

## Miami-Dade Qualified Combination Louver

Florida Product Approval No: 16781  
Miami-Dade NOA No.: 18-0918.02, EXP. 12/5/2023  
AMCA 540 and 550 Listed<sup>1</sup>  
Maximum Wind-load: 110 PSF

### Application and Design

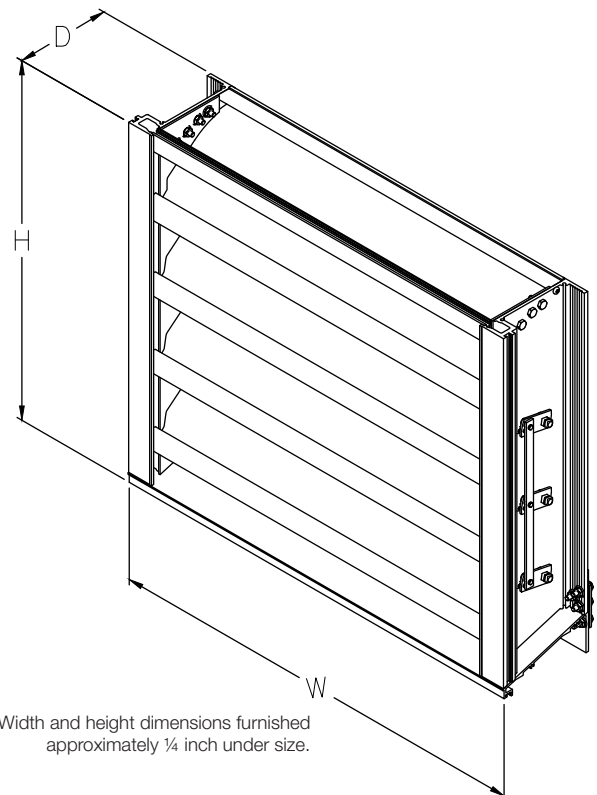
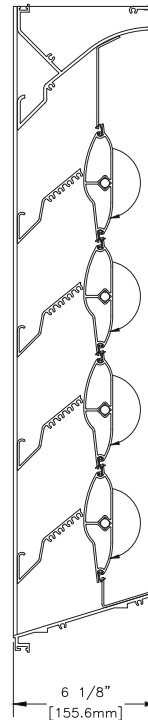
EACA-601D is a **Florida Product Approved and Miami-Dade Qualified** combination louver/damper designed to protect air intake and exhaust openings in building exterior walls that, at times, require tight air shut off. EACA-601D is tested in accordance with AMCA 500-L Air Performance and Water Penetration. EACA-601D is tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris (Basic Protection, Missile Level D). With the operable damper blades in the closed position EACA-601D is tested in accordance with AMCA 550 High Velocity Wind Driven Rain. **EACA-601D is licensed to bear the AMCA seal allowing design professionals to select and apply with confidence.** EACA-601D is tested and qualified per the following Florida test protocols: TAS 201 (Large Missile Impact), TAS 202 (Uniform Static Air Pressure) and TAS 203 (Cyclic Wind Loading). Per Miami-Dade, EACA-601D may be installed in locations where the room behind the louver is not designed to drain water into the room or the room will house non-water resistant or non-water proof equipment components or supplies.

### Standard Construction

- Frame** . . . . . Head: heavy gauge extruded 6063-T5 aluminum, 6 in. x 0.125 in. nominal wall thickness  
Sill: heavy gauge extruded 6005-T5 aluminum, 6 in. x 0.125 in. nominal wall thickness  
Jambs: heavy gauge extruded 6005-T5 aluminum, 6 in. x 0.188 in. nominal wall thickness
- Blades** . . . . . Stationary blade: drainable design, heavy gauge extruded 6063-T5 aluminum, 0.081 in. nominal wall thickness, positioned at 45° angles on approximately 5 in. centers  
Operable blade: airfoil design, heavy gauge extruded 6005-T5 aluminum, 0.081 nominal wall thickness
- Seals** . . . . . TPE blade seals  
Compressible stainless steel jamb seals
- Temperature Restrictions** . . . . . (-20° F) - (+180°F)
- Linkage** . . . . . Side linkage, out of airstream (concealed in frame)
- Bearings** . . . . . Synthetic sleeve type
- Axles** . . . . . ½ in. dia. zinc plated steel
- Construction** . . . . . Mechanically fastened
- Birdscreen** . . . . . 3/4 in. x 0.051 in. flattened expanded aluminum in removable frame, inside mount (rear)
- Finish** . . . . . Mill
- Minimum Size** . . . . . 12 in. W x 16 in. H
- Maximum Single Section Size** . . . . . 60 in. W x 120 in. H

