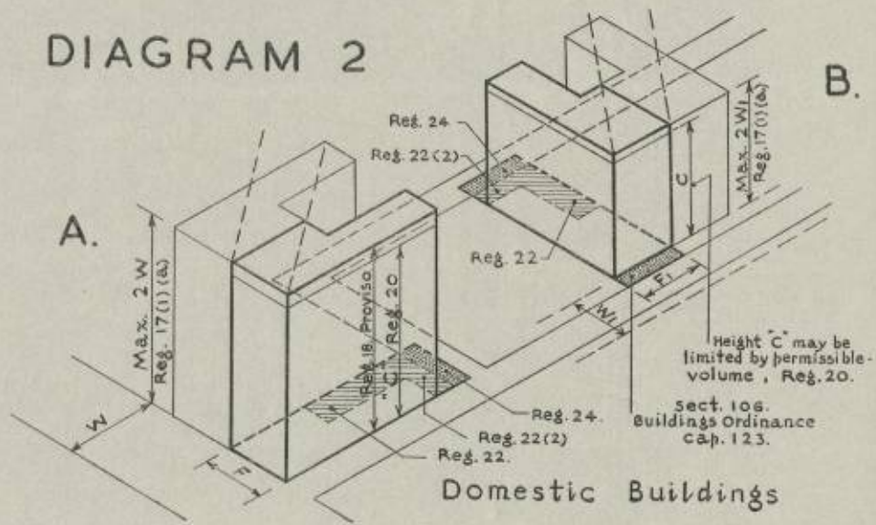
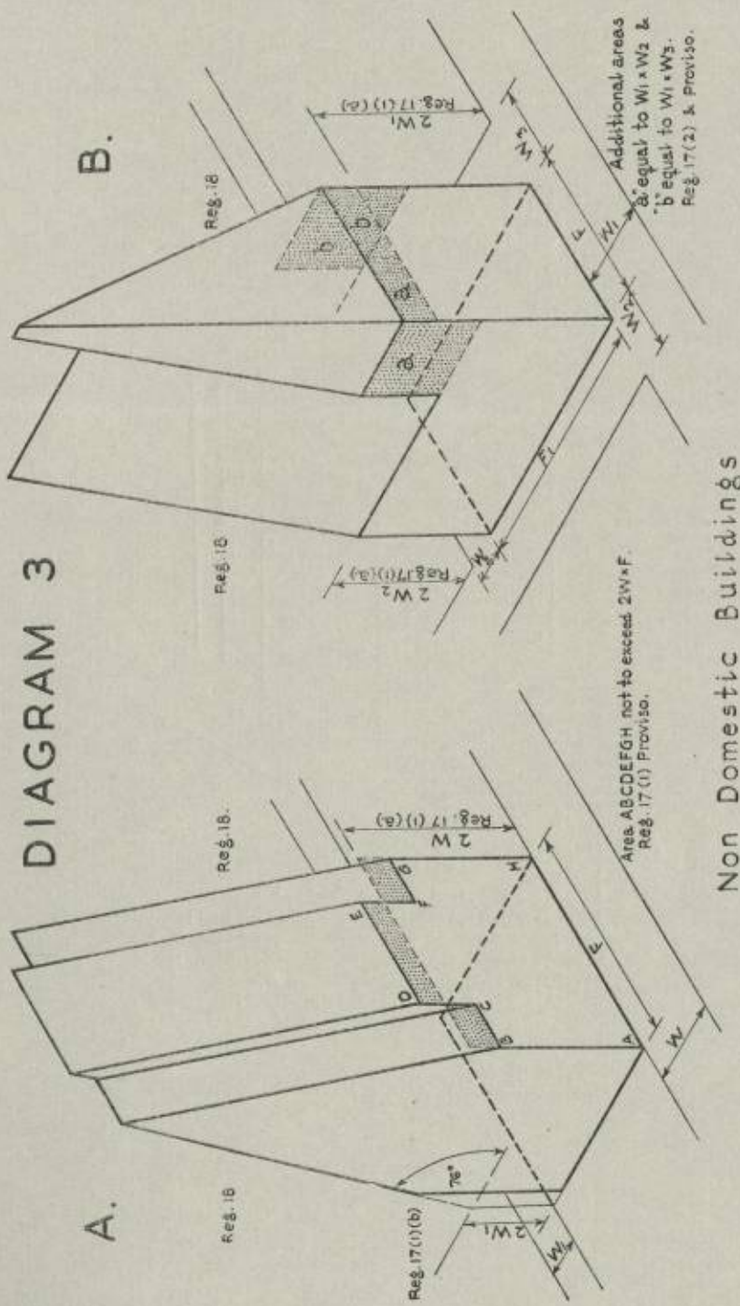
DIAGRAM 2



Domestic Buildings

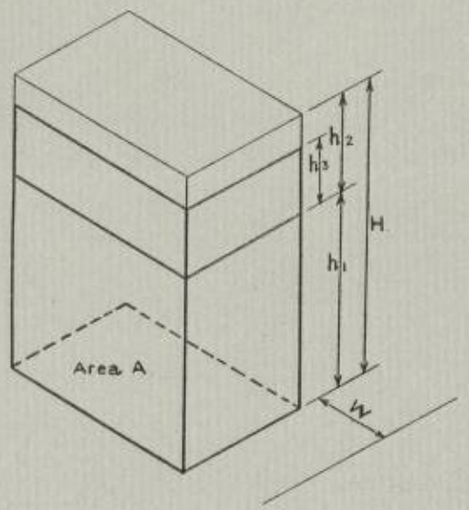
DIAGRAM 3



Non Domestic Buildings

DIAGRAM 4

Buildings for Composite use.



Area of site A.
Non-domestic Factor - F_1.
Domestic Factor - F_2.
Gross volume, Reg. 20(1), is $F_1 \times W \times A$.
Non-domestic volume required - $A \times h_1$ - $h_2 = H - h_1$.
Permissible domestic volume is $A \times h_3$, where h_3 equals $h_2 \times \frac{F_2}{F_1}$.
Volumes may be arranged as desired within the envelopes shown on Diagram 3 B.

PART IV.

Lighting and ventilation.

Lighting and ventilation.

25. Every storey of every building used for the purpose of an office or for habitation shall be provided with effectual means of lighting and ventilation.

Windows.

26. (1) Every room used for such purposes shall be provided with natural lighting and ventilation by means of one or more windows which shall open directly into the external air.

(2) Such windows shall be so constructed that—

(*a*) the aggregate superficial area of the glass in the windows is not less than 1/10th of the area of the floor of the room;

(*b*) the windows can, to an extent at least equal in the aggregate to 1/16th of the area of the floor of the room, be opened in such manner that the top of the opening of each window is at least 7 feet 6 inches above the level of the floor and in the case of detached and semi-detached buildings at least 6 feet 6 inches above the level of the floor.

(3) Where any such window opens on to an enclosed space, the mean height of the walls opposite such a window shall be not more than 4 times, in the case of a building used for offices, and 1½ times, in the case of a domestic building, the width of such enclosed space, measured at right angles to the window.

(4) Where any such window opens on to a space enclosed on three sides, such window shall be sited—

(*a*) opposite the open side of the space; or

(*b*) on a wall adjoining the open side and not more than 1½ times the width of such space therefrom; or

(*c*) where the mean height of the walls opposite such a window is not more than 4 times, in the case of a building used for offices, and 1½ times, in the case of a domestic building, the width of such space, measured at right angles to such window.

(5) For the purpose of this regulation—

(*a*) the height of the wall shall be measured from the level of the top of the window to the level of the eaves or to the top of the parapet of the wall;

(*b*) window shall include french window.

DIAGRAMS—The diagrams accompanying the text are purely explanatory and form no part of the enacted regulations.

DIAGRAM 5

Windows in spaces enclosed on four sides

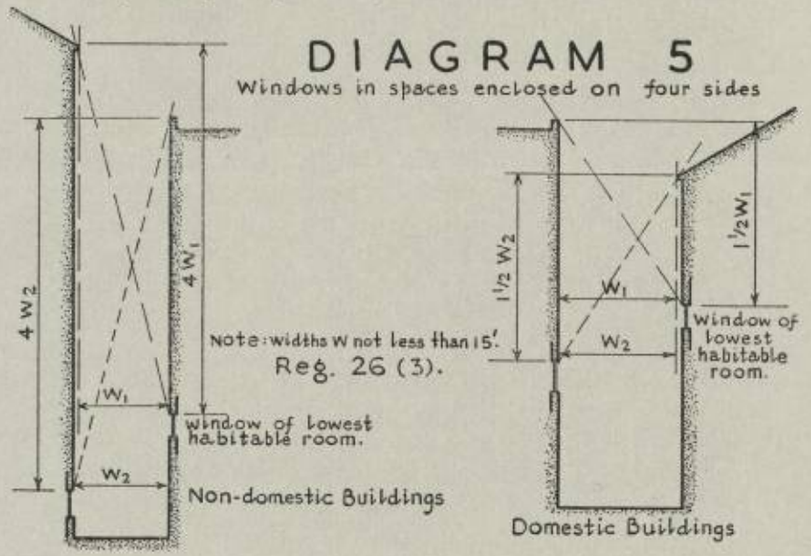
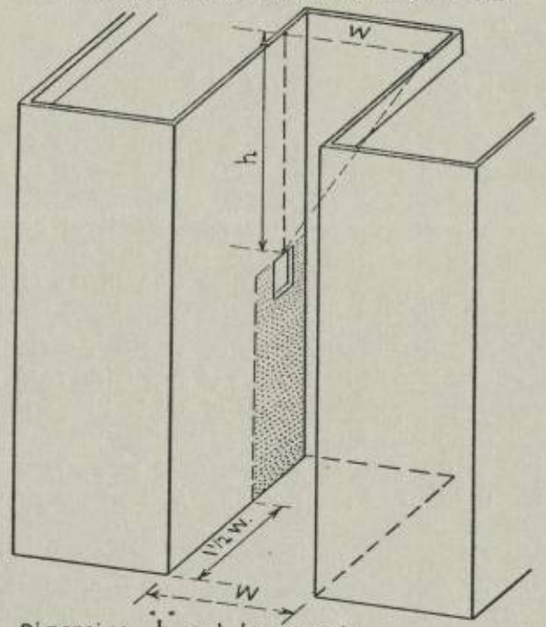


DIAGRAM 6

Windows in spaces enclosed on three sides



Dimension h not to exceed :-
for domestic buildings, 1½W.
for non-domestic buildings, 4W.
Reg. 26 (4)

Rooms with windows in shaded area not to be used for habitation, nor offices unless - mechanically ventilated and artificially lighted
Reg. 29.

Enclosed verandah etc. within lot boundaries.

27. Any room used for such purposes, having a window which opens on to an enclosed verandah, balcony, conservatory or similar enclosed place shall be deemed to open directly into the external air, if such room and such place are both provided with windows which do so open and would suffice for the purposes of regulation 26 if they were the windows of a room having a floor area equivalent to the combined floor areas of such room and such place.

Where no external wall.

28. Every room used for such purposes having no external wall shall be deemed to conform to regulation 26 if it is lighted and ventilated by means of a lantern light, of which can be opened an area not less than 1/16th of the area of the floor.

Alternative mechanical ventilation and artificial lighting.

29. Where owing to the position, level or unsuitable surroundings of any room used for such purposes, the provisions of regulation 26 cannot be complied with to the satisfaction of the Building Authority—

(*a*) a mechanical means of ventilation shall be provided which shall be capable of supplying fresh air to all parts of that room at a rate of not less than three air changes per hour; and

(*b*) in the case of a room used as an office such artificial lighting as the Building Authority may approve.

Additional vent may be required.

30. (1) Where in the opinion of the Building Authority compliance with the provisions of these regulations will not secure adequate ventilation for any room used for such purposes by reason of its intended use, unsuitable surroundings or other cause he may require that room to be provided with additional ventilation by means of—

(*a*) an aperture or airshaft communicating direct with the open air, having an unobstructed sectional area of not less than 20 square inches; or

(*b*) a fanlight which opens to a ventilated lobby or corridor; or

(*c*) such other means of ventilation as shall be approved by him.

(2) For the purpose of regulations 25 to 30, a laundry being part of or used in connexion with any building shall be deemed to be used for the purpose of habitation.

Kitchens.

31. Every room constructed or adapted to be used as a kitchen (not being a kitchen in a tenement house) shall be provided with—

(*a*) a window of which a superficial area of not less than 100 square inches opens directly into the open air; or

(*b*) an aperture or air shaft communicating direct with the open air having an unobstructed sectional area measuring not less than 64 square inches; or

(*c*) mechanical or such other means of ventilation capable of giving 5 air changes per hour as shall be approved by the Building Authority:

Provided that in the case of larger kitchens serving restaurants and canteens, the means of ventilation shall be capable of giving up to 40 air changes per hour.

Water closets.

32. (1) Every room containing any sanitary fitting shall be provided with—

(*a*) a window or lantern light of which—

(i) a superficial area of not less than 2 square feet for each sanitary fitting within such room, opens as near the ceiling as practicable directly into the open air; or

(ii) a portion, at least equal in area to 1/10th of the area of the floor, opens as near the ceiling as practicable directly into the open air; or

(*b*) mechanical or such other means of ventilation giving not less than three air changes per hour as shall be approved by the Building Authority.

(2) No such room shall open directly into any room intended for the manufacture, preparation or storage of food for human consumption.

(3) For the purpose of this regulation, a sanitary fitting means a water closet, each stall in a trough water closet or a urinal.

Light and air not to be diminished.

33. No building shall be erected in such a manner as to reduce the quantity of light and air available to any other building, which has been erected in accordance with these regulations, below that required under these regulations.

PART V.

Staircases and fire escapes.

Staircase to be fire resisting.

34. Where any building exceeds 2 storeys in height, the main staircase shall be constructed for its whole height of materials having a fire-resistance period, as defined in Part XIII of the Building (Construction) Regulations, of not less than 1 hour.

Staircases.

35. (1) Every building which exceeds 1 storey in height shall be provided with a staircase or staircases to give access to upper floors unless there is separate access to such upper floors.

(2) The main staircase of every building which exceeds 4 storeys in height shall be continued to the roof of the building unless a secondary staircase or fire escape is provided.

(3) The main staircase of every building which exceeds one storey in height shall—

(*a*) have a clear height of not less than 6 feet 6 inches;

(*b*) have a clear width of not less than 3 feet;

(*c*) be constructed with treads not less than 9 inches in width (measured at the centre of the flight) from the face of one riser to the face of the next riser and with risers not exceeding 7 inches in height;

(*d*) have not more than 16 steps in any flight without the introduction of a landing;

(*e*) be provided on one side at least with properly fixed handrails;

(*f*) be so arranged as to provide access to a street or to an open space leading thereto; and

(*g*) if continued to the roof of the building as a means of escape in case of fire be provided with a door at this level, such door to be glazed in the upper panels.

Staircases in buildings intended for separate occupation.

36. In any building intended for separate occupation by more than two tenants, the staircase intended for common use shall—

(*a*) be constructed for its whole height of fire resisting materials as provided in Part XIII of the Building (Construction) Regulations;

(*b*) be provided with natural lighting at each storey above the ground floor and be ventilated at least at its highest point.

Fire escapes.

37. Every building shall—

(*a*) be provided with such means of escape in case of fire as may be required by the intended use of a building;

(*b*) if more than 6 storeys in height, be provided with a second staircase as alternative means of escape in case of fire in addition to its main staircase.

Landings, lobbies and passages.

38. The minimum dimension of every landing, lobby or passage shall not be less than the width of the staircase to which it leads.

Distance from staircase.

39. Every part of any building intended for habitation or of any school or of any building used as a place of public assembly shall be not more than 80 feet from a staircase, passage or other normal means of egress.

Revolving doors and turnstiles.

40. (1) Where revolving doors or turnstiles are used an alternative means of exit shall be provided in close proximity.

(2) In any place of public assembly turnstiles, if used, shall be kept clear of the line of exit.

PART VI.

Domestic buildings.

Kitchens.

41. (1) Every domestic building, and unless exempted by the Building Authority any part of a domestic building which is intended to be separately let for dwelling purposes, shall be provided with kitchen accommodation.

(2) The internal surface of every kitchen to a height of at least 4 feet from floor level shall be faced with tiles or rendered in cement mortar, not less than ½ inch in thickness, or other non-absorbent material.

(3) Every kitchen shall be provided with a—

(*a*) properly constructed fireplace or cooking slab unless the cooking is to be done by gas, oil or electricity;

(*b*) sink and fittings for the supply of water.

Tenement house.

42. (1) No tenement house shall be erected with a depth from the front main wall to the nearest rear main wall exceeding 35 feet unless exempted by the Building Authority.

(2) (*a*) Every storey of every tenement house shall be provided with a window in such rear main wall of such storey.

(*b*) Such window shall be so constructed that—

(i) the aggregate superficial area of the glass in the window is at least 15 square feet;

(ii) the window can, to an extent of at least 15 square feet, be opened into the open space in such a manner that the top of the opening is at least 6 feet 6 inches above the level of the floor.

(3) (*a*) Every kitchen of every tenement house shall be provided with a window which shall open into the open air.

(*b*) Such window shall be so constructed that it can, to an extent at least equal to 1/10th of the area of the floor of such kitchen, be opened in such a manner that the top of the opening of the window is at least 6 feet 6 inches above the level of the floor.

(4) No windows required under these regulations in any tenement house shall be obstructed by the erection of any structure either inside or outside the building.

