

Aluminum Weather Louvres

Series WL standard weather louvres are the standard weather louvre used in countless installations throughout the world.

Available in four formats to suit any size installation, all WL types have a single bank of blades with a 45° face for good levels of rain resistance in the majority of conditions. Minimal resistance to airflow is assured with an approximate free area of 50% on all series.

Break points for switching between series (WL50 and WL75 are advised only):

WL38: Up to 1m nominal size (either width or height)

WL50: Up to 2m²

WL75: Anything above 2m²

WL100: By request only



Design features

Material	Extruded aluminium
	BZP steel screws or aluminium pop rivets
Sizes	Minimum heights (flanged units, nominal): WL38: 105mm
	WL50: 125mm WL75: 185mm WL100: 205mm
Blade	Various pitches (WL38 - 40mm, WL50 - 50mm, WL75 - 75mm and WL100 - 90mm) All with 45° face slope
Core	Fixed
Frame	Standard: Flanged
Fixings	Standard: None
Finish	Standard: Mill aluminium
Mass/m² face area	WL38: 12 kg
	WL50: 12 kg WL75: 15 kg WL100: 16 kg
Free area	Approx. 50% (varies with size)

Important note:

Free area is not a reliable guide to performance.

It is possible to have two louvres with identical geometric free areas but different airflow characteristics.

Wherever possible use a tested airflow coefficient, as stated on the following page or available in the test certificate WL75 louvres which is available on request.

BSRIA Testing

WL75 standard weather louvres have been tested against:

BS EN 13030:2001

The testing was carried out in April 2013 by BSRIA in Bracknell, Berkshire, England.

Copies of the test reports are available on request.



Performance

Louvres are subjected to simulated rainfall of 75mm per hour, with a wind speed of 13m/s (29mph).

Rain ingress is then measured at various draw speeds through the louvre, this is in addition to the constant 13m/s simulated wind speed.

WL75 louvres were tested with an optional rear mounted drip tray, this will have had negligible impact on airflow but a large impact on rain resistance.

Headline figures are shown here, a copy of the full test report is available on request.

WL75 - DT: (WL75 complete with rear mounted drip tray)

Mean airflow coefficient: 0.252 (Class 3)

Rain rejection: Class C up to approx. 1.4 m/s draw velocity
Class D above approx. 1.4 m/s draw velocity

Stocked sizes

The following sizes of Series WL38 standard weather louvres are held in stock, fitted with bird mesh and in mill aluminium finish available for immediate despatch.

150mm²
200mm²
250mm²
300mm²
350mm²
400mm²
450mm²
500mm²
550mm²
600mm²
700mm²
800mm²
900mm²
1000mm²

