Guide Specification

Section 129300 Site Furnishings

Wally Wall-Hanging Benches

1.0 GENERAL

1.1 WORK INCLUDED

A. Provision of steel and wood bench

1.2 RELATED WORK

A. Section 033000 Cast-in-Place concrete
B. Section 061000 Rough Carpentry
C. Section 062000 Finish Carpentry

1.3 SUBMITTALS

A. Product Data: Manufacturer's standard catalog cut sheets.
B. Samples: As required for color selection or material thickness only.
C. Shop Drawings: For custom applications, showing critical sizes and dimensions for installation and integration with other work.

1.4 DELIVERY, STORAGE AND HANDLING

A. Unwrap & inspect benches after delivery for signs of damage during transit.
B. Protect benches from damage during storage and handling.
C. Store benches indoors if possible. Do not stack.

1.5 PROJECT CONDITIONS

A. Contractor to provide adequate structure to support benches and its users.
B. Protect units from damage by adjacent work.

1.6 REFERENCES

A. American Wood Protection Association (AWPA)
Guidance Document N – *Data Requirements for Listing Thermally Modified Wood*
Standard U1 - *Use Category System: User Specification for Treated Wood*
Standard E1- *Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites*
Standard E7 - *Method of Evaluating Wood Preservatives by Field Tests with Stakes*
Standard E9 - *Field Test for the Evaluation of Wood Preservatives to be Used in Non-Soil Contact*
Standard E10 - *Method of Testing Wood Preservatives by Laboratory Soil-Block Cultures*
Standard E12 - *Method of Determining Corrosion of Metal in Contact with Treated Wood*
Standard E14 - *Method of Evaluating Wood Preservatives in a Soil Bed*
Standard E21 - *Test Method for the Evaluation of Preservative Treatments for Lumber and Timbers Against Subterranean Termites in Above-Ground, Protected Applications*
B. American Society for Testing and Materials (ASTM)

ASTM D5664 - *Standard Test Method for Evaluating the Effects of Fire-Retardant Treatments and Elevated Temperatures on Strength Properties of Fire-Retardant Treated Lumber*
ASTM D3201 - *Standard Test Method for Hygroscopic Properties of Fire-Retardant Wood and Wood-Based Products*
ASTM E1354 - *Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*

2.0 PRODUCTS

2.1 ACCEPTABLE PRODUCTS/MANUFACTURERS

A. Wally Bench, manufactured by Tournesol Siteworks LLC. 2930 Faber St., Union City, CA 94587 Tel: (800) 542-2282 FAX (510) 471-6243

2.2 FLAT WALLY BENCH – TYPE A

A. Materials

1. Lumber shall be manufactured from Boulevard thermally-modified wood, certified conforming to AWPA Use-Class UC3B, Above Ground, Exposed (see AWPA Guidance N for required tests). Manufacturer should provide documentation of the quality processes used during thermal modification. Base woods shall be FSC-certified Red Oak or Ash. Wood shall be sourced & processed entirely in the U.S. Alternate Ipe or other lumber available if specified.
    a. Finished dimensions: 1”thick x 3-1/2”wide with 1/8” radius edges and corners.
2. Powder-coated carbon steel cantilever support arm weldments – 5/16”thk & 3/16”thk ASTM A36 hot rolled steel
3. Powder-coated carbon steel board straps – 3/16”thk ASTM A36 hot rolled steel.
4. Hardware – Stainless steel grade 18-8 wood screws

B. Construction

1. Lumber – Double stacked front boards with hidden fasteners. Qty (5) seating surface boards with 1/8” spacing. Profiled and/or shaped with minimum surface smoothness of 20 KCPI. No tear-outs or knife-knicks. Pilot holes required for all attachment points.
2. Powder-coated carbon steel cantilever support arm weldments – Laser cut, machined, and fully welded.
3. Powder-coated carbon steel board straps – Laser cut and machined
4. All hardware to be internal, hidden and not visible from top of bench

C. Performance characteristics

1. Lumber – All corners and edges to be rounded or eased. All attachment points to be internal and not visible from top of bench.
2. Powder-coated carbon steel cantilever support arm weldments – All exposed sharp edges and weld splatter removed.
3. Powder-coated carbon steel board straps – All exposed sharp edges removed.

