



*"Innovative building solutions
for a sustainable environment"*



Acoustic Weather Louvre System

Designers and Specifier's Technical Manual

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Acoustic Weather Louvre System



SYSTEM 1 ACOUSTIC LOUVRE

General

The Zefyr Acoustic Louvre Type 1 is a factory assembled, medium performance, half chevron louvre.

Acoustic Performance

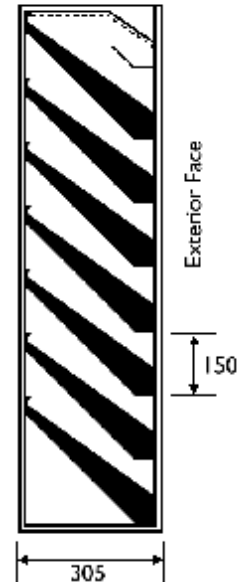
The following Noise Reduction levels (in dB) were recorded during testing:

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
Noise Reduction (dB)	5.2	5.6	7.1	11.8	18.5	21.7	19.5	18.6

No. of Intermediate Blades	Standard Louvre Height
2	590
3	740
4	890
5	1040
6	1190
7	1340
8	1490
9	1640
10	1790
11	1940
12	2090
13	2240
14	2390
15	2540

Note: Standard heights indicated in the table give maximum free areas. Louvres can, however, be manufactured to suit any opening

Typical Cross Section



SYSTEM 2 ACOUSTIC LOUVRE

General

The Zefyr Acoustic Louvre Type 2 is a factory assembled, medium performance, full chevron louvre.

Acoustic Performance

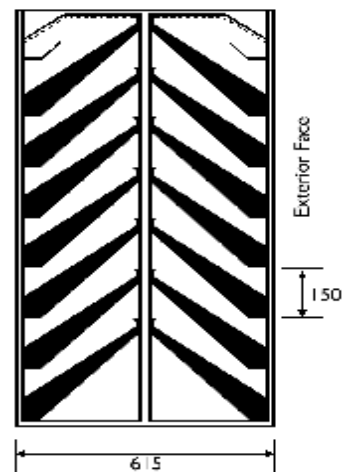
The following Noise Reduction levels (in dB) were recorded during testing:

Frequency (Hz)	63	125	250	500	1k	2k	4k
Noise Reduction (dB)	6.1	7.8	10.7	19.8	30.1	30.9	29.4

No. of Intermediate Blades	Standard Louvre Height
2	590
3	740
4	890
5	1040
6	1190
7	1340
8	1490
9	1640
10	1790
11	1940
12	2090
13	2240
14	2390
15	2540

Note: Standard heights indicated in the table give maximum free areas. Louvres can, however, be manufactured to suit any opening

Typical Cross Section



Acoustic Weather Louvre System



SYSTEM 3 ACOUSTIC LOUVRE

General

The Zefyr Acoustic Louvre Type 3 is a factory or site assembled, medium to high performance, half chevron louvre.

Acoustic Performance

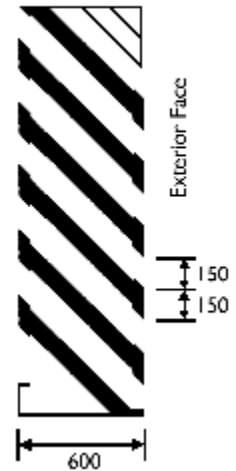
The following Noise Reduction levels (in dB) were recorded during testing:

Frequency (Hz)	63	125	250	500	1k	2k	4k
Noise Reduction (dB)	2	4	7	11	15	14	10

No. of Intermediate Blades	Standard Louvre Height
2	1730
3	2030
4	2330
5	2630
6	2930
7	3230

Note: Standard heights indicated in the table give maximum free areas. Louvres can, however, be manufactured to suit any opening

Typical Cross Section



SYSTEM 4 ACOUSTIC LOUVRE

General

The Zefyr Acoustic Louvre Type 4 is a factory or site assembled, high performance, half chevron louvre.

Acoustic Performance

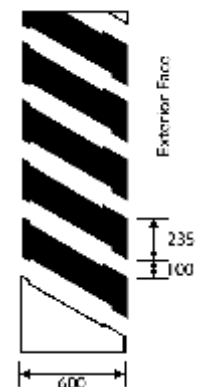
The following Noise Reduction levels (in dB) were recorded during testing:

Frequency (Hz)	63	125	250	500	1k	2k	4k
Noise Reduction (dB)	0	4	11	21	31	29	21

No. of Intermediate Blades	Standard Louvre Height
2	1172
3	1507
4	1846
5	2183
6	2520
7	2857

Note: Standard heights indicated in the table give maximum free areas. Louvres can, however, be manufactured to suit any opening

Typical Cross Section



Opening Sizes

Where louvres are to be installed into steelwork, allow 3mm clearance all round the louvre.

Where louvres are to be installed into brickwork, allow 6mm clearance all round the louvre.

Louvre Widths

Louvre widths are available from 500mm to a maximum of 2000mm. Where larger openings are involved, use multiples of suitably sized units.

Free Inlet Area and Pressure Drop

In the design of any ventilation system, the pressure drop through the louvres is one of the critical performance considerations and louvre free area is not meaningful in itself.

The exact percentage of free area to the overall louvre face area is a function of height and width and can be calculated quite simply. Refer to your nearest Zefyr representative for details. For the actual pressure drop through the louvres, refer to the appropriate pressure drop chart.

Acoustic Performance

Acoustic performance independently proven to British Standards

Zefyr Group

Acoustic Weather Louvre System



7000 Series Acoustic Louvre - Pressure Drop Curves

