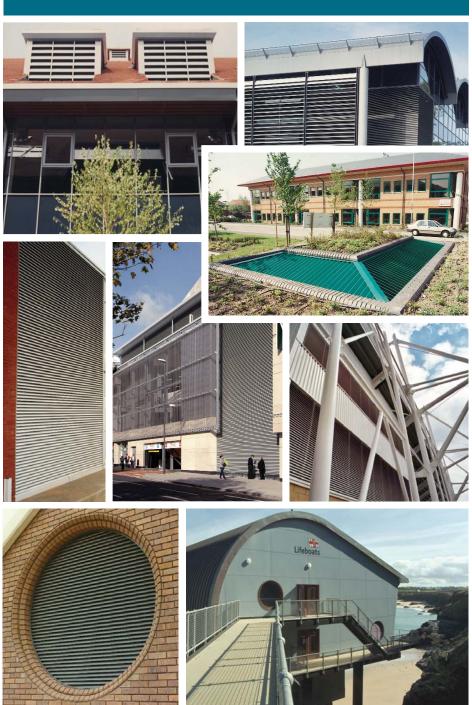
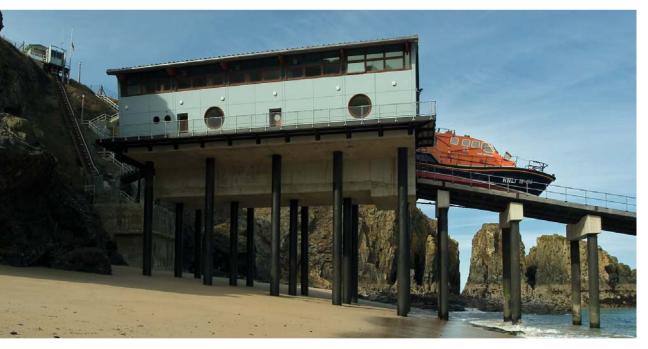
VENTILATION LOUVRES





PRODUCT RANGE

Range and applica	Page		
KW High-perforn	nance weather protection louvre (KW 75HPG)	4	
Application			
Туре	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-banl	k 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 doors	sets	13	
Application	Can be used alone or as an integral part of a louvre installation.		
Types	To match most KW louvres.		
KA Acoustic louv	res	16	
Application	Ventilation combined with airborne sound insulation, in addition to weather protection and visual screening.		
Types	Range of depths to provide increasing acoustic performance.		
KC Screening lou	uvres	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.		
-			



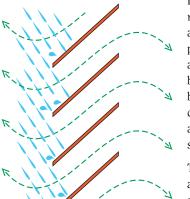
Left: Padstow RNLI Lifeboat Station. Kingfisher circular ventilation loweres ensure an adequate supply of cool air and extraction of warm air from the central winch motor room.

Far Left: Westfield Shopping centre, Derby the 1 million square foot shopping centre redevelopment incorporates plant ventilation and screening lowres specifically matched to a RAL metallic to complement the building's colour palette.





The new 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 singlebank louvres see page 6.

Composition

Louvre blades and mullions are extruded aluminium grade 6063 T6 to BS 1474.

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

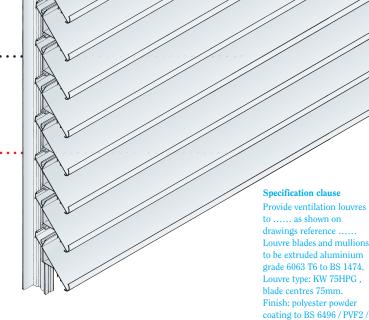
Minimum blade centres 75mm. Free area between blades at 75mm centres: 47%.

