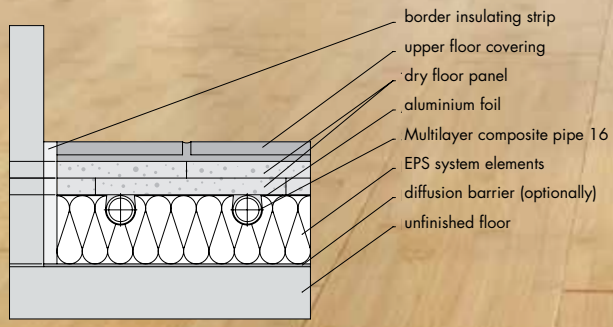


Perfect for wood constructions and prefabricated buildings



## PRINETO dry-laying surface heating and cooling system



# PRINETO dry-laying surface-heating and cooling system

## Underfloor heating for prefabrication and refurbishment

Underfloor heating significantly improves the indoor environment quality of housing. However, often it's not possible to install common surface heating systems in wooden constructions, e. g. in prefabricated houses due to the high system weight. Furthermore wet-laying brings moisture into the building which is leading to longer construction times.

The **PRINETO** dry system allows a quick and easy installa-

tion that is not dependent on the weather. Because of its low weight and install height, perfectly suitable for wooden joist ceilings. Due to its sophisticated technology the **PRINETO** dry underfloor heating system can be laid easily and convinces with its high pressure resistance and with little cutting loss of system elements.

## Advantages of the PRINETO dry-laying system

- The system elements (30/50 mm) are insulation, heat manifold and pipe fastener at the same time – laying in one work step
- Snake-like laying with defined distances between the pipes of 12 or 24 cm
- Quick and easy installation not dependent on the weather
- Very well suited for wooden joist ceilings due to low system weight
- No moisture in the building
- Reduction of construction time compared to wet-laying systems, since no drying time is required
- Laying of upper floor covering possible shortly after dry screed laying
- Very pressure-resistant floor (depending on dry screed, approx. 3 kN/m<sup>2</sup>)
- Very low installed height compared to wet systems
- Laying of heat insulation and heat conducting elements in one work step
- Little cutting loss of system elements (approx. 3% only)

Please observe the general instructions in the **PRINETO** catalogue concerning the installation and laying of

surface systems and the instructions from the dry screed producer.

## PRINETO dry-laying – system components and installation

The **PRINETO** multilayer composite pipe 16 (art.-no. 878 520 100) is inserted in the grooves of the aluminium-coated insulation elements. The aluminium foil conducts the heat from the multilayer composite pipe directly to the insulation surface, where it is distributed to the dry-laid screed. The structure therefore corresponds to construction type B as per DIN 18560-2.

Laying is started in the room which is farthest from the heating circuit manifold. For guiding the flow along the wall towards the glass facade a **PRINETO** grooved element (art.-no. 878 386 133) 48 cm wide is cut into 4 equal strips each 12 cm wide, and laid along the wall of the room in such a way that a continuous groove is produced.

After this, the **PRINETO** U-turn elements (art.-no. 878 386 134) are laid in front of the grooved strips and along the opposite wall of the room. The U-turn elements opposite each other are staggered in such a way that pipe laying in a snake-like pattern in the grooves is possible. The respective last grooved element in a row is cut at right angles to the required remaining length. The remaining part of this grooved element can be used at the beginning of the next row. This way there is only little cutting loss when elements are installed. The remaining elements can be used when the “bottom” wall of the room is reached as starting pieces for the next room

**PRINETO** levelling elements (art.-no. 878 386 135) are laid in areas where pipe laying is difficult or the pipes are very close to each other (e.g. directly in front of the heating circuit manifold) or in doorways. For cutting the required pipe grooves into the elements we use our special **PRINETO** heat-cutter 230 V (art.-no. 878 386 136).

If the whole area of system elements has been laid completely, the marked connection of the grooved elements can be made. After that the **PRINETO** Stabil multilayered pipe can be rolled out by hand and pressed into the grooves completely by treading on it.

The **PRINETO** special adhesive (art.-no. 878 386 142) for adhering groove elements with dry screed elements guarantees an optimal heat flux density and ensures high floor stability and resilience.



Start of laying **PRINETO** U-turn elements in a corner of the room.



Doorway with **PRINETO** levelling element.



Connection of **PRINETO** grooved elements in corners.



**PRINETO** heat-cutter for cutting individual pipe grooves.



**PRINETO** special adhesive (art.-no. 878 386 142)

# **PRINETO** - The plastic pipe system for drinking water, heating and surface heating

As one of the alliance companies within the globally successful Würth Group, we established an international reputation for ourselves with innovative solutions in the fields of plumbing, heating and cooling systems as well as solar thermal systems.

Our philosophy is the realisation of innovations at a high technical level - to the benefit and satisfaction of our customers.



With the **PRINETO** wireless RTC WEB, IVT is presenting a new, universal individual room control system with complete equipment for heating and cooling applications. Even the basic version of the system fulfils all the requirements for perfect user convenience. Numerous inputs and outputs as well as measuring, control and regulation functions guarantee optimum, energy-efficient interaction with external devices and systems.

## Any questions?

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