

**Permanent Grandstands** set the standard in outdoor seating. Each installation is designed and constructed to withstand daily use, regardless of weather conditions, size of crowds, or special uses. Grandstand design provides open space beneath the stands for restrooms, team rooms, concessions, and storage.

Ease and speed of installation, as well as conformity with local building codes, are attractive design features with all our grandstand packages. In addition, Sturdisteel offers complimentary engineering services to adapt our standard designs to your needs. Regardless of site requirements, Sturdisteel engineers will design seating to meet your specifications.

Sturdisteel stands are offered with a choice of finishes and finish applications. Other options include roofing over seating areas, press box support structures, and aluminum seats, footboards, and riser boards.

Regardless of location or size of installation, Sturdisteel grandstands represent premium quality in long-term seating.

School Boards and Athletic Directors across the country know Sturdisteel grandstands are an investment in quality.

**Cover Photo:**  
Mt. Belvieu, TX



Augusta, GA



Carpenteria, CA

## PERMANENT GRANDSTANDS SPECIFICATIONS

### SECTION 13125

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Design, fabrication, and installation of permanent grandstands including:
  1. Steel Substructure; 2. Decking System;
  3. Concrete Foundation/Piers; 4. Pressbox Support; 5. Pressbox

##### 1.02 REFERENCES

- A. ASTM A36 - Specification for Structural Steel.
- B. ASTM A123 - Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products, after fabrication.
- C. ASTM A307 - Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.

##### 1.03 SUBMITTALS

- A. Submit shop drawings in accordance with Section 01300 - Submittals.
- B. Shop Drawings: Submit shop drawings sealed by a registered professional engineer indicating location, size, details, and quantity of all steel, aluminum, and wood components.

##### 1.04 QUALITY ASSURANCE

- A. Codes and Standards: Design, fabrication, and installation shall be in accordance with applicable codes, regulations, and handicap requirements. Owner will furnish local code requirements.
- B. Manufacturer Qualifications: Minimum 10 years experience in the design and manufacture of permanent grandstands.
- C. Installer Qualifications: Employ persons trained and experienced in the installation of permanent grandstands.
- D. Welders: AWS certified.

##### 1.05 PROJECT CONDITIONS

- A. Owner will verify site location.
- B. Owner will locate all underground utilities and obstructions.
- C. Owner will furnish geotechnical report indicating soil conditions.

##### 1.06 WARRANTY

- A. Guarantee permanent grandstands to be satisfactory as to design, workmanship, and materials for 1 year beginning after completion of project.

#### PART 2 PRODUCTS

##### 2.01 MANUFACTURER

- A. Sturdisteel Company, PO Box 2655, Waco, Texas 76702-2655. Tel (800) 433-3116. Fax (254) 666-4472.

##### 2.02 PERMANENT GRANDSTANDS

- A. Size: \_\_\_\_\_ feet long by \_\_\_\_\_ rows. (Refer to Seating Capacity Chart for permanent grandstands.)
- B. Design: Design shall be in accordance with American Institute of Steel Construction, Specifications for Aluminum Structures, and US Forest Products Laboratories.
- C. Design Loads:
  1. Live Load: 100 psf gross horizontal area.
  2. Perpendicular Sway Load: 10 plf of seat plank.
  3. Lateral Sway Load: 24 plf of seat plank.
  4. Wind Load: 30 psf vertical projection.
  5. Live Load for Seat and Tread Planks: 120 plf.
  6. Guardrail Loads:
    - a. Vertical: 100 plf.
    - b. Horizontal: 50 plf.
- D. Shop Connections: Welded and capable of

carrying stress put upon them.

- E. Welding: AWS standards.
- F. Steel Members:
  1. Stringers: 6'-0" on center.
  2. Columns: Spaced at 18'-0" on center longitudinal and 13'-0" on center transverse. (Spacing may vary depending on application)
  3. Crossbraces: Steel angles.
- G. Dimensions:
  1. Front Walkway: 54 or 60 inches clear width.
  2. Seat Height: 17 inches.
  3. Walkway Elevation: 42 to 48 inches.
  4. Aisle Width: 48 inches or conforms with applicable codes.
  5. Type R25 Stand: Rise 9-3/4 inches. Tread 25 inches.
  6. Type R30 Stand: Rise 11-1/2 inches. Tread 30 inches. (Minimum required for Backrest)
  7. Type R33 Stand: Rise 12-7/8 inches. Tread 33 inches. (Minimum required for Chair Seats) (Rise and tread may vary depending on application)
- H. Deck Arrangements:
  1. Walkway: Five 2 by 10 and one 2 by 12 or four 2 by 10 and two 2 by 12.
  2. Seat: One 2 by 10 or one 2 by 12. (Optional Backs or Chairs)
  3. Aisle Steps: One 2 by 12 or two 2 by 8 with one 2 by 6 or one 2 by 4 closure.
  4. Type R25 Stand: Full Deck, Closed Deck, Tongue & Groove or Interlocking Deck.
  5. Type R30 Stand: Full Deck, Closed Deck, Tongue & Groove or Interlocking Deck.