

## Wind-Driven Rain Louver Vertical Blade

### Application and Design

EVH-201 is a Wind-Driven Rain louver designed to protect air intake and exhaust openings in building exterior walls that are sensitive to direct water penetration. Design incorporates a drainable head member and vertical rain resistant blades to provide maximum resistance to wind driven rain in even the most extreme weather conditions. The EVH-201 is an **AMCA CERTIFIED LOUVER** enabling designers to select and apply with confidence.



### Standard Construction

**Frame** . . . . . Heavy gauge extruded 6063-T5 aluminum, 2 in. x 0.063 in. nominal wall thickness

**Blades** . . . . . Vertical rain resistant style, heavy gauge extruded 6063-T5 aluminum, 0.063 in. nominal wall thickness, positioned on approximately 1 in. blade spacing

**Construction** . . . Mechanically fastened

**Birdscreen** . . . . . 3/4 in. x 0.051 in. flattened expanded aluminum in removable frame, inside mount (rear)

**Finish** . . . . . Mill

**Sill Pan** . . . . . 0.063 formed aluminum

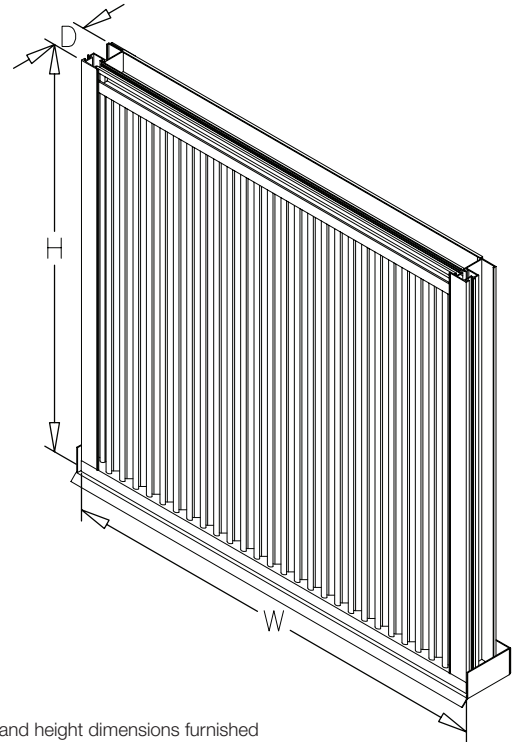
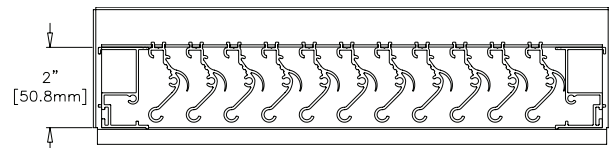
**Minimum Size** . . . 6 in. W x 12 in. H

**Maximum Single**

**Section Size** . . . 60 in. W x 96 in. H

### Options (at additional cost)

- A variety of bird and insect screens
- Blank-off panel
- Clip angles
- Filter rack
- Flanged frame (head and jamb only)
- Security bars
- A variety of architectural finishes including:
  - Clear anodize
  - Integral color anodize
  - Baked enamel
  - Kynar



\*Width and height dimensions furnished approximately 1/4 inch under size.

