



THERMAFIBER® RAINBARRIER® 45 MINERAL WOOL INSULATION

Thermafiber® RainBarrier® 45 continuous insulation semi-rigid products are designed for exceptional performance in rain screen and cavity wall construction applications. Thermafiber® RainBarrier® 45 insulation provides thermal control, fire-resistive characteristics, acoustical control, vapor permeance, and the ability to drain water from a wall cavity system. All Thermafiber® RainBarrier® products are non-combustible and compatible with common wall ties, adhesives, and air barrier systems.



RainBarrier® 45 is now available with a black veil that provides camouflaging in open-joint facade and rainscreen construction. See Owens Corning publication “Thermafiber® RainBarrier® Dark™ Product Data Sheet” (Pub. No. 10025102) for more information.

Features

- Non-combustible, nondeteriorating, and inorganic
- Repels and drains water
- UV-resistant
- Helps conserve energy and reduce greenhouse gas emissions
- Fire-resistant to temperatures above 2,000°F (1,093°C)
- Enhances acoustical performance
- Minimum 70% recycled content¹
- Contributes to credits in several green building programs, such as LEED® and Green Globes®

Standards, Codes Compliance

- ASTM C612, Mineral Fiber Block and Board Thermal Insulation, Types IA, IB, IVA, IVB

Technical Data

TESTED TO ASTM C518

Actual Density	"k" @ 75° [24°C] BTU.in/hr. sq. ft. °F	"R" value per inch of thickness ²
4.5 pcf	0.23	4.3

² R = thickness divided by "k."

Physical Properties

PROPERTY	TEST METHOD	VALUE
Corrosion of Steel, Aluminum, and Copper	ASTM C665	Pass
Stress Corrosion – Austenitic Stainless Steel	ASTM C795	Pass
Non-Combustibility	ASTM E136	Non-combustible
Non-Combustibility	CAN/ULC S114	Complies
Water Vapor Permeance	ASTM E96	Unfaced, 50 perm as tested
Water Vapor Sorption	ASTM C1104	Absorbs 0.03% by volume
Linear Shrinkage	ASTM C356	<2% @ 1,200°F (650°C)
Surface Burning Characteristics	ASTM E84	Flame Spread 0, Smoke Developed 0
Surface Burning Characteristics	CAN/ULC S103	Flame Spread 0, Smoke Developed 5
Fungi Resistance	ASTM C1338	Complies

Acoustical Performance

THICKNESS	COEFFICIENTS AT FREQUENCIES PER ASTM C423						
	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	NRC
1.5"	0.22	0.44	0.96	1.06	1.05	1.05	0.90
2"	0.30	0.69	1.08	1.01	1.00	1.03	0.95
3"	0.70	1.07	1.24	1.13	1.07	1.08	1.15
4"	1.03	1.25	1.20	1.05	1.05	1.08	1.15

Availability⁵

PRODUCT	AVAILABLE THICKNESS IN ½" INCREMENTS	STANDARD DIMENSIONS ^{3,4}
RainBarrier® 45	1"-8"	16" x 48", 24" x 48"
Tolerances	+¼", -⅛"	Width: ±⅛", Length: ±½"

³ See our product guide for more details.

⁴ Custom sizes are available upon request.

⁵ Available with black veil. See Owens Corning publication "Thermafiber® RainBarrier® Dark™ Product Data Sheet" (Pub. No. 10025102) for more information.

Installation

Thermafiber, Inc. recommends mechanical attachment of Thermafiber® RainBarrier® insulation products. See Owens Corning publication "Thermafiber® RainBarrier® Continuous Insulation Guide" (Pub. No. 10021356) for more information.

Product Options

Recycled Content Options^{1,6}:

- EPA Choice Fiber (U.S. Government Buildings)Minimum 75%
- Standard Fiber70%

⁶ Recycled content options other than standard must be specified at time of order.

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.

Certifications and Sustainable Features

- ¹Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at icc-es.org.
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information, visit ul.com/epd.
- Health Product Declaration (HPD).



Declare.



Made in the USA

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Green Globes® is a registered trademark of Green Building Initiative, Inc.

Notes

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

THERMAFIBER, INC.
ONE OWENS CORNING PARKWAY
TOLEDO, OH 43659 USA

888-TFIBER1 [834-2371]
www.owenscorning.com/thermafiber

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