# **MODEL EA-52**

Miami-Dade HVHZ Louver • 5" Deep • Chevron Drainable Blades • Stationary • Extruded Aluminum

#### Withstands pressures up to $\pm 120$ PSF.

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#### Standard Materials and Construction

FRAME: .081" thick (nominal) extruded aluminum, 6063-T52/T6 alloy.

Channel frame.

BLADE: .081" thick (nominal) extruded aluminum, 6063-T52/T6 alloy.

SCREEN: 1/2" removable expanded aluminum bird screen.

(Located on interior.)

FINISH: Mill

### Test Methods

Miami-Dade County Florida Test Protocols:

- TAS (PA) 201
- TAS (PA) 202
- TAS (PA) 203

Finish - Baked Enamel, Kynar, Anodize

Drain Pan

#### **Notes**

- 1. ½" nominal deduction will be made to the opening size given.
- 2. Approximate shipping weight is 7.0 lbs./sq.ft.

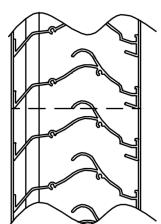
### Louver Sizes

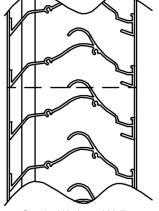
Min Panel	Max Single Panel			
12"W x 12"H	60"W x 96"H			

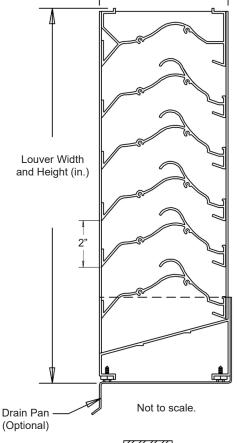
Windload requirements may limit panel sizes.

This louvers has been tested to AMCA Standard 540 for Wind Borne Debris Impact Resistance.

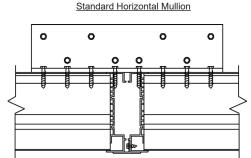
See Page 2 for seal and listing information.



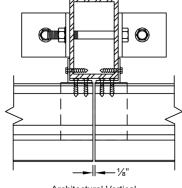




Optional Flange Frame (Jamb shown)



Standard Vertical Mullion



Architectural Vertical Mullion Optional

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Item #	I Qtv ⊢	Width	Height	Width	Height	Mullion	Туре	Location			VIONAL AS
IICIII #		Openi	ng Size	Louv	er Size	Widillott	Screens				<u>Union Made</u>
Arch.	/ Eng.:					EDR:		ECN:		Job:	
Conti	actor:		_	_	·				·		_
P	roject:					Date:		DWN:		DWG:	



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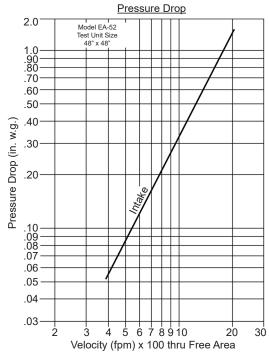
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#### Performance Data

Pressure Drop: .31 in. w.g. (76.8 Pa) at 1250 fpm (6.35 m/s) and 8,850 scfm (4.18 scm/s) (intake).

Free Area: 7.08 sq.ft. (0.658 sq.m.) = 44.3% for 48"W x 48"H (1.22 m x 1.22 m) sample (AMCA Standard 500-L).

Beginning Point of Water Penetration: Above 1250 fpm (6.35 m/s).



Intake air converted to standard air density. Tested to AMCA Standard 500-L, Figure 5.5.

		Free Area sq. ft. (sq. meters)							
		Width in. (mm)							
		12" (305)	24" (610)	36" (914)	48" (1219)	60" (1524)			
	12" (305)	0.21 (0.020)	0.49 (0.046)	0.76 (0.071)	1.04 (0.097)	1.31 (0.122)			
Height in. (mm)	24" (610)	0.63 (0.059)	1.43 (0.133)	2.24 (0.208)	3.04 (0.282)	3.85 (0.358)			
	36" (914)	1.04 (0.097)	2.38 (0.221)	3.72 (0.346)	5.05 (0.469)	6.39 (0.594)			
	48" (1219)	1.46 (0.136)	3.33 (0.309)	5.19 (0.482)	7.08 (0.658)	8.93 (0.830)			
	60" (1524)	1.88 (0.175)	4.27 (0.397)	6.67 (0.620)	9.07 (0.843)	11.47 (1.066)			
	72" (1829)	2.29 (0.213)	5.22 (0.485)	8.15 (0.757)	11.08 (1.029)	14.01 (1.302)			
	84" (2134)	2.71 (0.252)	6.17 (0.573)	9.63 (0.895)	13.09 (1.216)	16.55 (1.538)			
	96" (2438)	3.12 (0.290)	7.11 (0.661)	11.11 (1.032)	15.10 (1.403)	19.09 (1.774)			

Wind-Driven Rain F	Penetration Classes	Discharge Loss Coefficient Classes			
Class	Effectiveness	Class	Coefficient		
А	100% to 99%	1	0.4 and above		
В	98.9% to 95%	2	0.3 to 0.399		
С	94.9% to 80%	3	0.2 to 0.299		
D	Below 80%	4	0.199 and below		

Ratings do not include effects of a screen. Tests based on 48" x 48" sample size per AMCA Standard 511.

