The ICC Standard Development Committee for Bleacher Safety (IS-BLE committee) met in November 2010 to consider public and committee proposals that were submitted on the 2007 edition of the ICC 300 Standard in response to two call-for-comment periods (4/13/10-5/26/10 and 6/16/10-7/15/10), which resulted in this first public comments draft. This document is a listing in legislative format (Line through text to be deleted Underlined text to be added) of the actions taken by the IS-BLE committee. Only the text shown in legislative format is subject to public comment at this time.

To obtain the ICC-300-2007 go to http://www.iccsafe.org/Store/Pages/Product.aspx?id=9181X07.
CHAPTER 2
DEFINITIONS

QUALIFIED PERSON: A professional trained in the proper and safe use, operation and repair of bleachers, folding and telescopic seating and grandstands and is knowledgeable in the requirements of this standard.

CHAPTER 3
CONSTRUCTION

TABLE 303.2 DESIGN LOADS

<table>
<thead>
<tr>
<th>TIERED SEATING ELEMENT</th>
<th>LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seats (vertical)</td>
<td>120 pounds per linear foot.</td>
</tr>
<tr>
<td>Horizontal sway loads</td>
<td>24 pounds per linear foot parallel to the seats and 10 pounds per linear foot perpendicular to the seats. These loads need not be assumed to act concurrently and need not be applied simultaneously with other lateral forces such as wind or seismic loads.</td>
</tr>
<tr>
<td>Treads</td>
<td>Stair treads and aisle stair treads shall be designed to resist a minimum concentrated load of 300 pounds on an area of 4 square inches.</td>
</tr>
<tr>
<td>Handrails and guards, uniform load</td>
<td>Handrail assemblies and guards shall be designed to resist a load of 50 pounds per linear foot (pound per foot) applied in any direction at the top. The supporting elements shall transfer this load to the structure.</td>
</tr>
<tr>
<td>Handrails and guards, concentrated load</td>
<td>Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds, applied in any direction at any point along the top. Attachment devices and supporting elements shall transfer this load to the structure. This load need not be assumed to act concurrently with the uniform load.</td>
</tr>
<tr>
<td>Guards, infill components</td>
<td>Intermediate rails (all those except the handrail), balusters, and panel fillers (including flexible infill components) shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot, including openings and space between rails. Reactions due to this loading are not required to be superimposed with the uniform loads or concentrated loads. Application of the loads shall not allow guard openings greater than that permitted by Sections 408.2 and 503.2.</td>
</tr>
</tbody>
</table>

For SI: 1 square inch = 645.46 mm², 1 square foot = 0.0929 m², 1 pound = 4.448 N, 1 pound per linear foot = 14.594 N/m.
303.4 Stress increases. Where Handrails and guards are designed in accordance with the provisions for allowable stress design (working stress design) exclusively for the loads specified in Section 303.2, allowable stress for the members and their attachments is permitted to be increased by one-third. Stresses permitted in the design standards of the various materials shall be permitted to be increased by one-third due to sway or wind loads or by a combination of sway or wind loads and vertical loads, provided that no such increases shall be allowed for stresses due to vertical loads alone. All other allowable stress increases relative to the design of the installation shall be in accordance with the building code.

303.4 Horizontal Sway Loads. Bleachers, folding and telescopic seating and grandstands shall be designed to resist lateral forces produced by the sudden and concerted motion of spectators.

303.4.1 Sway Parallel to Seating. A horizontal load of 24 pounds per linear foot shall be applied parallel to seating at the footboard level of each row of seating.

303.4.2 Sway Perpendicular to Seating. A horizontal load of 10 pounds per linear foot shall be applied perpendicular to seating at the footboard level of each row of seating.

303.5 Load Combinations. In addition to the load combinations required to be considered for design in accordance with the building code, the additional load combinations in Section 303.5.1 or in Section 303.5.2 shall be considered. Parallel and perpendicular sway loads need not be considered simultaneously. Also uniform, concentrated and infill loads need not be considered simultaneously.

