Act reprinted pursuant to the Amendments Incorporation Act, 1937.

BUILDING ACT, 1923-1940

With notes of judicial decisions affecting sections of the reprinted Act.

BUILDING ACT, 1923-1940.

BEING

BUILDING ACT, 1923, No. 1600 OF 1923 [ASSENTED TO 6TH DECEMBER, 1923.]

AS AMENDED BY

BUILDING ACT AMENDMENT ACT, 1929, No. 1919 OF 1929 [ASSENTED TO 27TH NOVEMBER, 1929.]

LOCAL GOVERNMENT ACT, 1934, No. 2156 OF 1934 [ASSENTED TO 25TH OCTOBER, 1934.]

STATUTE LAW REVISION ACT, 1935, No. 2246 OF 1935 [ASSENTED TO 19TH DECEMBER, 1935.]

AND

BUILDING ACT AMENDMENT ACT, 1940, No. 53 OF 1940 [ASSENTED TO 5TH DECEMBER, 1940.]

An Act to consolidate and amend the law relating to buildings in the City of Adelaide and other municipalities and districts, and for other purposes.

BE IT ENACTED by the Governor of the State of South Australia, with the advice and consent of the Parliament thereof, as follows:

PART I.

PART I.

INTRODUCTORY.

1. This Act may be cited as the "Building Act, 1923-1940." Short title. Cf. U.K., 20 & 21, Geo. 5, c.clviii.

2. The provisions of this Act are arranged as follows:— Arrangement of Act.

PART I.—Introductory:

PART II.—Builders to furnish Plans and to comply with certain requirements:

PART III.—Preventing Obstruction of Streets by Building:

Amended by 53, 1940, ss. 16 (2), 35.

Commencement: The Local Government Act, 1934, was proclaimed to commence on 2nd November, 1934: *Gazette* 25th October, 1934, p. 845.

PART IV.—Special and Temporary Buildings and Structures:

PART V.—Rights of Building and Adjoining Owners:

PART VI.—Dangerous and Neglected Structures:

PART VII.—Surveyors:

PART VIII.—Building Referees:

PART IX.—By-Laws and Regulations:

PART X.—Legal Proceedings:

PART XI.—Miscellaneous:

PART XII.—Architectural Standards:

PART XIII.—Balconies and Verandahs.

Application of Act.

3. (1) This Act shall apply to all places within—

(*a*) the municipality of the City of Adelaide;

(*b*) every municipality and every district to which the Governor before the passing of this Act has, by proclamation made under the Building Act, 1881, or the District Councils Act, 1914, or any Act thereby repealed, directed the Building Act, 1881, to apply, or declared that the provisions of that Act and any amendments thereof shall apply; and

(*c*) every municipality and every district within which the Governor, after receipt of a petition from the council of such municipality or district declares, by proclamation, that this Act shall apply.

(2) Notwithstanding anything in subsection (1) hereof the Governor may, by any proclamation thereunder, if so prayed by such petition as aforesaid, declare—

(*a*) that this Act shall apply within such portion of a municipality or district as is specified in the proclamation; or

(*b*) that such portions of this Act as are so specified shall apply within the municipality or district or the specified portion thereof,

and in such case this Act shall apply only to the extent so declared.

Inserted by 53, 1940, s. 2.

(3) The Governor may by proclamation declare that this Act, or any specified portion of this Act, shall cease to apply within any municipality or district or portion of a municipal-

ity or district and thereupon this Act, or the specified portion thereof, shall cease to apply within that municipality or district or portion thereof, as the case may be.

Commencement of Act.

4. This Act shall come into force—

(*a*) within the municipality of the City of Adelaide, and the municipalities and districts referred to in subsection (*b*) of subsection (1) of section 3, on the first day of July, nineteen hundred and twenty-four; and

(*b*) within any other municipality or district or portion of a municipality or district, on the day fixed in that behalf by the proclamation whereby it is declared that this Act shall apply therein.

Interpretation.
Cf. U.K., 20 & 21. Geo. 5. c. clviii., s. 5.

5. In this Act, unless inconsistent with the context or subject matter, or some other meaning is clearly intended—

"adjoining occupier" means the occupier, or one of the occupiers, of land, buildings, storeys, or rooms adjoining those of the building owner:

"adjoining owner" means the owner, or one of the owners, of land, buildings, storeys, or rooms adjoining those of the building owner:

"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," as applied to a wall, means the underside of the course immediately above the footings (if any), or, in the case of a wall carried on a bressummer, above such bressummer:

"basement storey" means any storey of a building which is under the ground storey:

"bearing wall" means a wall which provides support for any dead load or live load in addition to its own weight: Inserted by 53, 1940, s. 3 (1).

"boarding house" means any building, permanent or otherwise, and any part thereof (other than premises licensed under the Licensing Act, 1932-1936) in which more than five persons, exclusive of the family of the proprietor thereof, are lodged and boarded for hire or reward: Inserted by 53, 1940, s. 3 (1).

"builder" means the master buider or other person employed to build or to execute any work on a building or structure, or if there is no master builder or other person so employed, or if such master builder or other person is unknown or cannot be found, then the owner of the building or other person for whom or by whose order such work is to be done or has been done:

Inserted by 53, 1940, s. 3 (2).

"building" includes shed, outbuilding, stable, workshop, garage, privy, and any other building of any kind whether used for human habitation or not:

Inserted by 53, 1940, s. 3 (2).

"building of the domestic class" means—

(*a*) a dwelling-house, office, hotel, boarding-house, hospital, or club;

(*b*) a shop and dwelling-house or shop and office in which, in either case, the portion used as a shop does not exceed twenty thousand cubic feet in cubical extent;

(*c*) a stable, workshop, or outbuilding used in connection with any building of any kind hereinbefore mentioned;

(*d*) any other building not being a public building or a building of the warehouse class:

Substituted by 53, 1940, s. 3 (3).

"building of the warehouse class" means a warehouse, factory, shop (other than a shop and dwelling-house or shop and office which is a building of the domestic class), workshop, manufactory, brewery, distillery, livery stable, garage (other than a garage appurtenant to a dwelling-house), or any other building which is used or constructed or adapted to be used for any like purpose:

"building owner" means such one of the owners of adjoining lands as builds or is desirous of building, or such one of the owners of buildings, storeys, or rooms separated from one another by a party wall or party structure as does, or is desirous of doing, a work affecting that party wall or party structure:

"by-law" means a by-law made under this Act by the particular council:

"clerk" means the town clerk of the particular municipality or the district clerk of the particular district:

"commencement of this Act" means, with respect to any particular municipality or district or portion of a municipality or district, the day on which this Act comes into force therein:

"council" means the council of the particular municipality or district:

"cross wall" means any internal wall built in connection with external or party walls, and bonding them together: Amended by 53, 1940, s. 3 (4).

"cubical extent" applied to the measurements of a building means the space contained within the external surfaces of its walls and the upper surface of the floor of its lowest storey and the topmost ceiling, or the level of the top of the roof plate when there is no ceiling:

"dead load" of a building means the actual weight of all permanent construction comprised in the building: Inserted by 53, 1940, s. 3 (5).

"district" means a district as defined by the Local Government Act, 1934: Amended by S.L.R. Act, 1935.

"divisional wall" means any wall (other than an external or party wall) subdividing any floor of a building and carrying any load in addition to its own weight:

* * * * * * * * * * * Definition of "domestic building" repealed by 53, 1940, s. 3 (6).

"dwelling-house" means a building used, or constructed or adapted to be used, wholly or principally for human habitation:

"external wall" means an outer wall or vertical enclosure of any building, not being a party wall:

"fire resisting," used with reference to materials, means any of the materials which, by the seventh schedule, it is provided shall be deemed to be fire-resisting materials for the purposes of this Act:

"first storey" means that storey of a building which is next above the ground storey, the successive storeys above the first storey being the second storey, the third story, and so on to the topmost storey:

"footing" means the construction whereby the weight of the building or structure is transferred to the foundations: Substituted by 53, 1940, s. 3 (7).

"foundation" applied to a wall means the solid ground or artificially formed support:

"frame construction" means a form of construction in which the design provides that the vertical forces due to the weight of the building or structure and the live load are carried down to the foundation by means of columns in such a manner that the walls are not required to assist in supporting those forces and loads: Substituted by 53, 1940, s. 3 (8).

Definition of "gallery" inserted by 1919, 1929, s. 3 (a) and repealed by 53, 1940, s. 3 (9).

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"ground storey" means that storey of a building to which there is the principal entrance from the outside on or near the level of the ground, and where there are two such storeys, then the higher of the two, but no storey of which the upper surface of the floor is more than six feet below the level of the adjoining pavement shall be deemed to be the ground storey:

Inserted by 53, 1940, s. 3 (10).

"habitable room" includes a living room and a room in a building of a domestic class which is used or in respect of which there is a probable presumption (until the contrary is proved) that it is used for the purpose of sleeping or eating or the cooking of food; and "inhabited" and "habitation" have corresponding interpretations:

Inserted by 53, 1940, s. 3 (10).

"hardwood" means jarrah, red gum, or any other timber approved by the surveyor as a hardwood:

Amended by 53, 1940, s. 3 (11).

"height," in relation to any building, means the 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 to the level of the underside of the ceiling of the topmost storey:

Definition repealed by 1919, 1929, s. 3 (b) and inserted by 53, 1940, s. 3 (12).

"height," in relation to a storey means—

(*a*) in the case of the topmost storey the measurement between the floor and the ceiling thereof, or between the floor and the under surface of the collar tie of the roof, or, if there is no collar tie, 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 storey other than the topmost, the measurement between the floor and the floor above:

Definition of "inhabited" repealed by 53, 1940, s. 3 (13).

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"level of the ground" means the level of the ground as determined by the surveyor:

Inserted by 53, 1940, s. 3 (14).

"live load" means all load other than dead load:

"mezzanine" and "mezzanine floor" mean an intermediate floor placed in any storey or room the area of which does not exceed one-half of the area of the floor of that storey or room: Inserted by 53, 1940, s. 3 (14).

"municipality" means a municipality as defined by the Local Government Act, 1934: Amended by S.L.R. Act, 1935.

"new building" includes—

(*a*) any building erected after the commencement of this Act;

(*b*) any building which has been taken down entirely or for more than one-half of its cubical extent, and has been re-erected, or commenced to be re-erected, wholly or partially on the same site, after the commencement of this Act; and

(*c*) any space between walls and buildings which is roofed, or commenced to be roofed, after the commencement of this Act:

"occupier" means any person who, either jointly or alone, has the actual physical possession of any land or tenement to the substantial exclusion of all other persons from participating in the enjoyment thereof: Substituted by 53, 1940, s. 3 (15).

"ordinary construction" means a form of construction in which the design provides that the vertical forces due to the weight of the structure itself and the live load are carried down to the foundations wholly by the walls or partly by the walls and partly by internal columns: Inserted by 53, 1940, s. 3 (15).

"owner" includes any person in possession or receipt either of the whole or any part of the rents or profits of any land or tenement, or in the occupation of any land or tenement otherwise than as a tenant from year to year, or for any less term, or as a tenant at will:

"partition wall" means an internal vertical structure employed solely for the purpose of subdividing any storey of a building into sections, and which supports no load other than its own weight: Inserted by 53, 1940, s. 3 (16).

"party fence wall" means a wall used or constructed to be used as a separation of adjoining lands of different owners, and standing on land of different owners and not being part of a building, but does not include a wall constructed on the land of one owner, the footings of which project into the land of another owner:

Substituted by 53, 1940, s. 3 (17).

"party structure" means any floor of fire-resisting construction or any arch of fire-resisting construction or any wall of fire-resisting construction which separates from the remaining portion of a building a separate occupation or tenement:

"party wall" means a wall built to be used as a separation of two or more buildings, or a wall forming part of a building built upon the dividing line between adjoining premises for their common use:

"public building" means a building or any part thereof either permanently or occasionally used for the assemblage of persons in large numbers or used, or constructed or adapted to be used, as a public theatre, public hall, public concert-room, public ball-room, public lecture-room, public library, or public exhibition-room, or as a public place of assembly, or used, or constructed or adapted to be used, for any like purpose:

"reinforced concrete" means a concrete in which steel is embodied in such a manner that the two act in unison in resisting stresses:

"roadway" in relation to any street or way, means and includes the whole space open for traffic, whether carriage traffic and foot traffic, or carriage or foot traffic only:

Amended by 53, 1940, s. 3 (18).

"shop front" means such portion of the structure of a shop as abuts or faces a street or way, and is not in the nature of a wall supporting a wall or portion of a wall above:

Inserted by 1919, 1929, s. 3 (c).

"sky-sign" means any model, sign, lettering, or device in the nature of an advertisement, announcement, or direction supported on or attached to any post, pole, standard, framework, or other support so that any part of the sky-sign is visible against the sky from some point in any street or way: the term does not include any flag, flagstaff, pole, vane, weathercock, cresting, or balustrade:

Inserted by 53, 1940, s. 3 (19).

"softwood" means oregon, pine, spruce, and any other timber approved by the surveyor as a softwood:

"square" applied to the measurement of any area means the space of one hundred square feet:

Substituted by 1919, 1929, s. 3 (e), and amended by 53, 1940, s. 3 (20).

"storey" means the space or distance or portion of a building included between the underside of a concrete or fire-resisting floor or the floor-joists of any other

floor and the underside of the concrete or fire-resisting floor or floor-joists next above it, or the underside of the tie beam, or collar tie, or half the vertical height of the rafters above, as the case may be; but a mezzanine shall not be deemed to divide a wall or building into storeys:

"street" means— Substituted by 1919, 1929, s. 3 (d).

(*a*) any public street or public road:

(*b*) any private street or private road which is dedicated to the public or which is vested in or under the control of any municipal corporation or district council:

(*c*) any street, road, lane, footway, square, court or alley—

I. to or over which the public has the right of access or user; or

II. over which there has been uninterrupted user by the public for at least five years and over which the public are permitted to have access:

"street alignment" means the line of demarcation between any street or way or part thereof and any land abutting thereon:

"surveyor" means any building surveyor appointed by the council and includes any deputy surveyor appointed by the council:

"timber frame building" means any building in which the framework of the external walls is of timber, whether the frame work is covered with timber, iron, or other materials: Inserted by 53, 1940, s. 3 (21).

"this Act" includes regulations in the schedules to this Act and regulations made under this Act, and also includes any by-laws made under this Act which are in force in the particular locality: Amended by 53, 1940, s. 3 (22).

"topmost storey" means the uppermost storey in a building whether constructed wholly or partly in the roof or not and in the case of a building of one storey only means that storey: Amended by 53, 1940, s. 3 (23).

"total floor area" applied to a building, means the sum of the superficies of horizontal sections thereof made at the level of each floor exclusive of the external walls and of such portions of the party walls as belong to the building: Substituted by 53, 1940, s. 3 (24).

"way" includes any public roadway or footpath not being a street, and any private roadway or footpath which it is proposed to convert into a highway or to form, lay out, or adapt as a street.

Repeal of enactments.

Subsec. (1) substituted by 53, 1940, s. 4.

6. (1) The Acts mentioned in the first schedule to this Act are repealed.

(2) All by-laws and regulations not inconsistent with this Act, and all orders, consents, conditions, and notices duly made, given, imposed, or issued under any enactment so repealed shall, so far as applicable for the purpose of this Act, be of the same validity and effect as if they had been made, given, imposed, or issued under this Act; and all such by-laws and regulations shall remain in force until the same are revoked, altered, or varied by by-laws or regulations duly made under the provisions of this Act: Provided that any such by-laws or regulations shall be deemed to be revoked by any by-laws or regulations inconsistent therewith duly made under the provisions of this Act.

(3) Officers appointed under any enactment so repealed shall continue in office in like manner as if this Act had not been passed subject, however, to the same powers of dismissal as if they had been appointed under this Act.

(4) Where in any Act or document any enactment so repealed or any provision thereof, is mentioned or referred to, such Act or document shall, with any necessary modifications, and so far only as the circumstances of the case permit, be read as if this Act or the corresponding provision of this Act were therein mentioned or referred to instead of such repealed Act or such provision thereof.

S. 7 repealed by 2156, 1934, s. 898 (1).

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PART II.

DUTY TO FURNISH PLANS AND COMPLY WITH CERTAIN REQUIREMENTS.

Heading substituted by 1919, 1929, s. 4.

Duty to furnish plans.

Cf. U.K., 26 Geo. 5, and 1 Edw. 8, c. 49, s. 64.

Substituted by 1919, 1929, s. 5.

Subsec. (1) amended by 53, 1940, s. 5 (a), (b).

8. (1) Every person who intends to erect, construct, add to, or alter any building on land of which he is the owner or to underpin any building erected on land adjoining any such land as first mentioned, shall before commencing such erection, construction, addition, alteration, or underpinning, give to the council notice in writing of the said intention which shall be delivered or sent to the surveyor at his office, and shall at the same time deliver or send to the surveyor at his office one complete set of plans and working drawings of the erection, construction, addition, alteration, or underpinning of the said building which shall be drawn to a scale of not less than one inch to every eight feet and shall show the position, elevation, form, and dimensions of the building and the several parts thereof, or of any addition or alteration therto, or underpinning thereof, and of every water closet and all other appurtenances.

The said person may deliver or send to the surveyor as aforesaid an additional set of plans and working drawings to be returned to him by the surveyor indorsed by the surveyor after consideration thereof as provided by section 9.

(2) In the case of any iron or steel skeleton frame building or of any reinforced concrete building, there shall be supplied as aforesaid with the said plans or working drawings any calculations of the stresses required in writing by the surveyor to be supplied; and in any case with respect to a building of any kind where, in the opinion of the surveyor, there is any reasonable cause for doubt as to the strength of any part of the structure or work, there shall be supplied as aforesaid on request in writing by the surveyor complete calculations relating to the said part.

(3) The said person shall at the same time deliver or send to the surveyor at his office a statement in writing signed by him setting out the purpose or purposes for which the said building to be erected, constructed, added to, or altered as aforesaid, and the said lands are intended to be used, and the said building and lands shall not, without the written consent of the council first had and received and subject to any conditions or provisions imposed by the council when granting the said consent being fully complied with, be used for any other purpose.

Amended by 53, 1940, s. 5 (c), (d).

(4) The said person shall at the same time deliver or send to the surveyor at his office one copy in writing of the specifications for the erection, construction, or alteration of or addition to the said building and for the underpinning of any adjoining building as aforesaid, and of the materials which it is intended to use in the said erection, construction, addition, alteration, or underpinning, and of the intended mode of drainage, and the said person shall also deliver or send as aforesaid a written statement of the probable cost of the work and, if known to him, the name and address of the builder.

The said person may deliver or send to the surveyor as aforesaid an additional copy of the said specifications to be returned to him by the surveyor indorsed by the surveyor after consideration thereof as provided by section 9.

(5) The said person shall at the same time deliver or send to the surveyor at his office a block plan drawn to a scale of not less than one inch to every forty feet—

(*a*) showing the land upon which the building is proposed to be erected, constructed, added to, or altered, or, in the case of a building already erected, of the land upon which the same is erected:

(*b*) giving the Lands Titles Office reference to the said land or otherwise sufficiently identifying the said land:

(*c*) showing the land intended to be used in connection with the said building:

(*d*) showing the position of the buildings and appurtenances on the land immediately adjoining the land first-mentioned in this subsection:

(*e*) showing the width of all streets and ways adjoining the said first-mentioned land and building and the relative level of the lowest floor of the said building with respect to all of such streets and ways:

(*f*) in the case of the underpinning of any building, showing the land upon which the said building is erected.

(6) The said person shall forthwith upon entering into any contract for the erection, construction, addition to, alteration, or underpinning of any building as aforesaid, deliver or send to the surveyor at his office a statement in writing setting forth the contract price for the said work and the name and address of the builder.

(7) A complete copy of all such plans, working drawings, and specifications shall be filed by the surveyor for permanent record. Amended by 53, 1940, s. 5 (e).

If any such plans, working drawings, or specifications have been filed by the surveyor for more than five years (whether or not the whole or any part of the said period was before the passing of the Building Act Amendment Act, 1940), he may, notwithstanding the provisions of Part III. of the Libraries and Institutes Act, 1939, cause the same to be destroyed.

(8) No person shall commence to erect, construct, add to, alter, or underpin any building, or shall erect, construct, add to, alter, or underpin any building, until plans, drawings, and specifications in respect of the erection, construction, addition, alteration, or underpinning have been approved in writing by the council: Provided that the council may, pending the approval of any such plans, drawings, or specifications, consent in writing (subject to any conditions fixed by the council) to the commencement or carrying out by any such person of any such work as aforesaid, in which case the provisions of this subsection shall, subject to any conditions fixed as aforesaid, not apply to any such person. Amended by 53, 1940, s. 5 (f).

(9) No person shall, without the written consent of the council, erect, construct, add to, alter, or underpin any building the plans, drawings, and specifications in respect of which have been approved by the council except in accordance with the plans, drawings, and specifications as so approved.

(10) In any case where in the opinion of the council it is desirable so to do, the council may, in the discretion of the council, by notice in writing exempt the person required by this section to deliver or send any plans, drawings, specifications, or statement from any particular requirement of this section or may, if the case so requires, accept in lieu of any such plans, drawings, or specifications a written description of the work in question.

(11) Where any person proposes to erect, construct, add to, or alter any building in accordance with an order of the Central Board of Health or of a local board of health, or to erect a building to be used exclusively as a greenhouse, conservatory, summerhouse, fuel shed, tool house, cycle shed, aviary, or for some similar purpose, the council may, in the discretion of the council, by notice in writing exempt that person from the obligation to comply with this section.

(12) The council may from time to time by resolution declare that all persons proposing to erect, construct, add to or alter any building in any manner or for any purpose Inserted by 53, 1940, s. 5 (g).

referred to in subsection (11) shall be exempt from the obligation to comply with this section. The council may revoke any such resolution.

Duty of council with regard to plans.

Substituted by 1919, 1929, s. 6.

Subsec. (1) amended by 53, 1940, s. 6 (a).

9. (1) The surveyor shall examine all plans, drawings, and specifications delivered to him under the next preceding section and report to the council whether or not the plans, drawings, and specifications comply with the provisions of this Act. If, however, any such plans, drawings, or specifications in the opinion of the surveyor are not clear or not easily legible or do not contain sufficient information, the surveyor may, within fourteen days of their delivery to him, return them to the owner for amendment without reporting to the council.

Subsec. (2) substituted by 53, 1940, s. 6 (b).

(2) The council shall consider the plans, drawings, and specifications, together with the surveyor's report thereon, and if the council is satisfied that the same comply with this Act the council shall, except in the circumstances mentioned in section 9a, approve the same. If the council is not so satisfied, the council may disapprove of the plans, drawings, and specifications or may, subject to the provisions of this Act and where so authorized by this Act, approve the same, with or without conditions. Notwithstanding the provisions of this subsection, if any plans, drawings, and specifications relating to a timber frame building or wooden building are considered by the council before the first day of January, nineteen hundred and forty-two, the council may disapprove thereof, notwithstanding that the same comply with the provisions of this Act.

(3) If the council approves the plans, drawings, and specifications the approval shall be signified by a statement thereof in writing signed by the clerk and countersigned by the surveyor and indorsed upon the plans, drawings, and specifications, or written upon a document attached thereto.

(4) The council may, upon application made, approve any modification of any plans, drawings and specifications approved under this Act. Unless so approved, such a modification shall be of no effect.

Cf. U.K., 26 Geo. 5. and 1 Edw. 8, c. 49, s. 64 (2).

Amended by 53, 1940, s. 6 (c).

(5) If the council disapproves of any plan, drawing, or specification it shall give notice in writing thereof to the owner stating the reasons for disapproval: Provided that it shall not be obligatory upon the council to state every particular in which the plan, drawing, or specification does not comply with this Act.

(6) The approval of the council to any plans, drawings, or specifications shall become void if the erection, construction, addition to, alteration, or underpinning, as the case may be, of the building is not substantially commenced within one year of the date of the approval: Provided that at any time after the expiration of the said period the approval of the council to the erection, construction, addition to, alteration, or underpinning, as the case may be, of the building may be obtained without payment of any further fees or (unless the council otherwise requires) the lodging of any further plans, drawings, or specifications.

Cf. U.K., 26 Geo. 5, and 1 Edw. 8, c. 49, s. 66.

9a. (1) If the council is satisfied that the plans, drawings and specifications delivered as aforesaid comply with this Act but the council is of opinion that it is undesirable that the building be erected or constructed on the land upon which it is proposed to be erected or constructed or, as the case may be, it is undesirable that the building be added to or altered, the council may give notice in writing to the owner of its intention to refer the plans, drawings, and specifications to the surveyor and the referees.

Power to disapprove plans.

Inserted by 53, 1940, s. 7.

(2) The council may thereupon in manner provided by Part VIII. and in accordance with the provisions of the said Part refer the matter to the surveyor and the referees. For the purpose of section 79 the council shall be deemed to be the party making, lodging, or demanding the reference.

(3) If any two or more of the surveyors and the referees are satisfied that the erection, construction, addition to, or alteration of the building is undesirable by reason of the effect it would have upon the development, health, or amenities of the neighbourhood, they may declare that the council may disapprove of the plans, drawings, and specifications and the council may disapprove the same accordingly.

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S. 10 repealed by 1919, 1929, s. 7.

11. (1) Every person who erects any building for use as a dwelling-house, or alters any building for use as a dwelling-house, shall provide therein a bathroom in which there shall be a bath not less than five feet in length.

Bathroom to be provided in dwelling-house.

(2) Every such bath shall be connected with a drainage system for the adequate disposal of waste water from the bath and, unless otherwise approved in writing by the council, such fittings shall be provided as are adequate to provide a supply of running water for the bath.

Subsecs. (2) and (3) inserted by 53, 1940, s. 8.

(3) With the consent in writing of the council, any such person, in lieu of providing a bath as aforesaid, may provide other bathing facilities approved by the council together with provision for the matters required pusuant to subsection (2).

Stable not to be erected near dwelling-house.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 56.
Amended by 1919, 1929, s. 8, and by 53, 1940, s. 9.

12. No person shall, without the consent of the council, erect or construct any stable, or alter or convert any building for the purpose of the same being used as a stable, and no such consent shall be given unless the stable is distant at least twenty-five feet from every dwelling-house, and unless the same is constructed of brick, stone, or concrete or is constructed of some other material approved by the council.

Duty to comply with Act.
Substituted by 53, 1940, s. 10.

13. Except as otherwise authorized by this Act, every person who erects, constructs, adds to, alters, underpins, converts, or reconverts any building or any part thereof shall, in carrying out such erection, construction, addition, alteration, underpinning, conversion or reconversion, comply with the requirements of this Act.

Persons demolishing or removing buildings to give notice.

14. Every person who intends to demolish or remove any building or any substantial part thereof shall give the council notice in writing of such intention, which shall be delivered or sent to the surveyor at his office, and shall afford the surveyor free access to such work for the purpose of inspection.

Requirements to be complied with by persons demolishing or removing building.
Para. (1) amended by 1919, 1929, s. 10.
Inserted by 53, 1940, s. 11.

15. Every person demolishing or removing any building or any part thereof shall comply with the following requirements:—

(1) He shall demolish or remove storey after storey unless otherwise directed by the surveyor, in which case he shall comply with any such direction:

(1a) He shall not use or cause to be used any cutting torch or machine for the purpose of flame cutting any portion of the building except with the approval of the surveyor and in accordance with the directions (if any) given by the surveyor:

(2) He shall not place any material upon the floor or floors of such building, in such manner or in such quantity as to endanger the safety of the building:

(3) He shall lower all material to the ground immediately upon displacement, unless otherwise permitted by the surveyor:

(4) He shall not demolish or remove or pull down any external wall or any part thereof abutting on any street between the hours of eight o'clock in the morning and six o'clock in the evening, unless permitted so to do by the surveyor:

(5) He shall, for the purpose of preventing or lessening the diffusion of dust, play water by means of a hose or other reasonable means upon all displaced material.

Alteration of buildings.

Substituted by 53, 1940, s. 12.

16. A building shall not be altered in such a manner that, when so altered, it will, by reason of the alterations, not be in conformity with the provisions of this Act applicable to new buildings.

Provision where building demolished.

Inserted by 53, 1940, s. 13.

16a. Except as otherwise specifically provided by this Act, if any building is demolished, destroyed, or taken down for more than one-half of its cubical extent, the building shall not be reconstructed, erected, or repaired except in accordance with the provisions of this Act.

When remainder of party or external wall to be taken down.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 231.

17. Where a party or external wall not in conformity with this Act has been taken down, burnt, or destroyed to the extent of one-half thereof or more (measured in superficial feet), every remaining portion of the old wall not in conformity with this Act shall either be made to conform therewith or be taken down before the rebuilding thereof.

Additions to and alterations of buildings.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 232.

Amended by 1919, 1929, s. 11.

18. 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 repair not affecting the construction of any external or party wall) shall, so far as regards such addition or alteration or other work, be subject to the provisions of this Act relating to new buildings: Provided that in any case where in the opinion of the council the general safety of the building is not thereby impaired, the council may consent in writing thereto and the said work may thereupon be carried out in a manner so that the standard of the work complies with the standard of work in the existing building.

Rules as to conversion of buildings.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 234.

Amended by 1919, 1929, s. 12.

19. (1) Until the approval of the council has been obtained, no person shall—

(*a*) convert into or use as a dwelling-house any building or part of a building not originally constructed for human habitation;

(*b*) convert into one dwelling-house two or more dwelling-houses constructed originally as separate dwelling-houses;

(*c*) convert into or use as two or more dwelling-houses any building constructed originally as one dwelling-house;

(*d*) convert a building, which when originally erected was exempt from the operation of any building enactments or by-laws in force within the municipality or district, into a building which, if it had been originally erected in its converted form, would have been within the operation of those enactments or by-laws;

(*e*) reconvert into or use as a dwelling-house any building which has been discontinued as, or appropriated for any purpose other than, a dwelling-house;

(*f*) convert into or use as a dwelling-room or part of a dwelling-room any room or part of a room used as a shop;

(*g*) convert a dwelling-house or any part of a dwelling-house into a shop; or

(*h*) convert a balcony into a verandah, or a verandah into a balcony.

Substituted by 53, 1940, s. 14.

(2) Unless otherwise sanctioned by the council, any person converting a building of one class into a building of another class, or converting a building of one kind into a building of another kind but of the same class, or using a building of one class as a building of another class, or using a building of one kind as a building of another kind but of the same class, shall comply with all the conditions prescribed for such other class or kind, as the case may be.

PART III. PART III.

PREVENTING OBSTRUCTION OF STREETS BY BUILDING.

Preventing obstructions in streets.

20. (1) No person shall—

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 221.

(*a*) unless lawfully authorized, erect or place, or cause to be erected or placed, any post, rail, fence, wire, bar, obstruction, or encroachment whatsoever in, upon, over, or under any street or way in any manner, or alter or interfere with any street or way in such a manner as to reduce the width thereof, or impede or hinder the traffic for which such street was formed or laid out from passing over the same:

Amended by 1919, 1929, s. 13 (a).

(*b*) erect any new building, structure, wall-fence, or fence in lieu of any building, structure, wall-fence, or fence which may encroach or project on any street or way without showing on the plan to be submitted for the approval of the council such new building, wall-fence, or fence proposed to be built or erected, and the position thereof as regards the street or way, nor until such plan has been approved by the council, nor unless such building, wall-fence, or fence is placed clear of and beyond the distance defined for the breadth of such street or way:

Amended by 1919, 1929, s. 13 (b) and by 53, 1940, s. 15 (a).

(*c*) erect any balcony over the street or way in front or at the side of his building, unless the same is constructed in accordance with, and of the materials required by, the by-law for the time being of the council made in that behalf under this Act, or, if there is no such by-law, unless the work is done to the satisfaction of the council, nor, in either case, until a plan thereof has been submitted to and approved by the council and the council has granted its licence in writing for such erection:

(*d*) use any balcony heretofore or hereafter erected over any street or way for any purpose of trade, or for storing or exposing goods, or hanging or suspending clothes, or as a place of habitation: Provided that nothing herein contained shall prevent any person from serving any refreshments upon any such balcony:

Amended by 1919, 1929, s. 13 (c) and by 53, 1940, s. 15 (b).

(*e*) erect any awning, portico, or verandah over the street or way in front or at the side of his building, unless the same is constructed in accordance with the conditions set out in the fourth schedule, and the work is done to the satisfaction of the council, nor until a plan of such awning, portico, or verandah has been submitted to and approved by the council and the council has granted its licence in writing for such erection.

(2) If anything is done contrary to the provisions of subsection (1) hereof, the council may give notice in writing to the builder or the owner or occupier to demolish or remove the post, rail, fence, wire, bar, obstruction, or encroachment, or to reinstate or restore the street to its former condition, or to demolish or remove the new building, wall-fence, or fence, balcony, awning, or verandah (as the case may be) erected contrary to the provisions of the said subsection.

(3) If such notice is not complied with before the expiration of two days or such longer period as the council may allow, from the giving thereof, the council may demolish or remove such post, rail, fence, wire, bar, obstruction, encroachment, new building, wall-fence, or fence, balcony, awning, or verandah, and reinstate or restore such street to its former condition, and recover the expenses thereof from the person to whom the notice was given in a summary manner; and the council or its officers shall not be liable for any damage done or occasioned in performing these acts.

Subsecs. (4) and (5) added by 1919, 1929, s. 13 (d).

(4) The granting or refusal of any such licence shall be in the discretion of the council and any licence may be granted subject to such conditions as the council thinks fit.

(5) In any case where, but for this section, it would be lawful for a person to erect any building, structure, wall-fence, or fence so that it encroaches upon or projects over any street or way, then, notwithstanding the provisions of subsection (1) hereof, the said person may, with the consent in writing of the council (which said consent may be granted subject to any reasonable condition thought fit by the council), erect any such building, structure, wall-fence, or fence. If the council refuses to grant such consent as aforesaid or fails to grant such consent within one month after the making of an application to the council for such consent, or if the council in giving any such consent annexes any condition to the consent, the said person may apply by summons to a Judge of the Supreme Court who shall make such order as to him shall seem just in the circumstances.

Any such order may empower such person as aforesaid to erect any such building, structure, wall-fence, or fence or may direct that any consent given as aforesaid by any council to which any condition has been annexed by the council, shall be freed from any such condition.

Doors and gates not to open outward on to street.

21. (1) No person shall hang or construct any gate, door, window sash, or shutter to any building or premises so as to open outwards on to any street or way, unless the whole of such gate, door, sash, or shutter is at least ten feet above the level of the ground, or place any cellar-flap or make any entrance to any cellar or underground room on any street or way.

(2) For the purpose of this section a gate, door, window sash, or shutter shall not be deemed to open outwards unless, when open to its utmost extent, some part thereof projects beyond the external face of the wall wherein or whereon the same is hung or constructed.

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S. 22 repealed by 1919, 1929, s. 14.

Sky-signs.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., Part XIII.

Amended by 1919, 1929, s. 15.

23. No person shall erect or construct or place or cause to be placed any sky-sign upon any building or structure unless the design of the sky-sign and means of attachment thereof have been approved by the council.

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S. 24 repealed by 1919, 1929, s. 17.

Showcases.

Amended by 1919, 1929, s. 16.

25. No person shall erect or construct or place or cause or permit to be placed on the outside of any building abutting on any street or way any mirror or showcase, except subject to the conditions contained in the sixth schedule and unless complete plans thereof have first been submitted to and approved by the council and the council has granted its licence in writing for the erection, construction, or placing of the said show case. The granting or refusal of any such licence shall be in the discretion of the council and any licence may be granted subject to such conditions as the council thinks fit.

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S. 26 repealed by 1919, 1929, s. 17.

PART III.

Obligations of person making excavations alongside streets.

Amended by 1919, 1929, s. 18.

27. No person shall, for the purpose of providing any cellar or basement or underground room in connection with any building or proposed building, make any excavation within ten feet of the street alignment unless—

(*a*) he has, before commencing such excavation, given at least seven days' notice in writing of his intention to the surveyor; and

(*b*) he has taken such precautions, by shoring and otherwise, as the surveyor thinks proper to prevent the subsidence into such excavation of any portion of any street or way adjoining the same.

If in the opinion of the surveyor the person making the excavation has not taken any or sufficient precautions to prevent such subsidence as aforesaid, the surveyor may take such precautions or further precautions as he deems necessary for that purpose and recover the cost of so doing from the owner of the land on which the excavation is made, in the manner in which fees are recoverable under this Act.

PART IV.

PART IV.

SPECIAL AND TEMPORARY BUILDINGS AND STRUCTURES.

Heading amended by 53, 1940, s. 16 (1).

Application to council for buildings to which rules of Act are inapplicable.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 89. Cf. 208, 1881, s. 53.

Amended by 1919, 1929, s. 19.

28. (1) Where any person is desirous of erecting on any land of which he is the owner any building or structure to which the general provisions of the second and third schedules are inapplicable, or, in the opinion of the council, inappropriate, having regard to the special purpose for which the building or structure is designed and to be actually used, he shall make an application to the council, accompanied by plans of the proposed building and a block plan of the site, with such particulars as to the construction of the building as are required by the council.

(2) The council, if satisfied with such plans and particulars, shall signify their approval of the same in writing, and thereupon the building may be constructed according to such plans and particulars.

(3) All expenses incurred in and about the obtaining of the approval of the council shall be paid by such person as aforesaid to the council and in default of payment may be recovered in a summary manner. Cf. 208, 1881, s. 57.

29. (1) Where an application is made to the council by any person stating his desire to erect in any place any building or structure of a temporary character to which the general provisions of the second and third schedules are inapplicable, the council shall, if they approve of the plans and particulars of the building or structure, limit the period during which it shall be allowed to remain in the place, and may make their approval subject to such conditions as to the removal of the building or structure, or otherwise, as they think fit. Control by council of certain temporary buildings. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 90.

(2) If at the expiration of the period so limited the building or structure is not removed in accordance with those conditions, the council may serve a notice on the occupier or owner of such building or structure requiring him to remove it within a reasonable time specified in the notice.