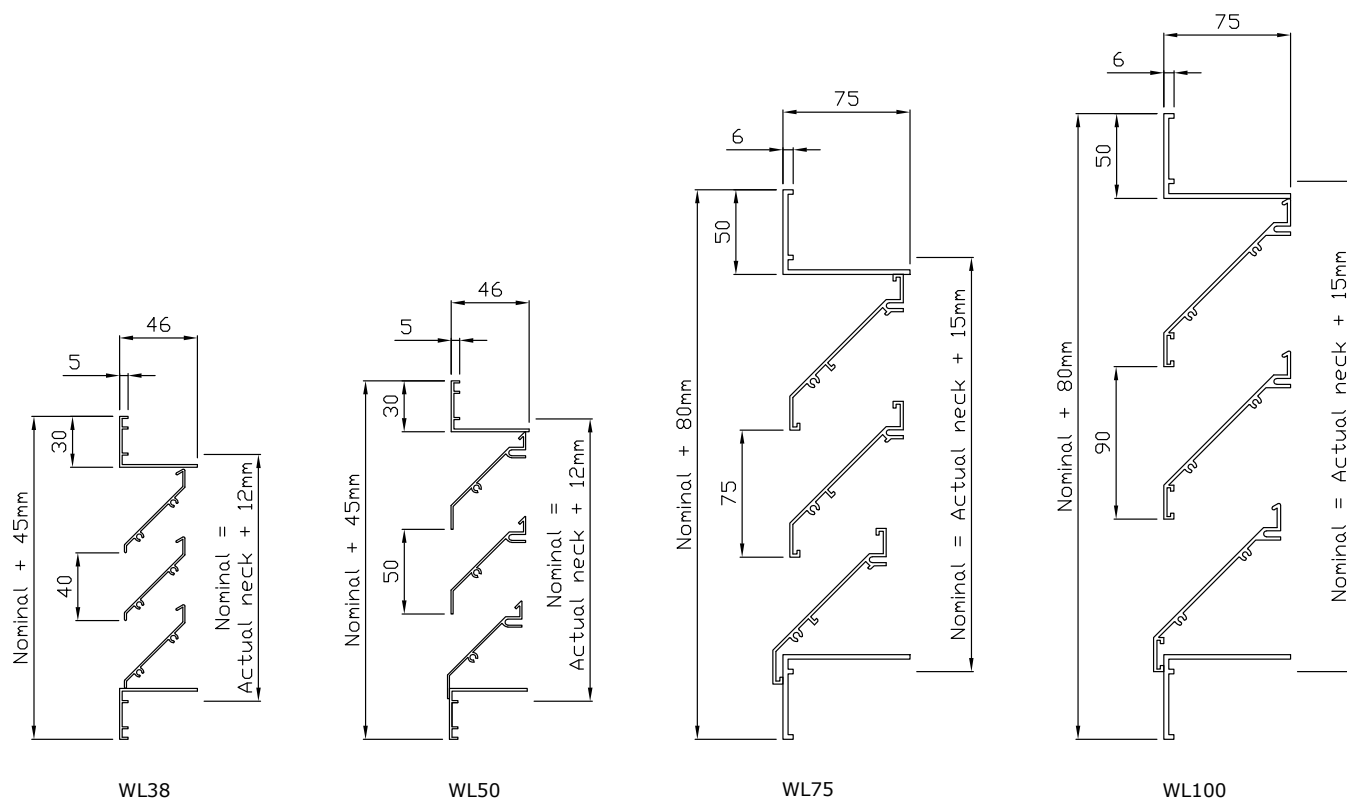
All sizes are nominal (hole size)

Units can be powder coated if a painted finish is required.

Product codes: WL38 - BM - Mill

Technical drawings

Flanged (standard)



Technical notes

Stop gaps

Louvre blades are laid out starting with the bottom blade and then working upwards.

Should a whole number of blades not be possible to fit into the required height, the top-most blade will either be cut down, or a stop gap will be fitted.

The maximum heights of stop gaps, based on louvre series are:

WL38: 25mm
WL50: 40mm
WL75: 60mm
WL100: 75mm

Stop gaps are visible only as flat aluminium sections, and are fitted prior to powder coating (if required).

Frame types

The below table shows the standard and optional frames available for each louvre series, along with ordering codes and dimensions.

These are only standard frame types. If you have a special requirement not shown here, please contact us.

WL Series	Frame code	Description	Standard or optional	Nominal to overall size	Overall depth
WL38 and WL50	30FW	30mm flat	Standard	+ 45mm	46mm
	25F	25mm flat	Optional	+ 30mm	46mm
	50FS	50mm flat (shallow)	Optional	+ 80mm	50mm
	3" x 2" x 1/8"	3 inch (76.2mm) flat	Optional	+ 130mm	2 inches (50.8mm)
	4" x 2" x 1/8"	4 inch (101.6mm) flat	Optional	+ 180mm	2 inches (50.8mm)
WL75 and WL100	50FD	50mm flat (deep)	Standard	+ 80mm	75mm
	3" x 3" x 1/8"	3 inch (76.2mm) flat	Optional	+ 130mm	3 inches (76.2mm)
	4" x 4" x 1/8"	4 inch (101.6mm) flat	Optional	+ 180mm	4 inches (101.6mm)

Large units

Large louvres may need to be produced in sections. The number of sections can be stated in your ordering code, or will be decided by HVC and stated on your order acknowledgement.

Side-by-side sections

Continuous appearance with concealed bolting points for joining adjacent sections. This will increase louvre depth by approximately 25mm.

