

SECTION 2200 STANDARD SIDEWALKS AND DRIVEWAYS

2201 SCOPE.

This section governs the furnishing of all labor, equipment, tools, material, and the performance of all work necessary to construct or reconstruct sidewalks and driveways.

2202 MATERIALS.

All items of material included in this section shall conform in general to the requirements of Section 2000.

- A. Concrete Mix. Concrete shall conform to the requirements. When the ambient air temperature is 90 deg F. or higher, a retarder will be used in all concrete mixes. Any additional additives, including color, shall be approved by City Engineer.
- B. Reinforcement. Reinforcement shall be 6x6-W2.9 x W2.9, welded steel wire fabric or as shown by the plans and specifications.

2203 CONSTRUCTION DETAILS.

The sidewalks or driveways shall be constructed or reconstructed to the configuration, and to the lines and grades indicated by the plans. Generally, sidewalks and driveways should be constructed after the curbing if applicable.

- A. Removal. Existing sidewalks or driveways shall be totally removed to the nearest contraction or expansion joint. With the approval of the Engineer, the sidewalk or driveway may be sawed provided no "free section" is left of less than 15 square feet. The section shall be sawed full depth.
- B. Grading and Subgrade Preparation. All excavation or embankment required in the grading or subgrade preparation shall be defined in the Sections 1000 and 1200, except as follows:

The top 6 inches of the subgrade shall be compacted to obtain a density of 95 percent of maximum in conformance with Section 1205(A).

If during construction operations additional fill material is needed beneath sidewalks or driveways it shall be of crushed limestone, placed in maximum lifts of 4 inches, moistened if necessary, and compacted by mechanical tampers to a density of 95 percent of the maximum. Uncontained crushed limestone fill shall not exceed 8" in depth.

- C. Forms. All forms shall be in good condition, clean, and free from imperfections. Each form shall not vary more than 1/4 inch in horizontal or vertical alignment for each 10 feet in length.
 - 1. Size. Forms shall have a height equal to or greater than the depth of the sidewalk or driveway section.
 - 2. Installation. The forms shall be set true to line and grade, and shall be supported to remain in position while depositing and consolidating the

concrete.

3. Preparation. The forms shall be lubricated and shall be designed to permit their removal without damage to the concrete.

2204 JOINTS.

Unless directed by the Engineer the joints shall be formed at right angles to the alignment of the sidewalk or driveway, and to the configuration specified by the plans or standards.

A. Joint Patterns.

1. Sidewalks. Sidewalk surfaces shall be marked with a transverse joint spaced at a distance equal to the width of the sidewalk. Sidewalks greater than 6 feet in width shall be divided by longitudinal joints spaced not less than 30 inches nor more than 48 inches. Transverse joints shall be spaced to form a square (picture frame) pattern. 4" squared edger tool marks shall remain showing.
2. Wide driveways. Driveways in excess of 10 feet in width shall have a longitudinal joint located in the center.

B. Expansion Joints. Expansion joints shall be placed where directed by the plans or Engineer. The expansion joints shall be located to give the sidewalk or driveway an appearance of continuity.

1. General. The preformed expansion joint material shall either be left 1/2 inch below the surface, or a suitable tear strip will be provided to allow for the application of the joint sealer.
2. Material. Expansion joints shall be formed by a 1 piece, 1/2 inch preformed joint filler cut to the configuration of the correct section. The filler material shall be as specified in Section 2003 (D).
3. Stability. Expansion joints shall be secured in a manner so they will not be disturbed by depositing and consolidating the concrete.
4. Edging. The edges of these joints shall be rounded with an edging tool of 1/4 inch radius.

C. Joints. Contraction joints or false joints shall be one inch deep by 1/8 inch wide with 1/4 inch radii edging.

1. Edging. Tooled joints shall be left on sidewalk and driveways. Joints shall be straight and true to line. All intersecting joints shall be clean and unfilled. No "Ribbons" shall exceed 1/8 inch above the tool mark.
2. Contraction Joints. Contraction joints may be sawed with the approval of the Engineer. Sawing of contraction joints may be permitted when machine

laid. The sawing of joints shall be equal to 1/3 of the thickness and shall be completed within 24 hours of the placing of concrete.

3. Joint Sealer. Joint Sealer is not required on contraction joints.

2205 CONCRETE WORK.

Concrete work for sidewalks and driveways shall be placed in accordance with the requirements of MCIB Standard Concrete Specifications. Joints shall be constructed as in Section 2204 or as modified by the plans or special provisions.

- A. Concrete Placement. Concrete shall not be allowed to extrude from below the forms. Vibration is not required for sidewalks or driveways.
- B. Finishing. After placing and the initial strike off, if the surface of the concrete is sufficiently wet that a ridge is formed at the inside of the edging tool, finishing will cease until the excessive moisture has evaporated. No water, dryer or additional mortar shall be applied to the free surface of the concrete.

After finishing, the surface of the concrete shall be broomed with a fine clean broom to provide an antiskid surface, and the edges and joints retooled.

In all cases the finished sidewalk or driveway shall have a true surface, free from sags, twists, spalls, or warps, and shall have a uniform color and appearance.

- C. Curing. As soon as practical after the concrete is finished it shall be cured with one of the acceptable liquid curing membranes applied according to manufacturers directions.

If forms are removed from sidewalks or driveways within a period of 72 hours of placement those surfaces shall also be cured.

Wet burlap, cotton mats, waterproof paper, polyethylene sheeting or earth backfill shall not be acceptable as curing methods for sidewalks or driveways.

- D. Protection. The Contractor shall protect the concrete work against damage or defacement of any kind until it has been accepted by the City. Concrete which is damaged or defaced, shall be removed and replaced or repaired to the satisfaction of the Engineer, at the expense of the Contractor.
- E. Temperature Limitations. Concrete shall be placed in accordance with requirements of Section 2009 and 2010.

2206 BACKFILL.

A minimum of 24 hours shall lapse before forms are removed and sidewalks or driveways are backfilled unless otherwise approved by the Engineer.

Backfill shall be accomplished in accordance with Sections 1100 and 1200.

The Contractor shall be responsible for the repair of any street pavement disturbed by the construction.

2207 JOINT SEALING AND CLEAN-UP.

All expansion joints shall be sealed with an approved joint sealer applied in accordance with Section 2003 within 7 days of the placement of the concrete.

The Contractor shall be responsible for the removal of excess dirt, rock, broken concrete, splatters and over spray from the area of the construction within 10 days of the date of placement.

2208 SURFACE TOLERANCES.

Sidewalks or driveways shall have a surface tolerance of 1/4 inch in 10 feet when checked with a 10 foot straightedge.