam boiler or other fire unless the flue is surrounded with brickwork at least 9 inches thick or reinforced concrete 6 inches thick from the floor of the story on which such oven furnace steam boiler or other fire is situate to a height of 12 inches above the roof.

Flues in connexion with engines.

90. A flue shall not be used in connexion with a steam boiler or hot-air engine unless the flue is at least 20 feet in height measured from the level of the floor on which such engine is placed.

Lining &c. flues.

91. The inside of every flue and also the outside where passing through any floor or roof or space enclosed by the roof or behind or against any woodwork shall be rendered or pargetted or lined with fire-resisting piping or stoneware.

Jambs.

92. The jambs of every fireplace opening shall be at least 9 inches in thickness and of incombustible material on each side of the opening thereof.

Incombustible material in certain cases.

93. The breast of every chimney shall be of incombustible material at least 4 inches in thickness and the brickwork surrounding every smoke flue shall be at least 4½ inches in thickness. Provided that where a ventilating flue is carried up with a smoke flue they may be separated by a properly constructed withe of cast iron not less than 1 inch in thickness.

94. The back of every fireplace opening in party or internal walls from the heart up to a height of 12 inches above the lintel or arch shall be brickwork at least 9 inches thick or reinforced concrete 6 inches thick. No flue shall be within 2 inches of the centre line of any party wall. **Backs of fireplaces &c.** **Position of flues.**

95. The thickness of the upper side of every flue when its course makes with the horizon an angle of less than 45 degrees shall be at least 9 inches. **Thickness.**

96. Every chimney smoke flue or chimney shaft shall be carried up in brick or stonework at least 4 inches thick throughout to a height of not less than 3 feet above the roof flat or gutter adjoining such flue or shaft measured at the highest point in the line of junction of such flue or shaft with such roof flat or gutter. **Height.**

97. The highest six courses of every chimney stack or shaft shall be built in cement mortar. **Top courses.**

98. The brickwork or stonework of any chimney shaft except that of the furnace of any steam-boiler shall not be built higher above the roof flat or gutter adjoining thereto than a height equal to six times the least width of such chimney shaft at the level of such highest point in the line of junction of such shaft with such roof flat or gutter unless such chimney shaft is built with and bonded to another chimney shaft not in the same line with the first or otherwise rendered secure. **Chimney shafts.**

99. There shall be laid level with the floor of every story before the opening of every chimney a slab of stone slate or other incombustible substances at the least 9 inches longer on each side than the width of such opening and at the least 18 inches wide in front of the breast thereof. **Hearth slabs.**

100. On every floor except the lowest floor such slab shall be laid wholly on stone or iron bearers or upon brick trimmers or other incombustible supports but on the lowest floor it may be bedded on concrete covering the site or on solid materials placed on such concrete. **How to be laid**

101. The hearth or slab of every chimney shall be bedded wholly on brick stone or other incombustible substance and shall together with such substance be solid for a thickness of 6 inches at least beneath the upper surface of such hearth or slab. **Hearth foundation.**

102. A flue shall not be built in or against any party structure or existing wall unless it is surrounded with good sound brickwork or other approved material at least 4½ inches in thickness properly bonded to the satisfaction of the Commission. **Flues in party walls &c.**

103. A chimney breast or shaft built with or in any party wall shall not be cut away unless the Surveyor certifies that it can be done without injuriously affecting the strength or stability of any building. **Cutting away chimney breast or shaft.**

104. A chimney shaft jamb breast or flue shall not be cut into except for the purpose of repair or doing some one or more of the following things, viz.:— **Cutting into chimney shaft &c.**

(a) Letting in or removing or altering funnels flues or pipes for the conveyance of smoke hot air or steam.

(b) Forming openings for soot doors in which case each such opening shall be fitted with a close iron door and frame.

(c) Making openings for the insertion of ventilating valves subject to the following restriction:—That an opening shall not be made nearer than 12 inches to any timber or other combustible substance.

105. Timber or woodwork shall not be placed— **Position of timber work in relation to chimneys &c.**

(a) Under any chimney opening within 6 inches from the upper surface of the hearth of such chimney opening; or

(b) Within 4 inches from the face of the brickwork or stonework about any chimney or flue.

