SCHEDULE 5 Regulation 9

BUILDING STANDARDS APPLICABLE TO DESIGN AND CONSTRUCTION

SECTION 1: STRUCTURE

Structure

1.1. Every building must be designed and constructed in such a way that the loadings that are liable to act on it will not lead to:

(a) the collapse of the whole or part of the building; or

(b) deformations which would make the building unfit for its intended use, unsafe, or cause damage to other parts of the building or to fittings or to installed equipment.

Disproportionate collapse

1.2. Every building must be designed and constructed in such a way that in the event of damage occurring to any part of the structure of the building the extent of any resultant collapse will not be disproportionate to the original cause.

SECTION 2: FIRE

Compartmentation

2.1. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the compartment of origin until any occupants have had the time to leave that compartment and any fire containment measures have been initiated.

Limitation

This standard does not apply to domestic buildings.

Separation

2.2. Every building, which is divided into more than one area of different occupation, must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated.

Structural protection

2.3. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the load-bearing capacity of the building will continue to function until all occupants have escaped, or been assisted to escape, from the building and any fire containment measures have been initiated.

Cavities

2.4. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

Internal linings

2.5. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the development of fire and smoke from the surfaces of walls and ceilings within the area of origin is inhibited.

Spread to neighbouring buildings

2.6. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the spread of fire to neighbouring buildings is inhibited.

Spread on external walls

2.7. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, or from an external source, the spread of fire on the external walls of the building is inhibited.

Spread from neighbouring buildings

2.8. Every building must be designed and constructed in such a way that in the event of an outbreak of fire in a neighbouring building, the spread of fire to the building is inhibited.

Escape

2.9. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the occupants, once alerted to the outbreak of the fire, are provided with the opportunity to escape from the building, before being affected by fire or smoke.

Escape lighting

2.10. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, illumination is provided to assist in escape.

Communication

2.11. Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the occupants are alerted to the outbreak of fire.

Limitation

This standard applies only to a building which–

(a) is a dwelling;

(b) is a residential building; or

(c) is an enclosed shopping centre.

Fire service access

2.12. Every building must be accessible to fire appliances and fire service personnel.

Fire service water supply

2.13. Every building must be provided with a water supply for use by the fire service.

Limitation

This standard does not apply to domestic buildings.

Fire service facilities

2.14. Every building must be designed and constructed in such a way that facilities are provided to assist fire-fighting or rescue operations.

Automatic life safety fire suppression systems

2.15. Every building must be designed and constructed in such a way that, in the event of an outbreak of fire within the building, fire and smoke will be inhibited from spreading through the building by the operation of an automatic life safety fire suppression system.

Limitation

This standard applies only to a building which–

(a) is an enclosed shopping centre;

(b) is a residential care building;

(c) is a high rise domestic building; or

(d) forms the whole or part of a sheltered housing complex.

SECTION 3: ENVIRONMENT

Site preparation – harmful and dangerous substances

3.1. Every building must be designed and constructed in such a way that there will not be a danger to the building nor a threat to the health of people in and around the building due to the presence of harmful or dangerous substances.

Limitation

This standard does not apply to the removal of unsuitable material, including turf, vegetable matter, wood, roots and topsoil on the site of a building (other than a dwelling) intended to have a life not exceeding the period specified in regulation 6.

Site preparation – protection from radon gas

3.2. Every building must be designed and constructed in such a way that there will not be a threat to the health of people in or around the building due to the emission and containment of radon gas.

Flooding and ground water

3.3. Every building must be designed and constructed in such a way that there will not be a threat to the building or the health of the occupants as a result of flooding and the accumulation of ground water.

Moisture from the ground

3.4. Every building must be designed and constructed in such a way that there will not be a threat to the building or the health of the occupants as a result of moisture penetration from the ground.

Existing drains

3.5. Every building must not be constructed over an existing drain (including a field drain) that is to remain active.

Limitation

This standard does not apply where it is not reasonably practicable to re-route an existing drain.

Surface water drainage

3.6. Every building, and hard surface within the curtilage of a building, must be designed and constructed with a surface water drainage system that will–

(a) ensure the disposal of surface water without threatening the building and the health and safety of the people in and around the building; and

(b) have facilities for the separation and removal of silt, grit and pollutants.

