



**Monodraught** are the recognised market leaders in ultra-low carbon, low energy solutions for Natural Ventilation, Natural Cooling and Natural Lighting.

**WINDCATCHER**<sup>®</sup>, **SUNPIPE**<sup>®</sup> and **COOL-PHASE**<sup>®</sup> brands are synonymous with quality and innovation (ISO9001 & 14001) and are supported by our market leading design service.

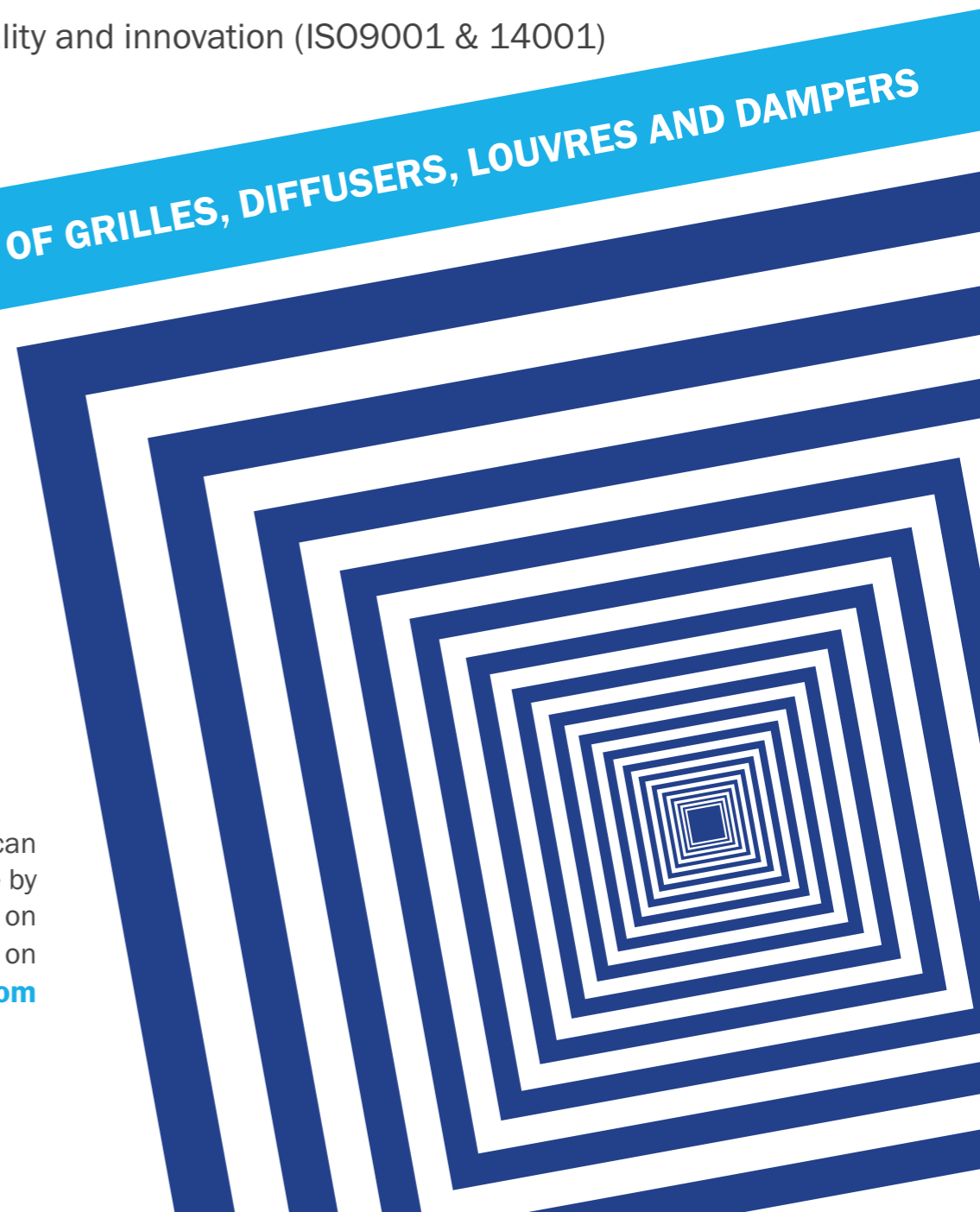
**Air-Precision** is an addition to Monodraught's portfolio including grilles, diffusers, external louvres and volume control dampers.

