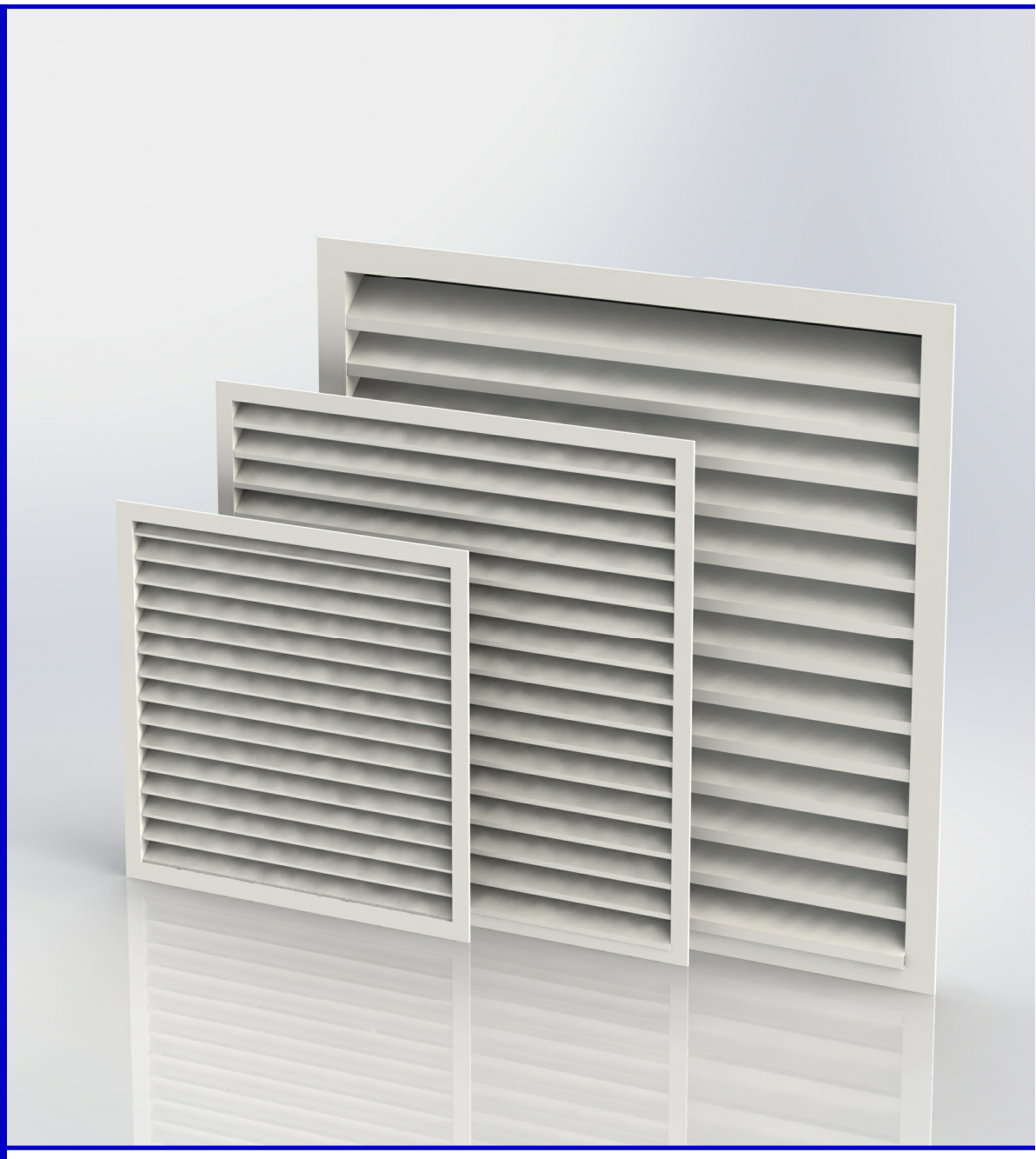
Incorporating

Louvre systems

Series WL
Standard weather louvres

- Standard range of single bank louvres as used in countless installations worldwide
- Good resistance to water ingress, with low resistance to airflow
- Approximately 50% free area on all models
- Polyester powder coating to the full range of RAL and BS colours
- WL38's in popular square sizes held in stock for immediate despatch
- Now available with burglar/security bars



WL: February 2023

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Quality assurance

HVC Supplies (Stourbridge) Ltd is an ISO 9001 certified company.

