

SCREEN



APPROVED INSTALLER

SYSTEM HANDBOOK

ESTABLISHED IN 1864 AND ONE OF THE OLDEST COMPANIES
IN THE MIDLANDS

The name Ash & Lacy is synonymous with Product Innovation and Engineering Excellence, keeping us at the forefront of building systems engineering and technology.

Thanks to progressive development of our own manufacturing capabilities, construction professionals can procure complete and effective **envelope solutions** from a single-source.

Our extensive, state of the art product range is fully supported by our unrivaled in-house technical and **design expertise**, freely provided at every stage of planning and construction, together with our full site warranty schemes.

From **Standing Seam Roof** and Rainscreen Cladding **Façade** and **Screen** systems, architectural **Fabrications**, **Spacer System** and **Fixings** range, through to our most recent **Steel Frame** system innovation, all products undergo rigorous testing. They consequently offer exceptional performance and value, supported by best in class service and technical support.

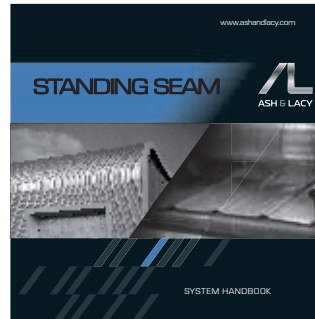
This system handbook provides extensive information on our **Screen Systems** that complements our range of product categories or can be used with other internal and external building systems. As part of a series of technical handbooks, this publication gives you advice on how to order, supply and install Ash & Lacy **Screen Systems**.



A fully engineered fast-track solution perfect for the enclosure of open spaces such as car parks and stair towers, improving aesthetics and providing a permanent and impenetrable barrier.

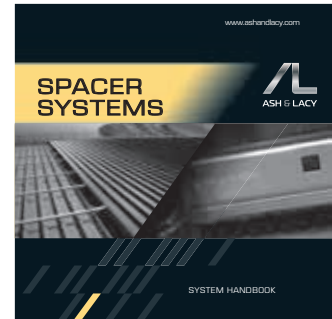
These component supply or fabricated systems transform virtually any structure due to its availability in a wide range of attractive materials, patterns and finishes. Straight or curved panel options, including the use of different panel types and finishes in the same elevation, provide tremendous architectural design versatility.

State of the art custom built in-house manufacturing facility offers flexibility to best suit site requirements and restrictions, offering tailored solutions to specific architects requirements.



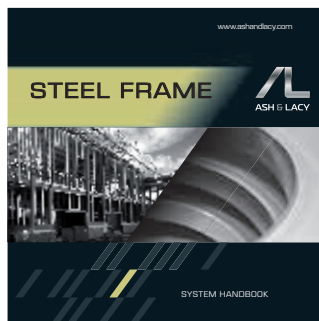
A superior quality raised standing seam roofing and cladding system that enhances aesthetics and provides a weather tight joint above rainwater flow. The perfect choice for an exceptionally wide range of new build and refurbishment roofing and vertical façade applications from residential, industrial, commercial and public projects to modular new build.

Available in a range of cover widths and a generous palette of material and colour finishes for optimum architectural design flexibility. Can also be specified with a steel frame solution, designed on a project by project basis, to form a pitched/curved roof above new or existing flat roofs.



AshGrid is an integral part of our standing seam system, and was the UK's first spacer support system of its type. We continue to lead through innovation, with the unique Safe-Loc detail incorporated within the AshGrid bar. Our spacer systems are varied in depth to deal with varying U value requirements, with bracketry spacing being adjusted depending upon the project specific loading requirements. This makes site installation safer and more efficient through engineered project design. AshGrid can also be supplied with our engineered ABV brackets to provide additional strength where deeper more robust constructions are needed.

Ashgrid can also be used with a wide range of other cladding products. Assistance can be offered determining bracket support centres and U value build up requirements.



The cold rolled Steel Frame range offers a structurally robust and dimensionally stable, warm spaced wall construction that can be used with the majority of external finishes, across most applications.

This component supply, structural stud & track system, is available to suit infill, oversail and loadbearing systems, which provide early weather protection capability to the building, and offer many advantages over traditional construction methods.

State of the art custom built in-house manufacturing facility offers flexibility to best suit site requirements and restrictions, offering components either cut to length or standard stock lengths, both of which can be individually marked allowing easy identification, thus resulting in faster installation.



Our comprehensive selection of roofing and cladding fixings provides quality solutions for almost any application. The range has evolved through extensive research and development, on-site experience and extensive 'real world' testing and engineering.

As a result Ash & Lacy offer unrivalled product quality and performance, with stainless steel, carbon steel and colour headed options, providing the ultimate fixing solution for light/heavy section and timber applications.



Our bespoke perimeter flashings and fabrications are available in a range of finishes and materials ranging from pre-coated steel to PPC aluminium to perfectly complement our standing seam system or facade panels. We can also provide a full range of ancillary components, such as fabricated stop ends and corner units.

We offer a similarly tailored service with our rainwater management components. Choose from a wide selection of materials from coated galvanised steel to high quality membrane lined options. Our range of ancillaries includes outlets, downpipes, bracketry and fabricated stop ends. A gutter calculation service is available, following order placement.



The Ash & Lacy Rainscreen Cladding Façade System out-performs other types of wall construction at an economic whole life cost, with low maintenance requirements and sustainable material options, backed by our renowned technical and fabrication expertise.

Including full through wall construction system this multi-layer system can be fabricated from ACM (Aluminium Composite Material), solid aluminium, Cor-Ten steel, copper or zinc to create a ventilated 'cold' façade fixed to an adjustable aluminium carrier system.

Choose from a wide selection of vertical and horizontal joint configurations in a variety of colours and finishes.

PRODUCTS

EXPANDED MESH

Now widely used as an architectural façade, our range of Expanded Mesh patterns, materials and colours can now be seen on schools and office buildings as well as the more conventional car parks and plant room enclosures. Available in most materials, you have a wide and varied palette to choose from, fully supported by our excellent production and technical teams.



Deaconess House, Edinburgh

PERFORATED METALWORK

With a wide range of uses from architectural staircases to bespoke façade solutions, the Ash & Lacy Perforated Metalwork range offers you the ultimate in flexibility and choice. Want something unique? Contact our Sales Team for details of special patterns where the only limit is your imagination.



Christchurch School, Burton

LOUVRE BLADES

To complement our range and offer you a single source for supply, design and delivery, we can offer a range of Louvre Blades to enhance your design. With the same range of colours and finishes as our Expanded Metal and Perforated Metalwork products, we have a blade profile to suit your project.