(5) (*a*) The internal area of every kitchen in a tenement house shall be—

(i) not less than 40 square feet where the total area of the domestic premises of which such kitchen forms part, does not exceed 500 square feet;

(ii) not less than 50 square feet where the total area of the domestic premises of which such kitchen forms part, exceeds 500 square feet but does not exceed 750 square feet;

(iii) not less than 60 square feet where the total area of the domestic premises of which such kitchen forms part, exceeds 750 square feet.

(*b*) In no case shall the smaller dimension of such kitchen be less than 5 feet.

(6) For the purpose of these regulations a tenement house means any building in the domestic part of which any living room is intended or adapted for the use of more than one tenant or sub-tenant. In this regulation "living room" means any room intended or adapted as a place for cooking or sleeping.

Building abutting on retaining wall.

43. (1) No domestic building shall be erected against a retaining wall which exceeds 15 feet in height.

(2) A space not less than 5 feet in width shall be left between any domestic building and the bottom of any retaining wall exceeding 15 feet in height.

(3) For the purposes of this regulation a massive rock face shall be deemed to be a retaining wall.

Retaining wall forming part of a building.

44. Any retaining wall, which forms part of any domestic building shall, subject to the provisions of regulation 23—

(*a*) be properly waterproofed to prevent dampness in the building;

(*b*) be properly insulated to prevent condensation on the internal face of any room intended for habitation within the building.

Domestic occupation of buildings used for dangerous trade.

45. No building may be used for domestic purposes if any part of the structure is used—

(*a*) for the manufacture or storage of dangerous goods;

(*b*) for the manufacture or storage of explosives;

(*c*) as a motor repair shop;

(*d*) as a vulcanizing shop;

(*e*) for automobile or carriage painting;

(*f*) as a paint shop where paint or varnish is manufactured or mixed;

(*g*) as a dry-cleaning establishment,

unless exempted by the Building Authority, who may prescribe such structural and other requirements as in his opinion are necessary.

PART VII.

Temporary buildings.

Definition of temporary buildings and short lived materials.

46. (1) (*a*) In these regulations temporary buildings shall mean any building for which a permit is issued on a temporary basis and is—

(i) required only for a short time;

(ii) constructed of short lived materials; or

(iii) constructed as a contractor's shed required in connexion with the erection of permanent buildings.

(*b*) The Building Authority may, in his discretion, include any building constructed on land held on licence.

(2) Short lived materials mean any building materials which are, in the absence of special care, liable to rapid deterioration or are otherwise unsuitable for use in the construction of permanent buildings—

(*a*) so far as they are used wholly or principally for the construction of the weather-resisting part of a roof or external wall of a building—

(i) tongued and grooved boarding fixed horizontally, and any boarding less than $\frac{5}{8}$ inch in thickness, or in the case of feather edge boarding less than $\frac{5}{8}$ inch in thickness at the thicker edge of the board;

(ii) sheets of fibre building board (except super hardboard as defined in British Standard Specification 1142 : 1953), wood chip board or compressed straw;

(iii) wood-wool building slabs;

(iv) plywood, except plywood suitable for external use;

(v) plaster board;

(vi) fibrous plaster;

(vii) lime or gypsum plaster on wood or metal lath;

(viii) cement plaster not exceeding $1\frac{1}{2}$ inches in thickness on wood or metal lath;

(ix) sheet iron or steel which is not galvanized, painted or otherwise protected by a bituminous or other not less suitable coating;

(x) organic-based felt, except where used in bitumen roof coverings constructed in accordance with Part VIII of the Building (Construction) Regulations;

(xi) canvas or cloth;

(xii) palm leaves or matting;

(*b*) unprotected softwood boarding, so far as it is used wholly or principally for the construction of the weather-resisting part of the roof of a building;

(*c*) any other combustible material.

Application to be made. Form 21. Form 22.

47. (1) On receipt of an application from a building owner together with such plans as the Building Authority may require, he may by notice in writing permit the erection of a temporary building.

(2) A permit issued under this regulation may specify the period for which such temporary building may exist, and such other conditions as the Building Authority may deem necessary.

Siting to temporary building.

48. (1) No temporary building constructed of readily combustible materials shall be erected within 10 feet of—

(*a*) any other building; or

(*b*) the boundary of the site within which it is located.

(2) Such space of 10 feet shall be kept clear.

Contractor's sheds. Form 23.

49. (1) Notwithstanding regulation 47, every contractor shall—

(*a*) submit an application to the Building Authority for permission to erect contractor's sheds (other than sheds in contractors yards) during the execution of building works;

(*b*) supply information regarding the situation, dimensions, construction, the length of time for which such contractors sheds are required and their intended use; and if intended for habitation, the number of persons to be accommodated shall be stated.

(2) The floor of every contractors shed which is intended for habitation, shall be properly concreted or raised at least 3 feet above ground level.

Kitchens, latrines and drainage required.

50. Every contractor carrying out building works shall provide—

(*a*) adequate kitchens and latrines for the use of the workmen employed on such works; and

(*b*) for the disposal of drainage, which shall be into a public drain or sewer where the same exists on or near a site.

Live wire or cable to be made safe.

51. Where any contractor's shed is erected near to any live wire or cable, the contractor shall arrange with the owners of such wire or cable, to take the necessary precautions to render safe such wire or cable.

Building Authority may erect sheds.

52. (1) Where any contractor fails to comply with the provisions of regulations 49 to 51 or causes damage to Government property in the erection and maintenance of such contractor's shed, the Building Authority may cause to be erected and maintained such contractor's shed as he may deem necessary and may make good any such damage.

(2) The Building Authority may recover the cost of such work from the contractor.

Deposit of security.

53. The Building Authority may require any contractor, to whom a permit is issued to erect temporary sheds, to make a deposit in the Treasury of a sum not exceeding five hundred dollars in respect of each shed as security for the fulfilment of all obligations of the permittee. The amount of the deposit shall be fixed by the Building Authority who shall consider the circumstances of each particular case.

Cancellation of permit.

54. The Building Authority may cancel any permit to erect a temporary building if the permittee—

(*a*) contravenes any of these regulations; or

(*b*) fails to maintain the building in a satisfactory manner.

PART VIII.

Timber yards.

Fences or walls to enclose timber yards.

55. Every place used or adapted to be used as a timber yard which is within 50 feet of any building, shall be enclosed on all sides for a height of at least 7 feet by—

(*a*) fences constructed of incombustible materials; or

(*b*) walls of bricks or building blocks built in cement mortar—

(i) not less than 4 inches in thickness;

(ii) provided with buttresses or piers not less than 8½ inches square in horizontal section at all ends and angles of such walls and not more than 10 feet apart, centre to centre; or

(*c*) walls of concrete not less than 6 inches in thickness.

Fences not to be within 6 feet of other premises.

56. (1) Unless exempted by the Building Authority the fences or walls surrounding a timber yard shall not be built nearer than 6 feet to the boundaries of any other premises.

(2) Such space of 6 feet shall not be used for storage or obstructed by the erection of any structure.

Storage of timber.

57. No pile, stack or store of timber shall—

(*a*) exceed 30 feet in height;

(*b*) be formed so as to provide any room or other space to be used for habitation or any other purpose except access or ventilation.

Exemptions.

58. Timber in baulk, with an average sectional area of not less than 100 square inches shall not be subject to these regulations.

Penalties.

59. Any person who contravenes or fails to comply with the provisions of regulations 55, 56 or 57 shall be liable to a fine of five hundred dollars.

PART IX.

Hoardings, shoring, scaffolding and platforms.

Plans of hoardings, etc. to be submitted.

60. Every building owner who intends to—

(*a*) erect, alter, or demolish any building; or

(*b*) carry out any excavations,

shall submit to the Building Authority plans of such hoardings, shoring, scaffolding and platforms as may be necessary for the safety and convenience of passers-by in the street, occupiers of adjoining premises, or any workmen employed on the work. Form 24.

Issue of permit. Form 25.

61. The Building Authority may, by notice in writing, permit the erection of such hoardings, shoring, scaffolding and platforms; prescribing such details of construction, lighting; and further precautions as he sees fit.

Maintenance of hoardings etc.

62. (1) Every building owner shall erect hoardings, shoring, scaffolding and platforms in accordance with the permit issued under regulation 61 prior to the commencement of the building

works specified in regulation 60, and shall maintain such hoardings, shoring, scaffolding, and platforms in good repair during the continuance of the permit.

(2) Except on isolated sites, all hoardings, unless exempted by the Building Authority, shall be close boarded.

(3) No hoarding, shoring, scaffolding, platform or building materials shall obstruct any drainage channel.

(4) No advertisement other than a description of the building and contractors shall be displayed on any such hoarding, shoring, scaffolding or platform.

Liability of permittee.

63. (1) Where any building owner fails to comply with the provisions of regulations 61 and 62 or causes any damage to Government property in the erection or maintenance of such hoardings, shoring, scaffolding and platforms, the Building Authority may cause to be erected and maintained such hoardings, shoring, scaffolding and platforms as he may deem necessary, and may make good any such damage.

(2) The Building Authority may recover the cost of such work from the building owner.

Live wire or cable to be made safe.

64. Where any hoarding, shoring, scaffolding or platform is erected near to any live wire or cable, the permittee shall arrange with the owners of such wire or cable, to take the necessary precautions to render safe such wire or cable.

Deposit of security.

65. The Building Authority may require any person, to whom a permit is issued to erect any hoarding, shoring, scaffolding or platform in, over or upon Crown land, to make a deposit in the Treasury of a sum not exceeding five hundred dollars as security for the fulfilment of all obligations of the permittee. The amount of the deposit shall be fixed by the Building Authority who shall consider the circumstances of each particular case.

Cancellation of permit.

66. The Building Authority may in the public interest cancel any permit to erect and require the removal of any hoarding, shoring, scaffolding or platform even if the permittee has fulfilled all his obligations.

COUNCIL CHAMBER,
17th April, 1956.

Clerk of Councils.

Explanatory Note.

(This Note is not part of the regulations but is intended to indicate their general purport).

Part I—General.

These regulations are the second in the group of three enacted under, and coming into force with the Buildings Ordinance, 1955. Reference should be made to the introductory passage in the Explanatory Note to the Building (Administration) Regulations.

2. Regulation 4 prohibits buildings being so constructed that they create a nuisance on streets, whether by way of obstructions or from exhaust vents; this regulation expands the provision of section 47 of the former Ordinance. Regulation 5, which replaces section 74 of that Ordinance, follows on by giving the Building Authority discretionary powers to require the provision of an access lane on the site of any new building which is likely to be receiving and despatching quantities of goods.

Part II—Projections.

3. Section 21 of the Buildings Ordinance, 1955, prohibits all projections over streets save those exempted by the Building Authority; the regulations in this Part set out the limitations under which such exemptions may be granted. Formerly projections could be constructed with the consent of the Governor in Council who could impose conditions (section 48 of the former Ordinance).

4. Few, if any, applications for the erection of verandahs have been made in the post-war period; and they are now prohibited altogether on streets by regulation 8 because they obstruct the passage of pedestrian traffic, and the view of drivers, which is considered unsafe.

5. Regulations 9 and 10 are designed to prevent balconies and canopies from obstructing footpaths and restricting the natural light available in the streets. These balconies are not permitted on streets less than 30 feet wide because the footpaths to such a street would normally be less than 5 feet wide, and they may not project beyond the line to which front main walls are required to be set back under regulation 18. The latter provision is less restrictive than that under section 50 of the former Ordinance which forbad erection of balconies where the building exceeds in height the width of the street over which the balconies are intended to project. Whereas regulation 11 requires that balconies over streets must have parapets and may have enclosed sides, regulation 14 prohibits their use as a factory, bathroom, etc. Regulation 16, which requires doors, windows, etc. which open over streets to be placed at least eight feet above the ground, is a particular example on the general prohibition under regulation 4 referred to above: public safety, however, requires that emergency exit doors should open outwards over streets, and this is permitted.

Part III—Heights, Volumes and Open Spaces.

6. The provisions concerning heights of buildings in the former Ordinance (sections 77 and 78) controlled the vertical height of the main wall and by means of an angle of set-back the overall height of the building. The effect of this was to establish a rigid building profile which, to a very great extent, dictated the design of every building. Regulation 17 permits the main vertical height of the front main wall to be twice the width of the street on which it abutts as against the 1½ times the width of the street permitted under the former Ordinance. Above this height the main walls are required to be set back within an angle of 76° with the horizontal (regulation 18) as against 68° permitted under the former Ordinance, which also provided that the total height of the building was limited to twice the width of the street. (In lots leased post 1903 the restrictions were greater). The provisions of regulations 17 and 18 are the outcome of consideration being given to Hong Kong's geographical position, the resulting meridan altitude of the sun and the hours of sunshine throughout the year. The requirements as to the set-back of 76° is intended to safeguard natural lighting to streets and, with a vertical height of twice the width of the street, the set-back line if projected downwards meets the centre of the street. Subject to these limitations the height of a building is restricted only by the permitted volume, which is calculated by multiplying a factor (F) by the width of the street and by the area of the site. (Regulation 20). In the case of domestic buildings this factor (F) is worked out for a terrace house, this usually being the least advantageously sited for providing light and ventilation. The factor is increased where the building is on a corner site, and increased again where it abutts on three or more streets.

7. As well as the limitation on heights of main walls and on volumes, every domestic building is required to be provided with open space within the lot of such building. (Regulation 22). It is not ground space so much as air space which is intended to be provided by this regulation. Thus, since the space must be provided at a level of 6″ below the lowermost storey of the domestic building, a building could cover the whole of the site at ground level with the premises of a non-domestic nature and become a domestic building at its second or third storey, provided it complied with this requirement as to open space. The proviso to regulation 22 is included to enable the Building Authority to deal with any special circumstances which may arise in the application of cases 2 and 3 in Table II which permit reduced amounts of open space.

8. Within the building, lower heights of ceilings are permitted under regulation 21 than those permitted under sections 29 to 31 of the former Ordinance. The present heights have been determined after considering the information, with special reference to Hong Kong, received from the Building Research Station and the Department of Scientific and Industrial Research, which goes to show that provided there is adequate ventilation and that ceilings and roofs are properly constructed, lower ceiling heights will not adversely affect the health of the occupant.

Part IV—Lighting and Ventilation.

9. The provisions in this Part expand considerably those contained in sections 63—68 of the former Ordinance. They are concerned with buildings used as offices or for habitation, with special provisions for kitchens and water-closets (regulations 31 and 32). Under regulation 26, every room in such a building is required to be lighted and ventilated by a window opening into the external air, which is defined in regulation 2 and, by that definition, must be opened to the sky and have a horizontal area of at least 120 square feet. The regulation goes on to prescribe in detail the specifications of a window which will be considered as adequate to give this lighting and ventilation; for example, paragraph (3) deals with the case of a window situated in a well of a building and, since this affects primarily the light, the provision is more stringent in the case of buildings used for habitation than in the case of an office building.

10. In certain cases the Building Authority may, by virtue of regulation 29, permit mechanical ventilation as an alternative. A building which is erected in accordance with these regulations is thereafter protected by regulation 33 which prohibits any other building being erected in such manner as to reduce the minimum quantity of light and air required by the first building.

Part V—Staircases and Fire Escapes.

11. The provisions of this Part which replace and expand sections 33 and 35 of the former Ordinance, are designed to ensure that occupants may escape safely from buildings in case of fire. Where a building exceeds two storeys the main staircase is required to be constructed for its whole height of materials capable of resisting the action of fire for one hour; and where it exceeds four storeys its main staircase is required to give access to the roof unless a secondary staircase or fire escape is provided. (Regulations 34 and 35). Where the building exceeds six storeys, regulation 37 requires the provision of an alternative means of escape in addition to the main staircase. Under the former Ordinance this additional means of escape was required in any building with a floor level at a height of more than 35 feet; this easing of restrictions is explained partly by the more incombustible materials used in buildings to-day, and by the greater heights which can be reached by ladders on modern fire appliances.

12. Regulation 36 provides that in any building intended for separate occupation by more than two tenants, the common staircase and landings shall be constructed to resist the action of fire for more than one hour. Regulation 39 provides that in every building intended for habitation or as a school, or as a place of public assembly, there shall be no place more than 80 feet from the staircase or other normal exit. Further provisions concerning the fire resisting qualities of materials used in the construction of buildings will be found in Part XIII of the Building (Construction) Regulations.

Part VI—Domestic Buildings.

13. In this Part are gathered together three subject matters particularly relevant to domestic buildings—kitchens, retaining walls and dangerous trades; there are also provisions to be applied to the special class of domestic building known as tenement houses. Regulation 41, which deals with kitchens in domestic buildings generally, replaces section 54 of the former Ordinance. Regulations 43 and 44 replace and expand the provisions of section 13 of the former Ordinance, and permit retaining walls less than 15 feet high to form part of domestic buildings subject to certain specified requirements. It is hoped that the provisions of these regulations will tend to eliminate waste in the use of land in sloping sites, give architects greater freedom in design and possibly reduce building costs. Regulation 45 prohibits the use for domestic purposes of a building in which are carried on any of the dangerous trades there specified; the Building Authority is, however, permitted to grant exemption and prescribe such requirements as he sees fit.

14. Tenement houses create a special problem for the designer, largely on account of their narrow frontages (usually only 15 feet), their great depth and high density of occupation. To avoid the general minimum requirements of these regulations from being unduly restrictive, tenement houses are treated separately in regulation 42. The principal concern of these provisions is to ensure adequate light and air, and kitchen accommodation; in all other matters tenement houses must comply with the general regulations.

Part VII—Temporary Buildings.

