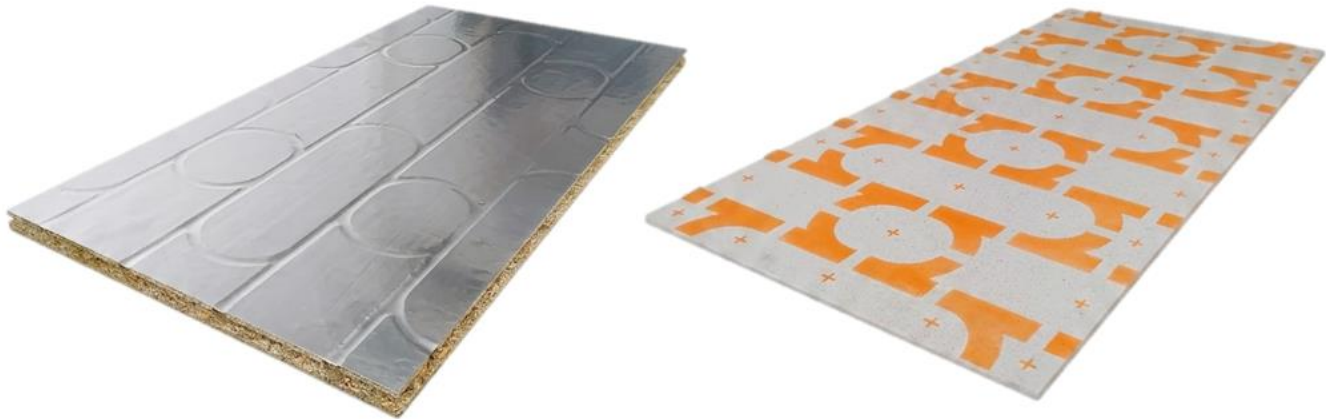


PROWARM PROFLOOR SYSTEM



PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD is an advanced structural solution based on pre-routed P5 MFP chipboard with an aluminium foil heat shield that increases the thermal efficiency of the heating system. Thanks to its enhanced moisture resistance and exceptional mechanical strength, the board provides a professional foundation for water underfloor heating systems installed using dry construction methods. It is recommended to cover the system boards with a dry screed layer, which optimizes heating performance and allows for any choice of final floor finish.

During the manufacturing process, the raw material undergoes precise mechanical machining, giving it optimal groove profiles and strictly defined dimensions. These parameters have been engineered to perfectly meet the requirements of modern HVAC installation systems, guaranteeing fast and precise installation.

PROWARM PROFLOOR TOP BOARD installed crosswise to the chipboards and featuring a pre-printed channel layout matching the system chipboard, significantly accelerates installation work and eliminates fitting errors. It is a homogeneous dry-construction building board made from gypsum reinforced with cellulose fibres. Thanks to factory-applied hydrophobic treatment and a specialized structure, the product combines exceptional durability with versatile application options. It is a non-combustible material with high resistance, allowing complete freedom in the final choice of floor finish.

INTENDED USE

PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD system boards are designed to be installed directly onto joists. The chipboard and cement top board combined create a structural flooring system. Very quick and easy to install the heating pipes in radiant hydronic heating systems using dry-construction technology, no need to wait for screed drying times. The panels are manufactured from high-density, premium-grade P5 chipboard, providing excellent moisture resistance and exceptional mechanical load-bearing strength. Thanks to its versatility and high dimensional stability, this system is ideal for modern residential housing, timber-frame construction, as well as public buildings. The system is suitable for joists centres of up to 600mm. Rigid foam insulation such as PIR must be installed between the joists flush with the top of the joists providing additional support and removing any air gaps for heat to be wasted.

SYSTEM ADVANTAGES

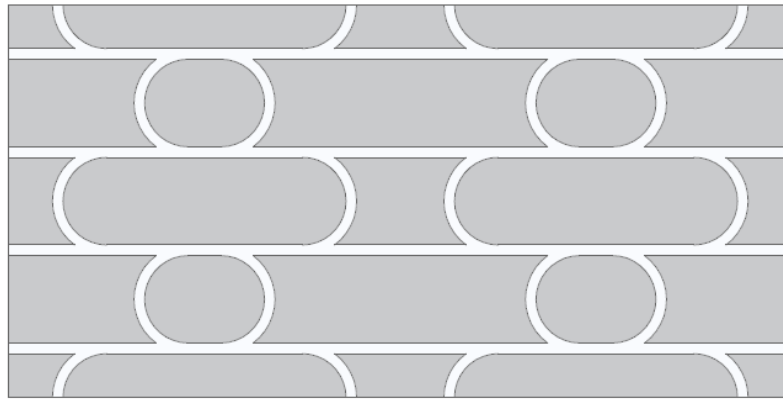
- Pre-routed channel system allows fast and easy pipe installation without additional fasteners (e.g. clips or staples)
- Aluminium foil heat shields ensure even heat distribution across the Surface
- Flat and level surface after installing the heating pipes with top board.
- Dry installation, 10mm top screed board systems with excellent thermal properties
- Can be installed directly on floor joists, subject to meeting specific requirements
- Minimal floor build-up height
- Tongue-and-groove edge profile enhances structural strength and prevents board lip displacement (differentials between panels)
- Robust and high strength top cement board layer, suitable for virtually any floor coverings, always check with the technical support team on flooring compatibility.
- High density: 720 kg/m³