# PERFORMANCE DATA

# EVH-201

Wind-Driven Rain Louver  
Extruded Aluminum

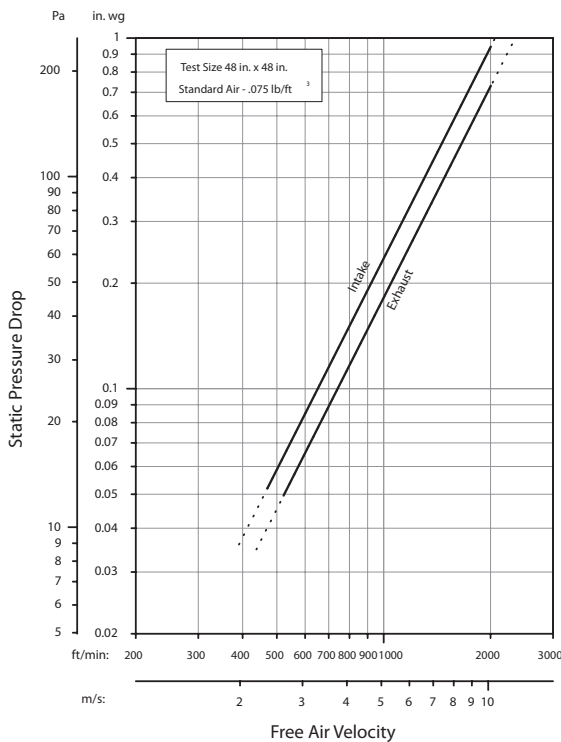
## Wind-Driven Rain Performance

75 mm/h (3 in./hr) Rainfall & 13 m/s (29 mph) Wind Velocity					202 mm/h (8 in./hr) Rainfall & 22 m/s (50 mph) Wind Velocity						
Free Area Velocity		Ventilation Air Core Velocity		Water Penetration		Free Area Velocity		Ventilation Air Core Velocity		Water Penetration	
(fpm)	(m/s)	(fpm)	(m/s)	Class	Effective	(fpm)	(m/s)	(fpm)	(m/s)	Class	Effective
0	0	0	0			0	0	0	0		
248	1.3	98	0.5			248	1.3	98	0.5		
497	2.5	197	1.0			497	2.5	197	1.0		
745	3.8	295	1.5			745	3.8	295	1.5		
993	5.0	394	2.0			993	5.0	394	2.0		
1241	6.3	492	2.5			1241	6.3	492	2.5		
1490	7.6	591	3.0			1490	7.6	591	3.0		
1738	8.8	689	3.5			1738	8.8	682	3.5	A	99.9
1985	10.1	769	3.9	A	100.0	1985	10.1	778	4.0	A	99.6
2235	11.4	851	4.3	A	99.9	2235	11.4	873	4.4	A	99.7
2482	12.6	986	5.0	A	99.1	2482	12.6	979	5.0	B	98.9

Discharge Loss Coefficient Class (Intake) = 3

Weather louvers shall be classified by their ability to reject simulated rain. The table shows different classifications based on the maximum simulated rain penetration per square meter (square feet) of louver. Water penetration rating at a given louver face velocity is determined by the water penetration while the louver is subjected to a selected simulated rainfall rate and wind velocity.

## Airflow Resistance (Standard Air - .075 lb/ft<sup>3</sup>)



Model EVH-201 resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information.

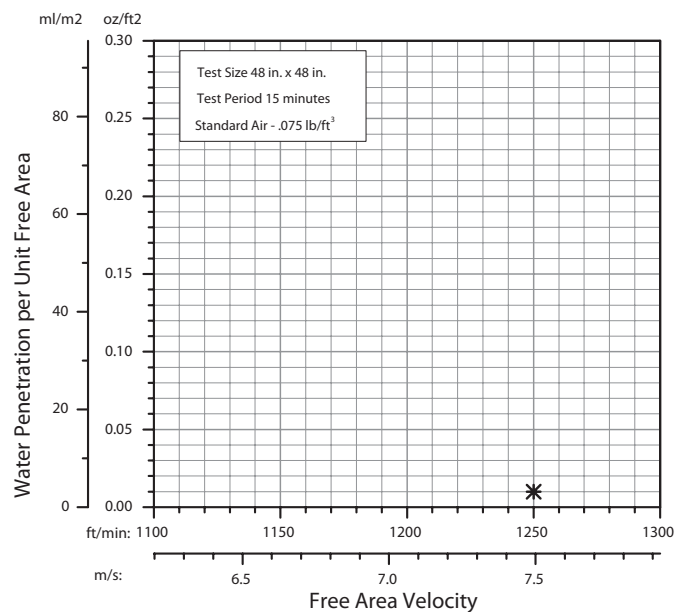
Discharge Loss Coefficient Classifications	
Class	Discharge Loss Coefficient
1	0.4 and Above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and Below

Wind-driven Rain Penetration Classes	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.80

Greenheck Fan Corporation certifies that the EVH-201 louvers shown herein are 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.

