GENERAL

The LV137 is a 5 3/8” depth, mechanically fastened, extruded aluminum louver, designed to shield air intake and exhaust openings in exterior walls during hurricane conditions. It features a drainable gutter system to channel water away and offers a continuous angle option for easy installation. With AMCA 540 and 550 listings, the LV137 is ideally suited for use in hurricane-prone and wind-borne debris regions, adhering to the International Building Code requirements.

STANDARD FEATURES

- 7/8" vertical, 1 15/16" horizontal blade spacing.
- 2 3/4" vertical, 2 3/16" horizontal blade depth.
- 1/16" blade thickness.
- 5 3/8" frame depth.
- Powder coating with all standard RAL colors and various anodized colors
- Minimum size 12" x 12"
- Maximum size 60" x 96"
- AMCA 540 (impact resistant, Enhanced protection) listed.
- AMCA 550 (high velocity rain resistant) listed.

OPTIONS AND ACCESSORIES

- Bird Screen
- Blank Off Panels
- Extended Sill
- Glazing Frame
- Insect Screen
- Security Bars
- Variety of Architectural Finishes

PERFORMANCE VALUES

- Blade Style : Vertical & Horizontal
- Free Area : 8.62 sqft 54 % (48” x 48” unit)
- Pressure Drop of .42 in.wg. : 989 fpm Free Area Velocity
- Design Load: 100 psf

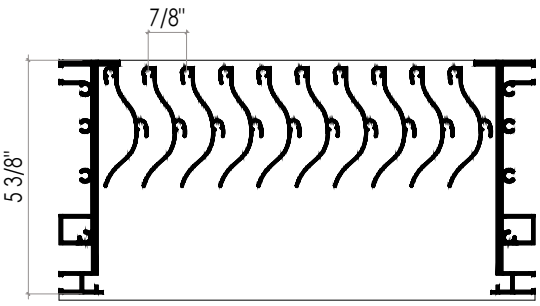
Beginning Point of Water Penetration

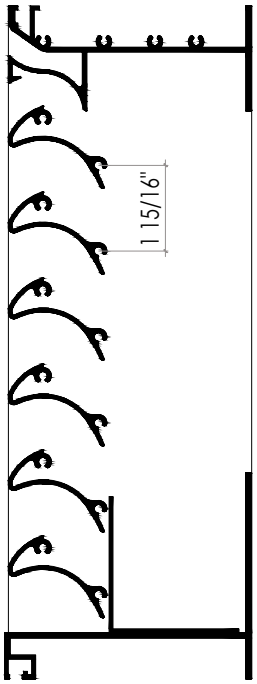
- Free Area Velocity : 1250 fpm
- Air Volume Delivered : 10649 cfm
- Pressure Loss : 0.004 oz. /sq. ft.

Certified Ratings:
Bisam Facade Inc. certifies that the LV-137 shown herein is licensed to bear the AMCA Certified Ratings Program seal. The ratings shown 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 Ratings Program seal applies to air performance, water penetration and wind-driven rain ratings.

550 HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND
540 IMPACT RESISTANT LOUVER
Basic Protection Level D
See www.AMCA.org for all certified or listed products
This label does not signify AMCA airflow performance certification.

Certified Ratings:
The AMCA International Listing Label applies to wind borne debris impact resistant louvers rated for “Enhanced Protection” (ANSI/AMCA Standard 540) and to high velocity wind driven rain (HVWDR) resistant louvers tested in the fully open position (ANSI/AMCA Standard 550).





Free Area

Width (Inches)

Height (Inches)	12	18	24	30	36	42	48	54	60
12	**0.34**	0.58	0.81	1.05	1.29	1.52	1.75	1.99	2.22
18	0.57	**0.96**	1.35	1.74	2.13	2.52	2.90	3.29	3.68
24	0.79	1.34	**1.88**	2.43	2.97	3.52	4.05	4.60	5.15
30	1.02	1.72	2.42	**3.12**	3.82	4.52	5.21	5.91	6.61
36	1.24	2.10	2.95	3.81	**4.66**	5.52	6.36	7.21	8.07
42	1.47	2.48	3.49	4.50	5.51	**6.52**	7.51	8.52	9.53
48	1.68	2.84	4.00	5.16	6.32	7.48	**8.62**	9.78	10.94
54	1.91	3.24	4.56	5.88	7.20	8.52	9.81	**11.13**	12.45
60	2.14	3.61	5.09	6.57	8.04	9.52	10.96	12.44	**13.91**
66	2.36	3.99	5.62	7.26	8.89	10.52	12.11	13.75	15.38
72	2.59	4.37	6.16	7.94	9.73	11.52	13.27	15.05	16.84
78	2.81	4.75	6.69	8.63	10.57	12.51	14.42	16.36	18.30
84	3.04	5.13	7.23	9.32	11.42	13.51	15.57	17.66	19.67
90	3.26	5.51	7.76	10.01	12.26	14.51	16.72	18.97	21.22
96	3.49	5.89	8.30	10.70	13.11	15.51	17.87	20.28	22.68