15. A new class of building in this legislation is created by regulation 46 which defines 'temporary building', and by this definition includes not only buildings constructed of short-lived materials but also more solid structures built on temporary permit. Section 101 and the Matshed Regulations under the former Ordinance provide the basis for the present regulations dealing with contractors' sheds (regulations 49 to 52). To bring home to building owners the impermanence of the buildings they intend to erect upon temporary permit, such buildings have been included in this class and require the Building Authority's written permit under regulation 47, which permit may specify the period of its validity. In the case of contractors' sheds the Building Authority is given an additional measure of control in that he may require the contractor to make a deposit up to $500 as security for the fulfilment of his obligations.

Part VIII—Timber Yards.

16. Since timber yards are particularly the concern of the building trade, it has been thought proper to include the provisions for their control in these regulations. Since, however, these regulations are not concerned with building works as such, it is necessary to provide penalties for their contravention. (Regulation 59).

Part IX—Hoardings, Shoring, Scaffolding and Platforms.

17. Hoardings, etc. are required both for the safety of the public where building works are carried out near streets and for the safety of workmen employed on the site. Under regulation 63, the Building Authority may erect and maintain the necessary hoardings, etc., where the building owner or permitee fails to do so, and may recover the cost from the defaulting party. As in the case of contractors' sheds, the person erecting hoardings, etc. may be required, under regulation 65, to make a deposit up to $500 as security for the compliance of these regulations.

(Secretariat 1/1/741/52)

BUILDING (CONSTRUCTION) REGULATIONS, 1956.

TABLE OF CONTENTS.

PART IV.

Foundations.

PART V.

Sites and floors.

PART VI.

Walls and piers.

PART VII.

Fireplaces, flues and chimneys.

PART VIII.

Roofs.

PART IX.

Structural use of Steel, Reinforced Concrete and Timber.

BUILDINGS ORDINANCE, 1955.
(No. 68 of 1955).

BUILDING (CONSTRUCTION) REGULATIONS, 1956.

PART I.

General.

1. These regulations may be cited as the Building (Construction) Regulations, 1956. Citation.

2. In these regulations, unless the context otherwise requires, words and expressions have the meaning attributed to them by the Buildings Ordinance, 1955, and— Interpretation.

"base" in relation to a wall, means the under side of that part of the wall which immediately rests on the footings or foundation or other structure by which the wall is carried;

"chimney" means a construction enclosing a flue and attached to or forming part of a building;

"chimney shaft" means a construction not bonded into a building, enclosing a vertical flue extending to a greater height above its topmost lateral support than 6 times its least horizontal dimension measured at—

(i) the base of the chimney shaft where it is not supported above the base, or

(ii) the level of the topmost lateral support;

"chimney stack" means such part of a chimney (or a combination of two or more chimneys) as is not within a building;

"dead load" means the weight of walls, floors, roofs, partitions and other permanent construction;

"dividing wall" means a wall which is required to be taken into account in pursuance of regulation 44 in deeming another wall to be divided into distinct lengths;

"domestic building" means a building constructed or intended to be used for habitation;

"external wall" means an outer wall of a building not being a party wall, even though adjoining a wall of another building;

"flue" means a duct through which smoke or other products of combustion or fumes from any cooking apparatus or stove or oven, or vitiated air, pass or are intended to pass for the purpose of reaching the open air;

"imposed load" means load other than dead load and includes wind pressure;

"incombustible material" means a material which neither burns nor gives off inflammable vapours in sufficient quantity to ignite at a pilot flame when heated in the manner specified in the appropriate provisions of British Standard Specification 476:1932 and "combustible material" shall be construed accordingly;

"lateral support" in relation to a wall or pier means support which resists movement in the direction of the thickness of the wall or in the direction of the thickness or width of a pier;

"load bearing" in relation to any part of a building (including the foundation) means any such part bearing a load other than that due to its own weight and to wind pressure on its own surface;

"Ordinance" means the Buildings Ordinance, 1955.

"partition wall" means any internal wall not being a dividing wall, external wall or party wall;

"party wall" means a wall forming part of a building and used or constructed to be used for the separation of adjoining buildings belonging to different owners or occupied or constructed or adapted to be occupied by different persons;

"prestressed concrete" means concrete in which predetermined stresses are induced to counteract the stresses due to dead and imposed load for the purpose of eliminating or decreasing the tensile stresses in concrete due to bending and shear;

"public building" means a building used or intended to be used either ordinarily or occasionally as a place of public worship or for instruction other than a place so used and being part of a domestic building, a hospital, a restaurant having a seating capacity for more than 100 persons, a place of public entertainment or a place of public assembly to which persons are admitted by ticket or otherwise;

"reinforced concrete" means concrete not inferior to the designated Grade III in regulation 19, reinforced by reinforcement complying with the provisions of paragraph (*a*), (*b*) or (*c*) of sub-regulation (1) of regulation 77;

"shell lime" means lime formed by burning sea shells or other like marine calcium deposits;

"storey-height" for the purposes of regulations 57-60 means the height of that part of a wall or pier which is between the level of one lateral support and the level of the lateral support next above or (if there is no such lateral support above) the top of such wall or pier.

Materials.

3. All materials used in the construction of any building shall—

(*a*) be of a suitable nature and quality for the purposes for which they are used;

(*b*) be adequately mixed or prepared; and

(*c*) be applied, used or fixed so as adequately to perform the functions for which they are designed.

British Standard Specification or British Standard Code of Practice.

4. The Building Authority may permit in writing subject to such conditions as he may endorse thereon the use of any type of material or any method of mixing or preparing materials or of applying using or fixing materials which conforms with a British Standard Specification or a British Standard Code of Practice prescribing the quality of material or standards of workmanship:

Provided that in the event of more than one such Standard or Code having been issued, the type of material or method used conforms with the latest edition and any published amendments thereto.

Permissible stresses not to be exceeded.

5. Every building shall be so constructed as to be capable of sustaining safely and transmitting all the dead and imposed load without exceeding the appropriate limitations of permissible stresses.

Dispersion of load.

6. Where load is transmitted through plain concrete, brickwork or other similar material, the angle of dispersion of the load through that material shall be taken as not more than 45 degrees with the direction of the load.

Overloading.

7. No building shall be subjected to load beyond its proper bearing capacity:

Provided that this regulation shall not apply with respect to any load which may be required or permitted by the Building Authority for the purpose of testing.

Demolitions.

8. Where demolitions or other building works are carried out which may affect adversely any adjoining building, it shall be provided with adequate support, and the authorized architect shall submit his certificate in accordance with the provisions of regulation 20 of the Building (Administration) Regulations.

PART II.

Materials.

Bricks and building blocks.

9. (1) Every brick and building block shall be composed of hard well-burned clay, natural or cast stone, concrete or other incombustible material of like hardness and durability and shall possess resistance to crushing not less than those respectively specified in Table I.

(2) Cast stone and concrete blocks shall be cured at normal temperatures until they attain the strengths specified in Table I and in any case for not less than 4 weeks.

(3) Every brick and building block shall be of such size, shape and surface as to permit of proper bonding and jointing.

(4) Where bricks and building blocks are formed with cavities, hollows or perforations—

(i) the volume of such cavities, hollows or perforations shall not exceed ½ the total volume of the brick or building block; and

(ii) such cavities, hollows or perforations shall be so disposed that the aggregate width of solid material measured at right angles horizontally to the face of such brick or building block shall be not less than ⅓ of the width thereof at any one place;

(iii) no wall of any cavity, hollow or perforation shall be less than three-quarters inch;

(iv) such bricks or building blocks shall be so laid as not to provide harbourage for vermin;

(v) no chase or recess shall be formed in such bricks or building blocks.

(vi) such bricks or building blocks may be used in load bearing walls only—

(*a*) in single storey buildings,

(*b*) in two storey domestic buildings, or

(*c*) for enclosing the top storey of a building.

TABLE I.

Bricks and building blocks.

Description of brick or building block		Resistance to crushing in lbs. per square inch of gross horizontal area
Purpose	Whether solid or hollow	
External or internal (load bearing)	Solid	1,500
External or internal (load bearing)	hollow	750
External (panel) (non-load bearing)	solid or hollow	500
Internal (partition) (non-load bearing)	solid or hollow	200

Cement.

10. Cement shall not be inferior in strength, soundness and durability to the current British Standard Specification for Portland Cement.

Lime.

11. Stone lime shall consist of—

(*a*) quicklime formed by burning a natural rock or other suitable material at such a temperature that it will slake when brought into contact with water, or

(*b*) dry hydrated lime in the form of a fine dry powder produced by treating quicklime so as to produce a dry, sound product:

Provided that the calcium and magnesium compounds present in the lime as oxides shall be not less than 70 per cent by weight.

Sand.

12. (1) Sand shall—

(*a*) consist of naturally occurring sand, crushed stone or a combination of both;

(*b*) be hard, clean and free from adherent coatings;

(*c*) contain no appreciable amount of clay balls or pellets;

(*d*) contain no greater proportion of fine clay, silt or fine dust (being such clay, silt or dust as will pass through a 0.001 inches sieve) than 5 per cent by weight in the case of naturally occurring sand, and 10 per cent by weight in the case of crushed stone.

(2) Sand shall contain no harmful material in sufficient quantity adversely to affect the hardening strength or durability of the mortar, plaster or concrete, or in the case of reinforced concrete to attack the reinforcement.

Red earth.

13. Red earth shall consist of decomposed rock containing not more than 15 per cent of clay. It shall contain no harmful material in sufficient quantity adversely to affect the hardening strength or durability of the mortar or plaster.

Water.

14. Water shall be clean fresh water free from harmful matter.

Cement mortar.

15. (1) Cement mortar shall be composed of cement and sand in the proportion of one volume of cement to not less than 2 nor more than 4 volumes of sand.

(2) Lime or red earth may be added to such cement mortar in the proportion of not more than 25 per cent of the cement in volume.

Cement-Lime Mortar.

16. Cement lime mortar shall be composed of cement, sand and stone lime or shell lime, mixed by volume in the proportions shown in Table II.

TABLE II.

Cement-lime mortar.

Cement	Lime		Cement-Lime	Sand		Maximum ratio of the volume of cement to the volume of sand
	Min.	Max.		Min.	Max.	
1	1	4	1	2	4	1 : 12 where stone lime is used. 1 : 9 where shell lime is used.

Note:—Not more than 25% of the volume of sand may be replaced by an equal volume of red earth.

Lime mortar.

17. (1) Lime mortar shall be composed of stone lime or shell lime, sand or red earth mixed by volume in the proportions shown in Table III.

(2) Lime mortar with a base of shell lime shall not be used in the construction of any external load bearing wall.

TABLE III.

Lime mortar.

Stone Lime	Shell Lime	Sand	*Note*:—Not more than 25% of the volume of sand may be replaced by an equal volume of red earth.
1	—	2 to 4	
—	1	1 to 3	

Aggregate.

18. (1) Aggregate for plain concrete shall consist of sand, well-burnt brick, well-burnt tile, well-burnt clinker, stone or any other material of which the Building Authority may approve. It shall be so graded as to make a sound concrete.

(2) Aggregate for reinforced concrete shall—

(*a*) consist of sand and crushed stone;

(*b*) be hard, strong and durable and reasonably clean and free from clay, organic or other harmful matter;

(*c*) being fine aggregate, be of such size that at least 90 per cent by weight will pass a 3/16 inch mesh screen, and not more than 15 per cent by weight will pass a No. 100 mesh, British Standard Specification;

(*d*) being coarse aggregate, be of such size that—

(i) not more than 10 per cent by weight will pass a 3/16 inch mesh screen;

(ii) at least 95 per cent by weight will pass a mesh of a size $\frac{1}{4}$ inch less than the minimum lateral distance between reinforcing bars, or $\frac{1}{4}$ inch less than the minimum cover, whichever is the smaller, or in the case of solid slabs will pass $\frac{3}{4}$ inch mesh screen;

(*e*) be so graded as to make a dense concrete.

Concrete.

19. (1) Concrete shall be composed of aggregate mixed with cement and water.

(2) The fine aggregate and coarse aggregate shall be measured separately.

(3) The proportions of cement to aggregate shall be—

(*a*) those specified in Tables IV and V for the appropriate grade of concrete; or

(*b*) any proportions between those specified in Tables IV and V:

Provided that the maximum permissible compressive stress for concrete of mixes intermediate to those specified shall be ascertained by proportion from the maximum permissible compressive stresses for concrete of the two nearest specified mixes, such proportion being based on the ratio of the sum of the volumes of fine and coarse aggregate, measured separately, to the volume of cement.

(4) The volume of coarse aggregate shall normally be twice the volume of the fine aggregate, but where a denser or more workable concrete can be produced by increasing the proportion of fine aggregate, the proportion of coarse aggregate may be correspondingly reduced.

(5) Notwithstanding the provisions of sub-regulations (3) and (4) where the Building Authority is of the opinion that in any particular case other proportions will produce a suitable grade of concrete, he may permit such proportions for that case.

(6) (*a*) Concrete designated as Grades I-V in column 1 of Table IV and having the resistance to crushing specified for such grades in the last column of such Table shall be known as "ordinary" concrete.

(*b*) Concrete designated as Grades IA-IIIA in column 1 of Table V and having the resistance to crushing specified for such grades in the last column of such Table shall be known as "Quality A" concrete.

(7) The quantity of water used for making concrete shall not exceed that required to ensure that the concrete is uniformly mixed, can be readily placed and worked into position, and will make a sound concrete.

(8) Concrete shall—

(*a*) be deposited before setting has commenced and without segregation of the materials;

(*b*) be adequately consolidated by tamping or any other means including vibrating which may be approved by the Building Authority;

(*c*) remain undisturbed after consolidation until hardened sufficiently to withstand safely any stresses to which it may be subjected;

(*d*) be adequately protected from the weather, from premature drying, or other causes of damage until it has hardened.

TABLE IV.

Concrete (ordinary) Grades I to V.

Designation	Nominal mix.	Total volume of aggregate per 112 lbs. of cement * cu. ft.	Proportions of mix. upper and lower limits: Cement cwt.	Fine aggregate cu. ft.	Coarse aggregate cu. ft.	Minimum resistance to crushing in lbs. per sq. in. of standard six-inch cubes: Within 7 days after mixing	Within 28 days after mixing
Grade I	1–1–2	3¾	1 1	1¼ 1½	2½ 2¼	1950	2900
Grade II	1–1½–3	5⅝	1 1	1⅞ 2¼	3¾ 3⅜	1700	2550
Grade III	1–2–4	7½	1 1	2½ 3	5 4½	1500	2250
Grade IV	1–3–6	11¼	1 1	3¾ 4½	7½ 6¾	1100	1650
Grade V	1–4–8	15	1 1	5 6	10 9	850	1250

* sum of volumes of Fine and Coarse aggregates measured separately.

TABLE V.

Concrete (Quality A) Grades IA to IIIA.

Designation	Nominal mix.	Total Volume of aggregates per 112 lbs. of cement. *cu. ft.	Proportions of mix. upper & lower limits: Cement cwt.	Fine aggregate cu. ft.	Coarse aggregate cu. ft.	Minimum resistance to crushing in lbs. per sq. in. of standard six-inch cubes: Preliminary tests: Within 7 days after mixing	Within 28 days after mixing	Works tests: Within 7 days after mixing	Within 28 days after mixing
Grade IA	1–1–2	3¾	1 1	1¼ 1½	2½ 2¼	3400	5250	3000	4500
Grade IIA	1–1½–3	5⅝	1 1	1⅞ 2¼	3¾ 3⅜	2850	4400	2500	3750
Grade IIIA	1–2–4	7½	1 1	2½ 3	5 4½	2300	3500	2000	3000

* sum of volumes of Fine and Coarse aggregates measured separately.

Materials for damp-proofing.

20. Materials for damp-proofing shall consist of—

(*a*) sheet lead or sheet copper;

(*b*) asphalt;

(*c*) self finished bitumen impregnated felt laid in bitumen;

(*d*) a core of sheet lead and bituminized hessian cloth between two layers or coats of bitumen surfaced with talc or other suitable material;

(*e*) a core of sheet lead between two layers of bituminized felt fibre coated with bitumen and surfaced with talc or other suitable material; or

(*f*) any other suitable material or combination of materials;

and shall be such as the Building Authority may approve as being durable, impervious to moisture and in all other respects suitable for their purpose, having regard to the particular circumstances of the case.

Timber.

21. Structural timber shall be of a quality and strength sufficient for its purpose and shall be well seasoned, sound and free from knots or shakes in such quantity as to affect adversely the strength or durability of the timber.

PART III.

Loads.

Wind effects.

22. (1) Every building shall be constructed so as to be capable safely of sustaining, resisting and transmitting, in addition to the dead and imposed loads, and without exceeding the appropriate limitations of permissible stresses, all forces due to wind pressures in any horizontal direction of the intensities specified in Table VI for the height of the building and exposure of its site.

(2) Such forces shall be calculated—

(*a*) for the vertical surfaces of the building, at the basic pressure (P) in Table VI appropriate to a height measured from the general ground level up to halfway between the eaves and ridge levels of the roof, considered as acting uniformly on the full height of the vertical walls;

(*b*) for any projections above the roof, at the basic pressure (P) in Table VI appropriate to the height from the general ground level to the top of such projections, considered as acting uniformly on the whole projected area of the projection.

(3) In calculating the stability of the building as a whole, the following additional horizontal forces shall be taken into account—

(*a*) the horizontal components of the windloads on roofs as specified in Table VII considered as acting halfway up the roof;

(*b*) the forces due to winddrag, calculated as the plan area in square feet of the roof multiplied by—

(i) a force equal to 0.05 P where the wind is at right angles to the slope of the roof,

(ii) a force equal to 0.025 P where the wind is parallel to the slope of the roof.

TABLE VI.

Basic wind pressure—(P).

