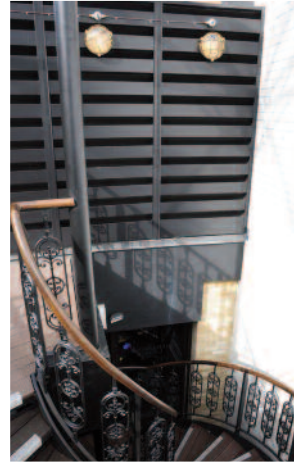


# VENTILATION LOUVRES





## PRODUCT RANGE and APPLICATIONS

Kingfisher louvres provide permanent ventilation combined with weather protection and visual screening. Acoustic attenuation louvres are also available.

They can be used to fill openings or to form screening enclosures to all kinds of hvac, mechanical and other plant rooms.

The louvres can provide a continuous appearance, and with a wide range of colour finishes form an architectural feature of a building. The system is very flexible, and louver banks can be made to almost any practicable size or shape.

The corrosion-resistant construction makes them suitable for all external installations including roof tops.

There is a wide range of blade designs to meet different requirements, according to the functions required: maximum air flow, weather protection, visual screening, and acoustic screening (see product selection table opposite). Matching louver doors are also available for most ranges.



### KW High-performance weather protection louver (KW 75HPG) 4

#### Application

Permanent ventilation combined with a high degree of weather protection and visual screening

#### Type

Single bank with integral gutter profile

### KW Single-bank louvres 6

#### Application

Permanent ventilation combined with weather protection and visual screening.

#### Types

Range of blades: Z-profile, S-profile.

### KW Multiple-bank louvres 10

#### Application

Permanent ventilation with increased weather protection and complete visual screening.

#### Types

Double or triple bank blades provide maximum protection and screening.

### KW Louvre doorsets 13

#### Application

Can be used alone or as an integral part of a louver installation.

#### Types

To match most KW louvres.

### Brise Soleil Solar Shading System 16

#### Application

External shading system for control of solar heat gain through glazing.

#### Types

Installed on support arm as either underblade or overblade.

### KC Screening louvres 18

#### Application

Economical visual screening where weather protection is not required.

#### Types

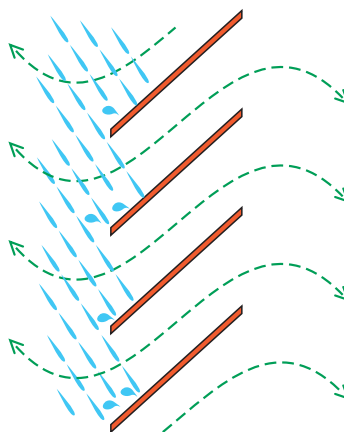
Z profile blades can be installed in many different orientations according to requirements.



## KW HIGH-PERFORMANCE LOUVRE

### **KW 75 HPG weather protection louvre**

The KW 75 HPG high-performance louvre blade combines low airflow resistance with maximum weather exclusion. Following exhaustive development work and independent testing, Kingfisher can offer one of the best-performing single-bank louvre systems on the market.



Louvres provide high rainwater rejection combined with high airflow rate up to A2 performance classification, assured by independent testing by BSRIA. This represents a better performance than most double-bank systems, achieved at a lower cost and within a smaller depth of opening.

The registered design is aesthetically pleasing and the gutter profile avoids the cascade effect.

Designed and developed under BS EN ISO 9001 which covers design management, development, manufacture and installation.

For more information applicable to single-bank louvres see page 6.

### **Composition**

Louvre blades and mullions are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

Flashings or frames are folded aluminium.

### **Accessories**

Bird/vermin guard: HDPE as standard or expanded aluminium, mesh size 15mm.

Insect guard: HDPE, mesh size 4mm.

### **Size, shape**

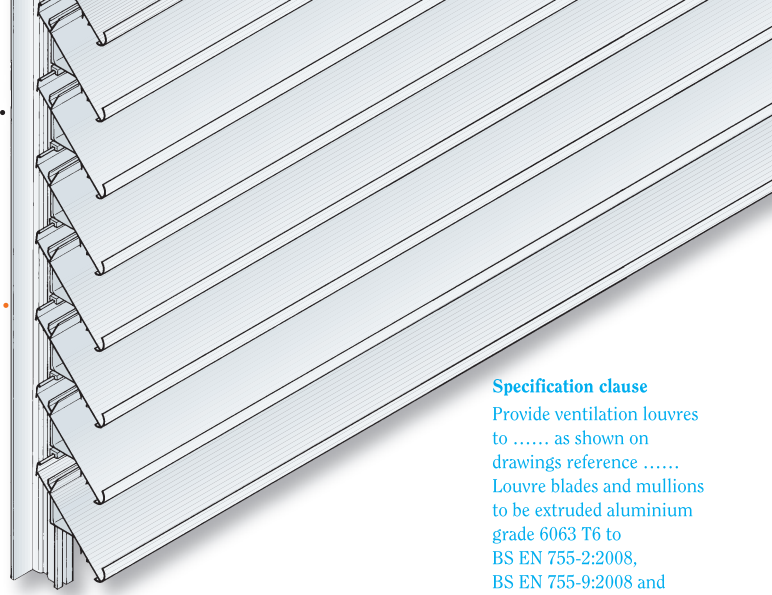
Minimum blade centres 75mm.

Free area between blades at 75mm centres: 47%.

Minimum installation depth  
with M1 mullion: 160-168mm  
with M2 mullion: 130-138mm

### **Appearance**

Choice of finish: polyester powder colour coating to BS 6496, PVF2, anodised AA25 to BS 3987 or natural mill finish.



### Performance

The table below gives results of independent tests by BSRIA to BS EN 13030: 2001 Performance testing of louvres subjected to simulated rain.

### Maintenance

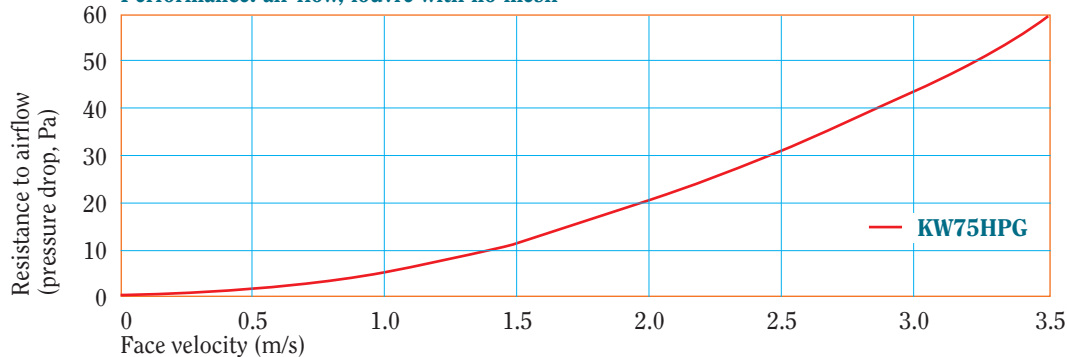
Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

### Performance: classification

Face velocity (m/s)	Mesh:	None		4mm		15mm	
		Class	E %	Class	E %	Class	E %
0		B2	95.1	A2	99.2	B2	97.7
0.5		C2	94.3	B2	98.1	B2	97.6
1.0		C2	93.0	B2	96.4	B2	97.3
1.5		C2	91.6	C2	94.4	B2	96.6
2.0		C2	88.2	C2	91.3	B2	95.0
2.5		C2	81.7	C2	85.1	C2	90.2
Coefficient of discharge		0.349		0.311		0.328	

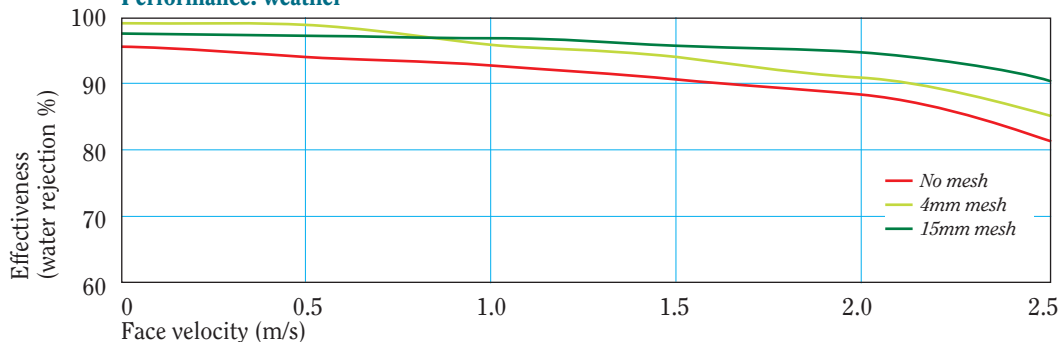
*E = Effectiveness of water rejection*

### Performance: air flow, louvre with no mesh



		Pressure drop (Pa) at given face velocities (m/s)						
		Cd	0.5	1.0	1.5	2.0	2.5	3.0
<b>KW75HPG</b>	<i>No mesh</i>	0.349	1.23	4.93	11.08	19.70	30.79	44.33
	<i>4mm mesh</i>	0.311	1.55	6.20	13.96	24.81	38.77	55.83
	<i>15mm mesh</i>	0.328	1.39	5.58	12.55	22.31	34.86	50.19

### Performance: weather



### Specification clause

Provide ventilation louvres to ..... as shown on drawings reference ..... Louvre blades and mullions to be extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993. Louvre type: KW 75HPG , blade centres 75mm. Finish: polyester powder coating to BS 6496 / PVF2 / anodised AA25 to BS 3987 / natural mill finish\*, colour ..... Continuous appearance / panelled\*. Accessories: HDPE / aluminium\* bird guard / insect guard\*. Louvres to be supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS. Tel: 01773 814102, Fax: 01773 814103, Email: info@kingfisherlouvres.com \*Delete as applicable.

