

RENOLIT Ondex

The world leader in the BI-STRETCHED sheet in Polyvinyl Chloride

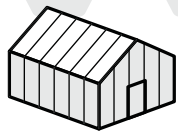


Rely on it.

RENOLIT ONDEX sheets profile GRECA 70 x 18

For single layer roofings, claddings and canopies

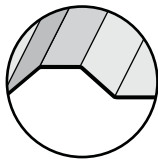
Reference GB11 023 - 12/2017



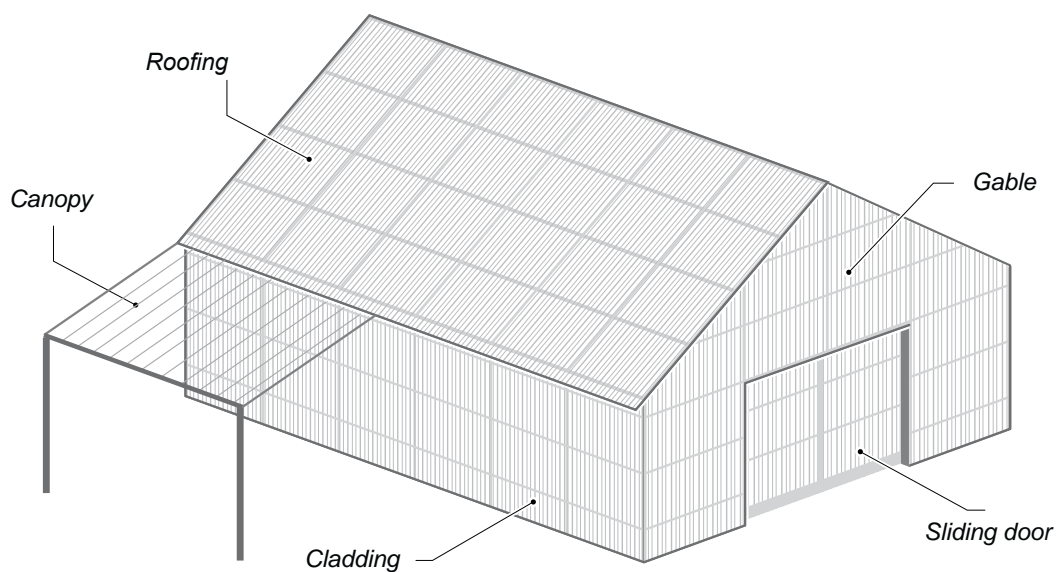
• Roofing and cladding



• Arched building



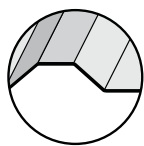
GRECA
70 x 18



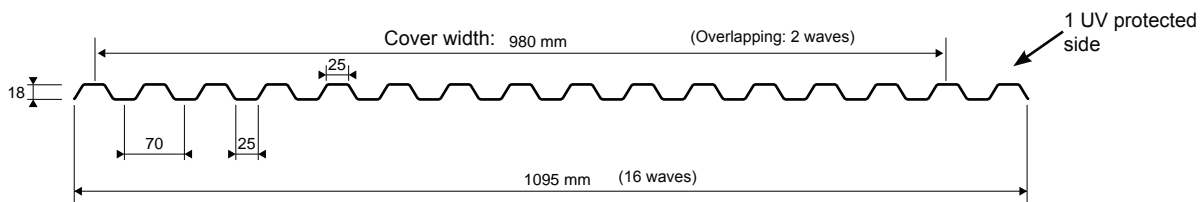
Please refer to the pictogram table

Profile

For roofing and cladding applications



GRECA
70 x 18



Specifications		HR	SOLLUX	ECOLUX
Nominal thickness in mm		1.1	0.9	0.7
Fire classification		B s1 d0		
Heat loss coefficient		5,7 W/m ² °C		6,8 W/m ² °C
Coefficient of linear expansion ASTM D 696 mm/mm°C		60 x 10 ⁻⁶		
Tensile strength DIN 53488	Crystal	≥ 1200 kJ/m ²		
	Translucent, diffusing colours	≥ 1500 kJ/m ²		
	Opaque	≥ 1500 kJ/m ²		
Modulus of elasticity ISO R 527		32 000 ±2 000 daN/cm ²		
Breaking stress ISO R 527		700 to 900 daN/cm ²		
Maximum purlin distance		≤ 1,10 m		
Overlappings	Transversal	200 mm		
	Longitudinal	2 waves		
Minimum slope (See DTU 40.35 for a wave height < 35 mm)		from 10 to 15% if roof length < 12 m 30% if roof length > 12 m		
Bend radius		2.5 m minimum		
Tightness accessories		When necessary with a light coloured flexible butyl sealant		

