

# CONROCK® and CONROCK® 60



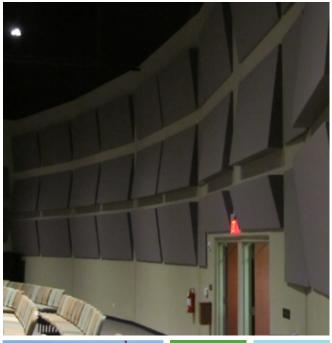
#### The ROCKWOOL Difference

ROCKWOOL 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. ROCKWOOL stone wool insulation has incredible fire resistance, sound absorbency and thermal protection properties, making it an ideal choice to include in your product.

The Core Solutions (OEM) team at ROCKWOOL recognizes that every manufacturer has different requirements and has created a versatile product line to service a variety of fabrication and applications. This work has been done to help the customer meet specification and optimize fit for use.

With world class technology and stringent process controls in place, our goal is to work with you to select the product that offers the best solutions for your application. Choose from our versatile line of products or work with our Core Solutions experts to create a custom solution.

ROCKWOOL has been servicing the Sandwich Wall Panel (SWP) industry with CONROCK® for many years. Now we have added CONROCK® 60 to the product line to help support our OEM customers that are looking for insulation with incredible sound attenuation and more.









- ✔ Non-combustible
- Sound absorbent
- Moisture resistant
- Easily fabricated
- Stable long-term thermal performance
- ✓ Dimensionally stable



There are currently two products in the CONROCK® product line that have been engineered to address specific industry needs: CONROCK® and CONROCK® 60. ROCKWOOL has been servicing the Construction Elements industry for many years, mainly in Sandwich Wall Panels (SWP), but is more frequently being used in applications like cold room facilities, roadside partitions, acoustical panels, sound studios and theatres. The CONROCK® line-up offers products to address Noncombustible, High Temperature and Acoustic applications.

## Construct with CONROCK®

As the first choice of stone wool insulation for SWP manufacturers, ROCKWOOL works with its customers to engineer the right core material for the product. When specified as the core of a sandwich wall panel (SWP), CONROCK® provides occupant comfort and safety with outstanding fire ratings, as well as energy savings for today's eco-conscious builder and tomorrow's code-driven changes. Not only is CONROCK® a key component in any assembly for fire walls or zero lot line applications, it will also provide incredible sound attenuation for a quiet environment.

## Control Sound with CONROCK® 60

With similar fire performance to CONROCK\*, CONROCK\* 60 has superior acoustic properties and can be easily fabricated for use in a variety of OEM applications. CONROCK\* 60 is classified as a rigid board and has excellent acoustical dampening properties. Because of its density and non-directional fibre orientation it dissipates sound waves to create a quieter environment.

Acoustical Panels and Partitions are ideal for insulating with CONROCK® 60. It is also water repellent, dimensionally stable and will not promote the growth of mould.

## Ideal applications for CONROCK°:

- ✓ Insulated Metal Panels
- ✓ Structurally Insulated Panels (SIPs)
- ✓ Acoustical SWP
- ✓ Cold Rooms
- ✓ Clean Rooms

## Ideal applications for CONROCK® 60:

- ✓ Acoustical Panels
- ✓ Theatres
  - Sound Studios
  - ✓ School Auditoriums/Gymnasiums
  - ✓ Churches
- Acoustical Partition Walls
- ✔ Roadside Walls
- ✓ Insulated Concrete Panels



A key feature of ROCKWOOL stone wool insulation is its fire resistance. CONROCK® is non-combustible and will not develop smoke or promote flame spread, even when directly exposed to fire. CONROCK® resists temperatures up to approximately 1177°C (2150°F).

## **Fire Performance**

Product	Specification	Test	Result
CONROCK®, CONROCK® 60	CAN4 S114	Test for Non-Combustibility	Non-Combustible
CONROCK®	ASTM E 84 (UL 723)	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 5
CONROCK® 60	ASTM E 84 (UL 723)	Surface Burning Characteristics	Flame Spread = 5 Smoke Developed = 10
CONROCK®	CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 10
CONROCK® 60	CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 5 Smoke Developed = 10



# Water Repellent

ROCKWOOL stone wool insulation does not absorb water or hold moisture. Its unique stone wool orientation is ideal for draining water away from the product it's protecting. It does not rot, corrode, sag, lose its shape or promote fungi or bacterial growth.

#### **Moisture Resistance:**

CONROCK®	ASTM C 1104	Moisture Sorption	0.05%
CONROCK® 60	ASTM C 1104	Moisture Sorption	0.07%





## Sound Absorbent

This rigid board has excellent acoustical dampening properties and is dimensionally stable, which makes it ideal for installation in panel applications.

The unique non-directional structure of ROCKWOOL stone wool insulation is denser than traditional insulations. This effectively reduces airflow and, essentially, sound transmissions. Higher air flow resistivity means better sound attenuation.

