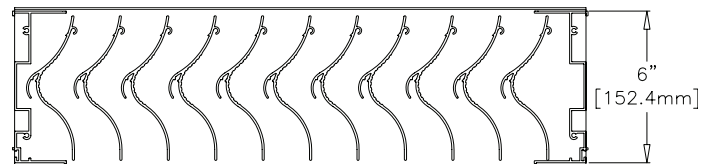


Florida Product Approved Wind-Driven Rain Louver

Application and Design

EVH-602X is a Florida Product Approved wind-driven rain louver designed to protect air intake and exhaust openings in building exterior walls that are sensitive to the penetration of wind driven rain. Design incorporates drainable head member, vertical rain resistant blades and a sloped sill to provide maximum resistance to wind driven rain in even the most extreme weather conditions. The EVH-602X is an **AMCA CERTIFIED LOUVER** enabling designers to select and apply with confidence. EVH-602X is qualified per the Uniform Static Air Pressure Test (ASTM E330/TAS 202). With optional welded construction EVH-602X is also qualified per the Large Missile Impact Test (ASTM E1996/TAS 201) and the Cyclic Wind-Loading Test (TAS 203). Qualified for wind-loads up to 200 PSF. Refer to UL published certification for size and design load rating restrictions.



Standard Construction

Frame Heavy gauge extruded 6063-T5 aluminum, 6 in. x 0.081 in. nominal wall thickness

Blades Vertical rain resistant style, heavy gauge extruded 6063-T5 aluminum, 0.081 in. nominal wall thickness, 1 7/8 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

Anchor Clips . . . Factory attached (mill finish)

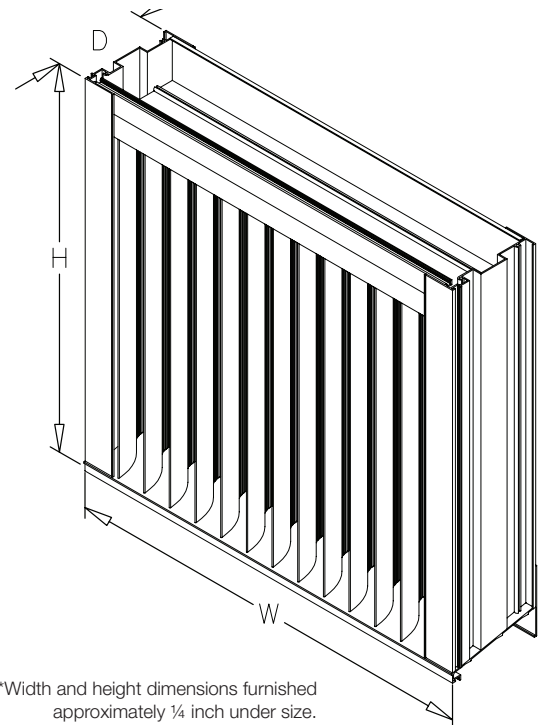
Minimum Size . . . 12 in. W x 16 in. H

Maximum Single

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

Options (at additional cost)

- A variety of bird and insect screens
- Blank-off panels
- Extended sill
- Filter racks
- Flanged frame
- Security bars
- Welded construction (*Large Missile Impact Qualified*)
- 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-602X

Florida Product Approval No.: FL7494.1
UL Classified: R25119

Wind-Driven Rain Performance


Ventilation Air Core Velocity m/s (fpm)	75mm/h (3 in/hr) Rainfall & 13 m/s (29 mph) Wind Velocity		200mm/h (8 in/hr) Rainfall & 22 m/s (50 mph) Wind Velocity		
	Water Penetration Effectiveness %	Water Penetration Classification	Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification
0.0 (0)		A	0.0 (0)		A
0.5 (98)		A	0.5 (98)		A
1.0 (197)		A	1.0 (197)		A
1.5 (295)		A	1.5 (295)		A
2.0 (394)		A	2.0 (394)		A
2.5 (492)		A	2.5 (492)		A
3.0 (591)		A	2.9 (591)		A
3.5 (689)		A	3.5 (689)		A
4.0 (787)		A	4.0 (787)		A
4.5 (886)	100.0	A	4.5 (886)		A
5.0 (984)	99.9	A	5.0 (984)	100.0	A