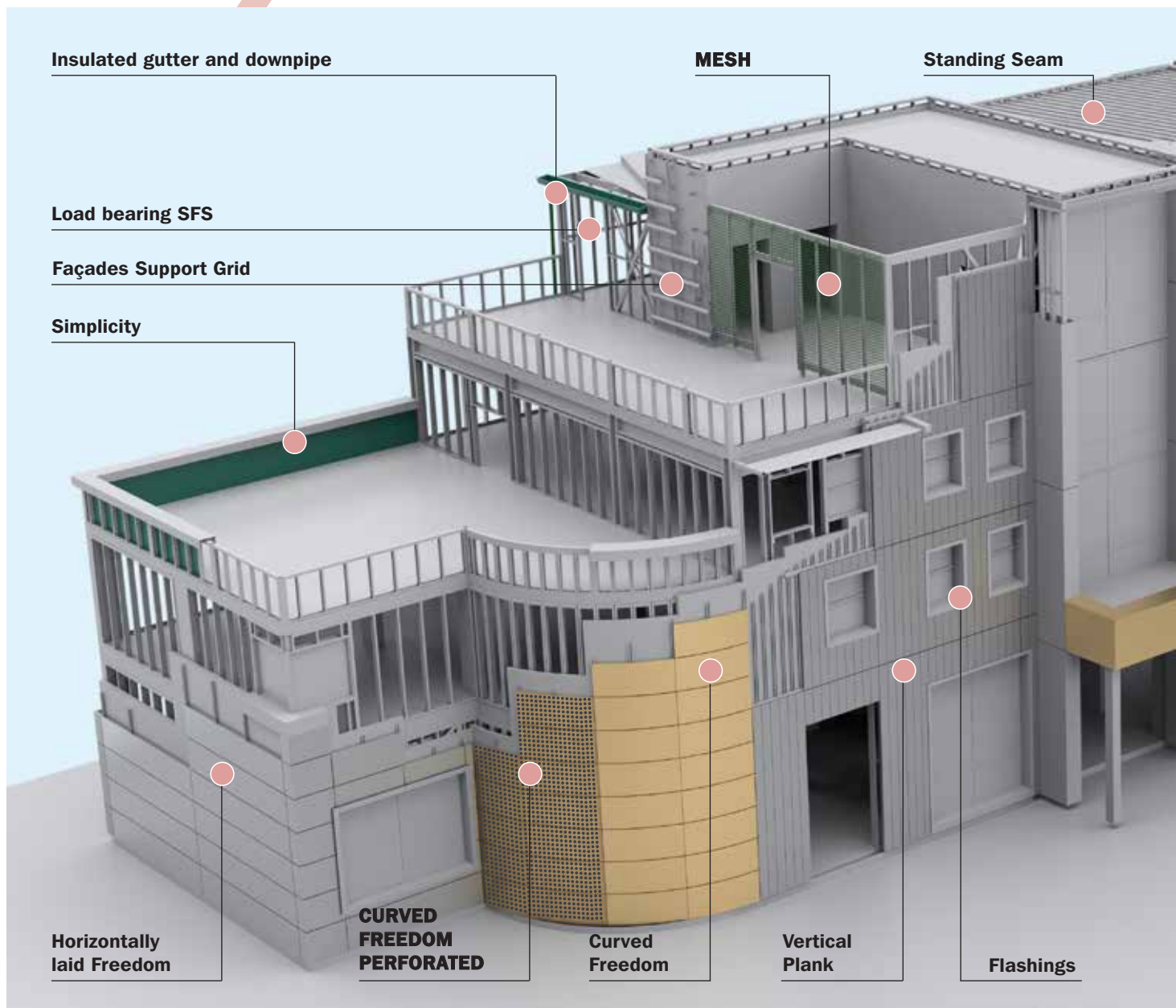
Southwater, Telford

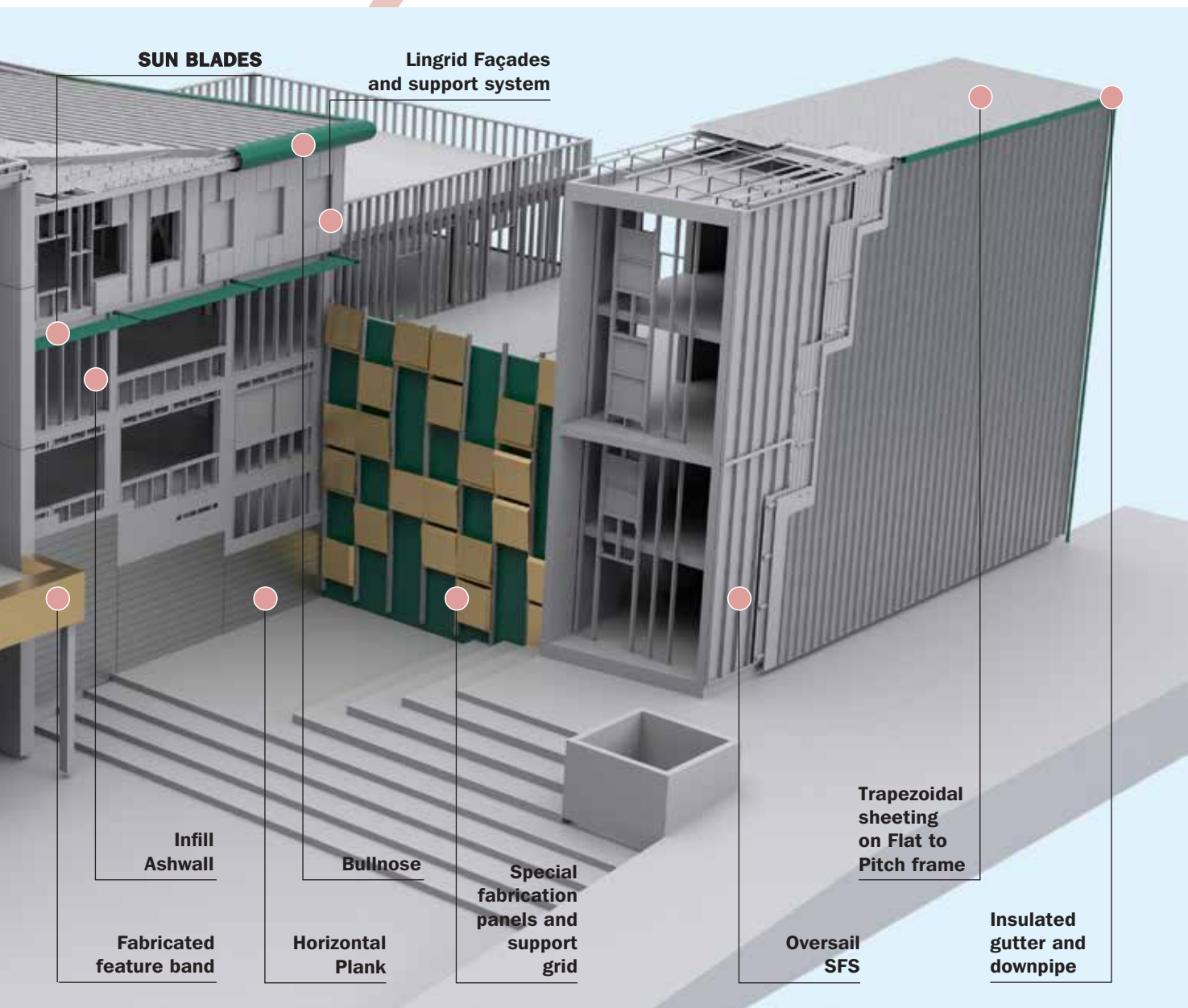
BESPOKE SOLUTIONS

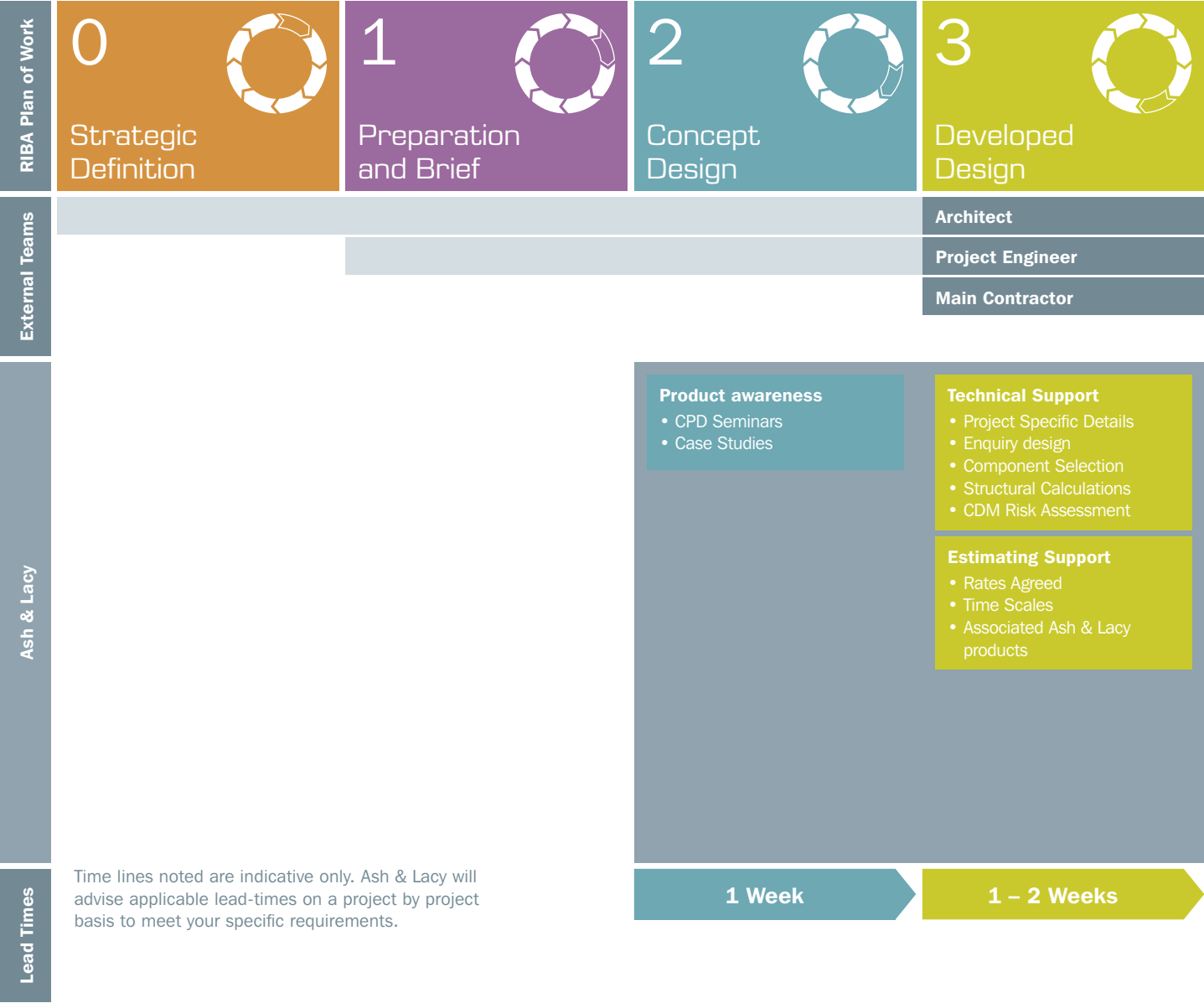
All the products in this Handbook are compatible with our façade systems and can be adapted to suit your project specific needs. Please ask our Sales Team for more information on how Ash & Lacy can turn your vision into a cost effective product.



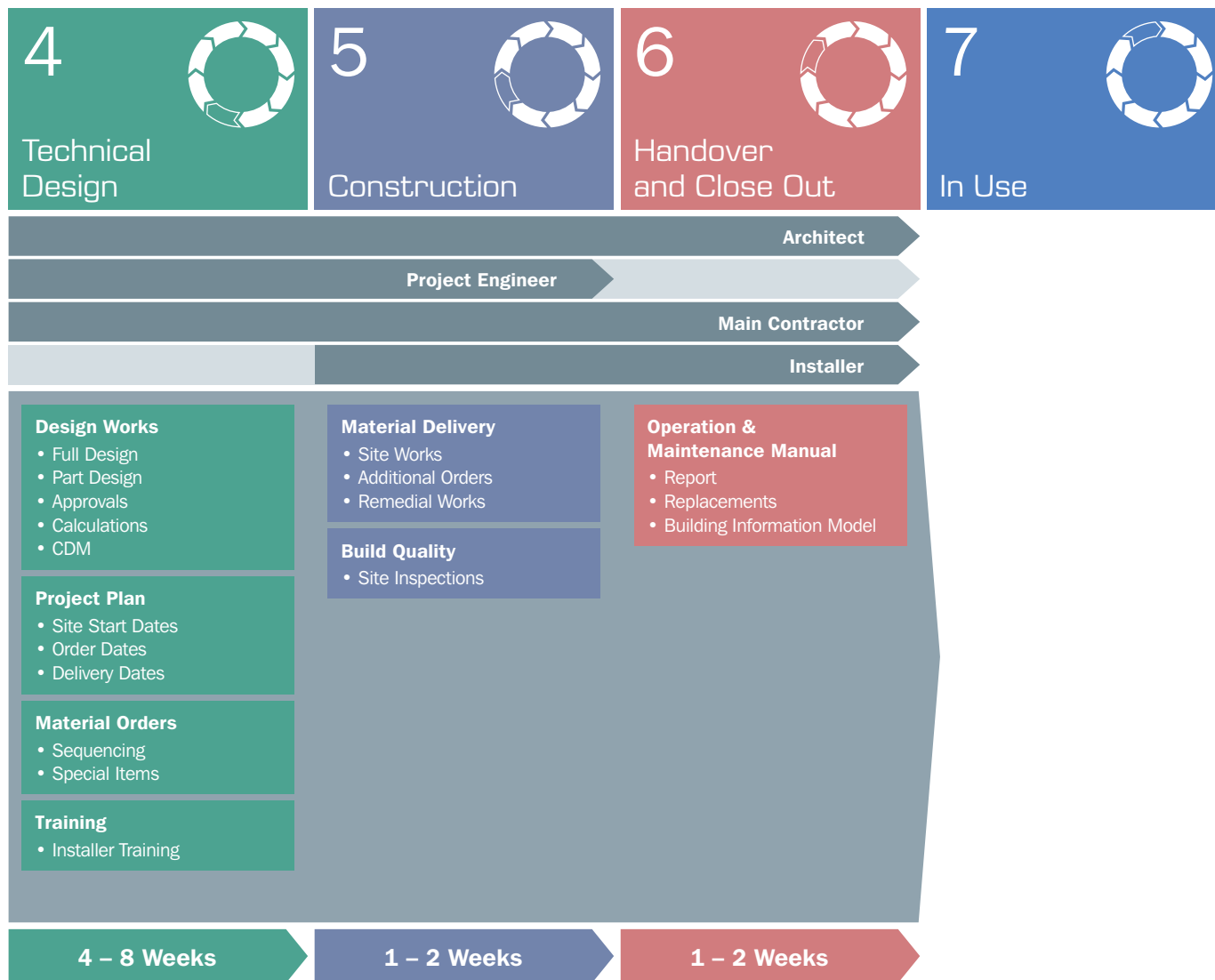
Kitchen Garden, Cambridge







SCREEN





Expanded Mesh Material Palette



Aluminium
1.5 - 5.0mm Grades 1050 & 5005



Mild Steel
1.5 - 3.0mm



Cor-Ten Steel
1.5 - 3.0mm Cor-Ten A



Stainless Steel
1.5 - 3.0mm

Various other metals are available. Please contact Ash & Lacy for further details.

