

Mascoat®

WEATHERBLOC-HRC

REFLECTIVE THERMAL INSULATING COATING

HRC



Selection & Specification Data

Product Name	Mascoat WeatherBloc-HRC												
Product No.	MWB-HRC												
Description	Mascoat WeatherBloc-HRC is a water-based acrylic reflective coating comprised of air-encapsulated, insulating particles that produce thermal insulation qualities. It is specifically designed for rooftops, warehouses, barns, storage areas, mobile homes, portable buildings, containers, coolers, walls and sheds.												
Features	<ul style="list-style-type: none"> ◆ Excellent thermal insulation at low thickness ◆ Excellent solar reflectance ◆ Excellent application characteristics ◆ Fast recoat times ◆ Helps deaden sound ◆ Applies to almost any surface ◆ Helps to seal walls and membranes ◆ Ultra-low VOC content 												
Base	Water-based Acrylic Insulation Coating												
Gloss	Flat												
Priming	Self priming over non-ferrous materials (stainless steel & aluminum). Primer is required for carbon steel substrates.												
Wet Weight	0.72 kg/liter (6.0 lbs/gallon)												
Weight Dry Film To Area	0.24 kg/m ² at 0.50 mm DFT (0.48 lbs/ft ² at 20 mils DFT)												
Volume Solids Content	75%												
Average Thickness per Coat	0.5 mm DFT at 21°–54°C (20–22 mils DFT at 70°–130°F)												
Practical Dry Coat Coverage (per 5 gallon container)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>DRY COAT THICKNESS</th> <th>0.38 mm (15 mils)</th> <th>0.5 mm (20 mils)</th> <th>0.75 mm (30 mils)</th> </tr> </thead> <tbody> <tr> <td>SQUARE METER</td> <td>31–34</td> <td>22–25</td> <td>15–17</td> </tr> <tr> <td>SQUARE FEET</td> <td>333–366</td> <td>250–275</td> <td>166–183</td> </tr> </tbody> </table>	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
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VOC Content	21 g/liter (0.18 lbs/gallon)												
Storage	Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 15°C and 35°F (60°F–95°F).												

Substrates & Surface Protection

Surface Prep	Surface should be clean, dry, and free of foreign matter. Surface prep can be used to NACE 1-3 (SSPC SP 5-6) when applicable.
Ferrous Surfaces	Should be primed prior to application of MWB-HRC Insulating Coating.
Non-ferrous Surfaces	The coating can be applied directly to non-ferrous surfaces.
Concrete and Cement Surfaces	Surface should be fully cured prior to application of MWB-HRC. Due to the porous nature of concrete/cement, coverage rate variations should be taken into account prior to application. A sealer can be applied prior to WB-HRC, but sealer manufacturer instructions for topcoating should be followed.

Application Equipment

Airless Sprayer	<table border="0"> <tr> <td>Pump Ratio:</td> <td>33:1 or larger</td> </tr> <tr> <td>Output per Cycle:</td> <td>180cc (Minimum) 290cc (Optimum)</td> </tr> <tr> <td>Volume:</td> <td>1.5 gpm (5.7 lpm) or greater</td> </tr> <tr> <td>Hose:</td> <td>3/8" or larger with no more than 3' of 1/4" whip. 1/2" hose recommended for length above 50'.</td> </tr> <tr> <td>Tip Size:</td> <td>0.017" (for tight spots) 0.019–0.023" (Normal use)</td> </tr> <tr> <td>Pressure:</td> <td>Minimum of 3000 PSI</td> </tr> </table>	Pump Ratio:	33:1 or larger	Output per Cycle:	180cc (Minimum) 290cc (Optimum)	Volume:	1.5 gpm (5.7 lpm) or greater	Hose:	3/8" or larger with no more than 3' of 1/4" whip. 1/2" hose recommended for length above 50'.	Tip Size:	0.017" (for tight spots) 0.019–0.023" (Normal use)	Pressure:	Minimum of 3000 PSI
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Small Spray Application	Please consult Mascoat for the Small Application Sprayer. This sprayer is excellent for small applications and touch-ups.												
Brush or Roll	Not recommended for this coating												

Application Conditions

Surface Temperatures	Surface temperatures for applications should be greater than 60°F (10°C). Lower surface temperatures will increase dry times.
Applications	<p><i>Ambient & Cold (60°–120°F, 15°–49°C):</i> For temperatures (surface or ambient – whichever is lower), an initial tack coat is recommended of 10 mils (0.25 mm or 250 microns). This tack coat will help eliminate sag on vertical wall applications. Tack coat should be dry to touch prior to next pass. Coating can be reapplied after each coat is thoroughly dry.</p> <p><i>Hot (>140°F, >60°C):</i> Not recommended</p>
Application Thickness	Product can be applied in successive coats to increase insulation ability. There are no upper limitations.
Dryfall	Dryfall within a 10 ft radius.