Assessed to ISO 9001
Cert/Ref No. 1186

Series WL

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

Available in three 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 2m^2
WL75: Anything above 2m^2

Design features

Material	Extruded aluminium BZP steel screws or aluminium pop rivets
Sizes	Minimum heights (flanged units, nominal): **WL38:** 105mm **WL50:** 125mm **WL75:** 185mm
Blade	Various pitches (WL38 - 40mm, WL50 - 50mm, WL75 - 75mm) All with 45° face slope
Core	Fixed
Frame	Standard: Flanged Optional: Recessed and reversed
Fixings	Standard: None Optional: See page 8
Finish	Standard: Mill aluminium Optional: See page 14
Mass/m^2 face area	**WL38:** 12 kg **WL50:** 12 kg **WL75:** 15 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.

150mm^2
200mm^2
250mm^2
300mm^2
350mm^2
400mm^2
450mm^2
500mm^2
550mm^2
600mm^2
700mm^2
800mm^2
900mm^2
1000mm^2

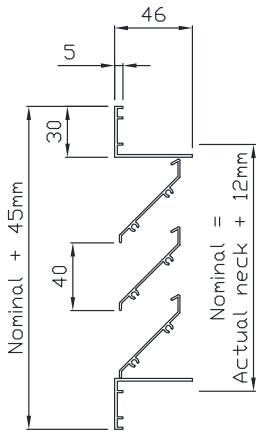
All sizes are nominal (hole size)

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

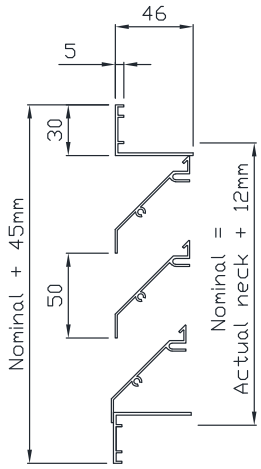
Product codes: WL38 - BM - Mill

Technical drawings

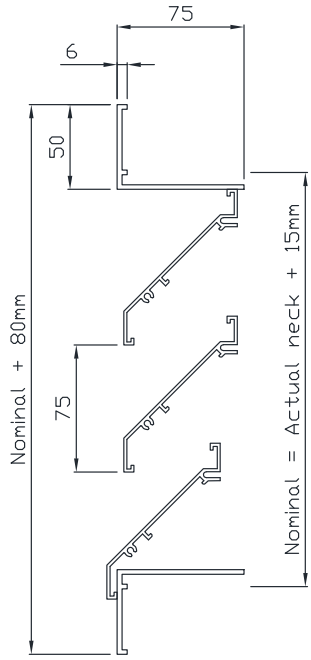
Flanged (standard)



WL38

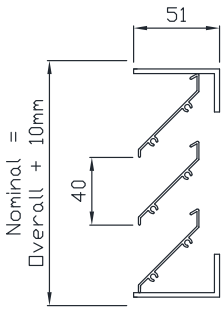


WL50

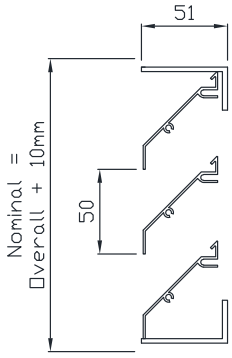


WL75

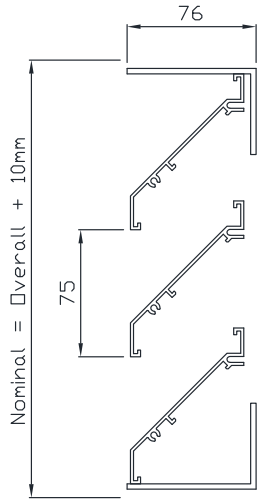
Recessed frame - REC (optional)