(3) If the owner or occupier fails to remove such building or structure within the time so specified, the council shall, notwithstanding the imposition and recovery of any penalty, cause complaint thereof to be made before a justice, who shall thereupon issue a summons requiring such occupier or owner to appear before a special magistrate or two or more justices to answer such complaint; and if the said complaint is proved to the satisfaction of the magistrate or justices, he or they may make an order, in writing, authorizing the council to enter upon the land upon which such building or structure is situated and to remove or take down the same and do whatever may be necessary for such purpose, and also to remove the materials of which the same is composed to a convenient place, and (unless the expenses of the council are paid to them within fourteen days after such removal) sell the same as they think proper.

* * * * * * * * * * * S. 30 repealed by 53, 1940. s. 17.

* * * * * * * * * * * S. 31 repealed by 1919, 1929, s. 21.

32. This Part of this Act shall not apply in the case of a pile, stack, or store of timber, not being a structure affixed or fastened to the ground. Piles of loose timber not regarded as structure. Cf. UK., 20 & 21, Geo. 5, c. clviii., s. 93.

PART V.

PART V.

RIGHTS OF BUILDING AND ADJOINING OWNERS.

Rights of owners of adjoining lands repecting erection of walls on line of junction.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 113 (part).

33. Where lands of different owners adjoin and are unbuilt on at the line of junction, and either owner is about to build on any part of the line of junction, the following provisions shall have effect:—

(1) If the building owner desires to build a party wall on the line of junction, he may serve notice thereof on the adjoining owner, describing the intended wall:

(2) If the adjoining owner consents to the building of a party wall, the wall shall be built half on the land of each of the two owners, or in such other position as is agreed between the two owners:

(3) The expense of the building of the party wall shall be from time to time defrayed by the two owners in due proportion, regard being had to the use made and which may be made of the wall by the two owners respectively:

(4) If the adjoining owner does not consent to the building of a party wall, the building owner shall not build the wall otherwise than as an external wall placed wholly on his own land:

(5) In any case where a party wall is built in pursuance of the provisions of this Part of this Act, the owner of any land so built upon shall grant an easement of support in respect of such wall over the last-mentioned land and appurtenant to the other land upon which the party wall is built, and shall cause such easement to be registered upon the folium of the register book relating to his said land, if the land is under the provisions of The Real Property Act, 1886, or shall cause such easement to be registered in the General Registry Office, if the land is not under such provisions, and the building owner shall bear the expenses of and incidental thereto.

Right to acquire easement for party wall.

Inserted by 1919, 1929, s. 22.

33a. When lands of different owners adjoin and a party wall was at the time of the commencement of this Act on any part of the line of junction and either owner is about to build and use the said wall, the owner of the land upon which the party wall is erected, shall grant an easement of support in respect of the said wall over the said land and appurtenant

to the other land upon which the party wall is built, and shall cause the said easement to be registered upon the folium of the register book relating to the said land, if the land is under the provisions of The Real Property Act, 1886, or shall cause the easement to be registered in the General Registry Office, if the land is not under the said provisions. The building owner shall bear the expenses of registering the said easement and any other expenses incidental thereto.

34. The building owner shall have the following rights, in addition to and without prejudice to any rights he may have under any other Act or at common law, that is to say:—

Rights of building owner.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 114.
Cf. 208, 1881, s. 70.

(1) A right to make good, underpin, or repair any party wall which is defective or out of repair:

(2) A right to pull down and rebuild any party wall which is so far defective or out of repair as to make it necessary or desirable to pull it down:

(3) A right to pull down any timber or other partition which divides any buildings and is not conformable with the provisions of this Act, and to build instead a party wall conformable thereto:

(4) A right to raise and underpin any party wall permitted by this Act to be raised or underpinned, upon condition of making good all damage occasioned thereby to the adjoining premises or to the finishings and decorations thereof, and of carrying up to the requisite height all flues and chimney stacks belonging to the adjoining owner on or against such party wall:

(5) A right to pull down any party wall which is of insufficient strength for any building intended to be built, and to rebuild the same of sufficient strength for that purpose, upon condition of making good all damage occasioned thereby to the adjoining premises or to the finishings and decorations thereof:

(6) A right to cut into any party wall upon condition of making good all damage occasioned to the adjoining premises by such operation:

(7) A right to cut away any footing or any chimney breasts, jambs, or flues projecting, or other projections, from any party wall in order to erect an external wall against such party wall or

external wall, or for any other purpose, upon condition of making good all damage occasioned to the adjoining premises by such operation:

(8) A right to cut away or take down such parts of any wall or building of an adjoining owner as may be necessary in consequence of such wall or building overhanging or encroaching upon the ground of the building owner, in order to erect an upright wall against the same, on condition of making good any damage sustained by the wall or building by reason of such cutting away or taking down:

(9) A right to perform any other necessary works incident to the connection of a party wall with the premises adjoining thereto:

But the above rights, numbered (1) to (9) inclusive, shall be subject to this qualification, that any building which has been erected previously to the date of the commencement of this Act shall be deemed to be conformable to the provisions of this Act, if it is conformable with the provisions of the Acts of Parliament regulating buildings in the said State at the time such building was erected:

(10) A right to raise a party fence wall or to pull the same down and rebuild it as a party wall.

Rights of adjoining owner.
Cf. U.K., 20 & 21. Geo. 5. c. clviii., s. 115.
Cf. 208, 1881, s. 72.

35. (1) Where a building owner proposes to exercise any of the foregoing rights with respect to party walls, the adjoining owner may by notice require the building owner to build on any such party wall such chimney copings, jambs, or breasts or flues, or such piers or recesses, or any other like works, as may fairly be required for the convenience of such adjoining owner, and are specified in the notice, and it shall be the duty of the building owner to comply with such requisition in all cases where the execution of the required works will not be injurious to the building owner, or cause to him unnecessary inconvenience or unnecessary delay in the exercise of his right.

(2) Any difference that arises between a building owner and an adjoining owner in respect of the execution of any such works shall be determined in the manner in which differences between building owners and adjoining owners are hereinafter directed to be determined.

Rules as to exercise of rights by building and adjoining owners. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 116. Cf. 208, 1881, s. 73.

36. (1) A building owner shall not, except with the consent in writing of the adjoining owner and of the adjoining occupiers, or, in cases where any party wall is dangerous (in which case the provisions of Part VI. of this Act shall apply), exercise any of his rights under this Part of this Act in relation to any party wall, or party fence wall, unless at least six weeks before doing so he has served on the adjoining owner a party wall notice stating the nature and particulars of the proposed work, and the time at which the work is proposed to be commenced.

(2) When a building owner in the exercise of any of his rights under this Part of this Act lays open any part of the adjoining land or building, he shall, at his own expense, make and maintain for a proper time a proper hoarding and shoring or temporary construction for the protection of the adjoining land or building and the security of the adjoining occupier.

(3) A building owner shall not exercise any right by this Act given to him in such manner or at such a time as to cause unnecessary inconvenience to the adjoining owner or to the adjoining occupier.

(4) A party wall notice shall not be available for the exercise of any right unless the work to which the notice relates is begun within six months after the service thereof, and is prosecuted with due diligence.

(5) Within fourteen days after the receipt of such notice, or at any time before building operations are commenced, the adjoining owner may serve on the building owner a notice requiring him to build on such party structure any works to the construction of which he is entitled under section 35.

(6) The last-mentioned notice shall specify the works required by the adjoining owner for his convenience, and shall, if necessary, be accompanied by explanatory plans and drawings.

(7) If either owner does not within fourteen days after the service on him of any notice express his consent thereto, he shall be considered as having dissented therefrom, and thereupon a difference shall be deemed to have arisen between the building owner and the adjoining owner.

Settlement of difference between building and adjoining owners. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 117.

37. In all cases not specially provided for by this Act, where a difference arises between a building owner and an adjoining owner in respect of any matter arising with reference to any work to which any notice given under this Part of this Act relates, such difference shall be referred for decision to the referees referred to in Part VIII. of this

Act, with power, by their award, to determine the right to do and the time and manner of doing any work, and generally any other matter arising out of or incidental to such difference; but any time appointed for doing any work shall not, unless otherwise agreed, commence until after the expiration of the period by this Part of this Act prescribed for the notice in the particular case.

Power for building owner to enter premises.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 118.
Cf. 208, 1881, s. 74.

38. A building owner, his servants, agents, and workmen, at all usual times of working, may enter and remain on any premises for the purpose of executing, and may execute, any work which he has become entitled to or is required in pursuance of this Act to execute, removing any furniture, or doing any other thing which may be necessary; and if the premises are closed, he and they may, accompanied by a constable or other peace officer, break open any fences or doors in order to effect such entry: Provided that before entering on any premises for the purposes of this section the building owner shall, except in the case of emergency, give fourteen days notice of his intention so to do to the occupier and owner, and in case of emergency shall give such (if any) notice as may be practicable.

Building owner to underpin adjoining owner's building.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 119.
Cf. 208, 1881, s. 71.

39. Where a building owner intends to erect within ten feet of a building belonging to an adjoining owner a building or structure any part of which within such ten feet extends to a lower level than the foundations of the building belonging to the adjoining owner, he may, and, if required by the adjoining owner, shall (subject as hereinafter provided) underpin or otherwise strengthen the foundations of the last-mentioned building so far as may be necessary, and the following provisions shall have effect:—

(1) At least one month's notice in writing shall be given by the building owner to the adjoining owner, stating his intention to build, and whether he proposes to underpin or otherwise strengthen the foundations of the said last-mentioned building, and such notice shall be accompanied by a plan and sections showing the site of the proposed building and the depth to which he proposes to excavate:

(2) If the adjoining owner within fourteen days after being served with such notice, gives a counter

s. 39. THE CORPORATION OF THE CITY OF ADELAIDE v. THE ATTORNEY-GENERAL FOR SOUTH AUSTRALIA AND OTHERS (1931) 45 C.L.R. 517; 38 A.L.R. 66.; 3 Austn. Digest 62. The council is not a building owner by virtue of its ownership of the fee simple in a street.

notice in writing that he disputes the necessity of or that he requires such underpinning or strengthening, a difference shall be deemed to have arisen between the building owner and the adjoining owner:

(3) The building owner shall be liable to compensate the adjoining owner and occupier for any inconvenience, loss, or damage which may result to them by reason of the exercise of the powers conferred by this section:

(4) Nothing in this section contained shall relieve the building owner from any liability to which he would otherwise be subject in case of injury caused by his building operations to the adjoining owner.

Security to be given by building and adjoining owners. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 121. Cf. 208, 1881, s. 75.

40. (1) An adjoining owner may, if he thinks fit, by notice in writing, require the building owner (before commencing any work which he may be authorised by this Part of this Act to execute) to give such security as is agreed upon or, in case of difference, is settled by the local court of full jurisdiction nearest to the site of the proposed work, for the payment of all such expenses, costs, and compensation in respect of the work as may be payable by the building owner.

(2) The building owner may, if he thinks fit, at any time after service on him of a party wall requisition by the adjoining owner, and before beginning a work to which the requisition relates, but not afterwards, serve a counter-requisition on the adjoining owner requiring him to give such security for payment of the expenses, costs, and compensation for which he is, or will be liable, as may be agreed upon, or in the case of difference, may be settled as mentioned in subsection (1) hereof.

(3) If the adjoining owner does not within one month after service of such counter-requisition give security accordingly, he shall at the end of that month be deemed to have ceased to be entitled to compliance with his party wall requisition, and the building owner may proceed as if no party wall requisition had been served on him by the adjoining owner.

Rules as to expense in respect of party walls. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 120. Cf. 208, 1881, s. 76.

41. (1) As to expenses to be borne jointly by the building owner and the adjoining owner—

(*a*) if any party wall is defective or out of repair, the expense of making good, underpinning, or repairing the same shall be borne by the building owner and adjoining owner in due proportion, regard being had to the use that each owner may make of the structure:

(*b*) if any party wall is pulled down and rebuilt by reason of its being so far defective or out of repair as to make it necessary or desirable to pull it down, the expense of such pulling down and rebuilding shall be borne by the building owner and adjoining owner in due proportion, regard being had to the use that each owner may make of the structure:

(*c*) if any timber or other party wall dividing a building is pulled down in the exercise of the right by this Part of this Act vested in a building owner, and a party wall is built instead thereof, the expense of such pulling down and of building such party wall, and also of building any additional party walls that may be required by reason of the partition having been pulled down, shall be borne by the building owner and the adjoining owner in due proportion, regard being had to the use that each owner may make of the party wall and to the thickness required for support of the respective buildings parted thereby.

(2) As to expenses to be borne by the building owner—

(*a*) if any party wall, or any external wall built against another external wall, is raised or underpinned in pursuance of the power by this Part of this Act vested in a building owner, the expense of raising or underpinning the same, and of making good all damage occasioned thereby, and of carrying up to the requisite height all such flues and chimney stacks belonging to the adjoining owner on or against any such party wall or external wall as are by this Part of this Act required to be made good and carried up, shall be borne by the building owner:

(*b*) if any party wall which is of proper materials and sound, or not so far defective or out of repair as to make it necessary or desirable to pull it down, is pulled down and rebuilt by the building owner, the expense of pulling down and rebuilding the same, and of making good any damage by this Part of this Act required to be made good, and a fair allowance in respect of the disturbance and inconvenience caused to the adjoining owner, shall be borne by the building owner:

(*c*) if any party wall is cut into by the building owner, the expense of cutting into the same and of making good any damage by this Part of this Act required to be made good shall be borne by such building owner:

(*d*) if any footing, chimney breast, jamb, or floor or any projection is cut away in pursuance of the powers by this Part of this Act vested in any building owner, the expense of such cutting away and of making good any damage by this Part of this Act required to be made good shall be borne by the building owner: Amended by 1919, 1929, s. 23 (a).

(*e*) if any party fence wall is raised for a building, the expense of raising such wall shall be borne by the building owner:

(*f*) if any party fence wall is pulled down and built as a party wall the expense of pulling down such party fence wall and building the same as a party wall shall be borne by the building owner:

Provided that if at any time the adjoining owner makes use of any party wall (or any part thereof) raised or underpinned as aforesaid, or of any party fence wall pulled down and built as a party wall (or any part thereof), beyond the use thereof made by him before the alteration, there shall be borne by the adjoining owner from time to time a due proportion of the expense (having regard to the use that the adjoining owner may make thereof)— Amended by 1919, 1929, s. 23 (b).

I. of raising or underpinning such party wall or external wall, and of making good all damage occasioned thereby to the adjoining owner, and of carrying up to the requisite height all such flues and chimney stacks belonging to the adjoining owner on or against any such party wall or external wall as are by this Part of this Act required to be made good and carried up:

II. of pulling down and building such party fence wall as a party wall.

42. Within one month after the completion of any work which a building owner is by this Part of this Act authorized or required to execute, and the expense of which is in whole or in part to be borne by an adjoining owner, the building owner shall deliver to the adjoining owner an account in writing of the particulars and expense of the work, specifying any deduction to which such adjoining owner or other Account of expenses to be delivered to adjoining owner. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 122, 208, 1881, s. 77.

person may be entitled in respect of old materials, or in other respects; and every such work shall be estimated and valued at fair average rates and prices, according to the nature of the work and the locality and the market price of materials and labour at the time.

Adjoining owner may object to account.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 123, 208, 1881, s. 78.

43. (1) At any time within one month after the delivery of the said account the adjoining owner, if dissatisfied therewith, may declare his dissatisfaction to the building owner by notice in writing, specifying his objection thereto, and thereupon a difference shall be deemed to have arisen between the parties, and such difference shall be determined in manner hereinbefore in this Part of this Act provided for the settlement of differences between building and adjoining owners.

Building owner may recover if no objection made.
Cf. U.K, 20 & 21, Geo. 5, c. clviii., s. 124, 208, 1881, s. 79.

(2) If within the said period of one month the adjoining owner does not declare in the said manner his dissatisfaction with the account, he shall be deemed to have accepted the same, and shall pay the same on demand to the party delivering the account, and if he fails to do so, the amount so due may be recovered as a debt.

Structure to belong to building owner until contribution paid.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 125, 208, 1881, s. 80.

44. Where the adjoining owner is liable to contribute to the expenses of building any party wall, then, until such contribution is paid, the building owner at whose expense the same was built shall stand possessed of the sole property in the structure.

Adjoining owner liable to expenses incurred on his requisition.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 126, 208, 1881, s. 81.

45. The adjoining owner shall be liable for all expenses incurred on his requisition by the building owner, and in default of payment thereof the same may be recovered from him as a debt.

Saving for lights in party walls, etc.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 127.

46. Nothing in this Act shall authorize any interference with an easement of light or other easement in or relating to a party wall, or take away, abridge, or prejudicially affect any right of any person to preserve or restore any light or other thing in or connected with a party wall in case of the party wall being pulled down or rebuilt.

PART VI.

DANGEROUS AND NEGLECTED STRUCTURES.

Heading amended by 53, 1940, s. 18 (1).

47. (1) In this part of this Act the expression "structure" includes any building, wall, or other structure, and anything affixed to, against, or projecting from any building, wall, or other structure, and also includes any sky sign.

Meaning of "structure."
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 128.

(2) The provisions of this Part shall apply to any structure whether erected before or after the commencement of this Act.

Amended and subsec. (2) inserted by 53, 1940, s. 19.

Dangerous Structures.

Heading inserted by 53, 1940, s. 18 (2).

48. (1) In the case of any structure in a dangerous state, the surveyor shall, on it becoming known to him, make a survey of such structure.

Survey to be made of dangerous structures.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 129.
Cf. 208, 1881, s. 59.

(2) It shall be lawful for the surveyor, at any time, to enter into or upon any structure, or upon any land upon which any structure is situated, for the purpose of making a survey of such structure.

Amended by 53, 1940, s. 20.

49. (1) If after completing the survey, the surveyor is satisfied that the structure is in a dangerous state, he shall cause notice to be given to the owner or occupier of the structure requiring him to carry out any works specified in the notice, to the satisfaction of the surveyor, and within the time specified in the notice. The said notice may require the owner or occupier to carry out any one or more of the following, namely, to take down, to secure, to make safe, or to repair the structure.

Notice by surveyor.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., ss. 131, 132.

Substituted by 53, 1940, s. 21.

(2) If the surveyor is of opinion that the structure is in a dangerous state by reason of the overloading of the structure, he shall cause notice to be served on the owner or occupier of the structure requiring him forthwith to remove the load or such portion thereof as is necessary to make safe the structure.

(3) If in the opinion of the surveyor any structure is in a dangerous state, the surveyor may, whether notice as aforesaid has been given to the owner or occupier or not, cause the structure to be shored up or otherwise secured, and a proper hoarding or fence to be put up for the protection of the public.

Proceedings to enforce compliance with notice.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 133.
Cf. 208, 1881, s. 62.
Amended by 53, 1940, s. 22.

50. If the owner or occupier on whom the notice is served fails to comply with the notice as speedily as the nature of the case permits or, if any time is specified in the notice, within the time so specified, the council may make complaint thereof before a justice, who shall thereupon issue a summons requiring such owner or occupier to appear before a special magistrate or two justices to answer such complaint, and if the said complaint is proved to the satisfaction of the magistrate or justices, he or they may order the owner to take down, repair, or otherwise secure to the satisfaction of the surveyor the structure or such part thereof as appears to the magistrate or justices to be in a dangerous state, within a time to be fixed by the order; and if the same is not taken down, repaired, or otherwise secured within the time so limited the council may, with all convenient speed, cause all or so much of the structure as is in a dangerous condition to be taken down, repaired, or otherwise secured in such manner as may be requisite:

Provided that if the owner of the structure disputes the necessity of any of the requisitions comprised in the notice he may, by notice in writing, within seven days from the service of the notice upon himself, require that the subject shall be referred for determination to the referees provided for in Part VIII. of this Act.

Court may make order notwithstanding arbitration.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 134.

51. Notwithstanding any such notice requiring arbitration as aforesaid, any special magistrate or two justices, on complaint by the council, may, if of opinion that the structure is in such a dangerous condition as to require immediate treatment, make any order which such magistrate or justices may think fit with respect to the taking down, repairing, or otherwise securing the structure.

Expenses.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 135.
Cf. 208, 1881, ss. 62, 67.

52. (1) All expenses incurred by the council in relation to the obtaining of any order as to a dangerous structure and carrying the same into effect under this Part of this Act, or carrying out any work under this Part of this Act, shall be paid by the owner of the structure, but without prejudice to his right to recover the same from any person liable to the expenses of repairs.

(2) If the owner cannot be found, or if on demand he refuses or fails to pay the said expenses, the council, after the expiration of three months from the service on him, in manner prescribed by section 97, of notice of their intention so to do, may, if in their discretion they think fit, sell the

structure; but they shall, after deducting from the proceeds of the sale the amount of all expenses incurred by them, pay the surplus (if any) to the owner, on demand.

Provision respecting sale of dangerous structures. U.K., 20 & 21, Geo. 5, c. clviii., s. 136.

53. Where under this Part of this Act any dangerous structure is sold for payment of the expenses incurred in respect thereof by the council the purchaser, his agents and servants, may enter upon the land whereon the structure is standing for the purpose of taking down the same and removing the materials of which it is constructed.

Recovery of expenses. U.K., 20 & 21, Geo. 5, c. clviii., s. 138.

54. If the materials are not sold by the council, or if the proceeds of the sale are insufficient to defray the said expenses, the council may recover the expenses or the balance thereof from the owner of the building, together with all costs in respect thereof, in a summary manner.

Power to remove inmates from dangerous structures. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 139. Cf. 208, 1881, s. 68.

55. Where a structure has been certified by the surveyor to be dangerous to its inmates, a justice may, if satisfied of the correctness of the certificate, upon the application of the council, by order, direct that any inmates of such structure be removed therefrom by a constable or other peace officer, and if they have no other abode he may require that they be received into the Destitute Asylum, or other place established for the reception of the destitute poor in the place in which the structure is situate.

Neglected Structures.

Removal of dilapidated and neglected buildings. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 140. Cf. U.K., 26 Geo. 5, and 1 Edw. 8, c. 49, s. 58.

56. (1) The surveyor may, for the purpose of this section, at all times in the day-time, enter into or upon any structure or upon any land upon which any structure is situated.

(2) If, after inspection of any structure, the surveyor is satisfied that any structure is—

(*a*) ruinous; or

(*b*) so far dilapidated as to have become unfit for use or occupation; or

(*c*) by reason of neglect or otherwise, in a bad state of repair,

Subsecs. (1) and (2) substituted and subsec. (2a) inserted by 53, 1940, s. 23.

the surveyor may cause notice to be given to the owner or occupier of the structure requiring him to carry out the works specified in the notice, to the satisfaction of the surveyor and within the time specified in the notice. The said notice may require the owner or occupier to carry out any one or more of the following, namely, to take down, to rebuild, or to repair the structure.

(2*a*) If the owner or occupier on whom the notice is served fails to comply with the notice, the council may make complaint thereof before a justice, who shall thereupon issue a summons requiring the owner or occupier to appear before a special magistrate or two justices to answer the complaint. If the said complaint is proved to the satisfaction of the magistrate or justices, he or they may order the owner to take down, rebuild, or repair, to the satisfaction of the surveyor, the structure within a time to be fixed by the order; and if the same is not taken down, rebuilt, or repaired, within the time so limited, the council may, with all convenient speed, cause the structure to be taken down, rebuilt, or repaired, as the case may be: Provided that if the owner of the structure disputes the necessity of any of the requisitions comprised in the notice he may, by notice in writing, within seven days from the service of the notice upon himself, require that the subject shall be referred for determination to the referees provided for in Part VIII. of this Act.

(3) Where the order directs the taking down of a neglected structure or any part thereof the council, in executing the order, may remove the materials to a convenient place, and (unless the expenses of the council under this section in relation to such structure are paid to them within fourteen days after such removal) sell the same, if and as they in their discretion think fit.

(4) All expense incurred by the council under this section in relation to a neglected structure may be deducted by the council out of the proceeds of the sale, and the surplus (if any) shall be paid by the council on demand to the owner of the structure; and if such neglected structure, or some part thereof, is not taken down, and such materials are not sold by the council, or if the proceeds of the sale are insufficient to defray the said expenses, the council may recover such expenses or the deficiency from the owner of the structure, together with all costs in respect thereof in a summary manner, but without prejudice to his right to recover the same from any lessee or other person liable to the expenses of repairs.

Supplemental as to Dangerous and Neglected Structures.

Further provision for enforcing repayment of expenses incurred by council.
U.K., 20 & 21 Geo. 5, c. clviii., s. 141.

57. (1) Where the council have incurred any expenses in respect of any dangerous or neglected structure, and have not been paid or have not recovered the same, any special magistrate or two justices, on complaint by the council, may make an order fixing the amount of such expenses and the costs of the proceedings before such magistrate or justices, and directing that no part of the land upon which such

dangerous or neglected structure stands, or stood, shall be built upon, or that no part of such dangerous or neglected structure, if repaired or rebuilt, shall be let for occupation, until after payment to the council of the said amount; and thereupon, and until payment to the council of the said amount, no part of such land shall be built upon, and no part of such dangerous or neglected structure so repaired or rebuilt shall be let for occupation.

(2) Every such order shall be made in duplicate, and one copy of such order shall be delivered to and shall be retained by the clerk of the local court nearest to the said structure, and the other copy shall be kept at the office of the surveyor.

(3) The surveyor shall keep in his office a register of all orders made under this section, and shall keep the same open for inspection by all persons at all reasonable times, and any such order not entered in such register within thirty days after the making thereof shall cease to be of any force. No property shall be affected by any such order unless and until such order is entered in such register.

PART VII.

SURVEYORS.

58. (1) The council, for the purpose of aiding in the execution of this Act, shall appoint some fit person to be called the "building surveyor" (herein referred to as "the surveyor"), and may appoint such inspecting officers and such clerks as they think fit. All such appointments shall be during the pleasure of the council.

Power for council to appoint surveyors.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 152.
Cf. 208, 1881, ss. 36 and 58.

(2) Such surveyor, inspecting officers, and clerks shall perform such duties as the council direct.

Amended by 53, 1940, s. 24.

(3) There shall be paid to the surveyor, inspecting officers, and clerks such salaries or fees as the council direct.

(4) Subject to the foregoing provisions of this section, and to the council's power of dismissal, the persons who at the commencement of this Act hold office as the surveyor, inspecting officers, and clerks shall continue to be the surveyor, inspecting officers, and clerks respectively under this Act.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 160.

(5) If any building or structure is executed, or any work is done to, in, or upon any building or structure, by or under the superintendence of the surveyor, acting professionally or on his own private account, the surveyor shall not survey such building or structure for the purposes of this Act, or act as the surveyor in respect thereof, or in any matter connected therewith; but it shall be his duty to give notice to the council, who shall then appoint some other person to be the surveyor and to act in respect of the matter.

Buildings to be supervised by the surveyor.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 154.
Cf. 208, 1881, s. 35.

59. Subject to the provisions of this Act and to the exemptions in this Act mentioned, every building or structure and every work done to, in, or upon any building or structure, and all matters relating to open spaces about buildings shall be subject to the supervision of the surveyor.

Powers of council as to surveyor.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 155.

60. The council shall have the following powers with regard to the surveyor, inspecting officers, and clerks, that is to say:—

(*a*) They may dismiss or suspend the surveyor, or any inspecting officer or clerk, and in case of any suspension or during any vacancy may appoint a temporary substitute and pay him such remuneration as they think proper:

(*b*) On a vacancy occurring in the office of surveyor, inspecting officer, or clerk, they may appoint another qualified person in his place:

(*c*) Where, on account of the pressure of business or on any other account, the surveyor or any inspecting officer or clerk cannot discharge his duties promptly and efficiently, they may appoint some other person to assist in the performance of his duties and pay him such remuneration as they think proper.

Surveyor to have an office.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 157.

61. The council shall provide and maintain an office for the surveyor.

Power of entry to inspect buildings.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 166.
Cf. 208, 1881, s. 42.

62. The surveyor at all reasonable times during the progress and after the completion of any building, structure, or work affected by any of the provisions of this Act, or by any terms or conditions on which the observance of any such provisions may have been dispensed with, may enter and inspect such building, structure, or work, and any premises where it is situated.

63. Where, by reason of any emergency, any act or work is required to be done immediately or before notice can be given as required by this Act, such act or work may be done on condition that before the expiration of twenty-four hours after it has been begun, notice thereof is served on the surveyor.

In case of emergency works may be commenced without notice.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 167.
Cf. 208, 1881, s. 43.

64. In any of the following cases, that is to say—

(*a*) where, in erecting any building or structure, or in doing any work to, in, or upon any building, anything is done in contravention of this Act, or anything required by this Act is omitted to be done; or

(*b*) where the surveyor, on surveying or inspecting any building or work in respect of which notice has not been served as required by this Act, finds that the same is so far advanced that he cannot ascertain whether anything has been done in contravention of this Act, or whether anything required by this Act has been omitted to be done;

the surveyor may serve on the builder engaged in erecting such building or structure, or in doing such work, a notice (hereinafter referred to as a notice of irregularity) requiring him within forty-eight hours from the date of notice to cause anything done in contravention of this Act to be amended; or to do anything required to be done by this Act which has been omitted to be done; or to cause so much of any building, structure, or work as prevents the surveyor from ascertaining whether anything has been done or omitted to be done as aforesaid to be to a sufficient extent cut into, laid open, or pulled down.

Notice by surveyor in case of irregularity.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 169.
Cf. 208, 1881, ss. 44, 45.

65. (1) Notwithstanding that a building or structure has ceased to be in charge of or under the control of the builder, a notice of irregularity to the effect stated in section 64 may, at any time during the erection of such building or structure, or within three months after the completion thereof, be served on the builder, or on the owner or occupier thereof, or other the person causing or directing or who has caused or directed the work, instead of or in addition to the builder (if any).

Notice of irregularity after completion of building.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 170.

(2) When the owner of a building or structure does not allow the builder to comply with the requisition of a notice of irregularity served on the builder and the builder serves notice on the surveyor to that effect, a notice of irregularity to the effect above mentioned may, at any time within fourteen

days after service of the notice by the builder on the surveyor, be served on the owner or occupier of the building or structure, or other the person causing or directing or who has caused or directed the work.

Summary proceedings on non-compliance with notice.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 171.
Cf. 208, 1881, s. 46.

66. (1) If the person on whom a notice of irregularity is served makes default in complying with that notice within the period named therein, a special magistrate or two justices, on complaint by the surveyor, may make an order on such person, requiring him to comply with the notice, or with any requisitions therein which in the opinion of the magistrate or justices are authorised by this Act, within a time named in the order.

(2) If the order is not complied with, the surveyor may, after giving seven days' notice to such person, enter with a sufficient number of workmen upon the premises and do all such things as may be necessary for enforcing the order, and for bringing any building, structure, or work into conformity with the provisions of this Act, and all expenses incurred by the surveyor in so doing may be recovered in a summary way, either from the person on whom the order was made or from the owner of the premises.

Rights of owner preserved.
U.K., 20 & 21, Geo. 5, c. clviii., s. 170 (4).

67. Nothing in section 64, 65, or 66 shall prejudice any remedy of the owner or occupier of a building or structure or any other person against the builder of such building or structure.

Register to be kept.

68. A register shall be made up and kept in the surveyor's office of all plans submitted for the approval of the surveyor, and of all building notices received by the surveyor. Such register shall set out the description, locality, and contract price of all new buildings, alterations, or additions indicated on such plans, and the amount of fees chargeable thereon, and the date of receipt of such plans and building notices, and such other information as the council direct.

PART VIII.

BUILDING REFEREES.

Appointment of referees. Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 196. Cf. Vic., 2847, 1916, s. 3.

69. (1) For the purposes of this Act two persons may be appointed as referees in respect of any municipality or district. One of such referees shall be appointed by the council and the other by the Minister.

(2) Every person so appointed—

Amended by 1919, 1929, s. 25.

(*a*) shall be an architect, civil engineer, or building surveyor of known ability; and

(*b*) shall not be a member or officer of the council.

(3) Subject to this Act, the council or the Minister (as the case may be) may remove any referee appointed under this section and appoint another qualified person in his place.

Inserted by 1919, 1929, s. 25.

(4) In any case where the Minister by notice in writing by post requires a council to appoint a referee under this section and within one month after the giving of the notice the council fails to appoint a referee, a referee appointed by the Minister for the municipality or district in question shall, until such time as the council appoints a referee, be the sole referee for that municipality or district and shall have and may exercise all the powers given by this Act to referees. Upon the council appointing a referee the referees appointed by the Minister and the council shall have and may exercise the powers given by this Act to referees.

Referee not to act when interested. Cf. Vic., 2847, 1916, s. 4.

70. (1) A referee shall not act as such with respect to any building of which he is the owner, architect, or builder, or in which he is in any manner, whether directly or indirectly, interested.

(2) In the event of any referee being so disqualified, the council or the Minister (as the case may be) shall appoint another qualified person to act in such matter instead of such referee.

Duties of referees. Cf. Vic., 2847, 1916, s. 5.

71. The referees—

(*a*) shall perform the several duties respectively imposed upon them, whether expressly by this Act or at the instance of any builder or owner who requires any matter to be referred to them as provided in this Act;

(*b*) subject to this Act, shall determine any matters arising for their determination; and

(*c*) subject to and for the purposes of this Act, shall have and may exercise the powers of arbitrators under the Arbitration Act, 1891.

Jurisdiction of referees defined.
Cf. U.K., 26 Geo. 5, and 1 Edw. 8, c. 49, s. 67. Vic., 2847, 1916, s. 6.

72. If any doubt, difference, or dissatisfaction in respect of any matter as to which provision is made by or under this Act arises between any parties concerned, or between any party and the surveyor, as to—

(*a*) any act done or to be done in pursuance of this Act;

(*b*) the effect of the provisions of this Act in any case;

(*c*) the mode in which the provisions and directions of this Act are or ought to be carried into effect;

(*d*) whether the requirements implied in terms of qualification applied to sites, to soils, to materials, or to workmanship or otherwise, and denoting good, sound, fire-proof, fit, proper, or sufficient, are fulfilled in certain cases;

(*e*) the expenses to be borne by the respective owners of premises parted by the same party walls or the proportions thereof;

(*f*) the proportions of the expense to be borne by the occupier or by the owner of premises in respect of any works executed; or

(*g*) any other matter whatever,

any party concerned may require the referees on appeal to determine such matter, upon a requisition by notice in writing to the clerk setting forth, either generally or otherwise, the matters in respect of which the determination of the referees is required.

Differences of opinion
Cf. Vic. 2847, 1916, s. 7.

73. (1) The determination of the referees shall be final and conclusive; but where the referees differ in opinion as to any matter, the same shall be referred by them to the final arbitrament and decision of an umpire, who shall be some qualified person appointed by the referees.

(2) For the purposes of this Act such umpire shall have and may exercise all or any of the powers of the referees, or either of them, and the provisions of this Act with regard to referees shall, so far as applicable and with such alterations, modifications, and substitutions as are necessary, extend and apply to any such umpire.

(3) No member or officer of the council shall be appointed an umpire.

Referee acting singly. Vic. 2847, 1916, s. 8.

74. (1) When any matter is by this Act required, directed, or permitted to be done by the referees, the same may be done by either of them with the assent of all the parties thereto unless express provision to the contrary is made; and if done by either of them with such assent it shall be as valid and effectual as if done by both of them.

(2) Subject to such restrictions and regulations as are made in that behalf by the council, the referees may appoint one of their number under their hands and the seal of the clerk to make any inquiry or any survey which appears to them either necessary or expedient in order to enable them to determine any matters in reference.

Power to modify building regulations in special cases. Vic. 2847, 1916, s. 9.

75. (1) Where in the case of any particular building proposed to be altered or erected the owner or builder or architect thereof lodges with the surveyor an objection in writing to the effect that with respect to that building any of the provisions of this Act, are inapplicable or will needlessly affect with injury the course and operation of business or will defeat the objects of this Act, and that by the adoption of a modification of such provisions such objects will be attained either better or as effectually, the objection shall be considered by the surveyor and the referees.

Amended by 53, 1940, s. 25.

(2) If after consideration of the objection by the surveyor and the referees, any two or more of those persons are of the opinion that the objection is well founded they may direct with respect to such building such modification of any such provision to be made as will give effect to the purposes of this Act.

Powers not revocable save by consent of parties. Cf. Vic. 2847, 1916, s. 10. Amended by S.L.R. Act, 1935.

76. The power and authority of the referees shall not be revocable by any party to any matter without the consent of all the parties thereto; and although any party does not attend upon the hearing of any matter, the referees may proceed with the same and make their award.

Referees to keep minutes, etc. Vic., 2847, 1916, s. 11.

77. The referees shall—

(*a*) keep proper minutes of all their proceedings; and

(*b*) lodge the same or true copies thereof certified under their hands with the clerk.

Awards. Vic. 2847, 1916, s. 12.

78. (1) Every award of the referees shall be given in writing and shall be signed by the referees and lodged with the clerk and shall be filed by him in the office of the council.

(2) Every such award—

(*a*) may by leave of the Supreme Court or a Judge thereof be enforced in the same manner as a judgment or order of the said court to the like effect; and

(*b*) shall, together with the costs, charges, and expenses of the reference, be binding and conclusive against the parties thereto and all persons whomsoever.

(3) Any person, on payment to the clerk of a fee of two shillings and sixpence, may inspect any such award and take a copy thereof or make any extracts therefrom.

(4) In any proceedings in any court or before any Judge or justice a copy of an award of the referees signed by the referees or sealed with the seal of the council shall be *prima facie* evidence of the matters therein contained.

Fees payable to referees.
Vic., 2847, 1916, s. 13.

79. (1) Every referee shall receive for his own use and benefit a fee of two guineas for his time and trouble in determining any reference, objection, or appeal made under this Act, whether in conjunction with the surveyor or not.

(2) Such fee shall be paid in the first instance by the party making, lodging, or demanding the reference, objection, or appeal before the same is entered upon, considered, or decided.

Declaration of referees.
Vic. 2847, 1916, s. 14.