Other Coating Specifications

Item	English Value (Metric Value)	Test Method
Cyclic Salt Fog	Excellent 2000 hrs	ASTM B-117
UV-A Exposure	Excellent 2000 hrs	ASTM D-5894
Humidity Cabinet	Excellent 2000 hrs	ASTM D-4585
QUV	Excellent 2000 hrs	ASTM G-154
Cross Hatch Adhesion	100% 5 B	ASTM D-3359
Pull Apart Strength	>280 psi	ASTM D-4541
Elongation Rate	Above 30%	ASTM D-638
SRI	108	ASTM E-1980
Thermal Emittance	0.85	ASTM C-1371
Solar Reflectivity	0.86	ASTM C-1549
Flame Spread	Class A	ASTM E-84
Smoke Developed	Class A	ASTM E-84
Fire Rating	Class A	ASTM E-84

Mixing & Thinning

Mixing	Only a mud mixing paddle should be used. Use 1/2" drill motor to stir contents with paddle. <i>Make sure drill is set to reverse to ensure that the paddle will not mar the bucket's inner wall.</i> Please consult Mascoat for paddle, if needed. DO NOT MECHANICALLY SHAKE.
Thinning	DO NOT THIN unless authorized in writing by Mascoat.
Pot life	Coating is one part, so no catalyzation is needed. Pail can be reused if properly sealed.
Container	5 gallon pail (18.92 liters)

Package, Handling & Storage

Container Wet (with pail/lid)	14.5 kg /18.92 liters (32.0 lbs/5 gallon pail)
Net Contents	13.6kg/18.92 liters (30.0 lbs/5 gallon pail)
Flash Point (Setaflash)	None
Storage	Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 15°C and 32°C (60°F and 90°F).
Shelf Life	18 month shelf life from manufacture date.
Caution	Do not let product freeze.

Dry Times vs. Humidity

Surface Temperature	% Humidity	Time Between Coats (hours)
61–70°F (16–21°C)	10–30%	4.00
	31–50%	5.50
	51–70%	6.50
	>70%	8.00
71–80°F (22–26°C)	10–30%	2.00
	31–50%	3.00
	51–70%	3.50
	>70%	4.00
81–90°F (27–32°C)	10–30%	1.50
	31–50%	2.00
	51–70%	2.50
	>70%	3.00
91–100°F (33–37°C)	10–30%	1.25
	31–50%	1.50
	51–70%	1.75
	>70%	2.00
101–110°F (38–43°C)	10–30%	1.00
	31–50%	1.25
	51–70%	1.50
	>70%	1.75
111–120°F (44–49°C)	10–30%	0.75
	31–50%	1.00
	51–70%	1.25
	>70%	1.50
121–130°F (50–54°C)	10–30%	0.50
	31–50%	0.75
	51–70%	0.75
	>70%	1.00

Dry times are based on 0.5 mm (20 mil) coats. Thicker coats may require longer dry times. Use 90° thumb test or moisture meter prior to recoat. This is the estimated dry time for 15–20 mils (0.38–0.50 mm) of Mascoat WeatherBloc-HRC wet. Dry time may vary depending on other conditions such as wind or enclosed environments. Lighter thickness passes will expedite dry times. Forced ventilation in confined areas will also expedite dry times.

Cure Times

Temperature	Cure Time
50–60°F (10–15°C)	60–72 hrs
61–70°F (16–21°C)	48–60 hrs
71–80°F (22–26°C)	36–48 hrs
81–90°F (27–32°C)	20–24 hrs
91–100°F (33–37°C)	18–20 hrs
>100°F (>37°C)	14–16 hrs

Cleanup & Safety

Cleanup	Equipment may be cleaned with soap & water.
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.
Ventilation	Recommended for constricted areas.
Caution	This material is not for human consumption.
Clothing	Safety clothing & gloves are recommended.