



# THERMO-SHIELD EXTERIOR

## DESCRIPTION

Thermo-Shield® Exterior Wall Coats are highly efficient, energy-saving, flexible coatings designed to insulate and waterproof exterior walls. They are non-toxic, friendly to the environment, and form a monolithic (seamless) membrane that bridges hairline cracks. They are completely washable and resist many harsh chemicals and dirt pick-up. These water-based coatings are made from an acrylic resin system filled with vacuumed ceramic micro spheres that acts as a thermally efficient blanket. Thermo-Shield® Exterior Wall Coats put a stop to the “frequent painting cycle” – they outlast other paints several times over. They have superb waterproofing performance, fire resistance and their adhesion increases with saturation. These coatings have “Variable Permeability” – they become watertight when saturated by water, and breathe away trapped water vapor when dry. They protect against UV, greatly reduce thermal shock and sound transmission, and have low VOC levels. These coatings come in a variety of architectural colors and leave a beautiful satin finish.

## TYPICAL USES

For painting concrete, metal, wood, polymerized surfaces and reducing condensation. **STD EXTERIOR:** Used in most climatic conditions where color fading is a major concern. It has superb fire resistance, excellent chemical resistant to salt spray, strong acids, petroleum products and other harsh chemicals. **TROPICAL EXTERIOR:** With same properties as STD, it is used in climatic conditions where fungi growth is a major concern. **ACENT BASE:** No pigmentation. Used as a semi-clear coat or when tinting for darker colors.

## INSULATION

Although these coatings enjoy very low Conductance (0.06 W/mK), it is the combination of their high Reflectance (89%), high Emittance (94%) and Endothermic Effect® that makes them a very good choice for protecting your exterior walls from heat buildup. Unlike typical mass insulation, where heat conduction is just slowed down, this technology keeps the heat out. Sun light only produces heat when it is absorbed by the wall surface, and being able to keep heat from forming into the surface of the walls is a very effective way to insulate. The cooling process of Endothermic Effect® ensures that the surface continues to insulate, even if Reflectance is diminished with aging, dust build-up or darker colors.

## PRIMER

No primer is usually required. Follow instructions for proper application and film build-up

## SURFACE PREPARATION

All surfaces must be clean and free from laitance, dust, dirt, rust, oil and grease. Minimally, surfaces must be cleaned to remove any loose or chipping paint, or any other foreign material prior to coatings.

## COLOR

Tinting may be achieved with Thermo-Shield® Exterior Wall Coatings by the addition of universal colorants. Darker colors will give a correspondingly lower reflectivity.



#### **PERCENT NON-VOLATILE:**

54.41% by VOLUME / 54.85% BY weight

#### **THEORETICAL COVERAGE**

(To be applied in 2 coats)

10.4 sm. Per gallon at 150 microns DFT with no loss. (130 sf/gal at 6-mills DFT)

#### **DRYING TIME**

To set: 20 minutes

To re-coat: 4 hours

To through: 12 hours

(At 24 deg C and 50% relative humidity)

#### **THINNING**

None required. Clean water in small amounts (up to 0.24 Liter –1 cup- per gallon) may be added to replace evaporation losses or to adjust for spray equipment configuration. Caution: excessive thinning will cause the coating to lose adhesion and elasticity.

#### **EQUIPMENT**

Roller or airless spray application is recommended. Very small areas may be brushed. When Thermo-Shield® Exterior Wall Coatings are applied by brush, three (3) coats cross-brushed are required for adequate protection.

#### **AIRLESS SPRAY:**

Tip Orifice	.031 inches
Atomizing Pressure	2200 - 2500 psi
Fan Spread	60 Degrees
Pump	Minimum 1 gallon per minute at 2500 psi
Filter	Remove filters & screens

\*\*\* Prime pump with water before attempting to spray Thermo-Shield® Wall Coatings. Acceptable equipment includes Binks Super Hornet, Graco 433 or larger, and many others.

#### **METHODS**

To assure adequate and uniform coverage, the “spray and back roll” techniques are recommended – spray all coats in the same direction, do not cross spray to avoid showing undulations and other small imperfections in the walls. Thermo-Shield® Exterior Wall Coats should be applied in full wet coats.

#### **CLEAN UP**

Clean the tools and equipment with warm soapy water. Rinse with clean water; flush mineral spirits through spray equipment to prevent rusting and to lubricate packing and gaskets.

#### **PACKAGING**

One and five-gallon pails.

