

Rockwell Sheet Sales Ltd

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Corrugated

Multiwall Polycarbonate

Simple / Safe / Stylish

Rockwell offers a range of multiwall corrugated polycarbonate sheets in a variety of thicknesses, finishes and profiles.

Sheets are supplied manufactured to length – with certain profiles also available pre-curved to 3500mm or 6000mm radii.

Benefits:

- Provides areas of safe shading filters 99% of harmful UV rays
- Cellular sheet structure reduces condensation associated with single skin roof structures
- Offers increased thermal insulation as low as 1.8W/m2K
- Self-extinguishing with fire rating Euroclass EN13501-1 2006 B-s1, d0 (UK Class 0)
- Working temperature range -40oC to +130oC
- Weight saving over GRP rooflight sheets for easier handling
- Durable multiwall polycarbonate structure improves profile rigidity
- Choice of diffusing clear and opal finishes supplied as standard
- Variety of translucent sheet colours also available subject to quantity
- Corrugated profiles can be successfully utilised for interior and set design
- Sheets manufactured to length and supplied with heat sealed ends
- Clear sheet transmits up to 84% of daylight, opal transmits up to 76%
- Produced to UNI EN ISO 9001:2008 quality standard with 10 year warranty
- Fully recyclable with minimal environmental impact

GrecaPlus+ Page 06

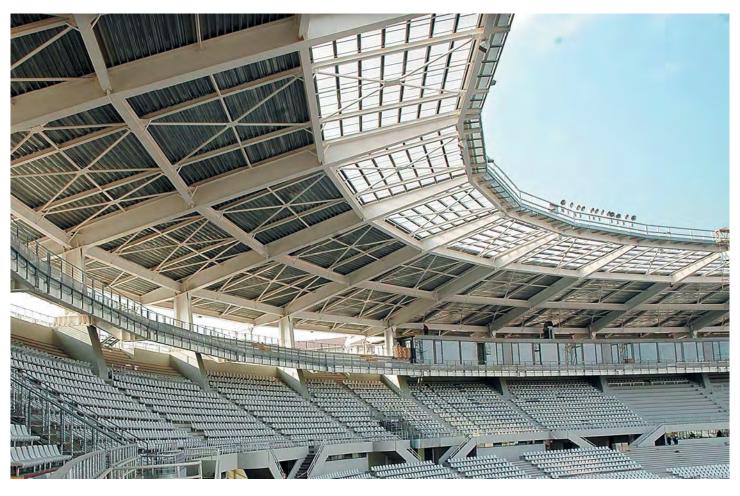
GrecaPlus+ is a premier range of multiwall polycarbonate sheet profiles available in thicknesses from 8mm to 20mm. Also available in re-inforced, standard and curved sheet options - **GrecaPlus+** can be utilised successfully with most metal and composite roofing panels available on the market today.

OndaPlus+ Page 10

OndaPlus+ is a mid-range 177/51 profile, triplewall corrugated polycarbonate sheet available in 4mm and 6mm thicknesses. Available in both standard and curved sheet options, **OndaPlus+** can be utilised for both pitched and barrel rooflights, and vertical cladding.

SmartPlus+ Page 14

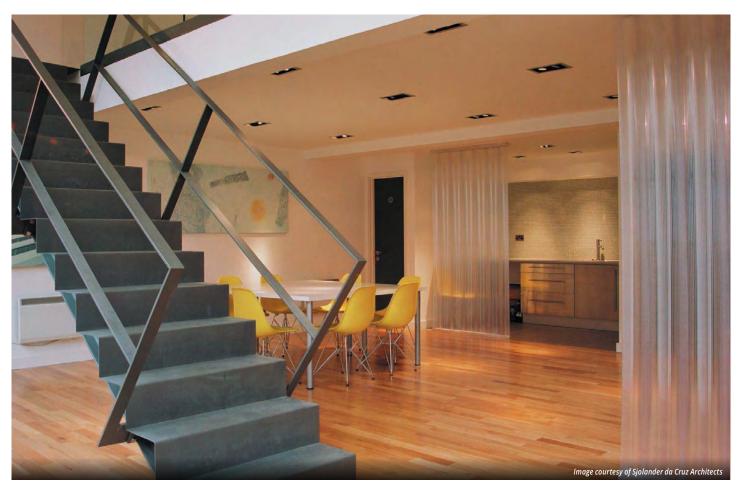
SmartPlus+ is an economy range of 2.5mm thick twinwall corrugated polycarbonate profiled sheets suitable for a wide variety of translucent roofing and cladding applications.





