



LEVOLUX

SOLAR SHADING | BALCONIES | ARCHITECTURAL FACADES



SOLAR SHADING | BALCONIES | ARCHITECTURAL FACADES

CONNECT.

Levolux is genuinely interested in understanding what is important to you and how you perceive 'value'. Appreciating your perspective ensures that our proposals create value for you; either in the solution itself or the way in which we deliver it. A strong connection between us allows transparent consideration of all choices available to you and the implications on outcome.

COLLABORATE.

Over 35 years of experience of designing and supplying architectural solutions has taught us that each project has a unique set of challenges. We recognise the respective strengths of other stakeholders on the project. By communicating and working with experts that possess specialist knowledge, we can develop the best value solution.

CREATE.

Together we create reliable solutions that are logically developed in the context of your value chain and what is technically, economically and socially achievable. With 200 years' collective experience, our design team is well versed in engineering principles but also understands what is practical in terms of functionality, quality of performance and/or efficient delivery.





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We add value to our clients by delivering solutions that are differentiated by one or more of:

- ✓ The function performed by the Levolux system
- ✓ The high performance level of the Levolux system
- ✓ The way in which we deliver the solution

LEVOLUX SOLAR SHADING

Energy efficient, aesthetically pleasing and undoubtedly built to last, our solar shading systems can be tailored to address the unique needs of your building.



LEVOLUX BALCONIES

Our range of contemporary modular balconies includes both bolt-on balconies and Juliette balconies. Choose from glass and metal balustrades as part of a balcony or in isolation.



ARCHITECTURAL FACADES

Make your mark with our high performance facade solutions, which are available in a variety of materials and can be tailored to suit the architectural intent for the building.



SOLAR SHADING

Optimise your building's performance whilst creating eye-catching architecture with cutting edge solar shading solutions from Levolux.



WHY INVEST IN SOLAR SHADING?

- ✓ Comply with the requirements of Document L2 of the Building Regulations and avoid solar overheating.
- ✓ Reduce energy consumption through lower air conditioning loads.
- ✓ Reduce glare on - and from - the building.
- ✓ Maximise natural daylight transmission into the building.
- ✓ Create a cool, comfortable internal environment.
- ✓ Choose from a wide array of shapes, styles and finishes - or design your own.



LEVOLUX SOLAR SHADING SOLUTIONS

INFINITI Fin Systems



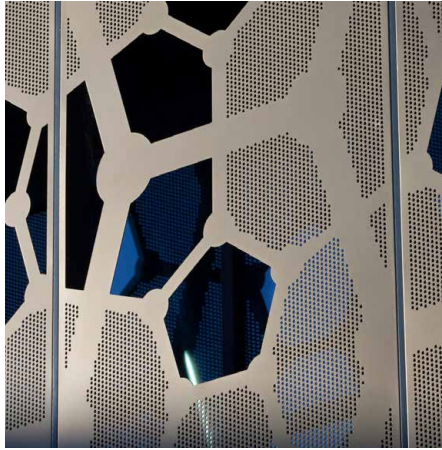
A range of fixed or controllable solar shading fins. A variety of shapes are available, including aerofoil, box and circular. Material choices include aluminium, glass and timber. Secret-fix options are available.

SKYVANE Brise Soleil



A range encompasses fixed brise soleil systems and a roof shading rack arm system that can be controlled manually or mechanically in conjunction with a control system.

LIGNITI Screening

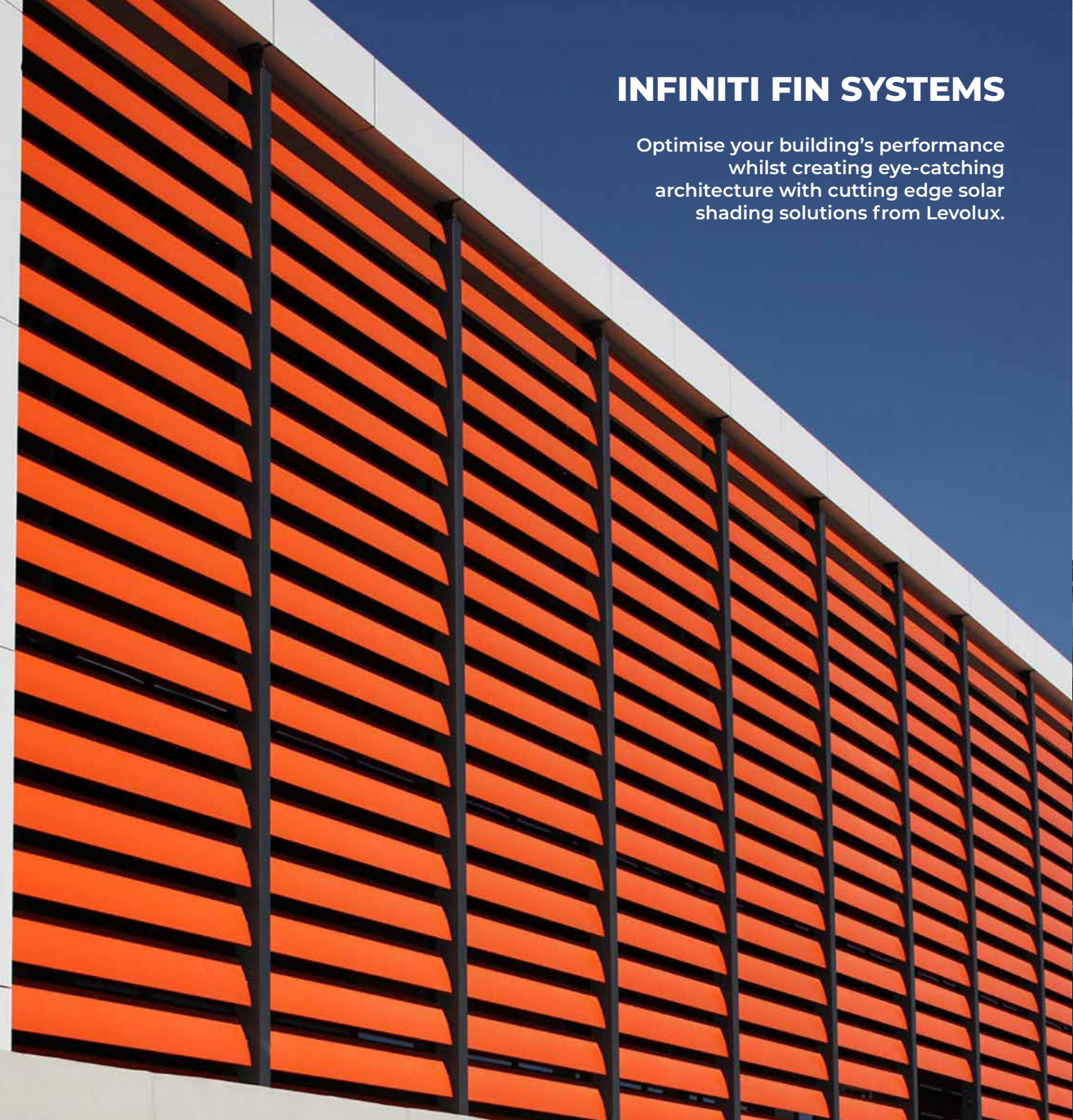


A range of screening and vent louver systems as well as architectural perforated panel systems that can be used to screen car parks and other structures for aesthetic and/or solar control purposes.

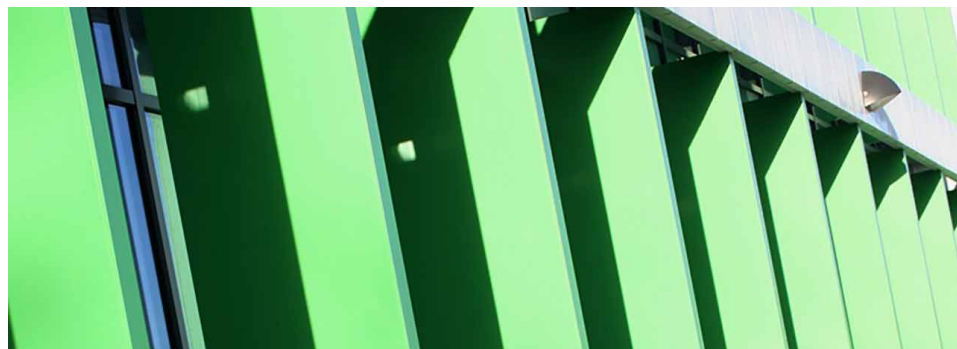


INFINITI FIN SYSTEMS

Optimise your building's performance whilst creating eye-catching architecture with cutting edge solar shading solutions from Levolux.



INFINITI Aluminium Fins



Our aluminium fins are available in a variety of typical profiles and sizes to suit both the structural span and solar shading performance requirements. Finishing options include anodising, polyester powder coated (PPC) finishes to any RAL or BS colour or specialist coatings to mimic natural materials such as timber or terracotta.

INFINITI Timber Fins



Achieve effective solar shading and screening solutions using Levolux Infiniti timber fin systems. Infiniti timber fin systems can also be supplied in louvre format to allow natural ventilation of internal building spaces. Infiniti timber fins are typically produced from either Western red cedar or oak timber.

INFINITI Glass Fins

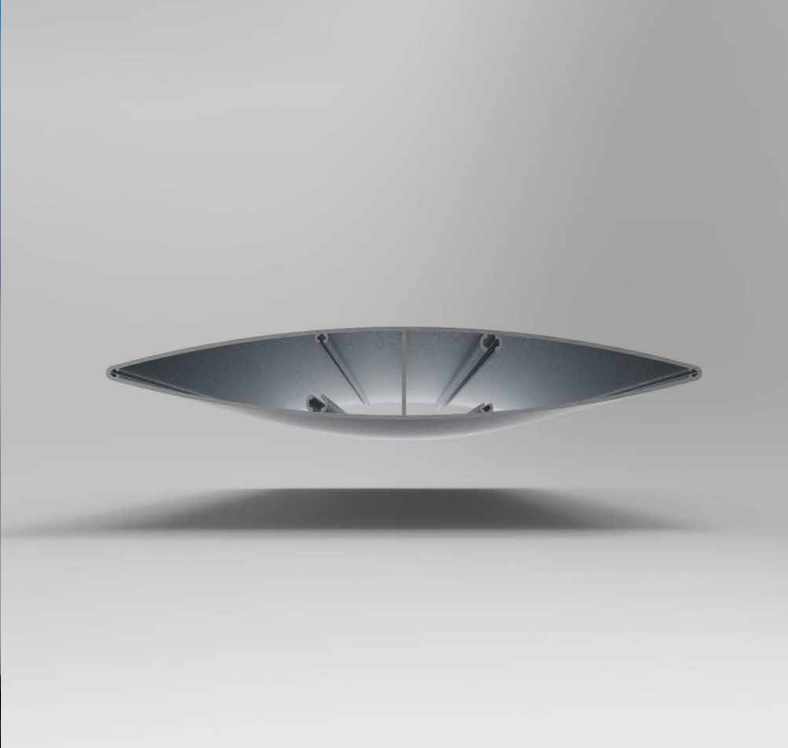


Our glass fins are available in a variety of typical profiles and sizes to suit both the structural span and solar shading performance requirements. The Infiniti glass range can also be supplied in louvre format to allow natural ventilation of internal building spaces whilst keeping intense sunshine and moisture build-up at bay.



INFINITI ALUMINIUM FINS

LEVOLUX ALUMINIUM FIN SYSTEM



LEVOLUX INFINITI AEROFOIL FINS

Available in aerofoil profile with a range of sizes up to 700mm wide.

Typical sizes include 150, 200, 300, 400 and 500mm. However, other sizes can be designed to suit specific project requirements.

Options are also available for secret-fix fin solutions.

WHY INVEST IN SOLAR SHADING?

- ✓ Highly effective solar shading and screening solutions from Levlux Infiniti aluminium fin systems.
- ✓ These products are typically specified to shade buildings and car parks to control solar heat gain yet maximise the natural daylight into the building.
- ✓ Our aluminium fins are available in a variety of typical profiles and sizes to suit both the structural span and solar shading performance requirements.
- ✓ Finishing options include anodising, polyester powder coated (PPC) finishes to any RAL or BS colour or specialist coatings to mimic natural materials such as timber or terracotta.
- ✓ Configurable either in a fixed position or as an adjustable system, with options for manual, motor-driven or automatically-programmed adjustment.
- ✓ Secret-fix versions are also available.

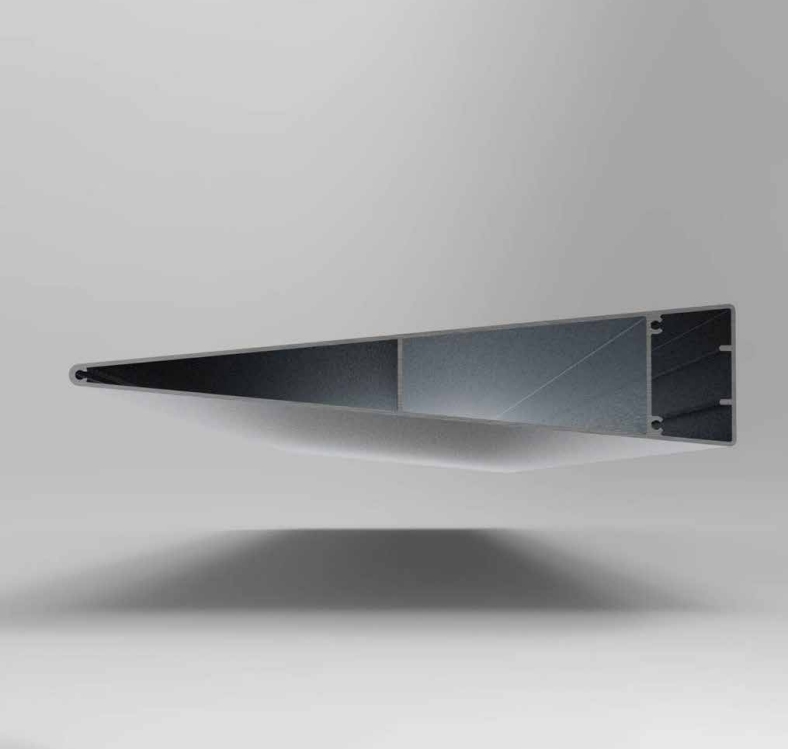
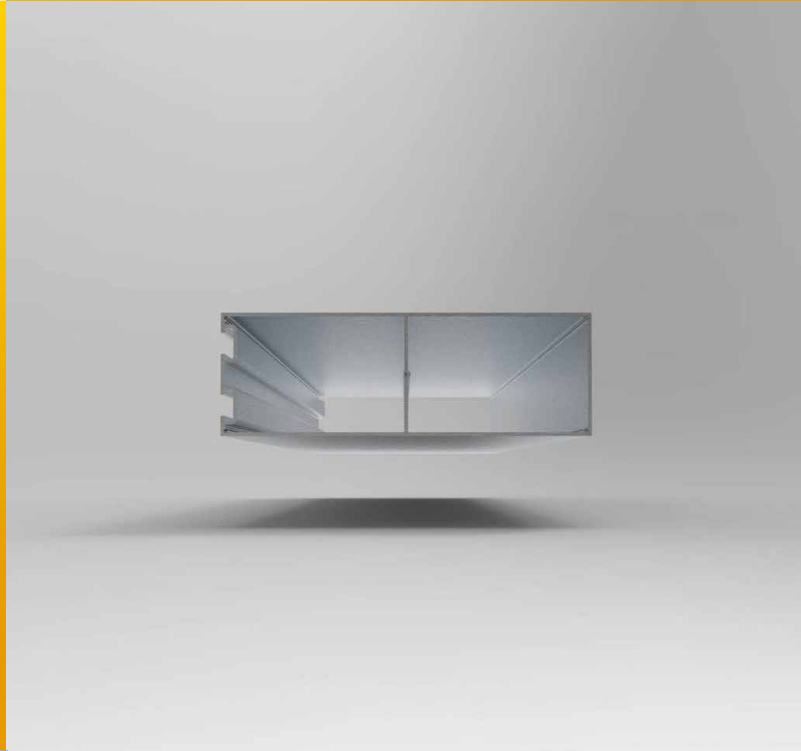


LEVOLUX INFINITI BOX FINS

Available in box profile — also known as square or rectangular fins — with a range of sizes.

Typical widths include 150, 200, 300, 400 and 500mm, all available in depths of 50 and 100mm. Alternative sizes can be designed to suit specific project requirements.

Also available with secret-fix options.



LEVOLUX INFINITI BESPOKE FINS

Available in a range of profiles and sizes up to 700mm wide.

Typical profiles include triangular, trapezoidal, teardrop, diamond, circular or oval shapes.



INFINITI

ALUMINIUM SECRET FIX AEROFOIL FINS

FEATURES & BENEFITS

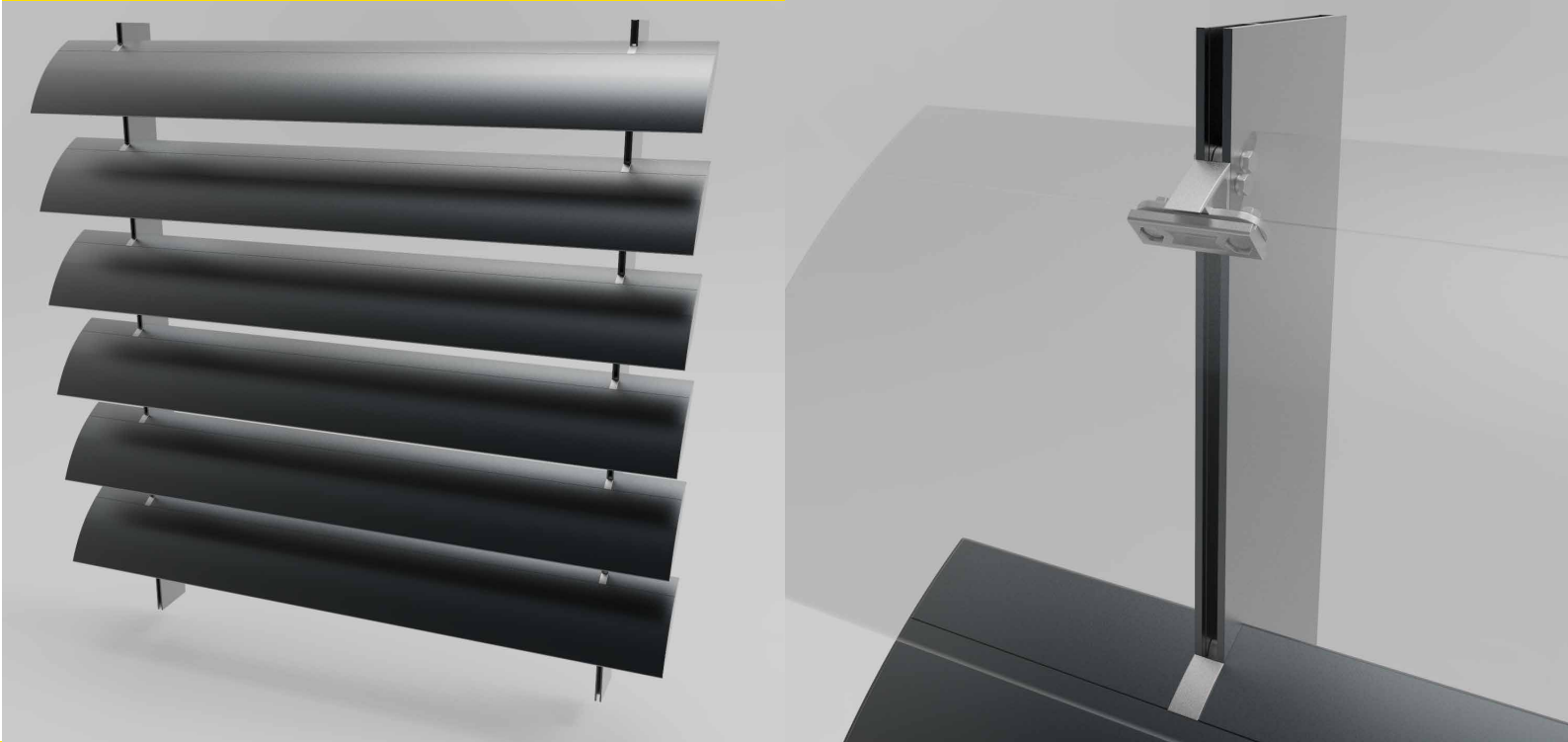
ITEM: LEVOLUX INFINITI ALUMINIUM AEROFOIL FIN SYSTEM

Materials / Finish as delivered:
Louvre blades: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL ____ / Anodised to ____]
Side support arms: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL____ / Anodised to ____]
Mounting brackets: _____
Support struts: _____
Fasteners: M8 stainless steel bolts
Accessories: End Caps.

