

Interlocking multiwall polycarbonate glazing system



### Simple / Safe / Stylish

Module 500/40 is a modern glazing system incorporating 40mm thick interlocking polycarbonate sheets.

Manufactured to the required length/height in 500mm sheet widths, the durable multiwall panels have the ability to transmit the maximum available natural light into any building whilst providing excellent thermal insulation.

The fast-fit design of the Module 500/40 system makes it a practical choice for use in high or low level glazing applications, as well as internal partitions, feature facades and rain screen cladding.

Supplied in clear or opal as standard, with a choice of attractive translucent sheet colours and coatings also available for low minimum quantities - Module 500/40 offers the architect and contractor a range of design advantages.











### System benefits

- Tough and resilient Double X structured polycarbonate sheet.
- Available in long lengths up to 8m if required.
- Low thermal transmittance Centre pane U value of 0.82W/m2.
- Filters 99% of harmful UV light.
- B-s2-d0 Euroclass fire rated (equivalent UK Class 0).
- Withstands temperature variations between -40°C and +130°C.
- Minimum of system components for quick, simple and secure fixing.
- Choice of clear and opal sheet finishes as standard, with colour tinted and Bi-colours available for low minimum quantities.
- Top hung, tilt and louvered opening windows available.
- Silver anodized or RAL/BS colour powder coated aluminium perimeter trims.
- Fully recyclable materials with minimal environmental impact.

#### Technical support

Technical advice, samples and drawing assistance is available for designers, contractors, building managers and end users with cost information provided swiftly to help at all stages of construction.

Full system datasheets, installation guides, typical CAD drawings and project examples are all available to view at our website **www.rockwellsheet.com.** 







## Connecting with colour

Module 500 is available in clear and opal sheet colours as standard, with a range of attractive translucent sheet colours available for low minimum quantities. Module 500/40 can also be supplied as a Bi-Colour (2 colour extrusion) or with a solar reflective surface coating.





## Module 500/40

## Quick Installation

With the minimum of components, Module 500/40 is a glazing system of unrivalled simplicity.

Module 500 does not require traditional glazing bars. Instead the sheets are connected together by their watertight tongue and groove edge joints, thus effectively creating one large glazing panel.

The sheets are located within durable anodised aluminium framing trims at the top and bottom of the glazing. For taller glazed areas, use is made of hidden fastening clamps which are positioned within the sheet joints and secure the glazing back to suitable horizontal secondary supports.

This unique fastening system leaves the outer face of the glazing perfectly smooth and free of visible mechanical fixings.

#### Spanning & Loading Data



Negative Wind Load	Max span over 2 supports	Max span over 3 or more supports
-0.60KN/m2	1900mm	2200mm
-0.75KN/m2	1800mm	1900mm
-1.00KN/m2	1600mm	1700mm
-2.00KN/m2	1200mm	1250mm









#### Thermal transmittance

The U Value of an area glazed with Module 500/40 will vary with its size. Examples of the U values achieved by a complete glazed assembly (excluding glazing with any opening door/window sections) comprising of 40mm XX wall Module 500 installed with both standard and thermal break perimeter fixings profiles are shown below.

40mm XX Module 500	6mtr x 1mtr	6mtr x 1.5mtr	6mtr x 2mtr
Standard Profiles	1.66W/m2	1.47W/m2	1.38W/m2
Thermal Break Profiles	1.37W/m2	1.26W/m2	1.21W/m2

Bespoke U value calculations can also be supplied on request.

#### Thermal break profiles



For improved thermal transmittance - the Module 500/40 system can also be supplied with a range of thermally broken aluminium perimeter fixing profiles.

#### Opening window sections

Module 500/40



Opening window sections manufactured from standard or thermally broken aluminium frames are also available for use with Module 500/40.

Windows can be anything from a simple louvered, to a more traditional tilt or top hung opening.

The factory assembled units can be connected to manual or electric actuator mechanisms and are supplied with rubber gaskets to maintain a weatherproof seal.













## **Technical Specification**

Sheet/module width	500mm wide (+/-5mm)
Thickness & structure	40mm thick XX-wall polycarbonate
Sheet length	Made to length (max. 8m) in c.4 weeks
Standard sheet colours	Opal white or clear with satinized surface texture
Special sheet colours (subject to min. quantity/surcharge)	Sea-grass green, graphite grey, cherry red, pacific blue, light blue, sunburst yellow, fuchsia , pink, amber, bronze and bi colour (2 colour extrusion). Silver reflective sunshield surface coating also available.
Average system weight	c.4.5Kg/m <sup>2</sup>
Thermal transmittance	0.82W/m2K (centre pane u value)
Perimeter profile type/finish	Anodized silver aluminium or PPC in 6m stock lengths, average weight c.1.0Kg/m
Noise reduction	19dB (UNI EN 150 10140:2010)
Light transmission	Clear 49% Opal 38%
Shading coefficient & G-value	Clear: 0.57 - 49% Opal: 0.42 - 37%
Fire classification	Euroclass - EN13501-1 2006 - B-s2-d0
Specific Heat Capacity	0.30 kcal/kg °C
Vapour Resistivity	15g/m <sup>3</sup>
Warranty period	10 year manufacturers limited warranty covering discolouration and hailstone damage
Impact resistance	High resistance achieved with tests simulating hail and balls



Haydon School Activity Hall - Image supplied courtesy of Nick Baker Architects and Hamish Park Photography

Rockwell GLAZING SOLUTIONS

Rockwell Sheet Sales Ltd Rockwell House Birmingham Road Millisons Wood Coventry, CV5 9AZ

Tel 01676 523386 Fax 01676 523630 Email info@rockwellsheet.com www.rockwellsheet.com

## Module 500/40

A comprehensive range of dwg files relating to this system are available to download at: www.rockwellsheet.com

1