Joining strips are supplied to ensure blade alignment with WL75's.

Vertically stacked sections

Units will be manufactured in sections of equal height, to be stacked together upon installation.



WL75 in side-by-side sections showing concealed angle with bolting points.

Fixings

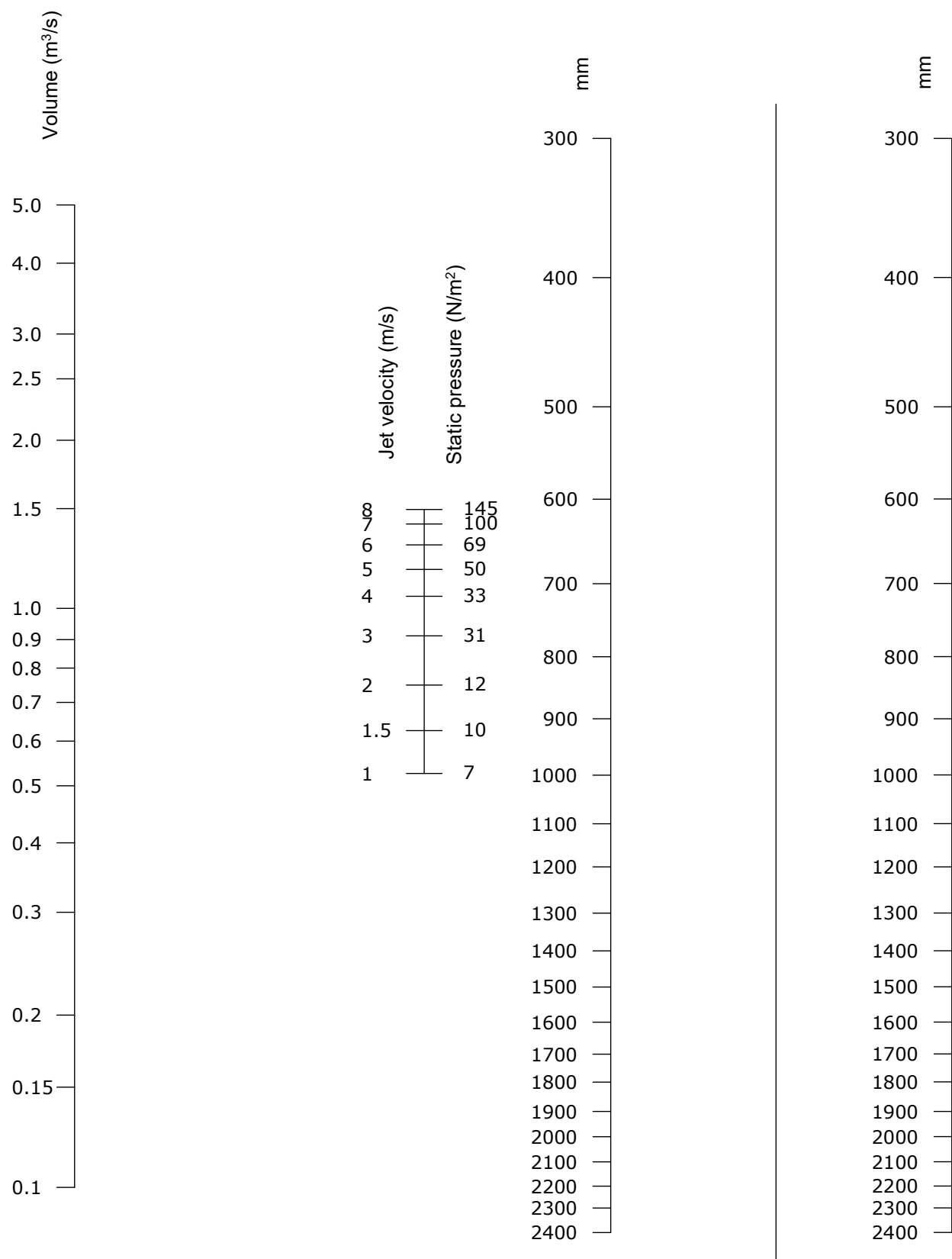
None (Standard)

Most weather louvres are supplied with no fixings.

