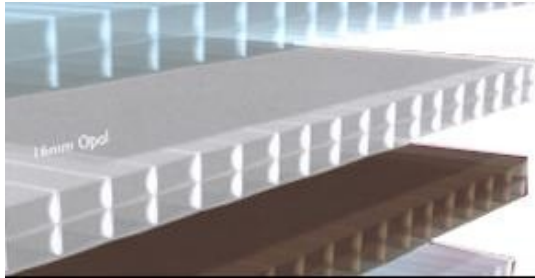




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## LONG LIFE

twin and triple wall polycarbonate sheets



### LIGHT TRANSMISSION

Long life sheets provide a wide variety of thicknesses with light transmissions ranging from 34% up to 83%.

They have been independently tested by the TNO Centre, Netherlands, for changes in optical properties after a period of 10 years; no significant changes were found (Full test report available on request).

### THERMAL INSULATION

Because of their multi-walled construction, the sheets provide excellent thermal insulation compared with glass and other glazing materials. Energy savings of over 50% can be achieved

Up to 35% reduction of solar energy transmission

### BENDING RADIUS

When cold-curved the minimum radius should not be less than 150 times the thickness of the sheet.

### WHY USE POLYCARBONATE?

We have been experiencing some of the warmest summers on record and are expecting this trend to continue into the next decade. Polycarbonate producers have developed new technologically advanced polycarbonate sheet. They reduce excessive heat buildup in conservatories, greenhouses, sun rooms and other glazed buildings, reducing cooling costs and energy requirements.

### FIRE PERFORMANCE

Self-Extinguishing and has been independently tested to all European standards including BS476 Part 7 and BS476 Part 6. It has a Class 1 surface spread of flame and can be recommended for use as a Class 'O' Building Material.

Under Approved Document B of the 1991 Building Regulations, most Long life sheets can be classified as TP(a) Rigid and regarded as having an AA designation, as specified in BS476 Part 3.

### STANDARD AVAILABILITY

Available in a full range of widths from 600 mm to 2100 mm with closed side edges and in lengths of up to 12 meters. Standard widths for 16mm Triple-wall are 700mm, 980mm, 1050mm, 1200mm, 1600mm and 2100mm all of which are available from stock in a variety of lengths or cut to size shapes as required.

Florian uses high performance polycarbonate sheets. During manufacture a layer of UV absorber is co-extruded onto the outer surface of the sheet, forming a barrier against the UV radiation.

This gives the polycarbonate exceptional resistance to ageing without effecting mechanical properties and impact strength.

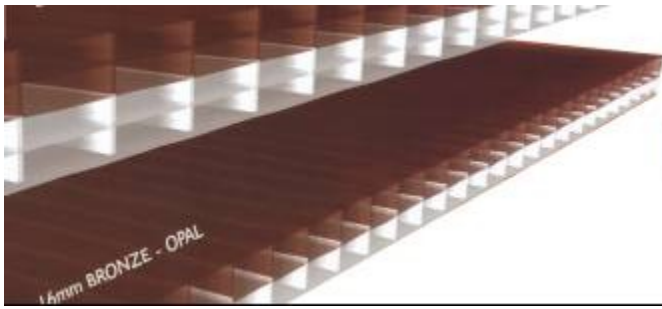
Although light in weight, it is 200 times stronger than glass and virtually shatterproof.

## TECHNICAL DATA

Immediate delivery of sheets in 4 and 6 foot widths. Sheets may be supplied cut to your exact size specifications with no extra cutting charges.

SHEET THICKNESS	MM	4	4.5	6	8	8	10	10	16	16	16	20	25	25	32
	INCH	5/32	3/16	1/4	5/16	5/16	3/8	3/8	5/8	5/8	5/8	3/4	1	1	1-1/4
WALL TYPE		Twin	Twin	Twin	Twin	Four	Twin	Triple	Triple	Five	Four/M	Triple	Five	Five/M	Five/M
RIB SPACING	INCH	.236	.236	.236	.354	.354	.354	.787	.787	.787	.625	.787	.787	1.25	1.25
STRUCTURE TYPE		Twin Wall Version		Triple Wall Version		8mm 4 Wall		M-Wall Version		Five M-Wall Version		Five Wall Version			
WEIGHT (lbs./ft. <sup>2</sup> )		.16	.20	.27	.35	.35	.41	.41	.55	.57	.57	.64	.70	.74	.80
LIGHT TRANSMISSION	CLEAR	83%	83%	82%	81%	80%	77%	76%	72%	62%	67%	62%	61%	60%	59%
	BRONZE	70%	70%	70%	50%	49%	35%	34%	40%	33%	35%	33%	32%	29%	26%
	ASTM-D1003 (%)	OPAL	54%	54%	54%	46%	48%	55%	51%	46%	41%	41%	29%	36%	33%
MINIMUM BENDING RADIUS		1' 11"	2' 4"	3' 1"	3' 11"	5' 2"	4' 8"	5' 7"	9' 4"	7' 10"	7' 10"	11' 3"	12' 6"	12' 6"	15' 7"
U FACTOR (BTU/hr.-ft. <sup>2</sup> )		.67	.67	.63	.59	.47	.56	.52	.40	.33	.37	.31	.28	.29	.28
R-VALUE		1.49	1.49	1.59	1.69	2.13	1.79	1.92	2.50	3.03	2.70	3.23	3.57	3.45	3.57