106. Wooden plugs shall not be driven nearer than 4 inches to the inside of any flue or chimney opening nor any iron holdfast or other iron fastening nearer than 2 inches thereto. **Wooden plugs.**

107. No iron or steel joist or other ironwork shall be placed in any flue except in so far as the same may be required for insuring stability. **Ironwork.**

Furnace chimney shaft.

108. Unless otherwise permitted every brick or masonry chimney shaft for the furnace of a steam-boiler shall be constructed in conformity with this clause of this Schedule viz.—

(a) Every shaft shall be carried up throughout in masonry or brickwork and mortar of the best quality and if detached shall be built with a batter from the base to the top of the shaft at the rate of at least 1¼ inch per 10 feet of height.

(b) The thickness of brickwork at the top of the shaft and for 25 feet below the top if the external dimension does not exceed 5 feet shall be at least 9 inches. For chimneys of greater dimensions the thickness shall be at least 13½ inches and every chimney shall be increased at least one-half brick for every additional 25 feet measured downwards.

(c) Every cap cornice pedestal plinth string course or other variation from plain brickwork shall be provided as additional to the thickness of brickwork required under this Schedule and every cap shall be constructed and secured to the satisfaction of the Commission. The foundation of the shaft shall be made to the satisfaction of the Commission on concrete or other sufficient foundation.

(d) The footings inside and outside the shaft shall spread all round the base by regular offsets to a projection equal to the thickness of the enclosing brickwork at the base of the shaft.

(e) The width of the base of the shaft if rectangular shall be at least one-tenth of the proposed height of the shaft or if the same is round or of any other shape then one-twelfth of the height unless otherwise permitted by the Commission.

(f) When in the opinion of the Commission it is necessary the chimney shaft shall be built with an independent lining of fire-bricks or other approved material to such a height as the Commission may direct.

(g) The height of the shaft shall be measured from the top of the footings.

Chimney shafts in other material than brick or masonry such as steelplate steel and concrete or reinforced concrete or other materials may be built subject to the approval of the Commission.

Close fires and pipes for conveying vapour &c.

109. The floor under every oven copper steam boiler or stove which is not heated by gas or electricity and the floor round the same shall for a space of 18 inches in front of furnace and 9 inches elsewhere be formed of materials of an incombustible and non-conducting nature not less than 6 inches thick or 3 inches thick when covered by ¼-in. steel or iron plate. A fender 2 inches in height shall be formed round the front of furnace.

Pipes for conveying smoke.

110. Unless otherwise permitted by the Commission a pipe for conveying smoke shall not be fixed against any building on the face adjoining any street lane or alley.

Position.

111. A pipe for conveying smoke or other products of combustion shall not be fixed nearer than 9 inches to any combustible material.

Pipes for heated air &c.

112. A pipe for conveying heated air (excepting air heated by hot water at low pressure and by bath heaters) or steam shall not be fixed nearer than 6 inches to any combustible material.

Lagging to pipes.

113. Any lagging to pipes for conveying smoke or other products of combustion heated air steam or hot water shall be of incombustible material.

Low-pressure pipes.

114. The restrictions imposed with respect to the distance at which pipes for conveying hot water or steam may be placed from any combustible materials and the lagging thereto shall not apply in the case of pipes for conveying hot water or steam at low pressure.

"Low pressure."

115. Steam shall be deemed to be at low pressure when its pressure is not greater than fifteen pounds per square inch above that of the atmosphere and hot water shall be deemed to be at low pressure when its temperature does not exceed 250 degrees Fahr.

Bath-heater gas-fire gas-cooking stove.

116. Every gas-fire gas cooking stove or bath heater or other appliance yielding products of combustion or partial combustion shall be provided with a vent pipe not less than 3 inches in diameter extending at least 12 inches above the roof and fitted with an approved hood. Every such vent pipe shall be formed of incombustible material, have an air space of not less than 1½ inch round same for the full length of such pipe, and shall be so arranged as to discharge the products of combustion or partial combustion directly to the outer air.

