

CTC MEETING # 22
December 1 – 2, 2011
CTC Elevator Lobby Study Group & CTC # 22 NOTES

Meeting notes in red

TOPICS ADDRESSED BY PROPOSALS

- 1. TG2 Proposals**
 - a. Proposal 1 - Implementation Of Recommendations**
 - b. Proposal 2 - Rational Analysis Complex Buildings**

- 2. TG3 Proposals**
 - a. Proposal 1 – Exit Access Through Enclosed Elevator Lobbies**
 - b. Proposal 2 – Direct Access**
 - c. Proposal 3 – Conflicting Doors And Signage**

- 3. TG4 Proposals**
 - A. Proposal 1 - Lobby Requirements Chapter 30**
 - B. Proposal 2 - Exceptions To Permissions**
 - c. Proposal 3 - Lobby Size Clarification**
 - d. Proposal 4 - Smoke Barrier Continuity**
 - e. Proposal 5 - Area Of Refuge Correlation**
 - f. Proposal 6 - Corridor Smoke And Draft Assembly Requirements**
 - g. Proposal 7 - Terminology For Elevator Lobbies**
 - h. Proposal 8- Links To 3008 And 3007**
 - i. Proposal 9 - Exception exterior elevators**
 - j. Proposal 11 Hoistway height versus building height**

- 4. TG Risk Assessment Proposal**

TG2 PROPOSALS

PROPOSAL 1

IMPLEMENTATION OF RECOMMENDATIONS

713.14.1 General. Enclosed elevator lobbies shall be provided in accordance with Section 713.14.2 for hoistways exceeding 420 feet (? mm) in height. The height of the hoistway shall be measured from the top of the lowest finished floor to the top of the highest finished floor of the floors served by the hoistway.

The height of elevator hoistways sharing a common atmosphere by elevator door openings at a common floor or by openings between hoistways shall be measured from the top of the lowest finished floor to the top of the highest finished floor of the floors served by the non separated hoistways.

Exceptions:

1. The height of elevator hoistways sharing a common atmosphere **only** at a level of exit discharge shall be permitted to be measured separately.
2. The height of elevator hoistways with openings at a common floor shall be permitted to be measured separately where the hoistways are separated by at least 2 sets of doors or a revolving door that maintains a separation of the **atmosphere environments**.

713.14.2~~4~~ Elevator lobby requirements. Where an enclosed elevator lobby is required they shall be provided at each floor hoistway entrance ~~where an elevator shaft enclosure connects more than three stories~~. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by *fire partitions*. In addition to the requirements in Section 708 for *fire partitions*, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for *corridor* walls and penetrations of the elevator lobby enclosure by air ducts and transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one *means of egress* complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the level(s) of *exit discharge*, provided the level(s) of *exit discharge* is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 712 are not required to have enclosed elevator lobbies.

3. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.

~~4. Enclosed elevator lobbies are not required where the building is protected by an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:~~

- ~~—— 4.1 Group I-2 occupancies;~~
- ~~—— 4.2 Group I-3 occupancies, and~~
- ~~4.3 Elevators serving floor levels over 75 feet (22 860 mm) above the lowest level of fire department vehicle access in high-rise buildings.~~

~~54.~~ Smoke partitions shall be permitted in lieu of *fire partitions* to separate the elevator lobby at each floor where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition to the requirements in Section 710 for smoke partitions, doors protecting openings in the smoke partitions shall also comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for *corridors* in accordance with Section 717.5.4.1.

5. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 909.21.

6. Enclosed elevator lobbies are not required where the elevator serves only *open parking garages* in accordance with Section 406.5.

~~**713.14.1.1 Area of refuge.** Areas of refuge shall be provided as required by Section 1007.~~

Reason: This proposal is a technical shift away from what has been termed by the CTC study group “traditional elevator lobbies” as opposed to Fire Service Access Elevators and Occupant evacuation elevators. This shift is based upon background data and a technical analysis produced by the Study Group on Elevator lobbies for the CTC. More specifically this study can be reviewed at the following link. **(not yet available)**

This study reveals based upon sprinkler performance and stack effect that the hazards of floor to floor movement of smoke are minimal until the shafts (hoistways) start becoming very tall. The study looks at sprinkler reliability to better establish that the sprinklers will operate as intended. The recommendations of the study group were used to draft the proposal. The recommendations are as follows:

1. Unsprinklered low- and mid-rise buildings (buildings with an occupied floor less than 55 feet above the lowest level fire department vehicle access or less than 75 feet above the lowest level of fire department access with an occupant load less than 30 on each floor)
 - No enclosed elevator lobbies required for traditional elevators.
 - *Rationale: While fire temperatures can be high, driving smoke and gasses around the building, occupants traveling at the typical rate of about 150*

ft/min over the maximum permitted travel distance of 200 ft can reach the safety of an egress stairway in about 1.3 minutes and can descend to the level of exit discharge in less than five minutes. This is merely an approximation but provides an indication of the amount of time necessary for egress in low and mid rise buildings.

- Sprinklers are required in any building containing Fire service access (3007) and occupant evacuation (3008) elevators so these would not be found in buildings in this category.
2. Sprinklered buildings with occupied floors less than 75 feet to the lowest level of fire department vehicle access :
 - No enclosed elevator lobbies required for traditional elevators
 - *Rationale: In sprinklered buildings fire temperatures are kept low and such buildings have little stack effect. Traditional elevators are not to be used by occupants in fires, so any small infiltration into the hoistway is not significant. Shafts shorter than 75 feet have limited stack effect flows.*
 - Enclosed lobbies required for fire service access (3007) and occupant evacuation (3008) elevators
 - *Rationale: Fire service access and occupant egress elevators need to continue in operation during a fire. Lobbies provide a protected space to stage and to await the elevator and further provide a physical barrier to smoke that might activate a lobby smoke detector and trigger Phase I recall.*
 3. Sprinklered buildings with an occupied floor more than 75 feet to the lowest level of fire department vehicle access but less than 420 feet in building height
 - a. No enclosed elevator lobbies required for traditional elevators.
 - i. *Rationale: In sprinklered buildings fire temperatures are kept low and such buildings have little stack effect. Traditional elevators are not to be used by occupants in fires, so any small infiltration into the hoistway is not significant.*
 - b. Enclosed elevator lobbies required for fire service access (3007) and occupant evacuation (3008) elevators
 - i. *Rationale: Fire service access and occupant egress elevators need to continue in operation during a fire. Lobbies provide a protected space to stage and to await the elevator and further provide a physical barrier to smoke that might activate a lobby smoke detector and trigger Phase I recall.*
 4. Sprinklered buildings more than 420 feet in building height
 - a. Enclosed elevator lobbies or pressurization of the hoistways required for traditional elevators.
 - i. *Rationale: While traditional elevators are not permitted to be used in fires, the shaft height might result in more inadvertent smoke infiltration due to stack effect and spread to remote areas. Enclosed lobbies with smoke tight construction or pressurization of the hoistways will limit infiltration. The threshold of 420 feet has*

