

**DIVISION 12 00 00**  
SECTION 12 93 00  
SECTION 12 93 43  
SECTION 12 93 43.13

**FURNISHINGS**  
SITE FURNISHINGS  
SITE SEATING AND TABLES  
SITE SEATING  
RATIO BENCH

**Part 1 General**

01. Summary

A. Section Includes:

1. Backed benches with cast aluminum frame and formed stainless steel seat.
2. Backless benches with cast aluminum frame and formed stainless steel seat.

02. Submittals

A. Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.

B. Product data:

1. Manufacturer's standard product literature.
2. Shop drawings.
3. Installation instructions.
4. Maintenance instructions.

C. Submit powdercoat finish samples for approval.

03. Quality Assurance

A. Manufacturer Qualifications:

1. Minimum 15 years experience in the manufacture of site seating.
2. Provide reference list of at least ten major transportation authorities, municipalities, universities, or other high-use public environments currently using site seating fabricated by the manufacturer.

04. Delivery, Storage and Handling

- A. Handle products in accordance with manufacturer's instructions.
- B. Store products in manufacturer's original packaging until ready for installation.
- C. Protect products from impacts and abrasion during storage.

05. Warranty

A. Provide manufacturer's standard warranty:

1. Warranty terms: one year from date of invoice against defects in materials and workmanship.

**Part 2 Products**

01. Manufacturer

A. Basis-of-design product: provide backed and/or backless benches based on the product named:

1. Ratio Bench by Forms+Surfaces.
2. Manufacturer Contact:  
Forms+Surfaces  
30 Pine Street  
Pittsburgh, PA 15223  
phone: 800-451-0410  
fax: 412-781-7840

email: sales@forms-surfaces.com

website: www.forms-surfaces.com

## B. Backed and Backless Benches

### 1. Materials:

- a. Bench frames: cast aluminum with integral armrests.
- b. Seats: formed stainless steel, 2mm (nom. 14 gauge) thickness with .25" x .90" obround perforations applied in an offset pattern.
- c. Fasteners: stainless steel.

### 2. Finishes:

- a. Bench frames: polyester powdercoat (Select one option below):

- 1) Standard Texture/ Gloss from Forms+Surfaces Powdercoat Chart.
- 2) Premium Texture from Forms+Surfaces Powdercoat Chart.
- 3) Custom RAL powdercoat color.

- b. Seats:

- 1) Uncoated stainless steel finish (Choose one finish below):

1. Sandstone.
2. Satin.

- 2) Powdercoat color (Select one option below):

1. Standard Texture/ Gloss from Forms+Surfaces Powdercoat Chart.
2. Premium Texture from Forms+Surfaces Powdercoat Chart.
3. Custom RAL powdercoat color.

### 3. Dimensions (Select model below):

- a. Backed bench: 77" long x 24.25" deep x 32.75" high. Seat height 16.875", seat depth 17.625", armrest height 26.125".
- b. Backless bench: 77.82" long x 18" deep x 23.85" high. Seat height 17.375", seat depth 17.76", armrest height 23.85".

### 4. Mounting:

- a. Freestanding.
- b. Surface mount. Provide anchors and stainless steel mounting screws when surface mounting is specified.

## Part 3 Execution

### 01. Examination

- A. Verify that substrates are stable and capable of supporting the weight of items covered under this section.
- B. Verify that substrates have been adequately prepared to securely anchor those items that will be surface mounted.

### 02. Installation

- A. Install according to the manufacturer's installation instructions.
- B. Install in conformance to applicable ADA guidelines and End User's established Accessibility policies.

**END OF SECTION**