

DIVISION 12 00 00 FURNISHINGS
SECTION 12 93 00 SITE FURNISHINGS
SECTION 12 93 43 SITE SEATING AND TABLES
SECTION 12 93 43.13 SITE SEATING
QUADRA SEATING SYSTEM

Part 1 General

01. Summary

A. Section Includes:

1. 17", TENSL UHPC casting with front-to-back aperture, no inset
2. 17", TENSL UHPC casting with aluminum inset
3. 17", TENSL UHPC casting with TENSL UHPC inset
4. 17", TENSL UHPC casting with FSC® Recycled reclaimed Teak hardwood inset
5. 17", TENSL UHPC casting with planter liner

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 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 seating system modules based on the product named:

1. Quadra Seating System 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. Module

1. Material:

a. Body: cast TENSU glass fiber reinforced ultra high performance concrete (UHPC).

1) TENSU Material Performance Characteristics:

1. Compressive Strength: ? 18,275 lbs./in² (126 MPa).
2. Flexural Strength: ? 2,756 lbs./in² (19 MPa).
3. Tensile Strength: 1,160 lbs./in² (8 MPa).
4. Water Absorption: < [measurable limit (kg/m x h0.5)] [3.5%].

b. Base: cast aluminum.

C. Inset

1. Material (Select one option below):

- a. FSC® Recycled reclaimed Teak hardwood.
- b. Aluminum.
- c. Planter liner: black polyethylene with UL94HB fire-rating.
- d. TENSU UHPC (Select one option below):
 - 1) No pattern.
 - 2) Bias pattern.

2. Finishes:

- a. Base: polyester powdercoat (Select one option below):
 - 1) Standard Texture from Forms+Surfaces Powdercoat Chart.
 - 2) Premium Texture from Forms+Surfaces Powdercoat Chart.
 - 3) Custom RAL powdercoat color.
- b. Aluminum inset (if selected, choose one option below):
 - 1) Standard Texture from Forms+Surfaces Powdercoat Chart.
 - 2) Premium Texture from Forms+Surfaces Powdercoat Chart.
 - 3) Custom RAL powdercoat color.
- c. Module: intrinsic UHPC finish, Natural color with hydrophobic treatment.

3. Dimensions and Weight:

- a. Overall dimensions and Weight:
 - 1) TENSU UHPC casting with front-to-back aperture, no inset: 17" long x 17" deep x 17.9" high, 164 lbs.
 - 2) TENSU UHPC casting with aluminum inset: 17" long x 17" deep x 17.8" high, 180 lbs.
 - 3) TENSU UHPC casting with TENSU UHPC inset: 17" long x 17" deep x 17.8" high. 192 lbs.
 - 4) TENSU UHPC casting with hardwood inset: 17" long x 17" deep x 17.8" high. 180 lbs.

5) TENSL UHPC casting with planter liner: 17" long x 17" deep x 17.8" high. 177 lbs.

4. Mounting:

- a. Freestanding.
- b. Surface mount. Provide stainless steel installation hardware when surface mount 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