

UNIFOAM®
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insert plus

Three-Groove Insulation Panel

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DESCRIPTION

Custom-cut insulation board with three grooves for wood furring strips.

- Type 1 density
Other densities are available on request
- Square cut boards
- Many dimensions for insulation
- **Unifoam Insert Plus includes furring strips.**



Made in Canada



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PRODUCT FEATURES

APPLICATIONS

Residential, commercial, industrial and institutional construction

- Insulation for interior and exterior walls
- Insulation for interior foundation walls
- Insulation under concrete slabs
- Insulation for roofs
- Insulation for ceilings

ADVANTAGES

Superior Performance

Enhanced installation efficiency through pre-cut grooves for wood furring strips

Precisely meets project requirements

Lightweight and easy to handle

Test results exceed ULC requirements

Permanent insulation value

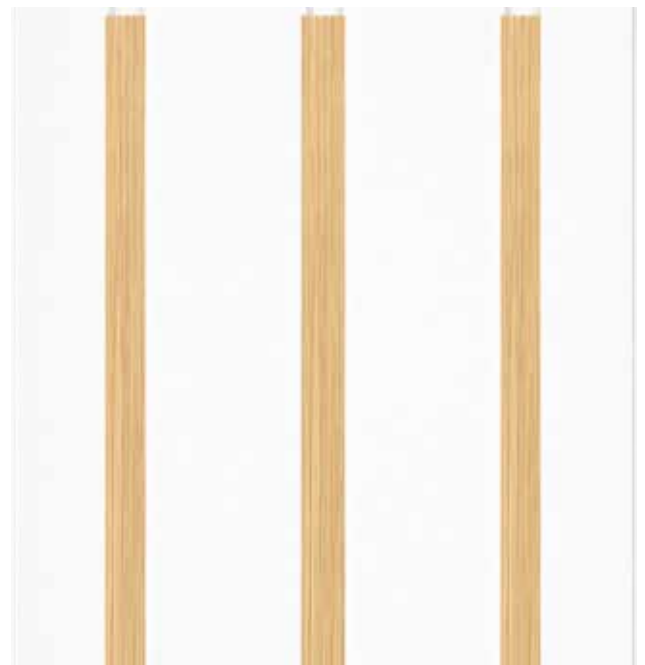
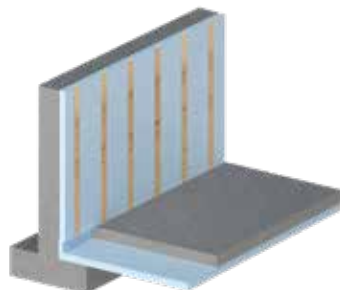
Energy savings through the elimination of thermal bridges

100% recyclable

Can be handled without health hazards and is non-irritating to skin

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With furring strips



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TECHNICAL DATA SHEET



EPS Physical Properties	ASTM Test Method	ULC S701 Type 1
Thermal resistance 1 in (25mm) hr·°F·ft ² /BTU (m ² ·°C/W)	C-518	Min : 3,7 Min : (0,65)
Water vapour permeability US Perm. (ng/Pa·s·m ²)	E-96	Max : 5,25 Max : (300)
Dimensional stability (%)	D-2126	Max : 1,5
Flexural strength lb/in ² (kPa)	C-203	Min : 25 Min : (170)
Water absorption (%)	D-2842	Max : 6,0
Compressive properties lb/in ² (kPa)	D-1621	Min : 10 Min : (70)
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 ⁻⁵ c-1) as per ASTM D-696 method.		

AVAILABLE SIZES

4 ft x 8 ft (1219mm x 2438mm) and 4 ft x 9 ft (1219mm x 2743mm) in thickness of :

2 5/8 in (67mm)

3 7/8 in (98mm)

Other dimensions and densities available upon request.

Unifoam Insert Plus includes furring strips.

ISO 9001:2015

Certified quality management system ISO 9001:2015.

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.



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

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Installation guide

INSULATION PANEL HOT-WIRE CUT FOR
WOOD FURRING INSERTION

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PRODUCT DESCRIPTION

UNIFOAM INSERT[®] is an expanded polystyrene insulation board cut with a hot wire to allow the insertion of 3" wood furring strips at 16" (406 mm) on center. UNIFOAM INSERT[®] insulation boards are ideal for insulating: interior foundation walls, interior and exterior walls, screw floors, flat and cathedral ceilings. It is 100% recyclable and contains recycled material.

