

## Florida Product Approved Acoustical Louver

### Application and Design

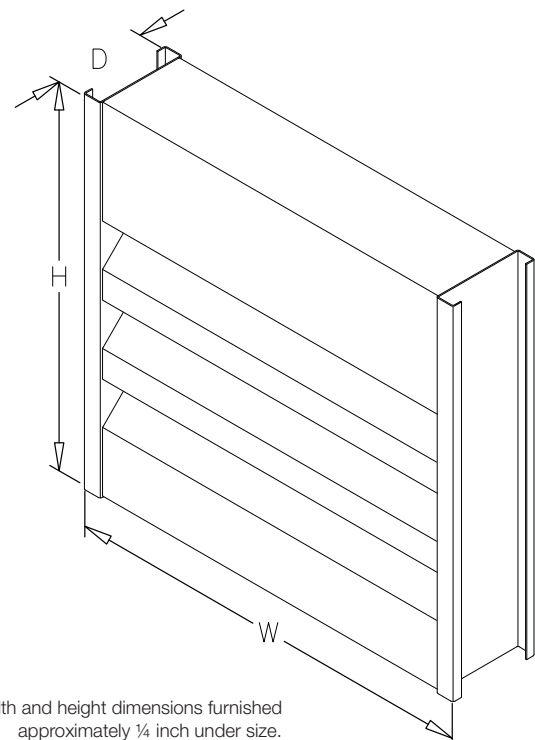
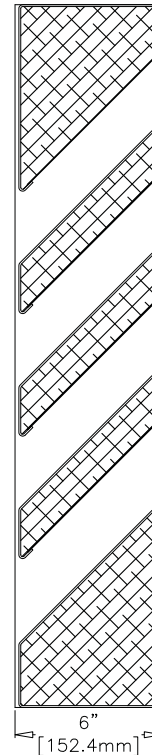
AFJ-601X is a Florida Product Approved acoustical louver designed to protect air intake and exhaust openings in building exterior walls. Design incorporates J style acoustical blades with high free area to provide maximum resistance to sound transmission, rain and weather while providing minimum resistance to airflow. The AFJ-601X is an **AMCA CERTIFIED LOUVER** enabling designers to select and apply with confidence. AFJ-601X is qualified per the Uniform Static Air Pressure Test (ASTM E330/TAS 202), 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 formed aluminum,  
6 in. x 0.080 in. nominal wall thickness
- Blades** . . . . . J style acoustical, heavy gauge formed  
aluminum, 0.080 in. nominal wall thickness
- Construction** . . . Mechanically fastened
- Birdscreen** . . . . . 3/4 in. x 0.051 in. flattened expanded aluminum  
in removable frame, inside mount (rear)
- Acoustical  
Insulation** . . . . . Fiberglass insulation
- Finish** . . . . . Mill
- Anchor Clips** . . . . Factory attached (mill finish)
- Minimum Size** . . . 12 in. W x 15 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
- 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 1/4 inch under size.

# PERFORMANCE DATA

# AFJ-601X

Florida Product Approval No.: FL6876.1  
UL Classified: R25119

## Free Area Chart (Sq. ft.)

Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
15	0.13	0.21	0.29	0.37	0.45	0.53	0.61	0.69	0.77
18	0.25	0.42	0.57	0.74	0.90	1.06	1.22	1.38	1.55
24	0.38	0.62	0.86	1.10	1.35	1.59	1.83	2.08	2.32
30	0.50	0.82	1.15	1.47	1.80	2.12	2.45	2.77	3.09
36	0.63	1.03	1.44	1.84	2.25	2.65	3.06	3.46	3.87
42	0.75	1.24	1.72	2.21	2.70	3.18	3.67	4.15	4.64
<b>48</b>	<b>1.00</b>	<b>1.65</b>	<b>2.30</b>	<b>2.95</b>	<b>3.59</b>	<b>4.24</b>	<b>4.89</b>	<b>5.54</b>	<b>6.19</b>
54	1.12	1.85	2.58	3.31	4.04	4.77	5.50	6.23	6.96
60	1.25	2.03	2.87	3.68	4.49	5.30	6.11	6.92	7.73
66	1.37	2.27	3.16	4.05	4.94	5.83	6.72	7.61	8.51
72	1.50	2.47	3.44	4.42	5.39	6.36	7.33	8.31	9.28
78	1.75	2.88	4.02	5.15	6.29	7.42	8.56	9.69	10.83
84	1.87	3.09	4.31	5.52	6.74	7.95	9.17	10.38	11.60
90	2.00	3.30	4.59	5.89	7.19	8.48	9.78	11.08	12.37
96	2.12	3.50	4.88	6.26	7.64	9.01	10.39	11.77	13.15



Greenheck Fan Corporation certifies that the AFJ-601X 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 water penetration, air performance and sound ratings.

