

# DESIGNING FOR DAYLIGHT



**marlon***Clickfix*<sup>1040</sup>  
Polycarbonate Glazing System

# DESIGNING FOR DAYLIGHT



**marlon** Clickfix 1040  
Polycarbonate Glazing System



# DESIGNING FOR DAYLIGHT

**marlon** *Clickfix* 1040  
Polycarbonate Glazing System



## DESIGNING FOR DAYLIGHT

Marlon *Clickfix1040* is the complete architectural glazing system providing quality natural light, superior thermal insulation and UV protection in addition to the impact resistance, resilience and structural strength inherent in polycarbonate. The modular design consists of interlocking panels. These simply click and fix into place for fast and easy installation and a completely seamless façade.

Marlon *Clickfix1040* is suitable for use in all building types in either the façade or roof, as cladding or partitioning, internally or externally.





# DESIGNING FOR DAYLIGHT



# thermally efficient

Marlon *Clickfix1040* is a 40mm structured polycarbonate panel with 10 insulating internal walls. This means there is significantly less thermal conductivity in the panel resulting in a lower U value of 0.99 W/m<sup>2</sup>K for a more energy efficient building.



# DESIGNING FOR DAYLIGHT





# @energy saving

The combination of quality light transmission and high thermal insulation means that Marlon *Clickfix1040* architectural glazing panels reduce the need for artificial lighting and promote more efficient thermostatic control. This system offers a highly effective means of reducing the energy consumption and consequently the carbon footprint of a building.





# DESIGNING FOR DAYLIGHT

# health & wellbeing

Marlon *Clickfix1040* admits good quality natural daylight which is particularly beneficial to the well-being and performance of those who occupy the building. Research proves what common sense suggests, that improved natural daylight has important physiological benefits resulting in brighter students, increased industrial productivity, higher retail sales and healthier, more productive livestock.



# DESIGNING FOR DAYLIGHT





# click&fix

The key to the Marlon *Clickfix1040* system is the integral interlocking connection which is concealed within the system. This connection allows the panels to simply click and fix into place, providing a completely seamless façade for glazed areas of unlimited size and shape. The Marlon *Clickfix1040* assembly uses no adhesives, the connection is mechanical, dry and 100% effective.



**marlon** *Clickfix* 1040  
Polycarbonate Glazing System



**marlon** *Clickfix* 1040  
Polycarbonate Glazing System

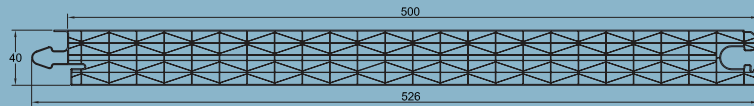
# DESIGNING FOR DAYLIGHT

System components and product range.



## Marlon *Clickfix1040* Panel

The Marlon *Clickfix1040* panel is manufactured from insulating multiwall polycarbonate sheet with a click and fix interlocking connection providing a completely seamless glazing solution.



## Marlon *Clickfix1040* Panel Properties

Property	Value
Panel Structure	10 wall
Panel Thickness	40mm ±0.5mm
Modular Width	500
Overall Width	526
Panel Length	≤ 5m -0 +10mm
	> 5m -0 +25mm
U Value	0.99 W/m²K
Hail Impact	Diam. 20mm v ≥ 21m/sec
Temperature Resistance	-40 up to +100
Linear Thermal Expansion	6.8 x 10 <sup>-5</sup> m/m°C
Impact Resistance	Class B ACR (M)
Recommended Minimum Pitch	10°

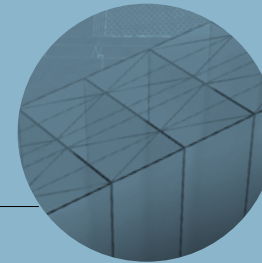
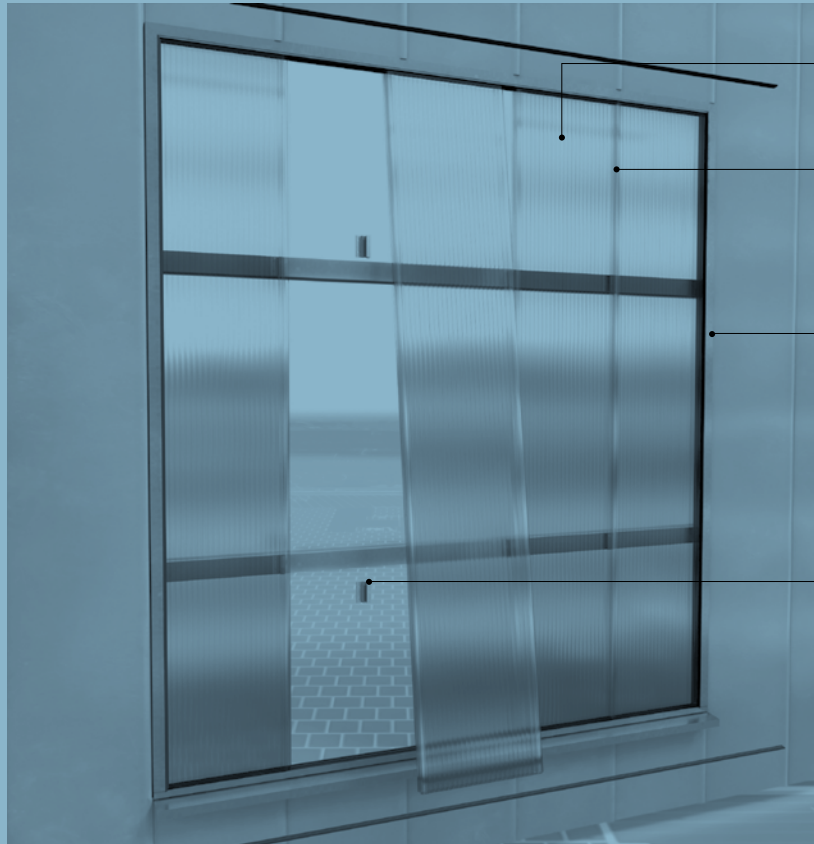
## Marlon *Clickfix1040* Panel Colour Options