Supplied and installed by an approved Levolux distributor.
In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.
+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION

TECHNICAL DATA



PROFILE	WEIGHT (KG/M)	TYPICAL SPAN (M)
150 x 38 mm	1.8	2.2 - 2.7
200 x 51 mm	2.5	2.6 - 3.1
250 x 51 mm	3.8	3.0 - 3.6
300 x 56 mm	4.8	3.2 - 3.9
400 x 63 mm	7.3	3.7 - 4.5
450 x 85 mm	8.9	4.2 - 5.1
700 x 150 mm	20.4	8.0 - 9.8

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic.

FINISHES

Typically supplied with a polyester powder coating or anodised finish, with a choice of colours and textures. Different grades are available to suit the environment, whether standard, industrial or marine.

CONNECTIONS

- Options to:
- Fix at ends with structural end cap (vertical)
 - Fix at ends to side plates (horizontal)
 - Secret-fix clips along length (vertical or horizontal)

DETAILS

Options to finish head, cill or jamb details with flashing or simple end caps.





INFINITI

ALUMINIUM AEROFOIL FINS

FEATURES & BENEFITS

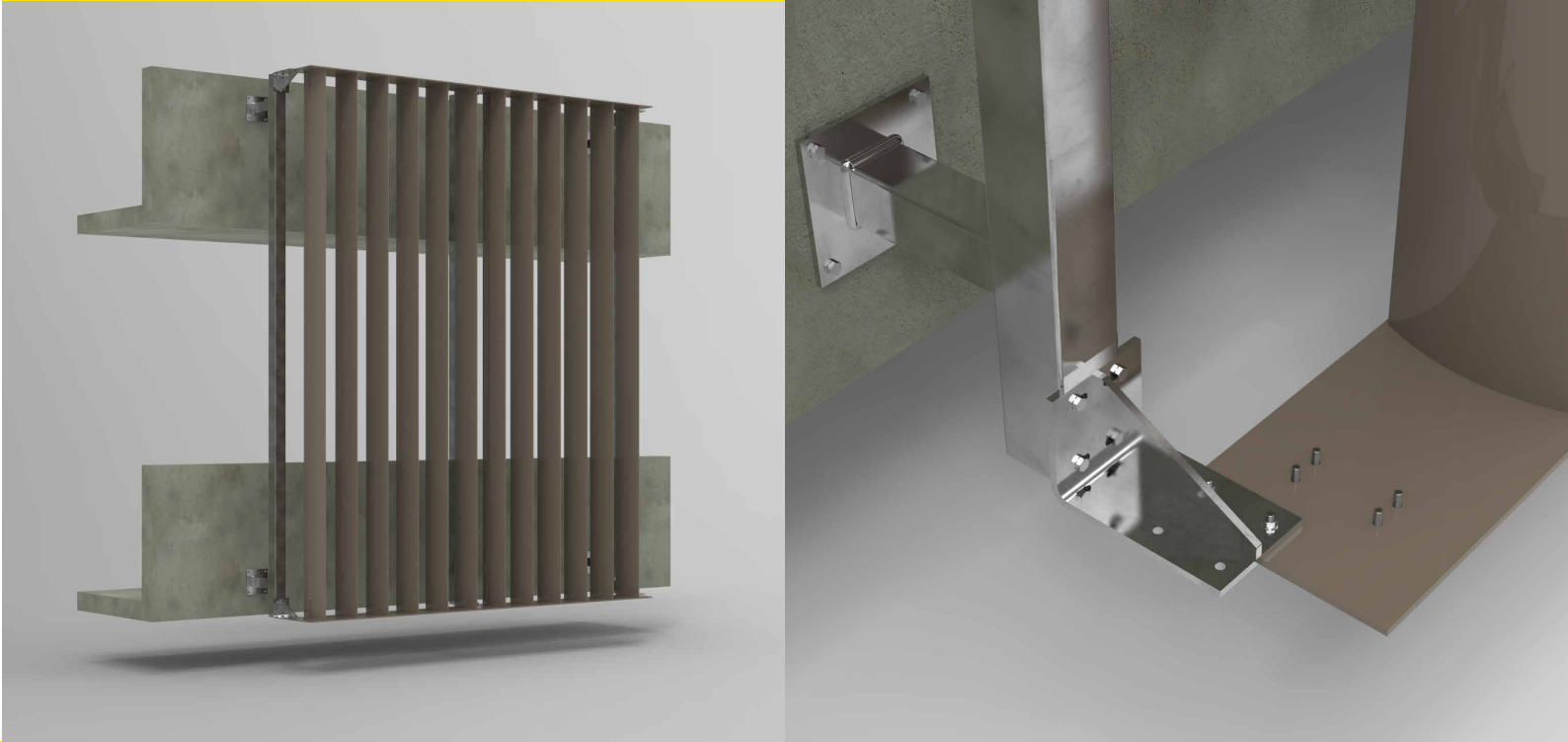
ITEM: LEVOLUX INFINITI ALUMINIUM AEROFOIL FIN SYSTEM

Materials / Finish as delivered:
Louvre blades: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL ____ / Anodised to ____]
Side support arms: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL____ / Anodised to ____)
Mounting brackets: _____
Support struts: _____
Fasteners: M8 stainless steel bolts
Accessories: End Caps.

Supplied and installed by an approved Levolux distributor.
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+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION

TECHNICAL DATA



PROFILE	WEIGHT (KG/M)	TYPICAL SPAN (M)
150 x 38 mm	1.8	2.2 - 2.7
200 x 51 mm	2.5	2.6 - 3.1
250 x 51 mm	3.8	3.0 - 3.6
300 x 56 mm	4.8	3.2 - 3.9
400 x 63 mm	7.3	3.7 - 4.5
450 x 85 mm	8.9	4.2 - 5.1
700 x 150 mm	20.4	8.0 - 9.8

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic. Aerofoil fins for mounting between side plates or structural endcaps, can be positioned as a projecting brise soleil system or a screen across the front of the building.

FINISHES

Typically supplied with a polyester powder coating or anodised finish, with a choice of colours and textures. Different grades are available to suit the environment, whether standard, industrial or marine.

CONNECTIONS

- Options to:
- Fix at ends with structural end cap (vertical)
 - Fix at ends to side plates (horizontal)

DETAILS

Options to finish head, cill or jamb details with flashing or simple end caps.





INFINITI

ALUMINIUM BOX FINS

FEATURES & BENEFITS

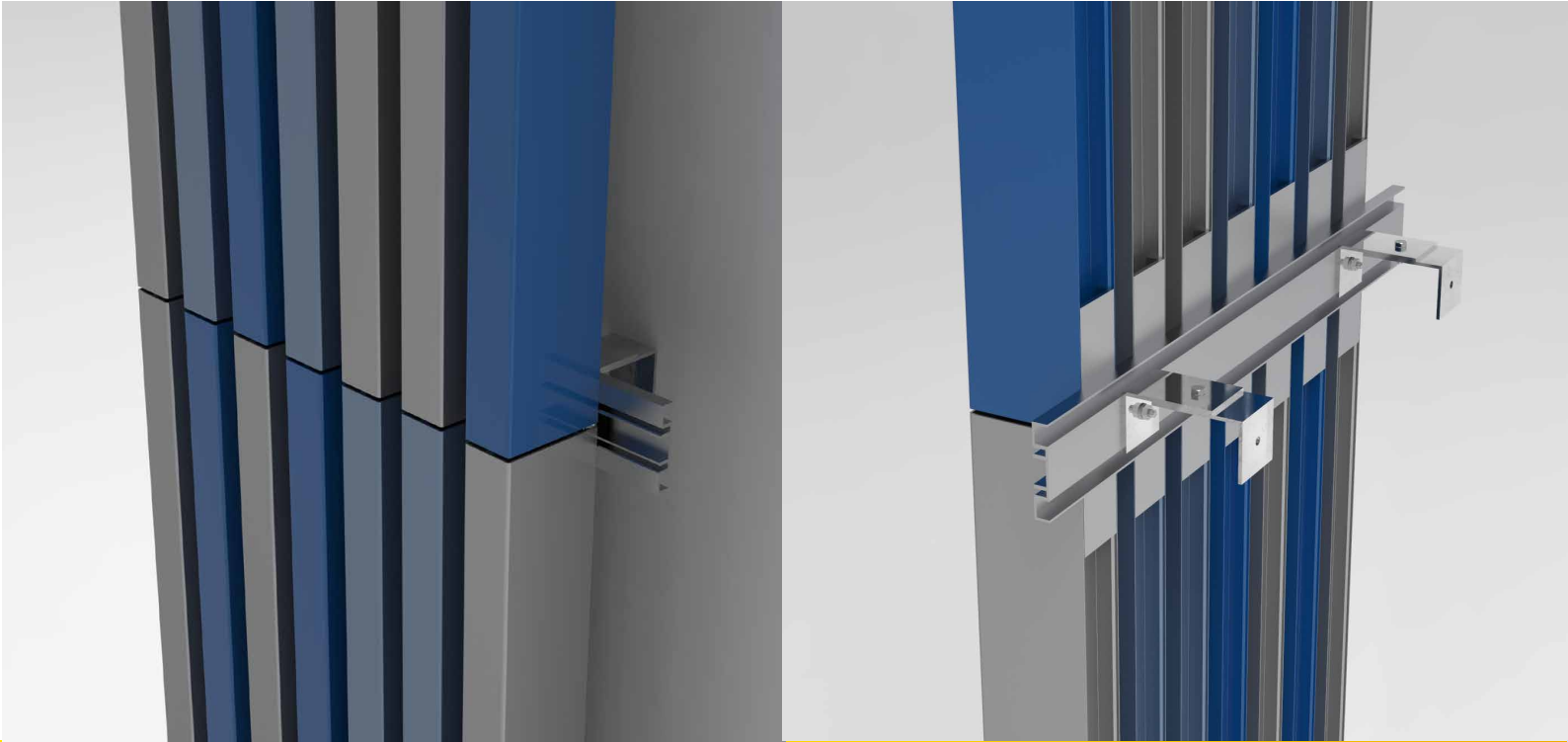
ITEM: LEVOLUX INFINITI ALUMINIUM BOX FIN SYSTEM

Materials / Finish as delivered:
Louvre blades: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL ____ / Anodised to ____]
Side support arms: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL____ / Anodised to ____)
Mounting brackets: _____
Support struts: _____
Fasteners: M8 stainless steel bolts
Accessories: End Caps.

Supplied and installed by an approved Levolux distributor.
In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.
+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION

TECHNICAL DATA



PROFILE	WEIGHT (KG/M)	TYPICAL SPAN (M)
200 x 50mm	3.8	3.6 - 4.4
300 x 50 mm	5.5	3.7 - 4.5
300 x 100 mm	7.7	6.5 - 7.9
400 x 100 mm	10.1	6.5 - 7.9
400 x 50 mm	8.7	3.0 - 3.7
500 x 50 mm	11.5	4.0 - 4.9

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic.

FINISHES

Typically supplied with a polyester powder coating or anodised finish, with a choice of colours and textures. Different grades are available to suit the environment, whether standard, industrial or marine.

CONNECTIONS

- Options to:
- Fix at ends with structural end cap (vertical)
 - Fix at ends to side plates (horizontal)
 - Secret-fix clips along length (vertical or horizontal)

DETAILS

Options to finish head, cill or jamb details with flashing or simple end caps.





FEATURES & BENEFITS

ITEM: LEVOLUX INFINITI ALUMINUM BESPOKE FIN SYSTEM

Materials / Finish as delivered:
Louvre blades: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL ____ / Anodised to ____]
Side support arms: Extruded aluminium, 6000 series alloy, [Polyester Powder Coated to RAL ____ / Anodised to ____]
Mounting brackets: _____
Support struts: _____
Fasteners: M8 stainless steel bolts
Accessories: End Caps.

Supplied and installed by an approved Levolux distributor.

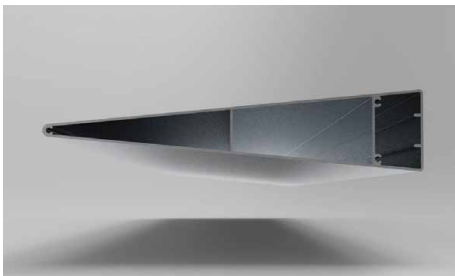
In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.

+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION



TECHNICAL DATA



INFINITI TRIANGULAR 300

SIZE
300mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 4.4 kg/m

TYPICAL SPAN
3.0 - 3.6m



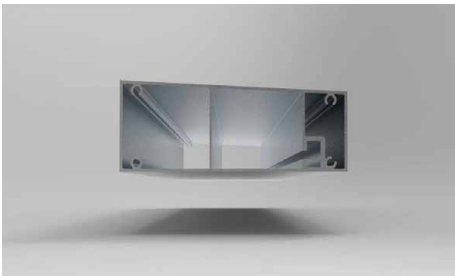
INFINITI TEARDROP 300

SIZE
300mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 5.5 kg/m

TYPICAL SPAN
3.2 - 4.0m



INFINITI TAPERED BOX 270 x 109

SIZE
270 x 109mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 10.7 kg/m

TYPICAL SPAN
7.5 - 9.2m



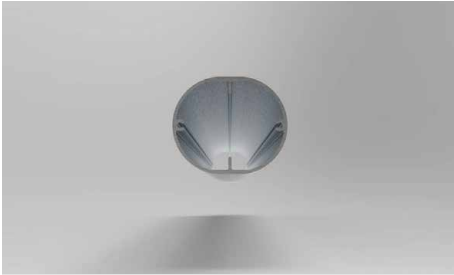
INFINITI DIAMOND 250

SIZE
250mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 3.6 kg/m

TYPICAL SPAN
2.2 - 2.7m



INFINITI OVAL 90 x76

SIZE
90 x 76mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 2.3 kg/m

TYPICAL SPAN
3.0 - 4.0m



INFINITI TRAPEZOIDAL

SIZE
77 x 25mm

FINISHES
Polyester Powder Coated | Anodised

WEIGHT
c. 1.0 kg/m

TYPICAL SPAN
1.8 - 2.2m

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic.

FINISHES

Typically supplied with a polyester powder coating or anodised finish, with a choice of colours and textures. Different grades are available to suit the environment, whether standard, industrial or marine.

CONNECTIONS

- Options to:
- Fix at ends with structural end cap (vertical)
 - Fix at ends to side plates (horizontal)
 - Secret-fix clips along length (vertical or horizontal)

DETAILS

Options to finish head, cill or jamb details with flashing or simple end caps.



INFINITI GLASS FINS

GLASS SOLAR SHADING FIN SYSTEM



LEVOLUX GLASS PV FINS

Levolux INFINITI Glass PV Fins is a framed solar panel that is soldered, laminated, framed and wired.

WHY INVEST IN INFINITI GLASS FINS?

- ✓ We combine Levolux Infiniti glass fins and louvre systems to create innovative solar shading and screening solutions to suit virtually any building, in any location.
- ✓ Our products are typically specified to shield glazed building envelopes from direct sunlight and control solar heat gain whilst still maximising natural daylight into the building.
- ✓ The Infiniti glass range can also be supplied in louvre format to allow natural ventilation of internal building spaces whilst keeping intense sunshine and moisture build-up at bay.
- ✓ Our fins and louvres are available in a variety of shapes and sizes depending on your shading or screening requirements.
- ✓ Infiniti glass fins can be supplied in clear or printed / coloured formats, or covered with PV for additional shading and heat reduction properties.
- ✓ Infiniti glass products can all be configured either in a fixed position or with options for manual, motor-driven or automatically-programmed adjustment to make manoeuvring the system simple. Levolux will always consult with you to find the most suitable solution.



LEVOLUX GLASS FINS

Levolux INFINITI Glass Louvre systems create innovative solar shading and screening solutions to suit virtually any building, in any location.



LEVOLUX GLASS LOUVRES

Levolux INFINITI Glass Louvre systems allow natural ventilation of internal building spaces whilst keeping intense sunshine and moisture build-up at bay.





INFINITI GLASS SUN SHADING FIN SYSTEMS

SPECIFICATION

ITEM: LEVOLUX INFINITI EXTERNAL GLASS FIN SYSTEM

Description: Fixed external laminated glass louvre system. The glass comprises of two sheets of clear toughened heat soak tested to BS EN 12150-2 BSI Standard.

Glass to have polished edges all round Glass thickness to depend on span and wind load conditions. Polyvinyl butyral UPB interlayer colour and opacity on request

The glass fins are to be clamped or bolted each end using bespoke details, which are fixed to a suitable structure.

Finish: All steel and aluminium components to be polyester powder coated to standard solid RAL colour.

Dimensions: As shown on drawings.

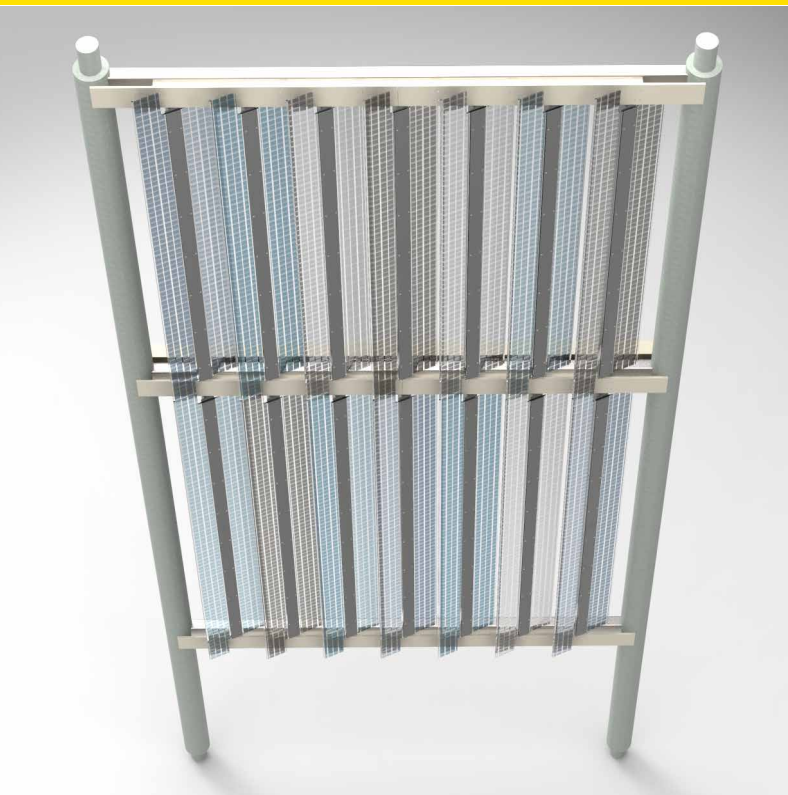
Fixing: Hexagonal head Stainless Steel fixings.

Manufacturer and reference: Levolux 9000 Glass Fin system supplied and installed by Levolux Ltd. Tel: +44 (0) 1744 648 478, E: info@levolux.com

Supplied and installed by an approved Levolux distributor.

