

SECURE ROOM

Anti-ligature Ventilation Louvre

High performance ventilation louvre designed and approved for use in Special Hospitals where there is a ligature risk.

Typical Applications:

- Special hospitals
- Seclusion rooms
- Prisons

Technical information:

- Heavy duty steel construction.
- Vanes fully welded top and bottom.
- Flange fixing plate securely fitted to wall fabric.
- Pin-torx security screw fixing of the louvre to the flange fixing plate.
- Wall aperture size 380mm x 380mm.
- Finish - powder coated cream gloss as standard, other colours available, by request.

Panel sizes:

Louvre Width (mm) 'A'	Louvre Width (mm) 'B'	Louvre Height (mm) 'C'	Air Flow %
300	300	244	20%

Air flow percentages are rounded down to the nearest whole number. Airflow calculations should be considered as a guide only.

380mm x 380mm (0.38m x 0.38m) unit:

Louvre area: Area of a trapezium = $\frac{1}{2} \times h \times (a + b) = 0.5 \times 0.340m \times (0.280m + 0.352598m) = 0.1075417m^2$

Area covered: Centre column area = $0.040m \times 0.340m = 0.0136m^2$

Blades area = 14 of $0.003m \times 0.340m = 0.01428m^2$

Angled shelf area = 2 of $0.016823m \times 0.156299m = 0.0052588m^2$

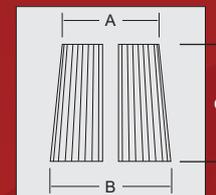
Total area covered = $0.0331388m^2$

Louvre area - Total area covered = Gaps between blades. $0.1075417m^2 - 0.0331388m^2 = 0.0744029m^2$

Free air flow percentage: $\frac{0.0883234}{0.2937600} \times 100$

=69% (rounded down to nearest whole number)

Note: The value on the examples is based on air figure constant and does not include any type of mesh.



**AIR FLOW DYNAMIC CALCULATIONS
AVAILABLE ON REQUEST**

Optional enhancements:

- Accelerant Protection - Internal stainless steel mesh shield with bevelled run out.
- Vibration Alarm - sensor connected to louvre blade.
- Covert fixings.