BOARD STRUCTURE

PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD

Panel dimensions: 1200x600x22 mm (0,72 m²)

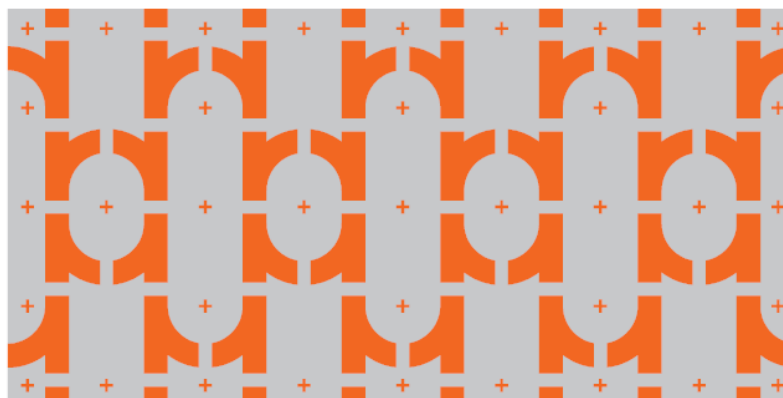
Edge: 4-side tongue-and-groove



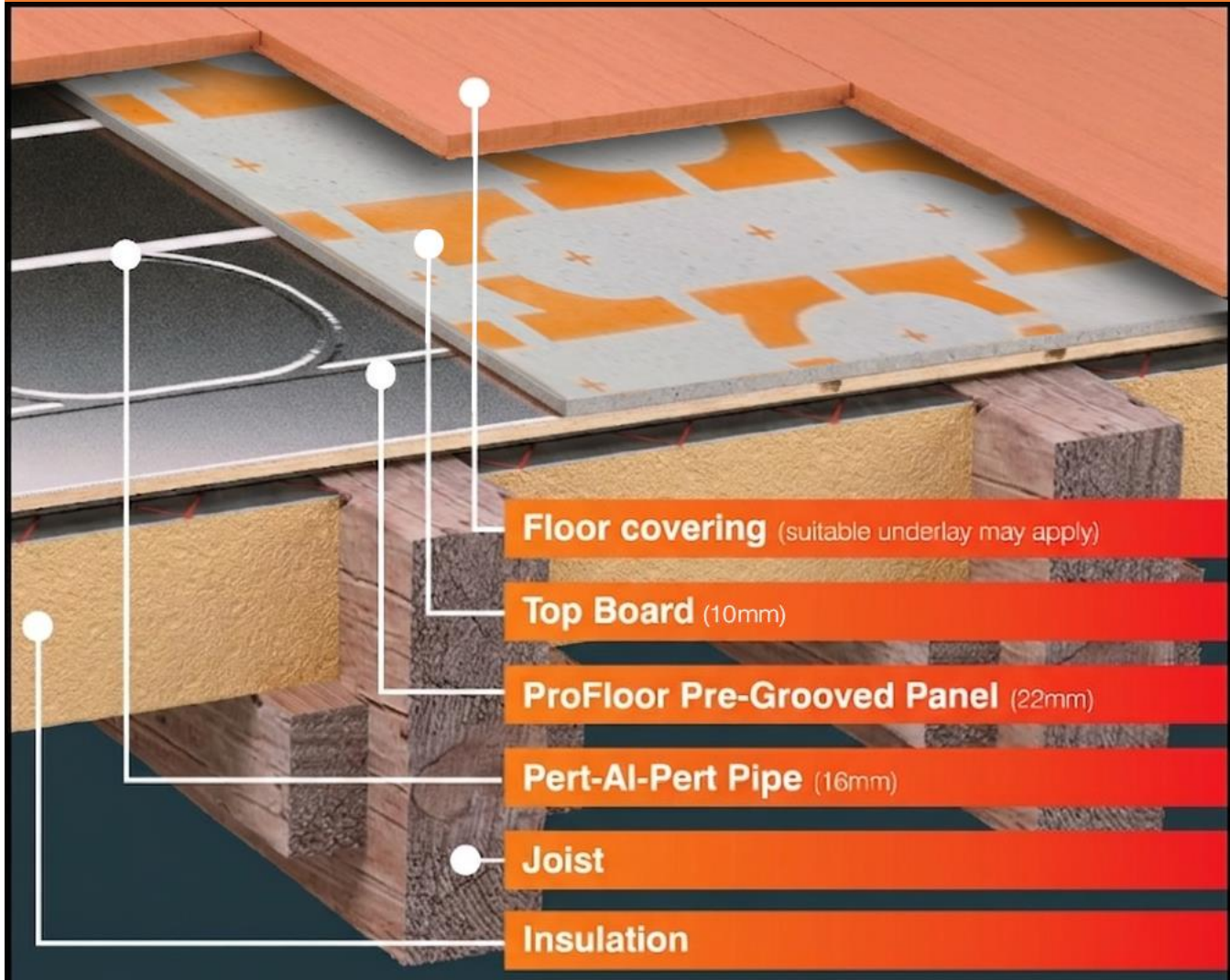
PROWARM PROFLOOR TOP BOARD Gypsum-fibre (dry screed)

