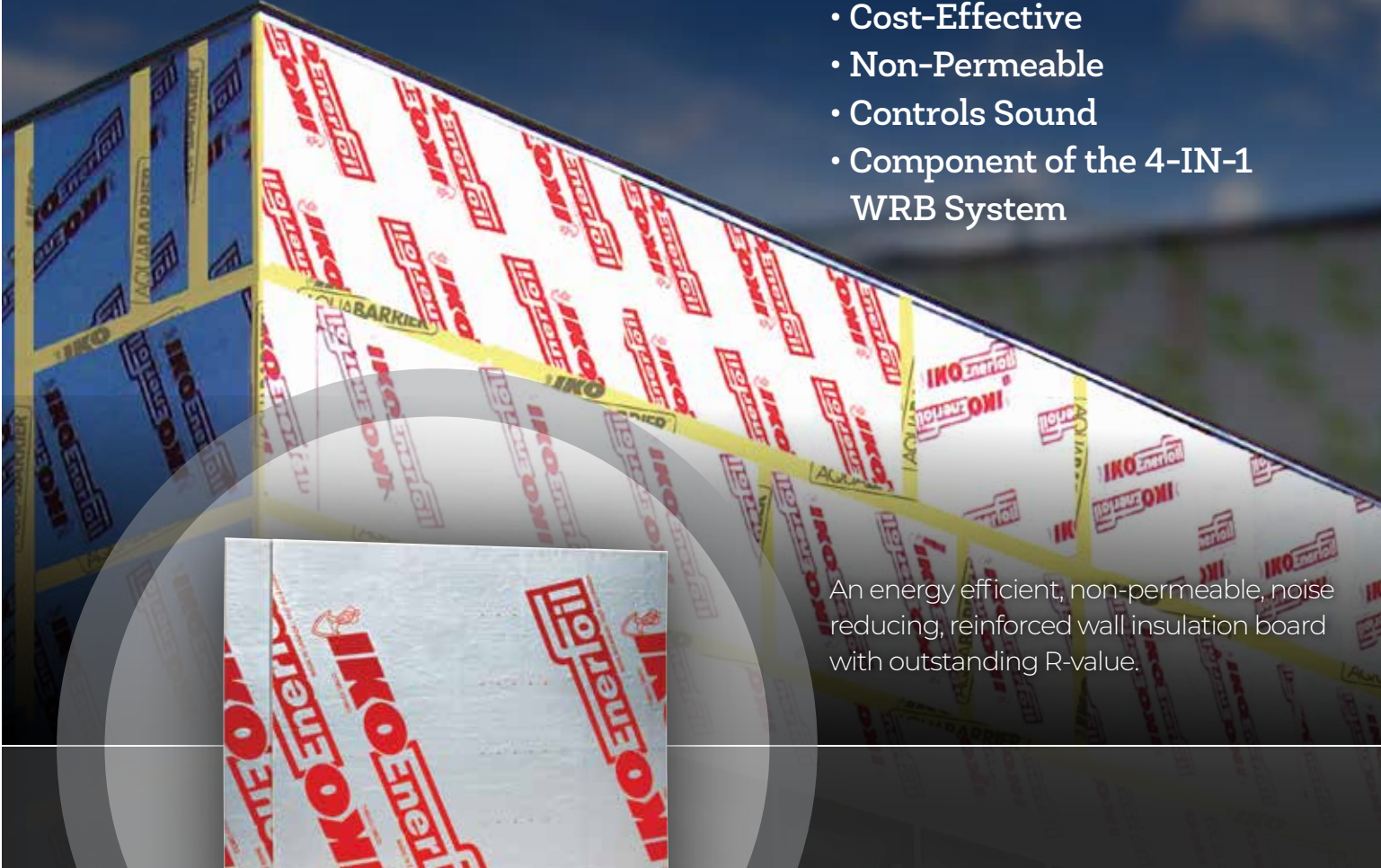


Enerfoil®

BUILDING ENVELOPE INSULATION

IKO.COM/COMM

- Multipurpose Sheathing
- Cost-Effective
- Non-Permeable
- Controls Sound
- Component of the 4-IN-1 WRB System



An energy efficient, non-permeable, noise reducing, reinforced wall insulation board with outstanding R-value.

