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**The Fire Protection and
Life Safety Experts**

- Code Consultation
- Fire and Egress Modeling
- Accessibility Consultation
- Fire Alarm Design
- Fire Sprinkler Design

TO: Don Harton
Code Task Force Chair

DATE: October 2, 2013

CC: Randy Smith, Regal Cinemas
Todd Halstead, NATO

FROM: Gene Boecker, AIA

**RE: NATIONAL ASSOCIATION OF THEATRE OWNERS 2013-2014
ICC PROPOSED CODE CHANGES- IFC & IEBC
ICC/ANSI A117.1 PROPOSALS FOR THE NEXT EDITION
PROJECT NO. 130584.00.000**

IFC/IEBC PROPOSED CODE CHANGES

Below is a summary of relevant 2013 proposed code changes to the International Fire Code (IFC) and the International Existing Building Code (IEBC) that directly impact NATO and the requirements for new and existing multi-plex cinemas. Items in Bold are still active. Grayed items have been disapproved and will therefore have no effect.

Also below is a limited list of the proposals which will be included in the first draft of the revised ICC/ANSI A117.1 standard for accessibility.

Summary of the Applicable Code Sections in the IFC

F109-13 Rearranges the requirements for decorative finish materials.
Recommendation: Support
Reason: The change attempts to improve the clarity of the code requirements for decorative finish materials.
Committee Action: Recommend Approved with Modification.
Public Comments: Recommendation for renumbering – nothing technical which affects assembly occupancies.
Recommendation: Observe.

F110-13 Clarifies the test requirements and adds options for alternative tests for decorative finish materials.
Recommendation: Support
Reason: The code change increases the options available for testing decorative finish materials.
Committee Action: Recommend for Disapproval.
 No public Comments submitted. The item is disapproved.

MEMORANDUM

- F119-13** Changes the requirements for where an automatic sprinkler system is required. Removes the provision that specifically identifies “multi-theater complexes” as requiring sprinkler protection. Replaces the provision with a requirement that assembly occupancies must be protected with sprinkler systems where the shared exit components accommodate a cumulative occupant load of 300 or more.
- Recommendation:* Support
- Reason:* Provides an objective criteria applicable to assembly occupancies in general instead of singling out multi-theater cinemas. If approved, it would allow smaller multi-screen facilities to be constructed without sprinklers if the total occupant load for the multiple theaters is less than 300.
- Committee Action:* Recommend for Disapproval.
- Public Comment:* Add definition to assist in application of the requirement.
- Recommendation:* Support.
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- F310-13** A new section is added for carbon dioxide systems used in beverage dispensing applications. The section applies to systems with 100 or more pounds of carbon dioxide used in beverage dispensing applications. The requirements include providing special ventilation and protection from damage, a special permit, and a specific emergency alarm system.
- Recommendation:* Oppose
- Reason:* No technical basis is provided that the proposed code requirements would be adequate to address the presumed hazard. The proposed requirements include vague and unenforceable requirements; e.g., “Carbon dioxide systems shall be installed so the storage tanks, cylinders, piping and fittings are protected from damage by occupants or equipment during normal facility operation.” The code change singles out carbon dioxide beverage systems, while not addressing other systems with identical hazards.
- Committee Action:* Recommend Approved with Modification. In systems with more than 100 pounds of CO₂ the installation shall comply with NFPA 55; a relief valve must be provided and an alarm must be provided within the room in which the system is installed.
- Recommendation:* Observe.
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- F355-13 Proposes that simple asphyxiants, such as carbon dioxide used by soda fountains, be classified as hazardous materials.
- Recommendation:* Oppose
- Reason:* No technical basis is provided that the proposed code requirements would be adequate to address the presumed hazard. Classifying carbon dioxide bottles as hazardous materials could subject cinemas to requirements that were originally written for hazardous occupancies.
- Committee Action:* Recommend for Disapproval.
No public Comments submitted. The item is disapproved.