been heavily debated and is a difficult issue. The reason this study group chose this number relates indirectly to this issue but indicates a higher level of risk to occupants. More specifically this is the height where it becomes difficult to pump water from the ground (fire department) for standpipes and sprinklers. This therefore is where reliability of water supply becomes more of a concern which can possibly relate to sprinkler performance. Also since it is consistent with additional criteria in the code seemed a reasonable point to transition to more restrictive requirements to compensate for the possible increase in risk level to occupants (egress time) and the possibility for an increase in smoke production and stack effect due to height.

- b. Enclosed elevator lobbies required for fire service access (3007) and occupant evacuation (3008) elevators
 - i. Rationale: Fire service access and occupant egress elevators need to continue in operation during a fire. Lobbies provide a protected space to stage and to await the elevator and further provide a physical barrier to smoke that might activate a lobby smoke detector and trigger Phase I recall.*
- c. EXCEPTION: Hoistways for traditional elevators separated into vertical sections not exceeding 420 feet in height with no communication of the shaft environment between sections shall not require enclosed lobbies or pressurization as long as the following condition is met.
 - i. Where connection of elevator banks is by a transfer corridor, it shall be necessary to pass through at least 2 swinging doors or a revolving door that maintains a separation of the environments to pass from one section to another.
 - ii. Rationale: By breaking shafts into shorter sections and limiting communication of different shaft environments, both stack effect and smoke migration will be limited to the extent that pressurization of the hoistways is not required.*

It is important to note that these recommendations address fire service access elevators as well as occupant evacuation elevators but such elevators are not applicable to Section 713.14. In fact the recommendation of the analysis for those types of elevators was to keep the lobbies as they provide a multitude of functions that differ from traditional elevator lobbies. Additionally it should be noted that although enclosed elevator lobbies have been eliminated in many buildings for “traditional” elevators any building containing occupied floors more than 120 feet from the lowest level of fire department access will be required to have fire service access elevators. Such elevators are required to have a lobby with several integral features. If the elevators of choice are passenger elevators in the building an elevator lobby would be required of more substantial construction as compared to what is required in Section 713.14.1. This same logic would apply in buildings that allow the use of elevators for evacuation in accordance with Section 3008. In that case lobbies would be required for the entire building regardless of building height.

Also note that the reference to area of refuge for elevator lobby requirements has been eliminated as based upon this proposal an elevator lobby would not be required for use as an area of refuge as such buildings would be tall enough that sprinklers would always be required.
Pointer is redundant.

PROPOSAL 2

RATIONAL ANALYSIS COMPLEX BUILDINGS

909.4 Analysis. A rational analysis supporting the types of smoke control systems to be employed, their methods of operation, the systems supporting them and the methods of construction to be utilized shall accompany the submitted *construction documents* and shall include, but not be limited to, the items indicated in Sections 909.4.1 through ~~909.4.6~~ 909.4.6.7. [F]

909.4.1 Stack effect. The system shall be designed such that the maximum probable normal or reverse stack effect will not adversely interfere with the system's capabilities. In determining the maximum probable stack effect, altitude, elevation, weather history and interior temperatures shall be used. [F]

909.4.2 Temperature effect of fire. Buoyancy and expansion caused by the design fire in accordance with Section 909.9 shall be analyzed. The system shall be designed such that these effects do not adversely interfere with the system's capabilities. [F]

909.4.3 Wind effect. The design shall consider the adverse effects of wind. Such consideration shall be consistent with the wind-loading provisions of Chapter 16. [F]

909.4.4 HVAC systems. The design shall consider the effects of the heating, ventilating and air-conditioning (HVAC) systems on both smoke and fire transport. The analysis shall include all permutations of systems status. The design shall consider the effects of the fire on the HVAC systems. [F]

909.4.5 Climate. The design shall consider the effects of low temperatures on systems, property and occupants. Air inlets and exhausts shall be located so as to prevent snow or ice blockage. [F]

909.4.6 Duration of operation. All portions of active or passive smoke control systems shall be capable of continued operation after detection of the fire event for a period of not less than either 20 minutes or 1.5 times the calculated egress time, whichever is ~~less greater.~~ ~~In buildings with multiple smoke control systems that operate independently, such systems shall be capable of continued operation after detection of the fire event for a period of not less than either 60 minutes or 1.5 times the calculated egress time, whichever is less.~~ [F]

909.4.7 Smoke control system interaction. The design shall consider the interaction effects of the operation of multiple smoke control systems. The analysis shall include all permutations of systems status.

Reason: Task Group 2 of the CTC Elevator Lobby group studied the need for elevator lobbies for traditional elevators (Section 713.14.1), FSAE (3007) and Occupant Evacuation elevators (3008). This group conducted a technical analysis that concluded with several recommendations for the need for such lobbies and in addition provided a recommendation on the need for more close analysis of buildings with more extreme complexity. The analysis can be found at the following link: **(not yet available)**

In fact in many cases a traditional elevator lobby was determined to be unnecessary but for unusual building configurations there was more of a concern for interaction of systems and the negative impact of stack effect based upon the findings of the analysis. For instance, highrise buildings may contain an atrium and will also use stair pressurization. In some cases hoistway pressurization could also be used as an option for compliance with the elevator lobby requirements. These are three smoke control systems that when running simultaneously may not work as intended. Below is recommendation 5 from the technical analysis.

