



Roxul RHT® Board  
Roxul RHT® Flex  
Roxul RHT® Wrap

High Temperature Insulation for  
Industrial/Mechanical Applications

# Protecting High Temperature Workplaces and the Environment: Roxul Industrial/Mechanical Insulation

Roxul offers three high-performance, insulation products for demanding industrial/mechanical applications where high temperature, fire resistance and moisture resistance are concerns. RHT® Board, RHT® Flex and RHT® Wrap are stone wool based insulation products made from natural stone and recycled content. Roxul RHT® is suitable for use in petro-chemical, power generation plants, boilers, furnaces, towers, ovens and drying equipment.

Roxul RHT® Board, Flex and Wrap are available in different densities and dimensions to meet various application requirements.

## Facings

---

The Roxul RHT board is available with reinforced, flame-resistant aluminum foil facer. Roxul Flex and Roxul Wrap can be laminated with black mat scrim for easy marking and cutting.

## Compressive Resistance

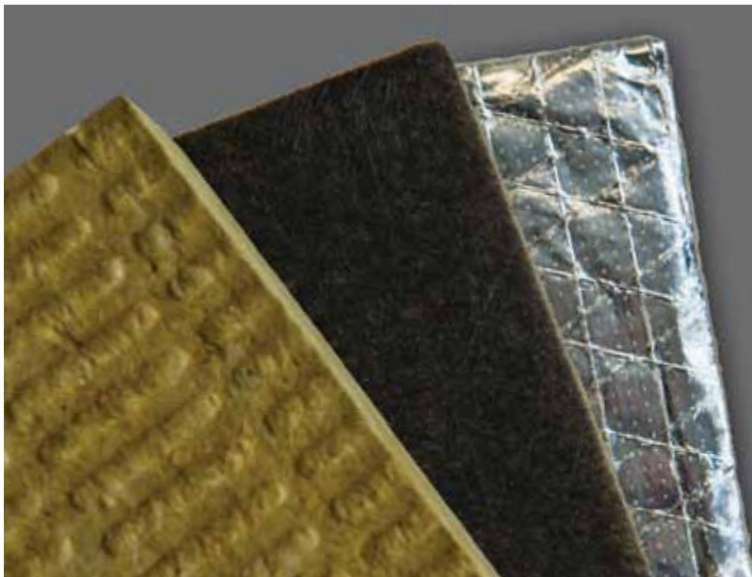
---

Roxul's RHT insulation products are engineered to provide exceptional strength to resist installation and delivery damage, as well as withstand high traffic areas onsite.

## Energy-Saving Thermal Performance

---

The low thermal conductivity of Roxul RHT products result in energy savings in areas where it's needed most. RHT Board, RHT Flex and RHT Wrap deliver consistent thermal performances across the board, from petrochemical plants to power generation industries. In many applications, less RHT can be used and greater energy efficiency achieved with reduced insulated diameter and overall jacketing costs.



## Roxul RHT Facings

The Roxul RHT board is available with reinforced, flame-resistant aluminum foil facer. Roxul Flex and Roxul Wrap can be laminated with black mat scrim for easy marking and cutting.

## Easy Installation

All Roxul industrial/mechanical insulations are easy to handle on job sites. They're simple to cut with a serrated knife for clean straight edges providing a better fit at the point of installation. Quick and easy cutting means less waste and faster installation, which saves money on labor and lost production time. Quick and easy cutting also means fast and simple routine maintenance.

