PreMark[®]



APPLICATION INSTRUCTIONS

PreMark® Preformed Thermoplastic Pavement Markings

First-time applicators should contact Flint Trading, Inc. for product support and on-site training.

For enhanced skid/slip resistance, Flint Trading, Inc. recommends using PreMark® with ViziGrip® in areas with pedestrian/cyclist traffic such as crosswalks, bike paths, and parking facilities.

SURFACE APPLICATION, GENERAL REQUIREMENTS:

Equipment: • Flint 2000EXTM, or equivalent propane fueled torch with pressure regulator and 25 ft. of hose

• Gas Powered Blower or Broom • Tape Measure • Chalk Sticks and Chalk Snap Line

• Utility Knife, Putty Knife • Adequate Supply of Propane • Hammer and Chisel

• Paint roller (for sealer applications only) • Water sprayer (optional)

Moisture: Pavement must be dry prior to positioning the PreMark[®] material.

Surface: Surface must be free of dirt, dust, deicing agents, chemicals and significant oily substances. PreMark® can be applied on asphalt, portland cement concrete (in conjunction with PreMark® sealer), and new, or old thermoplastic. Portland cement

asphalt, portland cement concrete (in conjunction with PreMark® sealer), and new, or old thermoplastic. Portland cement concrete must be free of all curing compounds. When applying on old thermoplastic scrape off any loose material and remove the oxidized (powdery) layer by grinding the surface, or heating the surface and scraping off the oxidized layer to expose fresh

material. Do not apply on top of paint or cold plastic.

Material: Keep PreMark® dry at all times. Avoid extreme storage temperatures. PreMark® should be stored indoors at temperatures

between 35° F. and 90° F. Packages should be stored flat and stacked a maximum of 25 high. PreMark® should be handled with care in temperatures below 50° F, as it will be less flexible in colder weather. Shelf life is 12 months. PreMark® sealer

should be used for applications on non-bituminous pavements.

Temperature: PreMark® does not have any road or ambient temperature requirements.

SAFETY PRECAUTIONS:

Protective clothing, consisting of leather boots, or work shoes, long pants (note: no synthetic fabrics should be worn), gloves, and either safety goggles or a face shield, and a safety vest should be worn while applying PreMark[®]. Avoid all contact with the molten PreMark[®] material and Flint 2000 EX[®] heat torch flame. If you do get molten material on your skin, flush the area immediately with plenty of water and then seek medical attention. Do not attempt to pull the molten material off of your skin. In the event of accidental skin contact with the sealer wash contaminated skin with soap and water and remove contaminated clothes immediately. In the event of accidental sealer contact with the eyes, immediately flush eyes with plenty of water for at least 15 minutes; remove contact lenses; call a physician.

INSTRUCTIONS FOR APPLICATION ON ASPHALT:

- 1. Clean intended application area thoroughly. All loose particles, sand, dust, etc. must be removed. Utilize a power blower or compressed air if available, otherwise sweep completely.
- 2. Ensure that no moisture is present prior to positioning the PreMark® material on the pavement surface. Surface moisture is not often visible so you should assume that some moisture is present. Remove moisture by drying the application area with a propane fueled torch such as the Flint 2000 EX.
- 3. Position all connecting parts of the PreMark[®] (lines, legends, or symbols) on to the pavement surface with the **exposed beaded side up.** There should be no gaps between the adjoining segments. You may overlap the edges slightly. Check to ensure that proper layout and alignment is obtained before heating the material.
- 4. Prepare to heat the PreMark® by positioning yourself with the wind at your back as you face the marking. This will allow the wind to move the heat over the unheated portion of the material while at the same time keeping the heat away from your feet. Regularly spaced indents have been manufactured into the top surface of the PreMark® material. The closing of these indents will provide a visual cue during application that the material has reached a molten state and proper bead embedment has been achieved. The PreMark® material must be heated to its melting temperature to achieve a bond with the pavement. **Insufficient heat will result in inadequate bonding and failure.**

