



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

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

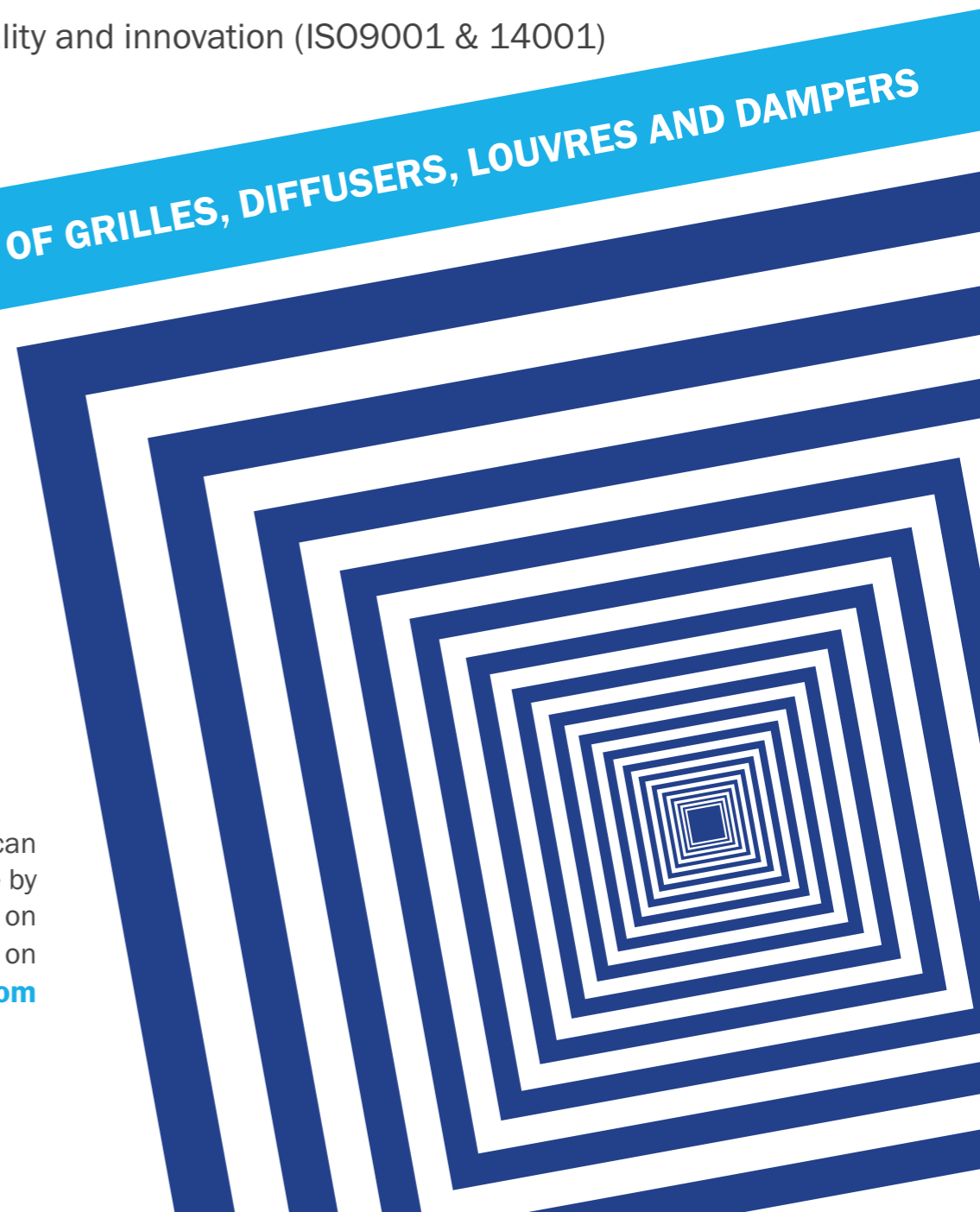
Air-Precision is an addition to Monodraught's portfolio including grilles, diffusers, external louvres and volume control dampers.

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**



Sand Trap Louvres - STL



Series STL sand trap louvres are specialist louvres, designed to be the primary filters for air intakes in areas where airborne sand and dust are prevalent.

