International Code Council

ICC 300-2012 edition
Public comments received on Public Comments Draft #1 Dated December 2010

For March 2011 Meeting - Teleconference
IS-BLE 4-10/11 - originally submitted proposal

ICC 300 Section 309.1

Proponent: Gene Boecker, Code Consultants, Inc.

Revise as follows:

309.1 Fire Protection. Fire protection systems shall be provided where required by the building code.

Exception: An emergency voice/alarm communications system is not required for outdoor bleachers and grandstands provided all of the following are met:

1. The bleacher/grandstand has an occupant load of less than 15,000;
2. An public address system is provided;
3. Enclosed space located under seating are less than 1,000 square feet aggregate;
4. Enclosed space immediately adjacent to seating and not under the seating are limited to less than 3,000 square feet aggregate; and
5. All portions of the means of egress in the seating area are essentially open to the outside.

Reason: The requirement for a voice alarm system with emergency power is inappropriate for small open air venues such as high school grandstands. These facilities often have limited electrical power and no access to generators or other approved emergency power sources by virtue of their locations remote from the main school. Additionally, the regular use of a public address system is more than ample for notifying spectators of an emergency condition. The presence of an alarm system brings into question the means for activation. If there are no sprinklers in an open air grandstand, then the activation method must be by manual (pull) stations. Placement of manual stations in a grandstand invites mischief and vandalism.

When the voice alarm provisions were included into the building codes, the provision was taken from the Uniform Fire Code (UFC) that had provisions for fire alarms for large occupant load facilities (Group A, Divisions, A, 2 and 2.1) but which delineated open air facilities as a separate division of assembly occupancies (Group A Division 4). Alarms were only required for the former and not the latter as late as the 1991 UFC. When the UFC was restructured from the 1991 edition to the 1994 edition, the information was moved to Chapter 10 of the UFC but still maintained the link between the when required (1007.2.2.1) and the system initiation (107.2.2.2) as well as the emergency power requirements (1007.2.2.3). This concept was continued with the 1997 UFC which introduced the 1000 occupant threshold for the voice alarm. The only intent was to introduce this threshold – not to expand the application to other Group A occupancies. Those using the UFC understood this and possessed the “corporate memory” to understand the intent.

When the provisions were adopted into the International codes, this linkage was lost and the “corporate memory” was lost to the new parts of the country. Thus, the fire alarm became required for all Group A (assembly) occupancies including the outdoor venues which had never had fire alarm requirements in the past. Since the introduction of the International Building Code (IBC) and International Fire Code (IFC) this has been an item that has been dealt with on a local
level to varying degrees of success. Those jurisdictions with “corporate memory” acknowledge that the requirement makes little sense for small grandstands and bleacher arrangements. In the other two thirds of the country, this is applied without regard to history or rationale. It is in the code and therefore must be applied.

Prior to the IBC and IFC coming into existence, only the Standard Fire Prevention Code and Standard Building Code required fire alarms for all Group A occupancies. However, the practical applications and intent of that provision allowed for exceptions to be made on a local basis for small venues. Thus, smaller, open air venues regularly were constructed without any fire alarm in all of the three legacy codes.

The limitations included in the exception are intended to make sure that the smaller venues can be exempted from the voice alarm requirements while making sure that larger venues are provided with the necessary back-up to the public address system. The threshold of 15,000 was selected because it seems to be a number around which concourses below the grandstands begin to be used and relates to the threshold at which the aisle width used for outdoor facilities is provided with a different factor (Table 404.5(3)). Using a common factor reduces the likelihood of erroneous application of the standards provisions. Where individual enclosed areas exceed 1,000 square feet, sprinklers are required for those areas according to the building code. Thus, an activation method exists for fire alarm and voice alarm initiation. The limitation of 3,000 square feet for areas away from below seating allows for larger spaces but requires that they be located away from seating. The final item in the exception list assures that even if the circulation areas outside the grandstands are unconditioned, if they could limit the ability of smoke to dissipate by virtue of sides and roof, they cannot be used. A portion of the language was taken from that used to describe the free ventilation for pedestrian bridges; more restrictive than what is required for open parking garages.

This exception sets a threshold for something that has been variously allowed to exist or strictly disapproved. The fact that the provision has been applied inconsistently is a clear indication that some adjustment must be made. The proposal sets reasonable limits on the voice alarm threshold.

