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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The CSI Construction Specifications Practice Guide*.

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all "Specifier Notes" after editing this section.

Section numbers and titles are from *MasterFormat 2016 update*.

SECTION 12 63 13

STADIUM AND ARENA BENCH SEATING

Specifier Notes: This section covers Sturdisteel aluminum stadium bench seating. Consult Sturdisteel for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum stadium bench seating.

1.2 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this section, complete with designations and titles.

- A. AAMA 2603 – Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.

- B. Aluminum Association (AA) Aluminum Design Manual.
- C. ASTM A 307 – Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
- D. AWS D1.1 / D1.1M – Structural Welding Code – Steel.
- E. AWS D1.2 / D1.2M – Structural Welding Code – Aluminum.

Specifier Notes: Include CWB CSA W47.1 and CWB CSA W47.2 for projects in Canada.

- F. CWB CSA W47.1 – Certification of Companies for Fusion Welding of Steel.
- G. CWB CSA W47.2 – Certification of Companies for Fusion Welding of Aluminum.

1.3 PREINSTALLATION MEETINGS

Specifier Notes: Edit preinstallation meetings as necessary. Delete if not required.

- A. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of aluminum stadium bench seating.
- B. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer's representative.
- C. Review materials, installation, adjusting, protection, and coordination with other work.

1.4 SUBMITTALS

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

- A. Comply with Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating location, size, details, and quantity of components and accessories.
- D. Samples: Submit manufacturer's color samples for selection.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- F. Manufacturer's Project References: Submit manufacturer's list of successfully completed aluminum stadium bench seating projects, including project name and location, name of architect, and type and quantity of seating furnished.

- G. Installer's Project References: Submit installer's list of successfully completed aluminum stadium bench seating projects, including project name and location, name of architect, and type and quantity of seating installed.
- H. Warranty Documentation: Submit manufacturer's standard warranty.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer regularly engaged, for past 10 years, in design and manufacture of aluminum stadium bench seating of similar type to that specified.
- B. Installer's Qualifications:
 - 1. Installer regularly engaged, for past 5 years, in installation of aluminum stadium bench seating of similar type to that specified.
 - 2. Employ persons trained and experienced for installation of aluminum stadium bench seating.

Specifier Notes: Specify AWS for projects in USA. Specify CWB for projects in Canada.

- C. Welder's Qualifications: [AWS] [CWB] certified within past 12 months for each type of weld required.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
 - 1. Store and handle materials in accordance with manufacturer's instructions.
 - 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
 - 3. Do not store materials directly on ground.
 - 4. Protect materials and finish during storage, handling, and installation to prevent damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Sturdisteel, PO Box 2655, Waco, Texas 76702. Toll Free 800-433-3116. Phone 254-666-5155. Fax 254-666-4472. Website www.sturdisteel.com. E-mail info@sturdisteel.com.
- B. Substitutions: Not permitted.

2.2 DESIGN REQUIREMENTS

- A. Design: Conform to AA Aluminum Design Manual.

- B. Applicable Codes: Design and workmanship shall be in accordance with IBC 2012 and ICC 300 Bleachers, Folding and Telescopic Seating, and Grandstands.
- C. Design Loads:
 - 1. Live Loads:
 - a. Uniform Loading, Seat Boards: 120 plf.
 - b. Uniform Loading, Tread Boards: 120 plf.
- D. Shop Connections: Welded and capable of carrying stress put upon them.

Specifier Notes: Specify AWS D1.1 and AWS D1.2 for projects in USA. Specify CWB W47.1 and CWB W47.2 for projects in Canada.

- E. Welding: [AWS D1.1 and AWS D1.2] [CWB W47.1 and CWB W47.2].

2.3 ALUMINUM STADIUM BENCH SEATING

Specifier Notes: Specify galvanized steel or extruded aluminum brackets.

- A. Brackets: [Galvanized steel] [Extruded aluminum alloy 6061-T6].
 - 1. Tread Mounted: Z-brackets.
 - 2. Riser Mounted: T-brackets and L-brackets.
- B. Seat Boards, Backrests, Stanchions, and Covers:
 - 1. Extruded aluminum alloy 6063-T6.

Specifier Notes: Specify clear anodized or powder coat finish.

- 2. Finish: [Clear anodized 204R1, AA-M10C22A31, Class II] [Powder coat, AAMA 2603, color selected by Architect from manufacturer's standard colors].
- C. Riser Boards:
 - 1. Extruded aluminum alloy 6063-T6.
 - 2. Maximum Length: 32 feet.

Specifier Notes: Specify clear anodized or powder coat finish.

- 3. Finish: [Clear anodized 204R1, AA-M10C22A31, Class II] [Powder coat, AAMA 2603, color selected by Architect from manufacturer's standard colors].
- D. Tread Boards:
 - 1. Extruded aluminum alloy 6063-T6.
 - 2. Maximum Length: 32 feet.

Specifier Notes: Specify mill finish or clear anodized finish.

3. Finish: [Mill finish] [Clear anodized 204R1, AA-M10C22A31, Class II].

Bleacher manufacturer will not be responsible for the discoloration, staining and fading of exposed mill finish aluminum surfaces due to oxidation; prior to, during or after installation. Oxidation of mill finish aluminum surfaces is a natural phenomenon and is caused by condensation or moisture during packaging, transportation and/or storage.

E. Accessories:

1. End Caps:
 - a. End of rows for flat seat and tread boards.
 - b. Attach with 3/16-inch pop or drive rivets.
 - c. Channel End Caps: Aluminum alloy 6063-T6; clear anodized 204R1, AA-M10C22A31, Class II.
 - d. Form-Fitted End Caps: Aluminum alloy 2024; clear anodized 204R1, AA-M10C22A32, Class II.
2. Hold-Down Clip Assembly:
 - a. Attach boards to brackets.
 - b. Aluminum alloy 6061-T6.
 - c. Hold-Down Clips: 4-way adjustable, 5/16-inch by 1-1/4-inch carriage bolt, 5/16-inch nut.

F. Hardware:

1. Steel Bolts and Nuts: ASTM A 307, galvanized steel.

G. Number Plates:

Specifier Notes: Specify type of number plates.

1. Type: [Adhesive stickers] [Plastic plates; attach with 1/8-inch aluminum pop rivets] [Aluminum plates; attach with 1/8-inch aluminum pop rivets].
2. Size: 1-5/8 inches by 2-3/4 inches.
3. Color: Brushed silver background, black characters.
4. Location: Ends of seat boards.
5. Number rows as indicated on the Drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas and surfaces to receive aluminum stadium bench seating.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

- A. Install aluminum stadium bench seating in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install aluminum stadium bench seating plumb, level, square, straight, and to proper elevation.
- C. Install aluminum stadium bench seating secure to supports.

3.3 ADJUSTING

- A. Inspect completed aluminum stadium bench seating and make necessary adjustments to ensure proper installation.
- B. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- C. Remove and replace with new material, damaged components that cannot be successfully repaired, as determined by Architect.

3.4 PROTECTION

- A. Protect installed aluminum stadium bench seating to ensure that, except for normal weathering, seating will be without damage or deterioration at time of Substantial Completion.

END OF SECTION