

BLEACHERS CHECKLIST FOR USE WITH 2009 ICC w/WI AMENDMENTS

DESIGN

Calculations show proper inputs for live, dead, snow, and wind loads based upon location & geometry and load resisting systems provide a continuous path to the ground.

Wind load analysis is in accordance with ASCE 7-05 section 6.4 simplified method or section 6.5 analytical method if enclosed, protected by roof or constructed pressbox(es)

Appropriate, code permitted factors for load duration, load combinations, etc, are used in the calculations (sections 1604, 1605, and material chapters as applicable).

Unusual conditions – unbalanced snow & drift, seismic, and impact loads, discontinuous columns, cantilevers, etc. – are considered and are clearly noted on plans.

Construction documents show the applicable info from section 1603 and calculated member sizes agree with the plans.

GENERAL

A bleacher is either type IIB if non-combustible or VB if it has combustible decking

Unless a firewall separation is provided, enter the worst class of construction for bleachers and any pressbox, concession stand or storage area

Bleaches without roof or without sidewall are a A-5 and are allowed as unlimited area or stories

Enclosed skyboxes are A-3 if serving more than 50 people

Table 602 – apply setback to building, NOT bleachers, measuring the setback between the structures, rather than to an imaginary line

SBD-10648 (R. 04/13)

FOUNDATION

Loads on footings have been determined considering all applicable loads and load combinations on all floors and roof, based upon the correct tributary area supported.

Soil bearing value and soil type shown on plans agrees with the bearing value used in the calculations and in Table 1806.2. Designer to verify high soil bearing values or discrepancies in soil type and bearing values (see standard paragraph 3964).

Plans indicate horizontal reaction resistance at foundation as applicable (hairpins, cross ties, etc.).

Calculations match plans – eccentric loads, moment/restrained vs. pin connections, type of load resisting system and continuity, etc.

Material strengths/allowable stresses are shown on the plans or in the specifications and match the submitted calculations.

Plans show connection of bleacher to foundation to prevent uplift and overturning.

Headroom requirements of IBC 1003.2 and 1208.2 are applicable. Areas of less than 7'-6" height are acceptable with proper barrier per IBC 1003.3.1. or the slope roof provisions of IBC 1208.2 exception 2

For additions and alterations, the design considers loads imposed on the existing structure due to the new construction (analyze existing structure utilizing the code in effect at the time of const. – see Q&A SPS 361.03 and see IEBC 1003).

MAINTENANCE

SPS 361.03(13) requires bleachers to comply with ICC 300-02 which includes a requirement for an annual maintenance inspection in s. 105.2. Note that ICC 300-07 requires the same actions per IBC 1028.1.1

ACCESSIBILITY & EGRESS

IBC 1104.4 – Pressboxes shall be accessible if over 500 square feet including the area of occupied roofs and porches

IBC 1009.1 exception 3 – allows bleacher aisle stairs per IBC 1025 to serve a pressbox

Wheelchairs spaces shall be provided in accordance with Table 1108.2.2.1

IBC 1108.2.4 – In multilevel seating areas, wheelchairs spaces shall be provided on the main level and on one of each two additional levels unless exception met.

At least 5%, but not less than one, of the total number of aisle seats provided shall be designed aisle seat

IBC 1028 – Bleacher egress requirements

IBC 1009.6.3 - Requires one hour separations between enclosed or unenclosed stairs and usable space underneath

IBC 1004.1.1 & 1028.15 – Determine the maximum number of gym, arena occupants per 1004.1.1 & 1028.15

IBC 1004.3 – Require posting of maximum occupant load in a conspicuous place near the main exit or exit access doorway. Sign to be legible permanent design and is to be maintained by owner.

IBC 1005.1 – Verify there is adequate egress width from the space for the posted maximum occupant load.

SANITARY REQUIREMENTS

IBC 2902.4.1 - Toilet facilities shall be provided within 500' and are accessible whenever bleachers are in use.

SANITARY (Continued)

IBC 1109.2.1 - Provide family or assisted use toilet rooms where an aggregate of 6 or more male and female water closets are required.

IBC 1109.2.2 - Provide ambulatory accessible water closet if 6 or more fixtures are required for male & female water closets

FIRE PROTECTION

IBC 508.4 - Separated mixed-use shall have the proper fire barrier between it and the bleachers with storage occupancy size limited per type of construction, frontage and whether sprinklers are provided

Minor lawnmower storage is permitted without creating a storage garage

IBC 903.2.1.5 – Sprinkler accessory areas greater than 1,000 square feet if serving A-5 occupancy (measure spaces individually with just solid construction between)

IBC 1025.6.2.3 item 2 – Smoke-protected assembly seating, including bleachers seating taking credit for smoke-protection, requires pressboxes and storage facilities over 1,000 square feet to be sprinklered

IBC 1028.1.1 – Bleachers, grandstands and folding & telescopic seating, that are not building elements shall comply with ICC 300-07

IBC 1024 – Approved luminous egress path marking shall used as required by this section to delineate the exit path

IBC 1009.6.2 – Outdoor stairways and outdoor approaches to stairways shall be designed so that water will not accumulate on walking surfaces

IBC 1028.11.3 – Provide a contrasting marking strip on each tread at the nosing or leading edge per sizing as defined.