Finishes

Anodised

ANO

Powder Coated

PPC

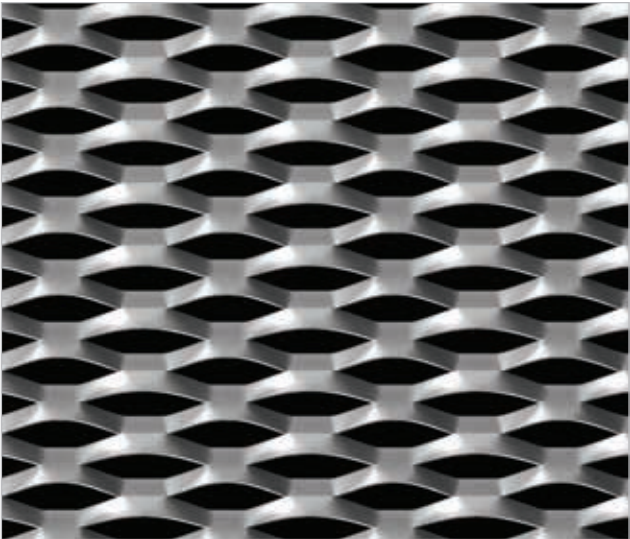
Galvanised

GALV

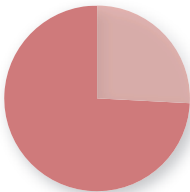
Mill Finish

MF

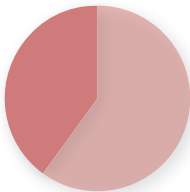
Our products can be treated with the appropriate finish for your budget and project.



