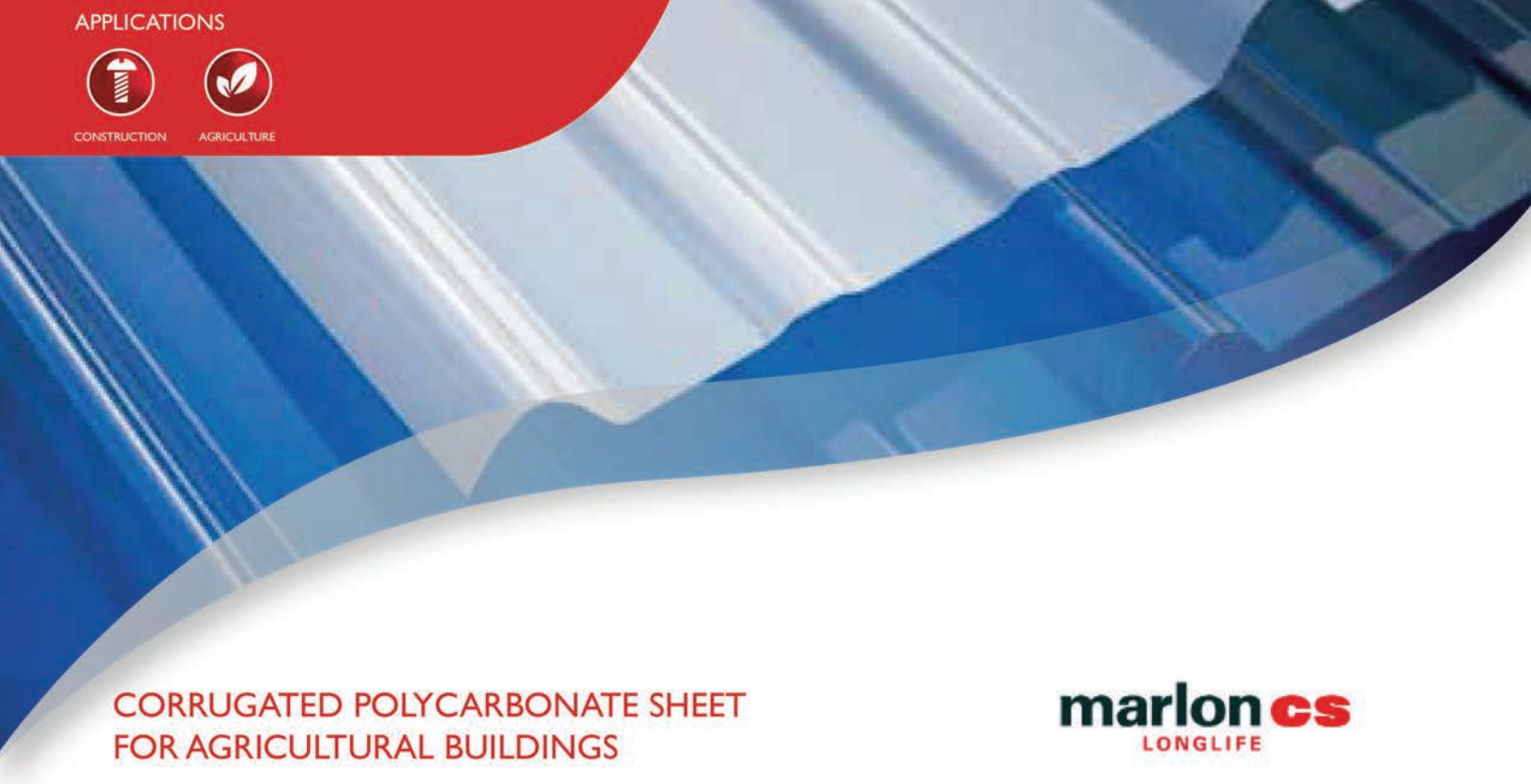
APPLICATIONS

CONSTRUCTION AGRICULTURE



CORRUGATED POLYCARBONATE SHEET FOR AGRICULTURAL BUILDINGS

marlon cs LONGLIFE

Marlon CS Longlife installed as rooflights or vertical sidelights, provides natural daylight into farm buildings and sheds. Naturally day lit buildings not only create a pleasant and improved environment for livestock but also have significantly lower running costs and are more energy efficient than those buildings relying on artificial light sources.

Available in natural white for a softer, diffused natural light, clear for maximum daylight and a range of solar controlling and heat reducing tints, Marlon CS Longlife can be incorporated into any profiled metal roofing and cladding system, ranging from simple single skin to advanced composite panel.

NATURAL WHITE
LIGHT DIFFUSING SHEET

Softer, diffused natural light.
Minimises shadows and glare.

Natural White has clever technology which dissipates daylight as it travels through the sheet creating a much softer, diffused light inside the building with minimal shadowing and glare.

