

### TECHNICAL DATA

## Thermolastic<sup>®</sup> Solar Shield<sup>®</sup>

# Premium Grade Elastomeric Fluid-Applied Reflective Membrane

#### **DESCRIPTION**

Thermolastic<sup>®</sup> Solar Shield<sup>®</sup> is a premium 100% acrylic water-based elastomeric fluid-applied reflective membrane. Thermolastic<sup>®</sup> Solar Shield<sup>®</sup> is to be applied in one or more coats depending upon specification requirements.

Each roof application has unique requirements and as such may require a specific system configuration and application. This product is manufactured to our product specification and our only obligation shall be to replace such product if proven to be defective. Thermo Manufacturing Systems, LLC does not assume responsibility for any defects in application of this product, or any deficiencies in any roof or substrates on which this product is applied, nor shall Thermo Manufacturing Systems, LLC be responsible or liable for injury, loss, or damage of any kind or character, direct or consequential, arising from the application, use or inability to use this product.

#### **USES**

Thermolastic® Solar Shield® is specially formulated with stain-blockers for coating new BUR and modified bitumen. Additionally, Thermolastic® Solar Shield® is recommended as a waterproofing and reflective membrane for numerous Thermolastic® Roofing Systems and engineered metal roof panels. Thermolastic® Solar Shield® is also recommended as a reflective surfacing for a wide variety of roofing systems manufactured by others. Product should be applied when substrate temperature is greater than 40°F and less than 120°F.

#### COLOR

Standard colors are white and gray. Other Energy Star qualified colors are available. Custom tinting is available upon request.

#### STORAGE STABILITY

One year when stored in unopened containers at 40°F - 80°F. DO NOT FREEZE.

#### **CLEAN UP**

Water

#### **PRIMER**

On properly prepared surfaces, no priming is needed for application to plywood, most metal, new BUR or new modified bitumen.

#### **CURE TIMES**

When applied at 22 wet mils coating thickness and at conditions of 75°F and 50% relative humidity, Thermolastic® Solar Shield® will dry to the touch in 2 hours, but should not be recoated until it has reached full cure usually within 24 - 48 hours. Colder weather and/or higher humidity will tend to retard curing whereas warmer weather and/or lower humidity will tend to accelerate curing.

#### **LIMITATIONS**

Thermolastic<sup>®</sup> Solar Shield<sup>®</sup> will freeze and should not be shipped or stored at temperatures below 32°F. Thermolastic<sup>®</sup> Solar Shield<sup>®</sup> is not recommended for installations where ponding water is likely to occur for longer than 48 hours. Thermolastic<sup>®</sup> Solar Shield<sup>®</sup> should not be applied when weather conditions will not permit drying, i.e. high relative humidity (>90%), just before rain, dew, freezing temperatures or sunset.

#### **PACKAGING**

Available in 5 gallon pails, 55 gallon drums and totes

#### **SURFACE PREPARATION**

Thermolastic® Solar Shield® is supplied ready to use. Thinning is not required or recommended. If required, stir the materials slowly to ensure uniformity. DO NOT MIX AT HIGH SPEED. All surfaces to be coated must be clean, dry and free of any oil, grease, dirt or rust. Rust must be removed and area treated with appropriate Thermo Materials® products.

#### **APPLICATION INSTRUCTIONS**

Apply by brush, roller with long nap, or conventional or airless spray equipment

#### **WARRANTY**

When installed by an approved applicator and with an approved maintenance program, various extended warranties are available for specific Thermo Materials<sup>®</sup> Roof Restoration Systems by notifying Thermo Manufacturing Systems, LLC **PRIOR** to job start. Call for details regarding warranty application documentation requirements.

#### **APPROVALS**







#### TYPICAL PHYSICAL PROPERTIES

PROPERTY	VALUE	TEST METHOD
Weight per Gallon	12.0 lbs ± 0.5 lbs	
Solids Content by Weight	70% ± 2%	ASTM D1644
Viscosity (KU)	> 140	ASTM D562
Viscosity (cPs)	12,000	ASTM D2196
Initial Elongation	329.2%	ASTM D2370
Initial Tensile Strength	320.4 psi	ASTM D2370
Low Temperature Flex after 1000 hrs Xenon Arc Aging	Pass	ASTM D522
Fungi Resistance	Zero Rating	ASTM G21

#### CRRC RATED PRODUCT DIRECTORY

PRODUCT	CRRC PRODUCT ID	INITIAL SOLAR REFLECTANCE	INITIAL THERMAL EMITTANCE
Solar Shield <sup>®</sup> – White	0760-0003	.87	.91
Solar Shield <sup>®</sup> – Sand Stone	0760-0004	.71	.90