### Options (at additional cost)

- A variety of bird and insect screens
- A variety of electric or manual actuators
- Extended sill
- Filter rack
- Flanged frame
- Security bars
- A variety of architectural finishes including:
  - Clear anodize
  - Integral color anodize
  - Baked enamel paint
  - Kynar paint



\*Width and height dimensions furnished approximately ¼ inch under size.

<sup>1</sup>Operable damper blades in the closed position

# PERFORMANCE DATA

# EACA-601D

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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	0.16	0.28	0.40	0.52	0.64	0.75	0.87	0.99	1.11
18	0.29	0.51	0.73	0.95	1.17	1.39	1.61	1.83	2.05
24	0.49	0.86	1.23	1.60	1.96	2.33	2.70	3.07	3.44
30	0.66	1.15	1.64	2.14	2.63	3.12	3.62	4.11	4.60
36	0.82	1.44	2.06	2.68	3.29	3.91	4.53	5.15	5.76
42	1.12	1.97	2.81	3.65	4.49	5.34	6.18	7.02	7.87
48	1.32	2.31	3.31	4.30	5.29	6.28	7.27	8.26	9.25
54	1.49	2.60	3.72	4.84	5.95	7.07	8.19	9.30	10.42
60	1.65	2.90	4.14	5.38	6.62	7.86	9.10	10.34	11.58
66	1.95	3.42	4.89	6.35	7.82	9.28	10.75	12.22	13.68
72	2.15	3.77	5.38	7.00	8.61	10.23	11.84	13.46	15.07
78	2.32	4.06	5.80	7.54	9.28	11.02	12.75	14.49	16.23
84	2.49	4.35	6.21	8.08	9.94	11.80	13.67	15.53	17.40
90	2.79	4.87	6.96	9.05	11.14	13.23	15.32	17.41	19.50
96	2.98	5.22	7.46	9.70	11.94	14.17	16.41	18.65	20.89
102	3.15	5.51	7.87	10.24	12.60	14.96	17.32	19.69	22.05
108	3.32	5.80	8.29	10.78	13.26	15.75	18.24	20.73	23.21
114	3.62	6.33	9.04	11.75	14.46	17.18	19.89	22.60	25.31
120	3.81	6.68	9.54	12.40	15.26	18.12	20.98	23.84	26.70



Greenheck Fan Corporation certifies that the EACA-601D 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 and water penetration ratings.



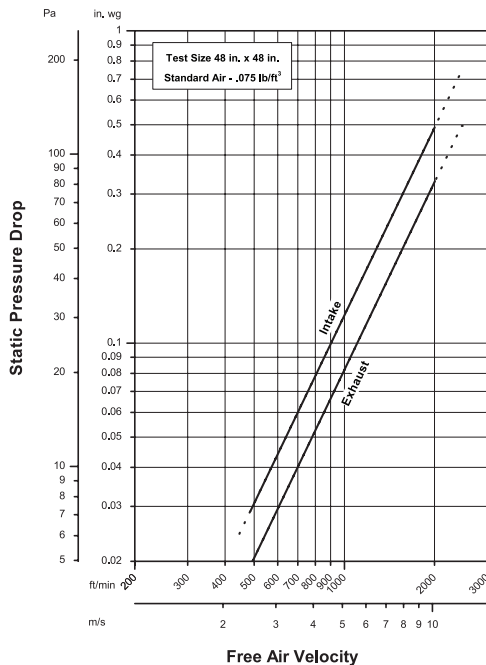
**HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY CLOSED AND IMPACT RESISTANT LOUVER**  
*Basic Protection Level D*

This label does not signify AMCA airflow performance certification.

See www.AMCA.org for all certified or listed products

Greenheck Fan Corporation certifies that the EACA-601D louvers shown herein are approved to bear the AMCA Listing Label. The Ratings shown are based on tests and procedures performance 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 and High Velocity Wind Driven Rain Resistant Louvers.