Screen - 203/76/30



Visual Area 26%



Open Area 60%

AL

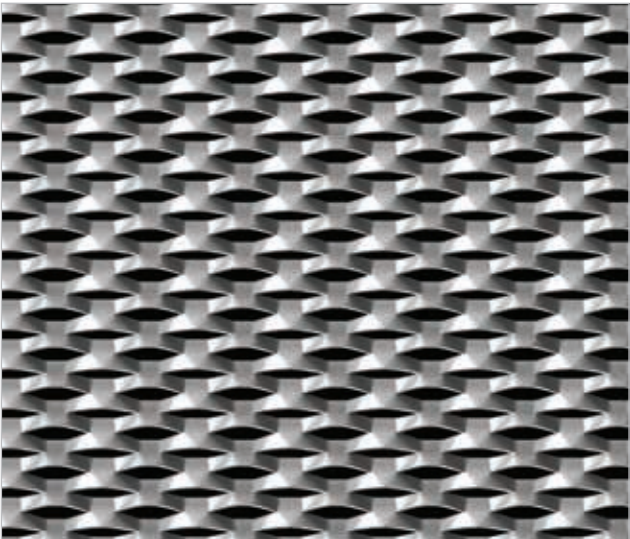
1.5 / 2.0 / 3.0

ANO

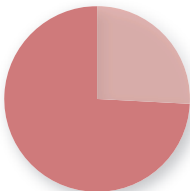
PPC

MF

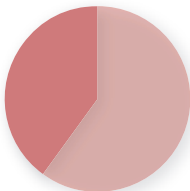
Maximum sheet size: 1500 x 3,500mm



Screen - 114/48/20



Visual Area 26%



Open Area 60%

AL

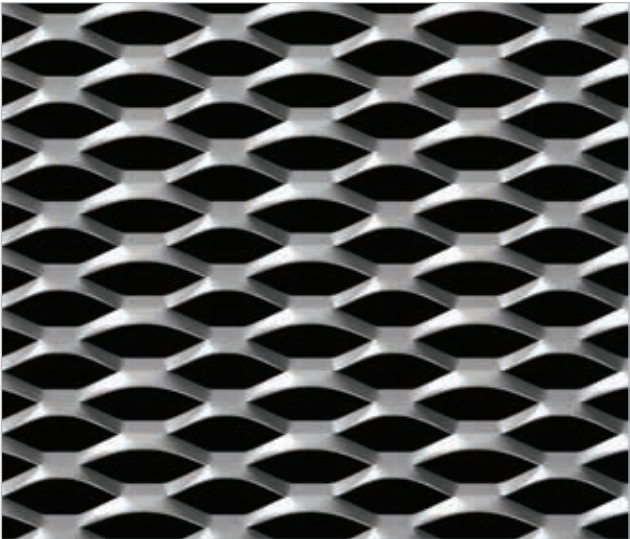
1.5 / 2.0 / 2.4

ANO

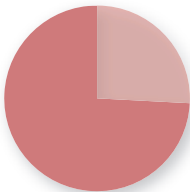
PPC

MF

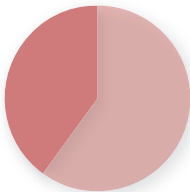
Maximum sheet size: 1500 x 3,500mm



Screen - 203/76/20



Visual Area 26%



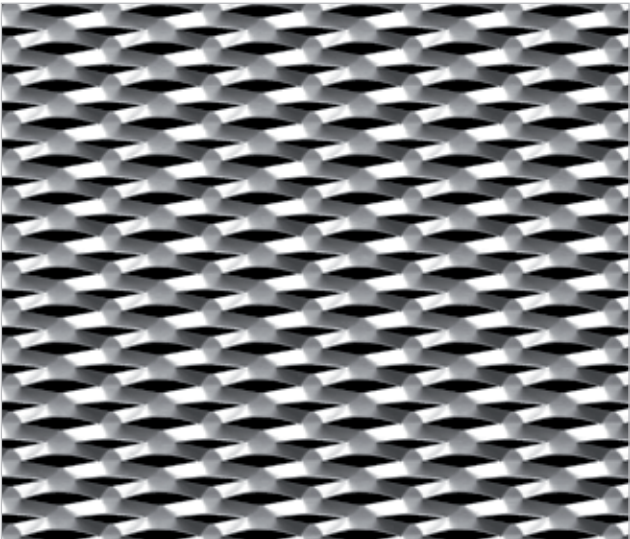
Open Area 60%



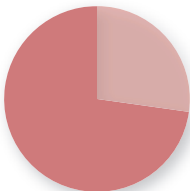
2.0 / 3.0



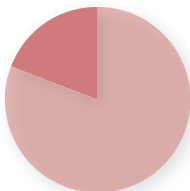
Maximum sheet size: 1500 x 3,500mm



Screen - 122/50/18



Visual Area 28%



Open Area 81%

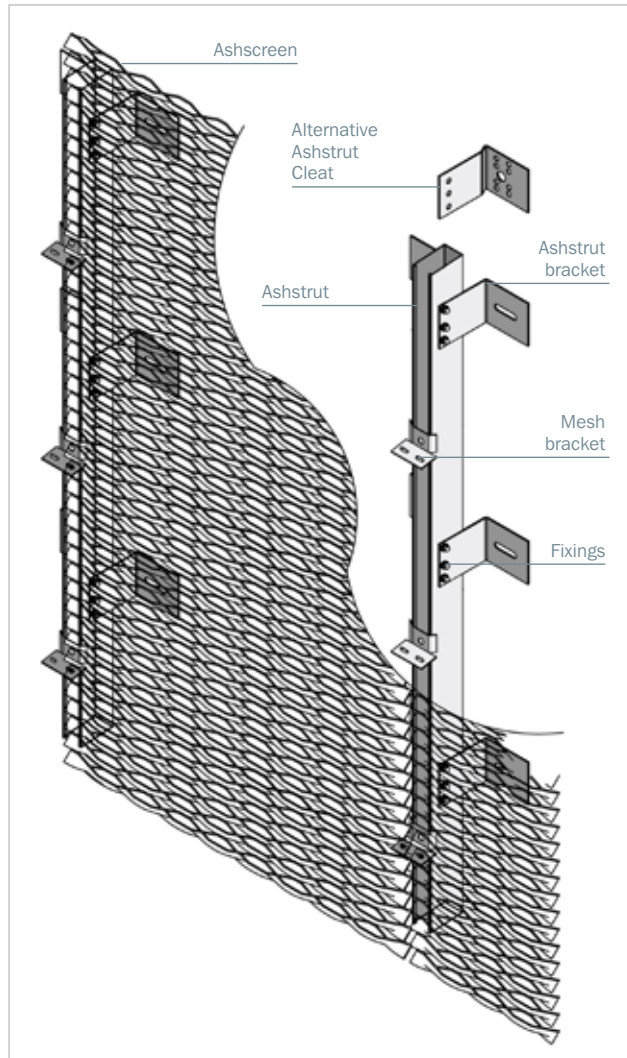


2.0 / 3.0

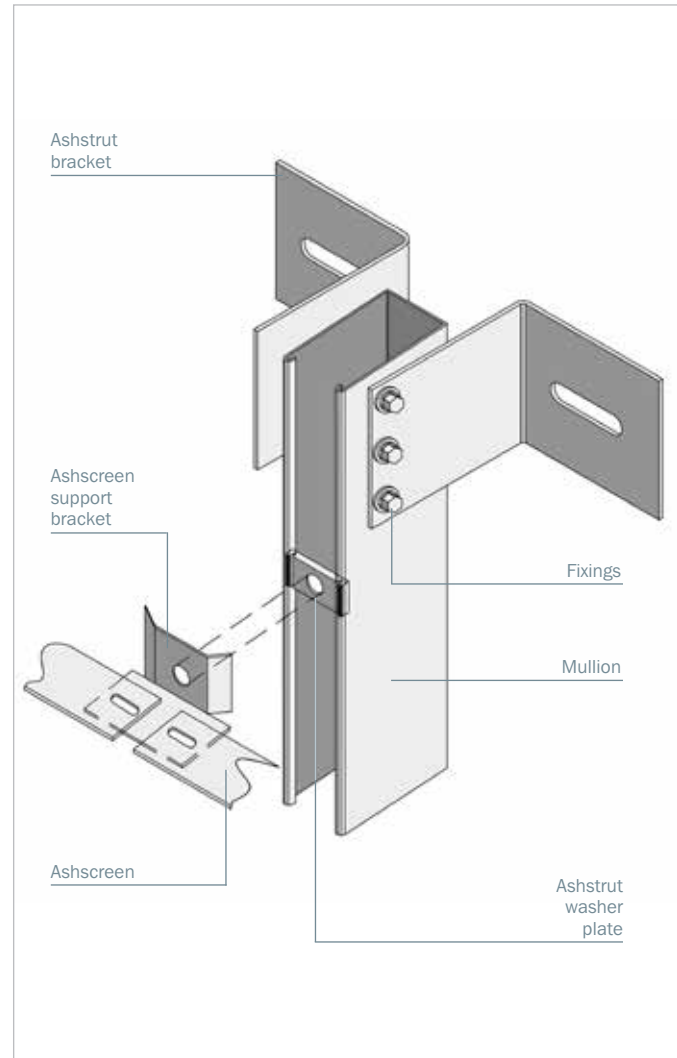


Maximum sheet size: 1500 x 3,500mm

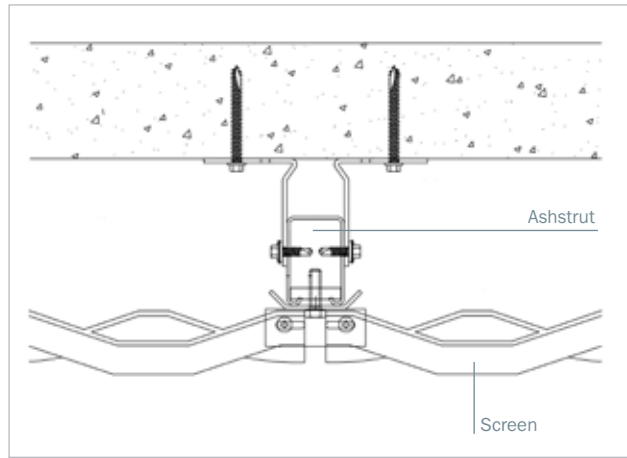
Expanded Isometric



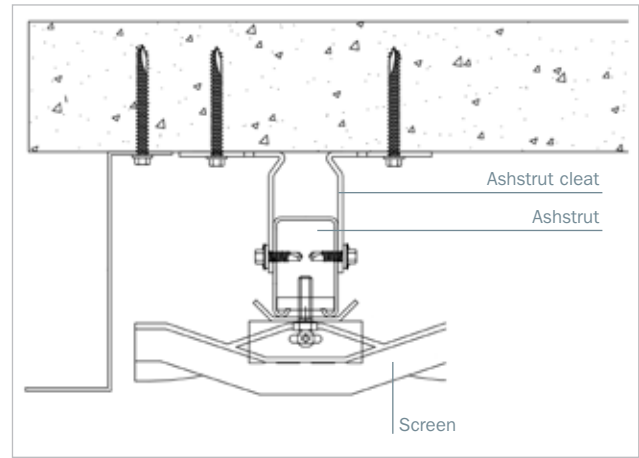
Isometric assembly



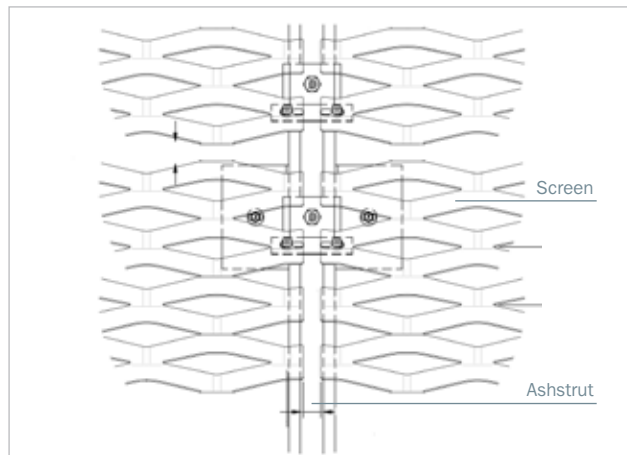
Joint detail



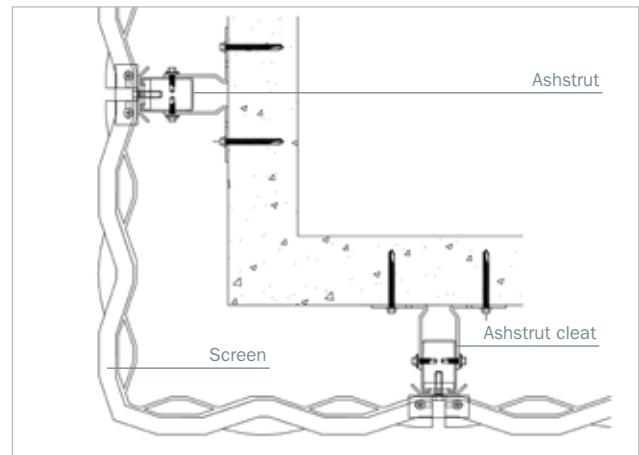
End detail with flashing



Panel intersection







Corner detail


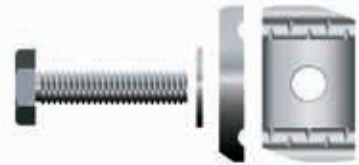


SCREEN ACCESSORIES

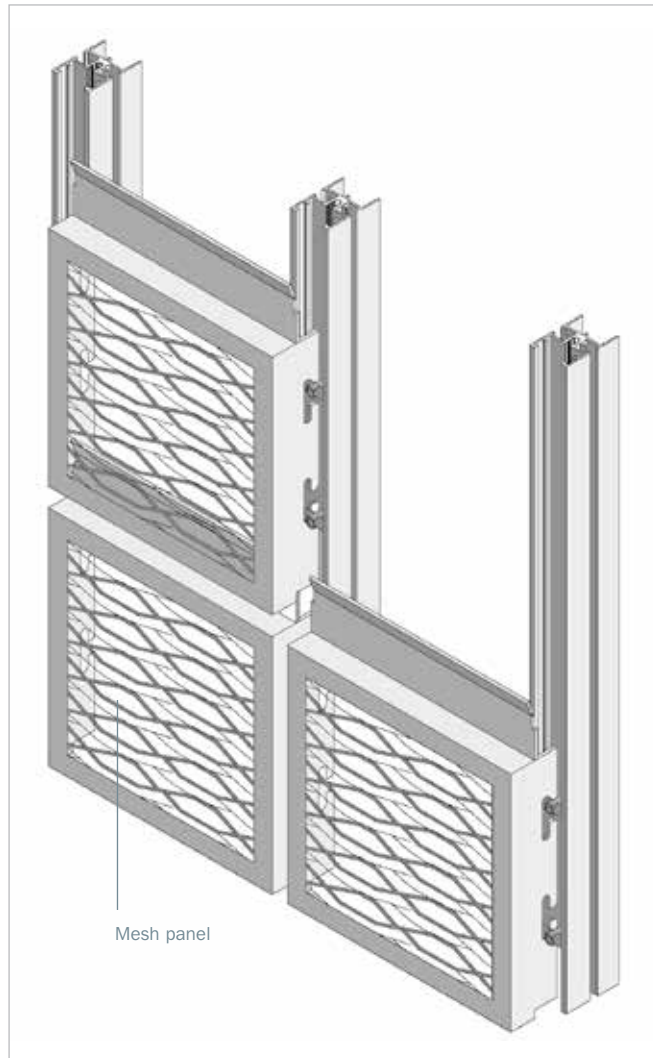
Austentic Stainless Steel Bimetal Self Drilling

Reference	Code	Diameter x length (mm)	Effective thread length	Finish	Illustration
LP-BM-LS28	RSFIX 14 RSFIX14COL	5.5 x 28	7	Mill finish PPC/state colour	
BML-S25-S16	RSFIX 08 RSFIX08COL	5.5 x 25	9	Mill finish PPC/state colour	
BML-S35-S16	RSFIX10 RSFIX10COL	5.5 x 35	19	Mill finish PPC/state colour	
BML-S55-S16	RSFIX13 RSFIX13COL	5.5 x 55	39	Mill finish PPC/state colour	

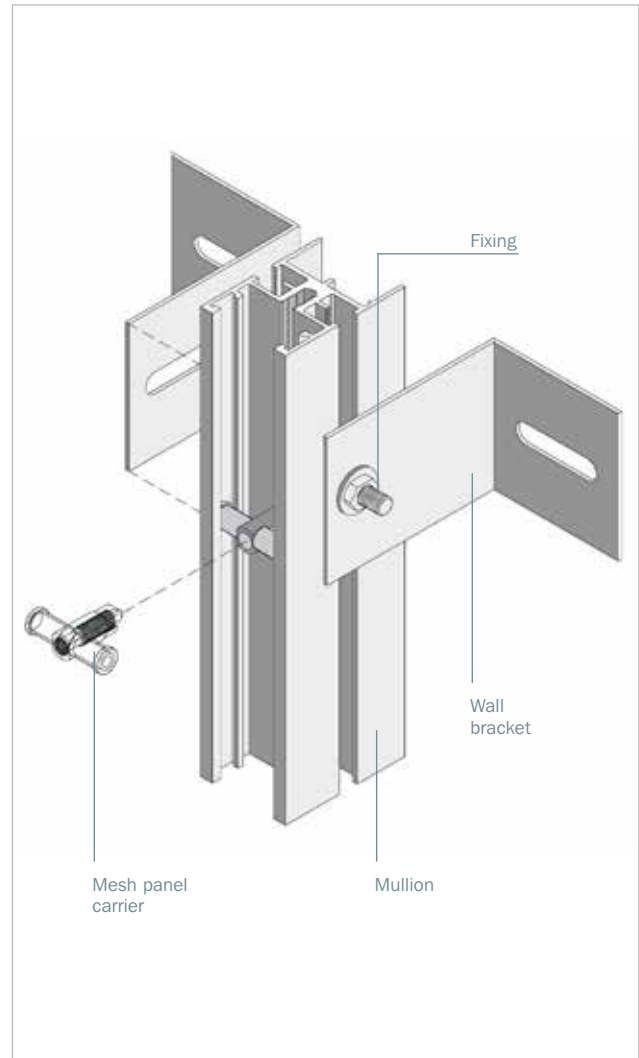
M6 x 20 Pan head S/S Bolt, Nylok Nut & EPDM Washer

Reference	Code	Standard length (mm)	Effective thread length	Fixings	
A2 Stainless Steel	RSFIX 19	20	20	Mesh to Mesh Bracket Fixing	
HT Steel HDG	RSFIX 21	30	9	Mesh Bracket to Mullion Fixing	

