

TENDER SPECIFICATIONS

SPECIFICATION FOR SUPPLY OF PAVING FABRIC (ASPHALT INTERLAYER)

(ASPHALT OVERLAY FOR FLEXIBLE PAVEMENT & ASPHALT OVERLAY OVER DISTRESSED RIGID PCC PAVEMENT)

1.0 GENERAL

This work comprises supply of “Paving Fabric” conforming to the material specifications stated herein, as per the bill of quantity and schedule of supplies enclosed.

This work shall consist of furnishing and placing Paving Fabric as a full width or strip interlayer over existing pavement prior to placement of an asphalt concrete overlay, in accordance with these specifications.

2.0 MATERIALS

2.1 General Requirements

TechPave Paving Fabric is a nonwoven paving fabric manufactured from high quality polypropylene staple fibres. The fibres are mechanically bonded through needle-punching with heat treatment on one side to form a strong, flexible and dimensionally stable fabric structure, with optimum bitumen retention capacity.

Indigenously manufactured Paving Fabric shall be preferred, considering advantages of shorter delivery period, no inventory pipe-up and not much impact on cost due to fluctuation of exchange rate of foreign currency. Minimum 2.5/5.0 meter width of Paving Fabric shall be requiring minimizing the wastage.

A plant visit by the Engineer’s representative to verify the manufacturer’s quality control procedures and witness testing of products is also required prior to the dispatch of material.

2.2 Transportation & Storage

All rolls shall have a protective cover with a label or tag specifying name of the product, name of the manufacturer, roll number, date of manufacture and roll dimension.

Material shall be protected from sunlight, mud, dirt, debris, any other harmful substances or mechanical damage during transportation.

Rolls shall be stored in a secured area sufficiently elevated above the ground and adequately covered to protect them from the following: site construction damage, precipitation, prolonged exposure to ultraviolet radiation including sunlight, chemicals that are strong acids or strong bases, flames including welding sparks, high temperatures, and any other environmental conditions that may damage the physical property values of the material.

Any material, which is damaged during transportation, handling or storage and do not meet the minimum requirements of the specifications is liable for rejection by the Engineer.

2.3 Quality Control & testing

The quality management system of the manufacturer shall conform to the requirements of ISO 9001:2008 and In-house Laboratory should have certificate of NABL Accreditation ISO/IEC 17025:2005.

Manufacturer shall issue a test report stating minimum average roll values of material properties, at the time of shipment is made.

CE-certification (BTTG certification) should be required for supply of material.

Manufacturer shall submit the proof of supply and satisfactory performance for the quantity of 10000 Sqmt at least, for projects in India.

Contractor shall furnish proof of all above and it is mandatory.

2.4 Properties of Paving Fabric

The properties of Paving Fabric shall conform to Table-1 below:

Table-1

PROPERTY	TEST METHOD	UNITS	TECHPAVE C040
Grab Tensile Strength	ASTM D 4632	Kg	39
Grab Elongation	ASTM D 4632	%	50
Asphalt Retention	TEXAS DOT 3099	Kg/10 m ²	10
Melting Point	ASTM D 276	°C	150
Surface Texture	Visual Inspection		Heat Set (Calendared) Heat Bonded
Roll Width		Mtr.	2.5/5.0
Roll Length		Mtr.	50/100

Minimum Average Roll value

Minimum Refers to 95 % confidence limit

3 INSTALLATION

3.1 Site Preparation

Prior to the placing of the Paving Fabric; Pot-holes shall be repaired properly and all cracks wider than 3 mm shall be filled with suitable crack filler; the pavement surface shall be reasonably clean and dry.

All repair work shall be carried out as per current regulating standards to ensure a uniform level surface.

Existing Rigid pavement shall be leveled by using a fine road miller and or a leveling course shall be applied on it.

Tackcoat shall be applied at the recommended rate stated as per MORTH minimum 0.9-1.1 Kg/Sqmt, which should be sufficient to saturate the fabric and ensure proper bond between existing pavement, Paving Fabric and the overlay.

3.2 Laying of Paving Fabric

The Paving Fabric shall be installed smoothly by manual or mechanical means without wrinkles or folds before the tackcoat has cooled and lost its tackiness on the prepared leveled surface.

TEHPAVE C040 SHALL ALWAYS BE PLACED WITH THE CALENDERED (HEAT-SET) FACING UP

Application of a small pressure through a pneumatic roller to ensure proper adhesion between the Paving Fabric and the leveling course and to keep the Paving Fabric under tension and free of ripples.

Proper contact and bond should be ensured between Paving Fabric and the pavement surface.

Adjacent Paving Fabric rolls shall be overlapped as shown on the drawings. Unless otherwise shown on the drawings or directed by the Engineer, the minimum overlap shall be 300mm on longitudinal and transverse directions. All laps must be fixed by manual tackcoat.

On curves, Paving Fabric may be folded or cut to conform to the curves. The fold or overlap shall be in the direction of construction and held in place by pins, etc.

Placement of overlay should closely follow immediate after Paving Fabric laydown.

Prior to placing overlay the installed Paving Fabric shall be inspected and approved by the Engineer in Charge. Any damages shall be repaired by covering the damaged location with a patch with additional tackcoat, which extends an amount equal to the required overlap beyond the damaged area, as directed by the Engineer in Charge.

Movement of construction equipment directly over the installed material shall not be permitted.

Sudden breaking and sharp turning of construction equipment shall be avoided over the material.

4 APPROVED MANUFACTURERS

4.1 Approved Manufacturers

- (1) Techfab (India) Industries Ltd.
712 Embassy Centre,
Nariman Point, Mumbai – 400 021
Phone: 022 – 2287 6224/6225
Fax: 022 – 2287 6218

5.0 DELIVERY

Delivery of Paving Fabric shall be done according to the delivery schedule.

6.0 PAYMENT

6.1 Method of Measurement

Paving Fabric will be measured by the Square Meter of material received at the owner's / contractor's store.

6.2 Basis of Payment

Payment for the supply of Paving Fabric shall be made at the contract unit price per Square Meter, which shall be full compensation for the cost of materials, transportation, duties and taxes.

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