

SECTION 518 PAVEMENT WATERPROOFING FABRIC

518-1 Description.

Furnish and install a waterproofing fabric between layers of asphaltic concrete for the purpose of providing a moisture barrier and reinforcing the pavement structure.

518-2 Materials.

Use non-woven heat resistant fabric capable of being saturated by asphalt cement so as to provide an adequate bond without an excessive film of asphalt.

Meet the fabric requirements listed below:

Properties	Test Method	Characteristics
Grab Tensile	ASTM D 5034 & ASTM D 5035*	150 lb./in. minimum [26 kN/m minimum]
Elongation	ASTM D 5034 & ASTM D 5035*	15% minimum
Mullen Burst	ASTM D 751	300 psi minimum [2 MPa minimum]
Asphalt Retention		0.30 gal./sy minimum [1.4 L/m ² minimum]
Weight		6 oz./sy minimum [0.2 kg/m ² minimum]

*Modified for 1 inch [25.4 mm] opening.

Use fabric capable of withstanding 300°F [150°C] in the presence of asphalt without disintegration. Present evidence to show that the fabric has been successfully used in a similar installation and that it can withstand construction installation procedures.

Store and handle the fabric in accordance with the manufacturer's recommendations, and protect it from direct sunlight, ultraviolet rays, and temperatures greater than 140°F [60°C].

Furnish the Engineer with six copies of a certified test report from the manufacturer that show all data required to indicate compliance with the above requirements.

518-3 Installation Procedures.

518-3.1 Cleaning of Pavement: Sweep the surface of the pavement to remove dirt, rocks, and other deleterious material which may prevent a clean bonding surface immediately prior to application of the asphalt binder.

518-3.2 Application of Binder: Uniformly apply the asphalt binder material over the surface area where placing the fabric with the equipment specified in 300-3.1 at a rate of 0.33 to 0.40 gal/yd² [1.5 to 1.8 L/m²], and allow the material to cure as directed by the Engineer. For the asphalt cement binder, use a minimum temperature of 290°F [145°C], with a maximum temperature not to exceed the manufacturer's recommendation.

518-3.3 Placing Fabric: Place the fabric on the pavement using a mechanical device in a manner so as to cause the fabric to be smooth without wrinkles. Ensure that the material is clean and any folds in the fabric are cut and laid flat. Broom or squeeze the surface to cause the fabric to be in total contact with the underlying pavement.

518-3.4 Overlap: Overlap the fabric a minimum of 6 inches [150 mm] at longitudinal joints and a minimum of 1 foot [300 mm] at transverse joints. Make all joint overlaps in a manner so as to prevent pickup by the paving train placing the asphaltic concrete.

518-4 Protection of Fabric.

Schedule work to place the fabric and cover it with asphaltic concrete on the same day. Do not allow traffic, other than necessary construction equipment or emergency vehicles, on unprotected fabric.

518-5 Method of Measurement.

518-5.1 Pavement Overlay Fabric: The quantity to be paid for will be the area, in square yards [square meters], completed and accepted with no allowance made for overlapping at joints.

518-5.2 Bituminous Material: The quantity to be paid for will be the volume, in gallons [liters], actually applied and accepted, determined as provided in 300-8.

518-6 Basis of Payment.

518-6.1 Pavement Overlay Fabric: Price and payment will be full compensation for all work specified in this Section, except furnishing, heating, and applying asphalt binder.

518-6.2 Bituminous Material: Price and payment will be full compensation for the work of furnishing, heating, and applying the asphalt binder.

518-6.3 Payment Items: Payment will be made under:

Item No. 518- 70-	Pavement Overlay Fabric - per square yard.
Item No. 2518- 70-	Pavement Overlay Fabric - per square meter.
Item No. 300- 1-	Bituminous Material - per gallon.
Item No. 2300- 1-	Bituminous Material - per liter.