PANEL DIMENSIONS

Thickness: 2 5/8 in (67 mm), 3 7/8 in (98 mm)

Width: 48 in (1220 mm)

Length: 96 in (2440 mm)

PROPERTIES & STANDARDS

Thermal resistance

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

Compressive strength

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

Flexural strength

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

Water vapour permeability

According to the ASTM E-96: 3,67 perm. (208 ng/Pa. s. m²)

Water absorption

According to ASTM D-2842: 4.1%

Banks

Overlapped and interlocked 1 1/2 in (38 mm) on all 4 sides.

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EXECUTION OF THE WORK

Foundation wall

UNIFOAM INSERT[®] must be installed on a flat foundation wall and free of any concrete mounds. It is installed directly on the concrete wall. To fix the panels, simply drill 3 holes at a distance of 24" between each one, through each piece of wood to the concrete and then screw with screws or concrete nails. Use nails or screws, at least one inch larger than the thickness of the insulation chosen. Do not stick.

For each wall, the starter sheet should be cut to within 2 5/8" (67 mm) or 3 7/8" (98 mm) of the wood furring (depending on the thickness of the product installed).

Before covering an entire wall, make sure you have installed a starter sheet on the next wall.

For the last sheet of each wall, leave 1/2" (13 mm) of headspace for low-expansion spray foam.

For the inside corners, recover the loss by using it as a starting sheet for the next corner. For the outside corners, glue a metal corner after installing the drywall or add a strip of sheet metal (this must be bent at 90 degrees and wide enough to be nailed to the existing furring blocks).

Repeat these steps for the other walls. Seal 1/2" (13 mm) gaps in all corners and other visible openings with low-expansion spray foam.

For electricity, enclose electrical boxes in insulation and secure to wood furring or insulation with low-expansion spray foam. Install electrical wiring by digging a "V" shaped corridor in the insulation with a thin-bladed knife. Confirm with your electrician and the building code standards in effect if protection must be installed.

For windows, provide a solid outline (wood fur) for the installation of wide mouldings.

When installing gypsum board, start at the corner and install the left panel before the right panel so that the right panel holds the left panel. Screw the right panel into the corner wood fur.

IMPORTANT: Insulate the perimeter of the insulated wall and perforations in the panel insulation (e.g., around electrical boxes, windows, etc.) by filling the joints with low-expansion polyurethane foam.

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Floor

Glue the UNIFOAM INSERT[®] insulation boards to the concrete to prevent displacement during installation (optional). Use a small amount of solvent-free glue.

Cross the joints of the plywood with the UNIFOAM INSERT[®] insulation boards. Screw the plywood onto the wood furring every 12" (305 mm) apart.

Apply the chosen surface finish. For all floor finishing installations, please refer to the methods recommended by floor covering experts.

IMPORTANT: Floors with a slope for the drain may require some preparation.

Ceiling

When using UNIFOAM INSERT[®] panels for a flat or cathedral ceiling, it is advisable to install batt, roll or loose insulation (cellulose, fiberglass or mineral) between the attic joists. Once the UNIFOAM INSERT[®] panels have been installed, it is important to cover them with a vapour barrier (always on the warm side) and then proceed with the continuous installation of gypsum panels, before the installation of the divisions.

The successive layers:

1. Mat, roll or loose insulation
2. UNIFOAM INSERT panels
3. Vapour barrier
4. Gypsum board installed continuously

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FOUNDATION WALL INSULATION



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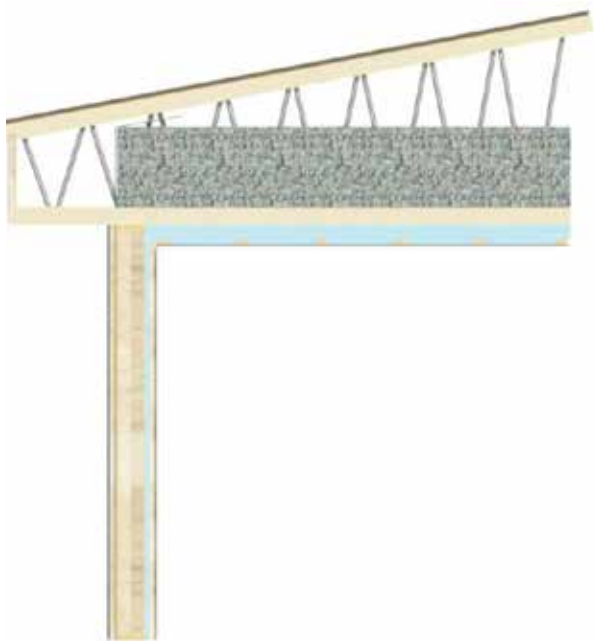
FLOOR INSULATION