117. The floor or roof over any room or enclosed space in which a furnace is fixed and any floor within 18 inches from the crown of an oven shall be constructed of fireproof materials. **Floors above furnaces and ovens.**

118. The expression "furnace" shall include any closed fireplace or fire-box or fire-chamber used for the purpose of generating steam pressure exceeding fifteen pounds to the square inch above that of the atmosphere or hot air or hot water the temperature of which exceeds 250 degrees Fahr. **Furnace.**

119. Every stove other than a self-setting range shall unless the Surveyor is satisfied that such a course is impracticable be set solid in brickwork or concrete and so as to leave no cavities at the back or sides of such stove or chimney-piece in which soot may accumulate. **Setting of stoves.**

PART VIII.

Ventilation and Lighting.

120. Every room unless exempted by the Commission shall have one or more windows opening directly into the external air with a total superficies clear of the sash frames and of any other obstruction to admission of daylight equal to at least one-tenth of the floor area of the room and so constructed that a portion equal to at least one-twentieth of such floor area can be opened and the opening in each case shall extend to at least 8 feet 6 inches above the floor level. **Light.**

PART IX.

Means of Escape and Provisions for Reducing Risk of Fire in Buildings.

121. The shaft of every lift or elevator shall be constructed and enclosed with brickwork not less than 9 inches thick reinforced concrete not less than 6 inches thick or other approved fireproof materials as follows:— **Construction lift shafts.**

(*a*) The sides of the shaft of every such lift or elevator shall be enclosed throughout its height and such shaft shall be enclosed (in cases where such shaft is not carried down to the foundations of the building) at the bottom and (in cases where such shaft is not carried up to the roof of the building) at the top.

(*b*) The shaft of any lift or elevator constructed within the well hole of a fireproof staircase and landings may be enclosed with open metal grilles or guards and open metal doors but save as aforesaid the materials used for enclosing shafts shall be solid fireproof materials (other than wood) not less than 3 inches thick. Doorways to enclosed shafts shall be fitted with fireproof and self-closing doors so constructed fitted and supported in position that when any such door is closed both it and the doorway shall be smoke-tight.

122. No goods lift shall be constructed in or communicate with an enclosed staircase in any building. **Goods lifts.**

123. When the shaft of any such lift or elevator is carried up to the roof of the building such shaft shall be carried through and above the roof and glazed with thin glass protected on the outside with strong wire guards. **Shaft of lift.**

124. All openings which abut on land in other occupation shall be fitted with fireproof glazing or alternatively such openings shall be protected with solid iron-armoured or gauze shutters as may be approved. All openings in external walls abutting on enclosed light courts common to separate buildings shall be fitted with metal frames and sashes and glazed with wire rolled glass or prisms or protected with steel-clad or wire gauze shutters as may be approved. **Openings in external walls.**

125. All skylights or lantern-lights which are placed in courts or wells constructed in buildings or constructed on roofs of fireproof construction shall so far as regards the frames and glazing thereof be constructed of fireproof materials and wire rolled glass respectively. **Skylights &c.**

126. All rooms used for the storage of petroleum or any products of petroleum turpentine or other similar volatile fluids or for the storage of inflammable cinematograph films or calcium carbide shall be dry throughout internally have walls floors and ceilings of damp-proof and fireproof construction and be properly ventilated. Doors unless opening directly to the outer air shall be steel clad or iron cased. The Commission may, if it thinks fit, in any individual case require that the quantity of such inflammable or dangerous material stored in any room or on the premises shall be limited to a specified extent. **Rooms used for storage of inflammable liquids &c.**

127. Doors to enclosed staircases shall be fireproof self-closing and so constructed fitted and supported that when such door is closed both it and the doorway shall be smoke-tight. **Doors to stairways.**

PART X.

(1) *Fireproof Construction.*

Application of other provisions of this by-law to buildings constructed under this Part.

128. The provisions contained in any other Part of this Schedule shall apply to every building erected or constructed in accordance with the provisions of this Part of this Schedule so far as they are not inconsistent with the provisions of this Part.

Frame-building construction when permitted.

129. The adoption of frame-building construction will be permitted for all buildings whether required by this Schedule to be fire-proof or otherwise; subject to the employment in combination of cement concrete and of steel as substantially the sole component materials for the frames of such buildings and provided that the conditions and stipulations hereinafter contained are complied with.

