AHC #3 Meeting Minutes – Appendix C

MOE WORK GROUP REPORT & NOTES FROM AHC #3
(IBC Chapters 4, 10 & 11)

This appendix is based on the AHC's reviw of the noted Work Group Report at AHC Meeting #3. Notes from the meeting are indicated in red.

CURRENT CODE ISSUES: (based on issues identified at AHC #1)

MEANS OF EGRESS WORK GROUP

CODES:
IBC: Ch 10 and 11

ISSUES:

- EGRESS THROUGH ELEVATOR LOBBY (NEED TO COORDINATE WITH CTC EFFORTS)
- GENERAL EGRESS
  - WIDTH – 8' CORRIDOR VS 5' CLEAR;
  - COMMON PATH OF TRAVEL
  - TRAVEL DISTANCE
  - SLIDING DOORS
- SPECIAL LOCKING DEVICES
  - DELAYED EGRESS
  - LATCHES ON SMOKE BARRIER DOORS
  - STAFF CONTROL IN PSYCH WARDS
  - INFANT CONTROL
- OCCUPANT EVACUATION VIA ELEVATORS
- PATIENTS AS PART OF OCCUPANT LOAD CALCULATION/REFUGE AREAS
- SUITE SIZE AND SUPERVISION
  - MEANS OF EGRESS
- WAITING SPACES OPEN TO CORRIDOR
- ACCESSIBILITY - MAXIMUM 18" CLEAR MAX ON THE SIDE OF TOILET FOR CARE-GIVER ACCESS

CHAIR: FLANNERY

AHC MEMBERS: POLLITT, KOSARZYCKI, ALTIZER, NICHOLS

INTERESTED PARTIES: WOESTMAN, MANLEY, BEBE, KOFFEL, JAQUES, HELLMAN, PURSELL, CHRIS, COLLINS

The Means of Egress Work Group chose to subdivide the issues identified at the April 20 and 21, 2011 meeting into 5 areas of study:

1. Elevators –
   - EGRESS THROUGH ELEVATOR LOBBY
   - OCCUPANT EVACUATION VIA ELEVATORS

2. Corridors-
   - GENERAL EGRESS
     - WIDTH – 8' CORRIDOR VS 5' CLEAR;
     - COMMON PATH OF TRAVEL
     - TRAVEL DISTANCE
   - PATIENTS AS PART OF OCCUPANT LOAD CALCULATION/REFUGE AREAS
   - WAITING SPACES OPEN TO CORRIDOR

3. Security and locking arrangements –
   - SPECIAL LOCKING DEVICES
     - DELAYED EGRESS

- LATCHES ON SMOKE BARRIER DOORS
- STAFF CONTROL IN PSYCH WARDS
- INFANT CONTROL
- SLIDING DOORS

4. Suites
   - SUITE SIZE AND SUPERVISION
     - MEANS OF EGRESS SUITE

5. Accessibility -
   - ACCESSIBILITY - MAXIMUM 18" CLEAR ON THE SIDE OF TOILET FOR CARE-GIVER ACCESS

Following are the reports on each topic:

Issue #1:

1. Elevators –
   - EGRESS THROUGH ELEVATOR LOBBY
   - OCCUPANT EVACUATION VIA ELEVATORS

Conclusion #1:

- CTC committee on elevator lobbies is still in process – this committee will suggest specific Group I-2 criteria

Proposed Code Change:

SECTION 407
GROUP I-2

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) 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.

407.5.3 Horizontal assemblies. *Horizontal assemblies* supporting *smoke barriers* required by this section shall be designed to resist the movement of smoke and shall comply with Section 711.9.

SECTION 711
HORIZONTAL ASSEMBLIES

711.9 Smoke barrier. Where *horizontal assemblies* are required to resist the movement of smoke by other sections of this code in accordance with the definition of *smoke barrier*, penetrations and joints in such *horizontal assemblies* shall be protected as required for *smoke barriers* in accordance with Sections 714.5 and 715.6. Regardless of the number of *stories* connected by elevator shaft enclosures, doors located in elevator shaft enclosures that penetrate the *horizontal assembly* shall be protected by enclosed elevator lobbies complying with Section 713.14.1. Openings through *horizontal assemblies* shall be protected by shaft enclosures complying with Section 713. *Horizontal assemblies* shall not be allowed to have unprotected vertical openings.

SECTION 713
SHAFT ENCLOSURES

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 406.5.

