

BENCH SPECIFICATIONS

PH Style – Surface Mount Galvanized Straight Leg Permanent Bench without Back

SECTION 13125

Surface Mount Galvanized Straight Leg Permanent Bench with Back

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Design and fabrication of steel frame aluminum seat benches.

1.02 QUALITY ASSURANCE

- A. Manufacturer Qualifications
 - 1. Manufacturer with minimum 30 years of experience in the design and manufacture of benches.
 - 2. Welders must conform to AWS and CSB standards.
 - 3. Material source quality control: Mill Test Certification.
 - 4. Adheres to International Building Code (IBC) 2018 and ICC-300 2023 Standards for Bleachers, Folding and Telescopic Seating, and Grandstands.

1.03 WARRANTY

- A. Warranty shall guarantee benches to be free from defect in materials and workmanship for a period of **1 year** under normal use. Warranty period shall begin on date of completion of projects installed by manufacturer, or its subcontractors, **OR** warranty period shall begin on date of final delivery on projects installed by others.
- B. Anodized finish of plank extrusions shall be covered for a period of **5 years** against loss of structural strength or finish deterioration due to exposure to weather conditions or UV rays.
- C. Discoloration of mill finish aluminum due to galvanic reaction not covered.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. National Recreation Systems, Inc.

2.02 DESIGN

- A. Design Loads:
 - 1. Live Loads:
 - a. Uniform Loading Structure: 100psf
 - b. Uniform Loading Seat: 120plf
 - 2. Sway Loads:
 - a. Perpendicular to Seat: 10plf
 - b. Parallel to Seat: 24plf

2.03 STEEL FRAME BENCH

- A. Quantity and Size: Shall consist of 1 unit 21'-0" long.
- B. Framework: Prefabricated galvanized steel spaced at 6'-0" intervals consisting of 2 3/8" O.D. schedule 40 pipe with seat and back supports of 1/4" x 3" hot rolled steel bar and 6" x 6" x 1/4" hot rolled steel mounting plate. (ASTM A-36). No mechanical fastening to seat support or leg shall be permitted except in factory provided, and designated holes.
- C. Shop Connections: Welds shall meet AWS standards.
- D. Seat and Back: Nominal 2" x 10" anodized aluminum with grey poly end caps.

2.04 MATERIALS / FINISHES

- A. Framework:
 - 1. Galvanized Steel: Structural fabrication with ASTM A-36 steel with galvanized finish. Each frame shall be unit-welded, using gas metal arc welding (GMAW) in accordance with AWS specifications (D1.1). After fabrication all steel components shall be hot dipped galvanized in accordance with ASTM A-123 specifications.
- A. Extruded Aluminum:
 - 1. Seat and Back Planks: Aluminum alloy 6063-T6, clear anodized 204MR1, AA-M10C22A31, Class II, with a wall thickness of .078" for impact and deformation resistance.
- B. Accessories
 - 1. Channel End Caps: Polyethylene Resin, Grey 2X10, HDPE-DMDA-8904 NT7 w/ added Inhibitor.
 - 2. Hardware: Bolts and Nuts shall be hot dipped galvanized
 - 3. Hold Down Clip: Aluminum alloy 6063-T6 mill finish.
 - 4. Pipe End Caps: Black or Gray Low Density Polyethylene Resin, 2 3/8-in, 5-8 ga

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install bench unit in accordance with manufacturer written instructions and shop drawings.

Note: Building codes may vary from site to site. The customer is responsible for verification of local code requirements.