Unprotected steel columns &c. not permitted in fireproof &c. construction.

130. Wherever in this Part of this Schedule it is provided that buildings or specified portions of buildings shall be fireproof the employment for columns or girders of steel alone unprotected by a casing of concrete or other approved material in the manner hereinafter provided will not be approved.

(2) *Steel Frame Construction.*

Steel frame construction.

131. Buildings of steel frame construction shall be so designed that the whole of the stresses shall be provided for in the frame structure.

Deposit of plans.

132. Every person proposing to erect an iron or steel frame building shall deposit with the Commission a complete set of the drawings of such building showing the details of construction of all its parts together with a detailed copy of all the calculations of the stresses and particulars of material.

Wind pressure.

133. All buildings shall be designed so as to resist a *wind pressure* in any horizontal direction of at least twenty-five pounds per square foot.

134. Subject to the provisions of Part V. (1) hereof calculations for wind pressure need not be shown when height of building does not exceed four times the least width thereof.

Sustaining capacity of skeleton framing.

135. The skeleton framing in any wall shall be capable of safely sustaining independently of any masonry or brickwork the whole weight bearing upon such wall including the weight of such wall and the due proportion of any floors and roofs bearing thereon together with the live loads on such floors and roofs.

136. All parts of the steel frame shall be riveted except where rivets cannot be driven in which case fitted bolts may be used in reamed holes.

Pillars.

137. The *pillars* supporting all iron or steel girders that carry walls or fireproof floors or roofs shall be of iron or steel and shall be completely enclosed and protected from the action of fire as hereinafter provided. The term "pillar" shall include all columns and stanchions or an assemblage of such columns or stanchions properly riveted or bolted together.

Girders.

138. *Girders* to support the enclosing walls shall be fixed at or within 4 feet of the floor line of each story.

Dimensions &c.

139. No steel or wrought-iron pillar shall in any part be less than ¼ inch thick nor shall any such pillar have an unsupported length of more than forty times its least lateral dimensions nor more than one hundred and sixty times its least radius of gyration.

Ends of pillars.

140. The ends of every such pillar shall be true plane surfaces at right angles to the axis of such pillar.

Joints.

141. All *joints* in such pillars shall be closely butted with cover plates properly riveted and unless unavoidably no joint shall be made except at or near the level of a girder.

Feet of pillars.

142. The *foot* of every such pillar shall have a proper planed baseplate riveted thereto with sufficient gusset pieces to properly distribute the load on the foundations.

Pillars built up hollow.

143. Where any such pillars are built up hollow the cavities shall be filled solid with cement concrete composed as specified in Part III. 10 (*b*) of this Schedule.

Cast-iron pillars.

144. In any cast-iron pillar the metal shall not be in any part of less thickness than ¾ inch nor less than one-twelfth of the least lateral dimension. Nor shall such pillar have an unsupported length of more than twenty times its least lateral dimension nor more than eighty times it least radius of gyration.

Caps and bases.

145. The *caps and bases* of such pillars shall each be in one piece with the columns or be connected thereto with a properly turned and faced joint securely fixed.

146. Every such pillar shall be turned and faced top and bottom to a true plane face at right angles to the axis. **Face.**

147. All joints in such pillars shall be at or near the level of a floor and shall be fixed and made with not less than four bolts each at least ¾ inch in diameter. **Joints**

148. The foot of every such pillar shall have such area as may be necessary to properly distribute the load on the foundations. **Foot.**

149. All girders that carry walls or floors or roofs shall be of wrought iron or mild steel. **Girders carrying walls &c.**

150. All iron or steel forming portion of the framed structure and used in the construction of any floor or staircase or landing shall be protected from the action of fire by being encased to the satisfaction of the Commission in concrete brickwork terra-cotta or metal lathing and plaster or cement without any wood blockings. **Iron or steel carrying loads in floors &c.**

151. All structural metal work shall be cleaned of all scale dust and rust and except where in contact with concrete be thoroughly coated with one coat of boiled oil or paint or other approved material before erection and after erection shall where practicable receive at least one additional coat. **Structural metal work to be free from rust &c.**

