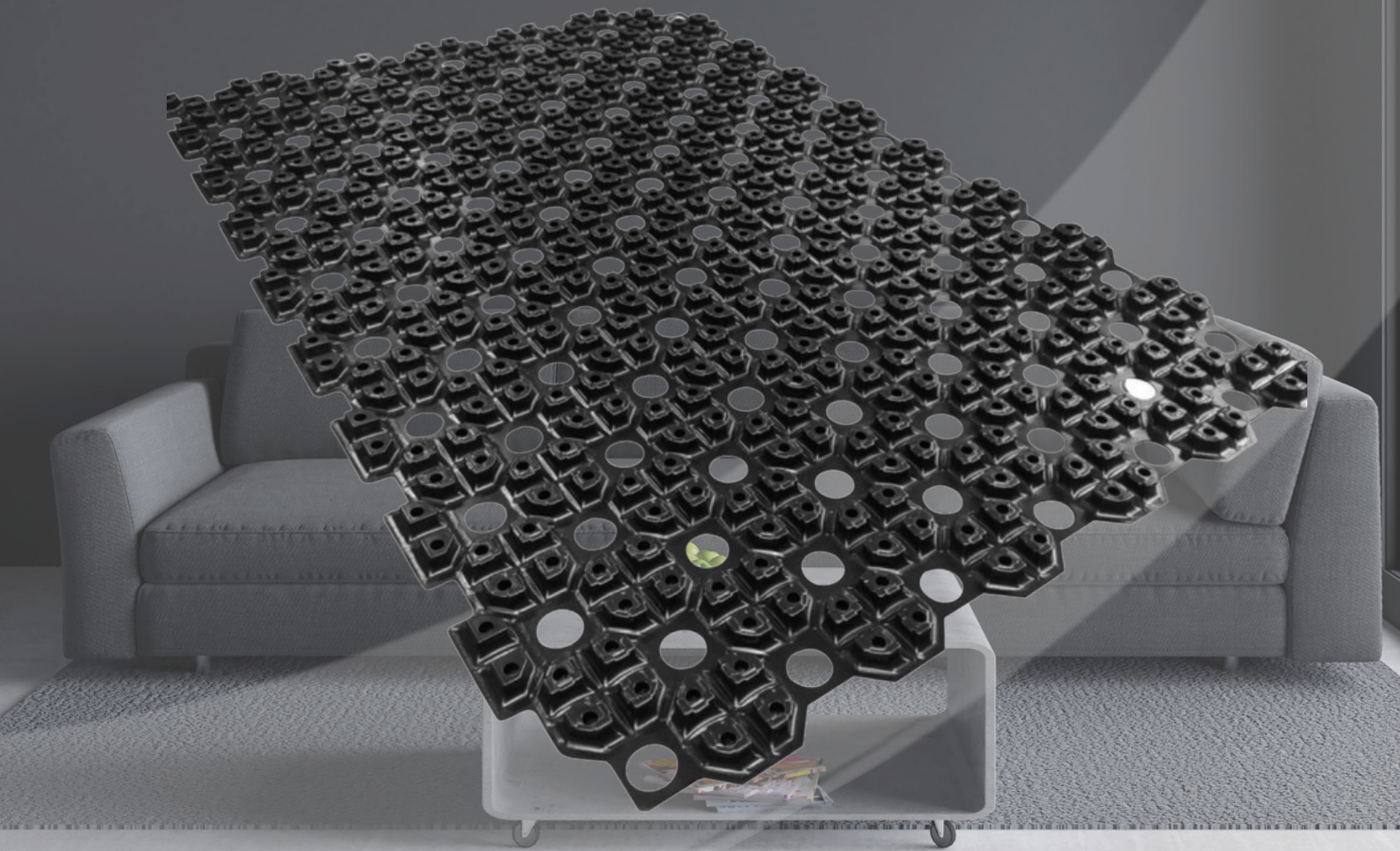


TIOCAS0002 LOWTOP CASTELLATED MAT



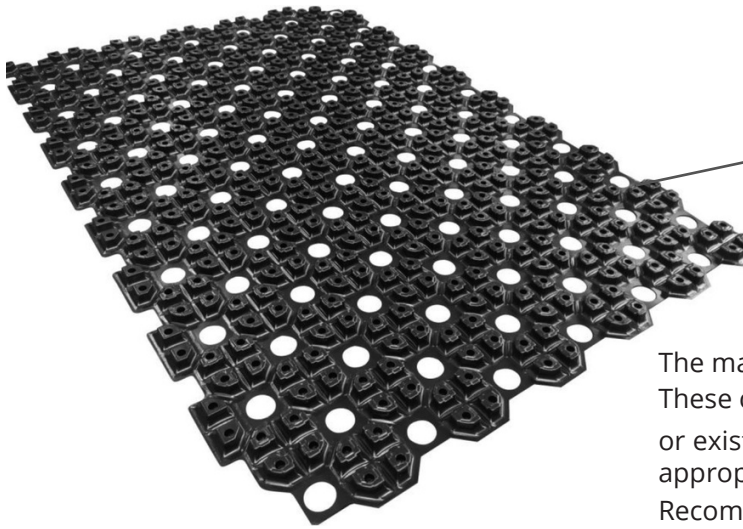
PRODUCTS FOR THE BUILT ENVIRONMENT



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CONSTRUCTION AND APPLICATION

