



DUCT VENTILATION AIR CONDITIONING Co. (W.L.L.)

Fixed Blade Louvers Catalogue



Rectangular

Type FBL



DVAC Certifies that the **Fixed Blade Louver Model FBL** shown herein is licensed to bear the **AMCA Seal**. The Ratings are based on tests and procedures performed in accordance with **AMCA Publication 511** and comply with the requirements of the **AMCA Certified Ratings Program**. The **AMCA Certified Rating Seal** applies to **Water Penetration and Air Performance Ratings**.





Fixed Blade Louvers

Remarks:

Fixed Blade Louvers

Model FBL - Rectangular

	Page
Introduction, Materials & Construction	3
Wall Mounted & Duct Mounted	4
Engineering & Performance Data: - Exhaust Pressure Drop - Intake Pressure Drop	5
Engineering & Performance Data: - Water Penetration	6

- Introduction
- Materials
- Construction

1- INTRODUCTION

Fixed Blade Louvers are designed to provide Air Intake and Air Exhaust Openings in building exterior walls to protect against the direct wind driven rain. **DVAC Fixed Blade Louvers** are licensed to bear the **AMCA Seal** for the **Water Penetration** and **Air Performance** tests.

2- MATERIALS

- **Casing:** Shall be made of Extruded Aluminum Mill Finish complying with ASTM B209, Alloy 3003, Temper H14, 14 Gauge (2.0mm Thickness)
- **Blades:** Shall be made of Extruded Aluminum Mill Finish complying with ASTM B209, Alloy 3003, Temper H14, 16 Gauge (1.5mm Thickness) Angle Blade 45° (Z shape)

Free Area: 30% with Frame

To Calculate the Air flow Rate:

$$L/S = \frac{0.37 \times W(\text{mm}) \times H(\text{mm}) \times \text{Face Velocity m/s}}{1000}$$

3- CONSTRUCTION

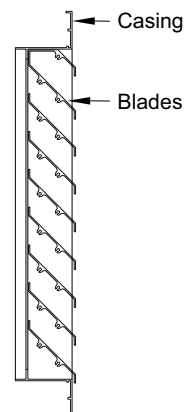
DVAC provides a high quality of louvers for external walls, Standard Color RAL 9010. Weather resistance structure with blade inclined at an angle of 45° to protect against rain water penetration.

DVAC Fixed Blade Louvers are composed of casing and horizontal blade assembly, fabricated with a high quality of Aluminum with the advantage of durability & anti-corrosion.

The blades are constructed maximum at 45 degrees to have the highest free area and provide minimum resistance to airflow.

Optional:

- **Galvanized Steel:** Complying with ASTM A653, Having G90 Coating Designation, 14 Gauge (2.0mm Thickness)
- **Stainless Steel** : Complying with ASTM A240/A430 Grade 304, 304L, 316 & 316L, 18 Gauge (1.2mm Thickness)
- **Powder Coated** : RAL 9010 (Standard) Other Coating Colors can be done upon request.
- **Bird Screen** : Shall be made of Hot Dip Galvanized 12x12x1.0mm



Fixed Blade Louvers: FBL

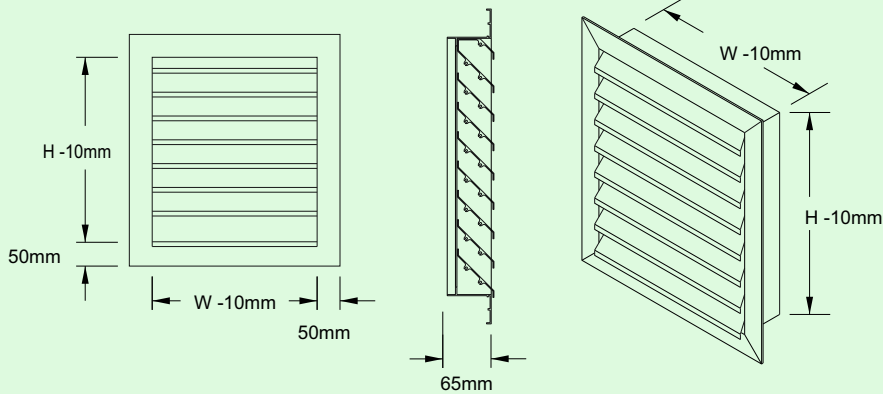
- Wall Mounted
- Duct Mounted

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FIXED BLADE LOUVER - WALL MOUNTED

Wall Mounted (Standard)

Code: GI-FBL-W is fabricated of four pieces Extruded Aluminum.