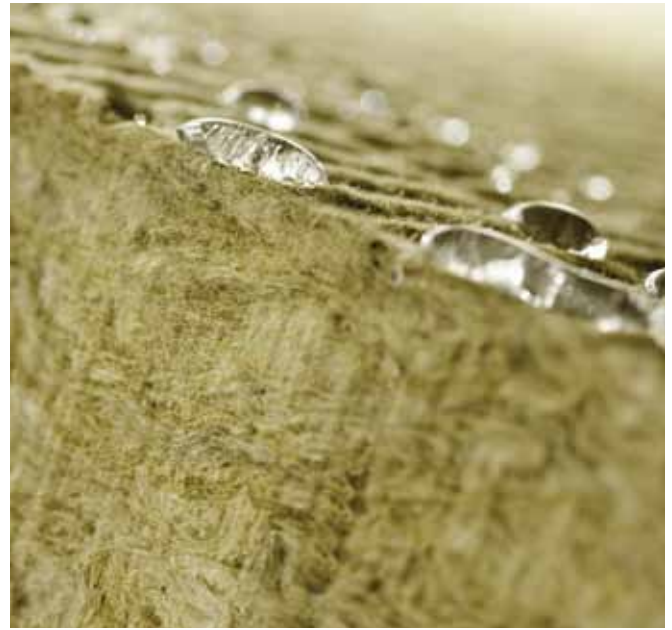


## Fire Resistant, Non-Combustible Insulation

The combination of stone wool and recycled content in all of Roxul's insulations makes these RHT products fire-resistant. Roxul RHT products are classified non-combustible as determined by ASTM E136 and CAN/ULC S114. It will not develop smoke or promote flame spread, even when directly exposed to fire, as most other insulation materials will. These industrial/mechanical products are designed for operating temperatures up to a maximum of 1200 °F (650 °C), withstanding the heat of up to 2150 °F (1177 °C) without melting. Roxul RHT insulations have excellent fire-resistant properties and are critical in providing personnel protection in industrial settings.

## Technical Support

Roxul's Technical Product Specialists help customers meet their insulation challenges head on with comprehensive support and expertise. Roxul's team provides all services, from calculating heat loss to proper nesting combinations, as well as recommendations for the most efficient thicknesses, and even installation.



## Water Repellent

Roxul's RHT Board, RHT Flex and RHT Wrap do not absorb water or hold moisture, making it ideal for applications where moisture is expected to penetrate the system. RHT is impregnated with water repellent characteristics that drain water away so thermal conductivity is not affected. It does not corrode metals or promote the growth of fungi, mildew or bacteria.

*Insulation is a readily available technology and the most economical approach to reducing energy consumption.*

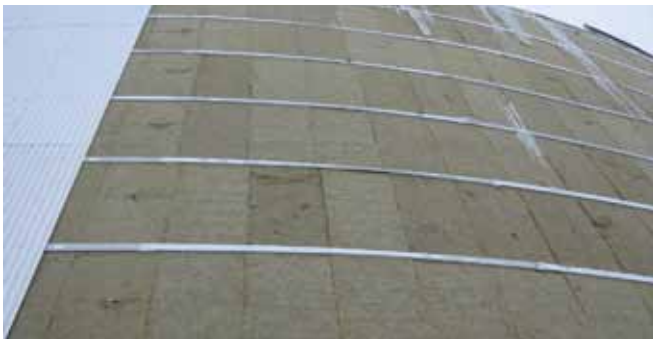
# RHT® Boards 30/40/60/80/100/150

Roxul RHT® is a series of stone wool industrial/mechanical insulation boards designed for high temperature applications where durability and compressive resistance are required. The series of versatile RHT products come in variety of densities and range from rigid to semi-rigid for demanding industrial and mechanical application uses including:

- Storage tank insulations
- Drying/oven equipment
- Petro-chemical and power generating equipment protection

**Properties:**

- Designed for high temperature applications
- Good compressive resistance
- Available with reinforced foil facer
- Excellent fire resistance properties, non-combustible
- Melting point of approximately 2150 °F (1177 °C)
- Service temperature of 1200 °F (650 °C)
- Chemically inert
- Water repellent yet vapor permeable material
- Earns LEED® points



Roxul RHT, ranging from rigid to semi-rigid, is flexible enough to be installed on a large storage tank to prevent its contents from freezing.

