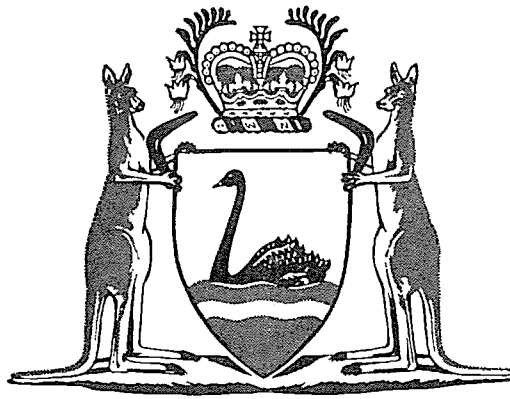


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Government Gazette

OF

WESTERN AUSTRALIA

(Published by Authority at 3.45 p.m.)

No. 9

PERTH: FRIDAY 29 JANUARY

[1982]

FACTORIES AND SHOPS ACT 1963-1981.

FACTORIES (HEALTH AND SAFETY) REGULATIONS.

Published in the *Government Gazette* on 11 October 1967 and reprinted, pursuant to the Reprinting of Regulations Act 1954, incorporating the amendments published in the *Government Gazette* on—

16 January 1976;
30 January 1976; and
26 August 1977.

Reprinted pursuant to the Reprinting of Regulations Act 1954, by authority of the Attorney General dated 25 January 1982.

FACTORIES AND SHOPS ACT 1963-1981.

REGULATIONS.

PART I.—PRELIMINARY.

1. These regulations may be cited as the Factories (Health and Safety) Regulations.
2. Subject to sections 6 to 10, inclusive, of the Factories and Shops Act 1963, these regulations apply, unless the contrary intention appears, in respect of every factory.
3. These regulations are divided into Parts as follows—
 - Part I—Preliminary, Regs. 1-3.
 - Part II—Cubic Space, Reg. 4.
 - Part III—Temperature, Ventilation and Humidity. Regs. 5-13.
 - Part IV—Confined Spaces. Regs. 14-16.
 - Part V—Natural and Artificial Lighting. Regs. 17-18.
 - Part VI—Sanitary Conveniences. Regs. 19-21.
 - Part VII—Washing Facilities. Reg. 22.
 - Part VIII—Roofs, Ceilings, Walls and Floors. Regs. 23-24.
 - Part IX—Access and egress. Regs. 25-36.
 - Part X—Drinking Water. Reg. 37.
 - Part XI—Seating. Reg. 38.
 - Part XII—Miscellaneous. Regs. 39-41.

PART II.—CUBIC SPACE.

4. (1) Subject to subregulations (2), (3) and (4) of this regulation, the occupier of any factory shall cause to be provided therein not less than eleven cubic metres of space for every person employed therein. Amended by
G.G. 16/1/76,
p. 78.

(2) Where, having regard to the circumstances and conditions existing in any factory, or any part thereof, the Chief Inspector is satisfied that it is not necessary that the provisions of subregulation (1) of this regulation be complied with, he may by direction in writing, determine that the provision of such lesser amount of cubic space per person in that factory or that part of the factory is sufficient compliance with the provisions of that subregulation.

(3) Where points of ignition for the use of coal gas or other gas are contained in any factory, the occupier shall, if so directed in writing by the Chief Inspector, cause to be provided therein such additional amount of space per person per point of ignition as is specified in that direction.

(4) For the purposes of calculating the amount of space provided in any factory or part thereof, any amount of space located more than 4.25 metres above floor level shall be disregarded, and a reference in this regulation to quantity of cubic space is a reference to that quantity of space exclusive of the space occupied by goods, cases, furniture and fittings.

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PART III.—TEMPERATURE, VENTILATION AND HUMIDITY.

5. Without affecting the particularity of the remaining provisions of this Part, in each section of every factory used by employees, the occupier shall take such measures that are necessary to suitably ventilate, secure and maintain reasonable temperature, air movement and humidity control, either by natural or mechanical means, and that are practicable having regard for the operation or process carried on in the factory.

Temperature.

Amended by
G.G. 16/1/76,
pp. 78-79.

6. (1) Subject to subregulation (4) of this regulation, for the purposes of regulation 5 of these regulations, reasonable inside temperatures as measured by a thermometer located 1.25 metres above floor level, shall not exceed the outside air temperature by more than 4° Celsius where the temperature is more than 27° Celsius.