5. The design of pressurization systems for elevator hoistways shall be based on a *rational analysis* in accordance with Section 909.4 that utilizes a network model approved by the AHJ and which includes an analysis of possible interactions between building shafts pressurized by different systems, and between pressurized and unpressurized shafts that exceed 420 feet in height. Add guidance to commentary for 909.4 that the rational analysis should show that the pressurization design will maintain the estimated Fractional Effective Dose (FED) below 0.5 and the estimated visibility distance above 25 feet within the stairway for 1.5 times the estimated evacuation time for each of the design fires selected.
 - *Rationale: Taller buildings with more complex flow paths require analysis utilizing a network model that can account for these interacting flow paths. The criteria suggested for commentary represents the standard of practice for a fire hazard analysis performed as the required rational analysis.*

The focus of this proposal is more about the interaction of multiple mechanical smoke control systems by asking for a specific analysis of the interaction of such systems similar to that required for the interaction of HVAC systems. There is also a concern that with multiple mechanical smoke control systems that duration should be increased to account for this complexity. High rise buildings have a tendency for a multitude of systems. The study of hoistway pressurization as an option for compliance with elevator lobby provisions drives the need to understand these interactions as stair pressurization will almost always be present in these buildings as well.

TG3 PROPOSALS

PROPOSAL 1

EXIT ACCESS THROUGH ENCLOSED ELEVATOR LOBBIES

Revise as follows:

713.14.1 Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three *stories*. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by *fire partitions*. In addition to the requirements in Section 708 for *fire partitions*, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for *corridor* walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one *means of egress* complying with Chapter 10 and other provisions within this code. Egress through an elevator lobby shall be permitted in accordance with Section 1014.2 item 5

3007.7 Fire service access elevator lobby. The fire service access elevator shall open into a fire service access elevator lobby in accordance with Sections 3007.7.1 through 3007.7.5. Egress is permitted through the elevator lobby in accordance with Section 1014.2 item 5.

Exception: Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to open into an elevator lobby in accordance with Section 708.14.1.

3008.7 Occupant evacuation elevator lobby. The occupant evacuation elevators shall open into an elevator lobby in accordance with Sections 3008.7.1 through 3008.7.7. Egress is permitted through the elevator lobby in accordance with Section 1014.2 item 5.

Add a new item 5 to section 1014.2:

5. Exit access through an enclosed elevator lobby is permitted. Access to at least one of the required exits shall be ~~accomplished~~ **provided** without travel through the enclosed elevator lobbies required by Sections 713.14.1, 3007 or 3008.

Where the path of exit access travel passes through an enclosed elevator lobby the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.

1018.6 Corridor continuity. Fire-resistance-rated *corridors* shall be continuous from the point of entry to an *exit*, and shall not be interrupted by intervening rooms. Where the path of egress travel within a fire-resistance-rated *corridor* to the *exit* includes travel along unenclosed *exit access stairways* or *ramps*, the *fire resistance-rating* shall be continuous for the length of the *stairway* or *ramp* and for the length of the connecting *corridor* on the adjacent floor leading to the *exit*.

Exceptions:

1. Foyers, lobbies or reception rooms constructed as required for *corridors* shall not be construed as intervening rooms.

2. Enclosed elevator lobbies as permitted by Section 1014.2 item 5 shall not be construed as intervening rooms.

Reason: First the purpose of elevator lobbies is discussed. The code itself does not state what the purpose of a traditional elevator lobby is but historically and to a certain extent from the code commentary there are several purposes that could be concluded.

- Prevent smoke from spreading from the floor of fire origin through the elevator hoistway.
- Protect occupied areas from smoke spread from the elevator hoistway

In the case of FSAEs and Occupant Evacuation elevators there are additional purposes such as providing a staging area for fire fighters, a protected area for occupants awaiting egress and also to delay the automatic activation of phase 1 recall. Note that Both FSAE and Occupant evacuation elevators require direct access to an exit within the lobby.

In terms of occupant evacuation elevators it would not be appropriate to allow a tenant space with all egress paths having to go through the enclosed lobby to get to a stair. The concern is that those occupants will be working against the traffic flow of egress.

Traditional enclosed elevator lobbies are required with a concern for smoke migration. Therefore it would not be appropriate to allow all paths of egress to travel through the enclosed elevator lobbies. In terms of FSAE it was determined that egress through the lobby should be limited in order to reduce the number of occupants that may be located in an area needed for fire fighter staging. Also, such lobbies may have those in wheelchairs awaiting rescue. Therefore, it would not be prudent to allow both paths of egress to pass through the enclosed lobby.

The last sentence of the proposed item 5 also clarifies that if an egress path passes through a lobby with more restrictive construction that the level of construction does not need to be continued to the exit.

The new exception to Section 1018.1 clarifies also that travel is permitted through an enclosed elevator lobby if the enclosed elevator lobby is located in a rated corridor.

PROPOSAL 2

DIRECT ACCESS

Revise as follows:

3007.7.1 Interior exit stairway access. The fire service access elevator lobby shall have direct access from the enclosed elevator lobby to an enclosure for an interior exit stairway.

Exception: Access to an interior exit stairway shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section 716.5.3.

3008.7.1 Interior exit stairway access. The occupant evacuation elevator lobby shall have direct access from the enclosed elevator lobby to an interior exit stairway or ramp.

Exception: Access to an interior exit stairway shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section 716.5.3.

1027.1 General. Exits shall discharge directly to the exterior of the building. The *exit discharge* shall be at grade or shall provide a direct path of egress travel access to grade. The *exit discharge* shall not reenter a building. The combined use of Exceptions 1 and 2 shall not exceed 50 percent of the number and capacity of the required exits.

DIRECT ACCESS. A path of travel from a space to an immediately adjacent space through an opening in the common wall between the two spaces.

Reason: Both FSAE and Occupant Evacuation elevators lobbies call for direct access to the stairway. The term direct access is not necessarily clear in its meaning and could if applied as intended place severe design limitations on some buildings. The intent of this proposal is to set out a viable option for the stairs to be more remotely located from the lobby. A package of requirements that provides fire resistance rated construction and smoke and draft protection is provided. A definition is also provided to clarify the use of the term. Section 1027.1 was revised slightly since the current use of the term “direct access” in that case has a different meaning.

