



# **30-year inorganic** roof system

For Standing Seam Metal Roofs

ROCKWOOL<sup>®</sup> is proud to partner with FABRAL<sup>®</sup> metal wall and roof systems to offer a 30-year water tightness and 30-year thermal warranty.

This jointly develop system uses ROCKWOOL TOPROCK<sup>®</sup> DD insulation and the FABRAL<sup>®</sup> POWERSEAM<sup>™</sup> panel system. When combined, this assembly offers best-in-class sound attenuation with a sound transmission class (STC) of 37 and an outdoor indoor transmission class (OITC) of 29. With Standing Seam Metal Roof systems becoming increasingly popular, one of the main areas of concern is rainfall noise. When compared to a similar Polylso insulated roofing assembly, this stone wool system offers superior sound attenuation when tested to ISO 140 part 2, 2010 - Heavy rain 0.4in/hr.

Put your occupant's comfort first by offering superior thermal performance & sound attenuation along with the longevity you expect from a standing seam metal roof system.

\* Performance measurements based on ISO 140 part 2, 2010 – Heavy rain 0.4in/hour. The ROCKWOOL® stone wool assembly tested uses two layers of ROCKWOOL® TOPROCK DD at 50mm and 76.5mm thickness between 50.8 mm FABRAL® 24 gauge standing seam metal roof deck and 38.25mm FABRAL® 22 gauge, Type B, Steel decking with ROCKWOOL® flute fill. This assemblies Rainfall dB rating was 48.3 dB. The Polylso assembly tested uses two layers of GAF® Polyisocyanurate Insulation at 46.9mm and 70.3mm between 50.8 mm FABRAL® 24 gauge standing seam metal roof deck and 38.25mm FABRAL® 22 gauge, Type B, Steel decking with ROCKWOOL® flute fill. This assemblies Rainfall dB rating was 55.7 dB. A lower dB rating is better.

# Superior sound attenuation

Keep occupants comfortable by reducing unwanted outside noise — starting with your roof system

# Why use ROCKWOOL® stone wool insulation?

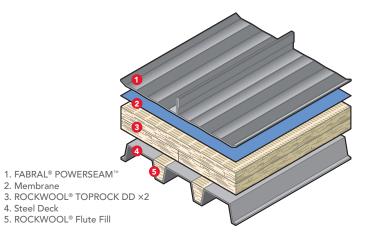
- 30-year thermal warranty
- (100% of published R-value)
- Corrosion resistant (ASTM C 795, ASTM C 665)
- Dimensionally stable
- Linear change 7 days @ 158°F 97%, RH 0.0%
- Will not promote the growth of mould or mildew
- No loss of R-value
- No blowing agents

## **LEED point Qualifiers**

- Complies with STC & OITC ratings based on ANSI S12.60-2010
- Explore strategies to reduce noise 2011 HVAC Application ASHRAE Handbook, Chapter 48, Noise and Vibration Control

### Why use FABRAL® POWERSEAM metal panels?

- 30-year water tightness warranty
- Air Infiltration
  - <.01 cfm/sf @ 20 psf pressure differential per ASTM E 1680
- Water Resistance:
  - No water penetration under 5 gal/hr spray at 20 psf pressure differential per ASTM E 1646
- Static Water Pressure Head Test:
- No leakage up to 6 hours per ASTM E 2140-01
- Panels can have a radius down to 10'
- Panels are 100% recyclable with recycled content of:
- Steel panels approximately 30%
- Aluminum panels approximately 60%
- Copper panels approximately 95%
- Available substrates: Steel, Stainless Steel, Aluminum, Copper, Zinc
- Panels have both floating and fixed clip systems
- Panels have factory applied sealant which allows weather tight warranties over open framing
- Panels available in 12", 16" and 18" widths
- Roofing Systems Certified for Canada
  - UL TGFU7-R9288



	Performance	Test Standard
Thermal performance	R20 @ 75°F mean R24 @ 25°F mean	ASTM C518 (C177)
Sound performance	STC: 37 OITC: 29	ASTM E 90
Rainfall	48.3 dB (ISO 140 part 2, 2010 – Heavy rain 0.4in/hour)	ISO 140 part 2, 2010
Non-combustible	Flame Spread: 0 Smoke Developed: 0	ASTM E84 (UL 723) CAN/ULC S102
Compressive Strength	Top Layer - 20psi (140kPa) @ 10%, 37psi (250kPa) @ 25% Entire Board - 11psi (75kPa) @ 10%, 15psi (105kPa) @ 25% Point Load @ 5 mm Compression - 20psi (205 kPa)	ASTM C165 EN 12430
	30psi (205 kPa)	
Reaction to Moisture	Moisture Sorption - 0.15% Water Absorption - <1.0% Water Vapor Transmission, Desiccant Method - 2330 ng/Pa.s.m <sup>2</sup> (41 perm)	ASTM C1104 ASTM C209 ASTM E96

Test Standard	Specification	
UL-Approved Rated Fire Roofs:	1, 1 ½ and 2 hour fire-rated assemblies per UL construction numbers P225, P510, P514, P516, P701 and P715	
UL90 Rating	<ul> <li>24 ga. steel or 0.032" 18" aluminum panels with stainless steel clips installed over 16 ga. purlins (Grade 50 steel) spaced at maximum of 5'-0" o.c.</li> <li>24 ga. steel or 0.032" 18" Aluminum panels with stainless steel clips at maximum of 3'-0" o.c. installed over Loadmaster Roof Deck System.</li> <li>24. ga. steel or 0.032" 18" Aluminum panels with stainless steel clips spaced a maximum of 45-0" o.c. installed over 22 ga. metal deck and up to 6" of rigid insulation and bearing plates to support clips.</li> <li>24 ga. steel or 0.032" 18" aluminum panels with stainless steel clips spaced at maximum of 2'-0" o.c. over ½" plywood decking</li> </ul>	
ASTM 1592	<b>24 ga. 18" Steel Panels:</b> • 38.55 psf @ 5', 107.88 psf @ 15" <b>22 ga 18" Steel Panels:</b> • 57.76 psf @ 5', 122.97 psf @ 15" <b>.040" 18" Aluminum Panels:</b> • 52.12 psf @ 4', 157.70 psf @ 1'	
Factory Mutual	I-180 22 ga 18" Steel Panels @ 2.5' I-120 24 ga 18" Steel Panels @2.5' I-120 22 ga 18" Steel Panels @ 5' I-90 24 ga 18" Steel Panels @3'-4" I-75 22 ga 18" Steel Panels @5' I-60 24 ga 18" Steel Panels @ 5'	

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