 **COMMERCIAL**

Specify with Confidence.

Enerfoil®

BUILDING ENVELOPE INSULATION



A non-permeable, nonstructural rigid polyisocyanurate insulation sheathing board with high thermal resistance properties. Constructed from closed cell polyisocyanurate foam core, which is bonded on each side to an aluminum foil facer.

Performance as a Sheathing

- **Polyiso has the highest R-value per inch** of any rigid foam board insulation. Increased thermal resistance improves wall energy efficiency performance.
- **Reduces initial construction costs.** The higher thermal values per inch of Enerfoil insulation sheathing means that it requires less space than less efficient insulation to deliver the same level of performance.
- **Controls sound.** Enerfoil reduces noise, adding quiet comfort to the building enclosure. Enerfoil has been tested to deliver world class STC qualities.
- **Non-emissive odour tested.** Enerfoil has passed testing for odour, assuring building occupants that industry standards are met.
- **User-friendly.** Laminated foil facers on both sides of the sheathing provide moderate abuse-resistance on the job site. Enerfoil is lightweight and easy to cut, thus reducing labour costs on-site. Stud and fastener line indicators improve accuracy of installation.
- **Provides versatility.** Foil facers provide the long-term moisture resistance necessary for various wall applications. Enerfoil's facers are also compatible with most solvent-based materials.
- **Has a uniform thickness** for consistently maintaining air space requirements in cavity wall applications.
- **Available in 4 ft x 8 ft boards with the following thicknesses:** 12 mm (0.5 in), 16 mm (0.625 in), 18 mm (0.75 in), 25 mm (1 in), 38 mm (1.5 in), 50 mm (2 in), 64 mm (2.5 in), 75 mm (3 in), 89 mm (3.5 in) and 100 mm (4 in).
- **Available in 4 ft x 9 ft boards with the following thicknesses:** 18 mm (0.75 in), 25 mm (1 in) and 38 mm (1.5 in). Other sizes are available upon request as a special order.
- **Can be precut** at our factory to the size you need with IKO AccuCut™ Service.¹
- **Enerfoil can work as a 4-IN-1 Insulated Weather-Resistive Barrier (WRB) System for exterior walls.** When Enerfoil is detailed with AcrylicStick SA Tapes, the Enerfoil System can be a code-compliant non-permeable 4-in-1 WRB assembly for exterior walls, thus providing four major design benefits - insulation, air barrier, weather resistive vapour barrier and sound reduction all at once. This eliminates the need for a building wrap and a vapour barrier.

Storage

- It is recommended that Enerfoil be stored indoors.
- When outdoor storage of insulation is unavoidable, the insulation must be stacked on pallets a minimum of 50 mm (2 in) above ground level and covered with a waterproof tarp.
- The insulation manufacturer's packaging is not considered waterproof and shall be slit, as recommended by the manufacturer, to reduce condensation inside the packaging.



Codes & Compliances

ASTM E84

Flame Spread Index < 75
Smoke Density Index < 450

CAN/ULC S102

Flame Spread Index (Canada) < 55

ASTM C1289
CAN/ULC S704

CAN/ULC
S742

Type 1
Class 1

13188-L

Class A1

IKO® COMMERCIAL

Specify with Confidence.

Please refer to "IKO AccuCut™ Guide" for more information on this service.

Enerfoil®

BUILDING ENVELOPE INSULATION

APPLICATIONS

Consult your local building code for requirements pertaining to air barriers, vapour retarders, joint treatment and strapping. Use and application of this product must be in accordance with all local, provincial and national building code requirements.

No special personal protective equipment is required to install Enerfoil; but good work practices and local safety officials may dictate the use of gloves, safety glasses and other safety equipment.

Enerfoil should not be used on the exterior below grade where it is subject to water infiltration. See IKO Enerfoil & Ener-Air and IKO AquaBarrier Application Guides at: IKO.COM/COMM for further application details.

NOTE: In order to reduce exposure to the elements, it is important to apply the exterior veneer over Enerfoil as soon as practical, following its installation. If left exposed for more than 30 days, keep a protective covering over the sheathing to protect it from environmental damage. Proper structural requirements can be met by bracing or exterior sheathing. Please consult your designer or engineer for further details.

