

SECTION 13 3416

METAL STRUCTURE PRESS BOX

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Furnish all labor, materials, equipment, tools and services to fully complete all Metal Press Box work as is indicated on the drawings and/or specified herein including, but not limited to, the following described items.
 - 1. Steel Substructure.
 - 2. Decking System.
 - 3. Concrete Foundation.
 - 4. Press Box Support Structure.
 - 5. Press Box.
 - 6. Railings and infill fencing
 - 7. Metal Access Stair

- B. Do not include sales tax, refer to Section 00 0104 - Notice to Contractors/Manufacturers.

1.02 REFERENCE STANDARDS

- A. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturers must have ten years of experience in the manufacture of bleachers and grandstands; welders must be AWS certified; manufacturing capability according to various code compliances.

- B. Installer Qualifications: Experienced in the proper installation of grandstands.

- C. Source Quality Control: Mill Test Certification.

1.04 SUBMITTALS

- A. Manufacturer's Product Data: Submit manufacturer's descriptive product data for project.

- B. Shop Drawings: Manufacturer to submit shop drawings sealed by a registered professional engineer and schedules for type, location, quantity, and details of steel and aluminum components required for project.

- C. Certificates:
 - 1. Insurance Certificate.

- D. Color Samples: For applicable materials, submit samples. Color as selected by Owner.

1.05 SITE CONDITIONS

- A. Field Site:
 - 1. Owner to make site accessible.
 - 2. Owner to verify site locations, benchmarks.

- B. Underground Utility Line: Owner to clearly mark all underground utilities and obstructions and Owner to relocate all that conflict with Press Box.
- C. Soil Test: Furnished by Owner.

1.07 BUILDING CODES

- A. Building Code that applies to this project is the 2018 IBC with State of Utah Amendments.

1.08 WARRANTY

- A. Press Box shall be under warranty for a period of one year beginning at Date of Substantial Completion for Projects installed by Manufacturer. The Press Box is warranted to be free from defect in materials and workmanship in the course of manufacture. This warranty excludes any other defects resulting from abnormal use in service, accidental or intentional damage or any occurrences beyond Manufacturer's control.

1.09 MAINTENANCE

- A. Owner is to conduct annual inspection and required maintenance of Press Box to ensure safe conditions. It is also recommended that a professional engineer or registered architect perform inspections biennially.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design Product: Subject to compliance with requirements, Southern Bleacher Company, or comparable product by one of the following:
 - 1. Sturdi Steel Bleacher.
 - 2. Dant Clayton
 - 3. Other manufacturers seeking to be approved must submit product literature to the Owner for review and receive approval from Owner seventy-two hours prior to bid time.

2.02 PRESS BOX WITH METAL STRUCTURE

- A. Product Description: Type II Construction:
 - 1. Press Box Support Structure: Independently supported. Support Structure to be sized to accommodate the dimension of the Press Box shown on the design drawings.
 - 2. Press Box Dimensions: 10 feet wide x 24 feet long with 2 interior compartments.
 - 3. Filming Area/Observation Deck located on Press Box roof.
 - 4. Press Box to be of open construction, allowing inspection of electrical wiring, switches and other components without destructive disassembly.
- B. Materials/Finishes:
 - 1. Press Box Support Structure:
 - a. Structural shapes meet one of the following ASTM specifications: A36, A36/A572 grade 50, A572 grade 50, A529-50, or A500 grade B.
 - b. Shop connections are seal welds.
 - c. After fabrication, all steel is hot-dipped galvanized to ASTM-A-123 specifications.
 - 2. Press Box: All materials shall be new and shall comply with ASTM specifications.
 - a. Floor:
 - 1) Main support to be a galvanized steel floor frame sized to support structure and metal belly pan for support of insulation.