**PRODUCT RANGE OF GRILLES, DIFFUSERS, LOUVRES AND DAMPERS**

#### We are supporting this range with:

- £1 million of fast moving stock
- Bespoke manufacture with any standard RAL colour within 5 days
- 15 dedicated selection experts
- Designed with industry leading software
- Belimo actuators used throughout
- AA5 anodisation (ISO7599) utilised
- Market leading quality fully supported by a **10 year guarantee**

We are confident that we can beat any quotation you have by 10% so please contact us on **01494897700** or email us on **[air-precision@monodraught.com](mailto:air-precision@monodraught.com)**



# Standard Weather Louvres - WL



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 most demanding conditions. Minimal resistance to airflow is assured with an approximate free area of 50% on all series.

Advised break points for switching between series:

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

WL50: Up to 2 m<sup>2</sup>

WL75: Anything above 2 m<sup>2</sup>

WL100: By request only

## Series:

- **WL38:** 38 mm Pitch weather louvre
- **WL50:** 50 mm Pitch weather louvre
- **WL75:** 75 mm Pitch weather louvre
- **WL100:** 100 mm Pitch weather louvre

## Mass/m<sup>2</sup> face area:

- WL38: 12 kg
- WL50: 12 kg
- WL75: 15 kg
- WL100: 16 kg

## Materials:

- Extruded aluminium
- BZP steel screws or aluminium pop rivets

## 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.*

## Blade:

- Various pitches (40, 50, 75 and 90 mm) all with 45° face slope

## Core:

- Fixed

## Debris Screen:

- BS: Bird Screen (12 mm x 12 mm mesh)
- IS: Insect Screen

## BSRIA Testing:

WL75 standard weather louvre have been tested against **BS EN 13030:2001**

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



## Performance:

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

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

Headlines figures **WL75 - DT** (WL 75 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 and Class D above approx. 1.4 m/s draw velocity.

# Standard Weather Louvres - WL

## Sizes:

(overall w x h [mm])

See below stock nominal sizes available (If your requirement is not shown in the following tables please contact us)

### SERIES WL38:

H	WIDTH																	
	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
150																		
200																		
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1000																		

### SERIES WL38 (LARGE FORMAT):

H	WIDTH												
	300	450	600	750	700	750	900	1050	1200	1350	1500	1650	1800
300	Please see SERIES WL38												
375													
450													
525													
600													
675													
750													
825													
900													
975													
1050													
1125													
1200													
1275													
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1875													
1950													
2025													
2100													
2175													
2250													
2325													
2400													

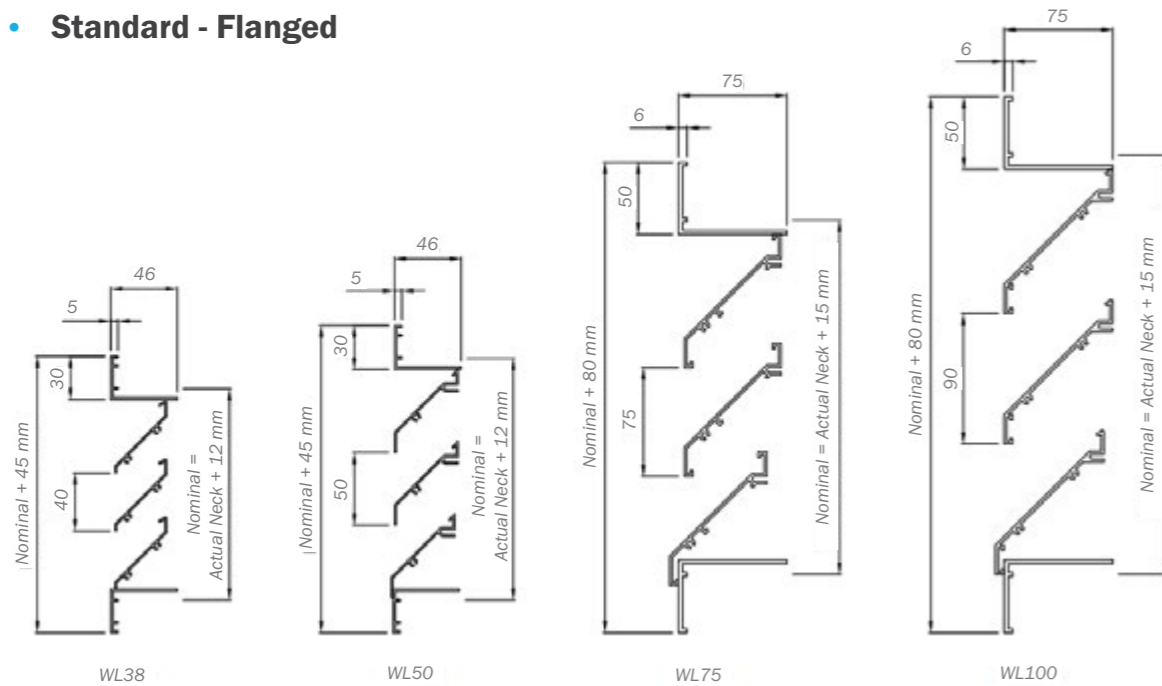
### SERIES WL50, WL75 and WL100:

H	WIDTH											
	300	450	600	750	900	1050	1200	1350	1500	1650	1800	
300												
375												
450												
525												
600												
675												
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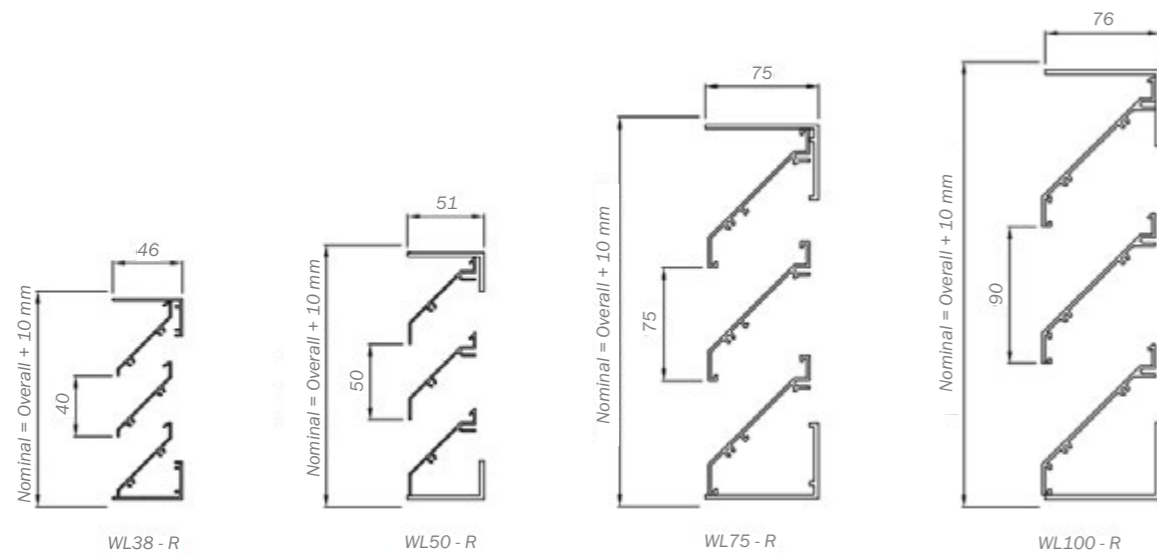
# Standard Weather Louvres - WL

