

## 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 8'-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.**