- 2) Floor to be INTERLOCK Aluminum Decking System, extruded aluminum alloy 6063-T6, mill finish. Attach Decking System to steel floor frame with mechanical fasteners at end of plank and at intermediate supports. (Tongue & Groove or Standard extrusion is not acceptable.)
 - 3) Insulation: Poly-encapsulated Formaldehyde-free fiberglass building insulation R-13, 3 1/2 inches thick. Batt or roll as manufactured by Johns Manville, or equal.
- b. Wall Structure:
- 1) 4 inch x 4 inch x 11 gauge square tubing with maximum span of 14 feet on front wall and maximum span of 6 feet on back wall and 4 inch x 2 1/2 inch x 14 gauge steel "cees" with maximum spacing of 5 feet for all walls with siding. Spans greater than these require engineered calculations for design.
 - 2) Insulation: Poly-encapsulated Formaldehyde-free fiberglass building insulation R-13, 3 1/2 inches thick. Batt or roll as manufactured by Johns Manville or equal.
 - 3) Interior Finish:
 - (a) 1/2 inch vinyl coated gypsum panels, Gold Bond vinyl-surfaced Durasan-Harvest Cotton.
 - (b) Cove Base: Vinyl 4 inches x .080 equal to PRO CB-35 Nubian.
 - (c) Exterior Finish:
 - (1) 26 gauge prefinished R-Panel paneling as manufactured by MBCI, Signature 200 color series, or equal.
 - (2) Wall panels are attached with #12 TEK screws - 6" O.C. at the top, midpoint and bottom of the panels.
 - (3) Lap screws are placed at each end of the panels, at the intermediate supports, and at the mid point between supports (TEK #14).
 - (4) All fasteners to be painted same color as exterior paneling.
- c. Roof Structure:
- 1) 4 inch x 4 inch x 11 gauge square tubing with maximum spacing of 6 feet on center and 4 inches x 2 1/2 inches x 14 gauge steel "cees" with maximum spacing of 2 feet on center.
 - 2) Roof: 1/8 inch fourway steel plate roof, continuous welded seams coated with acrylic metal primer as manufactured by Coronado and 36 mils of acrylink roof coating as manufactured by Isothermal Protective Coatings, or equal. Plate is welded on both sides of rafters with 1-1/2 inch long 1/8 inch fillet welds on 12 inch centers.
 - 3) Insulation: Poly-encapsulated Formaldehyde-free fiberglass building insulation, R-19 (minimum) 6 inches thick. Batt or roll as manufactured by Johns Manville or equal.
 - 4) Cornice: 26 gauge steel prefinished to match metal siding.
 - 5) Ceiling: 24 inch x 24 inch x 5/8 inch acoustical ceiling tile (model #- USG Fissured 560) with USG grid main tee (model # DXL24), cross tee (model # DXL 216), wall angle (model # M7), wind clips and other components as manufactured by USG, or equal.
- d. Exterior Door(s):
- 1) Full flush steel construction with honeycomb core. 18 gauge skin sheets. Dimensions: 3 feet 0 inches x 6 feet 8 inches. Color: As selected by Owner.
 - 2) Steel door frame (16 gauge) complete with 1/2 inch threshold and weather-stripping.
 - 3) Exterior Hardware: Von Duprin 360L. Handles shall be lever type that allow operation without tight grasping or twisting of the wrist. Keyed alike locks.
 - 4) Interior Hardware: Von Duprin 35L. Handle shall be panic bar that allows for opening without any grasping, twisting or turning.