Thermoformed, perforated mat for low-profile underfloor heating with the usage of special underlays. The mat allows to assembly a wet-built floor covering up to 3 cm high. The underfloor heating system is dedicated to renovated buildings and other buildings where the technical conditions make it impossible to perform underfloor heating in a traditional form.



The mat is intended for use on mineral substrates in renovated rooms. These can be cement concrete substrates, anhydrite screeds or existing ceramic floors. Depending on the type of substrate, an appropriate primer should be selected.

Recommendations:

For absorbent substrates - Baunit Grund

For non-absorbent substrates Baunit SuperPrimer

ADVANTAGES

- A mat dedicated to a very low installation by concrete screed
- The mat holds the pipe permanently and remain it stable, so there is no need to use additional fastening elements
- The perforation of the mat guarantees a good connection of the new screed with the already existing mineral basis
- The mats are originally covered with an adhesive ensuring a permanent connection to the already existing mineral basis

Underfloor heating polystyrene mat made in the thermoforming process. The mat is perforated and coated with an adhesive that allows it to stick to the substrate. The glue is secured with siliconized paper.

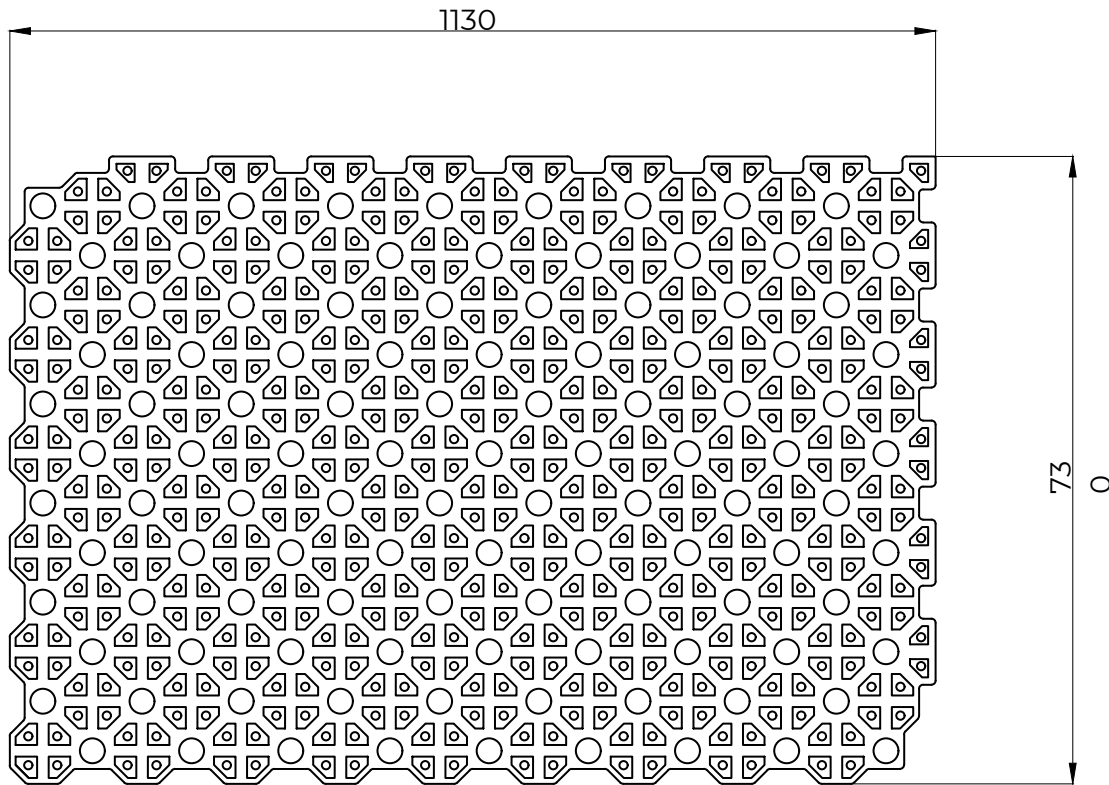
The mats are originally covered with an adhesive ensuring a permanent connection to the already existing mineral basis.



Pipe in the Eurorenova castellated mat

It should be remembered that the floor on which we plan to make underfloor heating with this technique is properly thermally insulated, leveled, even and free of dirt.