The Marlon *Clickfix1040* polycarbonate panels are available in a choice of standard colours including clear, glass clear and light diffusing.

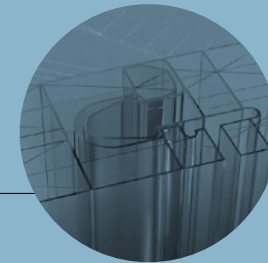
A full palette of non standard colours are available on request subject to order quantity.

## Marlon *Clickfix1040* System Components

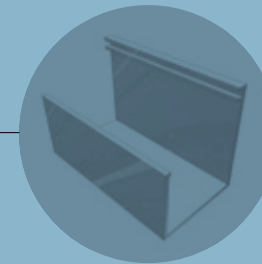
The Marlon *Clickfix1040* architectural glazing system offers a complete suite of accessories for quick and easy installation.



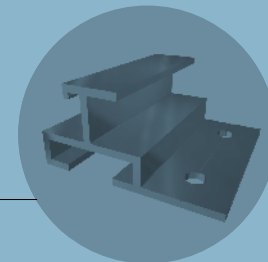
Translucent 40mm, 10 wall structured polycarbonate 500mm wide panels



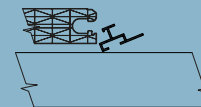
Integral extruded interlocking click and fix connection points



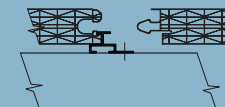
Aluminium channels for framing the recess, option available for channels with thermal breaks for a fully thermally broken system



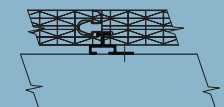
Clips for secure attachment to purlins



Locate Clip on edge of sheet



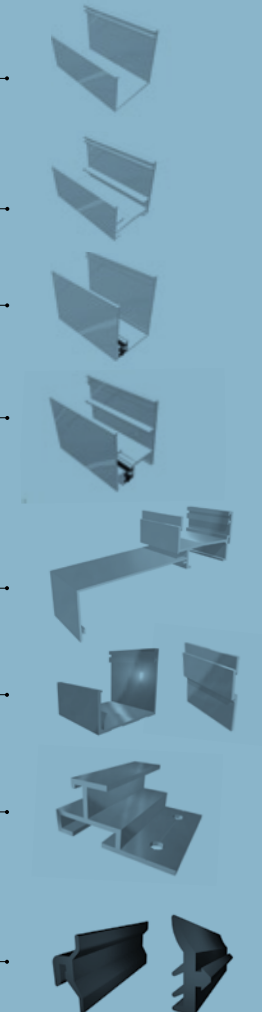
Secure Clip to purlin



Insert next panel

## Marlon *Clickfix1040* Accessories

- A** Upper and Side Channel \_\_\_\_\_
- B** Base Channel \_\_\_\_\_
- C** Thermally Broken Upper and Side Channel \_\_\_\_\_
- D** Thermally Broken Base Channel \_\_\_\_\_
- E** Base Channel with Sill \_\_\_\_\_
- F** Two Part Aluminium Channel \_\_\_\_\_
- G** Purlin Clip \_\_\_\_\_
- H** Gaskets \_\_\_\_\_





## Marlon *Clickfix1040* Mechanical Properties

---

### Strength & Damage Resistance

Damage to glazing can be hazardous and expensive but Marlon *Clickfix1040* manufactured from Marlon ST Longlife offers excellent protection against hailstones, vandalism and accidental damage with an impact resistance up to 200 times greater than glass. This characteristic is maintained over a broad temperature range and prolonged service life. The Marlon *Clickfix1040* panel will retain its physical properties in extreme weather conditions making it an ideal glazing system throughout the world. Marlon *Clickfix1040* can withstand temperature extremes from -40°C to 100°C (-40 to 212°F) long term and up to 130°C short term. No other glazing material can offer this combination of impact resistance and wide working temperature range.