WL38-REC



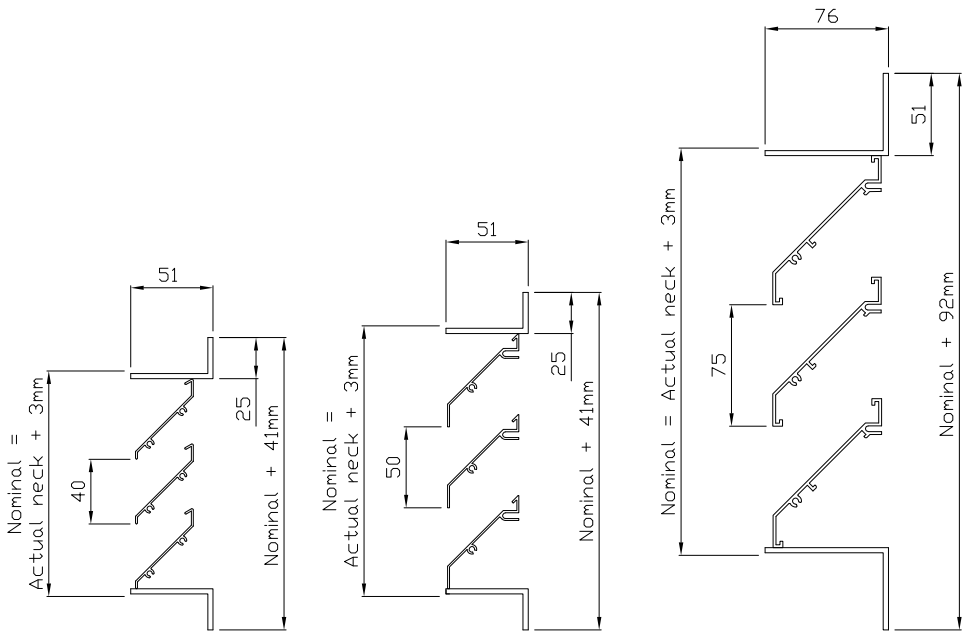
WL50-REC



WL75-REC

Technical drawings

Reversed frame - REV (optional)



WL38-REV WL50-REV WL75-REV

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

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	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.

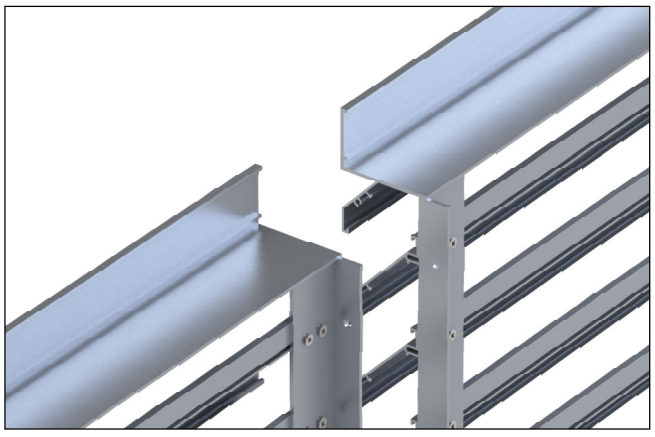
Side-by-side sections

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.



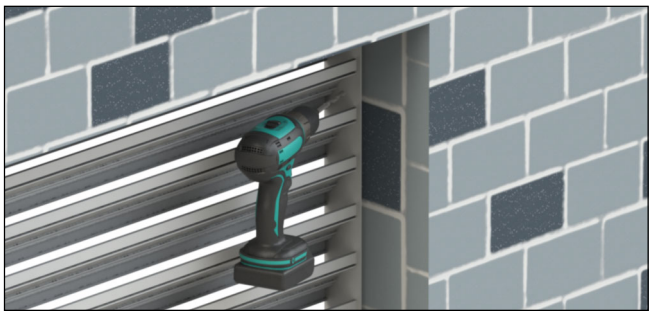
WL75 in side-by-side sections
showing concealed angle with bolting points.

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.



Pre-punched face fixing holes - Ordering code FH

5.7mm countersunk fixing holes will be punched into the louvre frame before powder coating, allowing quick and easy fitting on site.

Number and layout of fixing holes will be appropriate to louvre size. Arrangements can be specified.

Supplied with pozidrive self tapping screws in the same finish as the louvre.

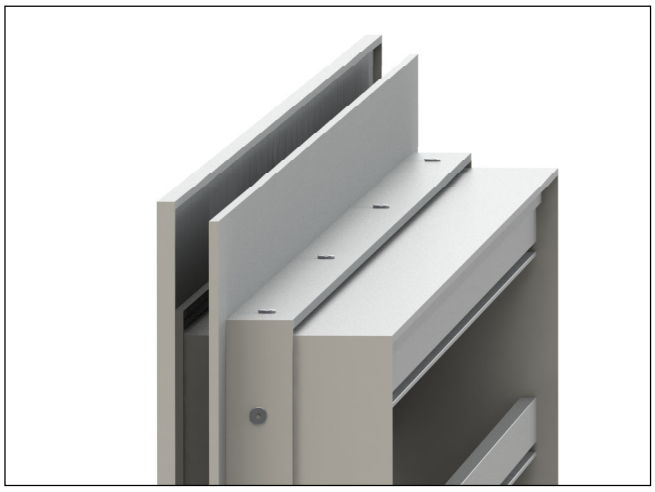
Only available with flanged and reversed flange louvres.

