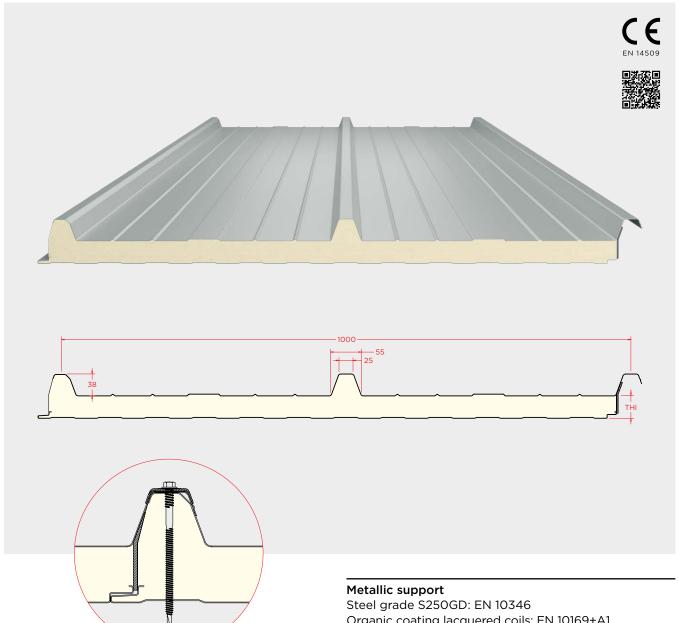
SANDWICH PANEL

INSULATED PANEL SYSTEMS FOR ARCHITECTURE CONSTRUCTION AND COLD STORAGE CHAMBERS







Insulation panel consisting of two profiled metal sheets joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Economical and efficient 3 wave panel solution for roofs with a minimum slope of 5%.

Product manufactured according to EN 14509 and subject to performance assessment and verification according to system 1.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Thicknesses: 120-150 mm ±2% Width: 1000 mm ±2 mm Length: $4,00 - 20,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 13,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,4-0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity: **PUR** 0,0207 W/m °C PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

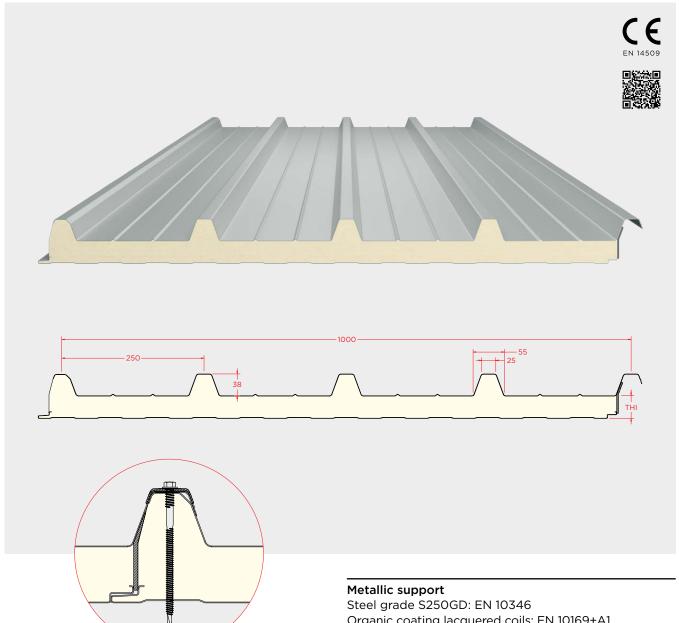
PUR B-s2,d0 PIR B-s2,d0 PIR-HI B-s1,d0

Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C / W/m^2 K = W/m^2 °C$



Insulating panel made of two profiled metal sheets, joined by a rigid polyurethane (PUR) or polycyanurate (PIR) foam core.

The most resistant and efficient solution in a 5 wave panel for minimum coverage of 5%.

Product manufactured in accordance with the EN 14509 standard and subject to validation and verification of regularity of performance in accordance with system 1.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Thicknesses: 120-150 mm ±2% Width: 1000 mm ±2 mm

Length: $4.00 - 20.00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 13,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,4-0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity: **PUR** 0,0207 W/m °C PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

PUR B-s2,d0 PIR B-s2,d0 PIR-HI B-s1,d0

Coating

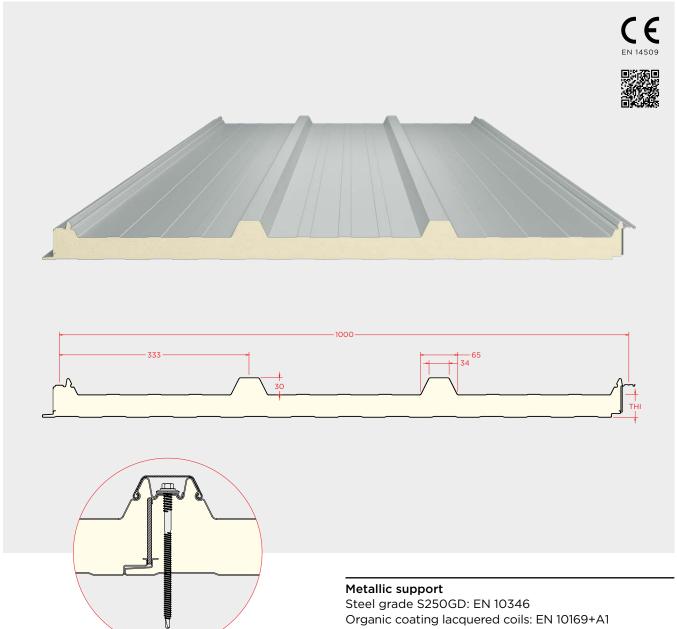
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C / W/m^2 K = W/m^2 °C$

Topcover Cap

Roof panel with joint caps



Description/Application

Panel with hidden fixing using joint covers for roofs with a minimum slope of 5%.

A durable and aesthetically pleasing solution with protection for fasteners.

