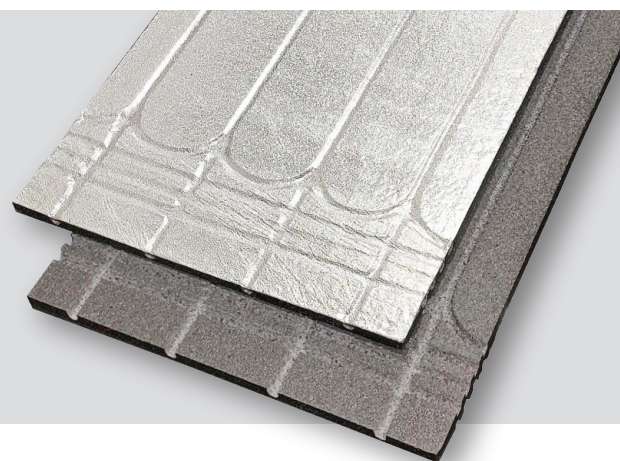




TEKWARM THERMO 300 PLAIN AND FOIL FACED

TEKWARM Thermo 300 is a higher performance lightweight EPS insulation routed on one side with optional aluminium foil applied to routed side of board.



OVERVIEW

TekWarm Thermo 300 is a high-performance Expanded Polystyrene (EPS) insulation board designed for use in flooring applications requiring superior compressive strength and thermal efficiency. With a compressive strength of 300 kPa, it is suitable for both domestic and commercial applications, ensuring long-term performance under high loading conditions. The insulation boards are lightweight, easy to install, and provide excellent thermal insulation to meet and exceed Building Regulations.

TekWarm Thermo 300 is made from graphite-infused EPS, delivering an enhanced thermal conductivity of 0.030 W/mK, making it ideal for projects requiring energy-efficient insulation.

TECHNICAL DATA

Property	TekWarm Thermo 300
Thermal Conductivity (W/mK)	0.030
Compressive Strength (kPa)	300 (at 10% deformation)
Bending Strength (kPa)	150
Water Vapour Permeability (mg/Pa.h.m)	0.009 - 0.020
Water Vapour Diffusion Resistance (μ)	30 - 70
Reaction to Fire Classification	Euroclass E
Available Thicknesses - 16mm pipe	25, 30, 35 and 50mm *

*Other thicknesses available - please contact office for minimum order quantities and availability

Climate Change	The product has an ozone depletion potential (ODP) of zero and a global warming potential (GWP) of less than 5.
Biological Properties	TEKWARM Routed board insulation is non-toxic and nonbiodegradable. TEKWARD Routed board will not sustain mould growth and has no nutrient value to insects or vermin.
Environment and sustainability	TEKWARM Routed Board insulation is manufactured from EPS (expanded polystyrene) which achieves an A+ rating in the BRE Green Guide to Specification.
Foiled thickness	100 micron

BENEFITS

- Thermal Conductivity as low as 0.030 W/mK
- High compressive strength – 300 kPa @ 10% deformation
- Lightweight and easy to handle
- Highly cost-effective insulation solution
- Compatible with underfloor heating (UFH) systems
- No reduction in performance over time
- Minimal water absorption & permeability
- 100% recyclable
- Manufactured with zero Ozone Depleting Potential (ODP)
- Fire class E - unique in high compressive strength routed UFH insulation Panels.

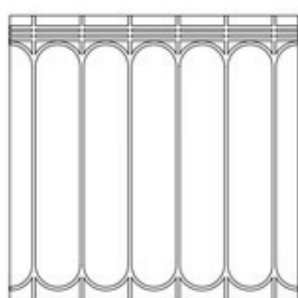
16mm Pipe systems

Pipe Centres	Routing Design Available	Options
at 50mm	Yes	Straights only (distribution panel)
at 150mm	Yes	Straights only
		Two return and 3-cross
at 200mm	Yes	Straights only
		Two return and 3-cross

AVAILABLE BOARD DESIGNS



STRAIGHTS ONLY
– Various centres



TWO RETURN
– 3-cross

LIMITATIONS

When covering the system with a distribution panel ensure that the board is suitable for the specific application and intended use. Consideration should be given to the thermal conductivity of the over boarding. The better the performance (higher thermal conductivity) the more responsive the UFH system will be.

This board is designed for standard commercial loading. For higher loading capability please look at alternate options available such as EPS 400 or EPS 500 grades.

APPLICATION GUIDANCE

Ground Floors - Solid

Solid Sub floor (Timber/Screed/Concrete) – The substrate should be clean and flat with no snots or contamination affecting the levelness of the floor. Any imperfections will impact the performance of the floor. The floor should be rigid with no movement – otherwise this could be noticeable post floor finish application. In screed and concrete application on ground floors the system can be installed over a suitable DPM providing a level finish is achieved.

Ground Floors – Between Joists

Supporting boards or battens between joists must be able to support the weight of the system. The joists must be level to ensure system contact is maintained with the flooring distribution board. If spanning joists, the distribution board must be structural – please check with distribution board manufacturer to ensure suitability. Ensure the top of the board is fully level with the top of the joists – a floor spirit level should be used to check this is the case. Loss of floor contact will impact thermal out of the system.

Intermediate floors – Solid

Solid Sub floor (Timber/Screed/Concrete) – The substrate should be clean and flat with no snots or contamination affecting the levelness of the floor. Any imperfections will impact the performance of the floor. The floor should be rigid with no movement – otherwise this could be noticeable post floor finish application.

Intermediate floors – Between Joists

Supporting boards or battens between joists must be able to support the weight of the system. The joists must be level to ensure system contact is maintained with the flooring distribution board. If spanning joists, the distribution board manufacturer must be structural – please check with board manufacture to ensure suitability. Ensure the top of the board is fully level with the top of the joists – a floor spirit level should be used to check this is the case. Loss of floor contact will impact thermal out of the system.

STORAGE & SHELF LIFE

The product does not have an expiry date but should be stored in a clean and dry location prior to use. The products should not be heavily loaded prior to use as this can impact the performance of the board.

HEALTH & SAFETY

This product is not classified under the Chemicals Hazard Information and Packaging for Supply Regulations. A Material Safety Data Sheet relating to this product can be obtained from Tekwarm.

- Protective goggles and gloves should be always worn when cutting the board
- The product is not classified according to the CLP regulation
- Please dispose of packaging and waste responsibly