Glazing bar - Ordering code GZ (Required depth needed)

An additional frame can be fixed to the louvre neck to create a glazing bar frame suitable for installation into uPVC channels in place of glass window panes.

Only available with flanged and reversed flange louvres.

Please note - Series GL50 glazing louvres are now available, designed from the ground up to suit glazing systems. Please refer to our website for more information.



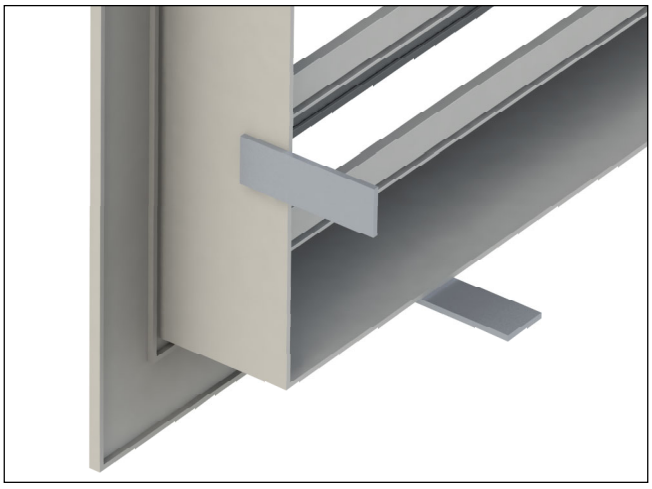
Rear mounted concealed fixing lugs - Ordering code RFL

3mm thick, 25mm wide aluminium lugs, protruding 50mm from the back of the louvre neck can be factory fitted to your louvre.

Lugs are supplied undrilled to accept whatever fixing is required on site, and are either welded or double riveted to the louvre.

An appropriate amount of lugs will be fitted to suit the louvre size.

Only available with flanged and recessed louvres.



Additional options

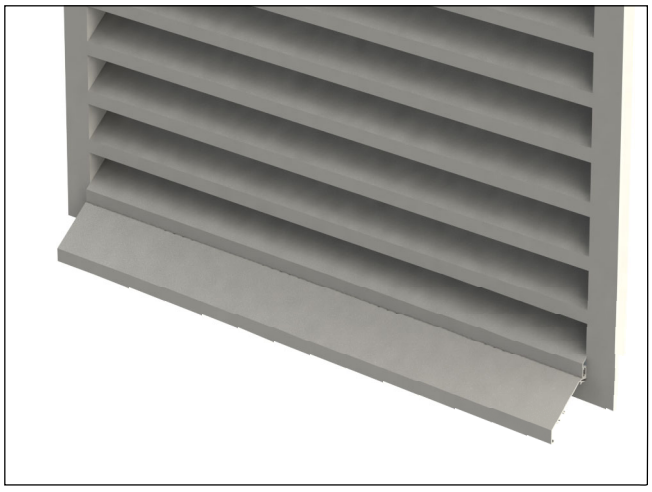
Face mounted drip cill - Ordering code DC

By fitting an extended cill beneath the bottom blade, any water caught by the louvre is ejected away from the wall, instead of the bottom section of frame.

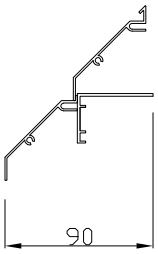
This can help prevent streak marks where water has run down a wall over time.

Not available with WL38.

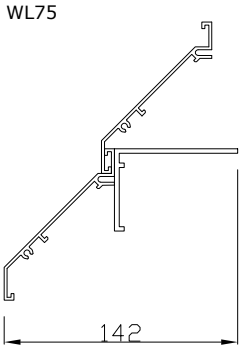
Please note: Recessed and reversed flange louvres will have a folded sheet metal drip cill with a profile appropriate to the selected blade type.



