

## SECTIONS 702 through 704 S RESERVED

### SECTION 705 PORTLAND CEMENT CONCRETE SIDEWALK

**705.01 Description.** This work consists of constructing portland cement concrete sidewalk on a prepared foundation.

#### MATERIALS.

**705.02 Portland Cement Concrete.** Portland cement concrete shall conform to the requirements of [Section 812](#), Class B.

**705.03 Preformed Expansion Joint Material.** Expansion joint material shall conform to the requirements of [Subsection 808.06](#).

**705.04 Curing Material.** Curing materials shall conform to the requirements of [Subsection 812.02](#) (i).

#### CONSTRUCTION METHODS.

**705.05 Preparation of Foundation.** The foundation shall be formed at the required grade to accommodate the elevations, dimensions, and details shown on the Plans for the bottom of the sidewalk. Where the sidewalk foundation is to be existing undisturbed soil, the foundation shall be firm and unyielding. All soft and yielding or other unsuitable material shall be removed and replaced with approved granular material. When the sidewalk foundation is to be any material other than existing undisturbed soil, the compaction and density requirements for the Section covering that material shall govern. Where rock is encountered, the grade shall be excavated to 6O (150 mm) below the bottom of the sidewalk, backfilled with approved granular material, and thoroughly compacted.

**705.06 Forms.** Forms shall be of wood or metal and shall extend the full depth of the concrete. Composite material forms may be used for radii work. Forms shall be straight, free from warp, and of sufficient strength to resist the pressure of the concrete, and shall not displace more than 3/8O in 10N (10 mm in 3 m) from the vertical or horizontal plane. Forms shall remain in both horizontal and vertical alignment until their removal. Forms shall be clean and coated with an approved form release agent before concrete is placed.

**705.07 Placing and Finishing Concrete.** The concrete shall be distributed to the required depth and for the entire width of the slab by shoveling, or an approved method which preserves the integrity of the mixture. Concrete shall be thoroughly spaded along all joints and on the inside of the forms for its entire depth. The concrete shall be leveled and immediately struck-off by means of an approved screed. The screed shall be shaped to the required crown and of sufficient strength to retain its shape under all working conditions.

While the concrete is still moist, it shall be floated with an approved float of either wood or metal to ensure that all irregularities or depressions are filled. The final finish shall be obtained by either a wood float or hair broom. Concrete shall be finished in accordance with [Subsection 501.11](#). If concrete is permitted to be placed during cold weather, it shall be placed in accordance with [Section 501](#).

The sidewalk shall be marked into rectangular slabs 5N (1.5 m) long by scoring, 2O (13 mm) minimum, with approved edging tools. The surface edges of each slab shall be rounded to a 3O (6 mm) radius.

**705.08 Expansion Joints.** Expansion joints shall extend from the surface to the foundation and must be at right angles to the sidewalk surface. A 2O (13 mm) expansion joint, shall be placed across the walk every 20N (6 m). This distance may be adjusted slightly to match existing joints in previously placed concrete work. Expansion material shall also be placed longitudinally along one side when sidewalk is placed between

curbs, pavements, or any fixed structures. Joints shall be formed around all appurtenances, such as manholes, utility boxes, and poles that extend into and through the sidewalk.

**705.09 Curing.** Concrete shall be cured according to [Section 501](#) for a period of five days. The dewalk shall not be opened to pedestrian and vehicular traffic until the end of the curing period.

**705.10 Backfill.** Immediately at the end of the curing period, the sidewalk shall be backfilled with approved material.

**705.11 Method of Measurement.** The quantity of portland cement concrete sidewalk will be measured as the number of square feet (square meters) measured at the surface of the sidewalk, placed and accepted.

**705.12 Basis of Payment.** The quantity of portland cement concrete sidewalk will be paid for at the Contract unit price per square foot (square meter). Price and payment will constitute full compensation for furnishing, hauling, and placing all materials; for preparing the foundation; for shaping the shoulders; for replacing rejected sidewalk; and for all labor, equipment, tools, and incidentals required to complete the work. If other than existing soil is approved for use as foundation material, it will be measured and paid for under the appropriate Section. If rock is encountered, measurement and payment for removal of the rock will be made under [Section 206](#).