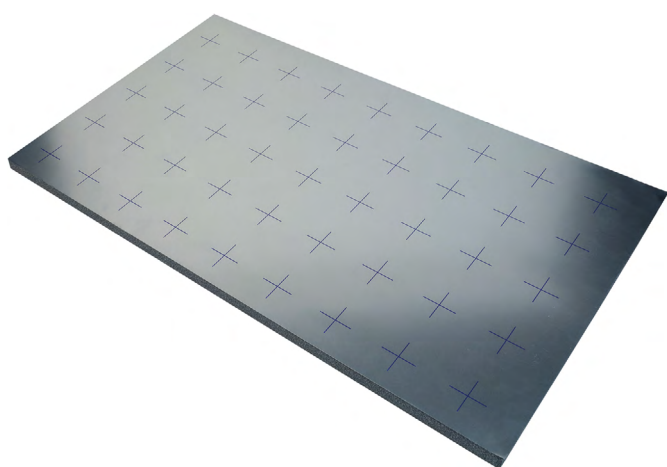


# Flat insulation panel made of EPS with graphite and aluminum layer, for radiant floor systems

Datasheet  
0987EN  11/2021

Flat insulation panel for radiant floor systems.  
Consisting of expanded polystyrene foam with graphite  
(EPS) with a 0,25 mm aluminum protection layer.  
Provided with print grid for pitch reference: 100x100 mm.

## Versions and product codes

PRODUCT CODE	SIZE [mm] h=height	N. OF SHEETS	TOTAL USEFUL SURFACE [m <sup>2</sup> ]
R981AGY003	h25	25	12,50
R981AGY004	h40	15	7,50

## ► Technical data

### Stocking conditions

- The panels must not be exposed to direct sunlight
- Stocking must be carried out in a dry and protected area, at temperatures above 5 °C and below 50 °C
- Keep the panels away from chemical agents
- Keep the panels away from open flames and heat sources

▲ **WARNING.** Do not expose to direct sunlight, even after installation, up to screed casting.

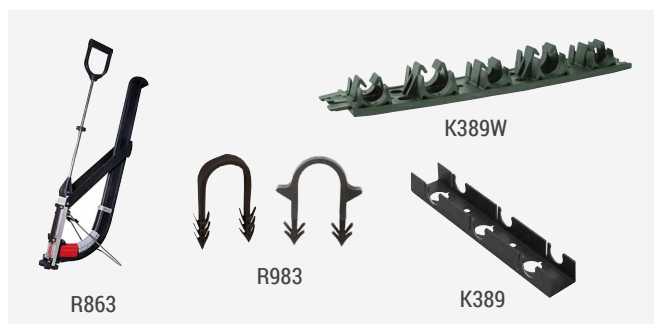
### R981AGY003

INSULATION PANEL	
Useful dimensions	1000 x 500 mm
Useful surface	0,5 m <sup>2</sup>
Total thickness	25 mm
Print grid	100x100 mm
INSULATION SHEET	
Material	Expanded polystyrene (EPS200) with graphite
Thermal conductivity, $\lambda_D$	0,03 W/(m K)
Thermal resistance $R_\lambda$	0,83 m <sup>2</sup> K/W
Min. resistance to 10% crushing	200 kPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-L(3)-W(3)-T(2)-CS(10)200-WL(T)6,5-Z30-70
PROTECTION LAYER	
Material	Aluminum
Thickness	0,25 mm

### R981AGY004

INSULATION PANEL	
Useful dimensions	1000 x 500 mm
Useful surface	0,5 m <sup>2</sup>
Total thickness	40 mm
Print grid	100x100 mm
INSULATION SHEET	
Material	Expanded polystyrene (EPS200) with graphite
Thermal conductivity, $\lambda_D$	0,03 W/(m K)
Thermal resistance $R_\lambda$	1,33 m <sup>2</sup> K/W
Min. resistance to 10% crushing	200 kPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-L(3)-W(3)-T(2)-CS(10)200-WL(T)6,5-Z30-70
PROTECTION LAYER	
Material	Aluminum
Thickness	0,25 mm

## ➤ Laying



The panels must be installed side by side using the side rails to connect them.

The pipes are fitted to the insulation panel to create the radiant floor circuits using pipe installation tracks K389 or K389W, or pipe installation clips R983Y001, R983Y500 with clip tacker R983.

The pipes can be installed with different patterns by forming spiral loops as required.

