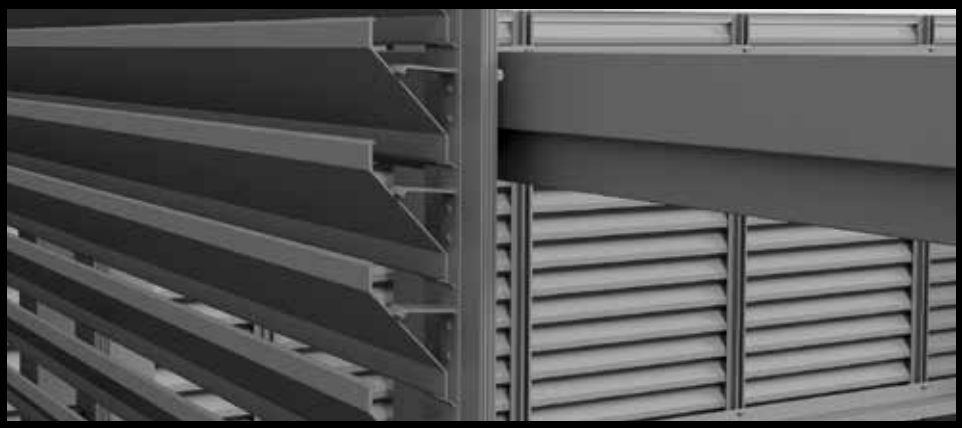
MAPLE

CONTOUR® LOUVRES

BSRIA-certified louvre systems for ventilation and screening purposes



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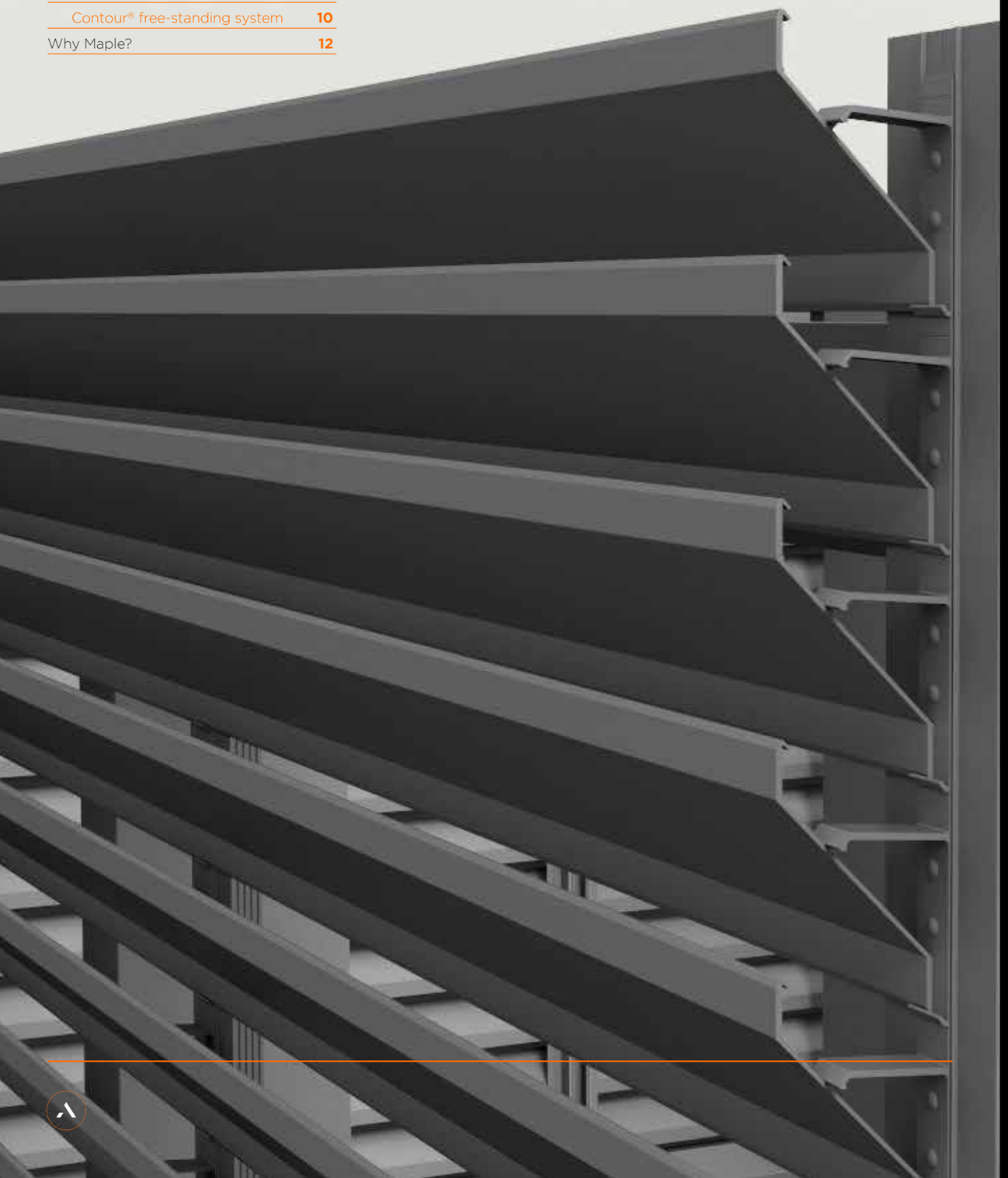


