



FLAT POLYCARBONATE SHEET

Marlon flat sheet is a highly versatile and lightweight material combining many benefits over traditional glazing and fabrication alternatives. It offers an unequalled combination of clarity, strength, durability, design freedom, thermal and fire resistance. Marlon FS can be cold curved, fabricated, thermoformed, hot bent and bonded, making it an ideal product for barrel vault roofing, rooflights, and as a superior glazing solution. Its high performance features make it an exceptional product for safety glazing, protective screening and visors. Marlon FS is available in clear to maximise light transmission, clear embossed and a range of tints including bronze, green, blue, opal and grey which offer solar control. The range includes Marlon FSX the UV protection option ideal for exterior applications and Marlon FS Hard with a hard coat surface which offers abrasion and chemical resistance.



marlon fs

OPTIONS

- Thicknesses: 2-12mm & Widths up to 2050mm
- Tints: Clear, Bronze, Green, Blue, Opal, Grey
- Specials: individual colours, special transparent, translucent and opaque options are available on request
- Textures: Embossed
- Protective Coatings: Double sided UV, IR Heat Block, Condensation Control

MAIN BENEFITS

- Legendary strength, 200 times greater than glass, it's virtually unbreakable
- Lightweight, less than half the weight of glass
- High natural light transmission
- Easy to handle, install and clean
- Design flexibility
- Thermally insulating
- Easy to mount, flexible, formable, and machinable
- Fire resistant
- Limited 10 year warranty

APPLICATIONS

Fabrication

- Visors
- Machine Guards
- Vending Equipment
- Shields for police and the security forces

Print and Display

- Displays, Signage & Illuminated Signage
- Poster Covers
- Light Fixtures

Construction

- Rooflights and glazing
- Covered Walkways & Canopies
- Sunrooms
- Architectural Roofing
- Protective Screens
- Vertical Glazing
- Bus Shelters

PRODUCT RANGE

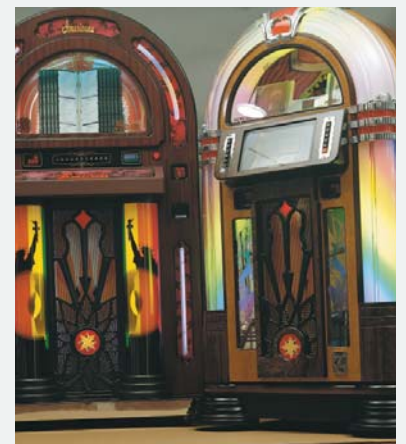
PRODUCT	PRODUCT DESCRIPTION
Marlon FS	Flat Sheet Polycarbonate
Marlon FS Textured	Clear Embossed Flat Sheet Polycarbonate
Marlon FSX Longlife	Flat Sheet Polycarbonate with UV Protective Coating (on one or both sides)
Marlon FSX Textured	Clear Embossed Flat Sheet Polycarbonate with UV Protective Coating (on one or both sides)
Marlon FS Hard	Flat Sheet Polycarbonate with Abrasion and Chemical Resistant Coating (one or both sides)

STANDARD RANGE

RANGE	SHEET SIZE (mm)	SHEET THICKNESS (mm)
Marlon FS	1220 x 2440	3, 4, 5, 6
	2050 x 1250	3, 4, 5, 6
	2050 x 2500	2, 3, 4, 5, 6
	2050 x 3050	2, 3, 4, 5, 6, 8, 10, 12
Marlon FSX Longlife	1220 x 2440	3, 4, 6
	2050 x 1250	2, 3, 4, 5, 6, 8, 10, 12
	2050 x 3050	2, 3, 4, 5, 6, 8, 10, 12
Marlon FSX Textured	2050 x 3050	3, 4, 6
Marlon FS Hard	2000 x 3000	3, 4, 5, 6, 8, 10, 12

PHYSICAL PROPERTIES

PROPERTIES		TEST METHOD	VALUE	UNITS
Physical Properties	Density	DIN 53479	1.2	g/cm ³
	Water Absorption in Water Equilibrium, 23°C	DIN 53495:A	0.35	%
	Water Permeability	DIN 53122	<2.28	g/cm ³
Mechanical Properties	Tensile Strength at Yield	DIN 53455	>60	MPa
	Tensile Strength at Break	DIN 53455	>70	MPa
	Tensile Modulus	DIN 53457	2300	MPa
	Impact Strength @ 23°C (notched Charpy)	DIN 53453	50	kJ/m ²
Optical Properties	Light Transmission 3mm	DIN 5036	87-91	%
	Refractive Index	DIN 53491	1.586	
Thermal Properties	Coefficient of Thermal Expansion	DIN 53752	68	m/m.K X10 ⁻⁶
	Thermal Conductivity	DIN 52612	0.2	W/m.K
	Maximum Continuous Service Temperature		>100	°C



FIRE PERFORMANCE

COUNTRY	THICKNESS (mm)	TEST METHOD	CLASSIFICATION
EU	2-4	EN 13501-1	B _{s1} -d0
UK	3	BS 476: Part 7	Class 1Y
Germany	3	DIN 4102	Class B1

WARRANTY



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



EPSE



Plastic Sheets

Tel +44 (0) 28 9084 9999
 Fax +44 (0) 28 9083 6666
 mail@brettmartin.com
 www.brettmartin.com

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