In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.

SYSTEM CONFIGURATION



TECHNICAL DATA



GLASS PV FINS

GLASS SPECIFICATION
Laminated Glass

GLASS THICKNESS
0.7 inch | 0.8 inch | 1 inch

FINISHES
Clear | Printed | Etched

CONFIGURATION
Custom-manufactured panel sizes



GLASS FINS

GLASS SPECIFICATION
Laminated Glass

GLASS THICKNESS
0.7 inch | 0.8 inch | 1 inch

FINISHES
Clear | Printed | Etched

CONFIGURATION
Custom-manufactured panel sizes



GLASS LOUVRES

GLASS SPECIFICATION
Laminated Glass

GLASS THICKNESS
0.7 inch | 0.8 inch | 1 inch

FINISHES
Clear | Printed | Etched

CONFIGURATION
Custom-manufactured panel sizes

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic.

FINISHES

Typically supplied with a choice of clear, printed or etched finish, with a choice of colors and textures. Different grades are available to suit the environment, whether standard, industrial or marine.

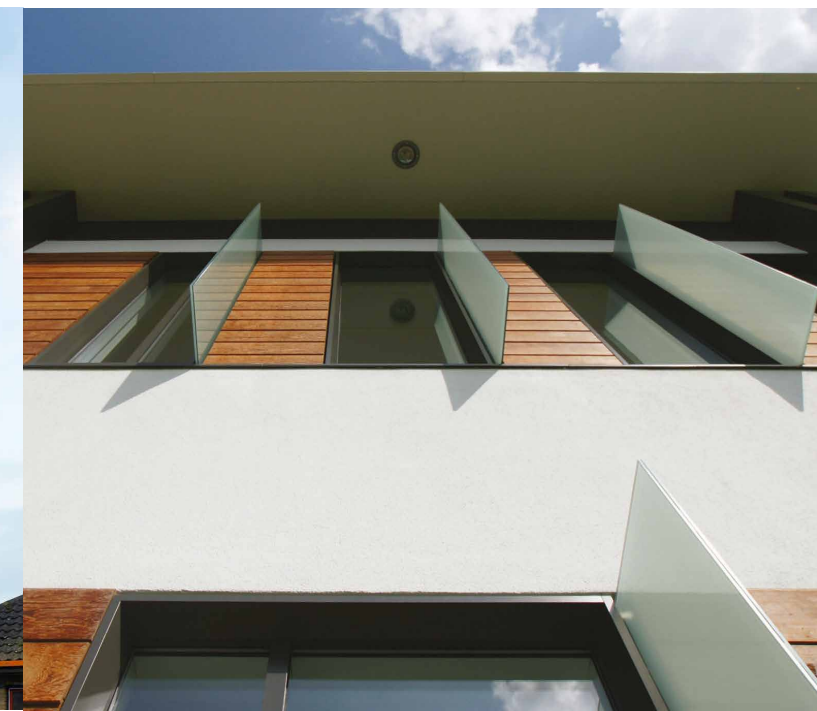
CONNECTIONS

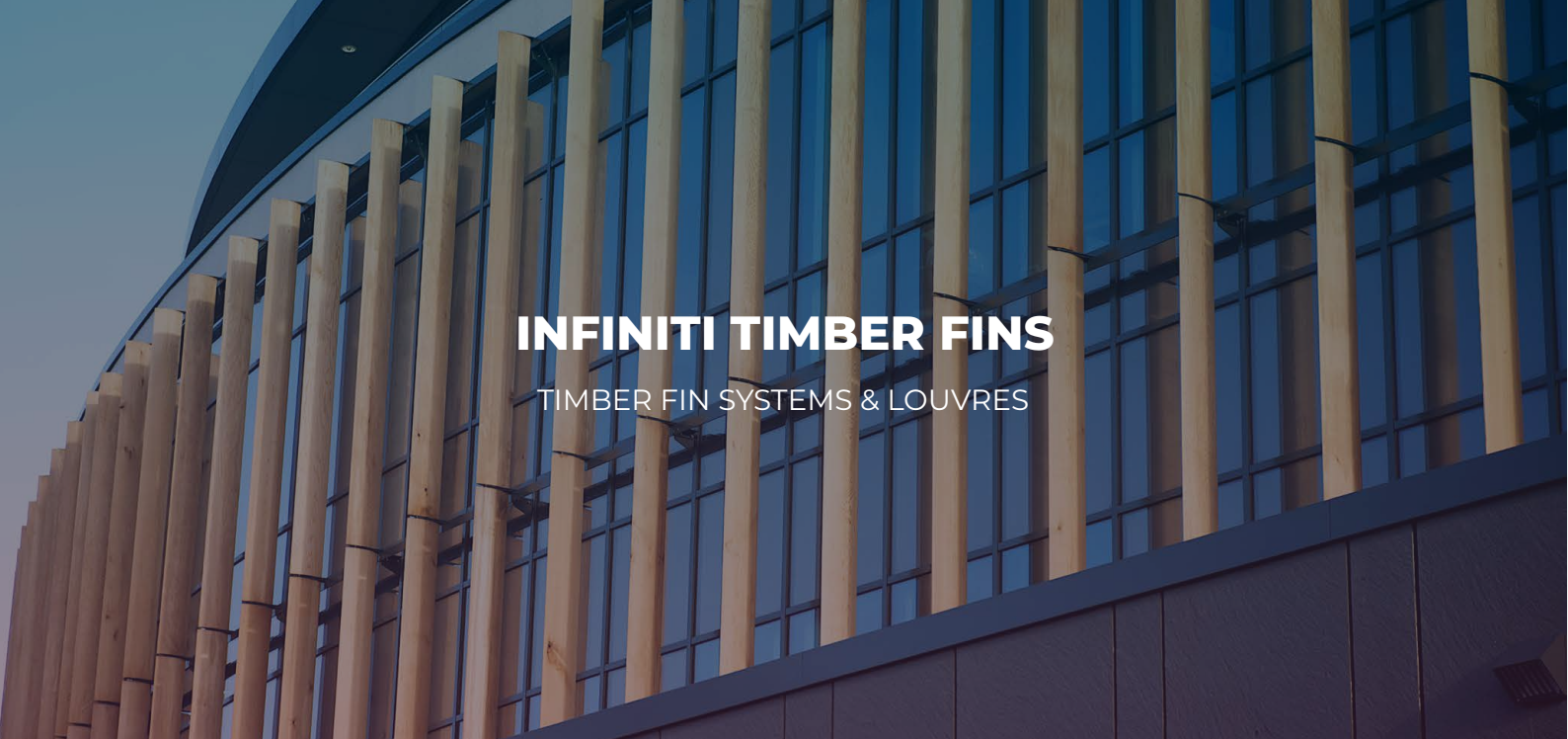
Options to:

- Secure at ends with structural end cap (vertical)
- Secure at ends to side plates (horizontal)
- Conceal clips along length (vertical or horizontal)

DETAILS

Options to finish head, cill, or jamb details with flashing or simple end caps.





INFINITI TIMBER FINS

TIMBER FIN SYSTEMS & LOUVRES

WHY INVEST IN INFINITI TIMBER FINS?

- ✓ Achieve effective solar shading and screening solutions using Levolux Infiniti timber fin systems.
- ✓ These products are typically specified to protect buildings from solar heat gain yet allow natural daylight into the building.
- ✓ The choice of timber fins is generally attributable to the sustainable sourcing of the timber material.
- ✓ Infiniti timber fin systems can also be supplied in louvre format to allow natural ventilation of internal building spaces.
- ✓ These products are available in a variety of shapes and sizes, depending on your shading or screening requirements.
- ✓ Infiniti timber fins are typically produced from either Western red cedar or oak timber.
- ✓ Infiniti timber louvres and fins can all be configured either in a fixed position or as an adjustable system with options for manual, motor-driven or automatically-programmed adjustment.



LEVOLUX INFINITI AEROFOIL FINS

Available in aerofoil profile with a range of sizes up to 700mm wide.

Typical sizes include 150, 200, 300, 400 and 500mm. However, other sizes can be designed to suit specific project requirements.

LEVOLUX INFINITI BOX FINS

Available in box profile — also known as square or rectangular fins — with a range of sizes.

Typical widths include 150, 200, 300, 400 and 500mm, all available in depths of 50 and 100mm. Alternative sizes can be designed to suit specific project requirements.



LEVOLUX INFINITI BESPOKE FINS

Available in a range of profiles and sizes up to 700mm wide.

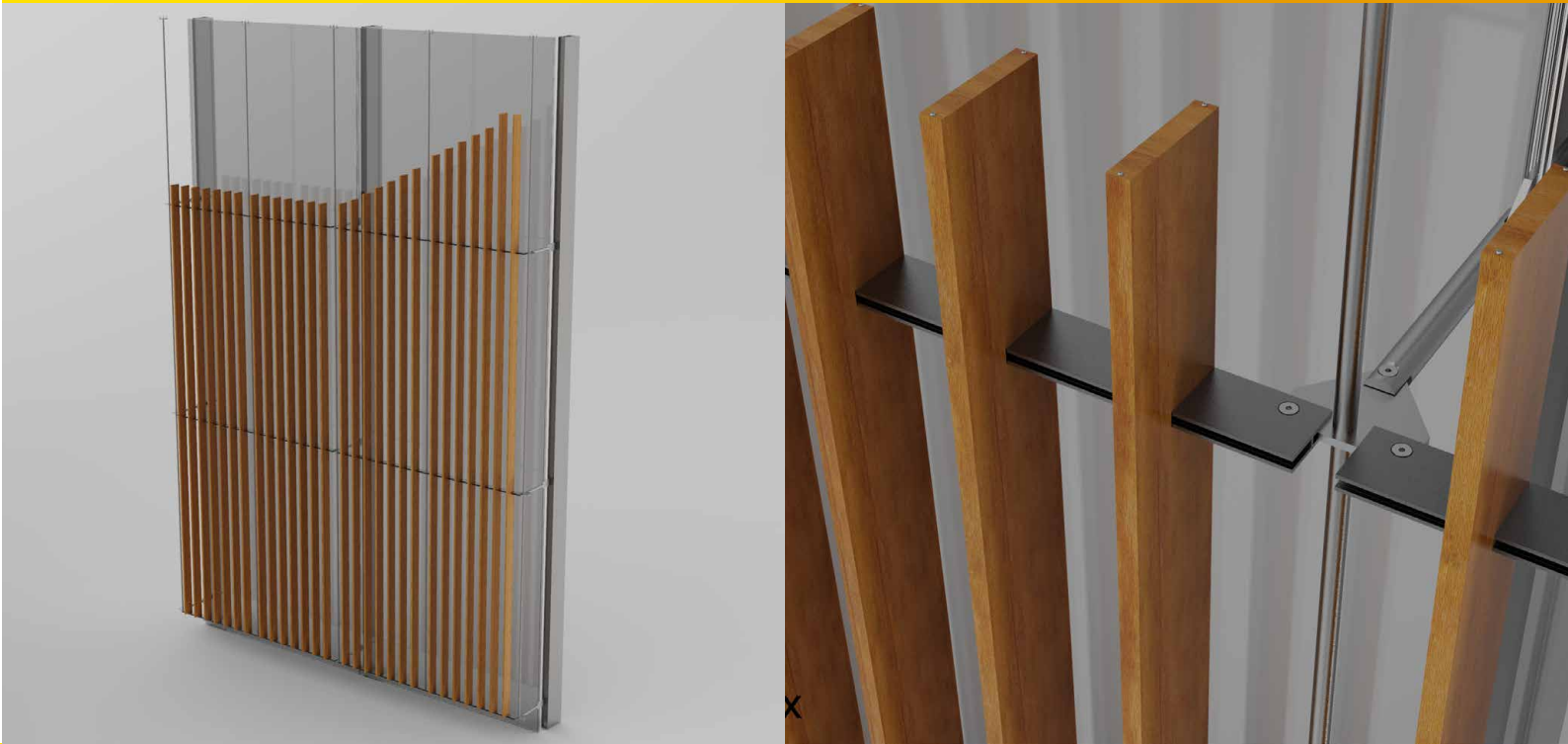
Typical profiles include triangular, trapezoidal, teardrop, diamond, circular or oval shapes.



INFINITI TIMBER FINS

TIMBER FIN SYSTEMS

SYSTEM CONFIGURATION



FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the solar shading performance and aesthetic.

FINISHES

Western Red Cedar.

CONNECTIONS

- Options to:
- Fix at ends with structural end cap (vertical)
 - Fix at ends to side plates (horizontal)

DETAILS

Options to finish head, cill or jamb details with flashing or simple end caps.

TECHNICAL DATA



TIMBER
AEROFOIL 150 x 38

SIZE
150 x 38 mm

FINISHES
Western Red Cedar

WEIGHT
c. 1.6 kg/m

TYPICAL SPAN
2.0 - 2.5 m



TIMBER
AEROFOIL 200 x 50

SIZE
200 x 50 mm

FINISHES
Western Red Cedar

WEIGHT
c. 2.6 kg/m

TYPICAL SPAN
2.4 - 3.0 m



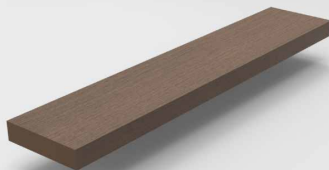
TIMBER
AEROFOIL 300 x 50

SIZE
300 x 50 mm

FINISHES
Western Red Cedar

WEIGHT
c. 4.7 kg/m

TYPICAL SPAN
2.4 - 3.0 m



TIMBER
BOX FIN 200 x 50

SIZE
220 x 50 mm

FINISHES
Western Red Cedar

WEIGHT
c. 3.9 kg/m

TYPICAL SPAN
2.4 - 3.0 m



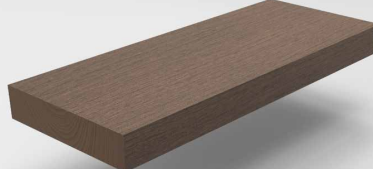
TIMBER
BOX FIN 300 x 100

SIZE
300 x 100 mm

FINISHES
Western Red Cedar

WEIGHT
c. 11.7 kg/m

TYPICAL SPAN
4.5 - 6.0 m



TIMBER
BOX FIN 400 x 100

SIZE
400 x 100 mm

FINISHES
Western Red Cedar

WEIGHT
c. 15.6 kg/m

TYPICAL SPAN
4.6 - 6.0 m



TIMBER
TRAPEZOIDAL FIN

SIZE
70 x 25mm

FINISHES
Western Red Cedar

WEIGHT
c. 0.8 kg/m

TYPICAL SPAN
1.2 - 1.5m



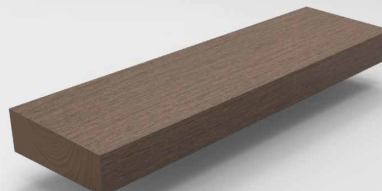
TIMBER
DIAMOND FIN

SIZE
250mm

FINISHES
Western Red Cedar

WEIGHT
c. 2.2 kg/m

TYPICAL SPAN
2.0 - 2.5m



TIMBER
TAPERED BOX FIN

SIZE
270 x 109mm

FINISHES
Western Red Cedar

WEIGHT
c. 10.6 kg/m

TYPICAL SPAN
4.5 - 6.0m



LEVOLUX TRINITI® BRACKET

CURTAIN WALLING



LEVOLUX TRINITI® BRACKET

The TRINITI® Bracket is a revolutionary Solar Shading support system for curtain walling, that offers a range of impressive benefits.

WHAT IS THE LEVOLUX TRINITI® BRACKET?

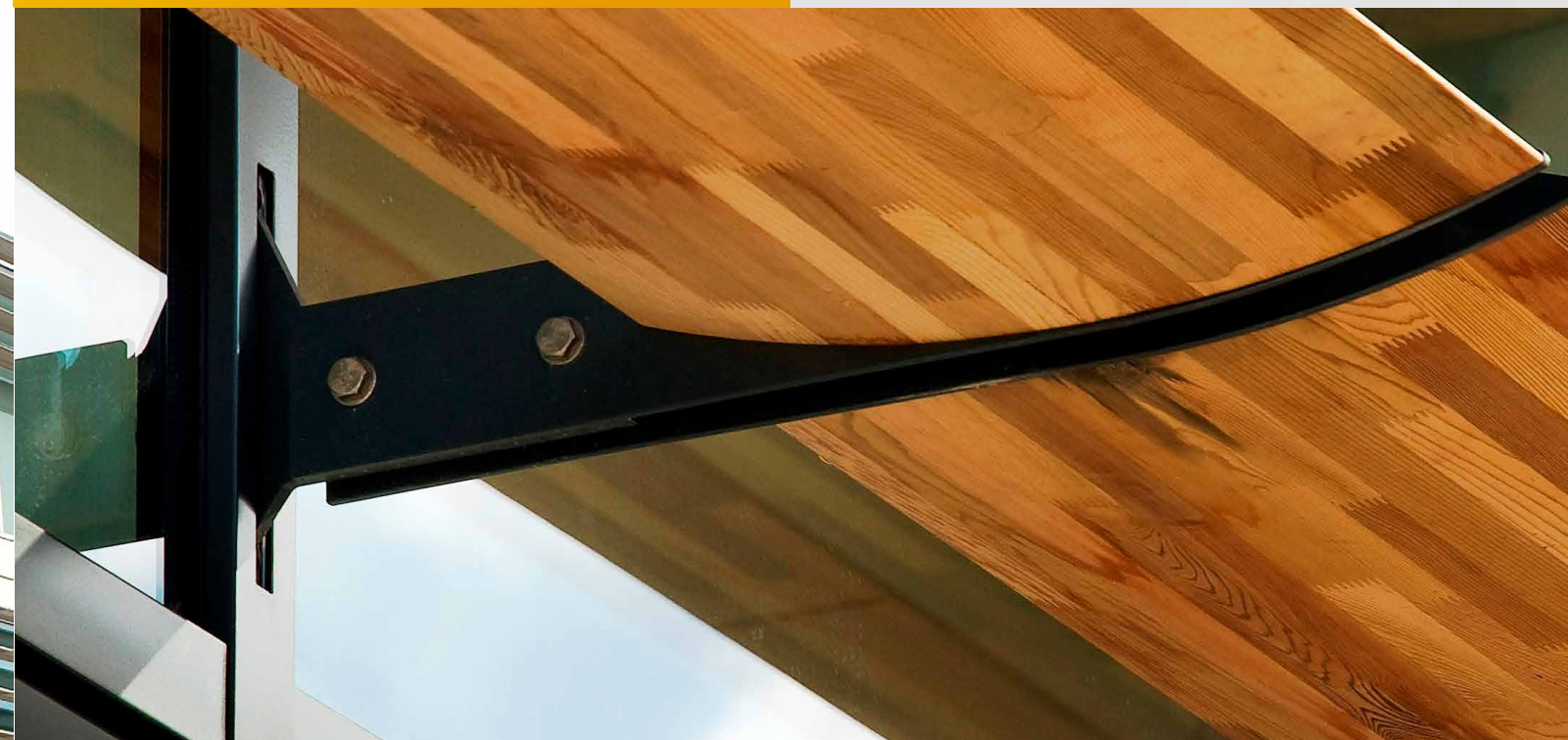
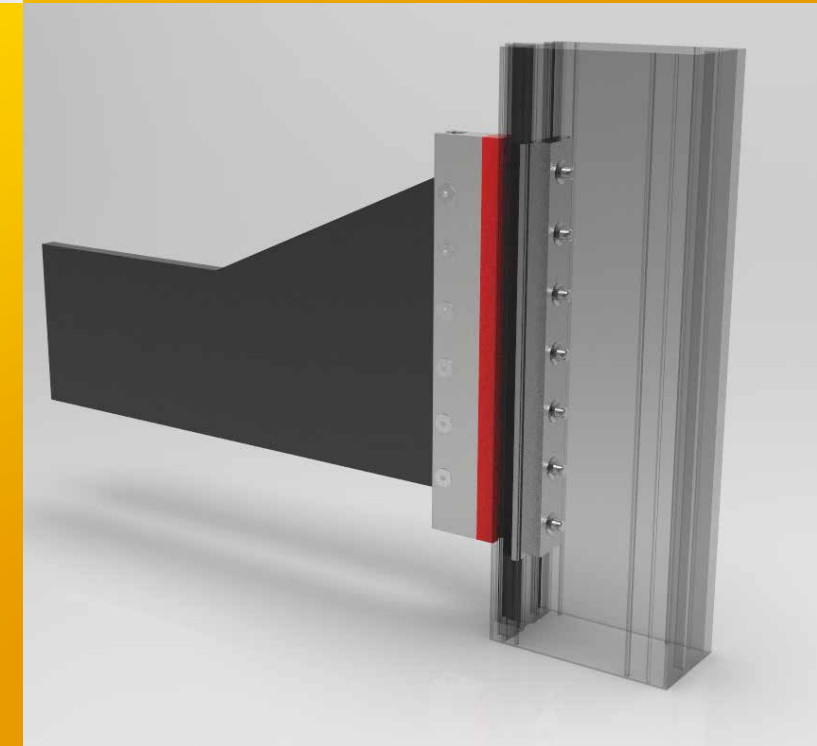
The Levolux TRINITI® Bracket is a thermally broken bracket designed to interface with virtually all curtain walling profiles, including short nose profiles and designed to meet the demands of Part L2 of the build code, by reducing the risk of interstitial condensation, providing an effective thermal isolation to reduce cold bridging effects and as an effective barrier to noise energy.