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.





anodised AA25 to BS 3987 /

Continuous appearance /

Louvres to be supplied by Kingfisher Louvre Systems Ltd, Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS. Tel: 01773 814102, Fax: 01773 814103.

info@kingfisherlouvres.com
*Delete as applicable.

natural mill finish*, colour

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

Email:

Performance

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

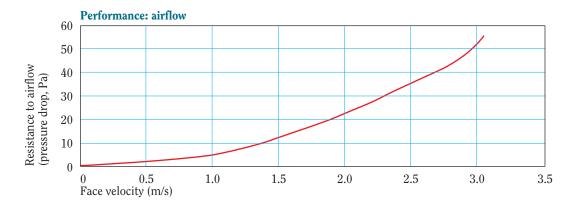
Maintenance

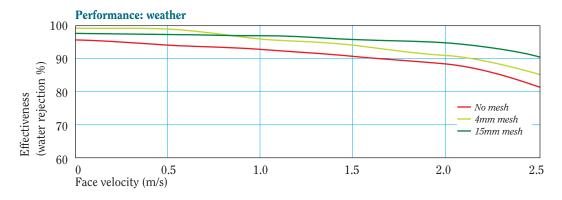
Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

Performance: classification

Face	Mesh:	None		4mm		15mm	
velocity (m/s)		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





5





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 largescale 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 1474.

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 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.

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.

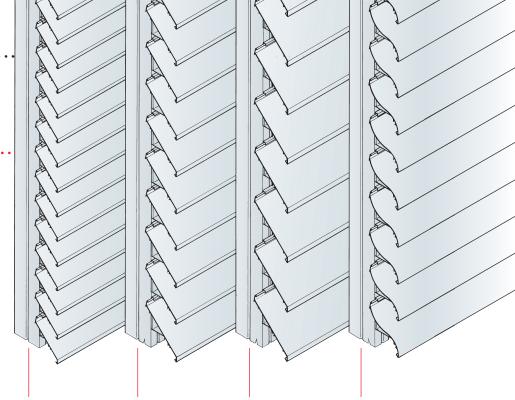
Appearance

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.





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.

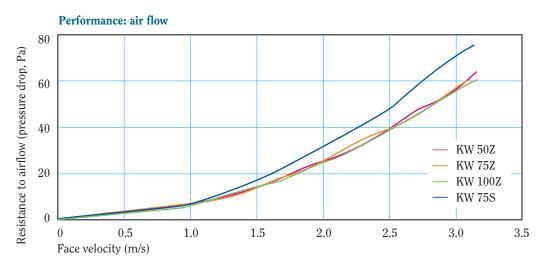
Туре		KW 50Z KW 75Z		KW 100Z	KW 75S	
Minimum blade centres		50mm	50mm 75mm		75mm	
Free area between blades at stated centres		52% at 50mm	58% at 75mm	61% at 100mm	50% at 75mm	
Overall depth*	M1 mullion M2 mullion	125mm 95mm	140mm 110mm	158mm 128mm	140mm 110mm	

^{*}From front of blades to rear of mullion.



..Kingfisher...

KW SINGLE-BANK LOUVRES



Maintenance



Vertical sections KW 100Z (KW 50Z, KW 75Z are similar) overall depth 1128mm: M2 mullion M2 mullion M3 mullion M4 mullion M5 mullion M6 centres

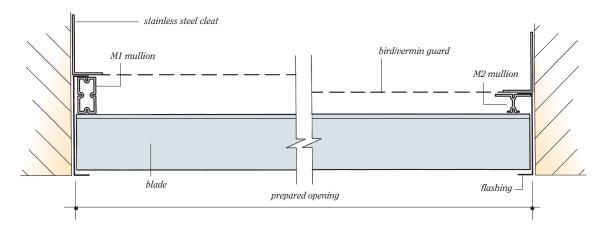
Horizontal section

overall

depth 158mm:

M1 mullion

KW 100Z



overall

M1 mullion

depth 140mm:

Specification clause

Provide ventilation louvres to as shown on drawings referenceLouvre blades and concealed mullions to be extruded aluminium grade 6063 T6 to BS 1474. 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.



KW MULTIPLE-BANK LOUVRES

KW High weather protection louvres

Louvre systems comprising double or triple banks of blades providing permanent ventilation. Designed to give even better weather protection than single-bank louvres, combined with low resistance to airflow and complete visual screening.

