

QFS Quiet Flow Acoustic Louvres

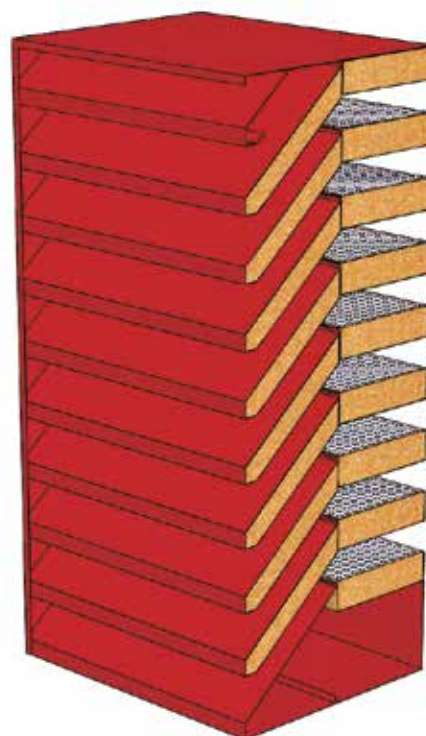
Classic design with rear splitters for enhanced performance



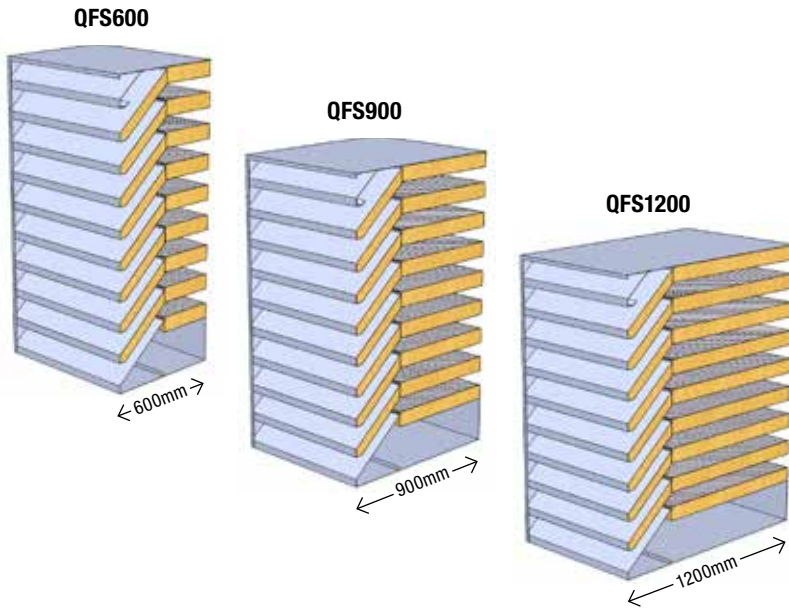
QFS Quiet Flow Louvres allow the passage of air through the facade of a structure while reducing noise levels.

QFS Quiet Flow Louvres are a variant of the QF models with horizontal blades, which provide increased acoustic performance and lower pressure loss. 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.



QFS Quiet Flow Louvres come in three depths; QFS600 - 600mm, QFS900 - 900mm and QFS1200 - 1200mm. 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; QF are classic louvres for standard acoustic performance and pressure loss and the economical QFT with broad blades, providing increased acoustic performance and lower pressure loss. See specific brochures for more information.

QFS ACOUSTIC PERFORMANCE (dB)

Model	Octave Band Centre Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	
QFS600	TL	4	8	13	20	34	40	39	37
	SRI	10	14	15	26	40	46	45	43
QFS900	TL	5	10	16	26	43	50	50	50
	SRI	11	16	22	32	49	56	56	56
QFS1200	TL	6	12	19	32	50	50	50	50
	SRI	12	18	25	38	56	56	56	56

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.