WL50



WL75



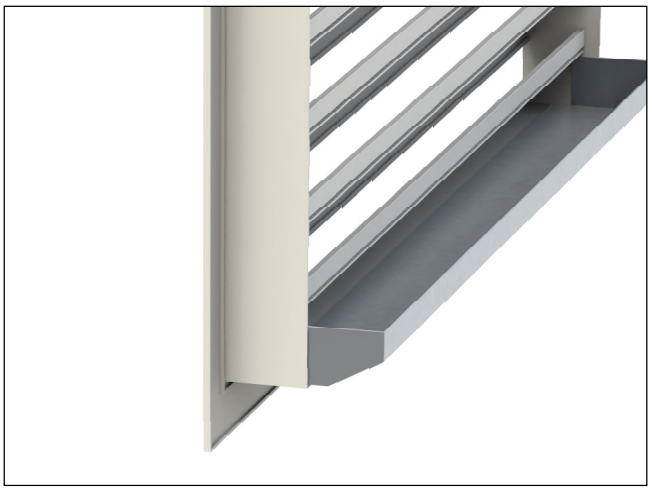
Rear mounted drip tray - Ordering code DT

Drip trays can be fitted to any series weather louvre, however on WL75's they are required if Class C rain rejection performance is needed.

Drip trays act to catch any water which penetrates through the louvre.

Trays protrude 65mm past the rear of the frame.

Please note: If specified on a reversed flange weather louvre, the drip tray will protrude into the aperture.



Further options

Combination units

Combining two essential components in any ventilation system, combination units integrate a standard weather louvre with a volume control damper. A fully welded, black powder coated galvanised steel backbox joins the two components.

This ready made solution means installation time and costs are reduced and ordering is made simple as you only need supply us with one size; we do the rest.

Volume control dampers can be supplied with a plastic handle or locking quadrant for manual operation, or with a factory fitted electric or pneumatic actuator.

For more information on combination units please refer to the combination unit PDF available for download from our website.

Suitable weather louvres:
Series WL50 and WL75

Suitable volume control dampers:
Series LF uPVC VCD high performance plastic
Series HVC-VCD aluminium

Burglar bars - Ordering code BB

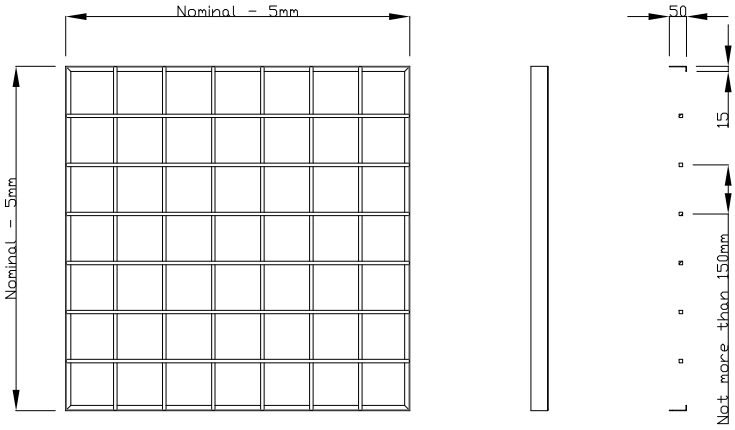
A wall mounted aluminium weather louvre can be a security risk, potentially providing an un-alarmed entry point to a building for any determined would be intruder.

Proving an extremely robust barrier to entry, burglar bars can be fitted to mitigate this risk.

