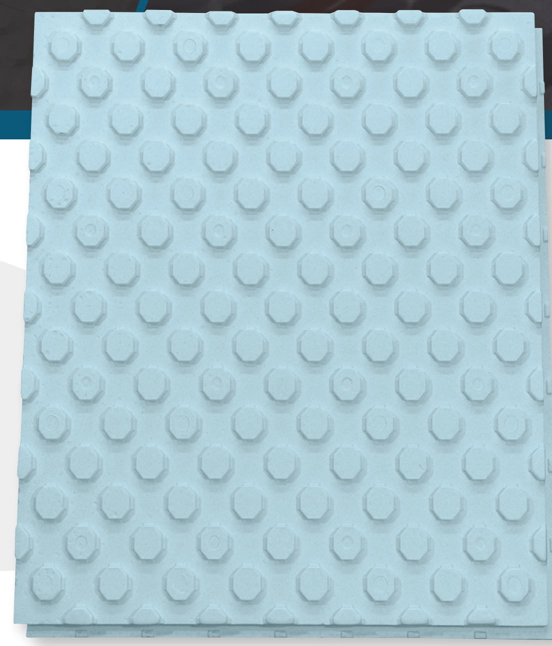
HYDROFOAM®

The easy insulation for radiant in-floor heating.



Product Overview

Nudura offers a complete range of expanded polystyrene (EPS) insulation products to use in your renovation and construction projects.

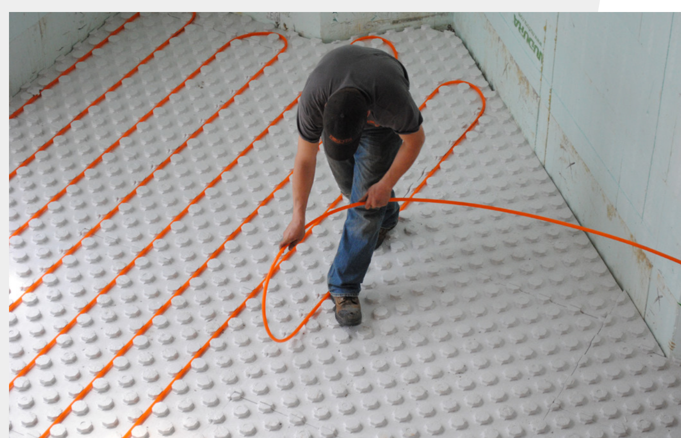
HYDROFOAM® is a 4 ft x 4 ft (1219mm x 1219mm) molded insulation board with a multi-directional anchoring design for radiant heat systems. HYDROFOAM is a 2-in-1 product to insulate under concrete slabs and offers efficient installation of radiant heat tubing. HYDROFOAM is overlapped and interlocked on all four sides, allowing for faster installation times and a secure fit. It comes in thicknesses of 2 1/2in (64mm) - R-10 (RSI 1.76, U-value 0.57), 3in (76mm) - R-12.6 (RSI 2.22, U-value 0.45), 4 in (100mm) - R-16 (RSI 2.82, U-value 0.35).

HYDROFOAM nano is available for existing areas such as concrete slabs and plywood floors and comes in 3/8in (10mm)- R-1.6 thickness (RSI 0.28, U-Value 3.55).

Features & Benefits

- 2-in-1 product: insulates concrete slabs and supports pipes
- Multi-directional anchoring
- Compatible with 1/2in (13mm) and 5/8in (16mm) diameter radiant tubing
- Radiant tube spacing is based on 3in (76mm) increments
- Shiplap/interlocking on all 4 sides
- Eco-friendly- No CFCs or HCFCs
- 100% recyclable
- Resistant to water and moisture
- Qualifies as low emitting materials*

*Conforms to LEED 4.1 CPDH testing standards.