Background sections for the separation requirements are as follows:

708.1 General. The following wall assemblies shall comply with this section.

1. Walls separating *dwelling units* in the same building as required by Section 420.2.
2. Walls separating *sleeping units* in the same building as required by Section 420.2.
3. Walls separating tenant spaces in *covered and open mall buildings* as required by Section 402.4.2.1.
4. Corridor walls as required by Section 1018.1.
5. Elevator lobby separation as required by Section 713.14.1.

708.2 Materials. The walls shall be of materials permitted by the building type of construction.

708.3 Fire-resistance rating. Fire partitions shall have a *fire resistance rating* of not less than 1 hour.

Exceptions:

1. Corridor walls permitted to have a 1/2 hour *fire-resistance rating* by Table 1018.1.
2. *Dwelling unit* and *sleeping unit* separations in buildings of Type IIB, IIIB and VB construction shall have *fire-resistance ratings* of not less than 1/2 hour in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

716.5.3 Door assemblies in corridors and smoke barriers. *Fire door* assemblies required to have a minimum *fire protection rating* of 20 minutes where located in *corridor* walls or *smoke barrier* walls having a *fire-resistance rating* in accordance with Table 716.5 shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:

1. Viewports that require a hole not larger than inch (25 mm) in diameter through the door, have at least a 0.25-inch-thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
2. *Corridor* door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
3. Unprotected openings shall be permitted for *corridors* in multitheater complexes where each motion picture auditorium has at least one-half of its required *exit* or *exit access doorways* opening directly to the exterior or into an *exit* passageway.
4. Horizontal sliding doors in *smoke barriers* that comply with Sections 408.3 and 408.8.4 in occupancies in Group I-3.

716.5.3.1 Smoke and draft control. *Fire door* assemblies shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m³/s per m²) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105.

716.5.3.2 Glazing in door assemblies. In a 20-minute *fire door assembly*, the glazing material in the door itself shall have a minimum fire-protection-rated glazing of 20 minutes and shall be exempt from the hose stream test. Glazing material in any other part of the door assembly, including transom lights and sidelights, shall be tested in accordance with NFPA 257 or UL 9, including the hose stream test, in accordance with Section 716.6.

Background information on the term “direct access” is as follows:

ANCHOR BUILDING. An exterior perimeter building of a group other than H having **direct access** to a *covered or open mall building* but having required *means of egress* independent of the mall.

405.4.3 Elevators. Where elevators are provided, each compartment shall have **direct access** to an elevator. Where an elevator serves more than one compartment, an elevator lobby shall be provided and shall be separated from each compartment by a *smoke barrier* in accordance with Section 709. Doors shall be gasketed, have a drop sill and be automatic-closing by smoke detection in accordance with Section 716.5.9.3.

407.4.1 Direct access to a corridor. Habitable rooms in Group I-2 occupancies shall have an *exit access* door leading directly to a *corridor*.

505.2.3 Openness. A *mezzanine* shall be open and unobstructed to the room in which such *mezzanine* is located except for walls not more than 42 inches (1067 mm) in height, columns and posts.

Exceptions:

1. *Mezzanines* or portions thereof are not required to be open to the room in which the *mezzanines* are located, provided that the *occupant load* of the aggregate area of the enclosed space is not greater than 10.
2. A *mezzanine* having two or more *means of egress* is not required to be open to the room in which the *mezzanine* is located if at least one of the *means of egress* provides **direct access** to an *exit* from the *mezzanine* level.
3. ...

1007.6 Areas of refuge. Every required *area of refuge* shall be *accessible* from the space it serves by an *accessible means of egress*. The maximum travel distance from any *accessible* space to an *area of refuge* shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required *area of refuge* shall have **direct access** to a *stairway* complying with Sections 1007.3 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an *area of refuge*, the shaft and lobby shall comply with Section 1022.10 for smokeproof enclosures except where the elevators are in an *area of refuge* formed by a *horizontal exit* or smoke barrier.

1007.7.2 Outdoor facilities. Where *exit access* from the area serving outdoor facilities is essentially open to the outside, an exterior area of assisted rescue is permitted as an alternative to an *area of refuge*. Every required exterior area of assisted rescue shall have **direct access** to an *interior exit stairway*, exterior *stairway*, or elevator serving as an *accessible means of egress* component. The exterior area of assisted rescue shall comply with Sections 1007.7.3 through 1007.7.6 and shall be provided with a two-way communication system complying with Sections 1007.8.1 and 1007.8.2.

1027.1 General. *Exits* shall discharge directly to the exterior of the building. The *exit discharge* shall be at grade or shall provide **direct access** to grade. The *exit discharge* shall not reenter a building. The combined use of Exceptions 1 and 2 shall not exceed 50 percent of the number and capacity of the required exits.

1105.1.1 Parking garage entrances. Where provided, **direct access** for pedestrians from parking structures to buildings or facility entrances shall be *accessible*.

1105.1.2 Entrances from tunnels or elevated walkways. Where **direct access** is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one entrance to the building or facility from each tunnel or walkway shall be *accessible*.

TABLE 2902.1

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted where such room is provided with **direct access** from each patient sleeping unit and with provisions for privacy.

3007.7.1 Access. The fire service access elevator lobby shall have **direct access** to an enclosure for an *interior exit stairway*.

3008.7.1 Access. The occupant evacuation elevator lobby shall have **direct access** to an *interior exit stairway* or *ramp*.

3109.4.1.8 Dwelling wall as a barrier. Where a wall of a *dwelling* serves as part of the barrier, one of the following shall apply:

1. Doors with **direct access** to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be *listed* and labeled in accordance with UL 2017. In dwellings not required

to be *Accessible units, Type A units or Type B units*, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be *Accessible units, Type A units or Type B units*, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.

PROPOSAL 3

CONFLICTING DOORS AND SIGNAGE

Add new text as follows:

1022.10 Elevator Lobby identification signs. At landings in interior exit stairways where two or more doors lead to the floor level, the door leading to the elevator lobby shall be identified by signage located on the door or directly adjacent to the door stating "Elevator Lobby." Signage shall be in accordance with Section 1022.9.1 items 4, 5 and 6.