## Water Penetration

Test Size 48 in. x 48 in. Test Duration of 15 min



The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The beginning point of water penetration is defined as that velocity where the water penetration curve projects through 0.01 oz. of water (penetration) per sq. ft. of louver free area. **\*The beginning point of water penetration for Model EVH-201 is above 1250 fpm free area velocity.** These performance ratings do not guarantee a louver to be weather-proof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.



# PERFORMANCE DATA

**EVH-201**  
Wind-Driven Rain Louver  
Extruded Aluminum

## Free Area Chart (sq. ft.)

Louver Height Inches	Louver Width in Inches									
	6	12	18	24	30	36	42	<b>48</b>	54	60
12	0.04	0.15	0.29	0.40	0.54	0.65	0.77	0.90	1.02	1.15
18	0.07	0.29	0.54	0.76	1.01	1.23	1.45	1.70	1.92	2.17
24	0.11	0.43	0.80	1.12	1.49	1.81	2.13	2.50	2.82	3.20
30	0.14	0.56	1.05	1.48	1.97	2.39	2.81	3.30	3.73	4.22
36	0.17	0.70	1.31	1.83	2.45	2.97	3.49	4.10	4.63	5.24
42	0.21	0.84	1.57	2.19	2.92	3.55	4.18	4.91	5.53	6.26
<b>48</b>	0.24	0.97	1.82	2.55	3.40	4.13	4.86	<b>5.71</b>	6.44	7.29
54	0.27	1.07	2.01	2.82	3.76	4.56	5.37	6.31	7.11	8.05
60	0.30	1.21	2.27	3.18	4.23	5.14	6.05	7.11	8.02	9.07
66	0.34	1.35	2.52	3.53	4.71	5.72	6.73	7.91	8.92	10.10
72	0.37	1.48	2.78	3.89	5.19	6.30	7.41	8.71	9.82	11.12
78	0.40	1.58	2.97	4.16	5.55	6.74	7.92	9.31	10.50	11.89
84	0.43	1.72	3.23	4.52	6.02	7.32	8.61	10.11	11.40	12.91
90	0.46	1.86	3.48	4.88	6.50	7.89	9.29	10.91	12.31	13.93
96	0.50	1.99	3.74	5.23	6.98	8.47	9.97	11.71	13.21	14.95

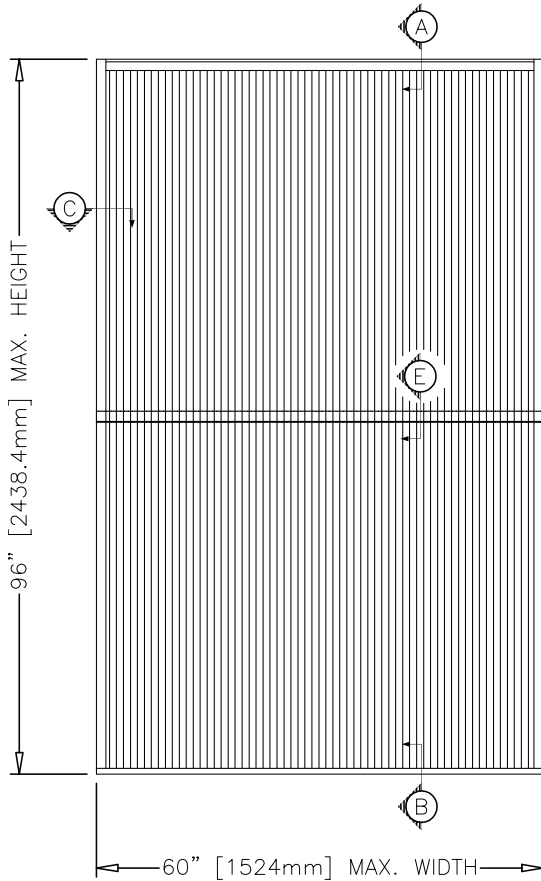
## Core Area Chart (sq. ft.)

