



PANEL WITH MINERAL FIBER CORE

THE NOROC® ARCHITECTURAL PANEL IS A FIRE-RATED, INSULATED PANEL DESIGNED FOR HIGHLY ENERGY EFFICIENT BUILDINGS. THE CORE COMPRISES A NONCOMBUSTIBLE, RIGID STONE-FIBER INSULATION BOARD MADE FROM NATURAL BASALT ROCK AND RECYCLED SLAG. THE CORE'S NATURAL INORGANIC CONTENT YIELDS AN ENVIRONMENTALLY FRIENDLY, FULLY RECYCLABLE PANEL.

SPECIFICATIONS

NOROC- L


DESCRIPTION	<ul style="list-style-type: none"> > Vertical mounting > Joint with concealed fasteners > Different architectural arrangements > Applications: exterior walls and interior partitions 				
WIDTH ⁽¹⁾	42½ in.				
LENGTH	7 to 40 ft				
THICKNESS	4, 5, 6 and 8 in.				
R-VALUE	R4 per in.				
STEEL INNER FACE	<ul style="list-style-type: none"> > 0.019 in. (0.483 mm) standard thickness – 26 Ga > 0.023 in. (0.584 mm) optional – 24 Ga 				
STEEL OUTER FACE	<ul style="list-style-type: none"> > 0.019 in. (0.483 mm) standard thickness – 26 Ga > 0.0285 in. (0.724 mm) optional – 22 Ga 				
JOINTS	Double tongue and groove interlocking with integrated pressure equalized rainscreen				
WEIGHT ⁽²⁾⁽³⁾	Thickness (in)	4	5	6	8
	Weight (lbs/ft ²)	4.62	5.33	6.04	7.25


(1) The final module width may change due to variations in fabrication and installation. We do not recommend designing a panel arrangement in which the module dimension plays a critical role. (2) Panel weight for a Noroc-L 42 1/2 wide panel. (3) Data calculated using 0.019 in. thick steel and stone fiber with a density of 8.50 lb/ft³.


APPLICATIONS

In addition to resisting fire and meeting hygienic requirements, Noroc products offer several applications: industrial or commercial buildings, cold storage, sports centers and more.

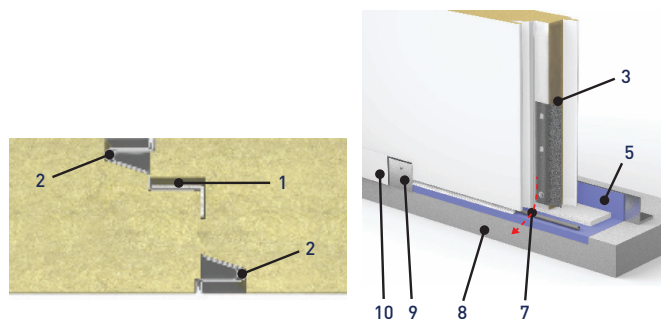
FEATURES / BENEFITS

- 
 - > Exclusive and superior fastening system
 - > Wider girt spacing reduces costs
 - > Fast, simple & economical installation

- 
 - > The materials are environmentally friendly, nontoxic & energy efficient
 - > Can contribute to obtaining LEED certification for a project
 - > Stone fiber has an ozone-depletion potential (ODP) of zero
 - > Noncombustible building materials with excellent fire resistant properties

- 
 - > No cavities, moisture penetration, thermal bridges, risk of interstitial condensation, or lack of insulation
 - > Noroc® pressure-equalized rainscreen joint ensures that the building envelope is well sealed
 - > Factory-applied butyl joint sealer ensures maximum seal

PRESSURE-EQUALIZED RAINSCREEN JOINT



- | | | |
|-------------------|--------------------|---------------|
| 1 AIR CAVITY | 4 STRUCTURAL ANGLE | 7 WEEP HOLE |
| 2 BUTYL | 5 VAPOR BARRIER | 8 FOUNDATION |
| 3 NOROC® FASTENER | 6 POLYETHYLENE | 9 TRIM HANGER |
| | | 10 TRIM |

**MAIN PHYSICAL
PROPERTIES OF
ROCK WOOL**

PROPERTY	METHOD	RESULTS
Surface burning characteristics	ASTM E84 (UL723)	FS=0, SDI=0
Test for non-combustibility	CAN4-S-114	Non combustible
Moisture absorption (96-h exposure to high humidity atmosphere)	ASTM C1104	0.05% by weight
Linear shrinkage	ASTM C356	0.19%
Thermal resistance (R-value/inch at 75°F)	ASTM C518 (C177)	4.0 pi ² °F h/BTU/in. of thickness
Corrosiveness	ASTM C665	Passed
Stainless-Steel Stress Corrosion specification as per test method C871 and C692: Nuclear regulatory Commission, Reg. Guide #1.36:US Military Specifications MIL-I-24244 (all versions, including B and C)	ASTM C795	Conforms
Density (lb/ft ³)		8.5 lb/ft ³
Compressive strength (at 10%) (4 in. panels)	ASTM C165	6.64 PSI (45.8 KPA)

TESTS

	PROCEDURE	TITLE	RESULTS
FIRE CANADA	CAN/ULC-S101	Fire endurance tests of building construction and materials	4 in. = 45 min 5 in. = 60min 6 in. = 120 min 8 in. = 180 min (4)
	CAN/ULC-S102	Surface burning characteristics of building materials and assemblies	Flame spread < 25 Smoke developed < 45
	CAN/ULC-S126	Standard method of test for fire spread under roof-deck assemblies	Test requirements have been met
FIRE US	ASTM E84	Surface burning characteristics of building materials	Flame spread <25 Smoke developed <450
STRUCTURAL	ASTM E72	Strength tests of panels for building construction	See load tables
AIR INFILTRATION	ASTM E283	Rate of air leakage through curtain walls under specified pressure differences	Test requirements have been met
	ASTM E330	Structural performance of exterior walls by uniform static air pressure difference	Test requirements have been met
THERMAL PERFORMANCE	ASTM C518	Steady-state thermal transmission properties by means of heat-flow meter apparatus	4.0 ft ² °F h/BTU/in. of thickness
WATER INFILTRATION	ASTM E331	Water penetration of exterior walls by uniform static air pressure differences	Test requirements have been met
	AAMA 501.1	Water penetration of exterior walls by dynamic air pressure difference	Test requirements have been met



(4) See detail ROC-IC-7.04 for installation procedures for interior partition use.