F358-13 A new section is added for liquefied carbon dioxide systems, such as those used in beverage dispensing applications. The section applies to systems with 100 or more gallons of carbon dioxide. The proposed section includes 5 pages of requirements for liquefied carbon dioxide systems addressing detection, alarm systems, mechanical ventilation, piping, notification of discharges, cleanup of spills, signage, lighting, and several other features.

Recommendation: Oppose

Reason: No technical basis is provided that the proposed code requirements would be adequate to address the presumed hazard. The code change singles out liquefied carbon dioxide systems, while not addressing other systems with equivalent hazards.

Committee Action: Recommend for Disapproval.
No public Comments submitted. The item is disapproved.

Summary of the applicable code sections in the IEBC

EB5-13 The definition of Level 2 alterations is proposed to be modified to include assembly seating, but to exclude furniture in other occupancies.

Recommendation: Oppose

Reason: While rearranging assembly seating could previously have been considered excluded from the requirements for Level 2 alterations, the code change proposal specifically identifies assembly seating as being included in the requirements for Level 2 alterations while excluding other types of furniture.

Committee Action: Recommend for Disapproval.

Public Comment: The revised proposal would only address movable items that are 5 feet 9 inches or more in height.

Recommendation: Observe. The proponents concern was a “reconfiguration of the space.” It will not affect most of the concerns in theater alterations.

EB17-13 The proposal would require at least one accessible means of egress for existing buildings undergoing a Level 3 Alteration (50% or more of the building is being renovated).

Recommendation: Support.

Reason: The addition of a single accessible means of egress may have little impact since the area must be provided with an accessible route into the altered space.

Committee Action: Recommend for Disapproval.

Public Comment: Clarification of concerns expressed by the committee over the original language.

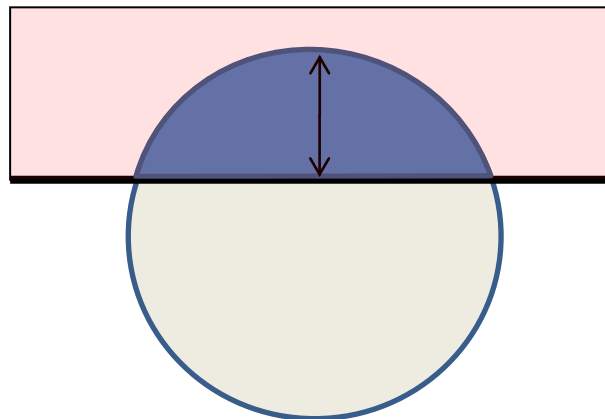
Recommendation: Support. This should have limited impact and would show good faith for NATO’s concern relative to accessibility needs.

Summary of the Applicable Standard Sections in the ICC/ANSI A117.1

3-6A - 12 The proposal would increase the turning circle to 67 inches in diameter.
Recommendation: Oppose.
Reason: The additional space may be necessary for a few types of wheeled mobility devices but the number is rather small and the potential impact is large.
Committee Action: Approve.
Recommendation: Support. The committee vote was more than 2/3 in favor of the change and provides adequate 180 degree turn capability for almost 90 percent of all people who use wheeled mobility devices. This should have limited impact and would show good faith for NATO's concern relative to accessibility needs.

3-6D -12 Access aisles for van parking would increase to 67 inches in width.
Recommendation: Oppose.
Reason: Adequate space exists in the aisle for turning because the vehicle does not occupy the entire width of the parking space. With additional space provided in the parking space, the total available space is sufficient for a 180 degree turn.
Committee Action: Approve.
Recommendation: Continue to oppose. Although a majority of the committee seems willing to make this change so it is consistent with the turning space increase, the reasons are not valid.

3-8 – 12 The proposal would eliminate part of the turning circle where it passes under a counter. Toe and knee clearance would be allowed over all but 10 inches of the circle. In the illustration below the dark shaded area would be allowed to be under the counter for a maximum of 10 inches. The rest of the circle would need to be free and open.



