



Installation guide

LAMINATED INSULATION BOARD WITH
REFLECTIVE VAPOUR BARRIER

Polyform

INSULATING SOLUTIONS

Product Description

NOVOFOIL® is a vapour barrier material consisting of an expanded polystyrene panel and an aluminium membrane that reduces the passage of water vapour. NOVOFOIL® must be installed on the warm side of the foundation walls and the reflective membrane must be visible from the inside of the insulated room.

Panel Dimensions

Thickness: 3 in (76 mm)

Width: 48 in (1220 mm)

Length: 96 in (2440 mm) and 100 in (2540 mm)

Resistances & Standards

Thermal resistance

According to C-518: 1 in (25 mm) R 3,87 (RSI 0,68)

According to C-1363: 3 in (76 mm) R 17,11 (RSI 3,013)

To consider the thermal contribution of the reflective effect, the product must be installed in accordance with the specified assembly and instructions based on a laboratory test that meets the ASTM-1363 standard. Please refer to the Technical Data Sheet – R-Value depending on the assembly.

Compressive strength

According to ASTM D-1621: 13 lb/in² (95 kPa)

Flexural strength

According to ASTM C-203: 61 psi (414 kPa)

Water vapour permeability

According to ASTM E-96: 3,67 perm (208 ng/Pa. s. m)

Water absorption

According to ASTM D-2842: 4.1%

Banks

Rebated along the length of the panel.

Work Execution

Foundation Inspection

Ensure that the foundation walls are watertight before starting the work.

Ensure that work to be done by other trades is completed before installing insulation.

Ensure that foundation walls are straight, smooth and dry, and that they are free of snow, ice, frost, dust and debris.

Do not begin work until the above deficiencies have been corrected.

Installation of the panels

Wall Assembly 1 (Installation with 1x3 Vertical Furring)

Step 1

Mechanically fasten 3 in (76 mm) NOVOFOIL® rigid insulation panels to the interior side of 8 in (200 mm) poured concrete foundation walls. The aluminum membrane must face the interior of the basement. Install ¾ in x 2½ in (19 x 64 mm) perimeter wood furring strips around the walls and openings. Furring strips must also be installed vertically at 24 in (610 mm) on center.

Step 2

Seal all panel joints and any cutouts made for electrical boxes or wires (if applicable) using 2 in (50 mm) wide vapor barrier tape to ensure airtightness. Also seal all perimeter joints at the floor and around openings such as doors and windows.

Step 3

Ensure air gaps are sealed around the entire perimeter—air leakage must be blocked. Install electrical wires between the NOVOFOIL® panels and the gypsum panels. For electrical installations, refer to the current Québec Master Electricians' Code.

Step 4

Install gypsum panels by screwing them into the wood furring strips.

Wall Assembly 2 (Installation with 2x3 Vertical Furring)

Step 1

Mechanically fasten 3 in (76 mm) NOVOFOIL® rigid insulation panels to the interior side of 8 in (200 mm) poured concrete foundation walls. The aluminum membrane must face the interior of the basement. Install 1½ in x 2½ in (38 x 64 mm) perimeter wood furring strips around the walls and openings. Furring strips must also be installed vertically at 24 in (610 mm) on center.

Step 2

Seal all panel joints and any cutouts made for electrical boxes or wires (if applicable) using 2 in (50 mm) wide vapor barrier tape to ensure vapor tightness. Also seal all perimeter joints at the floor and around openings such as doors and windows.

Step 3

Ensure that all air gaps are sealed around the entire perimeter—in other words, make sure to block any air leakage. Install electrical wires between the NOVOFOIL® panels and the drywall panels. For electrical installations, refer to the current Québec Master Electricians' Code.

Step 4

Install drywall panels by screwing them into the wood furring strips.

Wall Assembly 3 (Installation with Double 1x3 Furring)

Step 1

Mechanically fasten 3 in (76 mm) NOVOFOIL® rigid insulation panels to the interior side of 8 in (200 mm) poured concrete foundation walls. The aluminum membrane must face the interior of the basement. Install ¾ in x 2½ in (19 x 64 mm) perimeter wood furring strips around the walls and openings. Furring strips must also be installed vertically at 24 in (610 mm) on center and horizontally at 16 in (406 mm) on center.