152. In pillars the working stress per square inch of net section shall not exceed that given in the following table and in like proportion for intermediate ratios:— **Working stress of pillars.**

Ratio of Length to Least Radius of Gyration.	Working Stress in Tons per Square Inch of Net Section.					
	Cast-iron Pillars.			Mild Steel Pillars.		
	Hinged Ends.	One End Hinged and One End Fixed.	Both Ends Fixed.	Hinged Ends.	One End Hinged and One End Fixed.	Both Ends Fixed.
20	3·5	4·0	4·5	4·0	5·0	6·0
30	3·0	3·5	4·0	..	..	..
40	2·5	3·0	3·5	3·5	4·5	5·5
50	2·0	2·5	3·0	..	..	..
60	1·5	2·0	2·5	3·0	4·0	5·0
70	1·0	1·5	2·0	..	..	..
80	·5	1·0	1·5	2·5	3·5	4·5
100	..	..	..	2·0	3·0	4·0
120	..	..	..	1·0	2·5	3·5
140	..	..	..	0·0	2·0	3·0
160	..	..	..	..	1·0	2·5
180	..	..	..	..	0·0	1·5
200	..	..	..	..	..	0·5
210	..	..	..	..	..	0·0

153. Where a pillar is built into a wall the radius of gyration of that pillar in the direction of the thickness of the wall shall be taken for the purpose of the above table. **Pillars built into walls.**

154. The actual working stress of iron and steel (except in the case of pillars as hereinbefore set out) in tons per square inch of sectional area shall not exceed those given in the following table:— **Working stress of iron and steel.**

—	Tension.	Compression.	Shearing.	Bearing.
Cast iron	1¼	6	1½	8
Wrought iron	5	5	4½	8
Mild steel	8	8	6	10
Cast steel	6	10	6	10

155. The Surveyor may for the purpose of supervision of the building and at the expense of the owner of the building cause any pillar to be drilled at any point to ascertain its thickness and may cause to be made any other tests he may consider desirable. **Testing pillars.**

156. All pillars shall be wholly protected with a layer of concrete brick or terra-cotta. **Method of encasing pillars beams and girders.**

Concrete.

157. Concrete shall be of such thickness as to fill all outer spaces of the pillars and to extend at least 3 inches outside of the extreme surface of the metal of the columns. Concrete shall be composed of one part Portland cement two parts sand and four parts of broken stone broken brick broken terra-cotta or clinker of not more than ¾-in. gauge. A binding of metal lathing or other metal reinforcement shall be placed in this concrete not less than 1 inch from the outer surface thereof.

Brick.

158. Brick shall be at least 4½ inches thick outside of pillar metal and set in cement mortar. The main re-entrant portions of the pillar shall also be filled with brick or concrete.

Terra-cotta.

159. Terra-cotta shall not be less than 4 inches thick. A space of 1 inch shall be left between the metal of column and the inside of the terra-cotta which space shall be filled with concrete grouted in. The terra-cotta shall be set in cement mortar and every block fastened with metal ties of approved pattern.

Connexions.

160. In all cases satisfactory connexion shall be made at floors and ceilings.

Beams and girders.

161. Beams and girders shall be protected as specified for pillars except that the covering shall be at least 2 inches in thickness. Soffits of beams and girders when protected by concrete shall have approved metal binding embedded in the concrete in an approved manner.

Enclosure walls.

162. No enclosing wall of the building shall be of less thickness than 9 inches for the topmost two stories of its height nor less than 13½ inches in thickness for the remainder of its height below such topmost two stories provided that window backs may in all cases be 9 inches in thickness.

163. All brick and concrete work shall be executed in cement mortar and shall be bedded close up to the iron or steel without any intervening cavity and all joints shall be made full and solid.

Stone facing.

164. Nothing in this Part of this Schedule shall prevent the use of stone as an external facing for buildings provided that all work faced with stone shall be 4 inches thicker than hereinbefore provided unless bonded in as described in clause 42 of this Schedule.

165. Enclosing walls of reinforced concrete may be used as provided for hereinafter in buildings of reinforced concrete construction.

Curtain walls.

