



# RA SERIES ECOTOUCH<sup>®</sup> 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 <sup>1</sup>	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” Mounting<sup>2</sup>

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](http://www.owenscorning.com)



Thermal Conductivity per ASTM C177

Mean Temperature	Conductivity, k (Btu.in/hr.ft².°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 <sup>3</sup>	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.

Disclaimer of Liability

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, Owens Corning makes no representation about, and is not responsible or liable for the accuracy or reliability of data associated with particular uses of any product described herein. Nothing contained in this bulletin shall be considered a recommendation.

SCS Global Services provides independent verification of recycled content in building materials and verifies recycled content claims made by manufacturers. For more information, visit [www.SCSglobalservices.com](http://www.SCSglobalservices.com)

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](http://ul.com/gg).