WHY INVEST IN THE LEVOLUX TRINITI® BRACKET?

- ✓ Highly effective solar shading support system, which has been specially developed and tested to ensure it satisfies the demands of new building codes and regulations.
- ✓ It is designed to limit solar heat gain, reduce structural heat loss, prevent interstitial condensation and absorb noise energy.
- ✓ The Triniti Bracket is designed to accommodate the full range of Levolux Solar Shading systems.
- ✓ Offers a range of impressive benefits including: significant reductions in cold bridging, excellent sound insulation, superior structural integrity and zero interstitial condensation.
- ✓ When compared to a standard curtain walling bracket, the Triniti® bracket performs significantly better and is compatible with the full range of Levolux Solar Shading systems.
- ✓ Three key attributes: thermal isolation, acoustic isolation and superior strength.

LEVOLUX TRINITI® BRACKET

The Levolux TRINITI® Bracket is a thermally broken bracket designed to interface with virtually all curtain walling profiles



LEVOLUX TRINITI® BRACKET

CURTAIN WALLING

SPECIFICATION

ITEM: TRINITI® BRACKET

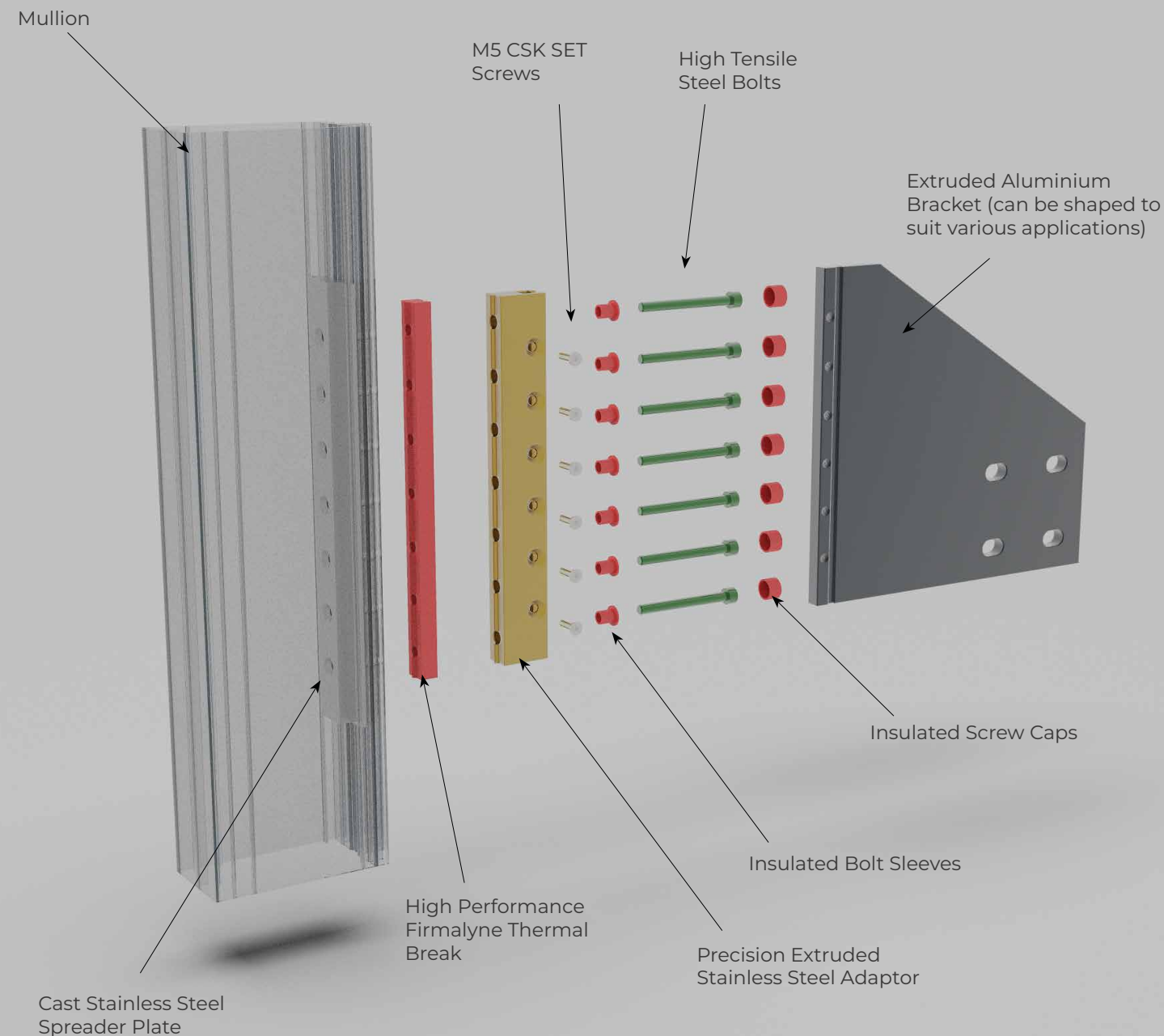
Fixing to the Curtain Walling System to be via the Levolux Trinititi® bracket, offering a thermally and acoustically broken, interstitial condensation risk-free system.

The system consists of an extruded, shaped, pre-drilled aluminium bracket, slid into an extruded stainless steel adapter plate and positioned with countersunk stainless steel set screws. The adapter is fixed using high tensile steel bolts through a Firmalyne high performance thermal and acoustic break into a cast stainless steel spreader plate within the curtain walling mullion. The bolts are further isolated using Firmalyne insulated bolt sleeves and screw caps.

The brackets are to be free issued by Levolux to the curtain wall subcontractor/fabricator for installation.

UK Patent No.GB2444257, European design registration number 000832407-0001and OCTApplication No.PCT/PCT/GB2007/004489

SYSTEM CONFIGURATION



TECHNICAL DATA

FIRE CLASSIFICATION

The Classification of aluminium used in construction products for reaction to fire is Class A1 without test (as EU Directive 96/603/EC).

The polyester powder coating has a classification for reaction to fire of A2, s1-d0 according to BS EN 13501-1:2018. For certain residential buildings all attachments are required to have a fire classification of A2-s1, d0 or better. However thermal breaks and gaskets are exempt from this requirement as no suitable commercial materials are available which comply with the above fire specification.

PERFORMANCE - THERMAL

Tested in accordance with BS EN ISO 10211-1&2, BS EN ISO 5250 and BS EN ISO 13788 by CWCT at Bath University.

- ✓ The thermally broken bracket has a greatly improved thermal performance compared to conventional aluminium brackets.
- ✓ The bracket provides a Point Thermal transmission X - value of 0.135W/K.
- ✓ The pure improvement of the bracket reducing heat loss at the cold bridge point is up to 70.43%.
- ✓ The minimum internal surface temperature of the back of the box is increased by 6.4°C.
- ✓ There is no interstitial condensation risk at the surface between the spreader plate and the back box.

PERFORMANCE - ACOUSTIC

- ✓ The bracket offers approximately 95% isolation of audible sound being transferred to the building structure.
- ✓ Sound isolation is effective within the frequency range the human ear is most sensitive with – 2000-5500Hz.
- ✓ Trinititi brackets manage vibration frequencies that can occur in louvres and associated structural components.

FEATURES & BENEFITS

MATERIALS

Manufactured from extruded aluminium alloy 6063 T6, stainless steel 316 and Nylon 66.

FINISHES

Polyester powder coated to RAL colours, average 60 microns, to Class 1 or 2; Anodised AA25 natural silver or colours; PVDF or Mill finish.

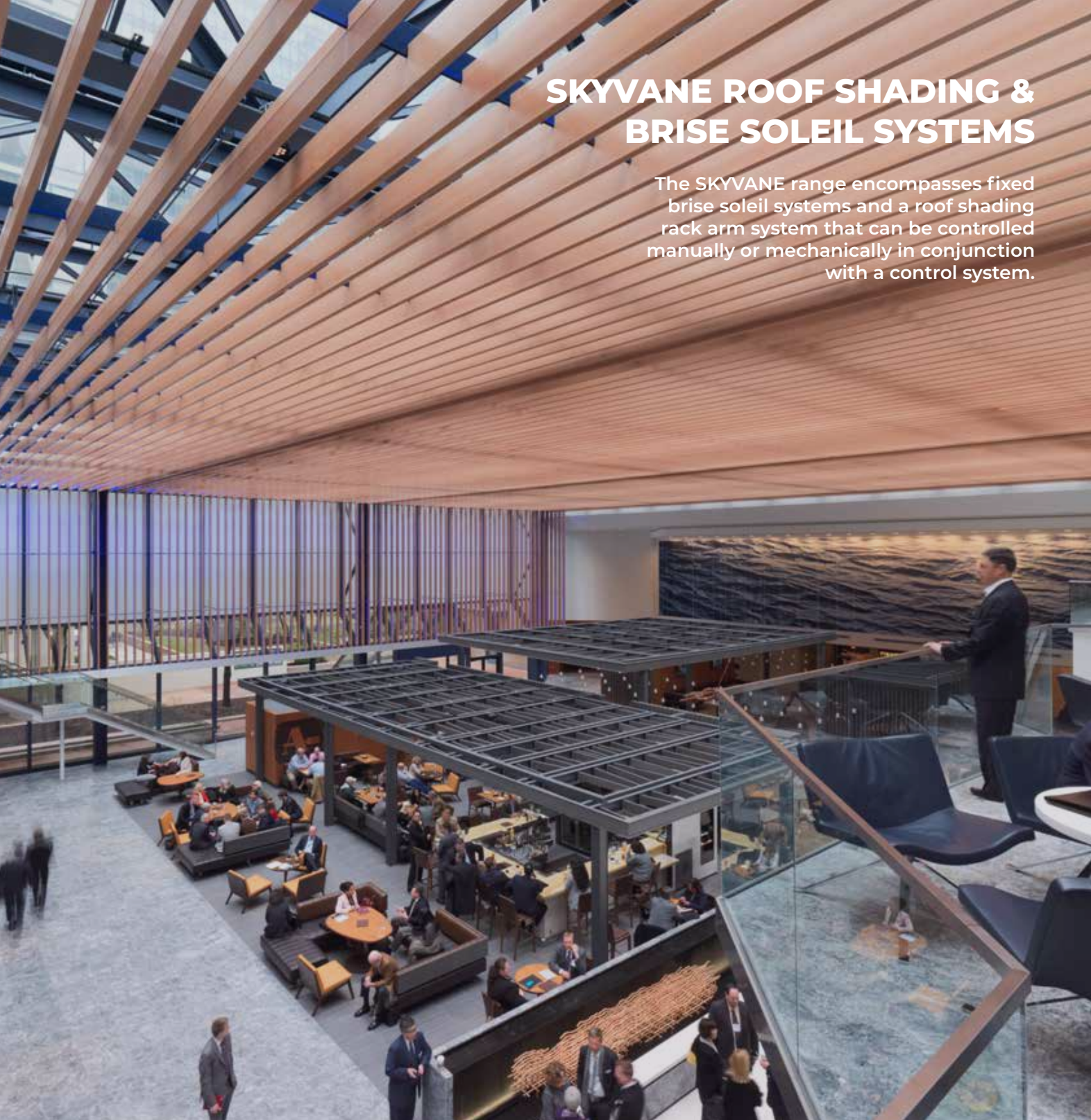
COMPONENT DETAILS

The Trinititi® bracket incorporates the following components:

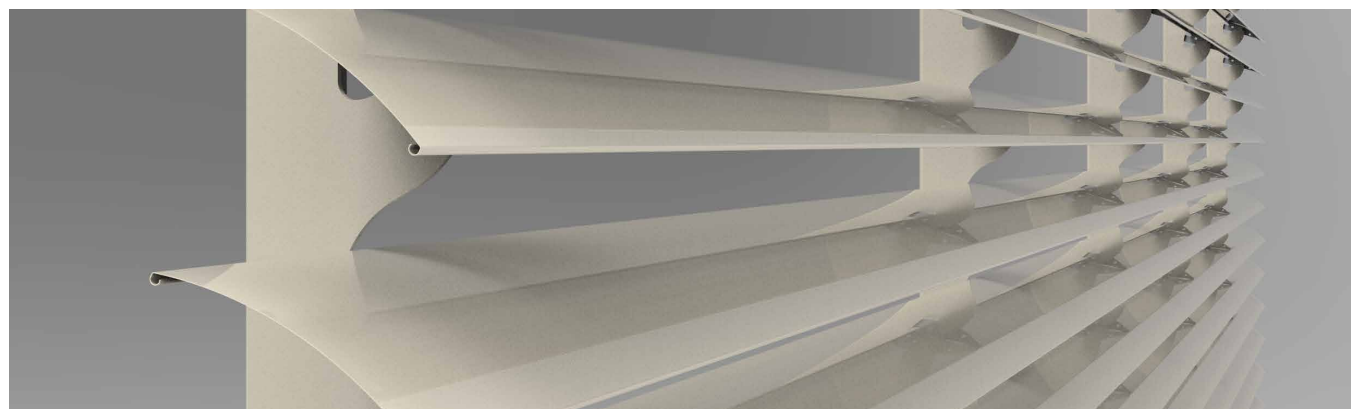
- Bracket
- Stainless Steel Aaptor
- Thermal Break
- Spreader Plate
- Insulated Bolt Sleeve
- Screw Cap
- High Tensile Socket Cap Head Bolts

SKYVANE ROOF SHADING & BRISE SOLEIL SYSTEMS

The SKYVANE range encompasses fixed brise soleil systems and a roof shading rack arm system that can be controlled manually or mechanically in conjunction with a control system.



SKYVANE Roof Shading



Levolux's SKYVANE Roof Shading system has been designed to shade horizontal, inclined & irregular shaped glazing. Typically specified as a sun shading / screening solution to control light / glare and solar heat gain through glazed roofs.

SKYVANE Brise Soleil



Levolux provides a range of SKYVANE Brise Soleil systems which have been designed to control sun heat gain in buildings to create a comfortable internal environment with reduced air conditioning loads in even the hottest climates.

SKYVANE ROOF SHADING

ROOF SHADING SYSTEMS FROM LEVOLUX

SPECIFICATION

ITEM: LEVOLUX EXTERNAL/ INTERNAL* SKYVANE ROOF SHADING

Fully adjustable non-retractable louvre system to be Levolux Skyvane 675/ 675X/ 680* Internal/External* system. To be assembled complete with extruded aluminium rack arms, UV and heat resistant nylon pivot arm and slat clips, stainless steel fastenings and fixings, and 675/675X* side baffles*.

50/80 mm solid/ perforated slats selected from our Levolux colour range, color+
*75mm extruded aluminium louvres to be anodized or polyester powder coated to any color from the RAL range.
System to have manual/ electric* operation with switch/ remote infra-red/ fully automatic solar shading* control.
To suit glazed areas.....mm widehigh+ or in accordance with glazed areas as detailed on drawing nos.....+

Supplied and installed by an approved Levolux distributor.

In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.

+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION



TECHNICAL DATA



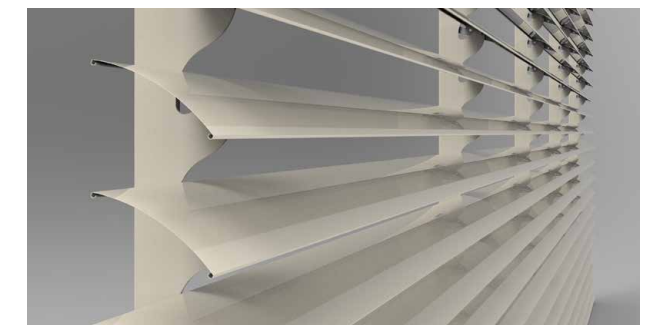
SKYVANE 680 ROOF SHADING

SIZE
80 mm

FINISHES
Polyester Powder Coated | Anodised

LOUVRE MATERIAL
Aluminum

USE
Internal or external. Heavy duty / Long span system



SKYVANE 675 ROOF SHADING

SIZE
75 mm

FINISHES
Polyester Powder Coated | Anodised

LOUVRE MATERIAL
Aluminum

USE
Internal or external requiring high level of dim-out (e.g museums, art galleries etc.)

FEATURES & BENEFITS

PROFILES

The Skyvane Roof Shading system is available in two options incorporating 80mm and 75mm blade widths.

FINISHES

Aluminium components are available in mill finish, anodised or polyester powder coated finishes. The 80mm blades are available in solid or perforated options.

The extruded aluminium louvres used in the 75mm system can be anodised or polyester powder coated to any standard RAL color.

COMPONENTS

The Skyvane system comprises of these main components

1. Rackarms
2. Drive shaft and operating mechanism
3. Controls
4. Blades



SKYVANE BRISE SOLEIL

BRISE SOLEIL SYSTEMS FROM LEVOLUX

SPECIFICATION

ITEM: LEVOLUX SKYVANE BRISE SOLEIL

Fixed External Solar Shading System manufactured from extruded aluminium components grade AA 6063 TF using stainless steel fastenings. Completed with a natural anodised/powder coated* finish from the Levolux range.

Color ref. RAL/BS.....+

Louvres to be supplied in 'Z' form with 90mm diagonal face attached via extruded aluminium clips to standard support arms. Standard/bespoke/cladding bracket supports.Support arms finished with end cap of standard color.

