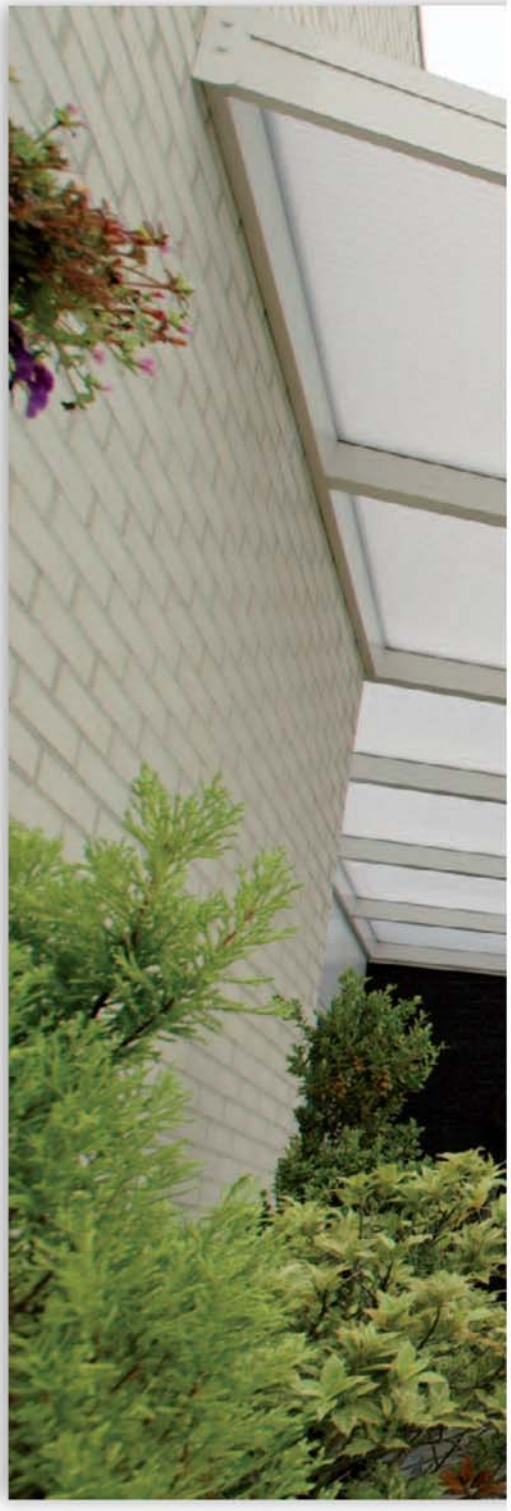
MULTIWALL SHEETS

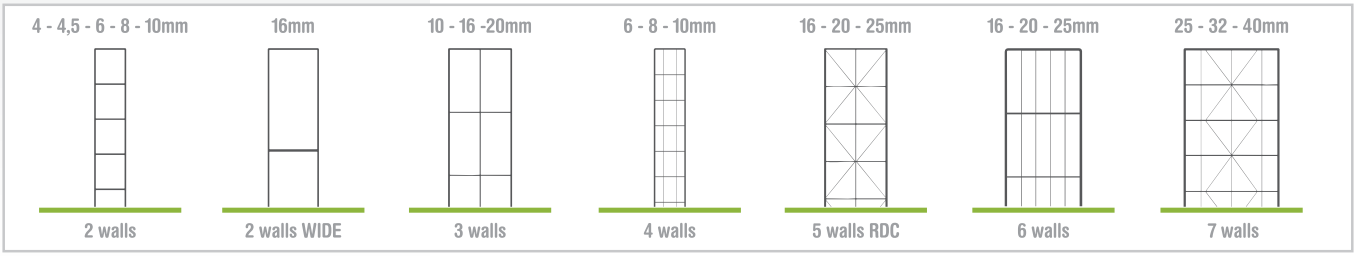
By concentrating on technological innovation and continuous research into the choice of raw materials and new methods of achieving UV protection, we have been able to develop a wide range of multiwall sheets, each with it own specific properties, to meet the demands of the various market sectors.
These products are classified according to their design and number of walls to make it easy to find the best product for each specific application.
The multiwall structure combined with the properties of polycarbonate ensure superior thermal insulation and excellent impact strength.
Policarb® sheets have UV protection on the side facing the exterior (both sides upon request) for good ageing resistance even after prolonged exposure to the sun and atmospheric agents.
Policarb® multiwall sheets are used for roofing, glazing, greenhouses, skylights, verandas, gazebos, shelters and false ceilings.



