Product description

Ondatec® is a corrugated multiwall polycarbonate panel designed to be used for roofs and vertical walls in industrial buildings.

Ondatec® contains a coextruded transparent UV resistant layer on the outside of the plate. The product is supplied with thermowelded ends to reduce the condensation and the accumulation of dirt of the inside of the structure.

Sector

Industrial / Comercial

Residencial

Application

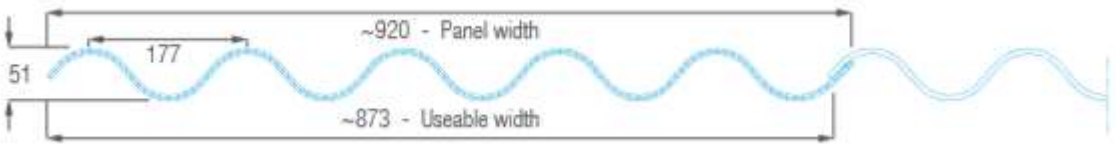
Discontinuous translucent flat roof (ridge-to.gutter)
Continuous translucent flat roof with load structure
Discontinuous translucent flat roof
Canopies for cars and garages

Advantage

High thermal insulation
Good light transmission
Easy and quick installation
Good coupling to insulation panels
Excellent impact resistance

Profile:

PROFILE: OK1/51-177/920 (5 waves ½)



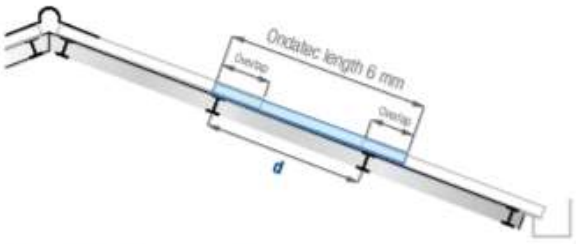
Technical characteristics

Properties	Value
Thickness	6 mm
Structure	3 walls
Weight	1,85 Kg/m²
Useful width	873 mm
Total width	920 mm
Length	Maximum suggested 6 m
Light transmission	Clear: 70 % White Opal 58 %
Thermal expansion coefficient	6,5 x 10^{-5} K^{-1} (0,065 mm/m°C)
Thermal transmittance (U)	3,3 W/m² K
Service temperature	-40°C a +120°C
Fire certification	Bs1do
Protección UV protection	External side
Closing of heads	Thermowelding

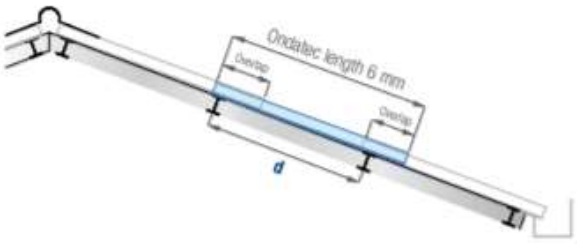
Certificates

- Reaction to fire certificate according to EN 13501-1. Classification obtained: Bs1do
- 10 years limited warranty

Admissible load:



d = distance between supports

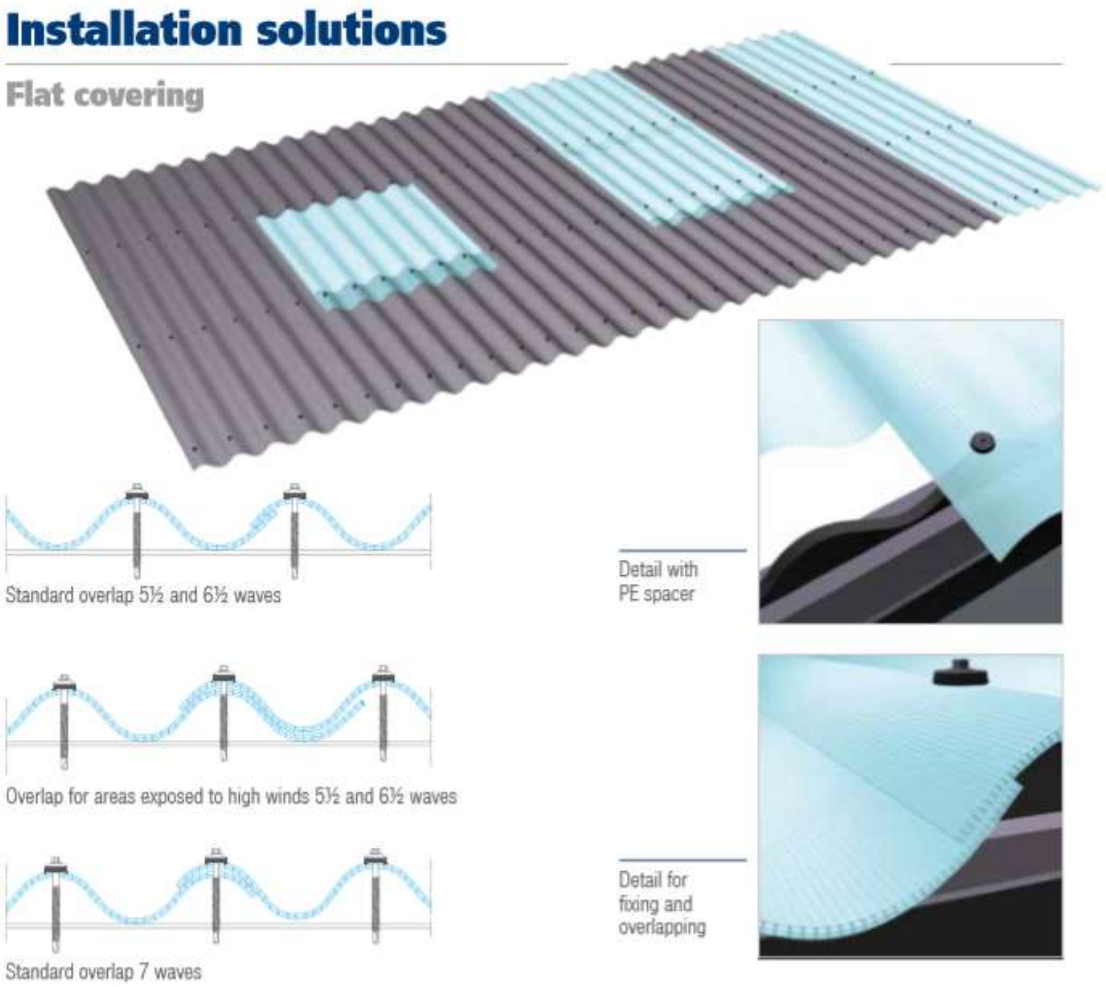


d = distance between supports

Camber L/50	Load for FLAT roof solution with 2 / 3 o more supports							
Load (Pa=N/m²)	**600**	**800**	**1000**	**1200**	**1400**	**1600**	**1800**	**2000**
With 2 supports Distance between supports (d) (cm)	110	105	100	95	90	85	75	70
With 3 o more supports Distance between supports (d) (cm)	145	130	120	115	110	105	100	95

Pendiente mínima aconsejable 5%

Recommended installation



Recommended installation_

Fixation system

The fastening system must allow the free expansion of the sheet, therefore the rigid fixings or thro are not recommended.

Structure. The sheets require a transverse support structure that can be of any nature or geomet modulation the maximum dimensions of the sheet mus t be respected according to the profile and to be supported.

Support structure. The maximum separation between purlins must be determined for eac depending on the load to be supported and the maximum allowable deformation. In any case, it be higher than 1,20 m. In case of separations between important purlins (greater than 1.20 m), inte supports should be placed.

Dilation of the sheets. The coefficient of thermal expansion of polycarbonate is significantly hi that of structures and other plastic products, therefore, it is essential to provide systems that allo expansion of the sheets. It i s necessary to make drills with a diameter 3 mm greater than that or t

Length of the sheets. The sheets of great length (more than 6 meters) accumulate longitudinal di high absolute value so they should be avoided whenever possible.
In case of needing larger lights, transverse overlaps are recommended, from 15 to 20 cm dependi slope of the roof.

Fixation of the sheets. The profiles can be drilled using standard drills and must be firmly fixe vibrations: taking special care when drilling at a right angle. The holes must always be made at a distance of 50 mm from the edges of the sheet.
The washers must be of a sufficient diameter so that the clamping force can be distributed and kee sheet for a good seal.

Overlap

The longitudinal overlap is made in the opposite direction of wind or rain. The transverse overla not be less than 200 mm above the purlin. Each sheet must overlap 100 mm from the purlin's fixi

Storage and handling

KEEP SHEETS OUT OF THE RAIN

Sheets must be stored out of the rain to stop condensation forming inside the cells.

KEEP SHEETS OUT OF THE SUN

In the event goods need to be stored while still in their packaging, do not leave the pallet in direct sunlight as this could generate high temperatures inside the packaging and make it difficult to remove the protective film on the sheets later.

SHEETS HANDLING

Sheets must be handed with the utmost care to avoid damaging them with impacts or scratches, which would compromise the material's performance

SHEET STORAGE

You can stack sheets up to three packs or pallets high. To stop the product coming into direct contact with objects liable to cause damage, you should place spacers or planks between the packs or pallets and any such objects.

USING LIFT TRUCKS

For safer and easier handling, you should use lift trucks with forks that can be spaced at least 2 m. apart and are at least as long as the pack or pallet is wide. Exercise the utmost caution, handling the load carefully and avoiding sudden movements so as not to cause the material to rock or bump up and down excessively.

HANDLING BY HAND

If individual sheets are to be handled by hand, you will need at least two people to carry the sheet on its side. When picking the sheet up off the pack or pallet, you must lift it off cleanly so that it does not scrape against the one underneath and turn it to lie on its side next to the pack.

Installation instructions

ALLOW FOR THE POLYCARBONATE'S THERMAL EXPANSION

Sheets must be fixed so that they are retained by at least one whole cell length on each side; an allowance fo the material's thermal expansion should be added to this measurement.

REMOVING PROCTECTIVE FILM AFTER INSTALLATION

Sheets come with a protective film on both sides. There is a printed film on one side of the sheet to show you that this is the side to face out. Remove the film as soon as the sheets have been installed.

SHEET SEALING

Where sealing is necessary, only use silicone, sealants, gaskets and paints that are comparible with policarbonate.

SHEET TAPING

Seal the ends of the sheets by applying adhesive aluminium tape to seal the cells ans stop dirt getting inside the chambers.

SHEET CUTTING

Sheets can be cut using common cutting instruments, such as vertical, horizontal or circular cutters, or reciprocating saws, provided they are fine toothed.

SHEET DRILLNG

Sheets can be drilled, provided suitable bits are used. Nonetheless, we do not recommend piercing the sheet with through fixings unless they are suitable slotted to allow for termal expansion.

Maintenance

SHEET CLEANING

To care for sheeting, we recommend cleaning at least twice a year with water and non-alkaline detergents. Do not use abrasive equipment or solvents, which could damage the Surface of the sheeting

DO NOT WALK ON TOP OF SHEETS

Do not walk directly on top of sheets during installation. We recommend placing a suitable supporting elemento n top to distribute weight evenly

The information referred to in this Technical Data Sheet is based on the experience and the tests carried out by the company, without this implying any kind of responsibility for its different applications, given that Stabilit Europa does not have any kind of control over its final use.

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