ADVANCED SCREENING AND VENTILATION SOLUTIONS

Louvres are commonly used to conceal heating, ventilation and air conditioning (HVAC) equipment and provide natural ventilation for enclosed plant rooms. Louvres can also be used as architectural elements, especially when enhanced with finishes such as powder-coating or anodising.

Louvre specialists recommend a Class A-rated system to conceal plant machinery and provide high-quality weather protection. Contour PL integrates Maple's durable Pluto free-standing sub-structure with a full selection of Class A weather louvres and Class 2 ventilation louvres to create a lightweight, easy-to-install system designed to meet various project specifications.

SPECIFYING LOUVRES – GUIDING PRINCIPLES

Airflow and weather protection

Louvres play a critical role in regulating airflow, except when specified purely for visual screening. As air intake velocities increase, pressure-drop rises, restricting airflow and causing equipment to overheat, which makes certifications declaring airflow coefficients important during the specification process. For projects requiring protection from wind-driven rain, weather louvres tested to EN 13030 provide effective airflow and rain defence, mitigating water ingress risks with bespoke designs.

Acoustics

When noise emission is a concern, acoustic louvres should be considered. These louvres are often required to reduce noise from plant rooms or loud machinery, especially in areas near pedestrian walkways or rooftop terraces. Their depth, typically between 150mm and 600mm depending on performance, and weight should be considered early to ensure adequate support structures are in place.

Security requirements and other accessories

Some projects, such as government or military buildings, data centres and power plants, require robust solutions to meet heightened security demands. Our louvres are installed securely with clips to ensure stability and durability. Accessories such as bird guards, insect mesh, blanking panels, dampers and louvred doors can be added, though guards may impact airflow performance and should be evaluated accordingly.

Design and appearance

Louvres have traditionally been viewed as functional systems providing ventilation, weather protection and screening. However, architects now design louvres not only for performance but to enhance a building's aesthetics. While horizontal blades are the most common, vertical blades offer an alternative look with equally effective protection. Coating options such as anodising and powder-coating provide further design flexibility, with a wide range of colours and finishes available, along with coatings that offer enhanced durability.

CONTOUR®
VENTILATION LOUVRE

Modular and efficient-to-install louvre system, where natural ventilation and protection against water ingress is required in plant and HVAC machinery rooms.

1. Choice of louvre blade pitch options: 50mm, 75mm, 100mm
2. Choice of mullions, depending on system requirements: 11mm, 40mm (standard), 70mm

Airflow performance

System	Coefficient of entry without mesh	Airflow class	Nominal free area (%)	Max system depth mm*
VL50	0.269	3	54.2	100
VL75	0.310	2	58.3	130
VL100	0.315	2	60.1	155

*** Maximum system depth when fixing back to concrete with 40mm standard mullion**

Weather performance

System	Class	Effectiveness	Velocity
VL50	C	84.0%	Up to 2 m/s
VL75	C	83.6%	Up to 2 m/s
VL100	C	80.1%	Up to 2 m/s

VL50

Used where good airflow and weatherability are both required. Aesthetically positioned at lower level where the smaller pitch can be more visually appreciated. Small overall depth allows more application freedom.

Louvre coefficient: 0.342
Louvre coefficient with mesh: 0.269
Nominal free area: 54.2%

VL75

Used where especially good airflow is required and weatherability allows for a little water ingress under storm conditions. Aesthetically positioned at either high or low level. A good all-round blade.

Louvre coefficient: 0.44
Louvre coefficient with mesh: 0.31
Nominal free area: 58.3%

VL100

Used where especially good airflow required and weatherability allows for a water ingress under storm conditions. Aesthetically positioned at either higher level.