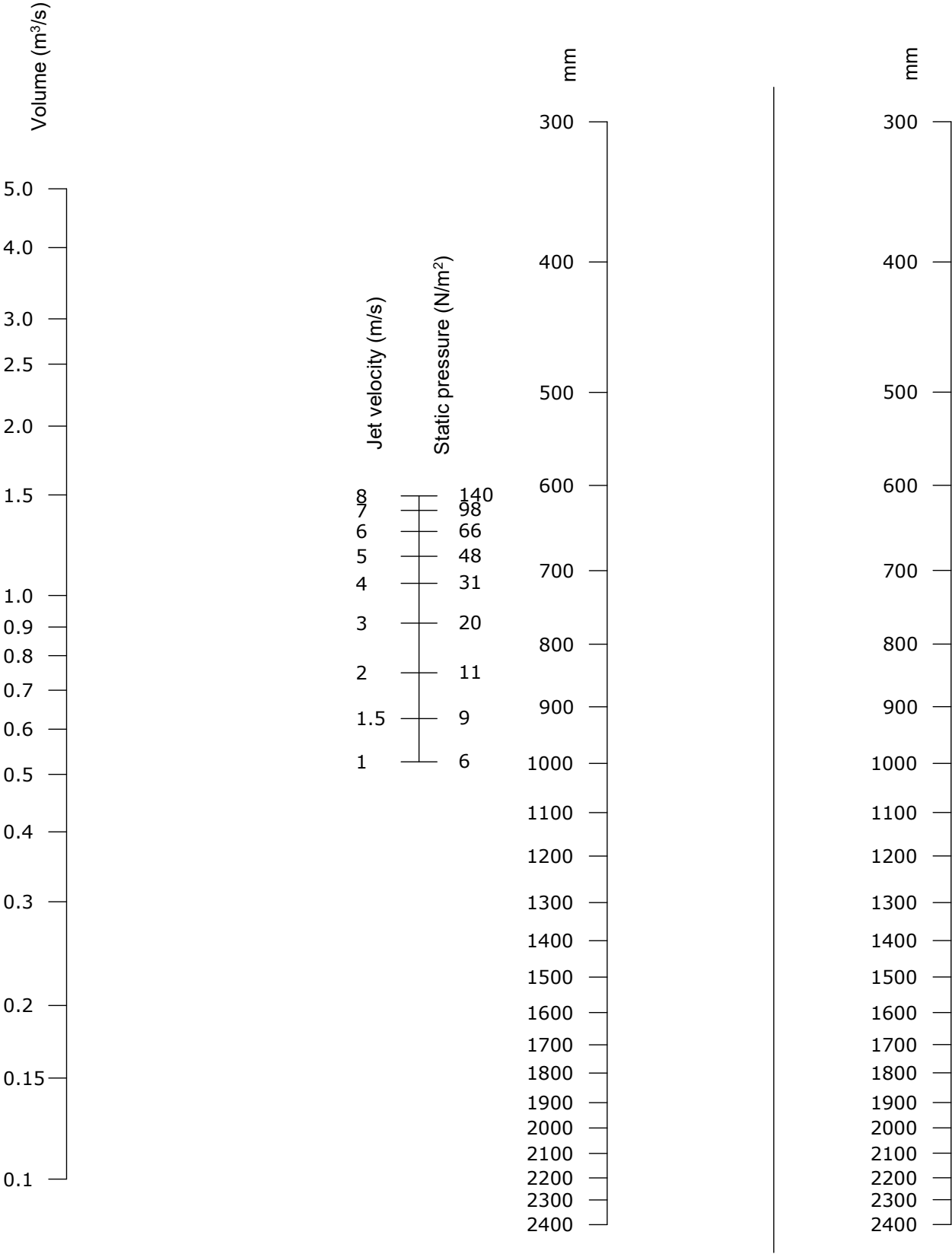
In this instance we recommend drilling through either the louvre flange or the neck, and screwing directly into the supporting structure with an appropriate fixing.



Selection data: WL38 and WL50



Selection data: WL75



Selection data: WL100

