

Product description

Macrolux® Multiwall is a polycarbonate sheet with alveolar structure that provides the product with insulation and resistance. It is protected from ultraviolet rays by co-extrusion of a layer of UV absorbers on the external side..

Sector

Industrial / Commercial
Sport centers/Infrastructures

Application

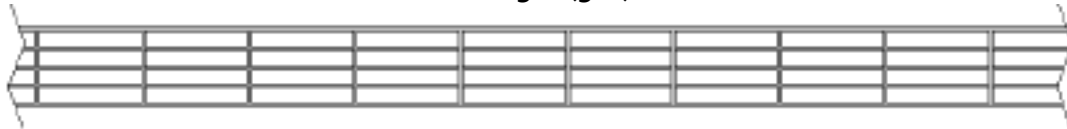
Translucent roof flat/curve in continuous with load structure
Translucent Roof Sports Structures / Airports / Railway Stations.
Translucent Divide Wall

Advantage

Easy and quick installation
High thermal insulation
Good light transmission
Optimal impact resistance
Energy saving

Profile:

PROFILE: C-05W (5W) – 20 mm



Technical characteristics

Properties	Value
Thickness	20 mm
Structure	5 walls
Width alveolus	20 mm
Width	2.100 mm
Length	6.000 mm (on request)
Light transmission	Clear: 60 % Ice: 40 %
G Value	Clear: 64 % Ice: 46 %
Thermal expansion coefficient	$6,5 \times 10^{-5} \text{ K}^{-1}$ (0,065 mm/m°C)
Thermal transmittance (U)	1,7 W/m ² K
Service temperature	-40°C a +120°C
Acoustic insulation	23 dB
Fire certification	B s1 do
UV protection	External side
Minimum bending radius	3.000 mm

Certificates

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

Admissible load:

- **Breaking loads in FLAT installation fixds on 4 sides.**

Minimum suggested slope 5%

Load (N/m ²)	Width sheet(mm)									
	700	800	900	1.000	1.200	1.400	1.600	1.800	2.000	2.100
600	-	-	-	-	5.160	2.480	2.060	1.645	1.230	1.015
800	-	-	-	-	2.910	2.185	1.825	1.465	1.100	925
1.000	-	-	-	6.000	2.295	1.935	1.635	1.320	1.010	855
1.200	-	-	-	3.900	2.035	1.760	1.485	1.215	945	805
1.400	-	-	6.000	2.660	1.810	1.585	1.345	1.115	880	765
1.600	-	-	3.480	2.120	1.630	1.435	1.235	1.035	835	735
1.800	-	6.000	2.570	1.800	1.535	1.370	1.175	990	800	704
2.000	6.000	3.700	1.960	1.560	1.400	1.240	1.080	925	765	680
Manixum length (mm)										

- **Breaking loads in CURVED installation**

Take care of the minimum bending radius

Load (N/m ²)	Radius (mm)																
	3.000	3.100	3.200	3.300	3.400	3.500	3.600	3.700	3.800	3.900	4.000	4.200	4.400	4.600	4.800	5.000	5.200
600	-	-	-	-	-	-	2.100	2.025	1.945	1.885	1.820	1.690	1.570	1.430	1.330	1.245	1.200
800	-	-	-	-	2.100	2.020	1.945	1.870	1.800	1.730	1.665	1.535	1.405	1.300	1.210	1.145	1.115
1.000	-	2.100	2.085	1.995	1.920	1.845	1.775	1.695	1.620	1.550	1.480	1.345	1.230	1.140	1.075	1.045	1.035
1.200	2.090	2.005	1.930	1.845	1.770	1.695	1.615	1.540	1.455	1.400	1.325	1.200	1.085	1.010	980	965	965
1.400	1.985	1.900	1.820	1.720	1.640	1.560	1.480	1.405	1.315	1.245	1.170	1.045	965	920	910	905	905
1.600	1.825	1.720	1.640	1.545	1.475	1.395	1.315	1.245	1.165	1.100	1.035	935	880	855	850	855	850
1.800	1.680	1.590	1.490	1.390	1.295	1.215	1.110	1.045	990	945	905	850	815	810	810	810	810
2.000	1.595	1.480	1.375	1.270	1.160	1.060	980	915	865	830	800	780	770	770	770	770	770
Maximum width (mm)																	

Recommended installation



Fixation system

The fastening system must allow the free expansion of the sheet, therefore rigid fasteners or through bolts are not recommended. Always provide sufficient clearance between the drill and the screw

Structure. Whenever possible, nerves should be provided in the direction of the maximum slope of the sheet, thus ensuring the minimum accumulation of dust.

The sheets require a longitudinal and / or transverse support structure that can be of any nature or geometry. In modulation, the maximum dimensions of the sheet must be respected according to its thickness and loads to be supported and compatible with a suitable cutting.

Implementation and manipulation

The sheets are protected by a film on both sides indicating the face protected from solar radiation.

When it is necessary to seal the joints, the compatibility of the polycarbonate with the sealant should be ensured (neutral silicone is recommended).

It is essential to cover the cells to prevent the entry of dust inside the sheet. It is recommended to place aluminum tape at the ends: smooth, at the top and porous, which allows the condensation water to escape at the bottom.

If you need to drill the sheet you must use fastening buttons.



Security

Do not step on the sheet. The **sheets are not passable**

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.