(2) Where the temperature in a factory or part of a factory regularly used by employees, drops below 13° Celsius, heating facilities shall be fitted and operated by the occupier where reasonably practicable to produce a temperature of not less than 13° Celsius.

(3) Where a system of air conditioning is installed in a factory or part of a factory, the system shall be such as will produce temperatures within the factory or part that are in accordance with the provisions of subregulation (1) of regulation 9 of these regulations.

(4) Where trade processes result in heat being radiated from processes, furnaces, engine, material being cooled off, or similar sources, and the temperature of any part of a factory regularly used by employees is increased beyond the limits of temperature prescribed by these regulations, the radiation shall be confined as far as possible to its source by the use of screens or walls of material of low conductivity, water curtains, or a satisfactory hood and duct to convey the heated air outside the building or other effective methods.

Natural Ventilation.

Amended by
G.G. 16/1/76,
p. 79.

7. (1) Unless a system of mechanical ventilation is installed and in operation, every factory and every room therein used by employees shall be provided with means of ventilation by fixed openings, other than windows and doors, for the inlet and outlet of air, and the area of the fixed openings shall be not less than 25 000 square millimetres of inlet opening and 25 000 square millimetres of outlet opening for every 10 square metres of floor area.

(2) Where practicable inlet ventilators shall be so fitted and located as to take advantage of available winds, be adapted satisfactorily to avoid draughts and be located below a height of one metre, measured from the floor level, and outlet ventilators shall be located within 450 millimetres of the underside of the ceiling, or if unceiled within 450 millimetres of the underside of the wall plate.

Mechanical Ventilation.

Amended by
G.G. 16/1/76,
p. 79.

8. Any system of mechanical ventilation used for general ventilation purposes shall be capable of supplying fresh air to any part of a factory regularly used by employees at the rate of six air changes per hour, or of not less than 0.85 cubic metres per person per minute, whichever is the greater and in calculating the cubic capacity of a workroom any space located more than 3.6 metres above floor level shall be disregarded.

Air Conditioning.

Amended by
G.G. 16/1/76,
p. 79.

9. (1) Where the control of the thermal environment in a factory is achieved by a system of air conditioning, the maximum inside temperature shall not exceed 24° Celsius in any part of a factory regularly used by employees, unless the outside shade temperature exceeds 32° Celsius, in which case the maximum inside temperature shall at least be 8° Celsius lower than the outside shade temperature but not less than 24° Celsius.

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(2) Any air conditioning system used shall be capable of maintaining the relative humidity of the cold air, between the limits of 25% and 60%, unless unusual conditions exist in the factory in which the system is installed.

(3) Where air conditioning is used the supply of fresh air per person shall not be less than 0.35 cubic metre per person per minute.

(4) Systems of air conditioning or mechanical ventilation shall be so constructed that recirculation of air does not occur in places where noxious or dangerous fumes or gases are likely to occur or where the trade or occupation carried on in the factory produces, or is likely to produce, contamination of the air.

Humidity.

10. Where, owing to the situation, material, or to the nature or process of work carried on in any factory the temperature or humidity is such as to be injurious to the health of employees, remedial action to minimize the temperature or humidity shall be taken.

Air Movement.

11. (1) Subject to subregulation (2) of this regulation, and except where trade requirements or exceptional circumstances apply, facilities capable of providing air movement shall be provided, and shall be so regulated as to give air movement in accordance with the following table:—

Amended by
G.G. 16/1/76,
p. 79.

Temperature inside Factory			Minimum Air Movement required in metres per minute
Dry Bulb Temperature in degrees Celsius		Wet Bulb Temperature in degrees Celsius	
Under 24	....	Any wet bulb temperature	10
24 and under 27	....	Under 21	10
		21 and over	30
27 and under 30	....	Under 18	10
		18 and under 21	30
		21 and over	60
30 and under 32	....	Under 18	30
		18 and over	60
32 and over	....	Any wet bulb temperature	60

(2) Where air conditioning is installed and being operated in any factory, the air movement shall be maintained between the limits of 6 metres to 12 metres per minute.

Removal of Impurities.

12. The occupier of any factory in which heating appliances are used as part of any process carried on therein shall—

- (a) cause any steam, fumes or products of combustion that are created by or being emitted from those appliances and that are or may be offensive or injurious to persons exposed thereto to be so removed from the factory by a flue or duct as to prevent the escape of the steam, fumes or products of combustion into any part of the factory where persons could be so exposed; and
- (b) so far as is practicable, having regard to the nature of the process carried on in, and the design and structure of, the factory, cause those heating appliances to be separated or partitioned off from any room or working area used by persons employed at the factory.

