



FLE431

Fixed Louvers with Extruded Aluminum



THE FLOWTECH GROUP

● **TAIPEI**

19F-5, No.1, Baosheng Rd., Yonghe dist. New Taipei City 234, Taiwan

Tel: +886 2-2232-8066 Fax: +886 2-2231-0285~6

E-mail: ydc28066@ms36.hinet.net , flow.tech@msa.hinet.net

<http://www.flowtech.com.tw>

● **Lab**

No.102, Neihsu 1st Rd., Dongshan Township,

Yilan County, Taiwan 269

Tel: +886 3-9612-449 Fax: +886 3-9614-413

● **Factory**

No.658, Meilin Rd., De-an Village, Dongshan Shiang,

Yilan County, Taiwan 269

Tel: +886 3-9612-449 Fax: +886 3-9614-413

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AGENT:





FLE431



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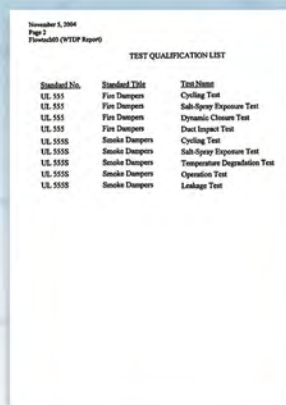
GLOBALLY RECOGNIZED CERTIFICATIONS AND STANDARDS

Ventilation Performance and Smoke management Laboratory

Any series of ventilation products such as fans, dampers required performance and quality requirements, can be provided by the laboratory for a full range of testing services. Technical requirements with an independent and impartial implementation for each test was supervision under by TAF, hence, all the domestic public works and fire safety related with ventilation products, do not have to shift the products to oversea for testing, and those owners and consultants would not have the trouble for witnessed commuting to foreign countries any more, this even saving more time and costs.



The only UL certification LAB. in ASIA.



TUV certificates



TAF LAB certificates

Fan Performance Testing Facility

Standards	
■ AMCA 210	■ BS 848-1
■ ISO 5801	■ DIN 24163-2

Smoke Damper Leakage Testing Facility

Standards	
■ AMCA 500	■ ISO 10294
■ UL 555S	■ GB 15930

Louver Pressure Drop Testing Facility

Standards	
■ AMCA 500	

Silencer / Acoustical Louver Testing Facility

Standards	
■ ASTM-E477	■ ISO 7235

Jet Fan Thrust Testing Facility

Standards	
■ ISO 13350	■ BS 848-10

Fire Damper Testing Facility

Standards	
■ UL 555	

Standards	<ul style="list-style-type: none"> AMCA 210 AMCA 300 AMCA 500 AS 4429 ASTM-E477 	<ul style="list-style-type: none"> ASHRAE 149 DIN 24163-2 BS 7346-2 BS 848-1 BS 848-2 	<ul style="list-style-type: none"> BS 848-10 GA 211 GB 15930 EN 12101-3 ISO 5801 	<ul style="list-style-type: none"> ISO 7235 ISO 10294 ISO 13350 UL 555 UL 555S



Exhaust Duct exit of Reverberant



Multiple Nozzles for Flow Measurement



Silencer in Exhaust Duct

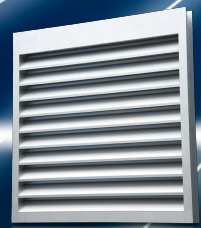


Reverberant Room
360°Routing Microphone in Reverberant



Flow Straightener





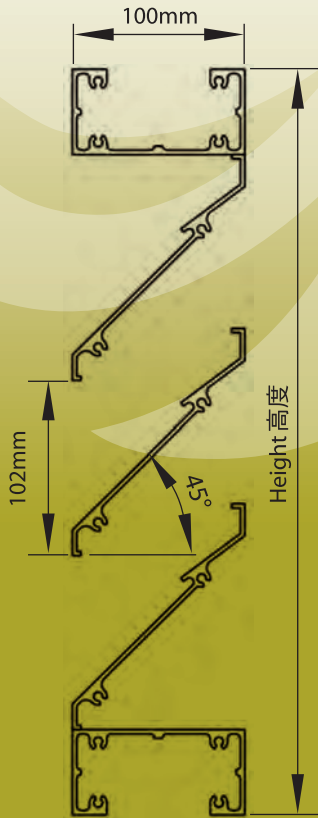
FLE431 Fixed Louvers with Extruded Aluminum

Application and design

FLE-431 is a louver designed to air intake and exhaust openings in building exterior walls. Design the blades with non-drainable. It have the better efficiency to prevent water penetration. The FLE-431 is an extremely efficient louver with AMCA Certified enabling designers to select and apply with confidence.