303.5.1 Load combinations using strength design or load and resistance factor design. When using strength design or load and resistance factor the following additional load combination must be considered.

\[ 1.2D + 1.0L + 1.6Z \]  
\[ 1.2D + 1.2 R_r \]  
(Equation 3-1)

303.5.2 Load combinations using allowable stress design. When using allowable stress design the following additional load combination must be considered.

\[ D + 0.75L + 0.75Z \]  
\[ D + 0.75R_r \]  
(Equation 3-3)
303.5.3 Notations of terms in load combination equations. The following notations shall, for the purpose of this chapter, have the meanings shown herein.

- **D** = dead load as defined by the building code
- **L** = live load as defined by Section 303.2
- **Z** = horizontal sway loads as defined by Section 303.4.2 and Section 303.4.3
- **R** = guard or handrail loads as defined in Table 303.2

(Renumber subsequent sections)

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.

CHAPTER 4
CONSTRUCTION

404.5 Required width. The clear width of aisles and other means of egress for indoor smoke-protected assembly seating shall not be less than the occupant load served by the egress elements multiplied by the appropriate factor in Table 404.5(1). The clear width of aisles and other means of egress for indoor assembly seating that is not smoke protected shall not be less than the occupant load served by the egress elements multiplied by the appropriate factor in Table 404.5(2). The clear width of aisles and other means of egress for outdoor smoke-protected assembly seating not be less than the occupant load served by the egress elements multiplied by the appropriate factor in Table 404.5(3). The total number of seats specified shall be those within the space exposed to the same environment. Aisles shall also comply with Section 405.

404.5.1 Measurement. The clear width of aisles and other means of egress shall be measured to walls, edges of seating and tread edges except for permitted projections. There shall be no obstructions in the required width of aisles except for handrails as provided in Section 409.7.

405.2 Minimum aisle width. The minimum clear width of aisles shall be as follows.

1. Forty-eight inches (1219 mm) for aisle stairs having seating on each side.
Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

2. Thirty-six inches (914 mm) for aisle stairs having seating on only one side.

Exception: Twenty-three inches (584 mm) between an aisle stair handrail and seating where an aisle does not serve more than five rows on one side.

3. Twenty-three inches (584 mm) between an aisle stair handrail or guard and seating where the aisle has a mid-aisle handrail.

4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

Exceptions:
1. Thirty-six inches (914 mm) where the aisle serves less than 50 seats.
2. Thirty inches (762 mm) where the aisle does not serve more than 14 seats.

5. Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.

Exceptions:
1. Thirty inches (762 mm) where the aisle does not serve more than 14 seats.
2. Twenty-three inches (584 mm) between an aisle stair handrail and seating where an aisle does not serve more than five rows on one side.

405.5 Uniform width. Those portions of aisles, where egress is possible in either of two directions, shall be uniform in required width and shall be measured in accordance with Section 404.5.1.

405.6 Dead ends. The length of a dead-end aisle shall not exceed 16 rows in nonsmoke-protected assembly seating and 21 rows in smoke-protected assembly seating.

Exceptions: Dead-end aisles terminating at a cross aisle or vomitory providing access to an exit at only one end and complying with any one of the following shall be permitted.
1. In nonsmoke-protected assembly seating, dead-end aisles exceeding 16 rows are permitted where seats beyond the 16th row are no more
than 24 seats from another aisle, measured along a row of seats having an aisle accessway with a minimum clear width of 12 inches (305 mm) plus 0.6 inch (15.2 mm) for every additional seat beyond seven where seats have backrests or beyond ten where seats are without backrests in the row.

2. For smoke-protected seating, dead-end aisles exceeding 21 rows are permitted where seats beyond the 21st row are no more than 40 seats from another aisle, measured along a row of seats having an aisle accessway with a minimum clear width of 12 inches (305 mm) plus 0.3 inch (7.6 mm) for each additional seat beyond seven where seats have backrests or beyond ten where seats are without backrests in the row.

406.6.2 Tread marking stripe. Where tread or riser nonuniformity exceeds 0.188 inch (4.8 mm), a distinctive marking stripe shall be provided on each tread adjacent to the non uniform tread or riser. The marking shall be provided on each tread at the nosing or leading edge such that the location of each tread is readily apparent when viewed in descent. Such stripe shall be a minimum of 1 inch (25 mm) wide and a maximum of 32 inches (7651 mm) wide.