Roof length from the ridge to the gutter below 15 m

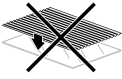
The 10 commandments

<p>The temperature of the ventilated sheet must not exceed the recommended temperatures.</p>	<p>Do not exceed the recommended wind conditions.</p>	<p>Do not install above the recommended altitudes.</p>	<p>Protect the sheets from sunlight, wind and rain with an opaque white polyethylene tarpaulin during storage and throughout the installation.</p>	<p>Identify the UV protected side(s) "côté ciel" 1 side or 2 sides</p>
<p>Do not step directly on the sheets</p>	<p>Drill and use screws and accessories in accordance with the manufacturer's recommendation.</p>	<p>Check the purlin distance according to the loads (snow/wind).</p>	<p>The sheets must not be used to form dual walls over insulating products.</p>	<p>For crystal or translucent sheets, supports and overlappings with other dark coloured sheets must be painted in white.</p>

Behaviour in respect to sources of heat



Translucent, diffusing and opaque sheets: 70° max. Crystal: 65° max.



Do not fit any temporary shading system (fabric) or dropped ceiling to the underside of the sheets (crystal or translucent).



Ventilate the roof surface to reduce condensation and lower the temperature

Protect the sheets from sunlight, wind and rain during storage and throughout the installation.

• Colour of the adjacent sheet and supports

In order to ensure a greater durability



- paint in white the transversal and longitudinal overlappings in contact with a dark coloured material such as black, brown, dark red, dark green and dark blue.

This applies only to crystal and translucent RENOLIT ONDEX sheets

- Supports: Paint in white the purlins on which the crystal or translucent RENOLIT ONDEX sheets will be installed.

Structure

The supports for this kind of roofing or cladding must comply with the regulations in force.

They are made of steel or timber.

The bearing surfaces are flat and parallel to the roof surface. They are continuous and light coloured. Their minimum width is:

- 40 mm for steel (40 mm for HR and SOLLUX sheets profile GRECA 70/18, it can be reduced to 20 mm for ECOLUX sheets).

- 60 mm for timber (60 mm for HR and SOLLUX sheets profile GRECA 70/18, it can be reduced to 50 mm for ECOLUX sheets)

Les chéneaux et gouttières ne doivent pas être fixés sur les plaques RENOLIT ONDEX mais sur les structures du bâtiment.

Gutters must be fixed on the building structure, not on the RENOLIT ONDEX sheets.

Expansion

Due to the PVC coefficient of expansion (from 2 to 3 mm per linear metre for a temperature variation of 40° C), drill Ø 10 mm fixing holes for Ø 6 to 7 mm screws

Entraxes des pannes

Downward loads (snow pressure)

Normal admissible loads in daN/m ²	Purlin distances in m under downward loads on 2 supports			Purlin distances in m under upward loads on 3 supports or more		
	HR	SOLLUX	ECOLUX	HR	SOLLUX	ECOLUX
	2 supports	2 supports	2 supports	3 supports or more	3 supports or more	3 supports or more
40	1,1	1,1	1,07	1,1	1,1	1,1
50	1,1	1,08	1	1,1	1,1	1,1
60	1,09	1,02	0,94	1,1	1,1	1,06
70	1,04	0,97	0,89	1,1	1,1	1,01
80	0,99	0,93	0,85	1,1	1,05	0,96
90	0,96	0,89	0,82	1,08	1,01	0,93
100	0,92	0,86	0,79	1,05	0,98	0,9
110	0,89	0,83	0,77	1,01	0,95	0,87
120	0,87	0,81	0,74	0,98	0,92	0,84
130	0,85	0,79	0,72	0,96	0,89	0,82
140	0,82	0,77	0,71	0,94	0,87	0,8
150	0,81	0,75	-	0,91	0,85	0,78
160	0,79	0,74	-	0,89	0,83	0,77
170	0,77	0,72	-	0,88	0,82	0,75
180	0,76	0,71	-	0,86	0,8	0,74
190	0,74	-	-	0,84	0,79	0,72
200	0,73	-	-	0,83	0,77	0,71

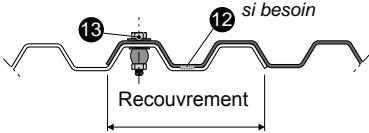
Upward loads (wind depression)