Insulating panel composed of two profiled metal sheets, joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Product manufactured in accordance with EN 14509 and subject to evaluation and verification of performance regularity in accordance with system 1.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Width: 1000 mm ±2 mm

Length: $4.00 - 20.00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 13,00 m

Thicknesses: 0,4-0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

 PUR
 B-s2,d0

 PIR
 B-s2,d0

 PIR-HI
 B-s1,d0

Coating

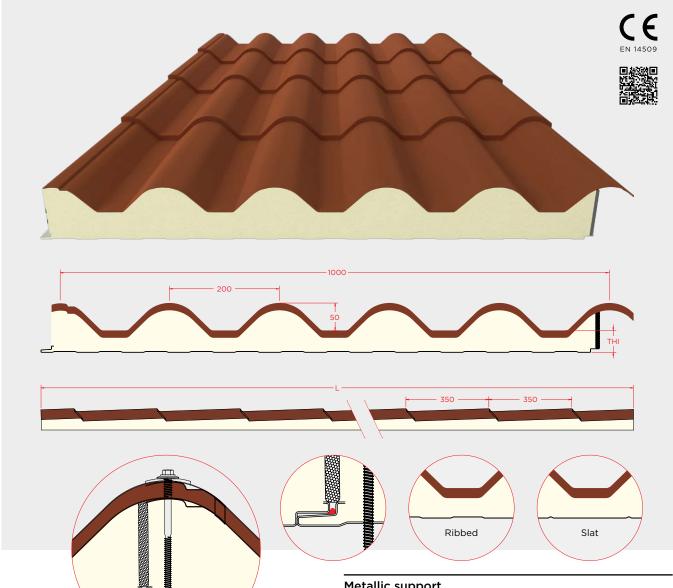
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C | W/m^2 K = W/m^2 °C$

Topcover Tile

Tile shaped roof panel



Description/Application

Panel with the shape of a traditional tile for roofs with a minimum slope of 10%.

Insulating product composed of two profiled metal sheets, joined by an insulating core made of rigid polyurethane (PUR) or polyisocyanurate (PIR) foam. The exterior panel has a textured paint finish for a greater resemblance to traditional tiles.

In harsher environments, it is recommended to apply silicone to the panel joint to prevent condensation.

Characteristics

Dimensions*

Thicknesses: 30-40-50 mm ±2 mm

Width: 1000 mm ±2 mm

Length: 2,10 - 14,00 m, in multiples of 0,35 m Maximum recommended length: 8,05 m

Metallic support

Steel grade S250GD: EN 10346 Thicknesses: 0,4-0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity: 0,0207 W/m °C PUR PIR 0,0207 W/m °C

Density: 40 kg/m³ Reaction to fire: **PUR** B-s2,d0 PIR B-s2.d0 PIR-HI B-s1,d0

Coating

Standard: Textured polyester paint 25 μm .

Special: Granite HDX 55 µm | Naive Wood textured

color for the interior.

Option for metallic coating in lacquered aluminum.

*Tolerances according to EN 14509 $W/m K = W/m °C / W/m^2 K = W/m^2 °C$

Topcover Tile Marselha

Tile shaped roof panel



Description/Application

Panel with the shape of a traditional tile for roofs with a minimum slope of 10%.

Insulating product composed of two profiled metal sheets, joined by an insulating core made of rigid polyurethane (PUR) or polyisocyanurate (PIR) foam. The exterior panel has a textured paint finish for a greater resemblance to traditional tiles.

In harsher environments, it is recommended to apply silicone to the panel joint to prevent condensation.

Characteristics

Dimensions*

Thicknesses: 40-60-80 mm ±2 mm

Width: 1000 mm ±2 mm

Length: 2,10 — 14,00 m, in multiples of 0,35 m Maximum recommended length: 8,05 m Steel grade S250GD: EN 10346 Thicknesses: 0,4-0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³
Reaction to fire:
PUR B-s2,d0
PIR B-s2,d0
PIR-HI B-s1,d0

Coating

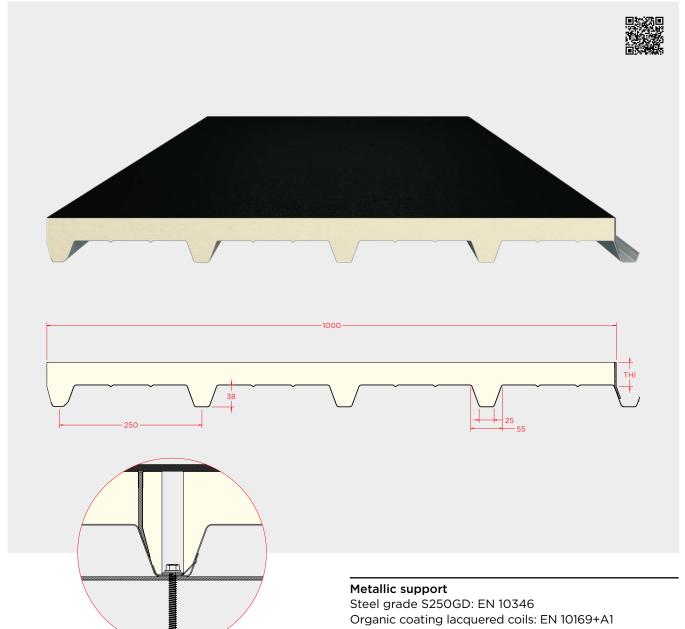
Standard: Polyester paint texturada 25 μm .

Special: Granite HDX 55 µm | Naive Wood textured

color for the interior.

Option for metallic coating in lacquered aluminum.

*Tolerances according to EN 14509 W/m K = W/m °C | W/m² K = W/m² °C



Deck panel for flat roofs with an outer surface made of felt cardboard.

The system must be waterproofed in situ with bituminous or PVC membrane.

