

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

- E1.1 These Specifications shall apply to the Work.
- E1.1 The Contractor shall supply, deliver and install City Hall courtyard furniture for 510 Main Street in accordance with the requirements hereinafter specified.
- E1.1.1 The Contractor shall provide the Contract Administrator with two (2) days notice prior to delivery. Exact placement of courtyard furniture shall be coordinated at time of delivery with Contract Administrator

E2. GOODS

- E2.1 Goods shall be considered as outdoor use, heavy use, public space seating, no care is required.
- E2.2 Goods shall not be permanently fixed to the courtyard, and shall be stored nightly. Goods shall be portable.

E3. FINISH

- E3.1 Color shall be Landscape Forms, Grotto.
- E3.2 Finish on metal for all items is Landscape Forms Pangard II ® that includes a rust inhibitor and topcoat finish of thermosetting polyester powdercoat that is U.V., chip and flake resistant. The following are test results for Landscape Forms, Pangard II polyester powdercoat:
- | | | | |
|--------|---|-----------------------|----------------|
| E3.2.1 | Gloss according to Garner 60 deg. | ASTM D 523-67 | 80-90 |
| E3.2.2 | Cross hatch adhesion | ASTM D 3359 Method B: | Pass 100% |
| E3.2.3 | Mandrel Bending Test | ASTM D 522 | 1/8"/3mm |
| E3.2.4 | Erichsen cupping | ISO 1520 | 5/16"/8mm |
| E3.2.5 | Impression hardness according to Buchholz | ISO 2215 | 95 |
| E3.2.6 | Impact test
1/10" distortion up to 160 in/lb | ASTM D 2794-69 | |
| E3.2.7 | Pencil hardness
Drill mill test | ASTM D3363074 | 2H (min)
ok |
| E3.2.8 | Saltspray Resistance
Max. undercutting 1/16"/1mm | ASTM B 117 | 1500 hr test |
| E3.2.9 | Humidity Resistance
Min. blisters 1/16"/1mm | ASTM D 2247-68 | 3000 hr test |

E4. COMPOSITION, MATERIALS AND DIMENSIONS

- E4.1 Item No. 1 – Verona chairs without arms
- (a) Perforated Metal shall be constructed of 11 gauge perforated metal pane of ¼" square holes on 7/16" straight centres;
- (b) Frame shall be constructed ¾" outside dimension, .120" wall thickness steel tubing;

- (c) UHMW Polyethylene glide shall be inserted in each leg;
- (d) White UHMW polyethylene strip bumper 3/8" x 3/8" x 9" long, attached to bottom of frame with stainless steel pop rivets;
- (e) Maximum chair width is 19 1/2";
- (f) Maximum chair depth is 24 1/4" back;
- (g) Maximum chair back height is 30 1/2".

E4.2 Item No. 2 Verona chair with arms

- (a) Perforated Metal shall be constructed of 11 gauge perforated metal pane of 1/4" square holes on 7/16" straight centres;
- (b) Frame shall be constructed 3/4" outside dimension, .120" wall thickness steel tubing;
- (c) UHMW Polyethylene glide shall be inserted in each leg;
- (d) White UHMW polyethylene strip bumper 3/8" x 3/8" x 9" long, attached to bottom of frame with stainless steel pop rivets;
- (e) Maximum chair width is 22";
- (f) Maximum chair depth is 24 1/4" back;
- (g) Maximum chair back height is 30 1/2";

E4.3 Item No. 3 Table without umbrella hole.

- (a) All tables shall be 29" high;
- (b) Surface mount free standing base shall be 1" wall cast iron; shall support 30" table top, 2.5" outside dimension, 120" wall thickness tubing;
- (c) Table top shall be moulded up to 3/16" thick. Gel coat, which shows on all exposed surfaces, is applied in the mould and is an integral part of the fibreglass itself;
- (d) Fibreglass shall have a granite finish consisting of Natural Quarry, light grey granite aggregate encapsulated in a clear polyester matrix, and reinforced with multi-directional fibreglass laminate;
- (e) Based on 5/32" thick laminate sample, fibreglass laminate shall conform to the following testing:

(i)	Flexural strength	ASTM D 790	23,400 psi
(ii)	Flexural modulus	ASTM D 790	1.04,00 psi x 10 ⁶
(iii)	Tensile Strength	ASTM D 638	14,500 psi
(iv)	Tensile modulus	ASTM D 638	1.21 psi
(v)	Percent Elongation	ASTM D 638	1.8
(vi)	Barcol Hardness	ASTM D 2583	40-45
(vii)	Percent Glass	ASTM D 2584	35.8

E4.4 Item No. 4 Washington square bench – 3 seat

- (a) 3 seat unit shall be 26" deep x 32" high x 68 Long;
- (b) Metal frame shall be constructed of 1 1/2" diameter x .120" wall hot rolled welded steel tubing;
- (c) Metal seats shall be constructed of 11 gauge steel perforated with 1/4" square holes on 7/16" straight centers. Seat standoff uses .50 diameter cold finished carbon steel round bar;
- (d) Welded steel tube frame supports, perforated metal seats, three seat unit w/perforated seat panels. Powdercoat color: Grotto Freestanding/surface mount Landscape Forms (or approved equal).

E4.5 **Item No. 5** **Chair Dolly**

- (a) Load capacity shall be 240 lbs;
- (b) Frame width shall be 14 ½"; overall height shall be 48"; overall depth shall be 33 ½";
- (c) Two (2) 8" x 1 ¾" skid resistant wheels;
- (d) Moves up to 8 chairs at a time, eliminating costly and tedious hand carrying;
- (e) Heavy duty frame with bonded vinyl handle.

E5. DELIVERY

- E5.1** To be supplied, delivered and installed no later than 10 weeks from date of order, fob destination, freight prepaid.