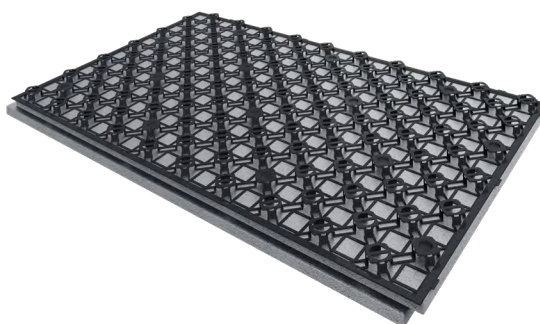


CAM insulation *Spider* panel for radiant floor systems

Datasheet
1048EN  12/2021

The R979SC *Spider* panel is a "three-dimensional" grid molded in plastic, or more precisely, in high-resistance polypropylene. The coupled EPS insulation panel is responding to CAM (Minimum Environmental Criteria) and therefore fit for installation in public premises.

This panel range includes a variety of heights, from 10 mm up to 50 mm.

The patented geometry of the three-dimensional grid enables to firmly fit the pipe during laying while drowning it completely into the screed.

Versions and product codes

SERIES	PRODUCT CODE	VERSION	HEIGHT [mm]	RANGE OF APPLICATION
R979SC SPIDER CAM	R979SCY021	With CAM insulation	22 + 10 insulation	Fit for systems requiring CAM-certified insulations
	R979SCY022		22 + 20 insulation	
	R979SCY023		22 + 30 insulation	
	R979SCY024		22 + 40 insulation	
	R979SCY025		22 + 50 insulation	

Technical data

Storage conditions

- Do not expose the panels to direct sunlight
- Store the panels in a dry and sheltered area at temperatures between 5 °C and 50 °C
- Keep the panels away from chemical agents
- Keep the panels away from open flames and heat sources

▲ WARNING. Store the panels in a sheltered area and do not expose to direct sunlight up to screed casting, even after installation.

R979SCY021

THREE-DIMENSIONAL GRID	
Dimensions	1200 x 800 mm
Surface	0,96 m ²
Total thickness	22 mm + 10 mm insulation
Pipe diameter	16 x 17 mm
Allowed pitches	Multiples of 50 mm
Fluidity index	8 g/10'
Density at 23 °C	1,1 g/cm ³
Izod impact resistance at 23 °C	6 kJ/m ²
Vicat softening temperature	> 50 °C
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{INS} = s_{INS}/\lambda_{INS}$)	0,30 m ² K/W
Flexibility level	1200 MPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-T(2)-L(2)-S(2)-P(4)-DS(N)2DLT(1)5-BS250-CS(10)150WL(T)3

R979SCY022

THREE-DIMENSIONAL GRID	
Dimensions	1200 x 800 mm
Surface	0,96 m ²
Total thickness	22 mm + 20 mm insulation
Pipe diameter	16 x 17 mm
Allowed pitches	Multiples of 50 mm
Fluidity index	8 g/10'
Density at 23 °C	1,1 g/cm ³
Izod impact resistance at 23 °C	6 kJ/m ²
Vicat softening temperature	> 50 °C
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{INS} = s_{INS}/\lambda_{INS}$)	0,61 m ² K/W
Flexibility level	1200 MPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-T(2)-L(2)-S(2)-P(4)-DS(N)2DLT(1)5-BS250-CS(10)150WL(T)3

R979SCY023

THREE-DIMENSIONAL GRID	
Dimensions	1200 x 800 mm
Surface	0,96 m ²
Total thickness	22 mm + 30 mm insulation
Pipe diameter	16 x 17 mm
Allowed pitches	Multiples of 50 mm
Fluidity index	8 g/10'
Density at 23 °C	1,1 g/cm ³
Izod impact resistance at 23 °C	6 kJ/m ²
Vicat softening temperature	> 50 °C
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{INS} = s_{INS}/\lambda_{INS}$)	0,91 m ² K/W
Flexibility level	1200 MPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-T(2)-L(2)-S(2)-P(4)-DS(N)2DLT(1)5-BS250-CS(10)150WL(T)3

