



Perimeter Fire Containment Product and Service Guide

Products, service and the expertise to
support your curtain wall projects



ROCKWOOL

Insulation for Perimeter Fire Containment Systems

ROCKWOOL stone wool insulation is well suited to address the requirements of the spandrel component of the curtain wall assembly, as well as the void created at the intersection of exterior curtain wall assemblies and non-fire-resistance-rated floor or floor/ceiling assemblies, as required by the International Building Code® and CAN/ULC industry standards.

Together, ROCKWOOL Curtainrock® 40/80 and ROCKWOOL ROXUL Safe® provide a comprehensive, critical line of defense in fire protection that has been third-party tested and approved for perimeter fire containment when used with specific UL™, ULC™ or Intertek® listings.

System Design

Always follow the specifications of a UL/ULC- or Intertek-tested ASTM E2307 listing when designing and constructing a perimeter fire containment system.

ROCKWOOL Curtainrock® 40 and Curtainrock® 80

Curtainrock is a semi-rigid stone wool insulation board designed for the spandrel (or curtain wall) component of curtain wall systems. ROCKWOOL offers Curtainrock 40 (nominal 4 lb/ft3) and Curtainrock 80 (nominal 8 lb/ft3) to meet curtain wall specification and listing requirements. These materials are noncombustible and fire resistant. They will not develop smoke or promote flame spread when exposed to fire, providing a critical line of defense in fire protection. ROCKWOOL Curtainrock 40/80 products are available unfaced or with a reinforced vapor retarding foil facing.



ROXUL Safe®

ROXUL Safe is a lightweight, semi-rigid stone wool insulation approved for use in specific UL, ULC and Intertek listings for fire-rated joints, through penetrations and perimeter fire containment systems as a minimum 4 lb/ft3 density material. ROXUL Safe is specifically engineered to fill perimeter gaps between concrete floor slabs and exterior wall systems, between firewalls and ceiling slabs, and around conduit pipes and duct openings through walls and floor slabs. It is noncombustible and fire resistant and will not develop toxic smoke or promote flame spread, even when exposed directly to a fire. ROXUL Safe should always be used in conjunction with a fire sealant to prevent passage of fire and smoke from one floor to the next. The material needs to be installed at the proper compression as specified in the testing listing, which will also identify the product orientation for installation within the perimeter joint.

Why Stone Wool?

The results of structural integrity testing prove that ROCKWOOL stone wool materials are more durable and easier to install — with less material degradation and better resilience to weathering — than slag wool insulation.

The benefits of working with stone wool insulation include:

- **Fire resistant for occupant safety**
ROCKWOOL stone wool can withstand temperatures greater than 2,150° F (1,177° C) and does not contribute to the development and spread of fire or the release of toxic gases.
- **Dimensional stability to maintain performance**
Stone wool retains its characteristics over time, which means reduced maintenance requirements over the life of a building. ROCKWOOL products have a small coefficient of linear expansion, meaning that even with changes in temperature and/or humidity over long periods of time, the product supports a reliable installation to avoid gaps.
- **Sound absorbent for acoustic comfort**
The nondirectional structure of ROCKWOOL stone wool insulation helps to reduce the intensity and propagation of sound, creating a more comfortable environment for occupants.
- **Water repellent to resist absorption and moisture effects**
Water repellent yet vapor permeable, our insulation materials offer inherent drying potential, which means should they get wet and be allowed to dry, the insulation will retain its stated performance as long as the materials are not damaged. Stone wool is also resistant to rot, mold and mildew growth — contributing to a safer indoor environment.
- **Thermal resistance to stand the test of time**
The R-value of stone wool insulation will not decrease over time. This is because stone wool is not produced with blowing agents. The consistent, long-term, thermal performance helps create a more comfortable environment for building occupants and provides reliable energy efficiency.



LEFT Designed by James K. M. Cheng Architects Inc., the visually stunning Living Shangri-La hotel, located on the Vancouver waterfront, was built using Curtainrock and ROXUL Safe products as its specified insulation. **RIGHT** Located in the heart of Toronto, The Ritz-Carlton Hotel and Condominium was built using both Curtainrock and ROXUL Safe as part of the perimeter fire containment system.