Insulating product with an internal profiled metal sheet and an external flexible sheet joined by a rigid polyurethane foam core.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Width: 1000 mm ±2 mm

Length: $4,00 - 18,00 \text{ m} \pm 10 \text{ mm}$

Thicknesses: 0,5-0,6-0,7 mm

Insulated core

Polyurethane (PUR)

Thermal conductivity: 0,020 W/m °C

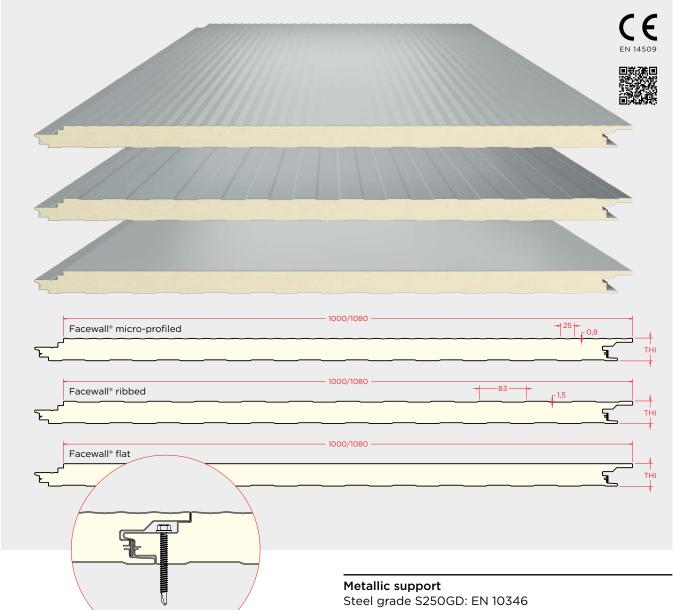
Density: 40 kg/m³ Reaction to fire: F

Coating

Felt paper on the external side.

Polyester paint 25 μm on the internal side.

*Tolerances according to EN 14509 W/m K = W/m °C | W/m² K = W/m² °C Facewall® Wall panel



Description/Application

Insulating panel composed of two profiled metal sheets, joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Facade panel with hidden fastening, available with ribbed, micro-profiled, or flat surfaces.

Product manufactured in accordance with EN 14509 and subject to evaluation and verification of performance regularity in accordance with system 1.

Characteristics

Dimensions*

Thicknesses: 40-50-60-80-100 mm ±2 mm

Width: $1000 - 1080 \text{ mm} \pm 2 \text{ mm}$ Length: $4,00 - 14,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 8,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

 PUR
 B-s2,d0

 PIR
 B-s2,d0

 PIR-HI
 B-s1,d0

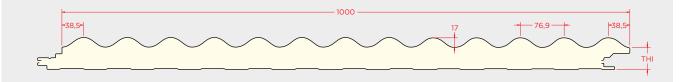
Coating

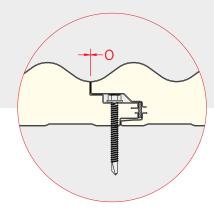
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C | W/m^2 K = W/m^2 °C$







Insulating panel composed of two profiled metal sheets joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Facade panel with hidden fastening, available with a corrugated (mini-wave) face.

Product manufactured in accordance with EN 14509 and subject to evaluation and verification of performance regularity in accordance with system 1.

Characteristics

Dimensions*

Thicknesses: 40-60 mm ±2 mm Width: 1000 — 1080 mm ±2 mm Length: 4,00 — 14,00 m ±10 mm

Maximum recommended length: 8,00 m

Metallic support

Steel grade S250GD: EN 10346

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

PUR B-s2,d0 PIR B-s2,d0 PIR-HI B-s1,d0

Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 W/m K = W/m °C | W/m² K = W/m² °C



Insulating panel made up of two profiled metal sheets, joined by a core of rigid polyurethane (PUR) or polysocyanurate (PIR) foam.

Facade panel with hidden fixing, available with flat exterior surface and open or closed joint.

Product manufactured in accordance with the EN 14509 standard and subject to evaluation and verification of the regularity of performance according to system 1.

Characteristics

Dimensions*

Thicknesses: 40-60 mm ±2 mm Width: 1000 — 1080 mm ±2 mm Length: 4,00 — 14,00 m ±10 mm

Maximum recommended length: 8,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

PUR B-s2,d0 PIR B-s2,d0 PIR-HI B-s1,d0

Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C | W/m^2 K = W/m^2 °C$



Insulating panel composed of two profiled metal sheets joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Facade panel with hidden fixing, available with a flat exterior surface.

Product manufactured in accordance with EN 14509 and subject to evaluation and verification of regularity of performance in accordance with system 1.

Characteristics

Dimensions*

Thicknesses: 40-60 mm ±2 mm

Width: 600 mm ±2 mm

Length: $4,00 - 14,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 8,00 m

Thicknesses: 0,5-0,6 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

 PUR
 B-s2,d0

 PIR
 B-s2,d0

 PIR-HI
 B-s1,d0

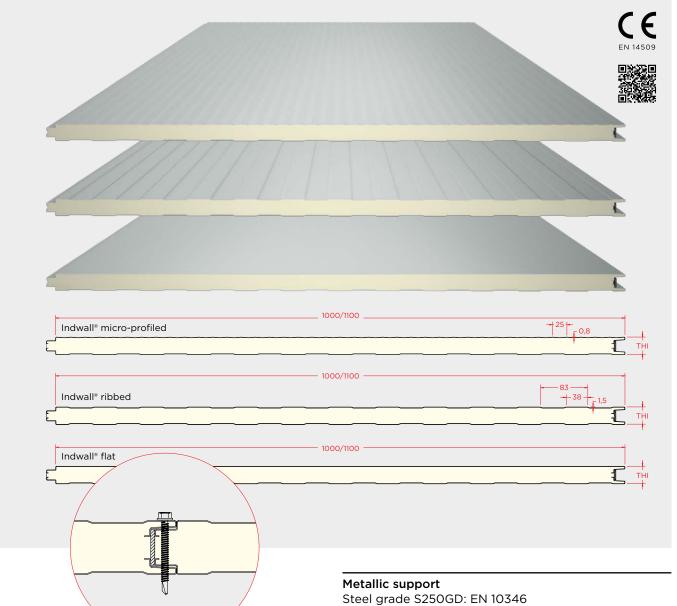
Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 W/m K = W/m °C | W/m² K = W/m² °C Indwall[®]

Industrial wall panel



Description/Application

Insulating panel composed of two profiled metal sheets, joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Self-supporting panel for walls or facades with exposed fastening. Industrial solution for prefabricated construction, available with micro-profiled, ribbed, or flat exterior surfaces.

