

**522 CONCRETE SIDEWALK AND DRIVEWAYS.**  
(REV ~~49-125-2114~~) (~~17-21~~)

Section 522 is deleted and the following is substituted:

**SECTION 522**  
**CONCRETE SIDEWALK AND DRIVEWAYS**

**522-1 Description.**

Construct, reconstruct or remove concrete sidewalks, driveways including curb ramps, in accordance with these specifications, and in conformity with the lines, grades, dimensions and notes shown in the plans and the Standard Plans.

**522-2 Materials.**

Meet the requirements specified in 520-2. Assume all risk when placing concrete under adverse weather conditions. Permission from the Engineer to place concrete under such conditions will in no way relieve the contractor of the responsibility of satisfactory results.

**522-3 Forms.**

Provide forms as specified in 520-3.

**522-4 Foundation.**

~~Excavate or fill to the required grade or to match existing conditions. Shape and~~  
~~Compact fill areas, including cut areas under the sidewalks that have been excavated more than~~  
~~6 inches below the bottom of sidewalk, to a minimum of 95% of the maximum density as~~  
~~determined by FM 1-T099 of AASHTO T99 density. Compact the foundation material upon~~  
~~which the sidewalk is set to a firm even surface, true to grade and cross section.~~ The area to be compacted is defined as that area directly under the sidewalk and 1 foot beyond each side of the sidewalk when right-of-way allows.

~~Excavate or fill to the required grade or to match existing conditions. Compact the~~  
~~foundation material upon which the sidewalk is set to a firm even surface, true to grade and cross~~  
~~section.~~ Place the concrete on moist foundation material.

**522-5 Joints.**

**522-5.1 Expansion Joints:** Form 1/2 inch 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:** Open type or sawed contraction joints may be used.

**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 radius.

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

Joints at not more than 30 feet intervals ..... within 12 hours after finishing.

Remaining joints ..... within 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 under a 10 foot straightedge, or more than 1/8 inch on a 5 foot transverse section. Finish the edge of the sidewalk with an edging tool having a radius of 1/2 inch.

**522-7.3 Repair of Minor Defects:** Remove the forms within 24 hours after the concrete has been placed, and fill minor defects with mortar composed of one part portland cement and two parts fine aggregate. Plastering will not be permitted on the surface of the sidewalk. Remove and replace any rejected sidewalk without additional compensation.

**522-7.4 Sidewalk Removal:** Remove existing sidewalk in accordance with 110-7.

**522-7.5 Clean-up:** Remove from the job site any surplus or discarded materials or rubbish and restore the job site area to a condition acceptable to the Department, upon completion of work, and before final payment is made.

**522-8 Curing.**

Cure the concrete as specified in 520-8. After the concrete has set sufficiently, but no later than 72 hours after placing, refill the spaces in back and in front of the sidewalk to the required elevation with suitable material, compacting in layers not thicker than six inches.

**522-9 Method of Measurement.**

The quantity to be paid will be quantity, in square yards, completed and accepted. Ramps, reconstructed sidewalks, walk around sidewalks, sidewalk landings, sidewalk curb, and driveways will be included in the area to be paid.

**522-10 Basis of Payment.**

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

Payment will be made in accordance with the pay items listed in the Bid Price Proposal.