Normal admissible loads in daN/m ²	Purlin distances in m under upward loads on 2 supports			Purlin distances in m under upward loads on 3 supports or more		
	HR	SOLLUX	ECOLUX	HR	SOLLUX	ECOLUX
	2 supports	2 supports	2 supports	3 supports or more	3 supports or more	3 supports or more
40	1,1	1,1	1,01	1,1	1,1	1,1
50	1,1	1,03	0,94	1,1	1,1	1,05
60	1,04	0,97	0,89	1,1	1,08	0,99
70	0,98	0,92	0,84	1,1	1,03	0,94
80	0,94	0,88	0,81	1,05	0,98	0,9
90	0,9	0,84	0,77	1,01	0,94	0,87
100	0,87	0,81	0,75	0,98	0,91	0,84
110	0,85	0,79	0,72	0,95	0,88	0,81
120	0,82	0,77	0,7	0,92	0,86	0,79
130	0,8	0,75	-	0,89	0,83	0,77
140	0,78	0,73	-	0,87	0,81	0,75
150	0,76	0,71	-	0,85	0,8	0,73
160	0,75	-	-	0,84	0,78	0,71
170	0,73	-	-	0,82	0,76	-
180	0,72	-	-	0,8	0,75	-
190	0,7	-	-	0,79	0,74	-
200	-	-	-	0,78	0,72	-

Installation for roofing application

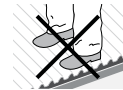
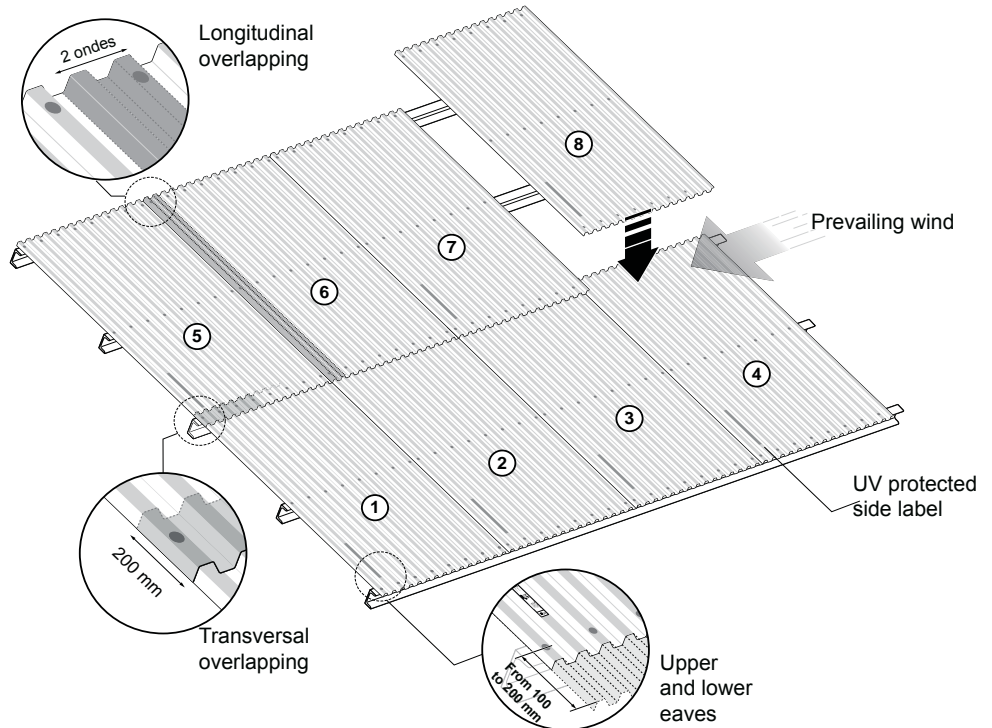
GRECA 70 x 18
for roofing application.

Overlapping: 2 waves and seaming



13 If the purlin distance is > 80 cm the middle of the overlapping will be seamed especially if the structure is in an area exposed to the wind.

12 Using a butyl sealant is required in the following cases:
- Slope < 15 %
- Need for a perfect tightness



See the recommended fixing accessories on page 8

Distribution of the fixing elements

Fixing type		GRECA 70 x 18
Flat roof	End of the sheet	
	Middle purlins	
End of the sheet *	End of the sheet	
	Middle purlins	

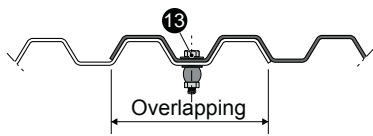
* Overlapping on the arched part with a radius below 5 m should be avoided.