A highly versatile and easy-to-assemble product, it is manufactured in accordance with EN 14509 and subject to performance regularity assessment and verification according to system 1.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Width: 1000 — 1100 mm ±2 mm Length: 4,00 — 14,00 m ±10 mm

Maximum recommended length: 8,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,4-0,5 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

 PUR
 B-s2,d0

 PIR
 B-s2,d0

 PIR-HI
 B-s1,d0

Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 $W/m K = W/m °C | W/m^2 K = W/m^2 °C$

Indwall[®]

Modular construction/sectorization industrial panels



Description/Application

Insulating panel composed of two profiled metal sheets, joined by a rigid polyurethane (PUR) or polyisocyanurate (PIR) foam core.

Self-supporting panel for walls or facades with exposed fastening. Industrial solution for prefabricated construction, available with micro-profiled, ribbed, or slat exterior surfaces.

A highly versatile and easy-to-assemble product, it is manufactured in accordance with EN 14509 and subject to performance regularity assessment and verification according to system 1.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Width: $1000 - 1100 \text{ mm} \pm 2 \text{ mm}$ Length: $4,00 - 14,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 8,00 m

Thicknesses: 0,4-0,5 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity:
PUR 0,0207 W/m °C
PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

 PUR
 B-s2,d0

 PIR
 B-s2,d0

 PIR-HI
 B-s1,d0

Coating

Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 W/m K = W/m °C | W/m² K = W/m² °C

Icewall®

Cold storage panel



Description/Application

Insulated panel composed of two profiled metal sheets joined by rigid polyurethane (PUR) or polyisocyanurate (PIR) foam.

High thickness self-supporting panel designed for application in cold storage chambers.

Versatile panel developed for an easy installation in

temperature-controlled storage areas.

Panel produced according to EN 14509 and subject to evaluation and verification of regularity of performance according to system 1.

Characteristics

Dimensions*

Thicknesses: 60-80-100 mm ±2 mm Thicknesses: 120-150-180-200 mm ±2%

Width: 1000 — 1165 mm ±2 mm Length: $4,00 - 14,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 8,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,5 mm

Insulated core

Polyurethane (PUR) | Polysocyanurate (PIR)

Thermal conductivity: **PUR** 0,0207 W/m °C PIR 0,0207 W/m °C

Density: 40 kg/m³

Reaction to fire: EN 13501-1

PUR B-s2.d0 PIR B-s2,d0 **HPIR** B-s1,d0

Coating

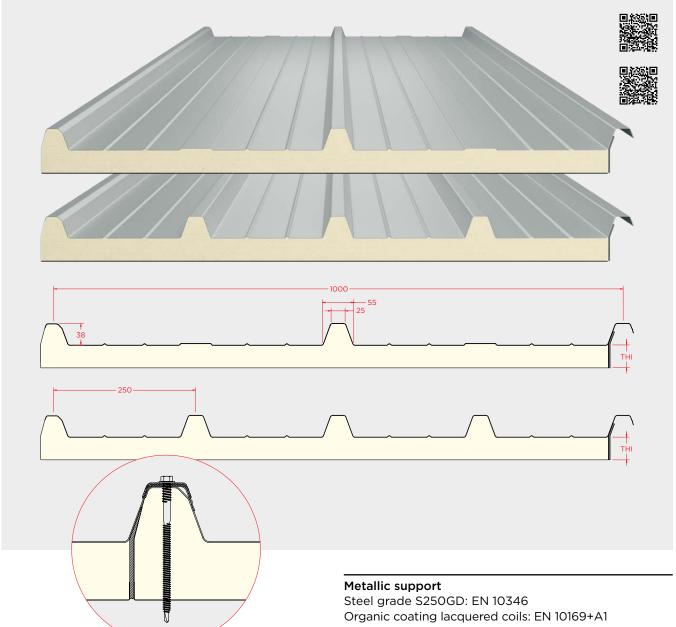
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 µm | PVC food-safe

*Tolerances according to EN 14509 $W/m K = W/m °C / W/m^2 K = W/m^2 °C$

Monotop 3/5

Panels with flexible sheet



Description/Application

Insulated panel composed of an external profiled metal sheet and an internal flexible metal sheet joined by a rigid polyurethane foam core.

3 or 5 wave roof panel, with external face in profiled sheet and internal face in embossed centesimal aluminum or felt board.

Characteristics

Dimensions*

Thicknesses 30-40-50-60-80-100 mm ±2 mm

Width: 1000 mm ±2 mm Length: 4,00 — 18,00 m ±2 mm

Maximum recommended length: 13,00 m

Thicknesses: 0,4-0,5-0,6-0,7 mm

Insulated core

Polyurethane (PUR)

Thermal conductivity: 0,0207 W/m °C

Density: 40 kg/m³

Coating

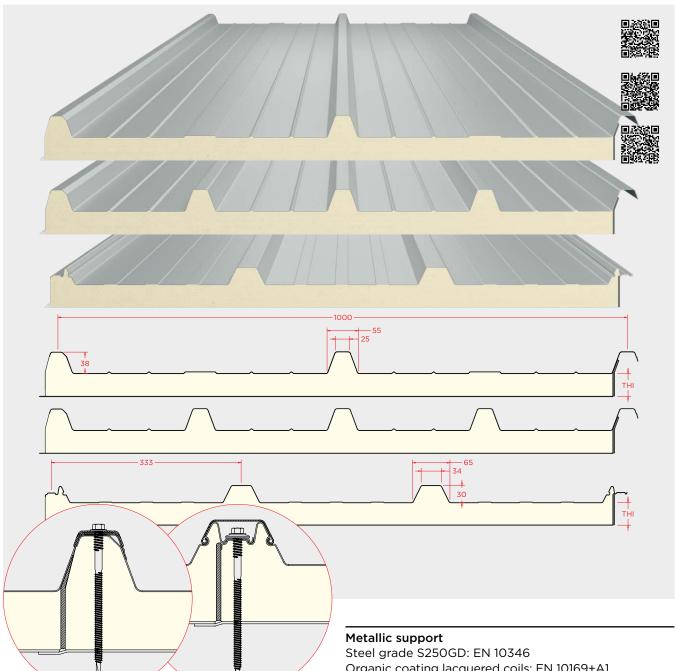
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm

*Tolerances according to EN 14509 Panel with undeclared performance: F rating $W/m K = W/m °C \mid W/m^2 K = W/m^2 °C$

Agrotop® 3/5/Cap

Panels for Agricultural Buildings



Description/Application

Insulated panel composed of an external profiled metal sheet and an internal flexible metal sheet, joined by a rigid polyurethane foam core.

