

POLYROC®

Concrete-Finished Insulation Panel

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DESCRIPTION

Polyroc® wall panels are prefinished exterior insulation panels made of fine granular concrete, designed to be installed on a building's perimeter foundation walls—specifically on short walls (maximum ground height: 6 ft [1.8 m]). They can be used in both new construction and renovation contexts, as well as in commercial, residential, industrial, and institutional projects.

The panels are lightweight and easy to handle, weighing 15.5 lb (7 kg). They can be easily cut using a masonry saw blade. Each panel is cut square on the sides and grooved at the top and bottom to allow for anchor insertion. This product is reusable and can be removed and reinstalled at a later time.



Made in Canada



PRODUCT FEATURES

APPLICATIONS

Residential, commercial, industrial and institutional construction.

Effective insulation and a durable finish in a single step.

Designed for use above and below ground level and above ground level, against concrete blocks.

Easily dismantled and reused in expansion expansion projects.

Walls may require an air and/or vapour barrier, and foundations must be properly waterproofed below ground level.



TECHNICAL DATA SHEET



EPS Physical Properties	ASTM Test Method	ULC S701 Type 2
Thermal resistance 1 in (25mm) hr·°F·pi²/BTU (m²·°C/W)	C-518	Min : 4,0 Min : (0,70)
Water vapour permeability US Perm. (ng/Pa·s·m²)	E-96	Max : 3,5 Max : (200)
Dimensional stability (%)	D-2126	Max : 1,5
Flexural strength lb/in² (kPa)	C-203	Min : 35 Min : (240)
Water absorption (%)	D-2842	Max : 4,0
Compressive properties lb/in² (kPa)	D-1621	Min : 16 Min : (110)
Limiting oxygen index (%)	D-2863	Min : 24
The maximum continuous service temperature °F (°C) is 167 (75). The maximum intermittent service temperature °F (°C) is 180 (82,2). The coefficient of thermal expansion in/in/°F (mm/mm/°C) is 3,5 x 10-5 (6 x 10-5c-1) as per ASTM D-696 method.		

AVAILABLE SIZES

21" X 48" (534mm x 1220mm)

Panel thicknesses:

2 1/4" (58mm)

2 3/4" (70mm)

3 1/4" (83mm)

or 4" (102mm)

Polystyrene thicknesses:

2" (51mm) R-8

2 1/2" (64mm) R-10

3" (77mm) R-12

3 3/4" (95mm) R-15

Other dimensions and densities are available on request.

ISO 9001:2015

Certified quality management system ISO 9001:2015.



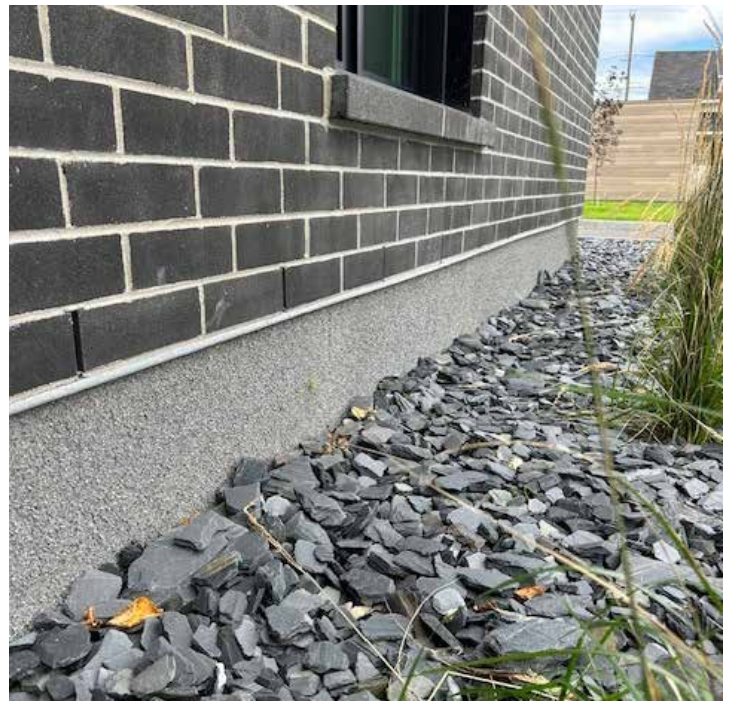
The expanded polystyrene used to manufacture POLYROC® is Intertek certified (ETL Listed) in accordance with **ULC S701**.

Warning

Flammable: interior applications require a protective barrier.

All installations must comply with the National Building Code. The information and suggestions contained in this brochure are provided solely for informational purposes and are offered in a spirit of collaboration. To our knowledge, we believe the information presented can be considered reliable. This brochure shall not constitute, in any case, a REPRESENTATION or a WARRANTY either EXPRESS or IMPLIED, either in terms of the information, data and suggestions included, or with respect to the absence or violation of any patent or other rights of third parties. Any proposed applications must be evaluated beforehand according to the application context and must, as a result, be adapted or modified to suit local conditions and materials if necessary.

