



# ROXUL® FABROCK™

Versatility and quality –  
customized for you.

**ROXUL®**  
The Better Insulation™



# The ROXUL® Difference

ROXUL stone wool insulation is made from Basalt rock and recycled material to create high quality products with superior performance. Stone fibers occur naturally as a byproduct of volcanic activity but in its manufactured state, stone wool combines the power of rock with the characteristics of typical fibrous insulation. ROXUL stone wool insulation has unparalleled fire resistance, sound absorbency and thermal protection properties, making it an ideal choice to include in your product.

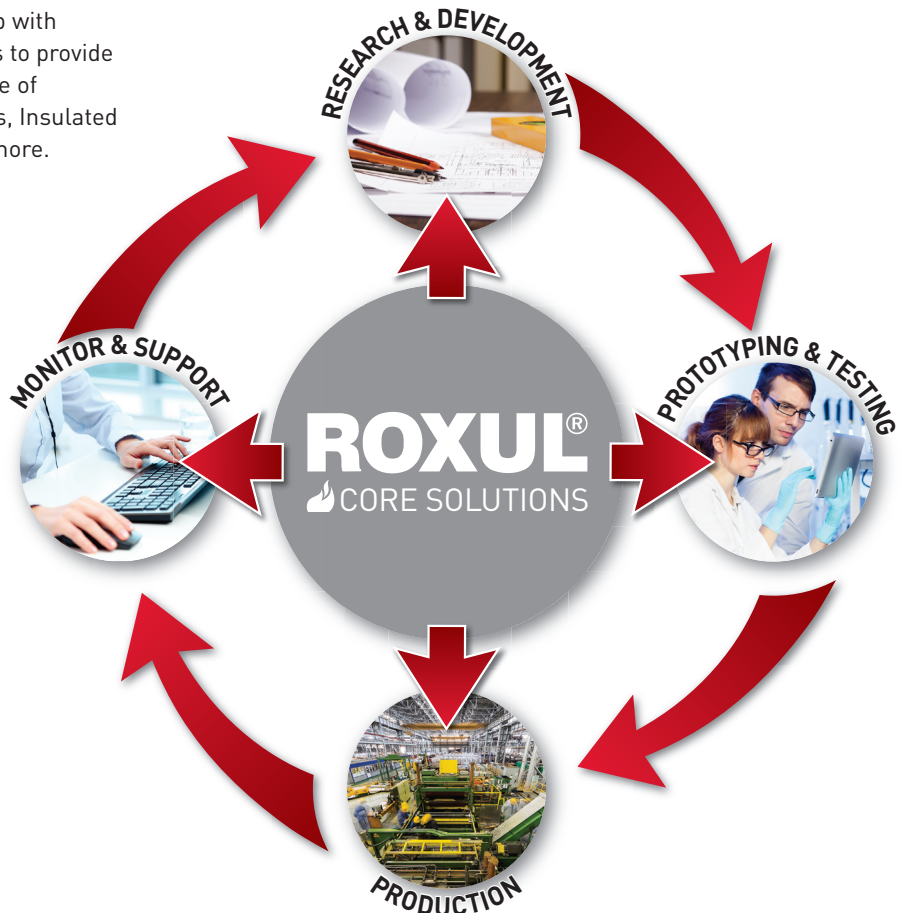
ROXUL's Core Solutions team works in partnership with fabricators and Original Equipment Manufacturers to provide technologically advanced products for a wide range of industries like Fire/Acoustic Doors, Office Interiors, Insulated Packaging, Appliance, Transportation, HVAC and more.

The Core Solutions business at ROXUL recognizes that every industry has different requirements and has created a more versatile product line to specifically service a variety of fabrication and manufacturing applications.

With world class technology and stringent process controls in place, our goal is to work with our customers to consider the use of the product and offer the option specific to the OEM application.



Choose from our product line or work with our experienced Core Solutions Team and Technical Innovations Group to create a customized solution for your specific OEM application.