80. Before any referee acts in pursuance of his appointment he shall make the following declaration, to be administered by a Judge of the Supreme Court or a special magistrate:—

I, A.B., do solemnly and sincerely declare that I will diligently, faithfully, and impartially execute the duties of a referee under the Building Act, 1923.

Duties of clerk of the council as to referees.
Vic., 2847, 1916, s. 15.

81. The clerk shall—

(*a*) keep a register of all matters referred to the referees or which come under their cognisance in pursuance of this Act;

(*b*) keep and preserve all documents connected with the duties of the referees; and

s. 78. (2). CORPORATION OF THE CITY OF ADELAIDE v. FOY AND GIBSON PROPRIETARY LIMITED (1930) S.A.S.R. 170; 3 Austn. Digest 39. Held that no order would be made for the enforcement of the terms of an award where the reference to the referees was a reference as to the effect of the Act in respect of works proposed to be done. As to the consequences of such an award.

(*c*) receive all notices provided for pursuant to this Act requiring any act to be done by the referees and file and number the same in the order in which they are received.

PART IX.

PART IX.

BY-LAWS AND REGULATIONS.

DIVISION I.

DIVISION I.—BY-LAWS.

Power to council to make by-laws. Cf. U.K., 20 & 21 Geo. 5, c. clviii., s. 184.

82. (1) Subject to the provisions of this Act, the council may make such by-laws as they may think expedient for the better carrying into effect of the objects and powers of this Act with respect to the following matters or any of them, that is to say:—

(*a*) The prohibition or regulation of lamps, signs, signboards, advertisements, or (and) other structures or things overhanging or near the public street or way:

(*b*) The prohibition or regulation of the erection, repair, and removal of porticoes, verandahs, balconies, awnings, and similar structures over the public street or way, and the materials, height, and construction of the same:

(*c*) Compelling the owner or occupier of any building to which a balcony, portico, or verandah over the public street or way is attached to keep the same properly painted and repaired, and the floors and roof thereof watertight and free from rubbish, and providing in default thereof power for the council to do the work and to recover the cost from such owner or occupier:

(*d*) The regulation of the use of the roofs of such porticoes, verandahs, or balconies for viewing processions or sights in the public streets or ways:

(*e*) The prohibition or regulation of the use over or near the public street or way, in connection with the erection, repair, alteration, or removal of buildings and other structures, of cranes and hoists worked by steam, electric, hydraulic, or other power, and machines, boilers, and other apparatus and contrivances:

Amended by 1919, 1929, s. 26, and 2156, 1934, s. 898 (2).

(*f*) The prohibiting, within localities defined by such by-laws, of the erection, construction, or alteration of or addition to any buildings or structures, except buildings or structures of classes or descriptions permitted by such by-laws and in any case where any such by-law is made with respect to any locality, the prohibiting of the use of any land within the locality to which any such by-law applies in any manner or for any use prohibited by the by-law:

Amended by 1919, 1929, s. 26.

(*g*) The prohibiting of the erection, construction, or alteration of, or addition to buildings and structures of specified classes or descriptions, elsewhere than within localities permitted by such by-laws:

(*h*) The fixing of the building line for any class or classes of buildings with reference to the street alignment:

Inserted by 53, 1940, s. 26 (a).

(*h*1) For prescribing the minimum area of allotments of land upon which dwelling-houses of any specified class or description may be erected and the open spaces which shall be provided in respect of such dwelling-houses: Provided that no such minimum area or open space shall be less than the area or the open space which under the provisions of the second schedule is required to be provided in respect of such dwelling-houses:

Amended by 53, 1940, s. 26 (b).

(*i*) The fees to be paid to the council by the builder or by the owner or occupier of any building or structure to which this Act applies: Provided that the fees so prescribed in respect of any matter shall not exceed the fees prescribed for that matter by the eighth schedule:

(*j*) Any other matter or thing in respect of which it is by this Act provided or contemplated that the council shall or may make by-laws.

(2) Any by-law may impose for any breach thereof, or of any other by-law made by the council under this Act, a penalty not exceeding twenty pounds and a further penalty not exceeding two pounds for every day during which such offence continues after conviction; and such penalties may be recovered in a summary manner.

Inserted by 53, 1940, s. 26 (c).

(2*a*) If any by-law is made pursuant to paragraph (*f*) or (*g*) of subsection (1) and the Minister is of opinion that the effect or operation of the by-law will affect any municipality or district other than that of the council by which the by-law

is made, the Minister may, before submitting the by-law to the Governor, refer the by-law to the council of such other municipality or district. The Minister shall consider any representations made as to the by-law by such council.

(3) Any by-laws may be made to apply only to particular parts of the municipality or district.

(4) The council may provide by any by-law that, in any case in which the council think it expedient, they may dispense with the observance of any by-law on such terms and conditions (if any) as they think proper.

(5) All by-laws made pursuant to this section shall be made in manner prescribed by and be subject to the provisions of Division I. of Part XXXIX. of the Local Government Act, 1934. Substituted by 2156, 1934, s. 898 (2).

(6) The production of the *Government Gazette* purporting to contain a copy of any by-law shall be conclusive evidence of the contents and the due making of such by-law, and shall be *prima facie* evidence of the validity thereof.

DIVISION II.—REGULATIONS.

Governor may make regulations.

83. (1) The Govenor may make regulations prescribing all matters and things which may be necessary or convenient for giving effect to the provisions and objects of this Act, and in particular (without derogating from his general power) he may make regulations with respect to any or all of the following matters, that is to say:—

(*a*) The forms of notices, applications, and other documents to be used for the purposes of this Act, and other like matters of procedure:

(*b*) For regulating the plans and levels of sites for new buildings:

(*c*) Foundations and sites of buildings and other erections:

(*d*) The mode in which, and the materials with which such foundation and sites are to be made, excavated, filled up, prepared, and completed, for securing stability and for purposes of health:

(*e*) The protection of ironwork and other metal work used in the construction of buildings from the action of fire:

(*f*) Woodwork in external walls:

(*g*) The description and quality of the substances of which plastering may be made:

(*h*) The mode in which, and the materials with which, any excavation made within a line drawn outside the external walls of a house, building, or other erection, and at a uniform distance therefrom of three feet, shall be filled up:

(*i*) The procedure and forms for obtaining the approval of the council or the surveyor of plans and other matters:

Inserted by 53, 1940, s. 27 (a).

(*j*) Prescribing educational and professional qualifications for persons employed as building surveyors by councils; constituting and providing for the appointment of a committee or other body for the purpose of examining persons and granting certificates of competency to persons passing such examinations or who are otherwise qualified therefor; prescribing the mode of determining such qualifications and obtaining recognition therefor in other States of Australia; providing for the cancellation of such certificates and the grounds upon and the manner in which such cancellation may be effected; and providing that after a day fixed in the regulations no person shall be employed as a building surveyor who does not hold such a certificate which is in force: Provided that if at the day fixed as aforesaid, any person holds the office of building surveyor under any council, the regulations shall not in anywise affect the office of that person under that council: Provided further that the regulations may provide that any committee constituted pursuant to regulations made under the Local Government Act, 1934-1939, to examine and grant certificates of competency to engineers and surveyors employed by councils, shall be the body to conduct examinations and grant certificates pursuant to the regulations made under this Act.

Amended by 1919, 1929, s. 27, and by 53, 1940, s. 27 (b).

(2) The Governor may also make regulations revoking, altering or adding to any of the provisions contained in the second, third, fourth, sixth, seventh, or eighth schedules, and the said schedules shall be read as so amended.

(3) Any regulation made under this section may be limited to any specified municipality or district or to any specified part thereof or to any specified class of buildings therein.

(4) Any regulation may include a reference to any specification or code of the Standards Association of Australia or of any other association or body which is promulgated at the time of the making of the regulation, and may provide that anything to be done in connection with any building or structure shall be done in accordance with and shall comply with the provisions of any such specification or code.

Inserted by 53, 1940, s. 27 (c).

PART X.

PART X.

LEGAL PROCEEDINGS.

84. Every person shall, for every act or default contrary to any provision of this Act, be guilty of an offence and be liable to a penalty not exceeding fifty pounds and, where the offence is of a continuing nature, to a further penalty not exceeding two pounds for each day while such offence is continued after written notice in that behalf by the surveyor.

Penalty for non-compliance with requirements of Act.

Amended by 1919, 1929, s. 28.

85. (1) Notwithstanding the imposition or recovery of any penalty under this Act, if any building, wall, or other thing after the commencement of this Act is erected, constructed, or altered, or is used, kept, continued, or suffered to remain, wholly or partially contrary to any of the provisions of this Act, the surveyor may, by notice in writing under his hand, require the owner (or the occupier, if the owner is unknown or cannot be found) within a time to be limited in the notice to put the building, wall, or other thing in a state and condition conformable to this Act or else to pull down and remove the same.

Remedy in addition to penalty.

Cf. U.K., 26 Geo. 5, and 1 Edw. 8, c. 49, s. 65.

(2) If such owner or occupier does not, within the time limited by the said notice, make the building, wall, or other thing conformable to the provisions of this Act, or if no owner or occupier can be found on whom to serve such notice, the surveyor shall report the matter to the council, and the council may thereupon cause all or so much of the building, wall, or other thing as in its opinion is not conformable to the provisions of this Act to be taken down, rebuilt, or re-erected in such manner as may be requisite, and all the expenses of so doing shall be paid by the owner and may be recovered in any court of competent jurisdiction.

(3) If any building, wall, or other thing as aforesaid, or any part of the same, is taken down, rebuilt, or re-erected as aforesaid, the council may sell the materials thereof or so much of the same as has been taken down and apply the proceeds of such sale in payment of the expenses incurred in respect of such building, wall, or other thing, and the council shall restore any overplus arising from such sale to the owner of the building, wall, or other thing on demand.

Penalty for obstructing fire doors.
Inserted by 1919, 1929, s. 29, and amended by 53, 1940, s. 28.

85a. Any person who obstructs or causes the obstruction of any fire door in any party-wall or other wall or of any door opening on to any fire escape shall be liable to a penalty not exceeding ten pounds.

Summary proceedings for offences, etc., and recovery of penalties.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 187.

86. (1) All offences, penalties, fees, costs, and expenses against or under this Act, directed to be prosecuted or recovered in a summary manner, or the prosecution or recovery of which is not otherwise provided for, may be prosecuted and recovered before any special magistrate or two or more justices in manner provided by the Justices Act, 1921, or any other Act for the time being in force regulating summary proceedings before justices.

(2) All convictions and orders made by any such magistrate or justices in such proceedings may be enforced as provided by the said Act or any other Act.

Application of penalties.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 190.

87. All fines and penalties imposed or inflicted for any offence against this Act shall be paid to the council of the municipality or district within which the offence was committed for the use of the municipality or district.

Local court and justices may make orders.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 189 (1). 208, 1881, s. 88.

88. Where jurisdiction is by this Act given to a local court, or to a magistrate or justice or justices, it, he, or they may settle the time and manner of executing any work, or of doing any other thing, and may put the parties to the case upon such terms with respect to the execution of the work as it, he, or they think fit. Such court, magistrate, justice, or justices shall also have power to award or refuse costs according to the circumstances, and to settle the amount thereof, and the amount of the costs awarded may exceed ten pounds.

Proceedings in local courts.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 89.

89. Proceedings in any local court in respect of any matter arising under this Act shall be conducted in the same manner as proceedings are conducted in any ordinary case within the jurisdiction of such court, or as near thereto as circumstances permit; and orders made by such courts shall for all

purposes be deemed to be judgments of the said court, and may be enforced by execution or otherwise in a similar manner to that in which the judgments of such court are ordinarily enforced; and in all cases where the judgment of such court is to do some act other than the payment of money, any neglect to perform such act within the time limited in such judgment shall subject the person ordered to do such act to a penalty of five pounds for every day until such act is performed.

Appeal from local court.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 189 (2). 208, 1881, s. 90.

90. In any case over which jurisdiction is by this Act given to a local court there shall be an appeal against any decision or order of such court to the Supreme Court, in the same manner and upon the same terms in and upon which there is an appeal from the decision of such court in any case within the ordinary jurisdiction of such court, or as near thereto as circumstances permit; but no such appeal shall be allowed unless the value of the matter in difference between the parties exceeds thirty pounds; and the opinion of the court before which the case is tried as to such value shall be conclusive.

Appeal from justices to Supreme Court.
208, 1881, s. 93.

91. In every case in which jurisdiction is by this Act given to a special magistrate or a justice or justices there shall be an appeal from any conviction, order of dismissal, or other order made by him or them to the Supreme Court.

Council not to be proceeded against until after notice.
Cf. 208, 1881, s. 95.

92. No writ or process shall be sued out against the council or the surveyor or other officer for anything done or intended to be done under the provisions of this Act until after the expiration of one month next after notice in writing has been delivered to the clerk on behalf of the council, or to the surveyor or other officer, or left at his office or usual place of abode, stating the cause of action and the name and place of abode of the intended plaintiff, or of his attorney or agent, in the cause; and every such action shall be brought or commenced within six months next after the accrual of the cause of action, and not afterwards.

Council may demolish buildings and sell materials and recover expenses.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 191.

93. (1) Where any person has been convicted of any offence against this Act, by constructing, erecting, adapting, extending, raising, uniting, or separating any building or structure, or any part of any building or structure, in contravention of any provision of this Act, the council may give notice in writing to such person to bring such building or structure into conformity with the said provision.

(2) If such person fails to comply with such notice within fourteen days after the giving thereof, the council may, notwithstanding the imposition and recovery of any penalty, cause complaint of such conviction notice and default to be made before a justice, who shall thereupon issue a summons requiring such person to appear to answer such complaint before a special magistrate or two justices.

(3) If on the hearing of the said complaint the matter thereof is proved to the satisfaction of the magistrate or justices, he or they may make an order, in writing, authorising the council, and it shall thereupon be lawful for the council, or any person authorised by them, after expiry of fourteen days from the date of such order, to enter upon such building or structure with a sufficient number of workmen and to demolish or alter such building or structure, or any part thereof, so far as the same has been adjudged to be in contravention of this Act, and to do whatever other acts may be necessary for such purpose, and to remove the materials to some convenient place, and, if in their discretion they think fit, to sell the same in such manner as they think fit.

(4) All expenses incurred by the council in demolishing or altering such building or structure, or any part thereof, and in doing such other acts as aforesaid, or the balance of such expenses after deducting the proceeds of sale of the aforesaid materials (if the council sell the same), may be recovered from the person committing the offence aforesaid in a summary manner.

(5) If the proceeds of such sale are more than sufficient to defray such expenses the council shall restore the surplus of such proceeds, after deducting the amount of all such expenses, to the owner of the building or structure on demand.

Payment of surplus proceeds into Treasury.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 193.
Amended by S.L.R. Act, 1935.

94. Where, by any provisions of this Act, any surplus of the proceeds of the sale of any building, structure, or materials is made payable to any owner thereof, and no demand is made by any person entitled thereto within one year of the receipt of the proceeds by the council, then the same shall be paid to the Treasurer of the State, and shall be by him paid out to the owner upon the order of the Supreme Court or a Judge thereof, obtained on the application by petition or summons of the owner and proof of his title thereto.

Payment of expenses by owners.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 194.

95. Where it is by any provision of this Act declared that expenses are to be borne by or may be recovered from the owner of any premises (including under the term "owner" the adjoining and building owners, respectively), the follow-

ing rules shall be observed with respect to the payment of those expenses:—

(1) The owner immediately entitled in possession to the premises, or the occupier thereof, shall, in the first instance, pay the expenses—with this limitation, that an occupier shall not be liable to pay any sum exceeding in amount the rent due, or that will thereafter accrue due from him in respect of the premises, during the period of his occupancy:

(2) If there are successive owners, each of them shall be liable to contribute to such expenses in proportion to his interest:

(3) Any difference arising as to the amount of contribution shall be decided by arbitration:

(4) Any occupier of premises who has paid any such expenses may deduct the amount so paid from any rent payable by him to any owner of the said premises; and any owner who has paid more than his due proportion of any such expenses may deduct the amount so overpaid from any rent payable by him to any other owner of the same premises:

(5) If default is made by any person in payment of any expenses hereby made payable by him in the first instance, the same may be recovered in a summary way; and if default is made by any person in repaying to any other person any money recoverable under this section, such moneys may be recovered in the same manner as if the obligation to pay such moneys were a simple contract debt.

Evidentiary provisions.

Inserted by 1919, 1929, s. 30.

95a. (1) In any procedings for an offence against this Act, the allegation in the complaint that any act has been done without the sanction, consent, approval, or allowance of the council or the surveyor shall be *prima facie* evidence of the matter alleged.

(2) A document purporting to be a copy of any by-law made by any council by virtue of this Act, and purporting to be signed by the clerk thereof, shall, without any other proof, be received as *prima facie* evidence of the existence, contents, and validity of such by-law.

(3) A certificate in writing purporting to be signed by the clerk of a council or by the surveyor thereof and stating that any place within the municipality or district, as the case may be, of the council is a street or way within the meaning of this

Act shall, without any other proof, be received as *prima facie* evidence that such place is a street or way, as the case may be, within the meaning of this Act.

Notices.

Notices to be in writing.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 208.

96. (1) Notices, orders, and other such documents under this Act shall be in writing, and notices and documents other than orders, when issued by the council, shall be sufficiently authenticated if signed by their clerk, or by the officer by whom the same are given or served.

(2) Orders made by the council shall be under the seal of the council.

Service of notices.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 209.
Cf. 208, 1881, s. 87.

97. (1) Any notice, order, or other document required or authorised to be served under this Act may be served by delivering a copy thereof at, or by sending a copy thereof by post in a registered letter addressed to, the usual or last known residence in the State of the person to whom it is addressed; or by delivering the same to some person on the premises to which it relates; or, if no person is found on the premises, then by fixing a copy thereof on some conspicuous part of the premises to which it relates; or, in the case of a company, by delivering a copy thereof at the registered office of the company.

(2) Any notice, order, or other document to be served upon a builder shall be deemed to be sufficiently served if a copy thereof is posted in a registered letter, addressed to such builder at the place of address stated in his building notice (if any) or, in default thereof, at his office or any one of his principal offices, or if a copy thereof is fixed on some conspicuous part of the premises to which it relates.

(3) Any notice, order, or other document by this Act required to be given to or served on the owner or occupier of any premises, or a copy thereof, may be addressed by the description of the "owner" or "occupier" of the premises (naming the premises) in respect of which the notice is given or served, without further name or description.

(4) Any notice or other document by this Act required to be given to or served on the council may be given or served by post in a registered letter addressed to the council at its office, or by delivering the same to some person at its office.

(5) Any notice required by this Act to be served on the surveyor may be served on him by post in a registered letter addressed to him at his office, or by delivering the same to some person at his office.

98. Any notice served or given pursuant to this Act, and any publication therein contained, shall be deemed in any question relative to any building, structure, or work or relative to the ownership of any building, structure, or land, to be *prima facie* evidence, as against the person by whom the notice was given or served, of the nature of the building, structure, or work proposed to be built or done or as to the ownership of the building, structure, or land.

Notice to be evidence.

Substituted by 1919, 1929, s. 31.

PART XI.

PART XI.

MISCELLANEOUS.

98a. (1) There shall be an advisory committee for the purposes of this Act.

Advisory committee.

Inserted by 53, 1940, s. 29.

(2) The committee shall consist of five members to be appointed by the Governor from time to time on the recommendation of the Minister.

(3) One of the members shall from time to time be appointed by the Governor, on the recommendation of the Minister, as the chairman of the committee.

(4) The committee shall—

(*a*) from time to time report to the Minister as to matters upon which the committee is of opinion this Act or the regulations require alteration or do not make sufficient provision:

(*b*) report to the Minister upon any proposals for the amendment of this Act or the regulations which are referred to the committee by the Minister:

(*c*) perform and undertake such powers and duties as may be entrusted to the committee by the Minister:

(*d*) generally advise the Minister upon the administration of this Act.

(5) The Minister may, from time to time, fix fees to be paid to any member of the committee. The Minister may from moneys provided by Parliament pay any such fees to any member of the committee.

(6) The Minister may from moneys provided by Parliament pay to any member of the committee any travelling or other expenses incurred by the member in the exercise of his office.

(7) The Minister may, from time to time, direct that any persons submitting any matters for consideration by the committee shall pay to the Minister such fees or charges, or both, as are fixed from time to time by the Minister.

Expenses of administration.

Substituted by 53, 1940, s. 30.

99. (1) The fees received by the council for acts done or to be done under the provisions of this Act shall, to the extent necessary for the purpose, be applied by the council towards the expenses incurred by the council in carrying this Act into execution.

(2) In the statement required to be prepared annually by the council pursuant to section 296 of the Local Government Act, 1934-1939, there shall be shown, in respect of the financial year to which the statement relates, the amount of the fees received by the council as aforesaid and the amount of the expenses incurred by the council in carrying this Act into execution.

Fees.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 173.

Cf. 208, 1881, ss. 48 and 65.

100. (1) There shall be paid to the council by the builder employed in erecting any building or structure, or in doing any work, or, in his default, by the owner or occupier of the building or structure so erected or being erected, or in respect of which such work is done or is being done, the fees specified in the eighth schedule, or such other fees as are prescribed by the council by by-law in that behalf.

Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 177.

Cf. 208, 1881, s. 50.

Amended by 1919, 1929, s. 32.

(2) Subject to section 9 the fees to be paid under this section shall be due at the times following, that is to say:—

(*a*) When plans are submitted for approval, after notice from the council that the plans have been checked and are ready for approval or have been disapproved:

(*b*) If no plans are submitted, then at the time when such plans should have been submitted:

(*c*) As to any fees not ascertainable when the plans are submitted, at the expiration of three days after the completion of any work in respect of which such fees are payable.

(3) If any such builder, owner, or occupier refuses or fails to pay the said fees when the same are due, they may be recovered in a summary manner, or by action in any court of competent jurisdiction, on its being shown to the satisfaction of the magistrate or justices that a bill specifying the amount of the fees was delivered to him or sent to him in a registered letter, addressed to his place of business or last known residence.

Power for council to annex conditions. Cf. U.K., 20 & 21 Geo. 5, c. clviii., s. 212.

101. (1) In any case where the council are authorised under this Act to refuse their sanction, consent, or allowance to the doing or omission of any act or thing, the council may, if they think fit, instead of refusing such sanction, consent, or allowance, give the same subject to such terms and conditions in relation to the subject matter of such sanction, consent, or allowance as the council think fit.

Amended by 1919, 1929, s. 33.

(2) Any such term or condition shall be binding on the owner and occupier of the building, or structure, or ground to which the sanction, consent, or allowance relates; and if at any time any such term or condition is not observed or fulfilled, the owner or occupier in default shall be subject to a penalty not exceeding fifty pounds.

Inserted by 1919, 1929, s. 33 (d) and amended by 53, 1940, s. 31.

(3) In any case where any plans, working drawings, specifications, or proposed building does not or will not comply with any of the requirements of this Act relating to building construction, but the council is satisfied that the said plans, working drawings, specifications, or building, except in minor or unimportant respects, complies or will comply with the requirements of this Act, the council may, on the recommendation in writing of the surveyor, by notice in writing, approve of any such plans, working drawings, specifications, or building and thereupon the said plans, working drawings, specifications, or building shall be deemed to comply with this Act. Any such approval may be given subject to any conditions the council may think fit. If the council refuses to give any such approval in any particular case or if the council annexes any condition to any such approval, the decision of the council with respect thereof shall, notwithstanding the provisions of Part VIII., be final and conclusive.

Power of entry to owner, etc., to execute work. Cf. U.K., 20 & 21 Geo. 5, c. clviii., s. 214.

102. Any owner, builder, or other person, and his servants, workmen, and agents, may, for the purpose of complying with any notice or order served or made on him in pursuance of this Act in respect of any building or structure, room or place, after giving seven days' notice to the occupier thereof, and on production of the first-mentioned notice or order, enter and from time to time without further notice re-enter such building or structure, room or place, and do all works and things therein, thereto, or in connection therewith which may be necessary for complying with such notice or order.

Limitation of time for proceedings when notice not given.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 215.
Amended by 1919, 1929, s. 34.

103. Where any building has been erected or work done without due notice having been given to the surveyor or the council (in accordance with this Act), the surveyor may, at any time within one month after he has discovered that such building has been erected or work done, enter the premises for the purpose of seeing that the provisions of this Act or any notice or order made under this Act have been complied with; and the time during which the surveyor or the council may take any proceedings, or do anything authorized or required by this Act to be done by the council or surveyor, as the case may be, in respect of such building or work, shall begin to run from the date of the discovery by the surveyor that such building has been erected or work done.

Plans and documents to be returned by council.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 216.
Amended by 1919, 1929, s. 35.

104. (1) Plans and other documents delivered at the office of the council, or to the surveyor, in pursuance of this Act, shall remain in the custody of the council or the surveyor until its or his written approval of such plans and documents (whether conditional or unconditional) has been given, or until such plans and documents have been disapproved, when one copy, if more than one copy has been so delivered, shall be returned to the person who so delivered them on payment of the proper fees.

Subsec. (2) repealed by 1919, 1929, s. 35 (d).

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Mode of giving approval of council.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 217.
Amended by 1919, 1929, s. 36, and by 53, 1940, s. 32.

105. The approval by the council of any matter or thing for which such approval is required by this Act shall unless otherwise by this Act provided be signified in writing, signed by the mayor or chairman, or the clerk.

Consent, how given on behalf of owners not to be found.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 218.

106. Where any consent is required to be given, any notice to be served, or any other thing to be done by, on, or to any owner in pursuance of this Act, if there is no owner, or if any such owner cannot be found, the special magistrate whose duty for the time being, it is to preside over the local court nearest to the site of the subject matter may give such consent, or do or cause to be done such thing, on such terms and conditions as he may think fit, and may dispense with the service of any notice which would otherwise require to be served.

Storing of wood or timber.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 219.
Amended by 1919, 1929, s. 37.

107. (1) It shall not be lawful for any person to erect or place a pile, stack, or store of cut or uncut timber, lathwood, firewood, casks, packing cases, or barrels, whether on or above the ground, within a less distance from a street or public way, or from a building or fence, than ten feet, unless separated therefrom by a sufficient fire-resisting wall to the satisfaction of the surveyor.

(2) It shall not be lawful for any person to pile, stack, or store cut or uncut timber, lathwood, firewood, casks, packing cases, or barrels in any yard or ground, or in any part of any premises, in which there is any furnace, except in the following cases:—

(*a*) Where the furnace is enclosed in a building or chamber constructed of fire-resisting material; or

(*b*) Where there is a distance of not less than ten feet between the furnace and the pile, stack, or store of timber, lathwood, firewood, casks, packing cases, or barrels.

Substituted by 1919, 1929, s. 37 (c).

(3) No person shall pile, stack, or store any cut or uncut timber, lathwood, firewood, casks, packing cases or barrels in such manner that the pile, stack, or store thereof exceeds twenty feet in height from the ground or floor level.

(4) It shall not be lawful to form in any pile, stack, or store of timber, lathwood, firewood, casks, packing cases, or barrels any room, or chamber, or space (other than a passage) to be used for any purpose whatsoever.

(5) Timber yards existing at the time of the commencement of this Act shall be made to comply with the provisions of this section within two years from the commencement of this Act.

(6) Nothing in this section shall apply to the storage of fuel to be used solely for his own domestic purposes, by the owner or occupier of any storage space.

Privies to be properly enclosed.
Amended by 1919, 1929, s. 38, and by 53, 1940, s. 33.

108. (1) Every privy (whether built before or after the commencement of this Act) shall have a door and an adequate opening for light and ventilation. The door of every privy in any yard or on any flat roof, other than a privy in the yard of a private dwelling-house, shall be properly screened from view.

(2) If any privy does not comply with the requirements of this section, the owner thereof shall be guilty of an offence against this Act.

Adjoining owner may cover over space between external walls.

109. Where there are two external walls in close juxtaposition, belonging to separate owners, the owner of either one of such walls may roof over the space between such walls by flashing, so as to prevent rainwater or any other thing falling down between such walls.

Removal of roof not to affect proceedings.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 220.

110. Proceedings with respect to a building shall not be affected by the removal or falling in of the roof or covering of such building.

This Act not to excuse from compliance with other Acts.

111. (1) Compliance with the requirements of this Act shall not excuse any person from complying with the requirements of any Act or regulation with respect to buildings or structures of any particular class or kind, or used or intended to be used for any particular purpose, or with respect to buildings or structures within any particular locality; nor shall compliance with the requirements of any such Act or regulations excuse any person from complying with the requirements of this Act.

(2) In case of conflict between any provision of any such Act or regulations as mentioned in subsection (1) hereof and any provision of this Act, the first-mentioned provision shall prevail, but only to such extent as is necessary to overcome such conflict.

Delegation of powers of council.
Inserted by 1919, 1929, s. 39.

111a. The council may by resolution delegate to any committee of its members or to any of its officers such of its powers and duties under this Act as it thinks fit, and may, by resolution revoke or vary any such resolution.

Exemptions from the Act and modifications thereof.

Buildings exempt from Act.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 226.
Cf. 208, 1881, s. 7.

112. All buildings and structures the property of His Majesty the King shall be exempt from the operation of this Act.

Termination of exemption or privilege.
Cf. U.K., 20 & 21, Geo. 5, c. clviii., s. 229.

113. Any buildings, structure, or work in any respect exempt from the operation of this Act, or in any manner privileged in respect of any provision of this Act, shall remain so exempt or privileged so long only as it is used for the purpose or retains the character by reason whereof it is so exempt or privileged.

114. A building, structure, or work erected or constructed before the commencement of this Act, to which no objection was taken under any law then in force, shall (subject to the provisions of this Act as to new buildings, or the alteration of buildings) be deemed to be erected or constructed in compliance with the provisions of this Act.

Application of Act to buildings erected before commencement of Act.
Cf. U.K., 20 & 21 Geo. 5, c. clviii., s. 233.

115. Notwithstanding anything contained in this Act, any building, structure, or work which has been commenced before the commencement of this Act, or which is to be carried out under any contract entered into before the commencement of this Act, may be completed subject to and in accordance with the provisions of the Acts relating thereto in force immediately previous to the commencement of this Act.

Buildings in progress.

PART XII.

PART XII.

ARCHITECTURAL STANDARDS.

116. (1) This Part shall apply within thirty feet of the alignment of the following streets within the municipality of the City of Adelaide, namely:—

Application of Part.
Substituted by 53, 1940, s. 34.

(*a*) South Terrace:

(*b*) East Terrace, between Pirie Street and South Terrace:

(*c*) Barton Terrace:

(*d*) Strangways Terrace:

(*e*) Pennington Terrace:

(*f*) Mackinnon Parade:

(*g*) Mann Terrace:

(*h*) Kingston Terrace:

(*i*) Lefevre Terrace:

(*j*) Mills Terrace:

(*k*) Brougham Place:

(*l*) Palmer Place.

(2) This Part shall also apply within such portion of any municipality (including the municipality of the City of Adelaide) or district as is declared by proclamation.

(3) The Governor may by proclamation declare that this Part shall apply within any portion of any such municipality or district and may by proclamation revoke or vary any such proclamation.

PART XII.

Class of buildings which may be erected.

Substituted by 53, 1940, s. 34.

117. (1) No building which is not a public building or a building of the domestic class shall, unless with the specific consent of the council, be erected within any portion of any municipality or district to which this Part applies.

(2) For the purposes of this section, no shop or workshop, whether attached to any other building or not, shall be deemed to be a building of the domestic class.

(3) Nothing in this section shall be deemed to derogate from the powers of the council to make by-laws under paragraphs (*e*) to (*i*) inclusive of section 82.

Architectural standards.

Substituted by 53, 1940, s. 34.

118. Notwithstanding section 9, the council may refuse to approve of the plans of any building proposed to be erected, altered or added to within any portion of the municipality or district to which this Part applies which in the opinion of the council would, by reason of the architectural design or elevations, or the size, quality, or nature of the building, injuriously affect the value of the property in the vicinity of the proposed building.

PART XIII.

PART XIII.

BALCONIES AND VERANDAHS.

Application of Part.

Substituted by 53, 1940, s. 34.

119. (1) This Part shall apply within the Municipality of the City of Adelaide.

(2) This Part shall also apply within any municipality, or district, or portion thereof, as is declared by proclamation.

(3) The Governor may by proclamation declare that this Part shall apply within any municipality or district, or portion thereof, and may by proclamation revoke or vary any such proclamation.

Licences for balconies and verandahs.

Substituted by 53, 1940, s. 34.

120. (1) No licence granted by the council to erect a balcony or verandah over a street or way in front of or at the side of any building within any municipality or district, or portion thereof, to which this Part applies, shall have effect as a licence for a longer period than five years; and no length of user of any balcony or verandah erected over any street or way shall deprive the council of the right to have the same removed.

(2) The owner of the building to which any such balcony or verandah is attached shall after the expiration, by reason of subsection (1) of this section or otherwise, of the licence respecting the balcony or verandah, remove the same within six months after service on him of notice in writing by the council requiring him so to do.

(3) Any person who fails to remove any balcony or verandah as required by subsection (2) of this section shall be guilty of an offence and liable to a penalty not exceeding ten pounds and to a further penalty not exceeding one pound for every day after the first that he so fails to remove the balcony or verandah.

SCHEDULES.

THE FIRST SCHEDULE.

Sec. 6.

Short Title of Act.	Extent of Repeal.
The Building Act, 1881 (No. 208 of 1881)	The whole.
The Building Act Amendment Act, 1882 (No. 266 of 1882)	The whole.
The Building Act Amendment Act, 1883 (No. 283 of 1883-4)	The whole.

SCHED. II.

PART I.

Second schedule substituted by regulations, Gazette, 12th December, 1940, p. 1441.

THE SECOND SCHEDULE.

PART I.

PRELIMINARY.

Arrangement.

1. The provisions of this schedule are arranged in Parts as follows:—

PART XIX. Piers, pillars, columns, girders and structural steel (regulations 269 to 286).

PART XX. Fire protection and escapes (regulations 287 to 323).

PART XXI. Residential flat buildings and multiple dwellings (regulations 324 to 335).

Interpretation.

2. In this schedule "Australian Standard Specification" means a specification or code of the Standards Association of Australia.

Specification of Standards Association of Australia.

3. Any reference in this schedule to any specification or code of the Standards Association of Australia shall be deemed to refer to the specification or code promulgated at the time of the making of these regulations.

Application to Public Buildings.

4. The provisions of this schedule which apply to buildings of the domestic class shall apply to such part of any public building as is inhabited and the provisions of this schedule which apply to buildings of the warehouse class shall apply to all other portions of any public building.

SCHED. II. PART II.

PART II.

SITES, HEIGHTS AND LOADS OF BUILDINGS.

Site.

5. In cases required by the surveyor the ground surface of the site for a new building shall be properly asphalted, or shall be covered with a layer of good cement concrete at least 4in. thick, or other damp resisting covering approved by the surveyor. All floors to basements and cellars shall be so asphalted or covered.

Drainage.

6. The subsoil of the site for every new building shall be effectively drained to the satisfaction of the surveyor.

Limitation of Height.

7. (1) The following rules shall govern the height of any building to be erected on any land abutting any street or way:—

(1.) A point shall be ascertained on the street alignment on the opposite side of the street or way which said

point shall be on a line at a right angle to the proposed building line of the building at the centre of the site of the building:

(II.) Another point shall be ascertained above the centre of the site of the building and at a height vertically above the said centre so that the height is 3ft. for every foot from the said centre to the point ascertained as provided by subdivision (I.) of this paragraph:

(III.) Except where otherwise provided, no portion of the building shall intersect a plane the base of which is horizontal and in which both of the said points lie.

(2) The height of any building abutting on two streets or ways shall be governed by the wider street or way to a depth of not more than 160ft. from the wider street or way.

(3) Notwithstanding that, pursuant to paragraph (1), a building may be erected to a greater height, a building of steel frame or reinforced concrete shall not exceed 132ft. in height and a building of ordinary construction shall not exceed 110ft. in height: Provided that, subject to compliance with paragraph (1), any portion of any such building which contains a lift engine room, a water tower, or a roof not constructed for storage or occupation or which is constructed for decorative purposes only, may be constructed at a greater height than 132ft. or 110ft., as the case may be.

(4) This regulation shall not apply to any church or chapel or to any tower which does not contain any habitable room.

(5) The height of any dwelling-house at any part shall not exceed the horizontal measurement from that part of the building to the street alignment of the street or way to which it fronts and directly opposite thereto.

(6) In the event of the destruction by fire of any building, erected prior to the commencement of this Act, which exceeded the maximum height permitted, the building may be re-erected to its original height, and with its original provision for light, subject to its construction being in all other respects in accordance with this Act.

(7) In addition to complying with the provisions of this regulation, every building shall comply with the provisions of regulation 250 of this schedule.

Loads.

8. (1) Every building, together with the walls and floors thereof, shall be capable of safely and independently sustain-

ing the whole dead load and the whole live or other load superimposed or bearing thereon, less the allowances hereinafter specified.

(2) For the purpose of calculating the loads on pillars, walls, floor systems and foundations in buildings, the live load on floors shall be estimated as not less than the following dead load:—

(*a*) In buildings of the domestic class (other than mentioned in succeeding subdivisions of this paragraph), including asylum wards, boarding-house bedrooms, hospital wards, hotel bedrooms, hotel private rooms, hotel private corridors, work-house wards, and other similar buildings, 40lb. per square foot:

(*b*) In school classrooms, offices, banks and other similar buildings, except in rooms used for strongrooms, 60lb. per square foot:

(*c*) In reading rooms, 75lb. per square foot:

(*d*) In art galleries, museums, churches, chapels, lecture rooms, meeting rooms, music halls, public assembly rooms, public concert rooms, dance halls, ball rooms, theatres, and other similar buildings or places of public assembly, retail shops, light factories, light workshops, garages and strongrooms, 100lb. per square foot:

(*e*) In drill rooms and for similar floors subject to vibration unless otherwise provided for, 150lb. per square foot:

(*f*) In book shops and book stores, stack rooms in libraries, 200lb. per square foot:

(*g*) For every floor in a building of the warehouse class, except such floors as are intended to be used for any of the purposes aforesaid, not less than 150lb. per square foot, but in heavy factories, hardware, machinery and paper stores and printeries, the actual floor loads:

(*h*) In all buildings of a composite class, or buildings for special purposes, the live load on each floor shall be calculated with due regard to the use to which the floor shall be put.

