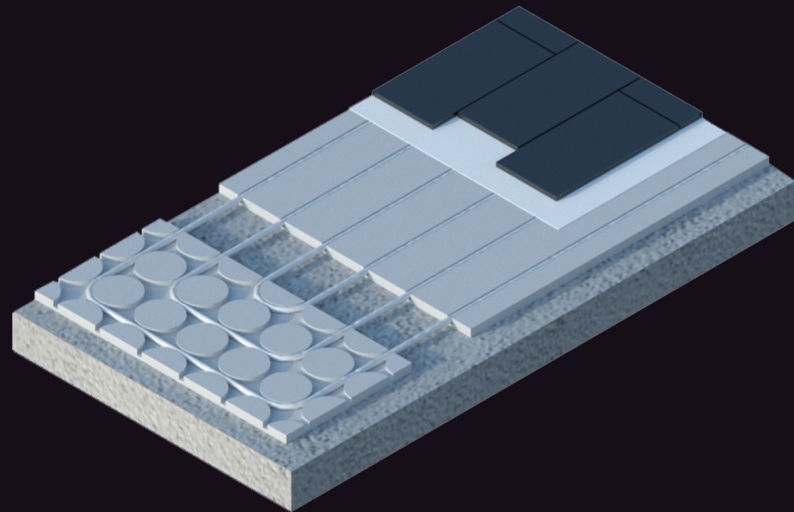


Dry underfloor radiant panels



VARMO DRY Technical Data Sheet

Low thickness dry radiant system

Contents

DESCRIPTION	3
ADVANTAGES	4
FIELDS OF APPLICATION	4
COMPONENTS AND MATERIALS	5
TECHNICAL INFORMATION	7
DESIGN AND INSTALLATION	8
FLOOR PLANT CIRCUIT DISTRIBUTION DIAGRAM	10
COMPONENTS	11
INSTALLATION INSTRUCTIONS	12

VARMO DRY

Low thickness dry radiant system



DESCRIPTION

VARMO DRY is an innovative system that allows underfloor heating to be created in just 3 cm (finished system with flooring). This solution is defined as "dry" because the concrete screed does not have to be made

The thickness of the floor must be added to the FERMACELL panels, to be fixed on top, with a total thickness that depends on the type of finish adopted and which is usually a maximum of three centimeters overall. Traces were obtained on the panels to insert a small diameter pipe (11.6 or 12 mm), which guarantees a low thermal inertia.

A warning before installing VARMO DRY is to have a smooth support surface. In case of renovations of existing homes it is recommended to fix the panels directly on the existing flooring. Keep traces of tube housing clean.

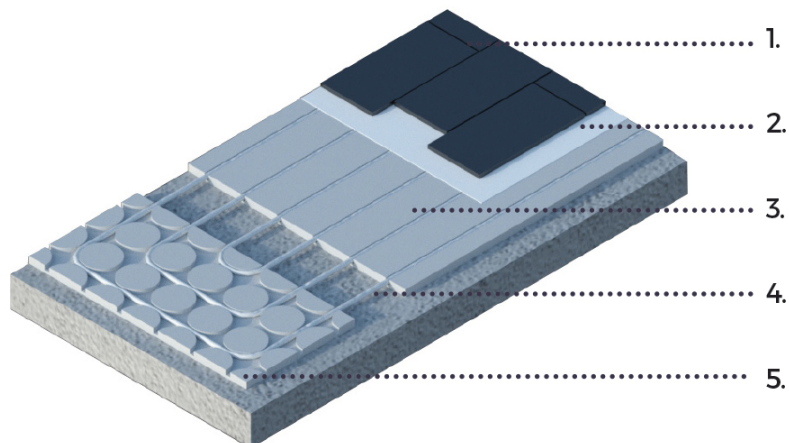
ADVANTAGES

- Reduced dimensions: In just 3 centimeters, finished systems can be created (flooring included).
- Can be laid on pre-existing floors
- Quick and easy to lay: it is not necessary to cast concrete (screed) and wait for it to mature
- Ideal for renovations
- Low thermal inertia
- No limitations on the choice of floor coverings