Exception: The contrasting marking stripe is permitted to be omitted where tread surfaces are such that the location of each tread is readily apparent when viewed in descent.

407.2 Minimum width. Where seating rows have 14 or fewer seats, the minimum clear aisle accessway width shall not be less than 12 inches (305 mm) measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind. Where chairs have automatic or self-rising seats, the measurement shall be made with seats in the raised position. Where any seat in a row does not have an automatic or self-rising seat, the measurements shall be made with the seat in the down position. For seats with folding tablet arms, row spacing shall be determined with the tablet arm down in the use position.

Exception: For seats with folding tablet arms, row spacing is permitted to be determined with the tablet arm in the stored position where the tablet arm when raised manually to a vertical position in one motion automatically returns to the stored position by force of gravity.

407.3 Dual access. For rows of seating served by aisles or doorways at both ends, there shall not be more than 100 seats per row. The minimum clear width of 12 inches (305 mm) between rows shall be increased by 0.3 inch (7.6 mm) for every additional seat beyond 14 where seats have backrests or beyond 21 where seats are without backrests. The minimum clear width is not required to exceed 22 inches (559 mm).
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 in accordance with Section 407.5.
2. Where seats are without backrests, 21 seats between aisles shall be permitted with a minimum clear width of 12 inches (305 mm).

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 (15 240 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

407.5 Smoke-protected aisle accessways. The design of smoke-protected aisle accessways shall comply with Table 407.5.

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF SEATS IN THE SMOKE PROTECTED ASSEMBLY OCCUPANCY</th>
<th>MAXIMUM NUMBER OF SEATS PER ROW PERMITTED TO HAVE A MINIMUM 12-INCH CLEAR WIDTH AISLE ACCESSWAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aisle or doorway at both ends of row</td>
</tr>
<tr>
<td></td>
<td>Seats with backrests</td>
</tr>
<tr>
<td>Less than 4,000</td>
<td>14</td>
</tr>
<tr>
<td>4,000</td>
<td>15</td>
</tr>
</tbody>
</table>
409.5.1 Mid-aisle handrail termination. Mid-aisle handrails shall not extend beyond the lowest riser and shall terminate within 30 inches (762mm) 18 inches (381mm) measured horizontally, from the face of the lowest riser. Handrail extensions are not required.

Exception: Mid-aisle handrails shall be permitted to extend beyond the lowest riser where the handrail extensions do not obstruct the width of the cross aisle.

CHAPTER 5
EXISTING BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS

502.2 Durability. Materials used in the construction of outdoor installations shall be weather resistant. Where wood is used, it shall be naturally durable or preservative-treated wood as defined in the building code or other approved material. Where ferrous metal is used, it shall be protected from corrosion. Fasteners shall consist of aluminum or other approved corrosion-resistant materials or shall be provided with approved-corrosion-resistant coatings such as copper or zinc.

5.2.2.1 Application. Bleachers, Folding and Telescopic Seating and Grandstand systems included in this standard must be maintained in good repair and structurally sound so not to pose a threat to the public health, safety or welfare.

505.2.2 Unsafe conditions. Seating shall comply with Chapter 5 and the applicable sections of the International Property Maintenance Code, Sections 304 and 305. In seating areas affected by damage, unsafe operation or defects that interfere with safe use shall not be used or operated until satisfactory repairs restoring safe use is completed.
505.2.3 Notification. Written or oral notice shall be provided to the owner or owner’s representative of the unsafe condition upon discovering the defective conditions.

SECTION 505
SEATING RELOCATION

Section 505.1 Relocating existing bleachers. Relocating existing bleachers to a new location shall be permitted provided the existing bleacher complies with Sections 303.6, 304, 306, 307, 308 and 310 and Chapter 5.

Exception: Where full compliance with Sections 310.1 and 501.4 is technically infeasible, the relocated existing bleachers shall provide access in compliance with the building code to the maximum extent technically feasible.