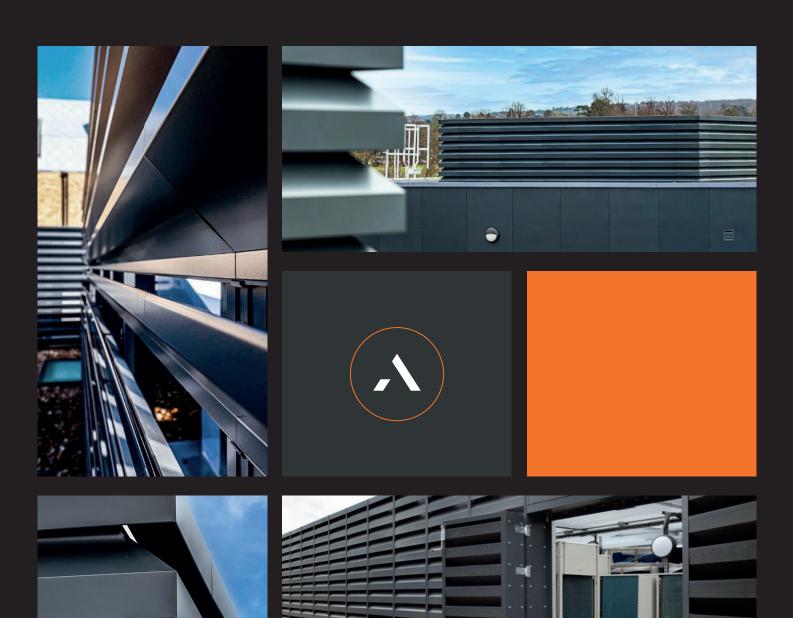
MAPLE

CONTOUR® ACOUSTIC

Noise-reduction louvres



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ADVANCED ACOUSTIC PERFORMANCE

Acoustic louvres are designed to allow airflow while reducing noise transmission, making them ideal in environments where ventilation must be maintained without compromising acoustic performance.

They work by redirecting the pathway between the noise source and the receiver nstead of sound waves travelling freely, the angled blades force them to reflect and scatter, reducing the intensity of transmitted sound. Contour® Acoustic louvres are fully tested for acoustic and ventilation performance. Linear and continuous designs are available as single panels, large assemblies or integrated doors. To achieve a balance between aesthetics and performance, architects can specify single or double-banked curved blades as an alternative option.

SPECIFYING ACOUSTIC LOUVRES – GUIDING PRINCIPLES

Acoustic performance

Selecting the right acoustic louvre begins with defining the acoustic requirement. This includes identifying the target sound reduction levels, expressed in Rw (Weighted Sound Reduction) or SRI (Sound Reduction Index) values, based on planning constraints, environmental noise levels or internal comfort expectations. Higher performance often requires deeper louvre profiles or double-bank configurations, so collaboration with an acoustic consultant is key to ensuring the

Balancing space and performance

When specifying acoustic louvres that are being integrated into the building envelope, a key challenge lies in balancing size and performance as the deeper profiles required for effective sound attenuation often clash with limited cavity zones if not planned early. The trade-off between acoustic performance, face area and efficiency must be carefully managed, while considerations such as access for maintenance and third party-verified compliance testing are equally important to ensure the louvres perform effectively throughout the building's lifecycle.

Airflow and pressure drop

Acoustic louvres, due to their internal baffles, typically offer a lower free area than standard louvres. This reduction in free area increases resistance to airflow, resulting in a higher pressure drop. As the air is forced through a smaller opening, the fan must work harder to maintain the required airflow, which can reduce fan effectiveness and increase energy consumption. Reviewing data on pressure drop versus airflow curves is essential to ensure that the system is correctly sized and that ventilation targets are achievable without compromising acoustic performance.

Balancing acoustic attenuation and weather resistance

Environmental exposure also plays a role in product selection. Acoustic louvres generally provided limited weather resistance, while weather louvres offer little acoustic attenuation. This results from contrasting design requirements: the blade geometry and construction needed for noise reduction conflict with those required for effective rain defence. Selection should therefor reflect site-specific conditions. For example, in covered plant areas, acoustic louvres with moderate weather resistance and strong attenuation may offer the best overall solution.



CURVED BLADE OPTIONS

These systems offer style and performance, and are available in a sleek, curved blade configuration.



SPECIFICATION

	MF-2R	MF-2R LP	MF-R	MF-RLP							
Blade pitch	305mm	355mm	305mm	355mm							
Blade size	180mm	180mm	180mm	180mm							
Material		Aluminium or pre-galvanised steel.									
Finish	Polyes	Polyester powder-coated (60µm). Available in RAL/BS standard colours.									
Weight	60kg/m²	56kg/m²	30kg/m²	28kg/m²							
Visual free area		Not app	olicable								
Nominal free area (typical)	23%	32%	23%	32%							
	Varies with size. Please contact head office for specific sizes.										

ACOUSTIC AND AIRFLOW PERFORMANCE DATA

Sound Reduction Indices (SRI) obtained from testing at Salford University to BS EN ISO 10140-2: 2010

MF-2R (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	6	11	14	19	24	26	23	22	23
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	5	11	20	32	47	65	87	112	140

MF-2R LP (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	5	8	12	16	22	18	15	14	19
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	2	5	9	15	22	30	40	51	64

MF-R (Single bank)

E (11)	67	105	050	500	11	O.	41	01	Б
Frequency (Hz)	63	125	250	500	IK	2k	4k	8k	Rw
SRI (dB)	6	6	10	11	14	14	13	10	13
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	3	6	10	16	23	32	42	53	65

MF-RLP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	4	5	8	9	12	9	7	6	11
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	2	4	7	10	15	20	27	34	42











CONTINUOUS BLADE OPTIONS

For a more traditional aesthetic, Contour® Acoustic offers a continuous line design with mitred corners, achieving the appearance of a weather louvre.