## KW SINGLE-BANK LOUVRES

### KW Weather protection louvres

Louvre system comprising banks of blades providing permanent ventilation combined with weather protection and visual screening.

Louvres are supplied either mounted on concealed mullions for a continuous appearance or as individual framed panels, and can form an architectural feature of a building. The system is very flexible; banks and panels can be made to any practicable size or shape.

Z-profile and S-profile blades are designed to give good protection against water penetration together with low resistance to airflow.

All components are aluminium for long life with good corrosion resistance.

### Applications

Any application requiring permanent large-scale ventilation combined with screening, for example air inlet and exhaust for ventilation or air conditioning systems, plant rooms, lift motor rooms, generators and pumping stations.

Blades clip in place and cannot be removed without special tools, so the system is suitable for use in publicly accessible areas.

Blanked-off panels are available to provide continuity of appearance where required.

### Accessories

Mitred corners where required, and a variety of edge trims and flashings to suit the installation.

*Bird/vermin guard (overlapped and secured to mullions):* HDPE (high density polyethylene) as standard, or expanded aluminium; hole size 15mm.

*Insect guard (framed in panels):* HDPE, hole size 4mm.

Also a wide range of ancillaries including doors (see page 13), access panels, and turrets.

### Size, shape

Blade centres can be varied as required, subject to minimum values shown overleaf. Increasing blade centres will affect weather and airflow performance. Blade angle is 45° for all types.

Maximum blade length is normally 3.0m for ease of handling. For continuous louvres the blades are butt jointed at an intermediate mullion and the blade ends are held by a single clip to ensure correct alignment, a 2mm expansion joint is required.

Banks and panels can be made to any practicable shape and size, with virtually no restriction on height or width.

Louvres can be curved in plan to special order; please enquire for minimum radii.

### Appearance

Louvres provide clean lines with a continuous appearance; no fixings or supports are visible from outside.

*Standard finish:* polyester powder coating to BS 6496.

*Alternative finishes:* PVF2, natural or colour anodised AA25 to BS 3987, natural mill finish. Where anodising is specified, the aluminium will be of anodising quality.

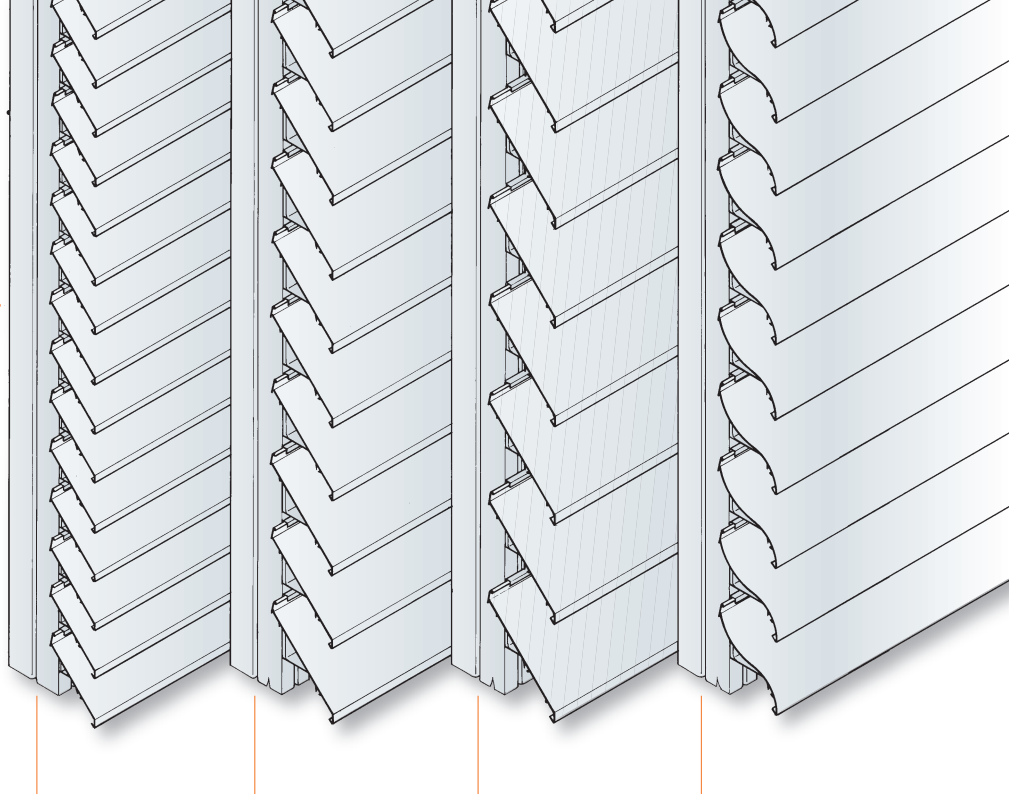
### Maintenance

Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

### Composition

Blades, mullions and clips are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

Trims and flashings are either extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993 or folded aluminium sheet, depending on installation details. Fixings are stainless steel.



### Dimensions

Blade centres shown are minimum figures, providing a good combination of air flow and weather protection. Choice of mullion is according to wind loading, span and opening detail.

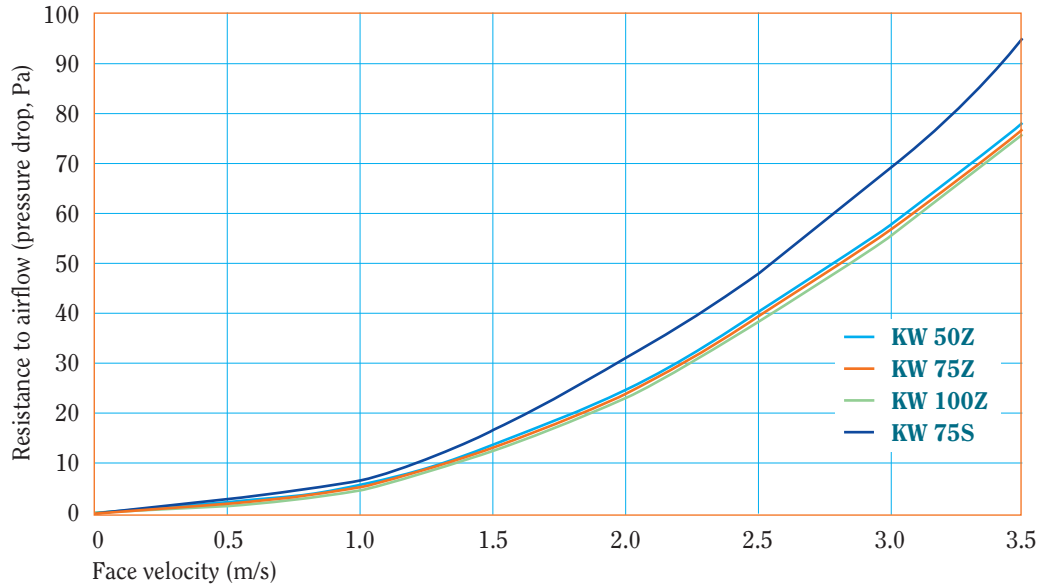
Type		KW 50Z	KW 75Z	KW 100Z	KW 75S
Minimum blade centres		50mm	75mm	100mm	75mm
Free area between blades at stated centres		52% at 50mm	58% at 75mm	61% at 100mm	50% at 75mm
Installed blade depth		65mm	80mm	98mm	80mm
Overall depth*	M1 mullion	125mm	140mm	158mm	140mm
	M2 mullion	95mm	110mm	128mm	110mm

\*From front of blades to rear of mullion.



