

## SECTION 664—MODULAR ARCHITECTURAL BLOCK SYSTEM

**664.1 DESCRIPTION**—This work is construction of a modular architectural block system. Modular architectural block systems may be used for nonstructural landscape architecture applications according to the manufacturer drawings and recommendations. An acceptable landscape architectural site cannot have structures with foundations above the aggregate base within 2.4 m (8 feet) of the back of the block system. System construction is restricted to a height of 1.2 m (4 feet) above grade.

### 664.2 MATERIAL—

(a) **Modular Architectural Blocks.** Certify as specified in [Section 106.03\(b\)3](#), [Section 713.2](#), and as follows:

Machine-made blocks uniform in color with a minimum compressive strength of 31 MPa (4,500 pounds per square inch) and an absorption of 6% or less, when tested according to [ASTM C 140](#), and a minimum durability factor of 80 when tested according to [ASTM C 666](#), Procedure A.

(b) **Geotextile.** Class 2, Type A, non-woven-heat-bonded as specified in [Section 735](#).

(c) **Coarse Aggregate.** AASHTO 8 and [Section 703.2\(c\)2](#).

(d) **Mortar.** [Section 705.7\(b\)](#)

(e) **Topsoil.** [Section 802](#)

(f) **Seeding and Soil Supplements.** [Section 804](#)

(g) **Rejection.** Blocks exhibiting any of the following conditions are not accepted:

- Defects that indicate imperfect proportioning, mixing, and molding;
- Non-uniform or contrasting coloration as determined by the Representative; or
- Surface defects, such as honeycombing or open texture, or areas damaged beyond satisfactory repair.

**664.3 CONSTRUCTION**—As indicated on the shop drawings and as follows:

Excavate and place geotextile, Class 2, Type A, non-woven-heat bonded, to the limits specified in [Section 212.3\(a\)](#) and [\(c\)](#). After placing the geotextile, construct a level 200 mm (8 inches) thick aggregate base according to the shop drawings. Ensure that each block course placed is level and aligned correctly with uniform staggered butt joints. Provide a block layout so as not to use any block smaller than half of a block in size. Clean the foreign material from the lower block course to ensure alignment and stability of the subsequent block course. Place the coarse aggregate backfill in 150 mm (6-inch) maximum lifts behind each block course against the geotextile before placing subsequent block courses. Use a vibratory plate to compact the course aggregate backfill before placing subsequent block courses. Wrap the geotextile material over the top of the coarse aggregate as indicated. Place the cap block course on a bed of mortar. Ensure butt joints in cap block course do not align with butt joints in preceding block course. Place topsoil and apply seeding and mulching using material and formula, at rates typical for the project. The contractor must be familiar with the placement of these block systems and certified by the block manufacturer. If not familiar with the block systems and certified by the manufacturer, provide an on-site trained technician from the block manufacturer, at no expense to the Department, during installation until the Representative is satisfied with workmanship.

**664.4 MEASUREMENT AND PAYMENT**—Square Meter (Square Foot)

Measured to equal the area of the vertical face of the blocks, including vertical face concealed by finished grade. Excavation is incidental to this item.