CI/SfB (57.9) Xh4
Uniclass L7535
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VENTILATION LOUVRES











VIS



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.



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.

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.

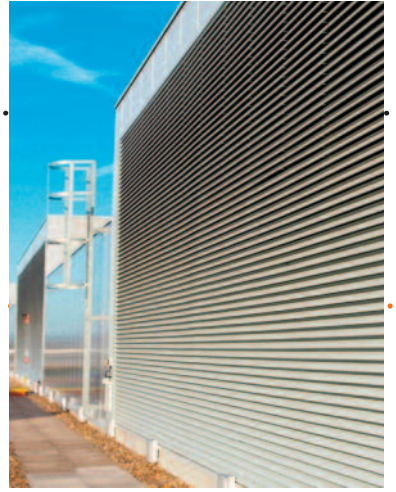
Appearance

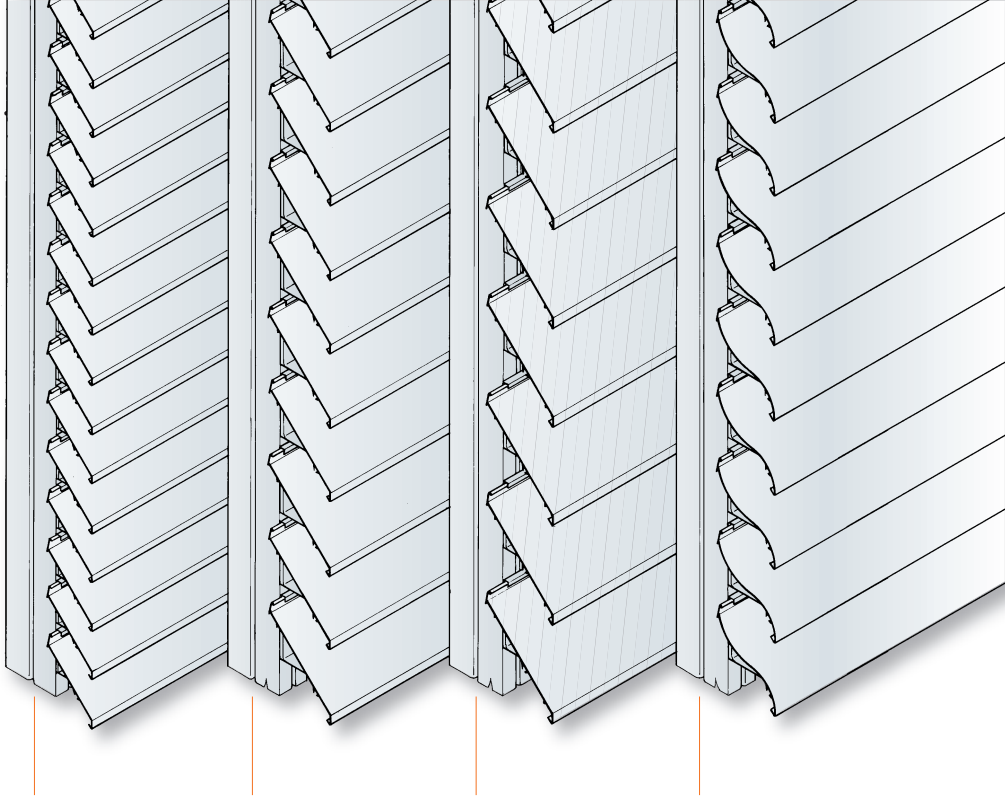
Louvres provide clean lines with a continuous appearance; no fixings or supports are visible from outside.

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).