R979SCY024

THREE-DIMENSIONAL GRID	
Dimensions	1200 x 800 mm
Surface	0,96 m ²
Total thickness	22 mm + 40 mm insulation
Pipe diameter	16 x 17 mm
Allowed pitches	Multiples of 50 mm
Fluidity index	8 g/10'
Density at 23 °C	1,1 g/cm ³
Izod impact resistance at 23 °C	6 kJ/m ²
Vicat softening temperature	> 50 °C
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{INS} = s_{INS}/\lambda_{INS}$)	1,21 m ² K/W
Flexibility level	1200 MPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-T(2)-L(2)-S(2)-P(4)-DS(N)2DLT(1)5-BS250-CS(10)150WL(T)3

Rg79SCY025

THREE-DIMENSIONAL GRID	
Dimensions	1200 x 800 mm
Surface	0,96 m ²
Total thickness	22 mm + 50 mm insulation
Pipe diameter	16 x 17 mm
Allowed pitches	Multiples of 50 mm
Fluidity index	8 g/10'
Density at 23 °C	1,1 g/cm ³
Izod impact resistance at 23 °C	6 kJ/m ²
Vicat softening temperature	> 50 °C
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_{λ} According to EN1264-3 ($R_{\lambda} = s_{\text{INS}}/\lambda_{\text{INS}}$)	1,52 m ² K/W
Flexibility level	1200 MPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-T(2)-L(2)-S(2)-P(4)-DS(N)2DLT(1)5-BS250-CS(10)150WL(T)3

Installation

⚠ WARNING. Do not lay the product when worksite temperature is below -5 °C.

- 1) Remove any dirt or liquid residues from the foundation.
- 2) Lay the wall edge strip.
- 3) Lay the panels on the foundation or the existing floor and fit the side hooks on top to connect the panels to each other.

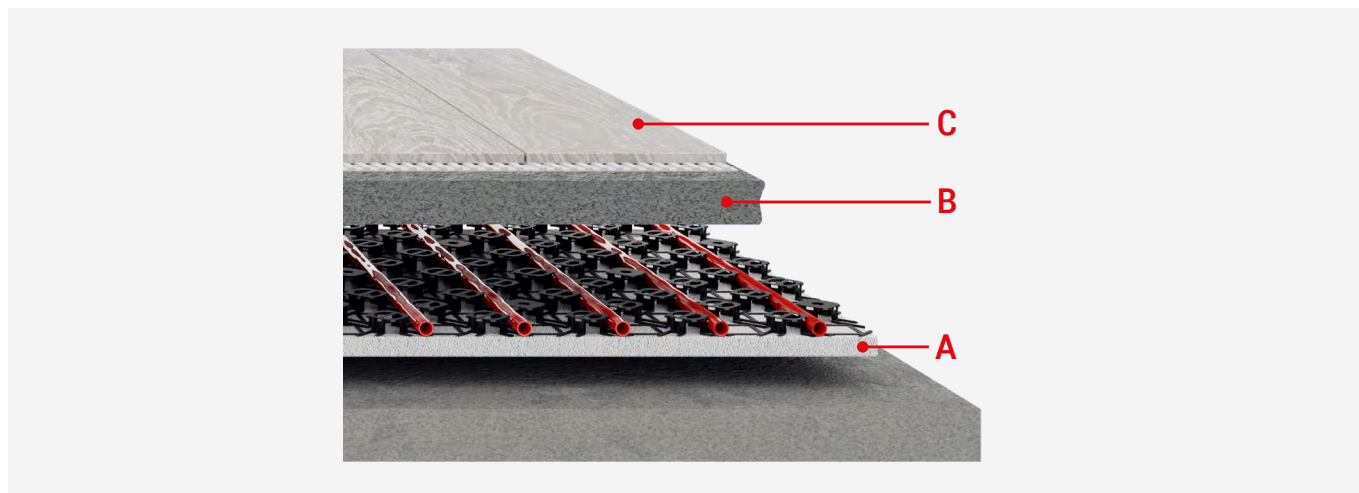


- 4) Lay the pipes.



- 5) Carry out a pressure test.
- 6) Cast the screed with the system pressurized.
- 7) Complete the installation by laying the surface finish.