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

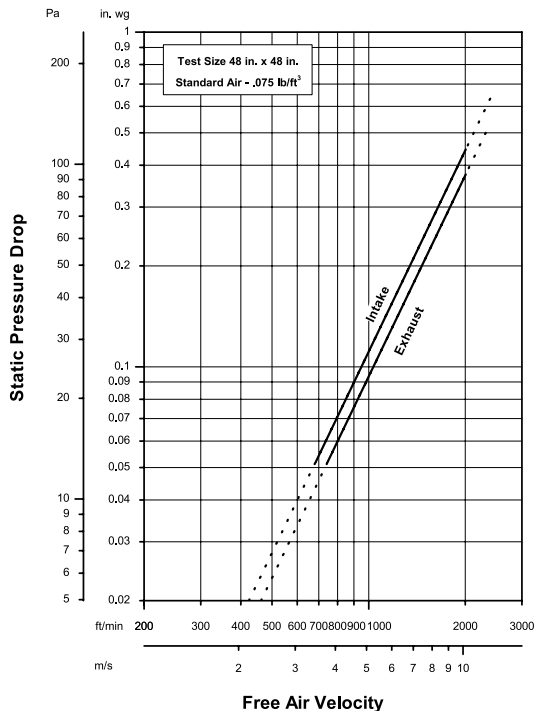
Discharge Loss Coefficient Class (Intake) = 2

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.



Greenheck Fan Corporation certifies that the EVH-602X 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.

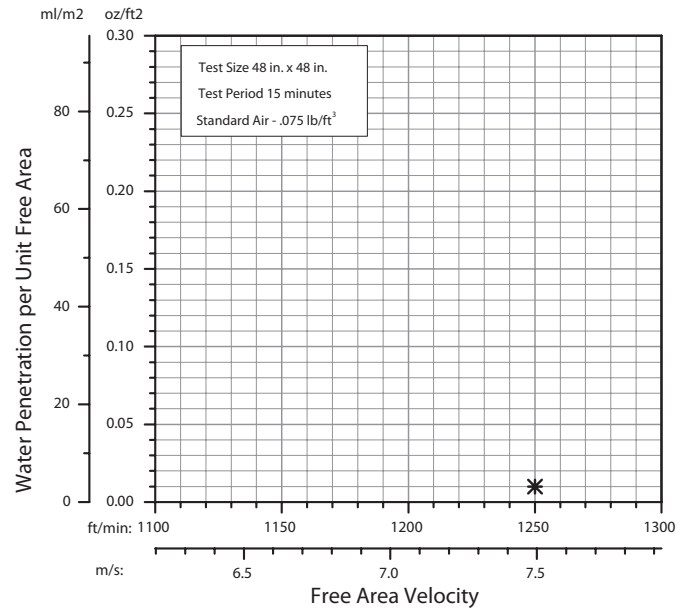
Airflow Resistance (Standard Air - .075 lb/ft³)



Model EVH-602X 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.

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-602X 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-602X

Florida Product Approval No.: FL7494.1
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Free Area Chart (sq. ft.)