GI-FBL-W is to be installed on face the wall.

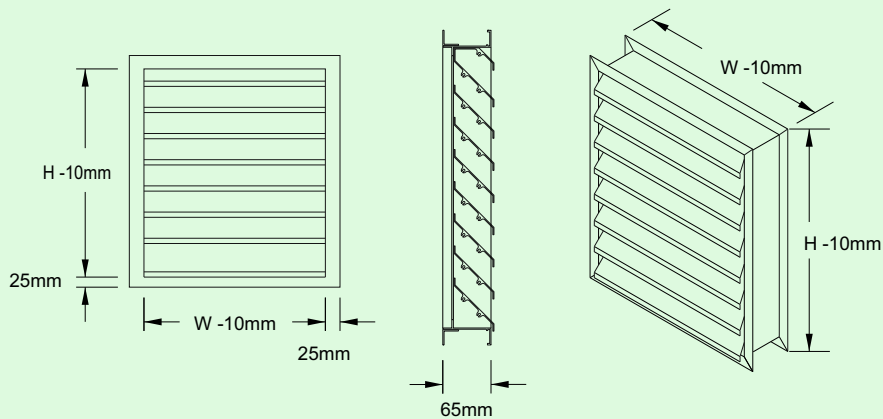


Wall Mounting Installation

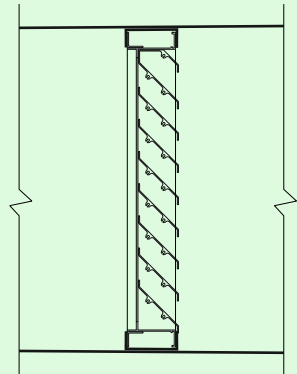
FIXED BLADE LOUVER - DUCT MOUNTED

Duct Mounting (Optional)

Code: GI-FBL-D is fabricated of four pieces Extruded Aluminum.



GI-FBL-D is to be installed on the duct



Duct Mounting Installation

Size Limitations:

- **Minimum Size:** 6"x6" (150x150mm)
- **Maximum Size:** Single section: 88"x88" (2200x2200mm)
Multiple sections: Unlimited

Ordering example:

AL FBL-W P 300x300
Material _____
Code _____
Powder Coated _____
Width x Height _____

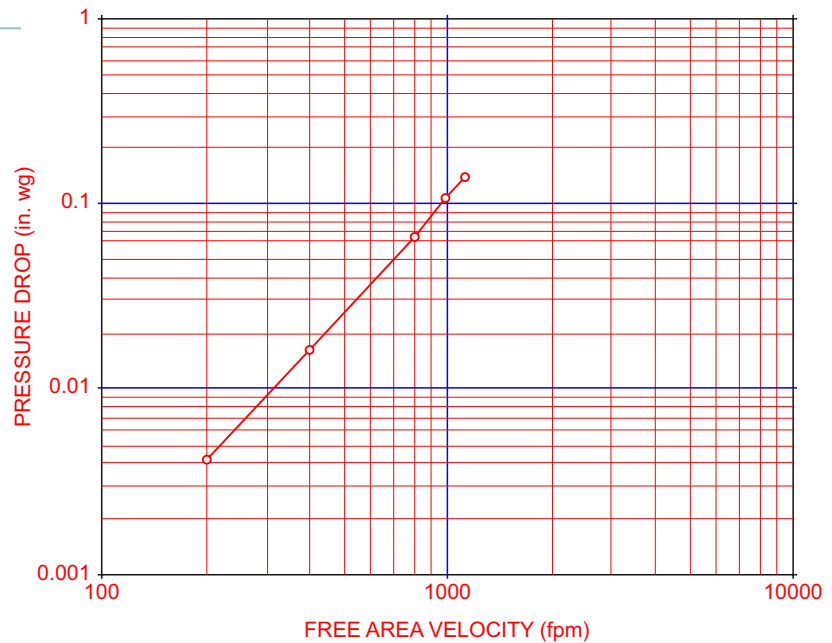
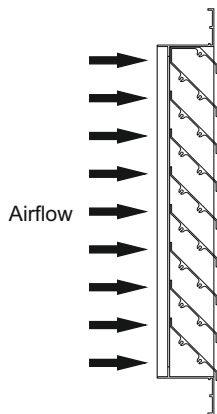
AMCA 500-L Tested Weather Louver