## Sound Transmission Class

The Sound Transmission Class (STC) is a rating of the effectiveness of an assembly in isolating or reducing airborne sound transmission. STC is a single number that summarizes airborne sound transmission loss data. Assemblies with higher STC ratings are more efficient at reducing sound transmission. STC is determined in accordance with ASTM E413-04.

## Transmission Loss

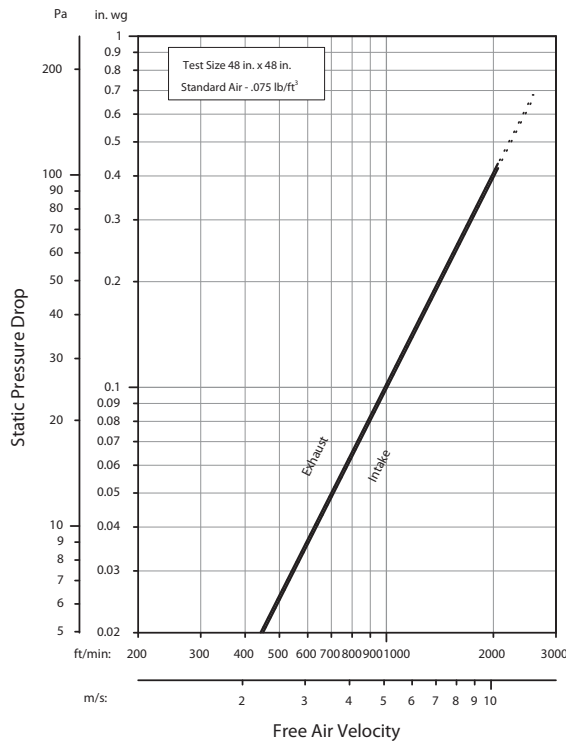
Transmission loss (TL) is a measurement of the reduction of sound power transmission (dB) through an assembly at a given frequency. The more sound power that is reduced, the greater the TL. TL is tested in accordance with ASTM E90-04.

## Free Field Noise Reduction in Decibels

Free Field Noise Reduction is determined by adding 6 dB to the Transmission Loss.

Octave Band	2	3	4	5	6	7	STC
Frequency (Hz)	125	250	500	1000	2000	4000	10
Transmission Loss (dB)	4	4	6	10	17	12	
Free Field Noise Reduction (dB)	10	10	12	16	23	18	

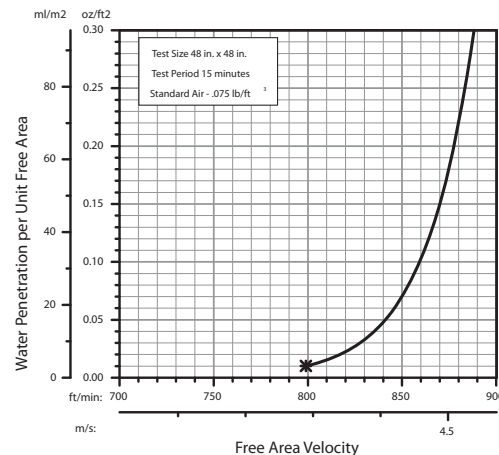
## Airflow Resistance (Standard Air - .075 lb/ft³)



Model AFJ-601X 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 (Standard Air - .075 lb/ft³)

Test size 48 in. x 48 in. Test duration of 15 min.