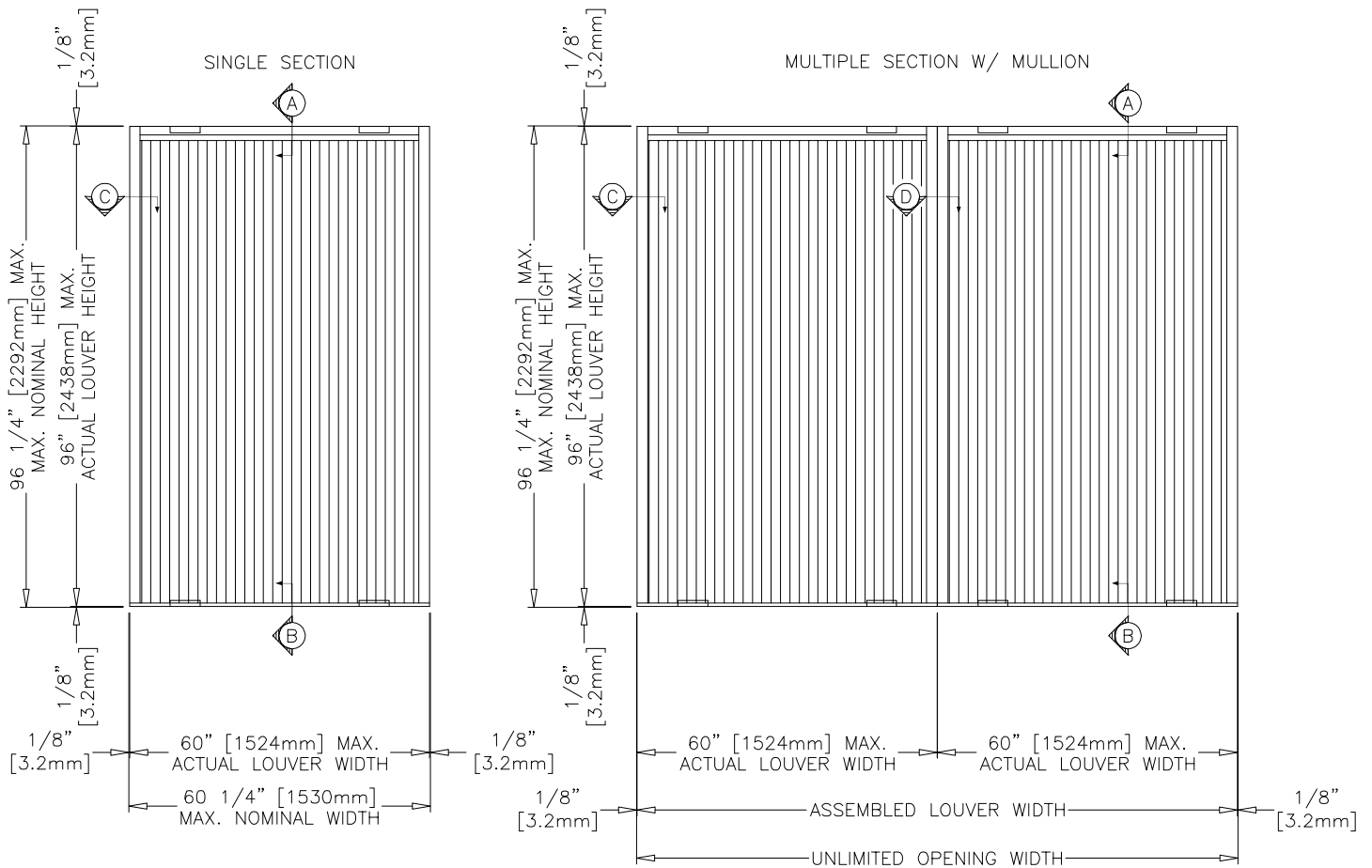
Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
16	0.23	0.39	0.61	0.77	0.91	1.07	1.23	1.45	1.61
18	0.29	0.48	0.76	0.95	1.13	1.33	1.52	1.80	1.99
24	0.45	0.76	1.19	1.50	1.78	2.09	2.39	2.83	3.13
30	0.61	1.03	1.62	2.04	2.43	2.85	3.26	3.86	4.27
36	0.78	1.31	2.06	2.59	3.08	3.61	4.14	4.89	5.41
42	0.94	1.58	2.49	3.13	3.72	4.37	5.01	5.92	6.55
48	1.11	1.86	2.93	3.67	4.37	5.13	5.88	6.95	7.69
54	1.27	2.14	3.36	4.22	5.02	5.89	6.75	7.98	8.84
60	1.43	2.41	3.79	4.76	5.67	6.65	7.62	9.01	9.98
66	1.60	2.69	4.23	5.31	6.32	7.41	8.50	10.04	11.12
72	1.76	2.96	4.66	5.85	6.97	8.17	9.37	11.07	12.26
78	1.93	3.24	5.10	6.40	7.61	8.93	10.24	12.10	13.40
84	2.09	3.52	5.53	6.94	8.26	9.69	11.11	13.13	14.54
90	2.26	3.79	5.96	7.49	8.91	10.45	11.98	14.16	15.68
96	2.42	4.07	6.40	8.03	9.56	11.21	12.86	15.19	16.82

Core Area Chart (sq. ft.)

Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
16	0.42	0.77	1.13	1.48	1.83	2.18	2.54	2.89	3.24
18	0.52	0.96	1.39	1.83	2.26	2.70	3.14	3.57	4.01
24	0.82	1.51	2.19	2.88	3.56	4.25	4.94	5.62	6.31
30	1.12	2.05	2.99	3.93	4.86	5.80	6.73	7.67	8.61
36	1.42	2.60	3.79	4.98	6.16	7.35	8.53	9.72	10.91
42	1.72	3.15	4.59	6.02	7.46	8.90	10.33	11.77	13.20
48	2.02	3.70	5.39	7.07	8.76	10.45	12.13	13.82	15.50
54	2.31	4.25	6.19	8.12	10.06	11.99	13.93	15.87	17.80
60	2.61	4.80	6.99	9.17	11.36	13.54	15.73	17.92	20.10
66	2.91	5.35	7.78	10.22	12.66	15.09	17.53	19.96	22.40
72	3.21	5.90	8.58	11.27	13.96	16.64	19.33	22.01	24.70
78	3.51	6.45	9.38	12.32	15.25	18.19	21.13	24.06	27.00
84	3.81	7.00	10.18	13.37	16.55	19.74	22.92	26.11	29.30
90	4.11	7.54	10.98	14.42	17.85	21.29	24.72	28.16	31.60
96	4.41	8.09	11.78	15.46	19.15	22.84	26.52	30.21	33.89

Maximum Size and Installation Information

Model EVH-602X is a Florida Product Approved louver and must be installed in accordance with the installation instructions shown herein. Model EVH-602X is qualified for installation within concrete/masonry, steel stud, structural steel or wood framed building conditions. Model EVH-602X is structurally calculated to withstand positive and negative wind-loads up to 200 PSF. The louver section size will determine the actual maximum wind-load that the louver sections will withstand. The maximum single section width is 60 in. The maximum single section height is 96 in. However, the maximum opening height is limited to 96 in., while the maximum opening width may be unlimited as multiple sections may be installed side by side in accordance with installation instructions.