# **Acoustical Performance ASTM C423 CO-EFFICIENTS AT FREQUENCIES**

CONROCK® 60 Thickness	125 Hz	250 Hz	500 Hrz	1000 Hz	2000 Hz	4000 Hz	NRC
3.0"	0.78	0.89	1.04	0.98	1.01	1.02	1.00
4.0"	1.00	0.95	1.06	1.04	1.06	1.08	1.05

## **Additional Compliance and Performance**

CONROCK® 60         ASTM C 356         Linear Shrinkage         CONROCK®           CONROCK®         ASTM C 518 (C 177)         R-value/inch @ 75°F         4.0           RSI value/25.4 mm @ 24°C         0.71           CONROCK® 60         ASTM C 518 (C 177)         R-value/inch @ 75°F         4.2           RSI value/25.4 mm @ 24°C         0.74           Corrosive Resistance:         CONROCK® CONROCK® 60         ASTM C 665         Corrosiveness to Steel           Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory         CONROCK® CONROCK® 10.5	0.19% 0.22% 0 hr.ft².F 1 m² K/W 2 hr.ft².F 4 m² K/W
CONROCK® 60         ASTM C 356         Linear Shrinkage         CONROCK®           CONROCK®         ASTM C 518 (C 177)         R-value/inch @ 75°F         4.0           RSI value/25.4 mm @ 24°C         0.71           CONROCK® 60         ASTM C 518 (C 177)         R-value/inch @ 75°F         4.2           RSI value/25.4 mm @ 24°C         0.74           Corrosive Resistance:         CONROCK® CONROCK® 60         ASTM C 665         Corrosiveness to Steel           CONROCK® CONROCK® 1 and C692: U.S. Nuclear Regulatory         ASTM C 795         ASTM C 795         ASTM C 795	0.22% 0 hr.ft².F 1 m² K/W 2 hr.ft².F 4 m² K/W
Thermal Resistance:  CONROCK® ASTM C 518 (C 177) R-value/inch @ 75°F 4.0  RSI value/25.4 mm @ 24°C 0.71  CONROCK® 60 ASTM C 518 (C 177) R-value/inch @ 75°F 4.2  RSI value/25.4 mm @ 24°C 0.74  Corrosive Resistance:  CONROCK® CONROCK® ASTM C 665 Corrosiveness to Steel  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	0 hr.ft².F 1 m² K/W 2 hr.ft².F 4 m² K/W
CONROCK®  ASTM C 518 (C 177)  RSI value/inch @ 75°F  4.0  RSI value/25.4 mm @ 24°C  O.71  CONROCK® 60  ASTM C 518 (C 177)  RSI value/inch @ 75°F  4.2  RSI value/25.4 mm @ 24°C  O.74  Corrosive Resistance:  CONROCK® CONROCK® CONROCK® ASTM C 665  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	1 m² K/W 2 hr.ft².F 4 m² K/W
CONROCK® (C 177)  R-value/inch @ 75°F 4.0  RSI value/25.4 mm @ 24°C 0.71  CONROCK® 60  ASTM C 518 (C 177)  RSI value/inch @ 75°F 4.2  RSI value/25.4 mm @ 24°C 0.74  Corrosive Resistance:  CONROCK® CONROCK® ASTM C 665  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	1 m² K/W 2 hr.ft².F 4 m² K/W
CONROCK® 60  ASTM C 518 (C 177)  RSI value/inch @ 75°F  4.2  RSI value/25.4 mm @ 24°C  0.74  Corrosive Resistance:  CONROCK® CONROCK® ASTM C 665  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	2 hr.ft².F 4 m² K/W
CONROCK® 60  (C 177)  R-value/inch @ /5°F  4.2  RSI value/25.4 mm @ 24°C  0.74  Corrosive Resistance:  CONROCK® CONROCK® ASTM C 665  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	4 m² K/W
CONROCK® CONROCK® 60  ASTM C 665  Corrosiveness to Steel  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	
CONROCK® CONROCK® 60  ASTM C 665  Corrosiveness to Steel  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	Pass
CONROCK® 60  ASTM C 665  Corrosiveness to Steel  Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory	Pass
Specification as per Test Methods C871 CONROCK® and C692: U.S. Nuclear Regulatory	
CONROCK® 60  Commission, Reg. Guide #1.36: U.S.  Military Specifications MIL-1-24244  (all versions including B and C)	onforms
Compressive Strength:	
CONROCK® ASTM C 165 at 10% 6.64 psi (45.8 kPa)(4" board)	
at 10% 196 psf (9.4 kPa)	
CONROCK® 60 ASTM C 165 at 25% 547 psf (26.2 kPa)	
Density:	
CONROCK® ASTM C 612 Mineral Fiber Block and Board Type IV.  Thermal Insulation	/A, Complies
8.5 lbs/ft3 136	6 kg/m3
CONROCK® 60 ASTM C 612 Mineral Fiber Block and Board Type IV	/B, Complies
6.0 lbs/ft3 96	





ROCKWOOL manufacturing facility in Marshall County, Mississippi

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 biggest 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 approx. 10,500 passionate colleagues in 38 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 & offshore.

AFB°, CAVITYROCK°, COMFORTBATT°, CONROCK°, CURTAINROCK°, ROCKBOARD°, TOPROCK°, MONOBOARD°, ROXUL° are registered trademarks of the ROCKWOOL Group in USA and ROXUL Inc. in Canada.

ROCKWOOL™, COMFORTBOARD™, FABROCK™, ROXUL SAFE™, ROCKWOOL PLUS™, and AFB evo™ are trademarks of the ROCKWOOL Group in USA and ROXUL Inc. in Canada.

SAFE'n'SOUND® is a registered trademark used under license by Masonite Inc.



#### **ROCKWOOL**

8024 Esquesing Line Milton, ON L9T 6W3 Tél: 1 800 265 6878 rockwool.com