Two banks of interlocking vertical blades catch up to 92.5% of sand and dust, where it drops down onto a sloped cill and is ejected through the louvre face by gravity.

The open ended blade design prevents clogging of the louvre, in contrast to the use of drain holes which are prone to becoming blocked.

A range of additional filters can be fitted to further enhance efficiency, from medium efficiency G2 filters, right up to high efficiency F8 models.

Installed in a removable aluminium frame, these filters are easy to maintain and improve the louvre's effectiveness.

Materials:

- Extruded aluminium

Mass / m² face area:

- 20 kg

Blade:

- Vertically mounted channel 75 mm face

Free area:

- Approx 38% (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.

Core:

- Fixed

Debris Screen:

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

Frame:

- Standard: Flanged
- Optional: Recessed and reversed

BSRIA Testing:

Series STL sand trap louvre have been tested against **BS EN 13181:2001**

The testing was carried out in September 2012 by BSRIA in Bracknell, Berkshire, England.



Performance:

Sand Rejection Performance:

- 92.5% effective at 0.5 m/s draw velocity.
- 65% effective at 1.0 m/s draw velocity.

Based on this performance data, we recommend 1.0 m/s draw velocity is the maximum used when sizing sand trap louvres to assure good performance.

Sand is blown at the louvre at 20 - 25 m/s, measured in the sand injection tube.

The test was of nominal size 1000 mm x 1000 mm.

Airflow Performance:

Mean coefficient of entry: 0.118 (Class 4)

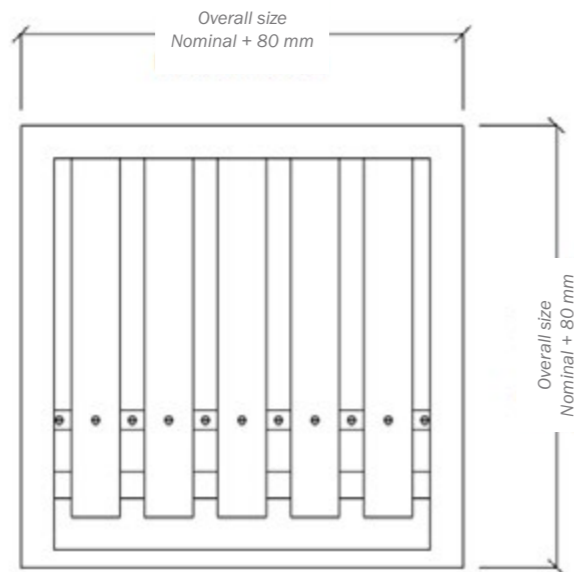
DRAW VELOCITY (m/s)	SAND REJECTED
0.00	97.0%
0.50	92.5%
1.30	49.0%
2.01	21.5%
2.81	11.8%
3.53	7.2%

Sand Trap Louvres - STL

Technical Drawings:

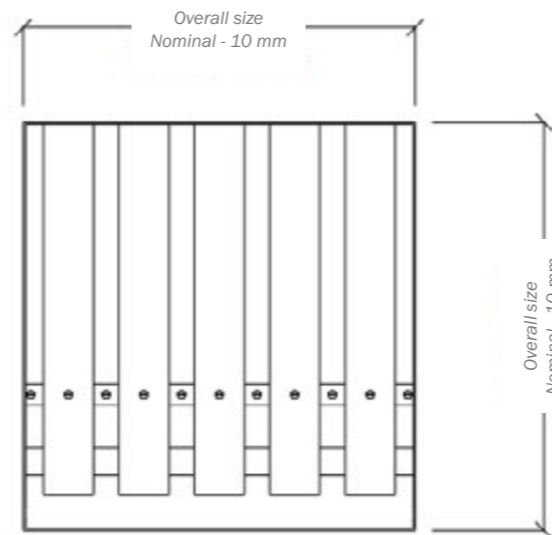
STL: Flanged

- 50 mm flange
- Louvre neck sits inside wall aperture
- Approx 20 kg/m²



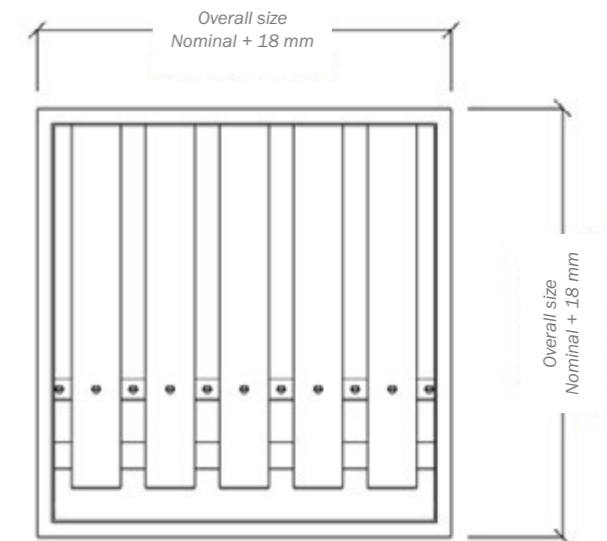
STLR: Recessed

- Whole louvre sits inside wall aperture
- Approx 20 kg/m²



STLREV: Reversed

- Sits proud of the wall
- Approx 20 kg/m²



Sand Trap Louvres - STL

Additional Filters:

Series STL sand trap louvres are available with a full range of disposable and replaceable filters.

A removable aluminium framework is bolted behind the louvre blades, holding the filter/s securely in place during normal working conditions.

Removal for maintenance simply involves undoing the bolts, allowing the frame and filter to come away from the louvre.

STL c/w filter overall depth: 125 mm

STLR c/w filter overall depth: 152 mm



Filter Classification:

Filters with a G rating are classified as primary filters, those with an F rating are classified as secondary.

The higher the number, the more effective the filter.

Replaceable:

Replaceable filters offer the advantage of a lower lifetime cost.

A galvanised steel pad holding frame is supplied. This has one side fitted with mesh, the other with a holding clip. Inside the frame your chosen filter media is fitted.

When clogged, oiled glass fibre and synthetic type filters need replacing completely, polyfoam filters can be washed.

The following medias are available for use with steel holding frames:

- **Oiled glass fibre (disposable):** G3/4
- **Synthetic (disposable):** G2 to G4, F5 to F8
- **Polyfoam (washable):** G2* to G4*

* Equivalent to EN779



Disposable:

Disposable filters are cheaper up-front, but do require complete replacement upon becoming clogged.

Filters have a recycled cardboard frame and are available in the following types:

- **Glass fibre:** G2/3
- **Synthetic:** G3



*Filter ratings to EN779.
All filters are 22 mm thick.*

Sand Trap Louvres - STL

Fixings:

Predrilled face fixing holes - FH:

8 mm fixing holes predrilled into the louvre frame before powder coating for quick and easy fitting on site.

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

Only available with flanged and reversed flange louvres.

Fixings are shown for illustration only.



Rear mounted concealed fixing lugs - FL:

Fixing lugs will be welded to the rear of the louvre frame extending 50 mm from the rear of the louvre neck.

These can be drilled and bolted through providing an easy to access, concealed fixing point.

Supplied undrilled.

Fixings are shown for illustration only.



Glazing bar - GZ (required depth needed):

An additional frame can be fixed to the louvre neck giving a glazing bar frame of a specified depth.



Sand Trap Louvres - STL

Volume Control Combination Units

Volume Control:

Sand trap louvres can be factory fitted with a rear mounted VCD aluminium volume control damper providing a sand trap louvre with guaranteed performance and a volume control damper in one easy to fit unit.

If required, VCDs can be replaced with shut off dampers. The same format damper, fitted with additional seals, these provide much greater levels of shut off than standard volume control dampers.

VCD Operation Mode:

- Plastic handle
- Locking quadrant
- Full range of Belimo actuators
- Pneumatic motors

Overall unit depth: 205 mm

Minimum wall depth: 200 mm

Mass /m² face area: 30 kg


Only available with flanged and recessed louvres.





Finish:


- Mill aluminium (standard)
- Brushed aluminium
- RAL: Polyester powder coated to RAL
- BS: Polyester powder coated to BS



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