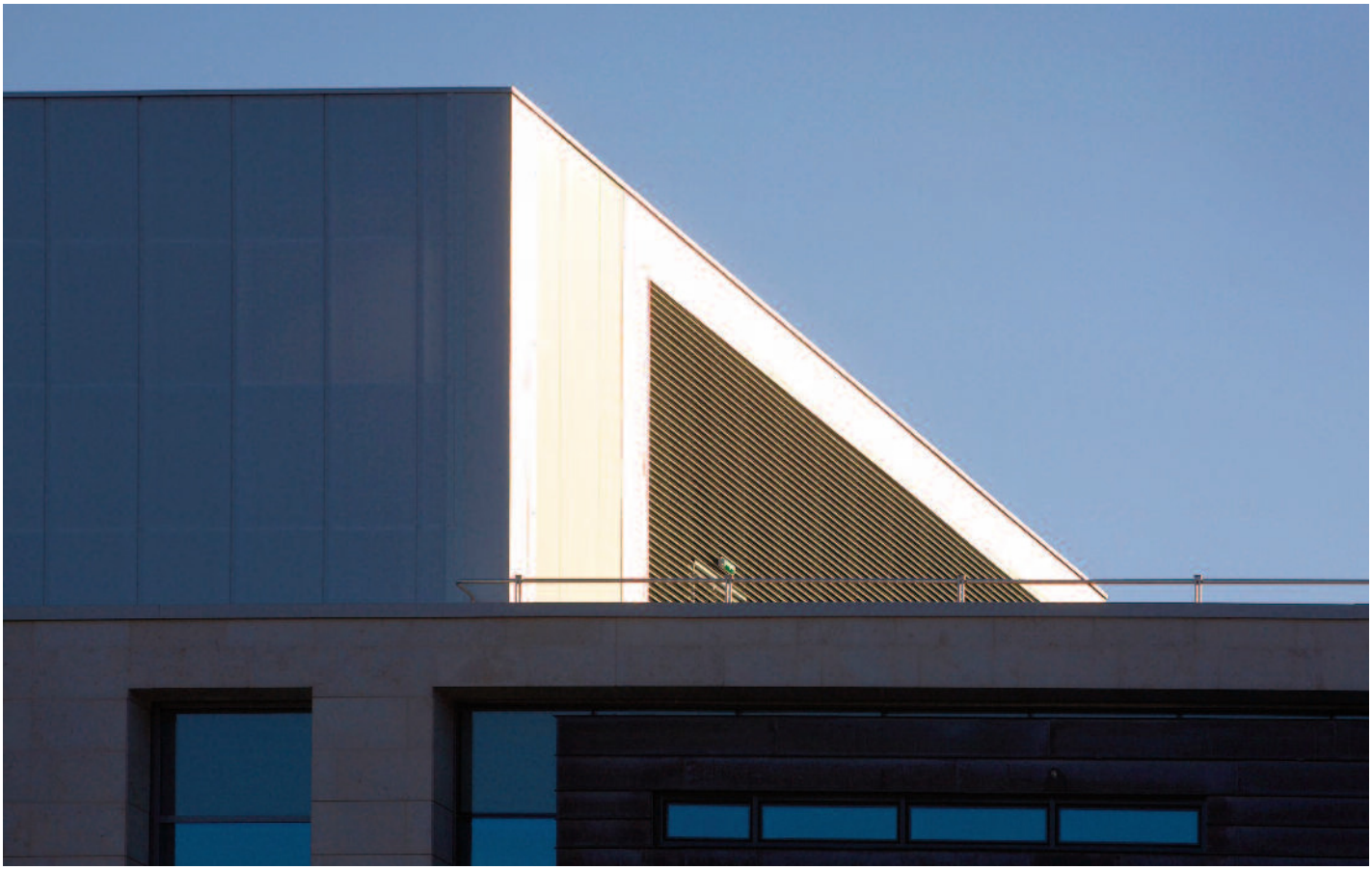


Dimensions

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.

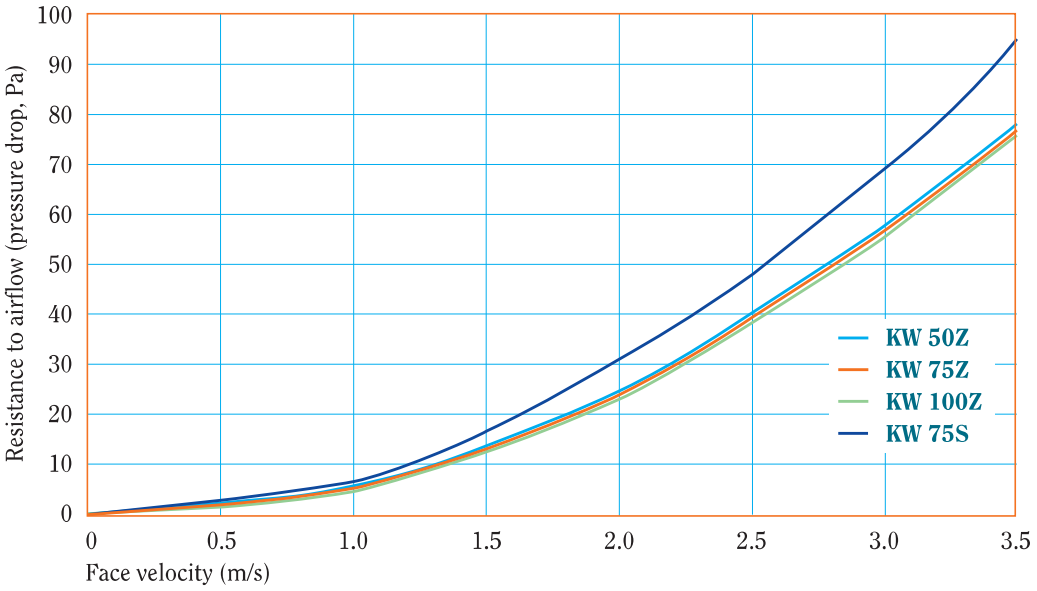
Type		KW 50Z	KW 75Z	KW 100Z	KW 75S
Minimum blade centres		50mm	75mm	100mm	75mm
Free area between blades at stated centres		52% at 50mm	58% at 75mm	61% at 100mm	50% at 75mm
Installed blade depth		65mm	80mm	98mm	80mm
Overall depth*	M1 mullion	125mm	140mm	158mm	140mm
	M2 mullion	95mm	110mm	128mm	110mm

