

PRODUCT DATA SHEET (ver. 02/02.2018)



1. Name

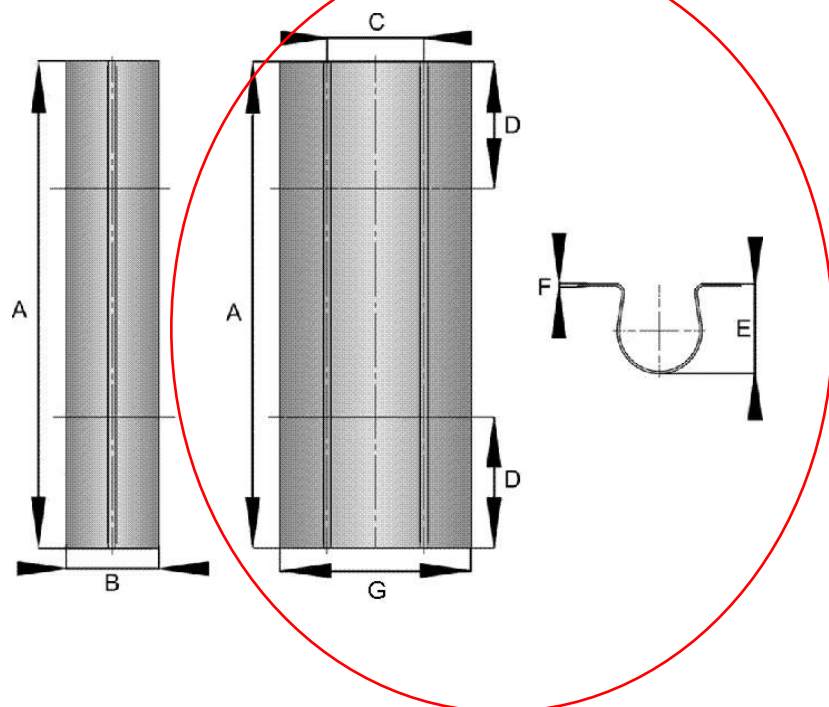
AluPlate heating screens, AluPlate heating screens with insulation

2. The features and intended use of the product

The AluPlate heating screens are intended for mounting underfloor heating, using a drywall system. They are particularly recommended for building renovations (wooden floors installed on sleepers) and when building houses, using the cage system.

3. Structure and dimensions

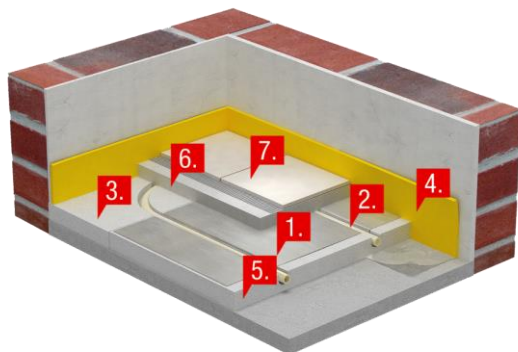
The AluPlate heating screens are made of aluminium panels that serve as both heating screens and clamping holders for the pipe.



Code	Diameter Ø (mm)	Dimensions (mm)							Material
		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	
AluPlate heating screen									
9-1700-001-00-21-00	16	1000	195	-	-	18,5	0,5	-	aluminium
9-1700-001-27-21-00	16	1000	195	-	250	18,5	0,5	-	
9-1700-002-00-21-00	16	1000	-	200	-	18,5	0,5	395	
9-1700-002-27-21-00	16	1000	-	200	250	18,5	0,5	395	
9-1710-001-27-21-00	20	1150	270	-	250	22,5	0,5	-	
AluPlate heating screen with insulation									
9-1705-002-00-21-00	16	1000	-	200	-	30	-	400	aluminium/ EPS100
9-1705-002-27-21-00	16	1000	-	200	-	30	-	400	
9-1705-001-00-21-00	16	1000	195	-	-	30	0,5	-	
9-1705-001-27-21-00	16	1000	195	250	-	30	0,5	-	
Closing bend for heating screens									
9-1750-016-00-21-00	16	400	150	200	-	30	-	-	EPS 100