166. Self-supporting or curtain walls built in between columns or piers and not supported on steel or iron girders shall be not less than 13½ inches thick for the three upper stories and shall be increased 4½ inches in thickness every additional four stories downwards. Curtain walls shall be executed in cement mortar and shall not be used for bearing walls.

Openings for windows.

167. No openings for windows shall be made in curtain walls unless the openings are framed.

(3) *Reinforced Concrete Buildings.*

168. Every building of reinforced concrete construction shall be designed as a framed structure and so that the whole of the stresses shall be provided for in the frame.

Drawings.

169. All reinforced concrete work shall be built in accordance with approved detailed working drawings and specification and in accordance with the extant regulations made by the London County Council with respect to the construction of buildings wholly or partly of reinforced concrete and with respect to the use and composition of reinforced concrete in such construction *mutatis mutandis*. In the construction of the said regulations made by the London County Council any reference to "the District Surveyor" shall be read and construed as if it were a reference to the Commission.

Supervision.

170. No reinforced work will be permitted to be carried out except under the immediate and continuous supervision of a builder or his foreman who shall produce to the satisfaction of the Surveyor evidence of having had not less than twelve months' practical experience in the actual execution of this form of construction.

Stairs to be enclosed.

171. All stairs for the use of the public shall be supported to the approval of the Commission and the stairs or stair or stair case shall be enclosed by walls of brick not less than 9 inches thick or of reinforced concrete not less than 4½ inches thick.

(4) *Supervision.*

172. Where not otherwise expressly provided for in this Schedule, the Council of every municipality shall superintend and see to the execution of the provisions of such Schedule and shall at its own cost do and provide all such acts matters and things as are necessary for that purpose.

BUILDING REGULATIONS 1937.

Regulation 176.

SCHEDULE D.

NOTICE.

THIS BUILDING has been CLOSED by order of the Commission of Public Health.

Any person who without the written authority of the Commission—

(*a*) removes or defaces this NOTICE or causes or permits it to be removed or defaced; or

(*b*) breaks or removes or causes or permits to be broken or removed any seal of the Commission affixed to any door of this building; or

(*c*) uses this building or causes or permits it to be used as a public building within the meaning of the Health Acts—

shall be guilty of an offence against the Building Regulations 1937 and liable to a fine of £100.

By order of the Commission of Public Health,

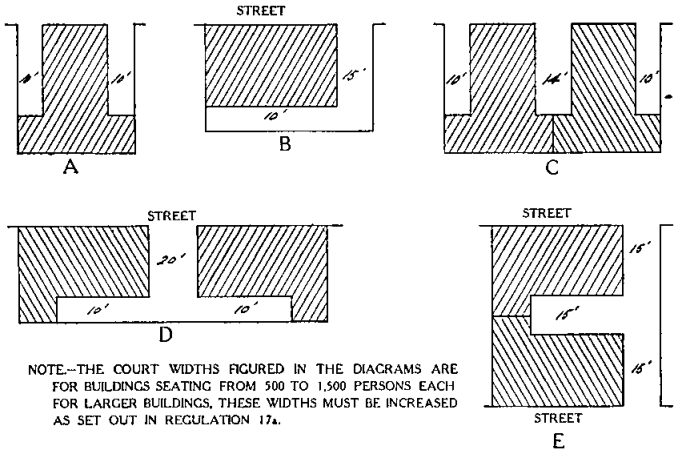
Secretary.

Date—

APPENDIX A

DIAGRAM ILLUSTRATING ARRANGEMENT OF COURTS.

(REGULATIONS 14-16)



NOTE.—THE COURT WIDTHS FIGURED IN THE DIAGRAMS ARE FOR BUILDINGS SEATING FROM 500 TO 1,500 PERSONS EACH FOR LARGER BUILDINGS, THESE WIDTHS MUST BE INCREASED AS SET OUT IN REGULATION 17a.

And the Honorable Sir John Richards Harris, His Majesty's Minister of Public Health for the State of Victoria, shall give the necessary directions herein accordingly.

C. W. KINSMAN,
Clerk of the Executive Council.

By Authority: H. J. GREEN, Government Printer, Melbourne.