Effective height of building * ft.	Wind pressure P, (lbs. per square foot) †		
	Exposure A. V=90 m.p.h.	Exposure B. V=105 m.p.h.	Exposure C. V=120 m.p.h.
up to 10	18	24	32
20	21	28	38
30	23	32	42
40	25	35	45
50	27	37	48
60	28	39	51
80	30	41	54
100	—	43	57
120	—	45	60
140	—	47	63
160	—	49	65
180	—	51	67
200 or more.	—	52	69

* For intermediate values of height, the pressures shall be calculated by interpolation.

† The degrees of exposure are:—

Exposure A. This exposure covers open country not directly exposed to the full effect of typhoons, not more than 200 ft. above sea level, and not on the sea front.

Exposure B. This exposure shall be used for exposed sites not more than 200 ft. above sea level and not on the sea front, and for sheltered sites from 200 to 800 ft. above sea level. It is the minimum exposure for all buildings more than 80 ft. high.

Exposure C. This exposure is applicable to exposed sites open to and near the sea, and to sites more than 800 ft. above sea level.

(4) (*a*) Every roof shall be constructed so as to be capable of resisting safely without exceeding the appropriate limitations of permissible stresses, the simultaneous effects of pressure and suction due to wind, considered as acting normal to the surface of the roof, as specified in Table VII, in terms of the basic pressure (P) of Table VI appropriate to the height and exposure of that roof.

TABLE VII.

Wind pressure and suction on roofs. (Wind normal to eaves)

Angle of windward surface of roof with horizontal	Wind pressure	
	Windward slope (or half of flat roof)	Leeward slope (or half of flat roof)
0°	— 1.00 P	— 0.75 P
10°	— 0.70 P	— 0.50 P
20°	— 0.40 P	— 0.45 P
30°	— 0.10 P	— 0.45 P
40°	† 0.10 P	— 0.45 P
50°	† 0.30 P	— 0.45 P
60°	† 0.40 P	— 0.45 P
70°	† 0.50 P	— 0.45 P
80°	† 0.50 P	— 0.45 P
90°	† 0.50 P	— 0.50 P

In this table—

(i) the sign † indicates pressure and the sign—indicates suction;

(ii) the pressure and suction for roofs having intermediate inclinations shall be determined by interpolation;

(iii) the sign P means the basic pressure in Table VI appropriate to the height and exposure of the roof under consideration.

(*b*) The wind pressure on a curved roof due to wind blowing at right angles to the axis of the roof shall be calculated on the assumption that the curved portion is divided into not less than four equal segments, and the pressure on each segment determined by the pressures and suctions specified in Table VII appropriate to the slope of the chord of each segment.

(5) Where the building is adequately stiffened by the walls and floors the provisions of sub-regulations (2) and (3) shall not apply—

(*a*) where the height of such building does not exceed twice the width of the base upon which it depends for its resistance to the overturning action of the wind pressure, nor

(*b*) to any part of a building which projects vertically or horizontally from the remainder of the building to an extent less than twice the width of that projection.

(6) Every individual part of the outside surface of a building shall be capable of resisting safely, without exceeding the appropriate limitation of permissible stresses, a pressure, acting inwards or outwards of—

(*a*) in the case of wall panels, wall sheeting, and windows, 0.8 P;

(*b*) in the case of roofs, the appropriate pressures or suctions of Table VII increased numerically by 0.3 P:

Provided that within a distance of 1/6th of the length of the building from the gables in the case of both walls and roof, and of 1/6th of the span from the eaves in the case of roofs, the pressures shall be taken at 1.5 P in the case of walls, and 2.0 P in the case of roofs.

(7) In this regulation the symbol P shall be the basic wind pressure specified in Table VI appropriate to the height and exposure of the part of the building under consideration.

Horizontal load.

23. All parapets, handrails and balustrades shall be capable of resisting safely a horizontal pressure, acting at handrail or coping level of—

(*a*) in the case of stairways, landings and balconies for domestic buildings—25 lbs. per foot run,

(*b*) in the case of all other stairways, landings, and balconies, and all parapets and handrails to roofs—50 lbs. per foot run:

Provided that in the case of balustrades and barriers in places of assembly, a pressure of 150 lbs. per foot run shall be taken.

Test load.

24. (1) The test load for any structure shall not exceed 1½ times the imposed load for which the structure has or should have been designed.

(2) The test load shall not be applied to a reinforced concrete structure until 28 days after the date of concreting. During the tests, struts strong enough to take the whole of the combined dead load and test load shall be placed in position leaving a gap under the members.

(3) If, under test, no structural defects can be observed and if the deflection is not excessive, the structure shall be deemed to be satisfactory.

Notice as to load.

25. (1) In every storey of every building except where the floor is one used for purposes of habitation, there shall be exhibited by the owner, at each staircase or at some other appropriate place, permanently and conspicuously, a notice, incised or embossed, of metal, plastic or other suitable material, in the following form, in letters and figures not less than ½ inch high, stating the imposed load for which the floor has been designed.

> Buildings Ordinance, 1955
>
> NOTICE.
>
> The imposed load on this floor is not to exceed ..... lbs. per square foot.

(2) Where floors of different rooms or different parts of floors have been designed for different imposed loads, a notice in the above form shall be suitably displayed in each room or on each part of the floor as the case may be, indicating the variations.

PART IV.

Foundations.

Foundations.

26. The foundations of every building shall be constructed so as to be capable of sustaining safely and transmitting all the dead and imposed loads to the subsoil without impairing the stability of that or of any other building or road and without exceeding the appropriate limitations of permissible stresses.

Construction of foundations.

27. Foundations shall be constructed:—

(1) of plain or reinforced concrete;

(2) at a depth below the surface of the ground sufficient to—

(*a*) secure adequate bearing capacity of the soil;

(*b*) avoid interference with drains or other services in adjacent streets, roads or lanes;

(*c*) avoid overloading the foundations of adjacent buildings or the soil supporting such foundations;

(3) of such thickness, not being less than 6 inches, and of such width as may be necessary to comply with the provisions of regulations 5 and 6:

Provided that where the foundation rests on sound hard rock the thickness of concrete need be no more than is necessary to provide a suitable level surface on which to construct the building;

(4) symmetrically under the centre of action of the load:

Provided that where the foundation lies on the boundary of the site, it may be wholly within such site, and shall be so designed, taking into account the eccentricity of loading, as to comply with regulation 5.

Permissible pressure on soil.

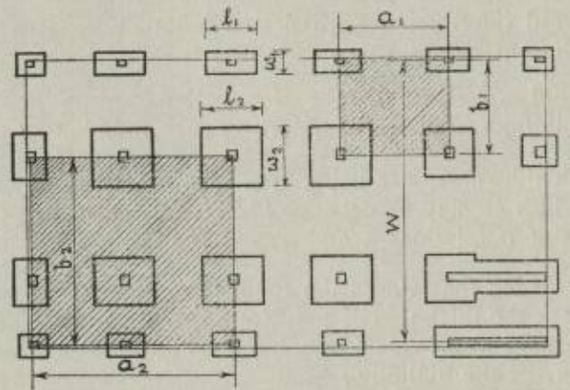
28. (1) The pressure on the soil under any foundation shall not at any point exceed that specified in Table VIII.

Provided that where adequate tests are made to determine the bearing capacity of the soil on any site, the calculated pressure on such soil may exceed those specified in Table VIII, but shall in no case exceed the proved safe bearing capacity.

(2) Where the foundation rests on cohesive soils, (Type 2 of Table VIII) the maximum pressure specified in the Table shall apply only to individual footings, walls or piers. The average pressure under a building calculated as the total load over that area of any one bay or other major portion of the structure, divided by that area, shall not exceed the appropriate pressure in the Table multiplied by the ratio of the width of the least individual footing to the width of the whole building.

DIAGRAMS—The diagram accompanying the text is purely explanatory and form no part of the enacted regulations.

DIAGRAM 1
FOUNDATIONS ON COHESIVE SOILS



FOUNDATION PLAN OF BUILDING

In the following, the symbols shall have the following meanings:-

a & b	,	dimensions of any bay or major portion of the building.
w_1	,	least dimension of narrowest individual footing.
w & l	,	dimensions of any individual footing.
W	,	least overall dimension of whole building.
p	,	permissible total load of any individual footing.
P	,	permissible total load on any bay or major portion of the building.

then, $p = f \times wl$.

and $P = f \times ab \times \frac{w_1}{W}$

where f is the appropriate permissible soil-pressure given in Table VIII

TABLE VIII.

Maximum pressure on soil under foundations.

	Type of soil under foundation	Maximum permissible pressure in tons per square foot
1	Rock (*a*) Hard sound rock, massive	40
	(*b*) Medium hard rock	25
	(*c*) Soft rock	8
2	Cohesive Soils (For individual footings only)	
	(*a*) Stiff clay	3
	(*b*) Medium clay	1½
	(*c*) Soft clay	½
3	Intermediate Soils Red Earth, Decomposed Rock, Laterite	
	(i) Compact	3
	(ii) Loose (dry)	2
	(iii) Loose (wet)	1
4	Non-Cohesive Soils	
	(*a*) Gravel & Sand-gravel mixture, compact	4
	(*b*) Gravel & sand-gravel mixture, loose	3
	(*c*) Coarse sand compact	3
	(*d*) Coarse sand, loose & fine sand, compact	1½
	(*e*) Fine sand, loose	½
5	Made ground & fill	Value depending on material depth and age of fill, to be determined by bearing tests
6	Peat and organic soils	

In the above table, the terms used shall be deemed to have the following meanings:—

Rock. the undisturbed rock mass whose minerals show no sign of decomposition.

Clay. a fine-grained inorganic soil possessing sufficient cohesion when dry to form hard lumps which cannot readily be pulverised by the fingers.

(*a*) *Stiff clay*, clay which can be removed by spading a fresh sample of which can be moulded by a substantial pressure of the fingers.

(*b*) *Soft clay*, clay which when freshly sampled, can be moulded under relatively slight pressure of the fingers.

Red Earth. the residual soil formed by decomposition of the rock mass, in situ.

Gravel. a mixture of mineral grains one quarter inch or more in diameter, and without clay.

Sand. a mixture of mineral grains less than one quarter inch in diameter, but retained on a 200 mesh screen.

(*a*) *Coarse sand,* Sand consisting chiefly of grains retained on a 52 mesh screen.

(*b*) *Fine sand,* Sand consisting chiefly of grains passing a 52 mesh screen.

Compact. a soil which requires the use of a pick for removal.

Loose. a soil which is readily removable by shovelling only.

(3) Where the foundation rests on non-cohesive soils, (Type 4 of Table VIII), the maximum pressure specified in the Table--

(*a*) shall if the foundation is less than 3 feet in least lateral dimension, be $\frac{1}{3}$ of the pressure specified therein multiplied by the least lateral dimension in feet, and

(*b*) may be increased by 5 per cent for each foot of depth below the lowest ground surface immediately adjacent. but shall not in any case exceed twice the pressure specified therein.

(4) Soil tests where required shall be carried out in accordance with the requirements of paragraph 860 of the Civil Engineering Code of Practice No. 1-1950—Site Investigation.

Permissible pressure on concrete.

29. The pressure on plain or reinforced concrete in foundations shall not exceed those specified in Table IX.

TABLE IX.

Pressure on concrete or reinforced concrete foundations.

Designation as specified in regulation 19.	Maximum pressure in tons per sq. ft.
Grade IA	96
IIA	80
IIIA	64
Grade I	50
II	44
III	39
IV	20
V	15

Piling.

30. (1) All piling used in connexion with the foundations of any building shall to the satisfaction of the Building Authority, be of adequate load bearing capacity; and each pile shall—

(*a*) be strong enough to carry its load;

(*b*) transfer its load to the soil in a satisfactory manner;

(*c*) not cause stresses in the soil, taken in combination with all the piles in the foundation, greater than the proved safe bearing capacity of the soil as determined by tests.

(2) (*a*) The permitted pile loading shall be such that the vertical pressures in the soil at or below the points of the piles, produced by the loads on all piles in a foundation, shall not exceed the proved safe bearing capacity of such soil as determined by tests.

(*b*) Piles or pile groups shall be assumed to transfer their loads to the soil by spreading the load uniformly at an angle of 60 degrees with the horizontal, starting at the top of the satisfactory bearing stratum in which they are embedded, and the area considered as supporting the load shall not extend beyond the intersection of the 60 degree planes of adjacent piles or pile groups.

(3) The permissible pile loading shall not be such as to cause excessive movement of the pile relative to the soil. Where any doubt exists, proof of this load shall be obtained from load tests, up to at least twice the proposed working load.

(4) Every pile shall be driven in such a manner as not to damage the material of the pile.

(5) All piles shall be capped with plain or reinforced concrete.

(6) Wood piles shall be cut to sound wood before the capping is placed, and the cut-off level shall be below the probable permanent ground water level.

(7) The authorized architect shall keep or cause to be kept accurate records of materials and principal dimensions of each pile, of the weight and fall of the hammer together with the average penetration of each pile for at least the last five blows and the levels at the bottom and the cut-off of the pile. He shall submit a copy of these records to the Building Authority.

Pressure from adjacent ground.

31. Where the ground adjacent to any building exerts pressure upon or causes the application of load to any part of that building, such building shall be constructed so as to be capable of sustaining safely and transmitting that pressure or load without exceeding the appropriate limitations of permissible stresses.

Footings.

32. Where footings are required to spread loads from walls to foundations, the bricks or building blocks below the base of such walls shall increase downwards by regular offsets not exceeding one half the thickness of the brick or building block on one or both sides of such walls. Such bricks or building blocks shall where possible be laid as headers.

PART V.

Sites and floors.

Covering of sites.

33. (1) The ground surface within the external walls of every building shall be covered with a layer of concrete, not inferior to that designated Grade V concrete in regulation 19, finished smooth on the upper surface. Such concrete shall have a thickness of—

(*a*) not less than 6 inches of Grade V concrete where the concrete is laid on ground;

(*b*) not less than 4 inches where it is—

(i) not inferior to Grade V concrete and is laid on a consolidated bed consisting of clinker, broken bricks or other similar materials not less than 3 inches thick; or

(ii) not inferior to Grade III concrete; or

(iii) reinforced to comply with regulation 5.

(2) Sub-regulation (1) shall not apply to any building (or part of a building) which is—

(*a*) to be used solely—

(i) as a foundry or blacksmith's shop;

(ii) for the milling or storage of timber;

(iii) for the storage of acids and chemicals which destroy concrete;

(*b*) of one storey—

(i) open on two or more sides; or

(ii) intended to be used solely for the storage of builder's materials or plant; or

(iii) intended to be used solely as a greenhouse, or tool shed and does not communicate by any door, window or other opening with any building to which sub-regulation (1) applies.

(3) Where in any part of a building the layer of concrete required by sub-regulation (1) is also a floor of the building, that layer shall be constructed of concrete not inferior to Grade III, not less than 4 inches thick, and laid on a consolidated bed not less than 3 inches thick constructed of clinker, broken bricks, or other similar materials.

(4) Where in any part of a building the floor next above the ground is constructed of plain or reinforced concrete, constructed so as to leave between it and the ground an air space, ventilated in accordance with sub-regulation (5) and enclosed so as to prevent its use for any other purpose, such floor may be deemed to be the layer of concrete required by sub-regulation (1).

(5) (*a*) An enclosed space under a floor shall be ventilated on at least two sides with air-bricks or otherwise, having an open area of not less than the equivalent of 2 square inches per linear foot run of external wall. No single opening in any such air brick or ventilator shall exceed $\frac{1}{4}$ inch in its least dimension.

(*b*) Where the flow of air may be obstructed in places by solid construction, ducts of a total area equal to not less than twice the total area of the opening in the air bricks or other ventilator in the external walls shall be formed in such solid construction.

Areas, etc. to be paved.

34. (1) The ground surface of every area, back yard or alleyway of every building (unless exempted as a garden) shall be covered with—

(*a*) a layer of concrete not less than 4 inches thick and not inferior to Grade V;

(*b*) stone or brick paving bedded and jointed in cement mortar;

(*c*) a layer of bituminous macadam 3 inches thick finished smooth with a topping of fine bituminous macadam 1 inch thick; or

(*d*) a layer of such other impervious material as the Building Authority may approve.

(2) Such surface covering shall be laid to fall at a gradient of not less than 1 in 80 to a gulley trap or drainage channels connected to a storm water drain.

Certain floors to be impermeable.

35. The floor of every room to which a water supply is provided shall be constructed of concrete or such other impermeable material as the Building Authority may approve.

Lowest floor to be above ground level.

36. The level of the floor next above the ground of every building shall be not less than 6 inches above the level of the surface of the external ground, paving, or oversite concrete at the entrance to that floor.

Ventilation below wood floors.

37. (1) Where in any part of a building the floor next above the ground is constructed of wood, it shall be so constructed as to leave an air-space not less than 9 inches deep between the level of the underside of the joists and the level of the upper surface of the layer of concrete required by sub-regulation (1) of regulation 33, and that space shall be so ventilated as to comply with the requirements of sub-regulation (5) of regulation 33.

(2) The provisions of sub-regulation (1) shall not apply where a continuous damp-proof membrane complying with the requirements of regulation 20 is provided between the concrete and the floor.

Construction of wood floors.

38. (1) Every wood floor shall be constructed of tongued and grooved boards, strips, or blocks, and shall be—

(*a*) where of boards or strips, nailed or otherwise securely fixed to floor joists; or

(*b*) where of blocks, fixed to a screeded concrete sub-floor with asphaltic bitumen or coal tar or other adhesive as the Building Authority may approve.