Louver Height Inches	Louver Width in Inches									
	6	12	18	24	30	36	42	<b>48</b>	54	60
12	0.20	0.59	0.99	1.39	1.78	2.18	2.57	2.97	3.36	3.76
18	0.32	0.97	1.61	2.26	2.91	3.55	4.20	4.84	5.49	6.14
24	0.45	1.34	2.24	3.14	4.03	4.93	5.82	6.72	7.61	8.51
30	0.57	1.72	2.86	4.01	5.16	6.30	7.45	8.59	9.74	10.89
36	0.70	2.09	3.49	4.89	6.28	7.68	9.07	10.47	11.86	13.26
42	0.82	2.47	4.11	5.76	7.41	9.05	10.70	12.34	13.99	15.64
<b>48</b>	0.95	2.84	4.74	6.64	8.53	10.43	12.32	<b>14.22</b>	16.11	18.01
54	1.07	3.22	5.36	7.51	9.66	11.80	13.95	16.09	18.24	20.39
60	1.20	3.59	5.99	8.39	10.78	13.18	15.57	17.97	20.36	22.76
66	1.32	3.97	6.61	9.26	11.91	14.55	17.20	19.84	22.49	25.14
72	1.45	4.34	7.24	10.14	13.03	15.93	18.82	21.72	24.61	27.51
78	1.57	4.72	7.86	11.01	14.16	17.30	20.45	23.59	26.74	29.89
84	1.70	5.09	8.49	11.89	15.28	18.68	22.07	25.47	28.86	32.26
90	1.82	5.47	9.11	12.76	16.41	20.05	23.70	27.34	30.99	34.64
96	1.95	5.84	9.74	13.64	17.53	21.43	25.32	29.22	33.11	37.01

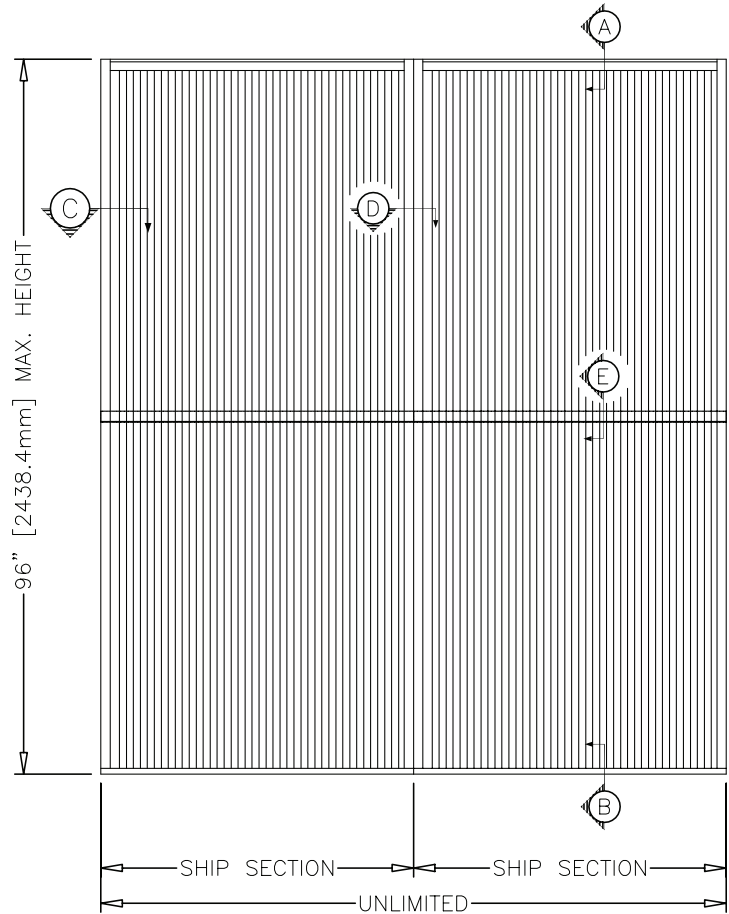
## Maximum Size and Installation Information