Recommendation: Approve. It recognizes that the back of the wheelchair cannot fit under the counter and therefore limits the ability of the user to turn within the circle.
Committee Action: Approve.
Recommendation: Approve.

3-9 – 12 The proposal would increase the size of the T-turn space and offer three options:

T-TURN DIMENSIONS

	Rectangular Space		Widths		Chamfer	Length Clear of Obstructions	
	Width	Depth	Arms	Base		Arms	Base
1	68	60	36	36	8	16	24
2	64	60	38	42	-	11	22
3	64	60	40	40	-	12	20

Recommendation: Oppose (same reason as 3-6A).

Committee Action: Approve.

Recommendation: Support. The provisions give alternatives for providing 180 degree turns in situations where a turning circle isn't possible. This should have limited impact and would show good faith for NATO's concern relative to accessibility needs.

3-13 – 12 The proposal would increase the size of the wheelchair space from 30x48 inches to 30x52 inches (additional 4 inches).

Recommendation: Oppose. It is not clear that the increase will positively affect a sufficient number of people to make it worthwhile. The standard is intended to be a minimum.

Committee Action: Approve.

Recommendation: Approve. The increase in size will address scooters and larger power operated wheelchairs which is a significant portion of the disabled community who use mobility devices. This should have limited impact and would show good faith for NATO's concern relative to accessibility needs.

3-13D -12 * The proposal would allow the wheelchair space in the auditorium to overlap the aisle by 4 inches.

Recommendation: Approve.

Committee Action: Approve with a modification. The modification was that the depth of the wheelchair space would be allowed to overlap required width of the aisle by 4 inches.

Recommendation: Approve. This will allow a net zero change for conditions where the wheelchair spaces are in the front of the cross aisle. If the wheelchair spaces are increased in depths proposed, then where wheelchairs are located at the rear of the cross aisle, the condition would be less desirable because the companion row seats would need to move forward 4 inches as well to maintain shoulder alignment.

3-13E – 12 Companion seat alignments would be changed from 12 inches from the rear of the wheelchair space to be 16 inches from the rear of the wheelchair space. This reflects the intent to increase the depth of the wheelchair space by 4 inches (see 3-13 above).

Recommendation: Approve. It provided clarity for how the companion seat should align.

Committee Action: Approve.

Recommendation: Approve.

- 3-20 – 12** The proposal would change the lower reach range from 15 inches above finished floor (AFF) to 23 inches AFF.
- Recommendation:* Approve. The lower forward reach is quite difficult beyond the end of the wheelchair space.
- Committee Action:* Approve. A similar proposal was submitted for the side approach but was disapproved. The lower side reach will remain at 15 inches.
- Recommendation:* Approve. The difficulty is in knowing when a forward approach is necessary because a side approach is not possible.
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- 4-7 – 12** The proposal would increase the width of an exterior accessible route from 36 inches to 48 inches with no allowances for reduction (an interior route is allowed to be reduced to 32 inches in width for short distances. This would not be allowed for exterior routes).
- Recommendation:* Oppose. This is not a requirement by any other set of rules.
- Committee Action:* Approve. The proposed federal Rights-of-Way Guidelines contains this provision so it will make the standard consistent with the new rules when they are adopted by the DoJ.
- Recommendation:* Approve. This should have limited impact and would show good faith for NATO's concern relative to accessibility needs.
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- 4-9 – 12** This proposal would add criteria for a 90 degree turn.
- Recommendation:* Approve.
- Committee Action:* Approve. Changes were also approved for a 180 turn around an object but this is the first time that 90 degree turns are being addressed at other than doors.
- Recommendation:* Approve.
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- 4-36 – 12** This proposal would have required automatic power operated doors where eight (8) exterior doors are provided in the same area.
- Recommendation:* Oppose. In addition to being poorly written, this is a scoping provision which needs to be in the IBC.
- Committee Action:* Disapprove.
- Recommendation:* No further action is needed. Items which are disapproved will not move forward to the first public draft.
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- 5-23 – 12** The proposal would require that the accessible route be separated from the vehicular path except where accessible parking is located and at crossings.
- Recommendation:* Approve. The issue revolves around conditions where the visually impaired need to find a route that does not lead them through the vehicular paths in parking areas.
- Committee Action:* Approved with a modification for format.
- Recommendation:* Approve.
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- 6-14 – 12** The proposal would limit the size of toilet paper dispensers to those that can carry no more than two 5-inch diameter (max.) rolls, This limits the types of dispensers which can be used.