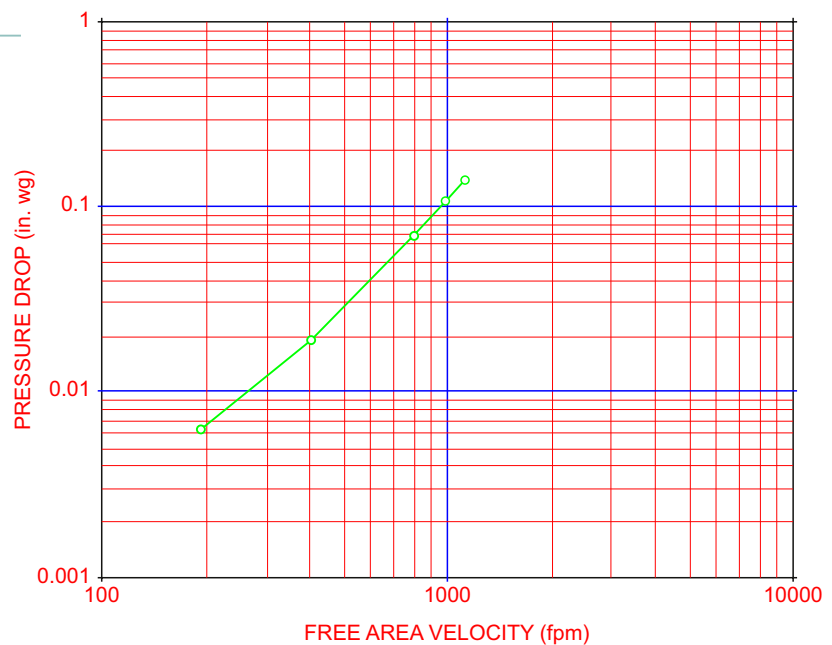
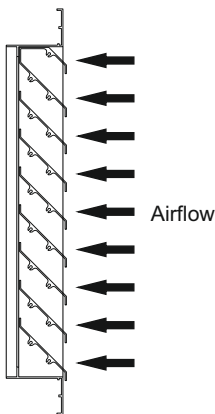
ENGINEERING & PERFORMANCE DATA

Pressure Drop Curves:

1- Exhaust Pressure Drop Curve



2- Intake Pressure Drop Curve



Note:

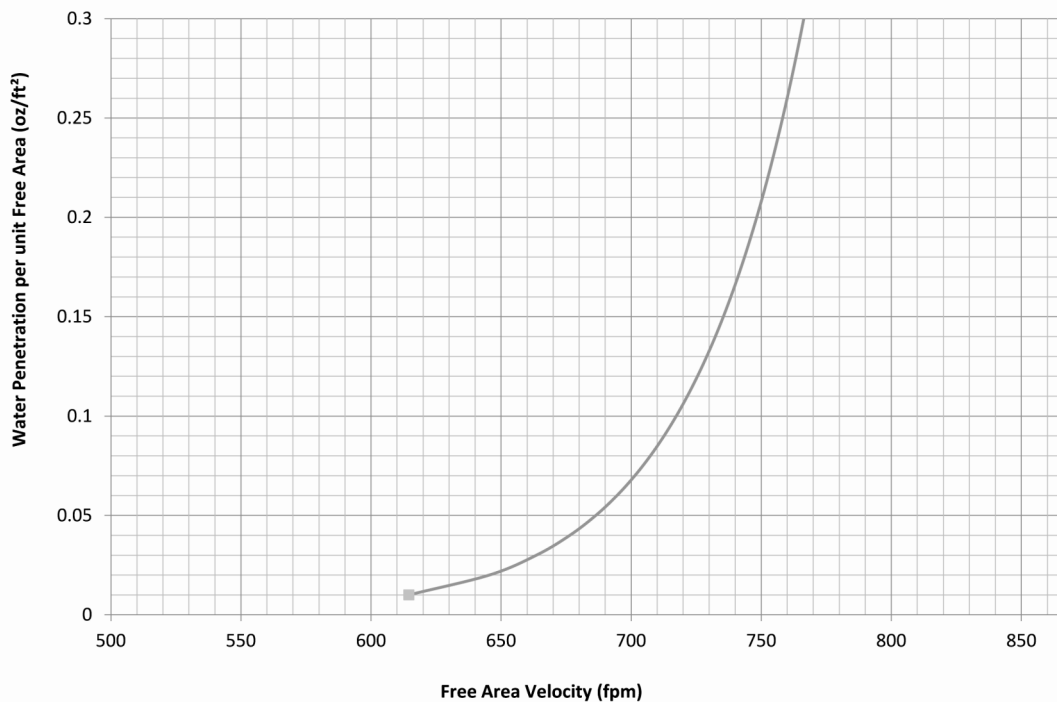
Tested in accordance with ANSI/AMCA 500-L. Figure 5.5
Test sample size is 1200mm x 1200mm.

