

# QuietFlow Acoustic Louvres

**NOISE CONTROL SERVICES LTD**  
ACOUSTIC PRODUCTS AND DESIGN

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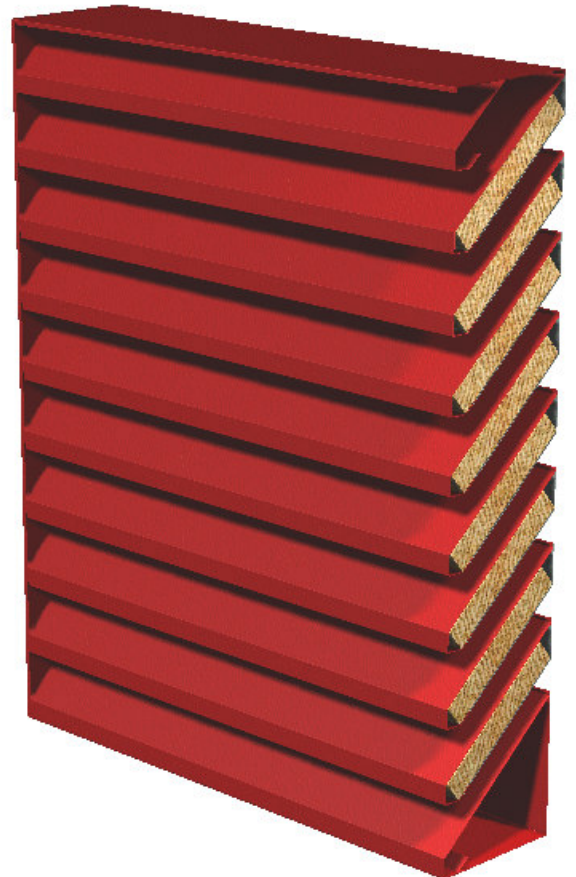
QuietFlow acoustic louvres are available in two models, QF1 and QF2. The QF1 type provides normal acoustic performance with a minimum pressure loss. The QF2 type provides optimum acoustic performance with a higher pressure loss.

The specially designed low profile blades are set to a pitch of 150mm and at an angle to prevent line of sight through the louvre.

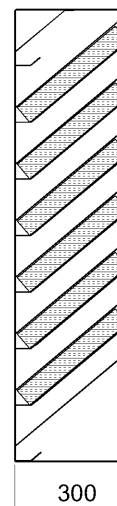
The acoustic louvres are available in a single unit up to sizes of 2400mm wide by 2400mm high. Larger openings can be accommodated by multiple units. Practical sizes should be chosen with consideration to manufacture and handling.

All QuietFlow acoustic louvres are constructed from pre-galvanised sheet metal components throughout. Optional powdercoat finish is available to the colour of your choice. Aluminium or stainless steel construction is also available.

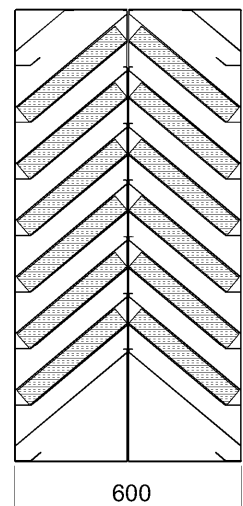
QuietFlow acoustic louvres can be supplied with vermin mesh guards fixed to the inside face. A range of flashing details is available to allow the installation of the louvre in various facades types.



QF1



QF2



## ACOUSTIC PERFORMANCE

The acoustic performance of QuietFlow acoustic louvres is tabled below. The figures are Sound Reduction Indexes or Transmission Loss as defined by **ISO140-3:1995** : *Acoustics - Measurement of sound insulation in buildings and of building elements - Part 3: Laboratory measurements of airborne sound insulation of building elements*

Model	Octave Band Centre Frequency (Hz)						
	125	250	500	1k	2k	4k	8k
QF1	8	10	12	19	20	18	18
QF2	11	13	19	30	32	30	27

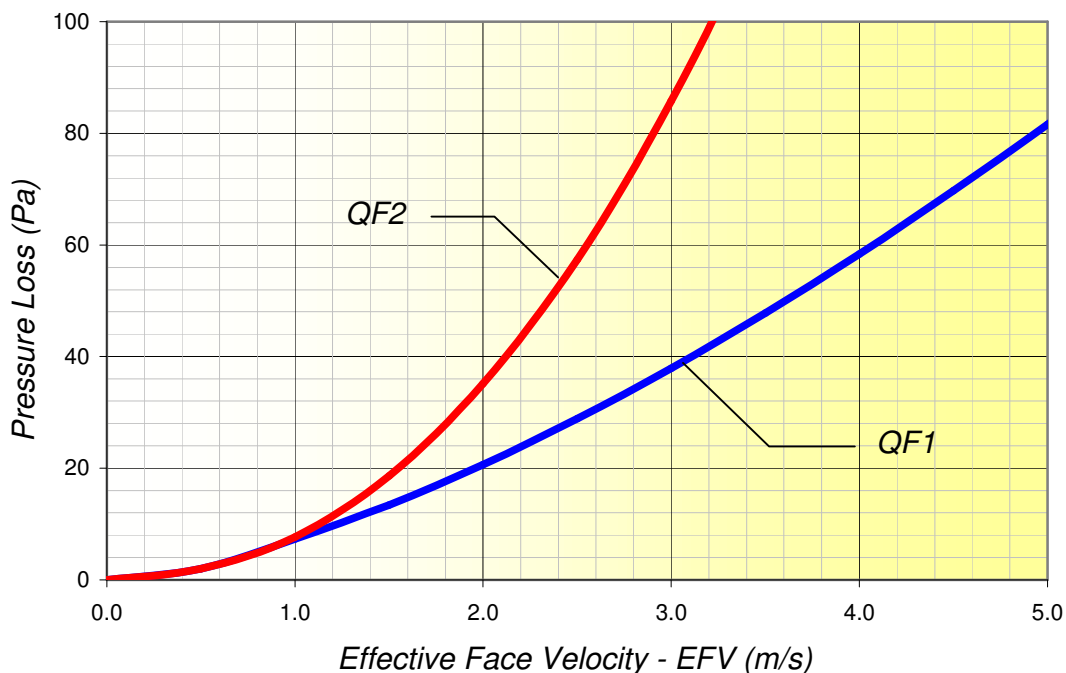
## PRESSURE LOSS

The pressure loss through the louvre is based on the Effective Face Velocity (EFV) and is calculated with the formula

$$EFV(m/s) = \frac{Airflow(m^3/s)}{Width(m) \times \{Height(m) - 0.300\}}$$

Use the graph below and the EFV to find the pressure loss through the louvre

The selection of an inlet louvre with face velocity greater than 2m/s may compromise weather protection.



## WEIGHT

QF1 Weight in kg

Height (mm)	Width (mm)						
	600	900	1200	1500	1800	2100	2400
600	22	31	41	50	59	69	78
900	33	47	60	74	88	102	116
1200	44	62	80	98	117	135	153
1500	54	77	100	123	145	168	191
1800	65	92	119	147	174	201	228
2100	76	107	139	171	202	234	266
2400	86	123	159	195	231	267	303

Double weights for QF2 louvres.

## INSTALLATION

In most applications, the louvre is installed after the construction of walls. A 10mm clearance is to be left on all sides. Flush mounting with the building exterior provides the best appearance and acoustic performance.

All perimeter gaps are to be packed and sealed with a suitable sealant. A thin bead of sealant is to be applied between mating faces of multiple louvre installations