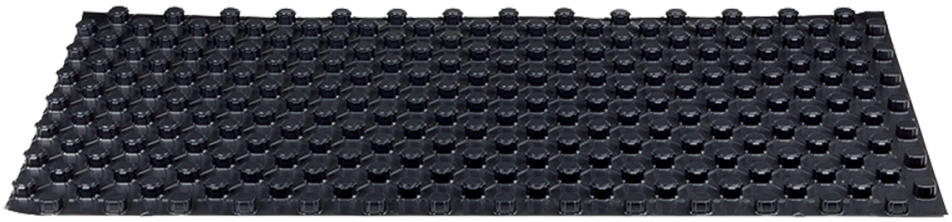
Traditional panels



VARMO FORM

VARMO FORM Technical Data Sheet

Thermoformed insulating panel

GENERAL FITTINGS
YOUNIQUE · ITALIAN

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Thermoformed insulating panel



VARMO FORM

DESCRIPTION

VARMO FORM insulating panels, made with solid bosses in sintered expanded polystyrene, are ideal for underfloor heating and cooling systems.
The interlocking rigid coating film in HIPS laminated polystyrene acts as a vapor barrier, and gives the bosses mechanical strength; it is also equipped with an undercut to ensure the stable position of the pipe and prevent horizontal and vertical movements.
The installation is facilitated thanks to the lateral overlap with pressure coupling that guarantees a perfect seal against thermal bridges and self-leveling screeds. Designed for applications with pipe diameter 16 and 17 and multiple 50 mm pitch.
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.
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

- Quick and easy to install
- Immediate walkability of the floor after installation
- No limitation in the choice of coatings
- Perfect resistance to thermal bridges and self-leveling screeds
- Mechanical strength

FIELDS OF APPLICATION

APPLICATIONS	
	Underfloor heating
	Wet solution
	Cement screed (40-45mm above bosses/pipe)
	Self-levelling screed (thickness 20-25mm)

