



# marlon<sup>st</sup>

LONGLIFE

## SOLAR CONTROLLING DUAL TINTED MULTIWALL POLYCARBONATE SHEET

Marlon ST Longlife dual tinted sheets offer dual-layer colour combinations in the same sheet to reduce heat build up and solar glare while providing soft, diffused natural daylight. The heat controlling outer layer is effective in reducing solar heat gain through the roof by up to 50% and by combining this with a light diffusing opal interior, adds to the aesthetics and ambience of any conservatory, lean-to or veranda. Dual tint options include Heatguard Opal and Bronze Opal providing a comfortable cool and naturally daylight interior space.



### OPTIONS

- **Fivewall:** 25mm
- **Sevenwall:** 32mm
- **Dual Tints:** Heat Guard Opal, Bronze Opal
- **Protective Coatings:** Double sided UV protection, IR Heat Block, Condensation Control

### MAIN BENEFITS

- Reduced heat gain by up to 50%
- Soft diffused lighting effect
- Fits fabricated roof structures and glazing systems
- Heatguard Opal or Bronze Opal options
- Brings in high levels of natural light
- Superb thermal insulation
- Light weight and easily handled
- Damage and impact resistance
- Weatherable Longlife UV protection
- Excellent fire performance
- 10 year warranty

### APPLICATIONS

- Rooflights
- Conservatories
- Architectural glazing

**LIGHT AND SOLAR TRANSMISSION**

	HEAT GUARD OPAL		BRONZE OPAL	
	LT	ST	LT	ST
25mm Fivewall	7	26	8	37
32mm Sevenwall	4	12	7	23

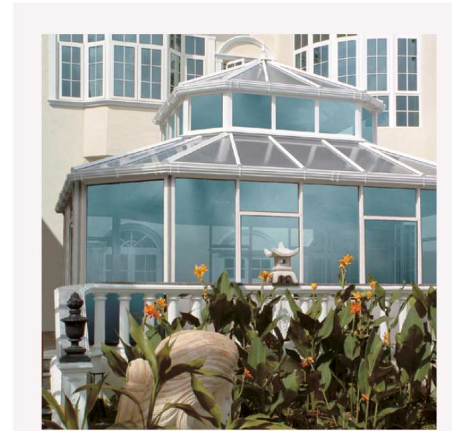
LT - Light Transmission (%) DIN 5036, ST - Solar Transmission (%) EN 410

**STRUCTURES**

STRUCTURE	SHEET THICKNESS mm	RIB SPACING mm	MAXIMUM SHEET WIDTH mm	WEIGHT Kg/m <sup>2</sup>	U-VALUE W/m <sup>2</sup> K	FALLING DART Nm
FIVEWALL 	25	20	2100	3.4	1.6	>27
SEVENWALL 	32	20	2100	3.6	1.25	>27

**PHYSICAL PROPERTIES**

PROPERTIES	TEST METHOD	VALUE	UNITS
Mechanical Properties	Tensile strength at yield	DIN 53455	>60 MPa
	Tensile Strength at break	DIN 53455	>70 MPa
	Elongation at yield	DIN 53455	6-8 %
	Elongation at break	DIN 53455	>100 %
	Modulus of elasticity	DIN 53457	>2300 MPa
	Charpy notched impact strength	DIN 53453	>50 kJ/m <sup>2</sup>
Physical Properties	Specific gravity	DIN 53479	1.20 g/cm <sup>3</sup>
	Refractive index nD25	DIN 53491	1.586
	Water absorption, 24h @23°C	DIN 53495	0.35 %
	Water permeability (thickness 1mm)	DIN 53122	<2.28 g/m <sup>2</sup>
Thermal Properties	Softening temperature Vicat 'B'	DIN 53460	148 °C
	Deflection temperature, load 1.8MPa	DIN 53461	142 °C
	Linear thermal expansion	DIN 53752	6.8X10 <sup>-5</sup> m/m.K
	Thermal conductivity	DIN 52612	0.2 W/m.K
	Maximum service temperature		Permanent 100 °C
		- no loading	Short Term 130 °C



**FIRE PERFORMANCE**

Marlon ST will in most cases meet the following classifications

TEST METHOD	CLASSIFICATION
BS476 Part 7	Class 1
EN 13501	B-s1, d0

Classification is subject to structure and thickness. For further details please contact our technical department.

**WARRANTY**



Marlon polycarbonate is also available in a range of flat, corrugated and corrugated multiwall sheet options. A range of accessories is also available. For further details please visit our website.

**ACCESSORIES**

- U profiles
- F profiles
- Aluminium Glazing Bars
- Aluminium Glazing Tape
- Ventilating Tape
- Flashing Tape
- Fixings
- Silicone Sealer



Plastic Sheets

**living space**  
multi-wall polycarbonate sheeting

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