### UV Protection

Marlon *Clickfix1040* has a high performance UV absorption layer, co-extruded on the outer surface of the panel. This protective layer prevents damaging UV radiation from penetrating the sheet for long term optical clarity and mechanical strength.

### Natural Light Energy

With a light transmission of 54% for clear panels and a low insulation value of 0.99 W/m<sup>2</sup>K, Marlon *Clickfix1040* maximises the use of natural light energy. The highly insulating properties of the panel help regulate the temperature of the internal environment for more efficient heating and cooling systems. In addition the panel allows natural light to penetrate the building, reducing the need for artificial lighting. This use of natural light energy reduces CO<sub>2</sub> emissions and the environmental impact of a building.



## Marlon *Clickfix1040* Mechanical Properties

---

### Chemical Resistance

Polycarbonate has good resistance to many chemicals (with the exception of solvents and strong alkalis) so is often suitable for use in aggressive environments.

### Fire Performance

Marlon *Clickfix1040* exhibits excellent fire performance and in the event of a fire it will soften and open, allowing smoke, heat and gases produced by the fire to escape. This 'venting' property means that damage within buildings can be limited. For details of fire ratings please contact our Technical department.

### Warranty

Marlon *Clickfix1040* is manufactured under Quality Management Systems registered to BS EN ISO 9001:2008. The panel carries a 10 year warranty. For full warranty details please contact our Technical department.

## Marlon *Clickfix1040* General Guidelines

### Sealing

It is recommended that the ends of the Marlon *Clickfix1040* panel are sealed to minimise the build up of moisture or dust contamination within the channels. A sealing tape, preferably aluminium, is applied at the top of the sheet to prevent ingress of moisture, dust and insects. A breather tape applied to the bottom end of the sheet permits air to move freely in and out of the sheet, helping minimise condensation.

### Thermal Expansion

In practical terms it is necessary to allow 3.5mm per linear metre between the top edge of the panel and the glazing profile.

### Cleaning

As a condition of ensuring that Marlon *Clickfix1040* performs at optimum throughout its service life, it is recommended that the sheet be cleaned periodically using suitable household cleaning agents as follows:

- Use lukewarm water to rinse sheet and soften dirt.
- Make up a solution of lukewarm water and ordinary household cleaner or a mild soap and use this to wash sheet.
- A sponge or soft cloth should then be used to gently remove dirt and grime.
- The cleaning process should then be repeated and the sheet rinsed and dried with a soft cloth.
- For larger areas clean the surface with a high-pressure water cleaner (max. 100bar or 1,450psi).

### Warning

Care should be taken to observe the following precautions:

1. Do not scrub Marlon *Clickfix1040* sheet with brushes or sharp instruments.
2. Avoid contact with the UV protected surface of Marlon *Clickfix1040* by Butyl Cellosolve, Isopropanol or any other solvent.
3. Avoid any abrasives or cleaners of a highly alkaline composition.

It is generally advisable in all instances to test any cleaner on a sample piece of Marlon *Clickfix1040* first and it should also be remembered that cleaners and solvents which state that they are suitable for cleaning polycarbonate may not be safe for use on the UV protective surface of Marlon *Clickfix1040*.

- Architectural glazing panels
- U value 0.99 W/m<sup>2</sup>K
- Simple to click and fix into place
- Full range of accessories
- Option for a fully thermally broken system
- Thermally insulating
- Excellent light transmission
- Minimal solar gain
- Reduction in energy use
- Lower CO<sub>2</sub> emissions
- Available in a range of tints
- Suitable for digital and screen print processing
- Colour fastness and UV stability
- Lengths up to 13m
- Fire performance
- Lightweight and durable
- Impact resistance 200 times greater than glass
- Manufacturing sites are ISO9001:2008 accredited
- Fully recyclable





## Plastic Sheets

### Head Office and Global Sales:

#### **Brett Martin Ltd**

24 Roughfort Road

Mallusk, Co. Antrim

UK

BT36 4RB

TEL: +44 (0) 28 9084 9999

FAX: +44 (0) 28 9083 6666

Email: [mail@brettmartin.com](mailto:mail@brettmartin.com)



## Daylight Systems

### UK and Ireland Sales Enquiries

#### **Brett Martin Daylight Systems Ltd**

Sandford Close

Aldermans Green Industrial Estate

Coventry, West Midlands

CV2 2QU

TEL: +44 (0) 24 7660 2022

FAX: +44 (0) 24 7660 2745

Email: [daylight@brettmartin.com](mailto:daylight@brettmartin.com)

For the latest information visit the company's website:

**[www.brettmartin.com](http://www.brettmartin.com)**



Certificate No. Q08123  
BS EN ISO 9001:2008

All reasonable care has been taken in the compilation of the information contained within this literature. All recommendations on the use of our products are made without guarantee as conditions of use are beyond the control of Brett Martin. It is the customer's responsibility to ensure that the product is fit for its intended purpose and that the actual conditions of use are suitable. Brett Martin pursues a policy of continuous product development and reserves the right to amend specifications without prior notice.