3 or 5 wave roof panel, or hidden fastening with joint covers for agricultural facilities, with external face in profiled sheet and internal face in polyester sheet, reinforced with fiberglass resistant to biochemical corrosion.

Characteristics

Dimensions*

Thicknesses: 30-40-50-60-80-100 mm ±2 mm

Width: 1000 mm ±2 mm

Length: $4,00 - 14,00 \text{ m} \pm 10 \text{ mm}$

Maximum recommended length: 12,00 m

Organic coating lacquered coils: EN 10169+A1

Thicknesses: 0,4-0,5-0,6-0,7 mm

Insulated core

Polyurethane (PUR)

Thermal conductivity: 0,0207 W/m °C

Density: 40 kg/m³

Coating

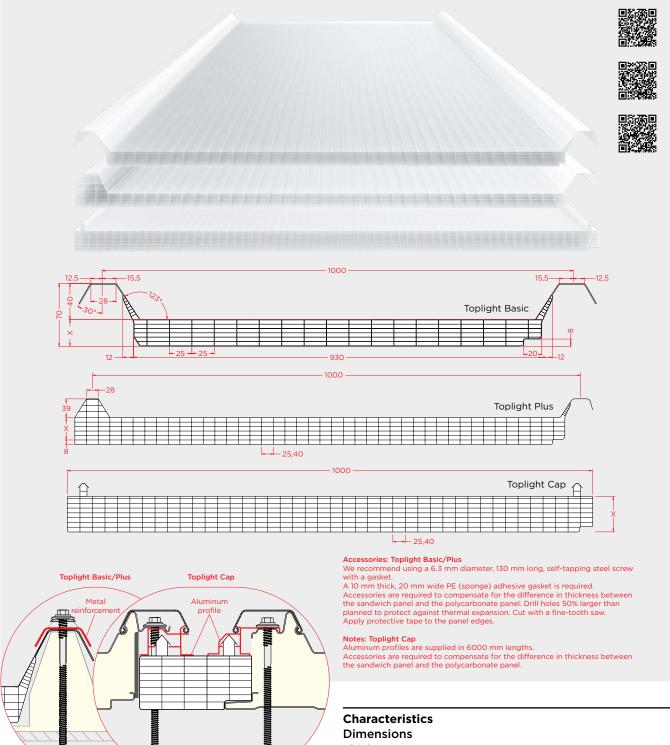
Standard: Polyester paint 25 µm

Specials: Granite HDX 55 μm | PVDF 35 μm Polyester sheet with fiberglass on the inside.

*Tolerances according to EN 14509 Panel with undeclared performance: F rating $W/m K = W/m °C / W/m^2 K = W/m^2 °C$

Toplight Basic/Plus/Cap

Natural lighting panels



Description/Application

White opal panels, designed for roofing systems and to facilitate the insertion of skylights.

Solutions with good thermal insulation and light transmission, adaptable to most coating panels. They allow the construction of various types of skylights and offer good mechanical and weather resistance.

Ideal for roofs and industrial skylights.

Thicknesses: 30–40 mm Waves interval: ~1000 mm Width modular: 1000 mm ±5 mm

Length: 13500 mm (max.)

Performance

Thermal transmittance: 1.2-1.1 W/m² °C Light transmittance: ~38-~35% Temperature variation: -40/+120 °C Reaction to fire: B-s1,d0 EN 13501-1

UV protection: yes

Installation

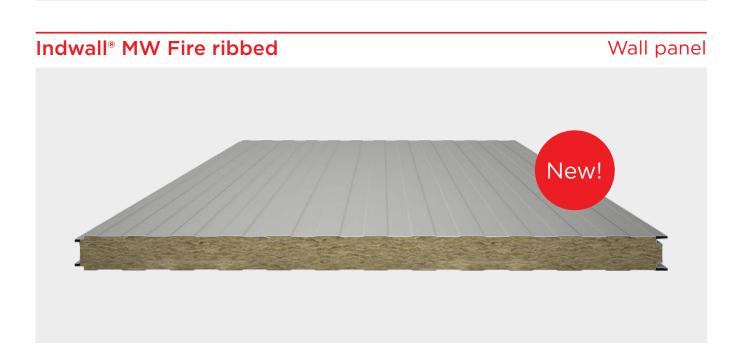
Important information at www.ofelizpainel.com







Facewall® MW Fire flat Wall panel New!



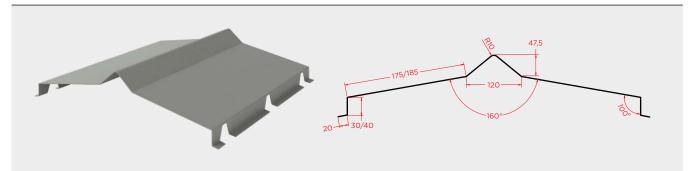






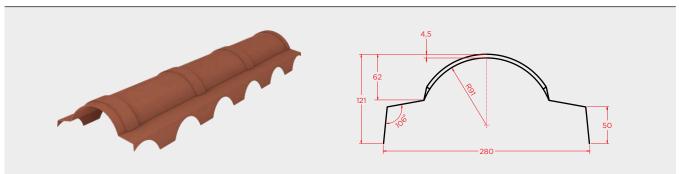


Plain ridge cap Topcover 3/5/Cap



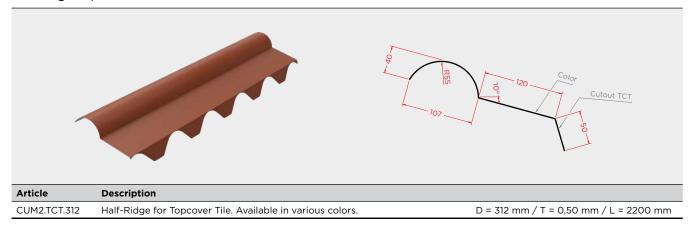
Article	Description	Standard product
CUM.TC3	Plain ridge cap 3,15 m with cutout for Topcover 3	Development: 625 mm
CUM.TC5	Plain ridge cap 3,15 m with cutout for Topcover 5	Total/useful length: 3150/3000 mm
CUM.TCC	Plain ridge cap 3,15 m with cutout for Topcover 3	
CUM.LISA	Plain ridge cap 3,15 m flat for Topcover 3/5/Cap	

