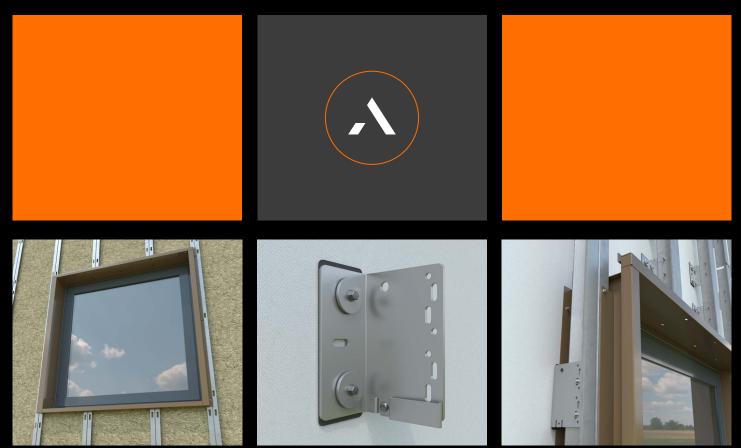
## ΜΛΡΙΕ

# eCLIPS RAINSCREEN SUPPORT SYSTEM

### The perfect foundation for rainscreen façades

// PATENTED DESIGN // INDEPENDENT VINCI LAB-TESTED // THERMALLY EFFICIENT // SUPERIOR STRENGTH







# SUPERIOR STRUCTURAL SUPPORT

The eClips rainscreen support system provides the perfect foundation for rainscreen façades, and makes buildings more thermally efficient.

By increasing the distance between brackets and combining patented insulation-fix technology with removable helping-hand clips, we reduce the number of penetrations in the structure, ensure the tightness of insulation sheets and keep air leakage to a minimum.

Designed and manufactured by Maple and installed by Maple-approved fitters - with technical support every step of the way - the independently tested system helps deliver bespoke projects on time and on budget.

### System flexibility

The eClips rainscreen support system allows a range of products to be fixed to the building envelope, and opens up endless creative possibilities for architects and contractors.

### Thermally efficient stainless-steel brackets

Positioning fewer, higher thermal specification and better load-bearing brackets at significantly larger centres reduces overall costs and cuts installation time, as well as reducing the thermal conductivity of the sub-frame. Weather seals are incorporated into the base of the brackets and the fixings to eliminate the risk of moisture ingress behind the weather membrane.

### Sustainable helping-hand clip

Helping-hand clips can be reused or recycled after the support structure is fixed permanently, helping BREEAM projects achieve their sustainability goals. The design of the brackets allows the smallest possible footprint when installing the insulation, allowing fitters to ensure there are no air pockets (critical for thermal efficiency and fire protection).

### Patented insulation-fix technology

eClips insulation clips improve U-values and weather-sealing performance by reducing the number of penetrations into the fixing grounds - vertical insulation clips connect to the mullion and horizontal clips connect to the C-rail transom to securely hold the insulation.



### eCLIPS CERTIFICATIONS **Quality assurance**

All our products are manufactured to the highest standards, including BS EN ISO 9001:2015. As our products are designed in-house, we're able to offer bespoke solutions as well as standard systems. Continuous innovation and value engineering ensure the quality of our systems is always improving.

### **CWCT testing**

Maple's systems and design principles have been thoroughly tested to Centre for Window & Cladding Technology standards.

#### Fire certification

The eClips rainscreen support system has been tested by Efectis in accordance with BS8414-2:2020, and according to the criteria set out in BR135, 3rd edition:2013,

#### VINCI lab-tested

The eClips rainscreen support system has been through rigorous testing at the VINCI Technology Centre, including tests for weather-tightness and impact resistance.

# eclips system

The eClips support system is designed to provide stronger and more thermally efficient fixings for a range of rainscreen façades.

### eClips HL (SFS)



### 01 // Bracket

Fabricated from stainless steel and designed for strength integrity at up to 1,200mm centres - fewer brackets required compared with other systems.

- Bracket projection range 90mm-290mm
- Material 304 grade stainless steel
- Maximum centres up to 1,200mm
- Unique feature removable and recyclable helping-hand clip
- Testing CWCT tested up to 12kN/m2

### 02 // **T/L mullions**

Vertical support for rainscreen systems and a fixing point for C-rail transoms. Serrations in the T-profiled rail allow for adjustment of panels on site.

- Material 6063 grade T6 aluminium
- Maximum centres up to 1,200mm
- Unique feature serrations allow for vertical adjustment on site
- Measurement 6,000mm standard lengths

### 03 // C-rail transom

Lightweight and strong horizontal rail for hanging facing panels. Helps fix insulation in position with integrated clips - less drilling and faster manual fix.