9. The occupier of any building of the warehouse class shall cause to be permanently displayed on every floor of the building near the main staircase or entrance a notice specifying the load which may be placed on that floor. No person shall

place or cause to be placed on any floor of any building of the warehouse class any load in excess of the live load specified in the notice displayed in respect of that floor.

10. The live load on verandahs and roofs subject to wind pressure only, and inclined at an angle of not more than 20° to the horizontal shall be 20lb. per superficial foot measured on all the surface of the verandah or roof. The live load on flat roofs available for traffic or resort shall be not less than 60lb. per superficial foot and the roof space shall not be used for any purpose for which under any other regulation a heavier loading must be allowed. The live load on all portions of roofs inclined at an angle of 20° and upwards to the horizontal shall be calculated from the following Duchemin formula:—

$$Pn = \frac{P \times 2 \sin \theta}{1 + \sin^2 \theta}$$

Where P = intensity of pressure on a plane normal to the direction of the wind.

Pn = intensity of normal pressure on a plane inclined at an angle θ to the horizontal.

θ = angle of inclination to the horizontal of roof surface.

The intensity of pressure on a cylindrical surface shall be two-thirds that of a plane surface. For sections of cylinders intermediate values shall be used.

11. A live load of 20lb. per superficial foot of surface shall be allowed for in flat ceilings of concrete construction.

12. The live loads on hoardings, signs and similar structures, shall be taken at not less than 20lb. per square foot of surface which may be exposed to a wind.

13. The minimum live load intensity for street awnings shall be 30lb. per square foot.

14. The live load on public footpaths shall be taken at 200lb. per square foot.

15. Retaining walls shall be designed to support adequately earth pressures and surcharges.

16. The upwards wind pressure under cantilever verandahs or supported awnings shall be provided for as if equal to a live load of 10lb. per square foot.

17. The live loads on fire escapes, stairs and landings (other than in dwelling houses) shall be 100lb. per square foot and the live load on stairs and landings in dwelling houses shall be 60lb. per square foot.

Live Load Reductions.

18. For the purpose of determining the extreme load to be carried on pillars, walls and foundations in buildings of the warehouse class more than two storeys in height, including book stores, libraries, museums, retail shops, and in buildings of the domestic class, a reduction of the live loads shall be allowed as follows:—

Portion of Building.	Type of Building.		
	Warehouses and Bulk Stores.	Manufacturing Retail Stores.	All Others.
	Reduction of Floor Live Load. Per Cent.	Reduction of Floor Live Load. Per Cent.	Reduction of Floor Live Load. Per Cent.
Columns carrying—			
The roof	0	0	0
Next storey below topmost storey	0	0	0
Next storey below	5	10	10
Next storey below	10	20	20
Next storey below	15	30	30
Next storey below	20	30	40
Next storey below	25	30	50
All succeeding storeys	25	30	50
Beams and girders carrying 300 sq. ft. and over of floor area	0	15	15

19. In the case of buildings subject to heavy shocks the live load shall be calculated in such manner as the surveyor determines.

Wind Loading.

20. (1) All buildings or parts of buildings exposed to wind pressure shall be designed to resist safely all wind loads both during erection and after completion, in accordance with the following:—

I. For portions of buildings above 100ft. level, and all towers, tanks, parapets and erections on or above the roof the maximum pressure shall be assumed in the design of the section above the 100ft. level, and in design of all towers, tanks and parapets above the roof level of a building of any height, except that a pressure of less than 20lb. per square foot shall not be used:

II. The pressure to be assumed on portions of a building between its 100ft. and 50ft. levels shall not be less than 75 per cent. of the maximum except that a pressure of less than 15lb. per square foot shall not be used:

III. The pressure to be assumed on portions of a building between its 50ft. level and the ground level shall not be less than 50 per cent. of the maximum, except that a pressure of less than 10lb. per square foot shall not be used.

The maximum wind pressure on any building shall, unless otherwise stated, be deduced from the formula:—

$$P = \frac{V^2}{300}$$

Where P = pressure in lb. per sq. ft.

V = the maximum velocity of wind in miles per hour at the centre where the building or structure is to be erected.

(2) Light structural steel buildings of the machine shop class with large openings in one or more elevations shall be designed to resist the stresses due to internal wind pressure and suction on the leeward elevation in addition to those due to the external wind pressure on the windward elevation.

(3) For members carrying combined stress due to wind and other loads, and for members carrying wind only in addition to their own dead load, the working stress may be increased 33⅓ per cent., provided the section thus found is not less than that required for all loads other than those due to wind.

(4) The values of wind velocity to be assumed in calculating pressure shall be taken as 80 miles per hour in Adelaide, or based upon data of maximum wind velocities in other localities.

SCHED. II. PART III.

PART III.

MATERIALS.

21. Materials of good quality shall be used.

Bricks.

22. Bricks shall be good, hard and well burnt.

23. Old bricks shall be thoroughly cleaned and be free from salt damp before use in any building.

24. Bricks shall be thoroughly soaked with water before use in any building.

25. Blocks or bricks of sand, lime, cement or other material shall not be used in the construction, erection, or alteration of any building without the written sanction of the surveyor.

Sand.

26. Sand used for any purpose within the scope of this Act shall be in accordance with the Australian Standard Specification (No. CA. 2.).

Lime.

27. Lime shall be thoroughly and freshly burnt, of good quality, and, unless ground, properly slaked before it is mixed with the sand or aggregate.

Lime Mortar.

28. Lime mortar shall be made of one part of lime and not more than three parts of sand measured dry by volume. Mortar gauged one part of cement to five or less parts of sand measured dry by volume may be substituted for lime mortar.

Portland Cement.

29. Portland cement shall comply with the Australian Standard Specification (No. A. 2).

Cement Mortar.

30. 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 initial setting has commenced. The cement and sand shall be measured dry by volume and thoroughly mixed before adding water. Wherever the term "cement mortar" is used in this schedule it shall mean mortar made and used in accordance with the requirements of this regulation.

Concrete.

31. (1) Concrete for use as reinforced concrete shall be as provided by the Australian Standard Specification for concrete in building (No. CA. 2).

(2) Concrete for foundations, footings, or solid walls not less than 9in. thick, or for any massed work not subject to stresses other than compressive, and in which reinforcements are not necessary for stability, shall be composed of one part of cement, not more than three parts of sand, and not more than five parts of other aggregate approved by the surveyor of gauge dimensions not exceeding 2in.

(3) Concrete for any purpose not otherwise specified, such as backings of walls or floors on top of filling, shall be composed of one part of cement, not more than three parts of sand and not more than four parts of other aggregate approved by the surveyor of gauge dimensions not exceeding $\frac{3}{4}$in.

Lime Concrete.

32. Lime concrete may be used for foundations of buildings of the domestic class of two storeys or less in height. The lime concrete shall be composed of one part by measure of hydraulic lime, not more than two parts of sand and not more than four parts of other aggregate approved by the surveyor of gauge dimensions not exceeding 2in.

Concrete Used as Fireproofing.

33. Concrete used as fireproofing shall be composed as provided by the Australian Standard Specification (No. CA. 1, Appendix G).

Timber.

34. All structural timber used in any building shall be of good sound seasoned material free from rot, large and loose knots, shakes, or any imperfection whereby the strength might be impaired.

Steel.

35. All structural steel used in members subject to stress, or as reinforcements in concrete, shall comply with the Australian Standard Specification (No. A. 1).

Rivet Steel.

36. Rivet steel shall comply with the Australian Standard Specification (No. A. 1).

Cast Steel.

37. All steel castings shall comply with the Australian Standard Specification (No. B. 27).

Cast Iron.

38. Cast iron shall comply with the Australian Standard Specification (No. B. 26).

Wrought Iron.

39. All wrought iron shall be uniform and fibrous. It shall have an ultimate tensile resistance of not less than 42,000lb. per sq. inch, and an elongation of 18 per centum in 8in. when tested in small test pieces.

New Materials and Methods of Construction.

40. Any new materials or methods of construction, which may be approved by the surveyor as being equal or superior to those provided, may be permitted.

PART IV.

PART IV.

SAFE LOADS AND TESTS OF MATERIALS AND CONSTRUCTION.

Safe Loads, Etc.

41. (1) Safe loads for soils and for piles shall be as specified in Part V. of this schedule.

(2) The safe bearing load for brickwork and masonry, other than in isolated piers, shall be taken at 8 tons per sq. ft. when lime mortar is used and at 13 tons per sq. ft. when cement mortar is used. The above pressures may be exceeded by an amount up to 20 per cent. in all cases where the increased pressure is only of a local nature, as at girder bearings.

(3) The safe bearing load for ashlar masonry shall be taken at 8 tons per sq. ft. when lime mortar is used; and 15 tons per sq. ft. when cement mortar is used; in the case of granite or basalt, 22 tons per sq. ft. when cement mortar is used.

(4) In isolated brick piers without proper lateral supports the stresses mentioned in paragraph (3) may be allowed in piers of a slenderness ratio

$$\frac{\text{height L}}{\text{Least dimension D}}$$

not exceeding 6. For higher slenderness ratios the stresses shall be reduced as set out hereunder:—

Value of $\frac{L}{D}$	Percentage Reduction in Stress from that given above.
8	20
10	40
12	60

An isolated brick or masonry pier if in cement mortar shall not have a slenderness ratio higher than 12 or be of a less width than 9in., and if in lime mortar shall not have a slenderness ratio higher than 8 or be of less width than 9in.

(5) The safe bearing load for concrete in foundations, when cement is used, shall be taken at 15 tons per sq. ft. The bearing load for concrete shall be taken as 20 tons per sq. ft., when the proportions are one part of cement, two parts of sand, and four parts of broken stone or other aggregate not exceeding 2in. approved by the surveyor.

(6) The safe bearing load for lime concrete shall be taken at 6 tons per sq. ft.

(7) The safe bearing load for rolled steel beams without wall plates shall be 250lb. per sq. in. of bearing surface on cement concrete. The safe bearing load for rolled steel beams, and for columns with properly-designed bearing plates, shall be 500lb. per sq. in. of bearing surface on cement concrete. In cases where the strength of the base plate is not sufficient to withstand safely the maximum value allowed, then the maximum value of 500lb. per sq. in. may be taken over the cross-sectional area of the steel column, and a lesser value over the remaining area of the base depending on the thickness and strength of the plates used.

(8) The actual working stress of iron and steel (except in the cases of pillars set out in Part XIX. of this schedule) shall not exceed in tons per square inch that given in the following table:—

	Tension.	Compression.	Shearing.	Bearing.
	Tons.	Tons.	Tons.	Tons.
Cast iron	1½	6	1½	8
Wrought iron	5	5	4½	8
Mild steel	8	8	6½	10
Cast steel	6	10	6	10

(9) Allowable stresses in timbers shall be as follows:—

	Lb. per Square Inch.	
	Oregon.	Jarrah.
Bending—		
Extreme fibre	1,400	2,000
Shearing—		
Parallel to grain	170	200
Longitudinal shear in beams	110	130
Compression—		
Perpendicular to grain	310	400
Parallel to grain	1,200	1,500

Allowable stresses in other timbers shall be as approved by the surveyor.

Factors of Safety.

42. Where the unit stress for any material is not prescribed in these regulations, the relation of maximum allowable unit stress to ultimate stress shall be as 1 to 3·5 for mild or structural steel subjected to tension or transverse stress, as 1 to 6 for cast iron other than that in columns, as 1 to 8 for cast iron in columns and as 1 to 5 for timbers. Factors of safety for other metals and materials shall be determined by the surveyor.

Proof of Quality.

43. For the purpose of the supervision of the construction of a building the surveyor shall, if required by him, be furnished with reasonable proof as to the quality of the materials used, and if not furnished with such proof to his entire satisfaction, or for any other reason, may cause any tests he considers necessary to be made at the expense of the builder.

Tests on Buildings.

44. (1) If at any time during the construction of any building, or within three months after the completion of the reinforced concrete construction, it is found necessary to test any part by reason of any sign of weakness or faulty work appearing in the construction, the builder or other person causing or directing the work to be executed, shall make such tests as the surveyor may consider necessary. In the event of the surveyor being satisfied that the construction is not as required by the provisions of these regulations, it shall be reconstructed and reinstated in accordance therewith.

(2) A period of not less than six weeks shall elapse between the date of construction and the date of test in the case of a concrete construction unless the builder signifies to the surveyor in writing that he wishes the test to be made at any earlier period, when the test shall be made at the time desired by the builder and the result of the test considered as if the said period of six weeks had elapsed.

Test Loads.

45. (1) The total deflection of beams or slabs freely supported and uniformly loaded and subject to the permissible working stresses shall not exceed 1/600th of the span when the span is 20 times the effective depth, and shall be in proportion for other ratios of span to depth and for other conditions of end-fixing and stress and loading.

(2) The superimposed test load on any floor, roof, or other structure, shall be not more than 1½ times the superimposed load for which the floor, roof or other structure has been designed. The superimposed test load on any beam, slab or other similar member which has been exposed to frost during the first week of hardening, shall be not less than 1½ times the superimposed load for which the beam, slab or other member has been designed.

Test Bars.

46. Test bars of wrought iron and steel shall have a sectional area in accordance with the Australian Standard Specification (No. A. 1).

Precaution for Tests.

47. All concrete tests shall be made in accordance with the Australian Standard Specification (No. CA. 2). Test blocks of concrete shall not be subjected to jarring, and shall not be moved after moulding until 24 hours have elapsed. These test blocks, however, must be cured in accordance with the Australian Standard Specification (No. CA. 2).

SCHED. II. PART V.

PART V.

FOUNDATIONS, FOOTINGS, SOILS AND EXCAVATIONS.

Excavations.

48. All excavations for buildings shall be properly guarded and protected and where necessary shall be sheet-piled so as to prevent the adjoining earth from collapsing.

Bearing Capacity of Soils.

49. (1) In cases in which the sustaining power of the soil has not been tested, the bearing capacity per square foot shall be limited to:—

	Tons.
Firm clay	3
Hard clay	4
Firm dry sand	3
Compact sand	4
Sound shale rock	10 to 15
Hard rock	20

(2) In no case shall the actual sustaining power of the soil be exceeded if it has been tested.

(3) When the building owner considers that the soil will safely carry a load greater than that shown in the above table, the building owner may require a test, at his own expense, to be made to determine the safe bearing capacity. The test shall be made under the supervision of the surveyor in accordance with the Australian Standard Specification (No. CA. 1) as follows:—

Load Tests for Bearing Value.—In testing foundations the area loaded shall not be less than 18in. square and shall be made at the proposed level of the bearing surface. The shaft of excavation shall be at least 2ft. larger all round than the bearing plate.

Test for Working Bearing Pressure.—The working load shall be applied for 48 hours and there shall be no appreciable sinking in the last 24 hours. The working load shall be increased 50 per cent. at the end of 48 hours and there shall be no appreciable settlement at the end of six days.

Test to Ascertain Maximum Bearing Pressure.—The load shall be applied by increments of ½ ton per square foot every 24 hours. After the first 24 hours the permissible bearing pressure shall be taken as two-thirds of the pressure at which there is no appreciable settlement, after making due provision for the ratio of the test area to the actual footing area to be employed, the uniformity or non-uniformity of the subsoil and the class of building concerned.

(4) If the surveyor is of the opinion that the soil will not safely carry a load of 3 tons to the square foot, he may serve a notice, in writing, upon the person carrying out any building operations to use such lower bearing pressure as is stated by the surveyor in the notice, or to suspend such operations. If the lower bearing pressure so stated is not acceptable to the building owner, building operations shall be suspended until a test has been made under the supervision of the surveyor in accordance with paragraph (3) of this regulation, and the cost of the test shall be borne by the building owner.

(5) Any interested person may, if he so desires, have tests for the bearing capacity of the soil conducted by the surveyor at his, the interested person's, own expense on land of which he is the owner, or on land the owner of which has granted permission for the test to be made. Applications for such tests shall be made to the surveyor and the results of any such test shall be deemed as indicating the bearing capacity of the soil tested in respect to all future building operations on the tested site, provided that such tests are carried out at the level and on the stratum on which footings of the intended structure will rest unless circumstances subsequently arise which may be deemed to have increased or decreased the bearing capacity of the soil.

Foundations.

50. Every building shall have foundations of solid ground or artificial foundations of brick, stone, concrete, reinforced concrete, steel or iron grillage encased in concrete, or piles. Lime concrete may be used for foundations of buildings of the domestic class of two storeys or less but for no other buildings.

Filling.

51. Sites under buildings shall be elevated where necessary by filling approved by the surveyor so as to be and remain at a higher level than the adjoining surface.

Pile Foundations.

52. Should pile foundations be used, borings of the soil shall be made first to determine the position of a suitable underlying stratum of hard material and the piles shall be driven to reach such stratum when practicable, and, if not practicable, in accordance with the following formula:—

(*a*) For drop hammer—

$$P = \frac{2 W h}{s + 1}$$

(*b*) For single-acting steam hammer—

$$P = \frac{2 W h}{s + 0{\cdot}1}$$

(*c*) For double-acting steam hammer—

$$P = \frac{2 h (W - a p)}{s + 0{\cdot}1}$$

P = Safe load in pounds.
W = Weight of hammer in pounds.
h = Fall of hammer in feet.
a = Effective area of piston in sq. inches.
p = Mean effective steam pressure in lb. per sq. inch.
s = Penetration or sinking in inches under the last blow, assumed to be sensible and at an approximately uniform rate. The sinking "s" must be measured only when there is no visible rebound of the hammer, and only when the last blow is struck upon practically sound wood.

The piles must not be placed closer than 3ft. centres. Maximum load must not exceed 50 tons per pile. When the pile is driven on to solid stratum, the maximum load must not exceed the safe load for a timber column of the same dimensions as the pile.

53. The heads of all piles are to be protected against splitting when they are being driven and after having been driven the piles are to be sawn off to a uniform level and covered with a grillage of hardwood timber, concrete, concrete and steel, iron or stone. The iron or steel shall be thoroughly encased in concrete to prevent rust. Timber grillage will not be permitted without the special approval of the surveyor.

54. When artificial foundations are necessary below the footings, they shall be of such materials and form as will distribute the loads on to the supporting medium.

Footings.

55. Every wall, pier, stanchion, or column shall have a footing unless supported on a girder, solid rock or concrete to the satisfaction of the surveyor. Every exposed footing shall be weathered.

Width of Footings.

56. The width of the bottom of the footing of every wall shall be such that the pressure on the foundations shall not exceed their safe bearing capacity, but shall in no case be less than 1½ times the thickness of the wall at its base. 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 one-half the thickness of the wall at its base, but not less than 6in. 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. If reinforced concrete is substituted, the minimum depth shall be 9in., except for walls of buildings of the domestic class not higher than 12ft. nor thicker than 9in. when constructed on soil of which the bearing capacity is not less than 3 tons per square foot, when the minimum depth shall be 6in. Reinforced concrete beams may be substituted for footings provided that the requirements of Part VIII. of this schedule are complied with and the safe bearing capacity of the foundations is not exceeded.

Projection Underground.

57. Footings or artificial foundations shall not extend beyond the street alignment except as follows:—

I. If the top of the footings or foundations is less than 10ft. below the level of the ground, the foundations or footings may extend 12in. beyond the street alignment:

II. If the top of the footings or foundations is 10ft. or more below the level of the ground, the footings or foundations may extend 27in. beyond the street alignment plus 1in. for every foot in excess of 10ft. by which the top of the footings or foundations is more than 10ft. below the level of the ground but in no case shall they extend more than 48in. beyond the street alignment.

In every case the top of the footings or foundations which extend beyond the street alignment shall be at least 12in. below the level of the footpath.

Underpinning.

58. The underpinning of walls shall be built with brick or stone to the required thickness and bedded in cement mortar, and shall have a footing as required for new walls.

Walls of Basements.

59. Walls of basements shall, in cases required by the surveyor, be increased in thickness and strength as required by the surveyor so as to act as retaining walls, and shall be built with a damp-proof course as set out in regulation 62 of this schedule.

SCHED. II. PART VI.

PART VI.

WALLS.

60. Every building, except in cases otherwise specified in this schedule, or when otherwise approved by the surveyor, shall be enclosed with external or party walls constructed of brick, stone, or other hard and incombustible substances of thicknesses required for walls in this Part, and the footings shall rest on the solid ground or upon concrete, or upon other solid substructures.

Damp-Proof Course.

61. The walls of every new building shall have a proper and continuous damp-proof course of asphalt, or of other durable material impervious to moisture, in every wall at a height of not less than 6in. above the surface of the ground adjoining such wall. When a damp-proof course is stepped, no vertical section shall exceed 2ft. 3in. in height.

Basement Walls.

62. When any part of a storey of a new building is intended to be below the level of the surface of the ground immediately adjoining the exterior of such storey and so that the ground shall be in contact with the exterior of the walls thereof, such storey, 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 not less than 2in., and not more than 4½in., extending from the base of such walls to the height of 6in. above the surface of the ground immediately adjoining the exterior of

such storey. The proper and continuous damp-proof course of asphalt, or of other durable material impervious to moisture, shall be inserted in every such hollow wall at the base of such wall, and at the level of the top of the cavity.

Walls to be Bonded.

63. Every wall constructed of brick, stone, or other similar substance, shall be properly bonded and solidly put together with mortar, and no part of any such wall shall overhang any part underneath unless provision is made for counteracting the effect of the projection. All return walls shall be properly bonded together.

Horizontal Courses.

64. All stones, bricks, blocks, etc., used in the construction of any wall shall be laid in horizontal beds or courses, unless the walls are constructed of a thickness at least one-third greater than specified elsewhere in this schedule, when the beds or courses need not necessarily be horizontal.

Facing to Walls.

65. Ashlar facing shall not be less than 4in. thick 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 if the facing is constructed to bond into the backing, or if built not less than 4½in. in thickness as the outer portion of hollow walls as prescribed. Properly constructed veneer facing shall be permitted.

Hollow Walls.

66. (1) Notwithstanding the provisions of this schedule the walls of buildings and the basement walls of buildings may be constructed as hollow walls in accordance with the following:—

(*a*) The inner and outer parts of the wall shall be separated by a cavity which shall throughout be of a width not exceeding 4½in.:

(*b*) The inner and outer parts of the wall shall be securely tied together with suitable bondings, ties of adequate strength formed of galvanized iron, glazed stoneware, or other approved material. Such ties shall be placed at distances apart not exceeding 2ft. 3in. horizontally, and 13½in. vertically:

(*c*) If of brick, the thickness of the outer part of the wall shall throughout be not less than 4½in. exclusive of any applied facings and the thickness of the inner part not less than 4½in., or if in cement mortar 2¾in. exclusive of any applied facings:

(*d*) Unless strengthened to the satisfaction of the surveyor by a partition wall, fire-place, or projecting pier, no hollow wall which is less than 9in. in thickness shall exceed 240 sq. ft. in superficial extent and no hollow wall which is more than 9in. but not more than 13½in. in thickness shall exceed 300 sq. ft. in superficial extent:

(*e*) 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 excepting that walls one storey in height may be 7¼in. in thickness:

(*f*) Nothing herein contained shall prevent a cavity not more than 1in. across being filled in with materials impervious to moisture, in which case the bonding ties may be omitted.

(2) Subject to compliance with the provisions of paragraph (1) of this regulation (other than sub-paragraphs (*c*) and (*e*) thereof) the inner part of any such hollow wall (other than a party structure or an enclosure wall to a lift or staircase) may be built as follows:—

(*a*) The inner part may be brick on edge, hollow terra cotta tiles, or gypsum blocks not less than 2¾in. thick built in cement mortar:

(*b*) The inner part may be compressed plates of straw or other composition not less than 2in. thick approved by the surveyor. The plates shall be pre-rendered with cement mortar not less than ½in. thick on the side nearest to the brick part of the wall and rendered on the other side with cement mortar or lime mortar not less than ½in. thick. No wooden studding shall be used in the construction and the live and dead loads shall be supported independently of the compressed plates:

(*c*) The inner part may be concrete slabs approved by the surveyor not less than 2in. thick re-inforced with expanded metal or wire mesh wired to steel rods in a manner approved by the surveyor, rendered in position in cement mortar and fixed to the approval of the surveyor.

Hollow Blocks.

67. (1) Hollow blocks of cement concrete, tile or other material, in every case approved by the surveyor, may be used for the construction of external walls (other than party walls) of buildings one storey in height if the thickness for walls

required by this Part of this schedule does not exceed 9in.: Provided that the method of using hollow concrete blocks and blocks which require to be built up of special sections shall be subject to the approval of the surveyor.

(2) Cement concrete blocks shall not be used green, and, unless special permission of the surveyor is obtained, no blocks shall be used within fourteen days from the date of the construction thereof. The blocks shall be bedded and jointed in cement mortar.

(3) Joists and beams shall not be let into walls of hollow blocks unless proper provision has been made for carrying them.

Length of Walls.

68. Walls shall be 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 another such return wall, being external, party, cross, or divisional walls, of the thickness required under this Part of this schedule, bonded into the walls so deemed to be divided.

Cross-Walls.

69. (1) The thickness of a cross-wall shall be two-thirds of the thickness required for an external or party wall of the same dimensions, and belonging to the same class of building, but shall never be less than 9in. if of brick or stone or less than 6in. if of cement, and no wall shall be deemed to be a cross-wall unless it is carried up to the plate level of the topmost storey, and unless in each storey 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 floor storey, and is supported by piers to the satisfaction of the surveyor, it shall be deemed to be a cross-wall in accordance with the provisions of this Part of this schedule.

(2) 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 and belonging to the same class of building.

Thickening of Walls.

70. A wall shall not be thickened without the sanction in writing of the surveyor.

Buildings of the Domestic and Warehouse Classes.—Thicknesses of Walls.

71. (1) Subject to paragraph (2) of this regulation and except in the circumstances mentioned in regulation 66 of this schedule, all external and party walls of brick or stone in buildings of the domestic and warehouse classes shall be of the thicknesses specified hereunder:—

Buildings of the Domestic Class.

In Lime Mortar—

(*a*) In single storey buildings, and in the topmost storey of buildings exceeding one storey in height, the thickness of walls shall not be less than 9in.

(*b*) In buildings more than one storey in height, but not exceeding three storeys, the thickness of the walls in all storeys next below the topmost storey shall not be less than 13½in.

(*c*) In buildings not less than three storeys in height, but not exceeding five storeys, the thickness of walls in the topmost three storeys shall be as set out in subdivision (*b*) and in all storeys next below the topmost three storeys the thickness of the walls shall not be less than 18in.

(*d*) In buildings not less than five storeys in height, but not exceeding eight storeys, the thickness of walls in the topmost five storeys shall be as set out in subdivision (*c*) and in all storeys next below the topmost five storeys the thickness of walls shall not be less than 22½in.

(*e*) In buildings not less than eight storeys in height, but not exceeding ten storeys, the thickness of walls in the topmost eight storeys shall be as set out in subdivision (*d*) and in all storeys next below the topmost eight storeys the thickness of walls shall not be less than 27in.

(*f*) In buildings exceeding ten storeys in height the thickness of walls in the topmost ten storeys shall be as set out in subdivision (*e*) and in all storeys next below the topmost ten storeys the thickness of walls shall not be less than 31½in.

In Cement Mortar—

(i.) In single storey buildings, and in the topmost storey of buildings exceeding one storey in height, the thickness of the walls shall not be less than 9in.

(ii.) In buildings more than one storey in height but not exceeding three storeys the thickness of walls in all storeys next below the topmost storey shall not be less than 13½in.

(iii.) In buildings not less than three storeys in height, but not exceeding six storeys, the thickness of walls in the topmost three storeys shall be as set out in subdivision (ii.) and in all storeys next below the topmost three storeys the thickness of the walls shall not be less than 18in.

(iv.) In buildings not less than six storeys in height, but not exceeding nine storeys, the thickness of walls in the topmost six storeys shall be as set out in subdivision (iii.) and in all storeys next below the topmost six storeys the thickness of walls shall not be less than 22½in.

(v.) In buildings exceeding nine storeys in height the thickness of walls in the topmost nine storeys shall be as set out in subdivision (iv.) and in all storeys next below the topmost nine storeys the thickness of walls shall not be less than 27in.

Buildings of the Warehouse Class.

In Lime Mortar—

(*a*) In single storey buildings and in the topmost storey of buildings exceeding one storey in height, the thickness of the walls shall not be less than 9in.

(*b*) In buildings more than one storey in height, but not exceeding three storeys, the thickness of the walls in all storeys next below the topmost storey shall not be less than 13½in.

(*c*) In buildings not less than three storeys in height, but not exceeding five storeys, the thickness of walls in the topmost three storeys shall be as set out in subdivision (*b*) and in all storeys next below the topmost three storeys the thickness of the walls shall not be less than 18in.

(*d*) In buildings not less than five storeys in height, but not exceeding seven storeys, the thickness of walls in the topmost five storeys shall be as set out in subdivision (*c*) and in all storeys next below the topmost five storeys the thickness of the wall shall not be less than 22½in.

(*e*) In buildings not less than seven storeys in height, but not exceeding nine storeys, the thickness of walls in the topmost seven storeys shall be as set out in subdivision (*d*) and in all storeys next below the topmost seven storeys the thickness of the walls shall not be less than 27in.

(*f*) In buildings exceeding nine storeys in height the thickness of walls in the topmost nine storeys shall be as set out in subdivision (*e*) and in all storeys next below the topmost nine storeys the thickness of walls shall not be less than 31½in.

In Cement Mortar—

(i.) In single storey buildings and in the topmost storey of buildings exceeding one storey in height, the thickness of the walls shall not be less than 9in.

(ii.) In buildings more than one storey in height, but not exceeding three storeys, the thickness of walls in all storeys next below the topmost storey shall not be less than 13½in.

(iii.) In buildings not less than three storeys in height, but not exceeding five storeys, the thickness of walls in the topmost three storeys shall be as set out in subdivision (ii.), and in all storeys next below the topmost three storeys the thickness of the walls shall not be less than 18in.

(iv.) In buildings not less than five storeys in height, but not exceeding eight storeys, the thickness of walls in the topmost five storeys shall be as set out in subdivision (iii.) and in all storeys next below the topmost five storeys the thickness of the walls shall not be less than 22½in.

(v.) In buildings exceeding eight storeys in height the thickness of walls in the topmost eight storeys shall be as set out in subdivision (iv.), and in all storeys next below the topmost eight storeys the thickness of walls shall not be less than 27in.

(2) The thickness of walls less than 40ft. in length in buildings of the domestic class and of walls less than 30ft. in length in buildings of the warehouse class may be reduced by 4½in. in thickness in all storeys below the topmost storey in buildings of two storeys and upwards in height.

(3) Walls in single storey buildings of the domestic class and curtain walls may be hollow of the thicknesses set out in regulation 66 of this schedule.

(4) The ratio of thickness to height in any portion of a wall for any storey shall not exceed the following:—

Class of Building.	Walls Built in—	
	Lime Mortar.	Cement Mortar.
Domestic	1 to 18	1 to 20
Warehouse	1 to 16	1 to 18

Notwithstanding the above, the allowable stresses set out in regulation 41 of this schedule are not to be exceeded.

Divisional and Partition Walls.

72. (1) Divisional walls in buildings of the domestic and warehouse class may be constructed of brick or stone, or of any other incombustible material which is capable of supporting the load carried by the wall.

The thickness of such divisional walls shall be as follows:—

(*a*) When stayed in both lateral directions at each storey to external or party walls by means of fire-resisting floors the divisional walls shall be of such thicknesses as will safely withstand the stresses which may be conveyed to them.

(*b*) In any other case the divisional walls shall be sufficiently thick for any part of such walls to withstand safely the stresses which may be conveyed to them, but shall be of the following minimum thicknesses:

If of brick or stone in cement mortar:—

	Brick.	Stone.
Topmost storey	2¾in.	4in.
Next storey below	4½in.	8in.
Three storeys next below	9in.	12in.
Three storeys next below topmost five	13½in.	16in.

For additional storeys an increase must be made of 4½in. for each three storeys including the basement.

If of brick or stone in lime mortar:—

	Brick.	Stone.
Topmost two storeys	4½in.	8in.
Two storeys next below these	9in.	12in.
Two storeys next below topmost four	13½in.	16in.

For additional storeys an increase of 4½in. must be made for each two storeys including the basement.

If the walls of a building of two or more stories are constructed of "Polyzoal" coralline limestone the minimum width of the divisional walls of the topmost storey shall be 5in.

If of reinforced concrete:—

The minimum thickness of reinforced concrete divisional walls shall be 3in.

(2) Partition walls (other than party structures and enclosure walls to lifts and staircases) may be built of—

(*a*) bricks on edge, hollow terra cotta tiles or gypsum blocks not less than 2¾in. thick built in cement mortar;

(*b*) compressed plates of straw or other composition approved by the surveyor not less than 2in. thick rendered on each side with not less than ½in. cement mortar or lime mortar and secured in metal frames;

(*c*) concrete slabs approved by the surveyor not less than 2in. thick reinforced with expanded metal or wire mesh wired to steel rods in a manner approved by the surveyor, rendered in position in cement mortar and fixed to the approval of the surveyor.

Partition walls which separate passages from offices and partition walls in hotels, boarding-houses, apartment houses, clubs, sanatoriums or similar institutions may be constructed as provided in subdivision (*b*) or (*c*) hereof but with plates 4in. thick or as provided in subdivision (*a*) hereof.

Partition walls which are party structures or enclosure walls to lifts or staircases shall conform to the provisions of the seventh schedule.

Garages, Wood Sheds, Tool Houses.

73. Notwithstanding any of the provisions of this schedule relating to walls of buildings of the domestic class, single storey garages, wood sheds or tool houses, not exceeding three squares in area, may be built with walls of 4½in. brickwork in cement mortar stiffened with piers 9in. x 9in. at intervals not exceeding 6ft.

Additional Storeys in Certain Cases.

74. Subject to the special approval of the surveyor, in the case of buildings to which approval was given prior to the commencement of this Act, additional storeys constructed

wholly of reinforced concrete, and with a flat roof, or pitched roof not exceeding one in six, may be added to a building irrespective of the thicknesses of the existing walls if the surveyor is satisfied that the existing walls and foundations will carry the additional load, or that suitable provision has been made to carry the additional load, and the additional height will not exceed the maximum height permitted for such buildings. The walls of additional storeys may be framed with sloping sides if constructed in accordance with Part VII. or Part VIII. of this schedule.

Use of "Polyzoal" Coralline Limestone.

75. (1) Except in the case of divisional walls (where the thickness of walls shall be as provided by regulation 72 of this schedule), where in this Part or in regulation 204 it is provided that brick of 4½in. thickness or less may be used, "Polyzoal" coralline limestone of 4in. thickness may be used, and where in this Part or in regulation 204 it is provided that brick of any multiple of 4½in. thickness may be used, "Polyzoal" coralline limestone of the same multiple of 4in. thickness may be used.

(2) When any such limestone is used in the construction of any unprotected external wall of a habitable room, the wall shall be built as a hollow wall.

SCHED. II. PART VII.

PART VII.

STEEL FRAME CONSTRUCTION.

General.

76. Any person who erects, constructs or alters a building in which frame construction is used either wholly or in part, shall comply with the following provisions insofar as the frame portions of the building are concerned, and shall deposit with the surveyor (in addition to the plans and working drawings required to be supplied under section 8 of this Act) details of construction of all the parts of the buildings, together with a detailed copy of all calculations of the stresses and particulars of material and a general description of the building, and shall not erect or alter any portion of the building until the details and calculations for that portion have been approved by the surveyor.

The regulations in Part VI. of this schedule shall apply to buildings wholly or partly of frame construction insofar as they do not conflict with regulations in this Part.

Skeleton Framing.

77. The skeleton framing in any wall shall be capable of sustaining safely, independently of any masonry or brickwork the whole weight bearing upon the framing, including the weight of the wall, and the due proportion of any floors and roofs bearing thereon, together with the live load on such floors and roofs.

Composite Framing.

78. When a mild steel frame is used, then the whole of the frame shall be of mild steel with the exception of pillars, which may be of cast iron or cast steel, and when a reinforced concrete frame is used, then the whole of the frame shall be of reinforced concrete. When circumstances make it advisable or necessary the surveyor may approve of the use of composite construction.

Horizontal Members.

79. Except when otherwise approved by the surveyor, girders to support walls shall be fixed at or within 4ft. of the floor line of each storey.

Connection.

80. In all cases proper mechanical connection to resist all stresses must be made between the vertical and horizontal members of the frame.

Curtain Walls.

81. (1) Curtain walls may be built of stone, brick, concrete, terra cotta or other materials approved by the surveyor. If the height of a curtain wall supported on the horizontal framework of a building exceeds 24ft., or the area between the adjacent vertical or horizontal framework exceeds 480ft. super., it shall be not less than 13½in. solid in thickness. Curtain walls of less dimensions may be not less than 9in. thick or may be hollow and of the dimensions and kinds set out in regulation 66 of this schedule.

(2) All curtain walls shall be built in cement mortar, and shall be bedded close up to the frame and all joints shall be made full and solid.

(3) Curtain walls of reinforced concrete may be used as provided for pursuant to Part VIII. of this schedule.

(4) In this Part "curtain wall" means a wall built between the vertical and horizontal framework of a building, and which does not carry any load other than its own dead weight.

Party Walls.

82. Curtain walls forming party walls shall comply with the provision of regulation 71 of this schedule.

Facing of Walls.

83. Nothing in these regulations shall prevent the use of stonework, ashlar facing, or other approved facing to buildings of frame construction, provided it conforms with the provisions of regulation 65 of this schedule.

Self-supporting Walls.

84. Walls built in between columns or piers of a frame structure and not supported on steel or iron girders or reinforced concrete beams shall comply with the provisions of regulation 71 of this schedule. Any such walls shall be built in cement mortar, and shall not be used for bearing walls unless in compliance with Part VI. of this schedule.