PoliCarb®

PoliCarb®

PROFILES



Multiwall U.V. protected polycarbonate sheets

IR

PRODUCT AVAILABLE WITH IR TREATMENT

PRODUCTION STANDARDS

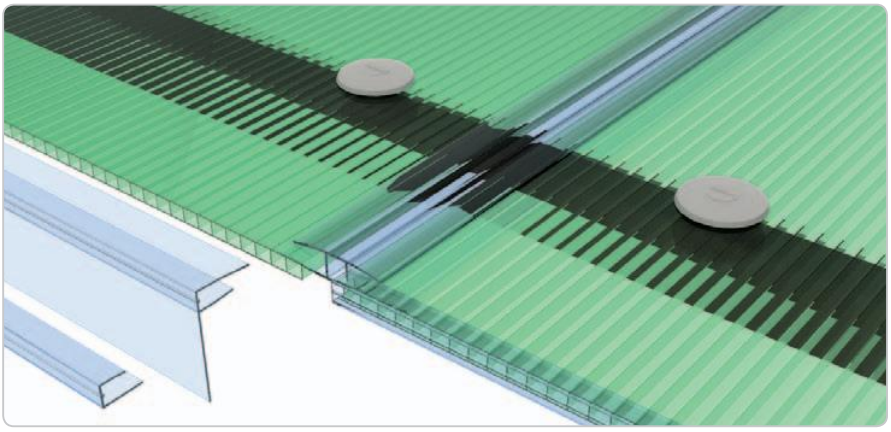
	structure	thickness	weight	U value	width	lenght
	walls	mm	Kg/mq	W/m²K	mm	mm
2 WALLS						
Policarb 2P-4mm	2	4	0,80	3,9	2.100	6.000
Policarb 2P-4,5mm	2	4,5	1,00	3,9	2.100	6.000
Policarb 2P-6mm	2	6	1,30	3,6	2.100	6.000
Policarb 2P-8mm	2	8	1,50	3,3	2.100	6.000
Policarb 2P-10mm	2	10	1,70	3,0	980-1.250-2.100	6.000
Policarb 16mm WIDE	2	16	3,90	2,5	980-1.250	6.000
3 WALLS						
Policarb 3P-10mm	3	10	2,10	2,7	980-1.250-2.100	6.000
Policarb 3P-16mm	3	16	2,70	2,3	980-1.250-2.100	6.000
Policarb 3P-20mm	3	20	3,20	2,1	980-1.250-2.100	6.000
4 WALLS						
Policarb 4P-6mm	4	6	1,40	3,1	2.100	6.000
Policarb 4P-8mm	4	8	1,55	2,7	2.100	6.000
Policarb 4P-10mm	4	10	1,75	2,5	2.100	6.000
5 WALLS						
Policarb 5P-16mm RDC	5	16	2,55	2,1	980-1.250-2.100	6.000
Policarb 5P-20mm RDC	5	20	3,10	1,8	980-1.250-2.100	6.000
Policarb 5P-25mm RDC	5	25	3,10	1,6	980-1.250-2.100	6.000
6 WALLS						
Policarb 6W-16mm	6	16	3,40	1,8	980-2.100	6.000
Policarb 6W-20mm	6	20	3,70	1,6	980-2.100	6.000
Policarb 6W-25mm	6	25	3,90	1,4	980-2.100	6.000
7 WALLS						
Policarb 7W-25mm	7	25	3,40	1,4	1.250	6.000
Policarb 7W-32mm	7	32	3,70	1,2	1.250	6.000
Policarb 7W-40mm	7	40	3,90	1,1	1.250	6.000

ADVANTAGES

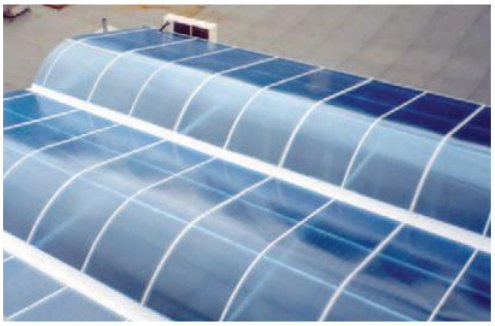
- Light transmission
- Resistance to U.V. rays and to hail
- Energy saving
- Economical
- Versatile

APPLICATIONS

- Vertical windows
- Roofing
- Curved roofing
- Ceiling



CONTINUOUS ROOFING
Detail of roof with H-shaped connector and air cell end profiles.



TECHNICAL FEATURES

Linear thermal expansion	0,065mm/m°C
Temperature range	-40°C +120 °C
U.V. protection	Coextrusion (both sides upon request)
Fire reaction EN 13501	EuroClass B-s1,d0

DESCRIPTION

The characteristic structure of the multiwall sheets with air space inside guarantees good thermal insulation and excellent resistance to crash stress.
The external side of Policarb® is coated with U.V. protection (on request both sides) warranting resistance to aging due to atmospheric agents and UV rays.
Policarb® is used for roofing, windows, skylights, greenhouses, porches, gazebos, ceilings.