(2) Every wood block floor bedded on concrete in contact with the ground shall be provided with a continuous damp-proof layer to protect the timber against rising damp, and such damp-proof layer shall not be inferior to a layer of hot bituminous adhesive of sufficient thickness to prevent the wood from coming into contact with the concrete.

Skirting.

39. Every skirting shall be solidly bedded against the wall to which it is attached.

PART VI.

Walls and piers.

Construction and bonding of walls.

40. The walls of all buildings shall be constructed of—

(*a*) bricks or building blocks bonded and solidly put together with mortar;

(*b*) concrete not inferior to Grade V;

(*c*) reinforced concrete; or

(*d*) any of the foregoing materials in combination with a framework of steel or reinforced concrete.

Buildings over 4 storeys or 48 feet in height.

41. Buildings which exceed 4 storeys or 48 feet in height shall be constructed—

(*a*) with a frame work of steel or reinforced concrete;

(*b*) with load bearing walls of reinforced concrete or concrete cast in-situ;

(*c*) with a combination of (*a*) and (*b*); or

(*d*) other method of construction approved by the Building Authority and designed in accordance with the current relevant British Standard Code of Practice.

Application of regulations.

42. Walls, other than panel walls, shall comply with the provisions of regulations 63 and 64, and with the provisions of—

(*a*) regulations 43 to 56; or

(*b*) regulations 57 to 60; or

(*c*) the relevant British Standard Code of Practice in force at the coming into operation of these regulations:

Provided that in a building where the imposed floor load exceeds 150 lbs. per square foot the external and party walls shall be designed and constructed in accordance with the provisions of such British Standard Code of Practice.

Rules for measuring height of storeys and height of walls.

43. (1) For the purposes of regulations 45 and 46, the height of the lowest or only storey shall be measured from the base of the wall, and the height of any other storey shall be measured from the level of the underside of the floor structure of the storey to the level of the underside of the floor structure next above it or, if there is no such storey, then to the highest part of the wall or, in a storey comprising a gable, to half the height of the gable.

(2) The height of a party wall comprising a gable shall be measured from its base to the base of the gable; the height of any other wall comprising a gable shall be measured from its base to half the height of the gable; and the height of any wall not comprising a gable shall be measured from its base to its highest part excluding any parapet which does not exceed 4 feet in height.

Rules for measuring length of walls.

44. (1) For the purposes of regulations 45 and 46, walls shall be deemed to be divided into distinct lengths by piers, buttresses, chimneys or dividing walls. Such piers, buttresses, chimneys or dividing walls shall be bonded into the walls, and—

(*a*) in the case of a pier or buttress shall—

(i) extend upwards from the base of the wall to the top of the wall;

(ii) be, at any height, not less in thickness (measured so as to include the wall) than three times the thickness of the wall; and

(iii) be not less in breadth than twice the thickness of the wall;

(*b*) in the case of a chimney shall have a horizontal sectional area, excluding any fireplace opening or flue, of not less than the area required for a pier or buttress and an overall thickness of not less than three times the thickness of the wall it is deemed to divide; and

(*c*) in the case of a dividing wall shall, if an internal load bearing wall comply with the requirements of regulation 47(1) and in any case be of a thickness of at least one half of that prescribed by regulation 45 or 46 in respect of the wall which it is deemed to divide and shall have a length measured at right angles to the buttressed wall equal to not less than $\frac{1}{6}$ of its height.

(2) All measurements of length of walls shall be made from the centres of the return walls, dividing walls, piers, buttresses or chimneys.

Thickness of external walls and party walls of buildings other than public buildings or buildings of the warehouse class.

45. Except as provided in regulations 53 and 61 every external and every party wall built of bricks or building blocks in a building other than a public building or a building of the warehouse class shall be—

(*a*) of not less thickness than that specified in Table X;

(*b*) built in cement mortar or cement lime mortar containing not more than 6 volumes of sand to 1 volume of cement.

TABLE X.

Thickness of external and party walls of buildings other than public buildings or buildings of the warehouse class.

Height of wall		Length of wall		Thickness of wall
Exceeding	Not Exceeding	Exceeding	Not Exceeding	
Feet.	*Feet.*	*Feet.*	*Feet.*	
—	12	—	—	8½″ throughout.
		—	30	8½″ throughout.
12	24	30	—	13″ throughout the lowermost storey; 8½″ throughout the rest of the wall.
		—	30	13″ throughout the lowermost storey; 8½″ throughout the rest of the wall.
24	36	30	—	13″ throughout the lowermost two storeys; 8½″ throughout the rest of the wall.
		—	30	17½″ throughout the lowermost storey; 13″ throughout the next two storeys; 8½″ throughout the rest of the wall.
36	48	30	—	17½″ throughout the lowermost two storeys; 13″ throughout the next storey; 8½″ throughout the rest of the wall.

Thickness of external and party walls of public buildings and buildings of the ware-house class.

46. (1) Except as provided in regulation 61 every external and every party wall built of bricks or building blocks in a public building or a building of the warehouse class where the imposed floor load does not exceed 150 lbs. per square foot shall—

(*a*) be built in cement mortar or cement lime mortar containing not more than 6 volumes of sand to 1 volume of cement;

(*b*) have a thickness at the top and for 16 feet below the top of not less than 13 inches:

Provided that it may be not less than 8½ inches for—

(i) a wall having only one storey height not exceeding 12 feet;

(ii) the topmost storey height of a wall where that wall does not exceed 24 feet in height.

(2) Every such wall being of the height and length specified in Table XI shall have a thickness at the base not less than that specified in that Table.

(3) The thickness of the intermediate parts of such wall between the base and 16 feet below the top shall be of not less thickness than that obtained if the wall were to be built solid throughout the space between straight lines drawn on each side of the wall and joining the thickness at the base to the thickness at 16 feet below the top.

(4) Notwithstanding sub-regulation (1) (*b*) of this regulation, offsets shall not be made in a wall between the base and the top thereof, except at the level of lateral supports.

TABLE XI.

Thickness of external and party walls of public buildings and buildings of the warehouse class.

Height of wall	Length of wall	Thickness at base
Not exceeding 24 feet	Any length	13 inches
Exceeding 24 feet and not exceeding 36 feet	Not exceeding 35 feet	13 inches
	Exceeding 35 feet	17½ inches
Exceeding 36 feet Not exceeding 48 feet	Not exceeding 35 feet	17½ inches
	Exceeding 35 feet	21½ inches

Thickness of internal load bearing walls.

47. (1) Every internal load bearing wall built of bricks or building blocks (not being a party wall) shall have a thickness not less than half that required under regulation 45 or 46, as the case may be, for an external or party wall of the same height but twice the length, and in any case not less than 8½ inches.

Partition walls.

(2) A non-load-bearing partition wall, adequately restrained laterally on all four edges may be of a thickness such that when 3 times its height is added to its length the total does not exceed 200 times its thickness.

Recesses and openings.

48. (1) (*a*) Notwithstanding the provisions of regulations 45, 46 and 47(1), openings and recesses may be formed in walls to which the provisions of such regulations apply.

(*b*) No such recess shall reduce the width of any wall to less than 8½ inches.

(*c*) The aggregate width of all recesses and openings formed at any one level shall not exceed ⅔ the length of the wall at that level.

(*d*) Where the wall is a buttressing wall, every recess or opening at any level shall be at a distance from the buttressed wall of not less than ⅛ the height of the buttressing wall.

(2) An arch or lintel sufficient to support the superstructure shall be built of incombustible material over every recess or opening in any wall.

(3) (*a*) Openings may be formed in party walls other than those separating parts of the building in different ownership.

(*b*) Such openings shall be fitted with self-closing doors in frames, the whole so constructed as to be fire resisting for at least half an hour.

(*c*) In any row of house or terrace exceeding 120 feet in length or consisting of more than six houses or tenements, party walls without openings shall be provided at a distance apart not exceeding 120 feet, or six houses or tenements, whichever is the less.

(*d*) Where openings in party walls are closed, bricks or solid building blocks not less than 8½ inches in thickness or reinforced concrete not less than 4 inches in thickness shall be used.

(4) For the purpose of this regulation, the expression "recess" shall include any chase or other reduction in the required thickness of a wall.

Loads on walls.

49. (1) A wall shall not be subject to loads other than distributed loads:

Provided that any wall may be subject to any concentrated load which is transmitted to that wall by a beam, column, pier or other structural member, having such bearing on the wall and such additional support as shall be necessary to comply with the requirements of regulation 5.

(2) For the purposes of this regulation, joists set at distances apart not exceeding 42 inches shall be deemed to compose a distributed load.

Corbelling and overhanging work.

50. (1) Subject to the provisions of regulation 48, where any part of any wall overhangs any part beneath it, it shall—

(*a*) be in addition to the required thickness of that wall; and

(*b*) be corbelled out or otherwise supported to comply with regulation 5.

(2) The projection of any corbelling shall not exceed $\frac{1}{3}$ of the thickness of the wall immediately below that corbelling.

Thickness of walls where difference in ground levels.

51. (1) Where the level of the ground or of the surface of the site concrete is different on one side of a wall to that on the other, the width of such wall in a building built of bricks or building blocks shall be not less than $\frac{1}{4}$ of such difference of level.

(2) If such difference in level exceeds 6 feet, the wall shall be designed and built as a retaining wall and in accordance with regulation 44 of Building (Planning) Regulations.

Thickness of external walls of certain small buildings.

52. (1) Subject to the provisions of sub-regulation (2)—

(*a*) a one-storey building, other than a domestic building, whose width measured in the direction of the span of the roof does not exceed 30 feet and the height of whose walls does not exceed 10 feet; or

(*b*) a garage, greenhouse, store, water closet or other room (attached to a domestic building) not intended to be used for habitation and not exceeding 10 feet in height,

may have external walls not less than 4 inches thick.

(2) (*a*) Where any such wall exceeds 8 feet either in height or length it shall be bonded into piers, one of which shall be placed at each end of the wall, not less than $8\frac{1}{2}$ inches square in horizontal section, or of such greater size as may be required to give adequate stability.

(*b*) Where any such wall exceeds 10 feet in length additional such piers shall be placed in the wall so as to divide the same into lengths not exceeding 10 feet.

(*c*) All bedding and jointing in such walls and piers shall be in cement mortar.

(*d*) Such walls shall bear no load other than the distributed load of the roof, which shall be so constructed that the walls are not subject to any lateral thrust therefrom.

Cavity walls.

53. (1) A load-bearing external or party wall not exceeding 24 feet in height and 30 feet in length in a building other than a public building or a building of the warehouse class, and, subject to the provisions of regulation 61 a panel wall in any building, may be constructed as a cavity wall.

(2) No storey in a building of cavity wall construction shall exceed a height of 12 feet.

(3) Cavity walls shall be constructed of solid bricks or building blocks properly bedded and jointed in cement mortar, and shall comprise two leaves, each not less than 4 inches thick and an intervening cavity not less than 2 inches and not more than 3 inches wide.

(4) The two leaves shall be united—

(*a*) by iron ties so shaped as not to transmit moisture across the cavity and not less than $\frac{3}{4}$ inch × $\frac{1}{8}$ inch in cross-section, well galvanized or otherwise protected from corrosion; or

(*b*) by ties of such other materials and cross-section as to comply with the relevant current British Standard Specification.

(5) Such ties shall be built into the horizontal bed joints during erection and placed at distances apart not exceeding 3 feet horizontally and 18 inches vertically.

(6) Such ties shall also be placed at distances apart not exceeding 12 inches (measured vertically) within 6 inches of the sides of all openings.

(7) The cavity shall during construction be kept free from mortar droppings.

(8) In the case of load-bearing walls the cavity shall extend downwards at least 6 inches below the level of the lower damp-proof course of the wall, and in all walls, wherever the cavity is bridged a damp-proof course or flashing shall be provided to direct moisture away from the inner leaf of the wall.

(9) Adequate drainage shall be provided to all cavities through the outer leaf of the wall. The maximum width of any opening for drainage purposes shall not exceed ¼ inch.

Glass block walls.

54. Where glass block panels are built into walls other than party walls—

(*a*) the opening into which the glass blocks are built shall be so constructed that no load from the building is transferred to the glass blocks;

(*b*) the maximum area of a single panel shall be 100 square feet and the maximum vertical dimension shall be 15 feet in external walls or 20 feet in internal walls.

Parapet walls.

55. Every parapet to an external or party wall shall—

(*a*) where built of bricks or building blocks have—

(i) a thickness of not less than 8½ inches; and

(ii) a height not more than 6 times its thickness;

(*b*) where built of reinforced concrete have a thickness of not less than 4 inches.

Boundary walls and fences.

56. (1) The boundary round the site of any building adjacent to a street or scavenging lane shall be provided with a boundary wall or fence not less than 6 feet in height unless exempted by the Building Authority.

(2) Every boundary wall of bricks or building blocks shall—

(*a*) be built in cement mortar or cement lime mortar;

(*b*) be not less than 4 inches thick if not exceeding 8 feet in height, built solid or honeycombed; and

(*c*) be provided with buttresses or piers not less than 8½ inches square in horizontal section and not more than 10 feet apart centre to centre which shall be placed—

(i) at all angles of such wall; and

(ii) at each end thereof unless such wall is bonded into another wall not less in thickness than the buttresses or piers required;

(*d*) be not less than 8½ inches thick if exceeding 8 feet in height.

Definition of slenderness ratio.

57. (*a*) The slenderness ratio of any wall or pier of any storey-height shall be—

(i) in the case of a wall, the ratio of the effective height to the thickness of the wall, exclusive of plaster or rendering,

(ii) in the case of a pier, the ratio of the effective height to the least lateral dimension.

(*b*) The effective height of a storey-height of a wall or pier shall be as shown in column 2 below—

Support to Wall or Pier.	*Effective Height.*
(i) Wall with lateral support at the top of that storey height.	¾ of the storey height.
(ii) Wall without lateral support at the top of that storey height.	1½ times the storey height.
(iii) Pier with lateral support at the top of that storey height.	The storey height.
(iv) Pier without lateral support at the top of that storey height.	Twice the storey height.

Maximum compressive stresses in walls or piers of bricks or building blocks.

58. (1) Where, in the case of walls or piers built of bricks or building blocks, the slenderness ratio of any storey height does not exceed 1, the compressive stresses in such storey height shall not exceed those specified in Table VIII for the designated bricks or building blocks opposite the specified mixture of mortar.

(2) Where the slenderness ratio of such storey height does exceed 1, the compressive stresses in that storey height shall not exceed the appropriate stress specified in Table XII multiplied by the factor specified in Table XIII for the slenderness ratio of such storey height:

Provided that the slenderness ratio shall not exceed 18.

(3) The compressive stress shall be deemed to be the sum of the dead and imposed load distributed uniformly over the area sustaining such load.

TABLE XII.

Maximum compressive stress in tons per square foot on walls and piers of bricks or building blocks when the slenderness ratio does not exceed one.

Mix of mortar.			Designation of bricks or building blocks, and minimum crushing strength (S)			
Cement	Lime	Sand	Squared Granite S = 7,500 lbs./ sq. in.	Solid Concrete Blocks S = 2,500 lbs./ sq. in.	Common Bricks S = 1,500 lbs./ sq. in.	Hollow Blocks S = 750 lbs./ sq. in.
1	0-¼ *	3	32	13	10	5
1	0-¼ *	4	24	12	9	5
1	1	6	22	12	9	4½
1	2	9	20	10	6	4
1	3	12	13	8	5	3½

* In accordance with Regulation 15 up to ¼ part of lime may be added to cement-mortar. The strength of the brick or building blocks shall be determined in accordance with the provisions of Schedule IV of the London Building (Constructional) By-laws, 1952—"Method of test for resistance to crushing of bricks and blocks".

TABLE XIII.

Reduction factor for slenderness ratio. Bricks and building blocks. (sub-regulation (2)).

Slenderness Ratio.	Factor	Slenderness Ratio.	Factor
1	1.00	10	0.60
2	0.96	12	0.50
4	0.88	14	0.40
6	0.80	16	0.35
8	0.70	18	0.30

The factor for intermediate values of the slenderness ratio shall be determined by interpolation.

Maximum compressive stresses in walls and piers of concrete.

59. (1) Where, in the case of walls or piers built of concrete, the slenderness ratio of any storey height does not exceed 1, the compressive stresses in such storey height shall not exceed those specified in Table XIV for the designated grade of concrete.

(2) Where the slenderness ratio of such storey height does exceed 1, the compressive stresses in that storey height shall not exceed the appropriate stress specified in Table XIV multiplied by the factor specified in Table XV for the slenderness ratio of such storey height:

Provided that the slenderness ratio shall not exceed—

(*a*) in the case of a pier, 18;

(*b*) in the case of a wall, with the minimum reinforcement specified in sub-regulation (4) of this regulation, 24.

(3) The compressive stress shall be deemed to be the sum of the dead and imposed load distributed uniformly over the area sustaining such load.

(4) (*a*) Shrinkage reinforcement shall be provided in all concrete walls.

(*b*) The volume of that reinforcement shall be not less than 0.4 per cent of the volume of the concrete in the wall, and half of that reinforcement shall be disposed vertically and half horizontally.

(c) The reinforcement shall be disposed near the wall surface and the spacing of bars shall not exceed 12 inches.

TABLE XIV.

Maximum compressive stress in tons per square foot on walls and piers of concrete, when the slenderness ratio does not exceed one.

Designation of concrete, as specified in regulation 19.	Maximum permissible stress.	
	tons per sq. ft.	lbs. per sq. in.
Grade I	50	780
Grade II	44	680
Grade III	39	600
Grade IV	20	350
Grade V	15	250

TABLE XV.

Factor for slenderness ratio. Concrete.

