1307.0095 CHAPTER 30 OF THE INTERNATIONAL BUILDING CODE; ELEVATORS AND CONVEYING SYSTEMS.

Subpart 1. **IBC Section 3001, General.** IBC Section 3001 is amended to read as follows:

3001.1 Scope. This chapter governs the design, construction, installation, alteration, and repair of elevators and conveying systems and their components.

3001.2 Referenced standards. Except as otherwise provided by applicable law, the design, construction, installation, alteration, repair, and maintenance of elevators and conveying systems and their components shall conform to Minnesota Rules, chapter 1307.

3001.3 Accessibility. Passenger elevators required to be accessible by the 2006 IBC, Chapter 11, shall conform to Minnesota Rules, chapter 1341.

3001.4 Change in use. A change in use of an elevator from freight to passenger, passenger to freight, or from one freight class to another freight class shall comply with Minnesota Rules, chapter 1307.

Subp. 2. **IBC Section 3002, Hoistway enclosures.** IBC Section 3002 is amended to read as follows:

3002.1 Hoistway enclosure protection. Elevators, dumbwaiters, and other hoistway enclosures shall be shaft enclosures complying with Section 707.

3002.1.1 Opening protectives. Openings in hoistway enclosures shall be protected as required in Chapter 7.

Exception: The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I Emergency Recall Operation.

3002.1.2 Hardware. Delete this section in its entirety.

3002.2 Number of elevator cars in a hoistway. Where four or more elevator cars serve all or the same portion of a building, the elevators shall be located in at least two separate hoistways. Not more than four elevator cars shall be located in any single hoistway enclosure.

3002.3 Emergency signs. An approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall be as illustrated in ASME A17.1-2004; Appendix O. The emergency sign shall not be required for elevators that are part of an accessible means of egress complying with Section 1007.4.

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above grade plane or four or more stories below grade

plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 2133.5 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than three inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

Exception: When approved by the authority having jurisdiction, passenger elevators to be installed in existing buildings where existing hoistway configuration or technical infeasibility prohibits strict compliance with the minimum inside car size, the minimum inside car area may be reduced to not less than 48 inches by 48 inches.

3002.5 Emergency doors. Where an elevator is installed in a single blind hoistway or on the outside of a building, there shall be installed in the blind portion of the hoistway or blank face of the building, an emergency door in accordance with ASME A17.1-2004.

3002.6 Prohibited doors. Doors, other than hoistway doors, elevator car doors, and smoke control doors, when required, shall be prohibited at the point of access to an elevator car. Smoke control doors shall be:

1. held open during normal operation by a "hold open" device that is activated for closure by fire or smoke sensing devices located in the elevator lobby or its immediate vicinity; and

2. readily openable from the car side without a key, tool, special knowledge, or effort when closed.

3002.7 Common enclosure with stairway. Elevators shall not be in a common shaft enclosure with a stairway.

3002.8 Glass in elevator enclosures. Glass in elevator enclosures shall comply with Section 2409.1.

Subp. 3. **IBC Section 3003, Emergency operations.** IBC Section 3003 is amended to read as follows:

3003.1 Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall be in accordance with Sections 3003.1.1 through 3003.1.4.

3003.1.1 Manual transfer. Standby power shall be manually transferable to all elevators in each bank.

3003.1.2 One elevator. Where only one elevator is installed, the elevator shall automatically transfer to standby power within 60 seconds after failure of normal power.

3003.1.3 Two or more elevators. Where two or more elevators are controlled by a common operating system, all elevators shall automatically transfer to standby power within 60 seconds after failure of normal power where the standby power source is of sufficient capacity to operate all elevators at the same time. Where the standby power source is not of sufficient capacity to operate all elevators at the same time, the elevators shall operate according to ASME A17.1-2004 2.27.2.

3003.1.4 Venting. Where standby power is connected to elevators, machine room ventilation or air conditioning, if provided, shall be connected to the standby power source.

3003.2 Firefighters' emergency operation. Elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1-2004.

Subp. 4. **IBC Section 3004, Hoistway venting.** IBC Section 3004 is amended to read as follows:

3004.1 Vents required. Hoistways of elevators and dumbwaiters having a travel of 25 feet or more shall be provided with a means for venting smoke and hot gases to the outer air in case of fire.

Exceptions:

1. In occupancies of other than Groups R-1, R-2, I-1, I-2, as defined in Minnesota Rules, chapter 1305, and similar occupancies with overnight sleeping quarters, venting of hoistways is not required when the building is equipped throughout with an approved automatic sprinkler system installed in accordance with the 2006 International Building Code, Section 903.3.1.1 or 903.3.1.2 and similar local codes.

2. Sidewalk elevator hoistways are not required to be vented.

3004.2 Location of vents. Vents shall be located directly (directly is defined as being as close as technically possible to the top of the hoistway including the supporting structures located at the top of the hoistway) below the top of the hoistway and shall be open either directly to the outer air or through noncombustible ducts to the outer air. Noncombustible ducts shall be permitted to pass through the elevator machine room provided the portions of the ducts located outside the hoistway or machine room are enclosed by construction having not less than the fire protection rating required for the hoistway. Holes in the machine room floors for the passage of ropes, cables, or other moving elevator equipment shall be limited so as not to provide greater than two inches (51 mm) of clearance on all sides.