LIGHT TRANSMISSION

High-resistance pigments (opal, bronze and green) are added to the polycarbonate to achieve different light transmission values. For values see the table on page 10.

SOLAR FACTOR

The solar factor is closely linked to the sheet structure.
It is the ratio, expressed as a percentage, between the total energy transmitted to the inside and total solar radiation.

THERMAL INSULATION

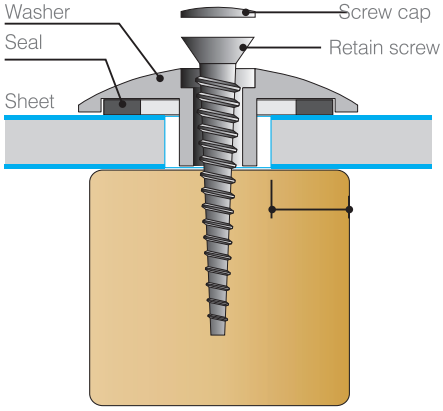
Heat loss is normally defined as thermal transmittance and referred to in physics as the “U-value”.
It is the rate of heat loss through a unitary surface per degree centigrade difference in temperature between the two sides and depends on the properties of the material of which the structure is made and the linear thermal transmittance conditions.

SELF-EXTINGUISHING

Policarb® sheets have Class 1 type approval and meet the EuroClass B-s1,d0 fire rating.

LOCK WASHERS

The sheets must be fastened to the structure using specific washers with a seal to guarantee a watertight finish and allow the material to expand due to changes in temperature.



THERMOWELDING

Policarb® sheets can be supplied welded at their ends, (up to 10mm th.) ensuring throughout time the cleanliness on the inside of the cells and greater transparency.

CLOSING TAPES

Adhesive steel tapes of varying heights for the closing of the cells are available:
- H. 19mm for sheets th. 4,5-6mm.
- H. 25mm for sheets th. 8-10mm.
- H. 38mm for sheets th. 16mm.
- H. 60mm for sheets th. 25-32-40mm.

PLANES SHEETS APPLICATION

The choice of sheet thickness is based on the requested values of snow/wind loads and on sheet dimensions.

The indicated values in the following charts (in pressure and in depression).

LOAD RESISTANCE (daN/m²) FIXED PLANE SHEET ON 4 SIDES

Policarb 2P-6mm

length (m)	width (m)			
	0.70	**0.60**	**0.50**	**0.40**
1.00	50	80	105	120
1.50	45	75	105	110
2.00	40	70	100	110
2.50	35	65	90	100
3.00	35	65	90	100

Policarb 2P-10mm

length (m)	width (m)				
	1.20	**1.00**	**0.80**	**0.70**	**0.50**
1.00	70	80	100	110	170
1.50	50	75	90	100	165
2.00	40	70	85	90	165
2.50	30	70	75	85	160
3.00	30	65	70	80	140

Policarb 4P-10mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.70**	**0.50**
1.00	60	70	85	90	145
1.50	40	65	75	80	140
2.00	30	60	70	75	135
2.50	25	60	65	70	130
3.00	25	55	60	70	115

Policarb 2P-16mm WIDE

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	175	205	220	240	275
1.50	130	185	205	220	265
2.00	110	130	145	155	200
2.50	75	110	110	120	160
3.00	75	95	95	110	155

Policarb 3P-16mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	105	135	150	175	230
1.50	70	125	140	150	220
2.00	70	120	135	140	150
2.50	70	110	110	135	145
3.00	60	90	100	130	140

Policarb 5P-16mm RDC

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	120	140	160	200	250
1.50	100	130	150	190	230
2.00	90	120	130	140	180
2.50	70	100	100	110	145
3.00	70	85	85	100	140

Policarb 5P-20mm RDC

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	140	155	180	230	280
1.50	120	140	170	200	255
2.00	100	130	140	160	205
2.50	80	120	130	140	165
3.00	80	100	100	130	160

Policarb 5P-25mm RDC

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	200	220	285	350	350
1.50	180	210	275	340	350
2.00	130	170	175	180	210
2.50	100	140	145	150	165
3.00	90	130	135	140	160

Policarb 6W-16mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	170	190	210	240	270
1.50	130	180	200	220	250
2.00	105	125	130	150	190
2.50	75	110	125	130	155
3.00	75	90	100	110	150

Policarb 6W-20mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	190	210	230	270	300
1.50	160	200	220	240	290
2.00	120	150	150	170	205
2.50	90	130	140	145	165
3.00	80	110	110	135	160

Policarb 6W-25mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.00	210	230	290	350	350
1.50	180	220	280	340	350
2.00	140	170	180	190	210
2.50	110	150	150	160	170
3.00	100	130	140	150	165