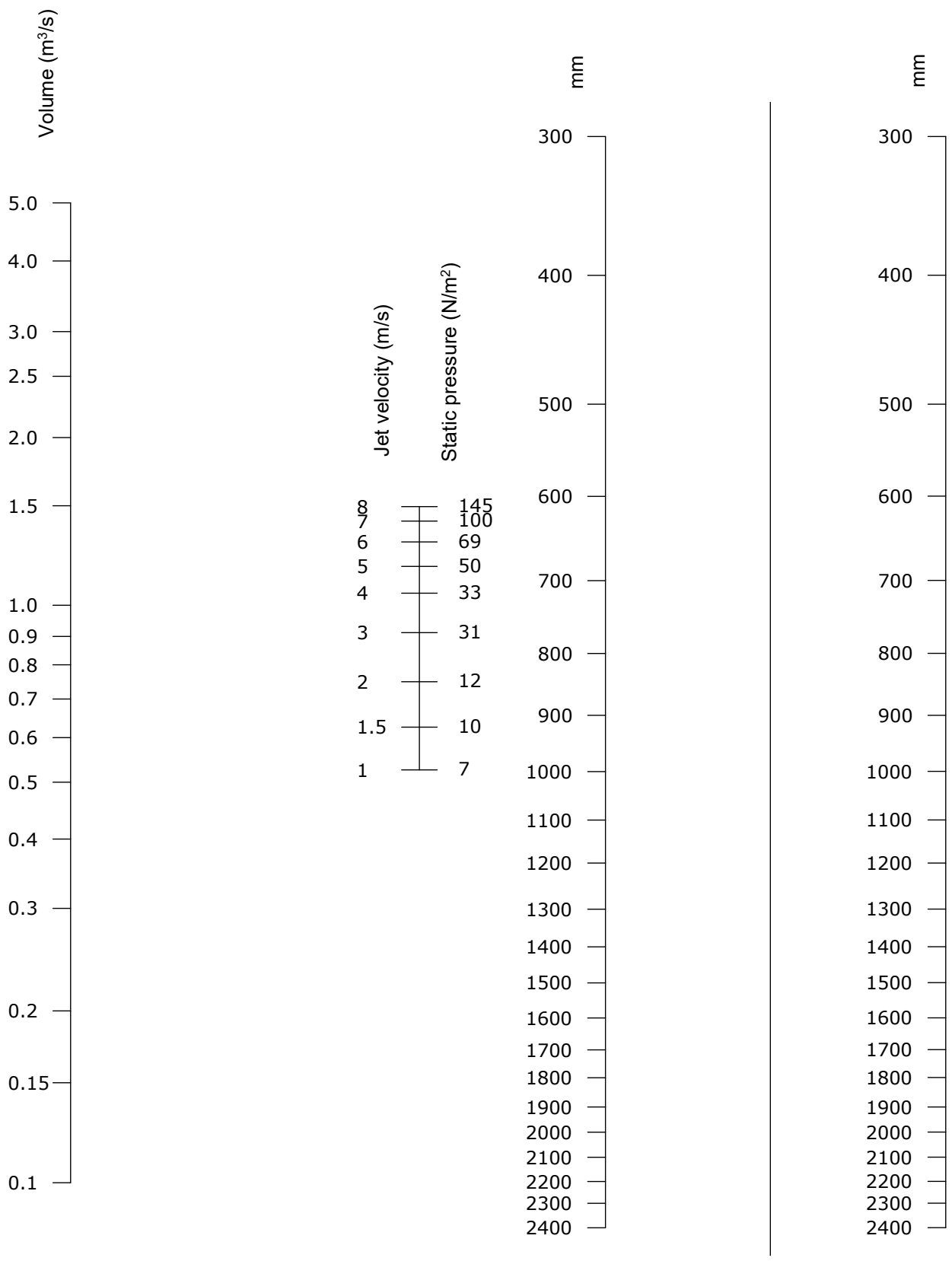
Designed to be fitted directly behind a louvre, burglar bars are constructed with a 1.2mm thick galvanised steel outer frame and a grid of 10mm fully welded steel bars, leaving spaces of not more than 150mm square.

Frames are supplied undrilled to accept whatever fixings are required on site.

