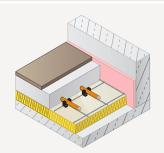
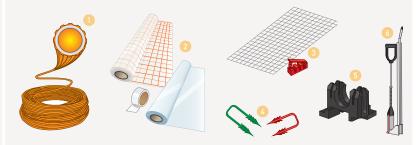
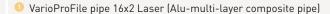
Floor heating for screed floors

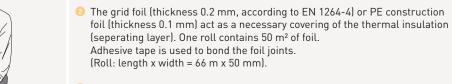
Systems 1/2

VarioClip | Wire mesh system









On The wire mesh ø 3 mm is a spot-welded mesh made of galvanised wire, with edge wire.

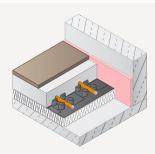
Mesh width: 100 x 100 mm

Dimensions: $2103 \times 1203 \text{ mm} = 2.53 \text{ m}^2$

The wire mesh connector is used for joining the wire meshes.

- O Furthermore, the wire mesh can be fixed to the thermal insulation with fixing needles. Hence, the wire mesh is secured against moving out of position.
- The VarioClip is fixed with the setter 0 on the wire mesh. With tilt protection – clips do not fall over.

VarioFix / VarioNop | Nap systems



















Nap panels:

- Pipe bracket, seperating layer (and thermal insulation)
- Dimensions 1450 x 850 mm (useable area 1400 x 800 mm)
- Min. pipe spacing 50 mm
- Bridges raise the VarioProFile pipe from the panel
- Form-fitting connection as first rows of naps overlaps
- Surface sufficiently stable to walk on
- Insulation reaction to fire: Euroclass E



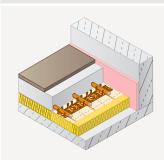
	VarioFix	VarioNop-11	2 VarioNop-30
Panel thickness including naps	20 mm	31 mm	50 mm
Insulation nominal thickness	-	11 mm	30 mm
Sound impact improvement	-	-	28 dB
Declared thermal conductivity λ	-	0.035 W/mK	0.040 W/mK
Service load on screed (EN 13163)	-	75 kN/m²	5 kN/m²
Compressibility	-	-	≤ 2 mm
Dynamical stiffness	-	-	≤ 20 MN/m³

(a) The levelling element is used in the door area, the connecting element (b) to connect residual pieces.

Dimensions of the levelling element: $1400 \times 200 \text{ mm}$ Dimensions of the connecting element: $1400 \times 100 \text{ mm}$

Systems 2/2

VarioRast | Rail system







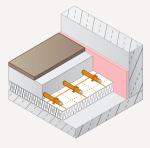






- VarioProFile pipe 16x2 Laser (Alu-multi-layer composite pipe)
- The grid foil act as a necessary covering of the thermal insulation (separating layer) and is made from 100% polyethylene recycling granulate with a 50 mm graticule and 0.2 mm thickness. One roll contains 50 m² of foil. Adhesive tape is used to bond the foil joints. (Roll: length x width = 66 m x 50 mm).
- On The VarioBar has a hole pattern with holes spaced 50 mm from each other and a self-adhesive strip on the back. It can be easily divided by hand every 100 mm. It raises the VarioProFile pipe from the grid foil allowing the heating screed to completely enclose the pipe. Length: 1 m
- Furthermore, the VarioBar is also fixed to the thermal insulation with fixing needles. Hence, the VarioBar cannot move out of position.

VarioRoll | Staple systems









VarioRoll 30-3





- VarioProFile pipe 16x2 Laser (Alu-multi-layer composite pipe)
- 2 VarioRoll thermal insulation and impact sound insulation:
 - Made from monitored impact sound polystyrene
 - Swift and easy installation
 - Reaction to fire: Euroclass E
 - Optimal retaining power for stapler pins via the incorporated weave
 - Service load on screed (according to EN 13163) 4 kN/m², Total load (according to ÖN B 6000) up to 6.5 kN/m²
 - One-sided 30 mm overlap with self-adhesive strips results in an overall area without joints
 - Special laminated weave foil with 50 mm grid as separating layer

	VarioRoll 20-2	VarioRoll 30-3
Insulation nominal thickness	20 mm	30 mm
Sound impact improvement	26 dB	28 dB
Declared thermal conductivity $\boldsymbol{\lambda}$	0.040 W/mK	0.040 W/mK
Compressibility	< 2 mm	≤ 3 mm
Dynamical stiffness	≤ 20 MN/m³	≤ 20 MN/m³

The VarioProFile pipe is fixed with stapler pins 0 to the VarioRoll thermal insulation using a stapler 0.