Recommendation: Approve. The large rolls tend to be outside the reach range of users.
Committee Action: Approve.
Recommendation: Approve.

6-22 – 12 The proposal would increase the distance between the floor and the bottom of toilet partitions from 9 inches to 12 inches for toe clearances. Added width/depth of the compartment would be increased from 6 inches to 8 inches where the toe clearance isn't provided.

Recommendation: Oppose.
Committee Action: Approve. Power wheelchairs tend to have foot rests that are higher than manual wheelchairs.
Recommendation: Approve. This should have limited impact and would show good faith for NATO's concern relative to accessibility needs.

8-5 – 12 * The proposal would add technical provisions for charging stations in assembly occupancies.

Recommendation: Oppose. The proposal is vague and could pose a risk to others if provided as proposed.
Committee Action: Approve as modified. The proposal states:

802.10.3.1 Charging Stations. Where charging stations are provided at wheelchair space locations they shall comply with Section 906.

906 Charging Stations.

906.1 General. A charging station shall consist of a grounded duplex outlet.

906.2 Clear Floor Space. A clear floor space complying with Section 305 shall be provided.

906.3 Height. Accessible charging stations shall comply with at least one of the reach ranges specified in Section 308

Recommendation: Approve with additional modifications. The technical provision has no effect unless the scoping requirements are added to the IBC. Additional electrical outlets should not be a major cost and may be easily incorporated into chair design. Many issues still need to be addressed for this item to be effective such as where is the outlet located? In front? To the side? Behind? Should it be allowed to be across the aisle if the wheelchair space is on an aisle? Then, it should be addressed as to how it will be incorporated into the IBC. If possible Codes Task Force should question their members regarding any requests for power outlet usage so that when scoping is proposed in a few years we will have data from which to respond.

8-6 – 12 The proposal would add a requirement to provide lighting on both sides of a stage for Sign Language Interpreters.

Recommendation: Approve.
Committee Action: Approved as Modified. The modification makes it clear that the intent is for this lighting at stages.
Recommendation: Approve with additional modifications so that it is clear that the intent is for live presentations and not for situations where motion picture projection is provided.

9-10 – 12

The proposal would require any lower counter to be the same depth as a higher counter and that no obstruction be placed so that a person who uses a wheelchair cannot see a person standing on the other side of the counter.

Recommendation: Approve. It allows for open communication between employee and patron.

Committee Action: Approved with modification. The committee blended two different proposals into one and expanding it to address glazing such as at ticket windows and set the minimum height for a counter at 26 inches. The text relative to the windows would read:

904.3 Sales and Service Counters. *Sales and service counters and windows shall comply with Sections 904.3.1 or and 904.3.2 or 904.3.3. Where a counter is provided, the accessible portion of the countertop shall extend the same depth as the sales and service countertop provided for standing customers.*

904.3.1 Vertical separation. *At service windows or service counters, any vertical separation shall be at a height of 43 inches (1090 mm) maximum above the floor.*

Exception: *Transparent security glazing is permitted above the 43 inches (1090 mm) maximum height.*

Recommendation: Approve. Ticket windows have been viewed similar to counters so this should not be a significant concern.

* Indicates particular interest to NATO members for auditorium design.

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