Wastewater drainage

3.7. Every wastewater drainage system serving a building must be designed and constructed in such a way as to ensure the removal of wastewater from the building without threatening the health and safety of the people in and around the building, and–

(a) that facilities for the separation and removal of oil, fat, grease and volatile substances from the system are provided;

(b) that discharge is to a public sewer or public wastewater treatment plant, where it is reasonably practicable to do so; and

(c) where discharge to a public sewer or public wastewater treatment plant is not reasonably practicable that discharge is to a private wastewater treatment plant or septic tank.

Limitation

Standard 3.7(a) does not apply to a dwelling.

Private wastewater treatment systems – treatment plants

3.8. Every private wastewater treatment plant or septic tank serving a building must be designed and constructed in such a way that it will ensure the safe temporary storage and treatment of wastewater prior to discharge.

Private wastewater treatment systems – infiltration systems

3.9. Every private wastewater treatment system serving a building must be designed and constructed in such a way that the disposal of the wastewater to ground is safe and is not a threat to the health of the people in and around the building.

Precipitation

3.10. Every building must be designed and constructed in such a way that there will not be a threat to the building or the health of the occupants as a result of moisture from precipitation penetrating to the inner face of the building.

Limitation

This standard does not apply to a building where penetration of moisture from the outside will result in effects no more harmful than those likely to arise from use of the building.

Facilities in a dwelling

3.11. Every dwelling must be designed and constructed in such a way that the size of any apartments or kitchens and the access to other rooms does not threaten the health of the occupants.

Limitation

This standard applies only to a dwelling.

Sanitary facilities

3.12. Every building must be designed and constructed in such a way that sanitary facilities are provided for all occupants of, and visitors to, the building and that there is no threat to the health and safety of occupants or visitors.

Heating

3.13. Every building must be designed and constructed in such a way that it can be heated.

Limitation

This standard applies only to a dwelling.

Ventilation

3.14. Every building must be designed and constructed in such a way that the air quality inside the building is not a threat to the health of the occupants or the capability of the building to resist moisture, decay or infestation.

Condensation

3.15. Every building must be designed and constructed in such a way that there will not be a threat to the building or the health of the occupants as a result of moisture caused by surface or interstitial condensation.

Limitation

This standard applies only to a dwelling.

Natural lighting

3.16. Every building must be designed and constructed in such a way that natural lighting is provided to ensure that the health of the occupants is not threatened.

Limitation

This standard applies only to a dwelling.

Combustion appliances – safe operation

3.17. Every building must be designed and constructed in such a way that each fixed combustion appliance installation operates safely.

Combustion appliances – protection from products of combustion

3.18. Every building must be designed and constructed in such a way that any component part of each fixed combustion appliance installation used for the removal of combustion gases will withstand heat generated as a result of its operation without any structural change that would impair the stability or performance of the installation.

Combustion appliances – relationship to combustible materials

3.19. Every building must be designed and constructed in such a way that any component part of each fixed combustion appliance installation will not cause damage to the building in which it is installed by radiated, convected or conducted heat or from hot embers expelled from the appliance.

Combustion appliances – removal of products of combustion

3.20. Every building must be designed and constructed in such a way that the products of combustion are carried safely to the external air without harm to the health of any person through leakage, spillage, or exhaust nor permit the re-entry of dangerous gases from the combustion process of fuels into the building.

Combustion appliances – air for combustion

3.21. Every building must be designed and constructed in such a way that each fixed combustion appliance installation receives air for combustion and operation of the chimney so that the health of persons within the building is not threatened by the build-up of dangerous gases as a result of incomplete combustion.

Combustion appliances – air for cooling

3.22. Every building must be designed and constructed in such a way that each fixed combustion appliance installation receives air for cooling so that the fixed combustion appliance installation will operate safely without threatening the health and safety of persons within the building.

Oil storage – protection from fire

3.23. Every building must be designed and constructed in such a way that an oil storage installation, incorporating oil storage tanks used solely to serve a fixed combustion appliance installation providing space heating or cooking facilities in a building, will inhibit fire from spreading to the tank and its contents from within, or beyond, the boundary.

Limitation

This standard does not apply to portable containers.

Oil storage – protection from spillage

3.24. Every building must be designed and constructed in such a way that an oil storage installation, incorporating oil storage tanks used solely to serve a fixed combustion appliance installation providing space heating or cooking facilities in a building, will–

(a) reduce the risk of oil escaping from the installation;

(b) contain any oil spillage likely to contaminate any water supply, groundwater, watercourse, drain or sewer; and

(c) permit any spill to be disposed of safely.

Limitation

This standard does not apply to portable containers.

Solid waste storage

3.25. Every building must be designed and constructed in such a way that accommodation for solid waste storage is provided which–

(a) permits access for storage and for the removal of its contents;

(b) does not threaten the health of people in and around the building; and

(c) does not contaminate any water supply, ground water or surface water.