**From front of blades to rear of mullion.*



KW SINGLE-BANK LOUVRES

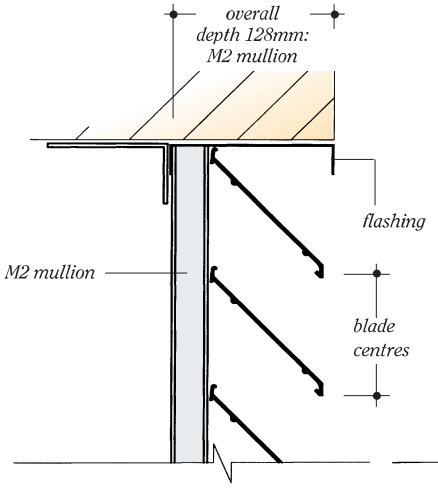
Performance: air flow, louvre with no mesh

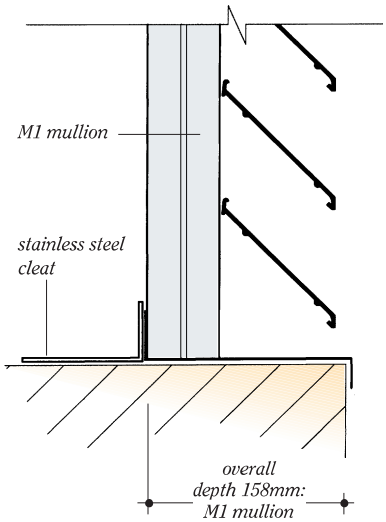


		Cd	Pressure drop (Pa) at given face velocities (m/s) 0.5	1.0	1.5	2.0	2.5	3.0	3.5
KW50Z	*No mesh*	0.306	1.60	6.41	14.42	25.63	40.05	57.67	78.50
	4mm mesh	0.274	2.00	7.99	17.98	31.97	49.95	71.93	97.90
	15mm mesh	0.290	1.78	7.13	16.05	28.54	44.59	64.21	87.40
KW75Z	*No mesh*	0.307	1.59	6.37	14.32	25.46	39.79	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

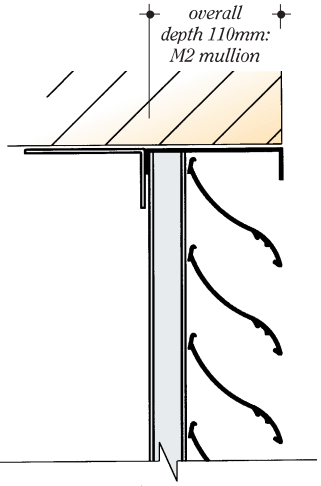
Vertical sections

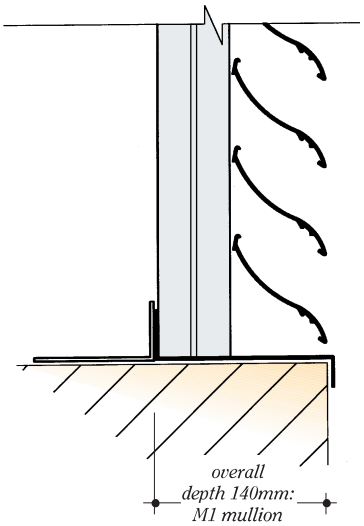
KW 100Z (KW 50Z, KW 75Z are similar)