Live Loads.

85. In designing buildings for industrial or commercial purposes where the loads exceed those laid down in Part II. of this schedule the actual live load caused by the use to which the building or part thereof is to be put, shall be used in the design of the building or part thereof. Special provision shall be made for machine or apparatus loads when the machine or apparatus causes greater load intensities than those specified in Part II. of this schedule.

Live Load Reductions.

86. In designing beams, girders, columns and footings the percentage reductions in total live load set out in Part II. of this schedule may be allowed.

Impact.

87. In the design of all structures carrying machinery, cranes, conveyors, or any other apparatus liable to set up vibration or to cause impact effects, 25 per cent. or such greater allowance as the circumstances may require shall be added to the stresses due to the effect of the static loads.

Temperature Effect.

88. In special cases such as long span roof trusses provision shall be made for expansion and contraction.

Erection or Temporary Loading.

89. The maximum stress imposed on any part or member of a structure during course of erection shall not be more than 25 per cent. in excess of the working stress specified in this schedule.

Stresses.

90. The several parts of the structure shall be proportioned so that the maximum working stresses, either uniform or on extreme fibres, will not exceed the figures set out in this clause.

If, however, any steel is used for which no working stress figure is provided in this Part, the maximum working stress for the member in which such steel is used shall be determined by dividing the lowest ultimate strength of the steel, as determined by not less than three actual tests, by the factor of safety which shall not be less than 3·5.

	lb. per sq. in.
Axial Tension—	
Structural steel on net section (bolts on area at bottom of thread)	18,000
Rivets (on nominal diameter	9,000
Bending on Extreme Fibres—	
Tension	18,000
Compression—Lateral deflection prevented	18,000
Lateral deflection not prevented (*See* regulation 107 of this schedule).	
Pins	22,000
Axial Compression—	
On gross section of columns (*See* regulation 98 of this schedule).	
Shearing on (*See* regulation 126 of this schedule)—	
Shop rivets	13,500
Turned bolts and pins	12,000
Field rivets—Power driven	12,000
Hand driven	10,000
Black bolts (where permissible—*See* regulation 119 of this schedule).	8,000
Webs on the gross area—Plate girders	11,000
Rolled shapes	12,000

Bearing on—	Where Single Shear Occurs lb. per sq. in.	Where Double Shear Occurs lb. per sq. in.
Pins and shop rivets	22,500	27,000
Turned bolts	20,000	24,000
Field rivets—		
Power driven	20,000	24,000
Hand driven	16,400	20,000
Black-bolts	13,000	16,000
Expansion rollers (in which d = diameter of roller in inches)	600 d lb. per lineal inch (where d shall be not less than 4in.)	
On plane faced or rolled surfaces	27,000lb. per sq. in.	

Castings.

	lb. per sq. in.
Direct Compression—	
Steel castings	16,000
Iron castings	10,000
Bending on Extreme Fibres—	
Iron castings—	
Tension	3,000
Compression	10,000
Steel castings	16,000

Minimum Section.

91. The minimum thickness of any steel carrying stress and exposed to outside atmosphere shall be ¼in. This provision shall not apply to light structural work such as skylights, light single storey buildings of a temporary or portable nature and like structures, rolled structural shapes and packings.

Sectional Tension Members.

92. The effective net sectional area shall be taken for all tension members.

Where countersunk rivets are used, the full loss of section due to the countersink shall be accounted for in determining the net section.

In making deductions for holes when calculating the net sectional area of tension members, the actual diameter of each drilled or reamered hole, and the actual diameter of each punched hole plus one-sixteenth of an inch shall be taken.

The effective sectional area of tension members formed of angle, or tee bars connected by one leg, shall be the net sectional area of the riveted leg plus one-half the area of the free leg. For channels connected at their ends by their webs the area shall be that of the web plus half that of the outstanding legs. Pin connected tension members shall have the section through the pinhole 25 per cent. greater than the least net section of the member and a net section at the back of the pinhole equal to 75 per cent. of that required through the pinhole.

Sectional Areas, Compression Members.

93. The gross sectional area shall be taken for all compression members provided that in computing the area of a section through open holes, or holes for black bolts, the net area only shall be considered.

Shearing Areas.

94. The shearing stress on the web plates of plate girders shall be calculated on the gross sectional area of the full depths of the plate. For rolled beams and channels, the gross sectional area of the web resisting shearing stress shall be calculated on the full depth of the beam or channel.

Symmetry of Section and Intersection.

95. Members shall preferably be of symmetrical section. All members shall, as far as possible, be symmetrical about the line of resultant stress and all rivets shall be grouped symmetrically about the same line. The neutral axes of intersecting main members shall preferably meet in a common point. If this is not practicable, then the results of eccentricity shall be suitably provided for.

Plates in Compression.

96. No plate used in compression shall have an unsupported width of more than 60 times its thickness and not more than 40 times the thickness of the unsupported material shall be considered as effective section. Column web plates whose thickness is less than one-fortieth of the unsupported width shall be stiffened at intervals not greater than twice the width of the web plates.

Outstanding Flanges.

97. The thickness of the outstanding legs of angles in compression, except when reinforced by plates, shall not be less than one sixteenth of the width of the outstanding legs.

Working Stresses in Columns.

98. (1) The permissible ratio of effective column length to least radius of gyration shall not exceed the following values:

I.	For all columns and for struts forming part of the main structure of a building	150
II.	For subsidiary members in compression ...	240

(2) The working stresses in the shafts of columns and other compression members shall not exceed the following, except as provided in regulation 279 of this schedule.

Ratio of Effective Column Length to Radius of Least Gyration. $\left[\frac{l}{r}\right]$	Working Stresses in Lb. per Sq. In. of Gross Section. (F_1)	Ratio of Effective Column Length to Radius of Least Gyration. $\left[\frac{l}{r}\right]$	Working Stresses in Lb. per Sq. In. of Gross Section. (F_1)
20	16,100	135	5,400
25	15,800	140	5,100
30	15,500	145	4,800
35	15,200	150	4,500
40	14,900		
45	14,500	155	4,300
50	14,100	160	4,100
55	13,700	165	3,800
60	13,200	170	3,600
65	12,700	175	3,400
70	12,100	180	3,300
75	11,500	185	3,100
80	10,900	190	3,000
85	10,300	195	2,800
90	9,700	200	2,700
95	9,100	205	2,600
100	8,500	210	2,500
105	8,000	215	2,400
110	7,500	220	2,300
115	7,000	225	2,200
120	6,600	230	2,100
125	6,200	235	2,000
130	5,800	240	1,900

Intermediate values may be obtained by interpolation.

Effective Column Length.

99. (1) *Effective Length.*—The effective length (l) of a compression member for the purpose of determining allowable axial stress shall be computed as follows:—

(a) Where both ends are held in position and restrained in direction 0.7 of the actual length:

(b) Where both ends are held in position and one end restrained in direction 0.85 of the actual length:

(c) Where both ends are held in position but unrestrained in direction, the actual length:

(d) Where one end is held in position and restrained in direction and the other end is restrained in direction but not held in position, 1.0 to 1.5 times the actual length, depending upon the degree of restraint.

(2) *Actual Length.*—The actual length of a compression member shall be measured between the centres of lateral support. In the case of a compression member provided with a cap or base the point of lateral support shall be assumed to be in the plane of the top of the cap or the bottom of the base.

(3) *Definition of a Restrained End—*

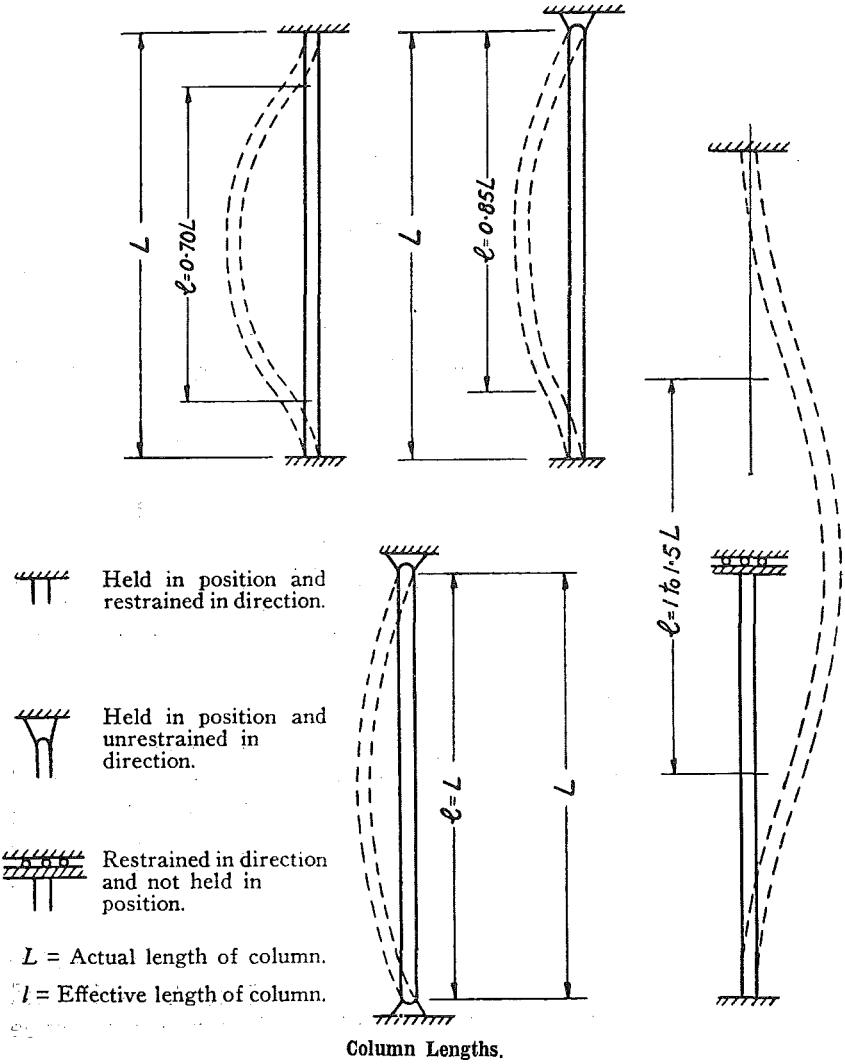
1. *In Direction.*—A column or other compression member may generally be assumed to have its end restrained in direction, provided that the resistance

moment of the restraining member (or members) and its connection is equal to:

(*a*) 0·25 of the resistance moment of the compression member (calculated as a beam with an extreme fibre stress of 18,000 lb. per sq. in.) for values of $\frac{l}{r}$ not exceeding 120.

(*b*) $0{\cdot}25 + 0{\cdot}20 \left\{\frac{l}{r} - 120\right\}$ of the resistance moment for values of $\frac{l}{r}$ exceeding 120, where l = the effective length and r = the radius of gyration of the member about the axis under consideration.

II. *Continuous Members.*—To constitute a restrained end condition for a compression member which is continuous through a point of lateral support, the moment of resistance of the restraining member (or



Column Lengths.

members) and its connection shall not be less than half of the respective values specified in subdivisions (*a*) and (*b*) of paragraph (1).

For a compression member to be regarded as continuous through a splice, the moment of resistance at the cross section of the splice shall be not less than that specified in subdivisions (*a*) and (*b*) of paragraph (1).

III. *Partially Restrained Ends.*—Where compression members are only partially restrained in direction, a proportionate increase in the effective length shall be made.

IV. *Flat Ends.*—A compression member having a "position-fixed" flat or square end capable of distributing the loading uniformly over the entire area of its section may for the purpose of ascertaining the effective length be assumed to have an end connection with a moment of resistance equal to 0.25 of the moment of resistance of the compression member as defined above, and such end may be assumed to be effectively restrained for values of $\frac{l}{r}$ not exceeding 120 or as partially restrained for values of $\frac{l}{r}$ above 120.

The term "restrained" in this regulation refers to restraint against crippling due to axial loading.

Column Splicing.

100. The ends of all pillars shall be a true surface at right angles to the axis.

Except where unavoidable, no joint in a column shall be made except at or near the level of a girder. Splices in compression members shall be situated as near points of lateral support as is reasonably practicable. In columns, due provision for bending moments shall be made in joints subjected to bending.

Solid Steel Slabs for Column Bases.

101. The thickness of solid steel slabs for column bases shall be determined from the following formula:—

$$t = \sqrt{\frac{u \times e^2}{6{,}000}} \quad or \quad = \sqrt{\frac{u \times f^2}{6{,}000}}$$

whichever is the greater.

Where t = the thickness (finished dimension) of the slab in inches.

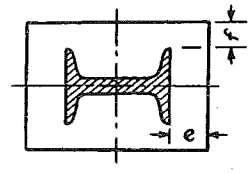
u = the unit pressure per sq. in. on the lower side of the slab.

e = the overhang of slab (see diagram) in inches.

f = the overhang of slab (see diagram) in inches.

In designing solid steel slabs or bloom bases for columns the column shall be assumed as having uniform bearing on the slab over the entire area of the machined end of the column shaft. It shall be assumed that a part of the slab which is the smallest rectangle which will enclose the column cross section will act as a continuation of the column and that the maximum bending moment in the slab will occur at the sides of this rectangle. While these assumptions are empirical, they are considered conservative since for the sake of simplicity in the calculations, various other factors are omitted which, if considered, would materially add to the strength of the slab.

The determining bending moment will occur on that side of the enclosing rectangle for which the overhang "*e*" or "*f*" is greatest.



Lattice.

102. (1) *Latticing and Plating of Columns.*—Columns with open sides and without continuous webs shall be provided with lattice or batten plate systems. Batten plates shall be provided on lattice columns at each end and at intermediate points if the lattice is interrupted. The latticing and plating of a column shall be proportioned to resist the maximum transverse shear at any cross section, such shear being assumed to be divided equally among all parallel planes of the stiffening system, whether of plates or of latticing. In no case shall a value be allowed for transverse shear less than 2½ per cent. of the maximum axial load, plus the additional shear at such planes of bracing due to any transverse loads on the member.

(2) *Lattice Bar Minimum Dimensions.*—The minimum width and thickness of lattice bars with rolled edges shall be in accordance with the requirements of the table hereunder. Bars with one or both edges sheared shall be ¼in. wider than the minimum widths given. The minimum thickness of lattice bars shall be $\frac{1}{40}$ of the shortest distance between the centres of rivets in the case of single latticing, and double latticing not riveted at the intersections, and $\frac{1}{60}$ of this distance for double latticing riveted at the intersection. Rolled sections of equivalent strength may be used for latticing in place of flats.

Bar (Both Edges Rolled).		Rivet. Diameter.
Width.	Thickness.	
In.	In.	In.
$1\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$
$1\frac{3}{4}$	$\frac{1}{4}$	$\frac{5}{8}$
$2\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{4}$
$2\frac{1}{2}$	$\frac{5}{16}$	$\frac{7}{8}$

(3) *Angle of Lattice Bars.*—Lattice bars shall be inclined at an angle of not less than 60 degrees to the axis of the member when single latticing is employed and at an angle of not less than 45 degrees when double latticing is used.

Batten Plates.

103. The minimum depth of end batten plates shall be equal to the horizontal distance between the centres of rivet groups.

The minimum depth of intermediate batten plates shall be half that of the end batten plate.

The minimum thickness of batten plates shall be one-fortieth of the horipontal distance between rivet lines with a minimum of $\frac{3}{8}$in. except in cases where the thickness of the members connected is less than this, when the thickness of the batten plate shall be the same as that of the members connected.

Spacing of Lattice Bars and Batten Plates.

104. The maximum spacing of lattice bars and batten plates shall be such that the ratio L/r for the portions between consecutive connections of the latticing or plating in one plane shall not be greater than 80 per cent. of the L/r ratio of the member as a whole.

The clear distance between plates shall be not more than four times the depth of the batten plates (measured along the length of the column).

For the purpose of calculation the distance between end rivets of adjacent batten plates shall be taken as the distance between connections.

Rivets in Columns.

105. At the ends of all riveted columns for a distance of at least one and one-half times the width of the member, the pitch of the rivets shall not exceed four rivet diameters.

The number of rivets in all batten plates shall be not less than three at each end of each plate.

Hollow Columns.

106. If the surveyor is satisfied that any concrete enclosed columns which are built up hollow are likely to be subjected to excessive corrosion, he may require the cavities of the columns to be filled with concrete. The aggregate of the concrete shall be broken inert stone or gravel (excluding limestone) broken brick or terra-cotta or similar inert material.

Lateral Stability, Beams and Girders.

107. On the gross section of the compression flanges of girders and beams in which lateral deflection is not prevented, the working stress in lb. per sq. inch. shall not exceed

$$24{,}000 - 300 \frac{L}{b}$$

For channels, and in other cases, where the flange is not symmetrical about the centre line of the beam, the working stress in lb. per sq. in. shall not exceed $24{,}000 - 500 \frac{L}{b}$

Where L = the lateral unsupported length of the compression flange.

b = the breadth of the compression flange, in the same units as L.

Provided that the working stress shall not exceed 18,000lb. per sq. in.

Where the ends of a beam are rigidly fixed, the length L shall be taken as the distance between points of contraflexure. In no case shall the ratio L/b exceed fifty.

Plate Girders.

108. Plate girders shall preferably be proportioned on their moment of inertia, using the net section of both flanges and the web. They may be proportioned by assuming that the flanges are concentrated at their centre of gravity in which case one-eighth of the gross section of the web when properly spliced may be used as flange section.

Flange Plates.

109. Flange angles shall form as large a part of the area of the flange as practicable, and the number of flange plates shall be reduced to a minimum. The flange plates shall not project beyond the centre line of the outer line or rivets which pass through the flange angles, more than eight times the thickness of the thinnest flange plate or more than 6in.

Flange to Web Rivets.

110. The number of rivets connecting the flange angles of plate girders to the web plate shall be sufficient to develop the increment of flange stress transmitted to the flange angles combined with any load which may be applied directly thereto.

Stiffeners.

111. (1) *Web Stiffening.*—Adequate provisions shall be made for resistance to buckling.

(2) *Stiffener Design—General.*—All stiffeners shall be proportioned as struts having a length equal to three-quarters of the depth of girder. End and intermediate stiffeners shall have a close bearing against flanges or flange angles. The pitch of rivets in stiffeners shall not exceed 6in. End stiffeners and those at points of concentrated load shall not be joggled.

(3) *End Stiffeners.*—Webs shall have stiffeners over end bearings. Their outstanding legs shall extend as nearly as practicable to the outer edge of the flanges or flange angles. The stiffeners shall be proportioned (as struts) to transmit safely the end reaction. They shall be connected to the web by enough rivets to transmit this reaction.

(4) *Stiffeners at Points of Concentrated Load.*—Stiffeners shall be placed at points of concentrated load. Stiffeners under or over concentrated loads shall be proportioned to distribute such loads into the web.

(5) *Intermediate Stiffeners.*—Intermediate stiffeners shall be provided when the clear depth of the web plate between flange angles or side plates exceeds 60 times its thickness. The distance centre to centre of such stiffeners shall not be greater than the full depth of the web plate, nor shall it exceed 6ft. The combined width over the outstanding legs of the stiffeners shall not be less than one-tenth of the girder depth plus 2in. The thickness of the outstanding leg shall not be less than three-fourths of the thickness of the web plate or one-twelfth of the outstanding leg.

The spacing of the stiffeners shall be such that the stress in. lb. per sq. in. due to shear in the web shall not exceed

$$12{,}000 - 40\ \frac{d}{t}$$

where d = distance between rivet lines in the flange angles or the distance between stiffeners, whichever is the less.

t = web thickness.

(6) *Lateral Stiffeners.*—Where necessary, the flanges of plate girders shall be stiffened to resist lateral forces.

Truss Tension Members.

112. Truss tension members shall preferably be of rigid construction the ratio of $\frac{l}{r}$ not exceeding 240.

Truss Compression Members.

113. Truss compression members shall be designed in conformity with the provisions laid down for the design of columns.

Beams, Girders and Trusses.

114. (1) *Camber and Defection.*—All trusses having a span greater than 40ft. shall have at least such initial camber that with the full live load at the centre of the span the camber will not be entirely taken out by deflection. The maximum deflection in any beam, truss or girder under full live load conditions shall not exceed one-three hundredth of the span.

(2) *Effective Spans.*—Where rolled beams are connected to continuous columns by web connections equal or superior to those given in Australian Standard Specification (No. CA. 1, Appendix E) and where minor beams are connected to one another through the web of a major beam or column by web connection, angles equal or superior to those given in Australian Standard Specification (No. CA. 1, Appendix E) so as to form a continuous line, the effective span for calculating bending moments shall be taken as not less than the distance between the gauge lines of the connection rivets on the webs of the beam. Where there is more than one line of rivets the centre of gravity of the rivet group shall be used for computing the effective span.

Where a plate web girder is connected at the ends to supporting members by full depth web connection angles, the effective span for computing the bending moment shall be taken as the distance between centres of gravity of the end rivet groups.

When trusses frame into the flanges of columns the minimum effective span for computing stresses in the truss frame shall be taken as the distance face to face of the columns.

For pins subjected to bending the effective span shall be the distance measured between the centres of the bearing surfaces.

In all other cases the effective span shall be taken as the distance between the centres of the bearing surfaces.

(3) *Effective Depths.*—In plate girders where the flange areas are approximately equal and in the case of truss girders the effective depth shall be taken as the distance between centres of gravity of the upper and lower flanges or chords.

Joints.

115. The butting ends of all spliced members, whether in tension or compression, shall be fully covered and riveted or bolted with turned bolts to develop the effective strength of the member excepting that vertical columns in which the resultant stresses due to all loads and bending moments are wholly compressive, if machine faced on the ends for bearing, shall be spliced sufficiently to hold the abutting parts true to place and to transmit at least 25 per cent. of the direct compressive stress through the splice material.

Joint Symmetry.

116. The centre of gravity of the splice plates shall coincide as nearly as possible with the centre of gravity of the member spliced.

Web Joints.

117. Web joints shall have double covers of adequate width to admit of sufficient rivets or fitted bolts to transmit the whole of the shearing stress at the joint. Where a portion of the web is included as flange section, the web covers and their connecting rivets or fitted bolts shall be proportioned to transmit bending as well as shearing stresses.

Turned Bolts.

118. Turned bolts in reamered holes may be used in shop and field work. The shanks of such bolts shall be long enough to provide full bearing on the turned portion, to permit the use of washers under the nuts and to ensure the thread of the nut being fully engaged.

Holes for turned bolts shall be reamered so as to ensure that the bolts bear uniformly throughout, and the bolts shall make a driving fit, with the threads entirely outside the hole.

Black Bolts.

119. Black bolts may be used in shop or field work for connections in light unimportant structures where specified or approved by the surveyor for all such secondary members as girts, doors and window framing, alignment bracing and purlins; and for floor joists framing into floor members. In cases where black bolts are used for field connections, suitable dead bearings formed by seating plates, packing brackets (or the like) shall be provided to resist the whole of the shear forces involved. This requirement as regards dead bearings shall, however, not apply to roof trusses or to the end connections of secondary floor beams. Clearances for black bolts shall be as small as practicable, but shall not exceed 1/16in. for all sizes.

Washers.

120. Bevelled washers of approved material shall be provided for all bolt heads and nuts bearing on bevelled surfaces. Washers, where used, shall have perfectly flat faces and shall be of sufficient thickness to prevent the nut bearing on the shoulder of the thread of the bolt. Where nuts are liable to work loose due to vibration, spring washers or lock nuts or other locking devices approved by the surveyor shall be used.

Minimum Number of Rivets.

121. All connections carrying calculated stress, except those in very minor parts such as lacing bars, sag bars, hand rails, shall have not less than two rivets or bolts at each end.

Position of Joints.

122. All joints in columns shall occur as reasonably as practicable to floor levels. Splices in compression members shall be situated as near points of lateral support as is reasonably practicable. In columns due provision for bending moments shall be made in joints subjected to bending.

Use of Rivets.

123. Rivets shall be used for the connections of all members excepting where otherwise provided.

Countersunk Rivets.

124. Flush countersunk rivets shall be avoided wherever possible, but where they are required, the head shall be made to more than fill the countersunk portion of the hole and then shall be made flush with the surface of the plate or section.

Long Rivets.

125. Rivets subject to stress, whose grip exceeds $4\frac{1}{2}$ diameters, shall be increased in number at least 1 per cent., for each additional 1/16in. of grip.

Rivet Areas.

126. (1) *Effective Diameter.*—In determining the number of rivets required, the diameter of the rivet before heating shall be taken as the effective diameter for calculating rivet area.

(2) *Shearing Areas.*—Rivets, bolts and pins in double shear shall be calculated as having not more than twice the shearing strength of those in single shear.

(3) *Effective Bearing Areas.*—The effective bearing area of a pin, rivet or bolt, shall be the diameter multiplied by the thickness of the member or unit transmitting or receiving

stress, except that for rivets with rounded countersunk heads one half of the depth of the countersink shall be omitted, and in the case of rivets with flat countersunk heads the full depth of the countersink shall be omitted.

Rivet Layout.

127. (1) *Minimum and Maximum Pitch.*—The distance between centres of rivets shall be not less than three rivet diameters. The pitch of rivets in the direction of the stress shall not exceed 6in. or 16 times the thickness of the thinnest outside plate, whichever is least, provided that for two gauge lines and rivets staggered, the above distance shall be measured between rivets on alternate lines.

(2) *Edge Distance, Rivets, Etc.*—Unless otherwise specified the distance from the centre of a rivet to a sheared edge shall not be less than one and three-quarter times the rivet diameter or to a rolled or planed edge less than one and one-half times the rivet diameter, except that in flanges of beams and channels, the minimum distance may be one and one-quarter times the rivet diameter. The distance from the edge of a plate to the centre of the rivet shall not exceed eight times the thickness of the plate.

Rivet and Bolt Gauge Lines.

128. Rivet and bolt gauge line spacing shall be as specified in the Australian Standard Specification (No. CA. 1) and as approved by the surveyor.

Stitch Rivets.

129. When two or more plates are used in contact, stitch rivets shall be provided to make them act as one. In compression and tension members the stitch rivets shall be spaced not more than 24 times the thickness of the thinnest outside plate, in the direction at right angles to the line of the stress; and not more than 16 times the thickness of the thinnest outside plate in the line of stress. In tension members composed of two angles in contact, a pitch of 3ft. 6in. may be used for riveting the angles together, and in compression members, 2ft., but the ratio L/r for each angle between rivets shall not be more than three-quarters of that for the whole member.

Floors.

130. Every floor shall be of sufficient strength in all parts to bear safely any imposed load, whether permanent or temporary, in addition to the dead loads depending thereon. The depth of beams in floors shall not be less than those shown in the table hereunder. Alternatively, the conditions specified for camber and deflection of beams, girders, and trusses, in the design of floor members may be used.

Position, etc.	Maximum Allowable Ratio of Span to Depth.
Ordinary rolled beams	24
Beams encased in concrete	24 (where the depth may be measured from the bottom flange of the beam to the top surface of the concrete)

Roofs.

131. The members of roof trusses may be connected by pins, welds, rivets or turned bolts. Roof trusses shall be of such design that the stresses in each member can be calculated.

All roof systems and their supporting structures shall be braced so as to be capable of safely resisting all lateral and longitudinal forces likely to be imposed upon them, and in any case the two end bays of multiple span systems shall be braced.

The maximum allowable ratio of span to depth of rolled beams used as roof purlins shall not exceed 40.

Fire Protection.

132. Steel structures shall be protected against fire as provided by this schedule.

Corrosion.

133. Steelwork exposed to the action of corroding agencies shall be protected against the effects of corrosion by one of the following methods:—

(*a*) Concrete casing:

(*b*) Painting:

(*c*) Galvanizing, sheradizing, or similar process:

(*d*) Any other method approved by the surveyor.

Steelwork protected in accordance with the requirements for fire protection, may be considered as complying with the requirements of this regulation. The thickness of concrete cover shall be at least that required for fire protection. Pockets or depressions shall be avoided as far as possible, and those which are unavoidable shall either be provided with effective drain holes or they shall be filled with waterproof material. In exceptional circumstances the surveyor may require an addition to be made to the sectional area required to resist computed stress so as to allow for corrosion when the structure is situated where climatic influences of local conditions are such that corrosion may be set up in the steel work. Where steel is incorporated in or forms part of a foundation, it shall be thoroughly protected from corrosion by concrete at least 3in. thick or by other method approved by the surveyor.

Steel Grillages.

134. When grillage beams, resting on a concrete bed, are used, they shall be provided with separators and bolts and shall be enclosed and filled between with concrete. All bearing portions of grillages shall be in metal to metal contact the one with the other, and all column bases shall be in metal to metal contact with the grillage members upon which they rest.

Pressure Upon Foundations.

135. For calculating column pressures on foundations, the full dead loads together with the reduced live loads, and the wind loads shall be taken.

Design of Footings.

136. Footings throughout the structure shall be designed so that any settlement which may occur will be as nearly as uniform as possible over the whole structure.

Workmanship and Finish.

137. All workmanship shall be of first-class quality in every respect. The greatest accuracy shall be observed to ensure that all parts will fit properly together on erection. Finished members shall be true to line and free from twists, bends and open joints. All shearing, chipping and boring shall be accurately done. All portions of the work shall be neatly finished. Parts of the structure which must be erected in the field shall be match marked, and a copy of a diagram showing all such marks shall be furnished to the erecting engineer. All parts weighing over 30cwt. shall have their weight legibly marked upon them.

Straightening.

138. Before any work is done on them, all plates, bars, and sections shall be carefully levelled, straightened, and made true by methods which will not injure the material. Where any material becomes sharply bent or kinked, it may be rejected.

Method of Machining Plates and Sections.

139. Where machining is specified, plates or sections shall be in the first instance of such a size as will ensure a true finished surface of sound metal.

Machining of Column Ends and Bases.

140. All connecting angles and gusset plates shall be fitted in place before column ends are machined. All joints of machined surfaces shall be shop assembled and the clearance shall nowhere be greater than 0·005in. when tested by a feeler gauge. Cast and bloom bases and caps shall be machined on

the surfaces to be in contact with steel and the opposite surfaces shall be rough dressed. Both sides of column butt-plates and cap plates shall be either planed or levelled to insure an even bearing on the members in contact with them.

Pins and Rollers and Pin Holes.

141. All connecting pins shall be finished accurately to gauge and parallel throughout, straight and with a smooth surface entirely free from flaws, and of sufficient length to ensure that all parts connected thereby have a full bearing on the pin. Pin holes shall be bored smooth, straight and true to gauge and at right angles to the axis of the member. The clearance in pin holes shall not exceed 1 per cent. of the diameter of the pin for pins up to and including 2in. diameter, and $\frac{1}{50}$in. for pins whose diameter exceeds 2in.

Smithing.

142. Any bending, forging or cutting required shall be carried out in such a manner as not to impair the strength of the metal. All joggles shall be formed, preferably in a press. Screwed ends of tie bars shall not be forged on but shall be formed from the solid bar. Enlarged ends shall be formed by upsetting in a forging machine or drawing from the solid bar. Eyes of tie bars shall be solid forged and not welded.

Drilling.

143. All rivet holes and other holes in main members or parts thereof over $\frac{3}{4}$in. in thickness shall be drilled through the solid, and preferably all such holes in main members of parts thereof $\frac{3}{4}$in. or under in thickness also shall be so drilled. Where several plates and angles form a compound member or girder, they shall, where practicable, be firmly connected together by clamps or tacking bolts and the holes drilled through all the thicknesses at one operation. After being drilled the plates and sections shall be taken apart and all burrs shall be removed before they are put together again. For rivets of all diameters $\frac{5}{8}$in. and more, the holes may be $\frac{1}{16}$in. larger than the nominal diameter of the rivet.

Punching.

144. Rivet holes and other holes in secondary members and parts thereof up to and including $\frac{3}{4}$in. thick may be punched full size. The diameter of the die (punching) shall be not more than $\frac{1}{16}$in. larger than the nominal diameter of the rivet, and the relative sizes of the punch and die shall be such as will not produce depression of the surface of the plate adjacent to the hole. Rivet holes and other holes in members $\frac{3}{4}$in. and under in thickness may be sub-punched with a punch making a hole $\frac{1}{8}$in. smaller in diameter than the nominal size

of the rivet or of the plate thickness, whichever is least, and reamered out with twist drills or reamers to a diameter 1/16in. greater than the nominal diameter of the rivet.

Reamering.

145. Poor matching of holes shall be a cause for rejection. Unfair holes shall not be enlarged by drifting, but if holes must be enlarged to admit the rivets, they shall be reamered.

Riveting.

146. Rivets shall be driven by pressure machines of approved design. Turned bolts shall be used in situations where rivets cannot be machine driven. Rivets when heated and ready for driving shall be free from slag, scale and carbon deposit. Rivets shall be of uniform light cherry red heat from head to point when inserted, driven immediately and upset in their entire length so as completely to fill the hole. Each rivet shall be of sufficient length to form a head of a standard dimension in accordance with one or other of the forms set out in the Australian Standard Specification (No. A. 34). Rivet heads shall be full, neatly made, concentric with the rivet shank and the rivet hole, and in full contact with the surface of the member. Loose, burnt or defective rivets shall be replaced. Caulking or recupping shall not be permitted, nor shall the rivet head be worked upon after its temperature has fallen to or below blue heat. In removing rivets care shall be taken not to injure the adjacent metal. If necessary, rivets shall be drilled out. All work shall be kept properly bolted and drifted together while it is being riveted. No drift having a diameter larger in any part than the hole in which it is to be used shall be allowed.

Welding.

147. All welding shall be in accordance with the requirements of the Australian Standard Specification (No. CA. 8).

Flame Cutting.

148. Flame cutting may be carried out by the use of a cutting torch or machine only if the metal is not carrying stress during the cutting. Stresses shall not be transmitted through a flame cut surface. Rivet and bolt holes shall not be cut by oxy-acetylene cutting pipe or other like means.

Corrosion Protection.

149. (*a*) *Cleaning.*—Before painting, all metal surfaces shall be thoroughly scraped and cleaned of rust, loose scale and dust, oil and grease.

(*b*) *Surfaces in Contact.*—Surfaces to be in contact shall be cleaned and when specified shall be given one coat of paint on each surface, before assembly.

(*c*) *Inaccessible Parts.*—All surfaces (to be protected by paint) which may be inaccessible after erection shall be cleaned and given two shop coats.

(*d*) *Paint.*—Paint used as a protecting agent shall be in accordance with any relevant Australian Standard Specification.

Concrete Covered Surfaces.

150. Surfaces which are to be protected by concrete casing shall not be painted. All such surfaces shall be left in a perfectly clean condition, free from all dirt, rust, grease or paint spots immediately prior to the placing of the concrete.

SCHED. II.
PART VIII.

PART VIII.

REINFORCED CONCRETE CONSTRUCTION.

151. Any person who erects, constructs or alters a building in which reinforced concrete construction is used, either wholly or in part, shall comply with the following provisions insofar as the reinforced concrete portions of the building are concerned, and he shall deposit with the surveyor (in addition to the plans and working drawings required to be supplied under section 8 of this Act) details of construction of all the parts of the building, together with a detailed copy of all calculations of the stresses and particulars of material and a general description of the building, and shall not erect, alter, or commence to erect or alter any portion of the building until such details and calculations for that portion have been approved by the surveyor.

152. Every such building shall be erected, constructed or altered in accordance with the requirements of the Australian Standard Specification. (No. CA. 2.)

PART IX.

TIMBER FRAME BUILDINGS.

153. Timber frame buildings shall, in all particulars which are plainly applicable, comply with Parts II. to IV. (inclusive), XIII. to XVIII. (inclusive), and XX. of this schedule.

Height of External Walls.

154. The external walls of every such building shall not, except with the consent of the council, exceed in height 27ft. measured from the floor level to the top of the wall plates.

Building to be Wholly in One Occupation.

156. Every such building shall be constructed or adapted for one occupation only.

Distance from Street and from Other Buildings.

157. Every such building shall be distant at least 8ft. from any street or way and 9ft. from the boundaries of any land not in the same occupation, or from any brick, stone, or concrete building in the same occupation of more than one square in area. The distance between any two timber frame buildings shall be not less than 18ft. except in the case of outbuildings in connection with dwellings which shall comply with the provisions of Part XVIII. of this schedule.

Construction Requirements.

158. Every timber frame building shall be constructed in accordance with the following requirements:—

I. The timber framework shall be capable of supporting and transmitting to the base structure the weight of the structure together with the live loads without the stresses in the materials of the framework anywhere exceeding those permitted. A framework constructed with members of the materials and sizes given in the following table shall be accepted as fulfilling the requirements of this paragraph. Details shall be submitted to and the design approved by the surveyor when—

(*a*) it is desired to depart from the sizes or spacings in the table; or

(*b*) the design is for a particular case not set out in the table.

Base Structure.

II. The framework of walls shall rest upon—

(*a*) sleeper walls of brick, stone or concrete of not less than 4½in. with 9in. square piers spaced at distances approved by the surveyor; or

(*b*) piers of brick, stone or concrete of dimensions not less than 9in. by 9in. and provided with adequate footings; or

(*c*) stumps of red gum or jarrah, of a size not less than that given in the table. Bottoms of stumps shall be at a depth below natural surface equal to one-fourth of their length, and in no case less than 18in. and shall rest upon—

(i.) a base of concrete 8in. square and 4in. thick; or

(ii.) a base of brickwork in cement mortar 9in. square and two courses thick; or

(iii.) on a sole plate of red gum or jarrah, 12in. long 6in. wide and 2in. thick rammed to a solid bearing before the stumps are fixed thereon.

All stumps projecting more than 4ft. above the surface of the ground shall be securely braced to the approval of the surveyor. All timber in contact with the ground shall be treated with a preservative approved by the surveyor.

Table of Timber Sizes and Spacings.