Reason: This code changes addresses new text in the 2009 IBC from FS81-07/08. The new text would require an elevator lobby at every elevator in a Group I-2 occupancy, "regardless of number of stories." The proponent did not provide any substantiation for why this current code creates a life safety threat. The original code change proposal that added this information was turned down by the Fire Safety committee, but was approved at the final action hearing. The only justification provided was that this would coordinate existing language.

The current code language does not require this level of separation. There was no evidence given that smoke transfer between floors in a sprinklered, compartmented building poses a significant hazard. In all Group I-2s, there is a requirement for smoke compartmentation on each floor. If there was significant transmission of smoke from one of the smoke compartments on the floor below, the occupants on the higher floor have another smoke compartment to horizontally evacuate to. This creates a method of smoke containment in an I-2 occupancy

The addition of elevator lobbies and enclosing doors could also hamper the horizontal evacuation process. The added number of doors that must be maneuvered through to reach the adjacent smoke compartment would slow the evacuation time. The change adds cost for facilities and complicates the design process with no apparent benefit.

Previous to the 2009 version, the IBC did not require hospitals, nursing homes and boarding homes to provide elevator lobbies if the building was provided with fire sprinklers. Elevator lobbies serve no purpose on floors of facilities that "defend in place". It is a long standing practice in healthcare to evacuate patients to the adjacent smoke compartment instead of evacuating them out of the building. Group I-2 provides smoke compartmentation for an added level of protection against the spread of smoke through the building. Floors are separated into at least two smoke compartments by rated construction and provide passive protection in addition to the active protection of a sprinkler system. These compartments in effect serve the same purpose as an elevator lobby.

The addition of elevator lobbies in these facilities could complicate the movement of patients to the adjacent smoke compartment by adding doors that bedridden patients must be transferred through. While alternatives to elevator lobbies exist, all increase construction cost for facility type who have a good fire record.

Notes:

- The CTC elevator lobby study group should address technical changes for lobbies.
- This committee has written letter to CTC asking for Group I-2 to not have elevator lobbies required

- The CTC technical information says that in sprinklered buildings there is not a problem with smoke migration through the elevator shafts – thus the elevators penetrating the smoke compartment is not detrimental to the defend-in-place stragegy.
- Wait for CTC elevator lobby group.

Issues #2:

2. Corridors-
- GENERAL EGRESS
  - WIDTH – 8' CORRIDOR VS 5' CLEAR;
  - COMMON PATH OF TRAVEL
  - TRAVEL DISTANCE
- PATIENTS AS PART OF OCCUPANT LOAD CALCULATION/REFUGE AREAS
- WAITING SPACES OPEN TO CORRIDOR

Conclusions #2 (Corridors):

The following is the intent, but needs to be drafted for code language.

In fully sprinklered buildings with defend in place principles and operational plans

• Corridor Width:

An 8 foot corridor with an effective clear path of 5' that allows the passage of staff, patents and equipment under normal operating conditions is allowed. Low hazard equipment, carts, and devices that are mobile (on wheels or less than 20 pounds and larger that 24x48) and do not encroach upon an effective 5' clear path are allowed provided the organization has a defend in place management plan to address egress in emergency situations.

• Areas Open to the Corridor:

– Corridors in I-2 occupancies will be allowed open spaces such as but not limited to waiting, nurse station, chart areas, patient gathering, operational or exercise areas of unlimited size provided the contents are low hazard. Sleeping spaces are not allowed to be open to the corridor.

Notes:

Corridor width:
- This allowance is attended for IFC maintenance only, not a reduction in IBC corridor width.
- Allow the following for hospital function:
  - movable equipment that is moved first as part of the fire evacuation plan,
  - attended/in-use equipment (i.e., food cart, linen cart)
  - patient transport and handling devices (i.e. gurneys, wheelchairs)
  - emergency equipment (i.e., crash cart)
- Doug to get NFPA code change regarding available width to the MOE committee
- Eugene, Ed, Jonathan, Brad,Doug to look at permitted projections in NFPA new section

Areas open to corridor:
- Equipment in areas open to the corridor should not obstruct the required corridor width.
- Operational areas are nutrition areas, chart areas, play rooms, family waiting rooms – look at what is in 407.2 – what would we want to add? Broaden waiting and treatment areas.
- Consensus was to take out exercise/therapy areas

Issue #3

3. Security and locking arrangements –
- SPECIAL LOCKING DEVICES
  - DELAYED EGRESS
  - LATCHES ON SMOKE BARRIER DOORS

- STAFF CONTROL IN PSYCH WARDS
- INFANT CONTROL
- SLIDING DOORS

Conclusion #3:

Code Change Proposal for Delayed egress –

IBC 1008.1.9.7 Delayed egress ~~locks~~. *Approved, listed*, delayed egress ~~locks~~ locking systems[1] shall be permitted to be installed on doors serving any occupancy except Group A, E, and H occupancies in buildings that are 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 ~~unlock~~ allow immediate free egress in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit.*

1. The delay electronics shall disarm ~~doors unlock~~ upon actuation of the *automatic sprinkler system* or automatic fire detection system, allowing immediate, free egress.
2. The ~~doors unlock~~ delay electronics shall disarm upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.
3. The ~~door locks~~ delay electronics shall have the capability of being ~~unlocked~~ disarmed by a ~~signal~~ switch located at ~~from~~ the fire command center or other approved location.
4. An attempt to egress ~~The initiation~~ ~~of~~ shall initiate an irreversible process which ~~will~~ shall allow such egress ~~latch~~ in not more than 15 seconds when a ~~force of not more than 15 pounds (67 N)~~ physical effort to exit is applied to the egress side door hardware[4] for *not more than* ~~*1*~~ *3* ~~*second*~~ *seconds*[3] ~~to the release device~~. The effort to open the door shall not require a force greater than 15 pounds (67N). Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics ~~door lock~~ ~~has~~ have been ~~released~~ disarmed, ~~by the application of force to the releasing~~ ~~device~~, ~~relocking~~ rearming the delay electronics shall be by manual means only.

   Exception: Where approved, a delay of not more than 30 seconds is permitted.

5. A sign with 1" high letters and numbers that are in sharp contrast to their background [5] shall be provided on the door located above and within 12 inches (305mm) of the ~~release~~ ~~device~~ door hardware reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 (30) SECONDS.

   Exception: In Group I-2 and I-3 health care occupancies, where approved, the use of a sign is not required where it interferes with the safety of the patients.[6]
6. Emergency lighting shall be provided at the door.

Reason:

[1]Delayed egress always requires a system of electronic devices that work together to perform the delayed egress task. Sometimes they are contained within an electromagnetic lock or a bar and sometimes they are separate components, but they are never just a lock.

[2]Immediate free egress can be accomplished without unlocking the door. Merchants, offices and health care facilities are hesitant to use delayed egress because an "after hours" egress event will leave their building unlocked. Addressing the "delay" as a separate issue from "locked", this modification will allow the door to relock FROM THE OUTSIDE after a delayed egress event, but change the operation of the door to free egress until the system is manually reset. The intent of the code is not to keep people out. Instead, it is to let them out.

[3]One second is not enough time for a fully cognizant person to recognize that their action is what is causing the alarm and decide to abort the exit attempt. Dementia patients tend to wander toward doors when not otherwise engaged. Since staffing cannot be 1:1, it means that the nurses are attending other issues. Reducing these "nuisance" alarm issues can greatly reduce the need to drop everything and go check and reset the door.

[4]There are three ways to initiate a delay sequence that are in common use, today. The code has never been changed to accommodate two of these. The original one, an electromagnetic lock with delay electronics and a switch built into the

case, is not addressed. It allows the use of existing door hardware and should be used with exit only applications. Otherwise, it can be triggered from both sides. The second means of delay initiation includes switches in cylindrical and mortise locks that begin the sequence when the inside lever is turned. This method has become possible with the ADA changes made to these locks to accommodate levers. The third method is the one the code seems to reference. It uses a switch bar (aka active dummy with switch), a panic bar with a switch, or fire-exit hardware with a switch. Depending on the manufacturer and the model number, the switch may either signal an external delay timer that controls an electromagnetic lock or signal a self-contained delayed egress system that controls a latch.

[5] Manufacturers typically supply the sign with their product, but often the sign blends in with the color of the door.

[6] Providing escape instructions to first stage Alzheimer's disease patients who often still can read is unwise. Staff is there to assist in a fire.