## KW SINGLE-BANK LOUVRES

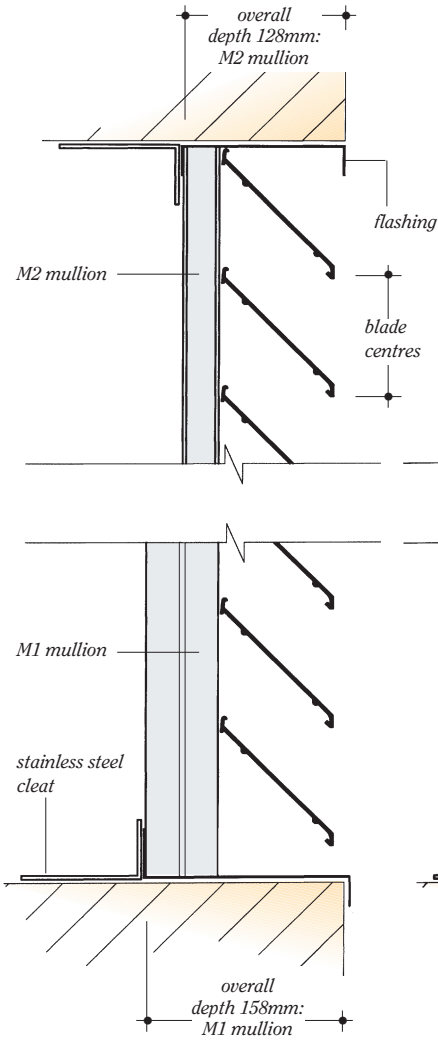
Performance: air flow, louvre with no mesh



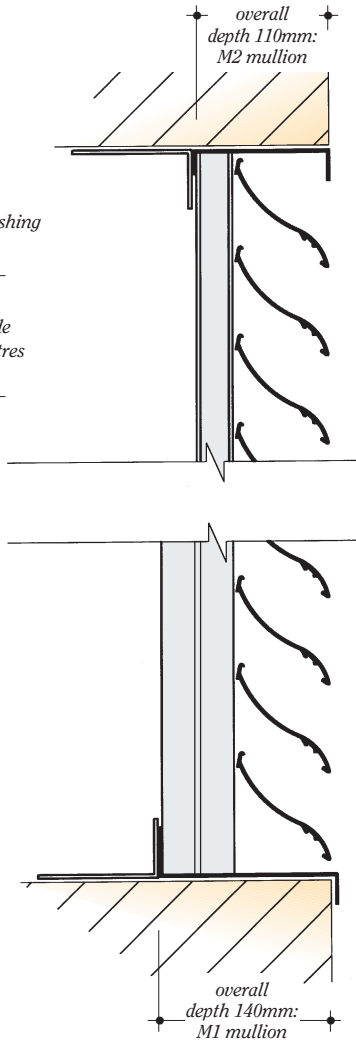
			Pressure drop (Pa) at given face velocities (m/s)						
Cd			0.5	1.0	1.5	2.0	2.5	3.0	3.5
KW50Z	No mesh	0.306	1.60	6.41	14.42	25.63	40.05	57.67	78.50
	4mm mesh	0.274	2.00	7.99	17.98	31.97	49.95	71.93	97.90
	15mm mesh	0.290	1.78	7.13	16.05	28.54	44.59	64.21	87.40
KW75Z	No mesh	0.307	1.59	6.37	14.32	25.46	39.79	57.30	77.98
	4mm mesh	0.273	2.01	8.05	18.11	32.20	50.32	72.46	98.62
	15mm mesh	0.285	1.85	7.39	16.62	29.55	46.17	66.48	90.49
KW100Z	No mesh	0.311	1.55	6.20	13.96	24.81	38.77	55.83	75.99
	4mm mesh	0.277	1.95	7.82	17.59	31.28	48.87	70.38	95.79
	15mm mesh	0.291	1.77	7.09	15.94	28.34	44.28	63.77	86.80
KW75S	No mesh	0.278	1.94	7.76	17.47	31.05	48.52	69.87	95.10
	4mm mesh	0.254	2.33	9.30	20.93	37.20	58.13	83.70	113.93
	15mm mesh	0.264	2.15	8.61	19.37	34.44	53.81	77.48	105.46

## Vertical sections

### KW 100Z (KW 50Z, KW 75Z are similar)



### KW 75S

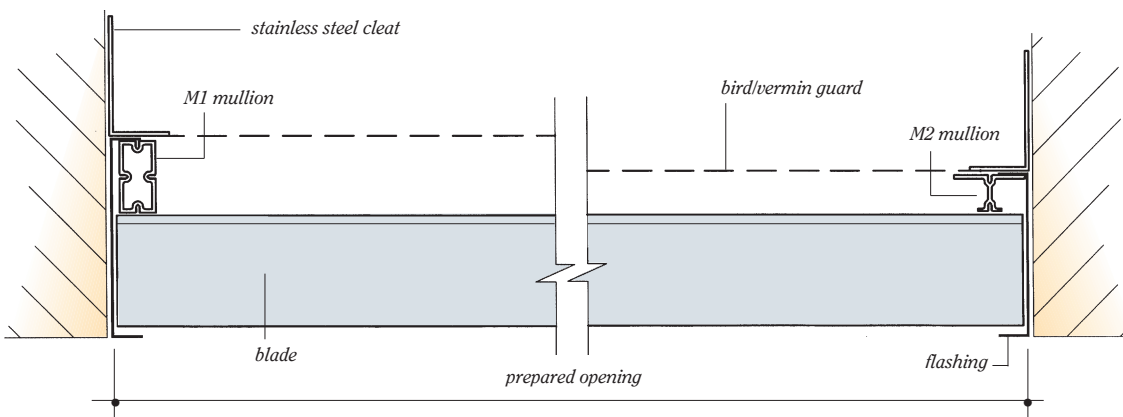


## Specification clause

Provide ventilation louvres to ..... as shown on drawings reference ..... Louvre blades and concealed mullions to be extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993. Louvre type: KW 50Z/ KW 75Z/ KW 100Z/ KW 75S\*, blade centres: ..... mm. Finish: polyester powder coating to BS 6496/PVF2/ anodised AA25 to BS 3987/natural mill finish\*, colour: ..... Continuous appearance/ panelled\*. Accessories: HDPE/ aluminium\* bird guard/insect guard\*. Louvres to be supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS. Tel: 01773 814102, Fax: 01773 814103, Email: info@kingfisherlouvres.com \*Delete as applicable.

## Horizontal section

### KW 100Z



## KW MULTIPLE-BANK LOUVRES

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### KW High weather protection louvres

Louvre systems can be supplied with double or triple banks of blades, in order to give increased weather protection, whilst still providing ventilation and maintaining an attractive facade.

KW 100T triple-bank louvres are externally the same as KW 100Z single-bank, so they can be used together in one installation whilst maintaining a consistent appearance.

Louvres are supplied either mounted on concealed mullions for a continuous appearance or as individual framed panels, and can form an architectural feature of a building. The system is very flexible; banks and panels can be made to any practicable size or shape.

All components are aluminium for long life with good corrosion resistance.

### Applications

Any application requiring permanent large-scale ventilation combined with screening, for example air inlet and exhaust for ventilation or air conditioning systems, plant rooms, lift motor rooms, generators and pumping stations.

Blades clip in place and cannot be removed without special tools, so the system is suitable for use in publicly accessible areas.

Blanked-off panels are available to provide continuity of appearance where required.

### Composition

Blades, mullions and clips are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

Trims and flashings are either extruded aluminium grade 6063 T6 to BS 1474 or folded aluminium sheet, depending on installation details.

Fixings are stainless steel.

### Accessories

Mitred corners where required, and a variety of edge trims and flashings to suit the installation.

*Bird/vermin guard (overlapped and secured to mullions):* HDPE (high density polyethylene) as standard, or expanded aluminium; hole size 15mm.

*Insect guard (framed in panels):* HDPE, hole size 4mm.

Also a wide range of ancillaries including doors (see page 13), access panels, and turrets.

### Size, shape

Blade centres can be varied as required, subject to minimum values shown, which provide a good combination of air flow and weather protection.

Increasing blade centres will affect weather and airflow performance. Blade angle is 45° for all types.

Choice of mullion is according to wind loading, span and opening detail.

Maximum blade length is normally 3.0m for ease of handling. For continuous louvres the blades are butt jointed at an intermediate mullion and the blade ends are held by a single clip to ensure correct alignment.

Banks and panels can be made to any practicable shape and size, with no restriction on height or width.

### Appearance

Louvres provide clean lines with a continuous appearance; no fixings or supports are visible from outside.