- Material 6063 grade T6 aluminium
- Maximum centres up to 3m vertically
- Unique feature serrations allow for horizontal adjustment on site
- Measurement 6,000mm standard lengths 26mm deep

### 04 // Insulation clip

Patented design improves HSE and installation efficiency when fixing insulation into position. Adaptable for different insulation thicknesses.

- Material 6063 grade T4 aluminium, PPC coated in Maple orange for visibility
- Maximum centres up to 600mm, and can be fixed vertically and horizontally
- Unique feature manual fixing for faster installation, less fixing into SFS studs

### **Key features**

- Used for horizontal orientated or square cassette panels
- Flexible design accommodates tolerance challenges in fixing zone

### Materials

- 304 grade stainless steel brackets
- 304 grade stainless steel helping-hand clips
- 6063 T6 aluminium vertical T/L mullions
- 6063 T6 aluminium horizontal C rail
- 6063 T4 aluminium insulation clips

### eClips VL (concrete/solid wall)





### 03 // Insulation clip

01 // Bracket

### Patented design improves HSE and installation efficiency when fixing insulation into position. Adaptable for different insulation thicknesses.

- Material 6063 grade T4 aluminium, PPC coated in Maple orange for visibility • Maximum centres - up to 600mm
- Unique feature manual fixing for faster installation, less fixing into SFS studs

### Key features

- Used for vertical orientated panels
- Used mainly for concrete or large, flat fixing zones







### Fabricated from stainless steel and designed for strength integrity at up to 1,200mm centres - fewer brackets required compared with other systems.

- Bracket projection range 90mm-290mm
- Material 304 grade stainless steel
- Maximum centres up to 1,200mm
- Unique feature removable and recyclable helping-hand clip
- Testing CWCT tested up to 12kN/m2

### 02 // **T/L mullions**

### Vertical support for rainscreen systems. Serrations in the T-profiled rail allow for adjustment of panels on site.

- Material 6063 grade T6 aluminium
- Maximum centres up to 1,200mm
- Unique feature serrations allow for vertical adjustment on site
- Measurement 6,000mm standard lengths

### Materials

- 304 grade stainless steel brackets
- 304 grade stainless steel helping-hand clips
- 6063 T6 aluminium vertical T/L mullions
- 6063 T4 aluminium insulation clips

# eCLIPS BRACKETS

Fabricated from stainless steel and designed for strength integrity at up to 1,200mm centres – fewer brackets required compared with other systems.

- Bracket projection range 90mm-290mm
- Material 304 grade stainless steel
- Maximum centres up to 1,200mm
- Unique feature removable and recyclable helping-hand clip
- Testing CWCT tested up to 12kN/m2

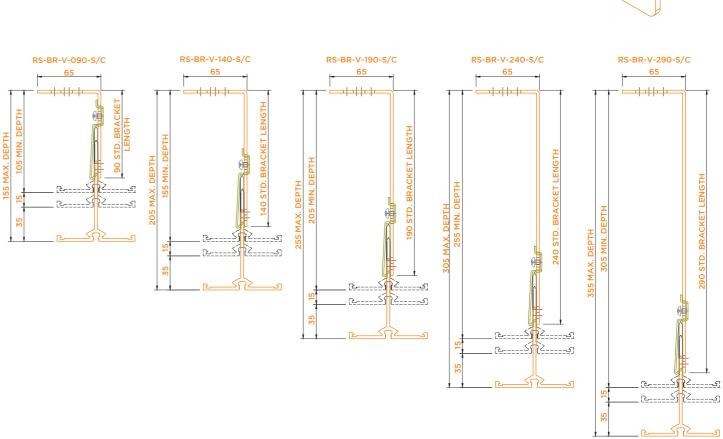
The tables below indicate the loading capabilities of 2mm, 3mm and 4mm brackets at centres of up to 1,500mm

### VERTICAL FIX

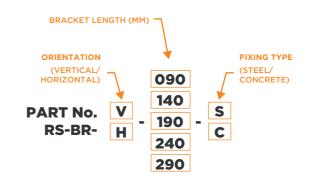
2mm	Bracket centres (m)			
Load (kPa)	0.6 x 0.6	0.6 x 1	1 x 1	1.2 x 1.2
1.2	$\checkmark$	$\checkmark$	$\checkmark$	×
1.8	$\checkmark$	$\checkmark$	×	×
2.4	$\checkmark$	$\checkmark$	×	×
3.6	×	×	×	×

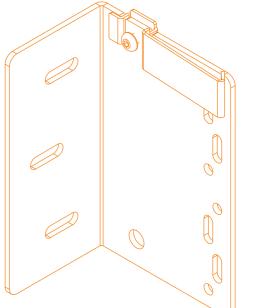
3mm	Bracket centres (m)				
Load (kPa)	0.6 × 0.6	1 x 1	1.2 x 1.2	1.5 x 1.5	
1.2	$\checkmark$	$\checkmark$	$\checkmark$	×	
1.8	$\checkmark$	$\checkmark$	×	×	
2.4	$\checkmark$	×	×	×	
3.6	$\checkmark$	×	×	×	