Member.	Timber Sizes (Nominal).	Maximum Spacing (Centre to Centre).	Material.	Remarks.
Stumps or blocks..	4in. x 4in. ..	4ft. 0in.	Red gum or jarrah	Depth in ground and bracing to be as required by regulation 5 (2) (c)
Ground floor bearers	4in. x 3in. ..	5ft. 0in.	Red gum or jarrah	To be fixed on edge. Size given applies also to those under walls.
Wall plates—				
(*a*) Bottom.....	4in. x 2in. ..	—	Red gum or jarrah	—
(*b*) Top	4in. x 2in. ..	—	Hardwood or softwood	—
Ground floor joists	4in. x 2in. or 5in. x 1½in.	1ft. 6in.	Red gum or jarrah	Double joists to be used at walls.
Studs	4in. x 1½in. .	2ft. 0in.	Hardwood or softwood	Housed ⅜in. into plates.

If the stumps or blocks are covered in manner approved by the surveyor by ant caps approved by the surveyor, the ground floor bearers, wall plates, and ground floor joists may be of hardwood or softwood.

Table of Timber Sizes and Spacings—*continued.*

Member.	Timber Sizes (Nominal).	Maximum Spacing (Centre to Centre).	Material.	Remarks.
Corner studs.....	4in. x 4in. or double 4in. x 2in.	—	Hardwood or softwood	Housed $\frac{3}{8}$in. into plates.
Head sills	4in. x 2in. ..	—	Hardwood or softwood	Housed $\frac{3}{8}$in. into studs.
Trimmer studs ...	4in. x 2in. ..	—	Hardwood or softwood	Housed $\frac{3}{8}$in. into plates.
Ceiling joists	4in. x $1\frac{1}{2}$in. .	2ft. 0in.	Hardwood or softwood	—
Hangers	$1\frac{1}{2}$in. x $1\frac{1}{4}$in. or 16 gauge galv. hoop iron	2ft. 0in.	Hardwood or softwood Hoop iron	To be securely nailed to hanging beam and ceiling joist.
Rafters—				
(*a*) For tiles or slates	5in. x $1\frac{1}{2}$in. or 4in. x 2in. ..	2ft. 0in.	Hardwood or softwood	—
(*b*) For iron or sheet materials	4in. x $1\frac{1}{2}$in. .	4ft. 6in.	Hardwood or softwood	
Hip and valley rafters	8in. x $1\frac{1}{4}$in. .	—	Hardwood or softwood	—
Struts	3in. x 3in. ..	8ft. 0in.	Hardwood or softwood	—
Collar ties—				
(*a*) For tiles or slates	3in. x $1\frac{1}{2}$in. .	4ft. 0in.	Hardwood or softwood	—
(*b*) For iron or sheet materials	3in. x $1\frac{1}{2}$in. .	4ft. 6in.	Hardwood or softwood	
Ridges	8in. x $1\frac{1}{4}$in. .	—	Hardwood or softwood	—
Flooring boards ..	$\frac{3}{4}$in. thick ...	—	Hardwood or softwood	Shall be tongued and grooved.
Wall bracing	2in. x 1in. or hoop iron $1\frac{1}{4}$in. wide	—	Hardwood or softwood	Extent of bracing to be approved by surveyor.

Member.	Live Loading.	Maximum Spacing (Centre to Centre).	Span.	Timber Sizes.	
				Hardwood.	Softwood.
Upper floor joists	Floors or flat roofs for which live loads are—	Ft. In.	Ft.	In.	In.
	60lb. per sq. ft.	1 6	0–9	6 x $1\frac{1}{2}$	6 x 2
			9–12	8 x $1\frac{1}{2}$	8 x 2
			12–15	10 x $1\frac{1}{2}$	10 x 2
			15–18	10 x 2	12 x 2
	75lb. per sq. ft.	1 6	0–9	6 x $1\frac{1}{2}$	7 x 2
			9–12	8 x $1\frac{1}{2}$	9 x 2
			12–15	10 x $1\frac{1}{2}$	11 x 2
			15–18	10 x 2	13 x 2
	100lb. per sq. ft.	1 6	0–9	6 x 2	8 x 2
			9–12	8 x 2	10 x $2\frac{1}{2}$
			12–15	10 x 2	12 x $2\frac{1}{2}$
			15–18	12 x 2	14 x $2\frac{1}{2}$
	150lb. per sq. ft.	1 6	0–9	8 x 2	10 x 2
			9–12	10 x 2	13 x 2
			12–15	12 x 2	14 x $2\frac{1}{2}$
			15–18	14 x 2	14 x 3
Purlins	—	4 0	Up to $4\frac{1}{2}$	3 x 2	3 x 2
Under purlins	—	6 0	Up to 9	4 x 3	4 x 3
			Under purlins of greater span than 9ft. shall be strutted or larger sections of sufficient strength shall be used.		
Ceiling hanging beams	—	7 0	Up to 10	8 x $1\frac{1}{2}$	8 x $1\frac{1}{2}$
			For longer spans hanging beams shall be increased 1in. in depth for every additional 2ft. increase in span over 10ft.		

Damp-proof Course.

III. If the framework of walls is supported upon sleeper walls a dampcourse of durable material approved by the surveyor, impervious to moisture, shall be provided below the level of all sleepers and plates. The dampcourse shall be continuous throughout the whole length of the wall. Where brick, stone or concrete piers are used a similar dampcourse shall be provided to every pier.

Vermin Plates.

IV. Vermin plates shall be provided in all cases where the floor is of timber construction.

Exterior Surface of Walls.

V. The exterior surface of walls shall be covered with weatherboards galvanized iron, asbestos-cement sheets, stucco, compressed plates of straw or other composition or other materials approved by the surveyor. Weatherboards shall be of good sound timber free from large knots and be not less than three-quarters of an inch in thickness and shall have an overlap of not less than 1⅛in., galvanized iron shall be of good quality not less than No. 26 Birmingham gauge. Asbestos-cement sheets shall be not less than three-sixteenths of an inch in thickness. Stucco or roughcast shall be applied to expanded metal lathing not less than No. 24 gauge, the first or scratch coat to be lime mortar gauged with cement and mixed with sufficient care to thoroughly bind same, the second coat to be cement mortar, and the final coat shall be such as to make the exterior coating water proof. Compressed plates of straw or other material shall be of an aggregate thickness of not less than 4in. and rendered on the exposed side with not less than ½in. cement mortar and rendered on the inner side with not less than ½in. cement mortar or lime mortar.

Inner Walls and Ceilings.

VI. The interior surface of all walls and ceilings of buildings of the domestic building class shall be finished in lath and plaster, metal, asbestos-cement, fibrous plaster, matchboard, insulating board, pressed board, veneer panels, compressed plates of straw or other composition or other materials approved by the surveyor.

Roofs.

VII. Roofs shall be covered with tiles, slates, metal, asbestos-cement, or other incombustible materials.

Additions.

159. No additions in any materials shall be made to any timber frame building which will decrease the insulation required for the building, nor shall any timber frame building be erected in such a position as will nullify the insulation of any existing building or structure.

Removal and Re-erection of Timber Frame Buildings.

160. Timber frame buildings, transported or removed either in whole or in part into a municipality or district, or from one part of a municipality or district to another shall, when complete, comply with all the provisions of these regulations in regard to the erection of new buildings.

SCHED. II.
PART X.

PART X.

SINGLE STOREY LIGHT METAL FRAME BUILDINGS.

161. Buildings erected in manner provided by this Part shall, in all particulars which are plainly applicable, comply with Parts II. to IV. (inclusive), XIII. to XVIII. (inclusive), and XX. of this schedule.

Class of Building.

162. A single storey building may be erected with walls of compressed plates of straw or other composition or of concrete slabs erected upon a metal framework.

Distance from Street and Other Land.

163. Any such building shall be distant at least six feet from any street or way and from the boundaries of land not in the same occupation.

Construction Requirements.

164. The walls of every such building shall conform to the following requirements:—

1. The metal framework of every wall shall be capable of sustaining safely, independently of any other part of the wall, the whole weight bearing upon the framework, and the due proportion of any floors and roofs bearing thereon, together with the live load on such floors and roofs:

II. The external walls shall be built of—

(*a*) compressed plates of straw or other composition approved by the surveyor of an aggregate thickness of not less than 4in. rendered on the exposed side with not less than ½in. cement mortar and on the inner side with not less than ½in. cement mortar or lime mortar and secured to the metal framework; or

(*b*) concrete slabs approved by the surveyor of an aggregate thickness of not less than 4in. reinforced with expanded metal or wire mesh wired to steel rods in a manner approved by the surveyor, rendered in position in cement mortar and fixed to the approval of the surveyor:

III. The internal walls shall be built as mentioned in paragraph II. of this regulation but shall be of an aggregate thickness of not less than 2in.

Floors, Roofs, Etc.

165. The construction of the floor, roof and other portions of the building not specifically dealt with by this Part shall conform to the requirements set out for elsewhere in this schedule.

SCHED. II. PART XI.

PART XI.

BRICK VENEER BUILDINGS.

166. Single storey dwelling-houses may be erected or constructed with external walls of brick veneer construction subject to the following requirements:—

I. The external walls—

(*a*) shall be erected or constructed in accordance with the requirements of this Part of this schedule;

(*b*) shall not anywhere exceed 12ft. in height, unless strengthened by piers to the satisfaction of the surveyor:

II. Except as provided for in this Part the building shall be erected or constructed in accordance with the requirements of other Parts of this schedule:

III. The building shall not be constructed or adapted for more than two occupancies and shall not be used as a boarding-house or hotel. Where two occupancies are included in the one building they shall be separated by brick walls not less than 9in. thick:

IV. The distances of the external walls from the allotment boundaries shall be not less than 6ft.

Construction Requirements.

167. (1) The external walls of every building of brick-veneer construction shall be constructed with an inner part of timber frame construction or metal frame construction and an outer part of brickwork.

(2) The inner part of any such external wall shall be constructed as follows:—

(*a*) The timber framework or metal framework of the inner part of the external wall together with that of internal walls shall be capable of sustaining and transmitting to the base walls and base structures all the live loads together with the dead load of the building other than that of the brickwork;

(*b*) A timber framework constructed with members of the materials and sizes given in the table in regulation 158 of this schedule and spaced as set out in that table shall be accepted as fulfilling the requirements of subdivision (*a*) of this paragraph. Computations and details shall be submitted to, and the design approved by, the surveyor when—

(I.) it is desired to depart from the sizes or spacings of the table; or

(II.) the design is for a particular case not set out in the table.

(3) The outer part of the external wall shall be constructed of brickwork which shall be—

(*a*) not less than 4½in. thick;

(*b*) constructed with cement mortar or composition mortar gauged with one part of Portland cement, one part of hydrated lime, and eight parts of sand, all parts being measured dry by volume;

(*c*) bonded to the timber or metal framework of the inner part of the wall with galvanized wire wall ties approved by the surveyor spaced not more than 24in. apart

vertically securely fixed to the timber or metal frame and built into the brickwork and

(*d*) maintained at such a distance from the timber or metal framework of the inner part as to leave a clear air-space between the brickwork and the timber or metal of not less than 1in. or more than 2in.

Footings.

168. The footings of external walls shall be constructed in accordance with the requirements for footings of brick walls.

Base Walls.

169. The portion of the external walls between the top of the footings and the floor level shall—

(*a*) be constructed of cement concrete or brickwork as hereinafter in this regulation provided;

(*b*) if constructed of brickwork, be constructed with mortar as prescribed in regulation 167 of this schedule;

(*c*) be constructed with 9in. square piers spaced not more than 4ft. apart along length of walls with the space between piers filled in with brickwork or concrete not less than 4½in. thick;

(*d*) be provided with ventilation openings, as required by this schedule: and

(*e*) be provided with a dampcourse below the floor plate, as required by this schedule.

Internal Walls.

170. (1) The internal walls may be of timber frame construction or metal frame construction, and constructed as provided in Parts IX. and X. of this schedule or shall be of any form of construction referred to in paragraph (2).

(2) Internal walls which carry no loads in addition to their own weight, may be constructed of—

(*a*) compressed plates of straw or other composition approved by the surveyor of an aggregate thickness of not less than 2in. rendered on each side with not less than ½in. cement mortar or lime mortar and secured in timber or metal frames;

(*b*) concrete slabs approved by the surveyor not less than 2in. thick reinforced with expanded metal or wire mesh wired to steel rods in a manner approved by the surveyor, rendered in position in cement mortar and fixed to the approval of the surveyor.

Floors, Roofs, Etc.

171. The construction of floors, roofs and other portions of the building not specifically dealt with in this Part shall conform to the requirements set out for each elsewhere in this schedule.

Linings.

172. Internal linings of external and internal walls and ceilings shall conform to the requirements of Part IX. of this schedule.

PART XII.

PROJECTIONS, RECESSES, OPENINGS AND STAIRS.

Projections.

173. (1) Every coping, cornice, stringcourse, fascia, window-dressing, portico, balconette, balustrade, and architectural projection or decoration on or over the property of an adjoining owner or the street alignment shall be of brick, tile, stone, artificial stone, slate, cement, or other fire-resisting material.

(2) No projection shall extend beyond the street alignment at any height less than 9ft. from the level of the public footway. No projection shall extend over any carriage way at a height less than 12ft. from the level of the roadway surface.

(3) Every verandah, balcony, porch, gangway, outside landing, or outside step not projecting beyond a street alignment, but within 3ft. of any adjoining building or land in other occupation, shall be separated from such building or land by a brick wall at least 9in. thick, or a reinforced concrete wall not less than 4in. thick, projecting at least 4in. beyond the woodwork thereof, unless such verandah, balcony, porch, gangway, outside landing, or outside step is constructed throughout of fire-resisting materials. Floor joists, purlins, rafters and fascias, may be of hardwood of a minimum thickness of 2in. Flooring boards may be of softwood.

(4) Eaves, soffits, and barge boards to any roof, if within 3ft. of any adjoining building or land in other occupation or within 1ft. of a street or way, shall be of fire-resisting materials including 2in. hardwood unless separated by brickwork at least 9in. thick, or reinforced concrete 4in. thick, and projecting 4in. beyond the woodwork.

(5) Gangways constructed of fire-resisting materials may, with the consent of the council, be erected over lanes to connect buildings in the one occupation.

174. Every cornice, balconette or other projection, shall be tailed into the wall of the building and weighed or tied down. No cornice or balconette shall, without the consent of the council, exceed 4ft. in projection over a public way or street exceeding 33ft. in width, or more than 2ft. in a street of 33ft. or less in width.

175. Cat-heads or hoists shall not project over any street without the consent of the council.

Bay Windows.

176. Bay windows of timber construction to a dwelling-house in one occupancy, or any dwelling-house of not more than two main floors with or without a basement, if constructed for not more than four separate occupations, may be erected, subject to the following conditions:—

(*a*) The bay windows shall have a fire-break at the level of each fire-resisting floor:

(*b*) No part of the windows shall be nearer than 4ft. to any street or any adjoining building or land in other occupation, unless separated therefrom by a party wall or an external wall projecting 4in. beyond the face of the windows:

(*c*) The windows taken together, shall not exceed in width three-fifths of the frontage of the building.

Oriels or Turrets.

177. Projecting oriels or turrets may be constructed, subject to the following conditions:—

(*a*) No oriel or turret shall project beyond the street alignment unless constructed of concrete, brick, stone, or other fire-resisting materials approved by the surveyor:

(*b*) No part of any such projection shall extend more than 3ft. beyond the street alignment in streets over 33ft. in width, or more than 2ft. in streets 33ft. or less in width. No oriel or turret shall project beyond the street alignment in streets less than 20ft. in width:

(*c*) No part of any such projection shall be less than 9ft. above the level of the footway of the street. No projection shall extend over any carriage way at a height less than 12ft. from the level of the roadway surface:

(*d*) No part of any such projection, where it overhangs the public way, shall be within a distance of 3ft. of the nearest part or external wall:

(*e*) The total width of any such projections, taken together, shall not on any floor exceed three-fifths of the length of the wall of the building on the level of that floor:

(*f*) No window of wooden construction in an oriel shall be nearer than 4ft. to any adjoining building, or land in other occupation, or to an adjoining street or way.

Recesses and Openings.

178. Recesses and openings may be made in external walls in ordinary construction subject to the following conditions:—

(*a*) The backs of such recesses shall not be of less thickness than 9in.:

(*b*) The aggregate area of such recesses in any storey shall not exceed one-half of the whole area of the wall in the storey in which they are made if segmental arch or lintel construction is used, and three-fifths if semi-arch or continuous lintel construction is used:

(*c*) The aggregate widths of such recesses in any storey shall not, taken together, exceed three-quarters of the whole length of the wall of the storey in which they are made if segmental arch or lintel construction is used, and four-fifths if semi-arch or continuous lintel construction is used:

(*d*) The aggregate area of openings in any storey shall not exceed one-half of the whole area of the wall in the storey in which they are made if segmental arch construction is used, and three-fifths if semi-arch or lintel construction approved by the surveyor is used. The aggregate area of the solid work of any wall shall not be less than one-third of the area of such wall on plan in case of segmental arch or lintel construction, or one-fourth in case of continuous lintel or semi-arch construction. These limits shall not apply to any shop front or show window constructed to the approval of the surveyor:

(*e*) The surveyor may allow the omission of arches and lintels when the recesses are not more than 5in. in depth and the thickness of the recessed portion of the wall is equal to the thickness required for the next upper storey; and he may also allow wider recesses and openings, subject to the sectional area on plan being maintained:

(*f*) The combined area of recesses and openings in the external wall of any storey shall not in any case exceed the area permitted for recesses or openings in that wall.

179. Permanent recesses may be made in party walls in ordinary construction subject to the following conditions:—

(*a*) The backs of such recesses shall not be of less thickness than 9in. for buildings of the warehouse class and of the domestic class:

(*b*) Over every recess so formed an arch of at least two rings of brickwork of the full depth of the recess shall be turned on every storey, except in the case of recesses formed for lifts. In cases in which a recess does not exceed 5in. in depth, corbelling in brick or stone may be substituted for the arching:

(*c*) The area of such recesses shall not, taken together, exceed one-half of the whole area of the wall of the storey in which they are made:

(*d*) Such recesses shall not come nearer than 13in. to the inner face of the external walls.

Chases.

180. (1) A chase for water pipes, or for any other purpose, shall not reduce the cross-sectional area of any pier to less than that required for its class and height of building. In a wall a chase shall not exceed in depth one-third the thickness of the wall, nor have less than 9in. of wall at the back of the chase.

(2) Chases shall be constructed so as not to impair the strength of any part of a building.

(3) Chases around pipes shall be filled with fire-resisting material for a distance of 1ft. at the top and bottom of each storey.

(4) Horizontal chases for pipes, after being placed in position, shall be filled solid with concrete or brick and cement mortar. There shall be a space of at least 2ft. between any chase and a flue, and a space of at least 4ft. between any two chases, or between a chase and a recess. The aggregate area of recesses and chases in any wall shall not exceed three-quarters of the whole area of the face of the wall in the storey.

181. Temporary chases may be made in party or external walls, up to the boundary line, if they are to be filled up immediately with concrete or other material approved by the surveyor.

Stairs.

182. (1) In every building of more than one storey there shall be provided stairs giving access to all the storeys above the ground storey.

(2) Stairs shall have a clear headway of at least 6ft. 6in.

(3) Stairs shall have proper balusters and a continuous hand-rail at a height of about 3ft. above the centre of the treads and landings.

(4) Stairs shall be in straight flights, and shall have half space or quarter space landings at intervals of not more than sixteen or less than two risers.

(5) Steps shall be of uniform dimensions throughout, and have treads not less than 10in. wide, inclusive of nosing and risers not more than 7in. high.

(6) Notwithstanding the provisions of this regulation stairs in a private dwelling-house (not being a residential flat building or a multiple dwelling as defined by regulation 324 of this schedule) need not be in straight flights and the treads in such stairs may be not less than 8in. in width and the risers may be not more than 8in. high.

(7) Stairs shall also comply with the provisions of regulations 312, 320, and 327 of this schedule.

Arches and Lintels.

183. Openings for doors and windows in all brick or stone buildings shall have good and sufficient external arches of stone, brick, or terra-cotta, well-built and keyed, with good and sufficient abutments; or the openings shall have lintels of suitable material which shall have a bearing at each end of not less than 4in. 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 relieving arches or lintels of approved material.

Timber in External Walls.

184. (1) All wood frames fixed in any external wall abutting on a street or way, except the woodwork of shop fronts when encased with metal not less than No. 26 Birmingham gauge in thickness, shall be set back 4½in. at least from the external face of such wall.

(2) All woodwork in hollow external walls which may be intended to form the head of a door frame, lintel, or other similar structure, and which may be inserted in the wall so as to project into or across the intervening cavity, shall be

covered throughout on the upper side thereof with a layer of material impervious to moisture. No wood plate shall be built into any wall.

Doors.

185. (1) No door shall be hung so as to open immediately on to a step or flight of steps or so as to obstruct, when open, any passage, stairway, or landing.

(2) Doors abutting on a street or way shall be recessed so as not to encroach on the public way.

(3) All exit doors shall be so arranged as to be readily visible, and shall not be obstructed of partitions or other erections interfering with access or visibility.

SCHED. II. PART XIII.

PART XIII.

JOISTS AND FLOORS.

Joists.

186. (1) No joists in floors shall be built within 6in. of the ground directly beneath unless the ground area beneath is covered with asphalt or concrete and ventilated to the approval of the surveyor.

(2) No joists carrying floorboards 1⅛in. thick or less shall be spaced at more than 18in. centres.

(3) All joists shall be supported so as to comply with regulation 8 of this schedule, but in no case shall a joist have an unsupported span greater than 20 times its depth.

(4) Joists shall also comply with the provisions in the table in regulation 158 of this schedule.

Bridging.

187. All wood floor joists with spans exceeding 10ft. shall be bridged with cross bridging, and the distance between bridgings, and bridging and walls shall not exceed 10ft. Bridging shall be placed between joists over all girders.

Timbers in Walls.

188. No timber shall be built longitudinally into any wall unless a corbel is built to receive it. Timbers bearing on party walls shall comply with the provisions of Part XX. of this schedule.

Timber in Party Walls.

189. The ends of any wooden beam or joists bearing on any party wall shall be at least 1½in. distant from the centre line of the party wall, and not less than 4½in. laterally from beams or joists on the opposite side of the wall. Where the beams or joists are not within 4½in. of the centre of the party wall no lateral separation shall be necessary.

Trimmer Joists.

190. Every trimmer joist receiving or carrying more than four common joists, and every trimmer joist receiving or carrying such trimmer joist at a distance greater than 3ft. from its bearing on the wall, shall be increased not less than 1½in. in thickness in the case of buildings of the warehouse class, and 1in. in the case of buildings of the domestic class.

Flooring.

191. Joists shall be covered with flooring boards not less than ¾in. thick in buildings of the domestic class, and in buildings of the warehouse class and in public buildings with softwood flooring boards 1⅛in. thick, or hardwood flooring boards ⅞in. thick.

Mezzanine Floors.

192. Mezzanine floors may be of wood or unprotected steel or both, but not more than two mezzanine floors of any construction shall be constructed in any room.

SCHED. II.
PART XIV.

PART XIV.

ROOFS.

Flat Roofs.

193. Any building which exceeds in height three-quarters of the maximum height for ordinary construction allowed by these regulations shall have a roof of fire-resisting construction. The roof shall be flat or of a pitch not exceeding one in four.

Construction of Roofs.

194. The roof of every building or erection placed thereon including every turret, dormer, lantern-light, or skylight, shall be externally covered with slates, tiles, metal, asbestos-cement, or any other materials approved by the surveyor. Cornices and barge boards to dormers not exceeding 12in. in depth, and the doors, door frames, windows, and window frames of such dormers, turrets, lantern-lights, skylights or

other erections may be of wood except in case of skylights or lantern-lights which are placed in light courts, or erected on roofs of fire-resisting construction which must be as specified under Part XX. of this schedule.

195. Roofs shall also comply with the provisions in the table in regulation 158 of this schedule.

196. Concrete roofs, unless otherwise permitted by the surveyor, shall be covered with mineral asphalt not less than ½in. in thickness, or with bituminous roofing materials approved by the surveyor.

197. When not of fire-resisting construction the plane of the surface of the roof of any building shall not incline from the external or party walls upwards at a greater angle than 75deg. with the horizontal, and the roofs of buildings of the warehouse class not more than 40deg. This shall not apply to towers, turrets, domes, spires, pavilion roofs or the steeper side of saw-tooth roofs.

198. Bulkheads or other structures on flat roofs not of fire-resisting construction may be erected with walls of timber studding covered with corrugated galvanized iron, not less than No. 26 Birmingham gauge, asbestos-cement or other substances approved by the surveyor, provided the isolation distances comply with those set out in Part IX. of this schedule.

Storeys in Roofs.

199. Not more than one storey shall be constructed in the roof of any building and this shall be constructed of materials as specified in the seventh schedule, but storeys in roofs of buildings of the domestic class in single occupation need not be constructed of such materials.

Fire-Resisting Roofs.

200. The construction of fire-resisting roofs shall be as specified in the Australian Standard Specification (No. CA. 2).

Tanks.

201. Tanks of a capacity of more than 500gall. placed on, in, 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 on iron or steel columns, or on piers of brickwork, or reinforced concrete. Covers on tops of water-tanks placed on roofs, if of wood, shall be covered with metal of at least No. 26 Birmingham gauge.

Rainwater Gutters, Downpipes and Drains.

202. (1) The roof or gutter of every building, and every balcony, verandah, cornice or other similar projection, or projecting window, whether constructed before the commencement of this Act or not, shall be arranged and constructed so as to prevent the water therefrom from dropping upon, or running over any street or way, or land in other occupation, or causing dampness in any part of any wall or foundation.

(2) All such gutters, downpipes and drains shall be maintained in good order and condition by the owner of the building.

Projecting Roofs.

203. Eaves, soffits, and barge boards to any overhanging roof, if within 3ft. of any adjoining building or land in other occupation or within 1ft. of a street or way, shall be of fire-resisting materials, unless separated by brickwork at least 9in. thick, or reinforced concrete 4in. thick, and projecting 4in. beyond the woodwork.

Gable Walls.

204. (1) The minimum thickness of gable filling walls when carried up in brick, masonry, or concrete, and when not used for fire-isolation purposes shall be as follows:—For masonry, 14in.; for brick in lime mortar, 9in.; for brick in cement mortar, 4½in. if strengthened with piers projecting 4½in., the aggregate width of these piers being at least one-quarter the length of the wall measured at the base of the gable. No gable filling wall of brick shall exceed in height eight times its thickness if built in lime mortar, or ten times its thickness if built with cement mortar or in reinforced concrete, but when the thickness has to be increased to comply with this regulation the increase may be by means of piers the aggregate width of which is at least one-quarter the length of the wall measured at the base of the gable.

(2) Gable filling walls with timber studs shall be permitted in the case of any dwelling-house of one storey, or of any dwelling-house of not more than two main floors with or without a basement if constructed for not more than four separate occupations, when the exterior lining shall be as specified for timber-frame walls in Part IX. of this schedule.

Guarding of Flat Roofs.

205. Flat roofs which are accessible by means of fixed stairs or lifts shall be guarded by a parapet or by substantial metal rails, either to be of a height of 3ft. 6in. from the roof, or by

a combination of both of the same height. The maximum vertical opening between rails, or rails and brickwork, shall not exceed 9in. or, alternatively, specially designed guard fences may be approved by the surveyor. For the purposes of this regulation, a roof shall not be deemed to be accessible by means of fixed stairs by reason only of the fact that the roof is accessible by means of a fixed ladder.

Height and Thickness of Parapets to External Walls.

206. (1) Every external wall built within 4ft. of land in other occupation, or within 4ft. of any adjoining building or within 2ft. of a street or way, shall be carried up so as to form a parapet at least 15in. high above the highest part of the adjoining gutter, or roof covering, except in buildings of the warehouse class, in which case the height shall be 2ft. The thickness of the parapet so carried up shall be at least 9in. throughout. The parapet may be omitted in the case of spires, turrets, and other architectural features covered with roof coverings approved by the surveyor.

(2) Every parapet 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 4ft. from the parapet wall, and shall extend at the least 12in. higher and wider on each side than such erection.

(3) No parapet shall exceed in height six times its least thickness if built with lime mortar, and eight times its least thickness if built with cement mortar.

Height of Party Walls Above Roof.

207. Every party wall shall be carried up in thickness in a building of the warehouse class equal to the thickness of such wall in the topmost storey, but in no case need it be more than 14in. thick, and in any other building to a thickness of 9in. above the roof, flat, or gutter, so as to give a height in a building of the warehouse class of at least 3ft. and in any other building of at least 15in. The walls separating not more than four semi-detached buildings of the domestic class may be carried up to the under side of the roof covering of fire-resisting material, the latter being solidly bedded on the walls.

PART XV.

CHIMNEYS, FLUES, FIREPLACES AND HEATING APPLIANCES.

Chimneys and Flues other than Furnace Chimney Shafts and Flues.

208. 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, 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 14in. from walls 9in. in thickness on corbels of stone or other incombustible material not less than 10in. in depth and of the full width of the jambs.

209. Chimneys and flues shall not be inclined at a less angle than 45deg. to the horizontal, except that the surveyor may sanction any other angle provided that approved soot doors of not less area than 40 sq. in. are provided.

210. Every angle at a change of direction in a chimney or flue shall be properly rounded.

211. All soot doors shall be distant at least 15in. from any woodwork.

212. An arch of brick, stone or concrete 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 4½in. on each side.

213. A flue used for the purpose of any trade or business shall be surrounded with brickwork at least 9in. thick, or by reinforced concrete 6in. thick, or by an outer flue to the satisfaction of the surveyor, from the floor of the storey on which any oven, furnace, hot water or steam boiler fired by the heat of combustion or other fire is situated, to at least 12in. above the roof.

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

215. The jambs of every fireplace opening shall be at least 9in. thick on each side of the opening thereof.

216. The breast of every chimney shall be of incombustible material, at least 4½in. in thickness, and the brickwork surrounding every smoke flue shall be at least 4½in. 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 of not less than 1in. in thickness.

217. The back of every fireplace opening made in party or internal walls, from the hearth up to a height of 12in. above the lintel or arch, shall be constructed of brickwork at least 9in. thick, or reinforced concrete at least 6in. thick. No flue shall be within 2in. of the centre line of any party wall.

218. The thickness of the upper side of every flue shall be at least 9in. when its course makes with the horizontal an angle of less than 45deg.

219. (1) Every chimney, smoke, flue, or chimney shaft shall be carried up in brick or stonework, at least 4½in. thick throughout, to a height of not less than 3ft. above the roof, flat, or gutter adjoining thereto, measured at the highest point in the line of junction with such roof, flat or gutter.

(2) The highest six courses of every chimney stack or shaft shall be built in cement mortar.

220. If any building is erected so that any wall thereof is built up to the boundary of the land upon which the building is erected and there is any chimney or flue in any wall of any adjoining building which is erected up to the said boundary, the building owner shall, in manner approved by the surveyor, carry up the chimney or flue in such wall of the adjoining building to a height at least that of the wall first mentioned.

221. The brickwork or stonework of any chimney shaft, except that of the furnace of any hot water or steam boiler, brewery, distillery, or manufactory, 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, unless such chimney shaft is built with, and bonded to, another chimney shaft not in the same line with the first, or is otherwise rendered secure.

222. There shall be laid level with the floor of every storey before the opening of every chimney a slab of stone, slate, or other incombustible substance at the least 6in. longer on each side than the width of such opening, and at the least 12in. wide in front of the breast thereof.

223. 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 materials, but on the lowest floor it may be bedded on concrete covering the site or on solid materials placed on such concrete.

224. 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 6in. at least beneath the upper surface of such hearth or slab.

225. 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 similar incombustible materials approved by the surveyor at least 4½in. in thickness, properly bonded.

226. 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 stability of any building.

227. 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:—

(*a*) Letting in or removing or altering flues, pipes, or funnels for the conveyance of smoke, hot air, or steam:

(*b*) Forming openings for soot doors, each opening to be fitted with a close iron door and frames:

(*c*) Making openings for the insertion of ventilating valves, subject to the restriction that an opening shall not be made nearer than 12in. to any timber or combustible substance.

228. Timber or woodwork shall not be placed—

(*a*) under any chimney opening within 6in. from the upper surface of the hearth of such chimney opening; or

(*b*) within 2in. from the face of the brickwork or stonework about any chimney or flue, unless the face of such brickwork or stonework is rendered.

229. Wooden plugs shall not be driven nearer than 3in. to the inside of any flue or chimney opening, nor shall any iron holdfast or other iron fastening be driven nearer than 2in. thereto.

230. 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 ensuring stability, or may be allowed by or under any other provision of this schedule.

Furnace Chimney Shafts.

231. Every brick or masonry chimney shaft for the furnace of a steam engine, brewery, distillery or manufactory shall be constructed in conformity with the following provisions:—

(*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 1¼in. in 10ft. of height:

(*b*) The thickness of brickwork at the top of the shaft, and for 25ft. below the top, if the external dimension does not exceed 5ft., shall be at least 9in. For chimneys of greater dimensions the thickness shall be at least 14in. and every chimney shall be increased at least one-half brick for every additional 25ft. measured downwards:

(*c*) Every cap, cornice, pedestal, plinth, stringcourse, or other variation from plain brickwork shall be provided as additional to the thickness of brickwork hereinbefore required. The footing of the shaft shall be 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.

(*f*) The height of the shaft shall be measured from the top of the footings:

(*g*) Chimney shafts in other material than brick or masonry, such as steel, steel and concrete, or reinforced concrete, or other types of construction, shall not be built without the sanction in writing of the surveyor.

Close Fires and Pipes for Conveying Vapour, Etc.

232. 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 18in. in front of the

furnace and 9in. elsewhere, be formed of materials of an incombustible and non-conducting nature not less than 6in. thick, or 3in. thick when covered by ¼in. steel or iron plate. A fender 2in. in height shall be formed round the front of the furnace, except where the floor is of fire-resisting material.

233. A pipe for conveying smoke or other products of combustion shall not discharge into a street or way, or be fixed against any building on the face adjoining any street or way, unless sanctioned in writing by the surveyor.

234. A pipe for conveying smoke or other products of combustion shall not be fixed nearer than 9in. to any combustible materials unless surrounded by an outer flue to the satisfaction of the surveyor.

235. A pipe or duct for conveying heated air (other than air heated by hot water at low pressure) or steam shall not be fixed nearer than 6in. to any combustible materials unless surrounded by lagging or protected in some other manner to the satisfaction of the surveyor.

236. Pipes or ducts for conveying smoke or products of combustion, heated air, steam, or hot water, and the lagging thereof, shall be constructed in incombustible materials.

237. 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 thereof shall not apply in the case of pipes used for conveying hot water or steam at low pressure.

238. Steam shall be deemed to be at low pressure when its pressure is not greater than 15lb. 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 250deg. Fahrenheit.

Floors Above Furnaces and Ovens.

239. The floor or roof over any room or enclosed space in which a furnace is or has been fixed, and any floor within 18in. from the crown of an oven, shall be constructed of fire-resisting materials approved by the surveyor.

Furnace.

240. In this Part of this schedule "furnace" includes any closed fireplace or firebox, or fire chamber used for the purpose of generating steam pressure exceeding 15lb. to the square inch above that of the atmosphere, or hot air or hot water the temperature of which exceeds 250deg. Fahrenheit, or for smelting or for manufacturing purposes.

Setting of Stoves.

241. Every stove, other than a self-setting range, electric or a gas-cooking stove, shall, unless the surveyor is satisfied that it is impracticable to do so, and certifies in writing accordingly, 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.

SCHED. II. PART XVI.

PART XVI.

LIGHT AND VENTILATION.

Minimum Height of Rooms, Corridors and Passage-ways above Stairs and Mezzanine Floors.

242. (1) Every room, except rooms wholly or partly in the roof, shall be at least 9ft. in height from the floor to the ceiling.

(2) Every room, wholly or partly in the roof of any building, shall be at least 8ft. 6in. in height vertically from the floor to the ceiling or roof for not less than one-half the area of the room.

(3) Corridors and passage-ways passing under a staircase shall not be less than 7ft. in height under the staircase.

(4) Stairs shall have a clear headway of at least 6ft. 6in.

(5) The clear height above or below a mezzanine floor construction shall be not less than 7ft.

Rooms Over or Adjoining Stables or Garages.

243. Every room, other than a store room, constructed over or adjoining a stable or garage, shall be separated from the stable or garage by a floor or walls rendered impervious to foul air.

Ventilation of Rooms.

244. (1) In addition to the ventilation specified under regulations 252 and 254 of this schedule, every room shall be provided with ventilators of which the total area in square inches shall be not less than the capacity of the room in cubic feet divided by 40. Rooms in which electric or gas cooking appliances are installed shall be provided with additional ventilation to the satisfaction of the surveyor.

(2) Every shop having only one entrance, in which the depth exceeds twice the width thereof, shall be provided with a system of mechanical ventilation approved by the surveyor unless through natural ventilation can be obtained.

(3) (*a*) Every factory, warehouse, restaurant or shop shall contain at least 400 cub. ft. of clear air space for each person employed therein. In the calculation of such air space no air space higher than 14ft. above the level of the floor of the factory, warehouse, restaurant or shop in which the same is being calculated shall be taken into consideration.

(*b*) Every factory, warehouse, restaurant and shop, and every part thereof, shall be provided with means of ventilation by openings for the inlet and outlet of air in the proportion of not less than 12 sq. in. of inlet openings and 12 sq. in. of outlet openings for each person employed in the factory, warehouse, restaurant, or shop, or part thereof, the space to be calculated exclusive of all bars, ornamentations, or obstructions thereto.

(*c*) The outlet openings referred to in the last preceding paragraph shall be placed at the highest practical point in the factory, warehouse, restaurant or shop, or part thereof.

Ventilation and Lighting of Staircases.

245. Every staircase shall be effectively ventilated and lighted either naturally or artificially, provided that in the latter case the lighting circuit is a separate one and controlled from the stair enclosure, and continuous in operation while the building is occupied.

Flues and Ventilating Shafts.

246. Unless otherwise permitted by the council, a flue or ventilating shaft shall not project beyond the building alignment of any wall abutting on a street or way, nor shall it be fixed against any building on the face adjoining any street or way.

