

CTC Care Facilities
Study Group Report of CTC Meeting June 28-29, 2012
Possible Public Comments
E66, E186, FS68, G54, G55, G65
G257 – E103, G66, G73, G76

CTC Care Facilities Study Group

E66-12(AS) (G31 coord)

Public comments request approved as modified

Further modify proposal as follows:

1008.1.9.6 (IFC [B] 1008.1.9.6) Special locking arrangements in doors in Groups I-1 ~~assisted living facilities~~ and I-2. Approved, special egress locks shall be permitted in a Group I-1 ~~assisted living facilities~~ or I-2 occupancies where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through 7 below.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
7. Emergency lighting shall be provided at the door.

Exception: Items 1 through 4 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of a psychiatric treatment area.

Reason: Elopement potential exists in all Group I-1, therefore this option should not be limited to just assisted living. This would not affect revisions made to this section in E67, which clarified the requirements for this type of lock.

E186-12(AS) (G31 coord)

Public comments request approved as modified

Further modify proposal as follows:

1107.5.1 Group I-1. *Accessible units* and *Type B units* shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2.

1107.5.1.1 Accessible units. In Group I-1, ~~other than assisted living facilities Condition 1~~, at least 4 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*. In Group I-1 ~~assisted living facilities-Condition 2~~, at least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

1107.5.1.2 Type B units. In structures with four or more *dwelling units* or *sleeping units intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

1107.6.4 Group R-4. *Accessible units* and *Type B units* shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2.

1107.6.4.1 Accessible units. In Group R-4, ~~other than assisted living facilities Condition 1~~, at least one of the *dwelling* or *sleeping units* shall be an *Accessible unit*. In Group R-4 ~~assisted living facilities-Condition 2~~, at least two of the *dwelling* or *sleeping units* shall be an *Accessible unit*.

1107.6.4.2 Type B units. In structures with four or more *dwelling units* or *sleeping units intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

Reason: This proposal is intended to coordinate with new terminology in G31-12. This will be consistent with anticipated need within these facilities.

FS68-12 Consistent elevator lobby requirements for facilities with smoke compartments

Public comment is Approval as Submitted.

Original proposal:

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-1, Condition 2 occupancies;

- 4.2 Group I-2 occupancies;
 - 4.3 4.2 Group I-3 occupancies; and
 - 4.4 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.

Reason: The Fire Safety committee disapproved this change because G31 had not yet been heard. Code change G31 established the Group I-1, Condition 2 as assisted living with the addition of smoke compartments. This separation configuration is similar to hospitals and jails. This proposal is asking that Group I-1, Condition 2 be required to have elevator lobbies consistent with hospitals and jails.

G54-12 (AM) (G257 Coord)

Public comments request approved as modified

Further modify proposal as follows:

404.5 Smoke control. A smoke control system shall be installed in accordance with Section 909.

Exception: In other than Group I-2 Condition 2 smoke control is not required for *atriums* that connect only two *stories*.

712.1.8 Two-story openings. In other than Groups I-2 Condition 2 and I-3, a floor opening that is not used as one of the applications listed in this section shall be permitted if it complies with all of the items below.

1. Does not connect more than two stories.
2. Does not contain a stairway or ramp required by Chapter 10.
3. Does not penetrate a horizontal assembly that separates fire areas or smoke barriers that separate smoke compartments.
4. Is not concealed within the construction of a wall or a floor/ceiling assembly.
5. Is not open to a corridor in Group I and R occupancies.
6. Is not open to a corridor on nonsprinklered floors.
7. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures.

Reason: The original proposal limits requires two story atriums in Group I-2 to have smoke control. This is not justified for nursing homes.

G55-12 (AM) D (Could withdraw)

Public comments request Disapproval

Report of hearings:

404.5 Smoke control. ~~A~~ In other than Group I-2 and Group I-1, ~~Condition 2~~, smoke control system shall be installed in accordance with Section 909.

Exception: In other than Group I-2 and Group I-1, Condition 2 smoke control is not required for *atriums* that connect only two *stories*.

Reason: Proposal was originally to match G54. CTC care would now like to not allow this limitation for nursing homes, so this should be removed.