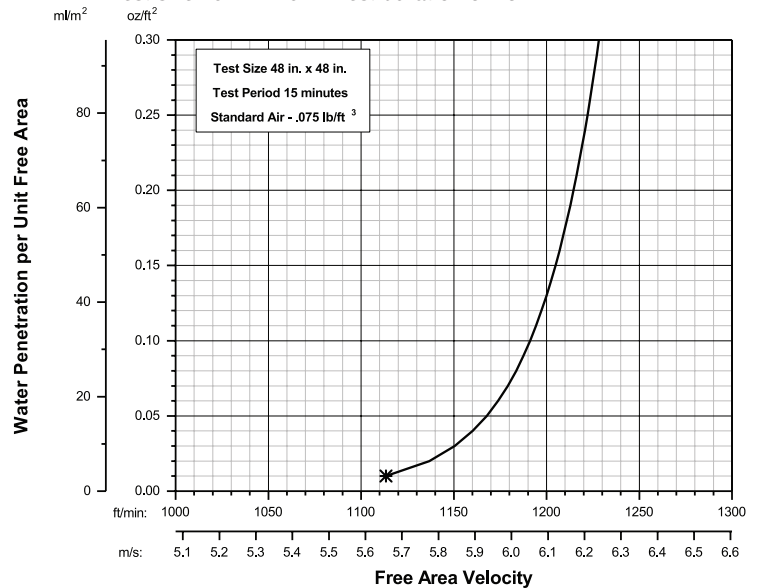
## Airflow Resistance (Standard Air - .075 lb/ft<sup>3</sup>)



Model EACA-601D 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. (Test Figure 5.5)

## Water Penetration (Standard Air - .075 lb/ft<sup>3</sup>)

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 .01 oz. of water (penetration) per sq. ft. of louver free area. **\*The beginning point of water penetration for Model EACA-601D is 1113 fpm free area velocity.** These performance ratings do not guarantee a louver to be weatherproof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.



