

BENCH SPECIFICATIONS

DI Style – Portable Bench without Backrest- Square Tube

SECTION 13125

Portable Bench without Backrest- Square Tube

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Design and fabrication of all aluminum bleachers.

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 ALUMINUM FRAME BENCH

- A. Quantity and Size: Shall consist of 1 unit 21'-0" long.
- B. Framework: Prefabricated aluminum frame spaced at 5'-1 ½" intervals.
 - 1. Vertical Supports: 2"x2"x1/8" 6061-T6 square tube.
 - 2. Horizontals:
 - a. Top: 3 ½" x 8 5/8" x 1/4" aluminum plate 6061-T6 mill finish
 - b. Bottom: 2" x 2" x 1/8" 6061-T6 square tube
- C. Shop Connections: Welded to meet AWS & CWB standards.
- D. Seats: Nominal 2"x10" anodized aluminum with grey poly end caps.

2.04 MATERIALS / FINISHES

- A. Framework:
 - 1. Aluminum: Structural fabrication with aluminum alloy(s) 6005-T5 and 6061-T6. Each frame shall be unit-welded, using gas metal arc welding (GMAW) according to AWS specifications.
- B. Extruded Aluminum:
 - 1. Bench Frame: Aluminum alloy(s) 6005-T5 and 6061-T6.
 - 2. Seat Planks: Aluminum alloy 6063-T6, clear anodized 204MR1, AA-M10C22A31, Class II, with a wall thickness of .078" for impact and deformation resistance.
- C. Accessories
 - 1. Molded 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.

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.