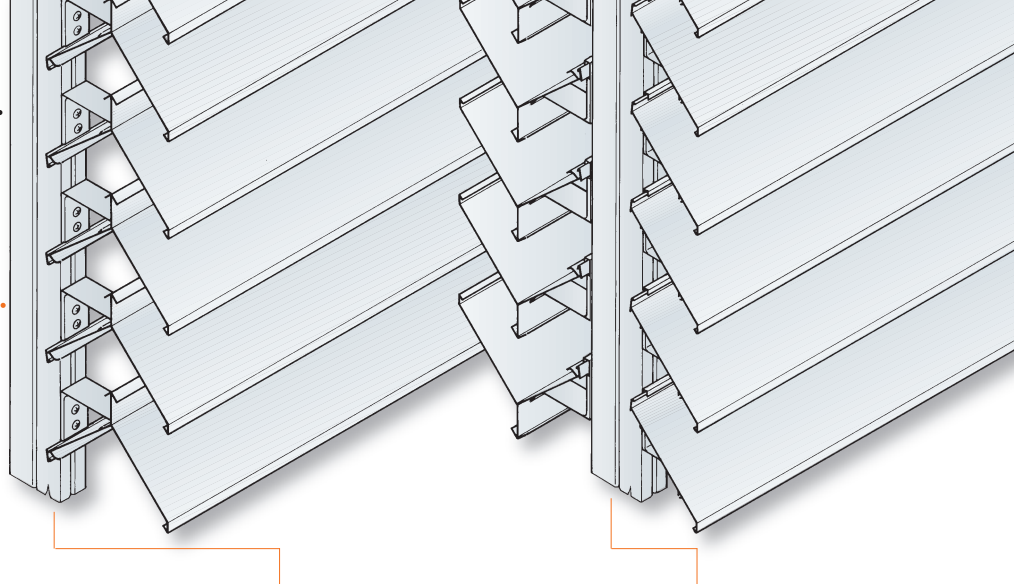
*Standard finish:* polyester powder coating to BS 6496.

*Alternative finishes:* PVF2, natural or colour anodised AA25 to BS 3987, natural mill finish. Where anodising is specified, the aluminium will be of anodising quality.

### Maintenance

Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

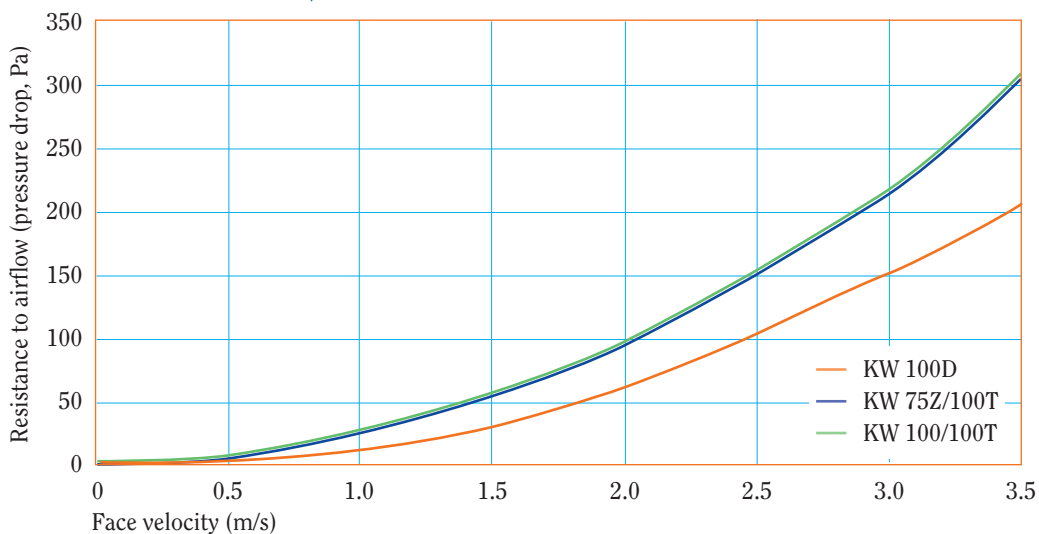




Type	KW 100D double bank	KW 75/100T triple bank	KW 100/100T triple bank
Minimum blade centres	75mm	75/100mm (front/rear blade)	100/100mm
Free area between blades at stated centres	32% at 75mm 42% at 100mm	42% at 75/100mm	42% at 100/100mm
Installed blade depth	131mm	80/131mm	98/131mm
Overall depth*			
M1 mullion	191mm	272mm	290mm
M2 mullion	161mm	242mm	260mm

\*For double banks, depth from front of blades to rear of mullion; for triple banks, depth from front of front blades to rear of rear blades

#### Performance: air flow, louvre with no mesh

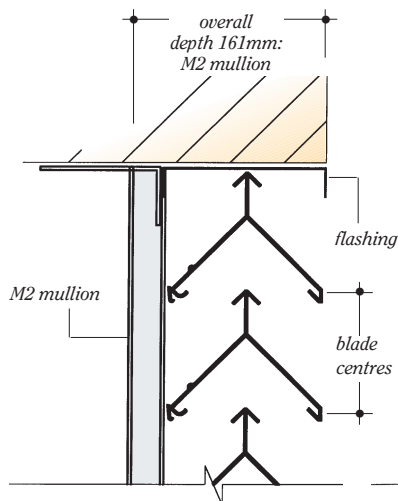


			Pressure drop (Pa) at given face velocities (m/s)						
Cd			0.5	1.0	1.5	2.0	2.5	3.0	3.5
KW100D	No mesh	0.188	4.24	16.98	38.20	67.90	106.10	152.78	207.96
	4mm mesh	0.180	4.63	18.52	41.67	74.07	115.74	166.67	226.85
	15mm mesh	0.182	4.53	18.11	40.76	72.46	113.21	163.02	221.89
KW75/ KW100T	No mesh	0.156	6.16	24.65	55.47	98.62	154.09	221.89	302.02
	4mm mesh	0.148	6.85	27.39	61.63	109.57	171.20	246.53	335.56
	15mm mesh	0.151	6.58	26.31	59.21	105.26	164.47	236.83	322.35
KW100/ KW100T	No mesh	0.154	6.32	25.30	56.92	101.20	158.12	227.69	309.92
	4mm mesh	0.146	7.04	28.15	63.33	112.59	175.92	253.33	344.81
	15mm mesh	0.149	6.76	27.03	60.81	108.10	168.91	243.23	331.07

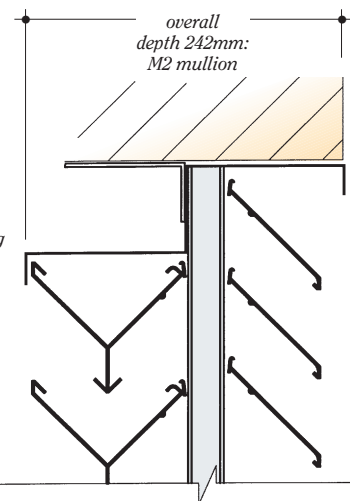
## KW MULTIPLE-BANK LOUVRES

### Vertical sections

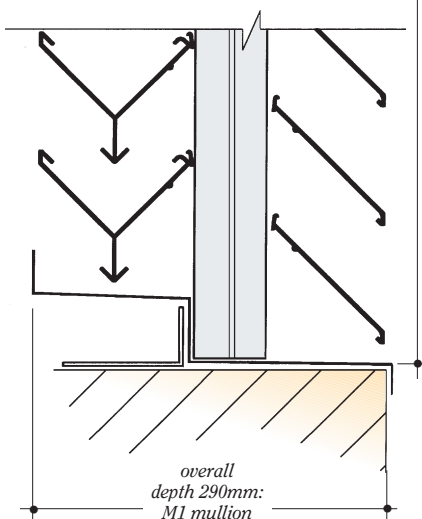
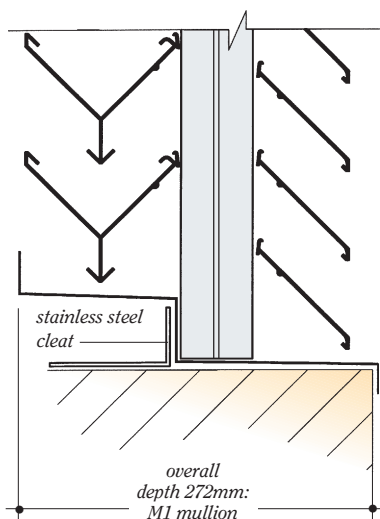
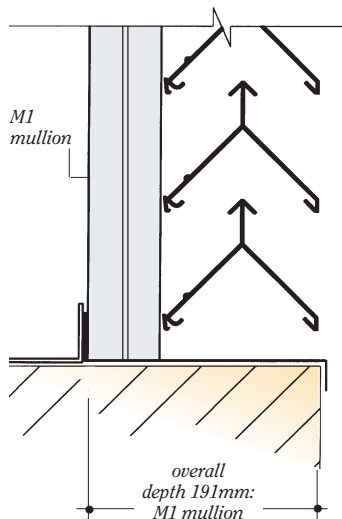
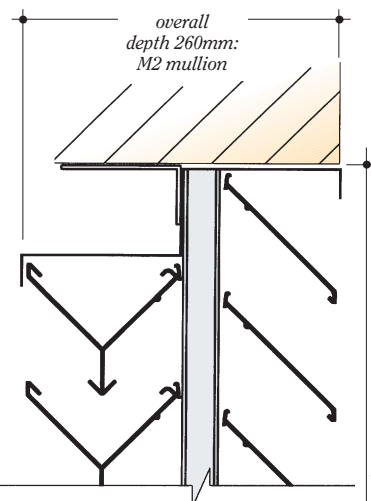
#### KW 100D



#### KW 75/100T



#### KW 100/100T



prepared opening

### Specification clause

Provide ventilation louvres to ..... as shown on drawings reference

..... Louvre blades and concealed mullions to be extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

Louvre type: KW 100D/ KW75/100T/ KW100/100T\*, blade centres: ..... mm.