Limitation

This standard applies only to a dwelling.

Dungsteads and farm effluent tanks

3.26. Every building must be designed and constructed in such a way that there will not be a threat to the health and safety of people from a dungstead and farm effluent tank.

SECTION 4: SAFETY

Access to buildings

4.1. Every building must be designed and constructed in such a way that all occupants and visitors are provided with safe, convenient and unassisted means of access to the building.

Limitation

There is no requirement to provide access for wheelchair users to–

(a) a house, where there are no apartments on the entrance storey;

(b) a house, where it is not reasonably practicable to construct a level or ramped access route between the point of access to, or from any car parking within, the curtilage of a building and an entrance to the house; or

(c) a domestic building not served by a lift, where there are no dwellings entered from a common area on the entrance storey.

Access within buildings

4.2. Every building must be designed and constructed in such a way that–

(a) in non-domestic buildings, safe, unassisted and convenient means of access is provided throughout the building;

(b) in domestic buildings, safe and convenient means of access is provided to each dwelling and throughout the common areas;

(c) in residential buildings, a proportion of the rooms intended to be used as bedrooms must be accessible to wheelchair users;

(d) in dwellings, safe means of access is provided for occupants throughout the dwelling; and

(e) in dwellings, safe and unassisted means of access is provided for visitors throughout at least one storey and to sanitary facilities.

Limitation

There is no requirement to provide access suitable for wheelchair users–

(a) in a non-domestic building not served by a lift, to a room, intended to be used as a bedroom, that is not on an entrance storey; or

(b) in a domestic building not served by a lift, to common areas, other than on an entrance storey.

Stairs and ramps

4.3. Every building must be designed and constructed in such a way that every level can be reached safely by stairs or ramps.

Pedestrian protective barriers

4.4. Every building must be designed and constructed in such a way that every sudden change of level that is accessible in, or around, the building is guarded by the provision of pedestrian protective barriers.

Limitation

This standard does not apply where the provision of pedestrian protective barriers would obstruct the use of areas so guarded.

Electrical safety

4.5. Every building must be designed and constructed in such a way that the electrical installation does not–

(a) threaten the health and safety of the people in, and around, the building; and

(b) become a source of fire.

Limitation

This standard does not apply to an electrical installation–

(a) serving a building or any part of a building to which the Mines and Quarries Act 1954(**1**) or the Factories Act 1961(**2**) applies; or

(b) forming part of the works of an undertaker to which regulations for the supply and distribution of electricity made under the Electricity Act 1989(**3**) apply.

(**1**) 1954 c. 70, as extended by the Mines and Quarries (Tips) Act 1969 (c. 10) and the Mines Management Act 1971 (c. 20).
(**2**) 1961 c. 34.
(**3**) 1989 c. 29.

Electrical fixtures

4.6. Every building must be designed and constructed in such a way that electric lighting points and socket outlets are provided.

Limitation

This standard applies only to domestic buildings where a supply of electricity is available.

Aids to communication

4.7. Every building must be designed and constructed in such a way that it is provided with aids to assist those with a hearing impairment.

Limitation

This standard does not apply to domestic buildings.

Danger from accidents

4.8. Every building must be designed and constructed in such a way that–

(a) people in and around the building are protected from injury that could result from fixed glazing, projections or moving elements on the building;

(b) fixed glazing in the building is not vulnerable to breakage where there is the possibility of impact by people in, and around, the building;

(c) both faces of a window and rooflight in a building are capable of being cleaned such that there will not be a threat to the cleaner from a fall resulting in severe injury;

(d) a safe and secure means of access is provided to a roof; and

(e) manual controls for windows and roof lights can be operated safely.

Limitation

Standards 4.8(d) and 4.8(e) do not apply to domestic buildings.

Danger from heat

4.9. Every building must be designed and constructed in such a way that protection is provided for people in, and around, the building from the danger of severe burns or scalds from the discharge of steam or hot water.

Fixed seating

4.10. Every building, which contains fixed seating accommodation for an audience or spectators, must be designed and constructed in such a way that a number of level spaces for wheelchairs are provided proportionate to the potential audience or spectators.

Limitation

This standard does not apply to domestic buildings.

Liquefied petroleum gas storage

4.11. Every building must be designed and constructed in such a way that each liquefied petroleum gas storage installation, used solely to serve a combustion appliance providing space heating, water heating, or cooking facilities, will–

(a) be protected from fire spreading to any liquefied petroleum gas container; and

(b) not permit the contents of any such container to form explosive gas pockets in the vicinity of any container.