4mm	Bracket centres (m)			
Load (kPa)	0.6 × 0.6	1 x 1	1.2 x 1.2	1.5 x 1.5
1.2	$\checkmark$	$\checkmark$	$\checkmark$	✓
1.8	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
2.4	$\checkmark$	$\checkmark$	$\checkmark$	×
3.6	$\checkmark$	$\checkmark$	$\checkmark$	×









Maple eClips Rainscreen Support System | 04-05

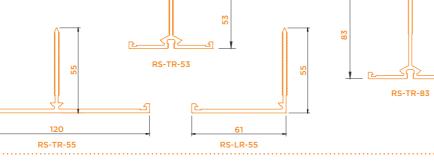
# eclips system DETAILS

### T/L MULLIONS

- Material 6063 grade T6 aluminium
- Maximum centres up to 1,200mm
- Unique feature serrations allow for vertical adjustment on site
- Testing CWCT tested up to 12kN/m2

### **INSULATION CLIPS**

- Material 6063 grade T4 aluminium, PPC coated in Maple orange for visibility
- Maximum centres up to 600mm,
- and can be fixed vertically and horizontally • Unique feature – manual fixing for faster
- installation, less fixing into SFS studs





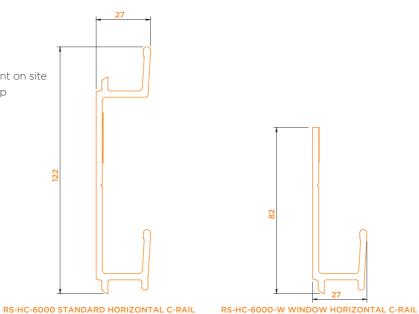




### **C-RAIL TRANSOM**

- Material 6063 grade T6 aluminium
- Maximum centres up to 3m vertically
- Unique feature serrations allow for horizontal adjustment on site
- Measurement 6,000mm standard lengths 26mm deep

C-rail transoms are only to be used for SFS applications.





Maple eClips Rainscreen Support System | 06-07

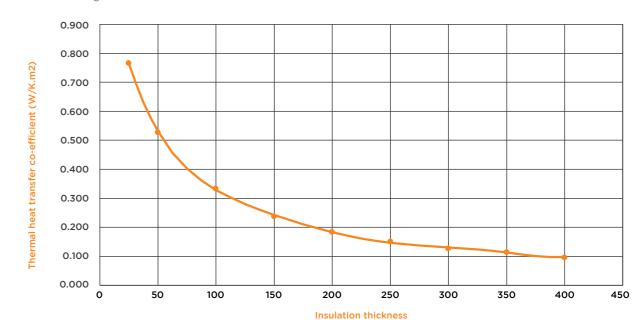
## THERMAL DATA

eClips uses stainless steel brackets and mineral wool insulation to meet Passivhaus standards for maintaining comfortable living temperatures.

The data below indicates the level of performance depending on all variables, including bracket sizes and insulation thickness.

Thermal performance Mineral wool depth		Bracket	Variables	Overall U-value, U	Overall U-value, U
		used	Wall	SFS	Concrete
	depth		Code	3mm/1.2m <sup>2</sup>	3mm/1.2m <sup>2</sup>
			kPa	1.2	1.2
			S. Steel thickness, mm	3.0	3.0
			Height / Width, mm	0	0
			Area, m <sup>2</sup>	0.00	0.00
			SFS Stud Centre, mm	600	
			Temperature, $\Delta T$	20.00	20.00
	mm	RS-BR-XXX-S		W/K.m <sup>2</sup>	W/K.m <sup>2</sup>
	25	83		0.379	0.767
	50	83		0.308	0.528
	100	83		0.229	0.334
	150	142		0.179	0.238
	200	212		0.146	0.184
	250	247		0.124	0.151
	300	282		0.110	0.127
	350			0.095	0.115
	400				0.097

Thermal heat transfer data when fixing to concrete and SFS:





Classification:

ation: Euroclass A1 to BS EN 13501-1

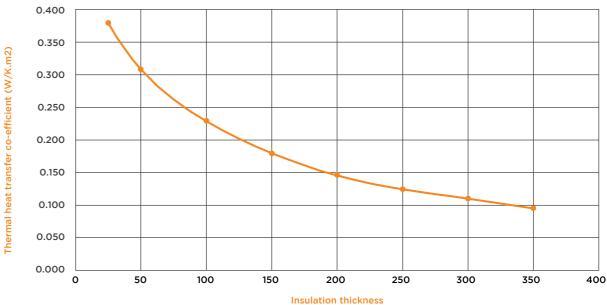
3.6kPa / (76m/s)

Vapour resistivity Water vapour resistivity: 5.00 MNs/g.m

Wind load Wind fatigue testing:

SFS

Concrete



# NBS SPECIFICATION

### **eCLIPS HL RAINSCREEN SUPPORT SYSTEM**

### Manufacturer

Maple Sunscreening. Contact No. 0161 456 6644

### Website

www.maplesunscreening.co.uk

Product Reference eClips HL Support System.

