

SECTION 522 CONCRETE SIDEWALK

522-1 Description.

Construct concrete sidewalks.

522-2 Materials.

Meet the requirements specified in 520-2.

522-3 Forms.

Provide forms as specified in 520-3.

522-4 Foundation.

Compact fill areas, including cut areas under the sidewalk that have been excavated more than 6 inches [150 mm] below the bottom of sidewalk, to a minimum of 95% of AASHTO T 99 density. The area to be compacted is defined as that area directly under the sidewalk and 1 foot [300 mm] beyond each side of the sidewalk when right-of-way allows.

522-5 Joints.

522-5.1 Expansion Joints: Form 1/2 inch [13 mm] expansion joints between the sidewalk and the curb or driveway or at fixed objects and sidewalk intersections with a preformed joint filler meeting the requirements specified in 932-1.1.

522-5.2 Contraction Joints:

522-5.2.1 Types: The Contractor may use open type or sawed contraction joints.

522-5.2.2 Open-Type Joints: Form open type contraction joints by staking a metal bulkhead in place and depositing the concrete on both sides. After the concrete has set sufficiently to preserve the width and shape of the joint, remove the bulkhead. After finishing the sidewalk over the joint, edge the slot with a tool having a 1/2 inch [13 mm] radius.

522-5.2.3 Sawed Joints: If electing to saw the contraction joints, cut a slot approximately 3/16 inch [5 mm] wide and not less than 1 1/2 inches [40 mm] deep with a concrete saw after the concrete has set, and within the following periods of time:

Joints at not more than 30 feet [9 m] intervals.....within 12 hours after finishing.

Remaining jointswithin 96 hours after finishing.

522-6 Placing Concrete.

Place the concrete as specified in 520-5.

522-7 Finishing.

522-7.1 Screeding: Strike-off the concrete by means of a wood or metal screed, used perpendicular to the forms, to obtain the required grade and remove surplus water and laitance.

522-7.2 Surface Requirements: Provide the concrete with a broom finish. Ensure that the surface variations are not more than 1/4 inch [6 mm] under a 10 foot [3.048 m] straightedge, or more than 1/8 inch [3 mm] on a 5 foot [1.5 m] transverse section. Finish the edge of the sidewalk with an edging tool having a radius of 1/2 inch [13 mm].

Apply a tine finish by an approved hand method to curb cut ramps in lieu of a broom finish.

Ensure that the tine finish consists of transverse grooves which are 0.03 to 0.12 inch [0.8 to 3.0 mm] in width and 0.10 to 0.15 inch [2.5 to 3.8 mm] in depth, spaced at approximately 1/2 inch [13 mm] center to center.

522-8 Curing.

Cure the concrete as specified in 520-8.

522-9 Method of Measurement.

The quantity to be paid for will be the area, in square yards [square meters], measured in place, completed and accepted. No deduction will be made for the area occupied by ornamental trees left within the area of the sidewalk. No deduction will be made for any areas occupied by manholes, inlets, or other drainage structures or by public utility appurtenances within the normal sidewalk area.

522-10 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section. Excavation will be paid for under the items for the grading work on the project.

Payment will be made under:

Item No. 522- Concrete Sidewalk - per square yard.

Item No. 2522- Concrete Sidewalk - per square meter.