



# Mascoat®

— WEATHERBLOC—HRC —



## REFLECTIVE THERMAL INSULATING COATING

A SPRAY-APPLIED COATING FOR REFLECTIVE AND THERMAL INSULATION PURPOSES



Mascoat's WeatherBloc-HRC is the latest product in a family of high-quality reflective and thermal insulating coatings to offer the best in protection against heat transfer for roof and sidewall applications. The coating was specifically formulated to combat radiant heat gain and solar loading for all climates. The coating offers outstanding temperature differentials with just a single coat application.

WeatherBloc-HRC differs from reflective roof coatings by employing Mascoat's high-performance insulation particulates, providing additional thermal performance. WeatherBloc-HRC uses ingredients that produce a low thermal heat flux across its surface, whether it is applied on top of OR under a roof surface. Typical rooftop coatings solely use their white appearance to reflect solar loading, while WeatherBloc-HRC's unique design can keep the heat out, even on a cloudy day. And unlike standard reflective rooftop coatings that become less effective when dirt and grime accumulate, Mascoat WeatherBloc-HRC will continue to perform even if dirty!

WeatherBloc-HRC is a water-based coating that is affordable, very easy to apply, and environmentally friendly. The coating offers seamless protection across the roof surface and safeguards exterior substrates from wind, sun and UV rays. It also aids in stopping thermal expansion and contraction, thereby extending roof life. That means less maintenance for your commercial structure, industrial facility or converted storage container – saving time and money.

Mascoat WeatherBloc-HRC has been tested in a number of unforgiving environments, and can also offer construction projects additional LEED points due to its energy saving potential. For more information about our company's commercial products, contact our insulation specialists today.

### USES

WeatherBloc-HRC is used to combat heat transfer and protect substrates. Typical applications include:

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

### BENEFITS

- Reflects and reduces heat transfer efficiently
- Protects substrates
- Improves roof aesthetics
- Non-toxic and lightweight
- Quick and easy application
- Provides substrate protection
- High build ability
- Offers sealant quality
- Reduces expansion and contraction
- Ultra-Low VOC content

### TECHNICAL DATA

All data is to ASTM standards when applicable

CONTAINER SIZE: 18.92 liters (5 gallons)

COMPONENTS: One-part (inclusive)

VOLUME SOLIDS: 75%

SHEEN: Flat

BASE: Water-based acrylic

CHLORIDES: Low to none

DRYFALL: 0.9 meters (3 feet)

FLAME SPREAD: Class A

SMOKE DEVELOPED: Class A

APPLICATION TEMPS: 10–76°C  
(50–170°F)

MAX SUSTAINED TEMP: 180°F (82°C)

TOPCOATING: Please contact Mascoat.

APPLICATION METHOD: Airless sprayer

### COVERAGE RATES

PER 18.92 LITER (5 GALLON) PAIL

DRY COAT THICKNESS	0.38 mm (15 mils)	0.5 mm (20 mils)	0.75 mm (30 mils)
SQUARE METER	31–34	22–25	15–17
SQUARE FEET	333–366	250–275	166–183

Note: Thicker coats will enhance coating's thermal performance.



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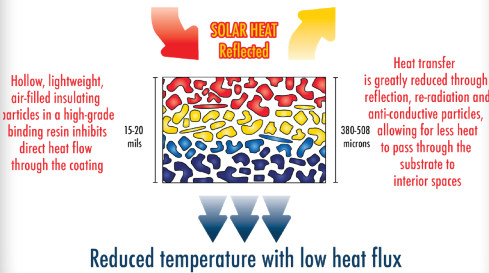
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## Mascoat WeatherBloc-HRC

Reflective & Thermal Insulating Coating



## HOW DOES THE COATING WORK?

Mascoat WeatherBloc-HRC thermally protects a structure from heat in multiple ways unlike reflective rooftop coatings, which only reflect sunlight to reduce solar loading. Its bright white coloring reflects upwards of 85% of the solar radiation like standard reflective coatings, but there's more to the coating than just coloring. It also contains irregularly-shaped ceramic particles that help greatly reduce the amount of heat transfer through the coating. This high content of entrapped air blocks thermal transfer very efficiently. While reflective coatings only recommend one coat because they are solely relying on reflective properties, an extra coat of WeatherBloc-HRC will give you enhanced performance. The coating will help reduce heat transfer even if it becomes dirty or is placed on the underside of a roof!

The combination of these factors allows for enhanced thermal dissipation across the surface of the coating. WeatherBloc-HRC's unique composition makes it extremely efficient for its thickness, resulting in less thermal transfer into interior spaces than standard reflective coatings.

## COATING THICKNESS

### TYPICAL ROOF COATING

} < 0.125 mm

These coatings are thin because they rely solely on their solar reflectivity to prevent radiant heat gain.

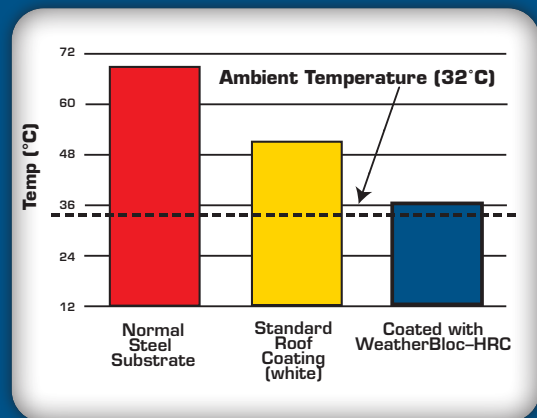
### WEATHERBLOC-HRC

} 0.38 – 1.25 mm

WeatherBloc-HRC is thicker than most reflective rooftop coatings because of the air-entrapped ceramic that help thermally insulate, as well as reflect solar radiation. Overall increase in coatings thickness not only provides better insulation, but also enhances substrate protection.

## WHAT RESULTS CAN CUSTOMERS EXPECT?

Since WeatherBloc-HRC works to reduce the heat transfer through the coating instead of just reflecting UV rays, it will perform better, especially as ambient temperatures increase. This chart shows that while a standard white roof coating in perfect condition will help decrease the amount of heat passing into interior spaces, a great deal of energy can still pass through, keeping interior temperatures high. Thanks to the insulating particles described above, WeatherBloc-HRC will help reduce heat transfer even further, keeping interior temperatures more manageable. Moreover, WeatherBloc-HRC will still provide an insulation value, even when dirty or on cloudy days.



## 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.

**Concrete Surfaces:** Due to the porous nature of concrete/cement, coverage rate variations should be taken into account prior to application. To reduce absorption, a concrete sealer can be applied prior to WeatherBloc-HRC, but sealer manufacturer instructions for topcoating should be followed.

**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. **DO NOT MECHANICALLY SHAKE.**

**Safety:** For minimum protection, Mascoat recommends an N95 particulate respirator mask. For additional protection, a half mask respirator with organic vapor cartridge can be utilized. Eye protection recommended due to spray application method.

**Airless Sprayer:** An airless sprayer is the best method for application of the coating. The sprayer should have a capacity of at least 1.0 gallon per minute (3.8 lpm). 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 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.

**Pot Life:** None – pail can be reused if properly sealed.

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

**Brushing and Rolling:** Except for small touch-ups of less than 0.5 ft<sup>2</sup> (0.04 m<sup>2</sup>), it is NOT recommended to brush on Mascoat WeatherBloc-HRC, as the insulating particles can be damaged and coating performance inhibited. Rolling is not recommended.

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

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

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