- 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



## Index

## Introduction

3 - Product overview and features

## Testing and certification

4 - Product testing

## Technical information

5 - Technical drawings - Flanged and recessed frame louvres
6 - Technical drawings - Reversed and concealed frame louvres
7 - Stop gaps, frame types and large units
8 - Fixings

## Options

9 - Additional options
Face mounted drip cill
Rear mounted drip tray
10 - Further options
Weather louvre and volume control damper combination units

Security bars

## Further information

11-13 - Selection data
14 - Feature: New Series HPL80 ultra high performance weather louvre Class A2 rain rejection up to $4 \mathrm{~m} / \mathrm{s}$

16 - Finish details and ordering codes

## Series 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 $45^{\circ}$ 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 1 m nominal size (either width or height)
WL50: Up to $2 \mathrm{~m}^{2}$
WL75: Anything above $2 \mathrm{~m}^{2}$
WL100: By request only

## Design features

| Material | Extruded aluminium |
| :---: | :---: |
|  | BZP steel screws or aluminium pop rivets |
| Sizes | Minimum heights (flanged units, nominal): WL38: 105mm <br> WL50: 125 mm <br> WL75: 185 mm <br> WL100: 205mm |
| Blade | Various pitches (WL38-40mm, WL50-50mm, WL75-75mm and WL100-90mm) All with $45^{\circ}$ face slope |
| Core | Fixed |
| Frame | Standard: Flanged <br> Optional: Recessed and reversed |
| Fixings | Standard: None Optional: See page 8 |
| Finish | Standard: Mill aluminium Optional: See page 14 |
| Mass/ $/ \mathbf{m}^{\mathbf{2}}$ face area | WL38: 12 kg <br> WL50: 12 kg <br> WL75: 15 kg <br> WL100: 16 kg |

## 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 75 mm per hour, with a wind speed of $13 \mathrm{~m} / \mathrm{s}(29 \mathrm{mph})$.

Rain ingress is then measured at various draw speeds through the louvre, this is in addition to the constant $13 \mathrm{~m} / \mathrm{s}$ 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. $1.4 \mathrm{~m} / \mathrm{s}$ draw velocity Class D above approx. $1.4 \mathrm{~m} / \mathrm{s}$ 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.
$150 \mathrm{~mm}^{2}$
$200 \mathrm{~mm}^{2}$
$250 \mathrm{~mm}^{2}$
$300 \mathrm{~mm}^{2}$
$350 \mathrm{~mm}^{2}$
$400 \mathrm{~mm}^{2}$
$450 \mathrm{~mm}^{2}$
$500 \mathrm{~mm}^{2}$
$550 \mathrm{~mm}^{2}$
$600 \mathrm{~mm}^{2}$
$700 \mathrm{~mm}^{2}$
$800 \mathrm{~mm}^{2}$
$900 \mathrm{~mm}^{2}$
$1000 \mathrm{~mm}^{2}$

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)


Recessed frame - REC (optional)

WL38-R



WL75-R


WL100-R

## Technical drawings

Reversed frame - REV (optional)


## 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: 40 mm
WL75: 60 mm
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.

| 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 |
|  | 25F | 25 mm flat | Optional | + 30 mm | 46 mm |
|  | 50FS | 50 mm flat (shallow) | Optional | $+80 \mathrm{~mm}$ | 50 mm |
|  | $3^{\prime \prime} \times 2$ " $\times 1 / 8 "$ | 3 inch ( 76.2 mm ) flat | Optional | $+130 \mathrm{~mm}$ | 2 inches ( 50.8 mm ) |
|  | $4 " \times 2 " \times 1 / 8 "$ | 4 inch (101.6mm) flat | Optional | + 180 mm | 2 inches ( 50.8 mm ) |
| WL75 and WL100 | 50FD | 50 mm flat (deep) | Standard | $+80 \mathrm{~mm}$ | 75 mm |
|  | $3^{\prime \prime} \times 3 " \times 1 / 8^{\prime \prime}$ | 3 inch ( 76.2 mm ) flat | Optional | + 130 mm | 3 inches ( 76.2 mm ) |
|  | $4 " \times 4 " \times 1 / 8 "$ | 4 inch (101.6mm) flat | Optional | + 180 mm | 4 inches (101.6mm) |

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

## 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 Vent Direct 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.


## 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.


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.


## Pre-punched face fixing holes - Ordering code 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.


## Rear mounted concealed fixing lugs - Ordering code RFL

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.


## 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.


WL100


## 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 65 mm 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, WL75 and WL100

## Suitable volume control dampers:

Series LF uPVC VCD high performance plastic
Series 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 1.2 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.



Selection data: WL100


## 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 $4.0 \mathrm{~m} / \mathrm{s}$
HPL80 with bird mesh: Class A2 up to $2.5 \mathrm{~m} / \mathrm{s}$

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


## Notes

## Finish

Mill aluminium (standard)
Satin anodised (AA5) - Only with WL38
Polyester powder coating to any RAL or BS colour

Ordering codes


## Example

$\square$

## Codes

| 1) | Quantity |  |  |
| :---: | :---: | :---: | :---: |
| 2) | Size (mm) | (Width x height) |  |
| 3) | 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 |
| 4) | Frame design | (nothing) | Flanged |
|  |  | REC | Recessed frame |
|  |  | REV | Reversed frame |
| 5) | Debris screens | BM | Bird mesh (12mm $\times 12 \mathrm{~mm}$ mesh) |
|  |  | IM | Insect mesh |
| 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: 30 mm flat flange (standard) |
|  |  | 25F | 25 mm flat flange (optional) |
|  |  | 50FS | 50 mm flat flange - shallow (optional) |
|  |  | $3 " \times 2$ " $1 / 8 "$ | 3 " (76.2mm) flat flange (optional) |
|  |  | $4 " \times 2$ " $1 / 8$ " | $4 "$ (101.6mm) flat flange (optional) |
|  |  | 50FD | WL75 and WL100: 50mm flat flange - deep (standard) |
|  |  | $3^{\prime \prime} \times 3^{\prime \prime} \times 1 / 8^{\prime \prime}$ | 3 " ( 76.2 mm ) flat flange (optional) |
|  |  |  | 4 " ( 101.6 mm ) 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 |  |  |
|  |  | SAA | Satin anodised - AA5 (only available with WL38) |
|  |  | 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 |

[^0]Leave code section blank if no option is required.

Notes

Ventilation Direct Ltd
Unit 10
Vantage Park
Vantage Close
Sheffield
s9 1BG
Tel: 01143503535
info@ventdirect.co.uk


[^0]:    Important: Size will be taken to be nominal (hole internal) unless stated otherwise.