AMCA 500-L Tested Weather Louver

ENGINEERING & PERFORMANCE DATA

Free Area Chart With Frame (Sqm)																
Height	Width															
	(mm)	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
400	0.027	0.037	0.047	0.057	0.067	0.074	0.084	0.092	0.102	0.112	0.122	0.131	0.141	0.151	0.161	0.161
500	0.039	0.053	0.067	0.081	0.095	0.105	0.119	0.130	0.144	0.158	0.172	0.186	0.200	0.214	0.228	0.228
600	0.050	0.068	0.086	0.104	0.123	0.136	0.154	0.168	0.186	0.204	0.223	0.241	0.259	0.277	0.295	0.295
700	0.061	0.083	0.106	0.128	0.150	0.167	0.189	0.206	0.229	0.251	0.273	0.295	0.318	0.340	0.362	0.362
800	0.072	0.099	0.125	0.152	0.178	0.198	0.225	0.244	0.271	0.297	0.324	0.350	0.377	0.403	0.429	0.429
900	0.084	0.114	0.145	0.175	0.206	0.229	0.260	0.282	0.313	0.344	0.374	0.405	0.435	0.466	0.496	0.496
1000	0.095	0.130	0.164	0.199	0.234	0.260	0.295	0.321	0.355	0.390	0.425	0.459	0.494	0.529	0.563	0.563
1100	0.106	0.145	0.184	0.223	0.262	0.291	0.330	0.359	0.398	0.436	0.475	0.514	0.553	0.592	0.631	0.631
1200	0.118	0.161	0.204	0.247	0.290	0.322	0.365	0.397	0.440	0.483	0.526	0.569	0.612	0.655	0.698	0.698
1300	0.129	0.176	0.223	0.270	0.317	0.353	0.400	0.435	0.482	0.529	0.576	0.623	0.670	0.718	0.765	0.765
1400	0.140	0.192	0.243	0.294	0.345	0.384	0.435	0.473	0.524	0.576	0.627	0.678	0.729	0.780	0.832	0.832
1500	0.152	0.207	0.262	0.318	0.373	0.415	0.470	0.511	0.567	0.622	0.677	0.733	0.788	0.843	0.899	0.899
1600	0.163	0.222	0.282	0.341	0.401	0.445	0.505	0.549	0.609	0.668	0.728	0.787	0.847	0.906	0.966	0.966
1700	0.174	0.238	0.301	0.365	0.429	0.476	0.540	0.588	0.651	0.715	0.778	0.842	0.906	0.969	1.033	1.033
1800	0.186	0.253	0.321	0.389	0.456	0.507	0.575	0.626	0.693	0.761	0.829	0.897	0.964	1.032	1.100	1.100

3- Water Penetration Test



Note:

Beginning of Water Penetration as per AMCA Publication 511 Section 8.3.2 based on AMCA measured free area: 613fpm.

AMCA 500-L Tested Weather Louver



