

COLD FLEX 2000 – Hot Applied Membrane

HIGHWAY MEMBRANE INSTALLATION INSTRUCTIONS

PRODUCT INFORMATION

POLYGUARD Cold Flex 2000 HIGHWAY MEMBRANE is a hot applied system adhered to the pavement with an AC tack coat. **Cold Flex 2000** products have a top layer of high strength fabric, with a thick layer of flexible mastic to provide stress relief, and a bottom layer of high strength fabric.

POLYGUARD Cold Flex 2000, applied to cracks or joints on an old pavement prior to installation of a new asphalt overlay, reduces the occurrence and severity of reflective cracking in the new overlay. In addition, the membrane will act as an "umbrella" over the old crack or joint, reducing the amount of rain or runoff moisture which penetrates the old pavement surface and reaches the pavement base.

EQUIPMENT NEEDED

Distributor or motorized tar kettle, equipped with hand held wand is recommended. Where not practical, a pour pot may be used to secure the material to pavement, and tack coat squeegeed to required coverage.

Miscellaneous equipment includes:

- a) Razor knives may be used to cut the mat.
- b) Rubber tired or hand roller is required for "rolling in" the membrane.

INSTALLATION INSTRUCTIONS

Asphaltic Tack Coat:

Asphaltic tack must be applied to the pavement surface prior to fabric installation. Acceptable tack coats are PG rated liquid asphalts which are compatible with the asphalt concrete mix. A tack coat of AC 20 (AASHTO M226), or AC 10 (in cold conditions) is also acceptable.

Application of Tack Coat:

Spray tack coat at .10 Gal./yd². Fog coat will suffice in warm weather. In colder conditions, heavier spray may be required. In no case should tack exceed .20 gal./yd². This could cause slippage of the mat when the heat of the hot mix relieves the binding agent. Whether tack is being applied by mechanical means or from a pour pot, the edges of the mat are the most important part. Edges should be bonded well to the old pavement. Minimum recommended temperature for the AC-20 tack application is 290°F.

The asphalt tack should be applied 3" wider than the material width. Tack shall be applied no further in advance of material placement than can be accomplished without losing adhesion of the tack.

Surface Preparation:

The surface upon which the material is to be placed should be free of dirt, water, and vegetation. Cracks over 1" or holes are to be patched.

Material Placement:

The material shall be placed into the tack prior to the time the asphalt has cooled and lost its tackiness. Where transverse and longitudinal joints meet, membrane must be butted or overlapped.

Overlap is mandatory on bridge decks. Additional tack is required to bond the two mat areas together where overlapping is used.

ROLLING IN, REPAIR, AND OVERLAY

Rolling In:

The membrane must be rolled in to ensure 100% surface contact between the membrane and the tack coat. If air pockets occur during rolling, membrane should be slit to allow air to escape, and rerolled to tack the membrane.

Repair:

Repairs can be accomplished by cutting loose membrane with a razor knife and tacking new repair material.

Removal and replacement of material that is damaged after placement is the responsibility of the contractor.

Asphalt Hot Mix Overlay:

Hot mix overlay can follow placement of membrane within 30 minutes. A 3" overlay is recommended but a 2" minimum overlay is required, with multiple lifts. Two lifts are desirable for eliminating "humps" which can occur with this thick membrane. Asphalt tack coat is required prior to overlay. The use of vibratory rollers over **Polyguard** membrane is not recommended.

General:

Air/pavement temperatures during installation should allow adequate tack.

LIMITATIONS WITH POLYMER MODIFIED OVERLAYS:

If a Superpave polymer modified type of overlay is being used, and paving temperatures of >300°F will be used, contact **Polyguard Products** for technical information. Paving temperatures over 300°F can liquify tack coat under hot applied material. Also, polypropylene backings are subject to high shrinkage at >300°F.