Corrugated

Multiwall Polycarbonate





Corrugated

Multiwall Polycarbonate Interiors

GrecaPlus+

UV protected corrugated multiwall polycarbonate sheet suitable for continuous flat and curved translucent rooflights. Can be installed independently or in conjunction with composite roofing panels and metal profiled corrugated sheets.

Applications and strong points

GrecaPlus+ is a 1000mm wide, corrugated polycarbonate sheet, available in 4 standard profiles of varying thickness. Sheets offer excellent light transmission and insulation values and feature either a triplewall or honeycomb internal structure.

Thanks to its ability to overlap in both side and length, **GrecaPlus+** can be utilised with the majority of composite panels or metal profiled corrugated sheet on the market. Designed for the construction of rooflights in both single and multiple sheet application, **GrecaPlus+** is also available pre curved to 3500 mm and 6000 mm radii.

GrecaPlus+ offers high protection against UV rays, is resistant to accidental impacts, temperature changes and hail. It is also fire rated Euroclass EN13501-1: B s1 d0 (Equivalent to a UK Class 0).

Technical specifications

Construction of flat and curved skylights and coverings with corrugated extruded multiwall polycarbonate sheets with triplewall or honeycomb structure.

- Heat sealed ends
- UV protected outer layer
- Choice of diffusing clear and opal finishes supplied as standard
- Variety of translucent sheet colours and bi-colours also available subject to quantity
- 1000 mm ± 5 modular width
- Corrugation pitch of 200mm and 250 mm
- Multiwall side waves for overlapping
- Euroclass fire rating EN13501-1: B s1 d0 (equivalent UK Class0)
- Manufactured to length

GrecaPlus+ 5-Corrugation Flat & Curved 40/8, 40/10, 40/16mm and 74/12, 78/16 mm U = 2,70 - 2,50 - 1,99 and 2,30 - 1,99 W/m2K.

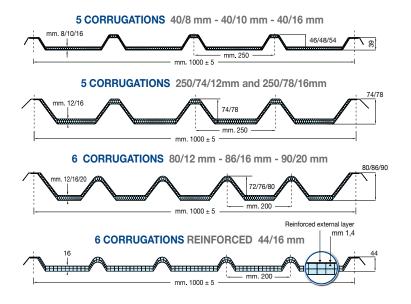
GrecaPlus+ 6-Corrugation Flat & Curved 80/12, 86/16, 90/20mm and 44/16mm Reinforced U = 2,30 - 1,99 - 1,80 and 2,20 W/m2K.





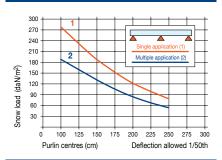




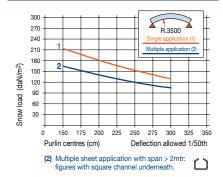


| FEATURES | 5-CORRUGATION | | | 6-CORRUGATION | | | | | |
|---------------------------|---|----------|----------|---------------|----------|-----------|----------|------------|----------|
| Thickness | mm 8 | mm 10 | mm 16 | mm 12 | mm 16 | mm 12 | mm 16 | mm 20 | mm 16 |
| Height of side wave | mm 40 | mm 40 | mm 40 | mm 74 | mm 78 | mm 80 | mm 86 | mm 90 | mm 44 |
| Structure | Honeycomb | | | | l | Honeycomb | | Triplewall | |
| Sheet width | mm 1000 ± 5 | | | | | | | | |
| Sheet length | upon request (max. length recommended is 7 mtr) | | | | | | | | |
| Thermal insulation | U = 2,70 | U = 2,50 | U = 1,99 | U = 2,30 | U = 1,99 | U = 2,30 | U = 1,99 | U = 1,80 | U = 2,20 |
| Temperature working range | - 40°C + 130° C | | | | | | | | |
| Linear thermal expansion | 6,7 x 10 ⁻⁵ mm/mm°C* | | | | | | | | |
| Satinized clear colour | 59% ± 2 | 58% ± 2 | 57% ± 2 | 58% ± 2 | 57% ± 2 | 58% ± 2 | 57% ± 2 | 52% ± 2 | 65% ± 2 |
| Opal colour | 41% ± 2 | 40% ± 2 | 37% ± 2 | 39% ± 2 | 37% ± 2 | 39% ± 2 | 37% ± 2 | 35% ± 2 | 41% ± 2 |