Slenderness Ratio.	Factor	Slenderness Ratio.	Factor
1	1.0	12	0.67
2	0.97	14	0.61
4	0.91	16	0.55
6	0.85	18	0.49
8	0.79	21	0.40
10	0.73	24	0.31

The factor for intermediate values of the slenderness ratio shall be determined by interpolation.

Eccentric loads and lateral forces on slender walls.

60. (1) The maximum stresses specified in regulations 58 and 59 may be exceeded by not more than 25 per cent where such excess is caused solely by eccentricity of loading or to lateral forces or to a combination of both.

(2) Additional stresses of a purely local nature, as at girder bearings, column bases and lintels or other concentrated loads, are to be calculated and the maximum stress resulting from these combined with those provided for in regulations 58, 59 and 60(1) shall not exceed the permissible stress given in regulations 58 and 59, as the case may be, by more than 50 per cent.

(3) In the case of walls of bricks or building blocks, no reliance shall be placed on the tensile strength of the bricks or building blocks.

Panel walls.

61. (1) Where an external wall is constructed of materials used in combination with a framework of steel or reinforced concrete, any part of that wall which does not sustain and transmit any load other than that due to its own weight and to wind pressure on its own surface may be deemed to be a separate panel wall.

(2) In every panel wall constructed (otherwise than as a cavity wall) of bricks or building blocks—

(a) the thickness shall be not less than $8\frac{1}{2}$ inches throughout;

(b) the height shall not exceed 24 feet;

(c) either the height or the length (whichever is the less) shall not exceed 18 times the thickness; and

(d) the base shall not overhang the beam upon which it is supported, to a greater extent than $\frac{1}{3}$ of the thickness of the panel.

(3) In every panel wall constructed as a cavity wall—

(a) the provisions of regulation 53 shall be complied with except that the inner leaf may be constructed of solid or hollow bricks or blocks not less than 4 inches thick;

(b) the height shall not exceed 24 feet;

(c) either the height or the length (whichever is the less) shall not exceed 12 feet;

(d) the area shall not exceed 200 square feet; and

(e) the base shall not overhang the beam upon which it is supported, to a greater extent than $\frac{1}{3}$ of the thickness of the overhanging leaf:

Provided that, if the bottom courses are built solid for the full thickness of the panel wall to a height above its base at least equal to that full thickness, the base may overhang the beam to an extent not exceeding $\frac{1}{3}$ of that full thickness.

(4) Every panel wall constructed of reinforced concrete shall be not less than 4 inches thick in every part.

Party walls to be carried up to roof.

62. (1) Every party wall shall be carried up to the underside of the roof.

(2) Where the roof is constructed of combustible materials—

(*a*) no combustible part of such roof shall be carried across the party wall; and

(*b*) the roof covering shall be solidly bedded in mortar direct on the top of the party wall for its whole width and length.

Timber not to be built into walls.

63. No floor or roof joist bond timber or wood plate shall be built into the thickness of any wall.

Damp-proof courses.

64. (1) Every wall built of bricks or building blocks shall be constructed with a damp-proof course complying with regulation 20.

(2) Such damp-proof courses shall be constructed—

(*a*) horizontally through the wall at a height of not less than 6 inches above the highest finished level of the external ground or paving or the surface of any oversite concrete on either side of the wall;

(*b*) horizontally under the coping of a parapet wall;

(*c*) vertically on the outer face of a wall where the ground surface on the outside of the wall is higher than any floor of the building, together with a horizontal damp-proof course under the floor:

Provided that such damp-proof course may be omitted where the floor and wall are constructed of

properly waterproofed reinforced concrete of not less than 8 inches in thickness;

(*d*) horizontally through the whole area of the brickwork of a chimney above the roof; and be connected to the apron flashing.

PART VII.

Fireplaces, flues and chimneys.

Fireplaces and stoves to have hearths.

65. (1) Where any fireplace or stove is built or placed on any floor which is constructed of combustible material it shall be provided with a hearth of concrete, stone or other like incombustible material, level with the floor, under and before the fireplace or stove.

(2) Such hearth shall—

(*a*) be solid for a thickness of not less than 6 inches in every part;

(*b*) extend not less than 6 inches beyond each side of the fireplace or stove opening;

(*c*) extend not less than 18 inches in front of the fireplace or stove opening;

(*d*) if of concrete be reinforced with not less than 0.144 square inches of reinforcement per foot width in each direction;

(*e*) be adequately supported.

Fireplace openings.

66. (1) Any wall of bricks or building blocks at the back of a fireplace shall be not less than 4 inches thick and in the case of an external or party wall it shall be not less than $8\frac{1}{2}$ inches thick.

(2) Such minimum thickness shall be carried up from the level of the hearth to the level of the ceiling of the room in which the fireplace is situated:

Provided that where the flue from that fireplace is back to back with another flue, such thickness shall be carried up to a height of not less than 12 inches above the level of the top of the fireplace opening.

(3) The jambs of every fireplace opening shall be not less than 8½ inches wide on each side.

(4) The enclosure and breast of every fireplace opening shall be supported by a lintel of reinforced concrete or steel or an arch of brick or stone.

(5) Every fireplace shall be lined with refractory fire bricks or slabs not less than 2 inches thick set in fireclay.

Fireplaces to have flues.

67. (1) Every fireplace shall be provided with a chimney.

(2) Where solid fuel or oil is burnt every fireplace shall have its own flue.

(3) The flue in every such chimney shall—

(*a*) where used for a fireplace burning solid fuel or oil be not less than 7½ inches across in any direction;

(*b*) where used for an open domestic gas fire or other gas fired appliance—

(i) be not less than 20 square inches in cross sectional area; and

(ii) be encased in incombustible material not less than 1 inch thick exclusive of plastering:

Provided that voids may be left in such material enclosing the flue and not connected therewith.

(4) Every such chimney shall—

(*a*) be rendered or pargeted on the inside or lined with fireclay, stoneware or other like incombustible material; and

(*b*) where used for a fireplace burning solid fuel or oil be made of solid bricks or building blocks, be properly bonded and solidly put together with cement mortar, or of plain or reinforced concrete, not less than 4 inches thick:

Provided that soot doors may be inserted in such chimneys.

Chimney stacks to be carried above roof.

68. (1) Every chimney stack shall be carried up above the level of the highest point of its intersection with the adjoining roof or gutter to a height of at least—

(*a*) 18 inches where used in connexion with a gas-fired appliance; or

(*b*) 3 feet where used in connexion with a fireplace burning solid fuel or oil.

(2) The height of every chimney stack measured from the level of the highest point of its intersection with the adjoining roof or gutter to the top of the stack, shall not exceed 6 times the least horizontal dimension of the stack unless it is adequately secured against over-turning.

(3) The topmost 6 courses of every chimney stack constructed of bricks or building blocks shall be laid in cement mortar, or cement lime mortar containing not less than 1 volume of cement to every 6 volumes of sand.

(4) (*a*) Where the height of a chimney stack measured from the level of the highest point of its intersection with the adjoining roof or gutter exceeds 5 feet, the part of such chimney stack above 5 feet may be constructed of metal pipes, adequately stayed to resist wind pressure, and with a cross sectional area not less than three quarters of the cross sectional area of the chimney stack below, and in any case not less than 6 inches in internal diameter.

(*b*) Such pipes shall be constructed—

(i) of cast iron, not less than ¼ inch thick at any point; or

(ii) of mild steel plates not less than 3/16 inch thick; or

(iii) if used with a gas-fired appliance, of steel metal of a thickness not less than No. 20 Standard Wire Gauge.

(*c*) All metal in flue pipes shall be protected against corrosion.

Combustible materials in proximity to chimneys.

69. (1) No timber (other than wood plugs), or other combustible material shall be placed in any wall or chimney within 9 inches of any flue or the inside of any fireplace opening;

(2) No wood plugs shall be driven into any wall or chimney within 6 inches of any flue or the inside of any fireplace opening;

(3) No woodwork or other combustible material of the surround of any fireplace opening shall be fixed round that opening unless it is—

(i) distant at least 6 inches measured horizontally and 12 inches measured vertically from that fireplace opening; and

(ii) solidly backed with incombustible material.

Chimney shafts.

70. Every chimney shaft shall comply with the following provisions:

(1) If built of bricks—

(*a*) it shall be constructed of suitable solid bricks jointed with suitable mortar;

(*b*) it shall be square, circular, or of any regular polygonal shape, and the outer face shall be built to a batter of at least $2\frac{1}{2}$ inches in every 10 feet of height;

(*c*) the height measured from the base to the top of the chimney shaft, shall not exceed the least width of the base multiplied by—

(i) 10 times if the shaft be square;

(ii) 12 times if the shaft be circular or polygonal;

(*d*) the thickness at the top, and for 20 feet below the top shall be at least $8\frac{1}{2}$ inches;

(*e*) for the purpose of this regulation, the expression "base" means the underside of the course immediately above the footings, if any, or if there are none, the bottom of the chimney shaft.

(2) If built of reinforced concrete, it shall comply with the provisions of Part IX. (Structural Use of Reinforced Concrete) of these regulations.

(3) If built of mild steel shall be constructed of steel plates not less than 3/16 inches thick and properly stayed and protected against corrosion.

(4) Any internal lining shall be additional to the thickness of the chimney and shall not be bonded therewith.

Open cooking slabs to have hoods.

71. (1) Every open cooking slab (not being a fireplace and not directly connected to a chimney) constructed or adapted for the use of coal, charcoal or wood as fuel shall be provided with an incombustible hood of sheet metal or other material as the Building Authority may approve, connecting with a chimney.

(2) The bottom edge of such hood shall be not more than 6 feet above floor level and shall cover the area of the cooking slab.

Ceilings over fireplaces to be protected.

72. No floor or roof of combustible material shall be constructed over any fireplace, heating appliance or oven, burning solid fuel or oil fuel, within five feet of the top of such fireplace, heating appliance or oven, unless protected with a lining of incombustible material not less than 3/16 inches thick, covering a horizontal area of not less than 100 square feet and so arranged as to give the most effective protection.

PART VIII.

Roofs.

Roofs to be covered.

73. (1) The roof of every building and of any minor structure placed above such roof except the doors, and frames of dormers or sky lights shall be covered with tiles, glass, metal, or other incombustible material:

Provided that where a roof is constructed entirely of incombustible materials the external covering may consist of—

(*a*) rock asphalt containing not more than 17 per cent by weight of bitumen; or

(*b*) a layer or layers of compressed and impervious felt membrane roofing having an aggregate thickness of not more than $\frac{3}{8}$ inch bedded down solidly on the roof by viscous materials.

(2) Where the roof is covered in the manner provided by sub-regulation (1) (*b*) and the slope thereof exceeds 20 degrees with the horizontal, the external layer of such roofing shall be surfaced with a mineral dressing.

Roofs to be weather proof.

74. Every roof shall be—

(*a*) weatherproof; and

(*b*) provided with adequate gutters and rain water pipes to prevent the direct discharge of water upon or over any footpath or roadway.

Accessible roofs to have parapet or railings.

75. Every part of a roof, to which internal access is provided, shall be protected by parapet walls or railings not less than 3 ft. 6 ins. in height.

Hollow ceilings.

76. Where a ceiling is constructed with a space between it and the floor or roof above, such space shall be properly protected against vermin and in the case of a timber floor or roof, such space shall also be adequately ventilated.

PART IX.

Structural use of Steel, Reinforced Concrete and Timber.

Steel framed and reinforced concrete structures. Structural timbers.

77. (1) Steel framed structures reinforced concrete structures and structural timbers shall be designed in accordance with the relevant provisions of—

(*a*) the London Building By-laws, Memoranda and Regulations, issued by the London County Council on the 1st day of January, 1938; or

(*b*) the London Building (Constructional) By-laws 1952, issued by the London County Council on the 1st day of January, 1953; or

(*c*) any subsequent amendments to the London Building (Constructional) By-laws, 1952 issued from time to time by the London County Council :

Provided that—

(i) the maximum loads and permissible stresses shall be those exclusively referable to the particular By-laws in accordance with which such structure is being designed; and

(ii) notwithstanding any provisions to the contrary, all such structures shall comply with the requirements of regulations 22 and 23.

(2) Where any steel framed or reinforced concrete structure is designed and constructed in accordance with the provisions of sub-regulation 1(*b*) or 1(*c*) the structural details and calculations required by regulation 16(2) of the Building (Administration) Regulations shall be prepared and signed by a person qualified as an engineer as provided by regulation 4 of those regulations but excluding persons qualified as an engineer under sub-regulation (1) (*a*) (iv) thereof.

(3) Structures may be designed and constructed in prestressed concrete, shell construction or in any other methods and materials, subject to the production of satisfactory proof to the Building Authority regarding the soundness of design.

PART X.

Wharves, piers and sea-walls.

Wharves, piers and sea-walls.

78. Every sea wall, breakwater, jetty, mole, quay, wharf or pier shall be designed and constructed to the satisfaction of the Building Authority.

PART XI.

Retaining Walls.

Materials.

79. Retaining walls may be constructed of masonry, brickwork, plain or reinforced concrete or steel sheet piling, and shall support the ground which they retain.

Foundations.

80. (1) Except where steel sheet piling is used, a foundation of concrete shall be provided on solid, undisturbed ground or on piles.

(2) Such foundation shall extend for the full thickness of the retaining wall.

Brickwork.

81. Retaining walls constructed of brickwork shall be properly bonded and built solid throughout in cement mortar.

Masonry.

82. Retaining walls constructed of masonry may be built in cement mortar or dry. In either case the wall shall be properly bonded.

Bond courses required.

83. (1) Retaining walls constructed of brickwork or masonry exceeding 12 feet in height shall be provided with one or more bond courses of concrete, in no respect inferior to Grade III at least 12 inches in depth :

Provided that bond courses of reinforced concrete may be less than 12 inches in depth.

(2) The distance between the foundation and the first of such bond courses and the distance between any two adjacent bond courses shall not exceed 6 feet measured vertically.

Weep holes.

84. (1) A weep hole, with an internal diameter of not less than 3 inches, shall be provided to every 4 square yards of the face of every retaining wall:

Provided that weep holes may be omitted in retaining walls—

(*a*) constructed of masonry built dry; or

(*b*) designed to withstand maximum potential hydraulic pressure; or

(*c*) with adequate subsoil drainage behind such retaining wall to carry away subsoil water.

(2) A layer of hand-packed broken brick or stone at least 12 inches in thickness shall be provided at the back of every retaining wall except retaining walls built of masonry laid dry.

Coping.

85. Every retaining wall shall be provided with a proper coping of concrete or other material as the Building Authority may approve.

Surface channels.

86. Adequate channels laid to suitable gradients, or paving in accordance with the provisions of regulation 34 shall be formed at the top and toe of every retaining wall to carry away stormwater, seepage, or other surface water.

PART XII.

Wells.

Permission required from Building Authority to sink or reopen wells.

87. No well shall be sunk or reopened without the permission of the Building Authority.

Wells prohibited in certain places.

88. No well shall be sunk in the vicinity of any septic tank, cesspool, sewage sump or in any foul ground.

Wells to be of sufficient depth and diameter.

89. Wells may be excavated or bored and shall be of sufficient diameter and depth to provide an adequate water supply.

Wells to be lined and filter required.

90. (1) Every excavated well except in solid rock shall be properly lined for its entire depth with brickwork, or other suitable material and such lining shall be provided with suitably fixed iron rungs or foot rests not more than 2 feet apart for the entire depth.

(2) The lining of every well shall be rendered impervious for a depth of not less than 6 feet from the level of the adjoining ground.

(3) A suitable filter of clean broken stone, gravel, or sand shall be provided at the bottom of every excavated well.

Access for cleaning and close fitting cover required.

91. (1) Access for cleaning purposes must be provided for every excavated well.

(2) An efficient close-fitting cover shall be fitted over every well.

Channels and paving to ground surface adjoining top of wells required.

92. (1) The top of every well shall be suitably protected to prevent the direct entry of any surface water or sullage water.

(2) The ground surface adjoining the top of every well shall be paved with suitable impervious material for a distance of not less than 4 feet in every direction from the side of such well and so constructed as to slope away from the well to a suitable channel.

Parapet wall required where water is drawn by a bucket.

93. A suitable parapet wall, not less than 2 feet 6 inches in height, shall be constructed around the top of every well from which water is to be drawn by means of a bucket.

PART XIII.

Fire Resisting Construction.

Interpretation.

94. For the purposes of the regulations in this Part—

"basement" means any storey of a building or any compartment which is wholly below the level of the street or streets on which such building abuts, or being partially below such level has no access to such streets in the event of fire;

"compartment of a building" means any volume, or floor area in any one storey, in any building assessed as a unit for the purposes of Table XVI;

"elements of construction" means any floor, beam or column;

"F. R. P." means the period for which the element of construction is capable of resisting the action of fire when tested in accordance with B.S.S. 476: 1932, or as specified in Schedule VI of the L.C.C. London Building (Constructional) By-laws 1952;

"staircase" includes landings and lobbies attached thereto without any intervening enclosure.

Adjacent buildings.

95. Every building shall be separated from any adjoining building by a wall having an F.R.P. of not less than 4 hours.

Elements of construction within buildings.

96. (1) Each element of construction in a building or compartment of a building shall have an F.R.P. not less than that specified in Table XVI appropriate to the use and the volume, or floor area in any one storey, as the case may be:

Provided that each element of construction in any building which exceeds 3 storeys shall in no case have an F.R.P. of less than 1 hour.

TABLE XVI.