Step 2

Seal all panel joints and any cutouts made for electrical boxes or wires (if applicable) using 2 in (50 mm) wide vapor barrier tape to ensure vapor tightness. Also seal all perimeter joints at the floor and around openings such as doors and windows.

Step 3

Ensure that all air gaps are sealed around the entire perimeter. In other words, make sure to block any air leaks. Install electrical wires between the NOVOFOIL® panels and the drywall panels. For electrical installations, please refer to the current Québec Master Electricians' Code.

Step 4

Install the drywall panels by screwing them into the wood furring strips.

Recommendations

Ensure that the rim joists are properly sealed against air infiltration and well insulated to prevent moisture issues.

Insulate the entire height of the foundation walls.

Provide a clearance of ¼ in (6 mm) to ½ in (12 mm) between the floor and the furring strips.

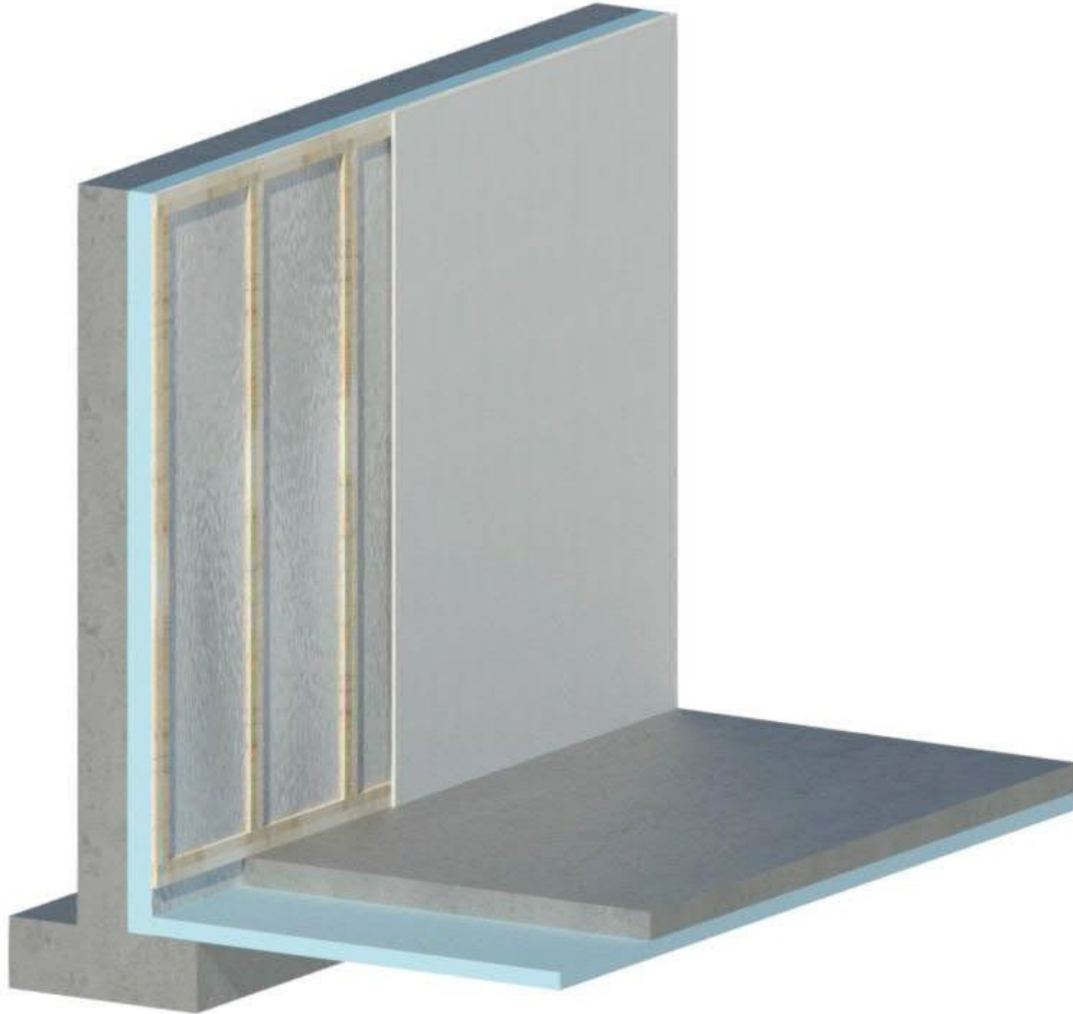
Warning

Ensure that the rim joists are properly sealed against air infiltration and well insulated to prevent moisture issues.