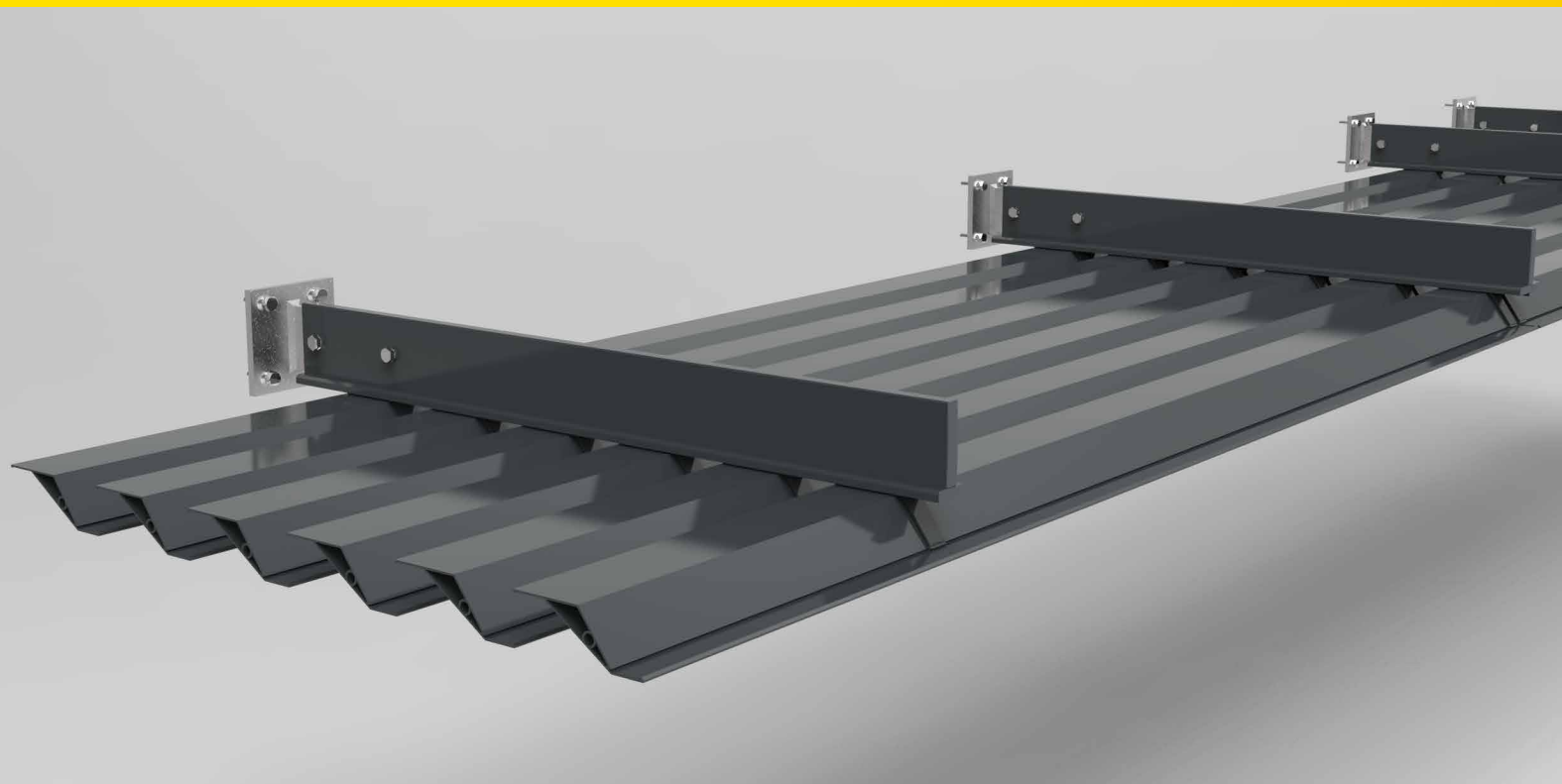
Width = Projection = System to be cantilever/angled/in-frame braced/unbraced* design.

Supplied and installed by an approved Levolux distributor.

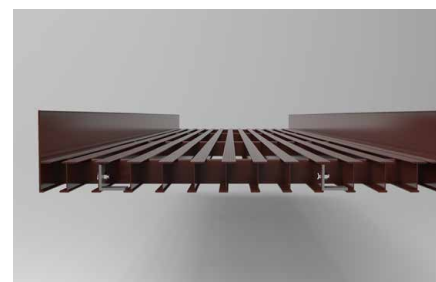
In line with our policy of continuous product development, Levolux reserves the right to alter specifications without prior notice.

+Insert as applicable *Delete as applicable

SYSTEM CONFIGURATION



TECHNICAL DATA



SKYVANE MATRIX XL+ BRISE SOLEIL

PROFILE
'J' shaped treads

FINISHES
Polyester Powder Coated | Anodised

TYPICAL MAX. SPAN
Subject to live loads

SYSTEM COMPONENTS
Brackets, support arms and bracing
as required



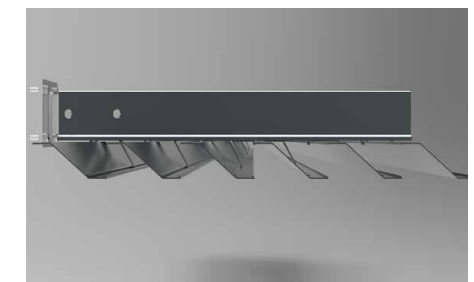
SKYVANE MATRIX XL BRISE SOLEIL

PROFILE
'Z' shaped XL louvre blade

FINISHES
Polyester Powder Coated | Anodised

TYPICAL MAX. SPAN
3.0 m

SYSTEM COMPONENTS
Brackets, support arms and bracing
as required



SKYVANE MATRIX BRISE SOLEIL

PROFILE
'Z' shaped louvre blade

FINISHES
Polyester Powder Coated | Anodised

TYPICAL MAX. SPAN
2.25 m

SYSTEM COMPONENTS
Brackets, support arms and bracing
as required

FEATURES & BENEFITS

PROFILES

The SKYVANE Brise Soleil system, utilising simplicity and efficiency to produce an effective external "Brise Soleil" solar shading system, with the option of an integral Walk-On Platform.

FINISHES

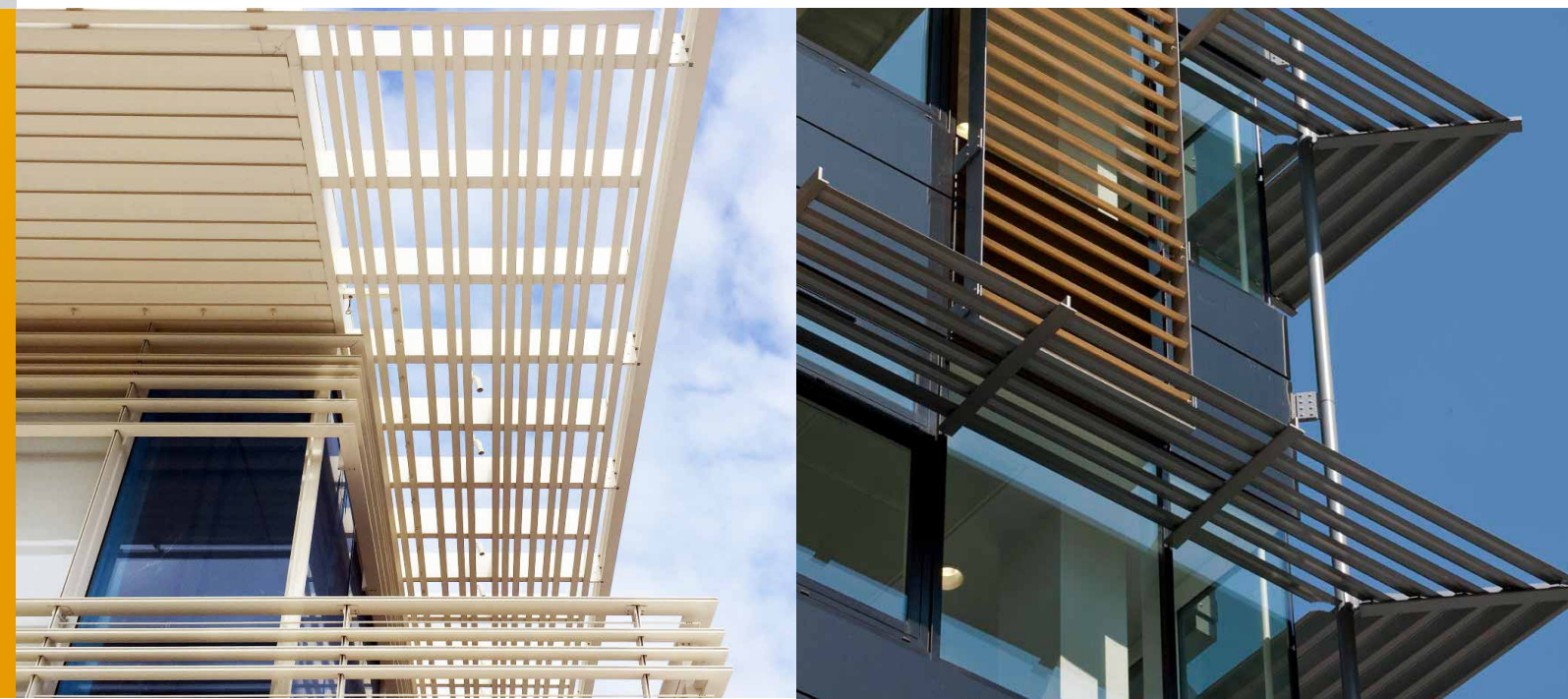
Aluminium components are available in mill finish, anodised, or polyester powder coated finishes. Different grades are available to suit the environment, whether standard, industrial, or marine.

COMPONENTS

1. 1st fix brackets
2. Support arms
3. Louvres
4. 'J' treads
5. Braces

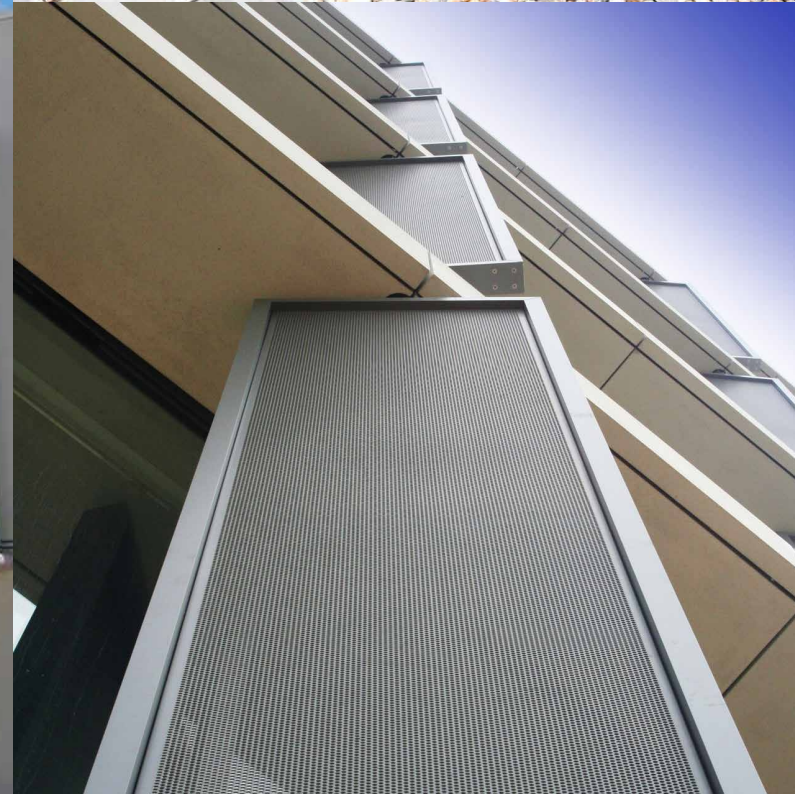
DETAILS

1st fix brackets - steel or aluminium fixing brackets is available, including a thermally broken curtain walling bracket.

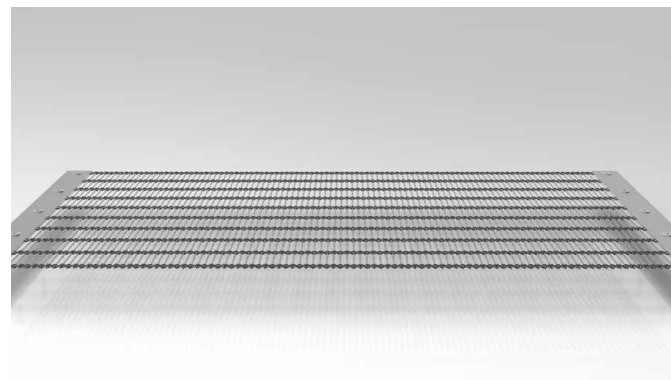
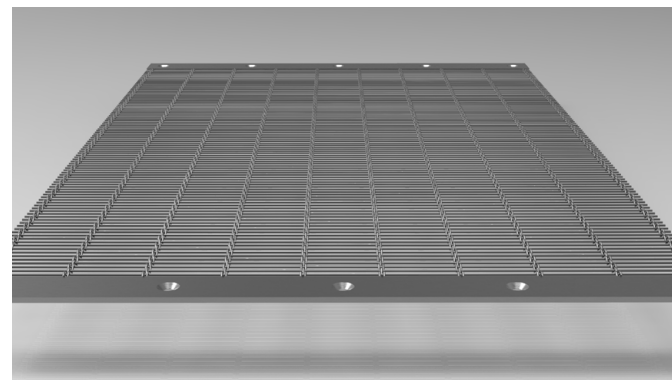


LIGNITI SCREENING SOLUTIONS

LIGNITI comprises a range of screening and vent louvre systems as well as architectural perforated panel systems that can be used to screen car parks and other structures for aesthetic and/or solar control purposes.



LIGNITI Screening



Levolux decorative screening solutions are a highly innovative area of Levolux's facade screening offer, with customisable solutions to suit specific project aesthetic and performance requirements.

LIGNITI Louvres



Levolux provides a range of engineered single and double bank louvre systems for building ventilation or plant screening. Levolux offer three types of louvre; Contour Louvres, HP Louvres and Screening Louvres.

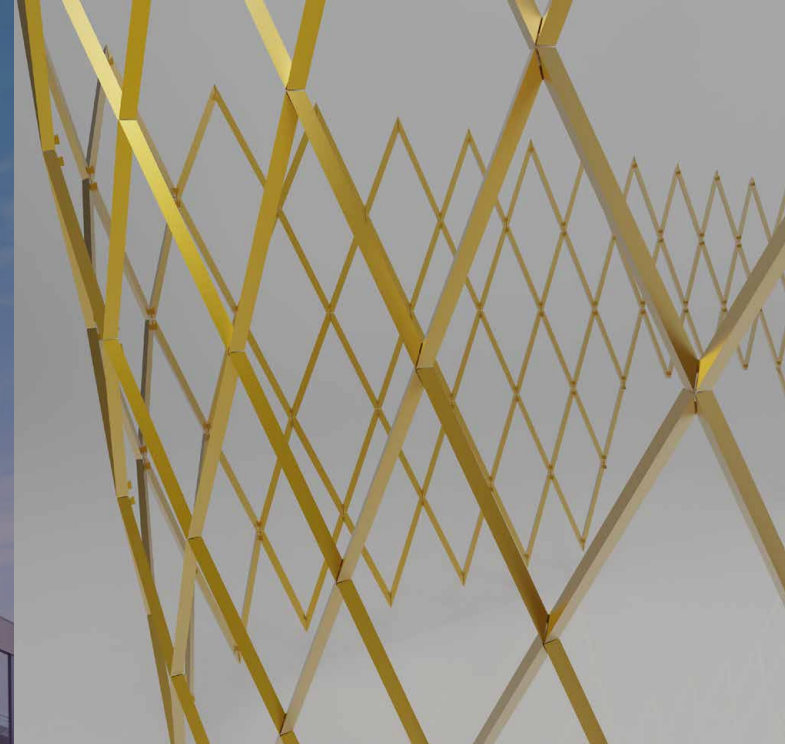


LIGNITI DECORATIVE SCREENING

PERFORATED SCREENS & PANEL SYSTEMS

WHY INVEST IN LIGNITI DECORATIVE SCREENING?

- ✓ Ligniti decorative screening solutions are a highly innovative area of Levolux's façade screening offer, with customisable solutions to suit specific project aesthetic and performance requirements.
- ✓ Ligniti screens and perforated panels can be used to provide sun screening for buildings and car parks, or simply employed as a highly creative decorative skin.
- ✓ Ligniti perforated panels are precision engineered using aluminium or stainless steel to form complex patterns and pictures that can provide insight into your building's purpose or history.
- ✓ Ligniti stainless steel mesh screening can provide highly attractive and durable privacy screening for buildings.
- ✓ Ligniti bespoke façade solutions are inspired by our customers and brought to life by Levolux's design team, who often reproduce highly specific appearances for each building.
- ✓ Ligniti decorative screening solutions are designed and supplied as a holistic system solution, comprising any support structure, brackets and fixings.

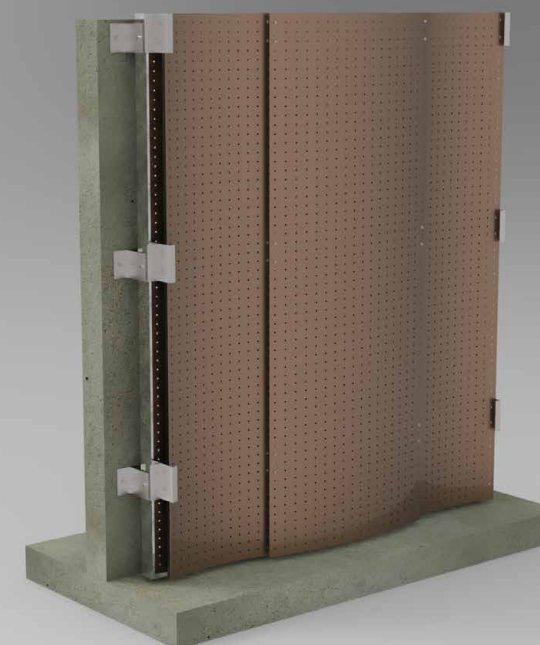
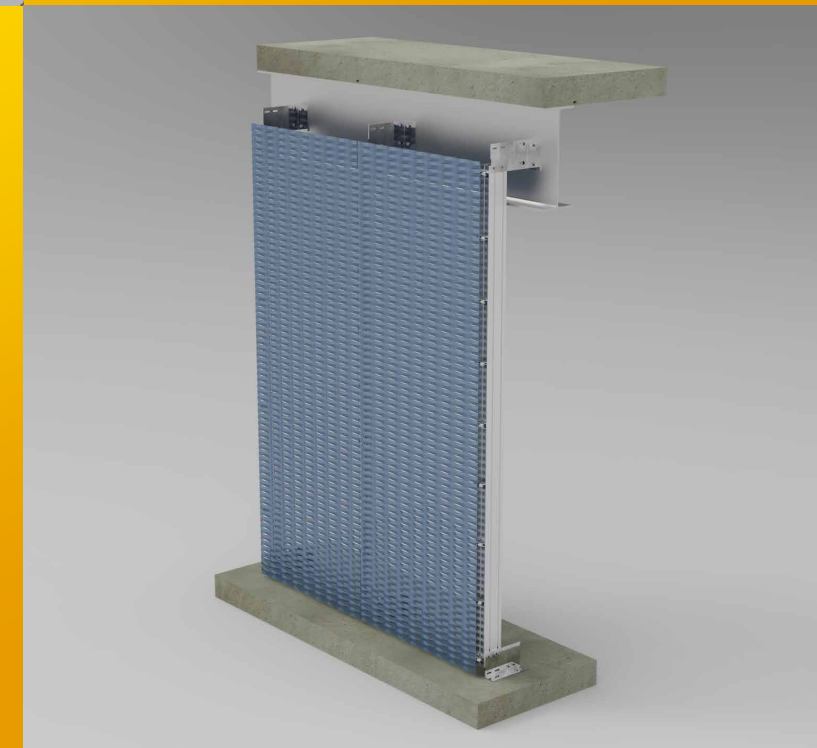


LIGNITI BESPOKE FACADE

Ligniti bespoke façade solutions are inspired by our customers and brought to life by Levolux's design team, who often reproduce highly specific appearances for each building.

LIGNITI MESH SCREENING

Ligniti stainless steel mesh screening can provide highly attractive and durable privacy screening for buildings.