Staff note: See attachment with code changes E142-09/10 which added Section 1028.1.1 to the 2012 IBC. Most spaces under seating are now required to be separated.

Committee Action: Approved as Modified

Replace the proposal as follows:

309.1 Fire Protection. Fire protection systems shall be provided where required by the building code.

Exception: An emergency voice/alarm communications system for outdoor bleachers and grandstands installed in accordance with NFPA 101 shall be permitted.

Committee Reason: The proposal was modified because an emergency voice/alarm communication system is addressed in NFPA 101. Reliability and features are covered in a practical and efficient manner. Some facilities have allowed this alternative, but enforcement has been inconsistent. The new exception will allow these types of systems to be used and set a reasonable threshold on the system requirements.

IS-BLE 4-10/11- public comment
ICC 300 Section 309.1

Proponent: Greg Nicholls, City of Mason, Ohio
ICC 300 – Public Comments Agenda for March 2011 Meeting
February 2011
Further revise the section as follows:

309.1 Fire Protection. Fire protection systems shall be provided where required by the building code.

Exception: An emergency voice/alarm communications system for outdoor bleachers and grandstands installed in accordance with NFPA 101 shall be permitted.

Exceptions:
1. An emergency voice/alarm system is not required for outdoor bleacher-type seating provided all of the following are met:
   1.1. The bleachers and/or grandstands have an occupant load of 15,000 or less;
   1.2. A public address system is provided;
   1.3. Enclosed spaces attached to the bleacher-type seating comprise, in the aggregate, 10% or less of the overall area of the bleacher-type seating or 1,000 square feet, whichever is less. Spaces under the bleacher-type seating shall be separated from the bleacher-type seating in accordance with Section 1028.1.1.1 of the International Building Code.
   1.4. All means of egress from the bleacher-type seating are open to the outside.
2. An emergency voice/alarm system is not required for outdoor bleacher-type seating with an occupant load or 300 or less.
3. An emergency voice/alarm system is not required for outdoor bleacher-type seating that have no attached enclosed spaces and are erected for a period of 120 days or less.

Reason: Mr. Gene Boecker made an earlier and reasonable attempt to limit fire alarm systems for outdoor bleachers and grandstands. The January 2011 ICC 300 draft instead contains a reference to NFPA 101, which does not apply a rational and reasonable solution.

For exception 1, a fire alarm system is not required for outdoor-only bleachers and grandstands, with their egress outdoor-only. Any hazard condition that originates with the outdoor areas is not hidden from the occupants, but gives them instant and complete awareness of the situation. A fire alarm system’s task is to give early warning to occupants, but the fire alarm system will actually take longer to initiate action from the occupants, since someone who has already seen the hazard needs to find and then activate a manual station. In other words, the alarm in this condition serves no constructive purpose. With bleachers and grandstands without any attached enclosed spaces, where would the manual pull stations even be located? A public address system would assist in calming the assembly crowd, and instruct the occupants to the exits. At events with over 300 people, there are typically security and organizing personnel who could inform those controlling the public address system of the hazard conditions and give them instructions for orderly use of the exits. This is what already occurs when high winds, lightning, etc. require evacuation at these outdoor venues. Should the hazard condition originate in the small, attached spaces (whether under-bleacher or next to them), they will be separated from the bleachers by 1-hour construction per the IBC (code change E142-09/10 to Section 1028.1.1.1). The limit of 15,000 occupants was chosen to correlate with the smallest figure in Table 404.5(3) ICC 300 for outdoor smoke-protected seating. The limit of 1,000 square feet for the attached enclosed spaces correlates to the requirement for sprinklers for any over that size in Section 9.5.2 of NFPA 102 and Section 903.2.1.5 IBC.

For exception 2, the limit on 300 matches the figure from NFPA 101 (Section 12.3.4.1.1), NFPA 102 (Section 906.1) and the IBC (Section 907.2.1) that exempts fire protection systems, including fire alarms. This would be consistent with the current ICC 300 draft language. Please note that if NFPA 101 were to be added as a reference standard by ICC 300, it would need the formal edition reference noted.

