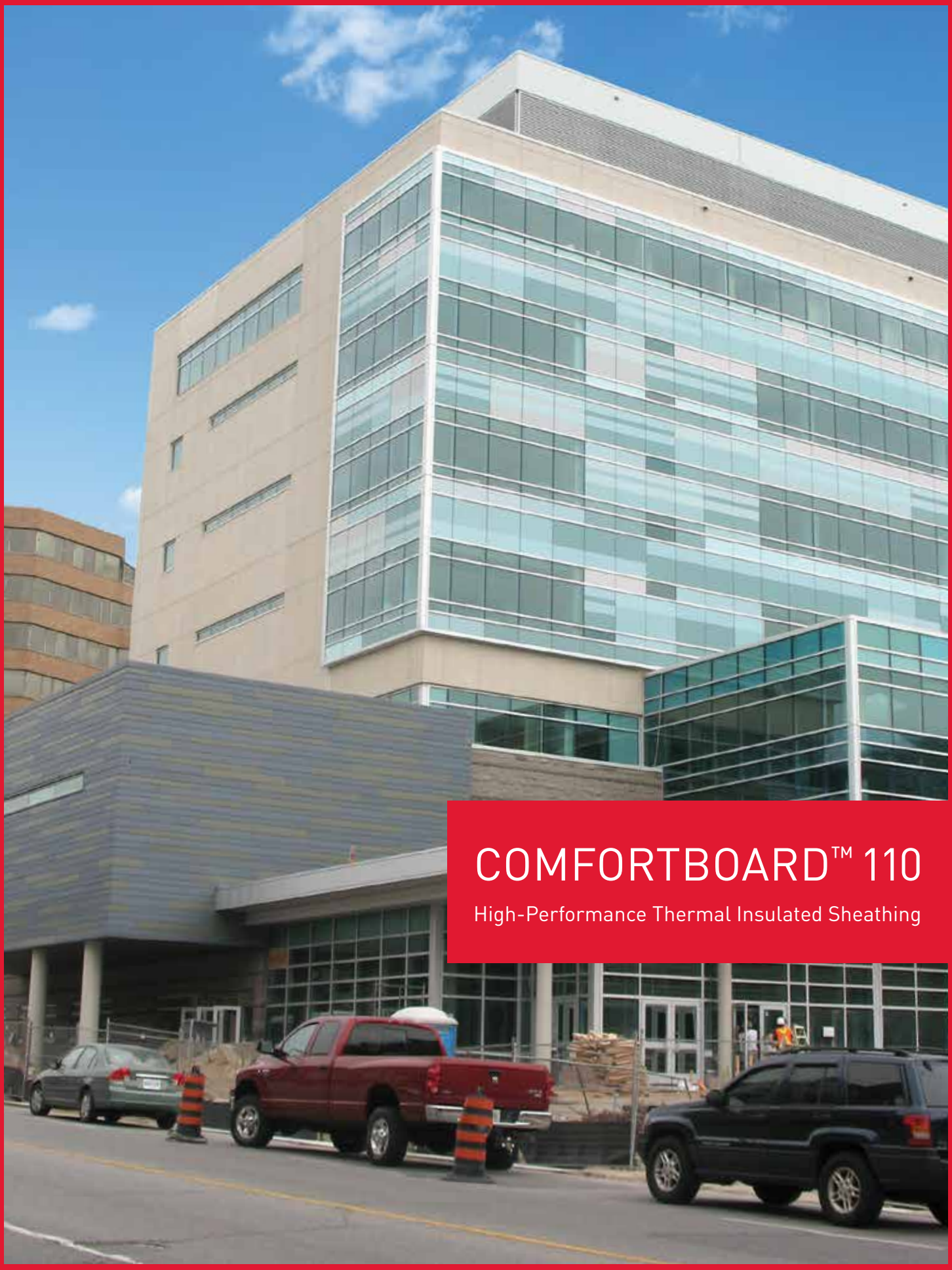

COMFORTBOARD™ 110

High-Performance Thermal Insulated Sheathing

ROXUL®
The Better Insulation™

ROXUL® COMFORTBOARD™ 110 Creates Breathable Wall Systems

ROXUL® COMFORTBOARD™ 110 (Thermal Insulated Sheathing) is a rigid, high-density, stone wool insulation board designed for use as an exterior continuous insulation in commercial applications.

COMFORTBOARD™ 110 is a thermally efficient, moisture resistant, vapor permeable board and takes the place of other external sheathing insulations to create high-performance wall assemblies that are effective against fire, moisture and thermal bridging, and allow for superior drying potential.

This high-density board provides the rigidity and durability needed for many exterior cladding assemblies, such as lightweight metal and composite panels systems. COMFORTBOARD™ 110 is available in standard thicknesses of 1", 1.25", 2", 2.5" and 3" with R-values ranging from R4 to R12.

