



# NCS Acoustics

DESIGN · MANUFACTURE · INSTALL



## QF Quiet Flow Acoustic Louvres

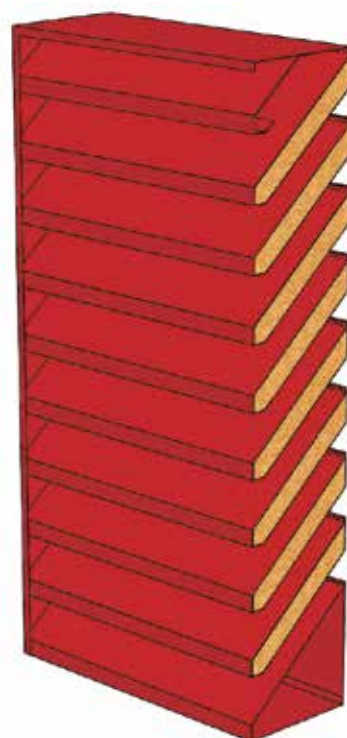
### Classic design



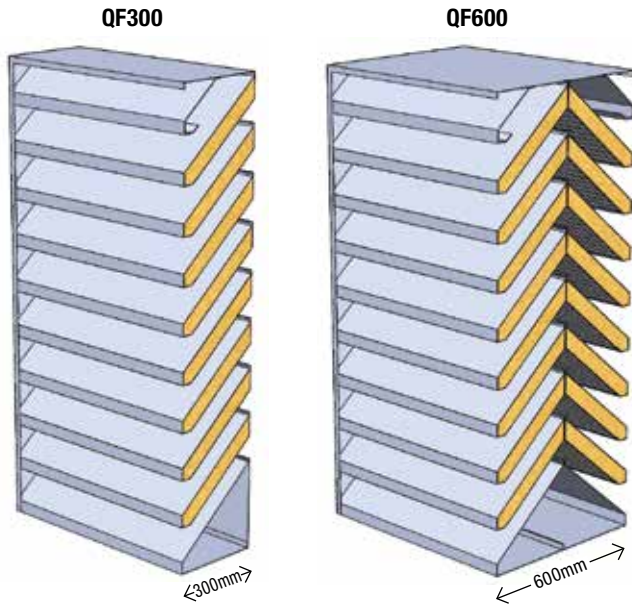
QF Quiet Flow Louvres allow the passage of air through the facade of a structure while reducing noise levels.

An attractive and very effective design, proven over time. Made from high quality, durable materials.

- Wide range of standard sizes or custom made.
- Galvanized sheet steel construction standard or can be made in aluminum or stainless steel.
- Powder-coated or epoxy paint finishes, available in a range of colours.
- Melinex lining and vermin mesh guards available.
- Low profile blades to prevent line of sight.
- QF600 is weather protected on both sides for exterior screening applications.



QF Quiet Flow Louvres come in two depths; QF300 - 300mm and QF600 - 600mm. Greater depth increases acoustic performance and pressure loss.



Available in a single unit up to sizes of 2400mm wide by 2400mm high. Larger openings can be accommodated by multiple units. A maximum height of 3600mm is recommended. Custom sizes can be made.

Other models available; QFS with horizontal rear splitters and the economical QFT with broad blades, providing increased acoustic performance and lower pressure loss. See specific brochures for more information.

### QF ACOUSTIC PERFORMANCE (dB)

Model	Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
QF300	TL 3	6	8	12	19	20	18	18
—	SRI 9	12	14	18	25	26	24	24
QF600	TL 5	9	13	19	30	32	30	27
—	SRI 11	15	19	25	36	38	36	33

The acoustic performance figures are transmission loss (TL) or sound reduction index (SRI) 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.