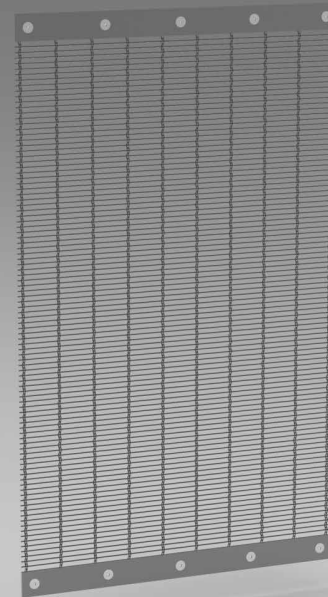
LIGNITI PERFORATED PANELS

Ligniti perforated panels are precision engineered using aluminium or stainless steel to form complex patterns and pictures that can provide insight into your building's purpose or history.

LIGNITI DECORATIVE SCREENING

PERFORATED SCREEN & PANEL SYSTEMS

SYSTEM CONFIGURATION



TECHNICAL DATA



BESPOKE FACADE

FINISHES

Polyester Powder Coated | Anodised

MATERIAL

Aluminium

CONFIGURATION

Individual profiles | Interconnecting Extrusions | Frame-mounted

SYSTEM COMPONENTS

Connections & fixings | Frame



MESH SCREENING PANELS

MATERIAL

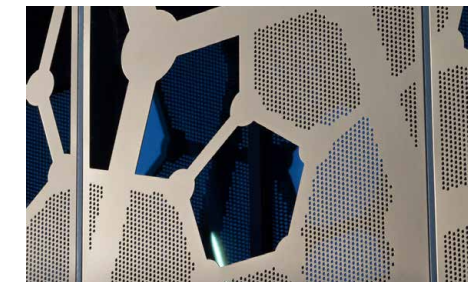
Stainless Steel | Aluminium

CONFIGURATION

Woven Mesh | Fin Profile | Panel | Expanded Mesh

SYSTEM COMPONENTS

Brackets & Fixings | Carrier Systems



PERFORATED PANELS

FINISHES

Polyester Powder Coated | Anodised | Brushed & polished Stainless Steel

MATERIAL

Aluminium | Stainless Steel

CONFIGURATION

Image replication | Patterned Circular | Customised perforations

SYSTEM COMPONENTS

Brackets & Fixings | Carrier Systems

FEATURES & BENEFITS

PROFILES

Available in a range of profile sizes to suit the load / span requirement, as well as the sun shading performance and aesthetic.

FINISHES

Typically supplied with a choice of polyester powder coated or anodised, with a choice of colors and textures. Different grades are available to suit the environment, whether standard, industrial, or marine.

CONNECTIONS

Options for:

- Individual profiles
- Interconnecting extrusions
- Frame mounted

DETAILS

Options to finish head, cill, or jamb details with flashing or simple end caps.



LIGNITI LOUVRES

LOUVRES FOR SCREENING & VENTILATION

WHY INVEST IN LIGNITI LOUVRES?

- ✓ Levolux provides a range of engineered single and double bank louver systems for building ventilation or plant screening.
- ✓ HP louvres are available with 50 or 75 mm pitch blades for enhanced air flow and protection against rain penetration.
- ✓ Ligniti vent louvres are available in either single bank (Contour) or double bank (HP) format.
- ✓ Contour louvres are available with 50, 75 or 100 mm pitch blades and provide good air flow where some water penetration can be tolerated.
- ✓ Our Ligniti screening system provides attractive screening for plant areas where rain penetration is not a concern (e.g. roof spaces).
- ✓ Levolux louver systems are installed quickly and efficiently thanks to our unique clip connection system.
- ✓ These products are available in a variety of finishes, including natural, anodised or polyester powder coated in a range of colours.



LIGNITI CONTOUR

A tried and tested single bank aluminium ventilation louver system that is available in a variety of finishes, including polyester powder coated to a range of RAL or BS colour an anodised finishes.

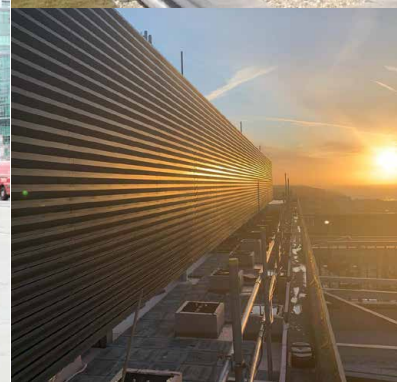
LIGNITI HP

An efficient, simple and effective weather high performance ventilation louver that has achieved the combination of airflow and weatherability without compromise that has eluded other louver manufacturers over the last 25 years.



LIGNITI SCREENING

Interfaced to the building with extruded aluminium casements or as a vertical screen to plantrooms. Used where airflow is required without any specific weatherability. Aesthetically positioned at any location but particularly suited to roof plantrooms or car parks.





LIGNITI

CONTOUR LOUVRES

SYSTEM CONFIGURATION



FEATURES & BENEFITS

AESTHETICS

A contoured aerodynamic shape with inherent strength enables this distinctive extruded profile to form a continuous appearance.

EASE OF INSTALLATION

Designed to be flexible, the system can be quickly and easily slotted into universal fixing brackets.

PERFORMANCE

This low maintenance, all aluminium louvre system is one of the most aerodynamically efficient available, with free area of 54.2-60.1%, whilst still providing good weather resistance.

REDUCED ENERGY CONSUMPTION

The low air resistance through the louvre reduces the energy load on the plant equipment reducing capital outlay and running costs.

TECHNICAL DATA

PERFORMANCE - VLS 50, VLS 75 & VLS 100

VLS 50 - Louvres without mesh have an inlet CD of 0.342.
Louvres with Levolux standard insect mesh have an inlet CD of 0.269. Nominal free area of 54.2%.

Weatherability Performance						
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A3	B3	B3	C3	C3	D3

VLS 75 - Louvres without mesh have an inlet CD of 0.44.
Louvres with Levolux standard insect mesh have an inlet CD of 0.31. Nominal free area of 58.3%.

Weatherability Performance						
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A2	B2	B2	C2	C2	D2

VLS 100 - Louvres without mesh have an inlet CD of 0.449.
Louvres with Levolux standard insect mesh have an inlet CD of 0.315. Nominal free area of 60.1%.

Weatherability Performance						
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A2	B2	B2	C2	C2	D2

SPANS

Maximum louvre and mullion spans vary with wind-load and building design.
Extra consideration should be given at exposed sites or locations on a building.

Louvre Span Data		
Load	Maximum Span	Maximum Cantilever
0.9kN/m²	1225mm	300mm
1.2kN/m²	1125mm	250mm
1.5kN/m²	1025mm	200mm

A cantilever at both ends of the mullion up to 15% of the span is allowable.

Mullion Span Data							
	Load	0.9kN/m²		1.2kN/m²		1.5kN/m²	
	Mullion Centres	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion
With or without mesh	1.025	2.75m	1.80m	2.40m	1.60m	2.15m	1.45m
With or without mesh	1.225	2.50m	1.65m	2.25m	1.50m	2.00m	1.30m
With blanking panel	1.025	2.25m	1.50m	2.00m	1.30m	1.75m	1.15m
With blanking panel	1.225	2.00m	1.35m	1.80m	1.20m	1.60m	1.05m

BLADE DETAIL





LIGNITI

HP LOUVRES



SYSTEM CONFIGURATION

TECHNICAL DATA



FEATURES & BENEFITS

AESTHETICS

A contoured aerodynamic shape with inherent strength enables this distinctive extruded profile to form a continuous appearance.

EASE OF INSTALLATION

Designed to be flexible, the system can be quickly and easily slotted into universal fixing brackets.

PERFORMANCE

This low maintenance, all aluminium louvre system is one of the most aerodynamically efficient available, with free area of 52%, whilst still providing good weather resistance.

REDUCED ENERGY CONSUMPTION

The low air resistance through the louvre reduces the energy load on the plant equipment reducing capital outlay and running costs.

PERFORMANCE - VLS HP50 & VLS HP75

VLS HP50 - Louvres with Levolux standard insect mesh have an inlet CD of 0.288. Nominal free area of 52%.

Weatherability Performance								
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Class rating	A3	A3	A3	A3	A3	B3	C3	C3

VLS HP75 - Louvres with Levolux standard insect mesh have an inlet CD of 0.288. Nominal free area of 52%.

Weatherability Performance								
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Class rating	A2	A2	B2	B2	C2	C2	D2	D2

SPANS

Maximum louvre and mullion spans vary with wind-load and building design. Extra consideration should be given at exposed sites or locations on a building.

Louvre Span Data		
Load	Maximum Span	Maximum Cantilever
0.9kN/m ²	1225mm	300mm
1.2kN/m ²	1125mm	250mm
1.5kN/m ²	1025mm	200mm

A cantilever at both ends of the mullion up to 15% of the span is allowable.

Mullion Span Data							
	Load	0.9kN/m ²		1.2kN/m ²		1.5kN/m ²	
	Mullion Centres	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion
With or without mesh	1.025	2.75m	1.80m	2.40m	1.60m	2.15m	1.45m
With or without mesh	1.225	2.50m	1.65m	2.25m	1.50m	2.00m	1.30m
With blanking panel	1.025	2.25m	1.50m	2.00m	1.30m	1.75m	1.15m
With blanking panel	1.225	2.00m	1.35m	1.80m	1.20m	1.60m	1.05m



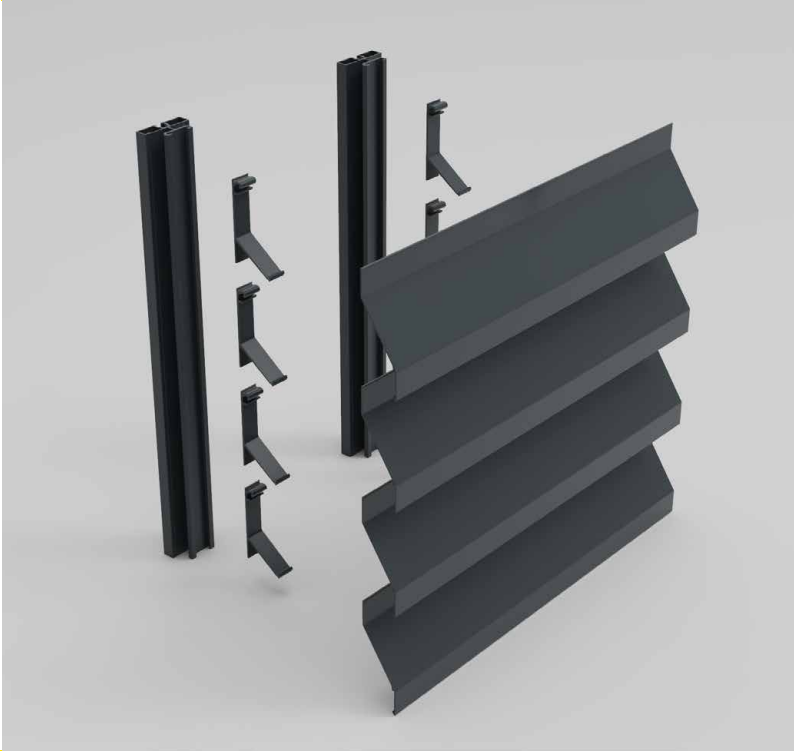
LIGNITI

SCREENING LOUVRES



SYSTEM CONFIGURATION

TECHNICAL DATA



FEATURES & BENEFITS

AESTHETICS

A contoured aerodynamic shape with inherent strength enables this distinctive extruded profile to form a continuous appearance.

EASE OF INSTALLATION

Designed to be flexible, the system can be quickly and easily slotted into universal fixing brackets.

PERFORMANCE

This low maintenance, all aluminium louvre system is one of the most aerodynamically efficient available, with free area of 30.7%, whilst still providing good weather resistance.

REDUCED ENERGY CONSUMPTION

The low air resistance through the louvre reduces the energy load on the plant equipment reducing capital outlay and running costs.

PERFORMANCE - VLS XL140

Louvres without mesh have inlet CD of 0.167
Nominal free area of 30.7%

Weatherability Performance						
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	4	4	4	4	4	4

SPANS

Maximum louvre and mullion spans vary with wind-load and building design.
Extra consideration should be given at exposed sites or locations on a building.

Louvre Span Data		
Load	Maximum Span	Maximum Cantilever
0.9kN/m ²	1500mm	300mm
1.2kN/m ²	1350mm	250mm
1.5kN/m ²	1225mm	200mm

A cantilever at both ends of the mullion up to 15% of the span is allowable.
Options: Integrated single or double doors, backing systems of either mesh, blanking plate or insulated panelling.

Mullion Span Data							
	Load	0.9kN/m ²		1.2kN/m ²		1.5kN/m ²	
	Mullion Centres	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion	70mm Mullion	40mm Mullion
With or without mesh	1.025	2.75m	1.80m	2.40m	1.60m	2.15m	1.45m
With or without mesh	1.225	2.50m	1.65m	2.25m	1.50m	2.00m	1.30m
With or without mesh	1.350	2.35m	1.60m	2.15m	1.40m	1.90m	1.20m
With or without mesh	1.500	2.25m	1.50m	2.00m	1.30m	1.80m	1.15m
With blanking panel	1.025	2.25m	1.50m	2.00m	1.30m	1.75m	1.15m
With blanking panel	1.225	2.00m	1.35m	1.80m	1.20m	1.60m	1.05m
With blanking panel	1.350	1.75m	1.20m	1.50m	1.15m	1.40m	0.95m
With blanking panel	1.500	1.50m	1.00m	1.30m	0.90m	1.20m	0.80m

SERENITI BALCONIES & BALUSTRADES

Ensure your development stands out with a Sereniti balcony from Levolux. Our customisable, modular and prefabricated balcony solutions are guaranteed to provide you with unrivalled choice and industry-leading craftsmanship.



WHY INVEST IN SERENITI BALCONIES?

- ✓ Our modular balconies are manufactured off-site for factory-controlled quality.
- ✓ All products are fully customisable and based on Levolux's modular balcony design principles.
- ✓ Derived from steel-framed structures with a range of decking, balustrade and soffit options.
- ✓ Available with non-combustible aluminium decking with slip resistance coating.
- ✓ Balustrade choices for all modular balconies include glass, railed aluminium or aluminium panels.
- ✓ Our balcony systems are designed to conform with BS 8579, with managed drainage or edge drainage options.
- ✓ Soffit profiles can be supplied in anodised or PPC finishes to any RAL colour and are available as a secret-fix profile for enhanced aesthetics.



This is my second job working with Levolux and the technical input upfront is very good and we found the right fully prefabricated balconies we were after. The on-site delivery in and around Manchester with Levolux is always undertaken very professionally. My client is very pleased with the overall quality of the balconies.



Robert Ianson
Senior Project Manager
Eric Wright Group



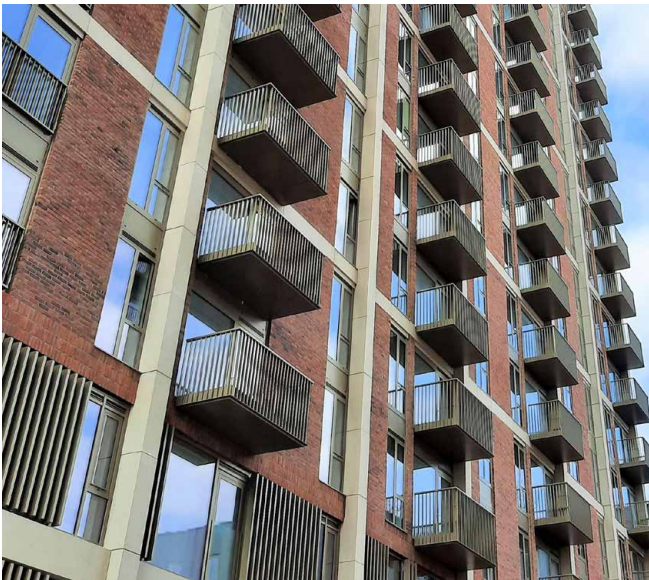
Levolux have worked with us through the design stage to find a product which suited our needs and then installed the balconies to a high standard, whilst coordinating with the site team and other contractors on site. The end result is a very high standard finish which has been complimented by all parties and stakeholders involved.



James Blackshaw
Project Manager
Vermont

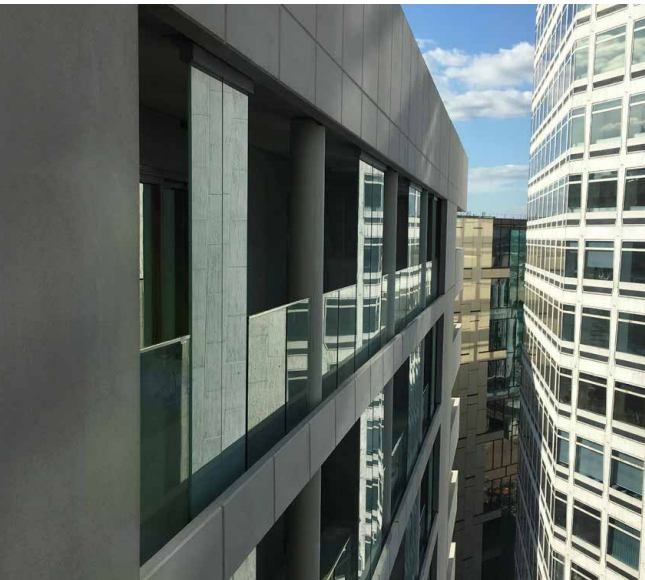
LEVOLUX MODULAR BALCONY SOLUTIONS

SERENITI Balconies



Levolux Sereniti balconies are manufactured in the UK and delivered as pre-assembled units. They will arrive complete with all connections, structural frames, decking, glass or aluminium balustrades, fascias, soffits and drainage solutions.

SERENITI Balustrades



Sereniti balustrade systems are ideal for projects with in situ concrete balconies that can benefit from a contemporary balustrade solution to achieve the desired quality of finish.





THE CRESCENT, SALFORD - MANCHESTER
LEVOLUX SERENITI BOLT-ON-BALCONIES
& INFINITI SOLAR SHADING

DESIGN FOR MANUFACTURE & ASSEMBLY

LEVOLUX MODULAR BALCONY SYSTEMS

Levolux incorporates a Design for Manufacture and Assembly (DfMA) approach for Sereniti Bolt-on Balconies and Balustrading.

In line with the UK Government's 2025 Construction strategy, the Levolux design-led approach aims to support clients in the directive to build:

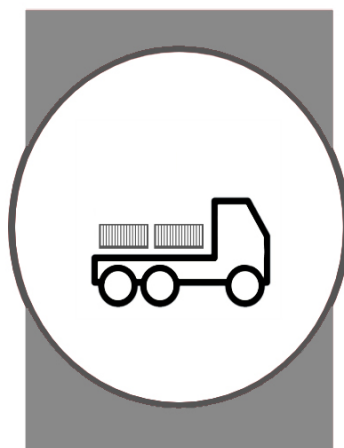
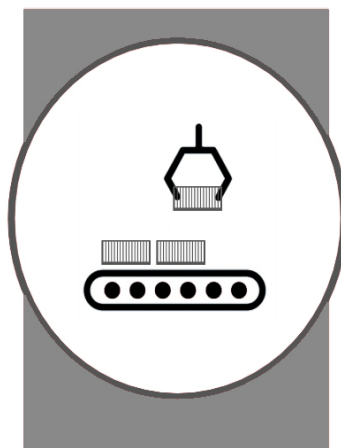
- ✓ **50% faster**
- ✓ **33% lower costs**
- ✓ **50% lower carbon emissions**

We also aim to design our balcony solutions to improve Quality, Health and Safety as well as consider the issue of the Labour and Skills shortage.

Levolux designs balconies to be fully manufactured and assembled off site in a controlled factory environment. This approach ensures optimal quality control and sustainability - minimising waste, mitigating health and safety risks and reducing time and cost of on-site operations.