Reason: This issue is more specific to FSAE and the potential for multiple required doors. The code currently requires direct access from the lobby to a stairway and additionally the same stairway must have a door that opens directly to the floor based upon standpipe access issues (i.e. limiting the number of doors that need to be open to lay hose during a fire). Fire fighters and occupants need to readily determine which door leads to the elevator lobby therefore signage is necessary to assist in wayfinding. The elevator lobby could be for fire service access elevators (FSAE) or occupant evacuation elevators. Since the signage need can apply to either type of elevator lobby and is related to interior exit stairways the requirements are proposed in Section 1022.

TG4 PROPOSALS

11/22/2011

PROPOSAL 1

LOBBY REQUIREMENTS CHAPTER 30

713.14 Elevator, dumbwaiter and other hoistways. Elevator, dumbwaiter and other hoistway enclosures shall be constructed in accordance with Section 713 and Chapter 30.

SECTION 3007

ELEVATOR LOBBIES

3007.1 General. Enclosed elevator lobbies shall be provided in accordance with the following sections.

1. Section 3007.2 based upon number of stories connected by a shaft enclosure.
2. Section 405.4.3 for underground buildings.
3. Sections 407.5.3 and 711.9 for Group I-2 occupancies.
4. Section 1007.4 for areas of refuge.
5. Section 3008.7.2 for fire service access elevators.
6. Section 3009.7.2 for occupant evacuation elevators.

3007.2-713.14.1 Enclosed elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by fire partitions. In addition to the requirements in Section 708 for fire partitions, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for corridor walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 712.1 are not required to have enclosed elevator lobbies.
3. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.

4. Enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:

- 4.1. Group I-2 occupancies;
- 4.2. Group I-3 occupancies; and
- 4.3. Elevators serving floor levels over 75 feet above the lowest level of fire department vehicle access in high-rise buildings.

5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

In addition to the requirements in Section 710 for smoke partitions, doors protecting openings in the smoke partitions shall also comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for corridors in accordance with Section 717.5.4.1.

6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 909.21.

7. Enclosed elevator lobbies are not required where the elevator serves only open parking garages in accordance with Section 406.5.

Re-number current Sections 3007 and 3008 accordingly.

Reason: This proposal is editorial in nature but is done with the hope of keeping the lobby requirements easier to apply and more consistent in the future. Section 405.4.3 contains the requirements for elevator lobbies in underground buildings. Sections 407.5.3 and 711.9 contain the requirements for elevator lobbies for the protection of horizontal assemblies in Group I-2 occupancies. The text in Section 713.14.1.1 has been relocated to new Section 3007.1 and editorially revised for consistency. Sections 3007.7.2 and 3008.7.2 (renumbered to 3008.7.2 and 3009.7.2 in this proposal) currently house the requirements for fire service access elevators and occupant evacuation elevators which have lobby construction requirements associated with them. New Section 3007.1 in this proposal now simply references users to the appropriate sections within the code for elevator lobby requirements. This way code users will be clear that there are several types of lobbies and that more than one set of requirements and triggers may apply to them. This also assists with correlation with ASME A17.1. (responsibility of committees needs to be addressed. Suggest that FS still address this new section 3007).

PROPOSAL 2

EXCEPTIONS TO PERMISSIONS

713.14 Elevator, dumbwaiter and other hoistways. Elevator, dumbwaiter and other hoistway enclosures shall be constructed in accordance with Section 713 and Chapter 30.

713.14.1 Elevator hoistway door opening protection required. Elevator hoistway door openings shall be protected in accordance with Section 713.14.2 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and where any of the following conditions apply.

1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2
2. The building contains a Group I-2 occupancy;
3. The building contains a Group I-3 occupancy;
4. The building is a high rise building and the elevator serves floor levels over 75 feet above the lowest level of fire department vehicle access.

Exceptions:

1. Protection of elevator hoistway door openings is not required where the elevator serves only open parking garages in accordance with Section 406.5.
2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.

713.14.12 Elevator hoistway door opening protection options Lobby. Where Section 713.14.1 requires protection of the elevator hoistway door opening, one of the following protection options shall be provided.

~~1.-An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The shall to separate the elevator hoistway shaft enclosure doors from each floor by fire partitions in accordance with Section 708. In addition, to the requirements in Section 708 for fire partitions, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for corridor walls, and Penetrations of the enclosed elevator lobby enclosure by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.~~

~~Exceptions:~~

- ~~1. Enclosed elevator lobbies are not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.~~
- ~~2. Elevators not required to be located in a shaft in accordance with Section 712.1 are not required to have enclosed elevator lobbies.~~

2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by smoke partitions in accordance with Section 710 where

the building is equipped throughout with an automatic sprinkler system installed in accordance with 903.3.1.1 or 903.3.1.2. In addition, doors protecting openings in the smoke partitions shall comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

~~3. Enclosed elevator lobbies are not required where~~ An additional doors shall be are provided at ~~the each elevator~~ hoistway door opening in accordance with Section 3002.6. Such door shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.

~~4. Enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:~~

~~4.1. Group I-2 occupancies;~~

~~4.2. Group I-3 occupancies; and~~

~~4.3. Elevators serving floor levels over 75 feet above the lowest level of fire department vehicle access in high-rise buildings.~~

~~5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~

~~In addition to the requirements in Section 710 for smoke partitions, doors protecting openings in the smoke partitions shall also comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for corridors in accordance with Section 717.5.4.1.~~

~~4.6. Enclosed Elevator lobbies are not required where the~~ The elevator hoistway is ~~shall be~~ pressurized in accordance with Section 909.21.

713.14.3 Means of egress. Elevator lobbies shall be provided with at least one means of egress complying with Chapter 10 and other provisions in this code.

713.14.41 Areas of refuge. Areas of refuge shall be provided as where required in Section 1007.

Reason: The purpose of this code change is editorial in nature and seeks only to convert the elevator lobby section to one focused on making the current exceptions equal in stature in the code to the main requirement for a lobby. This also removes some of the confusion with having requirements within some of the exceptions. This proposal focuses on the protection of the elevator opening into the shaft enclosure versus requiring an elevator lobby. This allows the other exceptions to become more clear and equal design options.

PROPOSAL 3

LOBBY SIZE CLARIFICATION

3007.7.4 Lobby size. Regardless of the number of fire service access elevators served by the same elevator lobby, each the enclosed fire service access elevator lobby shall be a minimum of 150 square feet (14 m²) in an area with a minimum dimension of 8 feet (2440 mm).