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 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 largescale 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 1474.

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.

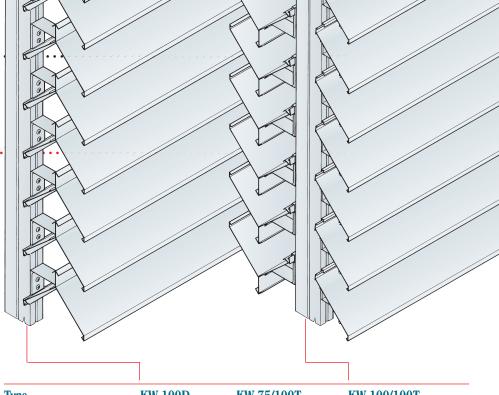
Standard finish: polyester powder coating to BS 6496.

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

••••••





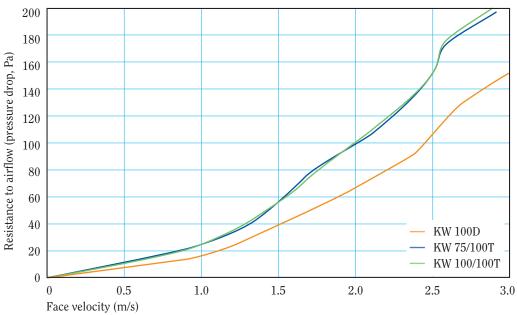
Туре	KW 100D double bank	KW 75/100T triple bank	KW 100/100T triple bank
Minimum blade centres	75mm	75/100mm (front/rear blade)	100/100mm
Free area between blades at stated centres	32% at 75mm 42% at 100mm	42% at 75/100mm	42% at 100/100mm
Overall depth*			
M1 mullion	191mm	272mm	290mm
M2 mullion	161mm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



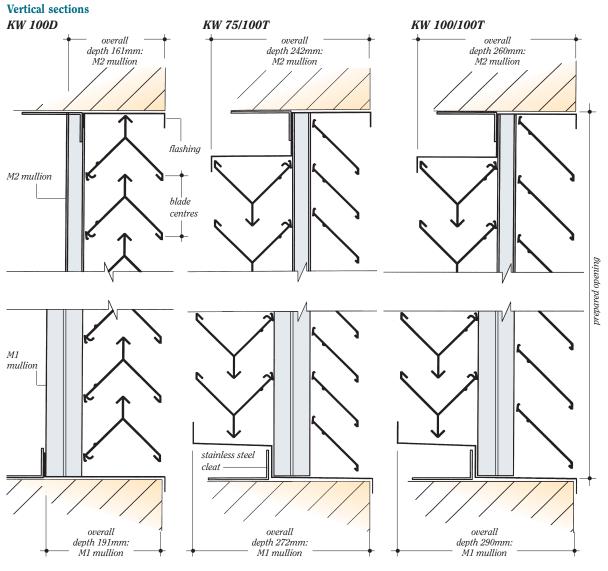


Performance: air flow



Kingfisher....

KW MULTIPLE-BANK LOUVRES



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

panelled*.

Specification clause

on drawings reference

louvres to as shown

...... Louvre blades and

concealed mullions to be extruded aluminium grade 6063 T6 to BS 1474. 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:

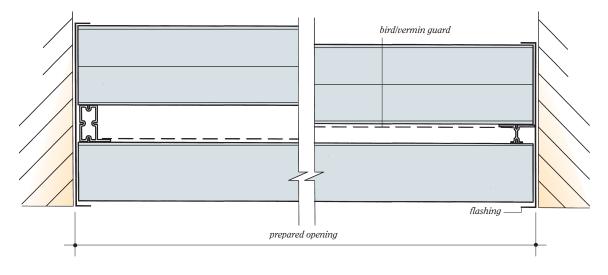
*Delete as applicable.

Continuous appearance/

Provide ventilation

Horizontal section

KW 100/100T



12



KW LOUVRE DOORSETS

KW Louvre doorsets

Louvre doorsets matching 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 1474.