Nudura™ HYDROFOAM®

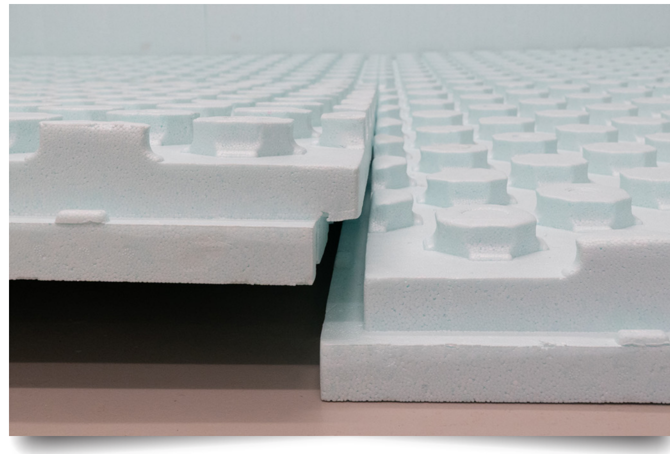
Installation Tips

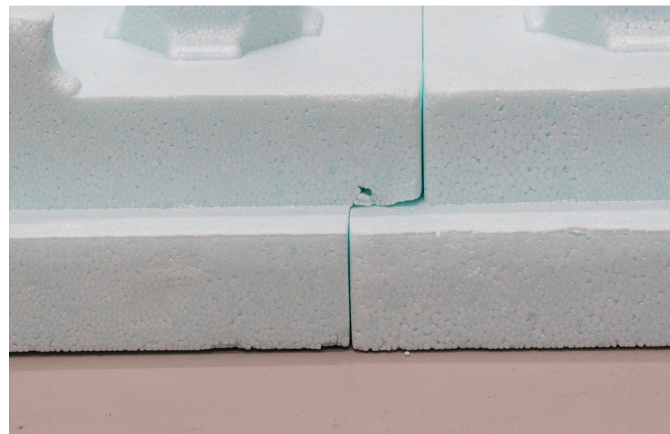
Start installation by making the surface level.

If required by local building code requirements, install a vapor barrier membrane before installing HYDROFOAM.

Insert hydronic floor heating pipes between the mutli-directional anchors, following your planned design.

Pour concrete directly over HYDROFOAM and tubing (refer to your local building code).





Building Code

We recommend using professional services and referring to the applicable local building codes when installing HYDROFOAM. For more details or for other types of installations, please go to www.nudura.com or call our experts at 1-866-468-6299.

Warning

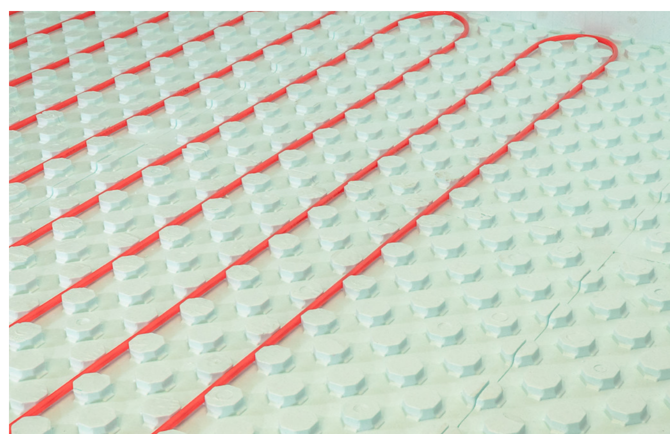
Flammable: Interior applications require a thermal barrier or ignition barrier as required by local building codes. All installations must comply with the applicable local building codes. The information and suggestions contained in this brochure are provided solely for informational purposes and are 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.

ISO 9001:2015

Certified quality management system ISO 9001:2015

Intertek Intertek

The expanded polystyrene used for HYDROFOAM® boards is Warnock Hersey (WH) certified in accordance with CAN/ULC S701 and ASTM C578 standards.



Nudura Inc. | 27 Hooper Road, Unit 10 | Barrie, ON L4N 9S3 | 866.468.6299 | nudura.com

Tremco CPG brings together Tremco Incorporated's Commercial Sealants & Waterproofing and Roofing & Building Maintenance operating divisions; Dryvit Systems, Inc.; Nudura Inc.; Willseal; Weatherproofing Technologies, Inc. and Weatherproofing Technologies Canada, Inc.

TREMCO Construction Products Group

07/2020

tremcocpg.com

Nudura
HYDROFOAM

TECHNICAL DATA

Product Properties

Testing in accordance with Specification Standard ASTM C578-17 (USA) and CAN/ULC S701-11 (CAN) for Type II (2) EPS Foam

EPS Physical Properties Imperial (Metric) Values	ASTM Test Method	Spec. Std. Requirements	Results
Thermal resistance* F.ft².h/Btu (K.m²/W)	C518	Min: 4.0 (0.70)	4.03 (0.71)
Water vapor permeance* Perm. (ng/Pa.s.m²)	E96	Max: 3.5 (200)	2.14 (122)
Dimensional stability (%)	D2126	Max: 1.5	0.3
Flexural strength lb/in² (kPa)	C203	Min: 35 (240)	53 (360)
Water absorption (%)	C272	Max: 4.0	0.23
Compressive properties lb/in² (kPa)	D1621	Min: 16 (110)	23 (157)
Limiting oxygen index (%)	D2863	Min: 24	28

*NOTE: Property is expressed per 1-inch (25.4 mm) thickness of material.

Available Sizes

4ft x 4ft (1219mm x 1219mm) with the following thicknesses;

Sheet Thickness	Thermal Resistance Value	Overall Sheet Thickness (Including Anchoring)
2 ½" (64mm)	R-10 (RSI 1.76, U-Value 0.56 w/m²•k)	3 3/8" (86mm)
4" (102mm)	R-16 (RSI 2.82, U-Value 0.35 w/m²•k)	4 7/8" (124mm)

Concrete Volume Calculation

To determine the volume of concrete required to reach the top of the octagon projections multiply the **Total ft² of Area x 0.055 (Total m² x 0.0168)**. The resulting concrete volume is in ft^3 (m^3) and must be added to the volume of concrete calculated to be placed over top of the Hydrofoam.

Technical Services, May 2020