



APPLICATION INSTRUCTIONS - PREFORM

USERS MUST READ AND UNDERSTAND INSTRUCTIONS FULLY AND MUST ALSO READ SAFETY PRECAUTIONS.

While installing PREFORM, preformed thermoplastic pavement markings, protective clothing and eye protection should always be used. Protective clothing consists of leather work boots, long pants, long sleeve shirt, and heat resistant gloves. **WARNING: DO NOT WEAR CLOTHING WITH SYNTHETIC FABRICS.** OSHA approved safety glasses are to be worn for eye protection.

TOOLS and EQUIPMENT NEEDED FOR PROPER INSTALLATION:

- Broom or powered blower
- Personal Protection Equipment (PPE)
- 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

Torch Tips:

- Read the manufacturer's Use and Safety Measures Pamphlet.
- Recommended torch- Magnum Torch with 33' hose
- When setting the regulator, there is no need to press lever. Adjust regulator so the valve is approximately two-thirds (2/3's) open.
- Hold torch at least 6" above marking being installed.
- If while heating/installing the preformed marking "splatters", the torch nozzle is too close to the material OR the pilot valve needs to be reduced.

THINGS TO KNOW:

- PREFORM may be installed on new asphalt as soon as the asphalt has cooled, and all excess oil is removed.
- PREFORM may be installed on Portland cement concrete. New concrete requires a 30-day cure time prior to installation of PREFORM.
- Primer sealer is not required on asphalt or porous, grooved, and brushed concrete.
- Primer sealer is necessary on extremely old asphalt and smooth concrete.

SURFACE PREPARATION:

Surface preparation is extremely important.

- Ensure application site is dry, clean/free of debris, and free of chemicals, including curing agents, oils, etc.
- Application site must be completely dry and free of ALL moisture to ensure proper application.
 - To ensure NO moisture is present, use the torch to heat/evaporate all moisture.
 - We recommend waiting 24-48 hours after a rain event to install PREFORM.
- Remove all concrete curing agents and old, chipping, flaking, oxidized markings from the application site.
 - Use a water blaster, sand blaster, or scarifier to remove.
- Once all chipping/flaking/oxidized markings are removed heat the remaining existing old markings prior to application of PREFORM. (NOTE: Old markings *must* be heated to allow PREFORM to fuse to the old marking. Extra care should be taken to check bond after material has cooled and prior to leaving the jobsite.)

INSTALLATION:

- Complete all steps of surface preparation
- Allow the application site to cool if torch was used to remove moisture.
- Mark your layout with spray paint or chalk.
- Snap a chalk line where the horizontal center of the marking is to be positioned.

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INSTALLATION Cont'd:

- Use the chalk line as a guide to layout the PREFORM marking/marking sections.
- When the PREFORM marking/marking sections are laid out, use chalk to trace an outline of marking(s) thus providing a template for installation.
- Remove the PREFORM marking/marking sections from the application site.
- PREFORM does NOT require preheating the application site. (*Application site must be free of ALL moisture.*)
- If using primer/sealer, follow the primer/sealer manufacturer's application instructions and apply now.
- Place PREFORM marking/marking sections on the application site in the outline previously drawn.
- Holding the torch at least 6" above the marking begin heating a 2' x 4' section keeping the torch constantly moving in a circular or back and forth sweeping motion as to not burn the marking.
- When the PREFORM marking has reached a molten, liquified state, and you visibly notice it has conformed to the substrate, the marking has been properly installed. (*To aid the installer PREFORM markings have "heat indicator" slits that will close/disappear once the marking has reached the required molten, liquified state to ensure proper installation.*)
- Allow the PREFORM marking installation to cool to ambient temperature.
- **ALWAYS inspect your installation for bond and reflectivity prior to leaving the installation jobsite.**
 - Bond is checked by using a putty knife and attempting to lift the installed marking around the edges. If the marking is easily lifted without asphalt/concrete film showing on the underside a bond has not been established. This is the result of the marking not receiving enough heat to become fully molten/liquified enabling the bond. (*As an example, a glue gun if hot and tacky the glue will stick, but if cooled just a bit - no tack, no bond.*)
 - Reflectivity is checked preferably with a retroreflectometer. If a retroreflectometer is not available and the sun is out, stand with your back to the sun while facing your installed PREFORM marking and look for the sun's light to reflect from the marking.
 - If initial reflectivity reading is poor, Type I highway glass beads may be hand casted over the PREFORM marking to ensure the marking has adequate immediate reflectivity.
 - For optimal reflectivity, the glass beads should be 50-60% embedded in the PREFORM marking.

STORAGE and HANDLING:

- PREFORM should be kept in the original packaging until application at the jobsite.
- PREFORM should be stored in doors. If stored outdoors, place under cover and protect from inclement weather.
- When stored indoors in original packaging at 35-95°F (1.67-35°C) PREFORM has a shelf-life of 24 months.
- Store boxes flat and stack no more than 20 boxes high.
- When transporting PREFORM do not stack pallets and do not stack other items on top of PREFORM boxes.

ADDITIONAL INFORMATION:

- In addition to asphalt and concrete PREFORM may be installed on cobblestone or brick surfaces. (*We recommend installing on a test area first.*)
- PREFORM is easily retrofitted by cutting with a knife or heavy-duty scissors. (*Any seams will be virtually invisible after proper heating.*)
- Reversible/non-beaded PREFORM Turn Arrows are available. (*Purchasing reversible/non-beaded allows for inventorying one arrow to be used for both right and left turns. Type I highway beads may then be hand casted at the installation site to achieve reflectivity requirement.*)
- Although not required with PREFORM markings, some installers prefer to heat the surface prior to application of preformed thermoplastic pavement markings. **WARNING: If the installer chooses to preheat the surface the chalk layout should be done first.** Heated asphalt will become darker and tacky. A temperature gun should be used to check the temperature of the asphalt or concrete. The surface should not be heated above 300°F.
- On most asphalt surfaces, markings shall be capable of being applied as the original permanent marking on the day the surface is paved without being adversely affected by the fresh pavement oil content. If excessive oil IS present on top, it should be removed.
- **Call your Preform Technical Sales Manager at 888-826-5161 for further assistance with special pavement situations and/or questions with application.**