## Compliance and Performance

ASTM C 612	Mineral Fiber Block and Board Thermal Insulation	Complies
<b>Fire Performance</b>		
ASTM E 136	Behavior of Materials at 1382 °F (750 °C)	Non-Combustible
CAN/ULC S114	Test for Non-Combustibility	Non-Combustible
ASTM E 84(UL 723)	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
<b>Maximum Service Temperature</b>		
ASTM C 411	Hot Surface Performance	In Compliance with ASTM C612 @ 1200° F (650 °C)
<b>Dimensional Stability</b>		
ASTM C 356	Linear Shrinkage	<1%

## Compliance and Performance

### Moisture Resistance

ASTM C 1104	Moisture Sorption	<0.1%
-------------	-------------------	-------

### Density

	ASTM C 612-93 – Nominal	ASTM C 612-00 – Actual
RHT30	3.0 lbs/ft <sup>3</sup> 48 kg/m <sup>3</sup>	2.5 lbs/ft <sup>3</sup> 40 kg/m <sup>3</sup>
RHT40	4.0 lbs/ft <sup>3</sup> 64 kg/m <sup>3</sup>	3.5 lbs/ft <sup>3</sup> 56 kg/m <sup>3</sup>
RHT60	6.0 lbs/ft <sup>3</sup> 96 kg/m <sup>3</sup>	4.4 lbs/ft <sup>3</sup> 70 kg/m <sup>3</sup>
RHT80	8.0 lbs/ft <sup>3</sup> 128 kg/m <sup>3</sup>	5.8 lbs/ft <sup>3</sup> 93 kg/m <sup>3</sup>
RHT100	10.0 lbs/ft <sup>3</sup> 160 kg/m <sup>3</sup>	7.6 lbs/ft <sup>3</sup> 122 kg/m <sup>3</sup>
RHT150	15.0 lbs/ft <sup>3</sup> 240 kg/m <sup>3</sup>	11.0 lbs/ft <sup>3</sup> 176 kg/m <sup>3</sup>

### Compressive Strength

	at 10%:	at 25%:
RHT30	NA	NA
RHT 40	63 psf (3 kPa)	146 psf (7 kPa)
RHT60	104 psf (5 kPa)	230 psf (11 kPa)
RHT80	167 psf (8 kPa)	334 psf (16 kPa)
RHT100	313 psf (15 kPa)	626 psf (30 kPa)
RHT150	See Technical Data Sheet	See Technical Data Sheet

### Corrosive Resistance

ASTM C 665	Corrosiveness to Steel	Pass
ASTM C 795	Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory Commission, Reg. Guide #1.36: U.S. Military Specifications MIL-I-24244 (all versions including B and C)	Conforms

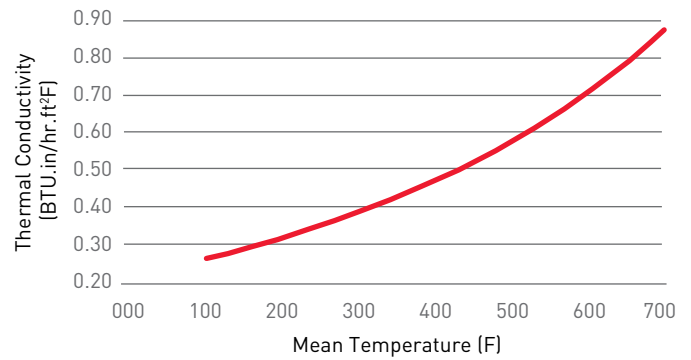
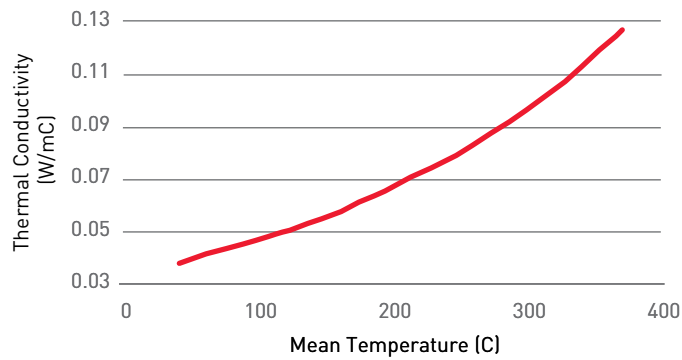
### Dimensions

24" (width) x 48" (length)  
610 mm (width) x 1219 mm (length)

### Thickness

Available in 1.5" through 4" in ½ increments, as well as 5" and 6" offerings.