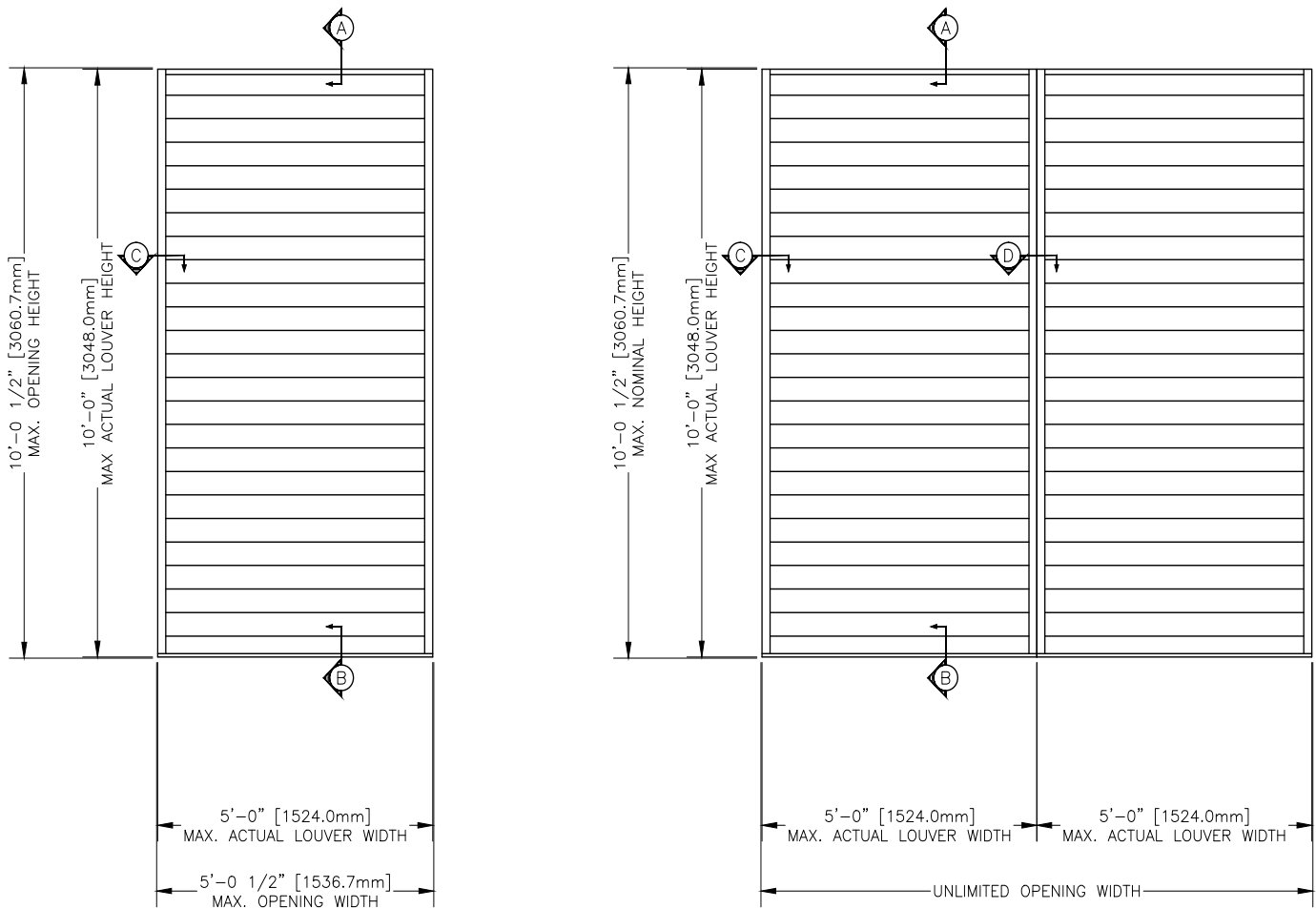
# INSTALLATION DETAILS

# EACA-601D

Florida Product Approval No: 16781  
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AMCA 540 and 550 Listed<sup>1</sup>  
Maximum Wind-load: 110 PSF

## Maximum Size and Installation Information

Model EACA-601D is a Miami-Dade Qualified and Florida Product Approved louver and must be installed in accordance with the installation instructions shown herein. Model EACA-601D is qualified for installation within concrete, CMU, wood, aluminum, structural steel or steel stud framed building conditions. Model EACA-601D is structurally calculated to withstand positive and negative wind-loads up to 110 PSF. The maximum opening section width is 60 inches. The maximum single section height is 120 inches. While the maximum opening height is limited to 120 inches, the opening width may be unlimited as multiple sections may be installed side by side in accordance with installation instructions. Structural reinforcing members along with any associated installation hardware is not provided by Greenheck unless indicated otherwise by Greenheck. Options and are not subject to structural analysis unless indicated otherwise by Greenheck.



**Minimum Single Section Size**  
12 in. W x 16 in. H

**Maximum Single Section Size**  
60 in. W x 120 in. H

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CONCRETE OR CMU ANCHORING			
1/4" TAPCON SCREW FASTENER TABLE			
DESCRIPTION	1/4" TAPCON W/ ADVANCED THREADFORM		
SUBSTRATE	CONCRETE OR CONCRETE MASONRY (CMU)		
MINIMUM	CONCRETE: 3 KSI ACI 301 CONCRETE CMU: ASTM C90, 3 KSI GROUT FILLED, LIGHT-WEIGHT ≥ 95 PCF, MEDIUM-WEIGHT ≥ 117 PCF		
EDGE DISTANCE <MIN>	1 IN	1 1/2 IN	2 1/2 IN
SLAB/BLOCK CORNER DISTANCE <MIN>	1 IN	1 1/2 IN	2 1/2 IN
PENETRATION <MIN>	1 3/4 IN		
LOUVER HEIGHT <IN>	SPACING <IN>		
≤120	4	4	6
≤84		6	
≤72	6		

