

# Bench Specifications

PB Style - Straight Leg Permanent Bench with Back

## SECTION 13125

### 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: National Recreation Systems, Inc.  
P.O. Box 11487 Fort Wayne, In 46858-1487
- B. Manufacturer Qualifications: Manufacturer must have a minimum of ten years experience in the design and manufacture of benches.
- C. Welders must conform to AWS standards.
- D. Source Quality Control: Mill Test Certification.

##### 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 for 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 by a **5 year** warranty against loss of structural strength or finish deterioration due to exposure to weather conditions or UV rays. 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: Uniform loading - Structure = 100 psf  
Uniform loading - Seat = 120 plf
  2. Sway Loads: Perpendicular to seats = 10 plf  
Parallel to seats = 24 plf

##### 2.03 STEEL FRAME BENCHES

- A. Quantity and Size: Shall consist of 1 unit(s) 08 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 (ASTM A-36). Imbedded end of bench legs are formed to help prevent leg from twisting in the concrete footer. No mechanical fastening of seat supports or legs supports shall be permitted.
- C. Shop Connections: Welded to meet AWS standards.
- D. Seats and Backs: Nominal 2" x 10" anodized aluminum with anodized end caps.

##### 2.04 MATERIALS / FINISHES

- A. Framework:
  1. Galvanized Steel: Structural fabrication with ASTM A-36 steel galvanized finish. Each frame shall be unit-welded, using gas metal arc welding (GMAW) according to AWS specifications (D1.1). After fabrication all steel is hot dipped galvanized to ASTM A-123 specifications.
- B. Extruded Aluminum:
  1. Seat and back planks: Aluminum alloy 6063-T6, clear anodized 204R1, AA-M10C22A31, Class II with a wall thickness nominally .078" for impact and deformation resistance.

C. Accessories:

1. Channel End Caps: Aluminum alloy 6063-T6, clear anodized 204R1,AA-M10C22A31,Class II.
2. Hardware: Bolts and Nuts shall be hot dipped galvanized.
3. Hold Down Clip Assembly: Aluminum alloy 6063-T6 mill finish.

**PART 3 – EXECUTION**

**3.01 INSTALLATION**

- A. Install bench unit(s) 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.**