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CEILING INSULATION (FLAT OR CATHEDRAL)

Flat ceiling



Cathedral ceiling

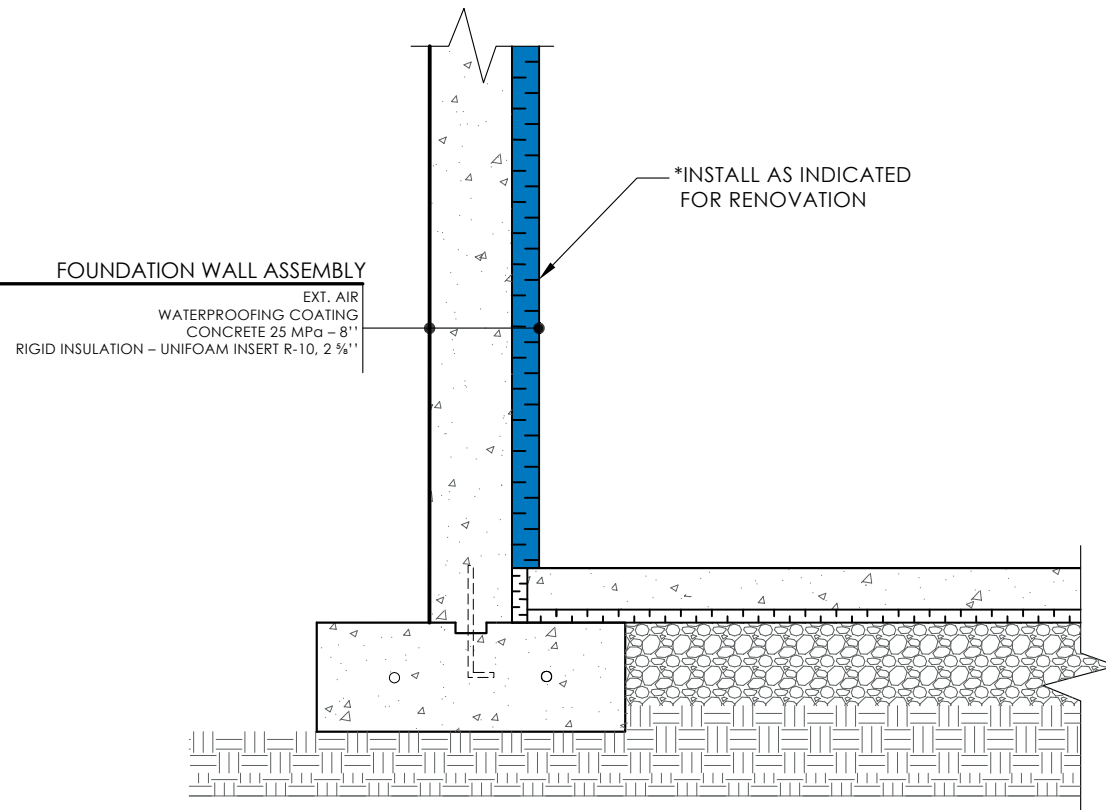
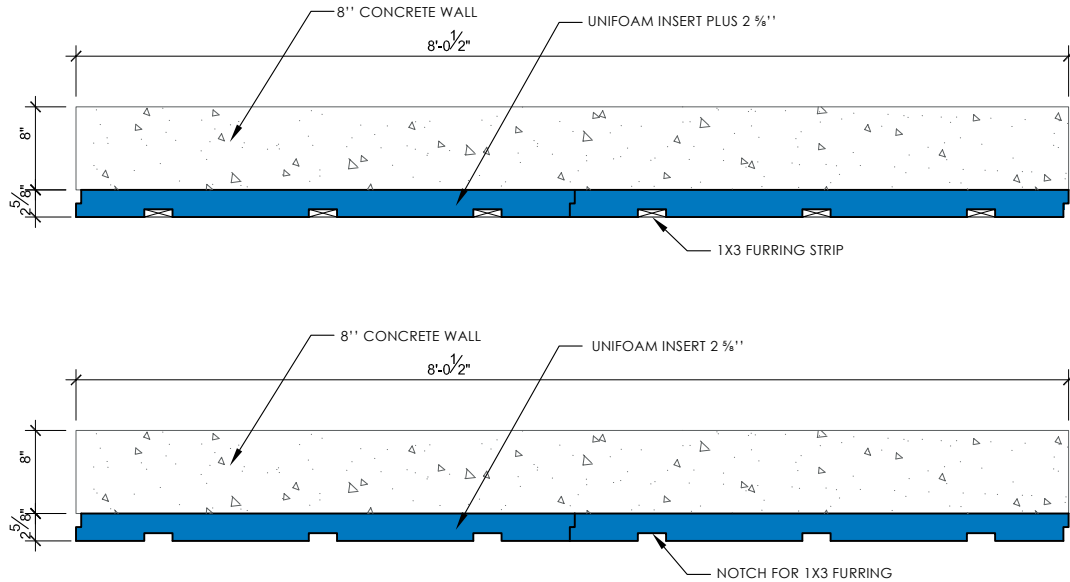