## Technical Drawings

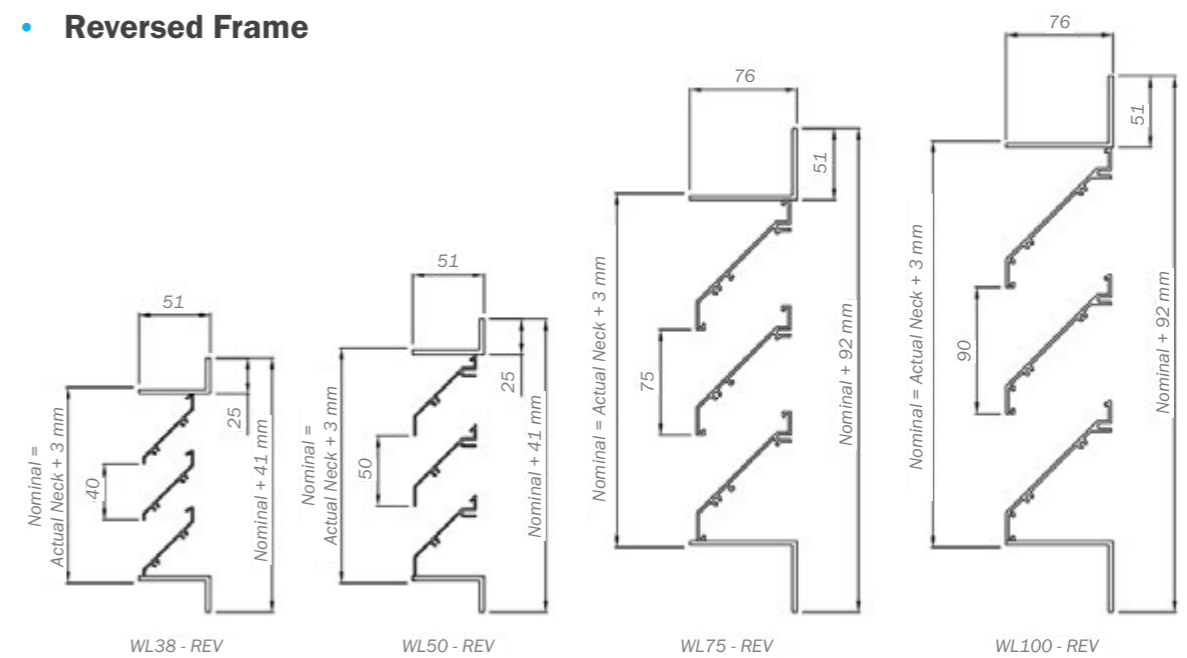
- **Standard - Flanged**



- **Recessed Frame**

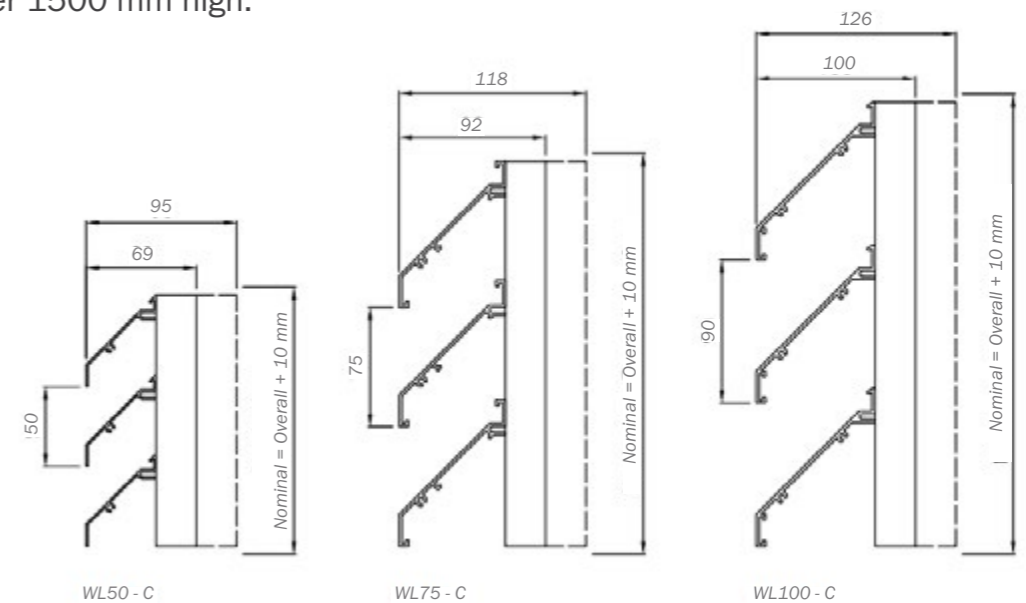


- **Reversed Frame**



- **Concealed Frame**

Blades are only supported by rear mullions. Hatched areas denote the larger supports which would be used on units equal to or over 1500 mm high.



# Standard Weather Louvres - WL

## 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:** 25 mm
- **WL50:** 40 mm
- **WL75:** 60 mm
- **WL100:** 75 mm

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

### Frame Types:

The table below 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	30 mm flat	Standard	+ 45 mm	46 mm
	50FS	50 mm flat (shallow)	Optional	+ 80 mm	50 mm
	75FS	76 mm flat (shallow)	Optional	+ 130 mm	51 mm
	100FS	102 mm flat (shallow)	Optional	+ 180 mm	51 mm
WL75 and WL100	50FD	50 mm flat (deep)	Standard	+ 80 mm	75 mm
	75FD	76 mm flat (deep)	Optional	+ 130 mm	76 mm
	100FD	102 mm flat (deep)	Optional	+ 180 mm	102 mm

## 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 Monodraught and stated on your order acknowledgment.

### Side-by-Side Sections:

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

### Vertically Stacked Sections:

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

Joining strips can be supplied if required to ensure alignment.