Finish: polyester powder coating to BS 6496/PVF2/ anodised AA25 to BS 3987/natural mill finish\*, colour: .....

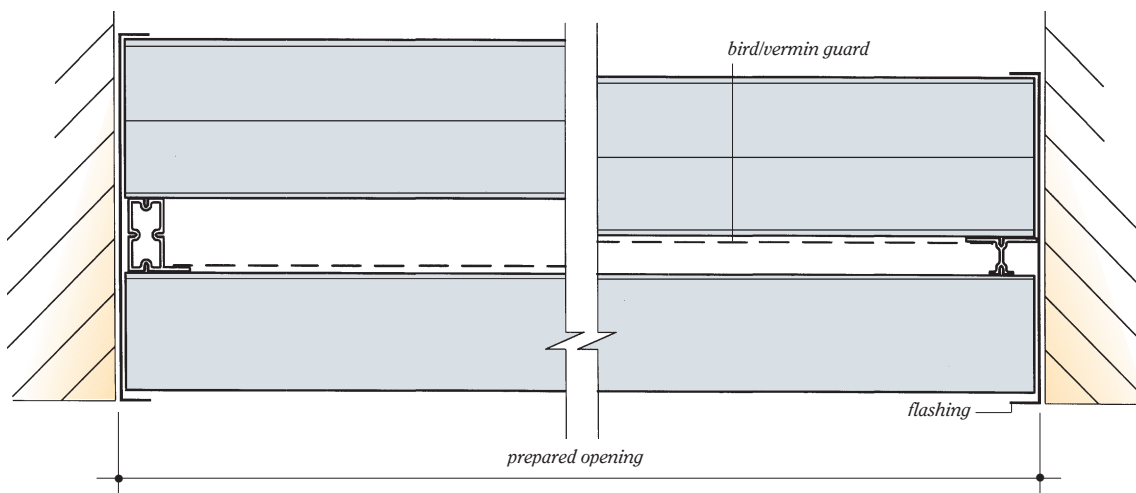
Continuous appearance/ panelled\*.

Accessories: HDPE/aluminium\* bird guard/insect guard\*.

\*Delete as applicable.

### Horizontal section

#### KW 100/100T



## KW LOUVRE DOORSETS



### KW Louvre doorsets

Louvre doorsets match corresponding KW louvres, which can be installed within louvre banks giving a continuous appearance, or within a wall opening. The doors provide permanent ventilation combined with weather protection and visual screening.

Doors can be supplied with louvre blades matching all KW single and multiple-bank louvres.

Doors are outward opening, single or double, and are supplied complete with frame and ironmongery.

All components are aluminium for long life with good corrosion resistance.

### Applications

To provide access to plant and boiler rooms, lift motor rooms, meter cupboards, pumping stations and other plant enclosures.

### Composition

The door leaf has a framing of welded extruded aluminium hollow sections, to which louvre blades are clipped after installation.

The door frame comprises extruded aluminium head, jambs and threshold bolted together to form a complete frame.

All components are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

### Ironmongery

*Standard doors:* Europrofile cylinder lock in Europrofile deadlock case, Surface-mounted Chubb door bolt, aluminium D handle (powder coated to match door), Dictator gas spring to assist opening and hold door open at 90° or fully closed as required.

*Fire escape doors:* aluminium D handle (powder coated to match door), panic push pad (single door), horizontal panic bar with 2-point locking (double doors).

*Optional extras to special order (subject to compatibility with door):* door closer, external key access to fire escape door, special door locks.

### Accessories

*Bird/vermin guard (overlapped and secured to stiles):* HDPE or expanded aluminium, hole size 15mm.

*Insect guard (framed in panels):* HDPE, hole size 4mm.

### Size, shape

*Standard leaf sizes:*

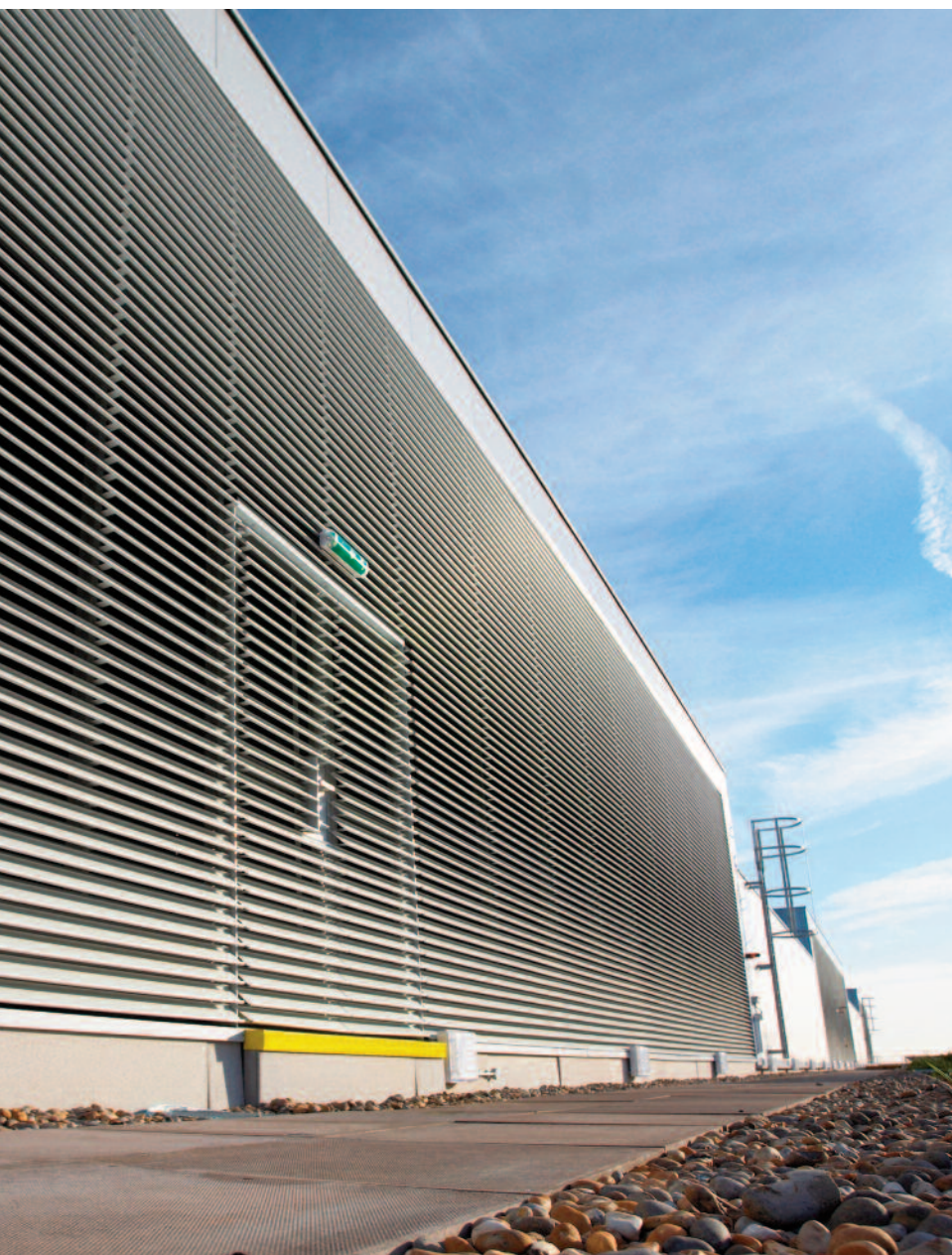
Single 900mm wide x 2136mm high, double 1800mm wide x 2136mm high.

Doors can also be supplied in any size up to a maximum of 3m<sup>2</sup> single or 6m<sup>2</sup> double.

Blade profiles and centres see pages 4 - 11.  
Blade angle 45°.



## KW LOUVRE DOORSETS



### Dimensions

Louvre type	Overall depth*
KW 50Z	112mm
KW 75Z	128mm
KW 100Z	146mm
KW 75S	128mm
KW 75HPG	138mm
KW 100D	180mm
KW 75/100T	240mm
KW 100/100T	258mm

*\*Generally, depth from front of blades to rear of door frame; for triple bank louvres, depth from front of front blades to rear of rear blades.*

### Appearance

Doors provide a continuous appearance when installed within a KW louvre bank. A small lock area with D handle is the only interruption to the line of the louvre blades.

*Standard finish:* polyester powder coating to BS 6496.

*Alternative finishes:* PVF2, natural or colour anodised AA25 to BS 3987, natural mill finish. Where anodising is specified, the aluminium will be of anodising quality.