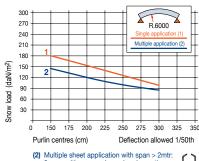
GRECAPLUS+ 40/8-10-16 (5-CORRUGATION) FLAT APPLICATION ON MORE SUPPORTS



GRECAPLUS+ 40/8-10-16 (5-CORRUGATION) **CURVED APPLICATION ON TWO SUPPORTS**

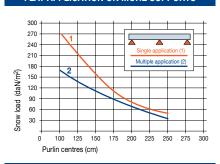


GRECAPLUS+ 40/8-10-16 (5-CORRUGATION) **CURVED APPLICATION ON TWO SUPPORTS**

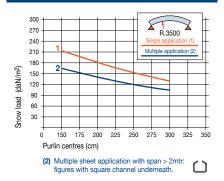


(2) Multiple sheet application with span > 2mtr. figures with square channel underneath.

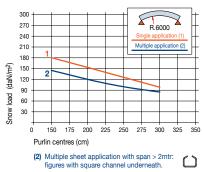
GRECAPLUS+ REINFORCED 44/16 (6-CORRUGATION) **FLAT APPLICATION ON MORE SUPPORTS**



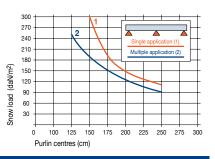
GRECAPLUS+ REINFORCED 44/16 (6-CORRUGATION) CURVED APPLICATION ON TWO SUPPORTS



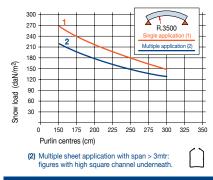
GRECAPLUS+ REINFORCED 44/16 (6-CORRUGATION) **CURVED APPLICATION ON TWO SUPPORTS**



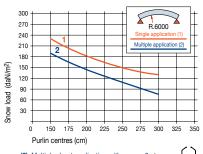
GRECAPLUS+ 80/12, 86/16 & 90/20 (6-CORRUGATION) FLAT APPLICATION ON MORE SUPPORTS



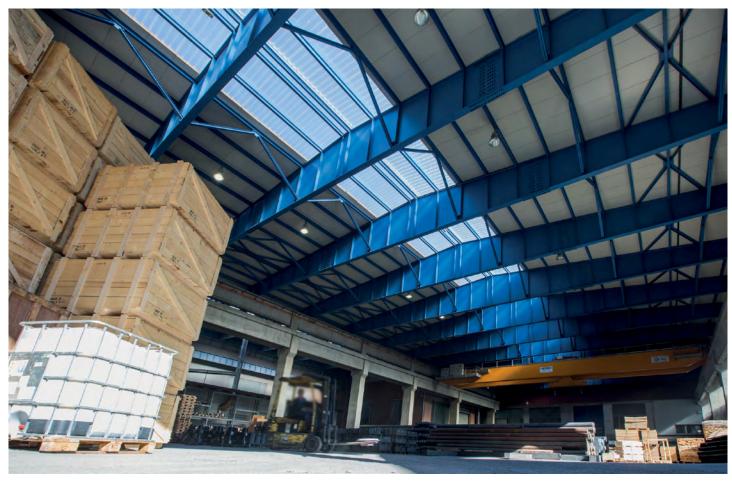
GRECAPLUS+ 80/12, 86/16 & 90/20 (6-CORRUGATION) **CURVED APPLICATION ON TWO SUPPORTS**



GRECAPLUS+ 80/12, 86/16 & 90/20 (6-CORRUGATION) CURVED APPLICATION ON TWO SUPPORTS



(2) Multiple sheet application with span > 3mtr: figures with high square channel underneath