For exception 3, the exemption from any fire protection systems is only for outdoor, temporary bleachers and grandstands, where it is not feasible to have the permanent devices and connections. This also proposes to reduce the limit for consideration as temporary from 180 days to 120 days to cover a season for any typical sport without going for half a year.
IS-BLE 9-10/11 - originally submitted proposal
ICC 300 Section 407.4

Proponent: Daniel Victor, Interkal, LLC

Revise as follows:

407.4 Single access. For rows of seating served by aisles or doorways at only one end of the row, the minimum clear width of 12 inches (305 mm) between rows shall be increased by 0.6 inch (15.2 mm) for every additional seat beyond seven seats where seats have backrests or beyond ten where seats are without backrests. The minimum clear width is not required to exceed 22 inches (559 mm). The path of egress travel, however, shall not exceed 30 feet (9144 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits. Where one of the two paths of travel is across the aisle through a row of seats to another aisle, there shall not be more than 24 seats between the two aisles; and the minimum clear width between rows for the row between the two aisles shall be 12 inches (305 mm) plus 0.6 inch (15.2 mm) for each additional seat above seven in the row between aisles.

Exceptions:
1. For smoke-protected assembly seating, the row length limits for a 12-inch-wide (305 mm) aisle accessway, beyond which the aisle accessway minimum clear width shall be increased, are in Table 407.5.
2. Where seats are without backrests, a maximum of 10 seats to an aisle shall be permitted with a minimum clear width of 12 inches (305 mm).
3. In smoke-protected assembly seating, the path of egress travel shall not exceed 50 feet (15240 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

Reason: I believe this clarifies the intent. See the reason for the proposal to Section 407.3.

Committee Action: Approved as Submitted.

Committee Reason: This is approved for consistency with the revisions to Table 407.5 and is consistent with the committee action for proposals 6, 8, 9 and 10. See the reason on IS-BLE-10-10/11.

IS-BLE 9-10/11- proposed revision
ICC 300 Section 407.4, 407.4.1(New)

Proponent: Dan Victor, INTERKAL, LLC

Further revise text as follows:

407.4 Single access. For rows of seating served by aisles or doorways at only one end of the row, the minimum clear width of 12 inches (305 mm) between rows shall be increased by 0.6 inch (15.2 mm) for every additional seat beyond seven seats where seats have backrests or beyond ten where seats are without backrests. The minimum clear width is not required to exceed 22 inches (559 mm). The path of egress travel, however, shall not exceed 30 feet (9144 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits. Where ICC 300 – Public Comments Agenda for March 2011 Meeting

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one of the two paths of travel is across the aisle through a row of seats to another aisle, there shall not be more than 24 seats between the two aisles; and the minimum clear width between rows for the row between the two aisles shall be 12 inches (305 mm) plus 0.6 inch (15.2 mm) for each additional seat above seven in the row between aisles.

Exceptions:
1. For smoke-protected assembly seating, the path length limits for a 12-inch-wide (305 mm) aisle accessway, beyond which the aisle accessway minimum clear width shall be increased, are in Table 407.5.
2. In smoke-protected assembly seating, the path of egress travel shall not exceed 50 feet (15 240 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

407.4.1 Path of egress travel. For rows of seating served by only one path of egress travel, the common path of egress travel shall not exceed 30 feet (9144 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

Exceptions:
1. In smoke-protected assembly seating, the common path of egress travel shall not exceed 50 feet (15 240 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.
2. For areas serving less than 50 occupants, the common path of egress travel shall not exceed 75 feet (22 860 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

407.4.2 Path through adjacent rows. Where one of the two paths of travel is across the aisle through a row of seats to another aisle, there shall not be more than 24 seats between the two aisles; and the minimum clear width between rows for the row between the two aisles shall be 12 inches (305 mm) plus 0.6 inch (15.2 mm) for each additional seat above seven in the row between aisles.

Exception: For smoke-protected assembly seating there shall not be more than 40 seats between the two aisles and the minimum clear width shall be 12 inches (305 mm) plus 0.3 inch (7.6 mm) for each additional seat above seven in the row between aisles.

Reason: The current text has several requirements combined, so that it is confusing as to what portion the exceptions are applicable to. It should be separated for clarity. In comparing the requirements to NFPA 101 Section 12.2.5.1.2 and 12.2.5.5.5 and IBC Section 1028.8. and 1028.8.1 it was also noted that there were additional allowances for travel distance for areas with less than 50 occupants (see Section 407.4.1 Exception 2) and access through adjacent rows for smoke-protected seating (see Section 407.4.2 Exception). These should also be allowed for bleacher design.