Wind-Driven Rain Performance

3 in./hr. (75mm/hr.) Rainfall Rate & 29 mph (13 m/s) Wind Velocity				8 in./hr. (203mm/hr.) Rainfall Rate & 50 mph (22.4 m/s) Wind Velocity			
Ventilation Air Core Velocity fpm (m/s)	Ventilation Air Free Area Velocity fpm (m/s)	Water Penetration Effectiveness %	Class	Ventilation Air Core Velocity fpm (m/s)	Ventilation Air Free Area Velocity fpm (m/s)	Water Penetration Effectiveness %	Class
0 (0.0)	0 (0.0)	100	A	0 (0.0)	0 (0.0)	100	A
98 (0.5)	162 (0.8)	100	A	96 (0.5)	158 (0.8)	100	A
196 (1.0)	324 (1.6)	100	A	192 (1.0)	324 (1.6)	100	A
294 (1.5)	486 (2.4)	100	A	291 (1.5)	474 (2.4)	100	A
393 (2.0)	650 (3.2)	100	A	381 (2.0)	655 (3.2)	100	A
492 (2.5)	814 (4.0)	100	A	473 (2.5)	796 (4.0)	100	A
590 (3.0)	976 (4.8)	100	A	575 (3.0)	971 (4.8)	100	A
688 (3.5)	1138 (5.6)	100	A	662 (3.5)	1141 (5.6)	100	A
786 (4)	1300 (6.3)	100	A	763 (4.0)	1309 (6.4)	99.8	A
885 (4.5)	1464 (7.1)	100	A	860 (4.4)	1467 (7.1)	99.8	A
983 (5.0)	1626 (8.0)	100	A	960 (5.0)	1628 (7.9)	99.8	A

Wind-Driven Rain Penetration Classes

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

The core area is the open area of the louver face. The core velocity is the airflow divided by the core area. Test louver core area is 10.77 ft².

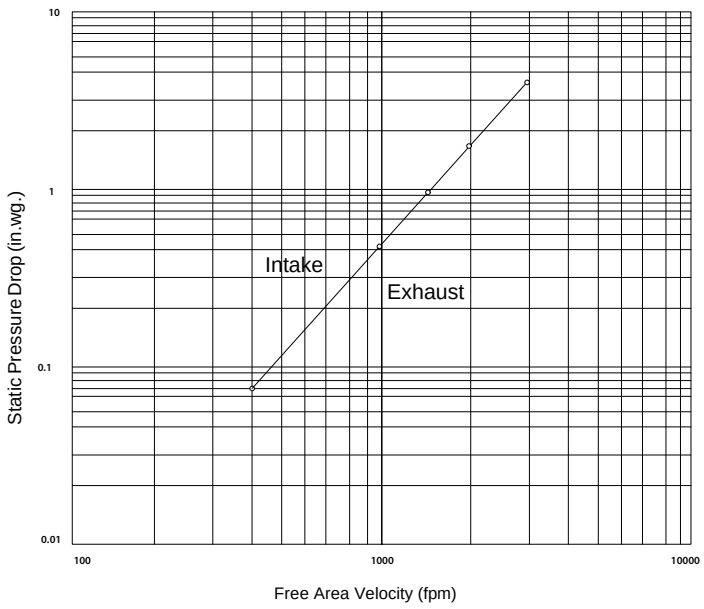
Free area velocity is the airflow divided by free area. Test louver free area is 6.5 ft².

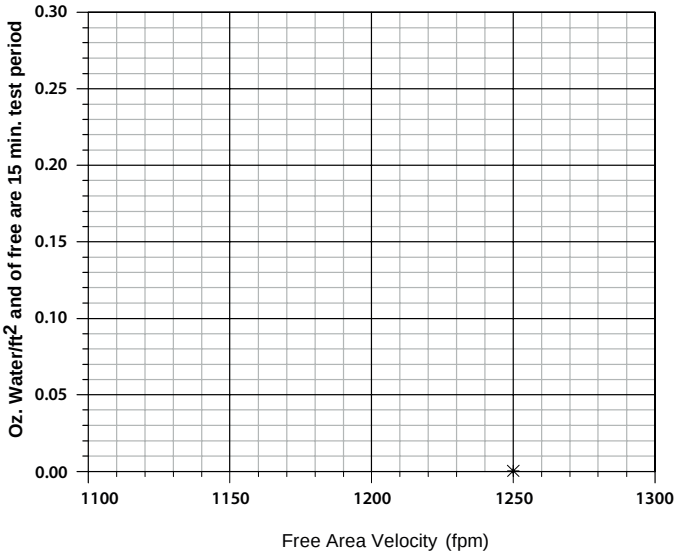
Airflow Resistance

Test method per ANSI / AMCA Standard 500-L-12 (Pressure Drop)

Test size : 48 in. x 48 in. (1219 mm x 1219 mm)

Pressure loss tested in accordance with figure 5.5 of AMCA.



Water Penetration

AMCA defines the beginning point of water penetration as the free area velocity at the intersection of a simple linear regression of test data and the line of 0.01 ounces of water per square foot of free area measured through a 48" x 48" louver during a 15-minute period. The beginning point of water penetration for Model LV137 is 1250 fpm free area velocity. The AMCA water penetration test provides a method for comparing louver models and designs as to their efficiency in resisting the penetration of rainfall under specific lab conditions. We recommend that intake louvers are selected with a reasonable margin of safety below the beginning point of water.