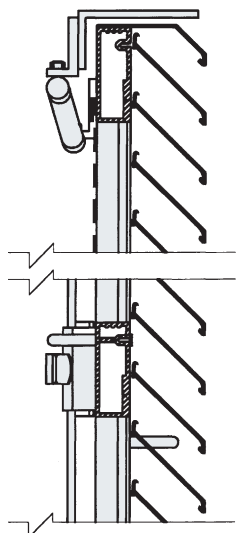
### Maintenance

Clean working components by wiping with a soft cloth and applying a light machine oil as required. Check operation of the door every three months to ensure all fixings are tight and latches engage correctly. Some special ironmongery may require routine maintenance in accordance with manufacturer's instructions provided.

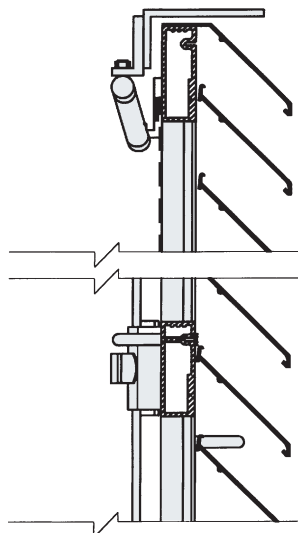
Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

## Vertical sections

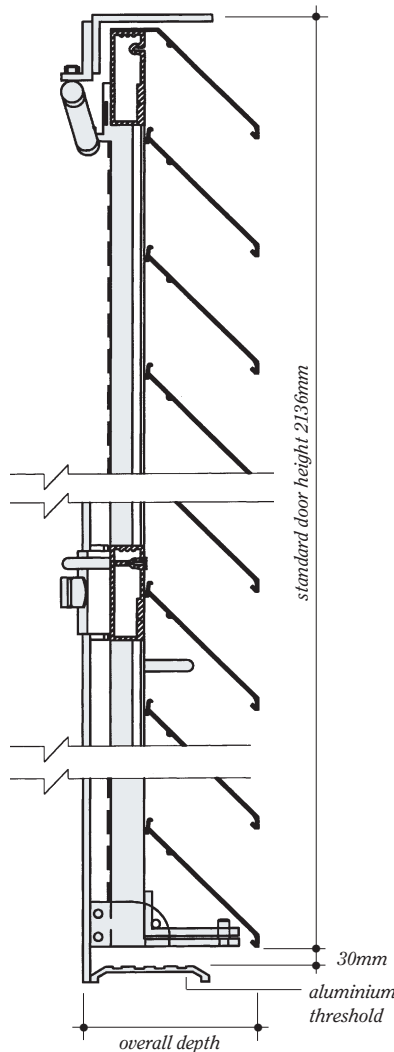
### KW 50Z



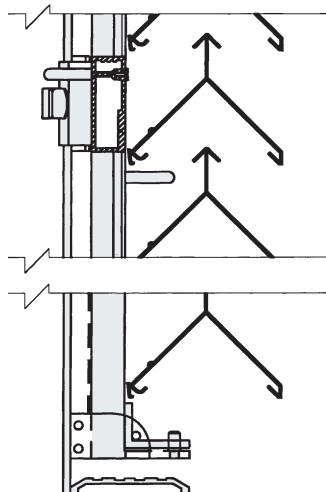
### KW 75Z



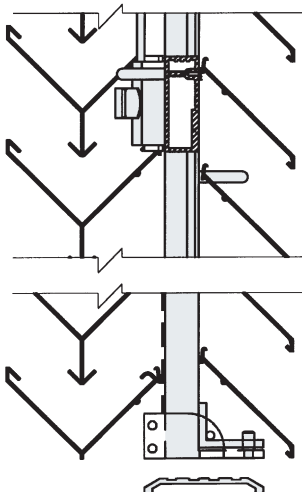
### KW 100Z



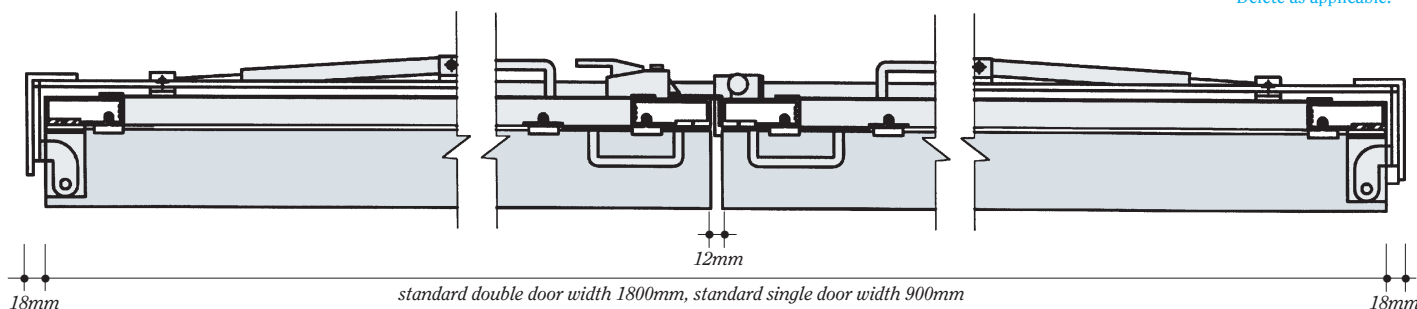
### KW 100D



### KW 100/100T



## Horizontal section, double doors, KW 100Z



## Specification clause

Provide louvre doorsets to ..... as shown on drawings reference .....  
Doors and frames to be extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993. Leaf to be outward opening\*.  
\*Ironmongery, standard doors: Europrofile cylinder lock in Europrofile deadlock case, surface-mounted Chubb door bolt to slave leaf, aluminium D handle powder coated to match door, Dictator gas spring to assist opening and hold door open at 90°/fully closed\*.  
\*Ironmongery, fire escape doors: aluminium D handle (powder coated to match door), panic push pad (single door), horizontal panic bar with 2-point locking(double doors)\*.  
Louvre blade type: KW 50Z/KW 75Z/ KW 100Z/KW 75S/ KW 75HPG/KW100D/ KW 75/100T/ KW 100/100T\* with sprung metal blade clips, blade centres: ..... mm.  
Finish: polyester powder coating to BS 6496/PVF2/ anodised AA25 to BS 3987/natural mill finish\*, colour: .....  
Accessories: HDPE/ aluminium\* bird guard/insect guard\*, special ironmongery: .....  
Louvres to be supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS.  
Tel: 01773 814102, Fax: 01773 814103, Email: info@kingfisherlouvres.com  
\*Delete as applicable.

## BRISE SOLEIL SOLAR SHADING SYSTEM

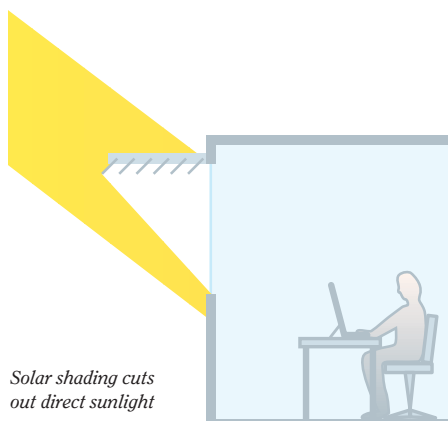
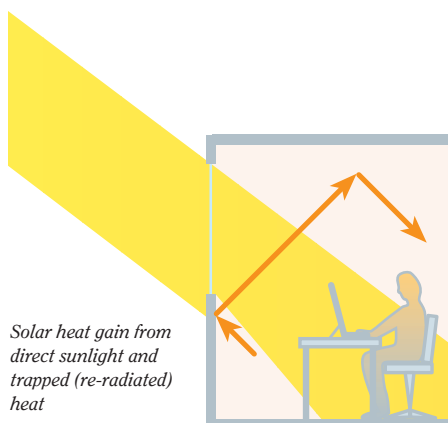
Kingfisher Brise Soleil is an external shading system for control of solar heat gain through glazing. Designed as a complete system which can be installed in various configurations.

### Applications

Suitable for offices, schools and other commercial and public buildings, both new and refurbished.

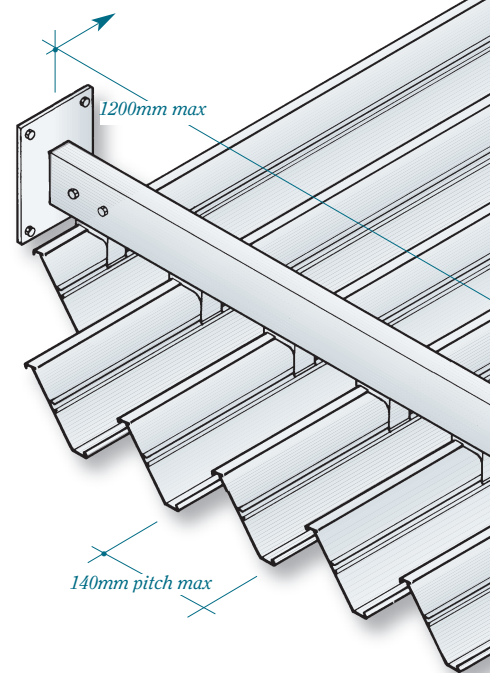
### Why use solar shading ?