GUI-SH-1605

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Residential



Polyform

855 Bd Industriel
Granby, QC J2J 1A6

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DESCRIPTION FOUNDATION WALL SECTION
INTERIOR INSULATION PANELS

PRODUCT UNIFOAM INSERT ET INSERT PLUS 2 5/8"

SCALE 3/4"=1'-0"

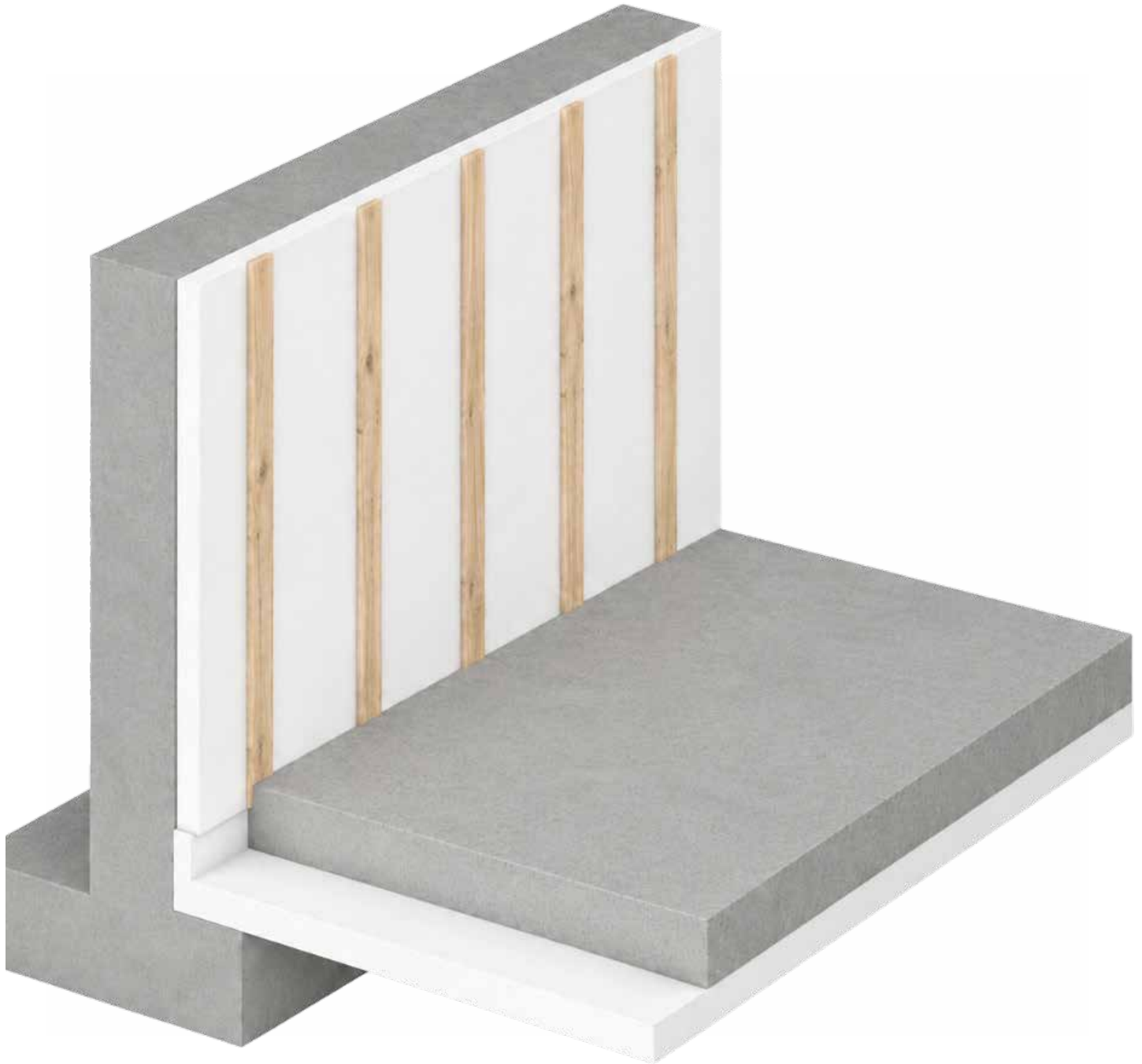