CONCRETE OR CMU ANCHORING				
3/8" POWERS WEDGE BOLT FASTENER TABLE				
DESCRIPTION	3/8" POWERS WEDGE BOLT			
SUBSTRATE	NORMAL WEIGHT CONCRETE	CONCRETE MASONRY (CMU)		
MINIMUM	2.5 KSI	6" WIDE, GRADE N, TYPE II, LIGHT/MEDIUM/NORMAL WEIGHT CMU CONFORMING TO ASTM C90, 1.5 KSI GROUT FILLED		
EDGE DISTANCE <MIN>	2 IN	3 IN	1 1/2 IN   2 IN	
SLAB/BLOCK CORNER DISTANCE <MIN>	2 IN	3 IN	1 1/2 IN   2 IN	
PENETRATION <MIN>	2 1/8 IN		2 1/2 IN	
ANCHOR ANGLE END DISTANCE <MIN>	≤ <ANCHOR SPACING>/2+3		≤ <ANCHOR SPACING>/2+3	
LOUVER HEIGHT <IN>	SPACING <IN>		SPACING <IN>	
≤120	6	8	NOT ALLOWED   NOT ALLOWED	
≤96	8		NOT ALLOWED	6
≤72			6	8
≤48			8	

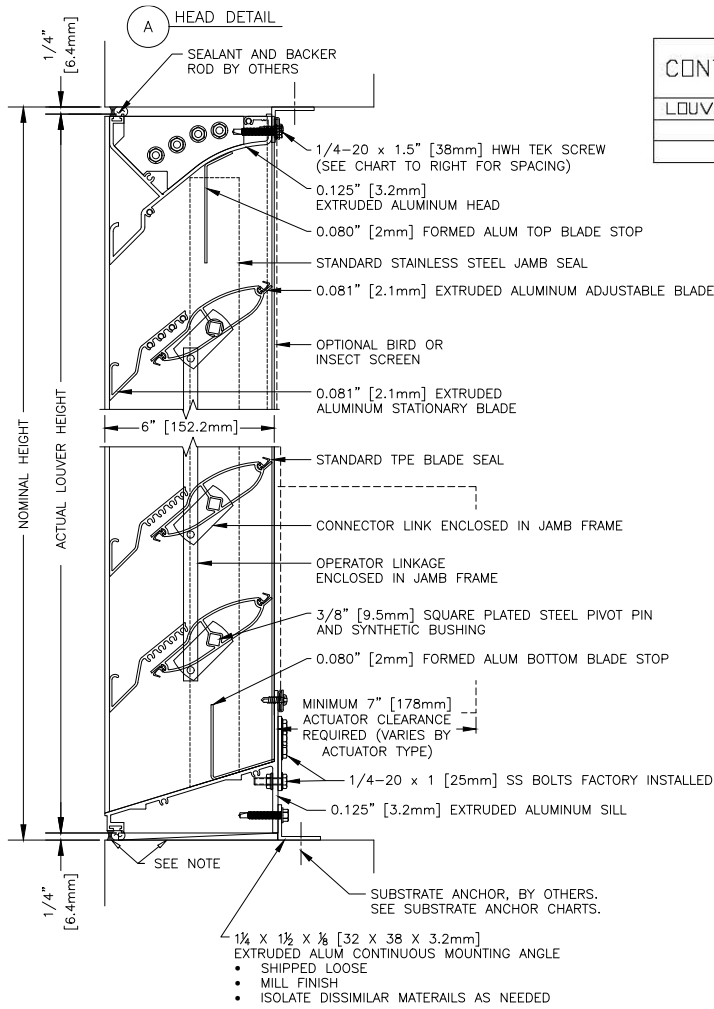
WOOD, STEEL OR ALUMINUM ANCHORING					
LAG SCREW, SCREW, & BOLT W/NUT FASTENER TABLE					
DESCRIPTION	1/4" LAG SCREW	3/8" LAG SCREW	1/4"-20 SCREW OR BOLT W/NUT		
SUBSTRATE	WOOD		STEEL	ALUMINUM	
MINIMUM	G ≥ 0.42		A36 STEEL OR Fy ≥ 36 KSI	STRESSES ≥ 6063-T5	
EDGE DISTANCE <MIN>	1 IN	1 1/2 IN	1/2 IN	1/2 IN	
CORNER DISTANCE <MIN>	1 IN	1 1/2 IN	1/2 IN	1/2 IN	
PENETRATION* <MIN>	2 3/4 IN		16 GA <0.06 IN>	3/16 IN   16 GA <0.06 IN>	
LOUVER HEIGHT <IN>	SPACING <IN>		SPACING <IN>		
≤120	4	6	4	6	
≤96		8	6		4
≤84					
≤72		6			

