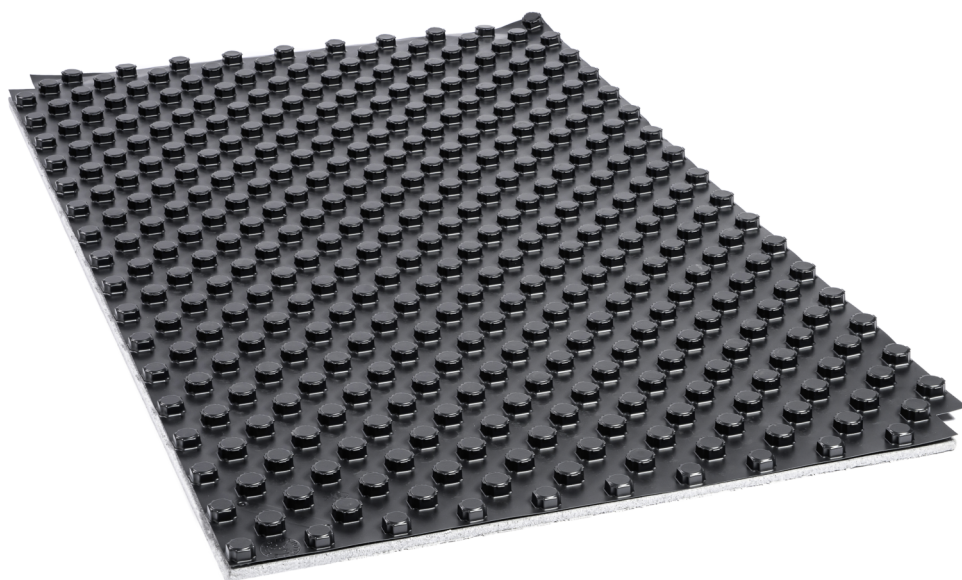




VARMO **TECK19**

Datasheet **VARMO TECK 19**

Thermoformed panel with reduced thickness

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Thermoformed panel with
reduced thickness

VARMO TECK19



DESCRIPTION

VARMO TECK 19 is the radiant panel for underfloor heating and cooling systems designed for renovations when there are height problems to fit a traditional underfloor system.

It is made of white EPS sintered expanded polystyrene, laminated with a black HIPS thermoformed polystyrene laminate film with a thickness of 0,6 mm, which can be used with 12 mm diameter pipes.

It complies with the regulations in force regarding thermal insulation and with UNI EN 13163 of 2009 and UNI EN 1264-4 standards; it has CE marking.

Combined with a self-levelling screed, it allows a new system to be created in just 29-39 mm, unlike traditional systems that require at least 80-90 mm.

It can be used in public and private environments, in dry places and in environments with a risk of humidity, such as bathrooms and kitchens.

If a self-levelling screed is used, VARMO TECK 19 has a very low inertia, which allows very precise thermoregulation and fast set-up, resulting in savings in operating costs due to lower energy consumption. We recommend gluing the panel to the underlying substrate, which must be solid, dry, clean and perfectly flat. Recommendations: the panel must always be protected from direct sunlight and stored in a dry, ventilated place, away from heat sources and open flames.

ADVANTAGES

- Reduced footprint: installation possible in just 29/39 mm (self-levelling screed)
- Reduced masonry work: VARMO TECK 19 can be laid directly on old floors, avoiding costly demolition and disposal work
- Speed of laying: the special design of the bosses allows for practical and fast laying; in fact, no clips are required to hold the pipe in place
- Energy saving
- No limitation in the choice of coatings
- Ideal for renovations

