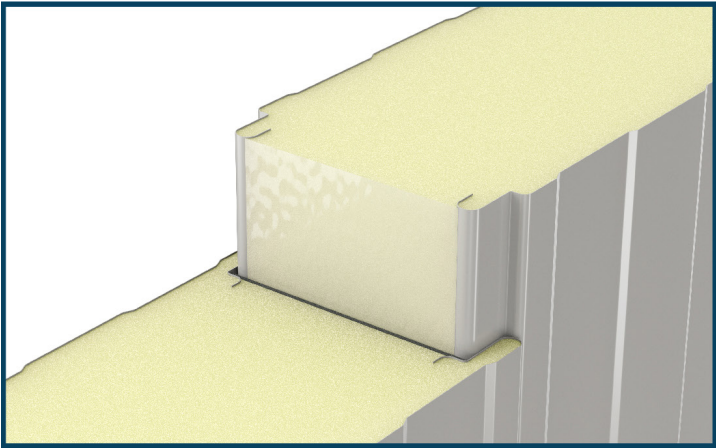




ISOPERn RF thermal insulation wall panel

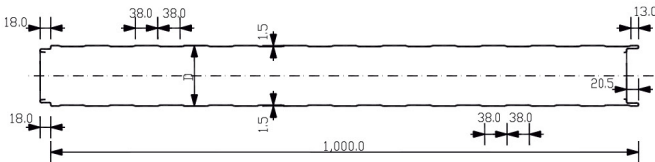
Product Overview

ISOPERn RF thermal insulating wall panels with visible fixings and PIR foam ensures durability and energy efficiency, tightness, fire resistance, easy installation, and timely implementation of any project with special architectural and aesthetic requirements. Also, the PIR insulating core does not contribute to the propagation of the flame, thus ensuring safety and comfort in the subsequent exploitation of the construction. This type of panels can be installed vertically or horizontally.



Application

ISOPERn RF thermal insulation panels can be used for a wide range of constructions such as: industrial buildings for production and storage, logistics centers, commercial centers, agro-zootechnical buildings, sports venues, small buildings (car washes, storage spaces) and many more. Each application should be verified against individual project requirements.



Technical Parameters

Module width [mm]	Core Thickness	Mass [kg/m ²]	Thermal Transmittance (U-value) acc. EN 14509:2013 [W/m ² ·K]
1,000	30	8.75	0.77
	40	9.15	0.58
	50	9.55	0.46
	60	9.95	0.37
	80	10.75	0.27
	100	11.55	0.22
	120	12.35	0.18

The technical data is valid for a face thickness of Ext. / Int. 0.45 / 0.40 mm.

Fire Performance

ISOPERn RF Wall Panel has been tested and approved to comply with SR EN 14509:2013.

Module width [mm]	Core Thickness	Reaction to Fire	Fire Resistance - External Wall - Horizontal	Fire Resistance - External Wall - Vertical	Fire Resistance - Internal Wall - Horizontal	Fire Resistance - Internal Wall - Vertical
1,000	30	B-s1, d0	NPD	NPD	NPD	NPD
	40	B-s1, d0	NPD	NPD	NPD	NPD
	50	B-s1, d0	NPD	E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 4m E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 20 (o↔i) ¹ - 4m	NPD	E 30 ¹ / EI 15 ¹ - 7.5m E 30 ¹ / EI 20 ¹ - 4m
	60	B-s1, d0	NPD	E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 4m E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 20 (o↔i) ¹ - 4m	NPD	E 30 ¹ / EI 15 ¹ - 7.5m E 30 ¹ / EI 20 ¹ - 4m
	80	B-s1, d0	E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 4m E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m	E 15 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 30 (o↔i) ¹ - 4m	E 30 ¹ / EI 15 ¹ - 7.5m E 30 ¹ / EI 20 ¹ - 4m	E 20 ¹ / EI 20 ¹ - 7.5m E 30 ¹ / EI 30 ¹ - 4m
	100	B-s1, d0	E 15 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 4m	E 15 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 30 (o↔i) ¹ - 4m	E 20 ¹ / EI 15 ¹ - 7.5m E 30 ¹ / EI 20 ¹ - 4m	E 20 ¹ / EI 20 ¹ - 7.5m E 30 ¹ / EI 30 ¹ - 4m
	120	B-s1, d0	E 15 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 15 (o↔i) ¹ - 4m	E 15 (o↔i) ¹ / EI 15 (o↔i) ¹ - 7.5m E 30 (o↔i) ¹ / EI 30 (o↔i) ¹ - 4m	E 20 ¹ / EI 15 ¹ - 7.5m E 30 ¹ / EI 20 ¹ - 4m	E 20 ¹ / EI 20 ¹ - 7.5m E 30 ¹ / EI 30 ¹ - 4m