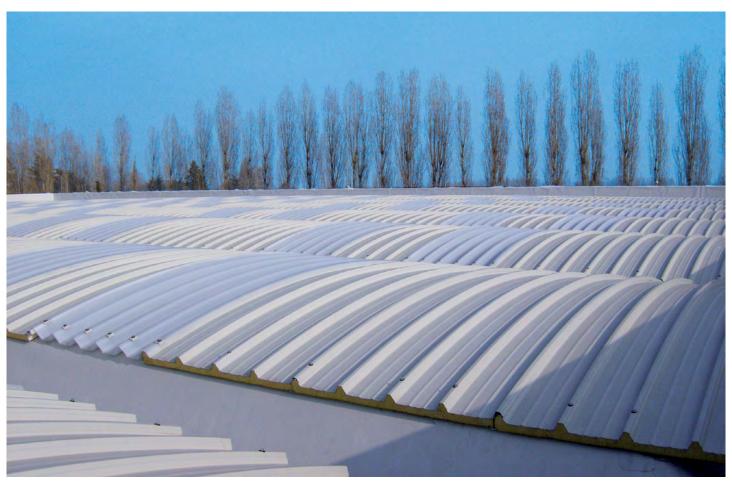




















OndaPlus+

UV protected corrugated multiwall polycarbonate sheet suitable for continuous flat and curved translucent rooflights.

Applications and strong points

OndaPlus+ is a corrugated triplewall polycarbonate sheet, extruded in 4mm and 6mm thicknesses to a standard European profile (Euro 177/51), **OndaPlus+** can be supplied in a standard flat form or pre curved to a radius of 3500mm.

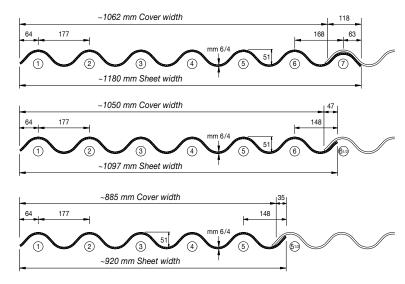
OndaPlus+ is free from microcracks and tensioning and has excellent spanning and loading capabilities. It offers high light transmittance and a superior protection to UV rays. It has good resistance to accidental impacts, bad weather, temperature changes and to hail. It is self-extinguishing as per Euroclass fire rating EN13501-1: B s1 d0 (equivalent UK Class0), has good thermal insulating properties and is quick and easy to install.

Technical specifications

Construction of skylights and flat/curved coverings with extruded triplewall polycarbonate 4/6 mm thick corrugated sheets:

- Corrugation profile EURO 177/51mm
- Heat sealed ends
- Euroclass fire rating EN13501-1: B s1 d0 (equivalent UK Class0)
- UV protected outer layer
- Manufactured to length
- Choice of diffusing clear and opal finishes supplied as standard
- Variety of translucent sheet colours and bi-colours also available subject to quantity







OndaPlus+ Flat and Curved R3500 in thickness 4 mm U Value = 3,70 W/m2K

OndaPlus+ Flat and Curved R3500 in thickness 6 mm

U Value = 3,30 W/m2K



PRODUCTION FEATURES

Thickness mm 4 mm 6

Structure Triplewall

Maximum width mm 1180 \pm 5 (cover width mm 1062)

Sheet length upon request (max. length recommended is 7mtr)

PHYSICAL-THERMAL FEATURES

Thermal insulation U = 3,70 U = 3,30

Temperature working range - 40°C + 130° C

Linear thermal expansion 6,7 x 10⁻⁵ mm/mm°C*

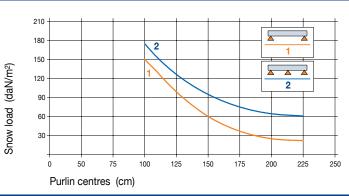
LIGHT TRANSMISSION FEATURES

| Satinized clear colour | 80% ± 2 | 72% ± 2 |
|------------------------|---------|---------|
| Opal colour | 68% ± 2 | 50% ± 2 |