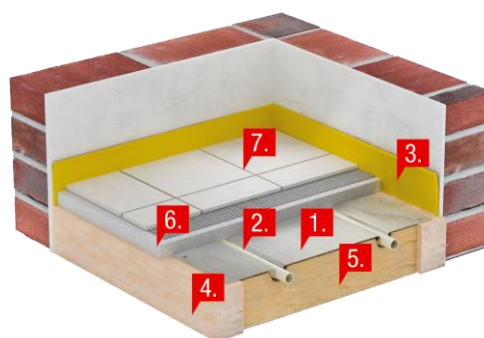
4. Assembly

a) Assembly on a flat surface



1. AluPlate heating screens
2. Heating pipe
3. Closing bend
4. Edge strip
5. Systemic insulation
6. Dry screed
7. Finishing layer

b) Assembly on sleepers



1. AluPlate heating screen
2. Heating pipe
3. Edge strip
4. Sleeper
5. Mineral wool
6. Dry screed
7. Finishing layer

Basic assembly principles:

- Run the edge strip along the perimeter of the room.
- Start installing AluPlate heating screens in the minimum distance of 25cm from the wall (to be able to install the bends later on).

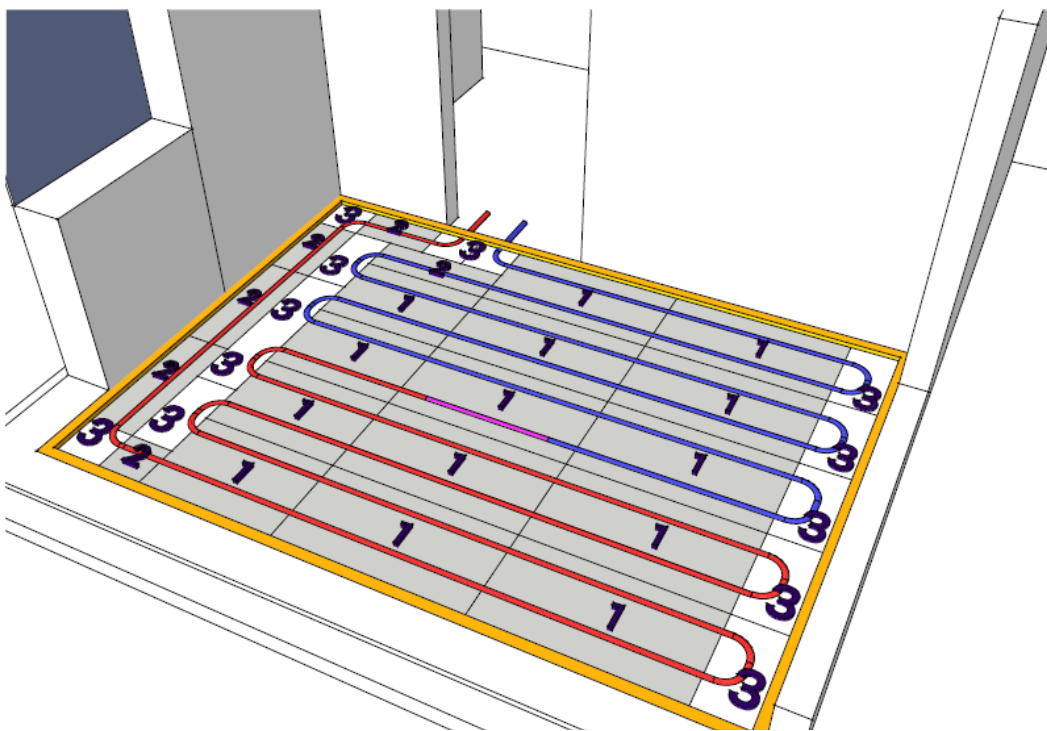
- Heating screens cannot be in contact with one another or overlap – keep the minimum spacing of approx. 5mm for screens installed between side panels, and approx. 10mm for screens installed between front panels.
- Screen channels should run along a single line to prevent any damage to the heating pipe.

a) assembly on a flat surface

When using a floor supported on sleepers: Oriented strand boards (OSB) are placed directly on the sleepers, followed by AluPlate screens with insulation, arranged perpendicularly to the sleepers.