### Roxul RHT 40 Thermal Conductivity

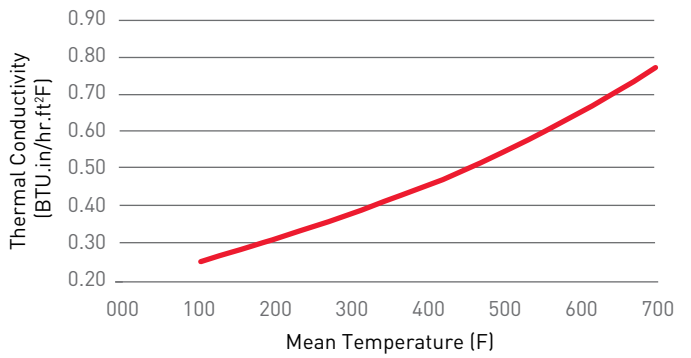
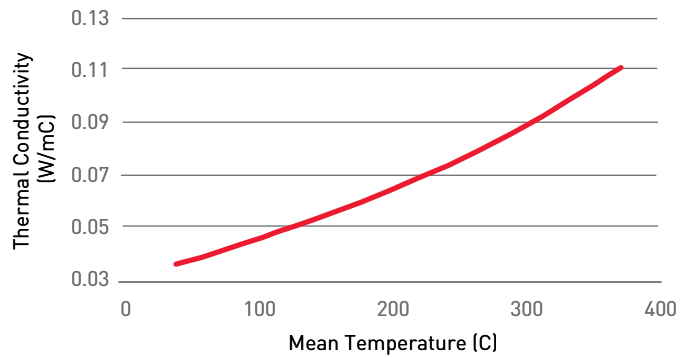


### Roxul RHT 40 Acoustical Performance

ASTM C 423  
CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.15	0.47	0.98	1.06	1.02	1.02	0.90
2.0"	0.26	0.68	1.14	1.13	1.06	1.07	1.00
3.0"	0.62	1.03	1.20	1.10	1.08	1.10	1.10

### Roxul RHT 60 Thermal Conductivity

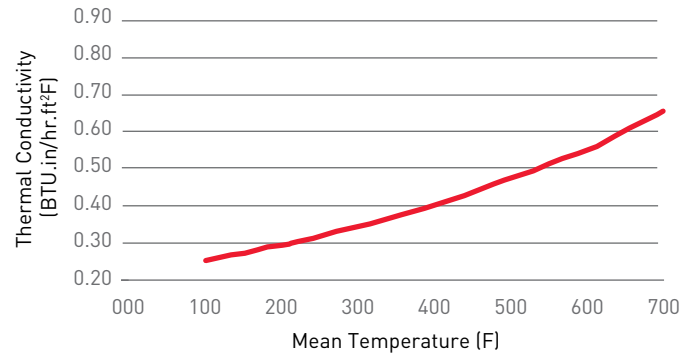
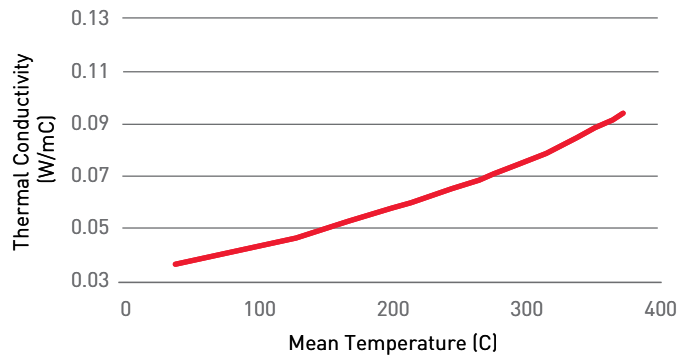