Construction

Model Name	FLE-431	FLE-431-S
Material	6063 Extruded Aluminum	AISI 304/316 Stainless Steel
Frame	2.5mm	
Blade	2.5mm	
Construction	Screw	
Louver Depth	100mm	
Blade Centers Distance	102mm	
Blade Angle	Blade Center	Blade Entrance
	45°	37°
Min. Size	305mm x 305mm (12"x12")	
Max. Size	1829mm x 2438mm (72"x96")	
Free Area 1220 mmx1220 mm	0.662m ² Free Area 44.5%	
Finish	Standard Mill	



Options

- The birdscreen material could be option 1.0mm, 1.2mm or others diameter galvanized wire steel or stainless wire steel. The size pitch may be 10~20 mm square mesh or the others size.
- Filter racks.
- Flanged frame.

Suggested Specification

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type contained within a 100 mm frame. Louver components (jambs, mullions, sills and blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required.

Features

- Over 15% Free Area Coefficient.
- Architecturally styled hidden mullions allowing continuous line appearance.
- Published performance ratings based on testing in accordance with AMCA Standard 500-L.

Free Area Chart

Louver Height(m)	Louver Width (m)										
	0.30	0.45	0.60	0.75	0.90	1.05	1.22	1.35	1.50	1.65	1.80
0.30	0.014	0.024	0.034	0.044	0.054	0.064	0.076	0.084	0.095	0.105	0.115
0.45	0.026	0.045	0.065	0.084	0.104	0.123	0.145	0.162	0.181	0.201	0.220
0.60	0.047	0.082	0.118	0.153	0.188	0.224	0.264	0.294	0.330	0.365	0.400
0.75	0.060	0.104	0.149	0.193	0.238	0.283	0.333	0.372	0.417	0.461	0.506
0.90	0.081	0.141	0.202	0.262	0.323	0.383	0.452	0.504	0.565	0.625	0.686
1.05	0.093	0.163	0.233	0.303	0.372	0.442	0.521	0.582	0.652	0.722	0.791
1.22	0.118	0.207	0.296	0.384	0.473	0.562	0.662	0.739	0.828	0.917	1.006
1.35	0.136	0.237	0.339	0.440	0.542	0.644	0.759	0.847	0.949	1.050	1.152
1.50	0.148	0.259	0.370	0.481	0.592	0.703	0.828	0.924	1.035	1.146	1.257
1.65	0.169	0.296	0.423	0.550	0.676	0.803	0.947	1.057	1.184	1.311	1.437
1.80	0.182	0.318	0.454	0.590	0.726	0.862	1.016	1.134	1.271	1.407	1.543
1.95	0.203	0.355	0.507	0.659	0.811	0.963	1.135	1.267	1.419	1.571	1.723
2.10	0.215	0.376	0.538	0.699	0.860	1.022	1.205	1.344	1.506	1.667	1.828
2.25	0.236	0.414	0.591	0.768	0.945	1.122	1.323	1.477	1.654	1.831	2.009
2.40	0.249	0.435	0.622	0.808	0.995	1.181	1.393	1.554	1.741	1.927	2.114



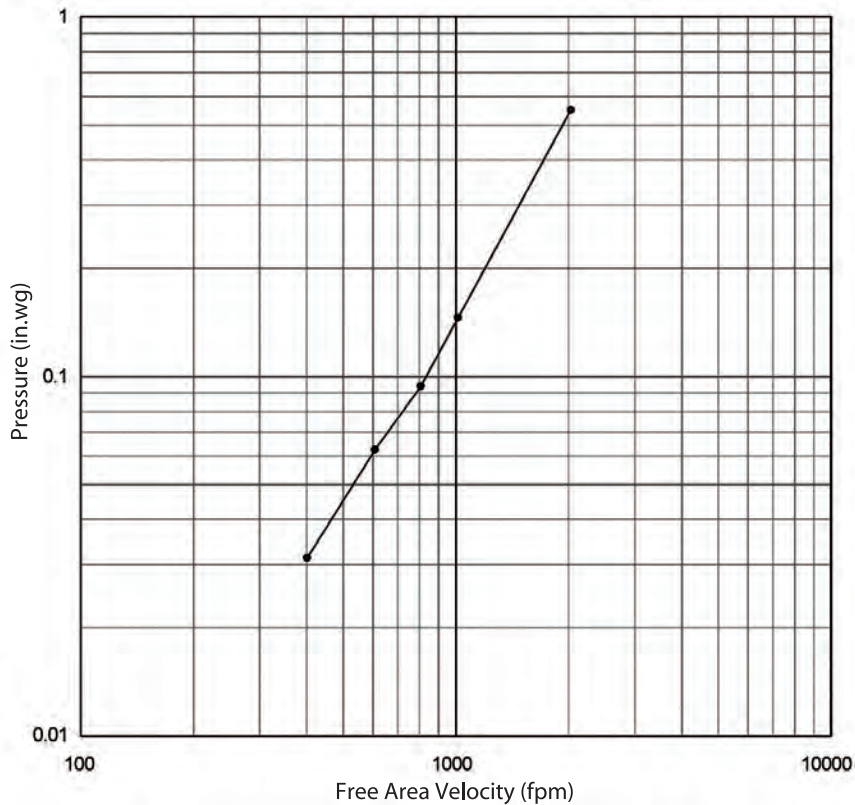
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Test Construction

Frame	6063 Extruded Aluminum
Blades	6063 Extruded Aluminum
Sizes	1220 mm × 1220 mm
Free Area	44.5% Free Area Coefficient

Air Performance

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the model specified. Label “Exhaust” on the Pressure Drop chart.