Reason: This proposal is to clarify that it was not the intent to require additional space for each additional fire service access elevator provided. The initial intent of the size requirement was merely to provide sufficient space to conduct fire fighting operations. The 2012 IBC has a new requirement for a second fire service access elevator which was not related to the section on lobby size. This second elevator was initially discussed as being needed for additional capacity but when discussed on the floor was noted as being more for redundancy.

The current size requirement is the result of a successful Public Comment to Code Change G197-07/08 submitted by the proponent representing the Los Angeles Fire Department. The proponent originally wanted 50 square feet for each additional elevator car served by the lobby but that was disapproved by the General Committee. The Public Comment deleted the 50 square feet and added the minimum dimension requirement of 8 feet. A detailed rationale for that approach can be found in the Commenter's Reason submitted with the Public Comment. So this proposed code change implements and clarifies the intent of the Public Comment that was approved by the ICC governmental voting representatives.

PROPOSAL 4

SMOKE BARRIER CONTINUITY

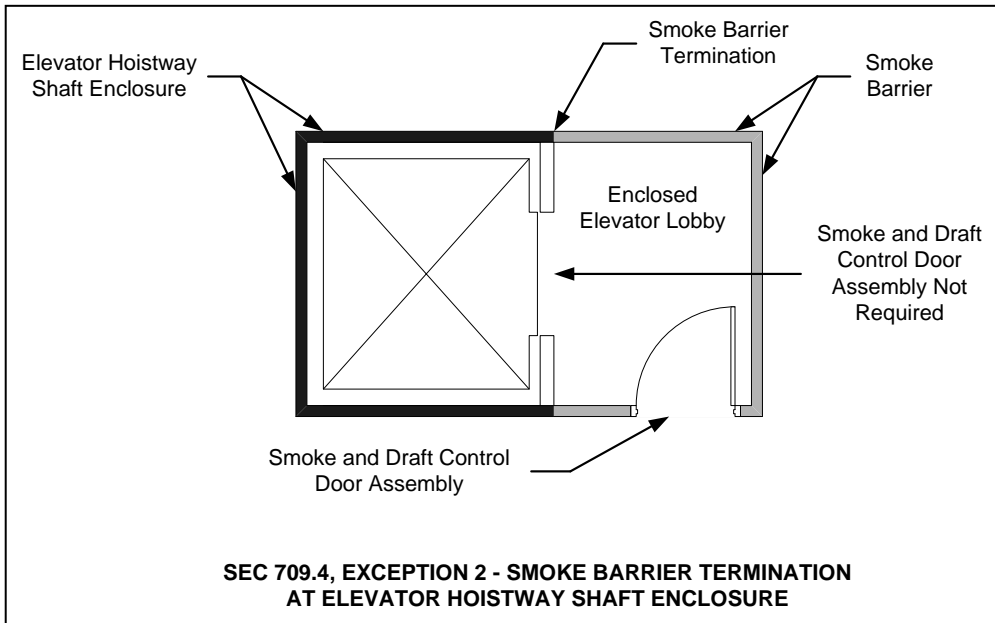
709.4 Continuity. *Smoke barriers* shall form an effective membrane continuous from outside wall to outside wall and from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above, including continuity through concealed spaces, such as those found above suspended ceilings, and interstitial structural and mechanical spaces. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall or floor supported in buildings of other than Type IIB, IIIB or VB construction.

Exceptions:

1. Smoke-barrier walls are not required in interstitial spaces where such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by the smoke-barrier walls.
2. Smoke barriers used ~~for to enclose~~ elevator lobbies in accordance with Section 405.4.3, 1007.6.2, 3007.7.2 or 3008.7.2 shall be permitted to terminate at the elevator hoistway shaft enclosure. not required to extend from outside wall to outside wall. A smoke and draft control door assembly as specified in Section 716.5.3.1 shall not be required at each elevator hoistway door opening.
3. Smoke barriers used for areas of refuge in accordance with Section 1007.6.2 are not required to extend from outside wall to outside wall.

Reason: Provisions are necessary to clarify that opening protection at the hoistway opening is not necessary when an enclosed elevator lobby is provided in accordance with Section 405.4.3, 3007.7.2, or 3008.7.2. An enclosed elevator lobby protects the hoistway from smoke migration, therefore the hoistway is already protected. In addition the shaft walls provide sufficient smoke and draft protection to allow the smoke barriers to terminate at those walls.

For Proposal 4:



PROPOSAL 5

AREA OF REFUGE CORRELATION

1007.6 Areas of refuge. Every required area of refuge shall be accessible from the space it serves by an accessible means of egress.

1007.6.1 Travel distance. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1.

1007.6.2 Stairway or elevator access. Every required area of refuge shall have direct access to a stairway ~~within an exit enclosure~~ complying with Sections 1007.3 and 1022 or an elevator complying with Section 1007.4.

~~Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1022.9 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier.~~

1007.6.23 Separation. Each *area of refuge* shall be separated from the remainder of the story by a *smoke barrier* complying with Section 709 or a *horizontal exit* complying with Section 1025. Each *area of refuge* shall be designed to minimize the intrusion of smoke.

Exception: *Areas of refuge* located within an enclosure for *exit access stairways* or *interior exit stairways* complying with Section 1009.3 or Section 1022.

1007.6.35 Two-way communication. *Areas of refuge* shall be provided with a two-way communication system complying with Sections 1007.8.1 and 1007.8.2.

Reason: This section currently requires that when an elevator lobby is used as an area of refuge that the lobby and the hoistway be protected as a smokeproof enclosure. Reference to the smoke proof enclosure requirements seemed inappropriate as they are focused upon stairs and would not be practical to apply to elevator lobbies. For instance it is unclear if an elevator lobby would be required to have a vestibule. Also if the pressurization option is chosen the criteria and requirements are focused upon stairs not elevator hoistway pressurization. The solution was to simply rely on the separation required for areas of refuge in general as that was the original intent of the requirement.