In sunny weather, solar heat gains through glazing can represent a substantial input of heat to a building. Apart from the direct solar heating, re-radiated heat becomes trapped inside the building, increasing the internal temperature even more. Ventilation rates or cooling loads must then be increased to maintain comfortable conditions.



### Kingfisher Brise Soleil

A system of continuous fixed blades, normally installed on support arms projecting horizontally above areas of glazing. All main components are aluminium for long life with good corrosion resistance.



### Composition

Blades, support arms and clips are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

Blades are carried in aluminium clips, which are factory attached to the support arms. The outer end of the arm is closed off with a welded aluminium cap; the inner end slots over the stainless steel fixing bracket.

### Size, shape

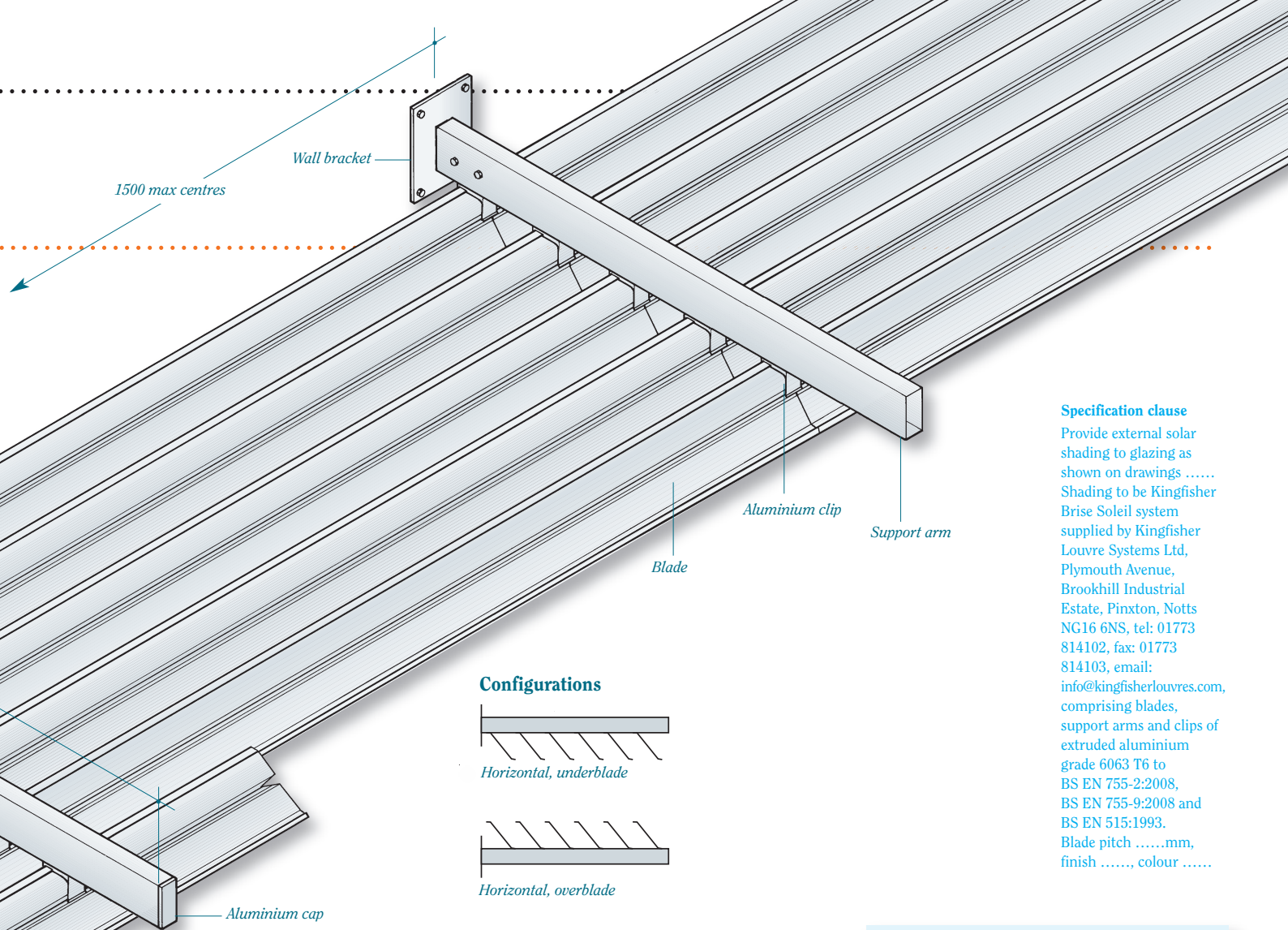
Support arms: maximum projection 1200mm, maximum spacing: 1500mm centres.

Blade pitch must be specified when ordering, maximum: 140mm. This will give complete shading for the UK.

### Appearance

Standard finish to blades, support arms and clips: polyester powder coating to BS 6496, in any RAL colour to order.

Alternative finishes: PVF2, natural or colour anodised AA25 to BS 3987, natural mill finish.



**Specification clause**  
Provide external solar shading to glazing as shown on drawings .....  
Shading to be Kingfisher Brise Soleil system supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Notts NG16 6NS, tel: 01773 814102, fax: 01773 814103, email: info@kingfisherlouvre.com, comprising blades, support arms and clips of extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993. Blade pitch .....mm, finish ....., colour .....

### Wind loadings

Maximum wind loadings are given in the table for support arm projection 1200mm (maximum allowable) with ten equally spaced blades.

For fixing brackets to the structure, the tensile load resistance of anchors must be 5.0kN minimum, per bolt.

Indicative installation heights are based on a site wind speed of 25m/s which covers all of the UK except NW Scotland and NW Ireland, site altitude approx 60m, no shelter from surrounding buildings. For sheltered sites installation heights of up to 50m may be possible; in more exposed sites lower heights will apply.

The advice of a structural engineer should be sought for guidance on the expected loads resulting from particular building design, location and orientation.

### Installation

The fixing bracket base plate has four 12mm diameter holes for fixing to the main structure of the building (these fixings are not supplied).

Each support arm slots over a bracket and is fixed to it using two M10 stainless steel bolts with dome nuts. Blades are attached to support arms by slotting into the pre-attached clips.

### Maintenance

Periodic cleaning is required to maintain appearance; this may be carried out when glazing is cleaned.



## TECHNICAL BACKGROUND

### Building Regulations

**Approved Document L2A Conservation of fuel and power in new buildings other than dwellings, 2010**

#### Section 1 Design Standards:

#### Criterion 3: Limiting the effects of solar gains in summer

This section sets out the approach to limiting heat gains as required by paragraph L1(a)(i) of Schedule 1 to the Building Regulations.

The guidance can be used to demonstrate that the building has appropriate passive control measures to limit solar gains.

The purpose is to limit solar gains to reasonable levels during the summer period, in order to reduce the need for or installed capacity of air-conditioning systems.

Some ways of assessing the overheating risk are given in CIBSE TM37 - Design for improved shading control.

	Support arm spacing (mm)		
	1500	1250	1000
Maximum dynamic wind pressure Pa	1020	1225	1530
Maximum design wind pressure Pa	1225	1470	1835
Indicative installation height (m)	4-5	6-10	10-20

## KC SCREENING LOUVRES

### KC Screening louvres

The KC 120 system comprises banks of louvre blades, designed primarily to provide visual screening at an economical cost, but not weather protection.

The Z profile blades can be installed angled upwards or downwards according to direction of view, or double banked for screening from any angle.

Blade spacing can be varied, and louvres may be vertical, horizontal or inclined, according to requirements.

Louvres are mounted on concealed mullions for a continuous appearance, and can form an architectural feature of a building. The system is very flexible; banks and panels can be made to any practicable size or shape.

All components are aluminium for long life with good corrosion resistance.

### Applications

Generally used for screening hvac and other plant on roofs from higher buildings or from low level. Blade centres can be adjusted to suit sightlines and specific requirements.

Blades clip in place and cannot be removed without special tools, so the system is suitable for use in publicly accessible areas.

Blanked-off panels are available to provide continuity of appearance where required.

### Composition

Blades, mullions and clips are extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.

All other components are aluminium.

Fixings are stainless steel.

### Accessories

Mitred corners where required, and a variety of edge trims and flashings to suit the installation.

### Size, shape

Minimum blade centres 100mm.

Maximum blade length is normally 3.0m for ease of handling/practicality.

### Appearance

Louvres provide clean lines with a continuous appearance; no fixings or supports are visible from outside.