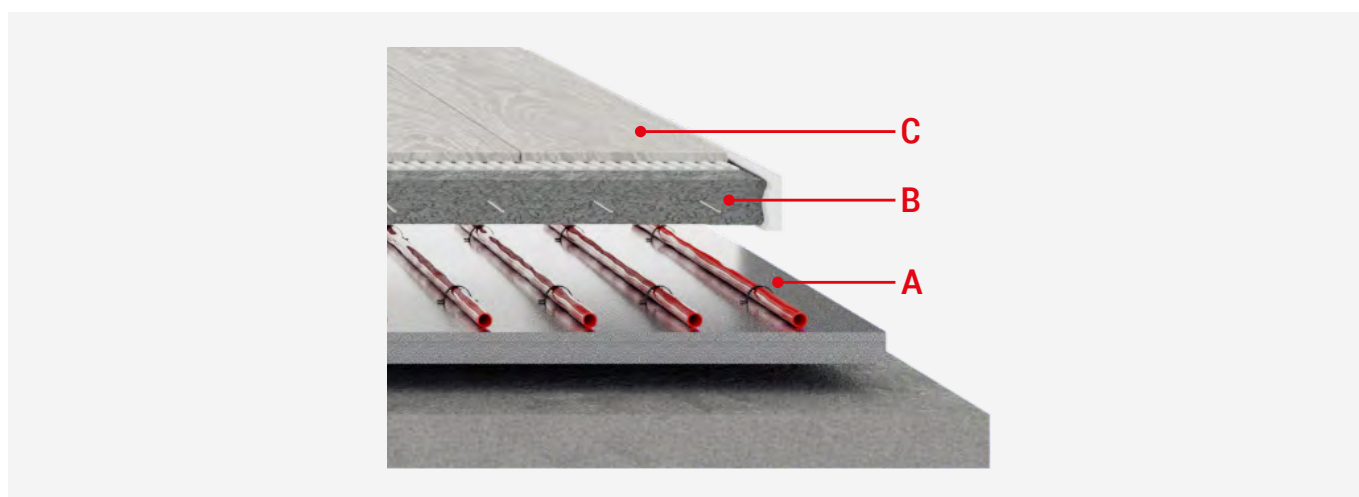
When laying is completed, and before casting the screed, we recommend installing electro-welded sheet K393 with large meshes over the panel.

Systems employing preformed insulation panels R981AG and edge strip K369 feature high thermal outputs and reduced start up times for their limited thermal inertia.

**⚠ WARNING.** Do not lay the product when room temperature is below 5 °C.



## ➤ Components and dimensions



PRODUCT CODE	PANEL "A" TOTAL HEIGHT [mm]	SCREED "B" MINIMUM HEIGHT [mm]	"A+B" MINIMUM HEIGHT COATING "C" EXCLUDED [mm]
R981AGY003	25	30*	55**
R981AGY004	40	30*	70**

\* Starting from the pipe top

\*\* + pipe diameter

## ➤ Reference standards

- EN 1264: Floor heating – Systems and components.
- EN 13163: Thermal insulation products for buildings – Factory made products of expanded polystyrene (EPS).

## ➤ Product specifications

### **Rg81AGY003**

Flat insulation panel for radiant floor systems. Consisting of expanded polystyrene foam with graphite (EPS200) with a 0,25 mm aluminum protection layer. Provided with print grid for pitch reference: 100x100 mm. Dimensions: 1000x500 mm. Useful surface: 0,5 m<sup>2</sup>. Panel height: 25 mm. Thermal conductivity: 0,03 W/(m K). Thermal resistance: 0,83 m<sup>2</sup>K/W. Min. resistance to 10 % crushing: 200 kPa.

### **Rg81AGY004**

Flat insulation panel for radiant floor systems. Consisting of expanded polystyrene foam with graphite (EPS200) with a 0,25 mm aluminum protection layer. Provided with print grid for pitch reference: 100x100 mm. Dimensions: 1000x500 mm. Useful surface: 0,5 m<sup>2</sup>. Panel height: 40 mm. Thermal conductivity: 0,03 W/(m K). Thermal resistance: 1,33 m<sup>2</sup>K/W. Min. resistance to 10 % crushing: 200 kPa.

**⚠ Safety Warning.** Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

**♻ Package Disposal.** Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

**ℹ Additional information.** For more information, go to [giacomini.com](http://giacomini.com) or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

**🗑 Product Disposal.** Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.