FIELDS OF APPLICATION

APPLICATIONS	
	floor heating (low temperature)

COMPONENTS AND MATERIALS

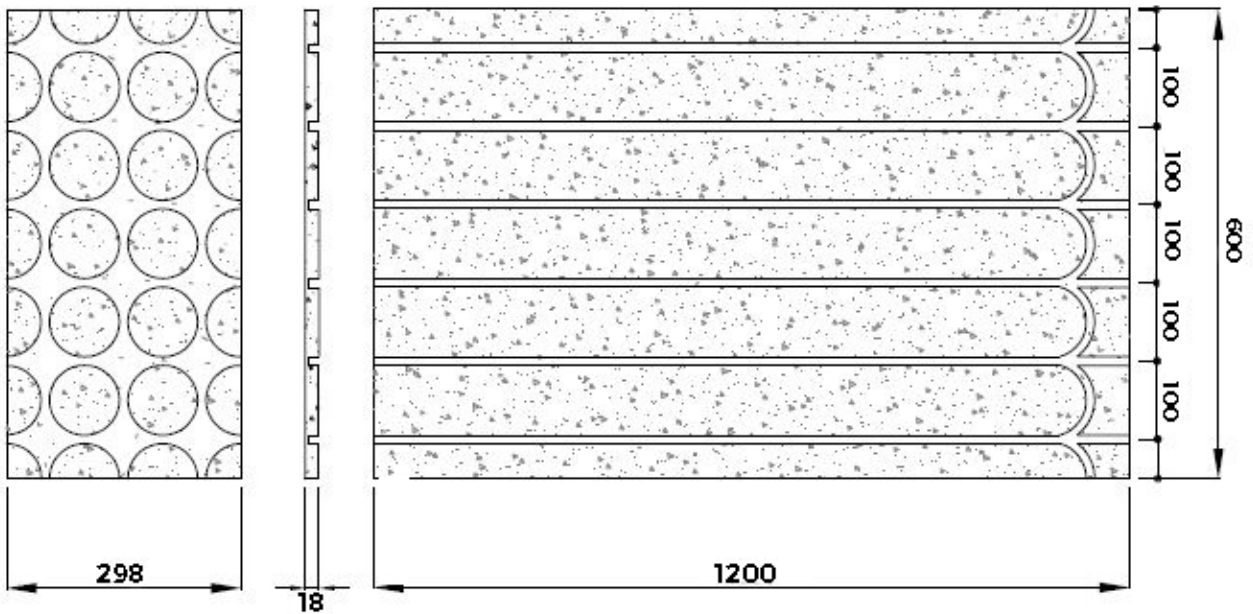
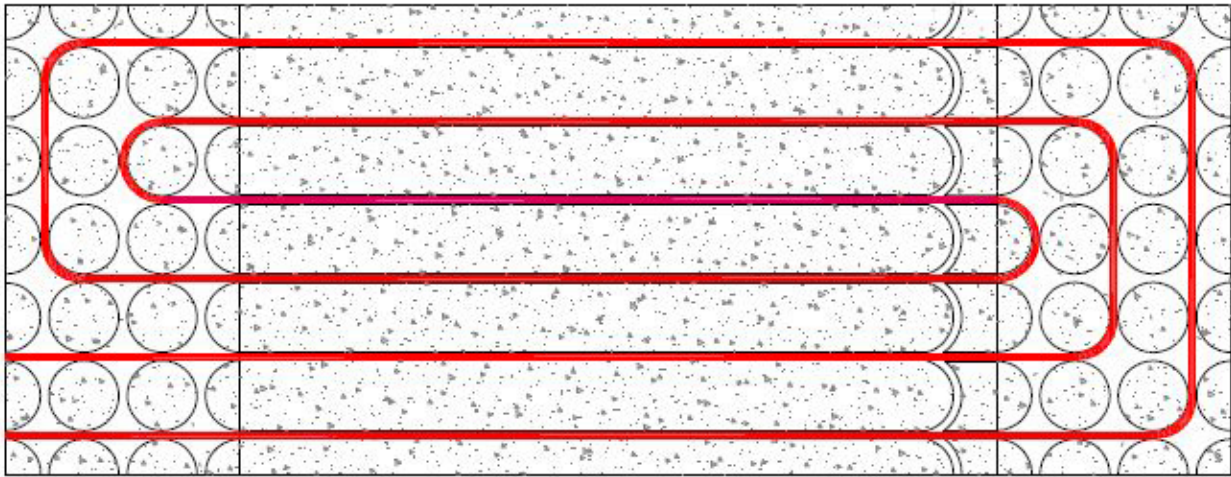
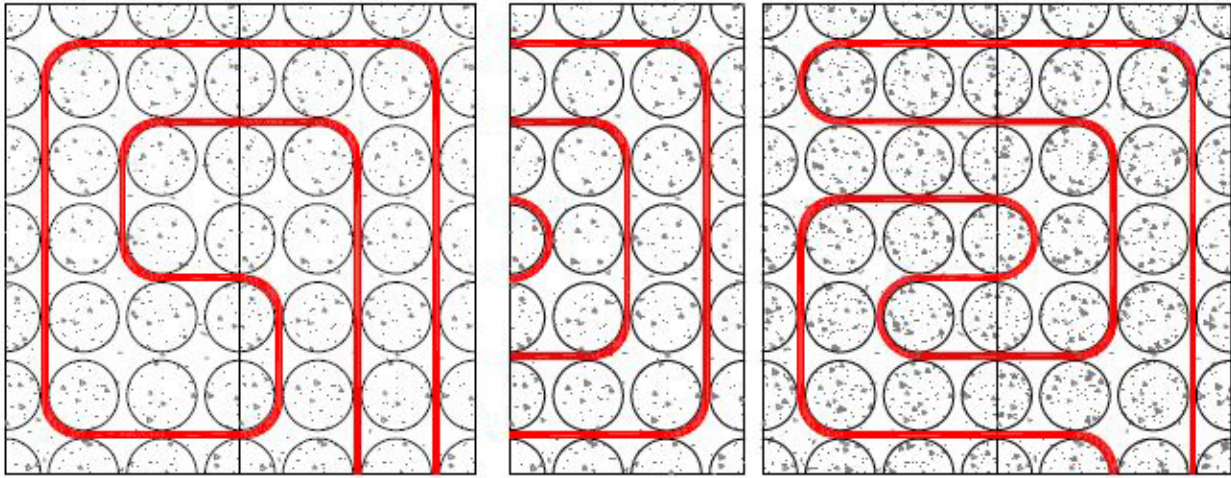


