



RA SERIES ECOTOUCH® INSULATION



Description

The Owens Corning™ RA Series EcoTouch® Insulation products are lightweight blankets. These products are designed to provide excellent dimensional stability, excellent thermal and acoustical performance, and easy handling and installation.

Features

- Design Flexibility** – The RA product line offers a wide range of thermal, acoustical, and mechanical performance levels and densities to provide value added performance in many varied applications. These products are available in both roll and batt form.
- Dimensional Stability** – RA products have excellent resilience and compressive strengths.
- Non-corrosive** – RA is non-corrosive, and will not accelerate corrosion on copper, aluminum, or steel.
- Excellent Acoustical Properties** – The RA series of products offer documented and proven acoustical performance for a wide range of applications.

Product Applications

RA insulation products are among the most versatile products offered by Owens Corning, used in applications such as:

- Residential and commercial refrigerators
- Residential and commercial freezers
- Walk-in and reach-in coolers
- Acoustical treatment for refrigerated appliances
- Water coolers and dispensers
- Vending machines
- Display cases
- Insulated acoustic panels
- Insulated shipping containers
- Low temperature specialty equipment
- Hot water heaters
- Foam stop applications
- Compressor covers
- Transportation insulation – buses and trucks

Physical Properties

| PROPERTY | TEST METHOD | VALUE |
|---------------------------------------|-------------------|-----------------------|
| Density (Type Specific) | ASTM C303 | See table |
| Thermal Conductivity at 75°F (24°C) | ASTM C518 | See table |
| Operating Temperature | ASTM C411 | Up to 450 °F (176 °C) |
| Fungi Resistance / Mold Growth | ASTM C1338 | Meets Requirements |
| Odor | ASTM C1304 | Meets Requirements |
| Water Vapor Sorption (Max. by Weight) | ASTM C1104/C1104M | 2% |

| CORROSION RESISTANCE | TEST METHOD | VALUE |
|----------------------------------|--------------------------------|--------------------|
| Corrosion (Steel) | ASTM C1617 | Meets Requirements |
| Stress Corrosion (Austenitic SS) | MIL-DTL-24244D | Meets Requirements |
| Stress Corrosion (Austenitic SS) | ASTM C795, ASTM C692 | Meets Requirements |
| Chemical Analysis | ASTM C795, ASTM C871, NRC 1.36 | Meets Requirements |

| FIRE CHARACTERISTICS | TEST METHOD | VALUE |
|--|----------------------------------|---------------------------------------|
| Non-Combustibility | ASTM E136 | Meets Requirements |
| Surface Burning Characteristics ¹ | UL723, ASTM E84, or CAN/ULC-S102 | Flame Spread ≤25, Smoke Developed ≤50 |

1. The surface burning characteristics of these products have been determined in accordance with UL723, ASTM E84, and CAN/ULC-S102. This standard should be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products, or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use.

Sound Absorption Coefficient, ASTM C423—Type "A" Mounting²

| Product | Thickness | 1/3 Octave Band Center Frequencies, Hz | | | | | | |
|---------|-----------|--|------|------|------|------|------|------|
| Type | Inches | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
| RA-26 | 1.0 | 0.08 | 0.30 | 0.66 | 0.87 | 0.95 | 0.95 | 0.70 |
| | 2.0 | 0.22 | 0.68 | 1.04 | 1.07 | 1.00 | 1.05 | 0.95 |
| RA-25 | 1.0 | 0.13 | 0.38 | 0.73 | 0.92 | 0.97 | 0.94 | 0.75 |
| | 2.0 | 0.27 | 0.83 | 1.15 | 1.15 | 1.05 | 1.06 | 1.05 |
| RA-24 | 1.0 | 0.11 | 0.32 | 0.71 | 0.96 | 0.99 | 0.98 | 0.75 |
| | 2.0 | 0.22 | 0.76 | 1.11 | 1.11 | 1.02 | 1.05 | 1.00 |
| RA-23 | 1.0 | 0.13 | 0.37 | 0.84 | 0.98 | 1.00 | 1.09 | 0.80 |
| | 2.0 | 0.23 | 0.86 | 1.19 | 1.14 | 1.05 | 1.15 | 1.05 |
| RA-22 | 1.0 | 0.12 | 0.40 | 0.89 | 1.03 | 1.04 | 1.08 | 0.85 |
| | 2.0 | 0.26 | 1.04 | 1.21 | 1.17 | 1.06 | 1.07 | 1.10 |

2. Note: Nominal samples were measured in accordance with ASTM C423. These measured absorption coefficients were adjusted to values representative of the product with mean specification properties. While these values are an accurate representation of our product, they are for design approximations only. Production, testing, and application variabilities will alter results. Specific designs should be evaluated in end-use configurations.

Standards, Codes Compliance

* ASTM C553, Mineral Fiber Blanket Thermal Insulation, Types I, II, and III
-All Types of RA are compliant to Types I, II, and III.

* MIL-DTL-32585, DETAIL SPECIFICATION: Insulation, Thermal and Acoustical, Fiberglass, -All Types of RA are compliance to Type I and II, Form 2

Certificates and Sustainable Features

- * Certified by SCS Global Services to contain a minimum of 53% recycled glass content, 31% pre-consumer and 22% post-consumer.
- * GREENGUARD GOLD and GREENGUARD Formaldehyde Free.
- * For additional information, refer to Material Safety Data Sheet (MSDS) found on the MSDS vault via www.owenscorning.com



Thermal Conductivity per ASTM C177

| Mean Temperature | Conductivity, k (Btu.in/hr.ft ² .°F) | | | | |
|------------------|---|-------|-------|-------|-------|
| | RA-26 | RA-25 | RA-24 | RA-23 | RA-22 |
| 25 °F | 0.22 | 0.21 | 0.21 | 0.21 | 0.20 |
| 50 °F | 0.23 | 0.23 | 0.22 | 0.22 | 0.21 |
| 75 °F | 0.24 | 0.24 | 0.24 | 0.23 | 0.22 |
| 100 °F | 0.26 | 0.25 | 0.25 | 0.24 | 0.23 |
| 150 °F | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 |
| 200 °F | 0.32 | 0.32 | 0.30 | 0.29 | 0.28 |
| 250 °F | 0.36 | 0.36 | 0.34 | 0.33 | 0.31 |
| 300 °F | 0.41 | 0.42 | 0.39 | 0.37 | 0.34 |

Availability

RA Insulation is available in both batt and roll form and in increments of 1/4" thickness.

| Product | Density ³ | Thickness | |
|---------|----------------------|-----------|---------------|
| | (PCF) | Rolls | Batts |
| RA-26 | 0.95 | 3/4"-5" | Not available |
| RA-25 | 1.08 | 3/4"-5" | Not available |
| RA-24 | 1.34 | 3/4"-4" | 3/4"-4.5" |
| RA-23 | 1.66 | 3/4"-3" | 3/4"-3.5" |
| RA-22 | 2.27 | 3/4"-1.5" | 3/4"-2.5" |

3. Density Value is nominal. Product control is on thermal conductivity.

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GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.



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