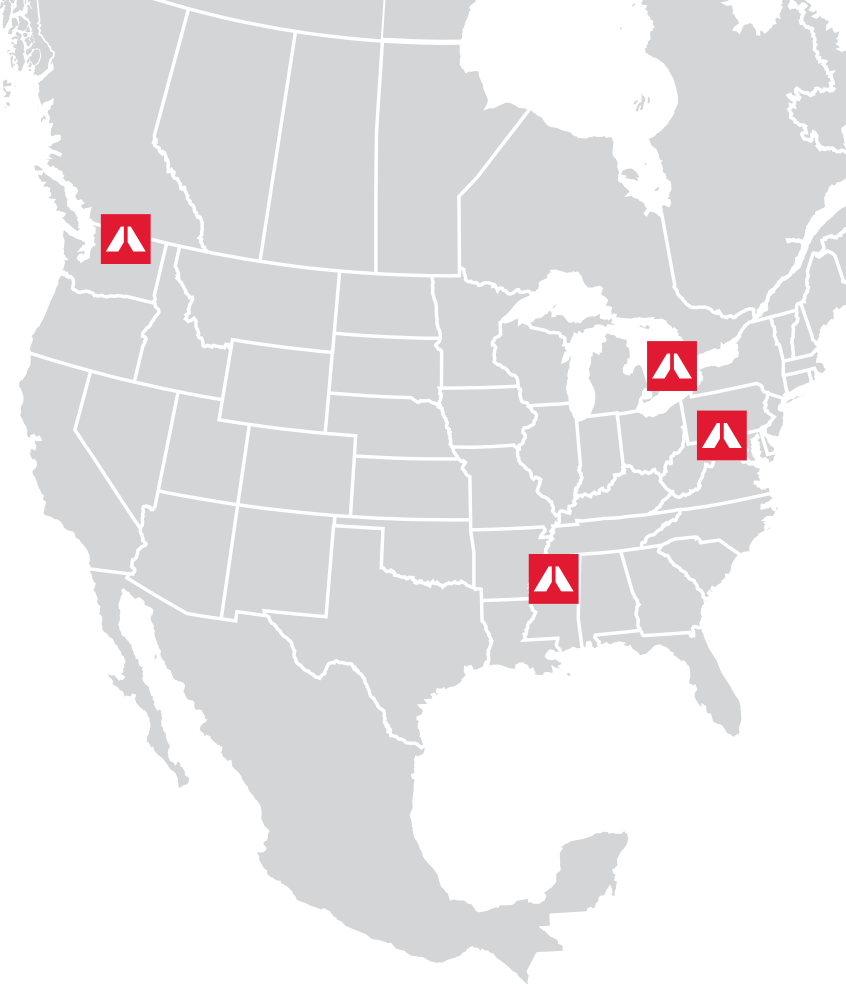
ROCKWOOL Production Network

As the world’s leading stone wool insulation manufacturer, ROCKWOOL has the products and solutions specifically engineered to meet the needs of each application area that we service, including perimeter fire containment insulation for curtain wall systems.

Within North America, ROCKWOOL has a network of manufacturing facilities to meet the growing demand for stone wool insulation. Through our operations in both the US and Canada, we produce a variety of insulation products. Our capabilities include finished boards, with and without pre-applied facings, as well as batt insulation products.

Our North America Locations

- Milton, Ontario
- Grand Forks, British Columbia
- Byhalia, Mississippi
- Ranson, West Virginia



Our Commitment

ROCKWOOL Quality and Warranty

ROCKWOOL stone wool insulation products are designed with stringent density and dimensional tolerances to ensure a consistent and reliable installation process in addition to long-term performance. The quality control measures we incorporate within our manufacturing process are designed to ensure your products are consistent and reliable, while meeting the requirements of ASTM E2307 listings. In addition, our products are subjected to regular third-party audits by UL and Intertek to make sure they meet the strict level of quality required for perimeter fire containment listings.

As additional support, ROCKWOOL provides a standard 30-year thermal warranty on all of our stone wool insulation products, along with a material guarantee that the product will arrive to our customers to specification and free of defects.



Cutting Tips

ROCKWOOL stone wool insulation products are easy to cut. A serrated knife is our recommended tool to use. We advise not to use utility knives as they will dull too quickly and end up tearing the product, but a serrated knife or bread knife also works extremely well with our products.

Not Just Insulation

A Network of Partners to Support You

ROCKWOOL works hand in hand with our partners across North America to support the development and execution of perimeter fire containment system-tested designs for the market.

When you work with ROCKWOOL, you also have the support of a global organization with an extensive history in firestopping and fire protection applications. When unitized construction of curtain wall panels is completed overseas and units are imported into North America for final installation, ROCKWOOL is generally able to work with our counterparts in other regions to identify acceptable product substitutions and provide letters of equivalency from the local market, depending on the specific requirements of the project and location of the panel construction.

Product SKU Portfolio

ROCKWOOL offers a comprehensive portfolio of thicknesses and dimensions across our ROCKWOOL Curtainrock 40, Curtainrock 80 and ROXUL Safe product lines to meet your project requirements. Along with a variety of sizes offered through ROCKWOOL, our products are well suited to meet the requirements of third-party fabrication when needed to meet custom project requests. We also continue to monitor industry needs through evolving thermal code requirements and design practices to adopt our product offering accordingly.

	Curtainrock 40	Curtainrock 80	ROXUL Safe
Application	Curtain Wall Insulation	Curtain Wall Insulation	Safing Insulation
Facing	Unfaced or Foil	Unfaced or Foil	Unfaced only
Density	Nom. 4 lb/ft3	Nom. 8 lb/ft3	Nom. 4 lb/ft3
Thermal	R 4.3 / inch	R 4.3 / inch	—
Thicknesses	1.5", 2", 2.5", 3", 3.5", 4", 4.5", 5", 6", and 7"	1", 1.5", 2", 2.5", 3", 3.5", 4", 4.5", 5", 6", and 7"	1.5", 2", 3", 4"* , 5", and 6"
Dimensions	24" × 48" 36" × 60" 48" × 72"	24" × 48" 36" × 60" 48" × 60" 48" × 72"	24" × 48"

ROCKWOOL may be able to produce custom products depending on the order quantity and manufacturing line capabilities. For more information and access to the full ROCKWOOL Price List, which includes dimension, packaging and load factor details for existing SKUs, please contact your local ROCKWOOL sales representative.