Louvre coefficient: 0.45
Louvre coefficient with mesh: 0.315
Nominal free area: 60.1%

SPECIFICATION

Blade pitch	50mm, 75mm, 100mm
Vertical support (mullion)	Aluminium 6063 T6 40mm deep as standard
Mullion fixing centres	1,225mm
Flashing	Aluminium 6063 T6
Fixing details	Louvre blade clips to mullions, attached to cleats fixed back to suitable grounds
Cleats	Bespoke to suit requirements
Blade clips	Aluminium 6063 T6
Coating	Polyester powder coated (60µm). Anodised (25µm). Available in RAL/BS standard colours

CONTOUR® HIGH-PERFORMANCE LOUVRE

Weather louvre system with a patented aerodynamic blade profile that can be easily converted from single-bank to double-bank to deliver Class A performance.

1. **Choice of louvre blade pitch options: 50mm, 75mm**
2. **Choice of mullions depending on system requirements: 11mm, 40mm (standard), 70mm**

Airflow performance

System	Coefficient of entry without mesh	Airflow class	Nominal free area (%)	Max system depth mm*
HP50	0.288	3	52	180
HP75	0.303	2	58	180

Weather performance

System	Class	Effectiveness	Velocity
HP50	A	99.1%	Up to 2 m/s
HP75	B	96.2%	Up to 1.5 m/s

HP50

High-performance weather blade used where economy outweighs weatherability at high-volume air flow.

Louvre coefficient with mesh: 0.288
Nominal free area: 52%

HP75

High-performance, double-pass vent louvre blade with the highest possible specification of combined weatherability and airflow. Zero vision through louvre.

Louvre coefficient with mesh: 0.303
Nominal free area: 58%

SPECIFICATION

Blade pitch	50mm, 75mm
Vertical support (mullion)	Aluminium 6063 T6 40mm deep as standard
Mullion fixing centres	1,225mm
Flashing	Aluminium 6063 T6
Fixing details	Louvre blade clips to mullions, attached to cleats fixed back to suitable grounds
Cleats	Bespoke to suit requirements
Blade clips	Aluminium 6063 T6
Coating	Polyester powder coated (60µm). Anodised (25µm). Available in RAL/BS standard colours

CONTOUR® SCREENING LOUVRE

An advanced rooftop plant screening system with a mullion design for long louvre spans. A highly versatile Maple system with different louvre, flashing, corner type and mullion design options.

1. **140mm pitch louvre blade inverted for screening requirements**
2. **Choice of mullions depending on system requirements: 11mm, 40mm (standard), 70mm**

SPECIFICATION GUIDANCE

When specifying a system for screening purposes, performance and testing data isn't as critical for ventilation and weather protection, especially on rooftop locations. On rooftop terraces or public locations, screening louvres should often be combined with acoustic solutions to absorb soundwaves from loud HVAC plant and machinery.

Maple Façades are NBS Chorus specification writing partners.

SL140

Screening louvre designed for purely aesthetic purposes, to hide HVAC machinery.

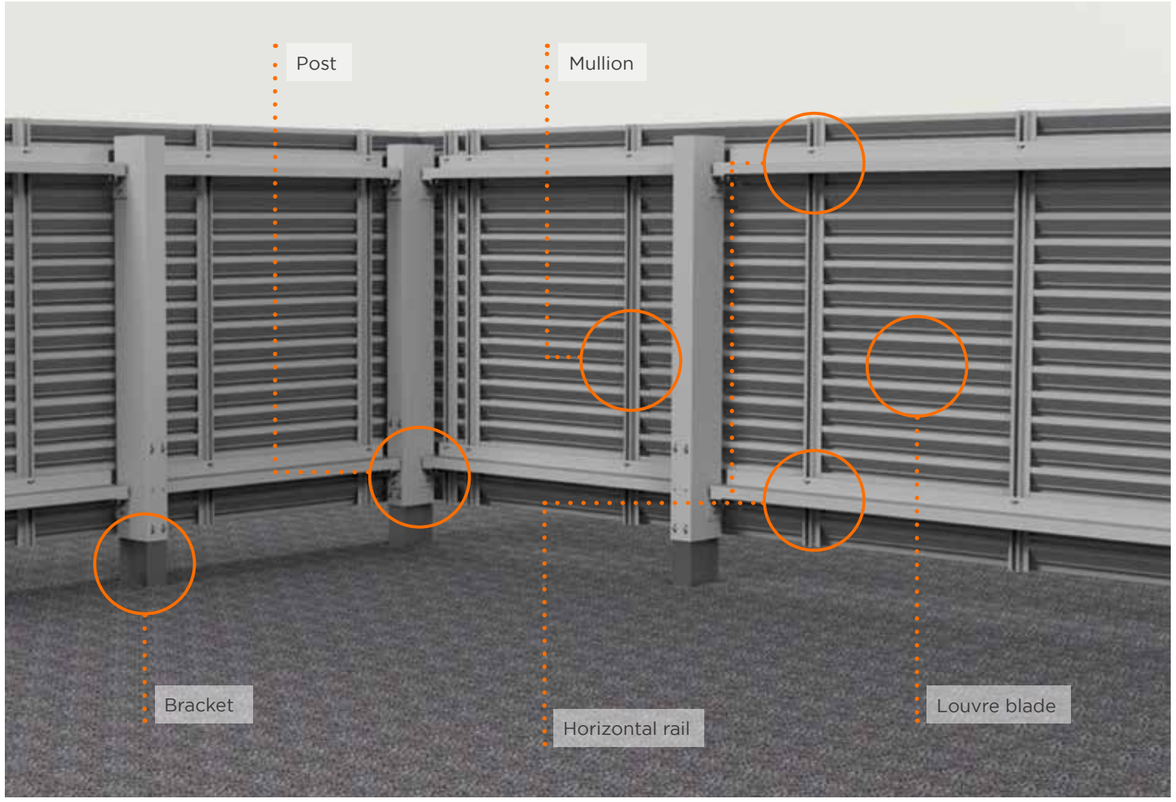
Louvre coefficient: 0.167 CD
Nominal free area: 30.7%