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Internal Combustion Engines.

13. The occupier of any factory shall not cause an internal combustion engine to be used therein unless—

- (a) provision is made for conducting the exhaust gases from the engine into the open air; and
- (b) so far as is practicable, having regard to the nature of the process carried on in, and the design and structure of, the factory, the engine, except at times when it is being tested, is so partitioned off from any part of the factory in which persons are employed, other than persons actually attending to the engine, as to prevent any injurious fumes from the engine entering that part of the factory.

PART IV.—CONFINED SPACES.

Substituted by
G.G. 26/8/77,
p. 3052.

14. (1) For the purposes of this Part, "confined space" means any compartment or space in which because of the dimensions of the compartment or space, a worker is required to work in a cramped or otherwise restricted position, or without proper ventilation, or adequate egress.

(2) Whenever any work within a factory is to be performed in a confined space in which there is present or is likely to be present any dangerous gases, flammable liquids or vapours, or any other harmful matter, the occupier shall notify the Chief Inspector before the commencement of such work.

Inserted by
G.G. 26/8/77,
p. 3052.

14A. (1) Whenever any work is being carried on in a confined space, in a factory, the occupier shall—

- (a) ensure that the confined space is emptied, flushed or otherwise purged of hazardous substances, excessive heat reduced and kept adequately ventilated;
- (b) cause any openings used for the purpose of ingress or egress to or from the confined space to be maintained free from any encumbrance;
- (c) if the nature of the work or the conditions existing at the time render difficult the rescue of a worker from the confined space, provide a life-line suitable for the purpose and cause the worker to be kept under observation for the duration of the work;
- (d) if the nature of the work or conditions existing at the time require any person or persons with such special qualifications as are necessary, having regard to the circumstances existing at the time or that may arise from any situation connected with the work, to render any assistance, cause such a person or persons to be in attendance for the duration of the work;
- (e) where dust or impurities are produced by the process being carried on in the confined space, cause a supply of fresh air to be provided into the space; and
- (f) if the process carried on in the confined space renders the use of a respiratory protective device desirable for the safety of the worker therein, provide a suitable device.

(2) For the purpose of paragraph (f) of subregulation (1) of this regulation, a respiratory protective device is a device which complies with the Australian Standard Specification for Respiratory Protective Devices published by the Standards Association of Australia and numbered AS1716-1975.

15. Where flammable substances have been used in the confined space before the operations are commenced, the occupier shall cause a test for flammability of the vapours to be carried out by a competent person authorized by the occupier and the confined space shall be found as a result of that test to be safe before work may proceed.

16. The occupier shall cause adequate fire extinguishing equipment to be placed adjacent to work being undertaken in any confined space.

PART V.—NATURAL AND ARTIFICIAL LIGHTING.

General Illumination.

Amended by
G.G. 16/1/76,
p. 79.

17. (1) In each section of any factory where persons are employed, and in all stairways, passageways, storerooms and accommodation in or attached to a factory that are used by employees, the occupier shall cause glare free lighting

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from natural or artificial sources, or from both sources, to be provided and maintained to the standards appropriate for the task, or location, carried on or located as the case may be in that section, as ascertained in accordance with the provisions of the following table:—

Erratum
G.G. 30/1/76,
p. 256.

Visual Task or Location Illumination Table

Class of Visual Task or Location	Minimum Illumination on Task	Tasks or Locations comprised by the Class
(i) Casual seeing only	Lux 10	The safe movement of persons in roadways and yard thoroughfares.
(ii) Simple unexacting tasks	50	Passageways, stairways, corridors, dining, change and rest rooms, sanitary and washing facilities, warehouses, storerooms for rough and bulky materials and where discrimination of details is not essential.
(iii) Ordinary intermittent tasks	100	Rough, intermittent bench and machine work, rough inspection and counting of stock parts, moderate discrimination of detail, engine and boiler rooms, canning and preserving, bottling, bakehouses, meat packing, rough sawing and bench work in timber.
(iv) Moderately critical prolonged tasks	200	Medium bench and machine work, bookbinding, binding and folding, fine moulding and core making, stitching and inspection boot and shoe manufacturing.
(v) Severe prolonged tasks with small detail or poor contrast	500	Fine bench and machine work, extra fine painting, spraying and finishing, fine inspection work, sewing dark coloured goods and weaving dark coloured woollen goods.
(vi) Very severe prolonged tasks with minute detail or very poor contrast	1 000	Assembly and inspection of delicate mechanisms (such as watches) tools and die making.
(vii) Exceptionally difficult or important tasks	2 000	First Aid or Medical Post.