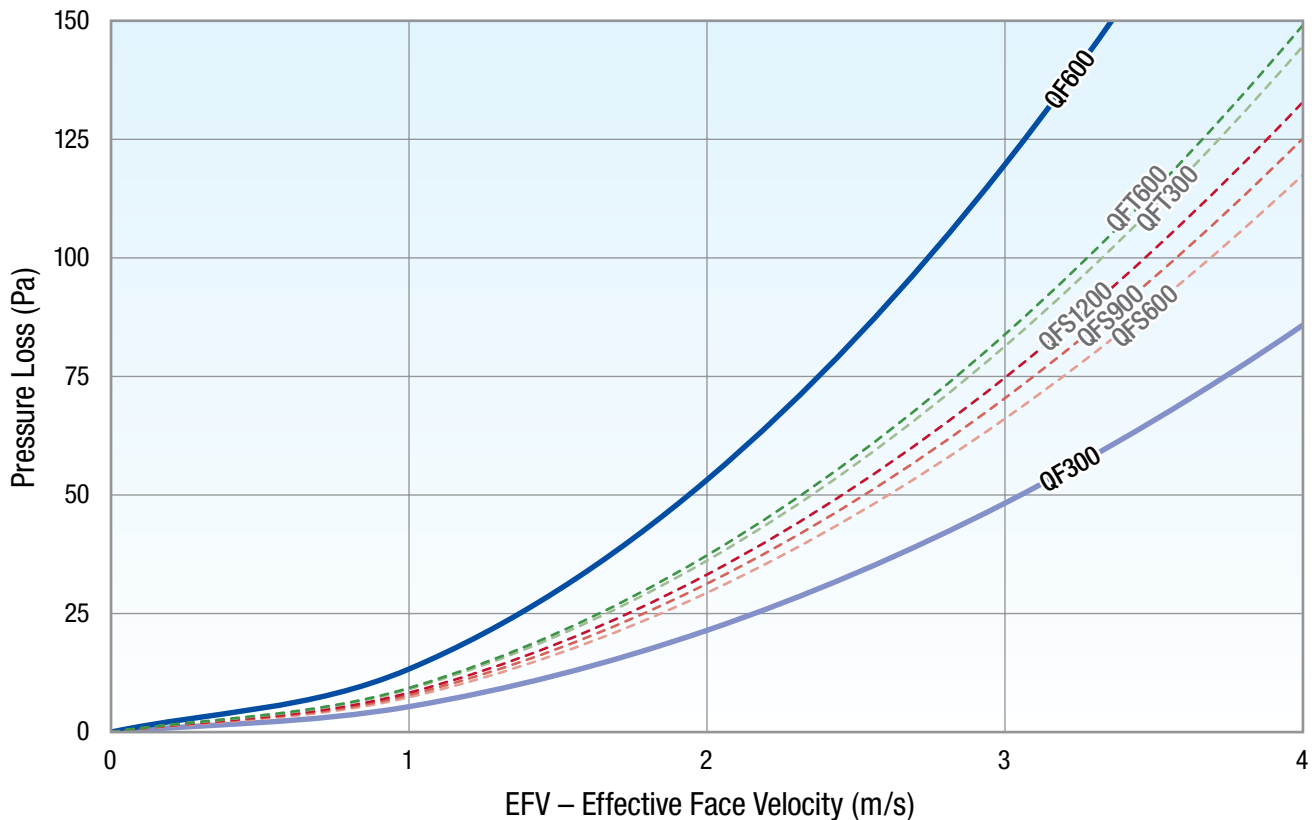
### PRESSURE LOSS

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

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

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.



QF MASS (kg)								
Model	Height (mm)	Width (mm)						
		600	900	1200	1500	1800	2100	2400
QF300	450	18	25	31	38	45	52	59
	600	23	32	41	50	59	68	78
	750	29	40	51	62	74	85	96
	900	34	47	61	74	88	101	114
	1050	40	55	71	86	102	117	133
	1200	45	63	80	98	116	133	151
	1350	51	70	90	110	130	150	170
	1500	56	78	100	122	144	166	188
	1650	62	86	110	134	158	182	206
	1800	67	93	120	146	172	198	225
	1950	73	101	129	158	186	215	243
	2100	78	109	139	170	200	231	262
	2250	84	116	149	182	214	247	280
	2400	89	124	159	194	229	263	298
QF600	450	35	49	63	77	91	104	118
	600	46	64	83	101	119	137	155
	750	57	80	102	125	147	169	192
	900	68	95	122	148	175	202	229
	1050	79	110	141	172	203	234	265
	1200	90	126	161	196	232	267	302
	1350	101	141	180	220	260	299	339
	1500	112	156	200	244	288	332	376
	1650	123	171	220	268	316	364	413
	1800	134	187	239	292	344	397	449
	1950	145	202	259	316	373	429	486
	2100	156	217	278	340	401	462	523
	2250	167	233	298	363	429	494	560
	2400	178	248	318	387	457	527	597



## CONSTRUCTION

QF Quiet Flow Acoustic Louvres are constructed from pre-galvanised sheet steel components throughout. Optional powdercoat finish is available to the colour of your choice. Aluminium or stainless steel construction is also available.

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

Louvres can be supplied with vermin mesh guards fixed to the inside face.

## 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.

A range of mullions, support frames and flashing details are available to allow installation in various facades.

We offer installation, testing, monitoring and maintenance services.



Got a question? Call us to discuss with an experienced engineer:

**+64 9 269 0001**

Or visit our website for more information:

**[www.ncsacoustics.co.nz](http://www.ncsacoustics.co.nz)**

Data correct at time of publication, please ensure you have the latest version by checking our website. NCS Acoustics Limited accepts no liability for use of data within this brochure. Materials may be updated at any time without notice.