SPECIFICATION

Blade pitch	140mm
Dimensions (blade size)	3,000 x 51 x 140 (mm)
Vertical support (mullion)	Aluminium 6063 T6 40mm deep as standard
Mullion fixing centres	1,225mm
Flashing	Aluminium 6063 T6
Fixing details	Louvre blade clips to mullions, attached to cleats fixed back to suitable grounds
Cleats	Bespoke to suit requirements
Blade clips	Aluminium 6063 T6
Coating	Polyester powder coated (60µm). Anodised (25µm). Available in RAL/BS standard colours.

CONTOUR® FREE-STANDING SUPPORT

An advanced rooftop plant screening solution with a mullion design for long louvre spans. A highly versatile Maple system with different louvre, flashing, corner type and mullion design options.



The Contour® free-standing support system is lightweight and easy to install (an important consideration for rooftop locations) and fixes directly to the building sub-frame. Viewed from the ground, it's a sleek system of powder-coated or anodised aluminium louvres. Behind the scenes, there's an advanced sub-structure of robust posts, mullions and fixings.

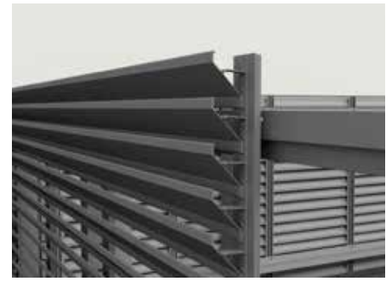
SYSTEM COMPONENTS

Brackets

Galvanised mild steel brackets secure posts and mullions down and are typically spaced at 3m intervals for optimal support. Brackets can also be powder-coated in various RAL colours.

Integral support system

Vertical aluminium mullions and rails offer strong, concealed support for louvre blades in exposed areas.



Louvre blades

Choose from a selection of louvre blades from the Contour range depending on project requirements.

SPECIFICATION

Blade pitch	Contractor's choice from Contour range
Dimensions (blade size)	Subject to specific blade choice, can span up to 3m
Vertical support	Aluminium 6063 T6
Vertical support fixing centres	1,000mm
Fixing details	Louvre blade clips to mullions, attached to cleats fixed back to suitable grounds
Base plate and post	Galvanised mild steel S275 or similar
Cleats	Bespoke to suit requirements
Blade clips	Aluminium 6063 T6
Coating	Polyester powder coated (60µm). Anodised (25µm). Available in RAL/BS standard colours.

WHY MAPLE?

Maple are experts in aluminium louvre projects and have been helping contractors, architects and client organisations across the UK deliver challenging projects for the last four decades. We thrive on bringing visions to reality through a combination of design logic, technical know-how and thoughtful planning with superior products and exceptional service.

PASSION

We care about your project as much as you do and will never leave a project until it is completed. We thrive on all customer feedback and are continuously striving for better solutions.

SUCCESS

We ensure that your project's design intent is protected through early collaboration and our Proven Process helps to keep your project on track.

EXPERTISE

We're experts in the end-to-end process of an aluminium brise soleil project from concept to completion.

THE MAPLE WAY®

PROVEN PROCESS

PROVEN PROCESS

Maple's Proven Process describes the 24 critical stages and in-depth methodology that support the five main building blocks of every successful project, and provide tangible benefits for clients – from inception to completion.

MAPLE

Maple is a leading designer, manufacturer and installer of rainscreen cladding, 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.

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