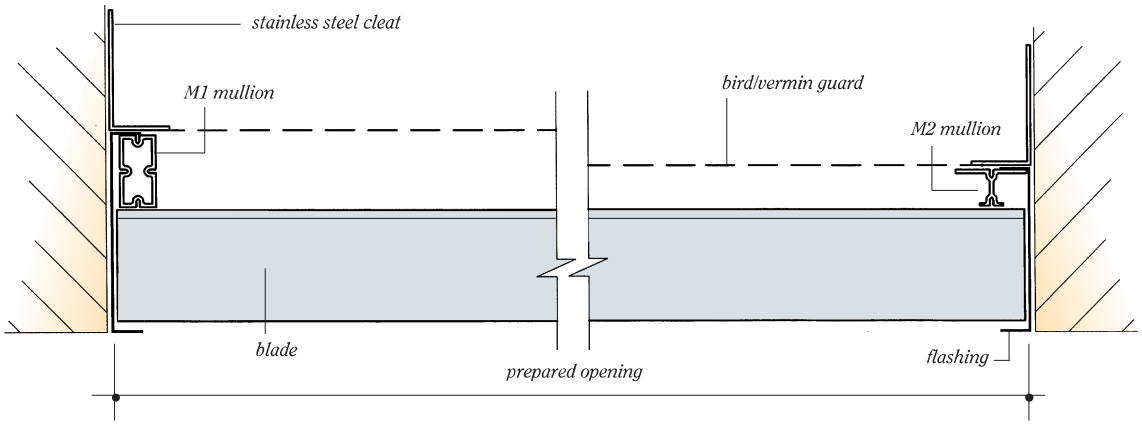
KW 75S





Horizontal section

KW 100Z



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.

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.

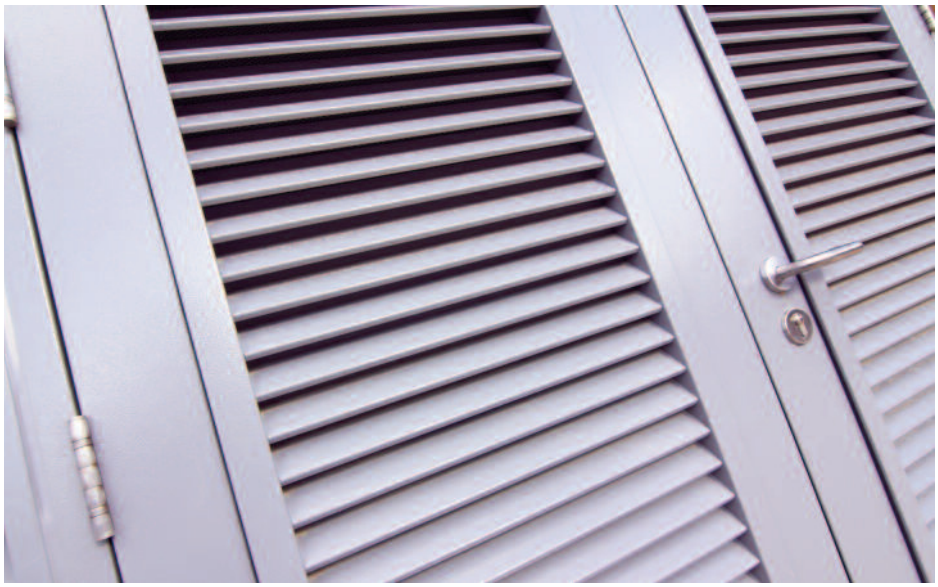
Insect guard (framed in panels): HDPE, hole size 4mm.

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 3m² single or 6m² 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.

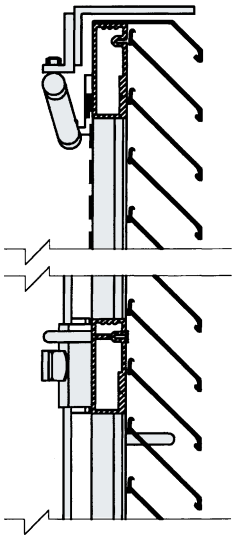
Maintenance

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.

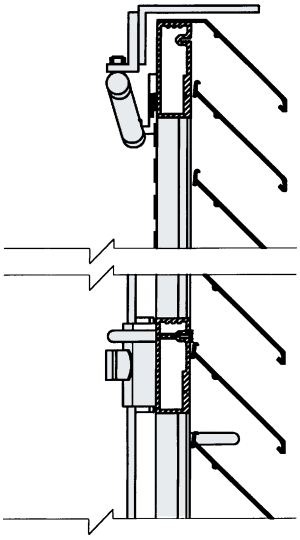
Periodic cleaning is required to maintain appearance (this is a condition of guarantee of finish where applicable).