Ventilation Under Floors.

247. Any building, the floor of which is immediately above the ground, having a wooden floor other than a floor constructed of solid wood bedded on concrete, shall have a space, not being in any case less than 6in. between the ground and the undersides of the bearers or floor joists, to admit of ventilation through the external walls by means of openings properly protected by rat-proof air-bricks or gratings and by adequate openings through other walls under floors for cross ventilation equivalent to 2 sq. in. of effective air space to every 1ft. run of walling: Provided that the surveyor may sanction in writing a space less than 6in. between the ground and the undersides of the bearers of floor joists in cases in which the surface beneath the floor is asphalted, cemented, or covered with an approved damp-resisting covering.

Frontage of Dwelling-House Buildings.

248. No dwelling-house shall be built unless the house will have a clear frontage to a street or way which is not less than 30ft. in width, or if the street or way is less than that width, within 15ft. of the centre line of the said street or way, and no building of any class shall be built so as to deprive and leave without such clear frontage or space, as the case may be, any dwelling-house which has been previously built having such clear frontage or space, unless it is a house built within an area of land which is afterwards subdivided into allotments fronting to a street or way, and having a depth therefrom of not less than 99ft.

Space in Connection with Dwelling-House Buildings.

249. (1) No dwelling-house (other than an hotel) shall be erected upon an allotment of land of less area than 3,960 sq. ft. or such other area (not being less than 3,960 sq. ft.) as the council may prescribe by by-law.

Every portion of a dwelling-house (other than a residential flat building or multiple dwelling within the meaning of regulation 324 of this schedule and other than an hotel) which is constructed or altered for separate occupation as a dwelling-house, shall be deemed to be a dwelling-house for the purposes of this regulation.

(2) Any part of any allotment of land over which any right of way has been granted shall not be deemed to be part of the area of the allotment.

(3) Notwithstanding the provisions of paragraph (1) of this regulation the council of the Municipality of the City of Adelaide may by resolution passed separately in respect of each case approve of the erection of a dwelling-house upon an allotment of less area than 3,960 sq. ft. but not less than 3,000 sq. ft. if—

(*a*) the dwelling-house is to be erected on the site of a dwelling-house existing at the time of the commencement of this Act; and

(*b*) the council is satisfied that the erection of the dwelling-house will not create undesirable conditions.

(4) No dwelling-house (other than an hotel) together with its appurtenances shall occupy more than two-thirds of the allotment of land upon which it is erected: Provided that the council may grant approval to the erection of any such dwelling-house in one occupancy occupying more than two-thirds of an allotment in replacement of an existing dwelling-house which occupies more than two-thirds of that allotment.

(5) It shall not be necessary to provide an open space for any hotel other than an accessible flat roof of area equal to one-third of the whole area of the site, exclusive of bulkheads for stairs and lift engine rooms.

(6) Where situated on a site considered by the council to be an established shopping locality, the council may permit a dwelling-house in one occupancy or any dwelling-house which is a shop and dwelling combined to occupy not more than four-fifths of the allotment, subject to the unbuilt upon area being not less than 500 sq. ft. in area. In a case where the one-fifth of the allotment is less than 500 sq. ft., if in a sewered district, the balance of the 500 sq. ft. may be provided in the form of an accessible flat roof.

In any case where the dwelling-house portion is wholly above the ground floor, the open space required by this regulation may be provided in the form of a flat roof over the shop portion of the building.

(7) Caretaker's quarters shall have an open space or area not less than 200 sq. ft. in area, being not less than 10ft. wide which may be provided by means of an accessible flat roof.

(8) The foregoing provisions shall not apply to houses abutting on a public park or on an open space (other than a street or way) of an acre or more in area which is dedicated to the public or the maintenance of which as an open space is permanently secured to the satisfaction of the council.

(9) The provisions of this regulation shall not apply to any residential flat building or multiple dwelling within the meaning of regulation 324 of this schedule, but every such residential flat building and multiple dwelling shall comply with the provisions of Part XXI. of this schedule.

Angles of Light in Light Courts.

250. (1) In this regulation unless inconsistent with the context or subject matter—

"angle of light" with reference to any window in a wall of a light court means the angle formed by the vertical plane of the face of such wall and a line drawn from a point in such vertical plane and on the basic light level of such wall bisecting diagonally a rectangle having for two of its sides the basic height and the basic width of such light court:

"basic height of a light court" with reference to any wall of a light court means the vertical distance from the basic light level of such wall to the level of the top of the parapet or eaves of the opposite wall of such light court:

"basic light level" of a wall of a light court means the level of the lowest horizontal line on the lowest window or windows in such wall which permits the volume of light to be admitted through such window or windows into the room or floor lighted thereby:

"basic width of a light court" with reference to any wall of a light court means the shortest horizontal distance from the face of such wall at the basic light level to the vertical plane of the face of the wall or parapet of the topmost storey on the opposite boundary of the light court, or, if none, to the vertical plane of the opposite boundary of the light court:

"height of a light court" with reference to any wall of a light court means the vertical distance from the sill of the lowest window in such wall to the level of the top of the parapet or eaves of such wall:

"light court" means a court wholly open at the top constructed or adapted for admitting light to a building and includes such parts of light courts of adjoining buildings abutting on the common boundary of such buildings as will when combined form a common court provided that reciprocal light easements thereover have been permanently created to the satisfaction of the council and includes also a street or way over which such building is permanently entitled to access of light:

"volume of light" means the volume of light capable of being admitted to a room or floor through the superficies of window required by regulation 252 of this schedule:

"wall of a light court" includes the wall or walls enclosing one side of a light court notwithstanding that at the level of upper storeys any of such walls is set back from the vertical plane of the lowest wall:

"width of a light court" means the shortest distance from the face of a wall of a light court at any given level to the face of the opposite wall, if any, at the same level, or, if none, to the vertical plane of the opposite boundary of the light court.

(2) Every window abutting on a light court other than windows lighting corridors, lavatories and sanitary conveniences, shall have an angle of light not less than the angle of light resultant from the ratio basic height to basic width

of the light court in the table hereunder applicable to such window and shall receive at such angle of light unobstructed light from the sky: Provided that where the opposite boundary of the light court on which such window abuts is also the boundary of an adjoining property such window need not receive such unobstructed light but shall be deemed to have the required angle of light if a window at the same basic light level erected on such opposite boundary would have the angle of light resultant from the ratio applicable according to the class of building under division II. of the said table.

TABLE.

Description of Window and Class of Building.	Ratio of Basic Height to Basic Width.
DIVISION I.—In all cases where windows other than those mentioned in division III. of this table are erected in opposite sides of a light court—	
(*a*) Factories and buildings of the domestic class other than dwelling-houses	4½ to 1
(*b*) Dwelling-houses	3 to 1
DIVISION II.—In all cases where windows other than those mentioned in division III. of this table are erected in one side only of two opposite sides of a light court—	
(*a*) Factories and buildings of the domestic class other than dwelling-houses	3½ to 1
(*b*) Dwelling-houses	2½ to 1
DIVISION III.—In the case of windows lighted from a light court which opens on to a street not less than 33ft. in width and is of uniform width for its full depth from such street such windows being distant from the street alignment not more than twice the width of such light court—	
All classes of buildings	6 to 1

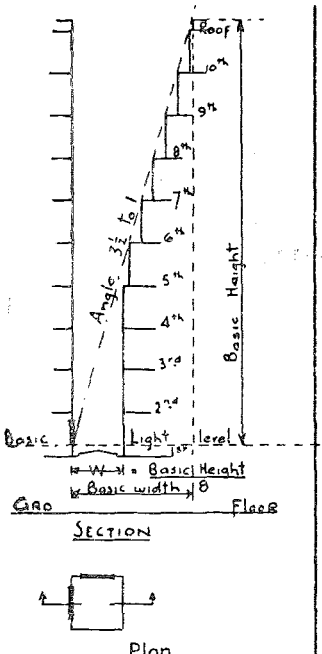
(3) The minimum widths of any light court shall be as follows:—

I. In the case of factories and buildings of the domestic class the minimum width at the basic light level measured from any wall wherein a window is constructed shall not be less than one-eighth of the basic height of the light court:

II. In the case of buildings of the warehouse class, other than factories, the minimum width shall not be less than one-eighth of the height of the court and one-tenth where the light court abuts on a right-of-way:

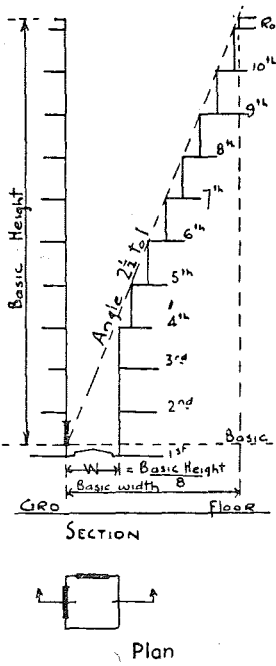
III. For all buildings of more than one storey in height the minimum width of any light court shall not be less than six feet:

ANGLES OF LIGHT - EXPLANATORY DIAGRAMS.



Plan

Illustrating Regulation 250, Division II. (a) of Table.



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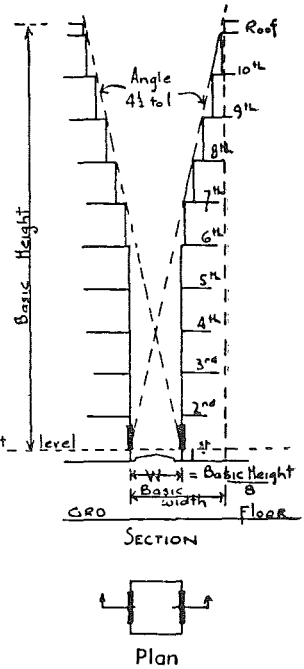

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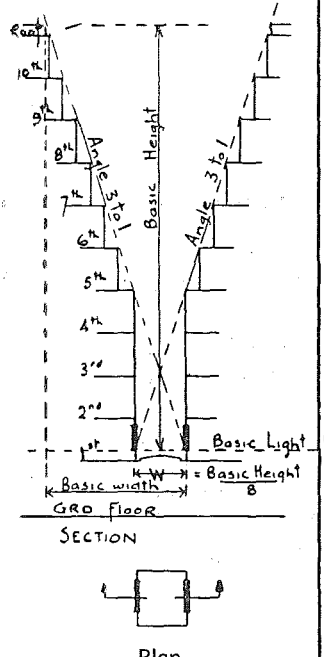

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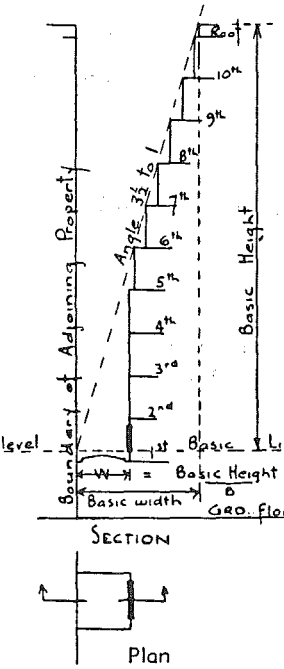

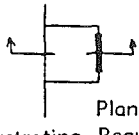

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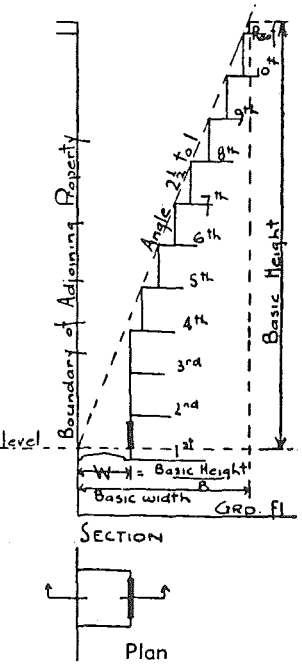

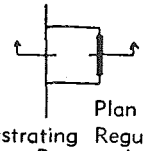

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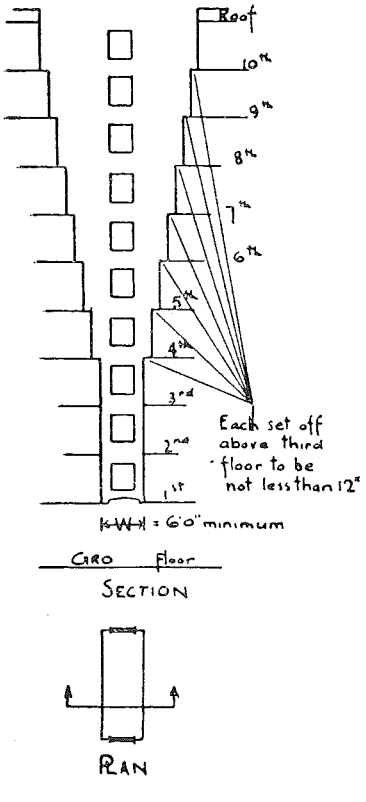
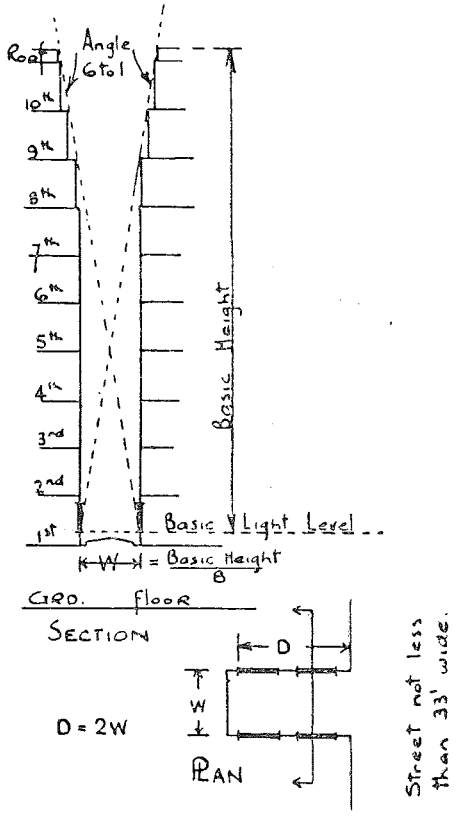
Illustrating Regulation 250, Paragraph (2).

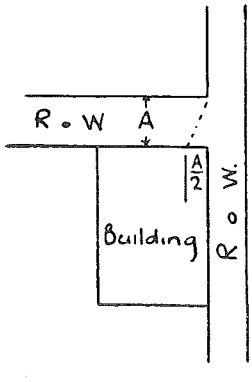
ANGLES OF LIGHT. - EXPLANATORY DIAGRAMS.

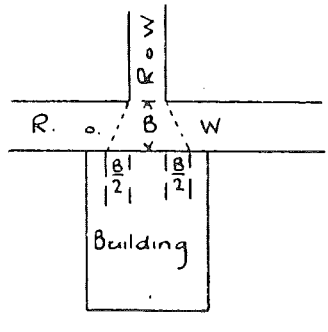
Illustrating Regulation 250, Paragraph (3) (iv.).



Illustrating Regulation 250, Division III. of Table







Illustrating Regulation 250, Paragraph (4).

IV. In the case of a light court having windows in one wall or opposite walls only the minimum width from any wall which neither contains any window required to have an angle of light nor is opposite to a wall containing such a window, shall not be less than six feet and where the number of storeys abutting on such light court exceeds three shall not be less at the level of each additional storey than the width at the level of the storey immediately below plus one foot.

(4) In cases where a street or way being a light court abuts wholly or partly on a building and is intersected by or connected with another street or way at right angles thereto the surveyor may permit windows, not having the required angle of light, to be constructed in that section of the wall of the building abutting on the light court and located within a distance of half the width of such court on one or both sides of the intersecting street or way.

Drainage of Inner Courts and Ventilating Shafts.

251. All inner courts and ventilating shafts enclosed on four sides shall be paved with an impervious material, graded to carry water quickly to the inlet of a drain constructed to discharge stormwater clear of the building or to discharge the stormwater into a drainage well.

Light and Ventilation.

252. (1) Unless otherwise provided or unless exempted by the council, every room shall have windows as follows:—

I. If the windows open into unrestricted space, the total superficies of the windows shall be equal to at least one-fifteenth of the floor area of the room:

II. If the windows open into a light court, the total superficies of the windows shall be equal to at least one-eighth of the floor area of the room:

III. If the windows open into a verandah, sunporch, sleepout or conservatory, the total superficies shall be one-tenth of the floor area of the room, and in the outer wall of any such sunporch, sleepout, conservatory or similar structure there shall be windows opening into unrestricted space with a total superficies equal to at least one-fifteenth of the combined floor area of the room and the sunporch, sleepout, or conservatory:

IV. The windows of any such room shall be constructed so that a portion thereof equal to at least one-thirtieth of the floor area of the room can be opened to ven-

tilation and the windows of any such sunporch, sleepout, or conservatory shall be constructed so that at least one-half thereof can be opened for ventilation:

v. For the purpose of this paragraph, the superficies of a window shall be the total superficies clear of the sash frames and free from any obstruction to the light.

(2) Each such window in a room shall extend to at least 7ft. above the floor level, but every room used for habitation purposes shall have at least one window of 9 sq. ft. superficies as aforesaid, of which one-half can be opened.

(3) A room having no external wall not opening into a sunporch, sleepout, conservatory or similar structure, or a room constructed wholly or partially in the roof, may be lighted through the roof by a dormer window, with a total superficies clear of the sash frames and free from any obstruction to the light, equal to at least one-twelfth of the floor area of the room, and shall be so constructed that a portion of such window equal to at least one twenty-fifth of such floor area, can be opened, and the opening in each case shall extend to at least 5ft. above the floor level; or any such room, except in a dwelling-house, may be lighted by a lantern light or skylight, of which a portion equal to at least one twenty-fifth of the floor area can be opened.

(4) The provisions of this regulation shall not apply to basements lighted by mechanical means in which a system of mechanical ventilation, continuous in operation, is provided to the approval of the surveyor. In any such case the maximum amount of natural light obtainable shall be availed of to the surveyor's satisfaction.

Exempted Rooms.

253. The following rooms are exempted from the operation of regulation 252 of this schedule if the provisions of this regulation are complied with:—

(*a*) Strongrooms designed and constructed as such:

(*b*) Box rooms, and similar places for storage purposes only, which do not exceed 50 sq. ft. in area:

(*c*) Cold stores, or other rooms where it is certified by the surveyor that such exemption is necessary for the purpose of trade or manufacture:

(*d*) Passage ways, corridors, staircases, and lift cages, if used for intercommunication purposes only, provided that the same are naturally lit by means of borrowed lights or otherwise, and ventilated to the approval of the surveyor:

(*e*) Rooms used for sanitary or lavatory purposes only shall have windows of a minimum area of 2 sq. ft. for each closet or each 2ft. of urinal space therein, with a minimum window area of 2 sq. ft. of which at least 2 sq. ft. shall open into the open air, or alternatively such windows as are above specified may be replaced by an opening of 2 sq. ft. in area for each 2 sq. ft. of window area required opening into an adequate ventilating shaft of a minimum cross section of 12 sq. ft. with a minimum width of 3ft. ventilated naturally or mechanically to the satisfaction of the surveyor. Where any such room has a window which can be closed there shall also be provided an air brick or a ventilator, either of which shall lead into the open air. The surveyor in special cases may require other means of ventilation to be provided either in addition to or in substitution for any of the means of ventilation referred to in this paragraph:

(*f*) If any portion of a room is enclosed by a wall, partition, screen, or similar structure, the enclosed section shall be provided with light and ventilation as if it were a separate room, always provided that if at least one-half of the area of the enclosing structure is of glass and a space of at least 6in. is left for ventilation between the top of the enclosing structures and the ceiling then such enclosed section shall be deemed to be sufficiently lighted and ventilated through such enclosing structure. Any such enclosing structures shall not be used to separate portions of rooms in different tenancies:

(*g*) Rooms without windows may be constructed in private dwellings and flats provided that every such room opens without obstruction directly into another room which has one or more windows opening directly into the outer air as prescribed in this Part of this schedule and provided the area of glass is not less than one-tenth of the combined floor areas of the two rooms, and the opening between such rooms is not less than 60 sq. ft. in area.

Ventilation of Basements.

254. Rooms in basements which are used for habitation purposes, including dining rooms, restaurants, tea rooms, billiard rooms, hairdressing saloons, offices, and shops, shall

be ventilated with a system of mechanical ventilation to the satisfaction of the surveyor if, in his opinion, satisfactory natural ventilation cannot be obtained.

Skylights, Etc.

255. All skylights and lantern lights in courts or wells and on roofs of fire-resisting construction shall have metal glazing bars of metals and sections approved by the surveyor and be glazed with wired glass.

Pavement Lights and Area Gratings.

256. Pavement lights and gratings to areas encroaching into the footway shall be enclosed by concrete, solid masonry or brickwork, surmounted by a proper stone or concrete kerb, and be covered with an approved horizontal iron grating, or be fitted with floor lights not over 6in. square or less than ¼in. thick, set in metal frames, level with the surface of the footway, and secured to the kerbing by being run thereto with lead, zinc, or other material approved by the surveyor, and must be maintained in good order and condition to the satisfaction of the surveyor. Prisms set in reinforced concrete may be used. No such light or area shall extend from the building line under the footway in streets or ways over 30ft. in width, more than 1ft. 6in.; or in streets or ways 30ft. or less in width more than 1ft. Pavement lights shall be supported at least every 4ft. by means of reinforced concrete or steel joists or by other means approved by the surveyor. No floor shall encroach beyond the street alignment over any portion of a street or way.

Windows in Upper Storeys.

257. Every window in every building above the first storey shall be equipped with a suitable device which will permit the cleaning of the exterior of the window without undue danger to the person cleaning the window. The device shall be of such pattern and construction as will reasonably and safely answer the purpose for which it is intended; provided, however, that if any window is of such construction that it may be easily cleaned from the inside, it need not be so equipped.

PART XVII.

PART XVII.

PRIVIES AND PLUMBING.

Privy.

258. (1) A room containing any privy or urinal adjoining any room used for living and sleeping or working purposes, or a room for public entertainment purposes, shall be separated from it by a partition not less than 2½in. thick of impervious material, and shall be floored with impervious material.

(2) Privies and rooms containing privies and urinals shall be constructed so as to comply with regulation 253 of this schedule.

(3) All privies built in the open, except those hereunder exempted, shall be built with stone or brick walls not less than 4½in. thick, or reinforced concrete walls not less than 3in. thick, and shall have impervious floors and roof coverings as provided for other buildings. The walls of privies serving dwellings constructed pursuant to the provisions of Part IX. or Part X. of this schedule may be constructed in manner provided by either of those Parts.

(4) The provisions of this regulation are in addition to the provisions of section 108 of this Act.

Gas Piping.

259. (1) Gas-piping shall be of best quality wrought iron or other metal, approved by the surveyor, and pipe fittings shall be of wrought iron, malleable cast-iron, or other metal approved by the surveyor.

(2) All gas pipes shall be properly supported.

(3) Composition or lead pipes shall not be used in any building for conveying gas except for connections that are exposed to view.

Rainwater Pipes.

260. All stormwaters led under a building shall be carried in cast-iron pipes with lead joints properly caulked, or in stone-ware pipes caulked with cement mortar and surrounded with concrete not less than 3in. thick, or in reinforced concrete pipes properly caulked with lead or cement, the joints of which are of the spigot and faucet type or shall be carried by any other similar means approved by the surveyor.

PART XVIII.

DOMESTIC OUTBUILDINGS, GARAGES, BATHROOMS, LAUNDRIES, SLEEPOUTS, SUNPORCHES AND CONSERVATORIES.

261. (1) Notwithstanding any other provisions of this schedule, any domestic outbuilding not used for human habitation, garage, bathroom, laundry, sleepout, sunporch or conservatory, which is appurtenant to a dwelling-house (all of which are hereinafter in this Part included in the term and referred to as "outbuildings") may be constructed as provided by this Part.

(2) The provisions of this Part shall not apply to any outbuilding which is not appurtenant to a dwelling-house nor to any outbuilding which is more than one storey in height or which exceeds three squares in area.

262. (1) Except as otherwise provided by this Part, any outbuilding which is not more than 9ft. in height and not more than three squares in area, may be erected in manner provided by Part IX. or Part X. of this schedule.

(2) Any outbuilding which is more than 9ft. in height and is not more than one storey in height nor more than three squares in area, shall have walls of brickwork at least 4½in. thick stiffened with piers at least 9in. x 9in. thick at intervals not exceeding 6ft., or walls of reinforced concrete at least 3in. thick, and when built within 3ft. of any boundary shall have a parapet at least 12in. in height.

263. No portion of any garage or of any other outbuilding (other than a bathroom, laundry, sleepout, sunporch or conservatory) shall come within 5ft. of any dwelling-house or other building in the same or other occupation or within 3ft. of any boundary of any adjoining allotment of land unless all the walls are of brickwork at least 4½in. thick in cement mortar, stiffened with piers at least 9in. x 9in. thick at intervals not exceeding 6ft. or are of reinforced concrete at least 3in. thick, and unless there is a parapet at least 12in. in height.

264. (1) Except as provided by paragraph (2), any outbuilding (other than a sleepout, sunporch or conservatory) erected within 5ft. of the street alignment shall have the wall nearest the street alignment of brickwork at least 4½in. thick or of reinforced concrete at least 3in. thick.

(2) The council may by notice in writing authorize the erection of any outbuilding within 5ft. of the street alignment, notwithstanding that it does not comply with the provisions of paragraph (1).

(3) Notwithstanding the provisions of paragraph (1), and notwithstanding that the outbuilding is to be erected in the manner provided by paragraph (1), the council may refuse approval of the erection of any outbuilding to be erected within 5ft. of any street alignment if the council is of opinion that the erection of the outbuilding would injuriously affect the value or amenities of any property in the vicinity.

265. No door or window in the wall of any outbuilding shall open within 3ft. of land in any other occupation, or within 5ft. of any building on any land in any other occupation. The provisions of this regulation do not apply to land over which there is any easement of right-of-way.

266. Floors of garages shall be of fire-resisting materials and, if of wood, shall be hardwood at least 2in. thick.

267. (1) The provisions of Part XX. of this schedule shall not apply to any sleepout, sunporch or conservatory appurtenant to a dwelling-house.

(2) The walls of any sleepout or sunporch which is appurtenant to a dwelling-house and which does not form portion of the main building may be of timber frame construction provided that an area of walling equal to not less than 50 per cent. of the floor area is fitted with hinged or sliding glass windows, venetian shutters or other open screens. The timber-frame walls may be sheathed externally with metal of at least No. 26 Birmingham gauge, hardwood of a minimum nominal thickness of 1in., asbestos-cement or compressed wood fibre sheets of a minimum thickness of 3/16in., compressed plates of straw or other material of a minimum thickness of 2in., stucco on No. 26 gauge metal lathing, or other material approved by the surveyor.

(3) The lower portion of the walls of any sleepout or sunporch, if of brick or reinforced concrete up to a height not exceeding 4ft. above the floor level, may be 4½in. thick if of brick or 3in. if of reinforced concrete, but if more than 4ft. must comply with the regulations for external walls. The necessary frames, sashes, and doors of any sleepout or sunporch may be of timber.

(4) Conservatories to any dwelling-house may be constructed in similar manner to sleepouts excepting that open screens shall not be required.

268. No portion of any sleepout, sunporch, or conservatory constructed with timber-frame walls shall come within 3ft. of any street or way or the boundary of the allotment on which it stands, unless separated therefrom by a brick wall not less than 4½in. in thickness, or a wall of reinforced concrete not less than 3in. thick.

PART XIX.

PIERS, PILLARS, COLUMNS, GIRDERS AND STRUCTURAL STEEL.

Definition.

269. In this Part the term "pier" or "pillar" includes all columns and stanchions, or an assemblage of metal or timber sections forming columns or stanchions properly riveted or bolted together.

Brick or Stone Piers.

270. (1) No isolated pier of brick or stone shall exceed in height 8 times the least dimension of the pier if built in lime mortar and 12 times if built in cement mortar. Any such pier shall be not less than 9in. in width. Piers carrying only the roofs of verandahs may be of such greater height as may be approved by the surveyor.

(2) Isolated piers of reinforced concrete may be of such height as is approved by the surveyor.

Foundations.

271. All isolated piers, and all pillars, when resting on or in the ground, shall rest on solid natural or artificial foundations, and shall have footings of brick, stone, or concrete, where necessary, properly designed and proportioned to take the loads transferred to them from the members above.

Factors of Safety.

272. The regulation of maximum allowable unit stress to ultimate strength in the case of columns and pillars shall be as follows:—

Metal other than cast iron or mild steel ..	1 to 4
Cast iron, unless otherwise stated	1 to 8
Mild steel	1 to 3·5
Timber	1 to 5
Isolated brick or masonry piers of natural artificial stone, other than reinforced concrete columns	1 to 10

unless otherwise stated in regulation 41 of this schedule. Reinforced concrete columns shall comply with Australian Standard Specification No. CA 2.

Column Fixings.

273. Proper provision shall be made to distribute column loads to foundations and footings. Columns with ends machined for seating on a machined end or bloom base shall

have ample area to transmit safely the full load in bearing. Angle cleats on such columns shall not be assumed to transmit any of the column load to the slab or bloom base.

Column ends may be fitted with gussets and a base plate.

In the case of a column with ends machined for seating on a base plate of rolled material, the rivets through the column, gussets, and angle cleats shall be designed to distribute the column load uniformly, or as nearly so as practicable, over the whole of such base plate, and in no case shall be designed to carry less than 60 per cent. of the column load. In the case, however, of columns with unmachined ends, the whole of the load shall be assumed to be transmitted to the base plate by the rivets through the column.

All connecting angles and gusset plates shall be fitted in place before column ends are machined.

Cast bases shall be planed on the surfaces to be in contact with steel, and the bottom surfaces, resting on dressed masonry or concrete, shall be rough machined.

Both sides of the shoe plates and cap plates shall be either planed or levelled to ensure an even bearing on the members in contact with them.

Plates over 1½in. in thickness shall be planed on the surface in contact with steel.

Cast Pillars.

274. (1) In any cast-iron or cast-steel pillar, the metal shall not be, in any part, of less thickness than three-quarters of an inch or less than one-twelfth of the least lateral dimensions, and holes shall be drilled on each side of the cast columns to determine the thickness of the metal. The pillar shall not have an unsupported length of more than twenty times its least lateral dimensions or more than eighty times its least radius of gyration.

(2) The caps and bases of cast pillars shall be in one piece with the columns, or be connected thereto with a properly turned and faced joint, sufficiently fixed.

(3) All cast pillars shall be turned or faced top and bottom to a true face at right angles to the axis when in contact with metal.

(4) All joints in cast pillars shall be at or near the level of the floor, and shall be fixed and made with not less than four bolts at least three-quarters of an inch in diameter.

(5) The foot of all cast pillars shall have such area as may be necessary to properly distribute the load on the footings or other support.

Stresses in Cast Pillars.

275. In cast-iron or cast-steel pillars the actual working stress per square inch shall not exceed that given in the following table, and in like proportion for intermediate ratios:—

Where the length divided by least radius of gyration equals—

80	1·9 tons
60	2·4 tons
40	3·0 tons
20	3·5 tons

For allowable stresses in steel columns see regulation 98 of this schedule.

Pillars in Walls.

276. Where a pillar is built into a wall, except in buildings of frame construction, 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.

Timber Columns.

277. The safe load for columns of any variety of timber, except such as may be otherwise determined by the surveyor, shall be fixed by the following formula:—

Safe load in pounds per square inch up to an $\frac{l}{d}$ ratio not exceeding 40.

$$W = f\left[1 - \frac{l}{60d}\right]$$

l = length in inches.
d = least dimension in inches.
f = allowable compressible strength of timber to be used.
W = safe total load.

Loading.

278. The proportion of floor and other loads to be transferred to columns shall be as set out in Part II. of this schedule.

Eccentric Loading of Pillars or Columns.

279. (1) In the case of columns having loading eccentric to the axis and parallel therewith, the bending moment about each principal axis shall be calculated with proper regard to the eccentricity of the loading, and the maximum compressive stress at the extreme fibre due to the bending actions shall be added to the axial loading per square inch. The sum of these stresses at the extreme fibre shall not exceed F_2.

Where $F_2 = fc + 16{,}800 \left[1 - \frac{fc}{F_1}\right] \left[1 - 0{\cdot}002 \frac{l}{r}\right]$

F_1 = the working stress per sq. in. specified in Reg. 23.

fc = the total axial loading on the column in pounds divided by the gross cross sectional area of the column in square inches.

$\frac{l}{r}$ = ratio of effective column length to least radius of gyration.

(2) In cases where a beam is connected to a continuing column, the bending moment in the column due to the eccentricity of the reaction from the beam may be regarded as divided between the column lengths above and below the level of the beam proportionately to their stiffnesses.

$\left[\frac{\text{moment of inertia}}{\text{length}} = \frac{I}{l}\right]$, account being taken of all bending or shearing forces at any joint.

(3) In continuing columns of all bending moments due to eccentricities of loading at any one floor level may be disregarded at the levels of the floor beams immediately above and below, provided that the column at these latter levels is effectively restrained in relation to the eccentric load.

(4) Eccentric loading shall not be permitted on cast-iron columns or pillars.

Columns on Girders.

280. Where columns are supported by girders, the computed deflection of the girder under the loads tabulated in Part II. of this schedule must in no case exceed one fifteen-hundredth part of the span, the total limit of the amount of deflection of the girder being 0·3 of an inch in any case.

Camber and Deflection.

281. All trusses and plate girders having a span greater than 40ft. shall have at least such initial camber that with the full live load at the centre of the span the camber will not be entirely taken out by deflection. The maximum deflection in any beam, truss or girder under full live load conditions shall not exceed one three-hundred and twenty-fifth of the span.

Chafing, Lagging.

282. The bases of columns in buildings of the warehouse class shall be protected against chafing by wood or other lagging.

Bearing of Girders.

283. (1) Every metal girder, other than a girder properly connected to a metal stanchion or acting as a cantilever, shall have a bearing in the direction of its length of 4in. at least at each end upon a wall or other support, and every girder shall have such columns, stanchions, piers of brick, concrete, or stone, or corbels, as may be necessary, to ensure the stability of the superstructure. All girders and columns or stanchions supporting a wall, floor, or roof of fire-resisting construction shall be of metal or reinforced concrete approved by the surveyor and shall be protected from fire as provided by Part VII. of this schedule.

(2) Every metal girder bearing upon a wall shall be borne by a template or corbel of stone, concrete, or iron, tailed into the wall and of an area to ensure that the safe bearing loads do not exceed those set out in regulation 41 of this schedule.

(3) Every concrete girder bearing on a wall or similar support with which it is not cast homogeneously shall have a bearing at each end in length equal to its breadth, and in no case less than 9in. When not cast *in situ* any such girder shall be properly bedded on a rich cement grout.

Expansion Space.

284. At each end of every metal girder, except those in frame construction or those encased in concrete, a space shall be left equal to one-quarter of an inch for every 10ft., and also for any fractional part of 10ft. of the length of the girder, to allow for expansion.

Structural Steelwork.

285. (1) All structural metal work shall be cleaned of all scale, dust, and rust, and, except where in contact with concrete, be thoroughly coated before erection with one coat of boiled oil, oil paint, or other material approved by the surveyor, and where accessible after erection shall receive at least one additional coat.

(2) All connections in structural steelwork shall be made by means of rivets, except where rivets cannot be driven, in which case fitted bolts may be used in reamered holes, or alternatively, the surveyor may approve for use either wholly or in part any other method such as welding, that he considers suitable.

Concrete Work.

286. Concrete columns and girders shall comply with Part VIII. of this schedule.

PART XX.

PART XX.

FIRE PROTECTION AND ESCAPES.

Public Buildings.

287. Every building intended to be used as a public building shall have all walls, partitions, floors and staircases constructed of fire-resisting materials. All spaces used for storage must have floors of fire-resisting construction above them. The floors of buildings not exceeding two storeys in height, or, in the case of a theatre, three storeys, may be of timber construction. Cellars and basements shall not be reckoned as a storey if the floors immediately above them are of fire-resisting construction.

Hotels, Boarding-houses, Etc.

288. Every building intended to be used as an hotel, boarding-house, apartment-house, club, sanatorium, or similar institution, shall, if more than three storeys in height, have all floors, ceilings and staircases constructed of fire-resisting materials other than wood. Cellars and basements shall not be reckoned as storeys if the floors immediately above them are of fire-resisting construction.

Number of Floors of Non Fire-resisting Construction.

289. No building of any class shall be erected or altered to contain more than four storeys with floors of non fire-resisting construction. All other storeys of any such building shall have fire-resisting floors.

Structural Supports to be Fire Protected.

290. All portions of the structure of any building which support—

(*a*) a wall of fire-resisting construction; or

(*b*) a floor of fire-resisting construction; or

(*c*) a roof of fire-resisting construction,

shall be of fire-resisting construction also.

Cubical Extent of Buildings.

291. No building of the warehouse class shall extend to more than 350,000 cub. ft., unless divided by walls of the same thickness as cross walls, or by floors of fire-resisting construction, in such manner that no division thereof extends to more than 350,000 cub. ft. unless a sprinkler installation is

Reg. 291. CORPORATION OF THE CITY OF ADELAIDE v. FOY AND GIBSON PROPRIETARY LIMITED (1930) S.A.S.R. 170; 3 Austn. Digest 57. The construction of "fire-isolated" stairs from the top to the bottom of a building is to be treated as the construction of one staircase.

provided, in which case any division thereof may be increased to 500,000 cub. ft. or unless there is provided throughout the whole of the building an automatic fire alarm approved by the surveyor which will on the outbreak of fire give an alarm to a fire brigade, in which case any division thereof may be increased to 400,000 cub. ft. Staircases and lift-wells connecting two or more divisions shall be fire-isolated by brick walls not less than 9in. thick, or reinforced concrete walls not less than 4in. thick. Doors opening on to such staircases and lift-wells shall be tin clad wooden doors. Buildings of fire-resisting construction shall not be limited as regards cubical extent.

Consent to Larger Dimensions.