Policarb 7W-25mm

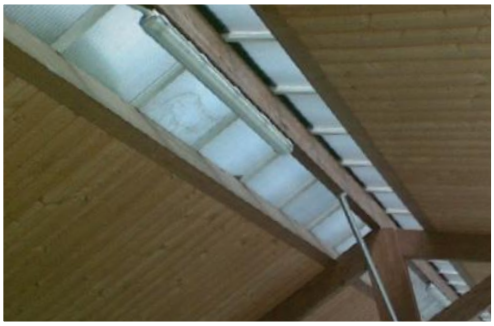
length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.50	180	240	315	385	390
2.00	170	200	240	280	275
2.50	145	170	195	215	240
3.00	140	165	190	210	235

Policarb 7W-32mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.50	220	250	325	395	430
2.00	170	210	260	305	330
2.50	145	190	225	255	270
3.00	140	180	210	235	250

Policarb 7W-40mm

length (m)	width (m)				
	1.20	**1.00**	**0.90**	**0.80**	**0.60**
1.50	240	255	330	400	450
2.00	180	215	265	315	355
2.50	155	190	230	265	280
3.00	150	185	215	245	255



COLD BENDED SHEET APPLICATION

In particular Policarb® is used to build integral are structures green house tunnel type since its alveolar structure increases the rigidity of the sheet longitudinally bent at its ribs.

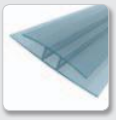
MINIMUM RADIUS OF CURVATURE

sheet thickness	4,5-2P	6-2P	10-2P	10-4P	16-3P	16-RDC	16-6W	20-RDC	20-6W	25-7W	32-7W	40-7W
radius (mm)	750	1.000	1.750	2.000	2.800	3.500	2.800	4.000	3.400	DO NOT BEND		

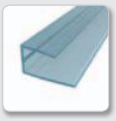
LOAD CAPACITY (daN/m²) FIXED SHEETS COLD BENDED ON 4 SIDES

	sheet thickness (mm)																			
	6	8	10	16	16RDC	6	8	10	16	16RDC	6	8	10	16	16RDC	6	8	10	16	16RDC
radius (m)	width sheet (m)																			
1.00	1.80					1.50					1.25					1.07				
1.20	1.50					1.25					1.00					0.90				
1.40	1.20	1.90				0.96	1.70				0.83	1.30				0.72	1.10			
1.60	1.00	1.65				0.82	1.27				0.68	1.06				0.60	0.92			
1.80	0.80	1.23	1.68			0.64	1.00	1.38			0.58	0.84	1.18				0.73	1.02		
2.00	0.75	1.15	1.60			0.60	0.92	1.28			0.55	0.78	1.08				0.68	0.93		
2.20	0.67	0.98	1.35				0.82	1.12				0.70	0.95					0.82		
2.40	0.60	0.88	1.23				0.70	1.00					0.84					0.74		
2.60		0.75	1.07					0.90												
2.80			0.93	1.92					1.58					1.33					1.15	
3.00			0.88	1.78					1.45					1.21					1.06	
3.20			0.83	1.62					1.32					1.11					0.97	
3.40			0.75	1.48					1.24					1.07					0.95	
3.60				1.40	1.60				1.20	1.25				1.04	1.15				0.92	1.00
3.80				1.30	1.50				1.15	1.20				1.00	1.12				0.90	1.00
4.00				1.20	1.38				1.10	1.15					1.05					0.97
4.20				1.20	1.35					1.10					1.00					0.95
4.40				1.12	1.28					1.07					0.98					0.95
4.60					1.20					1.05					0.98					0.93
4.80					1.15					1.00					0.95					0.90
load	80 daN/m²					100 daN/m²					120 daN/m²					140 daN/m²				

ACCESSORIES



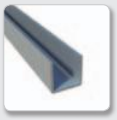
1298 th.8mm
1164 th.10mm
1165 th.16mm
1300 th.20mm
Profiles "H" U.V. protected



1296 th.8mm
1160 th.10mm
1161 th.16mm
2184 th.20mm
2260 sp.30mm
Profiles "U" U.V. protected

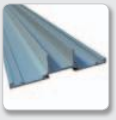
2191 th.8-10mm
2192 th.16mm
Profiles "R" U.V. protected

2193 th.8-10mm
2194 th.16mm
Profiles "F" U.V. protected



4285 th.10mm
4286 th.16mm
"U" aluminium profile

4272 th.2-10mm
4279 th.16-20mm
Upper aluminium profile



4273 th.2-10mm
4280 th.16-20mm
Side aluminium profile

4077 th.4-6mm
4076 th.8-10mm
4087 th.16mm
Washer with gasket

4276 th.3-6mm
4324 th.8-20mm
Gasket for aluminium profile