



# Mascoat

WEATHERBLOC-IC

# IC

## THERMAL INSULATING COATING

A SPRAY-APPLIED THERMAL INSULATING COATING FOR ALL PURPOSES



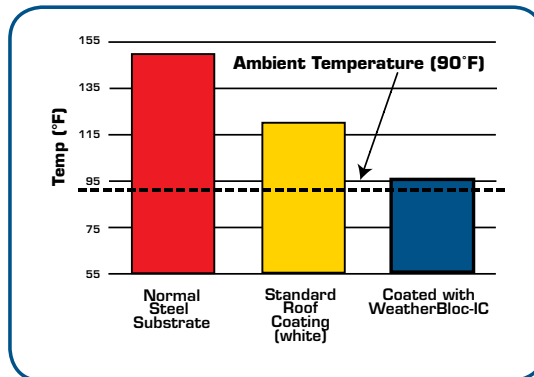
**COMMERCIAL BUILDINGS  
CONVERTED CONTAINERS  
WAREHOUSES  
OFFICE BUILDINGS  
PORTABLE BUILDINGS**

Formulated from an advanced system of air-encapsulated ceramic particles suspended in an acrylic binder, Mascoat's WeatherBloc-IC offers premium protection for substrates requiring thermal insulation. Because of its ability to reduce thermal transfer and stabilize building, office or warehouse temperatures, WeatherBloc-IC also helps to lower utility bills and improve year-round interior comfort.

WeatherBloc-IC is water-based, easy to apply and extremely low in VOCs, so it's safe and environmentally friendly. In addition to its superior insulating characteristics, the coating safeguards exterior substrates from wind, sun and UV rays. That means less maintenance for your commercial structure, industrial facility or converted storage container, which saves you time and money.

Whether used to insulate new construction or a retrofitted structure, Mascoat WeatherBloc-IC is an affordable, convenient way to protect siding, crawlspaces, masonry and roofing materials. A fraction of the thickness of conventional insulation, WeatherBloc-IC replaces or enhances problematic fiberglass-type insulation, while providing exceptional durability—with few maintenance requirements.

Mascoat WeatherBloc-IC has been tested in a number of unforgiving environments, and has continually exceeded ASTM standards for weatherability, adhesion, flexibility and UV resistance. For more information about our company's commercial products, contact our insulation specialists today.



### USES

WeatherBloc-IC is currently in use around the world to combat heat transfer and protect substrates. Typical applications include:

- Rooftops
- Walls
- HVAC systems
- Doors
- Windows
- Interiors
- Exteriors
- And much more...

### BENEFITS

- Reflects and refracts heat transfer efficiently
- Gives sealant quality to rooftops
- Protects substrates
- Extremely low permeability
- Non-toxic and lightweight
- Class A Fire Rating
- Quick and easy application
- Provides substrate protection



This product is accepted for LEED Certification Points

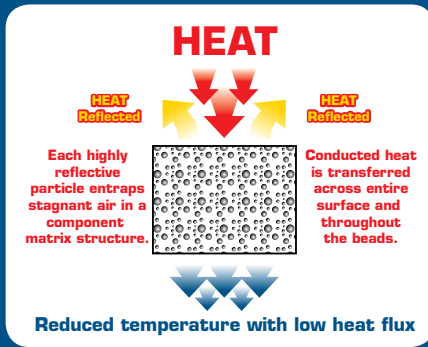


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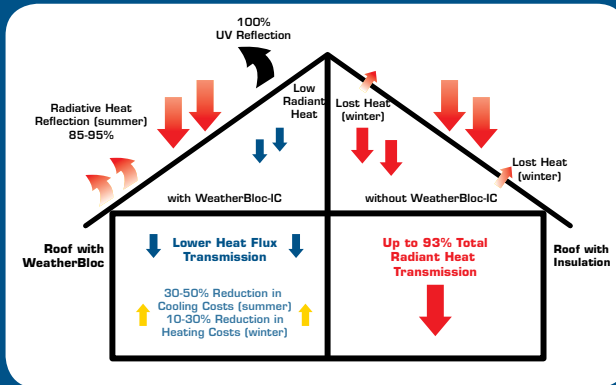
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**How does the coating work?** Mascoat WeatherBloc-IC thermally protects all year round, unlike reflective rooftop coatings, which only work during the hot summer months. The coating applies the common physics principles of reflectivity, conduction, emissivity and absorbance. Its microscopic particle structure, which resembles popcorn-like particles, reflects upwards of 85% of the radiant heat gain back to the environment from which it originated. Each ceramic particle encapsulates air, thereby offering a slow path of thermal transfer. This high content of entrapped and stagnant air blocks thermal transfer very efficiently. In addition, the coating's low emissivity allows for low heat flux. The combination of these factors allows for total thermal dissipation across the surface of the coating. The unique composition of the coating makes it extremely efficient for its thickness and prevents substrates from gaining heat.