#### Warranty

Dependent on specified finish and project location, consult manufacturer.

### Bracket construction

Laser cut and folded to suit project location, manufactured from 304Gr (or superior) stainless steel.

### Bracket lengths

Ranging from 90-290mm to form façade range of 180-430mm.

### Vertical support

6063 T6 aluminium T/L mullions (concrete/ solid wall applications will incorporate openings to allow for panel hook).

### Horizontal support

6063 T6 C-rail transom (only suited to SFS applications).

### Insulation clips

T4 aluminium vertical support and horizontal support to pin insulation. (Patented design.)

Support System Colour/Finish Mill Finish Aluminium.

Bracket Colour/Finish Mill finish Stainless Steel









### **eCLIPS VL RAINSCREEN SUPPORT SYSTEM**

Manufacturer Maple Sunscreening. Contact No. 0161 456 6644

Website www.maplesunscreening.co.uk

Product Reference eClips VL Support System.

#### Warranty

Dependent on specified finish and project location, consult manufacturer

### **Bracket lengths**

**Bracket construction** 

stainless steel.

Ranging from 90-290mm to form façade range of 180-430mm.

Vertical support

for panel hook).

Insulation clips Clipped into vertical support to pin insulation. (Patented design.)

Support System Colour/Finish Mill Finish Aluminium.

Bracket Colour/Finish Mill finish Stainless Steel









Laser cut and folded to suit project location, manufactured from 304Gr (or superior)

6063 T6 aluminium mullions (gaps to allow



## e(1|PS)CERTIFICATIONS

### Fire certification

The eClips rainscreen system has been tested by Efectis in accordance with BS8414-2:2020, and according to the criteria set out in BR135, 3rd edition:2013

### VINCI lab-tested

The eClips rainscreen system has been through rigorous testing at the VINCI Technology Centre, including tests for weather-tightness and impact resistance.

## $\square$ $\square$ $\vdash$ – CONSTRUCTION SUPPORT

Maple's in-house design and pre-construction team combines experience and technical know-how with a deep understanding of the construction industry to help clients turn concepts into cost-effective and buildable reality. For the best results, they get involved long before a rainscreen cladding project gets to site - often at pre-tender stage.

Our experienced pre-construction team can answer **technical queries** on everything from the front face of the rainscreen facade to the breather membrane.

We have a **library of standard details** in PDF and DWG format for use in drawings or presentations. Details include standard junctions at the head, jambs and base of windows, as well as coping flashing details and corner arrangements.

Value engineering is a disciplined process to improve the design of a façade to reduce waste and cost, and create efficiencies in manufacture and installation. We look at the materials, manufacturing and installation methods, logistics, planning constraints and other challenges to find the best solution.

Finite element analysis is a computerised method for predicting how products or components are going to perform in reallife situations. It's an important stage in the design process of rainscreen cladding and architectural facades as it tests how the system will react to forces such as heat. motion, vibration or wind.

### Detailed drawings and advanced 3D modelling aid visualisation, accommodate changes and give architects and contractors confidence in the proposed design. Maple

will also host design reviews and workshops with clients and architects to get under the skin of a project and optimise the system or product design.

Despite advances in visualisation technology, there's often no substitute for seeing the real thing. We can provide everything from material samples to full-size mock-ups, along with powder-coating or anodising examples.

## ΜΛΡΙΕ

### ABOUT MAPLE

Maple is a leading designer, manufacturer and installer of solar shading, weather protection and screening for building exteriors and interiors. Since 1983, we've been combining innovation, technical excellence and exceptional customer service to deliver projects that save energy, create visual impact and make buildings more comfortable for their occupants. Based in the UK, we're best known for our architectural façades, louvres and brise soleil — so rainscreen cladding systems were a natural extension to our range. Using our design expertise and unrivalled understanding of the sector, we've created a class-leading, commercially viable system that's highperforming, strong and easy to install. Today, we work with construction companies on individual projects and large developments, while many of the UK's leading architects trust us to turn their visions into practical, beautiful and award-winning reality.

eClips is a registered trademark of Maple Sunscreening Ltd.



### Maple Sunscreening Ltd

Bramhall Moor Technology Park, Pepper Road, Hazel Grove, SK7 5SA

Call: **0161 456 6644** Email: **sales@maplesunscreening.co.uk** Visit: **maplesunscreening.co.uk** 