OPTIONS

- **Thicknesses:** 0.8mm & 1.2mm
- **Tints:** Clear, Opal, Solar Grey, Natural White
- **Protective Coatings:** Double sided UV protection, Condensation Control*

**Available on selected profiles. Details available on request.*

MAIN BENEFITS

- Excellent Light transmission
- Provides free natural light energy
- More productive livestock
- Reduces running costs of the building
- Damage and impact resistant
- 200 times stronger than glass
- High optical clarity
- Performs well in extreme temperatures
- Chemical resisitant
- Light in weight, easily handled and installed
- Weatherable Longlife UV Protection
- 10 year light transmission warranty
- 3 year weather breakage warranty
- Excellent fire performance

APPLICATIONS

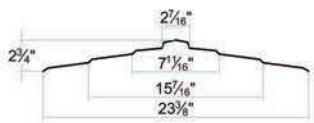
- Rooflights and sidelights in farm buildings
- Barns
- Chicken Houses
- Hog Barns
- Cattle Sheds

mwi components

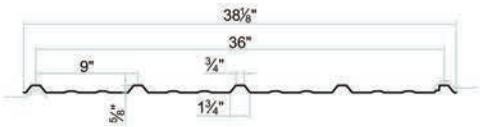
marlon cs
LONGLIFE

STANDARD PROFILES

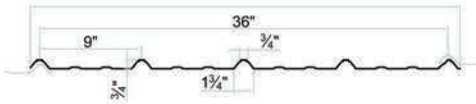
P1618 (Ridge Panel)



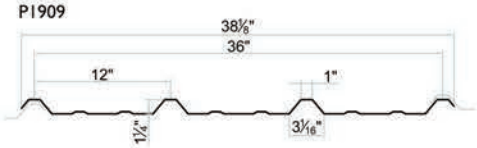
P1826 (AG Panel)



P1893 (Narrow Rib)



P1909



Non standard and bespoke profiles are available on request subject to minimum order quantity. Span / load data available for any profile.

SUPPORT CENTRES AND COVER WIDTHS

Wind load of 20psf assumed

PROFILE	SHEET THICKNESS	SUPPORT CENTRES	SHEET WIDTH	COVER WIDTH
P1893	0.8mm - 1/32"	620mm - 24 1/4"	963.5mm - 37 15/16"	914.4mm - 36"
P1909	0.8mm - 1/32"	870mm - 34 1/4"	968.2mm - 38 1/8"	914.4mm - 36"
P1618	1.2mm - 3/64"	As per roof sheet	593.9mm - 23 3/8"	593.9mm - 23 3/8"
P1826	0.8mm - 1/32"	620mm - 24 1/4"	968.2mm - 38 1/8"	914.4mm - 36"

Support centres depend on sheet thickness and wind loading. The most commonly requested sheet widths have been used for illustrative purposes. Other sheet thicknesses and widths are available. For information on a specific project please contact our technical department.

COLOUR OPTIONS	LIGHT TRANSMISSION	SOLAR HEAT GAIN (SHGC)
Clear	88%	0.84
Opal	46%	0.54
Natural White	73%	0.54
Solar Grey	20%	0.30

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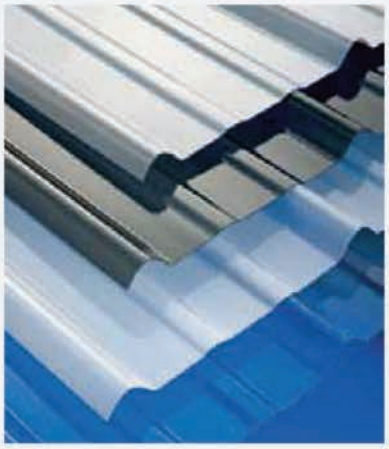
PHYSICAL PROPERTIES

PROPERTIES		TEST METHOD	VALUE	UNITS
Mechanical Properties	Tensile strength at yield	ASTM D 638	>62	MPa
	Tensile Strength at break	ASTM D 638	>72	MPa
	Elongation at yield	ASTM D 638	7	%
	Elongation at break	ASTM D 638	150	%
	Modulus of elasticity	ASTM D 638	>2300	MPa
Physical Properties	Density	ASTM D 792	1.20	g/cm³
	Refractive index nD25	ASTM D 542	1.586	
	Water absorption in standard atmosphere	ASTM D 570	0.15	%
	Mould shrinkage	ASTM D 955	0.5 - 0.7	%
Thermal Properties	Heat Distortion Temperatures			
	- Method B (0.45 MPa) annealed	ASTM D 648	145	°C
	- Method A (1.81 MPa) annealed	ASTM D 648	142	°C
	- Method A (1.81 MPa) unannealed	ASTM D 648	125	°C
	Specific heat	ASTM D 2766	1.25	kJ/kg.K
	Thermal conductivity	ASTM C 177	0.2	W/K.m
	Coefficient of thermal expansion	ASTM D 696	68	m/m.Kx10⁻⁶



FIRE PERFORMANCE

Marlon CS will in most cases meet the following classifications

TEST METHOD	CLASSIFICATION
EN11925-2	BS1D0
(0.75mm – 2.0mm)	

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

WARRANTY

REMEMBER

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

BRETT MARTIN

BSI

Marlon CS is manufacturered by Brett Martin

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