A True Continuous Insulation

In commercial steel stud applications, thermal bridging plays a large part in heat loss, leading to increased energy consumption. This assembly provides a true continuous insulation, when combined with ROXUL COMFORTBATT® Steel Stud insulation in the stud wall to form a high-performance, split insulation wall system. COMFORTBOARD™ 110 has superior compressive resistance and is compatible with lightweight hat channel supported cladding systems, eliminating the need for Z-furring strips which can cause thermal bridging. This allows for a reduced overall thickness of the wall system and greatly improves the energy efficiency of the building.

COMFORTBOARD™ 110 provides maximum thermal performance, fire resistance and drying potential using sustainable materials.

- ✔ Vapor Permeable
- ✔ Fire Resistant
- ✔ Environmentally Sustainable
- ✔ Moisture Resistant
- ✔ Stable Long-Term R-Value
- ✔ Dimensionally Stable
- ✔ UV Resistant
- ✔ Sound Absorbent

The ROXUL® BEDR™ Wall Rainscreen System is ideal for metal panel systems and comprises a high-density, rigid COMFORTBOARD™ 110 board in the external cavity, combined with ROXUL thermal COMFORTBATT® insulation in the exterior stud wall cavity.

Thermal Resistance

Standard	Temperature	R-value/inch	RSI value/25.4
ASTM C518 (C177)	25˚F (-4˚C)	4.3 hr.ft².F/Btu	0.74 m²K/W
	40˚F (4˚C)	4.2 hr.ft².F/Btu	0.72 m²K/W
	75˚F (24˚C)	**4.0 hr.ft².F/Btu**	**0.70 m²K/W**
	110˚F (43˚C)	3.6 hr.ft².F/Btu	0.64 m²K/W

Compressive Strength

Standard		
ASTM C165	at 10%	1220 psf (58.5 kPa)
	at 25%	1880 psf (90.0 kPa)

Product Details

Product	Density	Standard Thickness	R-value	Standard Dimensions W x L
COMFORTBOARD™ 110	ASTM C165-00 Actual 11 lb/ft³ , (176 kg/m³)	1", 1.25", 2.0", 2.5", 3"	R4, R5, R8, R10, R12	24" x 48" (610 mm x 1219 mm) 48" x 72" (1219 mm x 1829 mm)

Energy Efficient/Vapor Permeable

The trend toward energy efficiency is driving the need for high-performance building envelopes. These advanced wall systems are designed to produce higher effective R-values and minimize air leakage. This increases the need to design walls more carefully and reduce the risk of trapping moisture.

COMFORTBOARD™ 110 vapor permeable exterior insulation enables high-performance wall systems to have superior drying potential, minimizing the risk of condensation and water accumulation. The vapor permeance of ROXUL® insulation allows for increased drying potential or "breathability" without trapping transient moisture in the assembly. Foam plastic insulations have low vapor permeability and can work as vapor retarders. This may trap moisture within the wall, leading to mold or premature deterioration of building components.

Moisture Resistance

Standard		
ASTM C1104	Moisture Sorption	0.28 %
ASTM E96	Water Vapor Transmission, Desiccant Method	2160 ng/Pa.s.m^2 (35 perm)
ASTM C209	Water Absorption	1.2 %

Fire Resistant

COMFORTBOARD™ 110 is fire resistant, able to withstand temperatures up to 2150°F (1177°C), and does not produce smoke or propagate flames. This provides a critical line of defense, keeping occupants safe and reducing property damage in the event of a fire.

Dimensionally Stable

Metal panel cladding assemblies are subject to wide temperature changes from the exterior. This can cause shrinking and expanding in other insulation materials, resulting in gaps and significant heat loss in cold temperatures and vice versa in warm temperatures. COMFORTBOARD™ 110 remains dimensionally stable behind the assembly wall and does not expand, contract or bow with thermal cycles. This provides for a long-term, energy-efficient wall assembly.

Fire Performance

Standard		
CAN4 S114	Test for Non-Combustibility	Non-Combustible
ASTM E84 (UL 723)	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0

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, visit ROXUL.com

ROXUL is the Better Insulation Choice

ROXUL insulation is innovative, offering a world of green features. Sustainability is a fundamental pillar of our philosophy at ROXUL. We are proud to have our products used in projects targeting LEED® certification, as they can contribute both to energy efficiency and materials credits. For more information, we recommend reading the applicable LEED Reference Guide for detailed descriptions of all credits.

Find out more about how we can assist with your design projects.

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**, 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 endeavors have included:

- the capture and recycling of rainwater;
- reduction in energy consumption;
- recycling of raw materials back into the production process;
- 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.

Fire Resistant | Water Repellent | Saves Energy | Sound Absorbent | Easy Fit | Made from Stone

COMFORTBOARD™ and COMFORTBATT® is a trademark of ROXUL Inc.
LEED® is a registered trademark of United States Green Building Council.

ROXUL® The Better Insulation™

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