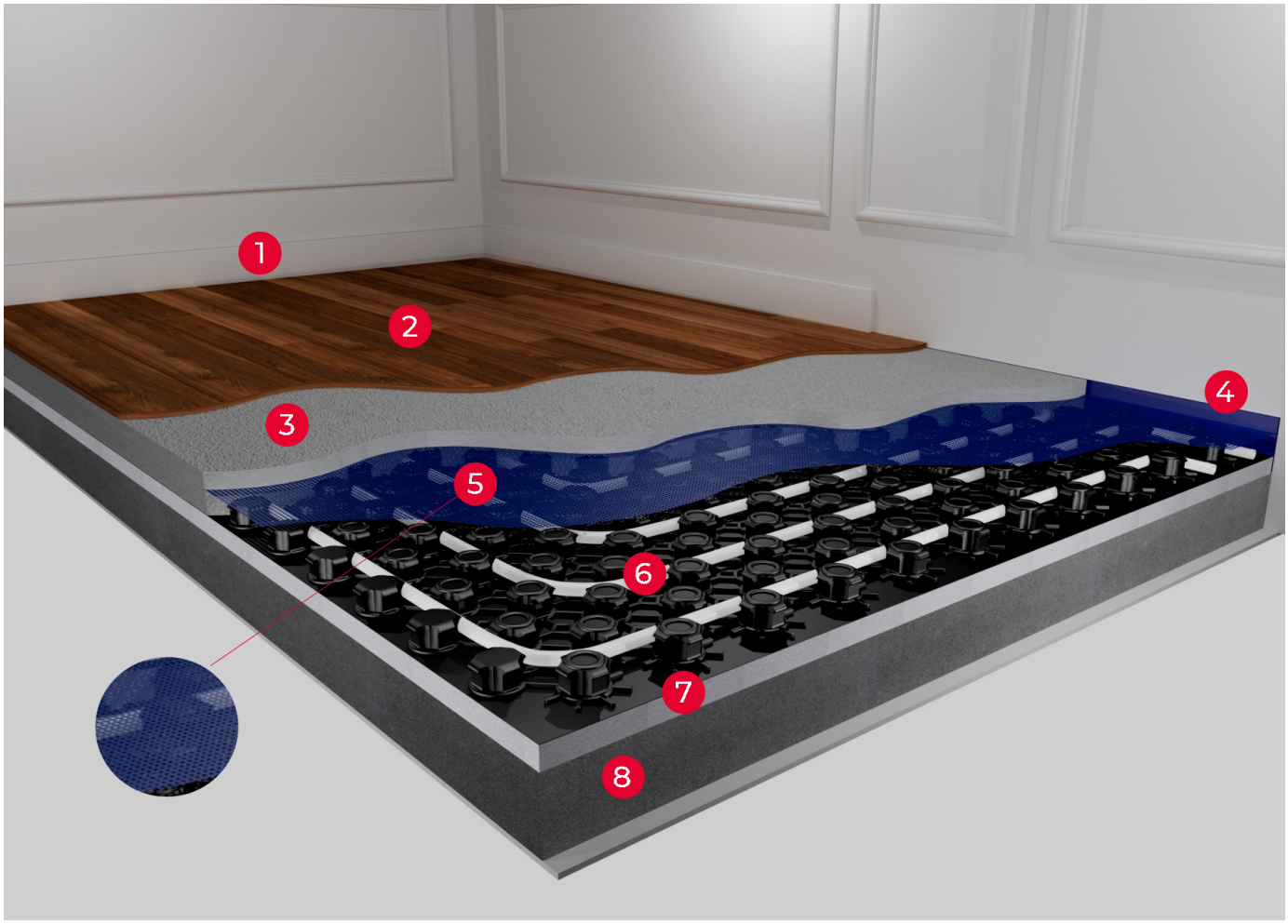
DIMENSIONAL FEATURES

Code	Usable panel dimensions (mm)	Total panel dimensions (mm)	Pcs per pack	Packaging m²	Packaging type
PI00VFN321022H	1400x800	1450x850	22	24.64	cardboard box
PI00VFN422022H	1400x800	1450x850	16	17.92	cardboard box
PI00VFN523022H	1400x800	1450x850	12	13.44	cardboard box
PI00VFN624022H	1400x800	1450x850	10	11.2	cardboard box
PI00VFN725022H	1400x800	1450x850	8	8.96	cardboard box
PI00VFN826022H	1400x800	1450x850	7	7.84	cardboard box

PERFORMANCES

Code	Insulation thickness mm	Embossing height mm	Total panel thickness mm	Panel surface m^2	Pipe diameter mm
PI00VFN321022H	10	22	32	1.12	16-17
PI00VFN422022H	20	22	42	1.12	16-17
PI00VFN523022H	30	22	52	1.12	16-17
PI00VFN624022H	40	22	62	1.12	16-17
PI00VFN725022H	50	22	72	1.12	16-17
PI00VFN826022H	60	22	82	1.12	16-17

STRATIGRAPHY



LEGEND	DESCRIPTION
1	Skirting
2	Covering
3	Screed
4	Edge Strip
5	Fibreglass mesh
6	Pipe
7	Varmo Form insulating panel
8	Floor slab

PHYSICAL FEATURES

	Reference standard	EPS / Class	VARMO FORM (all codes)
Declared thermal conductivity λD [W/mK]	UNI EN 12667	150	0.034
Declared thermal conductivity λD [W/mK]	UNI EN 12667	200	0.033
Compressive strenght at 10% strain σ10 [kPa]	UNI EN 826	150 / CS(10)150	150
Compressive strenght at 10% strain σ10 [kPa]	UNI EN 826	200 / CS(10)200	200
Long-term water absorption WLT [%]	UNI EN 12087	150 / WL(T)0,5	0.5
Long-term water absorption WLT [%]	UNI EN 12087	200 / WL(T)2,0	2
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	150 / Z 30-70	30-70
Water vapour diffusion resistance of EPS μ	UNI EN 12086	200 / Z 40-100	40-100
HIPS water vapour diff. res. μ	UNI EN 12086		10.000

THERMAL RESISTANCE

	Thermal resistance R□,ins [m2K/W]
PI00VFN321022H	0,3 / EPS 200
PI00VFN422022H	0,59 / EPS 150
PI00VFN523022H	0,88 / EPS 150
PI00VFN624022H	1,18 / EPS 150
PI00VFN725022H	1,47 / EPS 150
PI00VFN826022H	1,76 / EPS 150

DURABILITY AND FIRE RESISTANCE

	Reference standard	VARMO FORM (all codes)
Durability of thermal cond. against heat, atm. agents, degradation, ageing.	UNI EN 13163	The thermal conductivity of EPS does not change over time
Reaction to fire	EN ISO 11925-2 + EC1	EUROCLASS - E - UNI EN 13501
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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