## FABROCK™

The FABROCK™ series of ROXUL products is engineered specifically to stand up to the rigors of fabrication. FABROCK™ comes in a variety of formats, densities and dimensions, making it easy to cut, bend, split, wrap or compress. Choose from our versatile line of established FABROCK™ products or work with our Core Solutions experts to create a custom solution for high quality performance components before, during and after fabrication.

## Fabrication

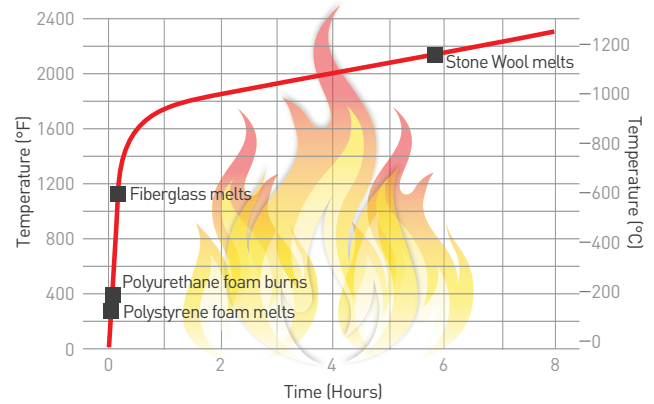
ROXUL and its network of third party fabrication services offer customers the opportunity to customize material to fit the application. Offering specialty sizes, die cutting, skiving and more, ROXUL will work with you to save you time and money with products that are specifically engineered for your application.



# Fire Resistant

A key feature of ROXUL® stone wool insulation is its fire resistance. FABROCK™ is non-combustible and will not develop smoke or promote flame spread, even when directly exposed to fire. FABROCK™ resists temperatures up to approximately 1177°C (2150°F) which is hotter than most fires ever reach.

Temperature Development in a Standard Fire (ASTM E119)



## Fire Performance

Product	Specification	Test	Result
FabRock™ 30, 60, 120, Wrap, DD, Batt	ASTM E136	Behavior of Materials at 750°C (1382°F)	Non-Combustible
FabRock™ 30, 60, 120, HD, Wrap, DD, Batt	CAN/ULC S114	Test for Non-Combustibility	Non-Combustible
FabRock™ 30, 60, 120, HD, Wrap, DD, Batt	ASTM E84 (UL 723)	Surface Burning Characteristics	Flame Spread = 0, Smoke Developed = 0
FabRock™ 30, 60, 120, HD, Wrap, DD, Batt	CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0, Smoke Developed = 0
FabRock™ Batt	CAN/ULC S129	Smoulder Resistance	0.09%



# Water Repellent

ROXUL stone wool insulation does not absorb water or hold moisture. It repels and drains water away from the product and will completely dry out while maintaining the original integrity of the product. It does not rot, corrode, sag, lose its shape, or promote fungi and bacterial growth.



## Moisture Resistance

Product	Specification	Test	Result
FabRock™ 30, 60, 120, HD, DD, Wrap, Batt	ASTM C1104	Moisture Sorption	< 1.0%
FabRock™ 30, 60, 120, HD, DD, Wrap, Batt	ASTM E96	Water Vapor Transmission, Desiccant Method	>10 Perm
FabRock™ HD	ASTM C209	Water Absorption	< 1.0%

## Moisture Resistance

Product	Specification	Test	Result
FabRock™ 30, 60, 120, HD, DD, Wrap, Batt	ASTM C1338	Determination of Fungi Resistance - Mold Growth	Passed - Zero Growth





# Sound Absorbent

The unique non-directional structure of ROXUL® stone wool insulation is more dense than traditional insulations. This effectively reduces airflow and, essentially, sound transmissions. Higher air flow resistivity means better sound attenuation. FABROCK™ is ideal for sound dampening, across a wide range of frequencies.