\* PENETRATION IS EQUAL TO OVERALL FASTENER LENGTH FOR CONCRETE/CMU FASTENERS IF SHIMS ARE USED, FASTENER LENGTH MUST BE INCREASED BY THICKNESS OF SHIMS

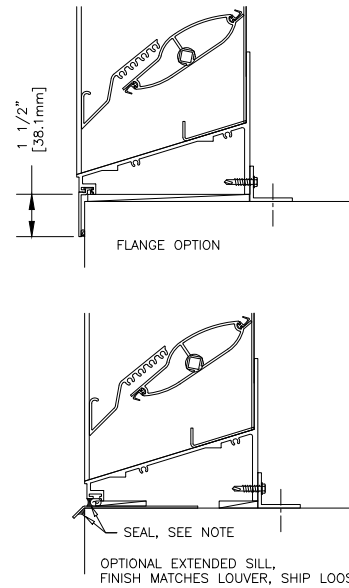
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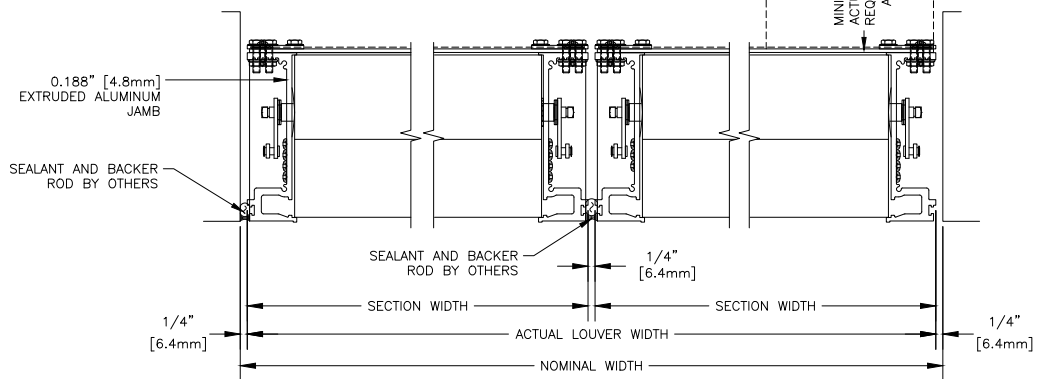