WL75 IN SIDE-BY-SIDE SECTIONS  
SHOWING CONCEALED ANGLE  
WITH BOLTING POINTS

# Standard Weather Louvres - WL

## Fixings:

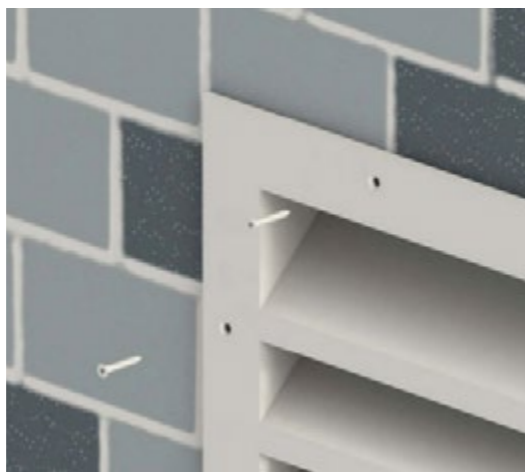
- **None (standard):**

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.



- **Predrilled Face Fixing Holes - FH:**

5.7 mm 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 - 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.



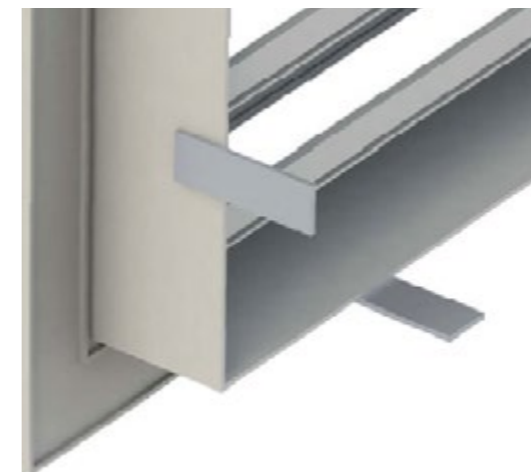
- **Rear Mounted Concealed Fixing Lugs - FL:**

3 mm thick, 25 mm wide aluminium lugs, protruding 50 mm 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.



# Standard Weather Louvres - WL

## Additional Options:

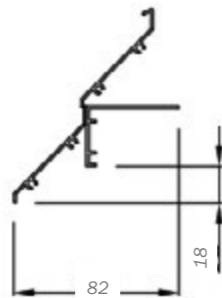
- **Face Mounted Drip Cill - DC:**

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 frame. This can help prevent streak marks where water has run down a wall over time. Available with flanged (shown), recessed and reversed flange louvres.

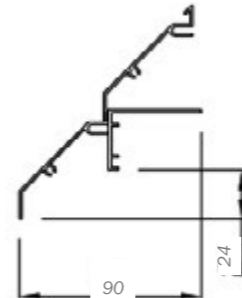
**Please note:** Recessed and reversed flange louvres will have a folded sheet metal drip cill with a profile appropriate to the selected blade type.



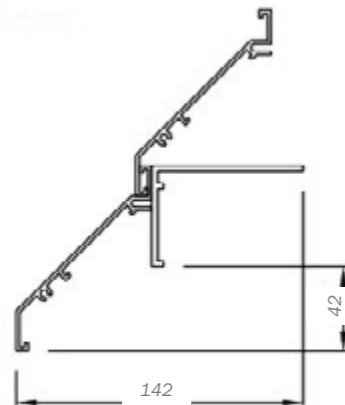
WL38



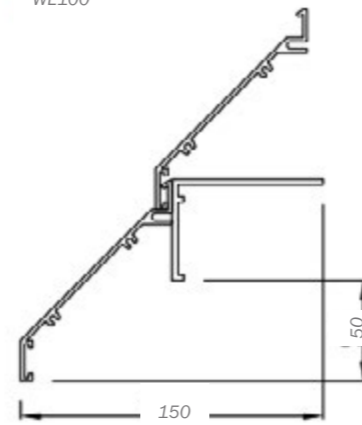
WL50



WL75



WL100



- **Rear Mounted Drip Tray - DT:**

Drip trays can be fitted to any series weather louvre except concealed, 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 65 mm past the rear of the frame.



