**PREFORM™ Preformed Thermoplastic**

**Application Instructions-----IMPORTANT!**

**USERS MUST READ AND UNDERSTAND INSTRUCTIONS FULLY AND MUST ALSO SEE SAFETY PRECAUTIONS**

While installing PREFORM™ material, protective clothing, and eye protection should **always** be used. Installer’s protective clothing should consist of leather/work boots, long pants- with NO synthetic fabrics. Heat resistant gloves and safety glasses are required to be worn. When using a torch, we recommend using the manufacturer’s use and safety measures pamphlet.

**Tools and equipment needed for proper installation of PREFORM™:**

- Broom or powered blower
- All required safety clothing, including vest
- Chalk stick, spray paint, or snap line for layout
- Full 40 lb. propane tank- small 20 lb. tanks tend to freeze up prematurely
- Infrared thermometer
- Tape measure and razor knife
- Application torch capable of producing at least 250,000 BTU’s, regulator and a 30+ foot hose

**Storing and handling PREFORM™**

PREFORM™ should be kept in the original package until arrival on job site and ready to install. This will prevent damage and loss of any parts. PREFORM™ should be stored indoors if at all possible, however, if outside, material must be under cover and protected from weather. Boxes should be stored flat and stacked no higher than 30 high. When transporting PREFORM™, do not stack pallets or items on top of boxes or breakage could occur. PREFORM™ should not be transported in temperatures below 33 degrees (0.6°C) and over 105 degrees (41°C).

**Surface Preparation**

PREFORM™ preformed thermoplastic can be used on new asphalt as soon as it has cooled. PREFORM™ can also be installed on Portland cement Concrete however new concrete should cure for a minimum of 45 days before application. A primer/sealer is NOT required for most applications however, extra care should be taken to check bond after material has cooled. It **IS** necessary to use a primer for extremely old asphalts or smooth concrete surfaces. When concrete curing agents or old chipping/flaking markings are present, use a water/sand blaster or scarifier to remove thoroughly. PREFORM™ should not be installed over existing paint or cold thermoplastic that is chipping/flaking or oxidized. It is acceptable to heat existing thermoplastic and apply PREFORM™ as long as loose and oxidized material has been removed.

Surface preparation is extremely important when installing PREFORM™. The surface area must be clean and free of debris, chemicals, including curing agents. Oils, and other previously marked materials such as paint, thermoplastic, and other preformed materials should be removed. The installation area must also be completely dry and **NO moisture** can be present. We recommend, for best applications, to wait a day or two after a rain. During the installation, if moisture is present, use the torch to evaporate the moisture, until surface area is fully dry.
**TORCH TIPS**

**Recommended torch- Magnum Torch with 33’ hose**

When setting regulator, no need to press leaver, just adjust regulator so valve is open to approx. 2/3rds. Torch should be at least 6 inches above preformed material. If material splatters, the torch nozzle is too close to the material OR the pilot valve needs to be reduced.

**Beginning your installation:**

Please note: If you choose to heat your surface area, remember to do your layout first. Once your surface preparation is complete, spray paint or chalk can be used to mark your layout. For legends, snap a chalk line where the horizontal center of the legend is to be positioned. Situate material sections on the guide-line and trace its outline to provide a template. For a quicker installation, we recommend heating the surface; energy is best utilized where the bond is to take place; ensuring less bonding failures and unseen subsurface moisture can be eliminated. Once sections are outlined, remove the preformed sections, and heat the area encompassing your layout. Proper heating is done, when your torch head is approximately 12” above the surface, and the torch is constantly moving in a circular or back and forth, sweeping motion. As you are heating an asphalt surface, you should notice the asphalt will become darker and tacky, which will be an additional aid in bonding and an indicator that your temperature has been reached. For older asphalt or concrete, a temperature gun can be used to determine temperature: approx. 300°F is recommended.

Immediately place your sections in place and continue heating over the PREFORM™ in a 2’x4’ area. Keep the torch at least 6” above the material, again, being sure to keep the torch constantly moving as not to burn material. You will see the material start to conform to the surface and filling in the crevasses. Once the material has become fully molten, or liquefied, the initial installation is complete.

ALWAYS inspect your installation after PREFORM™ has cooled to ambient temperature before leaving the job site for bond and reflectivity. Bond can easily be checked by taking a putty knife and attempting to lift up the markings around the edge. If markings can be lifted up easily without asphalt/concrete film showing on the underside, a bond has not been established because the material did not receive enough heat to become molten; enabling the bond (similar to a glue gun- if hot and tacky it will stick but if cooled just a bit- no tack, no bond). Additionally, check your reflectivity of your markings with a retro-reflectometer. If one is not available and the sun is out, stand with your back to the sun, facing your markings looking for the sun’s light. If initial reflectivity is poor, type 1 hwy beads are easily able to be hand casted, insuring your markings have adequate immediate reflectivity. For optimal reflectivity glass beads should be 50-60% embedded.

**NOTES TO REMEMBER:**

PREFORM™ can be installed on old or new, asphalt and concrete using above instructions. Installation can also be accomplished on cobble stone or brick surfaces as well- a test area is recommended.

PREFORM™ can be easily retrofitted by cutting with a knife or heavier duty scissors. Any seams will be virtually invisible after proper heating.

All dirt/debris and moisture must be removed before a successful installation of your preformed thermoplastic.

Reversible (un-beaded) PREFORM™ arrows can be ordered to make sure you always have left or right arrows in stock.

PREFORM™ will be conveniently made in 24”x 36” perforated strips- can utilize as 4, 8, 12, 16, or 24” flats.

Some newer asphalt mixtures may require to be down 3 months before applying any thermoplastic material. Confirm asphalt type to be sure.

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