LOW THICKNESS PANELS



VARMO TECK23

Datasheet VARMO TECK 23

Thermoformed panel with reduced thickness

GENERAL FITTINGS
YOUNIQUE · ITALIAN

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Thermoformed panel with reduced thickness

VARMO TECK23



DESCRIPTION

VARMO TECK 23 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 650 µm, which can be used with 16 and 17 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 3-4 cm, unlike traditional systems that require at least 8-9 cm.
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 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.
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 43 mm (self-levelling screed)
- Reduced masonry work: VARMO TECK 23 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
- Can also be laid diagonally at 45°

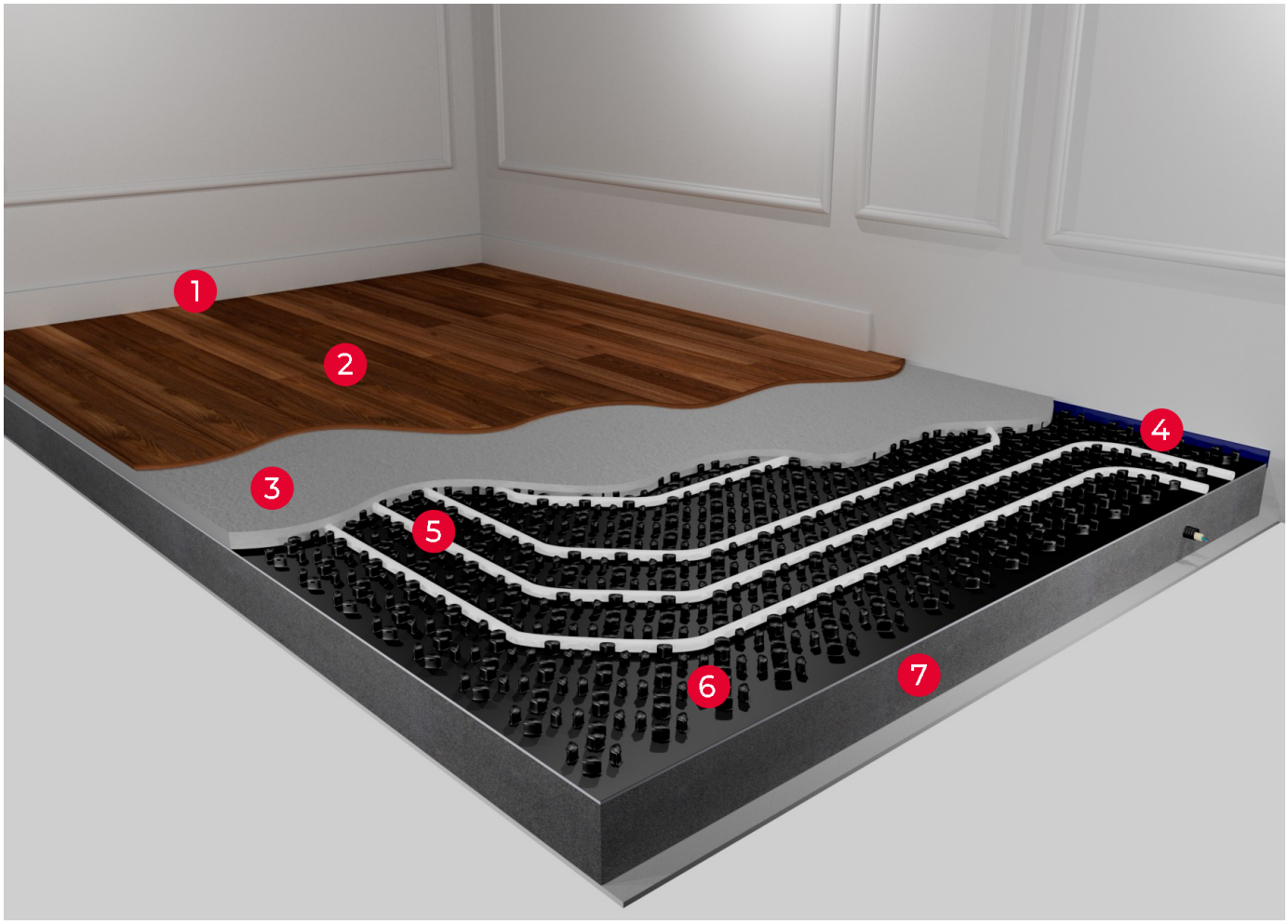
FIELDS OF APPLICATION

APPLICATIONS	
	Underfloor heating
	Wet solution
	Self-levelling screed (system thickness with anchored panel 33mm, with non-anchored panel 43mm)

DIMENSIONAL FEATURES

	PI00VTN230518H
Usable panel dimensions (mm)	1400x800
Total panel dimensions (mm)	1450x850
Panel surface (m2)	1.12
Insulation base thickness (mm)	5
Total panel thickness (mm)	23
Embossing height/pitch (mm)	18/50 diag
Pipe diameter (mm)	16-17
Pieces per pack	12
m2 per pack	13.44
Type of packaging	cardboard box

STRATIGRAPHY



LEGEND	DESCRIPTION
1	Skirting
2	Covering
3	Screed
4	Edge Strip
5	Pipe
6	Varmo Teck 23 insulating panel
7	Floor slab

PHYSICAL FEATURES

	Reference standard	EPS / Class	VARMO TECK 23
Thermal resistance Rλ,ins [m2K/W]	UNI EN 1264-3	400	0.16
Declared thermal conductivity λD [W/mK]	UNI EN 12667	400	0.032
Compressive strenght at 10% strain σ10 [kPa]	UNI EN 826	400 / CS(10)400	400
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. Δεl ; Δεd	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 23
Reaction to fire	EN ISO 11925-2 + EC1	EUROCLASS - E - 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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