



HIGH TRANSPARENCY POLYCARBONATE SHEETS

- GREENHOUSES
- PARTITION WALLS
- WINDOWS
- SKYLIGHTS
- SWIMMING POOLS

**AND ANY APPLICATION WHERE THE LIGHT
REPRESENTS AN ESSENTIAL CHARACTERISTIC.**



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HIGH TRANSPARENCY POLYCARBONATE SHEETS

High transparency sheets

The multi wall polycarbonate sheets are utilized to create light inside the structures; the transparency allows to have light points granting safety, high load, high impact resistance and high insulation.

Macrolux® multiwall polycarbonate sheets

2 wall section 4,5 - 6 - 8 - 10 mm	2W	
3 wall section 10 - 16 - 20 mm	3W	



LIGHT TRANSMISSION

A correct design of lighting needs the control of the quantity of light required in the structure. Consequently the installation of sheets with the right light transmission is very important. The light transmission values for **MACROLUX** sheets in the different colours and versions are as follows:

Structure	Thickness (mm)	Weight (kg/m ²)	Light transmission LT (%)			
			LONG LIFE			
			Clear (0010)	Bronze (0020)	Opal (0037)	Opal (0309)
2W	4	0,8	82	40	60	70
2W	4,5	1,0	82	40	60	70
2W	6	1,3	80	40	60	70
2W	8	1,5	80	40	60	70
2W	10	1,7	80	40	55	65
2W	10	2,0	78	40	55	65
3W	10	2,0	72	40	55	65
3W	16	2,7	72	40	40	50
3W	20	3,1	70	35	40	50

Internal measurement according to ASTM D1003 rule. The light transmission can vary of +/- 5 numerical.

UV PROTECTION

The very good optical characteristics and the high transparency of MACROLUX sheets are granted by the coextrusion protection against the ageing effect of UV rays. MACROLUX sheets are 10 years guaranteed.

Macrolux® load schedule

The following schedules are based on sheets **bounded on four sides**. We utilize the convention that width has to be intended transversally to the alveolus and length corresponds to the longitudinal length of the alveolus. The schedules have for each width (see the upper side of the schedule) and for each load indicated in the first left column the allowable length value of the sheet.

2W - 3WQ - 6 mm (1,3 kg/m ²)										
Load N/m ²	Width (mm)									
	500	600	700	800	900	1.000	1.200	1.400	1.600	1.800
600	6.000	4.270	2.505	1.905	1.450	1.135	935	810	680	545
800	5.250	2.720	1.770	1.340	1.020	890	785	680	575	465
1.000	3.540	1.980	1.405	1.120	905	785	665	570	488	410
1.200	2.970	1.534	1.170	950	789	673	540	460	410	360
1.400	2.470	1.265	975	770	625	545	445	380	340	310
1.500	1.850	1.090	870	680	550	465	380	325	310	290

2W - 3WQ - 8 mm (1,5 kg/m ²)										
Load N/m ²	Width (mm)									
	500	600	700	800	900	1.000	1.200	1.400	1.600	1.800
600			4.490	2.840	2.160	1.770	1.310	1.060	875	700
800		6.000	3.180	2.200	1.740	1.430	1.080	905	765	615
1.000		4.400	2.290	1.720	1.400	1.170	925	780	665	545
1.200		3.125	1.920	1.480	1.150	950	750	645	560	475
1.400	6.000	2.285	1.600	1.225	990	820	630	535	475	415
1.600	3.640	1.700	1.250	1.005	820	660	520	455	415	375
1.800	2.115	1.215	940	755	605	500	405	380	360	335
2.000	1.300	780	565	475	405	365	350	335	325	310

2W - 3WQ - 10 mm (1,7 kg/m ²)										
Load N/m ²	Width (mm)									
	500	600	700	800	900	1.000	1.200	1.400	1.600	1.800
600			6.000	3.420	2.540	2.070	1.640	1.390	1.145	895
800			4.815	2.450	1.975	1.710	1.385	1.170	970	780
1.000		6.000	2.665	1.995	1.615	1.415	1.210	1.040	865	695
1.200		4.720	2.325	1.790	1.490	1.290	1.090	925	780	630
1.400		3.315	2.110	1.690	1.400	1.235	1.010	835	705	580
1.600	6.000	2.690	1.850	1.500	1.265	1.115	890	730	625	525
1.800	5.130	2.150	1.595	1.320	1.145	1.020	810	640	560	478
2.000	3.685	1.820	1.445	1.195	1.025	900	715	600	520	450

Yellow index (ΔYi)

Example of a quick aging test with QUV UVA 340 lamp on 10mm multi wall sheets. Evaluation methods of yellow index are indicated in our Warranty and Warranty extension