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), door stay with pull cord release, Briton panic push pad (single doors), horizontal panic bar with 3-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 3m² single or 6m² double.

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

KW 50Z, KW 75Z, KW 100Z and KW 75S doors can be curved in plan to special order; please enquire for minimum radii.



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
75/100T	240mm

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

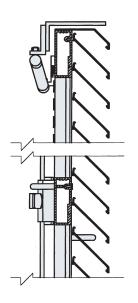
Standard finish: polyester powder coating to BS 6496.

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.

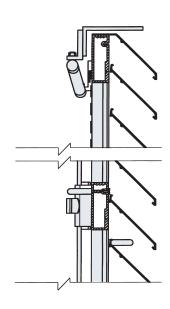
Maintenance

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.

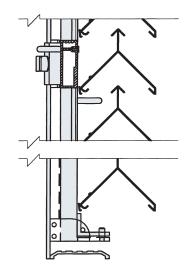
Vertical sections KW 50Z



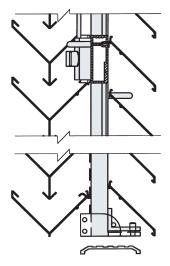
KW 75Z



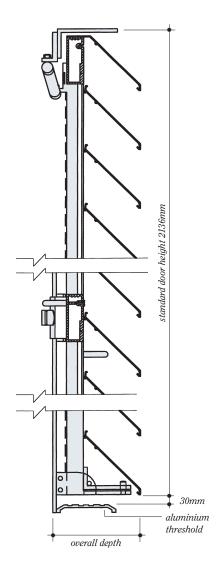
KW 100D



KW 100/100T



KW 100Z





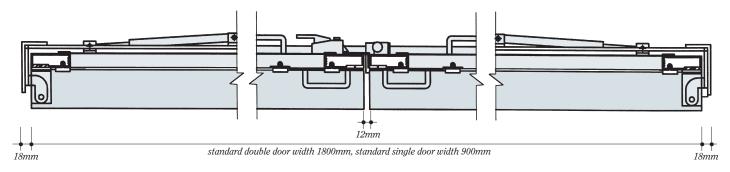
Specification clause

Provide louvre doorsets to .. as shown on drawings reference. Doors and frames to be extruded aluminium grade 6063 T6 to BS 1474. Leaf to be outward opening*. * Ironmongery, standarddoors: 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, door stay with pull cord release, Briton panic push pad (single doors)/horizontal panic bar with 3-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 Brookhill Industrial Estate, Tel: 01773 814102, Fax: 01773 814103, Email: info@kingfisherlouvres.com *Delete as applicable.

Ltd, Plymouth Avenue, Pinxton, Nottingham NG16 6NS.

Horizontal section, double doors, KW 100Z



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KA ACOUSTIC LOUVRES

KA Acoustic louvres

Acoustically treated louvres providing permanent ventilation combined with reduction of airborne sound transmission into or out of buildings. The louvres also provide weather protection, and are supplied as framed modular panels.

Applications

Can be used to provide airborne sound attenuation at ducted fan inlets and discharge outlets in plant room walls or elsewhere. Also for general plant room ventilation with sound attenuation.

Can be installed behind standard Kingfisher louvres or as an architectural feature of a building in themselves.

Composition

Standard lowere blades: galvanised steel sheet with no further applied finish.

To special order: stainless steel, British Steel HP200 plastic coated steel sheet.

The acoustic medium is non-toxic mineral wool, density 45kg/m³, packed at 10% compression to eliminate voids, and held in position within the louvre blades by perforated galvanised steel sheet.

Accessories

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

Bird/vermin guard: HDPE or expanded aluminium, hole size 15mm.

Insect guard: HDPE, hole size 4mm.

Single and double access doors also available with the same acoustic treatment.

Size, shape

Blade centres and blade angle are fixed, to achieve the stated acoustic performance. Any practicable height or width of installation is possible.