TECHNICAL DATA



Material: Polystyrene (PS)

- Mat size (length x width): **1130 mm x 730 x 13mm**
- **Effective panel size (length x width): 1115 mm x 715 mm**
- Effective area: **0,79 m²**
- Tab height: **15 mm**
- Mat thickness: **1 mm**
- Permissible size of heating pipes: **12 mm**
- Pipe spacing: **5 cm, 10cm, 15 cm, 20 cm (multiple of 5)**
- Underfloor heating construction system according to DIN 18560-2: **A**

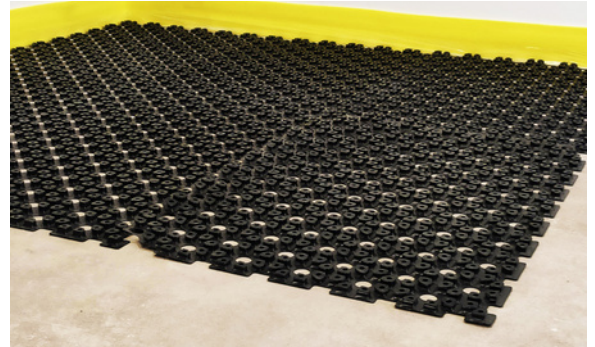
PERFORMING THE INSTALLATION

The substrate should be properly prepared and sealed. Edge dilatation should be arranged next to the walls. Expansion between rooms as well as dividing larger surfaces may be necessary and depends on the surface of the underfloor heating and the type of floor finish.

LOWTOP mat should be placed parallel to the walls and glued to the base, fastening them to each other in the same row. It is possible thanks to two extreme rows of tabs profiled in a way that enables connection. Mats should be placed only where the underfloor heating pipes will be led.

The pipe should be anchored between the tabs in LOWTOP mats and led parallel or diagonally to the mat edge. For this purpose, you do not need to use special tools or additional mounting accessories.

The mat is durable enough to support the weight of the person installing underfloor heating.



Installation of LOWTOP mats

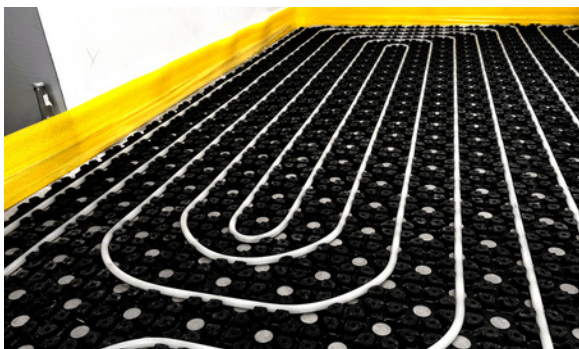
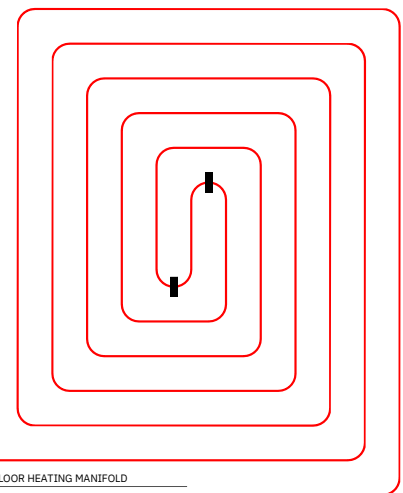
ATTENTION

The underfloor heating loop should be guided in the bifilar system (cochlea). Each of these loops has two turns of the pipe through 180°. For safety reasons, it is recommended to additionally secure this arc with an assembly hook before making a self-levelling screed, thus preventing the pipe from falling out of the holder before the screed becomes bound.

IMPORTANT

The routes and spacing of the pipes, the number and length of the under-floor heating loops as well as the flow settings should result from the calculations included in the underfloor heating design.

After performing the necessary leak test on the installation, perform a self-levelling screed.



Underfloor heating installation with usage of LOWTOP castellated mat



Fastening underfloor heating pipe in LOWTOP castellated mat

SCREED

The base for the screed must be properly primed and sealed. The holes in the LOWTOP mats allow the material to penetrate into the mineral substrate and bond with it, creating a monolithic whole, which makes it possible to make a 3 cm thick screed without the risk of cracks occurring after drying. Flows of the compound into the gaps or cavities may result in the formation of depressions on the surface of the underlay - in order to avoid defects on the surface of the screed, follow the recommendations of the manufacturer of the self-levelling compound.

After full hardening and drying in accordance with the manufacturer's documentation, the screed annealing process should be carried out. The level of moisture in the underlay allows the floor to be finished in accordance with the documentation of the screed manufacturer.



Flooding the underfloor heating system
self-leveling mass



TIO Climate Solutions
c/o H&H Distribution
Unit X&Y
The Steventon Depot
Hanney Road
OX13 6DJ



www.tioclimatesolutions.co.uk
01235 242710
office@tioclimatesolutions.co.uk