Minimum Single Section Size

12 in. W x 16 in. H

Maximum Single Section Size

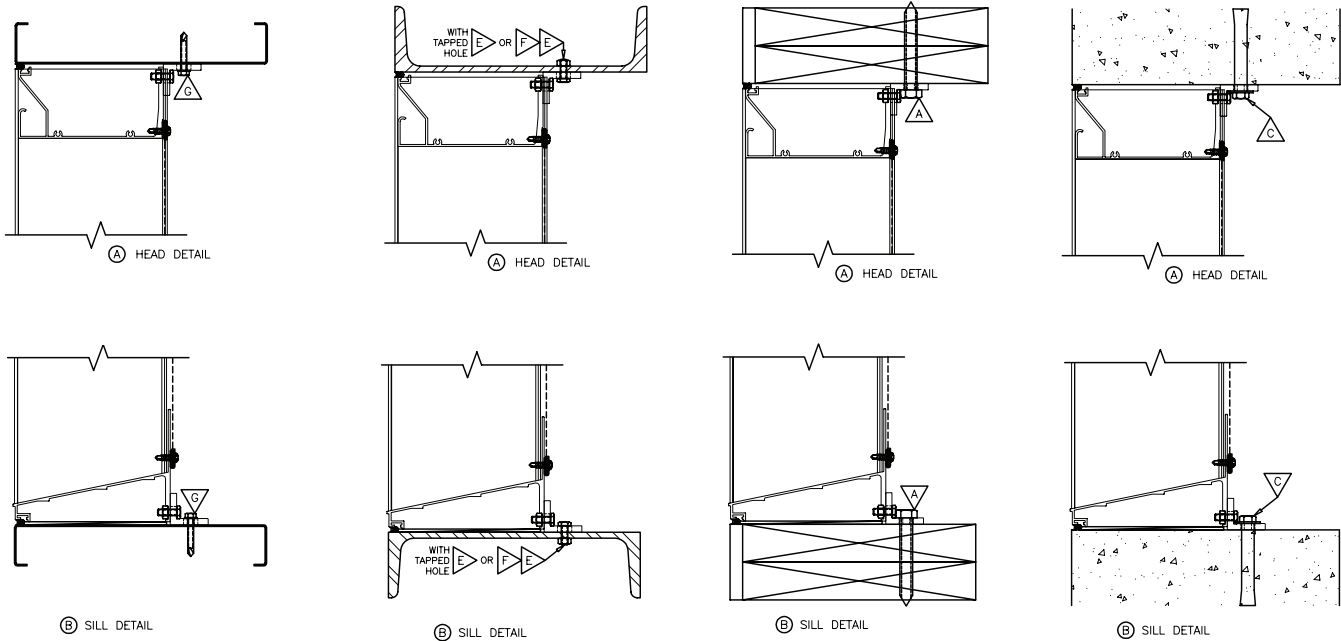
60 in. W x 96 in. H

INSTALLATION DETAILS

EVH-602X

Florida Product Approval No.: FL7494.1
UL Classified: R25119

Steel Stud Opening Structural Steel Opening Wood Opening Concrete/Masonry Opening



FASTENER SCHEDULE (FIELD INSTALLED - NOT BY GREENHECK)							
MOUNTING SUBSTRATE	FASTENER TYPE	DESCRIPTION	ANCHOR CLIP LOCATION	QUANTITY	MIN. EMBED.	MIN. EDGE DIST.	MIN. SPACING
WOOD	A	1/2" DIA. LAG SCREW	HEAD & SILL	2 PER CLIP	3"	2 1/2"	3"
CONCRETE	C	1/2" DIA. SLEEVE ANCH.	HEAD & SILL	2 PER CLIP	3"	3"	5"
MASONRY BLOCK	C	1/2" DIA. SLEEVE ANCH.	HEAD & SILL	2 PER CLIP	1 1/2"	3"	5"
STEEL STUD	E & F	1/4" DIA. BOLT & NUT	HEAD & SILL	2 PER CLIP	THRU BOLT	1/2"	1"