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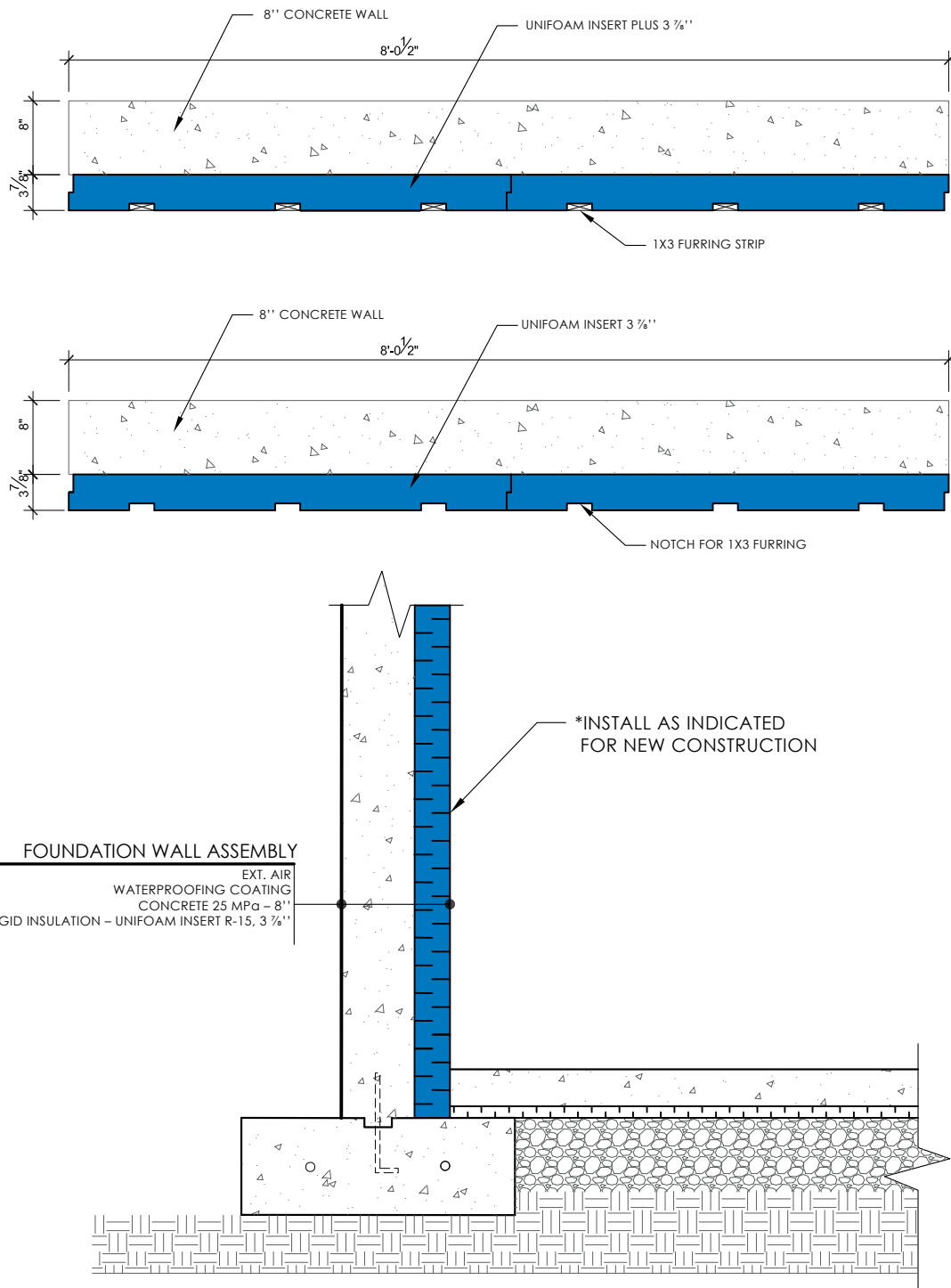
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DESCRIPTION FOUNDATION WALL SECTION
INTERIOR INSULATION PANELS

PRODUCT UNIFOAM INSERT ET INSERT PLUS 3 3/8"

SCALE 3/4"=1'-0"

DATE 02/09/2021

NO. 1.06

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