(2) Where a location or task occurring or carried on in a factory or any part thereof is not specifically provided for in the table set out in subregulation (1) of this regulation, the occupier shall provide the minimum values of illumination set forth in the Australian Standard Code for the Artificial Lighting of Buildings published by the Standards Association of Australia and numbered A.S. No. CA 30-1957.

(3) For the purposes of applying the provisions of the table set out in subregulation (1) of this regulation in any section of a factory where there is no specific task area at which the light values are to be measured, the values specified in the table are those measured on a horizontal plane situated one metre above the floor of that section.

Emergency Lighting.

18. The occupier of any factory shall provide emergency lighting—

- in all rooms of windowless factories regularly used by employees;
- in any building in which more than twenty employees are regularly employed in any one single interior during hours of darkness; and
- on staircases, passages and like structure which serve as a means of egress and which are not naturally lighted or are regularly used during hours of darkness.

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PART VI.—SANITARY CONVENIENCES.

Sewered Sanitary Conveniences.

Amended by
G.G. 16/1/76,
p. 79.

19. (1) This regulation applies with respect to every factory that is connected with a system of sewerage.

(2) In every factory the occupier shall provide sanitary conveniences for the use of the persons employed or engaged in accordance with the following scale and conditions:—

Water Closets	Proportion of Pans to Female Employees	Proportion of Pans to Male Employees
When the number of employees does not exceed 100	1 to 20	1 to 25
When such number exceeds 100 but does not exceed 200	1 to 25	1 to 30
When such number exceeds 200	1 to 25	1 to 40

(3) Subject to subregulation (4) of this regulation, separate closet accommodation shall be provided for the persons of different sexes.

(4) In any factory in which the majority of those employed or engaged are of the one sex and not more than two employees are of the other sex, separate closet accommodation for the persons of different sexes is not required if separate accommodation is available for the purpose at all times in adjoining or adjacent premises.

(5) Closets for different sexes shall not adjoin each other unless the closets are separated by a wall of brick, stone or concrete not less than 100 millimetres in thickness.

(6) Buildings containing closets or other sanitary conveniences shall conform with the building and health by-laws of the municipality in which the factory is situated.

(7) The door of every external closet shall be properly screened from the ground to a height of at least 1.8 metres and screening shall also be provided to prevent the closet being visible from overlooking windows.

(8) Any closet for females shall have a separate entrance behind the screen and that entrance shall not be within 3.6 metres of the entrance of any closet intended for the use of males.

(9) In every factory in which more than twelve males are employed, urinal accommodation shall be provided in the proportion of one stall or 600 millimetres of urinal for each thirty male employees or part thereof.

(10) The distance between a person's workplace and the closet shall be not greater than the height of one storey, and not more than ninety metres horizontally.

(11) The occupier shall cause sanitary conveniences to be cleaned each day.

(12) Buildings containing closets or other sanitary conveniences or washing facilities shall conform, in addition to the provisions of this regulation, to such additional requirements as are provided by—

- (a) the by-laws made under the Metropolitan Water Supply, Sewerage, and Drainage Act 1909 in the areas where those laws apply;
- (b) the Uniform Building By-laws from time to time in force under the Local Government Act 1960; and
- (c) the Health Act 1911 and by-laws made thereunder.

Unsewered Sanitary Conveniences.

20. (1) In every factory that is not connected with a public system of sewerage, the occupier shall provide sanitary conveniences for the use of his employees in accordance with the following scale and conditions:—

Amended by
G.G. 16/1/76,
p. 79.

Earth or Pan Closets	Proportion of Pans to Female Employees	Proportion of Pans to Male Employees
When the number of employees does not exceed 100	1 to 10	1 to 15
Where such number exceeds 100 but does not exceed 200	1 to 15	1 to 20
Where such number exceeds 200	1 to 15	1 to 30

(2) In every factory in which more than six males are employed urinal accommodation shall be provided in the ratio of one stall or 600 millimetres of urinal for every thirty males or part thereof.

(3) The provisions of subregulations (3) to (12) of regulation 19 of these regulations apply to every factory to which this regulation applies.

Common Sanitary Conveniences.

21. (1) Where two or more factories are contained within one building, or abut one another, the occupiers thereof may, for the purposes of complying with this Part, in lieu of providing separate sanitary conveniences, provide common sanitary conveniences in accordance with the remaining provisions of this regulation, for use of all persons employed by them in those factories.