## FABROCK™ Batt – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.0"	0.14	0.25	0.65	0.90	1.01	1.01	0.70
1.5"	0.18	0.44	0.94	1.04	1.02	1.03	0.85
2.0"	0.28	0.60	1.09	1.09	1.05	1.07	0.95
3.0"	0.52	0.96	1.18	1.07	1.05	1.05	1.05
4.0"	0.86	1.11	1.20	1.07	1.08	1.07	1.10

## FABROCK™ 30 – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.18	0.44	0.94	1.04	1.02	1.03	0.85
2.0"	0.28	0.60	1.09	1.09	1.05	1.07	0.95
3.0"	0.52	0.96	1.18	1.07	1.05	1.05	1.05
4.0"	0.86	1.11	1.20	1.07	1.08	1.07	1.10

## FABROCK™ LT – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.0"	0.08	0.23	0.66	0.93	1.02	1.02	0.70
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	1.0
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

## FABROCK™ Wrap – Acoustical Performance ASTM C423 — 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
4.0"	1.07	1.01	1.07	1.06	1.07	1.06	1.05

## FABROCK™ DD – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
3.0"	0.72	0.93	0.88	0.84	0.90	0.97	0.90

## FABROCK™ 60 – Acoustical Performance ASTM C423 — 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
3.0"	0.65	0.94	1.13	1.07	1.06	1.04	1.10
4.0"	0.92	1.04	1.07	1.07	1.07	1.08	1.05

## FABROCK™ 120 – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.18	0.44	0.94	1.04	1.02	1.03	0.85
2.0"	0.28	0.60	1.09	1.09	1.05	1.07	0.95
3.0"	0.52	0.96	1.18	1.07	1.05	1.05	1.05
4.0"	0.86	1.11	1.20	1.07	1.08	1.07	1.10

## FABROCK™ HD – Acoustical Performance ASTM C423 — CO-EFFICIENTS AT FREQUENCIES

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.0"	0.03	0.41	0.85	0.89	0.89	0.97	0.80
2.0"	0.39	0.73	0.81	0.86	0.97	0.95	0.85
4.0"	0.61	0.69	0.79	0.87	0.96	0.97	0.85



## ROXUL CORE SOLUTIONS in Action

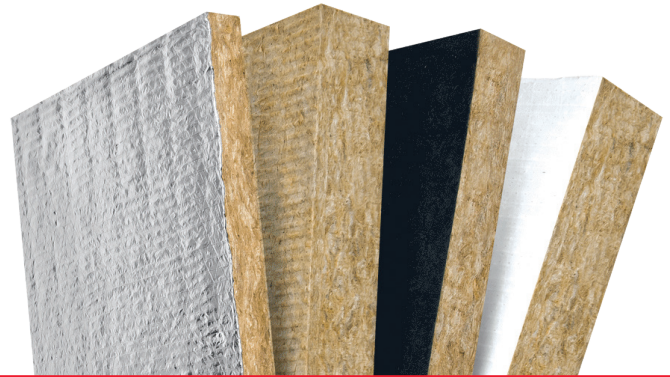
For over 20 years Perdue Acoustics has specialized in controlling sound around the world. As a leader in acoustic panels, they turn to ROXUL® CORE SOLUTIONS as the key supplier to achieve strong acoustic benefits. *"Perdue Acoustics will only use ROXUL to supply our very specialized core product! ROXUL was the ONLY company with the manufacturing process and expertise capable of meeting the extremely high demands of what we needed. They worked it out, engineered it out and 'brought home the gold' in everything we've ever asked them to do."*

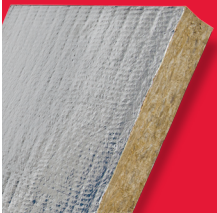


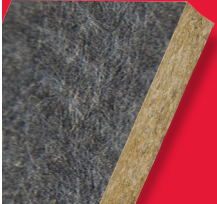
Jay Perdue

President and Owner of Perdue Acoustics

# Facing

FABROCK™ comes with a variety of surface facing options to meet the aesthetic or functional needs of your application. Please contact us for a complete listing of our facing options and additional technical information related to these materials.