STEEL STUD	G	1/4" DIA. SCREW	HEAD & SILL	2 PER CLIP	FULL	1/2"	1"
STRUCTURAL STEEL	E & F	1/4" DIA. BOLT & NUT	HEAD & SILL	2 PER CLIP	THRU BOLT	1/2"	1"
STRUCTURAL STEEL	E	1/4" DIA. BOLT	HEAD/SILL (FIELD DRILL & TAP HOLE)	2 PER CLIP	FULL	1/2"	1"
STRUCTURAL STEEL	G	1/4" DIA. SCREW	HEAD & SILL	2 PER CLIP	FULL	1/2"	1"

GENERAL NOTES:

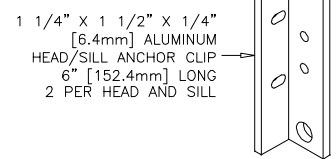
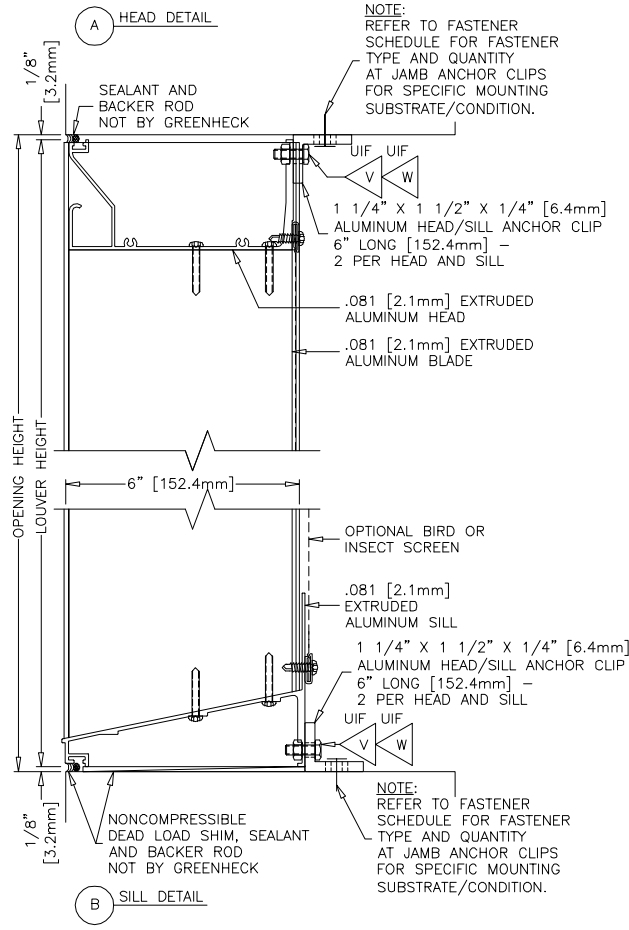
- IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS SUPERIMPOSED BY THE LOUVERS.
- INSTALLER TO PROVIDE SEPARATION OF DISSIMILAR MATERIALS AS REQUIRED.
- WOOD SUBSTRATE TO BE MINIMUM G = 0.42 DENSITY.
- CONCRETE SUBSTRATE TO BE MINIMUM 3,000 PSI.
- STEEL STUD OPENINGS (16 GA. MINIMUM THICKNESS) TO BE MINIMUM Fy = 33 ksi.
- STRUCTURAL STEEL OPENINGS (1/4" MINIMUM THICKNESS) TO BE MINIMUM Fy = 36 ksi.