(2) Common sanitary conveniences provided pursuant to subregulation (1) of this regulation shall be such that those conveniences would, if provided by one occupier for a number of employees equal to the total number of persons employed by all the occupiers providing the common facilities, comply in all respects with the provisions of this Part.

(3) Where two or more occupiers—

- (a) provide common sanitary conveniences for their respective employees in lieu of making separate provision for their respective employees; and
- (b) the common sanitary conveniences so provided do not meet the requirements of subregulation (2) of this regulation,

each of those occupiers commits an offence.

PART VII.—WASHING FACILITIES.

22. (1) Every occupier shall provide for the use of his employees washing facilities consisting of wash fountains with sprays, or washbasins or industrial troughing provided with a sufficient water supply by means of a tap located over each basin, or taps located at intervals of not less than 600 millimetres over industrial troughing.

Amended by
G.G. 16/1/76,
p. 79.

(2) The ratio of wash basins shall be not fewer than one basin to twenty persons employed, and the ratio of industrial troughing or wash fountains shall be not less than 600 millimetres of troughing or 600 millimetres of circumference of wash fountains to each 20 person employed by the occupier.

(3) All washing facilities shall be drained by means of a properly constructed trapped waste pipe or waste pipes connected to a drainage system which conforms to the requirements of the local authority in which the factory is situated.

(4) Where hand washing facilities are provided in change rooms or as part of a toilet area, separate facilities shall be provided for each sex, if more than one sex are employed on the premises.

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(5) The hand washing facilities shall be separate from any trough, sink, or basin used in connection with any process and shall be under cover, be situated within a reasonable distance of all working areas, and be easily accessible to the persons for whom they are provided.

(6) Nothing in this regulation affects the provisions of these regulations relating to the provision of hand washing facilities, where special tasks or processes are carried on or special conditions exist.

PART VIII.—ROOFS, CEILINGS, WALLS AND FLOORS.

Amended by
G.G. 16/1/76,
p. 79.

23. The occupier of any factory shall—

- (a) cause the roofs, walls and ceilings of the factory to be maintained in such a condition as does not constitute a hazard to persons employed in the factory; and
- (b) not cause or permit any room in the factory to be used as a work-room by employees if the ceiling or overhead joists of that room are less than 2.7 metres above the floor of that room.

24. (1) The occupier of any factory shall cause the floors or any part of that factory used by employees—

- (a) to be of a sound construction suitable for the process carried on in that part of the factory;
- (b) to be maintained in a good and serviceable condition; and
- (c) to be so drained as to effectively remove any liquid falling thereon if the process carried on therein renders the floor liable to be wet to such an extent that the wet is capable of being removed by drainage.

(2) Where, having regard to the nature of the process carried on in that part of the factory, it is practicable so to do, the occupier shall—

- (a) cause all openings in walls and floors, and all breaks in the levels of floors, to be properly guarded;
- (b) to be kept free from any obstruction likely to cause any employee to fall, trip, slip or stumble; and
- (c) cause safety access lanes to be marked on the floors.

PART IX.—ACCESS AND EGRESS.

Application.

25. (1) Subject to regulation 36 of these regulations, these regulations shall apply in relation to—

- (a) all factories which are occupied or first registered after the coming into operation of these regulations;
- (b) any factory that is occupied and registered at the time of the coming into operation of these regulations, and the occupier of which is served with directions in writing by the Chief Inspector directing that the provisions of these regulations shall apply in relation to the factory; and
- (c) all factories to which a major alteration or repair is made or in which there is a change of occupancy or change in the nature or work carried on therein.

(2) The Chief Inspector shall not issue a direction pursuant to paragraph (b) of subregulation (1) of this regulation unless—

- (a) he is satisfied that the existing exits and escapes from the factory are not sufficient to ensure the safety and welfare of persons employed therein; and
- (b) he has first given the occupier a reasonable opportunity of conferring with him thereon.

(3) For the purpose of these regulations, a building of high hazard occupancy means any occupancy in which there are goods or materials liable to burn with extreme rapidity or from which poisonous fumes or explosions are likely to arise or occur in the event of fire.

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Exits or Escapes.

26. (1) Exits shall consist of interior stairways, fire isolated stairways, ramps, horizontal exits, gangways, exterior stairways, passage ways and doorways or any of them used either singly or in association with others of them to provide a direct passage to the street or to an open space leading to a street. Amended by G.G. 16/1/76, p. 80.

(2) Where more than one exit is provided for the purpose of complying with these regulations, the exits shall subject to those regulations, be as far apart as practicable and distributed as uniformly as possible within or around the floor area or space they are to serve.

