

ITEM 608.0102 09 - FIBER REINFORCED COLORED AND IMPRINTED
PORTLAND CEMENT CONCRETE SIDEWALK, CLASS D

DESCRIPTION

Construct Portland cement concrete sidewalks as shown on the contract documents according to §608 of the Standard Specifications, using synthetic fiber reinforced colored and textured concrete.

MATERIALS

Concrete - The material requirements and composition shall comply with the specifications for Class D concrete in § 501-2 under "Portland Cement Concrete – General." Concrete shall be proportioned in accordance with the aggregate weights specified for Class D concrete in Table 501-3, Concrete Proportions. Fiber is to be added during batching at the rate of 0.9 kilograms per cubic meter. Batch the appropriate volume of concrete such that whole standard size bags of fiber are used. It is the responsibility of the producer to indicate on each delivery ticket the amount of fibers added to the concrete.

Fiber - Use synthetic, fibrillated fibers specifically designed for use as secondary concrete reinforcement. Fiber shall be approved prior to use by the Director, Materials Bureau.

Coloring Agent - All coloring agents shall produce a color conforming to the Federal Standard 595B. The color shall be as indicated on plans. Color admixtures for integrally colored concrete will be certified by the manufacturer as meeting the requirements of ASTM C979 Standard Specifications for Pigments for Integrally Colored Concrete and be packaged such that one dose is the proper dosage for one cubic meter of concrete. To integrally color the concrete, introduce the color additive into the mixer drum in a manner recommended by the manufacturer. The quantity of concrete being delivered shall be no less than one-third the capacity of the mixer drum. Batch the concrete in full cubic meter increments.

Pattern - Use imprinting tools capable of imprinting the surface of the concrete with a uniform and aligned pattern and/or texture. These materials shall be approved by the Engineer prior to their use.

Release Agent - Use clear release agent as specified by the imprinting tool manufacturer.

Caulk - Color matched caulking compound for joint sealing.

CONSTRUCTION DETAILS

Apply §608-3.01 with the following modifications:

Apply color admixtures at the manufacturers recommended dosage rate. This rate is to remain constant for all batches of concrete produced. Prior to placing concrete, protect adjacent surfaces and structures from spatters. **Once a portion of the batch has been placed, no additional water shall be added to the remaining batch.**

Waive the requirement for welded wire fabric.

**ITEM 608.0102 09 - FIBER REINFORCED COLORED AND IMPRINTED
PORTLAND CEMENT CONCRETE SIDEWALK, CLASS D**

Screed concrete to the finished grade and apply release agent evenly over the entire surface of the concrete.

Waive the requirement for a lightly broomed surface.

Apply pre-approved imprinting tools to the surface while the concrete is still plastic.

Unless otherwise specified, score or saw cut the surface to a minimum depth of ¼ the thickness of the slab at intervals of 1.5 m. If the saw cut option is used, the saw cutting must be performed the same day as placement.

Tool the edges, joints and scored areas in a manner consistent with the imprinting pattern.

Within 24 hours, remove release agent with pressure wash and apply a pre-approved sealer, recommended by the coloring manufacturer, at a rate consistent with manufacturer's specifications.

Install pre-molded resilient joint filler (§705-07) where the sidewalk line intersects a building, walk, permanent structure or other location designated by the Engineer, to within 25 mm of the top of the slab. Caulk the top 25 mm of the joint with color matching caulking compound.

Prior to the start of work, the Contractor shall show evidence of successful completion of similar installations and provide a job site sample for the approval of the Engineer. The sample size shall be 1.5 meters x 1.5 meters, minimum, and constructed at a location selected by the Engineer. As many test panels will be constructed as are necessary to achieve a sample panel that meets the satisfaction of the Engineer. All work shall conform to the appearance of the approved sample to the satisfaction of the Engineer. The sample shall not be incorporated into the work and will be removed when ordered by the Engineer.

METHOD OF MEASUREMENT

Apply §608-4.01

BASIS OF PAYMENT

Apply §608-5.01 with the following additions:

The unit bid per cubic meter shall include the cost of constructing and removing job site samples(s).