

Hybrid Interlayer Paving Mat

1.0 Special Provisions

The work shall consist of furnishing and installing a Hybrid interlayer paving mat constructed from fiberglass and polyester. The Hybrid interlayer paving mat shall be GlasPave 50 or pre-approved equal.

2.0 Material Requirements

2.1 Hybrid Paving Mat

The Hybrid paving mat shall be constructed of a fiberglass mesh embedded in a polyester mat. The material shall be resistant to chemicals, mildew and rot. Also the mat will not have any tears or holes that will adversely affect the in-field performance or physical properties of the installed material. The Hybrid paving mat will meet the following physical requirements:

Physical Properties of the Hybrid Paving Mat

<u>Property</u>	<u>Test Method</u>	<u>Units</u>	<u>Typical Value</u>
Mass per Unit	ASTM D5261	g/sm (oz/sy)	237(7.0)
Tensile MD	ASTM D5035	N/50mm (lbs/2in)	2500(560)
Tensile CD	ASTM D5035	N/50mm (lbs/2in)	2500(560)
Elongation	ASTM D5035	Percent	<5%
Melting Point	ASTM D276	C (F)	>232(450)

The manufacturer of the hybrid paving mat will furnish a certificate of compliance that all physical properties of the material shipped to the project meet the specification requirements.

3.0 Hybrid Paving Mat Installation

Prior to the project the manufacturer will ensure that the installer is trained on the best method(s) to install the Hybrid Paving Mat. The manufacturer will also ensure that a representative is on sight at the beginning of the project to supervise the initial installation.

3.1 Surface Preparation

All surfaces which are to have the Hybrid Paving Mat shall be thoroughly cleaned, dry and free of all dirt and other contaminants. All cracks greater than ¼ inch (6mm) shall be filled as directed by the engineer. As required by the engineer all irregular surfaces will receive a leveling course using a typical asphalt paver.

3.2 Mat Installation

Hybrid Paving Mat can be installed mechanically or by hand. Typical mechanical installation shall be by a fabric tractor or a bitumen distributor (spreader) with a fabric applicator on the back. The mechanical applicator should be able to handle up to 2.0m (78inch) wide rolls. In areas where the product needs to be installed by hand the mat shall be broomed to ensure good contact with the applied tack coat removing any ensuing bubbles. If wrinkles occur during installation they need to be repaired by slitting the wrinkle and lapping in the direction of the paver. The Hybrid Paving Mat shall be overlapped a minimum of 3inches (75mm) in the transverse and 2 inches (50mm) in the longitudinal direction. All transverse overlaps shall be in the direction of the paving operation.

3.3 Tack Coat Application

A hot asphalt tack coat shall be applied prior to placing the Hybrid Paving Mat. The grade of Asphalt Cement should be a PG Specification, AC, or AR. In normal conditions an AC 20 or PG 64-22 or AR-8000 or equivalent is recommended. In very high temperatures (>90F) an AC30 or PG 70-10 or equivalent is suggested. The Hybrid Paving Mat optimum tack coat application rate is 0.15gal/sqyd (0.70liter/sqm). The condition of existing surface may require an adjustment to this rate which will be at the discretion of the engineer. In no case shall cutbacks or solvents be used in the tack coat. The placing of the tack coat shall be by a motorized distributor (spreader) capable of adjusting application rates by 1/10th of a gallon. The distributor must be capable of applying a proper fan of tack coat from each valve on the distributor bar, the full width of the mat and over any overlapping joints. The distributor shall apply a uniform application of tack coat at the required application rate prior to installation of the Hybrid Paving Mat. In the event that the distributor cannot be used, then a tack coat can be applied with a squeegee or hand wand spray however this must be minimized. At all times traffic shall not drive on the tack coat. It is best practice to place the asphaltic concrete mix on to the Hybrid Paving Mat the same day the mat is applied. Regular vehicular traffic shall be kept off the mat.

4.0 Measure of Payment

The Hybrid paving mat shall be paid in accordance with the plans and specifications outline in the contract. The unit of measurement shall be paid for at the unit price per square yard (square meter) installed in place. The pay item does not include overlaps required in the installation of the Hybrid Paving Mat.

The pay item does include supply and installation of the Hybrid Paving Mat which includes all labor, tools, materials (including tack coat) and other incidentals required in the full completion of the placement of the mat.