### Roxul RHT 60 Acoustical Performance

ASTM C 423  
CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.19	0.55	1.03	1.06	1.02	1.01	0.90
2.0"	0.26	0.71	1.14	1.09	1.04	1.03	1.00

## Roxul RHT 80 Thermal Conductivity



## Roxul RHT 80 Acoustical Performance

### ASTM C 423 CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.17	0.58	1.06	1.07	1.00	0.99	0.95
2.0"	0.39	0.84	1.08	1.01	1.02	1.01	1.00
3.0"	0.68	0.92	1.08	1.03	1.03	1.03	1.00
4.0"	1.00	0.95	1.06	1.04	1.06	1.08	1.05



RHT is available in various thicknesses and densities to suit a wide range of specifications.

# RHT® Flex 30/40/60/80

RHT® Flex is a flexible stone wool insulation blanket that is non-combustible and designed for hard-to-fit, high temperature surfaces where durability is required. The lightweight, water repellent, fire resistant RHT FLEX blankets come in four densities and are used for demanding industrial applications and irregular-shaped mechanical equipment. Applications include:

- O.E.M. industries
- Drying/oven equipment
- Petro-chemical
- Power generating plants
- Boilers
- Furnaces
- Towers

## Properties

---

- Fire resistant, non-combustible
- Designed for high temperature applications
- Melting point of approximately 2150 °F (1177 °C)
- Service temperature of 1200 °F (650 °C)
- Lightweight and flexible
- Can be fabricated and laminated
- Excellent thermal resistance
- Water repellent yet vapor permeable material
- Earns LEED® points



Common applications include storage tanks, ovens and drying equipment, as well as petro-chemical and power generating equipment. With a melting point of 2150 °F (1177 °C), and a service temperature of 1200 °F (650 °C), Roxul RHT easily meets the requirements for hot surface performance. In addition, Roxul RHT is fire resistant and water repellent - as well as being dimensionally stable.



## Compliance and Performance

ASTM C 553	Mineral Fiber Blanket Thermal Insulation	Type VII, Complies
<b>Fire Performance</b>		
ASTM E 136	Behavior of Materials at 750 °C (1382 °F)	Non-Combustible
CAN/ULC S114	Test for Non-Combustibility	Non-Combustible
ASTM E 84(UL 723)	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
<b>Maximum Service Temperature</b>		
ASTM C 411	Hot Surface Performance	In Compliance with ASTM C 553 @ 1200° F (650 °C)
<b>Dimensional Stability</b>		
ASTM C 356	Linear Shrinkage	
RHT FLEX 30	TBA	
RHT FLEX 40	1.49% @1200 °F (650 °C)	
RHT FLEX 60	1.68% @1200 °F (650 °C)	
RHT FLEX 80	0.68% @1200 °F (650 °C)	
<b>Moisture Resistance</b>		
ASTM C 1104	Moisture Sorption	
RHT FLEX 30	TBA	
RHT FLEX 40	0.05%	
RHT FLEX 60	0.02%	
RHT FLEX 80	0.03%	
<b>Density</b>		
	ASTM C 553-92 – Nominal	ASTM C 553-08 – Actual
RHT FLEX 30	3.0lbs/ft <sup>3</sup> 48kg/m <sup>3</sup>	2.5lbs/ft <sup>3</sup> 40kg/m <sup>3</sup>
RHT FLEX 40	4.0lbs/ft <sup>3</sup> 64kg/m <sup>3</sup>	3.5lbs/ft <sup>3</sup> 56kg/m <sup>3</sup>
RHT FLEX 60	6.0lbs/ft <sup>3</sup> 96kg/m <sup>3</sup>	4.4lbs/ft <sup>3</sup> 70kg/m <sup>3</sup>
RHT FLEX 80	8.0lbs/ft <sup>3</sup> 123kg/m <sup>3</sup>	5.8lbs/ft <sup>3</sup> 93kg/m <sup>3</sup>
<b>Corrosive Resistance</b>		
ASTM C 665	Corrosiveness to Steel	Pass
ASTM C 795	Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory Commission, Reg. Guide #1.36: U.S. Military Specifications MIL-I-24244 (all versions including B and C)	Conforms
<b>Dimensions</b>		
24" (width) x 48" (length) 610 mm (width) x 1219 mm (length)		
<b>Thickness</b>		
Available in 1.5" through 4" in ½ increments, as well as 5" and 6" offerings.		