Limitation

This standard does not apply to a liquefied petroleum gas storage container, or containers, for use with portable appliances.

Vehicle protective barriers

4.12. Every building accessible to vehicular traffic must be designed and constructed in such a way that every change in level is guarded.

SECTION 5: NOISE

Resisting sound transmission to dwellings using appropriate constructions

5.1. Every building must be designed and constructed in such a way that each wall and floor separating one dwelling from another, or one dwelling from another part of the building, or one dwelling from a building other than a dwelling, will limit the transmission of noise to the dwelling to a level that will not threaten the health of the occupants of the dwelling or inconvenience them in the course of normal domestic activities provided the source noise is not in excess of that from normal domestic activities.

Limitation

This standard does not apply to–

(a) fully detached houses; or

(b) roofs or walkways with access solely for maintenance, or solely for the use, of the residents of the dwelling below.

SECTION 6: ENERGY

Policy

6.1. Every building must be designed and constructed in such a way that provision is made for energy conservation in accordance with the Building Standards Circular on Energy, 2004.

Building insulation envelope

6.2. In order to comply with standard 6.1 every building must be designed and constructed in such a way that the insulation envelope resists thermal transfer.

Limitation

This standard does not apply to–

(a) buildings, other than dwellings, which will not be heated nor cooled, other than heating provided for the purpose of frost protection; or

(b) buildings which are ancillary to a dwelling which will not be heated, other than heating provided for the purpose of frost protection.

Heating system

6.3. In order to comply with standard 6.1 every building must be designed and constructed in such a way that the heating and hot water service systems are designed, installed, and capable of being controlled to achieve optimum energy efficiency, having regard to the thermal transfer of the insulation envelope.

Limitation

This standard does not apply to–

(a) buildings which do not use fuel or power for controlling the temperature of the internal environment;

(b) buildings, or parts of a building, which will not be heated, other than heating provided for the purpose of frost protection;

(c) heating provided for the purpose of frost protection; or

(d) individual, solid-fuel stoves or open-fires, gas or electric fires or room heaters (excluding electric storage and panel heaters) provided in domestic buildings.

Insulation of pipes, ducts and vessels

6.4. In order to comply with standard 6.1 every building must be designed and constructed in such a way that temperature loss from heated pipes, ducts and vessels, and temperature gain to cooled pipes and ducts, is resisted.

Limitation

This standard does not apply to–

(a) buildings which do not use fuel or power for heating or cooling either the internal environment or water services;

(b) buildings, or parts of a building, which will not be heated, other than heating provided for the purpose of frost protection;

(c) pipes, ducts or vessels that form part of an isolated industrial or commercial process; or

(d) cooled pipes or ducts in domestic buildings.

Artificial and display lighting

6.5. In order to comply with standard 6.1 every building must be designed and constructed in such a way that artificial or display lighting must operate and be capable of being controlled to achieve optimum energy efficiency.

Limitation

This standard does not apply to–

(a) process and emergency lighting components of a building; or

(b) domestic buildings.

Mechanical ventilation and air conditioning

6.6. In order to comply with standard 6.1 every building must be designed and constructed in such a way that the form and fabric of the building minimises the use of mechanical ventilating or cooling systems for cooling purposes, and the ventilating and cooling systems are designed, installed, and capable of being controlled to achieve optimum energy efficiency.

Limitation

This standard does not apply to–

(a) domestic buildings; or

(b) buildings which do not use fuel or power for ventilating or cooling the internal environment.

Commissioning building services

6.7. In order to comply with standard 6.1 every building must be designed and constructed in such a way that services which use fuel or power for heating, lighting, ventilating and cooling the internal environment and heating the water, are commissioned to achieve optimum energy efficiency.

Limitation

This standard does not apply to–

(a) the process and emergency lighting components of a building;

(b) heating provided for the purpose of frost protection; or

(c) lighting, ventilation and cooling systems in a domestic building.

Written information

6.8. In order to comply with standard 6.1 the occupiers must be provided by the owner with written information on the operation and maintenance of the building services and a forecast of the energy consumption of the building.

Limitation

This standard does not apply to–

(a) buildings which do not use fuel or power for heating, lighting, ventilating and cooling the internal environment and heating the water supply services;

(b) the process and emergency lighting components of a building;

(c) heating provided for the purpose of frost protection; or

(d) lighting, ventilation and cooling systems in a domestic building.