



## **APPLICATION INSTRUCTIONS: HPS-8 PAVEMENT MARKINGS**

### **Temperature**

Both the pavement surface, ambient air temperature and wind chill must be at least 50° F and rising prior to striping, although 55 to 60F and rising is preferred for optimum adhesion and bead retention. If the dew point is within 5° of the ambient, the surface needs to be moisture tested as outlined below. These should be checked at least hourly when weather conditions cause temperatures to drop during the course of the striping operation. HPS-8 should never be heated over a maximum of 450° F. During normal use (70-90F surface and air), we recommend HPS-8 to be applied in the 400-425° F range. This range can be moved down slightly when striping on hot surfaces (over 110F) or moved up to 450F maximum when striping on cold surfaces. A simple adhesion test must be done to prove adequate adhesion if using an alternate application range (see adhesion testing section below). Note when striping on very hot, sunny days, the HPS-8 will take longer to cool to a no track condition.

### **Surface preparation**

All surfaces must be dry, free of any dust and loose debris and at the proper temperature prior to striping. Even though the surface may appear dry, it is best to check for sub-surface moisture to improve bond and minimize moisture pops. Check by taping a one foot square piece of clear plastic down on the roadway and observe for 30 minutes to see if moisture forms. One can also check by pouring some hot HPS-8 onto a piece of tar paper which is on top of the surface to be striped, wait 5 minutes, and see if moisture was drawn up onto the road surface under the tar paper. If moisture appears by either of these methods, we recommend you do not apply HPS-8. When in doubt, always check adhesion (see adhesion testing section below). Additional prep for the surfaces indicated below is as follows:

**Existing striped asphalt or concrete roadways** – Although not advisable, HPS-8 can be applied over most existing paint, thermoplastic, and HPS-8 striping material; provided, however, such applications will not be covered by the HPS-8 Warranty. The adhesion will only be as good as that of the existing stripe. The heat of application may cause tapes and multiple coats of old paint to lift off the surface. Existing thermo may need to be scarified to remove any oxidation. Older surfaces where the striping has worn to expose substrate or shows polished aggregate may require hotter material temperatures, mechanical abrasion to roughen the surface and/or primer to allow better bonding to the road surface. Use two-part sealer at manufacturer's recommendation or in the 2-3 dry mils range. HPS-8 should NOT be applied until all the two-part sealer solvents have evaporated sufficiently. Traffic should not drive on two-part sealer before application of HPS-8.

**New or not previously striped concrete roadways** - Concrete should be allowed to cure at least 14 days, and may need to be mechanically abraded or water blasted to remove any curing compounds, surface spalling or polishing if it proves detrimental to adhesion. Water blasting will be required for concrete applications NOT using two-part sealer. After water blasting is complete, the applicator should perform the moisture test detailed under the Surface Preparation heading above prior to the HPS-8 application. If two-part sealer is being used, then standard surface preparation will suffice. Use two-part sealer at manufacturer's recommendation or in the 2-3 dry mils range. HPS-8 should

NOT be applied until all two-part sealer solvents have evaporated sufficiently. Traffic should not drive on two-part sealer before application of HPS-8.

**New asphalt roadways** - Although HPS-8 may be installed sooner (once the mat cools below 100 F), it is recommended that new asphalt surfaces not be striped until all construction is completed (paving, shoulder work, etc.) and the pavement has had several days to age. This allows any oils, roller aides, or other “liquid” surface coatings to be tracked off the surface (thus assuring a better bond, giving a longer lasting line), as well as allows the asphalt to cure and develop cohesive strength. Waiting also helps prevent any of these oils, dirt, etc. from being tracked or deposited onto the HPS-8 and yielding a “dirty” looking stripe. As interim delineation and depending on time lapse between interim installation and application of the HPS-8, 7-10 wet mils of water borne traffic paint, with beads reduced accordingly, can be used behind the paver. Please note that in cases where alternate mix designs, thin overlays and water emulsions are used for “asphalt”, it may be necessary to wait longer or lightly abrade the new asphalt surface prior to HPS-8 installation if the composition of the asphalt causes adhesion problems. Use of two-part sealer on new asphalt is not recommended as the two-part sealer may cause adhesion problems between the fresh asphalt and HPS-8. When in doubt, always test adhesion.

**Warranty Applications** – An Ennis-Flint representative must be present for the HPS-8 Warranty to be effective. Application of HPS-8 without an Ennis-Flint representative present voids the Warranty. Please see the Ennis-Flint Standard HPS 8 Warranty document for full explanation of Warranty terms and conditions.

**Adhesion Testing** - HPS-8 is a very pliant and cohesive product, much like duct tape. When still warm it may be possible to pull the product up off the substrate, especially on concrete. Wait until the product cools completely before checking bond. Check adhesion after material cools for one hour. Cooling may be hastened by flooding the HPS-8 test area with water.