Tolerances: Thickness ± 5% , Length ± 1/4", Width ± 1/8", Weight ± 5%



# BRONZE - OPAL

polycarbonate sheet for shading and privacy



**Bronze/Opal is a high performance 2 in 1 polycarbonate sheet specifically designed for the rapidly expanding conservatory market. This sheet is supplied as a two-tone sheet (bronze/opal) with the bronze side to face outwards towards the sun and opal (white) to face inwards. When installed this provides a ready made conservatory ceiling which results in a brighter internal appearance even on a dull day and gives a far greater degree of privacy than other traditional glazing materials.**

During the manufacture of Bronze - Opal, two layers of high concentration and medium concentration UV absorber are co-extruded onto the surface of the sheet forming a barrier against UV radiation. This gives Bronze - Opal exceptional resistance to ageing enabling us to guarantee the sheet for 10 years. The combination of colors also reduces heat build up by 10 to 15 degrees-one of the most important factors in the design of a conservatory.

Although light in weight, sheet is approximately 200 times stronger than glass and virtually shatterproof.

## FEATURES

- First of its kind in the UK and Europe
- Excellent barrier to UV rays
- Varying degrees of UV absorber
- Independently tested by TNO centers
- Aesthetically pleasing colors
- High impact strength
- 10 Year guarantee

## BENEFITS

- Helps retain a greater degree of privacy
- Can reduce heat build up by up to 15°C
- Gives conservatory a proper ceiling and vastly reduces glare
- Eliminates need for expensive blinds
- Dual color obscures unsightly exterior dirt and marks
- Gives a bright internal appearance
- Suitable for white or wood grain conservatories

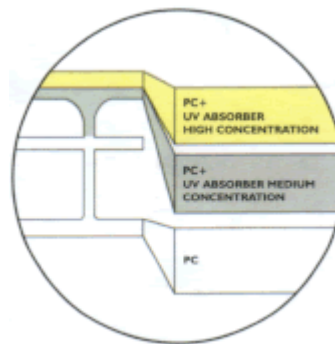
## LIGHT TRANSMISSION

Bronze-Opal sheets are available in 16mm Triple wall and 25mm Five wall with light transmissions ranging from 28% to 34%. Light diffusion is further increased by Opal color.

They have been independently tested by the TNO Centre, Netherlands, for changes in optical properties and after a period of 12 years, no significant changes were found. (Full test report available on request).

## THERMAL INSULATION

Because of their multi-walled construction Bronze-Opal sheets provide excellent thermal insulation compared with glass and other glazing materials. Energy savings of over 50% can be achieved.



## STANDARD AVAILABILITY

Bronze-Opal is available in a full range of widths from 700mm to 2100mm and in lengths of up to 12 meters. Cut size sheets and shapes are available on request.



## BENDING RADIUS

When cold curved the minimum radius should not be less than 150 times the thickness of the sheet.

## FIRE PERFORMANCE

Bronze-Opal is classed as self-extinguishing, does not emit poisonous toxic gases and has been independently tested to most European standards including BS476 Part 7 and BS476 Part 6. It has a Class 1 surface spread of flame and can be recommended for use as a Class 'O' building material.

## Guarantee

Polycarbonate sheets carry a limited 10 year guarantee against discoloration, ageing and resistance to hailstones. (Full details available upon request).

## TECHNICAL PROPERTIES

Sheet Thickness	16mm	25mm
Structure	3 Wall	5 Wall
Approx. Weight kg/sqm	2.7	3.4
K Value w/m k	2.3	1.6
Light Transmission	34%	28%