Maximum single section size for model EVH-201 is 60 in. W x 96 in. H. Larger openings require field assembly of multiple louver panels to make up the overall opening size. Individual louver panels are designed to withstand a 25 PSF wind-load (please consult Greenheck if the louvers must withstand higher wind-loads). Structural reinforcing members may be required to adequately support and install multiple louver panels within a large opening. Structural reinforcing members along with any associated installation hardware is not provided by Greenheck unless indicated otherwise by Greenheck. Additional information on louver installation may be found in AMCA Publication #501, Louver Application Manual.

SINGLE SECTION  
W/ SUPPORT ANGLE



MULTIPLE SECTION  
W/ MULLION



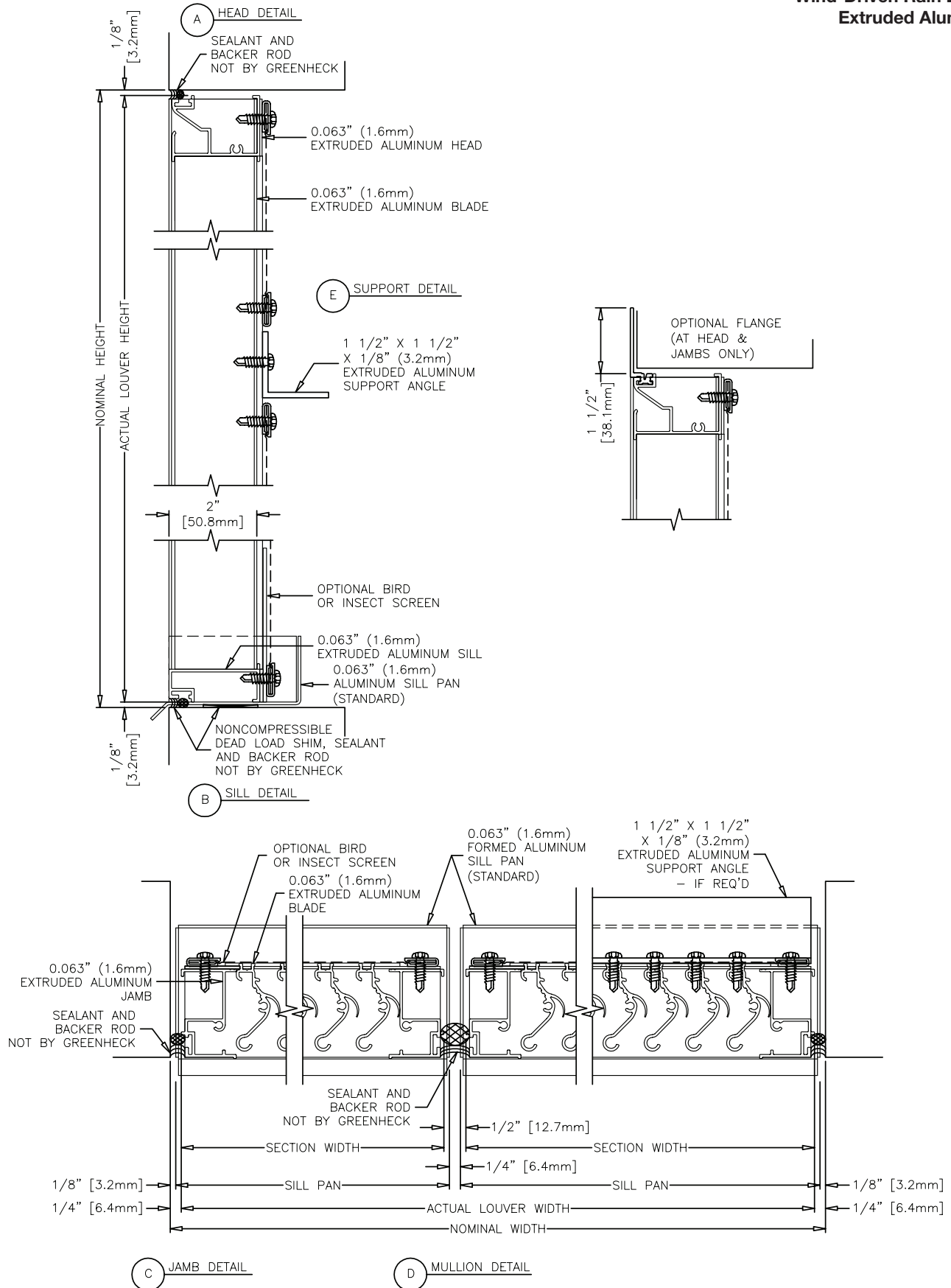
**Minimum Single Section Size**  
6 in. W x 12 in. H

