

# Hurricane Louver

5" Deep · Fixed Chevron Drainable Blade · Severe Weather Louver

## X5HW

### STANDARD MATERIALS AND CONSTRUCTION

**HEAD:** .08" thick; extruded 6063-T5 aluminum

**SILL:** .08" thick; extruded 6063-T5 aluminum

**JAMBS:** .08" thick; extruded 6063-T5 aluminum

**BLADES:** .060" thick; extruded 6063-T5 aluminum

**BLADE SPACING:** 2"

**ASSEMBLY:** Welded and Mechanical fastened

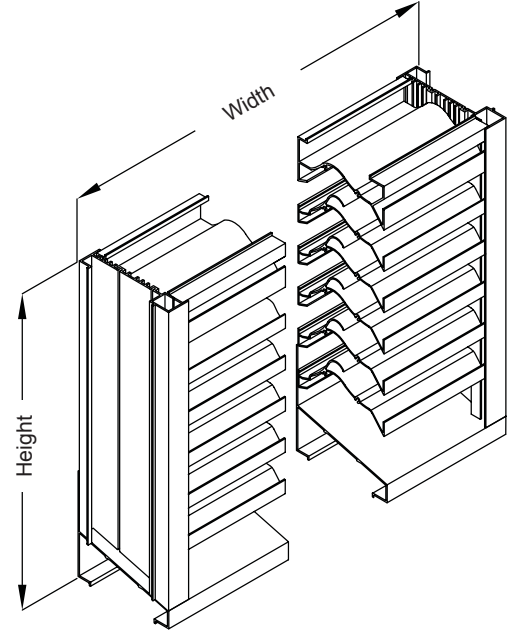
**FINISH:** Mill

**SCREEN:** ½ removable expanded aluminum bird screen

**MULLIONS:** Exposed, vertical with 1¼" x .08" 6063-T5 extruded aluminum cover (multiple panels only) Exposed, horizontal with .08" sill pan (single panel wide only)

**DESIGN DATA:** NOA 09-1015.11 - TAS 201, 202, 203

This system has not been tested for water infiltration resistance and is not a water resistant system.



### OPTIONS

Finishes - Baked Enamel, Kynar, Anodize

Variety of bird and insect screens

Sill Pan

Blade .081" thick; extruded 6063-T5

Flange Frame

Sleeve

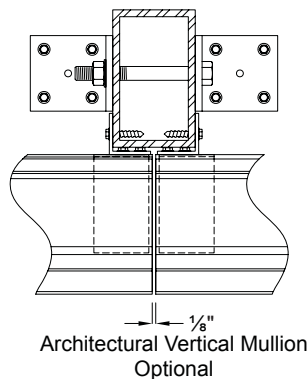
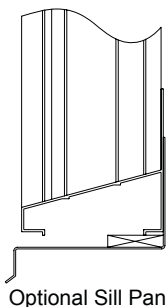
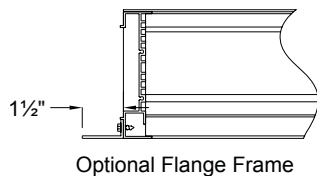
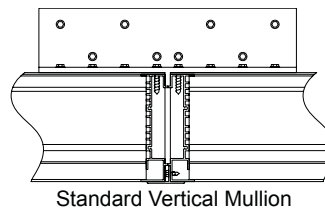
Sleeve with Damper

### NOTES

1. "A" width and "B" height are opening dimensions. Louvers are provided approximately ½" undersize.
2. Approved opening types: wood, steel, or concrete/masonry (masonry acceptable at jambs only, head and sill must be concrete). Anchoring details may vary.
3. Units are supplied with 2" x 2" mounting angles and mounting hardware for concrete installation as a standard. Please specify if louvers are to be mounted in substrate other than concrete, OR if the installation will require a larger mounting angle. Larger mounting angles may be required to either maintain edge distance, or to ensure that the screws don't penetrate the sill pan of the louver.
4. See installation sketches for required mounting structure.

### LOUVER SIZES

Panels	Minimum Panel	Maximum Single Panel
X5HW	12"W x 12"H	60"W x 96"H



Cesco Products certifies that the model X5HW louver shown herein is licensed to bear the AMCA Seal. The ratings shown are passed on test and procedures performed in accordance with AMCA Publication 511 and comply with the requirements for AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to Water Penetration and Air Performance Ratings only.