CONTINUOUS ANGLE TO LOUVER FRAME SCREW	
LOUVER HEIGHT (IN)	MAXIMUM SPACING (IN)
>108	3.75
≤108	4



**B SILL DETAIL**

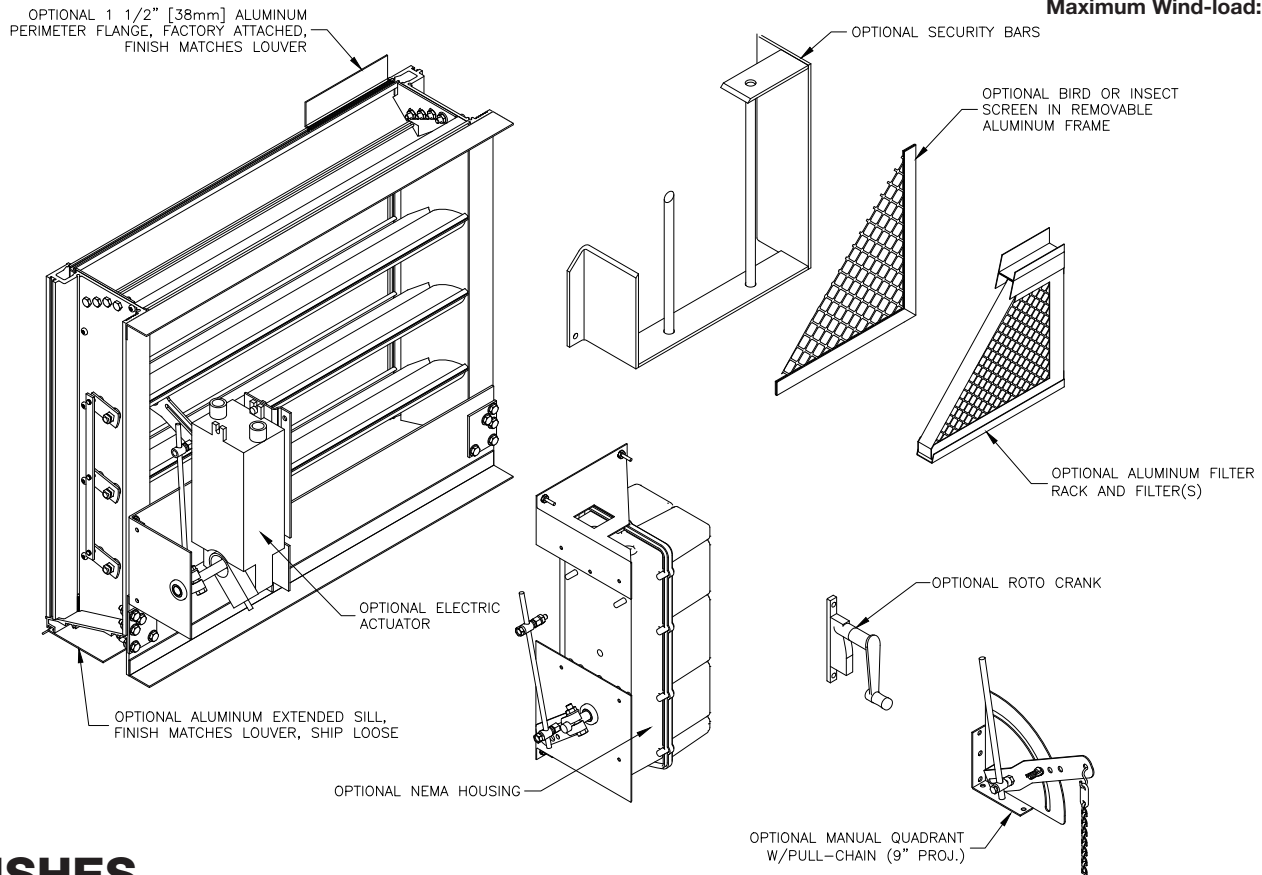
NOTE: SEALANT, BACKER ROD, NON-COMPRESSIBLE DEAD-LOAD SHIMS, SEPARATION OF DISSIMILAR MATERIALS AND SUBSTRATE ARE NOT BY LOUVER MANUFACTURER, SHIM AS NEEDED, PERIMETER SEALANT AND FULLY CLOSED BLADES REQUIRED TO PASS ANSI/AMCA 550 HIGH VELOCITY WIND DRIVEN RAIN.



# OPTION DRAWINGS

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## FINISHES

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)
<b>AAMA 2605</b> 100% Fluoropolymer (FEVE) 2-Coat 70% Kynar® (PVDF) 3-Coat 70% Kynar® (PVDF) 4-Coat 70% Kynar® (PVDF)	<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 27 standard colors shown can be furnished in 70% or 50% Kynar®, 100% Fluoropolymer or Baked Enamel.	10 Years (20 Years Optional)
<b>AAMA 2604</b> 50% Kynar® / Acroflur®	<b>"Better."</b> Tough, long-lasting coating has excellent color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	<b>Mica Colors:</b> Greenheck offers 6 standard Mica colors for 70% Kynar® or 100% Fluoropolymer.	5 Years
<b>AAMA 2603</b> Baked Enamel	<b>"Good."</b> Provides good adhesion and resistance to weathering, corrosion and chemical stain.	<b>Custom Colors:</b> Custom color matching is available. Consult your Greenheck representative for cost and/or lead-time implications if a custom color is required.	1 Year
<b>AA-M10C22A42</b> Integral Color Anodize	"Two-step" anodizing is produced by following the normal anodizing step with a second, colorfast process.	Light, Medium, Dark or Extra Dark Bronze; Champagne; Black	5 years
<b>AA-M10C22A41</b> Clear Anodize 215 R-1	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 years
<b>AA-M10C22A31</b> Clear Anodize 204	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	1 Year
<b>Prime Coat</b>	Louvers or architectural products shall be cleaned, pre-treated and receive a prime coat finish suitable for field painting. Greenheck does not recommend prime coat or field painting of materials.		n/a
<b>Mill</b>	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.



EACA-601D  
 July 2021

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