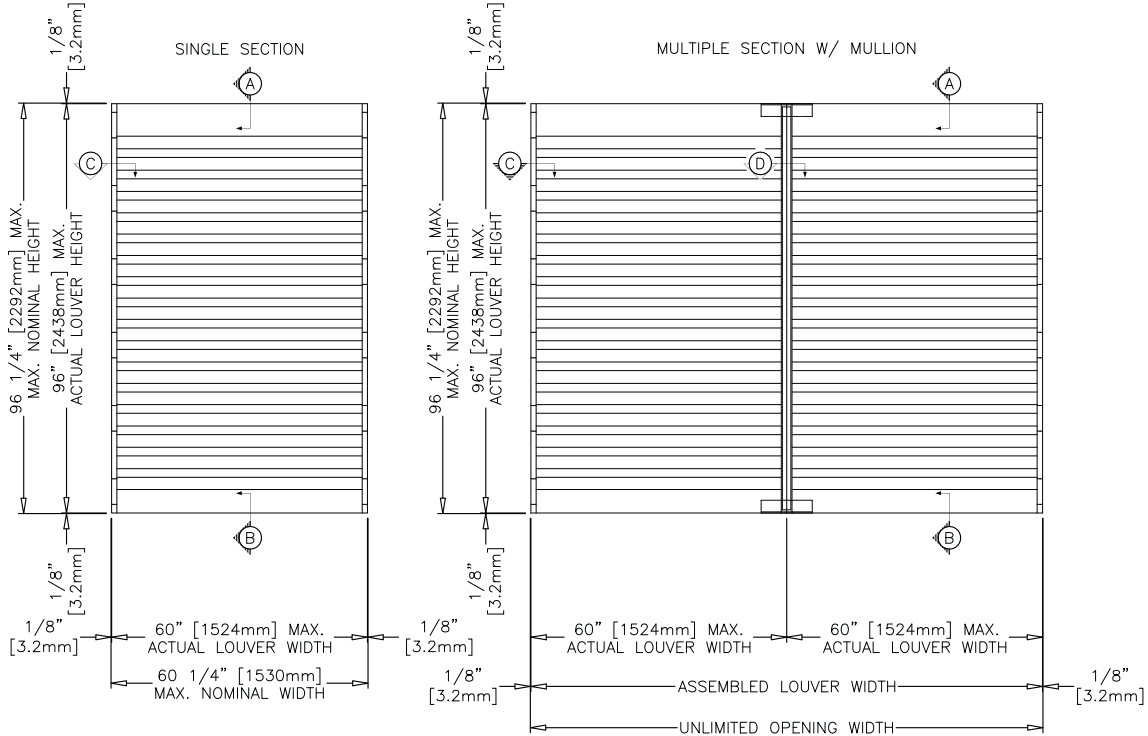
The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The beginning point of water penetration is defined as that velocity where the water penetration curve projects through .01 oz. of water (penetration) per sq. ft. of louver free area.

**\*The beginning point of water penetration for Model AFJ-601X is 799 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.



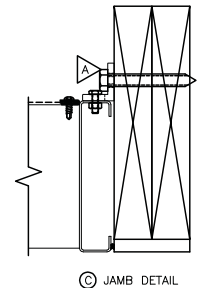
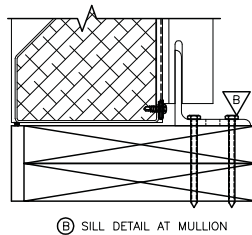
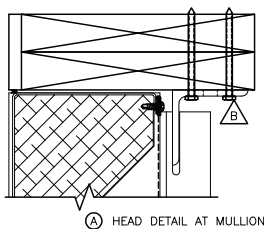
## Maximum Size and Installation Information

Model AFJ-601X is a Florida Product Approved louver and must be installed in accordance with the installation instructions shown herein. Model AFJ-601X is qualified for installation within concrete/masonry, steel stud, structural steel or wood framed building conditions. Model AFJ-601X 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. While, the maximum opening height is limited to 96 in., the opening width may be unlimited as multiple sections may be installed side by side in accordance with installation instructions.