SPECIFICATION

	MF-2L100SP	MF-2L150HP	MF-2L150SP	MF-2L300SP	MF-L300EP	MF-L300SP					
Blade pitch	200mm	305mm	200mm	200mm	160mm	200mm					
Blade size	100mm	205mm	100mm	100mm	100mm	100mm					
Material			Aluminium or pre	e-galvanised steel.							
Finish		Polyester powder-coated (60µm). Available in RAL/BS standard colours.									
Weight	42kg/m²	46kg/m²	48kg/m²	82kg/m²	47kg/m²	41kg/m²					
Visual free area	50%	32%	50%	50%	38%	50%					
Nominal free area (typical)	34%	23%	34%	34%	26%	34%					
		Varies with size. Please contact head office for specific sizes.									

ACOUSTIC AND AIRFLOW PERFORMANCE DATA

Sound Reduction Indices (SRI) obtained from testing at Salford University to BS EN ISO 10140-2: 2010

MF-2L100SP (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	5	5	6	10	13	20	18	21	13
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	6	13	22	35	51	69	90	114	141

MF-2L150HP (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	7	7	13	15	22	29	26	27	21
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	17	39	70	110	159	/	/	/	/

MF-2L150SP (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	5	6	8	12	19	22	20	21	16
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	6	13	22	35	51	69	90	114	141

MF-2L300SP (Double bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	7	9	12	23	33	41	32	28	25
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	6	13	23	35	51	69	90	115	141

MF-L300EP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	7	7	10	15	28	30	26	21	20
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	7	16	28	44	64	87	114	141	178

MF-L300 SP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	6	7	9	12	19	22	17	15	18
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	3	7	12	18	26	35	46	58	71















LINEAR BLADE OPTIONS

Classic trapezoidal design complemented by a linear blade finish.



SPECIFICATION

	MF-L100SP	MF-L150EP	MF-L150HP	MF-L150SP	MF-L300EP	MF-L300SP						
Blade pitch	200mm	160mm	305mm	200mm	160mm	200mm						
Blade size	100mm	100mm	205mm	100mm	100mm	100mm						
Material		Aluminium or pre-galvanised steel.										
Finish		Polyester powd	er-coated (60µm). A	vailable in RAL/BS s	tandard colours.							
Weight	21kg/m²	23kg/m²	23kg/m ²	24kg/m²	47kg/m²	41kg/m²						
Visual free area	50%	32%	32%	50%	38%	50%						
Nominal free area (typical)	34%	26%	23%	34%	26%	34%						
		Varies wit	h size. Please contac	t head office for spe	ecific sizes.							

ACOUSTIC AND AIRFLOW PERFORMANCE DATA

Sound Reduction Indices (SRI) obtained from testing at Salford University to BS EN ISO 10140-2: 2010

MF-L100SP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	4	4	5	6	9	12	12	11	8
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	3	7	12	19	27	36	48	60	74

MF-L150EP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	5	5	7	9	13	13	13	13	12
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	6	14	24	38	54	74	96	122	150

MF-L150HP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	6	6	8	10	14	18	15	15	14
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	9	21	37	58	84	114	150	190	235

MF-L150SP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	4	4	6	8	11	13	12	12	10
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	3	7	12	19	27	36	48	60	74

MF-L300EP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	7	7	10	15	28	30	26	21	20
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	7	16	28	44	64	87	114	141	178

MF-L300SP (Single bank)

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Rw
SRI (dB)	6	7	9	12	19	22	17	15	18
Face velocity (m/s)	0.5	0.75	1	1.25	1.5	1.75	2.0	2.25	2.5
Pressure drop (Pa)	3	7	12	18	26	35	46	58	71



WHY MAPLE?

PASSION

We care about your project as much as you do and will never leave a project until it is completed. We thrive on all customer feedback and are continuously striving for better solutions.



SUCCESS

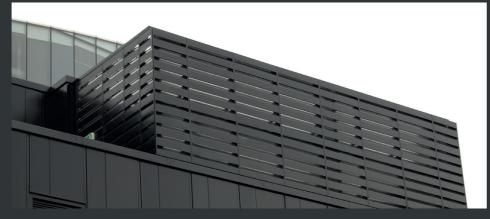
We ensure that your project's design intent is protected through early collaboration and our Proven Process helps to keep your project on track.



EXPERTISE

We're experts in the end-to-end process of an aluminium louvre project from concept to completion.











Maple are experts in aluminium louvre projects and have been helping contractors, architects and client organisations across the UK deliver challenging projects for the last four decades.

We thrive on bringing visions to reality through a combination of design logic, technical

know-how and thoughtful planning with superior products and exceptional service.





PROVEN PROCESS

Maple's Proven Process describes the 24 critical stages and in-depth methodology that support the five main building blocks of every successful project, and provide tangible benefits for clients - from inception to completion.





MAPLE

Maple is a leading designer, manufacturer and installer of rainscreen cladding, solar shading, weather protection and screening for building exteriors and interiors. Since 1983, we've been combining innovation, technical excellence and exceptional customer service to deliver projects that save energy, create visual impact and make buildings more comfortable for their occupants.



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