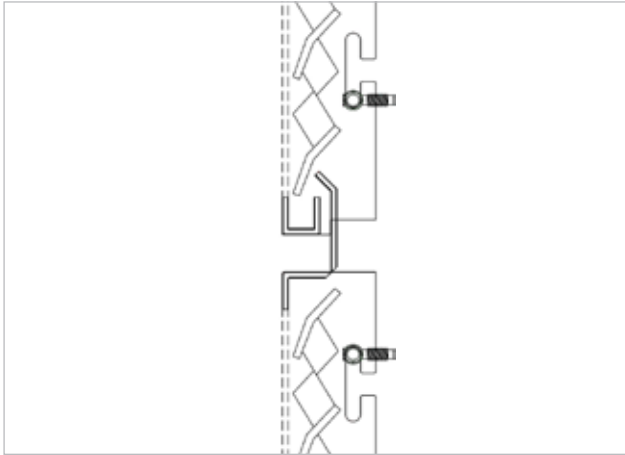
Lingrid C/W Screen



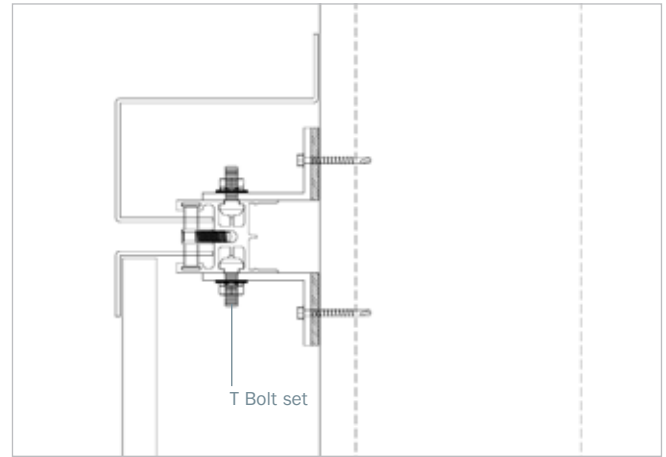
Isometric assembly



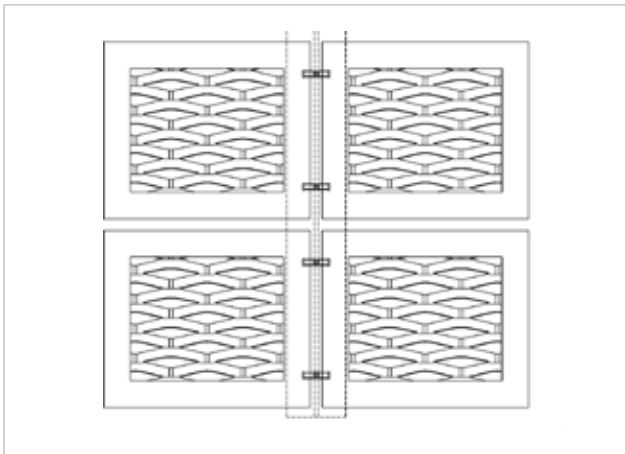
Horizontal joint



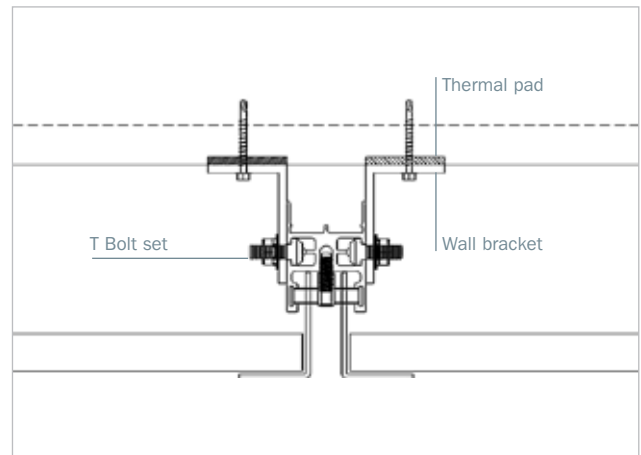
End detail



Panel Intersection



Joint Cleat





Perforated Material Palette



Aluminium
1.5 - 3.0mm



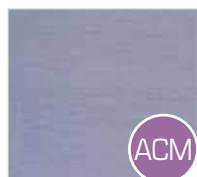
Mild Steel
1.5 - 3.0mm



Cor-Ten Steel
1.5 - 3.0mm



Stainless Steel
0.7 - 3.0mm



Aluminium Composite
Material
4.0mm

Finishes

Anodised

ANO

Polished

POL

Powder Coated

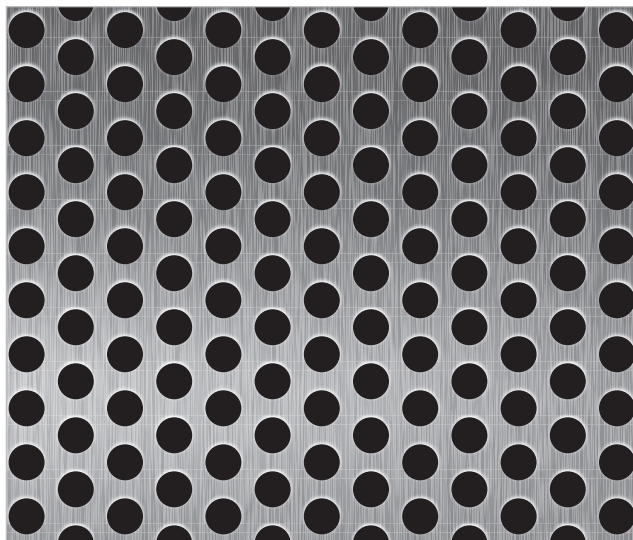
PPC

Galvanised

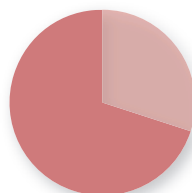
GALV

Our products can be treated with the appropriate finish for your budget and project.

Various other metals are available. Please contact Ash & Lacy for further details.



Perforated 30



Open Area 30%

AL

1.5 / 2.0 / 2.4

SS

1.5 / 2.0 / 2.4

MS

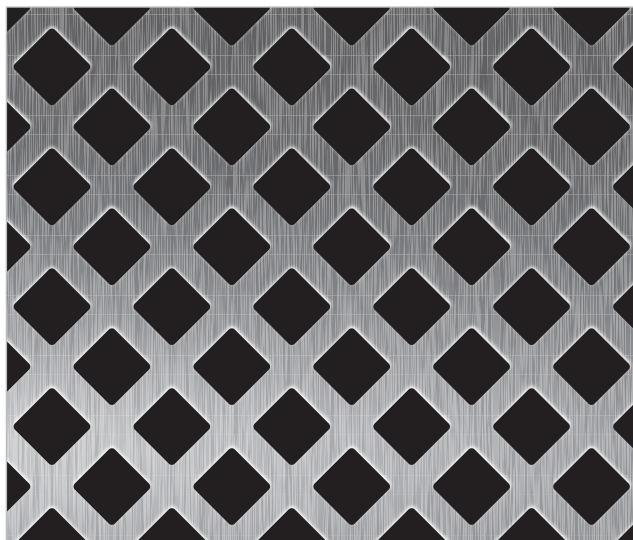
1.5 / 2.0 / 2.4

Pattern R6.35 T 11.0

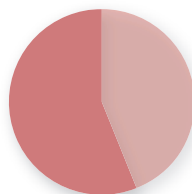
Finishes

POL

PPC



Perforated 44



Open Area 44%

AL

1.5 / 2.0 / 2.4

SS

1.5 / 2.0 / 2.4

MS

1.5 / 2.0 / 2.4

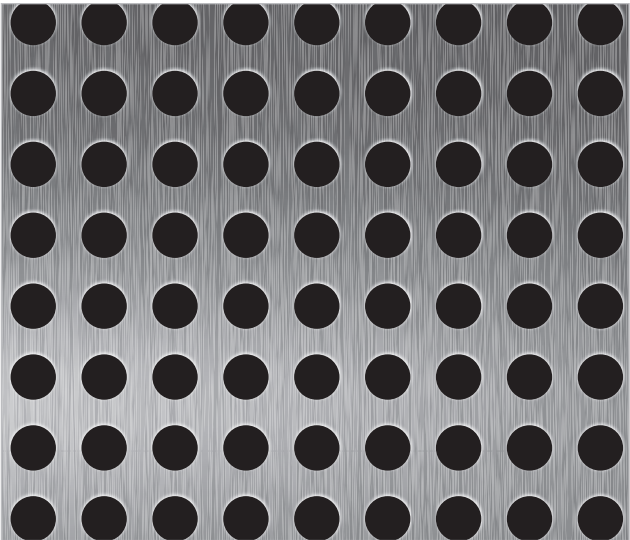
Pattern C10 M15

Finishes

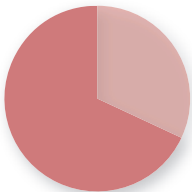
POL

PPC

GALV



Perforated 32



Open Area 32%

AL

1.5 / 2.0 / 2.4

SS

1.5 / 2.0 / 2.4

MS

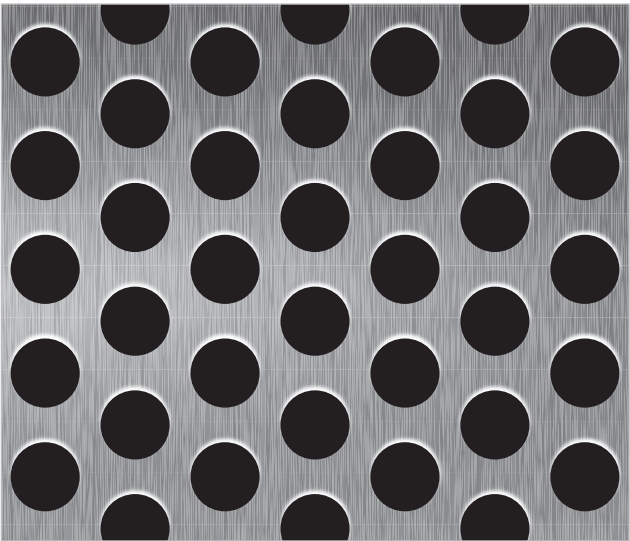
1.5 / 2.0 / 2.4

Pattern R8 U12.5

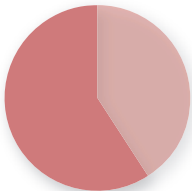
Finishes

POL

PPC



Perforated 41



Open Area 41%

AL

1.5 / 2.0 / 2.4

SS

1.5 / 2.0 / 2.4

MS

1.5 / 2.0 / 2.4

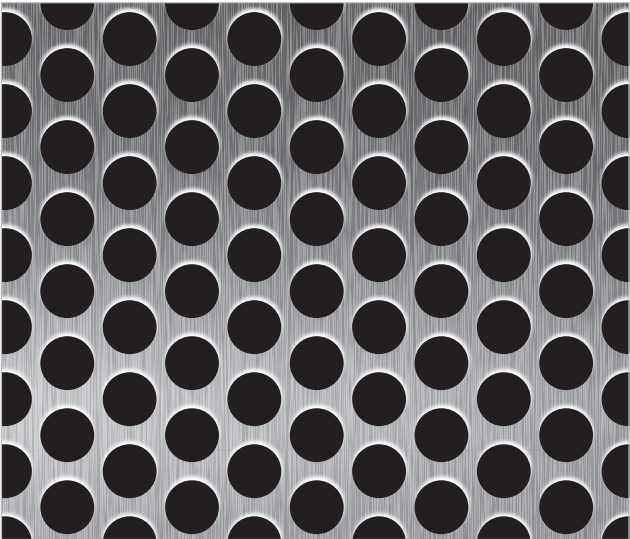
Pattern R12.7 T19.05

Finishes

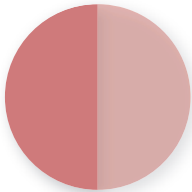
POL

PPC

GALV



Perforated 50

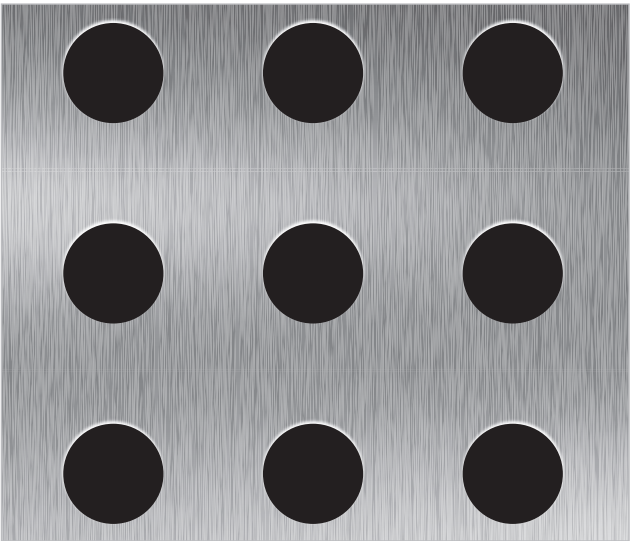


Open Area 50%

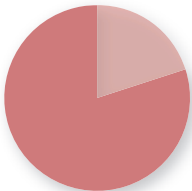
- AL 1.5 / 2.0 / 2.4
- SS 1.5 / 2.0 / 2.4
- MS 1.5 / 2.0 / 2.4