^{*} GENERAL DATA

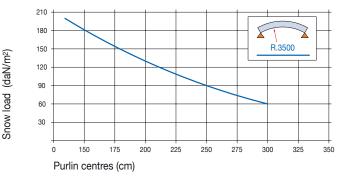


FLAT APPLICATION ON 2 OR MORE SUPPORTS

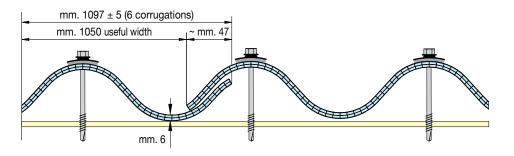




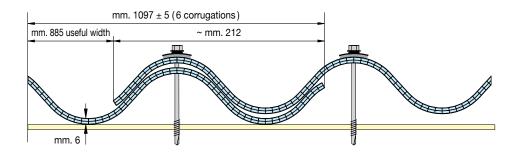
CURVED R3500 APPLICATION



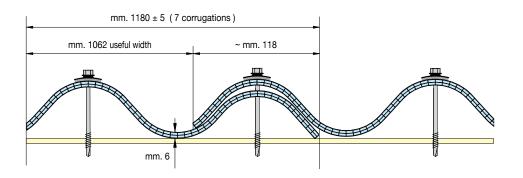
STANDARD OVERLAP (6-CORRUGATION SHEET)



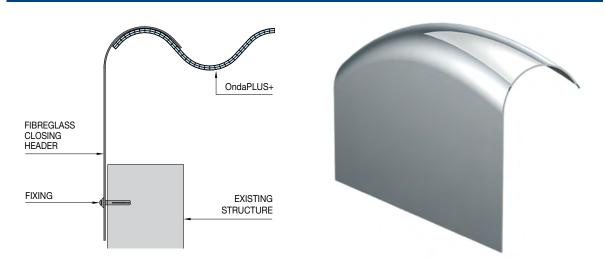
OVERLAP FOR AREAS EXPOSED TO STRONG WINDS (6-CORRUGATION SHEET)



FIXING ON HIGHER CORRUGATION (7-CORRUGATION SHEET)



CURVED END DETAIL













Onda**Plus+**

SmartPlus+

2.5mm Corrugated UV protected multiwall polycarbonate sheet for translucent coverings and use with metal profiled sheets and roofing panels.

Applications and strong points

SmartPlus+ is a 2.5 mm thick multiwall polycarbonate sheet for roofing & cladding.

Available in a variety of corrugated profiles to match the most popular metal or composite panels available on the market.

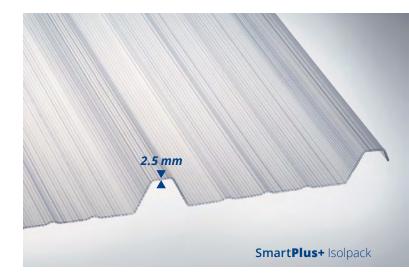
The multiwall structure offers thermal advantages over single skin sheets such as GRP or solid polycarbonate and will reduce incidences of condensation.

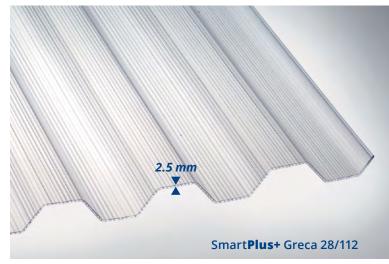
The **SmartPlus+** sheet can also be combined with Module 500 false ceiling system to further improve the thermal insulation value of the construction where required.

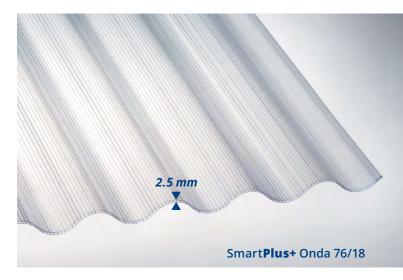
Technical specifications

Construction of flat skylights and coverings with corrugated extruded multiwall polycarbonate sheets with twinwall structure.

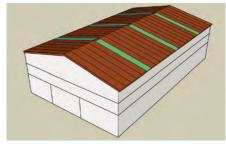
- Heat sealed ends
- UV protected outer layer
- Choice of diffusing clear and opal finishes supplied as standard
- Variety of translucent sheet colours also available subject to quantity
- Choice of profiles
- Euroclass fire rating EN13501-1: B s1 d0 (equivalent UK Class0)
- Manufactured to length

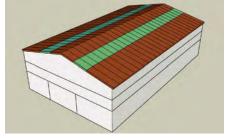






Typical applications





VERTICAL SKYLIGHT

HORIZONTAL SKYLIGHT



SmartPlus+ has certifications concerning resistance to hailstones according to UNI 10890:2000, conformity to the EN 10077-2:2004 norm, thermal insulation (U = 4.71 W/m2K) for building materials and also fire rating.