LEGEND	MATERIALS
1.	flooring
2.	mat (optional)
3.	VARMO DRY linear panel (H 18mm)
4.	pipe Ø11.6- pipe Ø 12 mm
5.	VARMO DRY panel for bends (H 18mm)

TECHNICAL INFORMATION

Features	PI00VDW18GFB PH	PI00VDW18GFB OH	PI00VDW18GFLO H	PI00VDW18GFLB H	PI00VDW18GFP CH (until stocks last)
TOTAL HEIGHT (mm)	18				
Pipes (mm)	11,6 - 12				
Total panel size (mm)	600x298	1.200x600			
Surface weight kg / m ²	21				
Thermal conductivity EN 12 667 W/mK	0.32				
Thermal capacity / specific heat kJ / KgK	1.1				
Nominal dry density (kg / m ³)	150±50				
Minimum installation pitch (mm)	100				
Fire resistant EN 13501-1	A2, s1-d0				
Resistance to vapor diffusion (μ)	13				
Expansion / bending due to relative humidity variation of 30% (at 20 ° C) mm / m	0.25				
Humidity compensation with relative humidity 65% and temperature 20 ° C %	1.3				
Ph	78				
Brinell hardness n / m ²	30				

DESIGN AND INSTALLATION



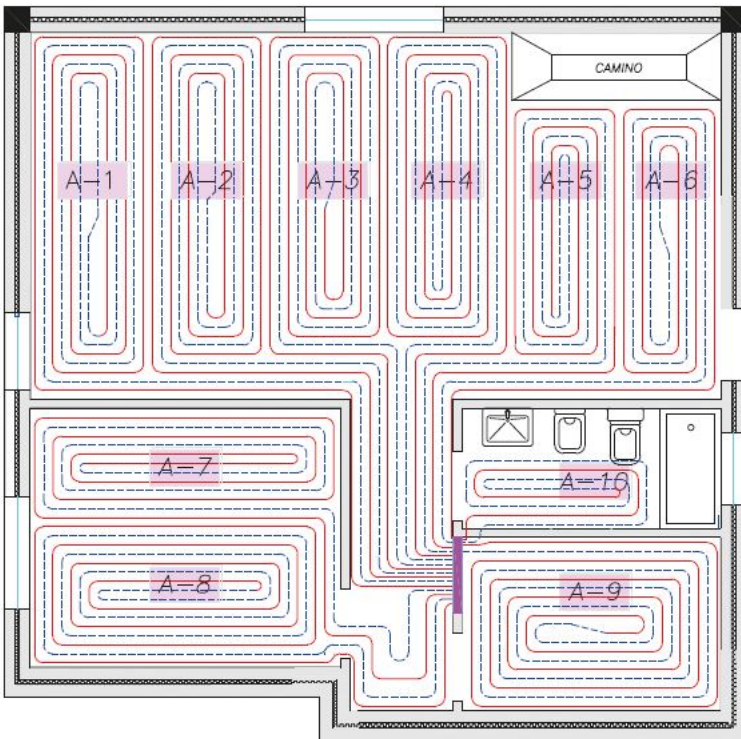
VARMO DRY panels are made in different versions: the largest is used where the pipe has a straight path, the smallest is positioned where the pipe must be blended. The installation distance is constant

at 10 cm.

To avoid excessive pressure drops, it is recommended that the length of the circuits does not exceed 60 m (equivalent to 6.5 m²).







Since the flow rate for each panel (120 ÷ 140 l / h max) is limited, it is possible to use a split connection fitting in order to reduce the size of the manifold.

FLOOR PLAN CIRCUIT DISTRIBUTION DIAGRAM



REFERENCE	MT
A1	64 Mt
A2	59 Mt
A3	54 Mt
A4	58 Mt
A5	42 Mt
A6	45 Mt
A7	48 Mt
A8	58 Mt
A9	56 Mt
A10	27 Mt

COMPONENTS

COMPONENTS	
	MIXING UNIT
	MANIFOLDS
	PIPE
	PERIMETER EDGING
	SKIM MORTAR
	ADHESIVE FOR PANEL

INSTALLATION INSTRUCTIONS

Fix the perimeter strip around the entire perimeter of the room, on the columns and on each vertical element, above the plaster.



Lay the insulating plates adhering to the perimeter strip.



Lay the polyethylene sheet of the band over the insulating plate and lay the polyethylene pipe on top of it in order to avoid possible infiltration of the screed.

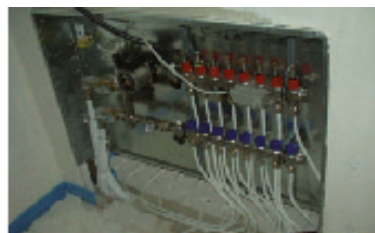


CIRCUIT REALIZATION

Once the panels have been fixed to the floor, you can proceed with the installation of the pipe by inserting it into the grooves on the panels. When laying the pipe, start from the delivery manifold following a double spiral pattern, unless otherwise specified in the project.



At the point of exit from the floor, the pipes must be protected with the fixing bends.



LEVELING WITH TOPPING MORTAR

With the topping up mortar, the traces of the panels are covered in order to create a well-leveled surface on which to fix the new flooring.





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