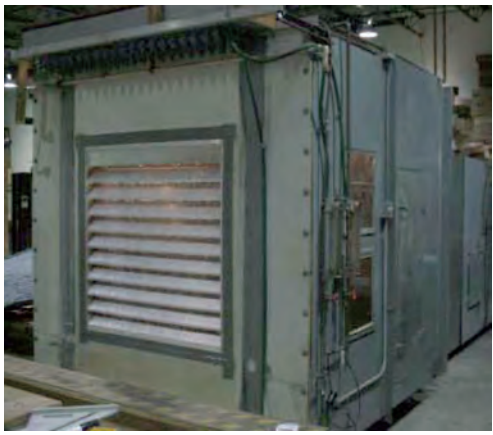
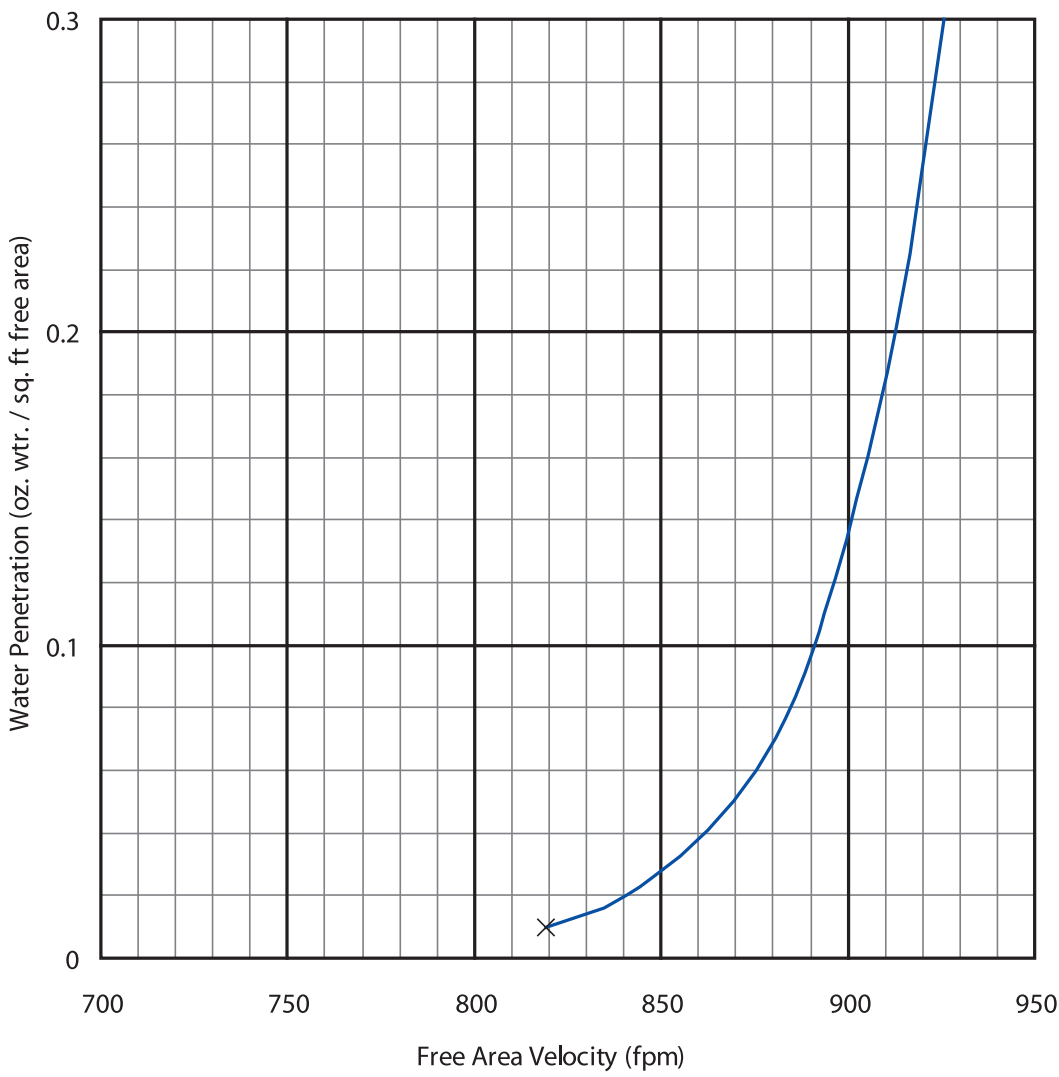


Test Size : 1220 mm × 1220 mm
Standard Air



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Water Penetration



Test Size : 1220 mm × 1220 mm
Standard Air

The Beginning of water penetration is 817.3 fpm
(15 min. duration)



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