Dimensions

Length

Standard lengths	2000-13500 mm
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Additional costs and transport restrictions may apply for non-standard lengths.

Width

The useful width is 1000 mm.

Product Tolerances

Product tolerances are measured according to the standard SR EN 14509:2013.

Length tolerance	L≤3m, -	5 mm
Length tolerance	L≤3m, +	5 mm
Length tolerance	L>3m, -	10 mm
Length tolerance	L>3m, +	10 mm
Cover width tolerance	-	2 mm
Cover width tolerance	+	2 mm
Thickness tolerance	-	2 mm
Thickness tolerance	+	2 mm
Thickness tolerance	D>100mm, -	2 %
Thickness tolerance	D>100mm, +	2 %

Mechanical Resistance

For load / span tables, please contact TeraSteel Technical Department.

Materials

Insulation Core

Polyisocyanurate (PIR) insulation core with a Thermal Conductivity (λ) declared of 0.027 W/m·K and initial 0.024 W/m·K according to SR EN 14509:2013 and SR EN 13165:2012.

External facing

The thicknesses of the coil coated steel sheet are: 0.50/0.60 mm.

Available coatings: polyester, PVC, PVDF.

Internal facing

The thicknesses of the coil coated steel sheet are: 0.40/0.50/0.60 mm.

Available coatings: polyester, PVC, PVDF.

Seals

The factory-applied sealing gasket ensures an air-tight joint and good thermal insulation. Panels of thicknesses 30 and 40 mm are delivered without joint seals. On request the 40 mm panels can be delivered with joint seals.

Profiles

The available profiles can be found in the corresponding profile table.

Colours

STANDARD/Special colors are available by request.

Environmental Performance

TeraSteel facilities from Romania generate renewable energy through photovoltaic power plants installed on the production units. The panels and materials used in the installation are not hazardous to the environment.

Packing

The panels are delivered in packages, wrapped with protective film, on polystyrene spacers. The number of panels in the package varies depending on the dimension (thickness, length) and customer requirements, within the limits of the manufacturing technology. The wall panels are disposed of in a package with their outer faces (the blue protective film indicates the outer face when mounting the panels) on top.

Site Storage & Installation

For site storage and installation instructions please refer to the assembly instructions provided by TeraSteel.

The waste resulting from the installation and when the buildings are no longer in use is collected by type of material and handed over to specialized companies for collection.

Production Standard

TeraSteel thermal insulation panels comply with the European standard SR EN 14509:2013 - Self-supporting, insulating sandwich panels with metal sheet on both sides.

Quality

TeraSteel thermal insulation panels are manufactured from high-quality materials using automated production equipment. Strict adherence to quality management system SR EN ISO 9001:2015 and compliance management system SR ISO 37301:2021 ensures long-term reliability and durability.

The panels also comply with the environmental management system certifications SR EN ISO 14001:2015 and the occupational health and safety management system SR EN ISO 45001:2023. The ISOPERN RF wall panel is CE marked according to SR EN 14509:2013.

Delivery

The panels can be transported by vehicles with side loading or top loading. Special conditions of loading and transport can be accepted only upon written request from the buyer (assuming full responsibility). The carrier is solely responsible for the integrity of the cargo throughout transport. When receiving the goods the beneficiary shall verify and record on the shipping documents any lack of conformity.

Warranty

TeraSteel warranties are assessed individually for each project, depending in particular on the aggressiveness of the environment and the type of surface treatment chosen.

Profiles

Profile	External	Internal
L - Lis		
P - Plisse		
S - Standard		

Contact Details

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For the latest product details, please always refer to the latest version of this data sheet by scanning the QR code or by clicking on this link: terasteel.co.uk/data-sheets

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