

R982QY903-905



Radiant
Systems

Preformed insulation panel made of EPS, for radiant floor systems

Datasheet
1096EN 06/2022



R982Q preformed panels are used in radiant floor systems to improve pipe insulation.

Their use is essential to create modern and functional radiant systems as they heat rooms in a very short time with limited powers, therefore also limiting the mass of the radiant structures and reducing heat dispersions downwards.

Plus, the preformed insulation panels enable to maintain comfortable room temperatures while setting the surface temperature within the limits provided for by the EN 1264 standard (max. 29 °C for living areas) and with no physical discomfort or structural issues typical of outdated installation techniques.

The use of insulation panels reduces the quantity of pipes required and as a consequence the number of radiant circuits, the water flow rates, the diameters of supply pipes, the hydraulic heads of the circulators and the powers involved, leading to immediate energy saving in the name of environment protection.

➤ Versions and product codes

PRODUCT CODE	SIZE [mm] T=pitch - h=height	N. OF SHEETS	TOTAL USEFUL SURFACE [m²]
R982QY903	T50 - h41,5	17	16,32
R982QY905	T50 - h56,5	11	10,56



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

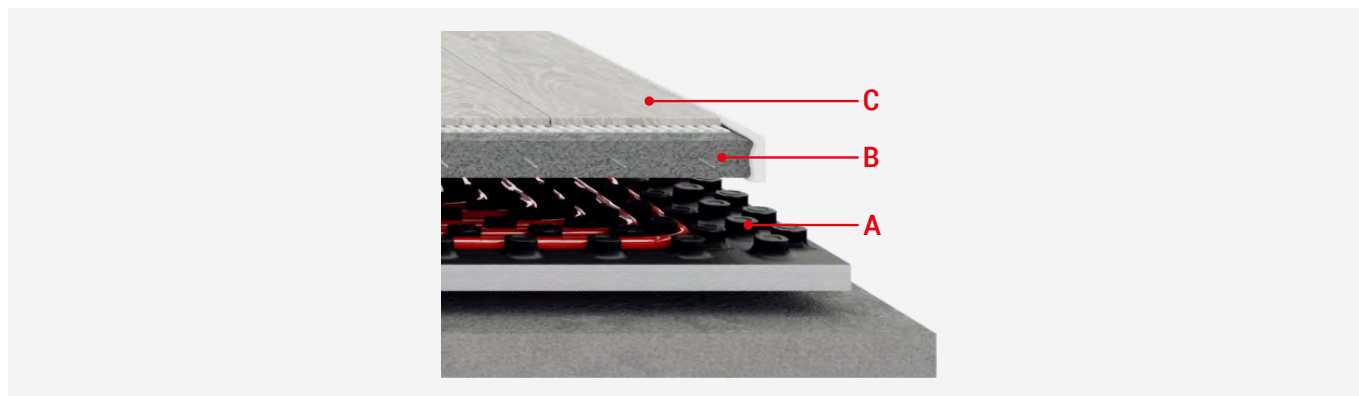
R982QY903

INSULATION PANEL	
Useful dimensions	1200 x 800 mm
Useful surface	0,96 m ²
Panel dimensions	1230 x 830 mm
Panel surface	1,02 m ²
Total thickness	41,5 mm sheet: 15 mm + protrusion: 26,5 mm
Pipe diameter	16÷17 mm
Allowed pitches	Multiples of 50 mm
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS200
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{\lambda_{ISO}} = s_{SD} / \lambda_{SD}$)	0,45 m ² K/W
Min. resistance to 10% crushing	200 kPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-L3-W3-T2-CS(10)200-WL(T)2-Z40-100
PROTECTION LAYER	
Material	Polystyrene
Thickness	0,16 mm
Film color	Black

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INSULATION PANEL	
Useful dimensions	1200 x 800 mm
Useful surface	0,96 m ²
Panel dimensions	1230 x 830 mm
Panel surface	1,02 m ²
Total thickness	56,5 mm sheet: 30 mm + protrusion: 26,5 mm
Pipe diameter	16÷17 mm
Allowed pitches	Multiples of 50 mm
INSULATION SHEET	
Material	Sintered expanded polystyrene EPS150
Thermal conductivity, λ_D	0,033 W/(m K)
Thermal resistance, R_λ According to EN1264-3 ($R_{\lambda_{ISO}} = s_{SD} / \lambda_{SD}$)	0,91 m ² K/W
Min. resistance to 10% crushing	150 kPa
Reaction to fire	Class E
Classification according to EN13163	EPS-EN13163-L3-W3-T2-CS(10)150-WL(T)5-Z30-70
PROTECTION LAYER	
Material	Polystyrene
Thickness	0,16 mm
Film color	Black

➤ Components and dimensions



PRODUCT CODE	PANEL TOTAL HEIGHT "A" [mm]	INSULATION/PROTRUSION HEIGHT [mm]	SCREED MIN. HEIGHT "B" [mm]	MIN. HEIGHT "A+B" COATING "C" EXCLUDED [mm]
R982QY903	41,5	15/26,5	30	71,5
R982QY905	56,5	30/26,5	30	86,5

➤ Reference standards

- UNI EN 1264: Floor heating – Systems and components.
- EN 13163: Thermal insulation products for buildings – Factory made products of sintered expanded polystyrene (EPS).
- UNI EN 12354-2: Construction soundproofing - Evaluation of building soundproofing performance starting from performance of employed products - Trampling soundproofing between rooms.

➤ Product specifications

R982QY903

Preformed insulation panel for radiant floor systems. Color black. Height 41,5 mm (insulation sheet 15 mm, protrusions 26,5 mm). Consisting of an insulation sheet made of sintered expanded polystyrene (EPS200) and a 0,16 mm polystyrene (PS) protection layer. For Ø 16÷17 mm pipes. Center distance 50 mm. Dimensions: 1230x830 mm (useful dimensions: 1200X800 mm). Panel useful surface 0,96 m². Thermal conductivity 0,033 W/(m K). Thermal resistance 0,45 m²K/W. Min. resistance to 10 % crushing, 200 kPa. Reaction to fire: class E.

R982QY905

Preformed insulation panel for radiant floor systems. Color black. Height 56,5 mm (insulation sheet 30 mm, protrusions 26,5 mm). Consisting of an insulation sheet made of sintered expanded polystyrene (EPS150) and a 0,16 mm polystyrene (PS) protection layer. For Ø 16÷17 mm pipes. Center distance 50 mm. Dimensions: 1230x830 mm (useful dimensions: 1200X800 mm). Panel useful surface 0,96 m². Thermal conductivity 0,033 W/(m K). Thermal resistance 0,91 m²K/W. Min. resistance to 10 % crushing, 150 kPa. Reaction to fire: class E.

⚠ 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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♻ 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.