






# PANEL WITH POLYISOCYANURATE (POLYURETHANE) CORE

NOREX® ARCHITECTURAL PANELS ARE HIGH-ENERGY-EFFICIENT INSULATED PANELS DESIGNED FOR BUILDING ENVELOPES.

SPECIFICATIONS




	NOREX-H	NOREX-L	NOREX-S			
DESCRIPTION	<ul style="list-style-type: none"> <li>&gt; Horizontal &amp; vertical mounting</li> <li>&gt; Joint with concealed fasteners</li> <li>&gt; Deep fluting 3/4 in. (19mm) deep and either 3/8 in. (9.5mm) or 3/4 inch (19mm) wide</li> <li>&gt; Different architectural arrangements</li> <li>&gt; Applications: outdoor wall</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Vertical mounting</li> <li>&gt; Joint with concealed fasteners</li> <li>&gt; Applications: outdoor wall, indoor ceilings</li> <li>&gt; Pressure Equalized Rainscreen Joint</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Vertical mounting with straight joint</li> <li>&gt; Applications: interior partitions</li> </ul>			
WIDTH <sup>(1)(2)</sup>	24, 30, 36 or 41½ in.	24, 30, 36 or 42½ in.	44 in.			
THICKNESS	2, 3 and 4 in.	2, 3, 4, 5 and 6 in.	2, 3, 4 and 5 in.			
R-VALUE	R 7.41/in. (ASTM C-518 13°C- 35°C)					
LENGTH	7 to 52ft. 3in.					
STEEL INNER FACE	<ul style="list-style-type: none"> <li>&gt; 0.019 in. (0,483 mm) standard thickness – 26 Ga</li> <li>&gt; 0.023 in. (0,584 mm) optional – 24 Ga</li> </ul>					
STEEL OUTER FACE	0.0285 in. (0.724mm) thickness – 22 Ga	<ul style="list-style-type: none"> <li>&gt; 0.019 in. (0.483 mm) standard thickness – 26 Ga</li> <li>&gt; 0.0285 in. (0.724 mm) optional – 22 Ga</li> </ul>				
JOINTS						
WEIGHT <sup>(3)(4)</sup>	Thickness (inch)	2	3	4	5	6
	Weight (lbs/ft <sup>2</sup> )	2.22	2.44	2.66	2.88	3.11

(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 width plays a critical role. (2) 2 in. panels are not available in 24 and 30 in. width. (3) Panel weight for a Norex-L 42½ in. wide panel. (4) Calculations based on 26 gauge steel on both sides and an insulated density of 2.65.

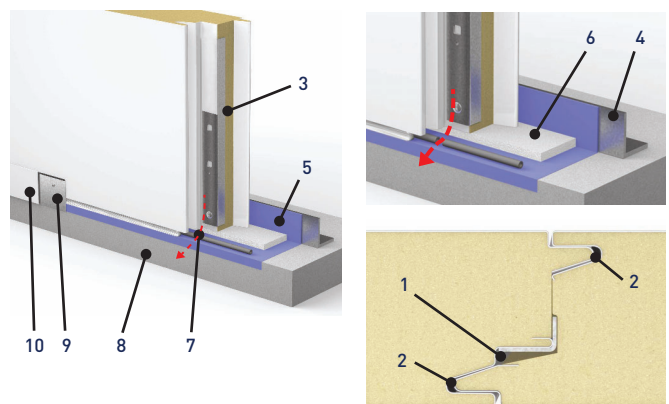
## APPLICATIONS

Norex panels can be found in a variety of applications including industrial and commercial buildings, Cold-storage and controlled-environment buildings, Sports centers, Interior partitions and Suspended ceilings with limited load-bearing capacity.

## FEATURES / BENEFITS

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  - > Exclusive and superior fastening system
  - > Wider girt spacing reduces costs
  - > Fast, simple & economical installation
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  - > The materials are environmentally friendly and nontoxic
  - > Can contribute to obtaining LEED certification for a project
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  - > No cavities, moisture penetration, thermal bridges, risk of interstitial condensation, or lack of insulation
  - > Norex-L 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 NOREX® FASTENER | 6 POLYETHYLENE     | 9 TRIM HANGER |
|                   |                    | 10 TRIM       |

**MAIN PHYSICAL  
PROPERTIES OF  
POLYISOCYANURATE**

PROPERTY	METHOD	RESULTS
R Value/in. of thickness	ASTM C518	7.41
Density (lb/ft <sup>3</sup> )	ASTM D1622	Density (pcf) 2.29 Std dev 0.01
Compressive strength (psi)	ASTMD1621	13.7 PSI (3 in. Thick Sample)
Flextural strength (psi)	ASTM C203	25–30
Permeability to water vapor (perms/in.)	ASTM E96/E96M	< 2,0
Water absorption (max.)	ASTM D2842	< 1.5%
Dimensional stability (max.)	ASTM 2126	Dimensional Stability Std dev 0.2 7 day Vol Chg @ 70°C/97% R.H 4.3
Linear thermal dilation coefficient (in./in./°F)	ASTM D696	35.47 x 10 <sup>-6</sup>

**TESTS**

	PROCEDURE	TITLE	RESULTS
<b>FIRE CANADA</b>	CAN/ULC-S101	Fire endurance tests of building construction and materials	Meets 10 minutes stay-in-place requirements
	CAN/ULC-S102	Surface burning characteristics of building materials and assemblies	Meets the National Building Code of Canada requirements
	CAN/ULC-S134	Fire test of exterior wall assemblies	Complies with the fire-spread and heat-flux limitations required by the National Building Code of Canada
	CAN/ULC-S138	Fire growth of insulated building panels in a full-scale room configuration	Test requirements have been met
	S-126	Fire spread under roof deck assembly	Test requirements have been met
<b>FIRE US</b>	ASTM E84	Surface burning characteristics of building materials	Flame spread <25 Smoke developed <450
	FM 4880	Class 1 fire rating of insulated wall, ceiling and roof panels	Product approved
<b>STRUCTURAL</b>	ASTM E72	Deflexion tests of panels for building construction	See Load Chart
	FM 4881	Class 1 exterior wall structural performance	See FM Wall load Chart
<b>AIR INFILTRATION</b>	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
<b>THERMAL PERFORMANCE</b>	ASTM C518	Steady-state thermal transmission properties by means of heat-flow meter apparatus	R 7.41- Value 35/13°C k factor (W/m <sup>2</sup> - K/m) 19.5 R 769- Value 18/-4°C k factor (W/m <sup>2</sup> - K/m) 18.8
	CAN/ULC-S770-09	Long term thermal resistance	Testing requirements have been met per CAN/ULC-S704-11
<b>WATER INFILTRATION</b>	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	Test requirements have been met