Ridge cap Topcover Tile

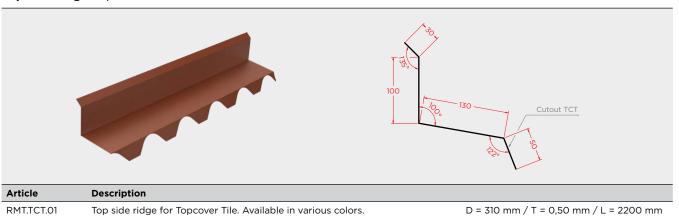


Article	Description	Standard product
CUM.TCT	Ridge cap 1,075 m with cutout for Topcover Tile	Development: 416 mm
CUM.TCTL	Ridge cap 1,075 m without cutout for Topcover Tile	Total/useful length: 1070/1000 mm

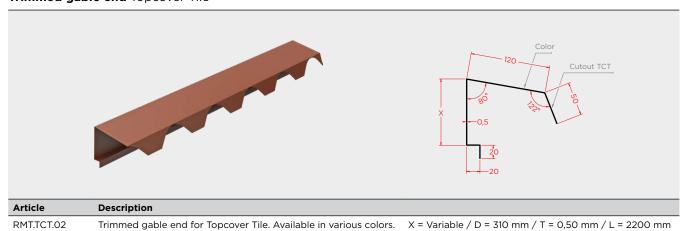
Half-ridge Topcover Tile



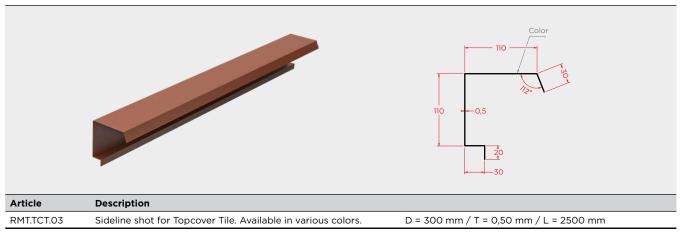
Top side ridge Topcover Tile



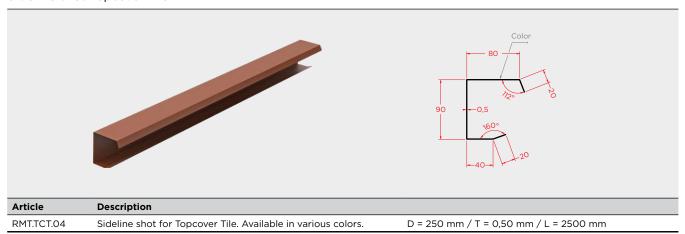
Trimmed gable end Topcover Tile



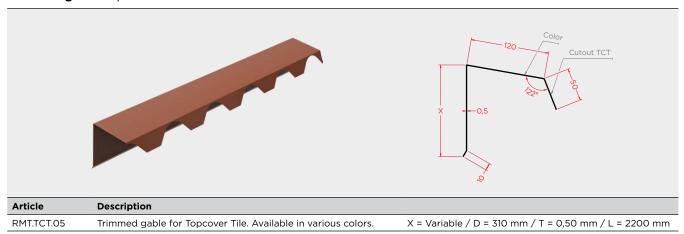
Sideline shot Topcover Tile



Sideline shot Topcover Tile

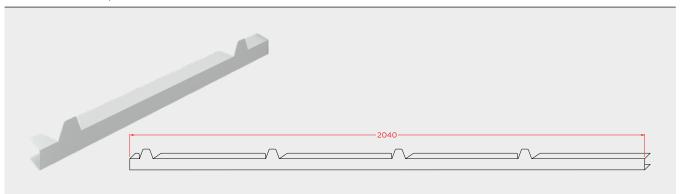


Trimmed gable Topcover Tile



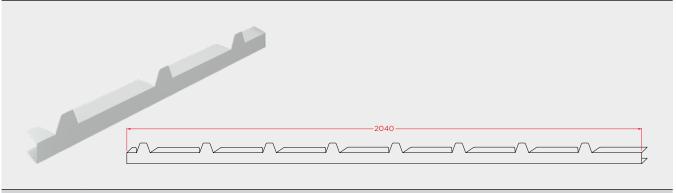
Accessories 23

Trimmed eave Topcover 3



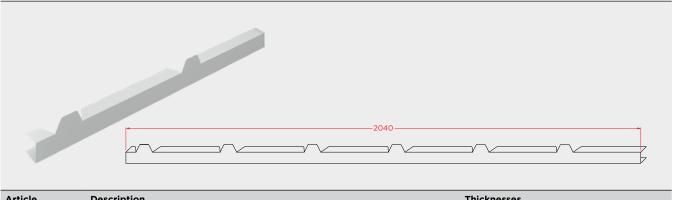
Article	Description	Thicknesses
TOP.TC3	Trimmed eave for Topcover 3.	30-40-50-60-80-100-120-150 mm

Trimmed eave Topcover 5



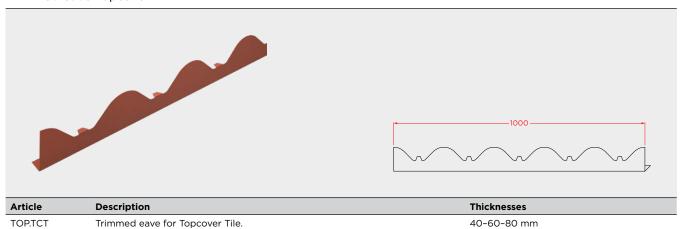
Article	Description	Thicknesses
TOP.TC5	Trimmed eave for Topcover 5.	30-40-50-60-80-100-120-150 mm

