

# Technical Product Information

BOARD INSULATION 07210\* PROCESS EQUIPMENT INSULATION 40 42 23\*\*

# RHT<sup>™</sup>40 Architectural / OEM

#### **General Product Information:**

ROXUL® products are mineral wool fibre insulations made from basalt rock and slag. This combination results in a non-combustible product with a melting point of approximately 2150°F (1177°C), which gives it excellent fire resistance properties. ROXUL mineral wool is a water repellent yet vapour permeable material.

## **Description & Common Applications:**

RHT40™ is a non-combustible, semi-rigid mineral wool insulation board that is water repellent and delivers exceptional life cycle performance and value in a diversity of thermal, acoustic and fire protection applications. RHT 40's lighter density affords ease of installation and fabrication for general commercial construction. The product's excellent moisture resistance, non-combustibility and dimensional stability make it the ideal choice for cavity wall assemblies and curtain wall applications. The demands of OEM applications ranging from transportation, equipment specifications and acoustical designs benefit from the product's low shot content and ease of handling.

## **Compliance and Performance:**

ASTM C 612 Mineral Fiber Block and Board Thermal Insulation Type IVA, Complies CAN/CGSB 51.10-92 Mineral Fibre Board Thermal Insulation Type 2, Class 4 MEA Approval New York City Approval 330-97-M R 25444

Fire Performance:

ASTM E 136 Behaviour of Materials at 750°C (1382°F) Non-Combustible
CAN4 S114 Test for Non-Combustibility Non-Combustible
ASTM E 84(UL 723) Surface Burning Characteristics Flame Spread = 0
CAN/ULC S102 Surface Burning Characteristics Flame Spread = 0

**Maximum Service Temperature:** 

ASTM C 411 Hot Surface Performance In Compliance with ASTM C612

@ 1200°F (650°C)

Smoke Developed = 0

**Dimensional Stability:** 

ASTM C 356 Linear Shrinkage <1% @ 1200°F (650°C)

**Moisture Resistance:** 

ASTM C 1104 Moisture Sorption 0.03%

**Corrosion Resistance:** 

ASTM C 665 Corrosiveness to Steel Passed
ASTM C 795 \* Stainless Steel Stress Corrosion Specification Conforms

as per Test Methods C871 and C692: U.S. Nuclear Regulatory Commision, Reg. Guide #1.36: U.S. Military Specifications MIL-I-24244 (all versions including B and C)

Thermal Resistance:

ASTM C 518 (C 177) R-value/inch @ 75°F 4.2 hr.ft².F/Btu

RSI value/25.4 mm @ 24°C 0.75 m²K/W

#### **Acoustical Performance:**

#### **ASTM C 423**

CO-EFFICIENTS AT FREQUENCIES							
Thickness	125	250	500	1000	2000	4000	NRC
	Hz	Hz	Hz	Hz	Hz	Hz	
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
4.0"	1.07	1.01	1.07	1.06	1.07	1.06	1.05

## Density:

ASTM C 612-93 - Nominal - 4.0 lbs/ft<sup>3</sup> 64 kg/m<sup>3</sup> ASTM C 612-00 - Actual - 3.5 lbs/ft<sup>3</sup> 56 kg/m<sup>3</sup>

# **Compressive Strength:**

ASTM C 165

at 10%: 63 psf (3 kPa) at 25%: 146 psf (7 kPa)

### Facings:

This product can be faced with reinforced foil, ASJ and glass mat facings. Please note that the facings will influence the product's service temperature range.



# **Key Application Qualifiers:**

- Easy to install
- Water repellent
- Non-combustible
- · Can be fabricated/laminated
- · Acoustic isolation/sound absorption
- Excellent thermal resistance
- Low moisture sorption
- Non-corrosive
- Chemically inert
- CFC and HCFC free product and process
- Made from natural & recycled materials

### Other ROXUL Products:

Please consult ROXUL for all your insulation needs. We have an extensive range of products for all applications from pipe insulation to commercial products to residential batts. ROXUL invites all inquiries and will act promptly to service all of your requirements.

#### Note:

As ROXUL Inc. has no control over installation design and workmanship, accessory materials or application conditions, ROXUL Inc. does not warranty the performance or results of any installation containing ROXUL Inc's. products. ROXUL Inc's. overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty is in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular purpose.

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Revised: December 21, 2005 Supercedes: June 1, 2002

<sup>\* &</sup>quot;Provisions for lot testing may be required, consult manufacturer."