G65(D) Kitchens in nursing homes

Public comments request approved as modified

Further modify proposal as follows:

407.2.5 Cooking facilities. In Group I-2 nursing homes Condition 1, rooms or spaces that contain ~~domestic a cooking facilities~~ facility with domestic cooking appliances shall be permitted to be open to the corridor where ~~the number of sleeping units within the smoke compartment is limited to 30 residents and~~ all of the following requirements are met:

1. The number of care recipients housed within the smoke compartment is limited to 30.
2. The cooking facility shall be limited to serving a maximum of 30 care recipients.
3. Only one ~~area with domestic cooking facilities~~ facility area is permitted within a smoke compartment.
- ~~4.2.~~ The types of ~~domestic~~ cooking appliances permitted are limited to ovens, cooktops, ranges, warmers and microwaves.
- ~~5.3.~~ The corridor is a clearly identified space delineated by, construction or floor pattern, material or color.
- ~~6.4.~~ The space containing ~~the~~ domestic cooking ~~facilities~~ facility shall be arranged so as not to obstruct access to the required exit.
- ~~7.5.~~ A domestic cooking hood installed and constructed in accordance with IMC Section 505 is provided over the cooktop or range.
- ~~8.6.~~ The domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. Pre-engineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions.
- ~~9.7.~~ A manual actuation device for the hood suppression system shall be installed in accordance with IFC Section 904.11.1 and 904.11.2.
10. An interlock device shall be provided such that upon activation of the hood suppression system, the power or fuel supply to the cooktop or range will be turned off.
- ~~8.11.~~ A shut ~~down~~ off for the fuel and electrical power supply to the cooking equipment, shall be provided in a location that is accessible only to staff.
12. A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes.
- ~~9.13.~~ A portable fire extinguisher shall be installed in accordance with IFC 906.

Reasoning: Based on the feedback from the Committee and the Opponents of the proposal, The CTC has revised some of the language to be more specific and more stringent.

The charging paragraph has been modified to more clearly define the space and the number of occupants has been moved to the requirements for greater clarity. The Condition 1 is coordination with G257-12.

Item #1 (new) states the maximum number of residents that may live within the same smoke compartment as the cooking facility. This limits the number of residents that could be at risk from an incident.

Item #2 (new) this clarifies that the cooking facility that is open to the corridor may only serve a maximum of 30 residents. This prohibits the central kitchen, serving the whole facility, from being open to the corridor. Further, this limits the number of meals that are being prepared in this facility which limits time of cooking duration, grease production and risk.

Item #3 The language was clarified to be clearer that only one cooking facility is permitted in a smoke compartment and for consistency with the other requirements.

Item #4 Added the word "domestic" to be consistent with the terminology contained within the Mechanical Code.

Item #6 Clarification for correlation.

Item #10 (new) added the requirement for an interlock that shuts off the power source/fuel supply if the hood suppression system activates.

Item #11 (previous #8) Terminology changed from shutdown to shutoff to correlate to the IMC and to be clear on its purpose. Also clarified that the switch is located in a location accessible only to staff.

Item #12 (new) Adds the requirement for a timer to deactivate the appliance in the event staff forgets to turn off the appliance. This adds a belt and suspenders level of safety which does not solely rely on human action.

In Skilled Nursing and Assisted Living care settings across the country, there are hundreds of similar kitchens, open to the corridor and common spaces, in operation today (see notes below). The ones in existence have been the result of varied negotiations with the AHJ and have resulted in a very inconsistent application/interpretation of the code. This code change is needed to create more consistency in the construction of these open kitchens and to standardize the level of safety features provided.

This proposal was originally brought forward by a group representing all of the major stakeholder groups in the Long-Term Care industry. This group worked closely with the CTC, along with Fire Marshals and other Code Officials to craft the language you see here to ensure an appropriate level of safety while providing a great benefit to the quality of life for the care recipients.

A similar proposal to what is contained here has already been approved by the Life Safety Code, and the Center for Medicare and Medicaid (CMS) endorses the use of open kitchens for small groups of residents.

Please bear in mind that all new nursing homes have been required to be fully sprinkled since 2003. All existing nursing homes have been mandated, by CMS, to be fully sprinkled by August of 2013. In the last 15 years of NFPA fire data, there has **never been a multiple death fire in a fully sprinkled nursing home**. The majority of the single death fires are the result of a resident smoking while on oxygen.

A NIST study* found that a single, low-flow residential sprinkler was able to control a cooking oil fire and extinguish any fire spread to the cabinets and walls. Because the nursing homes are sprinkled, combined with the small number of meals, hood suppression system, and automatic shut off features contained in this proposal, along with the 24/7 staffing in a nursing home create a high level of safety and will protect the residents when the kitchen is open to other spaces.

**NIST Special publication 1066 "Overview of NIST/USFA Localized Residential Suppression System Project", PG 5 & 6
Daniel Madrzykowski, Anthony Hamins, Shivani Mehta*

Open kitchen settings in operation currently (varied requirements)