Class	Use	Volume, or floor area in any one storey (as the case may be).	Fire Resistance Period.
1	Bulk Storage or warehouse purposes.	(*a*) More than 25,000 cu. ft. but not more than 50,000 cu. ft. in volume.	½ hour.
		(*b*) More than 50,000 cu. ft. but not more than 125,000 cu. ft. in volume.	1 hour.
		(*c*) More than 125,000 cu. ft. but not more than 250,000 cu. ft. in volume.	2 hours.
2	Trade or manufacture.	(*a*) More than 50,000 cu. ft. but not more than 125,000 cu. ft. in volume.	½ hour.
		(*b*) More than 125,000 cu. ft. but not more than 250,000 cu. ft. in volume.	
		(i) not more than 7,500 sq. ft. in floor area in any one storey;	1 hour.
		(ii) more than 7,500 sq. ft. in floor area in any one storey.	2 hours.

TABLE XVI—*(Condt.)*

Class	Use	Volume, or floor area in any one storey (as the case may be).	Fire Resistance Period.
3	Office or domestic purposes; schools hospitals.	(*a*) (i) More than 50,000 cu. ft. but not more than 125,000 cu. ft. in volume, or	½ hours.
		(ii) More than 1,000 sq. ft. but not more than 2,500 sq. ft. in floor area in any one storey.	½ hours.
		(*b*) (i) More than 125,000 cu. ft. in volume, or	1 hour.
		(ii) More than 2,500 sq. ft. in floor area in any one storey.	1 hour.
4	Partly for office purposes & partly for trade or manufacture, any part used for trade or manufacture.	(*a*) (i) Not more than 64,000 cu. ft. in volume.	½ hour.
		(ii) More than 64,000 cu. ft. but not more than 125,000 cu. ft. in volume.	1 hour.
		(iii) More than 125,000 cu. ft. but not more than 250,000 cu. ft. in volume.	2 hours.
		(*b*) (i) Not more than 2,500 sq. ft. in floor area in any one storey.	½ hour.
		(ii) More than 2,500 sq. ft. but not more than 5,000 sq. ft. in floor area in any one storey.	1 hour.
		(iii) More than 5,000 sq. ft. in floor area in any one storey.	2 hour.
5	Partly for domestic purposes & partly for manufacture, any part used for trade or manufacture.	(*a*) (i) Not more than 32,000 cu. ft. in volume.	½ hour.
		(ii) More than 32,000 cu. ft. but not more than 64,000 cu. ft. in volume.	1 hour.
		(iii) More than 64,000 cu. ft. in volume.	2 hours.
		(*b*) (i) Not more than 1,000 sq. ft. in floor area in any one storey.	½ hour.
		(ii) More than 1,000 sq. ft. but not more than 2,500 sq. ft. in floor area in any one storey.	1 hour.
		(iii) More than 2,500 sq. ft. in floor, area in any one storey.	2 hours.

TABLE XVI—*(Condt.)*

Class	Use	Volume, or floor area in any one storey (as the case may be).	Fire Resistance Period.
6	Transformer Chamber or purpose involving a similar fire risk.		2 hours.
7	Garage purposes.	(*a*) Not more than 500 sq. ft. in floor area.	½ hour.
		(*b*) More than 500 sq. ft. but not more than 1,000 sq. ft. in floor area.	1 hour.
		(*c*) More than 1,000 sq. ft. in floor area.	2 hours.

(2) Save with the consent of the Building Authority the floor area of any one compartment used for bulk storage or warehouse purposes shall not exceed 7,500 sq. ft.

(3) Where a single storey building does not exceed 250,000 cu. ft. in volume or 25 feet in height, steel work therein other than columns and beams in external or party walls may, subject to the provisions regarding the use of structural steel in regulation 77, be unprotected.

(4) The joints of and any elements of construction shall be tight and proof against the passage of smoke or flame.

Adjoining compartments to be separated.

97. Every compartment of a building shall be separated from any adjoining compartment by a wall made of bricks, building blocks or re-inforced concrete having an F.R.P. not less than 2 hours:

Provided that this regulation shall not apply where adjoining compartments are used solely for domestic purposes.

Staircases.

98. (1) Each element of construction of a staircase shall have an F.R.P. not less than the period required for each element of construction of the building or compartment in which the staircase is situated:

Provided that this paragraph shall not apply to staircases enclosed in accordance with paragraph (2).

(2) Where a staircase serves more than one compartment of a building—

(*a*) such staircase shall be enclosed by walls, and

(*b*) such walls shall have an F.R.P. not less than the longer period required for the elements of construction in any compartment so served:

Provided that this paragraph shall not apply to any external staircases open to the weather on at least two sides.

Topmost storeys.

99. Where compartments of a building to which the provisions of regulation 97 apply are situated in the topmost storey of a building, the walls required by that regulation shall be carried up to the underside of the roof of the storey:

Provided that where the ceiling is formed beneath a pitched roof, the walls need only be carried up to the underside of the roof so as to form in the roof space vertical firechecks at a distance apart not exceeding 120 feet.

Openings in walls separating compartments or enclosing staircases.

100. Walls separating compartments of a building or enclosing staircases, in accordance with regulation 97 or 98, may have openings where—

(*a*) the door and frame of such opening has an F.R.P.—

(i) in the case of walls separating compartments ½ hour, or

(ii) in the case of walls enclosing staircases ½ the period required for such walls:

Provided that in no case shall the door have an F.R.P. less than ½ hour; and

(*b*) such door is self-closing, except in the case of such a door in a domestic building which does not lead from a staircase to a corridor used in common.

Borrowed lights.

101. (1) Borrowed lights may not be provided in walls separating compartments of buildings in accordance with regulation 97.

(2) Where borrowed lights are provided in walls enclosing staircases in accordance with regulation 98 such lights shall—

(*a*) not exceed 1/5th of the total area of such wall, and

(*b*) be glazed with $\frac{1}{4}$ inch wired glass in fixed hardwood frames not less than $1\frac{3}{4}$ inches thick or steel frames in panels not exceeding 4 sq. ft., or with glass bricks or blocks in panels not exceeding 40 sq. ft. in area, with expansion joints of 1/10 inch per foot width at both sides and at the top of the panel.

Basements.

102. Each element of construction in a basement shall have an F.R.P. not less than twice the period required for the elements of construction of the building or compartment thereof in which the basement is situated:

Provided that no basement need have an F.R.P. exceeding 2 hours.

COUNCIL CHAMBER,
17th April, 1956.

Clerk of Councils.

Explanatory Note.

These regulations are the third in a group of these enacted under, and coming into force with the Buildings Ordinance, 1955. Reference should be made to the introductory passage in the Explanatory Note to the Buildings (Administration) Regulations. Compared with the provisions of the Buildings Ordinance (Cap. 123) these regulations concerning construction lay down the requirements in great detail. The provisions concerning piling (regulation 30), those dealing with the structural use of timber (regulation 77) and those with fire resisting requirements (Part XIII) have no counterpart in the former Ordinance. In the main, the regulations consist of highly technical rules; and for this reason it is proposed to comment only on two matters.

2. Part VI, which deals with walls and piers, includes regulations for determining their thickness in one of three ways: this may be done by calculation based on the maximum compressive stresses permitted in the materials used (regulations 57-60), by calculation in accordance with the relevant British Standard Codes of Practice for load bearing walls, or finally by complying with the detailed "rules of thumb" in the case of buildings not exceeding four storeys in height (regulations 45-52). Cavity wall construction is being permitted for the first time in Hong Kong (regulation 53).

3. Under the former Ordinance steel-framed and reinforced concrete buildings could be designed under London County Council By-laws of 1909 and 1915 which were repealed by the London Building Act of 1930. Regulation 77 now permits designing of such buildings, and also those employing structural timber, in accordance with the relevant provisions of the London Building By-laws, 1938, or of those of 1952 with subsequent amendments. Many of these 1952 by-laws were based on recommendations contained in the 1948 British Standard Codes of Practice, and these state the assumption that such designing would be entrusted to chartered structural or civil engineers experienced in the structural use of steel and reinforced concrete. It has therefor been thought necessary to restrict the use of these 1952 by-laws to certain engineers qualified under regulation 4 of the Buildings (Administration) Regulations. The authorized architect is required to countersign all structural plans and calculations prepared by

the qualified engineer. All authorized architects may, however, submit designs in accordance with the 1938 by-laws; (which are no longer accepted by the L.C.C.) though they will no longer be entitled to submit designs based on the 1909 and 1915 by-laws which are considered obsolete, and uneconomical in the use of materials. In all cases there is a further safeguard to be found in the provisions of subsection (3) of section 9 of the Ordinance which empowers the Building Authority to prescribe conditions concerning the five specified matters. Since authorized architects are permitted to use these L.C.C. by-laws, there will be found only four regulations dealing with loads (regulations 22-25); the first of these, which deals with the effects of wind, has been prepared to take account of typhoon winds experienced in Hong Kong.

(Secretariat 1/1/741/52)

STAMP ORDINANCE.
(Chapter 117).

STAMP (BANK AUTHORIZATION) (NO. 1) ORDER, 1956.

In exercise of the power vested in me by section 15 of the Stamp Ordinance, I hereby make the following Order :—

ORDER

Citation.

1. This Order may be cited as the Stamp (Bank Authorization (No. 1) Order, 1956.

Specified bank authorized to compound for the payment of certain duty.

2. The banks specified in the Schedule to this Order are hereby authorized with effect from 1st May, 1956, to compound for the payment of duty on unstamped cheques subject to the conditions stated in paragraphs (*a*), (*b*) and (*c*) of subsection (1) of section 15 of the Ordinance.

SCHEDULE.

Kwong On Bank Limited.
National Commercial Bank Limited.

Financial Secretary.

25th April, 1956.
(Secretariat 18/2321/49)

FERRIES ORDINANCE.
(Chapter 104).

EXCLUDED FERRIES (MA ON SHAN AND HO TUNG LAU) (AMENDMENT) REGULATIONS, 1956.

In exercise of the powers conferred by section 5 of the Ferries Ordinance, the Governor in Council has made the following regulations—

Citation.

1. These regulations may be cited as the Excluded Ferries (Ma On Shan and Ho Tung Lau) (Amendment) Regulations, 1956.

Amendment of proviso to regulation 2. (G.N.A. 47/55).

2. The proviso to regulation 2 of the Excluded Ferries (Ma On Shan and Ho Tung Lau) Regulations, 1955, is amended by the deletion of the figures and comma "1956," and the substitution therefor of the following—

"1957,".

Commencement.

3. These regulations shall be deemed to have had effect as from the 30th day of April, 1956.

Clerk of Councils.

COUNCIL CHAMBER,

8th May, 1956.

(Secretariat 2/5481/55)

AIR ARMAMENT PRACTICE ORDINANCE.
(Chapter 194).

AIR ARMAMENT PRACTICE (SCHEDULE AMENDMENT) ORDER, 1956.

In exercise of the powers conferred by section 11 of the Air Armament Practice Ordinance, the Governor in Council has made the following Order—

1. This Order may be cited as the Air Armament Practice (Schedule Amendment) Order, 1956, and shall come into operation on the 1st day of July, 1956. Citation and commencement.

2. The First Schedule to the Air Armament Practice Ordinance (hereinafter referred to as the principal Ordinance) is repealed and replaced by the following— Repeal and replacement of First Schedule. (Cap. 194).

"FIRST SCHEDULE. [s. 3.]

PRACTICE RANGE.

Note—All Latitudes are N. and Longitudes E. Latitudes and Longitudes are taken from Admiralty Charts Nos. 3429, 1466, 3605, 3280, 3279, 3612 and 1180, but Longitudes from Charts Nos. 1180, 3612 and 3605 have been decreased by 9".

The areas included in the Practice Range are bounded as follows—

(*a*) By a line starting at a point grid reference 690073 (Latitude 22° 21′ 11″ Longitude 114° 17′ 14″) thence in a direction 075° to point 79 grid reference 701076 (Latitude 22° 21′ 22″ Longitude 114° 17′ 38″) on the South end of the island known as Kiu Tsiu Chau (Sharp Island) thence in a direction 047° to the North-West point of Urn Island at grid reference 729103 (Latitude 22° 22′ 41″ Longitude 114° 19′ 16″) thence along the high-water line round the East of the island to the South-East point grid reference 736090 (Latitude 22° 22′ 02″ Longitude 114° 19′ 36″) thence in a direction 154° to a point grid reference 755054 (Latitude 22° 20′ 12″ Longitude 114° 20′ 40″) thence in a direction 100° to North Shore on Islet grid reference 782049 (Latitude 22° 19′ 58″ Longitude 114° 22′ 0″) thence in a direction 054° to grid reference 807067 (Latitude 22° 20′ 48″ Longitude 114° 23′ 27″) thence in a direction 151° to grid reference 824046 (Latitude 22° 19′ 45″ Longitude 114° 24′ 10″) thence in a direction 205° to grid reference 815031 (Latitude 22° 19′ Longitude 114° 23′ 45″) thence in a direction 144° to grid reference 826015 (Latitude 22° 18′ 12″ Longitude 114° 24′ 24″) thence in a direction 202° to grid reference 808965 (Latitude 22° 15′ 48″ Longitude 114° 23′ 24″) thence in a direction 258° to a point

785960 (Latitude 22° 15′ 35″ Longitude 114° 22′ 14″) thence in a direction 308° to a point grid reference 776976 (Latitude 22° 15′ 56″ Longitude 114° 21′ 42″) thence in a direction 263° to grid reference 749964 (Latitude 22° 15′ 46″ Longitude 114° 20′ 12″) thence in a direction 301° to the southerly point of Steep Island to grid reference 723979 (Latitude 22° 16′ 30″ Longitude 114° 18′ 54″) thence in a direction 011° to the South Easterly point of Trio Islands at grid reference 731012 (Latitude 22° 18′ 06″ Longitude 114° 19′ 12″) thence in a direction 349° to the North Easterly point of Table Island grid reference 728026 (Latitude 22° 18′ 48″ Longitude 114° 19′ 06″) thence in a direction 324° to the starting point.

(*b*) By a line starting at a point on the high-wter mark in Port Shelter grid reference 668067 (Latitude 22° 20′ 57″ Longitude 114° 15′ 53″) thence in a direction 075° to a point grid reference 690073 (Latitude 22° 21′ 11″ Longitude 114° 17′ 14″) thence in a direction 142° to the North Easterly point of Table Island at grid reference 728026 (Latitude 22° 18′ 48″ Longitude 114° 19′ 06″) thence in a direction 170° to the South Easterly point of Trio Islands at grid reference 731012 (Latitude 22° 18′ 06″ Longitude 114° 19′ 12″) thence in a direction 191° to the Southerly point of Steep Island grid reference 723979 (Latitude 22° 16′ 30″ Longitude 114° 18′ 54″) thence in a direction 301° to a point grid reference 703993 (Latitude 22° 17′ 06″ Longitude 114° 17′ 48″) thence in a direction 346° to a point on the high-water mark at grid reference 697019 (Latitude 22° 18′ 27″ Longitude 114° 17′ 27″) thence following the line of the high-water mark in a Northerly direction to a point grid reference 695030 (Latitude 22° 19′ 04″ Longitude 114° 17′ 27″) thence in a direction 295° to a point on the high-water mark at grid reference 685035 (Latitude 22° 19′ 16″ Longitude 114° 16′ 53″) thence following the high-water mark in a generally North Westerly direction to the starting point.

(*c*) By a line from Latitude 22° 24′ 32″, Longitude 113° 54′ 47″ southwards to Latitude 22° 23′ 38″, thence south-south-eastwards and east of Nam Long to Latitude 22° 22′ 28″, Longitude 113° 55′ 17″, thence south-westwards to Latitude 22° 22′ 02″, Longitude 113° 55′ 46″, thence north-eastwards to Latitude 22° 22′ 27″, Longitude 113° 56′ 43″, thence north-north-eastwards to Latitude 22° 22′ 51″, Longitude 113° 56′ 51″, thence north westwards to Latitude 22° 23′ 13″, Longitude 113° 56′ 35″, thence northwards to Latitude 22° 23′ 40″, Longitude 113° 56′ 38″, thence northwards to Latitude 22° 25′ 18″, Longitude 113° 57′ 05″, thence south-westwards to Latitude 22° 24′ 25″, Longitude 113° 55′ 30″, thence westwards to the starting point.

(*d*) By a line drawn 180° from the mainland shore through Kowloon Rock to a position in Latitude 22° 18′ 21″, Longitude 114° 11′ 47″, thence 090° to a position in Latitude 22° 18′ 21″, Longitude 114° 12′ 46″, thence 068° to the mainland shore and the area adjoining the Western boundary of the area lastly described and being a sector of the following circle namely—

a circle having its centre at Latitude 22° 19′ 08″, Longitude 114° 12′ 10″ with a radius of 1,000 yards and intersecting the Western boundary of the area first described at Latitude 22° 19′ 28″, Longitude 114° 11′ 48″ and Latitude 22° 18′ 47″, Longitude 114° 11′ 48″.".

3. The Third Schedule to the principal Ordinance is amended by the deletion of the words and letter "For Area (*d*)" and the substitution therefor of the following— Amendment of Third Schedule.

"For Areas (*a*) and (*b*)".

Clerk of Councils.

COUNCIL CHAMBER,

17th April, 1956.

Explanatory Note.

(This Note is not part of the Order, but is intended to indicate its general purport).

This Order replaces the firing areas set forth in the existing Schedule to the Defences (Firing Areas) Ordinance, Chapter 196, with amended firing areas.

2. The area described in paragraph (*a*) of the new Schedule corresponds approximately with the area described in paragraph (*a*) of the old Schedule less paragraph (*d*) of the old Schedule.

3. The area described in paragraph (*b*) of the new Schedule corresponds approximately with the area described in paragraph (*d*) of the old Schedule.