Maximum module size 2.5 x 2.5m.

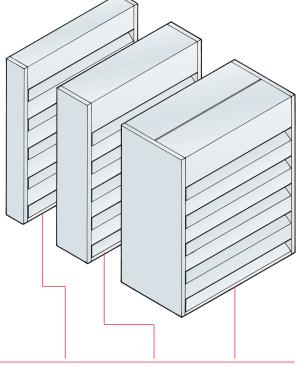
Appearance

Standard finish: galvanised steel.

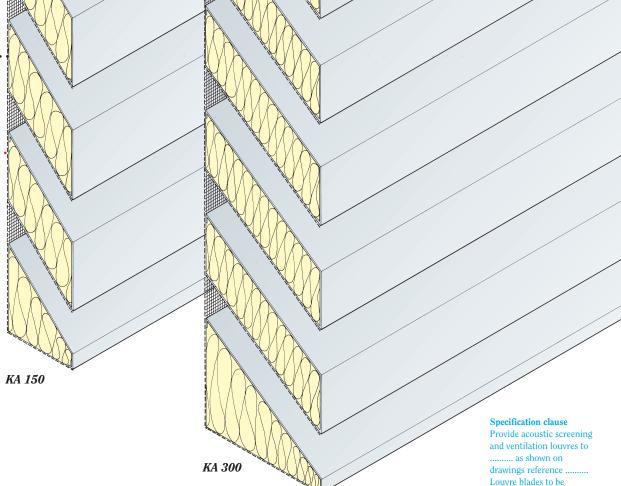
Alternative finishes: polyester powder coating to BS 6496, oven-baked spray coating, HP 200 plastic coating (in a range of BS/RAL colours), stainless steel.

Maintenance

Periodic cleaning is required to maintain appearance for finished products.



Blade type	KA 150	KA 300	KA 600
Overall depth	150mm	270mm	540mm
Free area	36%	37%	37%
Weight	28kg/m²	50kg/m²	100kg/m ²

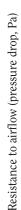


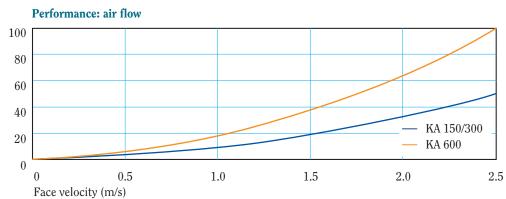


Performance: acoustic

Airborne sound insulation independently measured by Sound Research Laboratories to BS 2750: Part 5.

Louvre type	Depth	Airborne sound reduction index (dB) at octave band mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
KA 150	150mm	2	3	4	8	13	11	9	8
KA 300	270mm	4	7	10	12	15	16	13	12
KA 600	540mm	6	8	12	21	32	33	26	24

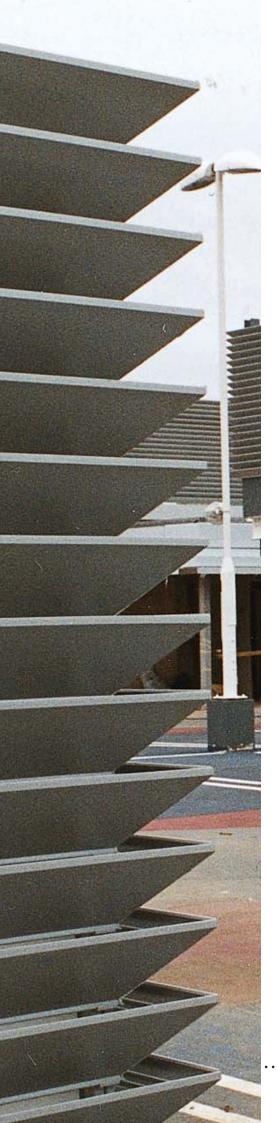




Colour: Acoustic medium: non-toxic mineral wool, density 45kg/m³, packed at 10% compression to eliminate voids, and held in position within louvre blades by perforated galvanised steel sheet.