- **The Green House®** project = 127 "houses" - each with an open kitchen - in operation in 19 states and several more in planning or construction. States include AL, AK, AZ, AR, GA, KS, MD, MA, MS, MI, MT, NE, NJ, NY, PA, TN, TX, WA, WI
- Edgewater, West Des Moines, IA – 4 skilled nursing households, each with an open kitchen.
- Concordia Village in Springfield, IL
- Three Crowns Park in Evanston, IL – 2 households, each with an open kitchen.
- Masonic Home in Louisville, KY - 3 open kitchens
- An estimated 30 – 40 open kitchens are in operation in OR
- Landis Homes in Lititz, PA
- Garden Spot Village, in New Holland PA has 4 Nursing households, each with an open kitchen. Their sister project, Maple Farm, in Akron, PA has 2 nursing households, each with an open kitchen.
- Lutheran Home at Telford, PA
- Covenant Oaks at Oakwood Village University Woods, in Madison, WI has 4 Assisted Living households, each with an open kitchen.
- St. Mary's Center in Madison, WI – 16 households, each with an open kitchen
- St. John's Home in Milwaukee, WI – One open kitchen
- Creekview at Evergreen, OshKosh, WI – 8 skilled nursing households, each with an open kitchen

Kim has pictures from Amy

In connection with G257

G257-12 (AS)

**TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES**

RISK CATEGORY	NATURE OF OCCUPANCY
III	Group I-2, <u>Condition 1</u> occupancies with an occupant load of 50 or more resident care recipients, <u>and Group I-2, Condition 2</u> but not having surgery or emergency treatment facilities
IV	Buildings and other structures designated as essential facilities, including but not limited to: <ul style="list-style-type: none"> • Group I-2, <u>Condition 2</u> occupancies having surgery or emergency treatment facilities.

Reason: This proposal is for consistency with new terms in G257-12. This clarifies where emergency treatment is part of a hospital. Nursing homes do not have emergency treatment facilities open to the public or surgery.

E103-12 (AS)

Public comments request approved as modified

Further modify proposal as follows:

1011.6.3 (IFC [B] 1011.6.3) Power source. *Exit* signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

Exceptions:

1. *Approved exit* sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
2. Group I-2 ~~hospital~~ Condition 2 exit sign illumination shall not be provided by unit equipment battery only.

Reason: This proposal is for consistency with new terms in G257-12.

G66 – 12 (AS)

Public comments request approved as modified

Further modify proposal as follows:

407.2.5 Nursing home housing units. In Group I-2 Condition 1 nursing homes, within areas where nursing home residents are housed, shared living spaces, group meeting or multipurpose therapeutic spaces shall be permitted to be open to the *corridor*, where all of the following criteria are met:

1. The walls and ceilings of the space are constructed as required for *corridors*.
2. The spaces are not occupied as resident sleeping rooms, treatment rooms, incidental uses in accordance with Section 509, or hazardous uses.
3. The open space is protected by an automatic fire detection system installed in accordance with Section 907.
4. The *corridors* onto which the spaces open, in the same *smoke compartment*, are protected by an automatic fire detection system installed in accordance with Section 907, or the *smoke compartment* in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
5. The space is arranged so as not to obstruct access to the required *exits*.

Reason: This proposal is for consistency with new terms in G257-12.

G73 – 12 (AS)

Public comments request approved as modified

Further modify proposal as follows:

407.4.3 Projections in corridors. In Group I-2 Condition 1 nursing homes, where the *corridor* width is a minimum of 96 inches (2440 mm), projections shall be permitted for furniture where all of the following conditions are met:

1. The furniture is attached to the floor or to the wall.
2. The furniture does not reduce the clear width of the *corridor* to less than 72 inches (1830 mm) except where other encroachments are permitted in accordance with Section 1005.7.
3. The furniture is positioned on only one side of the *corridor*.
4. Each arrangement of furniture is 50 square feet (4.6 square meters) maximum in area.
5. Furniture arrangements are separated by 10 feet (3050 mm) minimum.
6. Placement of furniture is considered as part of the fire and safety plans in accordance with Section 1001.4.

1005.7.2 (IFC [B] 1005.7.2) Other projections. *Handrail* projections shall be in accordance with the provisions of Section 1012.8. Other nonstructural projections such as trim and similar decorative features shall be permitted to project into the required width a maximum of 1½ inches (38 mm) on each side.

Exception: Projections are permitted in corridors within Group I-2 Condition 1 ~~nursing homes~~ in accordance with Section 407.4.3.

Reason: This proposal is for consistency with new terms in G257-12.

G76 – 12 (D) but this is Adhoc so assuming PC, current error in terms

Public comments request approved as modified

Further modify proposal as follows:

407.5 Smoke barriers. *Smoke barriers* shall be provided to subdivide every *story* used by persons receiving care, treatment or sleeping and to divide other *stories* with an *occupant load* of 50 or more persons, into no fewer than two *smoke compartments*. Such *stories* shall be divided into *smoke compartments* with an area of not more than 22,500 square feet (2092 m²) in Group I-2 occupancies Condition 1 and not more than 40,000 square feet in Group I-2 hospitals Condition 2 and the travel distance from any point in a *smoke compartment* to a *smoke barrier* door shall be not greater than 200 feet (60 960 mm). The *smoke barrier* shall be in accordance with Section 709.

Reason: This proposal is for consistency with new terms in G257-12.