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Installation guide

LAMINATED INSULATION PANELS WITH
FINE GRANULAR CONCRETE FINISH

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The panels are lightweight and easy to handle, weighing 15.5 lb (7 kg). They cut easily with a masonry saw blade. Each panel is cut square on the sides and grooved on the top and bottom to accommodate anchors. This product is reusable, so it can be removed and reinstalled at a later date.

PANEL DIMENSIONS

Standard thicknesses: 2 ¼ in, 2 ¾ in, 3 ¼ in and 4 in.

Width: 21 in (534 mm)

Length: 48 in (1220 mm)

POLYSTYRENE THICKNESSES

2 in (51 mm) R-8

2 ½ in (64 mm) R-10

3 in (77 mm) R-12

3 ¾ in (95 mm) R-15

Custom insulation panel thickness is available

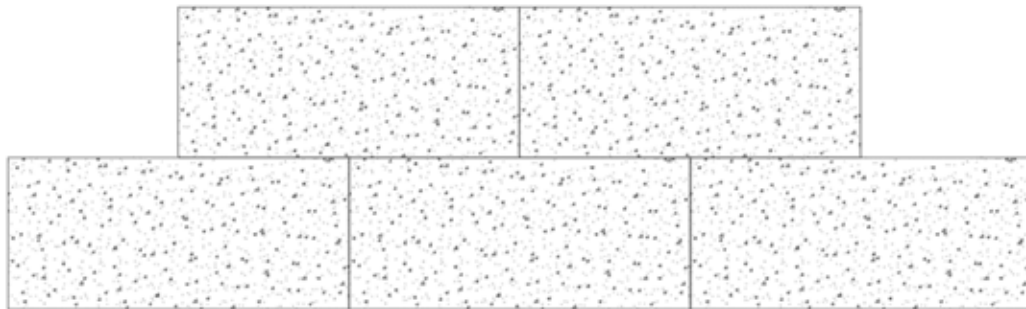
CONCRETE THICKNESS

¼ in (7 mm), factory-applied with a gray natural stone finish.

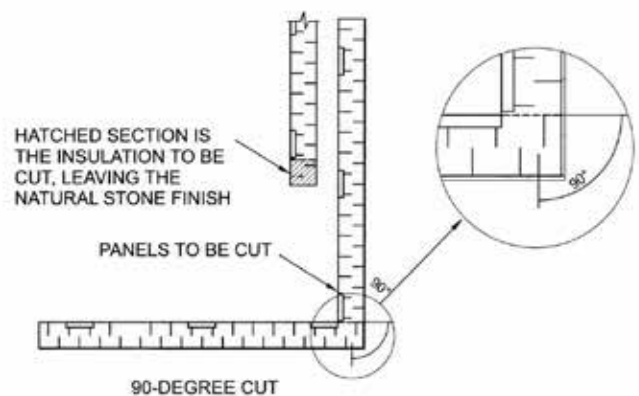
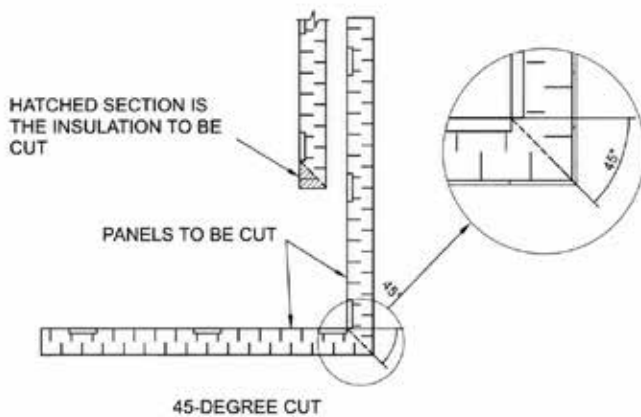
WORK EXECUTION

Panels can be installed horizontally on low walls. It is important to eliminate any masonry irregularities or uneven surfaces on foundations or exterior walls before installation. The polystyrene panels can be shaped so that they lie flat against the walls. This will reduce or prevent cracks caused by uneven wall surfaces. An air and/or vapour barrier can be pre-installed on walls and foundations, which must be properly waterproofed below grade.

Panels should be installed in such a way that the joints are not aligned, e.g. brick-style.

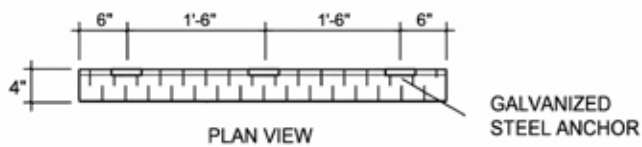


Corners can be cut at 45° or 90°, removing an edge of insulation.



HARDWARE

Panels are installed using specially designed galvanized steel mounting brackets. These fasteners are supplied with the panels. Three anchors must be installed 6" (15 mm) from the end and 18" (46 cm) center-to-center. These anchors are fastened with Ucan Scru-it or equivalent concrete screws. The screw must be inserted into the structure at least ¼" (7 mm) deep.



FIRE PROTECTION

Concrete-laminated insulation boards are combustible: protect them from sources of high heat.

DELIVERY

Panels are shipped on pallets. They are protected by a protective membrane, so they can be stored indoors or outdoors.