- e. Interior Door:
 - 1) Interior Birch Unit. Dimensions: 3 feet 0 inches x 6 feet 8 inches.
 - 2) Hardware: Handles shall be lever type that allow operation without tight grasping or twisting of the wrist. (Non-locking, passage set)
- f. Interior Walls:
 - 1) Framing to be steel galvanized studs (25 gauge) 1 1/4 inch x 3 5/8 inch at maximum 2 feet on center.
 - 2) Finishes to be consistent with all other interior finishes.
- g. Windows:
 - 1) Frame: Extruded aluminum single hung, vertical sliding unit, thermal break.
 - 2) Sash: Tilt toward inside for easy cleaning.
 - 3) Glazing: Clear tempered panes.
 - 4) Dimensions of each unit: Dependent on compartment size. At interior wall locations or structural support locations the dimension between windows shall be no greater than 6 inches.
 - 5) Finish: Electrostatically applied acrylic enamel.
- h. Work Bench: 1" thick x 21" wide clear anodized aluminum work bench supported by 4" x 4" x 11 gauge steel tubing. Countertops heights shall be constructed to allow wheelchair usage at all locations.
- i. Painting: Materials equal to Coronado, or equal.
 - 1) Surfaces: Exterior Door(s), Door Frame(s)
 - (a) Primer: Applied by Door Manufacturer.
 - (b) Finish: 2 coats acrylic latex semi-gloss enamel applied by press box manufacturer. Color as selected by Owner.
 - (c) Surfaces: Interior Doors
 - (1) Primer: Jones Blair Interior Exterior Oil Primer, or equal.
 - (2) Finish: 2 coats acrylic latex semi-gloss enamel. Color as selected by Owner.
 - (d) Surfaces: Exterior Siding
 - (1) Primer: Applied by Siding Manufacturer.
 - (2) Finish: Applied by Siding Manufacturer. Color as selected by Owner.
 - (3) Touchup: If applicable
 - (e) Surfaces: Wall and Roof Structure
 - (1) Primer: Coronado DTM Industrial 180-11 acrylic metal primer applied after welding, or equal.
- j. Caulking: Sonneborn NP1–Polyurethane sealant, All temperature, UV resistant, or equal. Silicone products are not acceptable.
- k. Electrical
 - 1) Submittal drawing shall indicate devices and circuitry.
 - 2) Fixtures: As shown on drawings. Fixtures shall be located above countertop and be maximized to full length of compartment space.
 - 3) Wiring to be in nonmetallic Panduit, or equal. N.E.C. breaker box to be 100 amp surface mounted on wall with 2 inch rigid conduit to be stubbed out at back wall of press box ready for service line to be connected. (Service line to Press Box is responsibility of Owner).
 - 4) Electrical outlet(s) installed per NEC shall be standard duty. All outlets shall be surface mounted on wall.
 - 5) Data, Telephone, WiFi: Empty single junction boxes per N.E.C. with 3/4 inch conduit stubbed to a recessed Back Box as shown on drawings. Junction boxes to be flush mounted into wall. Exterior location to be weathertight. Wiring completed on-site by others. Quantities as shown on drawings.
 - 6) Filming Area/Observation Deck: Weathertight outlet box for cameras and Weathertight J-Box for owner;s data. Quantity: One each.

- I. Filming Area/Observation Deck:
 - 1) Interior: Roof hatch with OSHA-rated aluminum ladder mounted to an interior back wall.
 - 2) Roof guardrailing to be 42" above walking surface around perimeter of deck attached to 5/8 inch galvanized studs to be welded to roof support structure. The guardrailing to include anodized aluminum with 9 gauge galvanized chain link fencing fastened in place with galvanized fasteners and aluminum ties.

2.03 WARRANTY

- A. The Press Box shall be under warranty for a period of one (1) year beginning at Date of Substantial Completion for projects installed by Manufacturer. The Press Box is warranted to be free from defect in materials and workmanship in the course of manufacture. This warranty excludes any other defects resulting from abnormal use in service, accidental or intentional damage or any occurrences beyond manufacturer's control.

PART 3 EXECUTION

3.01 INSTALLATION

- A. All work performed by technicians experienced in press box metal structure installation.
- B. Project will be as per approved shop drawings.

3.02 FIELD QUALITY CONTROL

- A. Foundation: Footings for the metal press box structure, provided in this specification Section, give sufficient bearing area at bottom to support all loads of the press box. Depth and design of footings shall be determined by Owner supplied soil test. Hot-dipped galvanized anchor bolts shall be secured in the concrete footings. Concrete shall attain a working strength as determined by the manufacturer's licensed engineer, but not to be less than 3,000 psi.

3.03 CLEAN-UP

- A. Clean up all debris caused by work of this Section.

END OF SECTION 13 3416