See the recommended fixing accessories on page 8

HR - SOLLUX			ECOLUX			
Steel purlin < 6 mm	Steel purlin from 4 to 12 m	Timber purlin	Steel purlin ≤ 6 mm	Steel purlin from 4 to 12 m	Timber purlin	DIY Timber or steel

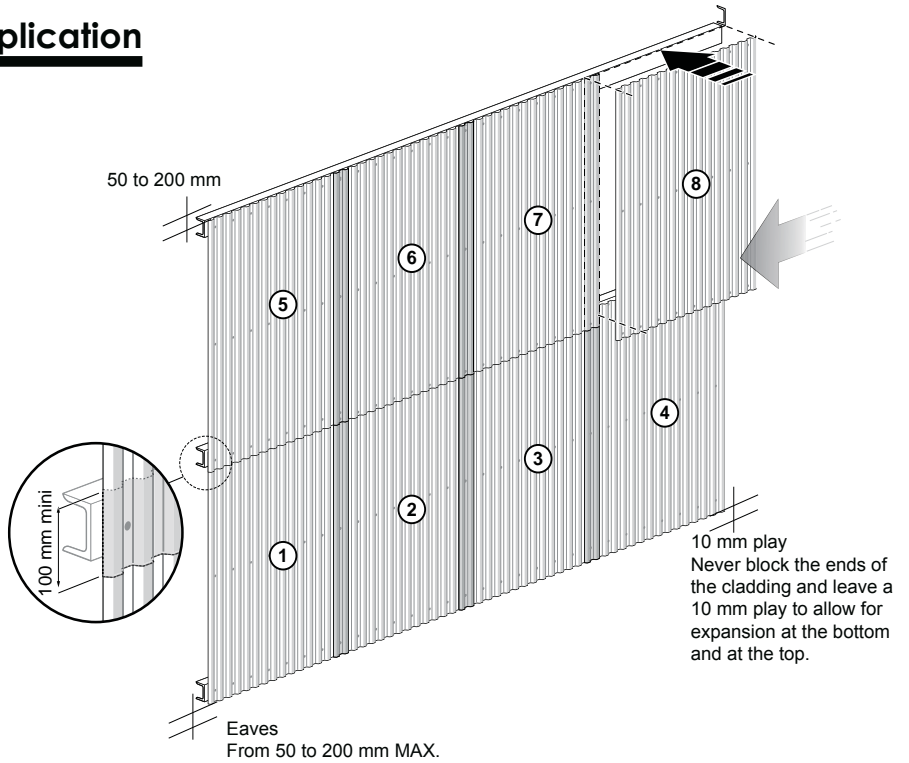
Installation for cladding application



13 If the purlin distance is > 80 cm the middle of the overlapping will be seamed especially if the structure is in an area exposed to the wind.



See the recommended fixing accessories on page 8

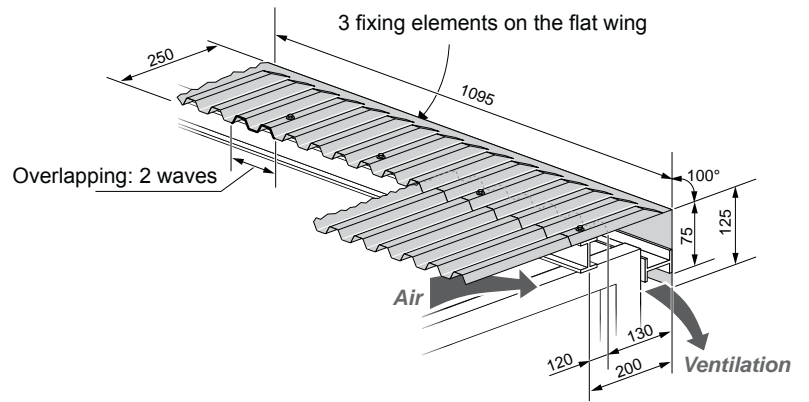
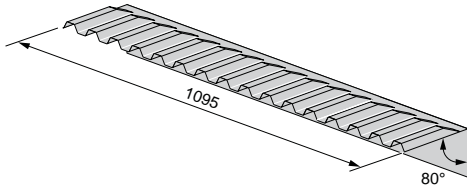


