

**SECTION 14
PAVEMENT REINFORCING FABRIC**

14-1 GENERAL - Pavement reinforcing fabric shall be placed on existing pavement to be surfaced or between layers of asphalt concrete when such work is shown on the Contract Plans, or specified in the Special Provisions, or ordered by the Engineer.

14-2 MATERIALS - Pavement reinforcing fabric shall be manufactured from polyester, polypropylene, or polypropylenenylon material. The fabric shall be non-woven, and shall conform to the following:

Characteristic	ASTM Test	Requirement
Weight, oz per square yard	D1910	4.0 to 8.0
Grab Tensile Strength (1" grip), lbs. min.	D1117	100
Elongation at Break, % min	D4632	50
Fabric Thickness, mills	D461	30 to 100

The following fabrics have been found to meet the requirements of these specifications: *Amoco, Amopave, Petromat, and Fibretex AO*, designed specifically for asphalt concrete overlays. Substitutions proposed by the Contractor shall be approved by the Engineer as provided for in Section 5-13, "Trade Names and Alternatives," of the General Provisions of the City Standard Specifications. When these materials are used, a mill certificate or affidavit indicating that the material to be installed is the same material as one of those named above, and that the fabric does meet the specifications, shall be submitted to the Engineer.

14-3 SURFACE PREPARATION - Before placing the pavement reinforcing fabric, all debris and water shall be removed from the pavement receiving the fabric to the satisfaction of the Engineer. All existing thermoplastic stripes and markings and raised pavement markers shall be removed. All materials removed shall be disposed of in accordance with Section 6-16, "Disposal Outside project Limits," of the General Provisions.

A binder of paving asphalt, type PG64-10, shall be applied to the surface to receive the pavement reinforcing fabric at an approximate rate of 0.25 to 0.40 gallon per square yard of surface covered. The exact rate shall be as approved by the Engineer based upon the fabric manufacturer's recommendation. Contractor shall submit said recommendation to the Engineer for approval at least forty-eight (48) hours in advance of fabric installation. Prior to the application of binder, Contractor shall produce spray "test strips" to demonstrate to the Engineer that his equipment is capable of producing a uniform spray pattern. Upon approval of test strips, spraying of binder may begin. The binder shall be applied to a width equal to the width of the fabric mat plus 3 inches on each side.

The temperature of the asphalt binder shall be greater than 300°F when applied, but shall not exceed 325°F when the fabric is placed. The width of the sprayed application shall be no more than 6-inches and no less than 2-inches wider than the fabric.

Before applying binder, cracks, spalls and holes in existing pavement shall be repaired as required and approved by the Engineer, and such repair work will be paid for provided for in Section 5, "Street Failed Area Repair," Section 9, "Asphalt Concrete," and Section 12, "Asphalt Concrete Leveling Course and Crack Fill Repairs," of these Technical Specifications.

14-4 PLACING - The fabric shall be stretched, aligned, and placed with no wrinkles that lap. The test for lapping shall be made by gathering together the fabric in a wrinkle. If the height of the doubled portion of extra fabric is ½ inch or more, the fabric shall be cut to remove the wrinkle, then lapped in the direction of paving. Lap in excess of 2 inches shall be removed.

Pavement reinforcing fabric shall not be placed in areas of conform taper where the design thickness of the overlying asphalt concrete is less than 0.12'.

If manual lay down methods are used, the fabric shall be unrolled, stretched, aligned, and placed in increments of approximately 30 feet.

Adjacent borders of the fabric shall be lapped 2 to 4 inches. The preceding roll shall lap 2 to 4 inches over the following roll in the direction of paving at ends of rolls or at any break. At fabric overlays, both the tack coat and the fabric shall overlap the previously placed fabric by the same amount.

Seating of the fabric with rolling equipment after placing will be permitted. Turning of the paving machine and other vehicle shall be gradual and kept to a minimum to avoid damage.

A small quantity of asphalt concrete, to be determined by the Engineer, may be spread over the fabric immediately in advance of placing asphalt concrete surfacing in order to prevent fabric from being picked up by construction equipment.

Public traffic shall not be allowed on the reinforcing fabric, except that public cross traffic shall be allowed to cross the fabric, under traffic control, after the Contractor has placed a small quantity of asphalt concrete over the fabric. Care shall be taken to avoid tracking binder material onto the pavement reinforcing fabric or distorting the fabric during seating of the fabric with rolling equipment. If necessary, exposed binder material shall be covered lightly with sand.

Contractor is responsible for thorough cleaning of all areas, including public streets and private properties, stained by tracking of binder oil.

14-5 MEASUREMENT - The quantity of pavement reinforcing fabric will be measured on the unit basis of horizontal surface area covered, as specified in the Bid Proposal. Overlaps and materials wasted by the Contractor will not be measured for the purpose of payment.

14-6 PAYMENT - The contract unit price paid for pavement reinforcing fabric shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work in finishing and placing pavement reinforcing fabric, as specified and no additional payment shall be made therefor.