➤ Components and dimensions



PRODUCT CODE	PANEL TOTAL HEIGHT [mm]	INSULATION/PROTRUSION HEIGHT "A" [mm]	SCREED MIN. HEIGHT "B" [mm]	MIN. HEIGHT "A+B" COATING "C" EXCLUDED [mm]
R979SCY021	32	10/22	40 (sand+concrete screed)	50
R979SCY022	42	20/22	40 (sand+concrete screed)	60
R979SCY023	52	30/22	40 (sand+concrete screed)	70
R979SCY024	62	40/22	40 (sand+concrete screed)	80
R979SCY025	72	50/22	40 (sand+concrete screed)	90

➤ Reference standards

- UNI EN 1264 Floor heating systems
- Law decree 192/2005 and 311/2006 Energy saving
- ISO 1183, ISO 178, ISO180, ISO 306 Plastic materials

➤ Product specifications

R979SCY021 - CAM-certified Spider

Three-dimensional high-resistance polypropylene molded grid for pipe fitting in radiant floor heating systems. Combined to a 10 mm EPS150 insulation panel it is fit for applications where a CAM insulation (Minimum Environmental Criteria) is required. The patented geometry holds the pipe firmly in place during laying operations and embeds it completely into the screed to guarantee an uniform temperature distribution to the system. The perforated protrusion enables to use the panel with sand and concrete based screeds. High resistance to trampling. Dimensions 1200x800x32 mm. For Ø 16÷17 mm pipes. Panel pitch: multiples of 50 mm. Thermal conductivity: 0,033 W/(m K). Thermal resistance ($R = s/\lambda$): 0,30 m²K/W.

R979SCY022 - CAM-certified Spider

Three-dimensional high-resistance polypropylene molded grid for pipe fitting in radiant floor heating systems. Combined to a 20 mm EPS150 insulation panel it is fit for applications where a CAM insulation (Minimum Environmental Criteria) is required. The patented geometry holds the pipe firmly in place during laying operations and embeds it completely into the screed to guarantee an uniform temperature distribution to the system. The perforated protrusion enables to use the panel with sand and concrete based screeds. High resistance to trampling. Dimensions 1200x800x42 mm. For Ø 16÷17 mm pipes. Panel pitch: multiples of 50 mm. Thermal conductivity: 0,033 W/(m K). Thermal resistance ($R = s/\lambda$): 0,61 m²K/W.

R979SCY023 - CAM-certified Spider

Three-dimensional high-resistance polypropylene molded grid for pipe fitting in radiant floor heating systems. Combined to a 30 mm EPS150 insulation panel it is fit for applications where a CAM insulation (Minimum Environmental Criteria) is required. The patented geometry holds the pipe firmly in place during laying operations and embeds it completely into the screed to guarantee an uniform temperature distribution to the system. The perforated protrusion enables to use the panel with sand and concrete based screeds. High resistance to trampling. Dimensions 1200x800x52 mm. For Ø 16÷17 mm pipes. Panel pitch: multiples of 50 mm. Thermal conductivity: 0,033 W/(m K). Thermal resistance ($R = s/\lambda$): 0,91 m²K/W.

R979SCY024 - CAM-certified Spider

Three-dimensional high-resistance polypropylene molded grid for pipe fitting in radiant floor heating systems. Combined to a 40 mm EPS150 insulation panel it is fit for applications where a CAM insulation (Minimum Environmental Criteria) is required. The patented geometry holds the pipe firmly in place during laying operations and embeds it completely into the screed to guarantee an uniform temperature distribution to the system. The perforated protrusion enables to use the panel with sand and concrete based screeds. High resistance to trampling. Dimensions 1200x800x62 mm. For Ø 16÷17 mm pipes. Panel pitch: multiples of 50 mm. Thermal conductivity: 0,033 W/(m K). Thermal resistance ($R = s/\lambda$): 1,21 m²K/W.

R979SCY025 - CAM-certified Spider

Three-dimensional high-resistance polypropylene molded grid for pipe fitting in radiant floor heating systems. Combined to a 50 mm EPS150 insulation panel it is fit for applications where a CAM insulation (Minimum Environmental Criteria) is required. The patented geometry holds the pipe firmly in place during laying operations and embeds it completely into the screed to guarantee an uniform temperature distribution to the system. The perforated protrusion enables to use the panel with sand and concrete based screeds. High resistance to trampling. Dimensions 1200x800x72 mm. For Ø 16÷17 mm pipes. Panel pitch: multiples of 50 mm. Thermal conductivity: 0,033 W/(m K). Thermal resistance ($R = s/\lambda$): 1,52 m²K/W.

⚠ 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.

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