**Maximum Single Section Size**  
60 in. W x 96 in. H

# PRODUCT DETAILS

# EVH-201

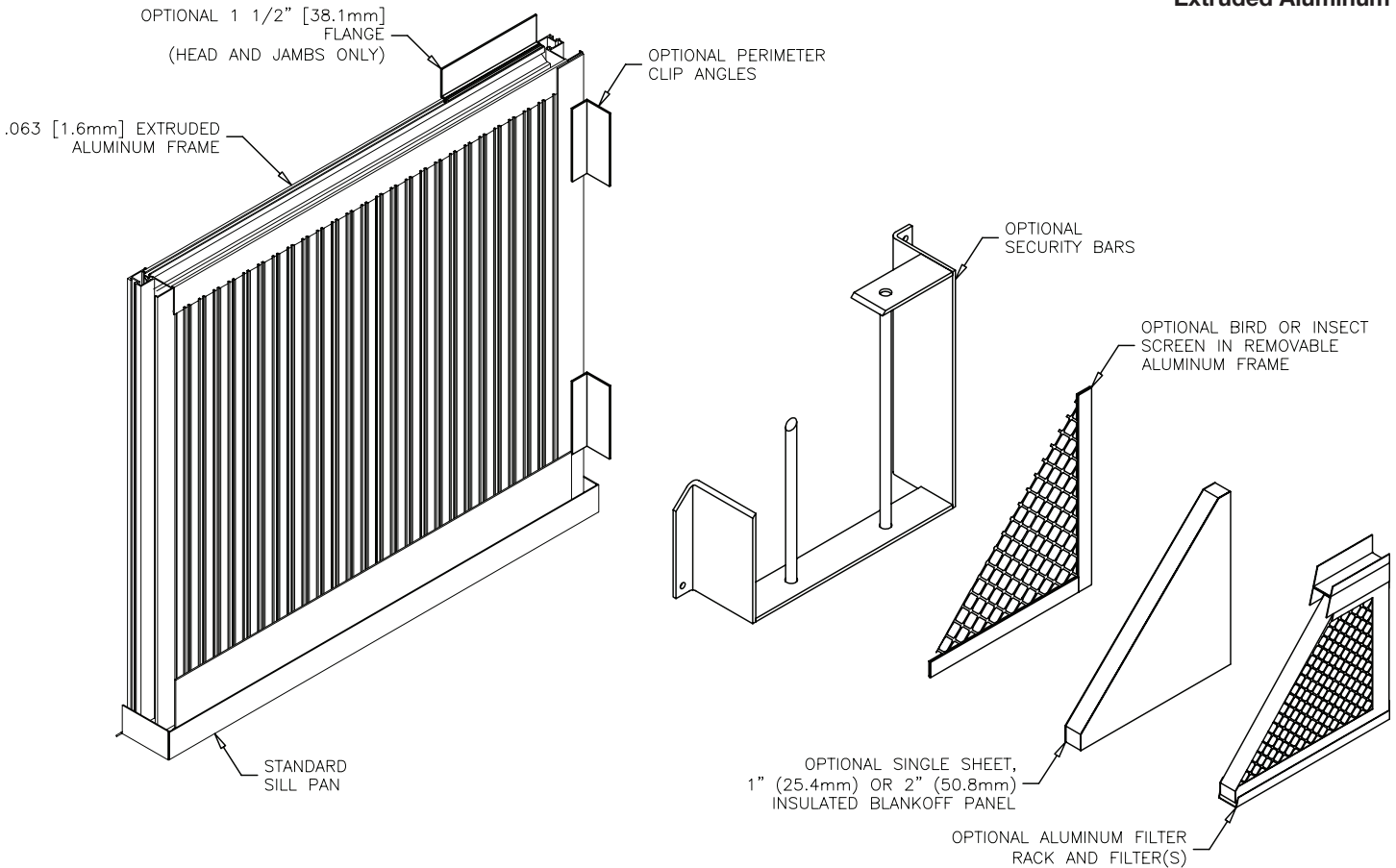
Wind-Driven Rain Louver  
Extruded Aluminum