1. Protective grilles must be installed at vent openings in the top of the hoistway to prevent people from falling into the hoistway. The protective grilles must be securely mounted to the building structure.

2. Interconnection of separate hoistways for the purpose of venting is prohibited.

3. Vents must be operated by a keyed manual remote device and equipped with a remote visual LED-type indicator device for indicating the full open position.

a. The indicator device shall be activated by a device having a direct mechanical connection to vent shutters.

b. The keyed manual remote control device shall have two positions: vent closed and vent open. The markings for both positions shall be permanent. The key shall be removable only in the closed position.

c. The keyed manual remote control device must be located adjacent to the fire control panel, if provided, or in the elevator lobby of a designated floor. The designated floor shall be approved by the authority having jurisdiction.

d. The keyed manual remote control device may not be co-located with any operating devices for the elevators.

3004.3 Area of vents. Except as provided for in Section 3004.3.1, the area of the vents shall not be less than 3-1/2 percent of the area of the hoistway nor less than three square feet (0.28 m^2) for each elevator car and not less than 3-1/2 percent nor less than 0.5 square foot (0.047 m^2) for each dumbwaiter car in the hoistway, whichever is greater.

3004.3.1 Reduced vent area. Where mechanical ventilation conforming to the International Mechanical Code is provided, a reduction in the required vent area is allowed, provided that all of the following conditions are met:

1. The occupancy is not in Group R-1, R-2, I-1, or I-2, as defined in chapter 1305, or of a similar occupancy with overnight sleeping quarters.

2. The vents required by Section 3004.2 do not have outside exposure.

3. The hoistway does not extend to the top of the building.

4. The hoistway and machine room exhaust fan is automatically reactivated by thermostatic means.

5. Equivalent venting of the hoistway is accomplished.

3004.4 Plumbing and mechanical systems. Delete this section in its entirety.

Subp. 5. **IBC Section 3005, Conveying systems.** IBC Section 3005 is amended to read as follows:

3005.1 General. Escalators, moving walks, conveyors, personnel hoists, and material hoists shall comply with Minnesota Rules, chapter 1307.

3005.2 Escalators and moving walks. Escalators and moving walks shall be constructed of approved noncombustible and fire-retardant materials. This requirement shall not apply

to electrical equipment, wiring, wheels, handrails, and the use of 1/28-inch (0.9 mm) wood veneers on balustrades backed up with noncombustible materials.

3005.2.1 Enclosure. Escalator floor openings shall be enclosed with shaft enclosures complying with Section 707.

3005.2.2 Escalators. Where provided in below-grade transportation stations, escalators shall have a clear width of 32 inches (815 mm) minimum.

Exception: The clear width is not required in existing facilities undergoing alterations.

3005.3 Conveyors. Conveyors and conveying systems shall comply with ASME B20.1-2003.

3005.3.1 Enclosure. Conveyors and related equipment connecting successive floors or levels shall be enclosed with shaft enclosures complying with Section 707.

3005.3.2 Conveyor safeties. Power-operated conveyors, belts, and other material-moving devices shall be equipped with automatic limit switches that will shut off the power in an emergency and automatically stop all operation of the device.

3005.4 Personnel and material hoists. Personnel and material hoists shall be designed utilizing an approved method that accounts for the conditions imposed during the intended operation of the hoist device. The design shall include, but is not limited to, anticipated loads, structural stability, impact, vibration, stresses, and seismic restraint. The design shall account for the construction, installation, operation, and inspection of the hoist tower, car, machinery and control equipment, guide members, and hoisting mechanism. Additionally, the design of personnel hoists shall include provisions for field testing and maintenance that will demonstrate that the hoist device functions in accordance with the design. Field tests shall be conducted upon the completion of an installation or following a major alteration of a personnel hoist.

Subp. 6. **IBC Section 3006, Machine rooms.** IBC Section 3006 is amended to read as follows:

3006.1 Access. An approved means of access shall be provided to elevator machine rooms and overhead machinery spaces.

3006.2 Venting. Delete this section in its entirety.

3006.3 Pressurization. The elevator machine room serving a pressurized elevator hoistway shall be pressurized upon activation of a heat or smoke detector located in the elevator machine room.

3006.4 Machine rooms and machinery spaces. Elevator machine rooms and machinery spaces shall be enclosed with construction having a fire-resistance rating not less than the required rating of the hoistway enclosure served by the machinery. Openings shall be

protected with assemblies having a fire-resistance rating not less than that required for the hoistway enclosure doors.

3006.5 Shunt trip. Delete this section in its entirety.

3006.6 Plumbing systems. Delete this section in its entirety.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748; 326B.101; 326B.106; 326B.13; 326B.187*

History: *31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4*

Published Electronically: *February 23, 2009*