

CHAPTER 8

SAFETY OF USERS

SECTION 801 HAZARDOUS MATERIALS

801.1 Objective. To protect people and property from the consequences of unauthorized discharge, fires or explosions involving hazardous materials.

801.2 Functional statements.

801.2.1 Prevention. Provide adequate safeguards to minimize the risk of unwanted releases, fires or explosions involving hazardous materials as appropriate to the design performance level determined in Chapter 3.

801.2.2 Mitigation. Provide adequate safeguards to minimize the consequences of an unsafe condition involving hazardous materials during normal operations and in the event of an abnormal condition in accordance with the design performance level determined in Chapter 3.

801.3 Performance requirements. See Section 2201.3.

SECTION 802 HAZARDS FROM BUILDING MATERIALS

802.1 Objective. To safeguard people from injury caused by exposure to hazards from building materials.

802.2 Functional statement. Building materials that are potentially hazardous shall be used in ways to avoid undue risk to people.

802.3 Performance requirements.

802.3.1 Construction materials. The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings shall not give rise to harmful concentrations at the surface of the material where the material is exposed or in the atmosphere of any space.

802.3.2 Glazing. Glass or other brittle materials with which people are likely to come into contact shall comply with one or more of the following:

1. If broken upon impact, break in a way that is unlikely to cause injury.
2. Resist a reasonably foreseeable impact without breaking.
3. Be reasonably protected from impact.

SECTION 803 PREVENTION OF FALLS

803.1 Objective. To prevent people from unintentionally falling from one level to another.

803.2 Functional statement. Buildings and their facilities shall be constructed to reduce the likelihood of unintentional falls.

803.3 Performance requirements.

803.3.1 Required barriers. A barrier shall be provided where people could fall 30 inches (762 mm) or more from an opening in the external envelope or floor of a building or its facilities.

803.3.2 Roofs. Roofs with permanent access shall have barriers provided.

803.3.3 Barrier construction. Barriers shall be constructed and installed appropriate to the hazard.

803.3.4 Openings in barriers. When barriers have openings, the openings shall be of an appropriate size and configuration to keep people from falling through based upon the anticipated age of the occupants.

SECTION 804 CONSTRUCTION AND DEMOLITION HAZARDS

804.1 Objective. To safeguard people from injury or illness and to protect property from damage during the construction or demolition processes.

804.2 Functional statement. Provisions are required during construction and demolition work to:

1. Protect authorized personnel from injury resulting from falling objects, fire, blasts, tripping or falling, or any other risk posed by the construction or demolition operation.
2. Prevent the entry of unauthorized personnel on the construction or demolition site.
3. Protect property off site from damage resulting from falling objects, fire, blasts or any other risk posed by the construction or demolition operations.

804.3 Performance requirements.

804.3.1 Operations and procedures. Sequencing of tasks, procedural methods and equipment shall be such that:

1. Personnel are protected from injury and illness attributable to hazards present because of the given operation.
2. Adjacent property, property on site and equipment are protected from damage from execution of the given tasks.
3. Safety procedures limit the accumulation of combustible materials on the site and provide safeguards for equipment and operations that represent ignition sources.

804.3.2 Protection from natural hazards. The structure under construction shall be protected from damage due to wind, rain or other natural hazards likely to occur during construction.

804.3.3 Protection of personnel. Provisions for personnel movement, transport and support shall be such that:

1. Personnel are protected from injury due to falling.
2. Personnel are protected from injury due to falling objects.
3. Personnel are protected from injury that could be caused by the particular operations being conducted.
4. Exposure to materials that are known to be health hazards is eliminated.

804.3.4 Unauthorized entry. The job site shall be protected from the intrusion of unauthorized personnel.

SECTION 805 SIGNS

805.1 Objective. To identify essential features of the building to its users.

805.2 Functional statement. Signs shall identify escape and rescue routes, hazards, accessible elements where not all elements are accessible, and other essential features of a building.

805.3 Performance requirements.

805.3.1 Visibility. Signs shall be clearly visible and readily recognizable under the conditions expected for their purpose.

805.3.2 Identification of exits and safe places. Signs shall identify exits and safe places and be located sufficiently to mark escape/rescue routes and guide people to exits and safe places.

805.3.3 Power failure. Signs that identify exits, safe places and escape/rescue routes shall remain visible in the event of a power failure.

805.3.4 Hazard identification. Signs indicating hazards shall be provided in sufficient locations to notify people before they encounter the hazard.

805.3.5 Accessible building feature signage. Signs shall identify accessible facilities and be located sufficiently to mark accessible routes.

SECTION 806 EMERGENCY NOTIFICATION

806.1 Objective. To provide notification of the need to take some manual action to preserve the safety of occupants or to limit property damage.

806.2 Functional statements.

806.2.1 Occupant notification. Where required, adequate means of occupant notification shall be provided to warn of the presence of a fire or other emergency in sufficient time to enable occupants to take the contemplated action without being exposed to unreasonable risk of injury or death.

806.2.2 Emergency responder notification. Where systems are designed to notify emergency responders, such systems shall indicate the type of emergency and the location of the building. Where buildings are large enough to

expect difficulty in prompt location of the fire or other public emergency, identification of the fire zone of origin shall be provided at the building.

806.3 Performance requirements.

806.3.1 Type of notification. Notification of occupants shall be by means appropriate to the needs of the occupants, the use of the building and the emergency egress strategy employed.

806.3.2 Sleeping occupants. When required by the anticipated use of the building, notification systems shall be capable of alerting sleeping occupants in reasonable time to enable them to reach a safe place before the occurrence of untenable conditions at any point along the primary egress path.