292. (1) In cases in which additional cubical extent is necessary for any building to be used for any trade or manufacture, and the council is satisfied in respect of the site that proper arrangements have been or will be made and maintained for lessening, so far as reasonably practicable, danger from fire, the council may consent to such building containing additional cubical extent.

(2) The consent shall continue in force only while the said building is actually used for the purpose of the trade or manufacture in respect of which the consent was granted.

Borrowed Lights in Party Structures, Etc.

293. (1) Borrowed lights may be inserted in the enclosing walls of lifts and staircases.

(2) When inserted in party structures or when inserted in walls enclosing fire-isolated staircases borrowed lights shall be glazed with wire glass secured with metal beads, or approved glass prisms set in fixed fireproof frames. No one opening shall exceed 15 sq. ft., or contain less than three panels, each of which shall be of equal area. The total area of the openings shall not exceed 20 per centum of the area of the wall in each storey.

Uniting Buildings.

294. (1) Buildings shall be deemed to be united when any opening fitted with a door approved by the surveyor 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; but buildings shall not be deemed to be united when they are connected only by an unenclosed gangway of fire-resisting construction.

(2) Buildings shall not be united except where they are wholly in one occupation, but doorways will be allowed in party structures opening on to staircases, landings, or

passages, if such doorways are protected with tin clad doors approved by the surveyor, and are hung so as not to block the egress space of the landings or passages.

(3) Buildings shall not be united if, when so united and considered as one building only, the buildings would not be in conformity with the provisions of these regulations.

Openings in Party Wall.

295. Openings in any party wall, division wall, or in two external walls dividing buildings of the warehouse class, which if taken together would extend to more than 350,000 cub. ft., or 500,000 cub. ft. if a sprinkler installation is provided, or 400,000 cub. ft. if an automatic fire alarm is installed as provided in regulation 291 of this schedule, shall be constructed in accordance with the following provisions:—

(*a*) Openings shall not exceed 60 superficial feet in area, excepting in sprinklered buildings when the opening may be 80 superficial feet in area, and such opening, or openings, taken together, shall not exceed one-half the length of the wall or walls on each floor of the building in which they occur:

(*b*) Openings shall have the floor, jambs, and head formed of brick, stone or iron, and be closed by a tin-clad door fitted to rebated frames without woodwork of any kind, or hung to slide, and any doors, sliding doors and shutters in such openings shall be fitted with bolts or other fastenings, and be capable of being opened from either side, and shall be constructed in an efficient manner. Openings exceeding 60 superficial feet in area shall have doors on both sides of the wall. In the alternative, such doors and shutters may, instead of being constructed as abovementioned, be constructed of fire-resisting materials approved by the surveyor.

Separation of Buildings.

296. 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 stopped up with fire-resisting materials as approved by the surveyor.

Notice to be Given.

297. Whenever any buildings which have been united cease to be in one occupation, the owner thereof, or, if the buildings are the property of different owners, then each of such

owners, shall forthwith give notice to the surveyor, and shall cause any openings made in the party or external wall to be stopped up as aforesaid.

Party Structures Required.

298. (1) Whenever any building is either wholly or partially used, occupied as, or converted into a shop or shops, and whenever any building is divided or converted into separate occupations or tenements, the shop or shops or the portion or portions of the said buildings so separately occupied shall be divided vertically and horizontally by party structures and separated from other buildings by party structures.

If the party structure vertically dividing the topmost storey of any such shops or portions separately occupied is not carried up to the under side of a roof covering of fire-resisting material, the ceilings of such shops or portions shall be of fire-resisting construction.

(2) Paragraph (1) of this regulation shall apply in the cases hereinafter mentioned only to the extent mentioned in this paragraph:—

I. If any dwelling-house not exceeding two storeys in height is constructed or altered to contain not more than four separate occupations, the portions of the building need not be separated as aforesaid:

II. If any dwelling-house not exceeding two storeys in height is constructed or altered to contain more than four separate occupations it shall be sufficient compliance with paragraph (1) of this regulation if the building is divided as aforesaid so as to separate each portion of the building constructed for not more than four separate occupations from the remainder of the building:

III. If any building not exceeding two storeys in height is constructed or altered to contain not more than four lock-up shops which do not exceed 50 squares in aggregate area and 125,000 cub. ft. in aggregate cubical content, the portions of the building need not be separated as aforesaid:

IV. If any building not exceeding two storeys in height is constructed or altered to contain more than four lock-up shops, it shall be sufficient compliance with paragraph (1) of this regulation if the building is divided as aforesaid so as to separate from the remainder of the building each portion of the building constructed to contain not more than four lock-up shops which do not exceed 50 squares in aggregate area and 125,000 cub. ft. in aggregate cubical content:

v. If any building is constructed or altered to contain separate sets of chambers or offices (with or without caretaker's quarters), the building need not by reason of such sets of chambers or offices or such quarters, be separated as aforesaid.

In all such cases any portion or portions of the said buildings so separately occupied shall have dividing walls of not less than 4½in. brickwork, 3in. reinforced concrete, 3in. hollow terra-cotta, or other hollow blocks approved by the surveyor and set in cement mortar.

(3) If any building is erected over any public way leading to premises in other occupation, the building shall be separated vertically and horizontally from the public way by party structures. This paragraph does not apply to a gangway connecting two buildings.

(4) The provisions of this regulation are in addition to and not in substitution for the provisions of regulation 302 of this schedule.

Construction of Party Structures.

299. Every party structure shall be constructed of fire-resisting materials throughout.

Shop Front Entrances.

300. Shop front entrances which return along passages or lobbies of fire-resisting construction (one of the walls of which is a party structure) may be returned to a depth not greater than the width of such passage or lobby: Provided that any shop front entrance may be returned to a greater depth if it is protected on the outer face thereof (in manner approved by the surveyor) with self-coiling rolling corrugated steel shutters running in metal grooves and fitted with proper appliances on the outside thereof suitable for raising or lowering, or by a sprinkler system approved by the surveyor.

Limitation of Floor Area.

301. If any building which contains separate sets of chambers or offices, or rooms tenanted, or constructed or adapted to be tenanted by different persons, extends to more than 50 squares in area, the building shall be separated by a cross wall or cross walls of the thickness specified in regulation 69 of this schedule with a parapet or parapets so that each part so separated shall not exceed 50 squares in area. This provision shall not apply to buildings of fire-resisting construction throughout with fire-isolated staircases.

Combined Shop and Dwelling.

302. In every building constructed or adapted to be used in part for purposes of trade or manufacture, and in part as a dwelling-house, in which the portion used for the purpose of trade and manufacture exceeds 20,000 cub. ft. in cubical extent, the portion used for the purpose of trade or manufacture, or both, shall be vertically and horizontally separated from the portion used as a dwelling-house by party structures. Doorways for communicating between the two parts of such building shall be fitted with self-closing doors of fire-resisting materials hung in frames of fire-resisting materials.

Habitable Room over Garage.

303. Any habitable room built over a garage shall have a floor and walls of fire-resisting material.

Construction of Lift Shafts and Lift Engine Rooms.

304. (1) The shaft of every lift shall be constructed and enclosed with brickwork not less than 9in. thick, reinforced concrete not less than 4in. thick, or other fire-resisting materials, as follows:—

I. The sides of the shaft of every such lift 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 the shaft is not carried up to the roof of the building, at the top:

II. The shaft of any lift constructed within the well-hole of a fire-resisting staircase and landings may be enclosed with open metal grilles or guards and open metal doors.

(2) The walls and roof of every lift engine room shall be constructed with brickwork not less than 9in. thick, reinforced concrete not less than 4in. thick or other fire-resisting material approved by the surveyor.

Doorways to Lift Shafts.

305. Doorways to lift shafts of buildings over four storeys in height, including basement, if any, shall be fitted with fire-resisting doors in which may be inserted fire-resisting glazing not exceeding 5 sq. ft. in area, in panes not exceeding 16 sq. in., held in position with metal beads.

Doorways to lift shafts of buildings four storeys or less in height, including basement, if any, may be fitted with doors constructed of softwood at least 2in. thick or constructed of hardwood framing and battens. These doors shall not exceed 7ft. in height.

Goods Lift.

306. No goods lift shall be constructed in or communicate with an enclosed staircase in any building of the warehouse class.

Prevention of Fire in Connection with Windows and Openings in Certain Cases.

307. All openings in any external wall of a building of the warehouse class, or of a building of the domestic class exceeding three storeys in height, which are distant less than 20ft. in any diagonal direction from any opening in any external wall of any other building, shall be fitted with solid iron or armoured doors, tin-clad shutters, or shutters of wire gauze: Provided that this provision shall not apply to shop fronts in an arcade building fitted with a sprinkler installation approved by the surveyor, or to windows constructed with approved frames and sashes of metal and glazed with wire-rolled glass prisms or electro copper glazing of not less than ¼in. in thickness.

Openings Abutting on Other Occupation.

308. All openings that abut on or are within 3ft. of land in other occupation shall be fitted with fire-resisting glazing as for vertical party structures, or alternatively the openings shall be protected with solid iron armoured or gauze shutters. 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 tin-clad or wire gauze shutters.

Skylights in Courts or Wells.

309. All skylights or lantern-lights which are placed in courts or wells constructed in buildings, or constructed on roofs of fire-resisting construction, shall, so far as regards the frames and glazing thereof, be constructed of fire-resisting materials and wire-glazing respectively.

Rooms Used for Storage of Inflammable Liquids, Etc.

310. Every room or other portion of a building, whether in existence before the commencement of this Act or erected thereafter, used for the storage of petroleum or any produce of petroleum, turpentine, or other similar volatile fluids, or for the storage of inflammable cinematograph films, or carbide, or other highly inflammable or dangerous material, shall have walls, floors, and ceilings of fire-resisting construction, be properly ventilated and provided with reservoirs to receive any possible leakage from the contents. The doors of such room or other portion of a building shall, unless opening directly to the outer air, be tin-clad or iron-cased.

Water Service for Fire Extinction.

311. (1) A water supply service for fire extinction, approved by the surveyor, shall be provided for—

(*a*) every building over three storeys in height;

(*b*) every building proposed to be used as a factory;

(*c*) every building over 20 squares in area proposed to be used as a shop; and

(*d*) every timber yard:

Provided that in any case where so approved by the surveyor, there may be provided in lieu of a water supply service, chemical fire extinguishers approved by the surveyor and to the number required by him.

(2) All buildings exceeding the maximum height permitted for buildings of ordinary construction shall be provided with a rising main not less than 3in. in diameter up to the roof level, with a 2½in. outlet and fire hose cock on each floor and on the roof in positions approved by the surveyor, and provided with back pressure and stop valves and screwed cap connections to which a fire brigade's pump can be attached.

Stairs.

312. (1) Every building which is more than three storeys in height, and every building which is two storeys or more in height and is intended for use as a factory, shall be provided with alternative stairs approved by the surveyor, one of which may be an external fire-escape stair. Cellars and basements shall not be reckoned as a storey for the purposes of this regulation if the floors immediately above them are of fire-resisting construction. All stairways shall, as far apart as practicable, lead to separate exits. A second stair shall not be necessary in any factory building of not more than three storeys in height in which not more than 150 persons are employed on the floors above the ground floor, if the one stairway provided is fire-isolated by brick walls not less than 9in. thick, or by walls of reinforced concrete not less than 4in. thick.

(2) All stairs (other than stairs in a private dwelling-house) shall be constructed of fire-resisting materials and the lining, if any, of the underneath of the stairs and landings shall be constructed of fire-resisting materials.

(3) Stairs shall also comply with the provisions of regulations 182, 320, and 327 of this schedule.

313. All walls and partitions enclosing staircases which are required to be fire-isolated shall be constructed of fire-resist-

Reg. 312. CORPORATION OF THE CITY OF ADELAIDE v. FOY AND GIBSON PROPRIETARY LIMITED (1930) S.A.S.R. 170; 3 Austn. Digest 57. Stairs from the top to the bottom of a building are to be treated as one stairway.

ing materials, but those enclosing other staircases may be constructed of 4½in. brickwork, 3in. reinforced concrete, 3in. hollow terra-cotta, or other approved hollow blocks set in cement mortar.

314. The egress space of each stairway from the two topmost storeys of every building over three storeys in height above the ground level shall be not less than 2ft. 8in. in width and for the remaining storeys not less than 3ft. 4in. in width.

Exits from Factories.

315. The exits from factories in which not more than 25 persons are employed shall be at least 2ft. 8in. in width, but if more than 25 persons and not exceeding 100 are employed the exits shall be at least 3ft. 4in. in width. If a greater number than 100 persons is employed the width of exits shall be increased 20in. for every additional 100 persons or proportion thereof.

Stairways and Exits from Shops.

316. The number and width of stairways and exits from shops shall be in accordance with the following tables:—

TABLE A.

Exits and stairways required for retail shops used for the sale of drapery, millinery, and fancy goods, or any other class of goods combined with drapery, millinery and fancy goods.

Area of each Floor in Square Feet.	Number and Width of Stairs and Exits.	Total Width of Stairs and Exits.
Up to 600	1 2ft. 8in.	2ft. 8in.
More than 600 and not more than 1,000	2 2ft. 8in. or 1 2ft. 8in. if fire isolated	5ft. 4in. 2ft. 8in.
" 1,000 " " 2,000	2 3ft. 4in.	6ft. 8in.
" 2,000 " " 4,000	1 5ft. 0in. } One stair to be 1 3ft. 4in. } fire isolated	8ft. 4in.
" 4,000 " " 6,000	2 5ft. 0in.	10ft.
" 6,000 " " 8,000	2 5ft. 0in. 1 3ft. 4in.	13ft. 4in.
" 8,000 " " 10,000	3 5ft. 0in.	15ft.
" 10,000 " " 12,000	2 5ft. 0in. } One 5ft. stair to 2 3ft. 4in. } be fire isolated	16ft. 8in.
" 12,000 " " 14,000	3 5ft. 0in. 1 3ft. 4in.	18ft. 4in.
" 14,000 " " 16,000	4 5ft. 0in.	20ft.
" 16,000 " " 18,000	4 5ft. 0in. } Two stairs to be 1 3ft. 4in. } fire isolated	23ft. 4in.
" 18,000 " " 20,000	5 5ft. 0in.	25ft.
" 20,000 " " 22,500	4 5ft. 0in. } Two 5ft. stairs to 2 3ft. 4in. } be fire isolated	26ft. 8in.
" 22,500 " " 25,000	6 5ft. 0in.	30ft.
" 25,000	Stairs and exits as required by the surveyor	

Reg. 316. CORPORATION OF THE CITY OF ADELAIDE v. FOY AND GIBSON PROPRIETARY LIMITED (1930) S.A.S.R. 170; 3 Austn. Digest 57. Stairs from the top to the bottom of a building are to be treated as one stairway.

TABLE B.

Exits and stairways required for retail shops other than those used for the sale of drapery, millinery, or fancy goods or any other class of goods combined with drapery, millinery, or fancy goods.

Area of each Floor in Square Feet.	Number and Width of Stairs and Exits.	Total Width of Stairs and Exits.
Up to 600	1 2ft. 8in.	2ft. 8in.
More than 600 and not more than 1,000	2 2ft. 8in. or	5ft. 4in.
	1 2ft. 8in. if fire isolated	2ft. 8in.
" 1,000 " " 2,000	1 2ft. 8in. / 1 3ft. 4in.	6ft.
" 2,000 " " 4,000	2 3ft. 4in. One stair to be fire isolated	6ft. 8in.
" 4,000 " " 6,000	1 5ft. 0in. / 1 3ft. 4in.	8ft. 4in.
" 6,000 " " 8,000	2 5ft. 0in.	10ft.
" 8,000 " " 10,000	2 5ft. 0in. / 1 3ft. 4in.	13ft. 4in.
" 10,000 " " 12,000	3 5ft. 0in.	15ft.
" 12,000 " " 14,000	2 5ft. 0in. / 2 3ft. 4in. One 5ft. stair to be fire isolated	16ft. 8in.
" 14,000 " " 16,000	3 5ft. 0in. / 1 3ft. 4in.	18ft. 4in.
" 16,000 " " 18,000	4 5ft. 0in.	20ft.
" 18,000 " " 20,000	4 5ft. 0in. / 1 3ft. 4in. Two stairs to be fire isolated	23ft. 4in.
" 20,000 " " 22,500	5 5ft. 0in.	25ft.
" 22,500 " " 25,000	2 3ft. 4in. / 4 5ft. 0in. Two 5ft. stairs to be fire isolated	26ft. 8in.
" 25,000	Stairs and exits as required by the surveyor	

The width of stairs in tables A and B from the third to the sixth floors may be reduced to the width required for the next lower area, and from the sixth floor upwards may be again reduced to the width required for the next succeeding lower area, but no stairs shall be reduced to a less width than 3ft. 4in., except for a floor area of 1,000 sq. ft. or less. If it is impracticable to provide the number of stairs required in table A or table B, the total width required by such tables may be provided in such manner as may be approved by the council.

Where fire isolated stairs in addition to the number required by the above-mentioned tables A and B are provided, each of such additional stairs may be accepted in lieu of two open stairs of similar capacity.

Doors to Fire Enclosed Staircases.

317. (1) Doors to staircases required to be fire-enclosed shall be fire-resisting self-closing doors not less than 6ft. 6in. in height and shall open on to landings. Any such door may be kept open by means of a fusible link approved by the surveyor.

(2) If any door as mentioned in paragraph (1) is provided and provision is made as aforesaid for keeping it open, self-closing doors approved by the surveyor may be fitted into the

opening but so as not to cause any obstruction or to interfere with the operation of the fire-resisting door. No such door shall be fitted with any lock other than a panic bolt or bolts approved by the surveyor.

(3) All doors of any kind mentioned in paragraph (1) or paragraph (2) shall, if hinged, open outwards.

Internal Approaches to Doorways.

318. No aisle shall be less than 2ft. 8in. wide. The aggregate width of aisles or gangways shall be equal to the egress space required. No corridor or passageway shall be less in width than the egress space required for doors opening thereon, and shall be not less than 8ft. in height. All passageways and means of egress shall be lighted and ventilated.

Obstructions to Stairs, Passages, Etc.

319. (1) No obstruction of any kind whatsoever shall be placed or kept in or upon any aisle, gangway, corridor, passageway, exit, staircase or landing in any building, so as to in any way reduce the width, area, or spaces prescribed in regard to any such aisle, gangway, corridor, passageway, exit, staircase or landing respectively.

(2) Continuous passageways, aisles or corridors leading directly to every exit and so arranged as to be conveniently accessible to every occupant shall be maintained at all times on all floors of all buildings.

(3) No rooms for storage shall be built under any escape stairway or landings unless completely fire-isolated therefrom.

(4) No combustible material shall be stored under or upon any escape stairway.

External Escape Stairs.

320. (1) External escape stairs shall be constructed of fire-resisting materials, and in the case of buildings exceeding three storeys in height, shall be constructed of metal not less than ¼in. in thickness or reinforced concrete.

(2) External escape stairs may, with the consent of the council, be erected in lanes from the level of the first floor upwards, provided such stairs be constructed of metal not less than ¼in. in thickness, of jarrah or other fire-resisting timber not less than 2in. thick. From the level of the first floor downwards the stair shall be continued as an internal stair, and, where necessary, fire-isolated.

Windows and Doors Near Escape Stairs.

321. All windows within 5ft. of an external escape stairs shall be constructed with metal frames and sashes, and be glazed with wire rolled plate glass, and all doors opening to the escape stairs shall be of fire-resisting construction.

Repair of Fire Escape Staircase.

322. Every fire escape staircase, whether internal or external, and whether erected before or after the commencement of this Act, shall be maintained and kept in good and substantial repair and fit for use to the satisfaction of the surveyor.

Gangways.

323. Gangways may, with the consent of the council, be erected over lanes to connect buildings in the one occupation, provided such gangways be constructed of fire-resisting materials.

PART XXI.

RESIDENTIAL FLAT BUILDINGS AND MULTIPLE DWELLINGS.

324. (1) In this Part, unless inconsistent with the context or subject matter, or some other meaning is clearly intended:—

"flat" means a suite of rooms which is wholly occupied or designed or intended or adapted to be occupied as a separate domicile; the term includes a suite of rooms in the nature of what is commonly known as a service flat:

"multiple dwelling" means a dwelling-house any part or parts of which are either rented, leased, let or hired out to be occupied, or adapted for occupation as the abode, residence or home of two or more families living independently of each other and in which some of the accommodation is used or is adapted to be used in common:

"residential flat building" means a building containing two or more flats.

(2) A row of two or more dwelling-houses such as are commonly known as terrace, semi-detached or maisonnette houses shall not be deemed to be a residential flat building or a multiple dwelling.

Use of Buildings as Flats or Multiple Dwellings.

325. Where it is proposed to use or alter a building so that it may be used as a residential flat building or multiple dwelling, the whole building, before being used, or when so altered, shall comply with the provisions of this Part which apply to residential flat buildings or multiple dwellings, as the case may be.

Proportion of Site that May be Covered.

326. (1) No residential flat building or multiple dwelling (both of which are hereinafter in this regulation included in the term "building") shall be erected except subject to the following restrictions:—

I. The allotment of land upon which the building is erected shall be not less than 3,960 sq. ft. in area:

II. The allotment of land shall abut upon the street alignment to a width of at least 40ft.:

III. For every habitable room included in the building there shall be left in the allotment an open space of at least 150 sq. ft. which shall not be occupied by the building and its appurtenances, but in no case shall the building and its appurtenances occupy more than two-thirds of the allotment:

IV. The building shall not be erected nearer to the boundary of any adjoining allotment than a distance of 4ft. for a building which is either of one or two storeys above the ground on the side towards that adjoining allotment, and in the case of a building of more than two storeys, nearer than a distance of 4ft. with an additional 18in. for every additional storey above two storeys.

V. If the area between a boundary and any wall of the building is used as a light court, the building shall comply with regulation 250 of this schedule.

(2) In addition to complying with the requirements of this regulation, the building shall comply with any additional requirements (whether of any kind specified in this regulation or not) which may be required under any by-law made by the council.

(3) If any such building is erected within the portion of the Municipality of the City of Adelaide which is bounded by North Terrace, West Terrace, South Terrace, and East Terrace, the provisions of subdivisions III. and IV. of paragraph (1) of this regulation shall not apply to the building,

but the building shall comply with the following requirements:—

I. There shall be an open space in the allotment at least 1,320 sq. ft. in area which is not occupied by the building and its appurtenances:

II. Any space which is less than 6ft. in length and 6ft. in width shall not be included as open space for the purpose of subdivision I. hereof:

III. There shall be provided a principal means of entrance to the building from a street or way and, in addition, a second and separate means of entrance to the building from a street or way which, in the opinion of the surveyor, is suitable to be used for the domestic services of the building:

IV. The building shall comply with regulation 250 of this schedule.

Height of Buildings.

327. (1) In a residential flat building or multiple dwelling which is more than two storeys in height and is not of fire-resisting construction—

(*a*) the building shall not be more than four storeys in height: Provided that when a residential flat building or multiple dwelling has a greater number of storeys above the ground floor in one part than another, on account of the grade of the site, one-half of the sum of the least and greatest number shall be considered the number of storeys;

(*b*) if wooden floors are used ceilings shall be constructed of sheet metal, asbestos-cement sheets, fibrous plaster sheets or other fire-resisting materials approved by the surveyor;

(*c*) all stairs shall be constructed of fire-resisting materials;

(*d*) the external and internal walls shall be of brick, stone, concrete or other incombustible material;

(2) For the purposes of the application to a residential flat building or multiple dwelling of regulation 298 of this schedule, every flat or, as the case may be, every part of the multiple dwelling separately occupied shall be deemed to be a separate occupation.

(3) Walls of all outhouses, sheds, or garages erected in connection with any residential flat building or multiple dwelling shall be constructed in brick, stone or concrete, or other incombustible material approved by the surveyor.

Kitchens, Bathrooms, Privies, Etc.

328. (1) In every residential flat building each flat shall contain a bathroom and a privy connected to a drainage system approved by the surveyor and shall contain a kitchen or place at least 70 sq. ft. in area where food may be prepared and in which there is a sink with running water over it connected to a drainage system approved by the surveyor.

(2) In every residential flat building there shall be provided a laundry with wash troughs and copper, or other means of washing clothes, with water laid thereto, for each six flats or fraction of six in the building: Provided that the council may in any case it thinks desirable, approve of a less number of laundries being provided but in every residential flat building at least one such laundry shall be provided.

(3) In a flat containing not more than four habitable rooms the privy may be fixed in the bathroom; in a flat containing five or more habitable rooms the privy shall be fixed in a separate compartment.

(4) The minimum width of the bathroom in each flat shall be 5ft. and the minimum floor area 35 superficial square feet, where the privy is in a separate compartment, but the size shall be increased by not less than 18in. in length or width where the privy is fixed in the bathroom.

(5) The minimum width of a privy shall be 3ft. and the minimum floor area 15 superficial feet.

(6) The height of the bathroom or of a privy shall be not less than 8ft. 6in. from floor to ceiling.

(7) The floor surfaces of bathrooms and laundries shall be of impervious material properly graded and drained. The walls of bathrooms and laundries shall have a smooth impervious surface for a height of at least 4ft. such as glazed tiles or cement rendering. The floor surfaces of privies shall be of impervious material properly graded to a suitable outlet.

329. (1) A multiple dwelling shall contain a kitchen at least 100 sq. ft. in area and shall contain a laundry.

(2) A multiple dwelling shall contain a privy and a bathroom for every eight persons or fraction of eight persons residing in the building. Every such privy and bathroom shall be in separate compartments and shall be connected to a drainage system approved by the surveyor and be of the dimensions and constructed in a manner provided by paragraphs (4), (5), (6), and (7) of regulation 328 of this schedule.

Cellars or Basements.

330. No cellar or basement shall be used or occupied as a habitable room in any residential flat building or multiple dwelling.

Privacy.

331. In every residential flat building containing more than one bedroom, each bedroom shall be accessible without passing through another bedroom, and there shall be either a bathroom and a privy which is accessible from each bedroom, or one bathroom and one privy which is accessible without passing through a bedroom.

Garbage.

332. The owner of every residential flat building and every multiple dwelling shall provide for each flat, or in the case of a multiple dwelling, for each family, a means satisfactory to the council for the destruction of garbage or for conveying garbage to a common receptacle; or shall provide separate and suitable receptacles for each flat or family, for holding garbage until it is removed, together with places for such receptacles in the open air, or in some closed-off closet or space, so that the garbage shall be free from offence; and shall also provide means satisfactory to the council whereby such receptacles may be removed without having to be conveyed through the main or front entrance of the building.

Light Courts and Ventilating Shafts.

333. Light courts and ventilating shafts shall be in accordance with Part XVI. of this schedule. Every court and ventilating shaft in a residential flat building or multiple dwelling shall be open to the sky and unobstructed from at least 3ft. above the floor of the lowest room having windows or doors facing the light court.

Fire Escapes.

334. (1) If in any residential flat building there is more than one flat on or above the first floor level, there shall be provided at least two stairs in the building.

(2) One of the stairs shall, subject to the special provisions of this regulation, comply with the general provisions in Part XX. of this schedule and be so constructed as to be directly accessible from each flat which has not direct communication with the ground, be shut off by self-closing fire-resisting doors which can be easily opened and have an automatic fastening capable of being opened readily from the inside, and be so constructed that it shall not be necessary to pass the well or shaft of any other stairs or unprotected lift shaft to reach the stairs, and in such manner that a fire

bursting through the windows or doors of any one room could not block all of such stairs at the same time. The said stairs shall extend from the roof, if flat, or the top floor, in other cases, to the ground level.

335. (1) In every multiple dwelling which is three or more storeys in height, there shall be provided at least two stairs.

(2) One of the stairs shall, subject to the special provisions of this regulation, comply with the general provisions of Part XX. of this schedule and shall be so constructed as to be shut off by self-closing fire-resisting doors which can be easily opened and have an automatic fastening capable of being opened readily from the inside, and be so constructed that it shall not be necessary to pass the well or shaft of any other stairs or unprotected lift shaft to reach the stairs, and in such manner that a fire bursting through the windows or doors of any one room could not block all of such stairs at the same time. The said stairs shall extend from the roof, if flat, or the top floor, in other cases, to the ground level.

Third schedule revoked by regulations, Gazette, 12th December, 1940, p. 1441.

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SCHED. IV.

THE FOURTH SCHEDULE.

Fourth schedule substituted by regulations, Gazette, 12th December, 1940, p. 1441.

STREET VERANDAHS, BALCONIES, PORTICOES AND AWNINGS.

1. Verandahs and porticoes shall be of cantilever or suspension form unless otherwise permitted by the council. The fascia shall finish flush with the face of the kerb.

2. All girders, rafters, purlins, and other framing shall be of steel or iron unless otherwise permitted by the council. Steel or iron girders shall be encased and the underside of verandahs shall be lined if required by the surveyor and in the manner directed by him.

3. Two inch by 1in. timber battens may be used for the encasing of girders and the attaching of the linings. The timber battens shall be secured to girders, rafters, and purlins by clip bolts, and no timber framing shall be used to support battens.

4. The cantilever and fascia girders shall not exceed 20in. in depth for verandahs more than 12ft. in width and 12in. in depth for verandahs not less than 12ft. in width.

5. Unless otherwise permitted by the council the roofs of verandahs shall have a pitch of ½in. per foot towards the building, and shall be covered with No. 24 Birmingham gauge galvanized corrugated iron secured to purlins with galvanized iron bolts or clips and washers at the tops of corrugations. The iron shall be lapped 1½ corrugations at sides and not less than 9in. at ends of sheets and shall be riveted every 12in. at sides and at every third corrugation at ends.

6. Box-gutters shall be formed at or near the building line and shall be made out of No. 24 Birmingham gauge galvanized iron well lapped, riveted, and soldered at ends of each sheet, and be supported on metal straps or shall be made of asbestos-cement and constructed in manner approved by the surveyor.

7. Downpipes shall be of sufficient capacity efficiently to discharge rainwater falling on roofs. The bottom 6ft. length of pipes shall be wrought or cast-iron. Pipes shall be chased to a height of 9ft. into walls or piers, or set back so as not to project beyond the face of the building, and shall discharge under the footway into the street channel or be connected up to underground stormwater drains.

8. Skylights may be provided in verandahs over 12ft. in width. Glass shall be wire-rolled plate glass in single lengths set in glazing bars approved by the surveyor.

9. All verandahs with steel posts shall be of the form and dimensions approved by the council.

10. Balconies and awnings shall be constructed in manner approved by the council.

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Fifth schedule repealed by 1919, 1929, s. 40.

SCHED. VI.

Sixth schedule substituted by regulations, Gazette, 12th December, 1940, p. 1441.

THE SIXTH SCHEDULE.

MIRRORS AND SHOW CASES.

1. Show cases shall be constructed of plate glass with metal moulds or wood moulds encased in metal not less than No. 26 gauge.

2. Mirrors and show cases shall be affixed flat against a wall, pier, or pilaster.

3. Show cases shall not extend more than 4½in. from the face of such wall, pier, or pilaster.

4. Moulds shall not project more than ½in. beyond the face of the glass in any mirror or show case, except in the case of cap moulds more than 9ft. above the levels of the pavement.

5. No door to any show case shall be hung so as to open outwards on to any street.

6. Backs of mirrors and show cases and also the bases of show cases may be of three-ply hardwood.

7. Mirrors and show cases shall be detachable from walls, piers, or pilasters, and shall be fixed 12in. above the pavement level. Brackets approved by the surveyor may be used in addition to wall plugs.

8. Tiling on any wall, pier, or pilaster shall not project beyond the street alignment as fixed by the surveyor.

SCHED. VII.

Seventh schedule substituted by regulations, Gazette, 12th December, 1940, p. 1441.

THE SEVENTH SCHEDULE.

FIRE-RESISTING MATERIAL.

In this Act the term "fire resisting" when used with reference to materials shall include:—

1. For general purposes—

(1) Brick work constructed of bricks, well-burnt, hard and sound, or of bricks of other manufacture approved by the surveyor, properly bonded, and solidly put together with mortar, compounded of lime or cement and sharp clean sand, hard, clean broken brick, broken stone, grit or hard clinker.

(2) Solid and durable natural or artificial stonework approved by the surveyor.

(3) Iron, steel, copper and any other metal which is approved by the surveyor.

(4) Concrete composed of broken brick, tile, stone or pumice mixed with sand and cement, or calcined gypsum in proportions approved by the surveyor.

(5) Reinforced concrete.

2. For staircases—

(1) In the case of external and fire-isolated staircases, jarrah, and in the case of other staircases, hardwood approved by the surveyor The stringers and bearers shall be not less than 2in. thick; the treads, risers and landings not less than 1½in. thick, and the ceilings and soffits (if any) of—

(*a*) plaster or cement, or of any combination of asbestos and cement sheeting which is approved by the surveyor;

(*b*) tongued and grooved boards of hardwood approved by the surveyor, not less than ⅜in. in thickness; or

(*c*) metal sheeting not less than No. 26 Birmingham gauge in thickness.

(2) Reinforced concrete.

(3) Iron or steel not less than ¼in. in thickness.

3. For floors—

(1) Brick, tile, terra-cotta, or concrete, not less than 4½in. thick, in combination with iron or steel.

(2) Reinforced concrete not less than 3in. thick.

(3) Reinforced concrete in combination with hollow blocks approved by the surveyor, in which case the thickness of concrete above the blocks shall not be less than 2½in.

4. For roofs—

(1) Brick, concrete, terra-cotta or reinforced concrete not less than 3in. thick.

(2) Reinforced concrete in combination with hollow blocks approved by the surveyor, in which case the thickness of concrete above the blocks shall be not less than 2½in.

5. For roof coverings over roofs of fire-resisting construction supported by iron or steel—

(1) Sheet metal of not less than No. 26 Birmingham gauge.

(2) Slates.

(3) Cement or terra-cotta roofing tiles.

(4) Combinations approved by the surveyor of cement and asbestos not less than 3/16in. in thickness in the form of corrugated sheets, or of units not exceeding 2 sq. ft. in area.

(5) Reinforced concrete.

6. For internal partitions forming party structures and enclosing walls of lift shafts and fire-isolated staircases—

(1) Brickwork, concrete or other incombustible material approved by the surveyor not less than 9in. thick.

(2) Terra-cotta not less than 6in. thick.

(3) Reinforced concrete not less than 4in. thick.

7. Glazing: In the case of glazing for vertical party structures and fixed borrowed lights in partitions of fire-resisting construction—wired glass not less than ¼in. in thickness, in sheets not exceeding 30in. x 24in., the sheets being secured in metal frames with metal beads. In the case of glazing for horizontal party structures—floor lights of glass not less than ¾in. in thickness, or more than 6in. square, set in metal or other incombustible frames; this shall only apply to floors of lobbies, passages and landings.

8. Fire-resisting doors shall be in accordance with the specifications of the Fire and Accident Underwriters' Association of South Australia promulgated at the time of the making of these regulations.

9. Any material approved from time to time by the surveyor as fire-resisting for a specific purpose.

SCHED. VIII.

THE EIGHTH SCHEDULE.

FEES PAYABLE TO THE COUNCIL.

The following fees shall be charged and received by the council for acts done or to be done by the council or the surveyor under the provisions of this Act, and for permits and licences issued by the council:—

A. Fees in Respect of New Buildings or Additions.

5s. per square up to 20 squares.

2s. 6d. per square over 20 squares.

Eighth Schedule. EMMETT & SONS LIMITED v. THE CORPORATION OF THE CITY OF ADELAIDE (1926) S.A.S.R. 333; 3 Austn. Digest 39. Fees payable under paragraphs A, B, and C are not alternative. Computation fees are payable notwithstanding that the computations are made by a contractor and merely checked by the surveyor.

1s. per square for each additional storey based on floor of greatest area.

Minimum fee, 10s.: Provided that the minimum fee in respect of any application dealing with any outhouse or other appurtenance to be erected in connection with any building already erected at the time of such application, and the estimated cost of which does not exceed £50, shall be 5s.

B. Fees in Respect of Structural Alterations.

For every structural alteration made to any building the fees shall be one-fourth of the fee charged in the case of new buildings or additions, but shall in no case be less than 10s.

C. Other Fees.

For the following duties performed by the surveyor, where such duties are not performed incidentally to the building or rebuilding of or adding to or altering any building in respect of which any other fees may be payable, that is to say—

	£	*s.*	*d.*
Showcase or mirror	0	10	0
Construction of stairs	1	0	0
Cutting away chimney breasts, etc.	1	0	0
Arches or floors	1	0	0
Openings in party or external walls	0	10	0
Condemning party fence walls	0	10	0
Inspection and removal of ruinous buildings	2	0	0
Surveying party walls, etc.	1	0	0
Surveying hoardings	1	0	0
Installation of petrol tank	1	0	0
Erection or construction of room for the storage of petrol, films, carbide or other inflammable materials	1	0	0
Installation of new shop front	1	0	0
Installation of new shop front requiring the provision of new girders or columns	2	0	0
Furnace, chimney shaft, or similar shaft for ventilation or other purposes, if not exceeding 75ft. in height	2	0	0
If exceeding 75ft. and not exceeding 100ft. in height	2	10	0
For every additional 10ft. or portion of 10ft. in height	0	10	0
Carrying of a flue from an oven, stove, steam boiler, furnace, or close fire into an old flue	0	10	0

Computation fees in respect of reinforced concrete and frame construction buildings:—

One-tenth of 1 per centum on value of the building up to £10,000; and

One-twenty-fifth of 1 per centum on the amount exceeding £10,000, but in no case less than £1.

Calculation fee on brick or stone buildings in which the floors are carried by internal pillars or columns—

1/15 of 1 per centum for first £10,000; and
1/30 of 1 per centum for the remainder.

Calculation fee for reinforced concrete or fire-resisting floors, including girders or beams, £2.

Calculation fee for reinforced concrete or fire-resisting floors without girders or beams, £1.

Calculation fee in connection with reinforced concrete stairs, £1.

Fees for special services:—In respect of any other act by any officer of the council in respect of any permit, licence, or sanction issued by the council not otherwise provided for, £1.