1. Cladding With Strapping Attachment*

For wood- or metal-framed assemblies, corner bracing is recommended at corners and around large openings. The framing must be structurally reinforced with either cross bracing or structural sheathing. Fasten Enerfoil to wood studs with washered nails. Ensure that fastener penetrates a minimum of 19 mm (3/4 in) into the framing. Fasten Enerfoil to steel studs using mechanical fasteners and washers.

2. Cladding with Masonry Ties*

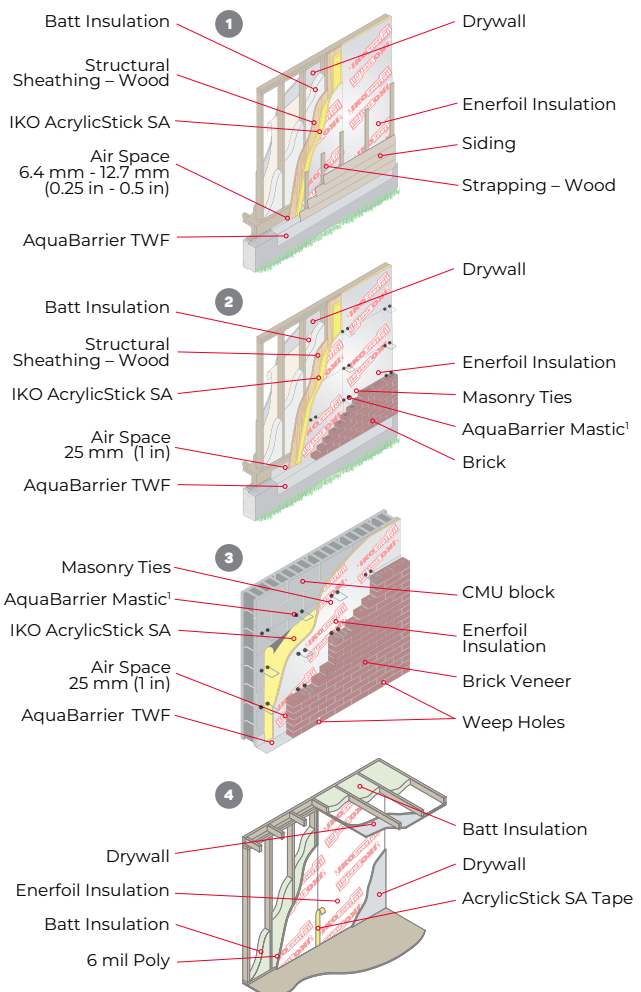
Fasten Enerfoil to wood studs with washered nails. Ensure that the fastener penetrates a minimum of 19 mm (3/4 in) into the framing. Fasten Enerfoil to steel studs with washered mechanical fasteners.

3. Block Wall Construction*

Attach Enerfoil against block wall with air/vapour barrier. Cut boards to friction fit between building code-approved masonry ties.

4. Interior Ceiling & Wall Applications*

When used in interior ceiling and wall applications, Enerfoil must be protected from the building interior by a minimum 12 mm (1/2 in) gypsum board. The use of an interior vapour retarder may not be required if the seams are taped. Consult your local building code. For walls, install Enerfoil with edges in direct contact with the framing members.



*IKO AquaBarrier AVB with S.A.M Adhesive can also be used in these assemblies. ¹When using an IKO-approved primer, adhesive or mastic, use in a well-ventilated area. Avoid breathing vapour. It is recommended to wear solvent-resistant gloves and NIOSH-approved respirator. Please refer to "IKO Insulation Fastener Guide" for further information. Note: Three of the illustrations show wood stud framing and sheathing, but other types of framing and sheathing may be used. Drawings are for illustration purposes only. Consult your design professional. AcrylicStick SA Tapes can be replaced with AquaBarrier AVB Tapes, if the AquaBarrier Tapes are adhered using IKO S.A.M. or S.A.M. LVC Adhesive and if installed in accordance with IKO specifications.

ACCESSORY PRODUCTS

AquaBarrier™ AVB and AquaBarrier™ Tapes

- Self-adhering, non-permeable membrane and tapes providing superior performance in wall assemblies where an air and vapour barrier is required.
- AquaBarrier AVB is available in both standard and low temperature grades and a variety of roll sizes.
- AquaBarrier AVB Tapes are available in 3", 4", 6", 9", 12", 18", 24", 26" and 36" in 25 mils or 40 mils thickness.
- AquaBarrier AVB and AquaBarrier Tapes` (with the use of IKO S.A.M. or S.A.M. LVC adhesive) provide an effective barrier to moisture, vapour transmission and air leakage, when installed according to IKO specifications.

