

# **RADIANCE**<sup>™</sup> e-0.25 Attic Barrier

# Low-e attic barrier for the underside of roof decks

#### YIELD

325-425 ft<sup>2</sup>/gallon (8-10.5 m<sup>2</sup>/L)

#### **PACKAGING**

Kit contains 4.1 gallons (15.5 L) Part A: 5 gallon plastic pail (3.6 gallons [13.6 L] of material) Part B: 1 gallon can 6.8 lbs (3.125 KG)

## **COLOR**

Part A: Milky white Part B: Silver

When the two parts are mixed, the resulting color is metallic silver

#### **DESCRIPTION**

Radiance™ e-0.25 Attic Barrier is formulated to be sprayed on the underside of the roof deck. When applied it creates an effective radiant barrier that will stop up to 79% of the potential radiant energy transfer into the attic.

The physics behind Radiance™ e-0.25 Attic Barrier is similiar to low-e glass windows, which reduce the absorption of heat into a building in the summer. The "e" refers to emissivity, which is the ability of a surface to emit or absorb radiant energy. The lower the "e" value, the more efficient it is in managing energy and the greater the energy savings for the dwelling.

| FEATURES  | BENEFITS  |  |
|---|---|--|
| Low emissivity with 0.21 "e" value              | Reduces cooling costs in summer                                 |  |
| Reflects up to 79% of radiant energy            | Increases interior comfort level                                |  |
| 100% seamless coverage of attic space           | More cost efficient than alternative attic systems              |  |
| Does not alter electromagnetic fields           | Will not disrupt attic-mounted antennae or cell phone reception |  |
| Breathable                                      | Will not increase attic moisture                                |  |
| One coat coverage on bare wood and primed metal | Fast application  |  |
| Application by spray, roller and brush          | Easy to apply   |  |

#### SHELF LIFE

Parts A and B: 12 months when properly stored

# STORAGE

Parts A and B: Store in original containers in a clean, dry area between 40 and 90  $\,^{\circ}$ F (4 and 32  $\,^{\circ}$  C). Keep away from direct sunlight. Keep from freezing.

#### WHERE TO USE

APPLICATION

- · Bottom side of roof decking
- Primed or coated metal roofing

LOCATIAON

- Interior only SUBSTRATE
- · OSB
- Plywood
- Chip board
- Wood
- Metal
- Concrete
- Masonry

#### Technical Data Composition

Radiance™ e-0.25 Attic Barrier contains water, acrylic copolymer emulsion and other proprietary ingredients.

#### Compliances

ASTM C 1321-98

#### **Test Data**

| PROPERTY                                   | RESULTS                    | TEST METHODS               |
|--|----------------------------|----------------------------|
| "e" value (emissivity)                     | 0.21                       | ASTM C 1371                |
| Vapor transmission, perms                  | 20                         | ASTM E 96                  |
| Weight per gallon, lbs                     | 8.77                       | ASTM D 1475                |
| Solid content, %<br>By weight<br>By volume | 16.4<br>12.0               | ASTM D 5201<br>ASTM D 5201 |
| Viscosity, KU                              | 55                         | ASTM D 562                 |
| Flash point, °F (°C)                       | 150 (65.6)                 | ASTM D 3278                |
| VOC Content, g/L (lbs/gal)                 | 212 (1.77)                 | ASTM D 3960                |
| Surface Burning                            | Class A Flame Spread (<25) | ASTM E 84                  |
|  |                            |                            |

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

#### Yield

| RATE, FT <sup>2</sup> /GAL (M <sup>2</sup> /L) | WET FILM, MILS (MICRONS) | DRY FILM, MILS (MICRONS) |
|--|--------------------------|--------------------------|
| 325 – 425 (8 – 10.5)                           | 4 (102)                  | 0.5 (13)                 |

# **HOW TO APPLY**

WOOD SURFACES

 Apply to a clean, dust-free, dry surface. No need to prime.

METAL SURFACES

- 1. Remove all surface contaminants by washing with an appropriate cleaner.
- Rust and mill scale must be removed using sandpaper, steel wool or other abrading methods.
- Bare metal surfaces must be primed with the appropriate primer. It is usually recommended to prime the same day it is cleaned.

MASONRY AND CONCRETE

- Apply to clean, dust-free, dry surface. No need to prime.
- 2. Remove all surface contaminants with an appropriate cleaner.

#### Mixing

- Remove lid from Part B and use a spatula to put entire contents into the 5 gallon pail containing Part A.
- Mix thoroughly for 3 minutes with a squirrel cage type mixer before use. Make certain to only mix as much material as can be applied in one day.

### APPLICATION

 Radiance™ e-0.25 Attic Barrier may be applied by brush, roller and sprayer. The preferred method is spraying.

# AIRLESS SPRAYER

Recommended pressure is 2,000 psi using tip size 0.019 to 0.021" (0.48 to 0.53 mm). For best results use a spray pump size 3/4 GPM or greater.

#### **ROLLER**

Use a 3/8" (9.5 mm) synthetic-nap roller cover.

Use a nylon/polyester device.

NOTE: Because of its use as an attic barrier, with roofing nails penetrating the surface, brushing or rolling may be difficult application methods.

### **Drying Time**

Dries to the touch in 2-4 hours at 77 °F (25 °C) and 50% relative humidity.

#### Clean Up

Use warm, soapy water. Follow sprayer manufacturer recommendations when cleaning equipment.

# FOR BEST PERFORMANCE

- Must be applied by a professional applicator.
- Do not topcoat; must remain in contact with air.
- Do not thin.
- Do not tint.
- Radiance<sup>™</sup> e-0.25 Attic Barrier is not designed to withstand any handling.
- To maximize the effectiveness of Radiance™
  e- 0.25 Attic Barrier, a minimum of 1"
  (25.4 mm) of airspace is required between the Radiance™ e-0.25 Attic Barrier and the next substrate.
- · Use with proper ventilation.
- Ensure appropriate personal protective equipment is used so that the product does not come into contact with skin, eyes or clothing. Use impervious gloves, eye protection, and if the TLV is exceeded or if used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with local, state and Federal regulations. Review Material Safety Data Sheet for further information.
- Do not expose to open flame.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-2517) to verify the most current versions.

 Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

#### **HEALTH, SAFETY AND ENVIRONMENTAL**

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.com/en-us, e-mailing your request to mbsbscst@ mbcc-group.com or calling +1 (800) 433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

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