# Standard Weather Louvres - WL

## 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 in our website.

**Suitable weather louvres:** Series WL50, WL75 and WL100

**Suitable weather control dampers:** Series LF uPVC VCD high performance plastic and Series VCD aluminium



- **Security Bars:**

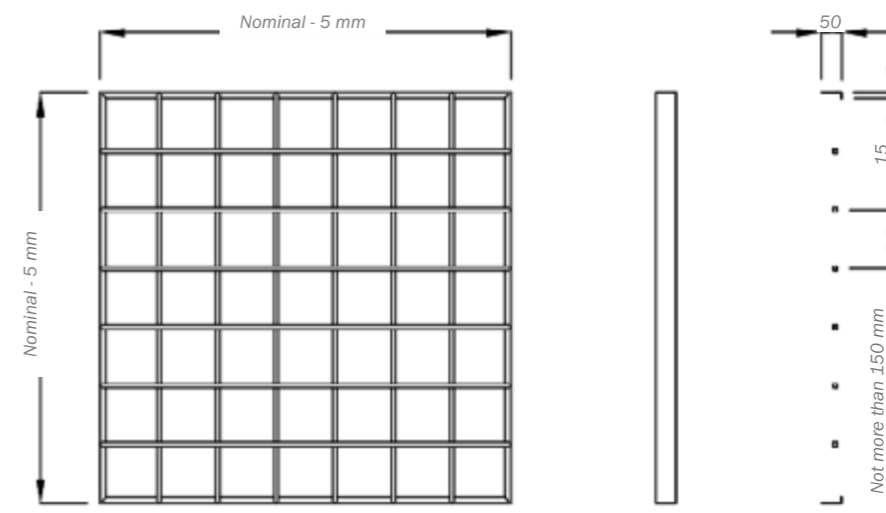
A wall mounted aluminium weather louvre can be a security risk, potentially providing an un-alarmed entry point to a building for any determined would be intruder.

Providing an extremely robust barrier to entry, security bars can be fitted to mitigate this risk.

Designed to be fitted directly behind a louvre, security bars are constructed with a 1.5 mm thick galvanised steel outer frame and a grid of 10 mm fully welded steel bars, leaving spaces of not more than 150 mm square.

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

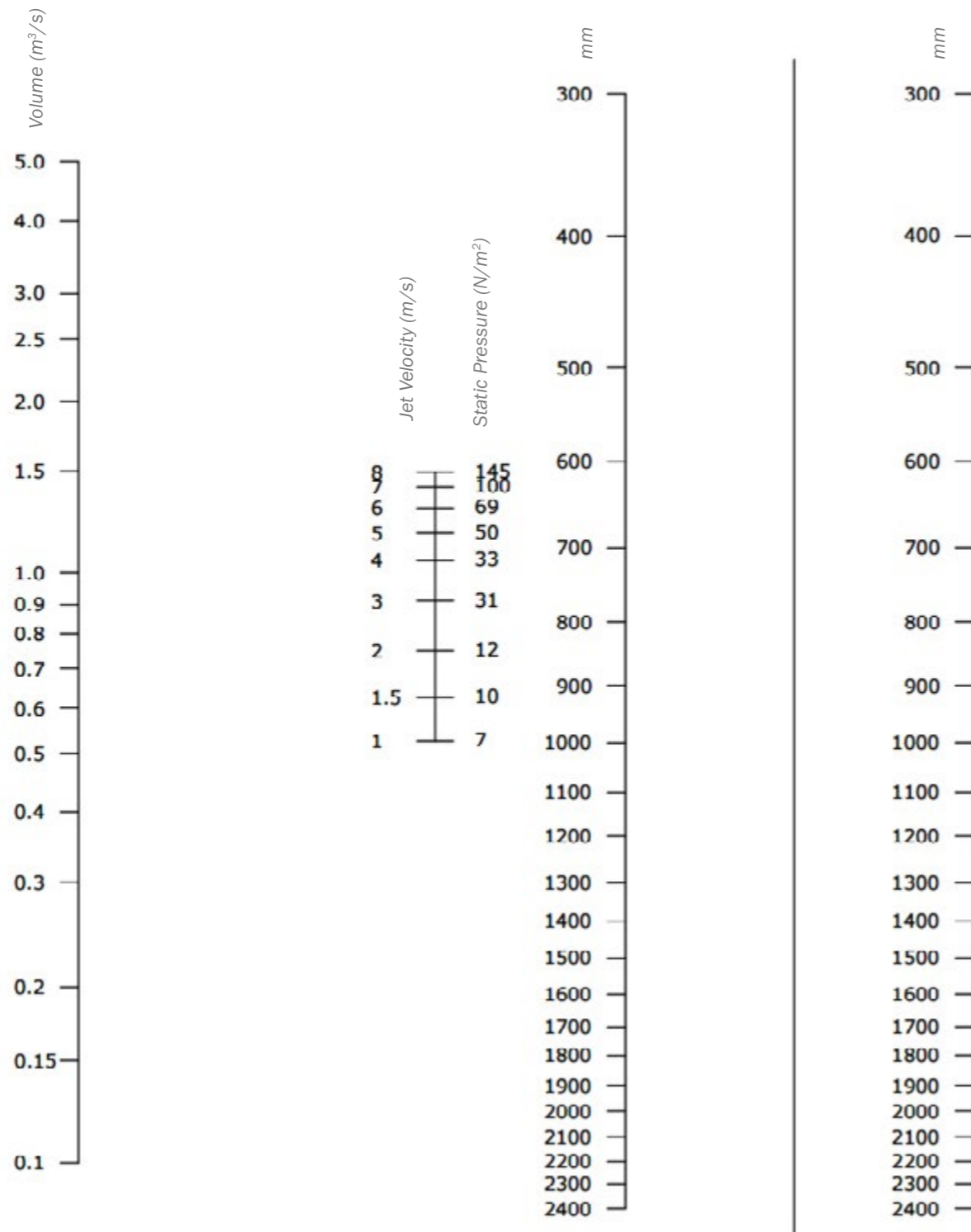
Supplied in a powder coated black finish as standard/