	Facer	Performance	Typical Applications
	Aluminum Foil with fiberglass reinforcement	ASTM E96 Permeance (WVTR) 0.02 Perm (grains/hr.ft <sup>2</sup> .in Hg)  ASTM E84/UL 723 Flame Spread = 25 Smoke Development = 50	Aesthetics
	White Polypropylene with fiberglass reinforcement	ASTM C523 – 85% Light Reflectivity (Energy Saving – Light Installation & Usage up to 20%)*  ASTM E96 Permeance (WVTR) 0.02 Perm (grains/hr.ft <sup>2</sup> .in Hg) Flame Spread = 25 Smoke Development = 50	Underground Walkways Aesthetics
	White Pin Perforated Polypropylene with fiberglass reinforcement	ASTM C523 – 85% Light Reflectivity (Energy Saving – Light Installation & Usage up to 20%)*  Permeance (WVTR) >10 perm (grains/hr.ft <sup>2</sup> .in Hg) Flame Spread = 25 Smoke Development = 50	Underground Walkways Aesthetics
	Black Mat with non-woven fiberglass	Permeance (WVTR) >10 perm ASTM E84/UL 723 Flame Spread = 25 Smoke Development = 50	Theatres/Recording Studio Walls Aesthetics

\* CASE STUDY – Lamtec White Facings Reduce Lighting Investment Cost and Annual Electricity Costs (Lamtec® Corp.)  
 Light Reflectance Determined in Testing by Atlas Services Group on May 3rd, 2011.

# A Global Leader

ROXUL Inc. is a subsidiary of ROCKWOOL International A/S, the world's leading supplier of innovative products and systems based on stone wool. ROCKWOOL International A/S is a publicly held company, which trades on the NASDAQ OMX Nordic Exchange Copenhagen. Operating 28 factories in 18 countries, the ROCKWOOL Group employs more than 10,000 people and features a global network of sales companies, trade offices and dedicated commercial partners. ROXUL® products provide superior thermal and acoustical value and are fire resistant, water repellent, non-corrosive, and resistant to mold.

For more information, visit [roxul.com](http://roxul.com)

## ROXUL is the Better Insulation Choice

ROXUL insulation is innovative, 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) accreditations toward sustainable development across four key categories.

A ROXUL representative will be pleased to provide you with further details on the products described in this brochure, and can also update you with comprehensive information on the entire line of ROXUL products.

Visit our website at [roxul.com](http://roxul.com), or contact us directly at **1-800-265-6878**.



## Environmentally Sustainable

Our stone wool production process uses some of the most advanced technology available. The last decade has seen a new generation of ROXUL manufacturing advancements designed to lower our environmental footprint. These endeavours have included:

- the capture and recycling of rainwater;
- reduction in energy consumption;
- recycling of raw materials back into the production process, resulting in zero waste to landfill;
- the use of natural lighting in our facilities; and
- repurposing water used during the manufacturing process.

We are proud that these steps have minimized our impact on the environment and surrounding community resources. But our green programs don't stop there.

ROXUL insulation is created using naturally occurring inorganic raw materials, and reuses waste from other manufacturers as well as from our own plants. Stone wool insulation is non-combustible and achieves its thermal performance without the use of blowing agents. Therefore, our products do not off-gas over time. This feature alone makes a substantial contribution to a cleaner environment.

To remain efficient and environmentally friendly, each ROXUL plant uses a varying combination of new and recycled content. For example, as a direct result of producing less manufacturing waste during the production process, we are able to use up to 40 per cent recycled content. Our continuing effort to improve our overall efficiencies further solidifies our commitment to environmental stewardship within our organization.



Sound Absorbent



Fire Resistant



Water Repellent



Better Fit



Made from Stone



Recycled Content