# RHT® Wrap 40/60

RHT® Wrap is a flexible stone wool insulation wrap that is non-combustible and designed for demanding industrial/mechanical applications where high temperature, fire resistance and moisture resistance are concerns. The lightweight, water repellent, fire resistant RHT insulation wrap comes in two densities. Because of its flexible properties, RHT Wrap is easy to install, cut, shape and fabricate, and is often used as insulation for round and irregular-shaped mechanical equipment.

Roxul RHT Wrap can be laminated with black mat scrim for easy marking and cutting.

RHT Wrap applications include:

- Drying/oven equipment
- Petro-chemical
- Power generating plants
- Boilers
- Furnaces
- Towers

## Properties

---

- Fire resistant, non-combustible
- Designed for high temperature applications
- Melting point of approximately 2150 °F (1177 °C)
- Service temperature of 1200 °F (650 °C)
- Lightweight and flexible
- Can be fabricated and laminated
- Excellent thermal resistance
- Water repellent yet vapor permeable material
- Earns LEED® points

## Roxul RHT Wrap 40 Acoustical Performance

---

### ASTM C 423 CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.15	0.47	0.98	1.06	1.02	1.02	0.90
2.0"	0.26	0.68	1.14	1.13	1.06	1.07	1.00
3.0"	0.62	1.03	1.20	1.10	1.08	1.10	1.10

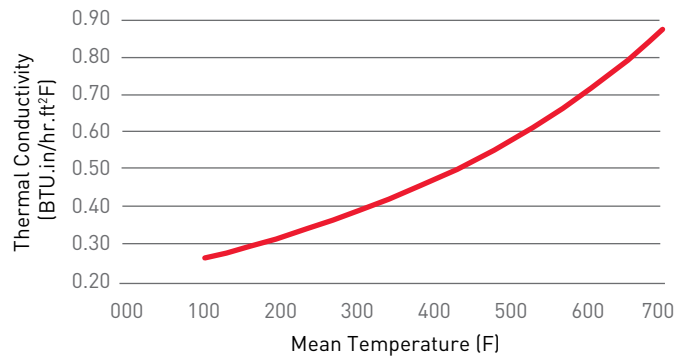
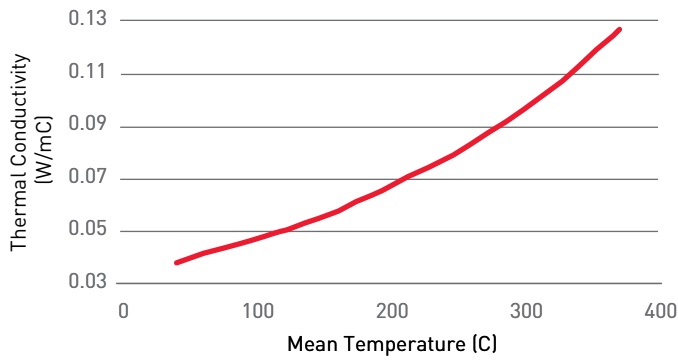
## Roxul RHT Wrap 60 Acoustical Performance

