System description:

The Oventrop base mat system NP-R is a water based surface heating/cooling system in conjunction with thin layered screed and can be used for new buildings and renovation projects.
Together with the corresponding levelling compound, the system is laid directly onto the existing flooring or the bare floor as compound construction.
Levelling compounds are offered by several manufacturers and can be used for the Oventrop base mat system NP-R according to the manufacturer's specifications (see illustrations "Overall height" on page 2).
When choosing the operating fluid, the latest technical status has to be considered (e.g. VDI 2035 - Avoidance of damage to hot water heating systems).

Examination of the constructional conditions and preparatory measures:

To guarantee a functioning compound construction, the suitability of the existing base has to be checked carefully.

- Check base for sufficient load bearing capacity
- Check evenness according to DIN 18202, table 3, line 3 and level any larger unevenness if required
- Existing joints must remain
- Wooden supports must be dimensionally stable and firmly connected with the base, close joints and holes with a suitable filler (follow manufacturer's instructions!)
- Separating substances (old floor coverings, dust, adhesive residues) must be removed from the base
- The base must not show any racks, be firm, clean and dry
- Select bonding bridge depending on the material of the existing base (follow manufacturer's instructions!)

Overall heights and tested levelling compounds:

The illustrations on page 2 show the levelling compounds which were tested with the base mat system NP-R. The minimum covers result from a compound construction which is laid directly onto the existing floor covering or the bare floor. The overall height does not include the top floor covering.

System components:

Base mat NP-R, with different laying distances.

Edge insulating strips to provide edge joints.

PE-RT plastic pipe "Copert" sized 12 x 2 mm.

Compression fittings "Ofix K".

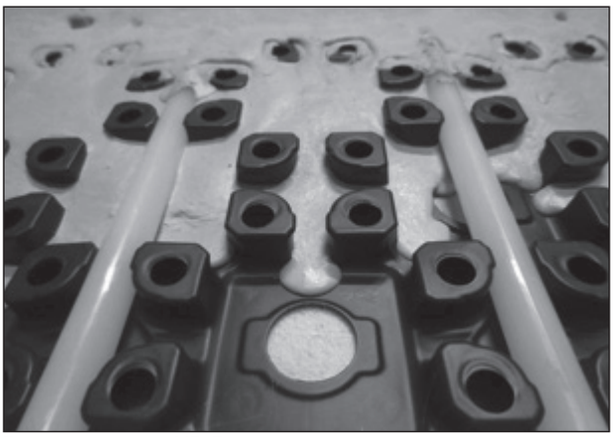
Stainless steel distributors/collectors "Multidis", valves, controls and components for individual room temperature control, such as installation sets "Unibox", electric room thermostats and actuators as well as wireless controls.

System solutions for flow temperature control.

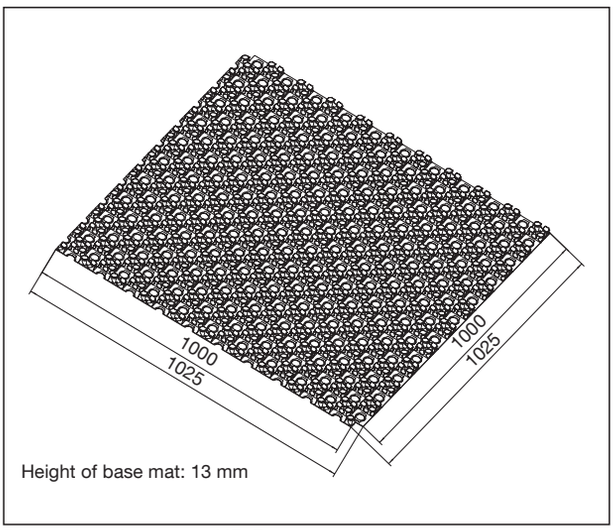
Tender specification base mat NP-R:

Pre-punched base mat without thermal insulation with foil overlap on both sides and full surface adhesive layer on the reverse side for fixing 12 x 2 mm PE-RT plastic pipes "Copert" and offering the possibility of 45° diagonal laying.
Laying distances: 5, 10, 15 cm.

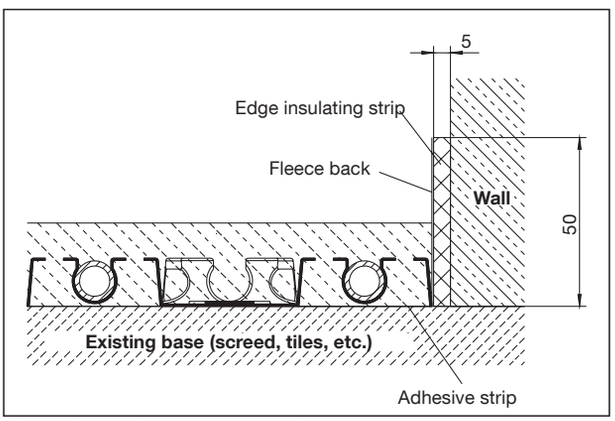
Item no.: 1402010



Base mat system NP-R



Dimensions base mat NP-R



Dimensions edge insulating strip

Technical data base mat NP-R:

Material:	Polystyrene foil
Laying distance:	5, 10, 15 cm
Effective size of base mat:	1.0 m x 1.0 m = 1 m²
Dimensions:	see illustration on page 1

Description and function base mat NP-R:
The base mat guarantees a safe fixing of the PE-RT plastic pipes “Copert” and the calculated laying distances are kept precisely.
The full surface adhesive layer on the reverse side guarantees a safe fixing of the base mat on the structural base.
The perforations of the base mat allow for an easy application of the levelling compound and a safe bonding with the existing base.