Vertical sections

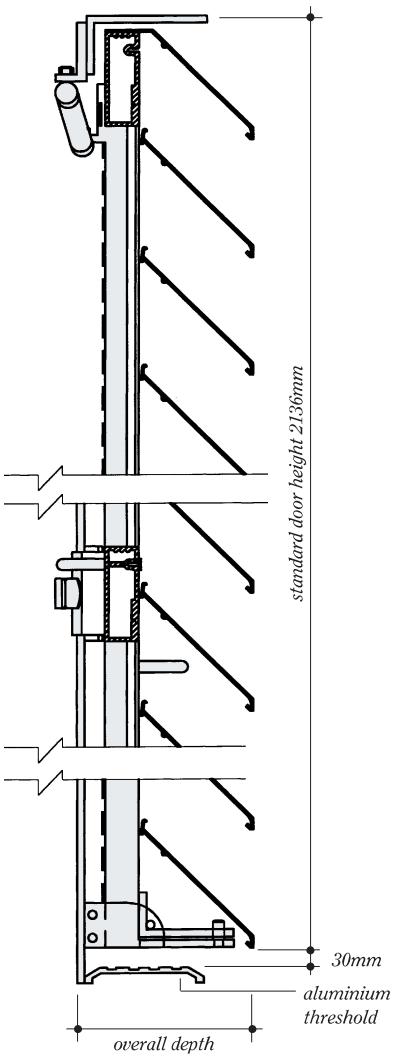
KW 50Z



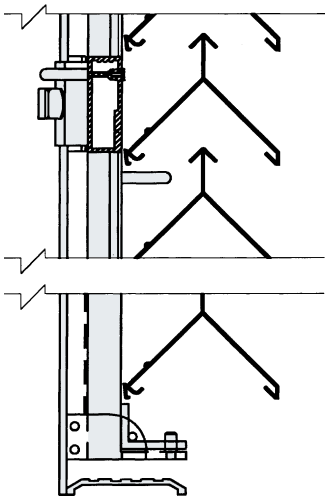
KW 75Z



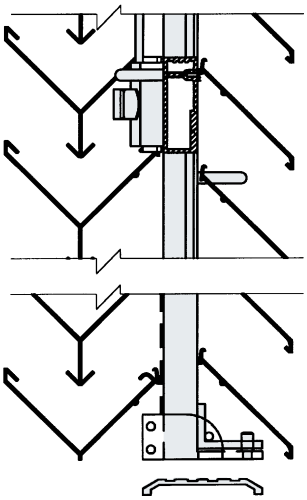
KW 100Z



KW 100D



KW 100/100T

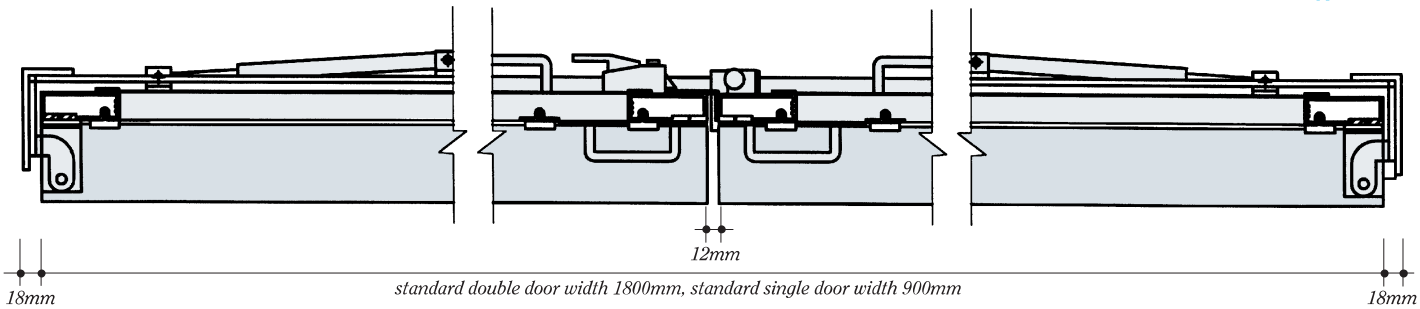


Specification clause

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.

Horizontal section, *double doors, KW 100Z*



FURTHER INFORMATION

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.



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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.

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Produced by Ted Hastings/Rackley Design 4498