# OPTION DRAWINGS

# EVH-201

Wind-Driven Rain Louver  
Extruded Aluminum



## FINISHES

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)
2-coat 70% KYNAR 500®/HYLAR 5000® AAMA 2605 – Dry film thickness 1.2 mil. (AKA: Duranar®, Fluoropon®, Trinar®, Fluoropolymer, Polyvinylidene Fluoride, PVDF2)	<b>“Best.”</b> The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	<b>Standard Colors:</b> Any of the 24 standard colors shown can be furnished in 70% or 50% KYNAR 500®/HYLAR 5000® or Baked Enamel.  <b>2-Coat Mica:</b> Greenheck offers 9 standard 2-coat Mica colors. Other colors are available. Consult Greenheck for possible extra cost when selecting non-standard colors or special finishes.	10 Years (Consult Greenheck for availability of extended warranty)
2-coat 50% KYNAR 500®/HYLAR 5000® AAMA 2604 – Dry film thickness 1.2 mil. (AKA: Acroflur®, Acrynar®)	<b>“Better.”</b> Tough, long-lasting coating has excellent color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.		5 Years
Baked Enamel AAMA 2603 – Dry film thickness 0.8 mil. (AKA: Acrabond Plus®, Duracron®)	<b>“Good.”</b> Provides good adhesion and resistance to weathering, corrosion and chemical stain.		1 Year
Integral Color Anodize AA-M10C22A42 (>0.7 mil)	“Two-step” anodizing is produced by following the normal anodizing step with a second, colorfast process.	Light, Medium or Dark Bronze; Champagne; Black	5 years
Clear Anodize 215 R-1 AA-M10C22A41 (>0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 years
Clear Anodize 204 R-1 AA-M10C22A31 (0.4-0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	1 Year
Industrial coatings	Greenheck offers a number of industrial coatings such as Hi-Pro Polyester, Epoxy, and Permatector®. Consult a Greenheck Product Specialist for complete color and application information.		Consult Greenheck
Mill	Materials may be supplied in natural aluminum or galvanized steel finish when normal weathering is acceptable and there is no concern for color or color change.		n/a

Finishes meet or exceed AAMA 2605, AAMA 2604, and AAMA 2603 requirements. Please consult [www.greenheck.com](http://www.greenheck.com) for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.