Trimmed eave Topcover Cap

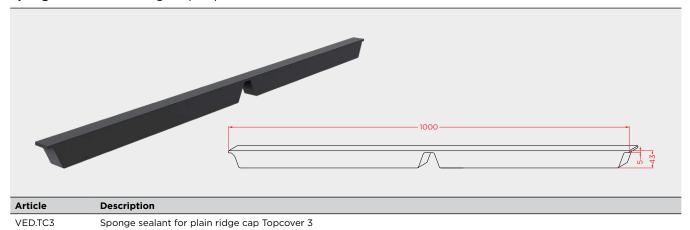


Article	Description	Thicknesses
TOP.TCC	Trimmed eave for Topcover Cap.	30-40-50-60-80-100 mm

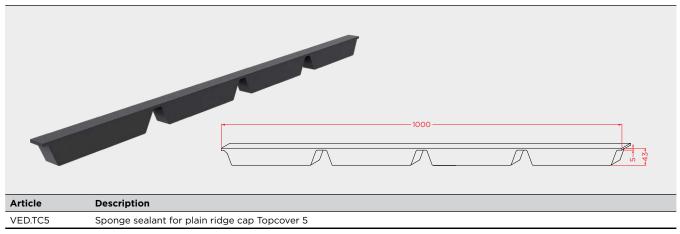
Trimmed eave Topcover Tile



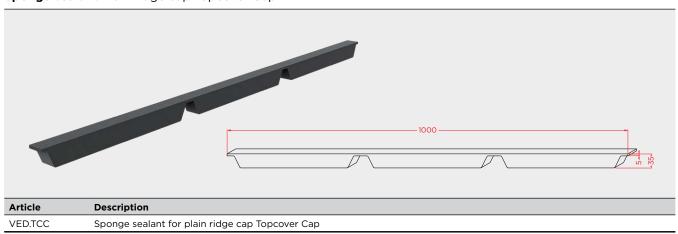
Sponge sealant Plain ridge cap Topcover 3



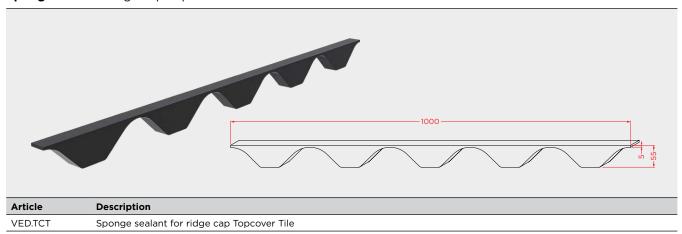
Sponge sealant Ridge cap Topcover 5



Sponge sealant Plain ridge cap Topcover Cap



Sponge sealant Ridge cap Topcover Tile



Accessories 25

Color range

The colors displayed in the catalog meet our standards as accurately as possible. However, minor variations are inevitable, which is why we recommend that you always perform a color test using an actual sample.

RAL 9010 Pure white

RAL 9006 White aluminium

RAL 9004 Signal black



RAL 7016 Anthracite grey



RAL 6005 Moss green





RAL 3009 Oxide red



RAL 1015 Light ivory

Topcover Tile color range

All RAL references presented here have a textured finish.

Exterior side

Interior side

RAL 8004T Copper brown



RAL 9010 Pure white





Naive Wood Textured lacquer







Alvero



Patinao Spanish roof



Range of special colors

The following references have a textured finish and are applied to wall panels.

Corten 256



Corten 522



Exclusive finishes

Granite® HDX 55 μm

ArcelorMittal

Properties

- Nominal organic thickness: 55 µm;
- Very good UV resistance;
- Excellent corrosion resistance:
- Very good formability;
- · Robust coating;
- Thermosetting paint;
- Surface treatment and painting: free of hexavalent chromium and heavy metals;
- Corrosion resistance category: RC5 (EN 10169);
- Automatic manufacturer's warranty of up to 35 years.

Applications

Outdoor use in harsh environments: profiled sheet metal, sandwich panels for industrial use with a high level of aggressive/corrosive agents, and construction materials.









RAL 7016 Anthracite grey



RAL 7022 Umbra grey



RAL 9006 White aluminium



RAL 9010 Pure white



Colorcoat HPS200 Ultra®

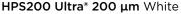
Tata Steel

Properties

- Org. nominal thickness: 200 μm;
- Exceptional performance;
- Certified for excellent color and gloss retention;
- Durability certificate valid for up to 40 years;
- Impact resistance: ≥ 18 J;
- Corrosion resistance category: RC5 (EN 10169);
- UV resistance: Ruv4 (EN 10169);
- Prepared for application on photovoltaic panel structures;
- · Manufactured in the United Kingdom.

Applications

For outdoor use in harsh environments, such as marine environments, with a high corrosive component. Ideal for warehouses, homes, commercial stores, and factories.