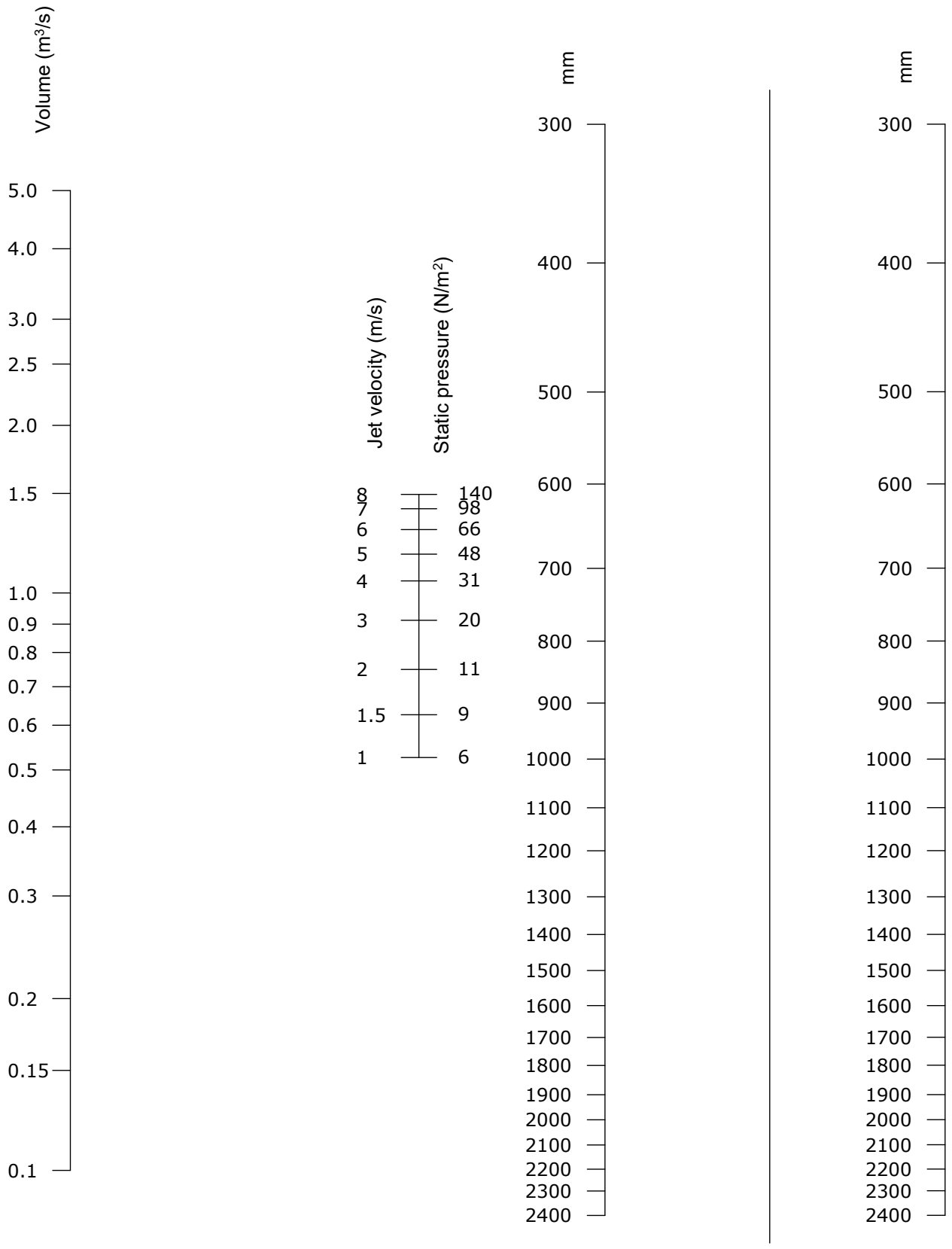
Supplied in a powder coated black finish as standard.



Selection data: WL38 and WL50



Selection data: WL75



Feature: Series HPL80 ultra high performance weather louvres

Should high performance rain rejection be required for your application, the new HPL80 may be more suitable than a Series WL standard weather louvre.

The new HPL80 louvre is an extremely high performance weather louvre, intended for installations demanding unimpeded ventilation, without the risk of water ingress.

Through its use of the new '*Air-Bypass'* blade design (UK patent application pending), never-before-seen levels of performance for a horizontally bladed weather louvre are achieved when tested against BS EN 13030:2001, the most widely used weather louvre test standard in Europe:

HPL80 with insect mesh: Class A2 up to 4.0 m/s

HPL80 with bird mesh: Class A2 up to 2.5 m/s

For more details on the HPL80, please search for the HPL80 on our website.

Finish

Mill aluminium (standard)