PRODUCTION FEATURES

| Thickness | mm 2,5 |
|--------------|--|
| Structure | twinwall |
| Sheet width | according to profile |
| Sheet length | upon request (max. length recommended is 7mtr) |

PHYSICAL-THERMAL FEATURES

| Thermal insulation | U = 4,71 |
|--------------------|----------|
|--------------------|----------|

Temperature working range - 40°C + 130° C

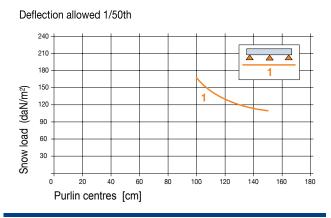
Linear thermal expansion 6,7 x 10⁻⁵ mm/mm°C*

LIGHT TRANSMISSION FEATURES

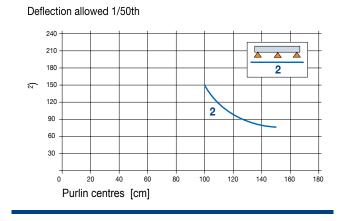
| Satinized clear colour | 84% ± 2 |
|------------------------|---------|
| Opal colour | 76% ± 2 |

^{*} GENERAL DATA

LOADING TABLE SMARTPLUS+ 5-CORRUGATION PROFILE FLAT APPLICATION ON MORE SUPPORTS



LOADING TABLE SMARTPLUS+ 28/112 PROFILE FLAT APPLICATION ON MORE SUPPORTS

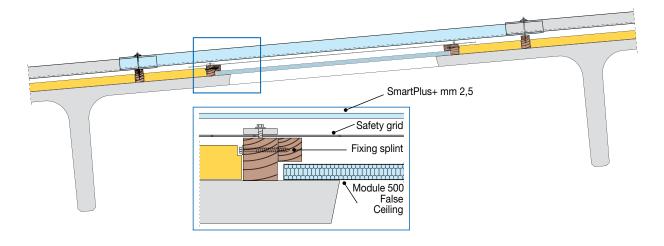


Smart**Plus+** roofing combined with Module 500 false ceiling

SmartPlus+ can also be combined with a Module 500 False Ceiling in renovating old, single skin skylights to achieve an excellent aesthetic and quality finish, and provide improved thermal insulation.

| PRODUCT | Insulation figure | | |
|----------------------------|--------------------------|--|--|
| PHODUCI | (total height is ~40 mm) | | |
| SmartPlus+ + Module 500/20 | 1,46 W/m²K | | |
| SmartPlus+ + Module 500/25 | 1,38 W/m²K | | |

The above insulation figures are the results of a theoretical calculation made considering a SmartPlus+ roofing combined with a Module 500 false ceiling. The total height of the two sheets is c. 40 mm and the dimension of the skylight taken into consideration is 1000x6000 mm (figures do not consider any loss due to profiles). Rockwell can not be held as responsible for any possible tolerances or mistakes regarding the above figures.





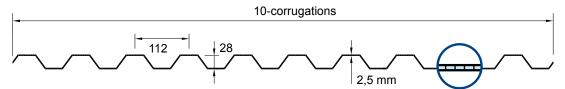




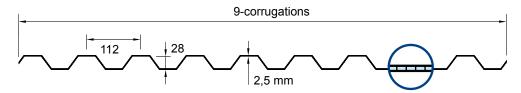


Smart**Plus+**

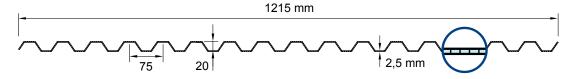
GRECA 28/112 10-corrugation



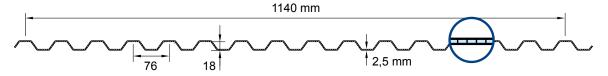
GRECA 28/112 9-corrugation



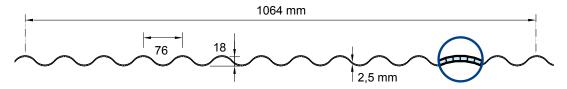
GRECA 20/75



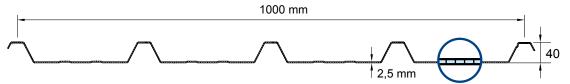
GRECA 76/18



ONDA 76/18



SAND 250/40



ONDA 146/48 (minimum order for production is 1000m²)

