BEWI Pro-Foil Cavity Wall

Technical Datasheet

A high-performance Partial-Fill and Full-Fill Cavity Wall insulation with improved thermal resistance.

BEWI Pro-Foil Cavity Wall board is an EPS board with a laminated air cushioned film and a reflective aluminium foil-facing. This provides a superior thermal resistance that lowers U-values enabling a reduction in cavity wall thickness.

The board also provides a higher vapour resistance and a rainwater barrier. It can be installed below DPC and contribrutes to the reduction of the thermal bridge at the junction of the ground floor and the external wall.

For further guidance refer to BS 5250: 2021 and Building Regulations.



- KIWA Certificate BAW 22 258 P A UK
- Declared Thermal Conductivity (λ_D) 0.030 W/mK
- Suitable for partial-fill (25mm or 50mm residual cavity) or full-fill (10mm residual cavity) residual cavity)
- Lightweight and easy to install
- Acts as cavity rainwater barrier

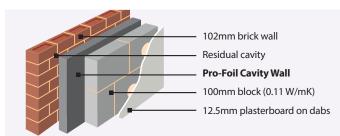


- Durable and rot-proof
- Permanent insulation for the lifetime of the building
- Can be installed below DPC level
- 100% recyclable

Regulatory

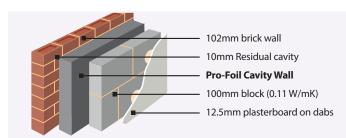


Partial-Fill Cavity Wall Insulation U-values



Regulatory Requirements	Pro-Foil thickness	U-Value W/m²K
ADL 2021 - new dwellings	55mm	0.26
ADL 2021 - existing dwellings	105mm	0.18
2025 Future Homes*	145mm	0.15

Full-Fill Cavity Wall Insulation U-values



Requirements	thickness	W/m ² K
ADL 2021 – new dwellings	65mm	0.26
ADL 2021 – existing dwellings	120mm	0.18
2025 Future Homes*	155mm	0.15



^{*} Proposed value for new and existing dwellings

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How it works?

Heat transfer is a combination of conduction, convection and radiation. Pro-Foil Cavity Wall not only slows down conductive and convective heat flow, but its reflective surface also acts as a radiant barrier to prevent further heat loss.

For optimum effectiveness, this reflective layer must face the air gap.

Board characteristics:

Size:

EPS - 1200mm x 450mm x thickness

Reaction to fire:

EPS - Euroclass E Foil - Euroclass E

Thermal properties

EPS thermal conductivity	0.030 W/mK
Thermal resistance of the foil	0.12 m ² K/W
Thermal resistance of the 10mm airgap (To BS EN ISO 6946:2017)	0.365 m ² K/W
Thermal resistance of ≥ 20mm airgap (To BS EN ISO 6946:2017)	0.713 m ² K/W
Foil emissivity	0.03 declared

Ancillaries:

- Aluminium tape
- Cavity Wall ties
- Cavity wall retaining discs
- Retaining clips

For further guidance refer to the Pro-Foil Cavity Wall installation guide available from our website.

Health & Safety

Keep Pro-Foil Cavity Wall boards away from open flames, heat and hot surfaces. Wear protective gloves when cutting and installing the insulation, also use a specialist knife or saw.

Storage

Pro-Foil Cavity Wall boards should be stored under cover and protected from winds.

Accreditation

CE, UKCA, UKNI marking	BEWI has taken the responsibility of CE, UKCA, UKNI marking the product in accordance with harmonised European Standard BS EN 13163: 2012 + A2-2016. Declaration of Performance is available on request.
Quality	All BEWI products are manufactured in production facilities which are certified to ISO 9001 Quality Management.
Environmental Responsibility	All Bewi manufacturing facilities are ISO 14001 certified.
Compliance	Pro-Foil Cavity Wall conforms to the required properties as defined in BS EN 13163:2012 - Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products – Specification.
Fire	Pro-Foil is supplied as flame retardant material, Euroclass E, as standard.

