



RADIANCE®

## Radiance® e-0.25 Attic Barrier

U.S. PATENTED

### Product Description

Radiance® e-0.25 Attic Barrier is designed to be applied to the underside of roof decks and gable ends (rafters optional). It helps keep structures warmer in the winter, and cooler in the summer, while at the same time reducing heating and cooling costs.

The physics behind Radiance® is similar to Low-e glass windows, which reduce the loss of radiant heat in the winter and the emission of heat into a building in the summer. The “e” refers to emissivity, which is the ability of a surface to emit or absorb radiative energy. The lower the “e” value, the more efficient it is in managing energy and the greater the energy savings.

Radiance® e-0.25 Attic Barrier is formulated to be applied to the attic side of the roof deck. It effectively stops 75% of the solar heat gain from through the roof. Radiance® e-0.25 Attic Barrier is a cost effective remedy for homes or buildings with inadequate insulation. Application is similar to that of paint and can be done in a matter of hours, instead of days. Radiance® e-0.25 Attic Barrier will not increase attic moisture and will not disrupt attic mounted antenna or cell phone reception.

### Where to Use Radiance® e-0.25 Attic Barrier

- Interior only
- Plywood and chip board roof decking
- Sheetrock
- Primed or coated metal roofing
- Ceiling tile
- Precast concrete

### Features and Benefits

- Reduces heating and cooling bills
- Reflects up to 75% of radiant energy
- One coat coverage on bare wood and primed metal
- Low emissivity... “e” value is 0.25

### HOW TO APPLY RADIANCE® e-0.25 ATTIC BARRIER

Before application, review MSDS, label and other product literature and ensure adequate safety precautions are followed.

#### Surface Preparation

**Attics (wood):** No need to prime. Apply to a clean, dry surface.

**Aluminum and Galvanized Steel:** Remove all surface contaminants by washing with an appropriate cleaner. Any corrosion must be removed with hand tool cleaning, steel wool or other abrading method.

**Drywall:** Remove all surface contaminants by washing with an appropriate cleaner.

**Masonry, concrete, cement brick and block:** Remove all surface contaminants with an appropriate cleaner. All surfaces must be fully cured. Remove all form release and

curing agents. Rough surfaces can be filled to provide a smooth surface.

**Plaster:** Bare plaster must be cured and hard. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with clean water and allow to dry.

**Steel:** 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 steel must be primed the same day as cleaned.

**Previously painted surfaces:** Remove all loose coatings and corrosion by scraping, sanding or other abrading method. Dull glossy and non-porous surfaces with sandpaper or abrasive cleaner. Remove all surface contaminants by washing with an appropriate cleaner. Patch and fill areas as needed. Spot prime any bare areas with the appropriate primer.

**Mildew:** Mildew must be removed before painting by washing with a solution of 1 quart household bleach and 3 quarts warm water. Wear rubber gloves and protective clothing. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry 48 hours before painting. DO NOT ADD DETERGENTS OR AMMONIA TO BLEACH SOLUTION.

### Mixing

**Method A:** Remove lid from part B and use a spatula to put entire contents into the 6 gallon pail containing part A. Mix thoroughly for 3 minutes before each use using a squirrel cage type mixer. **Method B:** Use a manual can opener and open the bottom of part B. Be cautious of any rough edges that may be produced. Remove lid and place entire contents of part B into 6 gallon pail containing part A. Mix thoroughly for 3 minutes before each use using a squirrel cage type mixer.

### Application

Radiance® e-0.25 Attic Barrier may be applied by brush, roller, or sprayer. The preferred method may be spraying because of protruding roofing nails.

**Roller:** Use a 3/8" synthetic-nap roller cover.

**Airless sprayer:** Recommended pressure is 2,000 psi using tip size 0.019" to 0.021". For best results use a spray pump size 3/4 GPM or greater.

### Dry Time

Dries to the touch in 2 - 4 hours at 77°F and 50% relative humidity. Only one coat is required.

### Clean up

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

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Construction Chemicals

### For Best Performance

- Do not apply to any surface exceeding 125°F
- Extinguish any open flame. Disconnect attic mounted HVAC units.
- Use shielded safety lighting.
- Provide mechanical ventilation from: a) home interior-to-attic-to-outside. b) outside-to-attic-to-outside.
- Run ventilation 10 minutes prior to use, during use, and for at least 30 minutes after application.
- Ensure appropriate personal protective equipment is used. Review Material Safety Data Sheet for further information.
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.

### TECHNICAL DATA

"E" value (emissivity)	< 0.25
Reflectance, %	78
Flash point, °F	130
VOC Content, g/L	427
Volume solids, %	14.40
Weight solids, %	21.60
Weight per gallon, lbs.	9.10
Vapor Transmission, Perms	10.5
Viscosity, KU	60
Color	Metallic silver
Odor	Mild
Wet mil thickness, mils	4
Dry mil thickness, mils	1
Dry to touch time, hours	2-4

### ORDER INFORMATION

#### Packaging

- 6 gallon pails contain 3.6 gal. (14 L) Part A liquid and 9 lbs (4.1 kg) Part B aluminum, making 4.3 gal. (16.2 L) product.

#### Coverage

- 325 - 425 sq. ft. per gallon depending on surface texture porosity at 4 mil. wet.

### WARNING

*Radiance® e-0.25 Attic Barrier* contains:

Part A- no hazardous ingredients in reportable concentrations as defined by 29 CFR 1910.1200 and WHMIS.

Part B- aluminum, isopropanol, stearic acid.

#### Risks

##### Part A

May cause skin, eye or respiratory irritation. Ingestion may cause irritation.

##### Part B

Flammable liquid and vapor. May cause skin, eye or respiratory irritation. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness, and nausea.

Ingestion may cause irritation. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage.

**INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.**

### Precautions

#### Part A

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves and eye protection. If the TLV is exceeded or used in a poorly ventilated area, use approved respiratory protection equipment in accordance with applicable federal, state and local regulations.

#### Part B

KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. Vapors are heavier than air. Keep container closed. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. All label warnings must be observed until container is commercially cleaned or reconditioned. Use impervious gloves and eye protection. If the TLV is exceeded or used in a poorly ventilated area, use approved respiratory protection equipment in accordance with applicable federal, state and local regulations.

#### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

### Proposition 65

This product contains materials listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

### VOC Content

427 g/L or 3.56 lbs. of VOC per gallon of coating, less water and exempt solvents.

For medical emergencies only, call ChemTrec (1/800/424-9300).

### CUSTOMER SATISFACTION GUARANTEE

The manufacturer assures your complete satisfaction when the product is applied according to the label directions. If this finish fails to perform, the manufacturer will furnish an equivalent amount of Radiance® at no cost or will refund the purchase. This guarantee does not include labor or cost of labor for the application of any paint. This guarantee gives you specific rights and you may also have other rights, which vary from state to state.



RADIANCE®



ChemRex®

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CUSTOMER SERVICE: (800) 766-6776  
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