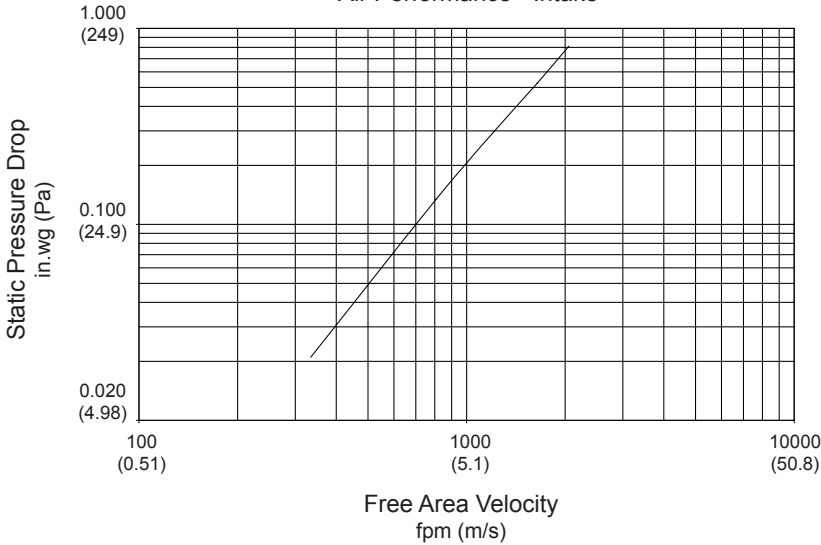
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# X5HW

- Water Penetration:** 0.01 oz. (3.0 g) at 1250 fpm (6.35 m/s) maximum recommended free area velocity  
**Pressure Drop:** 0.31 in.wg (76.8 Pa) at 1250 fpm (6.35 m/s) and 8850 scfm (4.18 scm/s)  
**Free Area:** 7.08 sq.ft (0.658 sq.m) = 44.3% for 48"W x 48"H (1.22m x 1.22m) test size
1. Test size is 48"W x 48"H (1.2m x 1.2m).
  2. Ratings do not include the effect of a screen.
  3. Data is at standard air density (0.75 lbs/cu ft).

Air Performance - Intake



Free Area in sq.ft. (sq.m.)

		Width				
		12 (305)	24 (610)	36 (914)	48 (1219)	60 (1524)
Height	12 (305)	0.21 (0.020)	0.49 (0.046)	0.76 (0.071)	1.04 (0.097)	1.31 (0.122)
	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 (1438)	3.12 (0.290)	7.11 (0.661)	11.11 (1.032)	15.10 (1.403)	19.09 (1.774)

Rainfall Rate	Wind Velocity	Core Velocity	Airflow	Free Area Velocity	Water Penetration Effectiveness	Discharge Loss Coefficient
3 in/hr (76 mm/h)	29 mph (46.7 kph)	583 fpm (3 m/s)	6276 cfm (3 cm/s)	1133 fpm (5.8 m/s)	99.0% - Class A	0.2 - 0.299 - Class 3
8 in/hr (203 mm/h)	50 mph (80.47 kph)	673 fpm (3.5 m/s)	7243 cfm (3 cm/s)	1307 cfm (6.68 m/s)	95.7% - Class B	0.2 - 0.299 - Class 3

Wind Driven Rain Performance Test based on 39.37"W x 39.37"H (1m x 1m) Core Area Louver with 3.43 ft<sup>2</sup> (.319m<sup>2</sup>) Free Area.

Wind-Driven Rain Penetration Classes		Discharge Loss Coefficient Classes	
Class	Effectiveness	Class	Coefficient
A	100% - 99%	1	0.4 and Above
B	98.9% - 95%	2	0.3 - 0.399
C	94.9% - 80%	3	0.2 - 0.299
D	Below 80%	4	0.199 and Below

1. Core Area is the front opening of a louver assembly with the blades removed.
2. Core Area Velocity is the airflow rate through the louver divided by the core area (39.37" x 39.37")
3. Free Area is the minimum area through which air can pass. It is determined by multiplying the sum of the minimum distances between intermediate blades, top blade and head, bottom blade and sill, by the minimum distance between jambs.
4. Discharge Loss Coefficient is calculated by dividing a louver actual airflow rate vs. a theoretical airflow for the opening, providing an indication of the louver airflow characteristics.



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### Water Penetration

(15 Minute Duration) Less than .01 oz/sq.ft. AMCA Standards are based on maximum of 1250 fpm free area velocity and a minimum of .01 oz/sq.ft. free area of water penetration. The AMCA test was unable to determine the beginning water penetration due to the fact that it lies above 1250 fpm through free area.