---

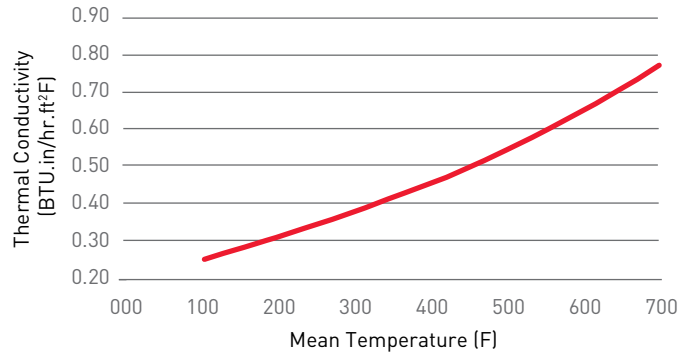
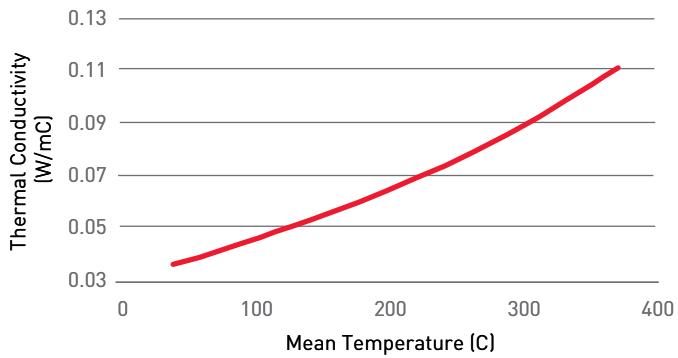
### ASTM C 423 CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.19	0.55	1.03	1.06	1.02	1.01	0.90
2.0"	0.26	0.71	1.14	1.09	1.04	1.03	1.00

### Roxul RHT Wrap 40 Thermal Conductivity



### Roxul RHT Wrap 60 Thermal Conductivity





## A Global Leader

Roxul Inc. is part of Rockwool International, the largest producer of stone wool insulation, which is made from natural basalt rock and recycled material.

Rockwool International was founded in 1909 and today operates worldwide with more than 8,500 employees, with 25 factories across three continents.

Rockwool has more than 40 years experience in developing and manufacturing advanced wall system products. For more than 20 years, Roxul has been serving the North American market.

In addition to high temperature insulation for industrial applications, Roxul also manufactures a range of other premium insulation products for multiple applications.

## Roxul is the Better Insulation

Roxul RHT® is an innovative insulation offering a world of green features. When Roxul is the specified insulation, green building developers can earn a variety of LEED® (Leadership in Energy and Environmental Design) points across four key categories toward sustainable development.



## Environmentally Sustainable

Our stone wool production process utilizes some of the most advanced technology available. The Roxul facility is designed to capture and recycle rainwater, reduce energy consumption, and create zero waste to landfill by recycling raw materials back into the production process.

Roxul insulations are created using naturally occurring, inorganic raw materials and materials with a high-recycled content. Stone wool insulation is non-combustible and achieves its thermal performance without the use of blowing agents. The products do not off-gas and are fully recyclable, therefore contributing to a sustainable environment.

Roxul is pleased to have third-party certification of our products' recycled content for our Milton facility, completed by **ICC-ES SAVE™**. All Roxul products produced in the Milton facility contain a minimum of **75% recycled content**. Our Milton facility is certified to produce products containing up to 93% recycled content. For further details, contact your Roxul Sales Representative. Roxul products produced in our Grand Forks facility are currently under ICC-ES SAVE™ Certification review. Please visit [www.roxul.com](http://www.roxul.com) for the latest information.



### ROXUL INC.

420 Bronte Street South  
Suite 105,  
Milton, Ontario L9T 0H9  
Tel: 1-800-265-6878  
[www.roxul.com](http://www.roxul.com)



Fire Resistant



Water Repellent



Sound Absorbent



Saves Energy



Made from Stone