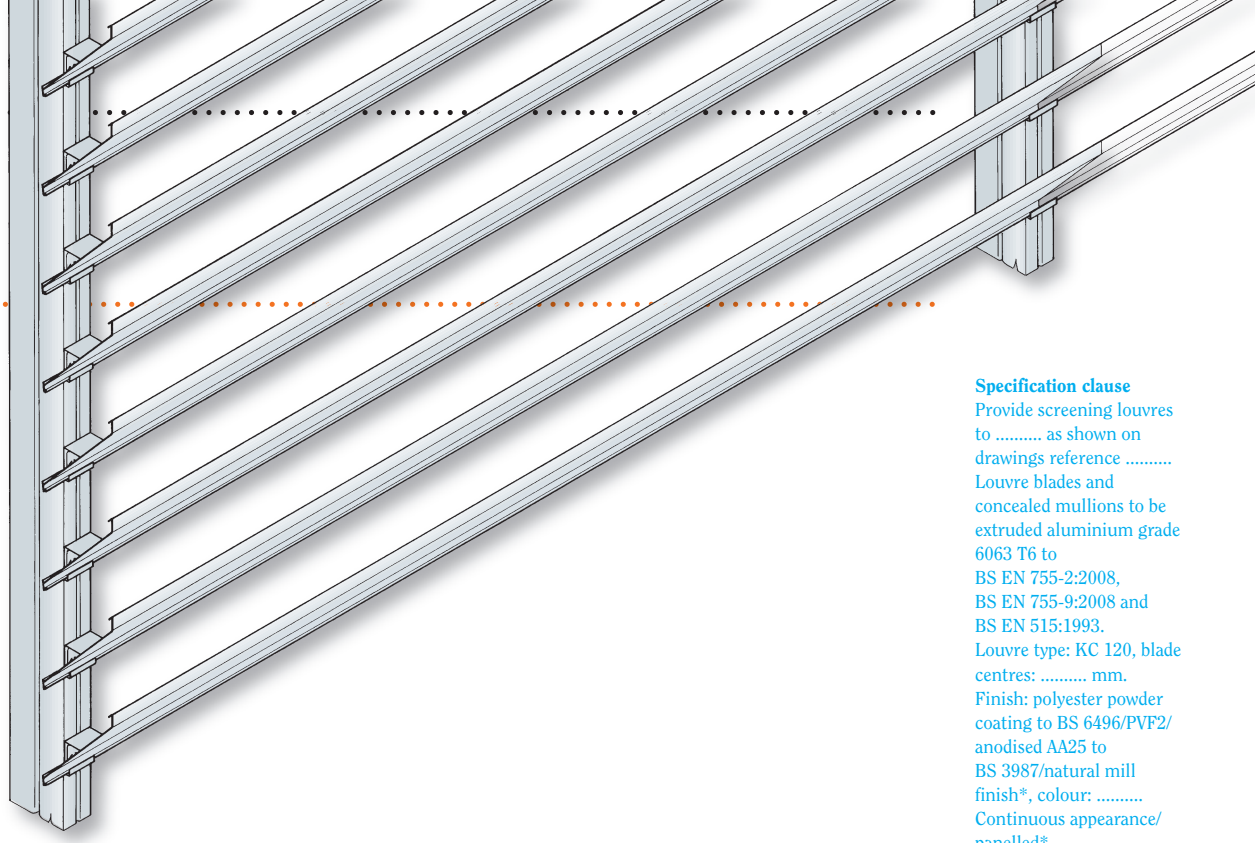
*Standard finish:* polyester powder coating to BS 6496.

*Alternative finishes:* PVF2, natural or colour anodised AA25 to BS 3987, natural mill finish. Where anodising is specified, the aluminium will be of anodising quality.

### Maintenance

Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

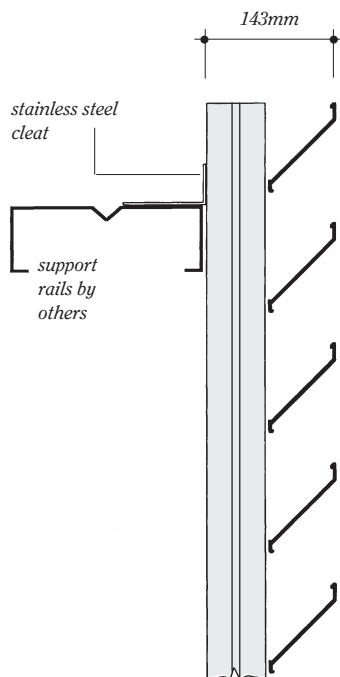




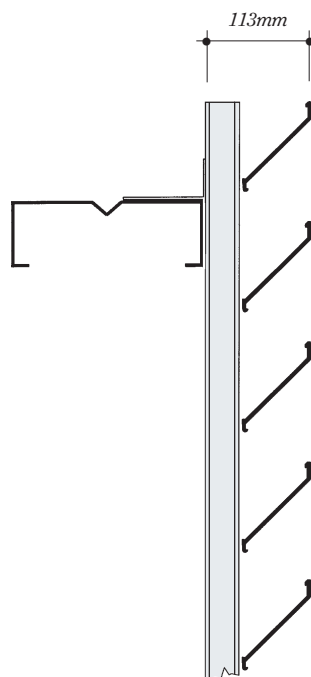
**Specification clause**  
 Provide screening louvres to ..... as shown on drawings reference .....  
 Louvre blades and concealed mullions to be extruded aluminium grade 6063 T6 to BS EN 755-2:2008, BS EN 755-9:2008 and BS EN 515:1993.  
 Louvre type: KC 120, blade centres: ..... mm.  
 Finish: polyester powder coating to BS 6496/PVF2/ anodised AA25 to BS 3987/natural mill finish\*, colour: .....  
 Continuous appearance/ panelled\*.  
 Louvres to be supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS.  
 Tel: 01773 814102, Fax: 01773 814103, Email: info@kingfisherlouvres.com  
 \*Delete as applicable.

### Vertical sections

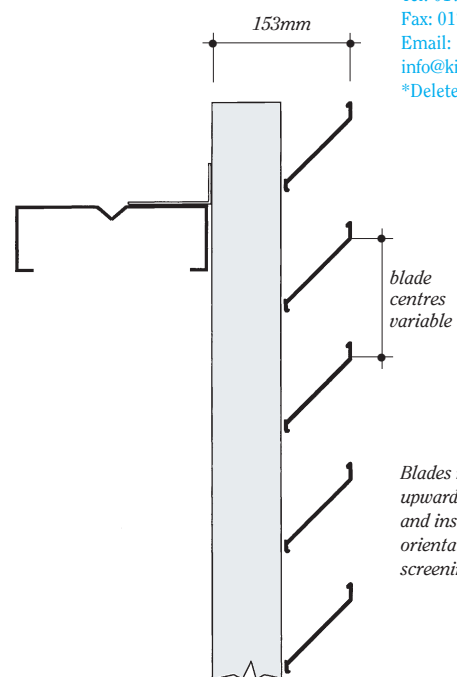
**M1 mullion**



**M2 mullion**

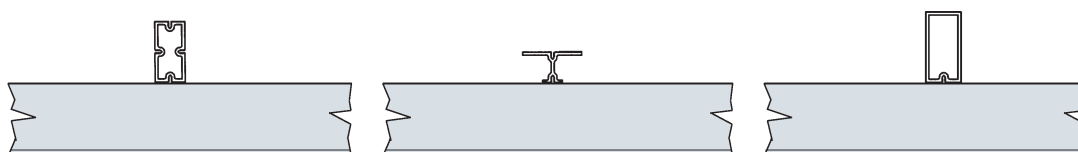


**M4 mullion**



*Blades may be angled upwards or downwards, and installed in any orientation according to screening requirements.*

### Horizontal sections



## FURTHER INFORMATION

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### REFERENCES

BS EN 755-2:2008 Aluminium and aluminium alloys. Extruded rod/bar, tube and profiles. Mechanical properties.

BS EN 755-9:2008 Aluminium and aluminium alloys. Extruded rod/bar, tube and profiles. Profiles, tolerances on dimensions and form.

BS EN 515:1993 Aluminium and aluminium alloys. Wrought products. Temper designations.

BS 3987: 1991 (1997) Specification for anodic oxidation coatings on wrought aluminium for external architectural applications.

BS 6496: 1984: (1991) Specification for powder organic coatings for application and stoving to aluminium alloy extrusions, sheet and preformed sections for external architectural purposes, and for the finish on aluminium alloy extrusions, sheet and preformed sections coated with powder organic coatings.



### OTHER PRODUCTS

A range of other building products including:

Passivent natural daylighting

Passivent natural ventilation systems

Passivent Tricklevents

Glidevale Sunscope Tubular Rooflights and Metro modular rooflights

Glidevale roof ventilation systems and roofing products

Protect membranes

Z-Led Cavity Trays and Gas Protection Products

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### KINGFISHER LOUVRE SYSTEMS LTD

Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS.

Telephone: 01773 814102 Fax: 01773 814103

Email: [info@kingfisherlouvres.com](mailto:info@kingfisherlouvres.com) Web: [www.kingfisherlouvres.com](http://www.kingfisherlouvres.com)

Kingfisher Louvre Systems Ltd maintains a policy of continuous development and reserves the right to amend product specifications without notice.

**BPD**

A member of the Building Product Design Group

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