If a flat floor is used: each screen must be fastened directly to the base, by wood screws applied in at least two locations on the screen. Then, separate the screens from the wall, using the edge strip. When the screens have been arranged, they have to be covered with fibre-cement boards or dry screed. All joints between panels must be filled with a steel net for façades, and then reinforced with flexible adhesive. Let the joints dry. Then, apply a layer of adhesive on the ready surface and install the screens, arranging them in the so-called “comb”.

If AluPlate heating screens with insulation are used, it is recommended to apply closing bends, which enables running the pipe over the bends.



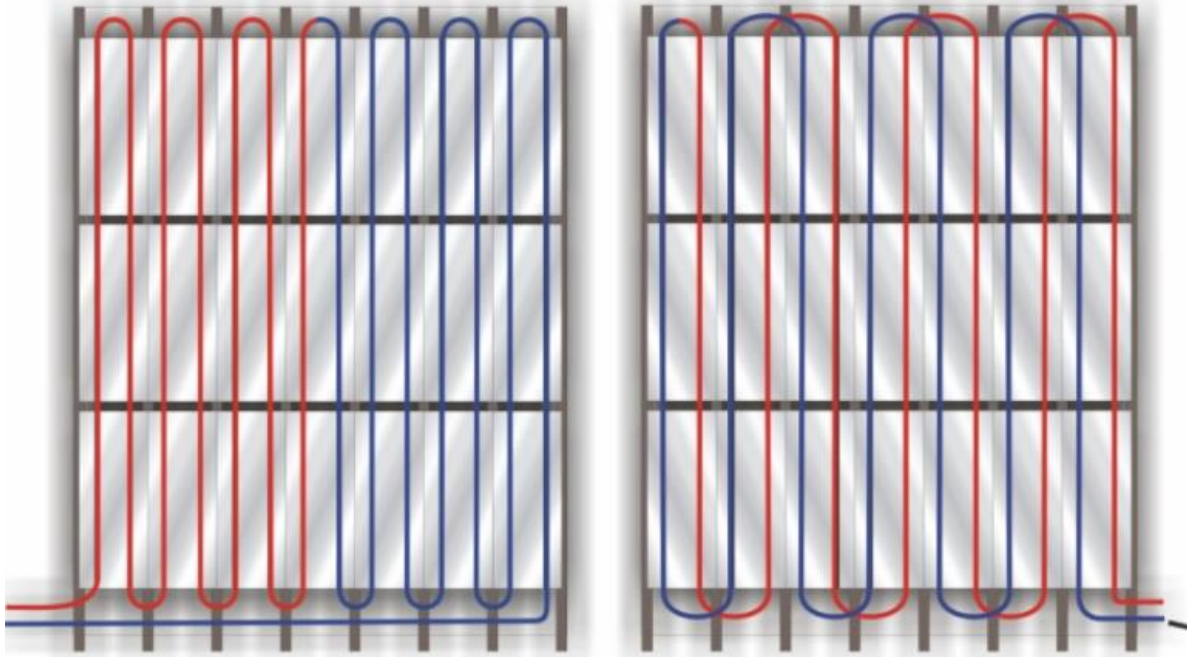
Exemplary layout plan for the Aluplate underfloor dry system

1. Insulating plate with Aluplate two-channel heating screen
2. Insulating plate with Aluplate single-channel heating screen
3. Closing bend

b) assembly on sleepers

Screens without insulation are arranged between sleepers and the screen edges are fixed with a taker. Same as in the previous variant, screed or fibre-cement boards are arranged perpendicularly. The boards are joined, using the method specified above and a special wide adhesive tape, and then filled in with adhesive. All other steps are identical.