The graphic to the right depicts heat and cold transmission in a typical rooftop scenario. By using Mascoat WeatherBloc-IC, up to 84% of the summer radiant heat load is reflected by the insulating particles. Winter conditions can yield a 10-30% savings due to the coating reflecting heated air back into the internal environment. Depending on geographic location and local conditions, the energy savings derived from using the coating can average between 10 and 50%.



## TECHNICAL DATA

All data is to ASTM standards when applicable

CONTAINER SIZE: 5 Gallons

COMPONENTS: One-part (inclusive)

COAT THICKNESS: 20 mils (0.5 mm) dry

COVERAGE PER GALLON: 47-52 ft<sup>2</sup> at 20 mils  
(1.22 m<sup>2</sup> at 0.5 mm)

WEIGHT: 6.4 lbs/gallon  
(0.74 kg/liter)

VOLUME SOLIDS: 70-72%

COLOR: White. Custom tinting upon request

SHEEN: Flat

BASE: Water-based acrylic

CHLORIDES: Low to none

VOC CONTENT: 0.05 lbs/gallon  
(5.9 grams/liter)

ELONGATION: Above 600%

ACCELERATED AGING: Excellent (2,000+ hours)

ABRASION RESISTANCE: Moderate to high

THERMAL EMISSANCE: 0.86

SOLAR REFLECTIVITY: 0.84

TRANSMITTANCE: 0.0

EMISSIVITY/

ABSORPTANCE: 0.16

UV REFLECTION: 100%

FLAME SPREAD: Class A

SMOKE DEVELOPED: Class A

FIRE RATING: Class A

APPLICATION TEMPS: 50-190°F

(10-88°C)

OPERATION TEMPS: -40-200°F

(-4-93°C)

TOPCOATING: Please contact Mascoat.

APPLICATION METHOD: Airless sprayer

## APPLICATION INSTRUCTIONS

**Surface Preparation:** All substrates should be cleaned prior to application of product. Most substrates need a simple pressure wash. Fastening points need to be examined and tightened or replaced. Voids and fastening points should be dressed with an elastomeric compound prior to application. Make sure that the elastomeric compound is fully cured prior to application of the coating.

**Primers:** On clean surfaces, primers are not needed except on carbon steel.

**Airless Sprayer:** An airless sprayer is the best method for application of the coating. The sprayer should have a capacity of at least 1.5 gallon per minute at 3,000 PSI. Remove all strainers and filters from gun and sprayer before application. Failure to do so will result in the filtering of insulation particles. Please consult Mascoat for detailed instruction sheet, including list of sprayers, prior to application. A Small Application (SA) Kit can also be used for small applications under 100 square feet or touch ups. This specially-made kit can be obtained by contacting Mascoat.

**Brushing and Rolling:** Except for small touch-ups, it is not recommended to brush or roll on Mascoat WeatherBloc-IC, as the insulating particles can be damaged and coating performance inhibited.

**Thinning:** Thinning is not recommended for this product.

**Mixing:** Only mud mixing paddles, available from Mascoat, should be used to mix the contents of the pail. Use a 1/2 inch drill motor to stir. Make sure that drill is set to the reverse setting to ensure that the paddle will not mar the pail's inner wall and contaminate the coating.

**Cleaning:** All equipment can be cleaned with soap and water.

**Warranty:** Ten-year specific limited warranty if product is applied by a Mascoat Certified Applicator. To find a certified applicator in your area, please contact your Mascoat representative.

All data on this sheet was collected using ASTM procedures when applicable. Findings may be different due to application techniques and environmental conditions. Thermal conductivity is based on equivalency testing.

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