Pattern R9.5 T12.7

Finishes POL PPC GALV



Perforated 20

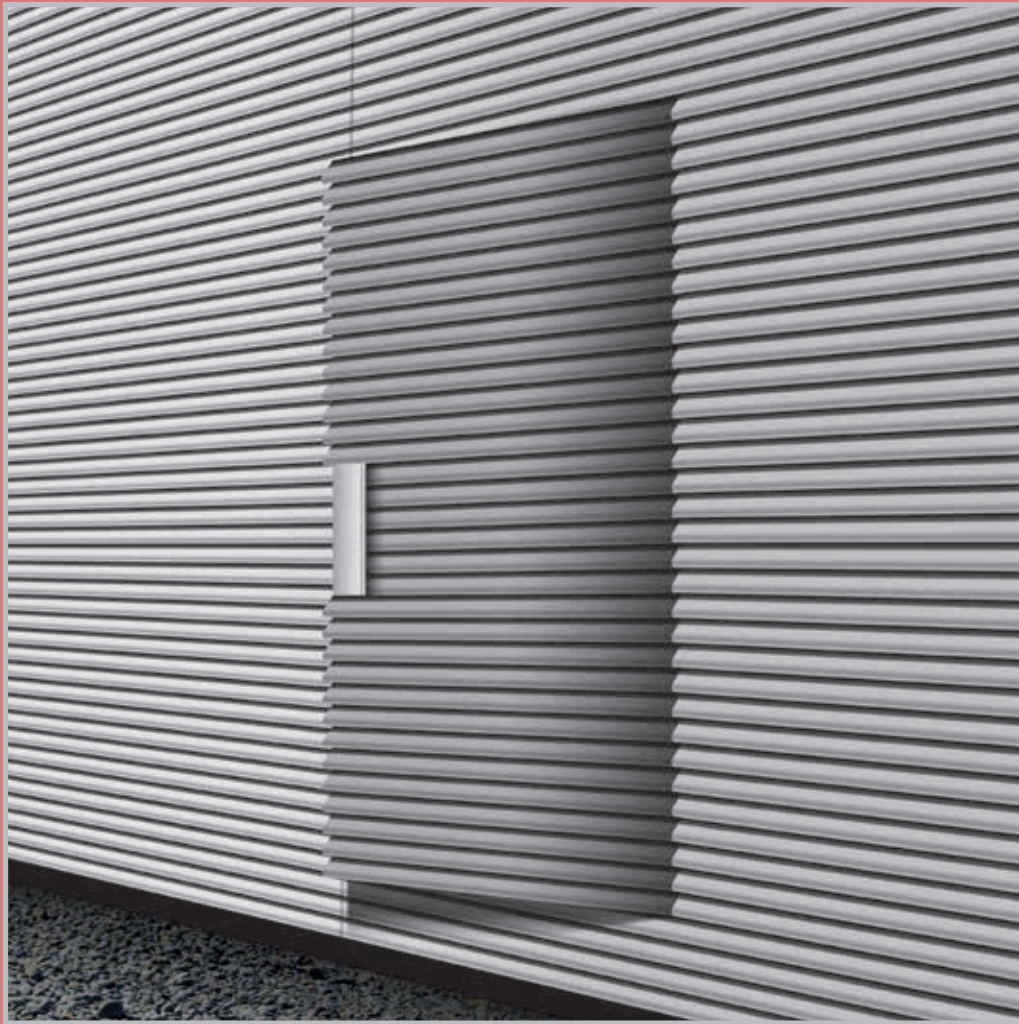


Open Area 20%

- AL 1.5 / 2.0 / 2.4
- SS 1.5 / 2.0 / 2.4
- MS 1.5 / 2.0 / 2.4

Pattern R25 U50

Finishes POL PPC GALV



Classic G 20V



The Classic G 20V is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The unique V shaped blade ensures an aesthetic added value.

Type	G20V
Description	Louvre 'build-in' wall grille
Blade	20V
Free/Open	95% / 34%
Blade height	20 mm
Pitch	20 mm
Flange	19 mm
Depth to fit	30 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect or bird screen in SAA

Classic G 20Z



The Classic G 20Z is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The Z shaped blade ensures a tight design.

Type	G20Z
Description	Louvre 'build-in' wall grille
Blade	20Z
Free/Open	63% / 41%
Blade height	40 mm
Pitch	35 mm
Flange	19 mm
Depth to fit	30 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect or bird screen in SAA

Classic G 50/75S



The Classic G 50/75S is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The S shaped blade ensures a tight design.

Type	G50/75S
Description	Louvre 'build-in' wall grille
Blade	50S
Free/Open	80% / 49%
Blade height	76 mm
Pitch	75 mm
Flange	48 mm
Depth to fit	62 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic G 50/75Z



The Classic G 50/75Z is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The Z shaped blade ensures a tight design.

Type	Classic G 50/75Z
Description	Louvre 'build-in' wall grille
Blade	50Z
Free/Open	80% / 49%
Blade height	76 mm
Pitch	75 mm
Flange	48 mm
Depth to fit	62 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic G 50S



The Classic G 50S is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The unique S shaped blade ensures a stylish design.

Type	G50S
Description	Louvre 'build-in' wall grille
Blade	20V
Free/Open	75% / 47%
Blade height	76 mm
Pitch	65 mm
Flange	48 mm
Depth to fit	62 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic G 50Z



The Classic G 50Z is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The Z shaped aerofoil blade ensures a tight design.

Type	G50Z
Description	Louvre 'build-in' wall grille
Blade	50Z
Free/Open	75% / 47%
Blade height	76 mm
Pitch	65 mm
Flange	48 mm
Depth to fit	62 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic N 50/75Z



The Classic N 50/75Z is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The Z shaped blade ensures a tight design.

Type	Classic N50/75Z
Description	Louvre 'build-in' wall grille with flangeless frame
Blade	50Z
Free/Open	80% / 49%
Blade height	76 mm
Pitch	75 mm
Depth to fit	65 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic N 50S



The Classic N 50S is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The unique S shaped blade ensures a stylish design.

Type	Classic N 50S
Description	Louvre 'build-in' wall grille
Blade	50S
Free/Open	75% / 47%
Blade height	76 mm
Pitch	65 mm
Depth to fit	65 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none"> • Insect screen in SAA (standard) • Bird screen in SAA (on request)

Classic N 50Z



The Classic N 50Z is a recessed mounted wall louvre manufactured from extruded aluminium profiles. The Turn and Click system ensures quick and easy assembly. An insect screen is fitted as standard. The Z shaped blade ensures a tight design.

Type	N50Z
Description	Louvre 'build-in' wall grille
Blade	50Z
Free/Open	75% / 47%
Blade height	76 mm
Pitch	65 mm
Depth to fit	65 mm
Max. Blade length	6,000 mm
Mesh	<ul style="list-style-type: none">• Insect screen in SAA (standard)• Bird screen in SAA (on request)



Classic W 20V



The Classic W 20V series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The unique V-shaped louvre blade ensures a better water repellent efficiency and makes the louvre system penetration-proof and difficult to look through from the outside.

Type	Classic W 20V
Description	Continuous louvre wall, small duty series
Blade	20V
Free/Open	95% / 37%
Blade height	20 mm
Pitch	20 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

Classic W 20Z



The Classic W 20Z series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The Z-shaped louvre features a clean-cut design.

Type	Classic W 20Z
Description	Continuous louvre wall, small duty series
Blade	20Z
Free/Open	63% / 47%
Blade height	40 mm
Pitch	35 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

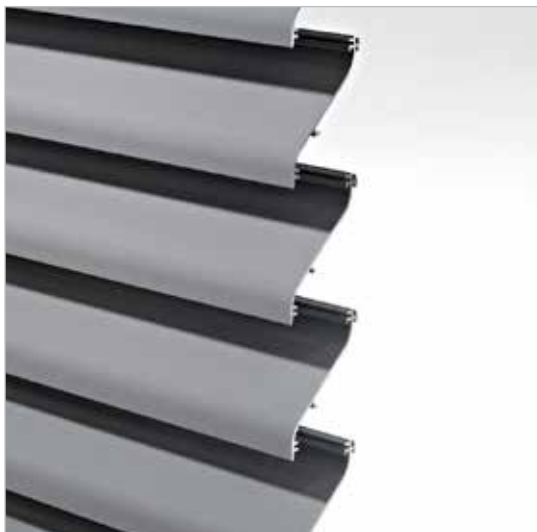
Classic W 35V



The Classic W 35V series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The unique V-shaped louvre blade ensures a better water repellent efficiency and makes the louvre system penetration-proof and difficult to look through from the outside.

Type	Classic W 35V
Description	Continuous louvre wall, small duty series
Blade	35V
Free/Open	59% / 35%
Blade height	39 mm
Pitch	35 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

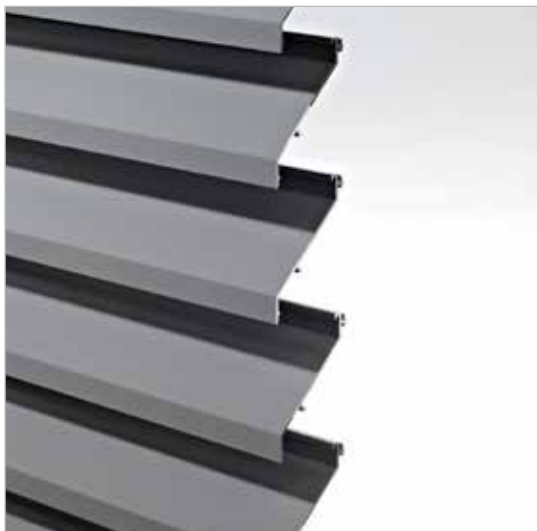
Classic W 50/75S



The Classic W 50/75S series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The unique S-shaped louvre blade features a stylish design.

Type	Classic W 50/75S
Description	Continuous louvre wall, small duty series
Blade	50S
Free/Open	80% / 54%
Blade height	76 mm
Pitch	75 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with vertically (73mm) fitted thermoplastic mesh, insect or bird mesh. • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

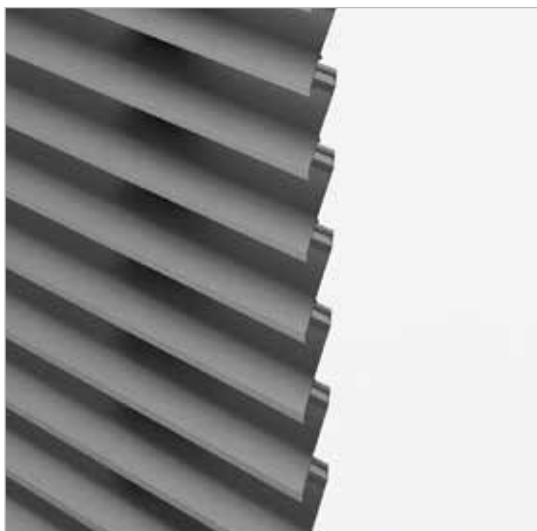
Classic W 50/75Z



The **Classic W 50/75Z** series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The Z-shaped louvre features a clean-cut design.

Type	Classic W 50/75Z
Description	Continuous louvre wall, small duty series
Blade	50Z
Free/Open	80% / 54%
Blade height	76 mm
Pitch	75 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with vertically (73mm) fitted thermoplastic mesh, insect or bird mesh. • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

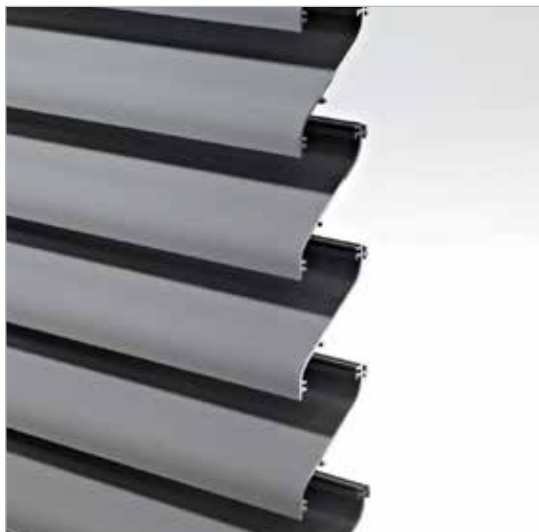
Classic W 50HP



The **Classic 50HP** and the **Classic 50HP** systems have been developed especially for intensive ventilation. The resistance factor of both systems is exceptionally low which allows large quantities of air to be introduced into or removed from spaces, using only a limited surface. Visual free area amounts to 88%, physical free area 68%. The Classic 50HP stands out for its straightforward click system that allows for easy installation. Additionally, Duco offers numerous solutions for the combination of the Classic 50HP with doors and roof turrets.