Wind Driven Rain Performance

	THIRD SHIP HAMILT OF THE SHIP HAMILTON							
Wind Velocity MPH (KPH)	Rainfall Rate in/h (mm/h)	Core Velocity FPM (m/s)	Ventilation Airflow CFM (cm/min)	Free Area Velocity FPM (m/s)	Effectiveness Ratio Percentage	Water Penetration Class	Coefficient of Discharge Class	
29 (46.7)	3 (76)	583 (3)	6,276 (3)	1,133 (5.8)	99.0%	Class A	Class 3	
Wind Velocity MPH (KPH)	Rainfall Rate in/h (mm/h)	Core Velocity FPM (m/s)	Ventilation Airflow CFM (cm/min)	Free Area Velocity FPM (m/s)	Effectiveness Ratio Percentage	Water Penetration Class	Coefficient of Discharge Class	
50 (80.5)	8 (203)	673 (3.5)	7,243 (239)	1,307 (6.68)	95.7%	Class B	Class 3	

Wind driven rain performance tests based on 1 m x 1 m (39.37" x 39.37") Louver with 7.08 sq.ft. (0.658 m²) free area.



Arrow United Industries certifies that the Model EA-52 shown herein is licensed to bear the AMCA 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 Seal applies to Air Performance, Water Penetration, and Wind Driven Rain Ratings only.

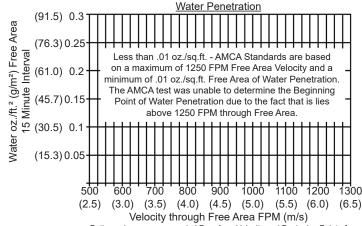


RESISTANT LOUVER Basic Protection Level D

Basic Protection Level D

Arrow United Industries certifies that the Model EA-52 shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.

The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers.



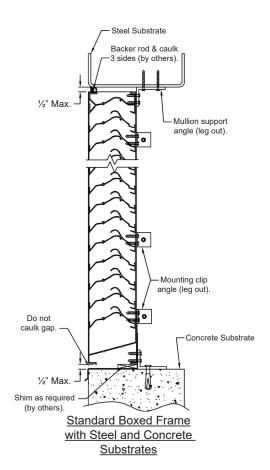
Both maximum recommended Free Area Velocity and Beginning Point of Water Penetration are 1250 FPM at standard air - .075 lbs. per cu. ft.

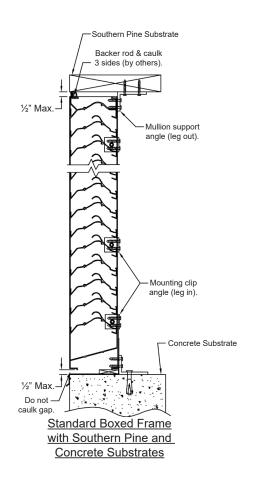


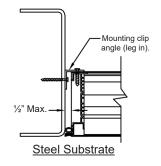
Visit our Miami-Dade Listing Page for the latest NOA information:

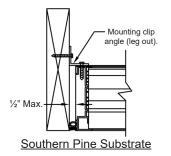
Miami-Dade HVHZ Louver • 5" Deep • Chevron Drainable Blades • Stationary • Extruded Aluminum

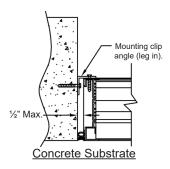
## <u>Standard Boxed Frame Model EA-52</u> Installation Instructions









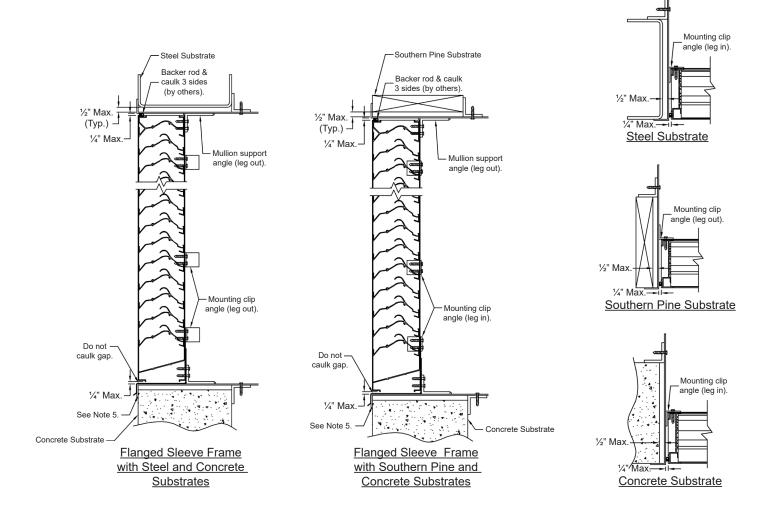


#### **Notes**

- 1. Mounting clip angles and mullion support angles can be installed with "legs in" or "legs out" for any approved substrate.
- 2. "Legs out" is the standard construction, "legs in" is optional.
- 3. Use shims to obtain uniform clearance between the louver and the louver opening on all sides. Shims are by others.
- 4. Shims under sill pans must allow enough space to insert "leg in" option into the opening.



# Flanged Frame Model EA-52 Installation Instructions



#### **Notes**

- 1. Mounting clip angles and mullion support angles can be installed with "legs in" or "legs out" for any approved substrate.
- 2. "Legs out" is the standard construction, "legs in" is optional.
- 3. The flanged sleeve can be used with any approved substrate.
- 4. Use shims to obtain uniform clearance between the louver and the louver opening on all sides. Shims are provided by others.
- $5. \ Sealant/caulk \ between \ flanged \ angle \ sleeve \ and \ substrate \ (typ.\ 4 \ sides) \ by \ installer.$
- 6. Two mounting angles run the full height and length of the louver.