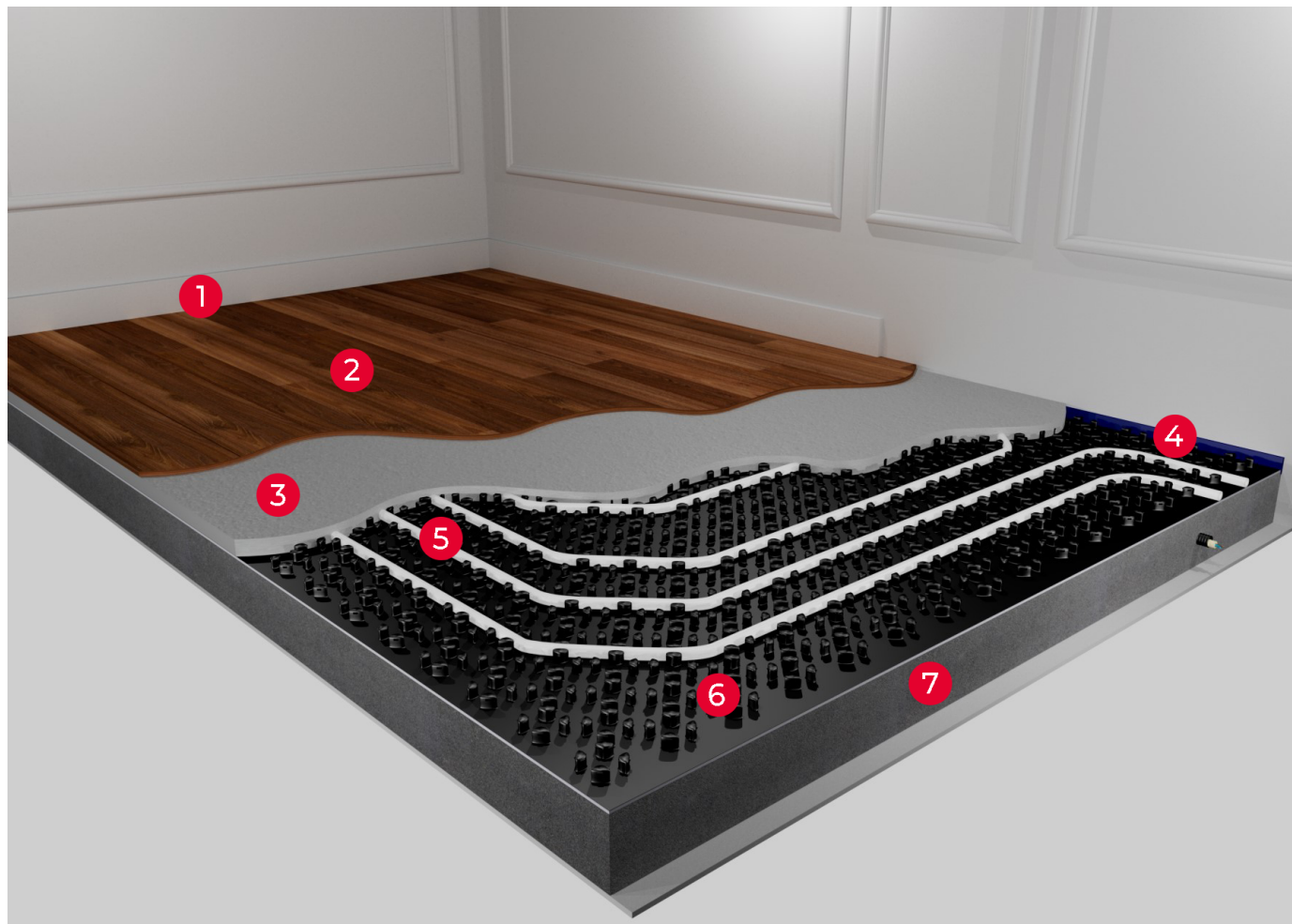
FIELDS OF APPLICATION

APPLICATIONS	
	Underfloor heating
	Wet solution
	Self-levelling screed (system thickness with anchored panel 29/39 mm)

DIMENSIONAL FEATURES

	PI00VTN230518H
Usable panel dimensions (mm)	1400x800
Total panel dimensions (mm)	1450x850
Panel surface (m2)	1,088
Insulation base thickness (mm)	5
Total panel thickness (mm)	19
Embossing height/pitch (mm)	18/40
Pipe diameter (mm)	12
Pieces per pack	18
m2 per pack	19,584
Type of packaging	cardboard box

STRATIGRAPHY



LEGEND	DESCRIPTION
1	Skirting
2	Covering
3	Screed
4	Edge Strip
5	Pipe
6	Varmo Teck 19 insulating panel
7	Floor slab

PHYSICAL FEATURES

	Reference standard	EPS / Class	VARMO TECK 19
Thermal resistance $R_{\lambda,ins}$ [m ² K/W]	UNI EN 1264-3	200	0,15
Declared thermal conductivity λ_D [W/mK]	UNI EN 12667	200	0,033
Compressive strenght at 10% strain σ_{10} [kPa]	UNI EN 826	400 / CS(10)400	200
Long-term water absorption WLT [%]	UNI EN 12087	400 / WL(T)6,0	6
Tolerance dim. thickness dN [mm]	UNI EN 823	T(2)	±2
Dim. stability at 23°C / 50% R.H. $\Delta\epsilon_l$; $\Delta\epsilon_d$	UNI EN 1603	DS(N)2	0.2
Water vapour diffusion resistance of EPS μ	UNI EN 12086	400 / Z 50-100	50-110
Water vapour diffusion resistance of HIPS μ	UNI EN 12086		10.000

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DURABILITY AND FIRE RESISTANCE

	Reference standard	VARMO TECK 19
Reaction to fire	EN ISO 11925-2 + EC1	EUROCLASS - F - UNI EN 13501
Durability of cond. Thermal against heat, atm. agents, degradation, ageing	UNI EN 13163	The thermal conductivity of EPS does not change over time
Fire resistance against heat, atmospheric agents, degradation, ageing	UNI EN 13163	The fire behaviour of EPS does not change over time



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