Type	Classic W 50HP
Description	Continuous louvre wall, medium duty series
Blade	50HP
Free/Open	88% / 68%
Blade height	50 mm
Pitch	50 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12

Classic W 50S



The **Classic W 50S** series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The unique S-shaped louvre blade features a stylish design.

Type	Classic W 50S
Description	Continuous louvre wall, medium duty series
Blade	50S
Free/Open	75% / 52%
Blade height	76 mm
Pitch	65 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with vertically (43mm) or vertically (63mm) fitted thermoplastic mesh, insect or bird mesh. • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

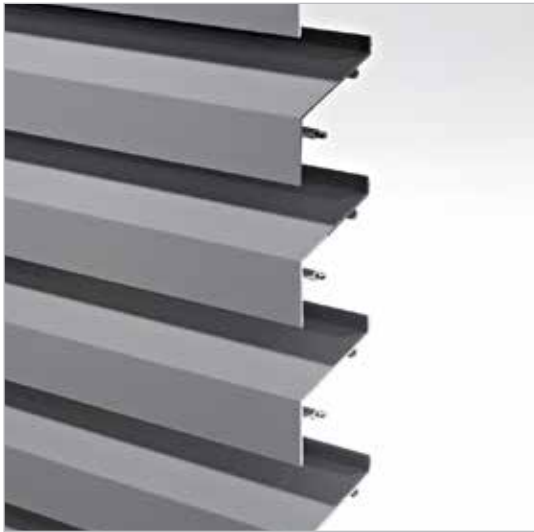
Classic W 50Z



The **Classic W 50Z** series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The Z-shaped louvre features a clean-cut design.

Type	Classic W 50Z
Description	Continuous louvre wall, medium duty series
Blade	50Z
Free/Open	75% / 52%
Blade height	76 mm
Pitch	65 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with vertically (63mm) fitted thermoplastic mesh, insect or bird mesh. • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

Classic W 50Z/30°



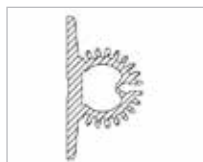
The **Classic W 50Z/30°** series is a continuous louvre wall to be fitted to a supporting structure. The turn and click system ensures quick and easy installation. The Z-shaped louvre features a clean-cut design. The continuous blade louvres are available in 65 or 75 mm pitches.

Type	Classic W 50Z/30°/ 65 & 75mm pitches
Description	Continuous louvre wall, medium duty series
Blade	50Z30°
Free/Open	65=41% 75=49% / 65=40% 75=46%
Blade height	65=72 mm 75=72 mm
Pitch	65=65 mm 75=75 mm
Max. Blade length	6,000 mm
Type of Mullion	50/50, 50/12, 21/50 MULTI or 30/12
Mesh	<ul style="list-style-type: none"> • Optionally with insect mesh 2.3 x 2.3 mm • Optionally with bird mesh 6 x 6 mm

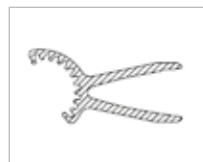




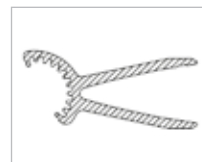
Ellips /Aerofoil



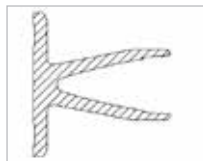
Cubic 40 Series
Multifit base plate
(80, 120)



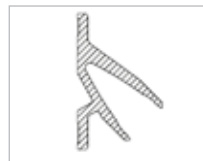
60/40 Multifit
Series clamp
fixing bracket



80/40 Multifit
Series clamp
fixing bracket
(80/80, 80/120)

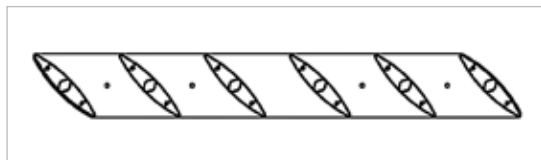


0° Unifit Series
clamp fixing
bracket



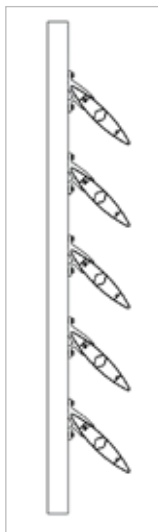
45° Unifit Series
clamp fixing
bracket

Intermediate

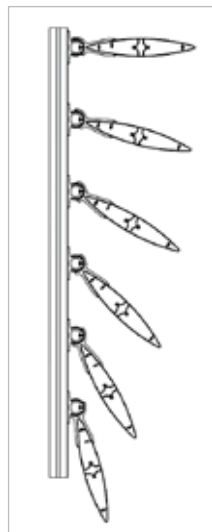


This sun control system is available with either fixed or electrically adjustable sun control blades. They are installed to the support system on-site (either horizontally or vertically). This system allows for a wide variety of blade mounting angles. This ensures that the system can shade the area optimally regardless of the glazed surface and the position of the sun throughout the day.

Unifit



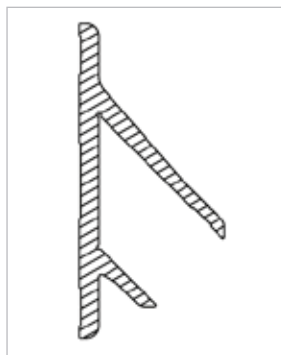
Multifit



Adjustable

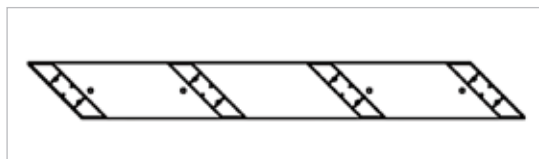


Linear



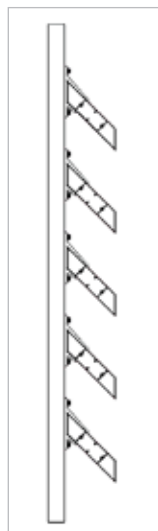
Unifit 45° Linear
200-300

Intermediate

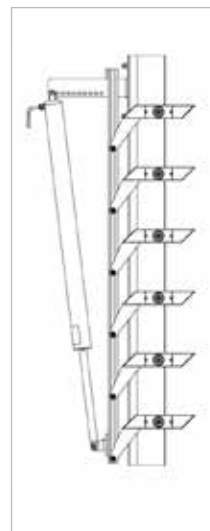


The Linear (200-300) is available with fixed or with electronically adjustable louvre blades. These are installed on site in the support structure (horizontal or vertical). The fixed louvre blades are installed below an angle of 45°. Together with the louvre blade, in the form of a parallelogram, this provides a particularly attractive effect. If the electronically adjustable louvre blades are closed, they have an optimum solar shading effect. The closed louvre blades and the façade area are aligned, forming one harmonious unit.

Unifit



Adjustable

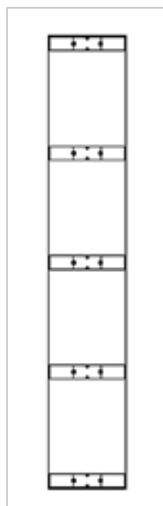


SOLAR SHADING

SUN CUBIC

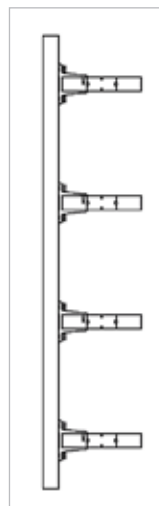
The use of solar shading as an architectural element - keeps the sun's heat out. This prevents the building from heating up and ensures a reduction in the cooling load up to 30%. Combined with natural ventilation the only healthy alternative to energy-guzzling air conditioning.

Cubic is available with either fixed or electrically adjustable solar shading blades. They are installed to the support system on-site (either horizontally or vertically). Depending upon the type, fixed solar shading blades are fitted at a blade mounting angle of 0° or 90°.



Cubic Intermediate

Permanent external solar shading system. The aluminium solar shading blades are held in place at a fixed blade mounting angle of 0° or 90° between end caps. The amount of clearance between two solar shading blades (blade pitch) depends on blade type.

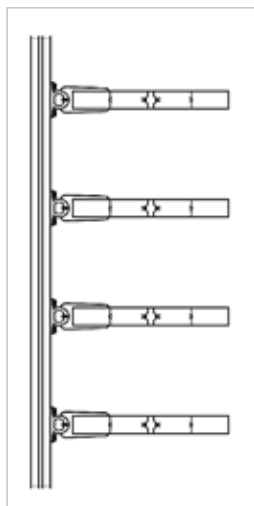


Cubic Unifit

Permanent external solar shading system. The aluminium solar shading blades are fitted to aluminium support profiles at a fixed 0 degree blade mounting angle using Unifit clamp fixing brackets. The amount of clearance between two solar shading blades (blade pitch) depends on blade type.

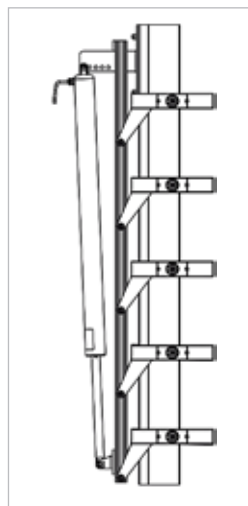
Together with the rectangular shape of the solar shading blade, this produces a very clean-cut effect. When fully closed, the electrically adjustable solar shading blades provide highly effective sun protection.

The closed solar shading blades and the façade face are aligned and, therefore, form a perfect unit. The rectangular blade styles admit high levels of diffused daylight. They are available in a choice of four sizes: 150 – 200 – 300 and 400.



Cubic Multifit

Permanent external solar shading system. The aluminium solar shading blades are fitted to aluminium support profiles at a variable blade mounting angle (0° or $(-)15^\circ$) using the patented Multifit system. This system consists of a 'base' and a 'clamp fixing bracket'. These two parts are linked together with a prong.



Cubic Adjustable

Permanent external solar shading system. The aluminium solar shading blades are electrically adjusted. The spring shafts reduce the clearance between the blades and the support system to a minimum. The amount of clearance between two solar shading blades (blade pitch) depends on blade type and any possible overlap between the solar shading blades.

IMAGINE

Let your imagination run wild. Our systems can be configured in so many different ways that you can explore many different ways to achieve a unique, exciting and vibrant facade. Just changing the orientation of the product, back or front lighting, can make your building stand out from the crowd.

Just some of the ways our clients have used our products are shown here.