If using AluPlate heating screens installed on sleepers, you need to start with cutting an appropriate groove in the sleeper, in order to be able to run the pipe over the bend.



Arranging floor panels directly on heating screens with insulation

It is recommended to apply polyethylene sheeting, foam dedicated to panels, or cardboard base, directly on the AluPlate heating screens, and then install floor panels.

5. Technical parameters

AluPlate heating screens are made of GTA aluminium. 1050 h24

Insulation parameters:

Insulation for AluPlate heating screens				
Version	Dimensions [mm]	Max load [t/m ²]	Thermal resistance of insulation R [(m ² K)/W]	Thermal conductivity of aluminium [W/(m•K)]
Single channel with grooves	200x1,000	2.4	0.75	Approx. 237
Single channel without grooves	200x1,000			
Double channel with grooves	400x1,000			
Double channel without grooves	400x1,000			

6. Codes

Code	Name
9-1700-001-00-21-00	SINGLE CHANNEL ALUPLATE HEATING SCREEN 1000X195MM FI 16
9-1700-001-27-21-00	SINGLE CHANNEL ALUPLATE HEATING SCREEN 1000X195MM WITH 25CM GROOVES FI 16
9-1700-002-00-21-00	DOUBLE CHANNEL ALUPLATE HEATING SCREEN 1000X395MM FI 16
9-1700-002-27-21-00	DOUBLE CHANNEL ALUPLATE HEATING SCREEN 1000X395MM WITH 25CM GROOVES FI 16
9-1705-001-00-21-00	SINGLE CHANNEL ALUPLATE HEATING SCREEN WITH FOAMED POLYSTYRENE INSULATION 1000X195MM
9-1705-001-27-21-00	SINGLE CHANNEL ALUPLATE HEATING SCREEN WITH FOAMED POLYSTYRENE INSULATION 1000X195MM AND 25CM GROOVES
9-1705-002-00-21-00	DOUBLE CHANNEL ALUPLATE HEATING SCREEN WITH FOAMED POLYSTYRENE INSULATION 1000X395MM FI 16
9-1705-002-27-21-00	DOUBLE CHANNEL ALUPLATE HEATING SCREEN WITH FOAMED POLYSTYRENE INSULATION 1000X395MM FI 16 AND 25CM GROOVES
9-1750-016-00-21-00	CLOSING BENDS FOR ALUPLATE HEATING SCREENS FI 16

7. Logistic data

Product code	Unit package			2.0m pallet		
	Quantity (pcs./package)	Package size (in mm)	Package weight (in g)	Quantity (pcs./pallet)	Quantity of unit packages	Pallet weight (in kg)
9-1700-001-00-21-00	50	1018x405x210	16.25	800	16	280
9-1700-001-27-21-00	50	1018x405x210	16.25	800	16	280
9-1700-002-00-21-00	40	1015x735x200	25.50	480	12	326
9-1700-002-27-21-00	40	1015x735x200	25.50	480	12	326
9-1710-001-27-21-00	40	1170x500x415	---	240	6	---
9-1705-002-00-21-00	22	1002x400x405	---	220	10	---
9-1705-002-27-21-00	22	1002x400x405	---	220	10	---
9-1705-001-00-21-00	11	1002x400x405	---	110	10	---
9-1705-001-27-21-00	11	1002x400x405	---	110	10	---

8. Advantages

- low load applied on floors,
- low-rise housing of the floor heater,
- screens ensure uniform distribution of heat along the entire heating surface,
- screens serve as holders that fix the pipe,
- single- or double-channel AluPlate screens with extra grooves applied within the distance of 25cm from its edge enable quick folding of the screen and dividing it into 25cm-, 50cm- or 75cm-long segments, without using any additional tools. They enable quick adjusting of screen dimensions to the dimensions of the room.