(3) An exit shall be so located that no point in a floor area, room, or space served by it is distant from the exit—

(a) in the case of a building of high hazard occupancy, more than—

(i) twenty-five metres in an unsprinklered building; and

(ii) thirty metres in a sprinklered building; and

(b) in the case of a building not of high hazard occupancy, more than—

(i) thirty metres in a unsprinklered building; and

(ii) forty-five metres in a sprinklered building.

(4) So far as is practicable, exits shall be arranged so that there is no pocket or dead-end in the factory in which a person may be trapped.

Ground Floor Escapes.

27. Every factory building shall have an alternative escape on the ground floor unless the building is of framed fire resisting construction or bearing wall protected construction, defined in the Uniform Building By-laws as Type 1 and Type 2 construction, where any floor does not exceed 280 square metres in area. Amended by G.G. 16/1/76, p. 80.

Floors above Ground Level.

28. (1) There shall be provided for every floor of a factory above the ground floor, a primary and an alternative escape exit, each of which is readily and safely accessible to and usable by all persons who may be accommodated on such floor.

(2) The main traffic internal stairway for each floor above the ground floor in every factory shall be deemed for the purposes of these regulations to be the primary escape in case of fire.

(3) The alternative escape shall be an external stairway or an internal stairway completely fire isolated, situated as far as possible from other stairs or lifts and having direct communication with the outer air.

(4) Additional means of exit shall be provided where the distance of travel exceeds the limit prescribed in subregulation (3) of this regulation.

(5) Where more than three stairways are provided in compliance with these regulations, at least two of those stairways shall be fire-isolated and where more than six stairways are so provided, at least three of those stairways shall be fire-isolated.

Basements.

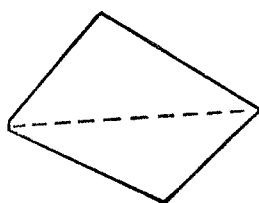
29. (1) A basement shall not be used as a factory or as part of a factory unless the basement conforms with respect to fire precautions with the requirements of the Chief Inspector after consultation with the Chief Officer of Fire Brigades. Amended by G.G. 16/1/76, p. 80.

(2) Where the floor area of a basement used as a factory or part of a factory does not exceed 230 square metres, the requirement of an alternative means of escape imposed by regulation may be waived if the means of access is a single primary stairway which is fire isolated and provided the space is not used for a high hazard occupancy.

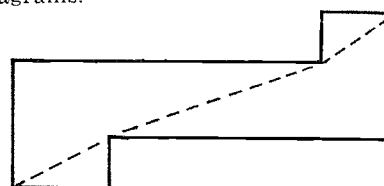
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(3) Where two or more exits are required to serve a basement, two of the exits shall be located not closer than one-fifth of the perimeter or three-quarters of the diagonal of such basement, space or room, whichever is the greater, measured within the walls and where the basement, space or room is irregular in shape, the diagonal shall be measured as the longest diagonal or where the plan has a re-entrant shape the sum of the diagonals shall be measured up to the internal angles of the plan.

Separation of Alternative Exits.
Explanatory Diagrams.



Irregular Plan.



Re-entrant Plan.

Internal Approaches to Doorways.

Amended by
G.G. 16/1/76,
p. 80.

30. (1) No aisle shall be less than 800 millimetres in width.

(2) The aggregate width of aisles, passages or gangways is to be at least as wide as the stairways or doorways to which they lead.

Width of Exits.

Amended by
G.G. 16/1/76,
p. 80.

31. (1) In this regulation, "floor area" means the total occupied area within the closing wall or partition.

(2) For the purposes of subregulations (3) and (4) of this regulation, the number of persons accommodated by a floor is—

(a) the number of persons for whose accommodation the floor area is designed or intended; or

(b) the number obtained by dividing the floor area by 5.5 square metres, whichever is the greater, and for the purposes of paragraph (a) of this sub-regulation, the number of persons accommodated on a mezzanine floor discharging on to a floor shall be added to the number of persons accommodated on the latter floor.

(3) Minimum widths in the case of each exit shall be—

(a) 800 millimetres if the exit is provided for a floor area accommodating not more than twenty-five persons;

(b) one metre if the exit is provided for a floor area accommodating more than twenty-five persons.