CHRISTCHURCH PRIMARY SCHOOL



Project	Christchurch Primary School
Location	Burton-on-Trent
Product	Screen Perforated
Main Contractor	Seddon
Installer	Advanced Roofing Ltd.
Sector	Education

A complete and highly innovative through-wall design by Ash & Lacy played a key role in the complete redevelopment of Christchurch Primary School in Burton-on-Trent.

The brand new school was built adjacent to the old infants school, which was demolished once the new building was completed and occupied.

Installed by Advanced Roofing Ltd for main contractor Seddon, the building's eye-catching facade comprises approximately 900m² of Simplicity 1 rainscreen cladding in a gold metallic Larson ACM finish. It also features a projective outer façade in Lingrid 1 rainscreen in 3mm RAL 9006 white aluminium PPC with bespoke perforated patterns, meeting the requirements of client Staffordshire County Council's architects and incorporating the slogan "Love to learn, Learn to Love", plus other graphic elements across the building, including musical notes and a clock face.

The Lingrid panel configuration required for this project was particularly noteworthy. Instead of deploying a more traditional vertical arrangement, panels had to be laid horizontally. To achieve this, Ash & Lacy implemented a thorough engineering review of the product, devising additional reinforcement brackets specifically for this application. This is an excellent example of the well-established Ash & Lacy philosophy of creating bespoke engineered solutions in response to individual client criteria.

The support system for the outer façade utilised the Ash & Lacy S150 mullion to a bespoke design to accommodate the large span requirements, manufactured in RAL 9006 PPC to produce the most complementary match to the perforated

panels. The SFS metal framing system was used as secondary steelwork support for the ACM inner facade.

The S150 horizontal support system was also designed in such a manner to reduce the visual impact of strengthening and stiffening elements behind the facade. Fixed to a series of unequally positioned hot rolled vertical posts, the mullions needed to span large distances without the use of anti-sag bars and keeping the connections as visually clean as possible.

Ash & Lacy were able to give the school a façade that reflected the educational aspirations of the staff with the panels arranged randomly, using different perforation sizes to corners and elevations to create an effect that is particular stunning at night time when back-lit. The positioning and co-ordination of each panel required careful attention to ensure that the architect's aesthetic vision of the pattern flowed consistently and freely across panel joints whilst not obscuring the graphics or the window openings.



EASTSIDE CAR PARK



Project	Eastside Car Park
Location	Birmingham
Product	Screen
Designer	Urban Design BCC In-house design team
Main Contractor	Berry Systems
Installer	Advanced Roofing Ltd.
Sector	Transport

Façade rainscreen cladding has been increasingly specified on a number of car park projects across the UK over the last few years. The combination of aesthetic qualities, ease of use and versatility makes façade the ideal solution to meet both the technical and visual requirements of a car park building.

Ash & Lacy's in-house design team can produce bespoke size and shape panels and even develop special extrusions to meet the project specifications.

This was the case with Eastside Car Park, part of 'Birmingham's Big City Plan' regeneration scheme, is currently being constructed adjacent to Birmingham's Millennium Point and illustrates another aspect of design innovation which can be achieved using façade panels.

Designed by Urban Design - Birmingham City Council's in-house design team and managed by Thomas Vale Construction Ltd, approximately 1900m² of façade panels have been used in a 3D geometric layout.

Because of limited space at Eastside, the framework and panels were prefabricated at Ash & Lacy's own facility in West Bromwich and supplied to site pre-assembled and ready to fitted by façade and barrier contractors, Berry Systems.

The car park demonstrates one of the many design possibilities which can be achieved using Ash & Lacy's façade solutions. Our technical support team can assist specifiers from concept stages right the way through to installation.

Façade panels are available in a variety of colours and finishes, horizontal or vertical joint arrangements and can be

supplied curved or flat. The addition of the Ashcolit Suite of linear support systems to Ash & Lacy's portfolio has now opened up a new world of even more innovative rainscreen cladding options



LONDON METROPOLITAN UNIVERSITY



Project	London Metropolitan University
Location	London
Product	Screen Perforated
Main Architect	Cartwright Pickard Architects
Sector	Education

Metropolitan Works is London's first Creative Industries Centre, offering digital manufacturing services, IT suites, training and workspace to local creative business and designers.

It is housed in a stunning new £4.5 million building designed by Cartwright Pickard Architects in the East End of London.

Echoing the form making processes undertaken at the Centre, the building was conceived as a series of interlocking volumes unified with a perforated aluminium cladding. On the ground floor level a dramatic frieze by local artist Tom Price has been laser cut into the anodized aluminium panels to give the façade a sense of movement and life.

A double height workshop on ground level contains state of the art rapid prototyping and digital manufacturing equipment. Above ground, 4 storeys of office accommodation were manufactured off site in modular units to overcome issues with site access.

The centre achieves a BREEAM rating of 'very good'. Sustainability features include green sedum roofs, rainwater harvesting and solar power contributing to hot water provision.

"The new Centre is extraordinary in both its design and purpose. It is the only industrial resource in the middle of London, combining a bureau service, CAD training, and superb Pay and Go project workspace. Metropolitan Works is ultimately modern, understanding the light, flexible, and multidisciplinary working practices of contemporary architecture and design companies. It is the place for realising ideas."

Matthew Lewis

Manager of Metropolitan Works

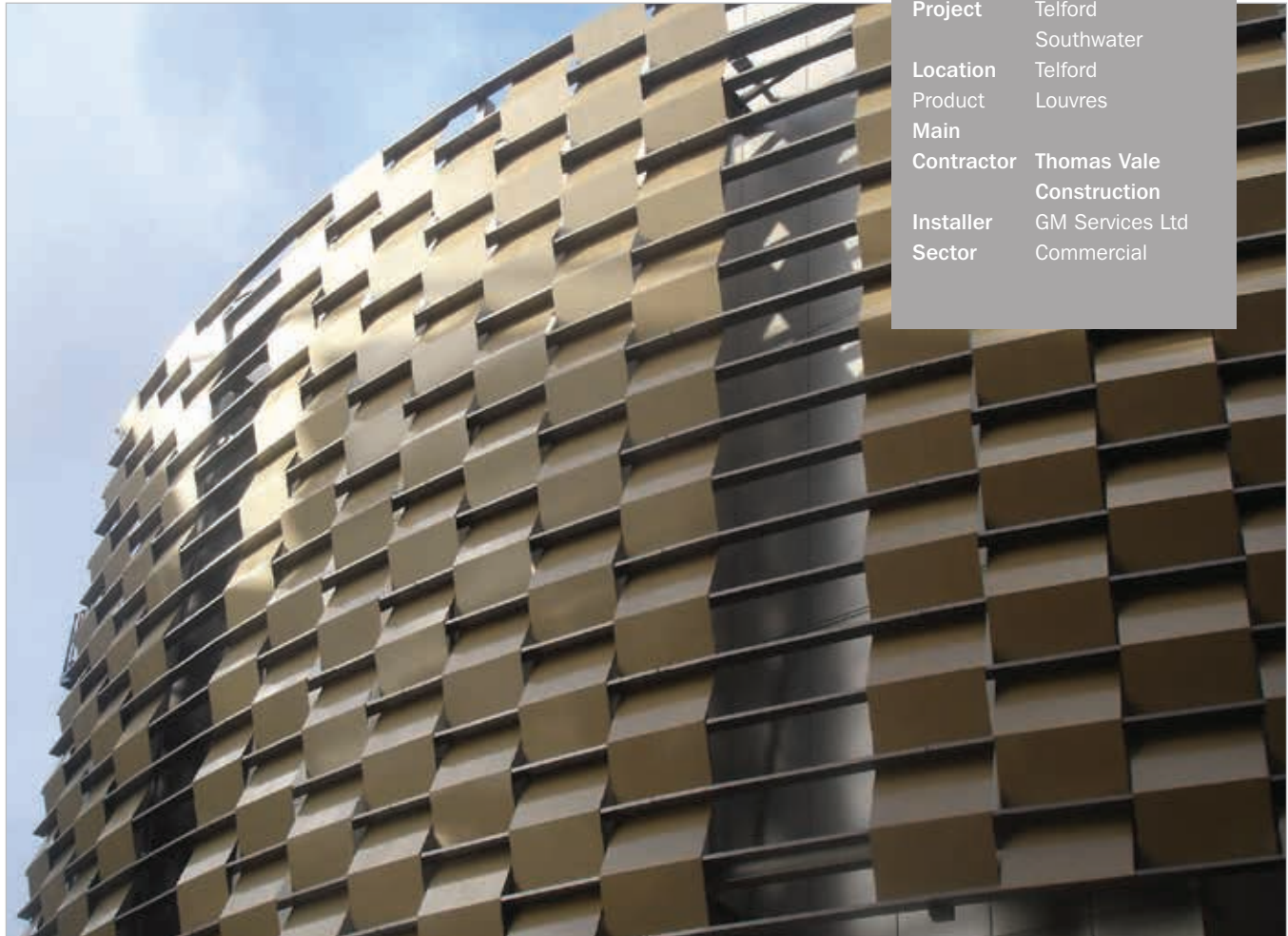
"We believe the finished building successfully reflects this world-class Centre of excellence for design and production - and it demonstrates how good, imaginative design can be combined with innovative methods of construction. In addition to the benefit of speed, off-site construction helps to improve the quality of finish and the thermal performance of the building because it is manufactured in a factory environment. This was also a very constrained site with little storage and handling space for materials, which lent itself to the modular building method."

James Pickard

Director of Cartwright Pickard Architects.



TELFORD SOUTHWATER



Project	Telford Southwater
Location	Telford
Product	Louvres
Main Contractor	Thomas Vale Construction
Installer	GM Services Ltd
Sector	Commercial

Cubic 200 solar shading blades and façade panels have been installed by GM Services Ltd as part of a ventilation and sun control system on the initial phase of Telford's forthcoming Southwater town centre development.

The Façade/Louvre product range offers a variety of extruded aluminium brise soleil systems with various louvre blade configurations, for both horizontal and vertical solar shading applications. This range of louvre wall systems can also incorporate ventilation louvres and louvre doors which can be provided with a variety of finishes.

The 200mm louvre blades used on this project were manufactured from polyester powder coated aluminium extrusions in RAL 9007 giving a grey aluminium finish. Ash & Lacy's renowned in-house aluminium fabrication facilities and skills were deployed to weld cut to length louvre blades to form a faceted curvature to the façade, designed to be fitted back to both the cladding and curtain wall systems.

Rigorous in-house testing was also conducted to ensure the specialist welding was to a sufficiently high standard whereby cyclic loads could be absorbed within the structural spanning requirement

Working to meet tight deadlines demanded by the project, over 300 hours of production had to be strategically and efficiently planned to weld the total of over 750 louvre blades required. The experience of the Ash & Lacy team provided a great understanding of the specification and project requirements and was a great display of craftsmanship incorporating various techniques such as finishing to create exceptional flatness.

The project also incorporated bespoke designed architectural

façade panels, manufactured in 3mm polyester powder coated aluminium in RAL 1035 pearl beige finish. Ash & Lacy's ability to provide the full package, from the fixings through to the cladding system meant their own in-house experts could carry out engineering assessments to ensure the integrity of attaching façade panels to the louvre blades to achieve the bespoke design aesthetic to bring the architects concept to life.

Designed to transform Telford Town Centre and opened in the Spring 2014, Phase one of Southwater includes an 11 screen cinema, an hotel, bars and restaurants, an energy centre and the refurbishment and extension of the ice rink.





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