



QUIETR® ROTARY DUCT LINER NEXT GENERATION

Owens Corning® QuietR® Rotary Duct Liner Next Generation delivers trusted performance, easy handling, and future-ready compliance, so fabricators and contractors can keep every bid in play without disrupting how they work today.

QuietR® Rotary Duct Liner Next Generation absorbs noise¹ within sheet metal ducts, and contributes to indoor comfort by lowering heat loss or gain through duct walls.

Features

- Absorbs fan and air turbulence noise and reduces popping noises¹ within sheet metal ducts
- Rotary Duct Liner is a thermo-acoustic insulation manufactured with fiberglass bonded together with a formaldehyde-free binder
- Outstanding thermal and acoustical performance
- Fungal growth resistant² with an EPA registered biocide that helps protect the airstream surface from microbial growth

Standards, Codes Compliance

- ASTM C1071, Type I, Flexible (replaces obsolete Federal Specification HH-1-545B)
- NFPA 90A/90B
- ICC Compliant
- California Title 24
- SMACNA Application Standard for Duct Liners
- NAIMA Fibrous Glass Duct Liner Installation Standard
- Conforms to ASHRAE 62
- NFPA 259

Product Applications

Rotary Duct Liner (RDL) is used for internal insulation of commercial and residential air conditioner (HVAC) units and ducts. The material can be easily cut with rotary, pressure, or water-cutting equipment.

Limitations

Use of QuietR® Rotary Duct Liner Next Generation is not recommended for the following applications:

- With wood- or coal-fired equipment, or equipment of any type that does not include automatic maximum temperature controls and where operating temperatures of 250°F (121°C) may be exceeded
- In kitchen or fume exhaust ducts, or ducts conveying solids or corrosive gases
- In any application where the duct liner may come in direct contact with liquid water (such as cooling coils, humidifiers, and evaporative coolers) unless protected from the water source
- Inside fire damper sleeves
- Immediately adjacent to high-temperature heating coils without radiation protection

Physical Properties

PROPERTY	TEST METHOD	VALUE
Operating Temperature	ASTM C411	250°F (121°C)
Maximum Air Velocity	UL 181 Erosion test and ASTM C1071	6,000 fpm (30.5 m/sec)
Water Vapor Sorption	ASTM C1104	<3% by weight at 120°F (49°C), 95% R.H.
Fungi Resistance ²	ASTM C1338 and ASTM G21	Meets requirements
Corrosiveness ³	ASTM C1936 and ASTM C1617 Steel	Meets requirements
Thermal Conductivity (k) at 75°F (λ at 24°C mean) R-2.2 R-4.2 R-6.3 R-8	ASTM C518	Btu·in/hr·ft ² ·°F W/m·°C 0.23/0.034 0.24/0.035 0.24/0.035 0.24/0.035
Surface Burning Characteristics ⁴ Flame Spread Smoke Developed	ASTM E84, UL 723, CAN/ULC-S102	 25 50

1 These data were collected using a limited sample size and are not absolute values.

Reasonable tolerances must therefore be applied. All tests were conducted in accordance with ASTM C423, Mounting A (material placed against a solid backing, such as a block wall). For more information, call your Owens Corning representative.

2 Fungi resistant according to the ASTM C1338 and ASTM G21 standards.

3 When wet, coated surfaces of QuietR® Rotary Duct Liner Next Generation in contact with galvanized steel may cause discoloration of the sheet metal.

4 The surface burning characteristics of these products have been determined in accordance with UL 723 or 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 that are pertinent to an assessment of the fire hazard of a particular end use. Values are reported to the nearest 5 rating. UL 723 and ASTM E84 are considered by most officials to be synonymous surface burning test methods.

Acoustical Performance

Sound absorption coefficients at 1/3 octave band center frequencies (Hz)

THICKNESS IN (MM)	125	250	500	1000	2000	4000	NRC
½ (13)	0.05	0.15	0.39	0.63	0.72	0.74	0.45
1 (25)	0.14	0.37	0.70	0.92	0.94	0.86	0.75
1½ (38)	0.19	0.55	0.89	1.06	1.00	0.92	0.90
2 (51)	0.25	0.67	1.03	1.09	1.00	0.98	0.95

Insertion Loss dB per ft. of Lined Duct

P/A, FT/FT²	1" LINER 1/3 OCTAVE BAND CENTER FREQUENCIES, HZ						2" LINER 1/3 OCTAVE BAND CENTER FREQUENCIES, HZ					
	125	250	500	1000	2000	4000	125	250	500	1000	2000	4000
8	0.6	1.5	2.7	5.8	7.4	4.3	0.8	2.9	4.9	7.2	7.4	4.3
6	0.5	1.2	2.3	5.0	5.8	3.6	0.6	2.3	4.2	6.2	5.8	3.6
4	0.4	0.8	1.9	4.0	4.1	2.8	0.5	1.6	3.5	5.0	4.1	2.8
2	0.2	0.5	1.4	2.8	2.2	1.8	0.3	0.9	2.5	3.5	2.2	1.8
1	0.1	0.3	1.0	2.0	1.2	1.2	0.2	0.5	1.8	2.5	1.2	1.2

Duct Liner Insertion Loss — Data extracted from ASHRAE Handbook, HVAC Applications, Chapter 48, 2015
P/A = duct perimeter, ft/duct cross sectional area (ft²). Example: 12" x 12", P/A = 1 (ft/ft²). For more information, call your Owens Corning representative.

Availability

THICKNESS		ROLL LENGTH		R-VALUE	
IN	MM	FT	M	(HR·FT²·°F)/BTU	(M²·°C)/W
½	13	100	31	2.2	0.38
1	25	100	31	4.2	0.74
1½	38	50, 100	15, 31	6.3	1.11
2	51	50	15	8.0	1.41

Certifications and Sustainable Features

- Certified by SCS Global Services to contain an average 53% with minimum 22% post-consumer and balance 31% pre-consumer recycled glass content (SCS-RC-02066)
- 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.
- Health Product Declaration® for QuietR® Rotary Duct Liner Next Generation



Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.com.

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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.

LEED® is a registered trademark of the U.S. Green Building Council.

Notes

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via <http://sds.owenscorning.com>.

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