Notes:

- Look at A117.1 visible signage for information on hardware
- Coordinate with CTC care facilities nursing homes

2nd Code Change proposal to add Exception 2 to Item 4:

IBC 1008.1.9.7 Delayed egress ~~locks~~. *Approved, listed*, delayed egress ~~locks~~ locking systems[1] shall be permitted to be installed on doors serving any occupancy except Group A, E, and H occupancies in buildings that are 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 ~~unlock~~ allow immediate free egress in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit.*

1. The delay electronics shall disarm ~~doors unlock~~ upon actuation of the *automatic sprinkler system* or automatic fire detection system, allowing immediate, free egress.
2. The ~~doors unlock~~ delay electronics shall disarm upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.
3. The ~~door locks~~ delay electronics shall have the capability of being ~~unlocked~~ disarmed by a ~~signal~~ switch located at ~~from~~ the fire command center or other approved location.
4. An attempt to egress ~~The initiation~~ ~~of~~ shall initiate an irreversible process which ~~will~~ shall allow such egress ~~latch~~ in not more than 15 seconds when a ~~force of not more than 15 pounds (67 N)~~ physical effort to exit is applied to the egress side door hardware[4] for *not more than* ~~*1*~~ *3* ~~*second*~~ *seconds*[3] ~~to the release device~~. The effort to open the door shall not require a force greater than 15 pounds (67N). Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics ~~door lock~~ ~~has~~ have been ~~released~~ disarmed, ~~by the application of force to the releasing~~ ~~device~~, ~~relocking~~ rearming the delay electronics shall be by manual means only.

   Exceptions:

   1. Where approved, a delay of not more than 30 seconds is permitted.
   2. Where approved, up to 2 doors within a means of egress with delays of 15 seconds each (30 seconds total) is permitted.

5. A sign with 1" high letters and numbers that are in sharp contrast to their background [5] shall be provided on the door located above and within 12 inches (305mm) of the ~~release~~ ~~device~~ door hardware reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 (30) SECONDS.

   Exception: In Group I-2 and I-3 health care occupancies, where approved, the use of a sign is not required where it interferes with the safety of the patients.[6]
6. Emergency lighting shall be provided at the door.

Reason:

NFPA as of 2009 does not limit the number of delayed egress locks in the path for means of egress.

Since delayed egress was developed in two separate theaters for two separate reasons, pilfering was a reason that is perfect for *one* 15 second delay. Back then, sprinkler requirements were not like they are today. On the other hand, delayed egress for health care in a fully sprinklered facility should be recognized as being different. A delay of thirty seconds is appropriate for this situation and so should two 15 second delays when used for good purpose, as they delay the person for no more time and often for less time. Following are two good purposes:

1. Property, especially in cities, is at a premium in both price and availability. For this reason, we see more and more two and three story ambulatory health care facilities as a result of needing to build up instead of out. This comes with a need to keep Alzheimer's disease and Head Injury patients on the floor **and** in the building. Currently, the facility is tasked with having to make a dangerous and unnecessary choice.

2. Most single story dementia facilities have a perimeter fence surrounding the back and sides of the building. All exits except the front door are into a protected yard. The front door controls entry into the office/lobby area and reception. It is a small area requiring only the front door as an exit. A second door leading from the front office area into the core of the facility keeps the residents from eloping and strangers from entering. Originally, this door was not an exit and the facility side of the door was disguised as a wall so residents (patients) would not try to get out. Since it was not an exit, a delayed egress system was placed on that door and another one on the front door. Keypads were on both sides and both systems would unlock upon activation of the fire alarm. It was a mantrap designed so that if the lobby to core door went into alarm, the front door would instantly become delayed egress. Pursuant to the "discovery" and subsequent enforcement of the idea that if people exit the way they entered, the lobby to core door was an exit, should not be disguised and the front door could no longer be delayed. Without exceptions for those with health issues, the patients were now less safe than before. Allowing two 15 second delays would return them to a safe environment. This reasoning could also be applied to ward doors leading into a common lobby with a stair tower door. The stair tower door would be free egress unless someone had triggered the ward delay in an attempt to elope from the ward. This would set off the alarm and arm the stair tower door's delayed egress system.

Notes:

- Item 4, Exception 2 – put in as separate code change.
- In reason statement, mention possibility of temporary man trap as a means to stop patients from leaving the building.
- Provide other examples of when used – top and bottom of stairs, on suite and on stairs, subdivide suite into medium and higher security areas
- Add to reason statement to show this could be used in other use groups
- Coordinate with CTC care facilities nursing homes
- Can this be used for ambulatory care?
- Ed will bring forward information from Virginia lock expert – look this up on ICC website
- Needs additional tweaks – committee has no problem with idea.

