

CHAPTER 10

INTERIOR ENVIRONMENT

SECTION 1001 CLIMATE AND BUILDING FUNCTIONALITY

1001.1 Objective. To safeguard people from illness caused by air temperature and to safeguard people from injury or loss of amenity caused by inadequate activity space.

1001.2 Functional statements. Buildings shall be constructed to provide:

1. Adequately controlled interior temperatures.
2. Adequate activity space for the intended use.

1001.3 Performance requirements.

1001.3.1 Temperature. Habitable spaces, bathrooms and recreation rooms shall be designed to maintain the internal temperature at a level sufficient for the occupants while the space is adequately ventilated.

1001.3.2 Space. Habitable spaces shall have sufficient space for activity, furniture and sanitary needs of the occupants.

SECTION 1002 INDOOR AIR QUALITY

1002.1 Objective. To maintain the habitable spaces of buildings and facilities with an environment that is conducive to the comfort, health and safety of the occupants.

1002.2 Functional statement. Habitable spaces within buildings shall be provided with air that contains sufficient oxygen and limits the levels of moisture and contaminants to levels that are consistent with good health, safety and comfort.

1002.3 Performance requirements.

1002.3.1 Ventilation. Habitable spaces within buildings shall have means of ventilation that maintains air quality at all times that the spaces are occupied and with the maximum number of occupants anticipated.

1002.3.2 Collection and removal. Buildings shall have a means of collecting or otherwise removing the following products from the spaces in which they are generated:

1. Cooking fumes and odors.
2. Excessive water vapor from laundering, utensil washing, bathing and showering.
3. Odors from sanitary and waste storage spaces.
4. Gaseous byproducts and excessive moisture from commercial or industrial processes.

5. Poisonous fumes and gases.

6. Airborne particles.

7. Products of combustion.

8. Off-gases from building materials, fixtures and contents.

1002.3.3 Building materials. Building materials that release quantities of contaminants that cannot be maintained at safe levels shall not be used.

1002.3.4 Contaminated air. Contaminated air shall be disposed of in a way that avoids creating a nuisance or hazard to people and other property.

1002.3.5 Sufficient supply air. The quantity of air supplied for ventilation shall account for the demands of any fixed combustion appliances.

SECTION 1003 AIRBORNE AND IMPACT SOUND

1003.1 Objective. To safeguard people from loss of amenity as a result of excessive noise being transmitted between adjacent tenants or occupancies.

1003.2 Functional statement. Building elements that are common between tenants or occupancies shall be constructed to prevent excessive noise transmission from other tenants or occupancies or common spaces to habitable spaces.

1003.3 Performance requirements.

1003.3.1 Tenant separations. The airborne transmission of sound through tenant separation walls and floors shall be reduced to a level that minimizes its effect on adjacent occupants.

1003.3.2 Floors. The structure-borne transmission of sound through floors shall be reduced to a level that minimizes its effect on adjacent occupants.

SECTION 1004 ARTIFICIAL AND NATURAL LIGHT

1004.1 Objective. To safeguard people from injury or loss of amenity due to lack of adequate lighting.

1004.2 Functional statements.

1004.2.1 Lighting for safe movement. Habitable spaces and means of egress within buildings shall be provided with adequate artificial lighting to enable safe movement.

1004.2.2 General lighting. Adequate natural or artificial light shall be provided in all habitable spaces.

1004.3 Performance requirements.

1004.3.1 Illumination. Adequate illumination shall be provided appropriate to the use and occupancy of the habitable spaces and means of egress served.

1004.3.2 Natural light. Natural light shall provide a luminance appropriate to the use and occupancy of the habitable spaces served.