

# StreetBond® Thermo

### **Technical Data Sheet**

Preformed thermoplastic pavement marking material is adhered to asphalt and concrete pavements by means of heat fusion of the preformed thermoplastic with a propane torch or infrared heater and with an approved 2-part epoxy primer. StreetBond® Thermo is a durable thermoplastic pavement marking product designed for use where retroreflectivity is not required but an enhanced skid resistant colored pavement marking for pedestrians, bicyclists, and vehicles is required.

### **PRODUCT INFORMATION**

Property	Test Method	Typical
Binder Content	ASTM D4797	18% Min.
Skid Resistance	ASTM E303	60 BPN Min.
Impact Resistance	AASHTO M249	Pass
Low Temperature Stress Resistance	AASHTO M249	Pass
Thickness	Calipers	Min 90 mil or 125 mil

### **Tools and Equipment**

- Broom or gas powered blower
- Personal Protection Equipment (PPE)
- Chalk stick, spray paint, or snap line for layout
- Tape measure and razor knife
- Hammer and 1 in Chisel for bond test
- Epoxy primer with 1:1 600 ml dispensing sealer gun
- Application torch capable of producing at least 250,000 BTU's, regulator, and a 30 ft. hose and a minimum 40 lb. propane tank. In lieu of a torch, an infrared heater may be used for application.

## **Product Information & Appearance**

- StreetBond® Thermo is comprised of intermixed skid resistant aggregates that are uniformly distributed on the surface and throughout the entire cross section of the material
- StreetBond® Thermo is non-retroreflective.
- StreetBond® Thermo is available in 12 standard colors and 9 premium colors
- StreetBond® Thermo has heat indicators evenly distributed on the surface which act as visual sign to aid the installer in determining when material has reached molten state and proper installation is achieved.
- Custom colors may be available upon request.
   StreetBond® Thermo has heat indicator slits to aid the installer during application. The heat indicator slits will dissipate as StreetBond® Thermo is heated during installation to a molten state whereby the material is able to bond properly.

### Packaging & Shelf Life

Packaging: StreetBond® Thermo shall be packaged in suitable cartons clearly labeled with Item Description, Material Thickness, Manufactured Date, and Batch number for ease of identifying the contents.

Shelf life: 2 years from manufacture date should be stored indoors. 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)



## **Application Instructions**

### **Surface Preparation:**

### Surface preparation is extremely important.

- Existing markings must be removed before application.
  - Use a water blaster, sand blaster, or scarifier to remove.
- Substrates must be dry prior to application. Surfaces should be free of dirt and chemicals. These agents can
  affect surface porosity. If the concrete surface doesn't not readily absorb a few drops of water, contact
  Streetbond Technical for additional help.
- 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 **StreetBond® Thermo**.

### Safety

While installing **StreetBond® Thermo** 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 nitrile gloves. **WARNING: DO NOT WEAR CLOTHING WITH SYNTHETIC FABRICS**. ANSI approved safety glasses are to be worn for eye protection. For specific information regarding safe handling of this material, please refer to the Safety Data Sheet (SDS).

#### Installation

**StreetBond® Thermo** remains flexible and capable of being handled without breaking at temperatures at or above 50°F. Without preheating of the substrate, **StreetBond® Thermo** is fusible to asphalt or concrete by means of a propane torch or infrared heater and an approved 2-part epoxy primer.

- 2-part epoxy primer is required on all substrates.
- ALL moisture must be completely removed from the surface prior to application.
- Application site must be clean and free of all debris.
- All previous pavement markings must be eradicated.
- Application surface shall be free of concrete curing agents. Material can be applied to green concrete
  (concrete that has set but not fully hardened) but it is recommended as a best practice to wait 30 days before
  installing on new concrete.
- Recommendation of a torch with a rating between 210,000 and 600,000 BTU's.
- **StreetBond® Thermo** may be installed on new asphalt as soon as the asphalt has cooled, and all excess oil is removed.
- StreetBond® Thermo may be installed on Portland cement concrete. While material is capable of being applied to green concrete (concrete that has set but not fully hardened), a 30-day cure time is recommended prior to installation. GAF approved primer is required on all substrates. Primers will require ambient and surface temperature to be 50F and rising.
- Use the chalk line as a guide to layout the StreetBond® Thermo marking sections. When the StreetBond®
  Thermo marking sections are laid out, use chalk to trace an outline of marking(s) thus providing a template for installation. Remove the StreetBond® Thermo marking sections from the application site.
- StreetBond® Thermo does NOT require preheating the application site.
- Apply primer inside the chalk lines just prior to installing ArtMark. IMPORTANT: Sealer must not be cured before **StreetBond® Thermo** has been applied and heated.
- Typical working time is 15–20 minutes depending on substrate temperature. Do not roll out more primer than can be heated in the working time. Place **StreetBond® Thermo** marking sections immediately on the wet primed application site. 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 **StreetBond® Thermo** marking has reached a molten, liquified state, and you visibly notice it has conformed to the substrate, the marking has been properly installed. Leave 8-12 inches between the material heating area and exposed primer substrate. Direct torch **StreetBond® Thermo** expose to the primer surface will prematurely cure the primer. Allow the **StreetBond® Thermo** marking installation to cool to ambient temperature. ALWAYS inspect your installation for bond 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 qun if hot and tacky the glue will stick, but if cooled just a bit no tack, no bond.)