D. Finish: specified finish; factory finished.

1. Carbon steel –
    a.: Following fabrication the bench supports shall be cleaned and treated with an iron phosphate process prior to the coating application. This process shall include a non-chromated alkaline cleaner, and an iron phosphate treatment, followed with an acidic sealer for maximum adhesion. Corrosion-resistant zinc undercoat shall be

applied, 1-2mils thick. Protective powder coat shall be polyester or polyester TGIC powder, minimum 4 mils thick. Following application parts shall be baked until properly cured.

b. Optional Tier-2 Finishes (Silvadillo, Jaguar Topaz): An additional clear overcoat of 1-2 mils

E. Sizes: Refer to catalog for standard sizes. Custom sizes as per approved shop drawings.

2.3 CONTOUR WALLY BENCH – TYPE B

A. Materials

1. Lumber shall be manufactured from Boulevard thermally-modified wood, certified conforming to AWPA Use-Class UC3B, Above Ground, Exposed (see AWPA Guidance N for required tests). Manufacturer should provide documentation of the quality processes used during thermal modification. Base woods shall be FSC-certified Red Oak or Ash. Wood shall be sourced & processed entirely in the U.S. Alternate Ipe or other lumber available if specified.

a. Finished dimensions:
Trapezoidal 1”thick x 1-1/2”wide with 1/8” radius edges and corners.
Rectalinear 1”thick x 1-1/2”wide with 1/8” radius edges and corners

2. Powder-coated carbon steel cantilever support arm weldments – 5/16”thk ASTM A36 hot rolled plate & 11gauge ASTM A1011 hot rolled steel
3. Powder-coated carbon steel board straps – 3/16”thk ASTM A36 hot rolled steel.
4. Hardware – Stainless steel grade 18-8 wood screws

B. Construction

1. Lumber – Qty (3) Trapezoidal front boards. Qty(9) seating surface boards with 1/8” spacing. Profiled and/or shaped with minimum surface smoothness of 20 KCPI. No tear-outs or knife-knicks. Pilot holes required for all attachment points.
2. Powder-coated carbon steel cantilever support arm weldments – Laser cut, formed, and fully welded.
3. Powder-coated carbon steel board straps – Laser cut and formed
4. All hardware to be internal, hidden and not visible from top of bench

C. Performance characteristics

1. Lumber – All corners and edges to be rounded or eased. All attachment points to be internal and not visible from top of bench.
2. Powder-coated carbon steel cantilever support arm weldments – All exposed sharp edges and weld splatter removed.
3. Powder-coated carbon steel board straps – All exposed sharp edges removed.

D. Finish: specified finish; factory finished.

1. Carbon steel –

a.: Following fabrication the bench supports shall be cleaned and treated with an iron phosphate process prior to the coating application. This process shall include a non-chromated alkaline cleaner, and an iron phosphate treatment, followed with an acidic sealer for maximum adhesion. Corrosion-resistant zinc undercoat shall be applied, 1-2mils thick. Protective powder coat shall be polyester or polyester TGIC powder, minimum 4 mils thick. Following application parts shall be baked until properly cured.

b. Optional Tier-2 Finishes (Silvadillo, Jaguar Topaz): An additional clear overcoat of 1-2 mils

E. Sizes: Refer to catalog for standard sizes. Custom sizes as per approved shop drawings.

2.4 CASCADE WALLY BENCH – TYPE C

A. Materials

1. Lumber shall be Ipe

a. Finished dimensions:
Square 3-1/2" x 3-1/2' with 1/4" radius edges and corners.
Rectangular 3-1/2"tall x 1-1/2"wide with 1/4" radius edges and corners

2. Powder-coated carbon steel cantilever support arm weldments – 3/8"thk ASTM A36 hot rolled plate & 2-1/2"x2-1/2"x11guage wall A500 square steel tube.