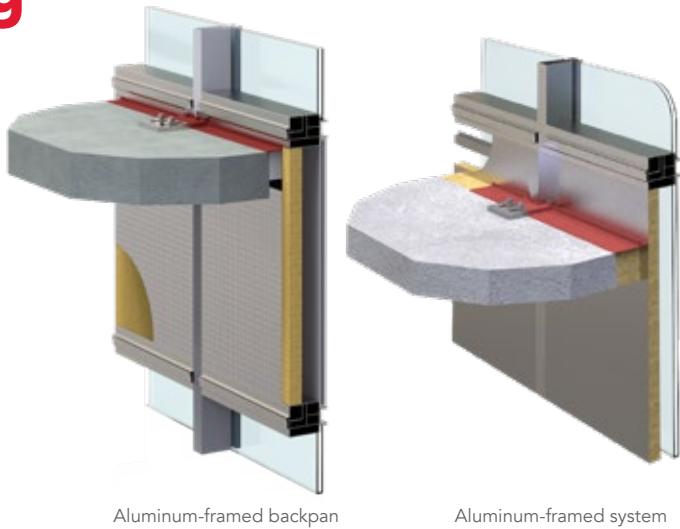
Technical and Building Science Services

ROCKWOOL is a partner with the technical know-how to support inquiries on perimeter fire containment and other firestopping requirements, along with a broader set of application areas for our stone wool insulation products.

We offer a comprehensive set of ASTM E2307-tested systems with industry-leading firestop manufacturers. This includes backpans, aluminum framing and all-vision glass designs, as well as testing for precast, GFRC and EIFS/veneer systems.

From glass to aluminum and stone spandrels, ROCKWOOL Curtainrock 40, Curtainrock 80 and ROXUL Safe can be incorporated into a variety of curtain wall perimeter fire containment systems to help you execute to the requirements of the project and to achieve your creative vision.

ROCKWOOL is committed to assisting you in achieving your project's highest performance by offering building science expertise and services.



For more information about current ASTM E2307 listings with approved use of ROCKWOOL stone wool insulation visit rockwool.com/north-america/resources-and-tools/tools/ul-listings

ROCKWOOL Building Science

The ROCKWOOL Building Science team was established to provide architects, designers and specifiers with the tools and services to unlock the energy-saving potential of your building design, reaching far beyond insulation.

Our North American Building Science team is part of a larger global network, allowing us to utilize international best practice, innovation and design solutions. We combine this knowledge with local expertise to offer high-quality tools, training and tailored advisory services relevant to the North American market.

Complimentary services provided by ROCKWOOL Building Science experts include:

- Building science expertise and resources
- Educational seminars and architectural/site visits
- Envelope detailing and material specifications
- Hygrothermal modeling and dew point calculations
- Thermal modeling – Effective R-value/ U-factor calculations
- Acoustic modeling – STC/OITC calculations

Contact ROCKWOOL Building Science by visiting rockwool.com/buildingscience

Absolute World Residential Tower: Ontario, Canada

LEED® Credits

ROCKWOOL Curtainrock 40, Curtainrock 80 and ROXUL Safe are certified according to UL GREENGUARD and GREENGUARD Gold. They are CDPH compliant, which contributes to LEED points under the Low Emitting Materials category. In material transparency, ROCKWOOL Curtainrock 40, Curtainrock 80 and ROXUL Safe are also RLA (Red List Approved) under the International Living Future Institute Declare program. They also have HPD documents. These can be used to achieve points under the Materials and Resources category under LEED.

To generate a ROCKWOOL LEED certificate specific to your project, please complete our submission form by visiting rockwool.com/leed-calculator.

For a full listing of ROCKWOOL sustainability documentation, including GREENGUARD certificates, GREENGUARD Gold certificates, HPDs, EPDs and Declare labels, please visit our sustainability landing page at rockwool.com/sustainability.

Declare.



Contact ROCKWOOL for support
rockwool.com/contact

From technical services to in-field sales and distribution support, ROCKWOOL is dedicated to providing our partners with solutions for perimeter fire containment systems. Whether you are a contractor, curtain wall consultant, glazier, distributor and/or fabricator, ROCKWOOL offers stone wool products, training, and support to meet your project requirements. See below to get in touch with us today.



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Find a Sales Rep:
<https://www.rockwool.com/contact/#findasalesrepresentative>

At the ROCKWOOL Group, we are committed to enriching the lives of everyone who comes into contact with our solutions. Our expertise is perfectly suited to tackle many of today's smallest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world's needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With more than 12,000 employees in 40 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine and offshore.

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