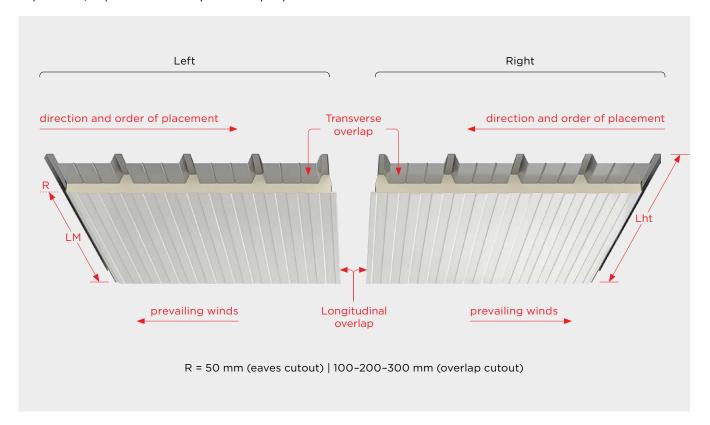


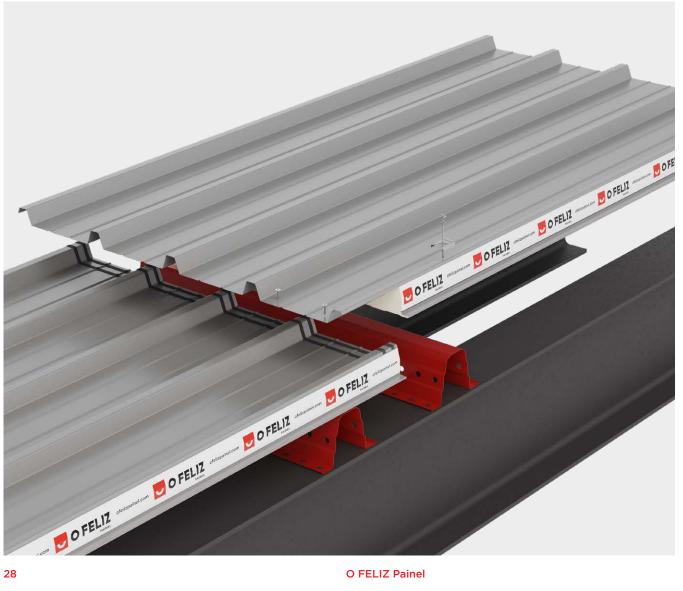
In all finishes, other colors are available upon prior consultation.

TATA STEEL

Overlap panel

Topcover 3, Topcover 5 and Topcover Cap: optional.

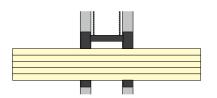




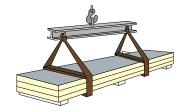
Procedures

Moving and storing sandwich panels

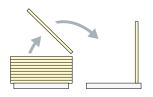
Moving



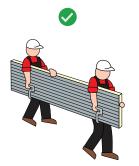
Lifting machine (up to 6m)

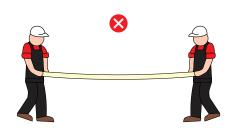


Crane with ladder (more than 6m)

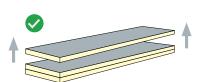


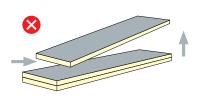
Place the panels vertically and on top of the polystyrene foam





Appropriate and inappropriate manual transport

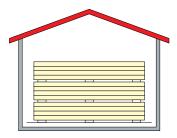




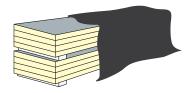
Correct and incorrect lifting

Indoor storage

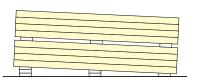
Outdoor storage







Cover the panels



Pile up with a slope

Procedures

Cleaning and maintenance of sandwich panels

1. General Recommendations

- **1.1** To ensure the durability of the roof, it must have an access system that allows entry for maintenance and cleaning operations. These operations must be performed by specialized personnel, so that access to the roof prevents accidental perforations, scratches, and damage to the sheet metal roof.
- **1.2** After application, the panel must be completely clean, with no metal shavings in contact with its surface, to prevent rust and subsequent corrosion of the metallic coating. This cleaning should preferably be done with air to avoid scratching the surface of the organic coating. The cut edges of the panel and the molding must also be protected from rust.
- **1.3** It is important to keep in mind that the type of coating for the panel must be chosen according to the type of corrosion environment at the application site; only then can the expected product durability be ensured.

2. Cleaning

- **2.1** During the panel's useful life, at least one cleaning must be performed annually.
- **2.2** Cleaning should be done with clean water, in a descending order. If necessary, depending on the level of soiling, you can use pH-neutral soap and water, in a ratio of 10% detergent to water. The water temperature should be at most 30°C. If a pressure washer is used, it should be set to a pressure of no more than 20 bar.
- **2.3** If there are localized stains, rub the stain with a damp cloth and then proceed with the general cleaning indicated in 2.2.
- **2.4** If the existing stains are caused by sealants and mastics adhered to the surface, the stain can be rubbed with a damp cloth and a 15% alcohol solution, taking care to wash the surface immediately with clean water. The solution should never be placed directly on the surface, but rather soaked in a cloth.
- **2.5** Cleaning should include gutters and drainpipes to remove leaves, soil, moss, and other debris that could obstruct the flow of water, causing excess water to accumulate. This accumulation of water can cause rust and moss growth. After cleaning, verify that the water is flowing normally again.

3. Maintenance

- **3.1** Throughout the life of the panel, maintenance inspections should be performed to identify any evidence of accidental degradation of the protective coatings, which could cause rust, and perform the necessary maintenance as soon as possible to ensure continued maintenance.
- **3.2** Inspections should be carried out annually, except in cases where the application site has very aggressive environmental characteristics that require increased frequency.

- 3.3 The following inspections should be performed:3.3.1 Check for rust around the edges of cut sheets, edges,
- and panel overlaps. When this problem is ignored, rust can spread to other areas and cause irreparable damage. In these situations, where there are signs of rust, proceed as follows:
- Cut or polish the areas affected by rust. If polishing/ sanding the affected area, sand until the metallic color of the sheet is visible and stop immediately, so as not to damage the sheet;
- Clean the cut/sanded area with clean, cold air and/or water and then dry;
- Apply a coat of anti-corrosion primer to the cut edges or the sanded area (limited to the area where the steel is visible);
- Once the first coat of primer has dried, apply a second coat of the same product to the same area as the previous application, but extending the application to the adjacent areas where the original coating of the sheet remains;
- Apply polyurethane acrylic paint to the modified area.
 Please note that, although the affected area is painted the same color as the original sheet, the color of the two areas may vary over the course of its useful life.
- **3.3.2** Check for specific paint defects resulting from scratches, perforations in the sheet, or localized corrosion. In cases where the sheet support is not visible, no further corrective action is necessary; simply applying a coat of acrylic polyurethane paint is sufficient. In cases where the sheet substrate is visible, corrective maintenance should be performed, proceeding as follows:
- Clean the affected area and its surroundings;
- Apply a light polyurethane epoxy primer;
- Apply acrylic polyurethane paint to the affected area with a fine brush, covering only the damaged area and not the original layer of the sheet. Please note that, although the affected area is painted the same color as the original sheet, the color of the two areas may vary over its useful life.

In cases where corrosion of the sheet is already evident, proceed as described in section 3.3.1.

- **3.3.3** Inspect the condition of mechanical fasteners, which, if improperly installed or in poor condition, can cause water infiltration and rust stains. In such cases, proceed as follows:
- Replace defective bolts;
- In the case of localized rust on the sheet metal, proceed as described in section 3.3.1.



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