International Code Council

ICC 300-2017 edition

Supplement 3 Public Input Agenda based on input received On the 2012 edition of the ICC 300 standard

For June 2017 Meeting - Teleconference

IS-BLE 35-17
ICC 300 Section 303.6

Proponent: Kevin Warapius

Revise as follows:

303.6 Deflections. Deflections of structural members in grandstands, bleachers, and folding and telescopic seating shall not be limited ~~Live load deflection of structural members shall be limited to 1/200 of the span.~~

~~**Exception:** Deflection of members in folding and telescopic seating shall not be limited.~~

Reason: The exception in ICC-300 for no limits for folding and telescoping has been in ICC 300 since the first edition in 2002 for design reasons specific to these systems, and the occupant comfort without deflection limits has been found to be acceptable for many decades. From a logical viewpoint, the occupants of any bleacher, grandstand, and stadium should have the same level of comfort regarding deflections, so since it has been acceptable with no limit for folding and telescoping seating, it should be equally applicable to all other types of seating construction.

The 2015 IBC refers to AISC 360 for serviceability and deflections, and AISC 360-16 – 16.1-165 states that serviceability and deflection should be addressed per ASCE 7, Appendix C and its commentary. ASCE 7-16 Appendix C state that the appendix is NOT a mandatory part of the standard but provides guidance for design for serviceability to maintain the function of a building and the comfort of its occupants during normal usage. The commentary states that excessive deflections, vibrations, and deterioration can diminish serviceability of buildings. Recommended serviceability limits in the commentary are intended to prevent damage to or loss of function of cladding(brick, masonry, EFIS, etc), doors, windows, and interior components and finishes, including doors, windows and partitions, none of which are present in grandstand and bleachers. Aluminum bleachers and grandstands have performed very well since the early 1970's as aluminum handles deflections due to vertical live loads, wind, sway, and thermal expansion and contraction without distress of any kind. Folding and telescopic bleachers have performed well without deflection limits, steel or concrete and aluminum grandstands are stiffer than these and should also not have specified deflection limits.

IS-BLE 36-17
ICC 300 Section 303.5.1

Proponent: Kevin Warapius

Revise as follows:

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.

$1.2D + 1.0L + \sout{1.6Z}\ \underline{1.0Z}$ (Equation 3-1)

$1.2D + 1.2R_r$ (Equation 3-2)

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

$D + 0.75L + 0.75Z$ (Equation 3-3)

$D + 0.75R_r$ (Equation 3-4)

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_r = guard or handrail loads as defined in Table 303.2

Reason: This strength load combination is not consistent with the allowable stress load combination in (Equation 3-3) – D + 0.75L + 0.75Z and apparently is a typographical error. Z = sway load is a short duration dynamic load like wind and earthquake and it should be factored the same as wind and earthquake loads per ASCE 7-16, which uses a1.0 Load factor for strength design and 0.75 load factor for allowable stress design.