Tender specification edge insulating strip:
Edge insulating strip made of polyethylene foam with adhesive edge and integrated fleece back.

Item no.: 1401990

Technical data edge insulating strip:

Material:	Polyethylene foam	
Dimensions:	Height:	50 mm
	Thickness:	5 mm
	Length of roll:	20 m

Description and function edge insulating strip:
When installing the surface heating system, the edge insulating strip is laid around the floor surface, i.e. between the screed and the adjacent surfaces or construction components. This way, a clean separation of the construction components is guaranteed. A sufficient expansion of the screed is guaranteed by the flexible edge insulating strip and a structure-borne sound transmission is avoided.
The adhesive edge and the fleece back allow for a uniform fixing of the edge insulating strip onto the wall.

Tender specification PE-RT plastic pipe “Copert”:
For surface heating and cooling systems with oxygen barrier.
Pipe according to DIN 16833/DIN 16834/ oxygen tight according to DIN 4726.

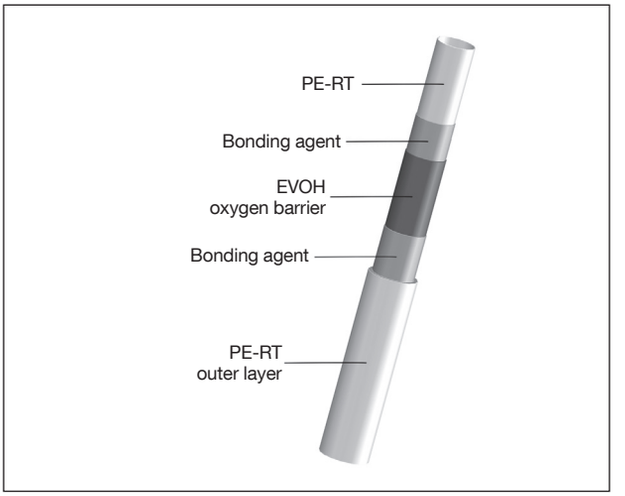
Item no.: 1401952

Technical data PE-RT plastic pipe “Copert”:

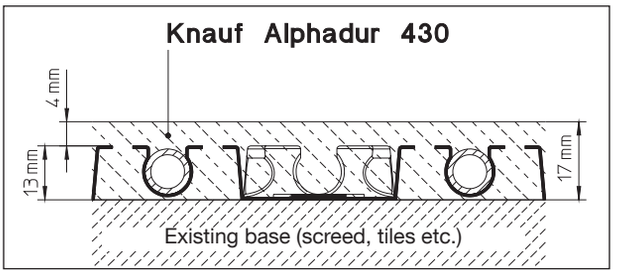
Dimension:	12 x 2 mm
Material:	PE-RT
Max. operating pressure p_S at 70 °C:	6 bar
Min. bending radius:	60 mm
Length per roll:	200 m

Description and function PE-RT plastic pipe “Copert”:
The pipe sized 12 x 2 mm was especially designed for the base mat system NP-R. A system separation is not required as a penetration of oxygen is prevented by the EVOH oxygen barrier of the pipe. The flexible pipe allows for a quick laying of the pipe loops.

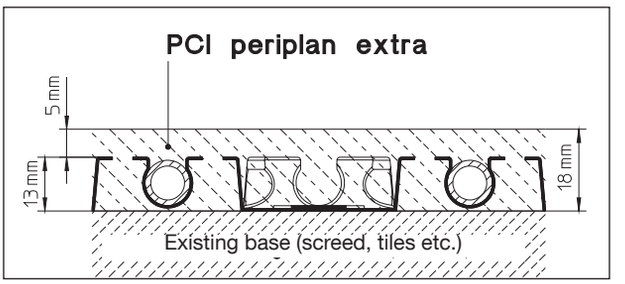
Installation advice base mat system NP-R:
The installation and operating instructions which can be found on the Internet under www.oventrop.com must be observed for a professional installation and commissioning of the “Cofloor” base mat system NP-R.



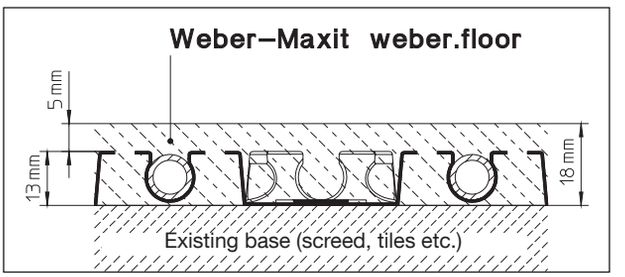
PE-RT plastic pipe “Copert” 12 x 2 mm



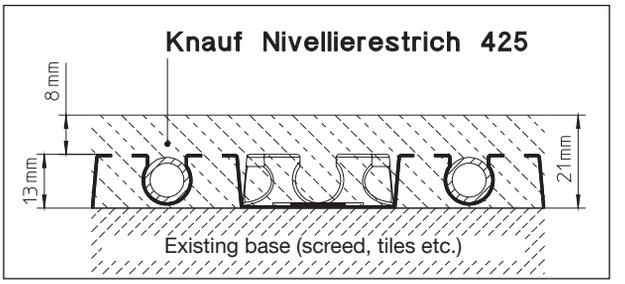
Knauf Alphadur 430 (minimum cover 4 mm, overall height 17 mm)



PCI periplan extra (minimum cover 5 mm, overall height 18 mm)



Weber-Maxit weber.floor (minimum cover 5 mm, overall height 18 mm)



Knauf Nivellierestrich 425 (minimum cover 8 mm, overall height 21 mm)

Subject to technical modifications without notice.

Product range 2
ti 285-EN/10/MW
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