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5. Heat the PreMark® by moving the flame from your torch in a sweeping motion, approximately 2 feet wide. Heat slowly, but steadily keeping the nozzle of the torch about 4 to 8 inches above the material. Caution: Maintain a minimum distance of 4 inches between the torch nozzle and the material. Any closer will cause superficial scorching of the material without adequate melting throughout. Continue to heat the PreMark® until the indents close. At this point stop the heating process. Overheating the material will sink the top coating of beads into the PreMark® material and the resulting marking will be less retroreflective initially. Note: The organic pigment in yellow PreMark® is susceptible to a superficial color change if exposed to excessive heat. Very intense heat applied to yellow PreMark® will yield a deep orange color. This color change affects the topmost layer of material only. Normal traffic wear will expose the underlying yellow color.

- 6. Inspect the recently applied PreMark® to ensure that complete bonding has occurred over the entire area. After the PreMark® has cooled to near ambient temperature, cut an area in the interior of the material with a chisel where it appears the material has received the least amount of heat. For white PreMark® this will appear the whitest in color. If the material can be lifted without evidence of asphalt on the underside, insufficient heat has been applied. Simply reapply heat until adequate bonding has occurred. Note: Do not leave the project until a sufficient bond has been established. Attempts to reheat at a later date will be unsuccessful.
- 7. PreMark[®] is formulated with surface applied and intermixed glass beads to provide both high initial retroreflectivity and better visibility throughout its service life. PreMark[®] can be supplied without pre-applied surface beads. When this happens beads must be applied to the surface during application while the material is in the molten state to provide adequate initial retroreflectivity. This is also a very important step in obtaining the required skid resistance.
- 8. PreMark® will cool and set rapidly within a couple of minutes of application. If desired, setting time can be accelerated with a spray of cool water.

INSTRUCTIONS FOR APPLICATION ON NON-BITUMINOUS SURFACES:

- 1. Follow steps 1 and 2 as stated for application on asphalt. Note: Worn, polished concrete should be ground or milled so the surface becomes rough.
- 2. Delineate the area to receive the PreMark® using a chalk line, chalk or crayon. Once the marking has been traced, or the area delineated, remove the marking from the pavement.
- 3. Apply sealer approved for use with PreMark[®] to areas outlined in chalk or crayon. Allow it to dry until it will not transfer to the finger when touched. The more porous the surface, the more sealer is required. **Caution: Do not attempt to speed up the drying process by using an open flame as the sealer is flammable at this stage.** Remember: It is important to cover the entire area with sealer where the PreMark[®] will be applied.
- 4. Continue with Steps 3 through 6 as stated above under "Instruction for Application on Asphalt" until application is complete. Note: When trying to lift the recently applied PreMark® material (step 6) off of the non-bituminous surface it is unlikely that any part of the pavement will be lifted up (with the PreMark®). Adequate bonding has occurred if the PreMark® separates and part of the PreMark® remains stuck to the pavement.

NOTES

- Closed indents act as a post-application visual cue that the application procedures have been followed.
- o PreMark[®] is compatible with asphalt and concrete surfaces and can be applied on special surfaces, i.e., bricks and cobble stones, using an approved sealer.
- O Do not allow 2 pieces of PreMark® to remain in direct contact with each other, as they will bond together especially in hot weather. Use the plastic separation sheets to avoid this situation.
- O You can "cut and paste" with PreMark[®]. Use a knife to score the material and carefully break it along the score. In warm weather you can use scissors. Don't throw or drop PreMark[®] in lower temperatures, as it will be less flexible in colder weather.
- Oil impervious PreMark[®] can be applied immediately after completion of daily paving operations.
- Dispose of all materials in accordance with all applicable federal, state and local laws and regulations.

PreMark® has a patented visible indent system, US Pat 5,861,206

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