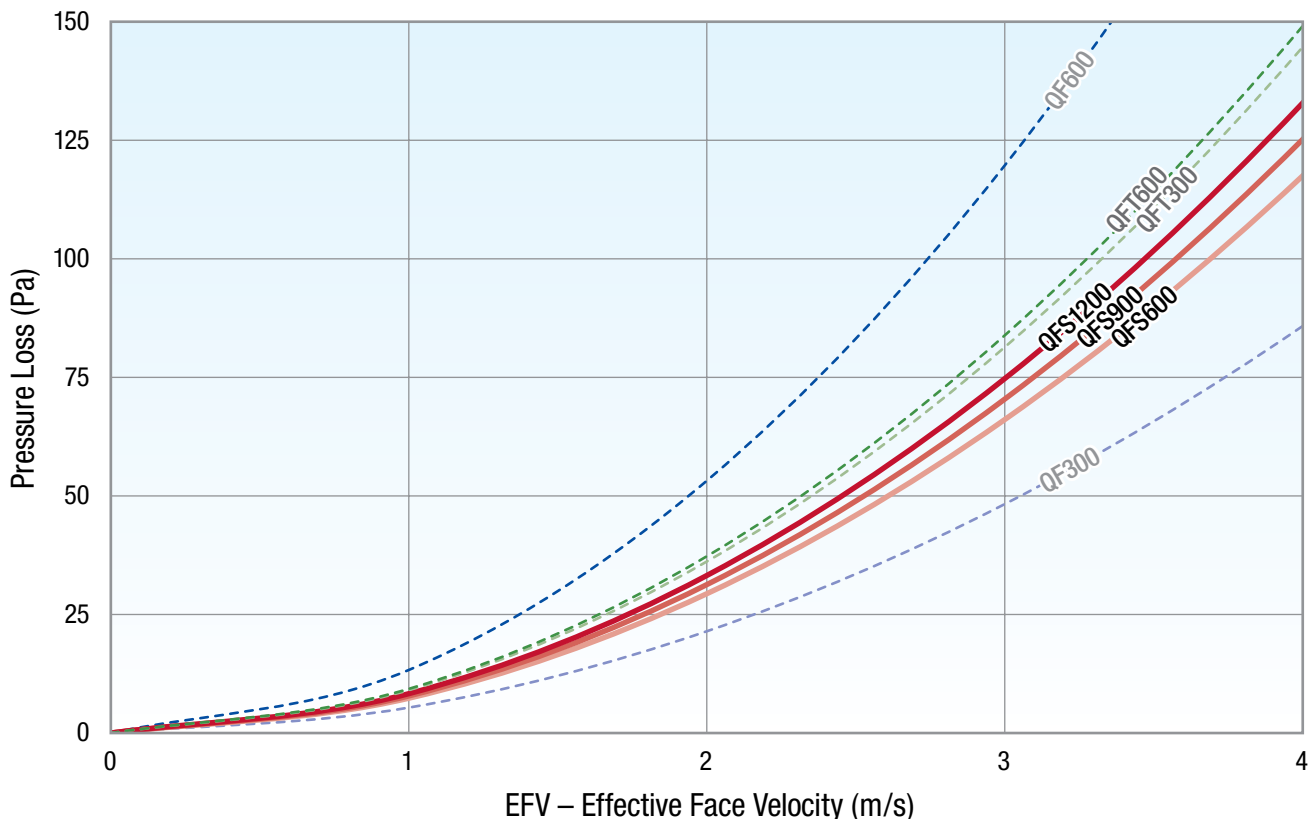
PRESSURE LOSS

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

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

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.



QFS MASS (kg)								
Model	Height (mm)	Width (mm)						
		600	900	1200	1500	1800	2100	2400
QFS600	450	34	46	58	71	83	96	108
	600	44	61	77	93	109	126	142
	750	55	75	95	115	135	156	176
	900	66	90	114	138	162	186	210
	1050	76	104	132	160	188	216	243
	1200	87	119	150	182	214	246	277
	1350	98	133	169	204	240	276	311
	1500	108	148	187	227	266	306	345
	1650	119	162	206	249	292	336	379
	1800	130	177	224	271	318	366	413
	1950	140	191	242	294	345	396	447
	2100	151	206	261	316	371	426	480
	2250	162	221	279	338	397	456	514
2400	173	235	298	360	423	486	548	
QFS900	450	47	63	80	96	113	129	146
	600	61	83	104	126	148	169	191
	750	76	103	129	156	182	209	235
	900	91	122	154	185	217	248	280
	1050	105	142	178	215	252	288	325
	1200	120	162	203	245	286	328	369
	1350	135	181	228	274	321	367	414
	1500	149	201	252	304	356	407	459
	1650	164	221	277	334	390	447	503
	1800	179	240	302	363	425	486	548
	1950	193	260	326	393	460	526	593
	2100	208	280	351	423	494	566	637
	2250	223	299	376	452	529	605	682
2400	237	319	400	482	563	645	727	
QFS1200	450	60	80	101	122	143	163	184
	600	78	105	132	159	186	213	240
	750	97	130	163	196	229	262	295
	900	116	155	194	233	272	311	350
	1050	134	180	225	270	315	361	406
	1200	153	204	256	307	359	410	461
	1350	172	229	287	344	402	459	517
	1500	190	254	318	381	445	509	572
	1650	209	279	349	418	488	558	628
	1800	228	304	379	455	531	607	683
	1950	246	328	410	492	574	657	739
	2100	265	353	441	529	618	706	794
	2250	284	378	472	566	661	755	849
2400	302	403	503	604	704	804	905	

CONSTRUCTION

QFS 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. Rear splitters are horizontal to reduce pressure drop.

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:

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Or visit our website for more information:

www.ncsacoustics.co.nz

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