PRODUCT DETAILS

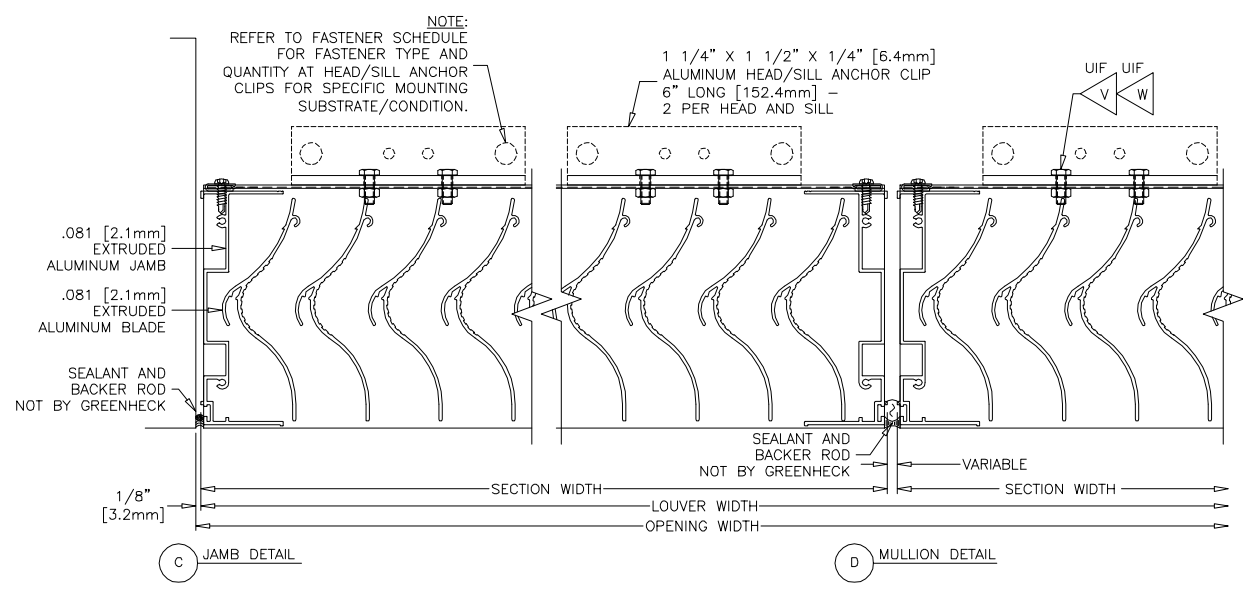
EVH-602X

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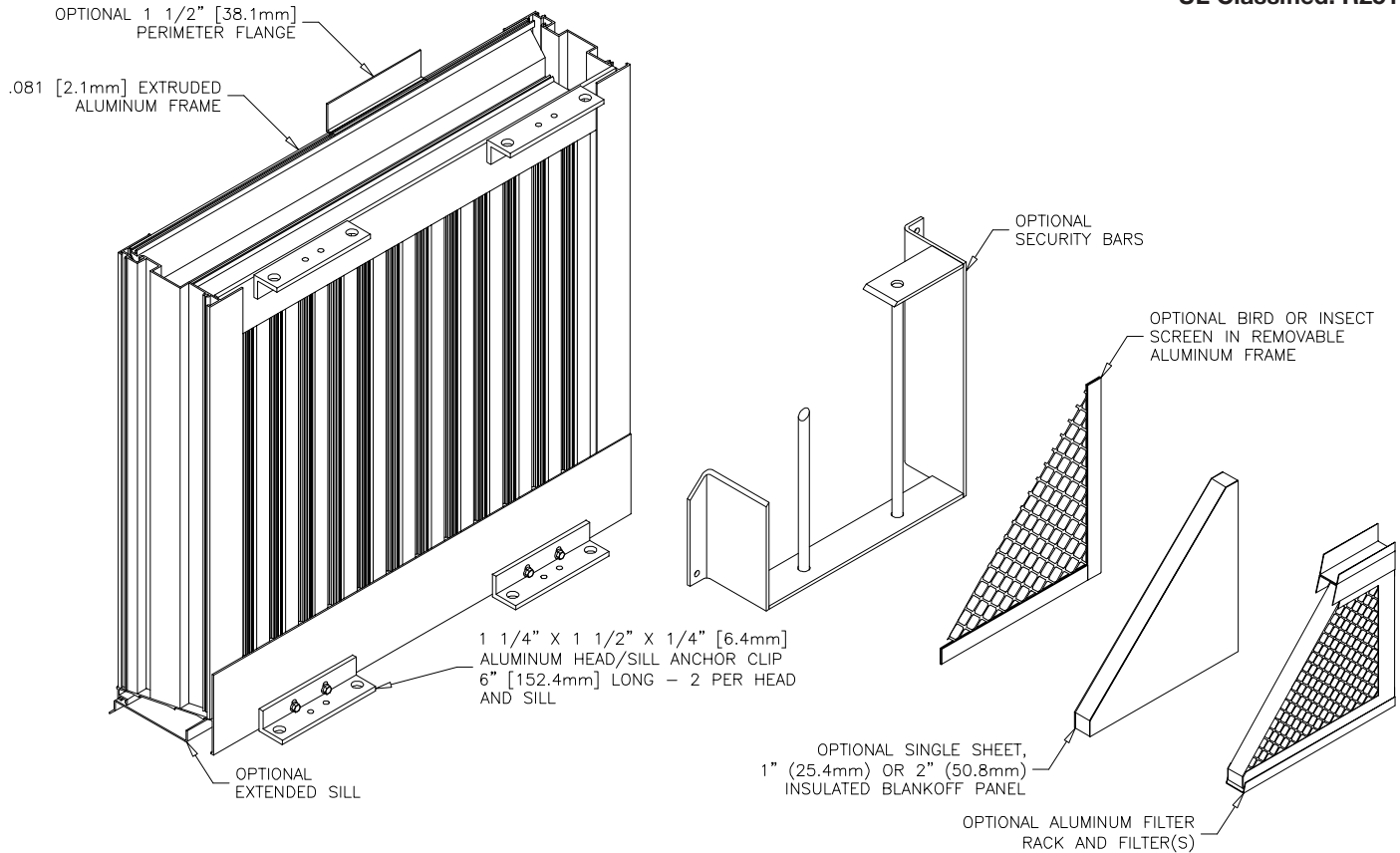
- UIF 1/4-20 X 3/4" HH SS CS 415573
- UIF 1/4-20 HH SS NUT 415099



OPTION DRAWINGS

EVH-602X

Florida Product Approval No.: FL7494.1
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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®, Flouropolymer, Polyvinylidene Fluoride, PVDF2)	“Best.” The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	Standard Colors: Any of the 24 standard colors shown can be furnished in 70% or 50% KYNAR 500®/HYLAR 5000® or Baked Enamel. 2-Coat Mica: 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®)	“Better.” 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®)	“Good.” 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 Permator®. 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 for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.



EVH-602X
November 2010 Rev. 4
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