Louvre type: KA 150/ KA 300/KA 600*. 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.



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 1474. 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

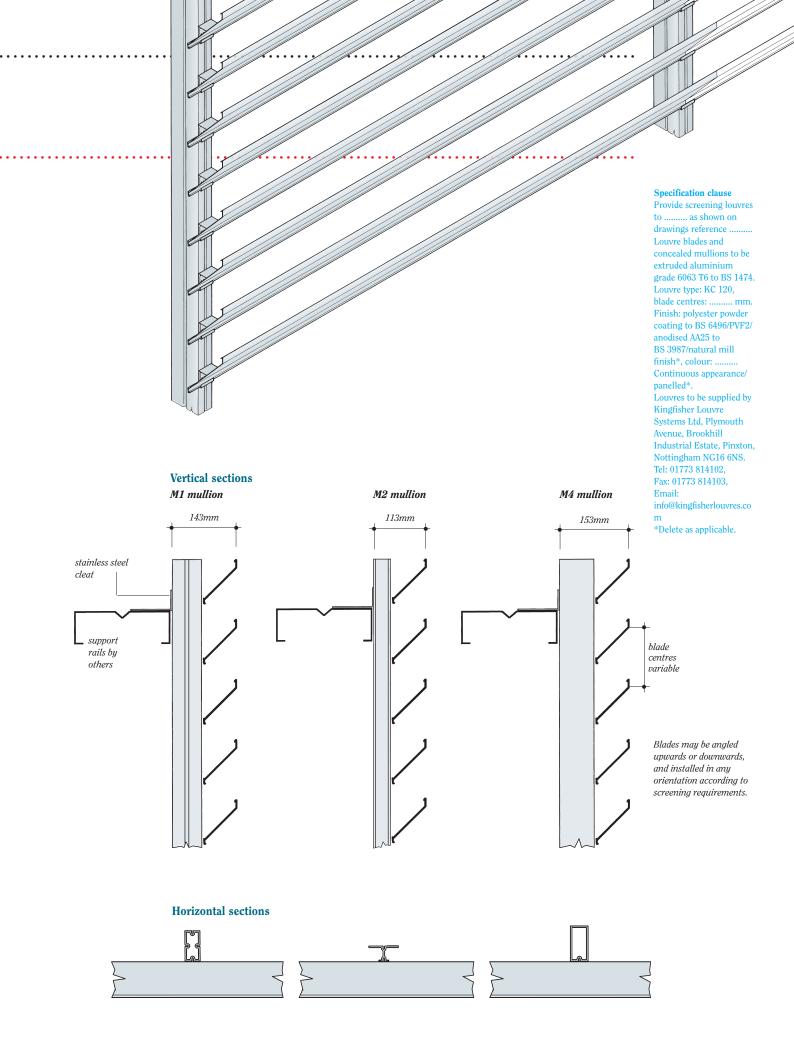
Louvres provide clean lines with a continuous appearance; no fixings or supports are visible from outside.

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





FURTHER INFORMATION

References

BS 1474: 1987 Specification for wrought aluminium and aluminium alloys for general engineering purposes: bars, extruded round tubes and sections.

BS 2750 Acoustics - measurement of sound insulation in buildings and of building elements. Part 5: 1980 (1983).

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

Building Product Design market a wide range of other building products including: Kingfisher Brise Soleil

Milgisher Brise Solen

Passivent natural daylighting
Passivent natural ventilation systems

Passivent Tricklevents

Glidevale Sunscoop Tubular Rooflights and Metro modular rooflights

Glidevale roof ventilation systems and roofing products

Protect membranes

Z-Led Cavity Trays and Gas Protection Products



KINGFISHER LOUVRE SYSTEMS LTD

Plymouth Avenue, Brookhill Industrial Estate, Pinxton, Nottingham NG16 6NS.
Telephone: 01773 814102 Fax: 01773 814103
Email: info@kingfisherlouvres.com Web: www. kingfisherlouvres.com

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



A member of the Building Product Design Group