

# *Thermafiber RainBarrier® Continuous Insulation (ci)*

**Thermal and fire  
protection in rain  
screen/cavity wall  
construction**

**Designed for use in  
open-joint façade  
construction**

RainBarrier insulation easily  
installs with common wall ties,  
façade channels and insulation  
hangers.



**Thermafiber®**  
THE NAME IN MINERAL WOOL®



# Fire safety Moisture resistance Sustainability

Energy efficiency in buildings becomes more critical every day. Adding RainBarrier as the continuous insulation (ci) on the exterior of your building can help you meet stringent new building codes, such as ASHRAE 90.1. Increasing the amount of insulation used in buildings reduces the amount of heating and cooling needed, which in turn reduces carbon emissions. Rainscreen construction is an effective practice that has been refined in Europe for decades, and it's making a big impact in the U.S.

Thermafiber RainBarrier repels and efficiently drains water in cavity wall systems. Left unchecked, water problems can quickly lead to mold, energy waste, corrosion and rot, among other issues. RainBarrier also adds safety, security, comfort and appeal to your building by offering the following benefits:

- **Protects your building from fire and smoke** with non-combustible material. Smoke protection can be especially critical in high-occupancy buildings such as schools, hospitals and dormitories.

ASTM E 84 Test results	Rigid foam	Thermafiber RainBarrier
Flame spread #	50 (Class B)	0 (Class A)
Smoke developed #	450 (Class B)	0 (Class A)

*"Flame spread" and "smoke developed" are terms used to describe burning characteristics of building materials. Rigid foam receives a smoke developed number of 450—the worst score possible. Non-combustible RainBarrier receives ratings of 0—the best possible—for both smoke developed and flame spread.*

- **Lets your building "breathe."** RainBarrier is air/vapor permeable, providing better control over humidity, condensation and air quality—and more flexibility when positioning the vapor barrier. (Rigid foam blocks airflow making it more difficult for the building to breathe.)

- **Provides dark and light color options**—not just blue or pink—on our base product, making it easy to camouflage the insulation in open-joint systems.
- **Reduces noise**, leading to fewer distractions and less stress.
- **Improves energy efficiency.** For less than the price of rigid foam, RainBarrier can provide an equivalent or greater R-Value. By insulating on the outboard and inboard sides, you can also reduce long-term operating costs.

## R-Values\*

Insulation thickness (inches)	RainBarrier 45
1	4.2
1½	6.3
2	8.3
2½	10.4
3	12.5
3½	14.6
4	16.7
4½	18.8
5	20.8
5½	22.9
6	25.0

\*R = thickness ÷ thermal conductivity (R = t/k). R means resistance to heat flow. The higher the R-Value, the greater the insulation power.

## Simpler on the jobsite

- **Durable:** RainBarrier won't break down in the sun—leave it exposed for any length of time
- **Flexible:** RainBarrier is semi-rigid and easy to cut, giving you more flexibility and tighter joints versus the jagged edges of field-cut foam
- **Compatible:** Install with common wall ties, insulation hangers and air/vapor barrier systems (for a complete list of installation techniques and recommendations, visit [www.thermafiber.com/rainbarrier](http://www.thermafiber.com/rainbarrier))



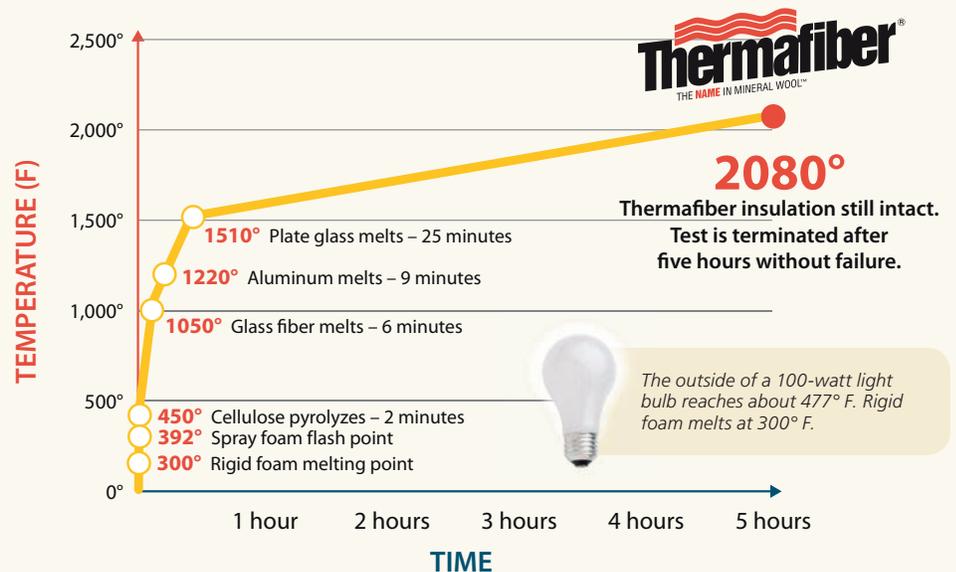
Unlike rigid foam, RainBarrier flexes for a better fit on curved walls and other surfaces.