PROPOSAL 6

CORRIDOR SMOKE AND DRAFT ASSEMBLY REQUIREMENTS

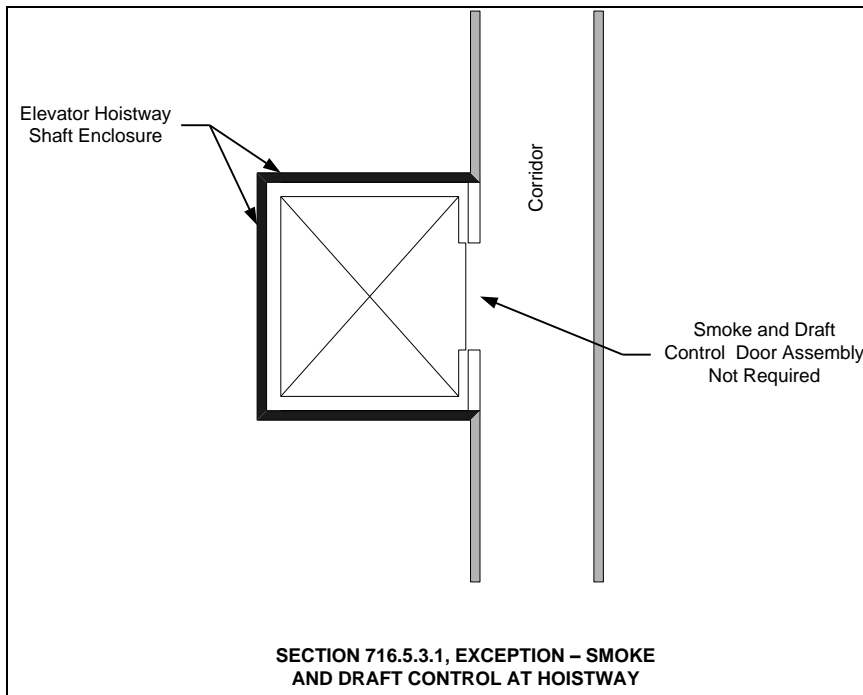
Revise as follows:

716.5.3.1 Smoke and draft control. *Fire door* assemblies shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot ($0.01524 \text{ m}^3/\text{s} \cdot \text{m}^2$) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105.

Exception: Where enclosed elevator lobbies are not required by Section 713.14.1, elevator hoistway doors opening into a corridor are not required to meet the requirements for a smoke and draft control door assembly.

Reason: This proposal is intended to clarify that when an elevator lobby is not required in accordance with Section 713.14.1 that smoke and draft protection is not required when the hoistway opens into a rated corridor. See figure below. Section 713.14.1 is based upon number of stories and not the fact that such elevators open onto a rated corridor so it is not entirely clear how the code is currently written that this was the intent. The following are the sections that are relevant to this issue and which demonstrate how such confusion could occur. The lobby provisions are independent from the corridor provisions.

For Proposal 6:



713.14 Elevator, dumbwaiter and other hoistways. Elevator, dumbwaiter and other hoistway enclosures shall be constructed in accordance with Section 713 and Chapter 30.

713.14.1 Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three *stories*. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by *fire partitions*. In addition to the requirements in Section 708 for *fire partitions*, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for *corridor* walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one *means of egress* complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the level(s) of *exit discharge*, provided the level(s) of *exit discharge* is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 712.1 are not required to have enclosed elevator lobbies.
3. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.
4. Enclosed elevator lobbies are not required where the building is protected by an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:
 - 4.1. Group I-2 occupancies;
 - 4.2. Group I-3 occupancies; and
 - 4.3. Elevators serving floor levels over 75 feet above the lowest level of fire department vehicle access in high-rise buildings.

5. Smoke partitions shall be permitted in lieu of *fire partitions* to separate the elevator lobby at each floor where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition to the requirements in Section 710 for smoke partitions, doors protecting openings in the smoke partitions shall also comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 909.21.
7. Enclosed elevator lobbies are not required where the elevator serves only *open parking garages* in accordance with Section 406.3.

713.14.1.1 Areas of refuge. Areas of refuge shall be provided as required in Section 1007.

SECTION 1018 CORRIDORS

1018.1 Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1018.1. The *corridor walls required to be fire-resistance rated shall comply with Section 709 for fire partitions.*

Exceptions:

1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. A *fire-resistance rating* is not required for *corridors* contained within a dwelling or sleeping unit in an occupancy in Group R.
3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.
4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1015.1.
5. Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior wall where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

SECTION 708 FIRE PARTITIONS

708.1 General. The following wall assemblies shall comply with this section.

1. Walls separating *dwelling units* in the same building as required by Section 420.2.
2. Walls separating *sleeping units* in the same building as required by Section 420.2.
3. Walls separating tenant spaces in *covered mall buildings* as required by Section 402.7.2.
4. Corridor walls as required by Section 1018.1.
5. Elevator lobby separation as required by Section 713.14.1.

708.2 Materials. The walls shall be of materials permitted by the building type of construction.

708.3 Fire-resistance rating. Fire partitions shall have a *fire-resistance rating* of not less than 1 hour.

Exceptions:

1. Corridor walls permitted to have a $1/2$ hour fire-resistance rating by Table 1018.1.

2. Dwelling unit and sleeping unit separations in buildings of Type IIB, IIIB and VB construction shall have fire-resistance ratings of not less than $1/2$ hour in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

708.6 Openings. Openings in a fire partition shall be protected in accordance with Section 716.

SECTION 710 SMOKE PARTITIONS

710.1 General. Smoke partitions installed as required elsewhere in the code shall comply with this section.

710.5 Openings. Openings in smoke partitions shall comply with Sections 710.5.1 and 710.5.2.

710.5.1 Windows. Windows in smoke partitions shall be sealed to resist the free passage of smoke or be automatic-closing upon detection of smoke.

710.5.2 Doors. Doors in smoke partitions shall comply with Sections 710.5.2.1 through 710.5.2.3.

710.5.2.1 Louvers. Doors in smoke partitions shall not include louvers.

710.5.2.2 Smoke and draft control doors. Where required elsewhere in the code, doors in smoke partitions shall meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot ($0.015424 \text{ m}^3/(\text{s} \cdot \text{m}^2)$) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature test and the elevated temperature exposure test. Installation of smoke doors shall be in accordance with NFPA 105.

SECTION 716 OPENING PROTECTIVES

716.1 General. Opening protectives required by other sections of this code shall comply with the provisions of this section.

716.5 Fire door and shutter assemblies. Approved fire door and fire shutter assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Section 716.5.1, 716.5.2 or 716.5.3 and the fire protection rating indicated in Table 716.5. Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.5.6. Fire door assemblies and shutters shall be installed in accordance with the provisions of this section and NFPA 80.

