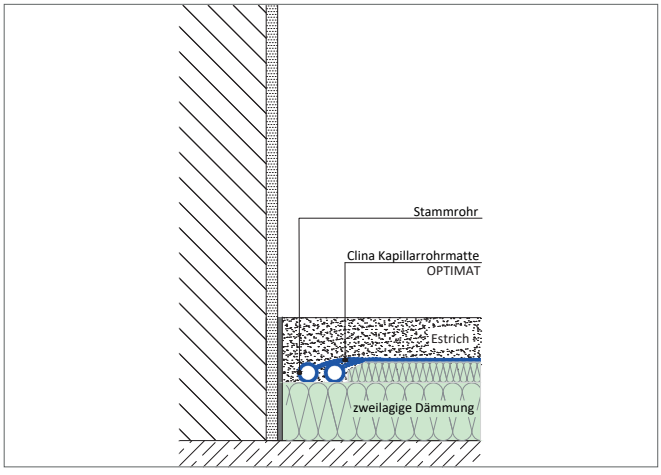
FLOOR HEATING IN SCREED

with capillary tube mat OPTIMAT SB 20.00

System data sheet



CLINA - BETTER HEATING AND COOLING

FLOOR HEATING IN SCREED

with capillary tube mat OPTIMAT SB 20.00

System data sheet

DESCRIPTION

- the capillary tube mats can be individually adjusted in length and width at the construction site
- they are laid over the entire surface of the insulation layer and, depending on the nature of the insulation, fixed with appropriate fixing material (e.g. plastic nails or U-clips); insulation system with moisture barrier is recommended
- mat distributor pipes and supply lines are placed in the screed or in the insulation (in recesses/slots)
- the capillary tube mats, welded together to a hydraulic circuit, are connected to the supply and return lines and to a centrally located manifold
- the connection of the capillary tube mats to each other as well as the connection to the supply and return lines are made by means of heating element socket welding
- the leak test in accordance with the factory guidelines is carried out before closing the recesses/slots and placing the screed; the test pressure is maintained during installation
- the temperature can be controlled room-by-room

ADVANTAGES

Screed layer thickness can be saved

If mat distributor pipes and supply lines can be accommodated in recesses or slots in the insulation layer, the application of the screed minimum thickness is sufficient.

High performance - high dynamics

Thanks to the small distance of the capillary tubes of 20 mm, the floor is heated homogeneously. As a result of this and due to the position of the capillary tube mats close to the surface a high heat output at low system temperatures can be achieved. This results in extremely short warm-up times. Compared to conventional underfloor heating systems (e.g. single-pipe systems), Clina underfloor heating only requires approx. 1/4 of the warm-up time.

Environmentally friendly and energy efficient

Very low system temperatures and extremely short warm-up times save money and protect the environment.

TECHNICAL DATA

HEATING CAPACITY

100 W/m²
according to characteristic curve for underfloor heating

COOLING CAPACITY

30 W/m² recommended

ACOUSTICS

depending on floor covering

INSTALLATION HEIGHT (insulation layer + screed):
mat distributor pipe in screed: pipe size plus minimum screed thickness
mat distributor pipe in insulation: minimum screed thickness

SYSTEM WEIGHT (filled with water):
750 g/m² plus screed and floor covering

Component	Material	Dimensions	Other
CAPILLARY TUBE MAT	polypropylene (PP-R), recyclable	mat distributor pipe: 20 x 2,0 mm capillary tube: 4,3 x 0,8 mm distance of the capillaries: 20 mm length: 600-6000 mm width: 150-1000 mm	designation: OPTIMAT SB 20.00 weight (incl. water): 750 g/m² open mat distributor pipes pressure stage: PN 10
INSULATION LAYER	EPS	height: as necessary	system insulation with moisture barrier is recommended
SCREED	cement screed or floating screed	screed thickness: according to DIN 18560-2	all customary screeds are suitable
SUPPLY AND RETURN LINES	polypropylene (PP-R), recyclable	DN 15 (PP 20 x 2,0 mm)	connection alternating according to Tichelmann principle

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