Easy-to-cut RainBarrier installs with common wall ties and insulation hangers.

## Safer in the building

- **Containment:** Improves life safety by preventing fire and smoke from spreading
- **Non-combustible:** RainBarrier remains intact at 2,080° F, even after 5 hours of testing
- **Air quality:** Results of chemical emissions tests show RainBarrier exceeds California's rigorous standard for formaldehyde concentration
- **Sound control:** Helps reduce noise between floors, walls and reduces noise pollution from outside sources



## Better for the environment

- **Recycled:** Made with up to 90% recycled content (slag, a byproduct of steel manufacturing)
- **Efficient:** Thermal transfer reduces the amount of energy needed to heat and cool a building, which also reduces carbon emissions
- **Beneficial:** Contributes to 33 LEED credits across 4 categories



Up to  
**90%**  
Recycled  
Content

### LEED® Green Building Credits

Energy & Atmosphere	Materials & Resources	Indoor Environmental Quality	Innovation in Design
1	2.1, 2.2 3.1, 3.2 4.1, 4.2 5.1, 5.2	3.1, 3.2 9	1

Contributes to 33 LEED credits across 4 categories.

# RainBarrier® vs. rigid/spray foam: a head-to-head comparison

Compare RainBarrier to rigid foam. Compare the efficiency. Compare fire protection. Compare aesthetics. Compare prices, too. Whatever your criteria, the more you compare, the more benefits you'll find with RainBarrier.

RainBarrier	Benefit	Rigid/spray foam
 Best possible score for both flame spread (0) and smoke developed (0)	Protects your building from spreading fire and smoke	 Rigid foam receives the worst possible score for smoke developed (450)
 Fire resistant to more than 2,000° F	Fire protection	 Rigid foam is combustibile and must be protected from high heat sources
 No additional protective or thermal barrier required	1-piece thermal protection	 May require additional thermal barrier or fire blocks to be added during construction
 Up to 90% recycled content	Conserves natural resources	 Foam products are petroleum based with a maximum recycled content of 40%
 Excellent STC & NRC values, helping to keep unwanted noise out of your building	Provides sound control and noise absorption	 Rigid foam manufacturers don't publish NRC or sound absorption data (for a reason)
 Contributes to 33 credits across 4 categories	Helps you earn valuable LEED Green Building credits	 Contributes to 22 credits across 4 categories
 Available in light or dark fiber to help camouflage the insulation in open-joint systems (or ventilated façades)	Color flexibility with base product to preserve aesthetics	 Base product available in pink, light blue or white
 RainBarrier resists ultraviolet light—you can leave it exposed indefinitely	Insulation doesn't break down under extended exposure to sunlight	 Rigid foam degrades in sunlight and should not be left exposed for over 60 days
 Customized project details and renderings, custom product sizing and packaging (you name it, and we've probably already done it)	Thermafiber Insolutions®, industry-leading technical and customization services	 Standard sizes, standard packaging
 For less than the cost of rigid foam, RainBarrier provides an equivalent (or better) R-Value.	Most cost-effective continuous insulation to meet your thermal requirements	 Foam products can be anywhere from 20% to 40% higher in cost, depending upon the project location
 RainBarrier contains no CFC or HCFC Blowing Agents	Low Global Warming Impact (GWP) <sup>1</sup>	 Blowing agents used in XPS and SPF insulations are harmful greenhouse gases

Wilson, Alex. "Avoiding the Global Warming Impact of Insulation". *Environmental Building News* June 2010: 8-14.