(4) The aggregate width of exits from any floor shall be such as to provide one metre of width for the first one hundred persons and an additional width of 500 millimetres for each additional one hundred persons or part thereof, except that—

(a) in calculating the number of persons to be served by any exits that serve more than one floor, there shall be added to the number of persons accommodated on that floor fifty per cent. of the number accommodated on the floor immediately above, twenty-five per cent. of the number accommodated on the two floors above the last mentioned floor and ten per cent. of the number accommodated on the two floors next above, the additional numbers being in each case persons having access to the exit;

(b) the aggregate width of exits shall be increased by twenty per cent. in the case of an unsprinklered building not of framed fire resisting or bearing wall protected construction;

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- (c) when fire-isolated stairs are provided in compliance with these regulations, the total width thereof shall be not less than fifty per cent. of the aggregate width of exits required by these regulations;
- (d) the width of any stairway in excess of two metres shall not be regarded as part of the aggregate width required by these regulations.

Doors and Gateways.

32. (1) All doorways intended for emergency egress shall have a width at least equal to the width required for the exit and a minimum headroom of two metres. Amended by
G.G. 17/1/76,
p. 80.

(2) Any door of an exit doorway shall be so hung and arranged that when open it does not diminish or obstruct the required width of the doorway, passageway, stairway or other means of exit and a swinging door in its swing shall not reduce the effective width of any stairway or landing, or the effective width of a passageway, to less than the required width.

(3) Except in the case of a door which is not more than 600 millimetres above ground level, any door of an exit doorway shall open in the direction of exit travel, unless the door serves a ground floor area of less than 140 square metres.

(4) An exit door shall not open immediately on to a flight of stairs but shall open on to a landing, the width of which shall be not less than the width of the door, and the length of which, measured in the direction of travel, shall be not less than 900 millimetres or half the width of the door, whichever is the greater.

(5) Any door to a fire-isolated stairway shall be self-closing, but that door may be kept open by an approved fusible link, if an additional self-closing door is fitted in the door opening in such a manner as to cause no obstruction to the stairway when opened and that additional door—

- (a) is constructed of hardwood of not less than 45 millimetres thickness or other material having equivalent fire resisting qualities; and
- (b) if glazed, is glazed with fire resistant glazing having an area not exceeding thirty per cent. of the area of the door.

(6) A fire door shall not, during working hours be prevented from closing by wedges or any means other than a fusible link, and shall not be kept open for a longer time than necessary for the passage of persons or goods.

(7) An exit door shall not be locked during the times that a building is occupied, and any fastenings—

- (a) shall be such that the door may be readily opened from the inside without the use of a key;
- (b) shall be maintained in good working order;
- (c) shall not project when the door is fully open to cause any obstruction to the exit.

Stairways and Landings.

33. (1) Exterior stairways may be substituted for fire-isolated stairways in buildings not exceeding six storeys in height, but such stairways shall be constructed in accordance with the requirements of these regulations. Amended by
G.G. 17/1/76,
p. 80.

(2) Stairways shall be constructed of fire-resisting materials and in conformity with the following provisions, that is to say—

- (a) *Winders*—the use of winders is prohibited.
- (b) *Treads and Risers*—treads and risers shall—
 - (i) be of uniform dimensions throughout;
 - (ii) be so proportioned that the product of the width of the tread and the height of the riser in millimetres shall be not less than 42 000 nor more than 48 000, but risers shall not exceed 180 millimetres in height and treads exclusive of nosing shall be not less than 250 millimetres wide; but external escape stairs may be of risers not exceeding 200 millimetres and treads not less than 230 millimetres.

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- (c) *Headroom*—every stairway shall have a headroom clearance of not less than two metres measured vertically above any landing or above a line connecting the nosings of the stair treads.
- (d) *Landings*—
 - (i) every stair shall have straight flights with half-space or quarter-space landings at intervals of not more than 17 nor less than 2 risers, but no stair shall have more than 34 successive risers, whether in two or more flights, without a change of direction;
 - (ii) the length and width of a landing shall be not less than the width of the stairway on which the landing occurs, except that in a straight flight, the distance between risers on a stairway shall be not less than 900 millimetres.
- (e) *Guards and Handrails*—
 - (i) every stairway shall have a wall or well secured balustrade or adequate guard on each side;
 - (ii) every stairway, when 1 020 millimetres or less in width, shall have handrails on at least one side, and when more than 1 020 millimetres in width, shall have handrails on both sides;
 - (iii) where a stairway exceed 2 040 millimetres in width, one or more intermediate handrails, continuous between landings shall be provided, the number and position of intermediate handrails being such that there shall not be more than 1 520 millimetres between any two handrails;
 - (iv) handrails shall be fitted at a vertical height of not less than 860 millimetres above the nosing of the tread and not less than 900 millimetres above the landing, and shall be so constructed that there is no obstruction on or above them tending to break a hand hold.
- (f) *Minimum Width*—Every stairway shall have a minimum width of 1 000 millimetres, but a stair serving a floor area accommodating not more than twenty-five persons may be reduced to 800 millimetres in width.
- (g) *Underside of Stairs*—
 - (i) the underside of stairs shall be lined except where risers are fitted;
 - (ii) except in the case of a reinforced concrete stairway, the space under any stairway shall be left entirely open or be entirely closed without openings thereto.