Panel dimensions: 1200x600x10 mm (0,72 m²)

Edge: square



LAYER CONFIGURATIONS



FLOOR FINISHING VARIANTS

PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD WITH PROWARM PROFLOOR TOP BOARD is suitable for most floor finishes:

- laminate flooring on a perforated underlayment
- vinyl flooring (LVT)
- three-layer engineered wood flooring
- textile materials, carpets
- PVC
- ceramic tiles
- natural stone

PROCESSING, DISPOSAL, STORAGE

Material processing:

- Standard woodworking machinery. Carbide-tipped tools/blades are recommended

Disposal:

- Waste Code (EWC) 030105/170201, dispose of as wood and wood-based materials

Storage:

- Store flat on pallets
- Protect against direct exposure to moisture and water (dry, covered areas)

TECHNICAL DATA

Basic Data – PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD

Panel dimensions	1200x600 mm 4-sided tongue and groove
Panel thickness	22 mm
Channel spacing	150 mm
Pipe size	16 mm
Weight	15.4 kg/m ²
Thickness of aluminum foil	0.05 mm

Basic Data – PROWARM PROFLOOR TOP BOARD

Panel dimensions	1200x600 mm - square edge
Panel thickness	10 mm
Weight	12.0 kg/m ²

Permissible Dimensional Tolerances

Length, width	± 2,0 mm
Diagonal difference	≤ 2,0 mm
Thickness	± 0,5 mm
Channel width	± 0,2 mm
Channel depth	± 0,5 mm

Essential Characteristics of the PROWARM PROFLOOR PRE-ROUTED FOIL FACED CHIPBOARD

Certificates (raw material)	CE / PEFC / FSC / SINTEF
Density	700 kg/m ³
Bending strength	14 N/mm ²
Modulus of elasticity in bending	2150 N/mm ²
Internal bond	0,40 N/mm ²
Swelling in thickness	10 %
Moisture resistance option 1: Internal Bond	0,20 N/mm ²
Moisture resistance Option 1: Swelling in thickness	11 %
Formaldehyde class	E1
Reaction to fire	D-s2d0
Water vapour permeability	15 wet 50 dry
Sound absorption α	0,10 / 0,25
Thermal conductivity λ	0,13 W/mK
Strenght tension f_t	7,4 N/mm ²
Strenght compression f_c	10,3 N/mm ²
Strenght bending f_m	11,7 N/mm ²
Strenght panel shear f_y	5,9 N/mm ²
Strenght planar shear f_r	1,5 N/mm ²
Stifness tension E_t	1800 N/mm ²

Stiffness compression E_c	1800 N/mm ²
Stiffness bending E_m	3000 N/mm ²
Stiffness panel shear G_v	860 N/mm ²
Linear expansion	< 3 mm/m
Biological durability – service class	1 & 2
Content of PCP	<5 ppm

Essential Characteristics of the PROWARM PROFLOOR TOP BOARD

Certificates (raw material)	CE / SINTEF
Density	1150-1200 kg/m ³
Water vapour diffusion resistance coefficient μ	13
Thermal conductivity λ	0,32 W/mK
Specific heat capacity c	1,1 kJ/kgK
Brinell hardness	30 N/mm ²
Swelling of thickness of 24 h immersion in water	< 2 %
Coefficient of thermal expansion	0,001 %/K
Expansion / Shrinkage in response to 30 % change in relative humidity 20 °C	0,25 mm/m
Moisture content at 65 % relative humidity and 20 °C air temperature	1-3 %
pH-value	7-8
Reaction to fire	A2, Non-flammable