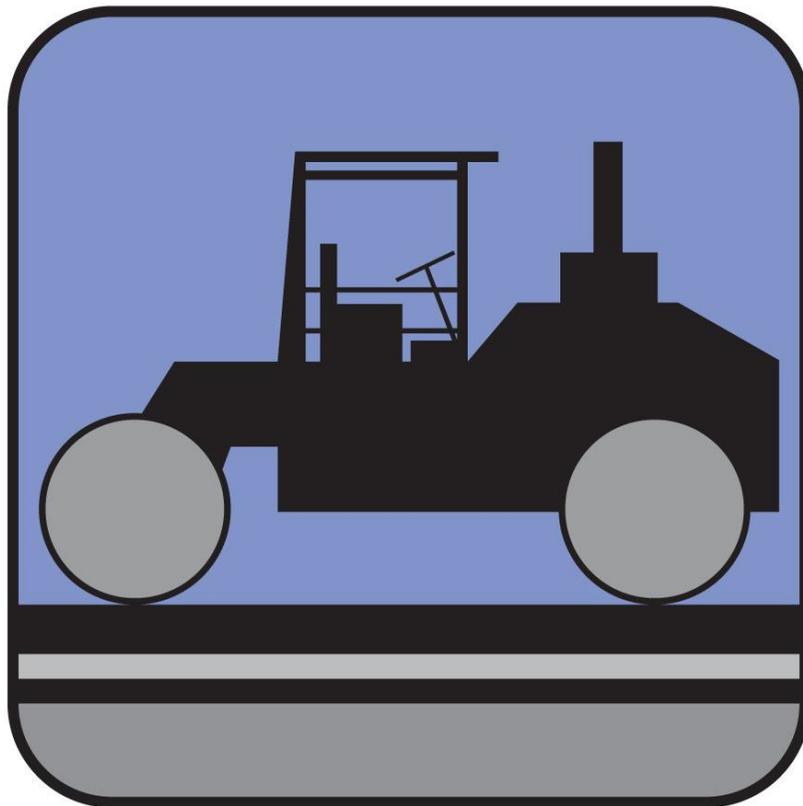




Construction Geosynthetics

Paving Fabric Installation Guide

PAVING



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1.0 General

- 1) This guideline covers general installation of overlay paving fabric in asphalt paved roads.
- 2) Where contradictions occur follow the instructions of the project engineer.

2.0 Equipment

- 1) The overlay fabric can be installed with a mechanical unit that is mounted on the front bucket of a tractor or backhoe.
 - a) Any mechanical or manual equipment should be capable of laying down the paving fabric smoothly.
- 2) Required tools:
 - a) Stiff bristle brooms or squeegees to smooth the fabric.
 - b) Scissors or blades to cut the fabric.
 - c) Brushes for applying asphalt sealant.

3.0 Prepare Surface

- 1) Thoroughly clean the old pavement by removing all dirt, water, oil and foreign materials.
- 2) Fill all cracks with an asphaltic cement slurry.
 - a) Fill very large cracks (1 / 8 inch or larger) and potholes with a full depth hot mix.

4.0 Seal & Apply Tack Coat

- 1) Preferred tack coat:
 - a) Uncut asphalt cement is the preferred tack coat to impregnate, seal and bond the paving fabric to the pavement.
 - i) Uncut asphalt cement is preferred because it develops adhesive strength quicker.
 - ii) Cut-back grade asphalt or emulsions which contain solvents are not recommended as tack coat.
- 2) Air and pavement temperatures during installation must be at least 50°F and rising for asphaltic cement or 60°F and rising for heavier grade emulsions.
- 3) Apply the tack coat at or above the recommended application temperatures of 140°F for asphaltic cement and 160°F for heavier grade emulsions.
 - a) The tack coat temperature must not exceed 300°F.
- 4) The application rate of the tack coat depends on the porosity of the existing pavement.
 - a) Apply the tack coat at a distribution range of 0.20 gal/sy to .30 gal/sy.
 - b) Use a calibrated distributor truck to assure the specified tack rate.
- 5) Apply the tack coat 6 inches wider than the width of the paving fabric rolls.

5.0 Place Paving Fabric

- 1) If emulsions are used, allow any water to evaporate before installing the paving fabric.
- 2) Place the fabric with the untreated (fuzzy) side against the existing pavement while the tack coat is still tacky.

- a) Calendered side is facing up.
- 3) Make sure fabric is smooth and straight.
- 4) Overlapping fabric:
 - a) For sharp corners or curves, slice fabric and overlap ends in the direction of the paving operation.
 - b) When a transverse joint is required, overlap the fabric 4 to 6 inches in the direction of the paving operation.
 - c) Overlap longitudinal joints 2 to 4 inches.
 - d) Apply additional tack coat to any joints to insure proper bonding.
- 5) After fabric placement, proceed with standard paving operation.

5.1 Notes for Applications over Milled Surfaces

- 1) The fabric must be broomed or pneumatically rolled into place.
- 2) The surface needs to be clean and dry.
 - a) Broom or air blow surface to eliminate dust and cuttings.
- 3) Apply tack coat 10% to 15% heavier than a standard overlay application.
 - a) If site conditions require milling deeper than the minimum necessary to remove surface ruts, AC thickness may need to be increased even more.
- 4) Place a minimum of 1.25 inches compacted asphalt overlay on all surfaces including the curb areas.
- 5) If milling has penetrated areas below the asphalt surface, these areas should be restored with hot mix asphalt.
 - a) If surface has deeper grooves with near vertical faces, sharp or vertical edges, faulted joints etc. place a dense grade hot mix asphalt leveling course before application of paving fabric.

6.0 Storage

- 1) Paving fabric rolls are wrapped in a UV protective cover.
- 2) If stored outdoors for a prolonged period, elevate the overlay fabric from the ground and cover with a tarpaulin or opaque plastic.
 - a) Contractor must insure rolls are adequately protected from:
 - i) Moisture
 - ii) Ultraviolet radiation
 - iii) Chemicals that are strong acids or bases
 - iv) Temperatures in excess of 140°F
 - v) Animal destruction

This material is presented for general information only. Always verify the suitability for a specific application with the project engineer. Where contradictions occur, follow the instructions of the project engineer. There is no implied or expressed warranty regarding the installation procedures or the geosynthetic products in this guide. Installation procedure and product choice is the sole responsibility of the contractor and contractor assumes all liability.