Satin anodised (AA5) - Only with WL50-25F/30FW

Polyester powder coating to any RAL or BS colour

Ordering codes

Example

1 - 1000 x 1000 - WL50 - BM - FH - 30FW - DC - RAL9010 - 1S - BB

Codes

1)	**Quantity**			
2)	**Size (mm)**	(Width x height)		
3)	**Series**	WL38	38mm pitch weather louvre	
		WL50	50mm pitch weather louvre	
		WL75	75mm pitch weather louvre	
4)	**Frame design**	*(nothing)*	Flanged	
		REC	Recessed frame	
		REV	Reversed frame	
5)	**Debris screens**	BM	Bird mesh (12.7mm x 12.7mm weave, galvanised steel)	
		IM	Insect mesh (1.6mm x 1.6mm weave, G304 stainless steel)	
		VM	Vermin mesh (6mm x 6mm weave, G304 stainless steel)	
6)	**Fixings**	FH	Pre-punched face fixing holes	
		RFL	Rear mounted fixing lugs	
		GZ	Glazing bar. State depth required.	
7)	**Flanges**	30FW	WL38 and WL50:	30mm flat flange (standard)
		25F		25mm flat flange (optional)
		50FS		50mm flat flange - shallow (optional)
		3” x 2” x 1/8”		3” (76.2mm) flat flange (optional)
		4” x 2” x 1/8”		4” (101.6mm) flat flange (optional)
		50FD	WL75:	50mm flat flange - deep (standard)
		3” x 3” x 1/8”		3” (76.2mm) flat flange (optional)
		4” x 4” x 1/8”		4” (101.6mm) flat flange (optional)
8)	**Additional options**	DC	Face mounted drip cill (not available with WL38)	
		DT	Rear mounted drip tray (required for Class C performance with WL75)	
9)	**Finish**	Mill	Mill aluminium (standard)	
		SAA	Satin anodised - AA5 (only available with WL50-25F/30FW)	
		RAL...	Polyester powder coated to RAL...	
		BS...	Polyester powder coated to BS...	
10)	**Sections**	_S	Number of sections required. If left blank this will be confirmed on order acknowledgement	
11)	**Burglar/security bars**	BB	Burglar bars required	

Important: Size will be taken to be nominal (hole internal) unless stated otherwise.

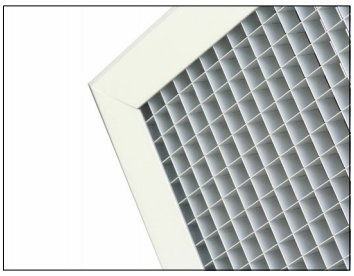
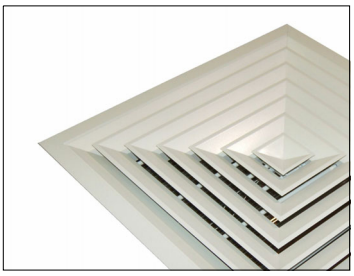
Leave code section blank if no option is required.

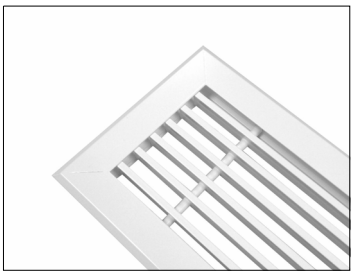
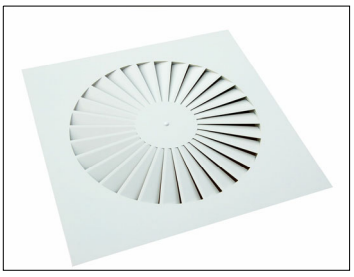
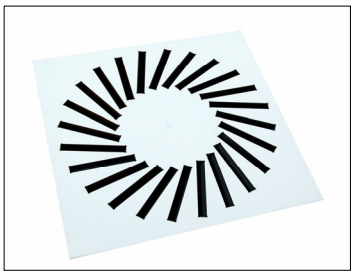
HVC & NCA products

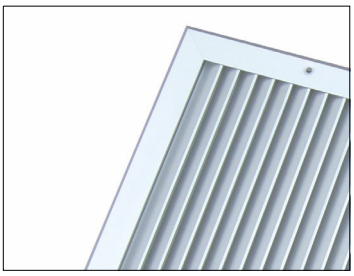
HVC offer the significant advantage of manufacturing both in duct and duct terminal equipment, making us a one stop shop for all your HVAC needs.

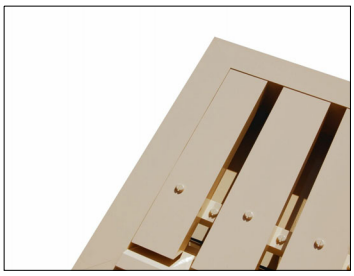
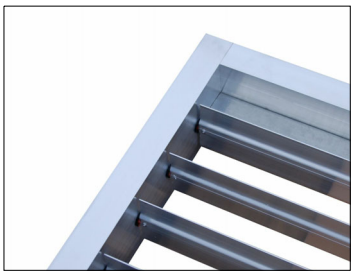
The products shown below are a selection, not an exhaustive list. Go to **www.h-v-c.com** for details on all HVC and NCA products.

HVC: Grilles, Diffusers, Louvres and Volume Control Dampers



NCA: Fire and Volume Control Dampers

Assessed to ISO 9001
Cert/Ref No. 1186

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