Thanks to our extensive experience of working with facades, Levolux also understands the importance of considering how its balconies may interface with other elements of the facade. Early engagement allows our Design Team to work collaboratively with clients to achieve a robust detail.

Levolux also understands the importance of minimising the number of deliveries to site. Through effective planning, Levolux can ensure the Just In Time delivery of balconies to optimise the efficiency of installation whilst being mindful not to increase the carbon footprint of the balconies.



LEVOLUX FOCUSES ON THE 5 KEY AREAS OF THE BALCONY

1

Structural Frame – Manufactured primarily from structural steel, due to the inherent strength and fire performance of this material.

2

Finishes – in line with the DfMA approach, Levolux balconies are specified with extruded aluminium profiles due to the fine tolerances that the extrusion process facilitates. Recycled contents of between 75% and 100% can now be provided.

3

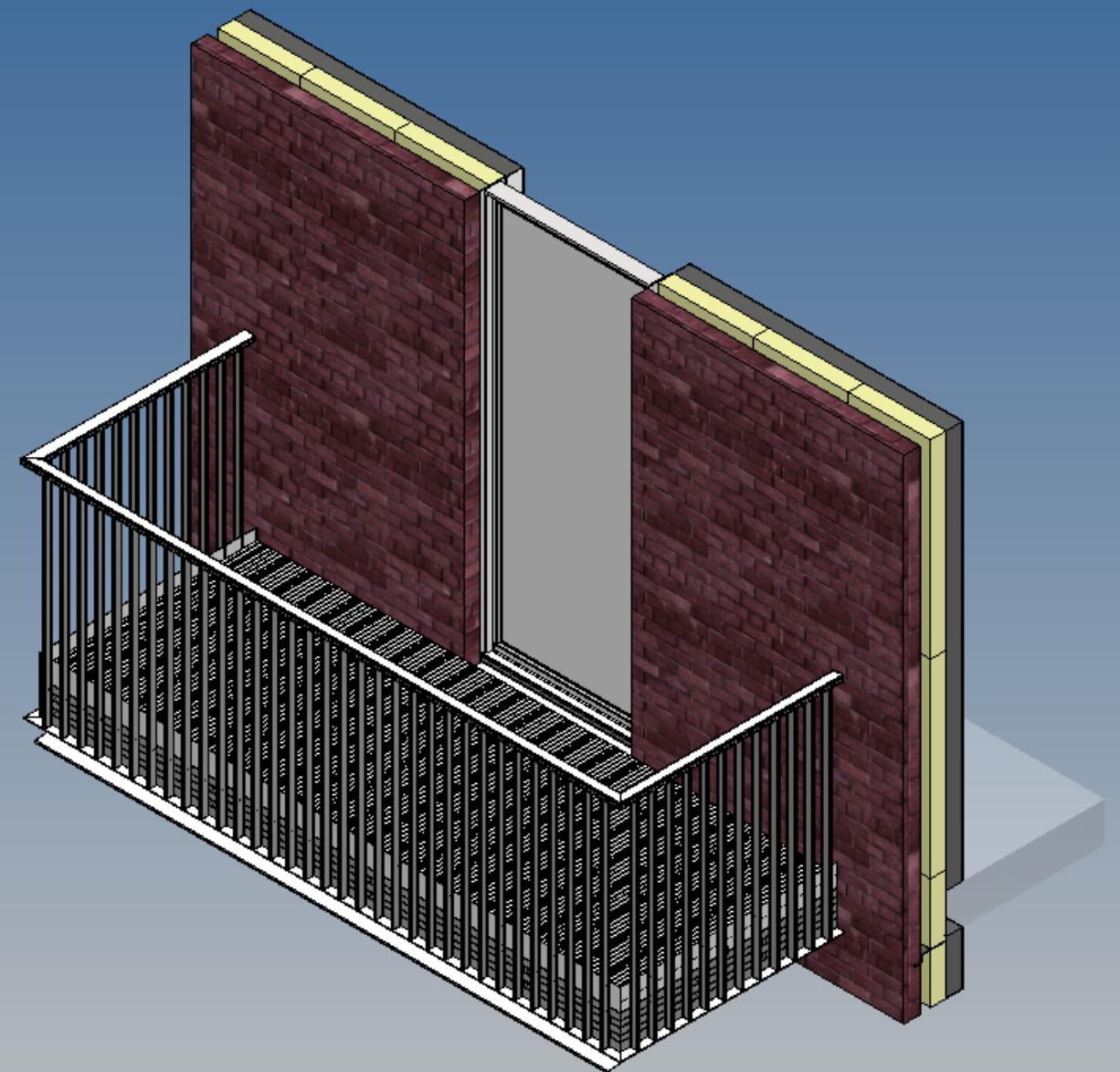
Balustrade – choices include extruded railed aluminium balustrade - providing a striking aesthetic with clean lines - or glass balustrade for a contemporary finish.

4

Drainage – with options available for “Managed” or “Edge” drained strategies to comply with the planning requirements.

5

Construction – Maintaining the principles of safety, simplicity and speed of installation.



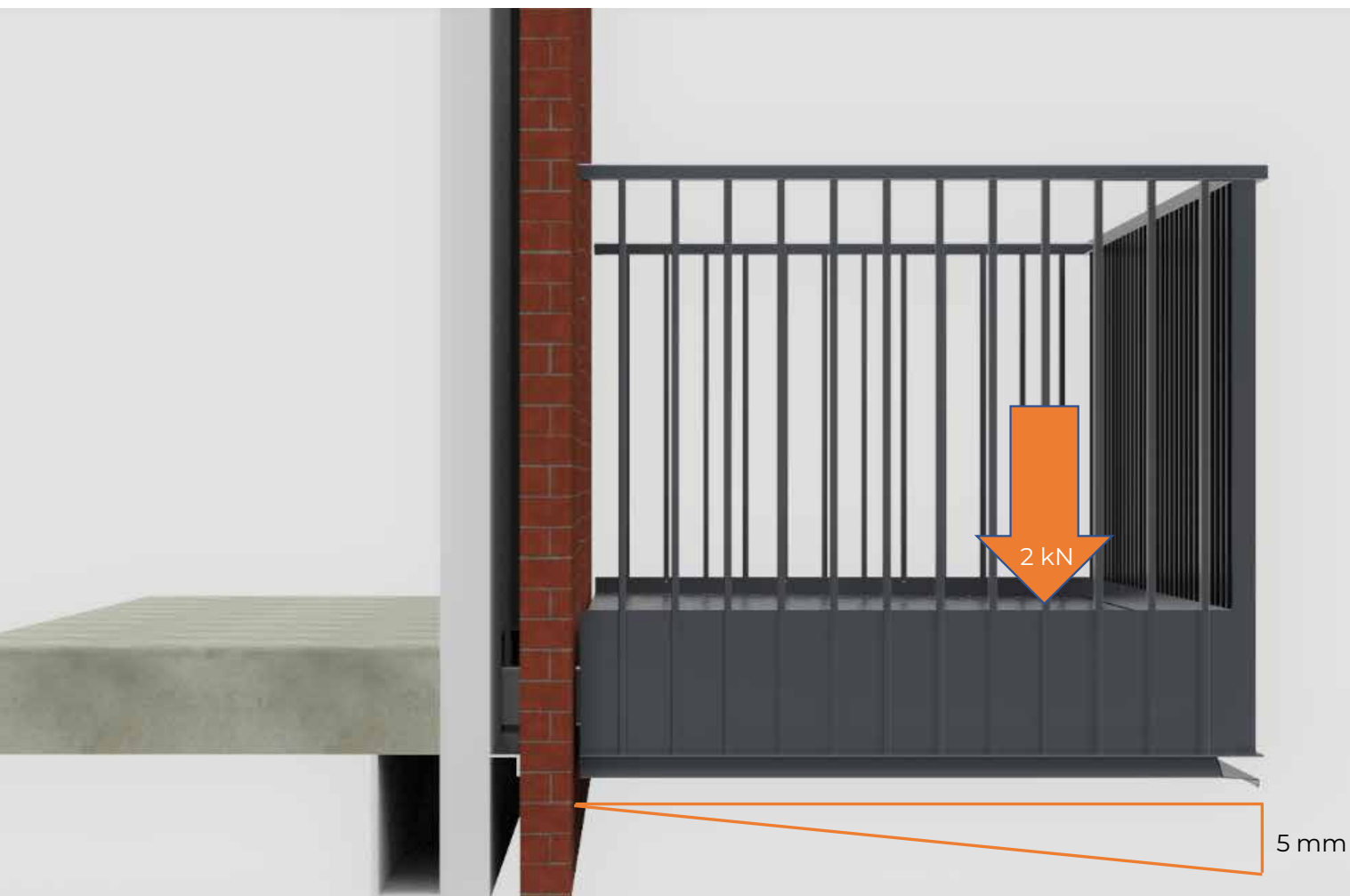
CONNECTIONS

LEVOLUX MODULAR BALCONY SYSTEMS

A key performance requirement of any balcony system is the rigidity of the pedestrian surface. Levolux's balcony specifications are designed to ensure that the cast-in connection, first fix bracket, structural frame and pedestrian surface deck combine to limit any deflection to 5 mm or less.

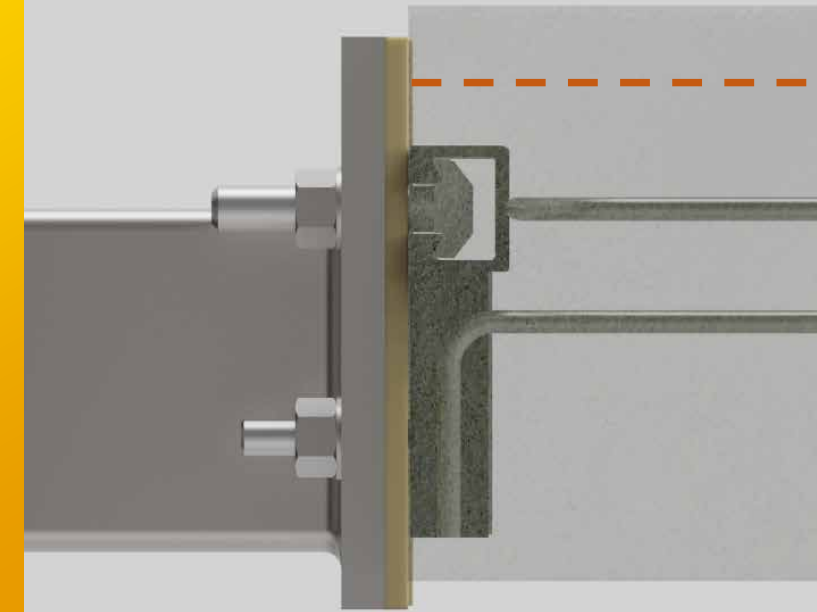
Levolux's balconies are compatible with a number of different cast-in connection types and, indeed, can be fixed directly to steel structures too.

To minimise the number of brackets required - thereby limiting thermal bridging and costs - Levolux recommends the use of **BALCON™** connections. In addition to its excellent structural performance, the connection is simple to install and provides a good degree of tolerance when fixing brackets.



CAST-IN CONNECTION

The specification of the connection must consider the ReBar layout. Generally, the connection is set at c. 75 mm from the top of the slab so that it avoids any clash with the reinforcement within the concrete slab.



Whilst some connections only provide for vertical adjustment, the BALCON™ cast-in connection also offers 35 mm of rotational adjustability (17.5 mm in each direction).

The structural performance of the connection is also a strong reason for its specification; often facilitating the use of brackets at 2.0 m centres or more.

The BALCON™ connection is available with a choice of 4 different horizontal or vertical channels.

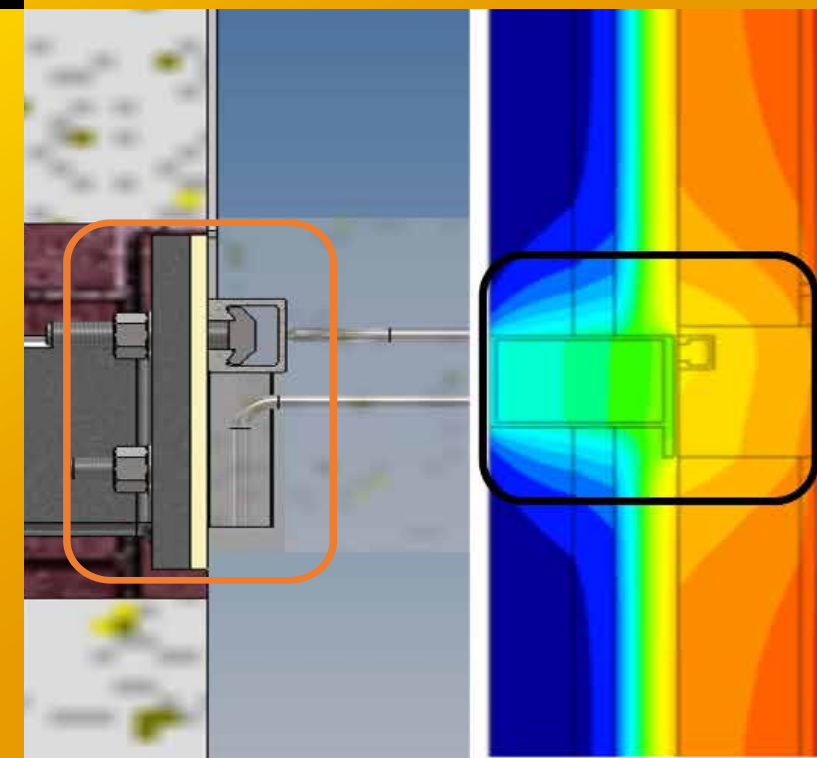
When specifying the BALCON™ 2 connection, this has the added benefit of preventing any vertical creep as a result of serrations in the vertical channel.

THERMAL BREAK

BS 8579 recommends heat gains or losses from a balcony, together with condensation risks, should be considered as part of the whole-building energy performance model.

A thermal break or thermal barrier is an element of low thermal conductivity placed in an assembly to reduce or prevent the flow of thermal energy between conductive materials.

It is good practise for balcony connections to have a thermal break in order to stop the occurrence of cold bridging at junctions illustrated in the thermal model – this area should always be at a temperature in excess of 17 degrees to avoid condensation.



BREAM STREET, FISH ISLAND - STRATFORD, LONDON

LEVOLUX SERENITI BOLT-ON-BALCONIES



BRACKET & INSTALLATION

LEVOLUX MODULAR BALCONY SYSTEMS

The Levolux first fix bracket has also been developed to reflect the three key principles of design:

- 1** Simplicity - providing excellent buildability so that the facade installation can continue without impairment of projecting steelwork.
- 2** Speed - incorporating a hook-on design that allows the balcony to be quickly and securely landed onto the bracket
- 3** Safety - comprising a locking mechanism so that the frame and bracket are interconnected immediately upon it being landed onto the bracket.

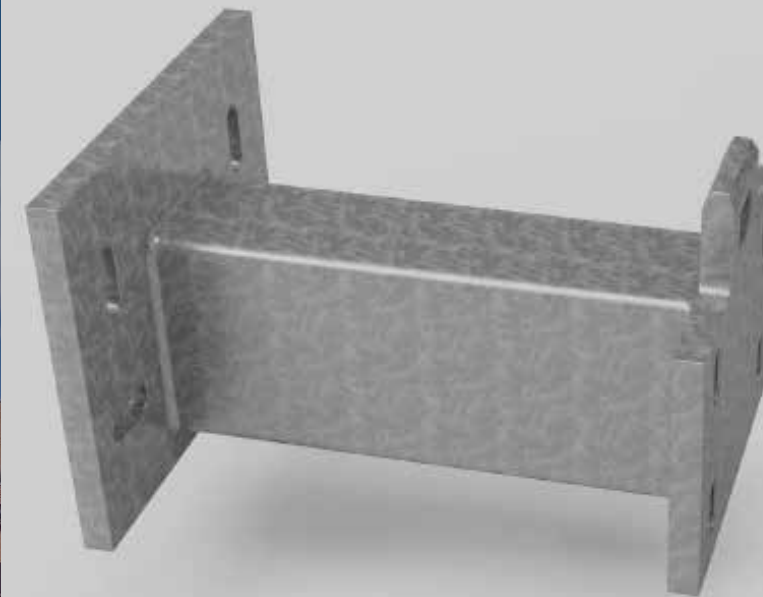
The Levolux first fix bracket / connection interface has been designed based of input from developers, designers and contractors alike ensuring a practical solution is delivered at this critical point of the build.

Key considerations include, but not limited to:

- ✓ Drainage requirement (door/window sill threshold)
- ✓ Firestopping
- ✓ Air Tight barrier
- ✓ Brick Ties
- ✓ Façade Construction / Finish

The Levolux first fix bracket is manufactured from heavy duty structural steel and is simply designed to ensure good detailing:

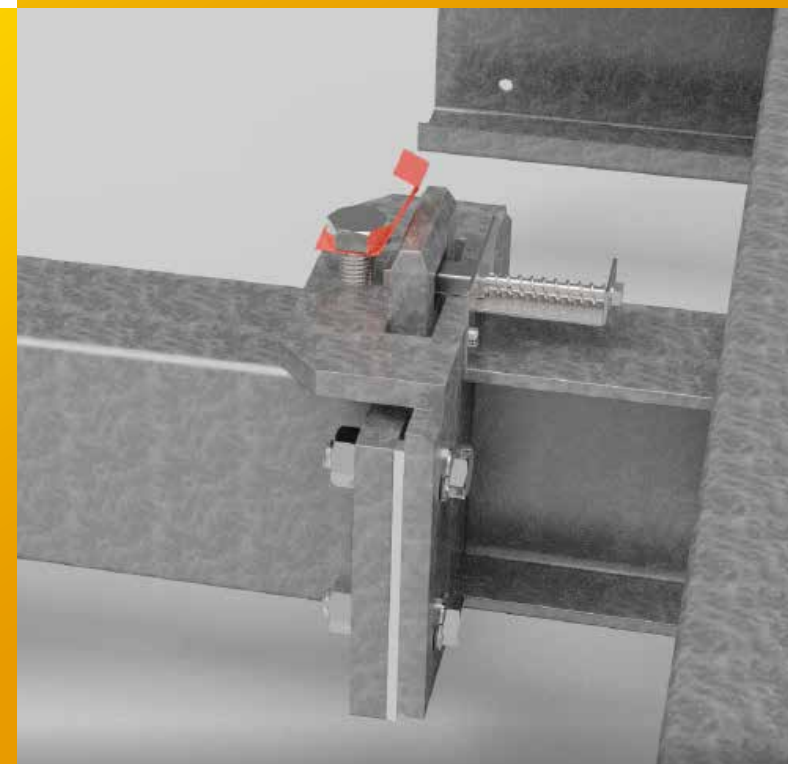
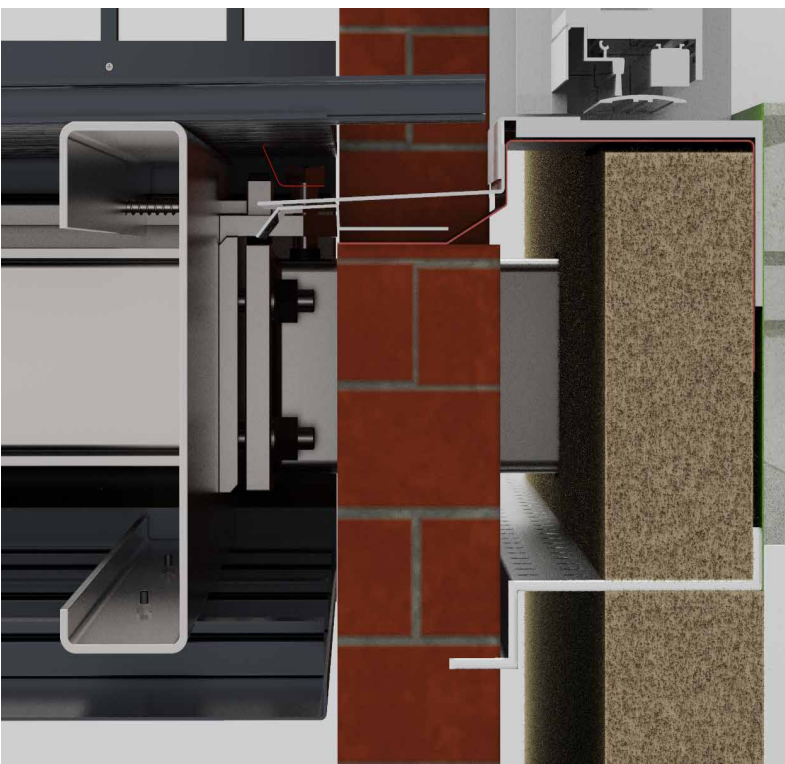
- ✓ A rectangular box section profile spans between plates to ensure simple detailing of fire stops and vapour control layers.
- ✓ The positions of the connection plates are off-centre to ensure that facade contractors can easily carry out their works in the vicinity of the brackets.