3. Powder-coated carbon steel board straps – 3/8"thk ASTM A36 hot rolled steel.

4. Hardware – Stainless steel grade 18-8 wood screws

B. Construction

1. Lumber – Qty (2) Square boards. Qty (6) rectangular with 1/2" spacing. Profiled and/or shaped with minimum surface smoothness of 20 KCPI. No tear-outs or knife-knicks. Pilot holes required for all attachment points.

2. Powder-coated carbon steel cantilever support arm weldments – Laser cut, machined, and fully welded.

3. Powder-coated carbon steel board straps – Laser cut and machined.

4. All hardware to be internal, hidden and not visible from top of bench

C. Performance characteristics

1. Lumber – All corners and edges to be rounded or eased. All attachment points to be internal and not visible from top of bench.

2. Powder-coated carbon steel cantilever support arm weldments – All exposed sharp edges and weld splatter removed.

3. Powder-coated carbon steel board straps – All exposed sharp edges removed.

D. Finish: specified finish; factory finished.

1. Carbon steel –

a.: Following fabrication the bench supports shall be cleaned and treated with an iron phosphate process prior to the coating application. This process shall include a non-chromated alkaline cleaner, and an iron phosphate treatment, followed with an acidic sealer for maximum adhesion. Corrosion-resistant zinc undercoat shall be applied, 1-2mils thick. Protective powder coat shall be polyester or polyester TGIC powder, minimum 4 mils thick. Following application parts shall be baked until properly cured.

b. Optional Tier-2 Finishes (Silvadillo, Jaguar Topaz): An additional clear overcoat of 1-2 mils

E. Sizes: Refer to catalog for standard sizes. Custom sizes as per approved shop drawings.

2.5 ESPLANADE WALLY BENCH – TYPE D

A. Materials

1. Powder-coated carbon steel cantilever support arms welded to steel rod seat – 5/16"thk ASTM A36 hot rolled steel plate & ½'dia 1018 cold finished carbon steel bar.

2. Intermediate rod support straps – 3/16"thk ASTM A36 hot rolled steel plate.

B. Construction

1. Bench is welded as one piece. Cantilever support arms, and intermediate straps, are laser-cut and Tig welded to saw cut steel rods.

C. Performance characteristics

1. All exposed sharp edges and weld splatter removed.

2. Rods ends chamfered

D. Finish: specified finish; factory finished.

1. Carbon steel –

a.: Following fabrication the bench shall be cleaned and treated with an iron phosphate process prior to the coating application. This process shall include a non-chromated alkaline cleaner, and an iron phosphate treatment, followed with an acidic sealer for maximum adhesion. Corrosion-resistant zinc undercoat shall be applied, 1-2mils thick. Protective powder coat shall be polyester or polyester TGIC powder, minimum 4 mils thick. Following application parts shall be baked until properly cured.

b. Optional Tier-2 Finishes (Silvadillo, Jaguar Topaz): An additional clear overcoat of 1-2 mils

E. Sizes: Refer to catalog for standard sizes. Custom sizes as per approved shop drawings.

3.0 EXECUTION

A. Planter mounted

1. Use hardware and backer plate provided in planter mount kit provided by manufacturer. Kit is not standard, must be added to bench at time of order.

B. Wall mounted

1. Ensure wall is structurally sound and engineered to hold weight of bench and occupants. Wall at bench mounting points to be flat and coplaner.

2. Source 3/8”dia non-corrosive anchoring hardware approved for use in the wall material the bench is to be mounted on. Follow anchor manufacturers recommendations for installing anchors.

3.1 PREPARATION

A. Prior to planter fabrication, the contractor shall verify as-built dimensions of area to ensure proper size, fit and quantity required.[1]

3.2 INSTALLATION

A. Dry fit bench onto the mounting surface to ensure fit-up before locating anchors

B. Ensure product is level and spacing between units is as specified