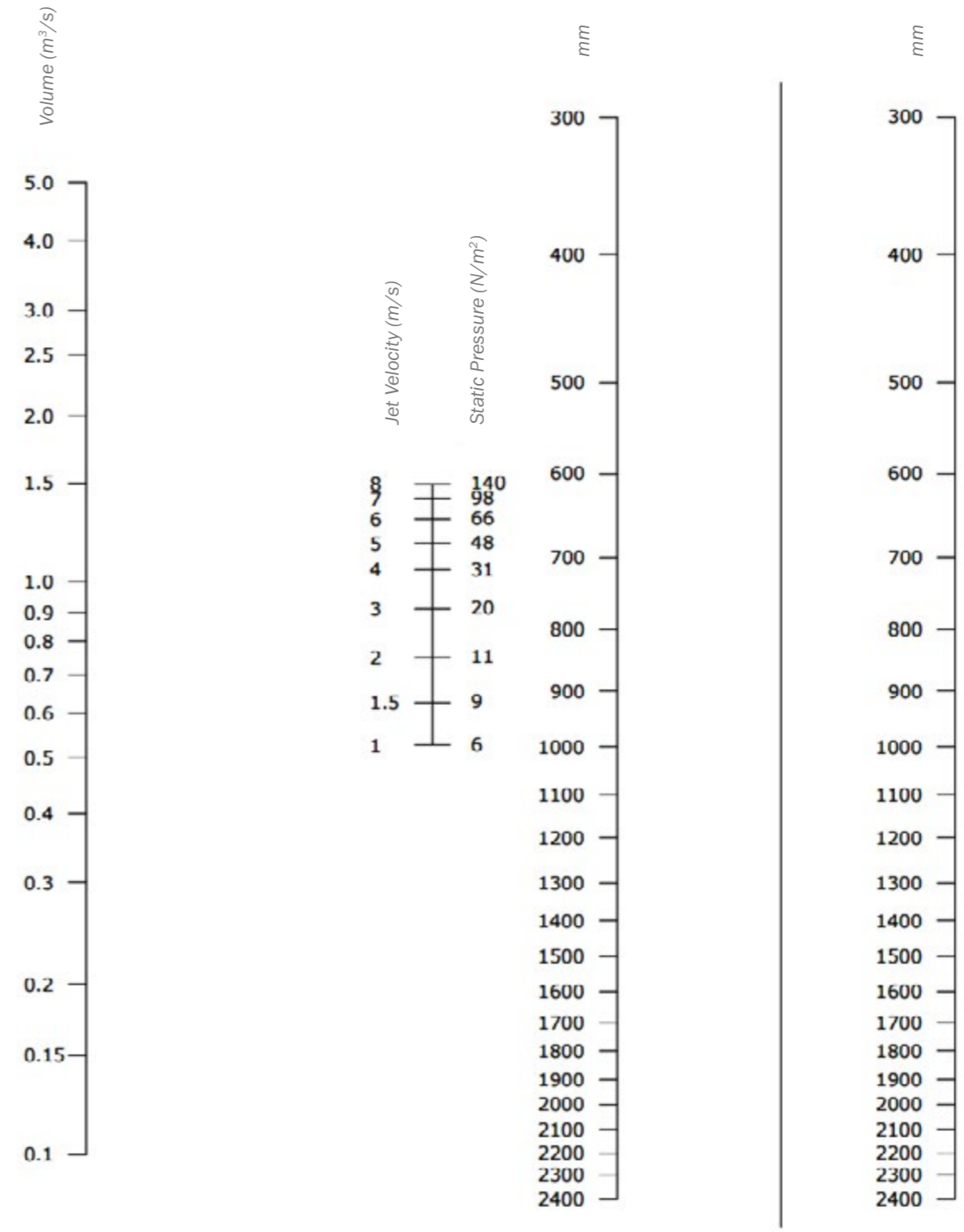


# Standard Weather Louvres - WL

## Selection Data WL38 and WL50

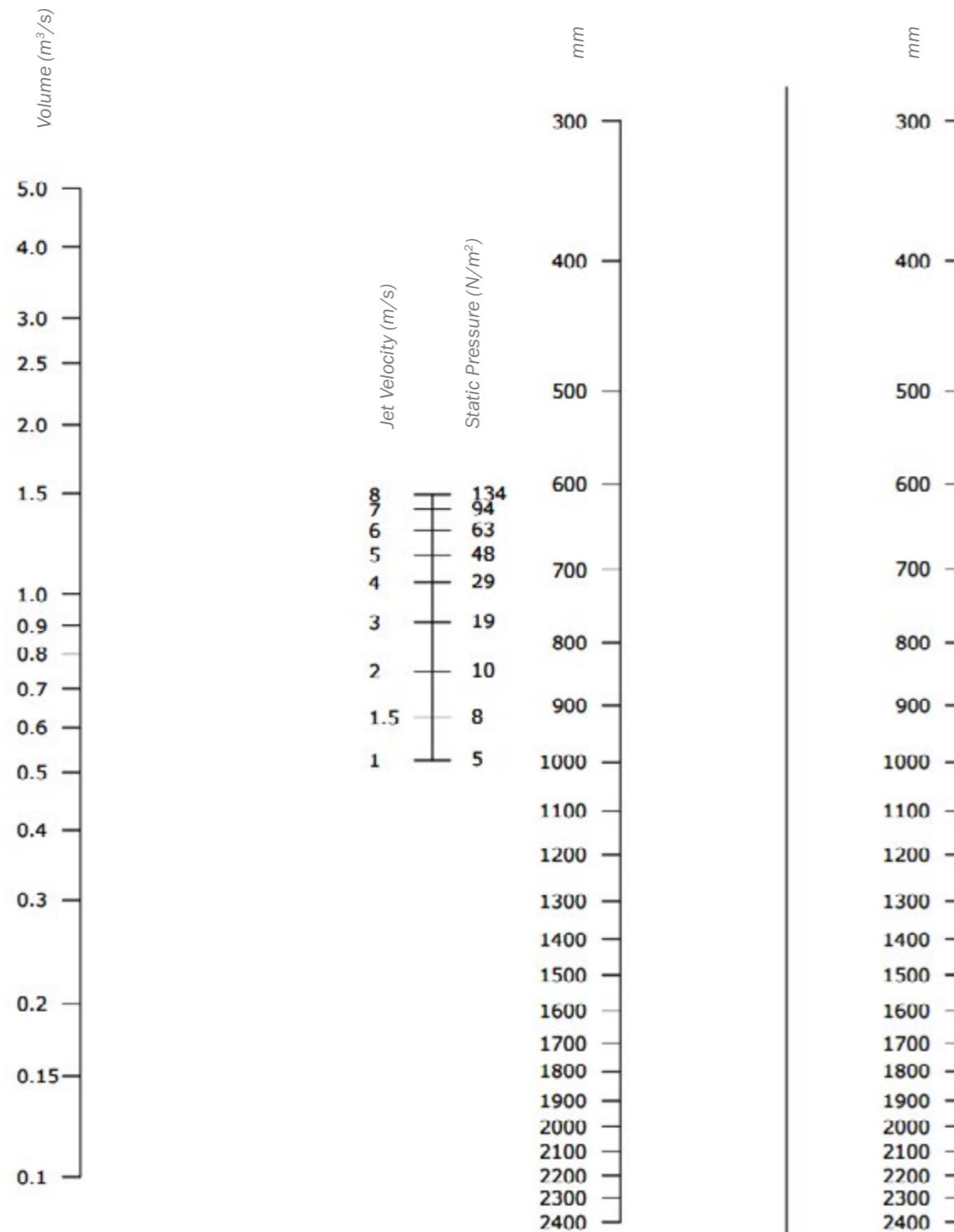


## Selection Data WL75



# Standard Weather Louvres - WL


## Selection Data WL75





## Finish:


- Mill Aluminium (standard)
- SAA: Satin anodised - AA5 (only available with WL38)
- RAL: Polyester powder coated to RAL
- BS: Polyester powder coated to BS



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