**Water Resistance**



**Fire Resistance**

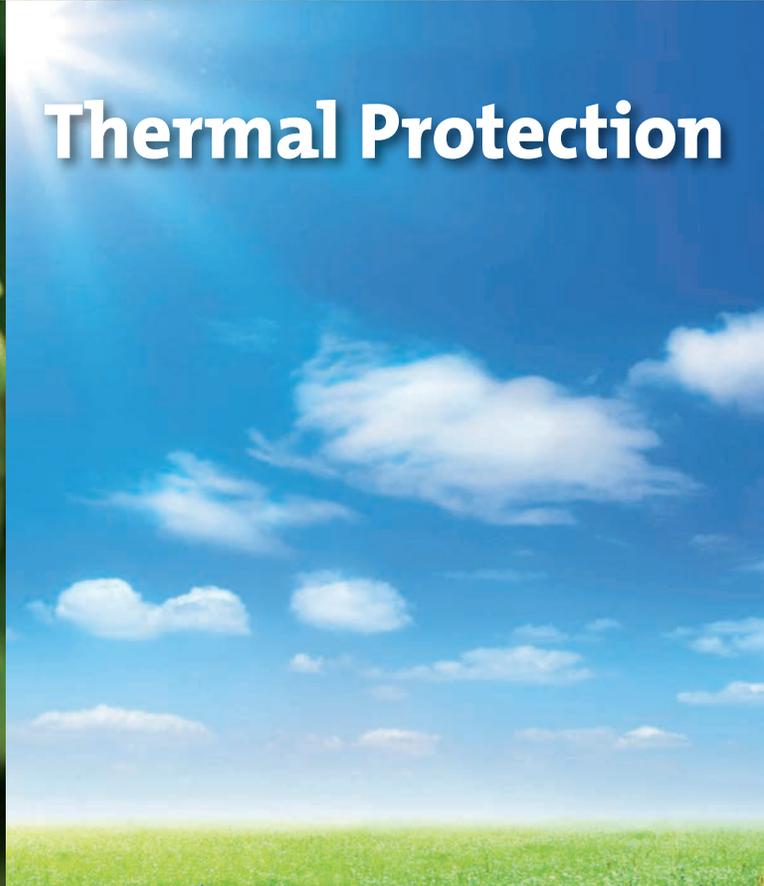


**Thermafiber**

**RainBarrier<sup>®</sup> insulation**



**High Recycled  
Content**



**Thermal Protection**

## RainBarrier protects hospitals, museums, schools, hotels and many other buildings

Thermafiber RainBarrier insulation is installed in a variety of buildings throughout North America. Recent or ongoing projects include:



**University of Michigan North Quad**  
Ann Arbor, MI  
\$175 million residential and academic complex



**Museum of the Moving Image**  
Astoria, NY  
\$65 million expansion of museum



**Fort Belvoir Community Hospital**  
Fort Belvoir, VA  
Construction of \$747 million, 1.2 million-square-foot hospital



**Mifflin Park Elementary School**  
Shillington, PA  
Construction of \$18.47 million, 79,000-square-foot elementary school

- **North Carolina A & T University General Classroom Facility**  
Greensboro, NC  
Construction of 88,000-square-foot multi-use classroom building
- **Wisconsin Institutes for Discovery**  
Madison, WI  
Construction of 300,000-square-foot biomedical research institutes

- **Dana-Farber Cancer Institute Yawkey Center for Cancer Care**  
Boston, MA  
Construction of 275,000-square-foot outpatient care and clinical research facility
- **Dream New York**  
New York, NY  
Construction of 13-story luxury hotel

**Thermafiber**<sup>®</sup>  
THE NAME IN MINERAL WOOL™



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Made in the USA



## Thermafiber Insolutions<sup>®</sup>

Thermafiber also supports RainBarrier (and all of its mineral wool products) with Thermafiber Insolutions, a customized five-pronged approach that helps you easily and successfully plan, order and install insulation. Insolutions includes:



**All-phase consultation**



**High-performance products**



**Time-saving insulation hanger systems**



**Labor-saving customization and packaging**



**Safe & Sustainable Insulation**

You need to make your building more energy efficient. Why not optimize that protection to include fire and smoke? Add in the water repellency and other advantages of RainBarrier, and you'll not only make your building more energy efficient, but also safe and appealing.

## It's easy to specify Thermafiber

To specify RainBarrier, just:

1. Go to [www.thermafiber.com](http://www.thermafiber.com) or log on to your favorite spec service website: [www.arcata.com](http://www.arcata.com), [www.4specs.com](http://www.4specs.com), [www.sweets.com](http://www.sweets.com)
2. Type "Thermafiber" in the search box
3. Click on "Specs" or follow the link to [Thermafiber.com](http://Thermafiber.com) and click on "Architectural Specs"
4. That's it. Questions? Call 1-888-834-2371.

**For more information about RainBarrier or other Thermafiber products, contact your field representative. Call 1-888-834-2371 or visit [www.thermafiber.com](http://www.thermafiber.com).**

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\*Reed Construction Data, April 2010