Code Change proposal:

Special locks –

1008.1.9.6 ~~Special~~ Controlled egress ~~locking arrangements~~ in group I-2. Approved, controlled egress ~~special egress~~ locks, including cylindrical locks, mortise locks, electromagnetic locks, and specially designed panic bars shall be permitted in the means of egress in a Group I-2 occupancy where the clinical needs of persons receiving care require such locking. ~~Special egress~~ ~~locks~~ Controlled egress 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. Use of a pull station shall not unlock the doors.
2. The doors unlock upon loss of power ~~controlling~~ to the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a switch that directly breaks power to the lock, located ~~signal from~~ at 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~~ controlled egress lock before entering an exit.
5. The procedures for the ~~operation(s) of the~~ unlocking ~~system~~ of the doors 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~~ patient care area.

1008.1.9.9 Electromagnetically locked egress doors. Doors in the *means of egress* in buildings with an occupancy in Group A, B, E, I-2, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-2, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meet the requirements below:

1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
2. The listed hardware is capable of being operated with one hand.
3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
4. Loss of power to the listed hardware automatically unlocks the door.
5. Where panic or *fire exit hardware* is required by Section 1008.1.10, operation of the listed panic or *fire exit hardware* also releases the electromagnetic lock.

Reason: The proposal will address security/abduction issues for issues. Changes will reduce confusion between delayed egress locks and these other types of locks.

Items remaining in #3:

Need to look at provisions for :

- 1008.1.9.8 Access-controlled egress locks
- 1008.1.9.10 Locking arrangement in correction facilities (as guide for what would work in secure areas

Notes:

- 10008.1.6 Item 3 – switch could be limiting in application of options for unlocking, “unlocked by a signal that directly breaks the power” suggested
- Justification for the pull station to not open the doors – clarify that this is only for patient care areas, not all areas.
- Needs to be in emergency action plan
- 1008.1.6 Exception suggested as separate change
- Can this be used for ambulatory care? Nursing homes (see CTC care facilities group)?
- 1008.1.9.9 can be processed as a separate code change
- 1008.1.9.6 needs additional tweaks – committee has no problem with idea.

Issue #4

4. Care Suites

- SUITE SIZE AND SUPERVISION
    - MEANS OF EGRESS SUITE

Revisions to Section 407. Waiting for report from ASHE. No proposal at this time.

Issue #5

5. Accessibility -

- ACCESSIBILITY - MAXIMUM 18” CLEAR ON THE SIDE OF TOILET FOR CARE-GIVER ACCESS

Coordinate with new CTC Accessibility study group. No proposals at this time.

NEW CODE ISSUES:

- Evacuation for all hazards not just fire
- Doors – swing, size, corridor overlap, break out, smoke seal, maneuvering clearances
- Renovations for suites or smoke compartment vs. new construction

WG CROSS OVER ISSUES:

- The Fire Safety work group referred a proposal for delayed egress locks to the MOE work group. The MOE work group is looking at locking for security/wandering issues. Coordination/communication needs to be maintained in this area.

- If the General work group wants to increase the size of the Care Suites in 407, that will affect the MOE from that space. Coordination/communication needs to be maintained in this area.

- CMS Survey tool for existing buildings – Fire Code committee

FURTHER RESEARCH ISSUES:

Information on how elevators are used during different emergencies.

Study efficiency, occupant load and staffing needed for suite sizes.

From #1 Elevator comments above:

AHC could check with NIST or ASME to see if there has been any occupant evacuation models with hospitals either during a general evacuation (i.e., flood, hurricane, tornado) or during a fire event. Is there any history on a hospital needing to do a building evacuation for a fire event? ASHE will provide general building evacuation studies.

From #4 Suite Sizes above:

A study to statistically determine the area needed for "average patient care area" within a typical suite arrangement (i.e. area needed for an ICU care area – bed, equipment, staff movement, supplies, etc) - The 5,000 sq.ft. was an arbitrary number. Study should address

- If the suite size increases, will the travel distance still work? Is there a chance to look at travel distance for patients only – not all spaces?
- NFPA 101 will be increasing the suite size 7,500/10,000 sq.ft with smoke detection/staff notification. Should the travel distance within the suite be increased if it is suggested to increase size in IBC? Does the number of doors slow down travel?

OUT-OF-SCOPE ISSUES:
None at this time

ADDITONAL ISSUES TO BE BROUGHT TO AHC ATTENTION
None at this time

Are you being prevented from returning through the smoke compartment of fire origin or the smoke compartment of egress origin?

WG PROGRESS ASSESSMENT:

The MOE work group has teleconferences every Friday, from approximately 10:00 to 11:30 EST. At the writing of this report we have had 14 teleconferences. Of the 5 areas of study, the committee has proposals for 2 and a direction for a third. We are waiting for additional information for the suite size and accessibility.