Fixing type	GRECA 70 x 18
Sheet end	
Middle purlins	

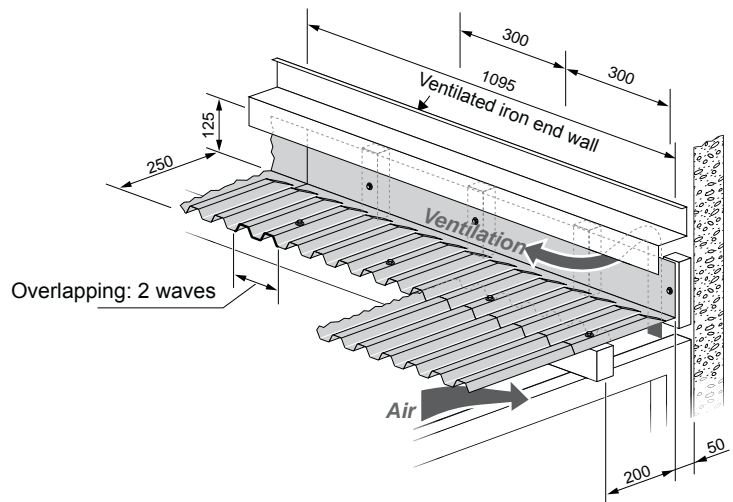
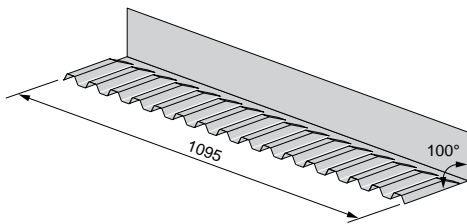
HR - SOLLUX + ECOLUX		
Steel purlin < 6 mm	Steel purlin ≥ 6 mm	Timber purlin

Special parts

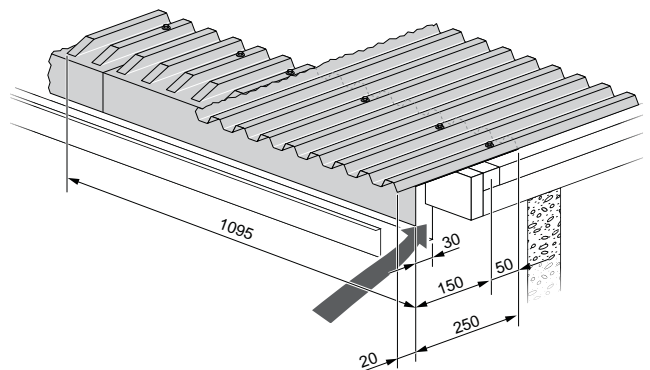
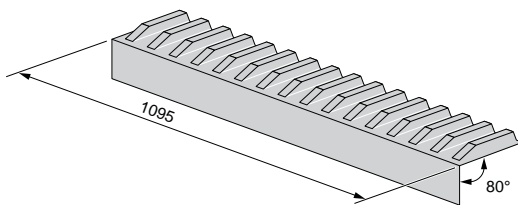
- Shed ridge beam



- Front flashing



- Gutter closer



Fixing accessories



Ranges HR and SOLLUX *

• ROOFING

N°	References	Sketch	Designation	Packaging
3	06 668		GRECA Pre-painted Galvanized steel saddle WHITE Ral 9010	100 units per packaging
4	11 297		PVC washer Ø 22 x 5 x 5	100 units per packaging
1	11 350		Steel screw 6,3 x 50 - steel support < 6 mm	100 units per packaging
2			Steel screw 6 x 85 - steel support 4 to 12 mm	100 units per packaging
6	20 683		Steel screw 6,5 x 70 - timber support	100 units per packaging
13	09 270		A2 stainless steel plasteseam – M5 x 20 - Ø 9.6	100 units per packaging
12	20 160		Light grey butyl sealant 12 x 3 for tightness between overlapping	286 ml

Range ECOLUX *

N°	References	Sketch	Designation	Packaging
7	20 177		Galvanized steel saddle + PVC washer	100 units per packaging
5	20 270		PE spacer: 18 – 19 – 39 high for GRECA 70/18	100 units per packaging
1	11 350		Steel screw 6,3 x 50 - steel support < 6 mm	100 units per packaging
6	20 683		Steel screw 6,5 x 70 - timber support	100 units per packaging
8	20 663		Fastening set -spacer & screw - for timber support	100 units per packaging
8	20 664		Fastening set -spacer & screw - for steel support	100 units per packaging

Ranges HR - SOLLUX - ECOLUX *

• CLADDING

N°	References	Sketch	Designation	Packaging
11	20 698		Steel screw 6.5 x 50 + VG 16 washer - for timber support	100 units per packaging
9	11 252		Zinc steel screw Ø6.3 x 22 + VA 19 washer - for steel support < 6 mm	100 units per packaging
10	20 606		Zamac screw Ø 5.5 x 32 + VI 19 washer - for steel support < 12 mm	100 units per packaging
13	09 270		A2 stainless steel plasteseam – M5 x 20 - Ø 9.6	100 units per packaging

* Please contact us for any other accessories, lacquered or stainless steel screws.