AcrylicStick™ SA and AcrylicStick™ SA Tapes

- Primerless, self-adhering and non-permeable membrane and tapes providing superior performance in wall assemblies where an air and vapour barrier is required.
- Available in 4", 6", 9", 12", 18", 36" and 60" widths.
- AcrylicStick SA and AcrylicStick SA Tapes provide an effective barrier to moisture, vapour transmission and air leakage, when installed according to IKO specification.



Enerfoil Insulation - Typical Physical Properties

| CHARACTERISTICS | UNITS | NOMINAL VALUE | | TEST METHOD | |
|---|--------------------|---|--|-----------------------------------|---------------------|
| Compressive Strength: | kPa (psi) | 110 (16) | | ASTM D1621 | |
| Tensile Strength: | kPa (psi) | 69 (10) | | ASTM D1623 | |
| Flexural Strength: | kPa (psi) | 564 (82) | | ASTM C203 | |
| Water Absorption: | % Vol./Vol. | 3.5 | | ASTM C209 | |
| Dimensional Stability @ 70°C MD/XD: | % | ±2 / ±2 | | ASTM D2126 | |
| R-Value – Initial and Design LTRR | | Initial R-Value | Design LTRR R-Value | Initial R-Value | Design LTRR R-Value |
| 12 mm (0.5 in): 18 mm (0.75 in): 25 mm (1.0 in): 38 mm (1.5 in): 50 mm (2.0 in): 64 mm (2.5 in): 75 mm (3.0 in): 89 mm (3.5 in): 100 mm (4.0 in): | Btu/h-ft²·°F | 3.4 5.1 6.8 10.2 13.6 17.0 20.4 23.8 27.2 | 3.0 4.4 5.9 8.9 11.8 14.8 18.0 21.0 24.0 | ASTM C518 | CAN/ULC S770 |
| Water Vapour Transmission Rate (WVTR): | ng/Pa-s-m² (perms) | < 3.3 (< 0.06) | | ASTM E96 (Method A) | |
| Air Permeability @ 75 pa: | L/s-m² | < 0.02 | | ASTM E2178 | |
| Air Leakage Rate Classification: | — | Class A1 | | CAN/ULC S742-11 ASTM E2357-11¹ | |
| Flame Spread: | — | < 55 < 75 | | CAN/ULC-S102 ASTM E84 | |
| Smoke Developed: | — | < 500 < 450 | | CAN/ULC-S102 ASTM E84 | |
| Service Temperature: | °C (°F) | -40 to 100 (-40 to 212) | | — | |
| Width Tolerance: | mm (in) | ±4 (0.16) | | — | |
| Length Tolerance: | mm (in) | ±2 (0.08) | | ASTM C303 | |
| Sound Transmission Class (STC): | — | 12 - 13 | | ASTM E90 (09) | |
| Odour Emission: | — | Pass | | ASTM C1304 (08)-2013 | |

¹When joints & penetrations detailed appropriately. ² Stated thermal resistance values are based upon conditioning requirements and test methodology found in ASTM C1289 and ASTM C518 for foil-faced polyisocyanurate insulation. See also Material Safety Data Sheet – MSDS #1511 or MSDS #1911. All values shown are approximate.

All values shown are approximate. The information on this sheet is based on data considered to be true and accurate based on periodic internal testing and production measurements at time of manufacture. The information is offered solely for the user's consideration, investigation and verification, and is subject to change without notice. Nothing contained herein constitutes or represents a warranty or guarantee for which the manufacturer can be held legally responsible. IKO assumes no responsibility for errors that may appear in this document. Please refer to Product Data Sheets for more technical information.

Find out more about our roofing, waterproofing and insulation products now by talking to an IKO sales representative or your professional contractor, or contact us directly at: **Canada 1-855-IKO-ROOF (1-855-456-7663), United States 1-888-IKO-ROOF (1-888-456-7663)** or visit our website at IKO.COM/COMM.