Exceptions:

1. Labeled protective assemblies that conform to the requirements of this section or UL 10A, UL 14B and UL 14C for tin-clad fire door assemblies.

2. Floor fire door assemblies in accordance with Section 711.8.

TABLE 716.5 OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS.

TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE	FIRE RATED GLAZING MARKING DOOR VISION PANEL ^e	MINIMUM SIDELIGHT/TRANSOM ASSEMBLY RATING (hours)	FIRE RATED GLAZING MARKING SIDELITE/TRANSOM PANEL
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TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE	FIRE RATED GLAZING MARKING DOOR VISION PANEL ^e	MINIMUM SIDELIGHT/TRANSOM ASSEMBLY RATING (hours)	FIRE RATED GLAZING MARKING SIDELITE/TRANSOM PANEL
Fire partitions: Corridor walls	0.5	1/3 ^b	Maximum size tested	D-20	1/3	D-H- OH-20

716.5.3 Door assemblies in corridors and smoke barriers. *Fire door* assemblies required to have a minimum *fire protection rating* of 20 minutes where located in *corridor walls* or *smoke barrier walls* having a *fire-resistance rating* in accordance with Table 716.5 shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:

1. Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have at least a 0.25-inch-thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
2. *Corridor* door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
3. Unprotected openings shall be permitted for *corridors* in multitheater complexes where each motion picture auditorium has at least one-half of its required *exit* or *exit access doorways* opening directly to the exterior or into an *exit* passageway.
4. Horizontal sliding doors in *smoke barriers* that comply with Sections 408.3 and 408.8.4 in occupancies in Group I-3.

PROPOSAL 7

TERMINOLOGY FOR ELEVATOR LOBBIES

Add new definitions as follows:

ELEVATOR LOBBY. A space (enclosed or unenclosed) in front of the elevator hoistway opening for access to an elevator.

Reason: There is often confusion with the term lobby versus elevator lobby . This provides a specific definition for an elevator lobby and also clarifies that lobbies can be open or enclosed. Often the term elevator lobby is used to simply describe the place where people enter or exit a lobby and is not necessarily an enclosed space.

PROPOSAL 8

LINKS TO 3008 AND 3007

713.14.1.1 Areas of refuge. Where an area of refuge is required and an enclosed elevator lobby is provided to serve as an area of refuge, the enclosed elevator lobby shall comply with as required in Section 1007.6.

713.14.1.2 Fire Service Access Elevators. Where fire service access elevators are provided, enclosed elevator lobbies shall comply with Section 3007.

713.14.1.3 Occupant Evacuation Elevators. Where occupant evacuation elevators are provided, enclosed elevator lobbies shall comply with Section 3008.

713.14.1.4 Underground buildings. Where enclosed elevator lobbies are required for underground buildings such lobbies shall comply with Section 405.4.3.

713.14.1.5 Group I-2 occupancies. Enclosed elevator lobbies required in Group I-2 Occupancies in accordance with Sections 407.5.3 and 711.9 shall comply with Section 713.14.1.

Reason. This proposal simply provides clarification as to where all the enclosed elevator lobby requirements are located in other portions of the code. Section 713.14.1.1 was revised to be consistent in approach to the new Sections 713.14.1.2 and 713.14.1.3. Sections 713.14.1.4 and 713.14.5 were added to be consistent with the concept of pointing to other relevant sections requiring enclosed elevator lobbies. If provisions are moved from Chapter 7 to Chapter 30 this proposal is no longer necessary.

Proposal 9

Exception outdoor smoke protected seating

Add new exception 8 to Section 713.14.1 as follows:

8. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required where the elevator hoistway opens to the exterior.

Reason: There should be an exception similar to open parking since there is no accumulation of smoke in where elevator hoistways open to the exterior.

Proposal 10

Hoistway height versus building height

Revise exception 4 to Section 713.14.1 as follows:

4. Enclosed elevator lobbies are not required where the building is protected by an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:

4.1. Group I-2 occupancies;

4.2. Group I-3 occupancies; and

4.3. Highrise buildings with Elevators hoistways travelling more than serving floor levels over 75 feet in height, above the lowest level of fire department vehicle access in high-rise buildings. The height of the hoistway shall be measured from the lowest floor to the highest floor of the floors served by the hoistway.

Reason: The wording was revised to clarify that the hazard is related to taller hoistway heights versus an elevator located higher up in the high rise building. In other words a single tenant dedicated elevator that travels only a couple stories should not require an elevator lobby.

CTC Elevator Lobby Study Group Proposals

Section (IBC)	Proposal
IBC 202 (new definitions)	TG3 Proposal 2 TG4 Proposal 7
IBC 709.4	TG4 Proposal 4
IBC 713.14.1(new)	TG4 Proposal 2
IBC 713.14.1	TG2 Proposal 1, TG3 Proposal 1 TG4 Proposal 1,2 TG4 Proposal 9 TG4 Proposal 10
IBC 713.14.1.1	TG4 Proposal 2, TG4 Proposal 8
IBC 713.14.1.2(new)	TG4 Proposal 8
IBC 713.14.1.3(new)	TG4 Proposal 8
IBC 713.14.1.4(new)	TG4 Proposal 8
IBC 713.14.1.5(new)	TG4 Proposal 8
IBC 713.14.3(new)	TG4 Proposal 2
IBC 716.5.3.1	TG4 Proposal 6
IBC 909.4.7 (new)	TG2 Proposal 2
IBC 909.4.7.1 (new)	TG2 Proposal 2
IBC 909.4.7.2 (new)	TG2 Proposal 2
IBC 1007.6	TG4 Proposal 5
IBC 1018.6	TG3 Proposal 1
IBC 1022.1 (new)	TG3 Proposal 3
IBC 1027.1	TG3 Proposal 2
IBC 3004	TG Risk assessment options A and B
IBC 3007(new)	TG4 Proposal 1
IBC 3007.7	TG3 Proposal 1
IBC 3007.7.1	TG3 Proposal 2
IBC 3007.7.4	TG4 Proposal 3 TG4 Proposal 9
IBC 3008.7	TG3 Proposal 1
IBC 3008.7.1	TG3 Proposal 2