Measurement of Width of Stairs.

34. The width of a stairway shall be measured—
- (a) where the stairway is enclosed on each side with walls, between the finished surfaces of the walls;
 - (b) where a stairway has a wall on one side only, between the finished surface of the wall and the inner side of the balustrade; and
 - (c) where balustrades are provided on both sides, between the inner surfaces of those balustrades.

Mezzanine Floors.

Amended by
G.G. 16/1/76,
p. 80.

35. Every mezzanine floor shall be provided with alternative means of egress which comply with these regulations, but alternative means of egress may be omitted in the case of a mezzanine floor on which a person cannot be trapped in the event of fire, if that floor does not exceed 93 square metres in area.

General.

36. Without prejudice to the operation of any of the provisions in any other Part of these regulations, nothing in this Part applies to a stairway, service gallery, platform, catwalk or like structure that is—
- (a) not provided for the purposes of complying with the provisions of this Part; and
 - (b) provided and used solely for providing access to plant, machinery and services within the factory for maintenance, repairs and like services.

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PART X.—DRINKING WATER.

37. (1) The occupier of any factory shall cause a supply of clean, cool, potable drinking water to be provided for and to be readily accessible to, all persons employed at the factory.

(2) The supply of drinking water shall be so provided that—

- (a) drinking points are within reasonable distance of work places;
- (b) drinking points are not placed in toilets;
- (c) there is not less than one drinking point for every forty employees;
- (d) where water is cooled by ice, the water container is so constructed that the ice does not come in direct contact with the water.

(3) The occupier shall not cause or permit open barrels, pails, tanks, or other containers, from which water may be dipped to be used for the supply of drinking water.

(4) Where water unsafe for drinking purposes is provided for use in industrial processes or for fire protection—

- (a) conspicuous notices shall be posted at points of supply clearly marked "UNFIT FOR DRINKING" or words to like effect;
- (b) every reasonable effort shall be made to prevent it from being so used; and
- (c) a non-return valve between a water supply system furnishing drinking water and a system furnishing water unsafe for human consumption shall be fitted.

PART XI.—SEATING.

38. (1) In every factory where work is performed from a sitting position, the occupier shall cause seating to be provided and maintained for the use of all persons employed on such tasks.

(2) Where practicable the occupier shall cause suitable seating to be provided for the use of employees whose duties are such as to permit them to sit from time to time without detriment to their work.

(3) Any seating that is provided shall be strongly constructed, stable, comfortable and where the tasks engaged in by the employee using it so requires, shall have a backrest capable of giving support to the lumbar region of the back.

PART XII.—MISCELLANEOUS.

39. (1) The occupier of any factory shall not cause or permit any person to use as a sleeping place any part of the factory unless that part is separated from the main factory by a substantial wall or partition extending from floor to ceiling.

(2) An occupier of a factory shall not cause or permit any employee to partake, and a person shall not partake, of a meal—

- (a) in any room where any work or manufacturing process has been carried on during the immediately preceding period of two hours, unless that work or process is of a nature that permits or requires meals to be so partaken, and the safety of the employee is not likely to be thereby endangered; or
- (b) in any room in the premises where white or red lead, litharge or other compounds of lead, mercurial or arsenical or other poisonous substances are used or produced.

40. Without affecting any other provision of these regulations or any provision of any Act or regulations or by-laws in force under any Act, the occupier of any factory shall cause—

- (a) all parts of the factory, including passageways and gangways, in which employees are engaged or to which they have access; and

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(b) all machinery, plant, equipment and fittings within the factory, to be maintained in such a condition as does not constitute a risk to the safety or health of the employees employed therein, and shall cause the working methods and processes carried on in the factory to be so carried on as to not constitute a risk to the safety or health of the employees employed therein.

41. Any person who—

- (a) does any act or thing which by these regulations he is forbidden to do;
 - (b) fails or omits to do any act or thing which by these regulations he is required to do,
- commits an offence.

Penalty: One hundred dollars.