International Code Council

ICC 300-2017 edition

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

For June 2017 Meeting - Teleconference

IS-BLE 28-17

ICC 300 Section 303.5.1

Proponent: Jim Hackett, representing California Division of the State Architect

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 + 1.6Z	(Equation 3-1)
0.9D + 0.4L + 1.6Z	(Equation 3-2)
1.2D + 1.2R_r	(Equation ~~3-2~~ 3-3)

Reason: New Equation 3-2 is intended to provide a stability check equivalent to the 2015 International Building Code (IBC) Equation 16-6. Live load is included in this load combination because maximum sway is produced when the occupant live load is approximately 40 psf. Starting with a design load of 100 psf, the 0.4L was derived as follows: 0.9(0.4)L rounded up to 0.4L.

Bibliography: Woodbury, William N (1947), Grandstand and Stadium Design, New York, NY: American Institute of Steel Construction, Inc.

IS-BLE 29-17
ICC 300 Section 303.5.1

Proponent: Jim Hackett, representing California Division of the State Architect

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 + 1.6Z (Equation 3-1)

1.2D + 1.6L + ~~1.2~~ 1.6R_r (Equation 3-2)

Reason: Equation 3-2 revised as follows: 1) live load is added to this load combination including rail loading because DSA finds during plan review that live load is being neglected on structural elements resisting both live load and rail load simultaneously, and 2) the load factor on rail load is increased from 1.2 to 1.6. This effectively eliminates the 4/3 stress increase applied to this load due to short term loading. The 4/3 stress increase for use in Allowable Stress Design was removed from the Uniform Building Code in 1988, but has never been applied to the Strength Design load combinations published in the UBC or International Building Code (IBC).

IS-BLE 30-17
ICC 300 Section 303.5.2

Proponent: Jim Hackett, representing California Division of the State Architect

Revise as follows:

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)
0.6D + 0.3L + 1.0Z	(Equation 3-4)
D + 0.75R_r	(Equation ~~3-4~~ 3-5)

Reason: The intent of the new Equation 3-4 is twofold: 1) to provide a stability check equivalent to the 2015 International Building Code (IBC) Equation 16-12, and 2) to provide a load combination insuring all elements resisting sway are designed for the full sway load. This is particularly important for elements resisting sway load but not a significant amount of live load. Live load is included in this load combination because maximum sway is produced when the occupant live load is approximately 40 psf. Starting with a design live load of 100 psf, the 0.3L was derived as follows: 0.6(0.4)L rounded up to 0.3L.

Bibliography: Woodbury, William N (1947), Grandstand and Stadium Design, New York, NY: American Institute of Steel Construction, Inc.

IS-BLE 31-17
ICC 300 Section 303.5.2

Proponent: Jim Hackett, representing California Division of the State Architect

Revise as follows:

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 + L + ~~0.75~~R_r (Equation 3-4)

Reason: Equation 3-4 s revised as follows: 1) live load is added to this load combination including rail loading because DSA finds during plan review that live load is being neglected on structural elements resisting both live load and rail load simultaneously, 2) the load factor on rail load is increased from 0.75 to 1.0, effectively eliminating the 4/3 stress increase for use in Allowable Stress Design have never been allowed in the IBC. This change makes the load combinations for rails designed under ICC-300 consistent with the load combinations for rails designed under the IBC.