Each bracket typically weighs c. 25 kg. This allows them to be installed manually without the need for expensive crane time.

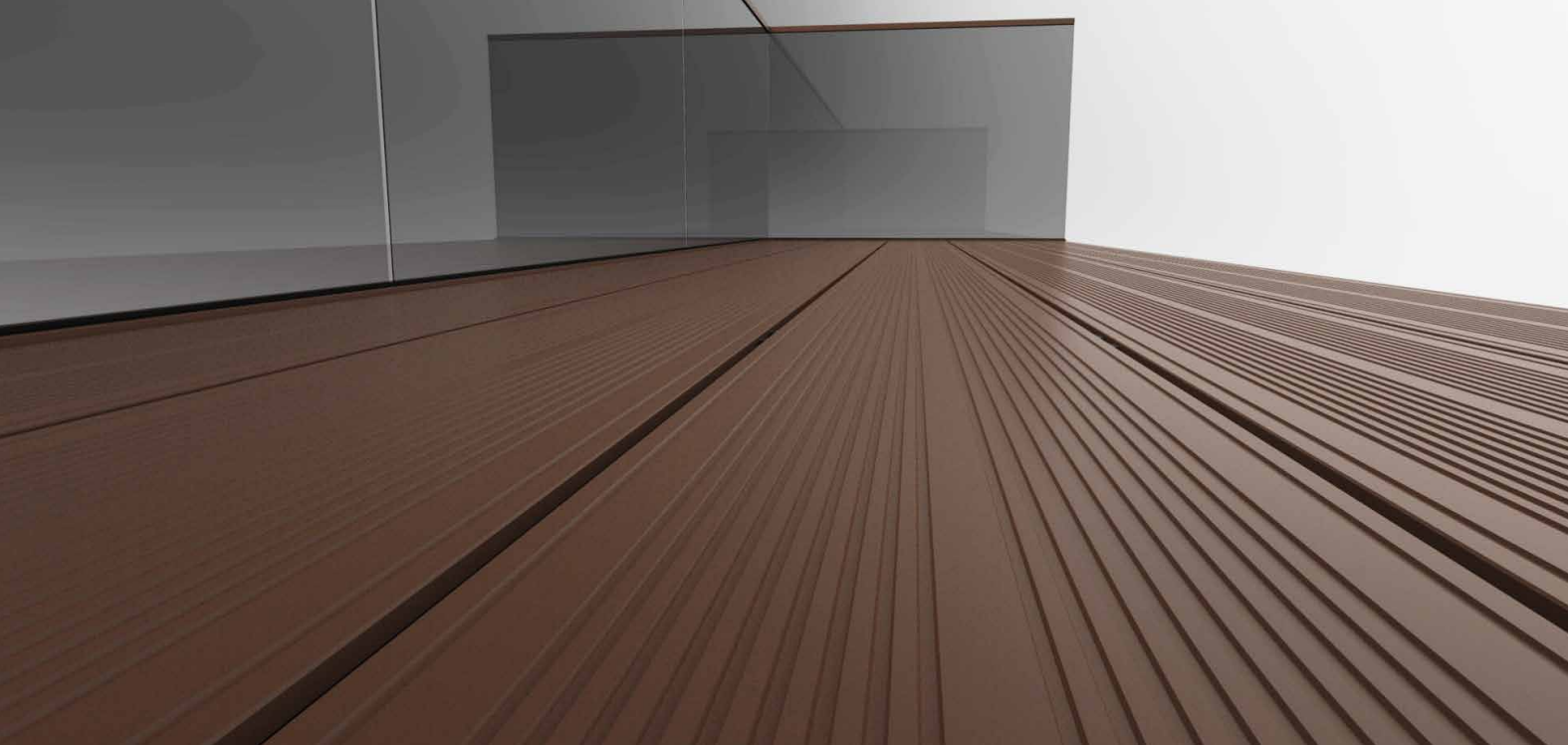
Once installed, the bracket will typically protrude 100 mm from the face of the facade; avoiding fouling any scaffold or mast climbers that may be required to install the facade system.

The 100 mm projection provides sufficient access for the installer to be able to fasten the frame to the bracket from above.



The locking mechanism on the frame is engaged immediately upon landing the balcony onto the bracket. The vertical movement of the red retaining clip will be the sign that the spring bolt has released, locking the balcony to the bracket.

Once the balcony is hooked on and locked in place, it is recommended that connections to one bracket are secured from inside the building. At this point, the crane can be released and the balcony can provide a platform to complete the installation.



KEY FEATURES

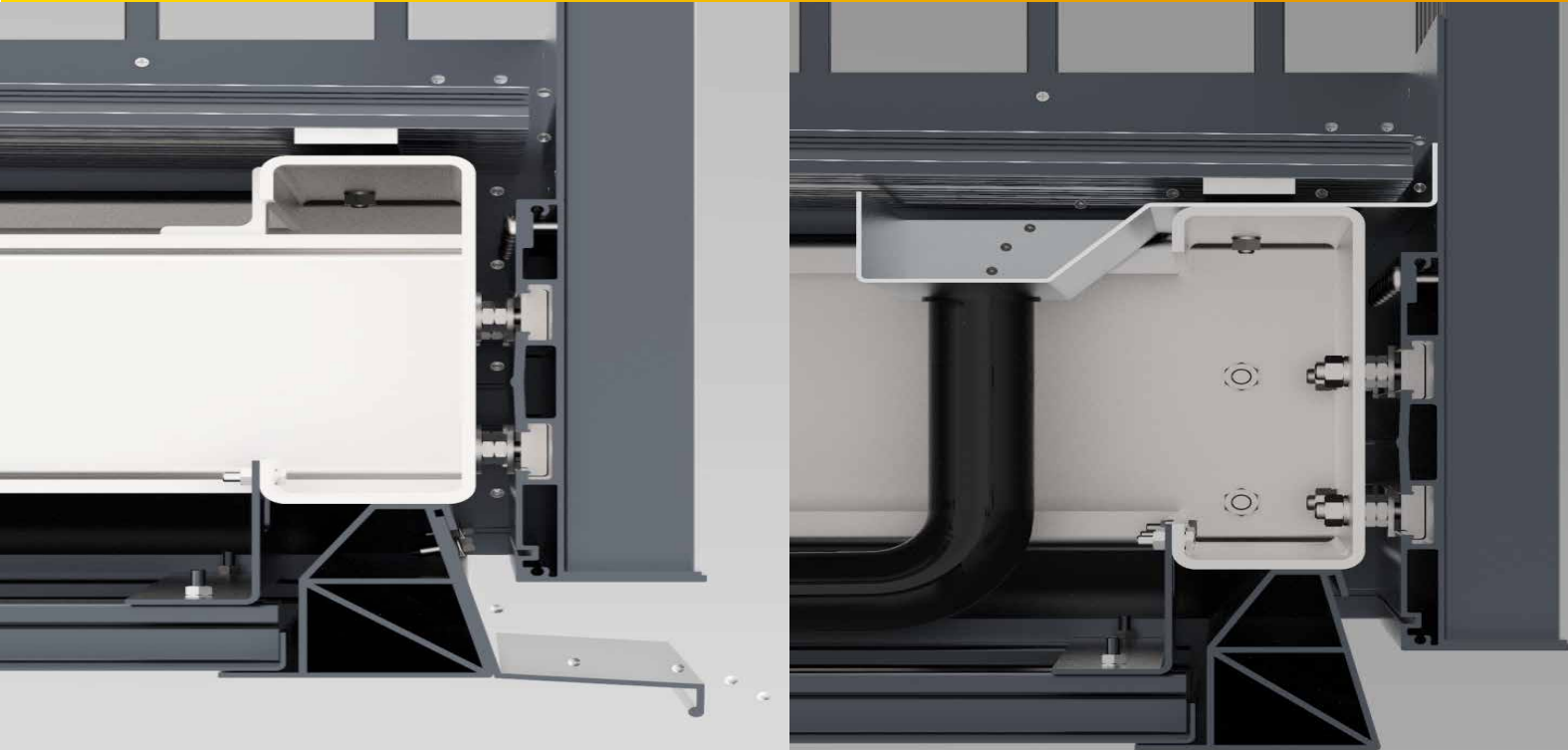
- ✓ Fire rated to class A1 or A2-s1,d0
- ✓ Excellent slip resistance (PTV of 36 or greater)
- ✓ Choice of colours to achieve the desired aesthetic
- ✓ Ease of maintenance due to the use of highly durable aluminium extrusions
- ✓ Choice of profiles to suit the desired drainage strategy:
 - Interlocking planks
 - Individually-laid planks

NON-COMBUSTIBLE PEDESTRIAN SURFACE

Levolux's balcony specifications can include a variety of pedestrian decking options.

Levolux typically recommends the use of its purpose-designed, non-combustible interlocking aluminium pedestrian decking system. Each profile - manufactured from high precision aluminium extrusion - interconnects with its adjacent piece to provide a continuous cover. This ensures that surface water can be conveyed to the drainage point.

Levolux also offers a more traditional pedestrian surface system, with open joints between each individual decking plank. Here, it is imperative that the design incorporates an impervious non-combustible layer to prevent the passage of objects, liquids or fire.



CHOICE OF DRAINAGE STRATEGY

Edge Drainage is permissible for balconies up to 2.5 m in projection. Where the strategy is for Edge Drainage, Levolux's specification ensures compliance with BS 8579 as:

- ✓ Water can be collected on the pedestrian surface and directed to the edge of the balcony.
- ✓ The pedestrian surface has a gentle gradient (1:80)
- ✓ A drip conveys the discharge at least 30 mm from the vertical surface.

Where the strategy involves Managed Drainage, Levolux's balconies comply with BS 8579 as:

- ✓ The interlocking pedestrian surface conveys the surface water to a continuous drainage channel.
- ✓ Drainage outlets and pipes are designed in accordance with BS EN 12056-3.

SERENITI BALUSTRADES

CUSTOM MODULAR BALUSTRADE SYSTEMS

WHY INVEST IN SERENITI BALUSTRADES?

- ✓ Custom designed modular balustrading solutions for use as balustrades on in situ concrete balconies, terraces, podia and walkways.
- ✓ Balustrade material choices include glass, aluminium railings or aluminium panelling.
- ✓ Our balustrades are also available as part of the Sereniti modular balcony system.
- ✓ Our glass balustrade system ensures a contemporary continuous glass appearance without interruptions caused by vertical support posts.
- ✓ A range of glass types and finishes are available to suit your project's specific requirements.
- ✓ Toughened monolithic glass is used with our structural handrail systems to provide a continuous balustrade. Suitable for use above 18m.
- ✓ Laminated glass systems are available, but applications are restricted by Building Regulations to buildings that are lower than 18m.
- ✓ Our aluminium balustrade systems include aluminium railed balustrades – square or tubular balusters – and aluminium perforated screen balustrading.
- ✓ Balustrade fixing channels are engineered to suit your requirements, with options to fix to the top or the face of the structural element.



SERENITI BALUSTRADE GLASS

Toughened Monolithic or Laminated Glass available. Finishes include: Plain, Fritted, Tinted, Etched.

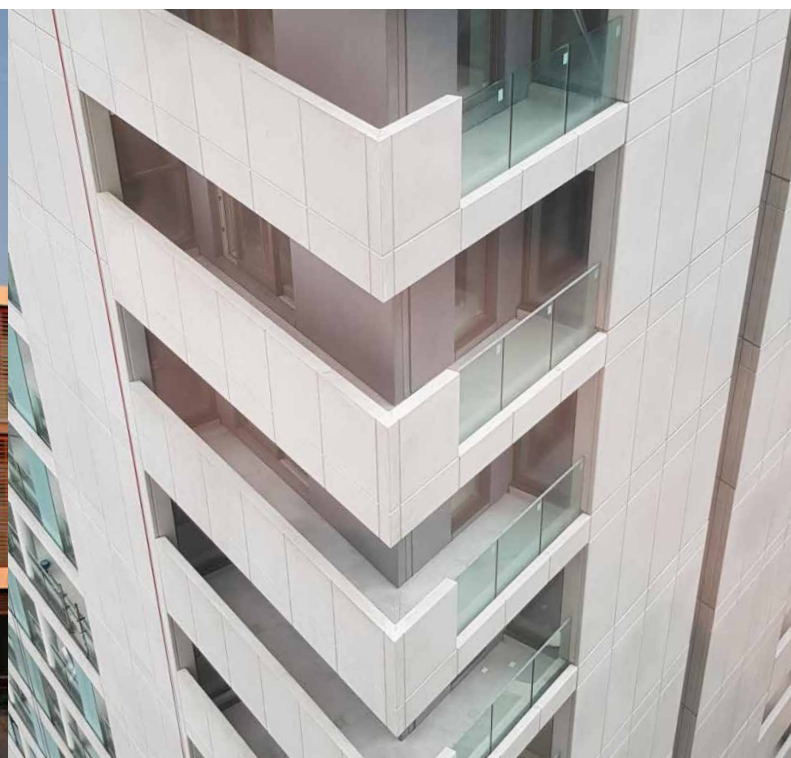
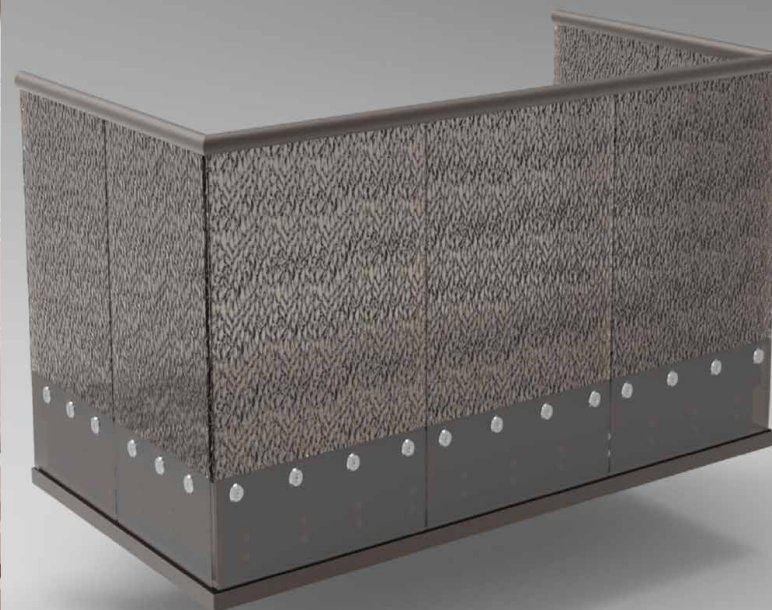
SERENITI BALUSTRADE RAILED

Our aluminium balustrade systems include aluminium railed balustrades – square or tubular balusters – and aluminium perforated screen balustrading.



SERENITI BALUSTRADE PANEL

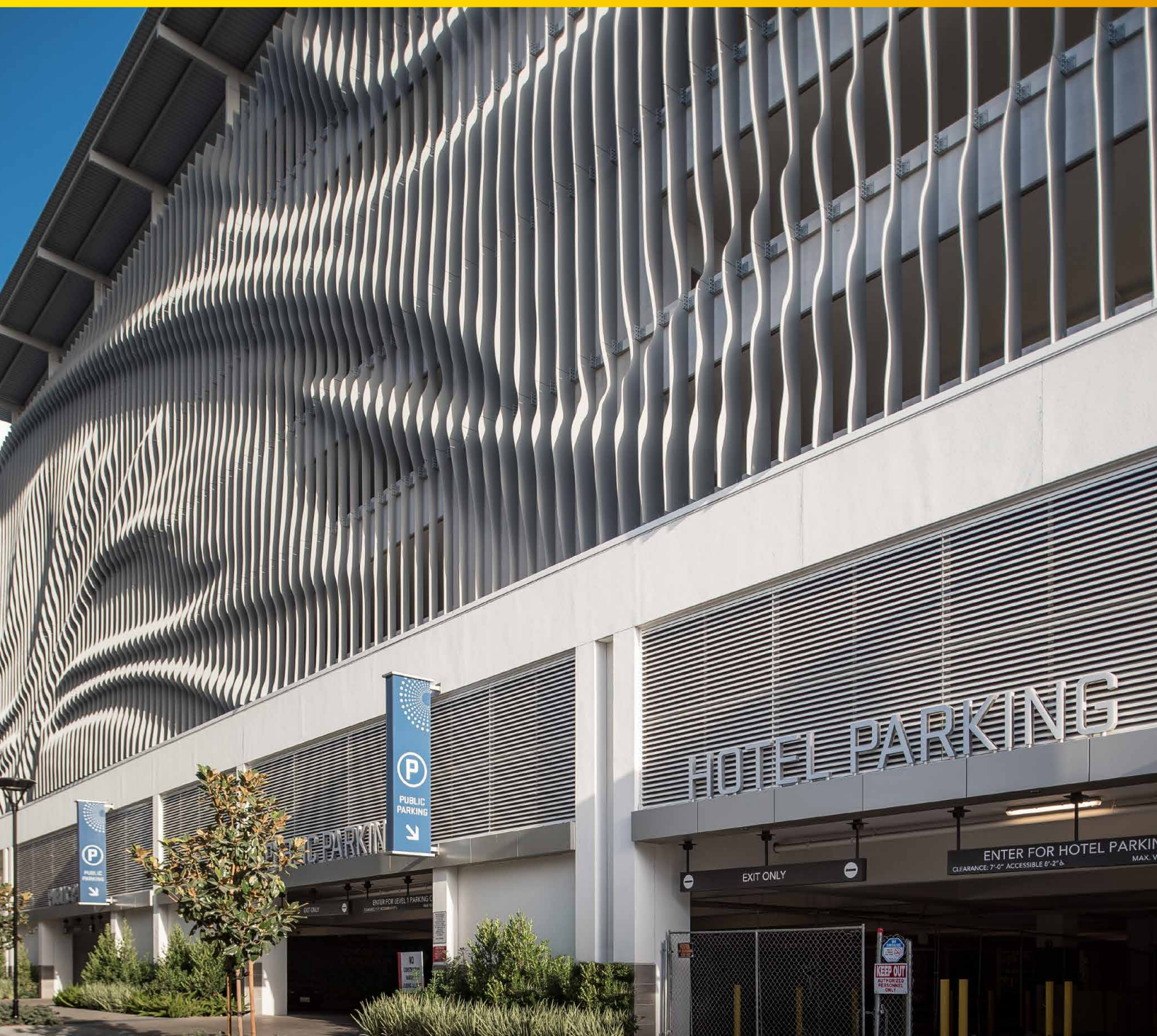
Our Sereniti metal panel balustrades are available in aluminium, patterned or perforated panels.



ARENA CENTRAL - BIRMINGHAM

LEVOLUX SERENITI GLASS BALUSTRADE





LEVOLUX
SOLAR SHADING | BALCONIES | ARCHITECTURAL FACADES

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