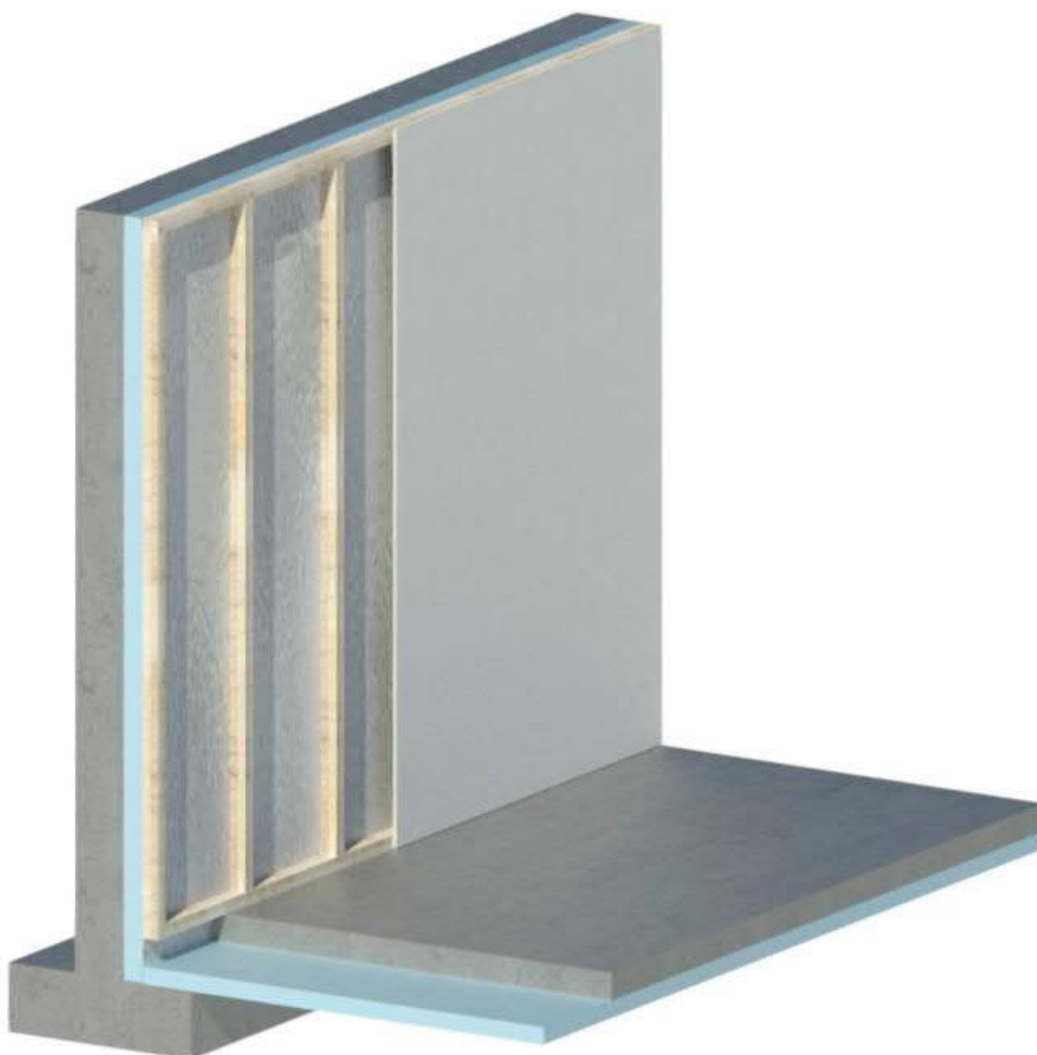
Insulate the entire height of the foundation walls.

Provide a clearance of ¼ in (6 mm) to ½ in (12 mm) between the floor and the furring strips.

Wall Assembly 1 (R-18.40)



Wall Assembly 2 (R-18.91)



Wall Assembly 3 (R-18.40)