4. The areas described in paragraphs (*c*) and (*d*) of the new Schedule correspond respectively with the areas described in paragraphs (*b*) and (*c*) of the old Schedule.

(Secretariat L/m 5120/54)

DEFENCES (FIRING AREAS) ORDINANCE.
(Chapter 196).

DEFENCES (FIRING AREAS) (SCHEDULE AMENDMENT) ORDER, 1956.

In exercise of the powers conferred by section 11 of the Defences (Firing Areas) Ordinance, the Governor in Council has made the following Order—

1. This Order may be cited as the Defences (Firing Areas) (Schedule Amendment) Order, 1956, and shall come into operation on the 1st day of July, 1956. Citation and commencement.

2. The First Schedule to the Defences (Firing Areas) Ordinance (hereinafter referred to as the principal Ordinance) is repealed and replaced by the following— Repeal and replacement of First Schedule. (Cap. 196).

"FIRST SCHEDULE. [s. 3]

FIRING AREAS.

Note.—(1) All Latitudes are N. and Longitudes E. Latitudes and Longitudes taken from Admiralty Charts Nos. 3429, 1466, 3605, 3280, 3279, 3612 and 1180, but Longitudes from Charts Nos. 1180, 3612 and 3605 have been decreased by 9".

(2) Map references in Firing Area D are taken from the revised edition (1938) of the 1:20,000 map, sheets 16 and 20.

(3) Map references in Firing Area D are taken from the revised edition (1938) of the 1:20,000 map, sheets 15 and 19.

(*a*) *Firing Area A*—

The area included in this firing area is bounded as follows—

By a line starting at a point grid reference 690073 (Latitude 22° 21′ 11″ Longitude 114° 17′ 14″) thence in a direction 075° to point 79 grid reference 701076 (Latitude 22° 21′ 22″ Longitude 114° 17′ 38″) on the South end of the island known as Kiu Tsiu Chau (Sharp Island) thence in a direction 047° to the North West point of Urn Island at grid reference 729103 (Latitude 22° 22′ 41″ Longitude 114° 19′ 16″) thence along the high-water line round the East of the island to the South-East point grid reference 736090 (Latitude 22° 22′ 02″ Longitude 114° 19′ 36″) thence in a direction 154° to a point grid reference 755054 (Latitude 22° 20′ 12″ Longitude 114° 20′ 40″) thence in a direction 100° to North Shore on Islet grid reference 782049 (Latitude 22° 19′ 58″ Longitude 114° 22′ 0″) thence in a direction 054° to grid

reference 807067 (Latitude 22° 20′ 48″ Longitude 114° 23′ 27″) thence in a direction 151° to grid reference 824046 (Latitude 22° 19′ 45″ Longitude 114° 24′ 10″) thence in a direction 205° to grid reference 815031 (Latitude 22° 19′ Longitude 114° 23′ 45″) thence in a direction 144° to grid reference 826015 (Latitude 22° 18′ 12″ Longitude 114° 24′ 24″) thence to a direction 202° to grid reference 808965 (Latitude 22° 15′ 48″ Longitude 114° 23′ 24″) thence in a direction 258° to a point 785960 (Latitude 22° 15′ 35″ Longitude 114° 22′ 14″) thence in a direction 308° to a point grid reference 776976 (Latitude 22° 15′ 56″ Longitude 114° 21′ 42″) thence in a direction 263° to grid reference 749964 (Latitude 22° 15′ 46″ Longitude 114° 20′ 12″) thence in a direction 301° to the Southerly point of Steep Island to grid reference 723979 (Latitude 22° 16′ 30″ Longitude 114° 18′ 54″) thence in a direction 011° to the South Easterly point of Trio Islands at grid reference 731012 (Latitude 22° 18′ 06″ Longitude 114° 19′ 12″) thence in a direction 349° to the North Easterly point of Table Island grid reference 728026 (Latitude 22° 18′ 48″ Longitude 114° 19′ 06″) thence in a direction 324° to the starting point.

(*b*) *Firing Area B*—

The area included in this firing area is bounded as follows—

By a line starting at a point on the high-water mark in Port Shelter grid reference 668067 (Latitude 22° 20′ 57″ Longitude 114° 15′ 53″) thence in a direction 075° to a point grid reference 690073 (Latitude 22° 21′ 11″ Longitude 114° 17′ 14″) thence in a direction 142° to the North Easterly point of Table Island at grid reference 728026 (Latitude 22° 18′ 48″ Longitude 114° 19′ 06″) thence in a direction 170° to the South Easterly point of Trio Islands at grid reference 731012 (Latitude 22° 18′ 06″ Longitude 114° 19′ 12″) thence in a direction 191° to the Southerly point of Steep Island grid reference 723979 (Latitude 22° 16′ 30″ Longitude 114° 18′ 54″) thence in a direction 301° to a point grid reference 703993 (Latitude 22° 17′ 06″ Longitude 114° 17′ 48″) thence in a direction 346° to a point on the high-water mark at grid reference 697019 (Latitude 22° 18′ 27″ Longitude 114° 17′ 27″) thence following the line of the high-water mark in a Northerly direction to a point grid reference 695030 (Latitude 22° 19′ 04″ Longitude 114° 17′ 27″) thence in a direction 295° to a point on the high-water mark at grid reference 685035 (Latitude 22° 19′ 16″ Longitude 114° 16′ 53″) thence following the high-water mark in a generally North-Westerly direction to the starting point.

(*c*) *Firing Area C*—

The area included in this firing area is bounded as follows—

By a line starting from high-water mark at Western end of Stonecutters Island (Latitude 22° 19′ 10″ Longitude 114° 07′ 46″) thence across to Green Island (Latitude 22° 17′ 15″ Longitude 114° 06′ 36″) thence across to Eastern shore of Lantau at Latitude 22° 17′ 45″ Longitude 114° 01′ 23″ thence following high-water mark along the Eastern shore of Lantau to Latitude 22° 20′ 13″ Longitude 114° 03′ 20″, thence across to Chung Hue at Latitude 22° 19′ 42″ Longitude 114° 05′ 26″, thence following high-water mark along the Southern shore of Chung Hue to Latitude 22° 20′ 00″ Longitude 114° 06′ 20″, thence along the Eastern shore of Chung Hue to Latitude 22° 20′ 37″ Longitude 114° 06′ 26″, thence to the island at Latitude 22° 20′ 46″ Longitude 114° 07′ 15″, thence to Stonecutters Island at Latitude 22° 19′ 37″ Longitude 114° 08′ 05″, thence along the shore of Stonecutters Island Westwards to starting point.

(*d*) *Firing Area D*—

The area included in this firing area comprises the greater area of the Castle Peak Peninsula and is bounded as follows—

By a line from Latitude 22° 24′ 32″, Longitude 113° 54′ 47″ Southwards to Latitude 22° 23′ 38″ thence South-South-Eastwards and East of Nam Long to Latitude 22° 22′ 28″, Longitude 113° 55′ 17″, thence South-Eastwards to Latitude 22° 22′ 02″, Longitude 113° 55′ 46″, thence North-Eastwards to Latitude 22° 22′ 27″, Longitude 113° 56′ 43″, thence North-North-Eastwards to Latitude 22° 22′ 51″, Longitude 113° 56′ 51″, thence North-Westwards to Latitude 22° 23′ 13″, Longitude 113° 56′ 35″, thence Northwards to Latitude 22° 23′ 40″, Longitude 113° 56′ 38″, thence Northwards to Latitude 22° 25′ 18″, Longitude 113° 57′ 05″, thence South-Westwards to Latitude 22° 24′ 25″, Longitude 113° 55′ 30″, thence Westwards to starting point.

(*e*) *Firing Area E*—

The area included in this firing area is bounded as follows—

A line drawn from the LEFT end of the 600* firing point on A Range GR 581052 to a point on the RIGHT bank of the nullah at 581055 then along the line of the nullah to GR 579057, then in a straight line to PT 366 GR 569068, then following the general line of the track to PT 497 at GR 577071, to GR 581072, then in a straight line to a point on the track at GR 582060, then following the line of the track to the RIGHT end of the 600* firing point on B Range at GR 584066, to GR 583057, to GR 582052, to GR 581052.".

Repeal and replacement of Third Schedule.

3. The Third Schedule to the principal Ordinance is repealed and replaced by the following—

"THIRD SCHEDULE. [s. 5]

FIRING SIGNALS.

Signals for day and night firing.

1. Notice that firing is taking place in any firing area shall be given by the hoisting or display of the signals hereinafter mentioned.

2. Such signals, when firing by day, shall be displayed one hour before firing is due to commence.

3. Such signals, when firing by night, shall be displayed two hours before sunset.

4. In all cases signals shall remain displayed until firing has ceased, and shall then be hauled down or extinguished.

Firing by day. Firing Areas A and B.

5. In respect of firing by day the signals referred to in paragraph 1 above are—

(*a*) for Firing Areas A and B—

(i) by a red flag flown at the gun site concerned;

(ii) by a large red flag on the range towing vessel. The display of this flag is a signal that the target is ready to be, or is being, fired at;

(iii) by a red flag flown from a point on the main road nearest to each gun site and from the following positions—

old Sai Kung Police Station flag-pole (map reference 671102),

on the typhoon warning mast at Lyemun (map reference 632984),

on a 10-foot pole on a buoy moored in the following positions—

map references 720970, 750010, 769049, 743070, 720060, 706084 and 685082;

(iv) during anti-tank firing only, by a red flag flown on flag-pole overlooking Ngam Tau Sha (map reference 69150315) and a red flag flown on flag-pole near the road (map reference 70350160) and a red flag flown on flag-pole near the jetty on Tung Lung Island (map reference 69559540);

Firing Area C.

(*b*) for Firing Area C—

(i) by a red flag flown at the gun site concerned;

(ii) by a large red flag on the range target towing vessel. The display of this flag is a signal that the target is ready to be, or is being, fired at;

(iii) by a red flag, with, below it, the International Code Flag "A" flown from Green Island Typhoon signal mast;

Firing Area D.

(*c*) for Firing Area D—

(i) by a red flag flown at each gun site;

(ii) by a red flag flown at Castle Peak (map reference 314109) unless the District Commissioner gives permission to the military authorities to dispense with this flag;

(iii) by a red flag flown from a launch patrolling the coast between Tap Siak Kok (map reference 274097) and Black Point (map reference 256129), save when three inch mortars only are being fired and the base plate position of each mortar is not west of map reference 319131;

(iv) by a red flag flown from a flag-pole at a point between Nam Long Village and the boundary of Firing Area D (map reference 284114);

(v) by a red flag flown from such other position or positions as may be agreed upon, from time to time, by the District Commissioner and the military authorities;

Firing Area E.

(*d*) for Firing Area E—

(i) by a red flag flown at grid reference 582056;

(ii) by a red flag flown at grid reference 580053;

(iii) by a red flag flown at grid reference 576066;

(iv) by a red flag flown at grid reference 585062;

(v) by a red flag flown at the road junction at grid reference 583053;

(vi) by a red flag flown at the road at grid reference 585055;

(vii) by a red flag flown at grid reference 578056.

Firing by night. Firing Areas A, B, C and D.

6. In respect of firing by night the signals for Firing Areas A, B, C and D are—

(*a*) by a red lamp hoisted at the gun site concerned;

(*b*) by a red lamp in each position at which a warning flag is flown by day.".

Clerk of Councils.

COUNCIL CHAMBER,

17th April, 1956.

Explanatory Note.

(This Note is not part of the Order, but is intended to indicate its general purport).

1. This Order replaces the firing areas set forth in the existing Schedule to the Defences (Firing Areas) Ordinance, Chapter 196, with amended firing areas, and adds a new firing area, Firing Area E to cover the Kai Tak Rifle Range.

2. Firing Areas A and B approximately correspond with the old Firing Area B which is now divided into two parts to enable firing to take place over one part leaving the other part open to navigation. Firing Areas C and D are the same respectively as the former Firing Areas A and C. Firing Area E is a new firing area, Kai Tak Rifle Range.

(Secretariat L/m 5120/54)

STAMP ORDINANCE.
(Chapter 117).

STAMP (BANK AUTHORIZATION) (NO. 2) ORDER, 1956.

In exercise of the power vested in me by section 15 of the Stamp Ordinance, I hereby make the following Order:—

ORDER.

Citation.

1. This Order may be cited as the Stamp (Bank Authorization) (No. 2) Order, 1956.

Specified bank authorized to compound for the payment of certain duty.

2. The bank specified in the Schedule to this Order is hereby authorized with effect from 1st June, 1956, to compound for the payment of duty on unstamped cheques subject to the conditions stated in paragraphs (*a*), (*b*), and (*c*) of subsection (1) of section 15 of the Ordinance.

SCHEDULE.

National Industrial Bank of China.

Arthur Clarke
Financial Secretary.

5th May, 1956.

(Secretariat 18/2321/49)

COMPANIES ORDINANCE.
(Chapter 32).

AUTHORIZED AUDITORS (APPEALS) RULES, 1956.

In exercise of the powers conferred by section 131F (2) of the Companies Ordinance, the Chief Justice has made the following rules—

1. These rules may be cited as the Authorized Auditors (Appeals) Rules, 1956. Citation.

2. In these rules— Interpretation.

"Board" means the Authorized Auditors Board established pursuant to section 131A of the Companies Ordinance; (Cap. 32).

"Court" means a Full Court constituted pursuant to section 3 of the Full Court Ordinance. (Cap. 2).

3. (1) The appellant shall file notice of appeal in the Court within twenty-one days of the date when service on him under section 131E of the Ordinance of a copy of any direction or order given or made by the Board has been or is deemed to have been effected, and there shall be attached to each copy of the notice of appeal a copy of such direction or order. Notice of appeal.

(2) The notice of appeal shall be signed by the appellant or his solicitor or, where it has been settled by counsel shall be signed by him and shall set forth in paragraphs consecutively numbered a concise statement of the facts, which shall be verified by affidavit, and the grounds of appeal.

(3) There shall be filed with the notice of appeal, or as soon thereafter as possible, all affidavits on which the appellant intends to rely.

(4) No other evidence shall be used in support of the appeal except by leave of the Court.

(5) The appellant shall cause a copy of the notice of appeal and copies of all affidavits to be served upon the Chairman of the Board.

Reply of Board.

4. (1) Within twenty-one days of the service of the notice of appeal, the Chairman of the Board shall file in Court the Board's reply, which shall be signed by him or the Board's solicitor or, where it has been settled by counsel shall be signed by him together with a complete transcript of the proceedings in the matter. The Board's reply shall set forth in paragraphs consecutively numbered a concise statement of the facts, which shall be verified by affidavit, and the grounds upon which the Board intends to rely in rebuttal.

(2) The Chairman of the Board shall within seven days of the filing of the Board's reply cause a copy thereof to be served upon the appellant.

Notice of hearing.

5. The Registrar of the Supreme Court shall upon the filing of the Board's reply set down the appeal for hearing on a date not less than twenty-one days after the date of filing of such reply.

Practice and procedure.

6. Subject to the express provisions of these rules, the practice and procedure of the Court in relation to an appeal shall be assimilated as nearly as may be to the practice and procedure for the time being of the Supreme Court in the exercise of its civil jurisdiction.

Application.

7. Nothing in these rules shall operate to the prejudice of any appeal made under the provisions of section 131F of the Ordinance and pending at the date when these rules come into force.

Made this 7th day of May, 1956.

Chief Justice.

(Secretariat 18/3231/56.)

PROCLAMATION

No. 1 of 1956.

Governor.

BY HIS EXCELLENCY SIR ALEXANDER WILLIAM GEORGE HERDER GRANTHAM, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Governor and Commander-in-Chief of the Colony of Hong Kong and its Dependencies and Vice-Admiral of the same.

WHEREAS by subsection (1) of section 1 of the Buildings Ordinance, 1955 (No. 68 of 1955), it is provided that the said Ordinance shall come into operation on a day to be appointed by the Governor by proclamation in the *Gazette*:

NOW THEREFORE I, ALEXANDER WILLIAM GEORGE HERDER GRANTHAM, do hereby PROCLAIM that the said Ordinance shall come into operation on the 1st day of June, 1956.

GIVEN under my hand and the Public Seal of the Colony of Hong Kong, this 19th day of May, 1956.

Published by His Excellency's Command,

Colonial Secretary.

19th May, 1956.

(Secretariat 1/1/741/52)

GOD SAVE THE QUEEN.

DUTIABLE COMMODITIES ORDINANCE.
(Chapter 109).

DUTIABLE COMMODITIES (AMENDMENT) REGULATIONS, 1956.

In exercise of the powers conferred by section 6 of the Dutiable Commodities Ordinance, the Governor in Council has made the following regulations—

Citation.

1. These regulations may be cited as the Dutiable Commodities (Amendment) Regulations, 1956.

Amendment of regulation 1. (Vol. IX; p. 277).

2. Regulation 1 of the Dutiable Commodities Regulations (hereinafter referred to as the principal regulations) is amended by the substitution of a semi-colon for the full stop at the end thereof and the addition thereafter of the following definition—

" "bar" includes any place exclusively or mainly used for the sale and consumption of intoxicating liquor.".

Amendment of regulation 20.

3. Paragraph (1) of regulation 20 of the principal regulations is amended by the insertion after the word "licence" in the first line of the following—

"other than a liquor licence".

Addition of new regulation 20A.

4. The principal regulations are amended by the addition after regulation 20 of the following new regulation—

"Applications for liquor licences.

20A. Every person requiring a liquor licence other than a temporary liquor licence shall furnish to the board—

(*a*) the particulars specified in the application form, and such other particulars as the board may require;

(*b*) such references to character as are required in the application form; and

(*c*) such particulars as the board may require of any person other than the applicant who may have charge of the premises to be licensed.".