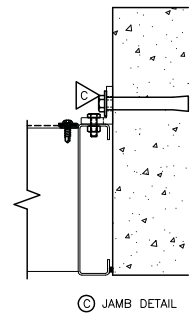
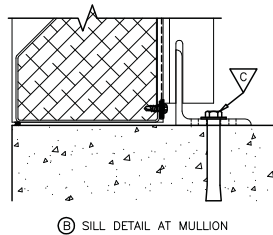
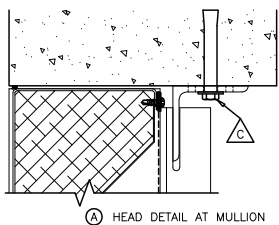


**Minimum Single Section Size**      **Maximum Single Section Size**  
12 in. W x 15 in. H                      60 in. W x 96 in. H

### Wood Opening



### Concrete/Masonry Opening

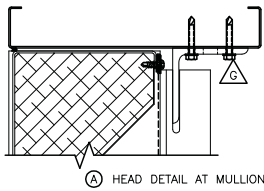


# INSTALLATION DETAILS

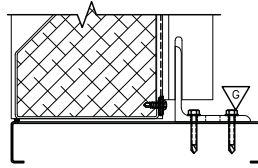
# AFJ-601X

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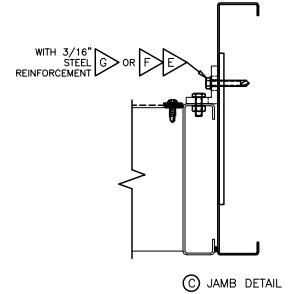
## Steel Stud Opening



(A) HEAD DETAIL AT MULLION

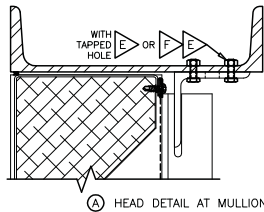


(B) SILL DETAIL AT MULLION

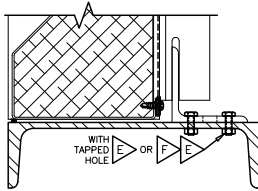


(C) JAMB DETAIL

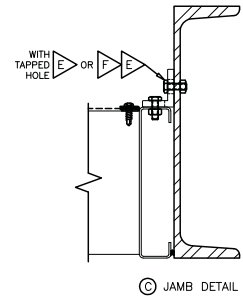
## Structural Steel Opening



(A) HEAD DETAIL AT MULLION



(B) SILL DETAIL AT MULLION



(C) JAMB DETAIL

### 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	JAMB	2 PER CLIP	3"	2 1/2"	3"
WOOD	B	1/4" DIA. LAG SCREW	VERT. MULLION (HEAD/SILL)	12 PER CLIP	3"	1/2"	1 1/2"
CONCRETE	C	1/2" DIA. SLEEVE ANCH.	JAMB	2 PER CLIP	3"	3"	5"
CONCRETE	C	1/2" DIA. SLEEVE ANCH.	VERT. MULLION (HEAD/SILL)	3 PER CLIP	3"	3"	5"
MASONRY BLOCK	C	1/2" DIA. SLEEVE ANCH.	JAMB	2 PER CLIP	1 1/2"	3"	5"
MASONRY BLOCK	C	1/2" DIA. SLEEVE ANCH.	VERT. MULLION (HEAD/SILL)	3 PER CLIP	1 1/2"	3"	5"
STEEL STUD	E & F	1/4" DIA. BOLT & NUT	JAMB	2 PER CLIP	THRU BOLT	1/2"	1"
STEEL STUD (3/16" STEEL REINFORCED)	G	1/4" DIA. SCREW	JAMB	2 PER CLIP	THRU BOLT	1/2"	1"
STEEL STUD	G	1/4" DIA. SCREW	VERT. MULLION (HEAD/SILL)	12 PER CLIP	FULL	1/2"	1"
STRUCTURAL STEEL	E & F	1/4" DIA. BOLT & NUT	JAMB	2 PER CLIP	THRU BOLT	1/2"	1"
STRUCTURAL STEEL	E	1/4" DIA. BOLT	JAMB (FIELD DRILL & TAP HOLE)	2 PER CLIP	FULL	1/2"	1"
STRUCTURAL STEEL	E & F	1/4" DIA. BOLT & NUT	VERT. MULLION (HEAD/SILL)	3 PER CLIP	THRU BOLT	1/2"	1"
STRUCTURAL STEEL	E	1/4" DIA. BOLT	VERT. MULLION (HEAD/SILL) FIELD DRILL & TAP HOLE	3 PER CLIP	FULL	1/2"	1"
STRUCTURAL STEEL	G	1/4" DIA. SCREW	JAMB	2 PER CLIP	THRU BOLT	1/2"	1"
ALL	H & I	1/4" DIA. SHOULDER BOLT & NUT	MULLION JOINT	VARIES			

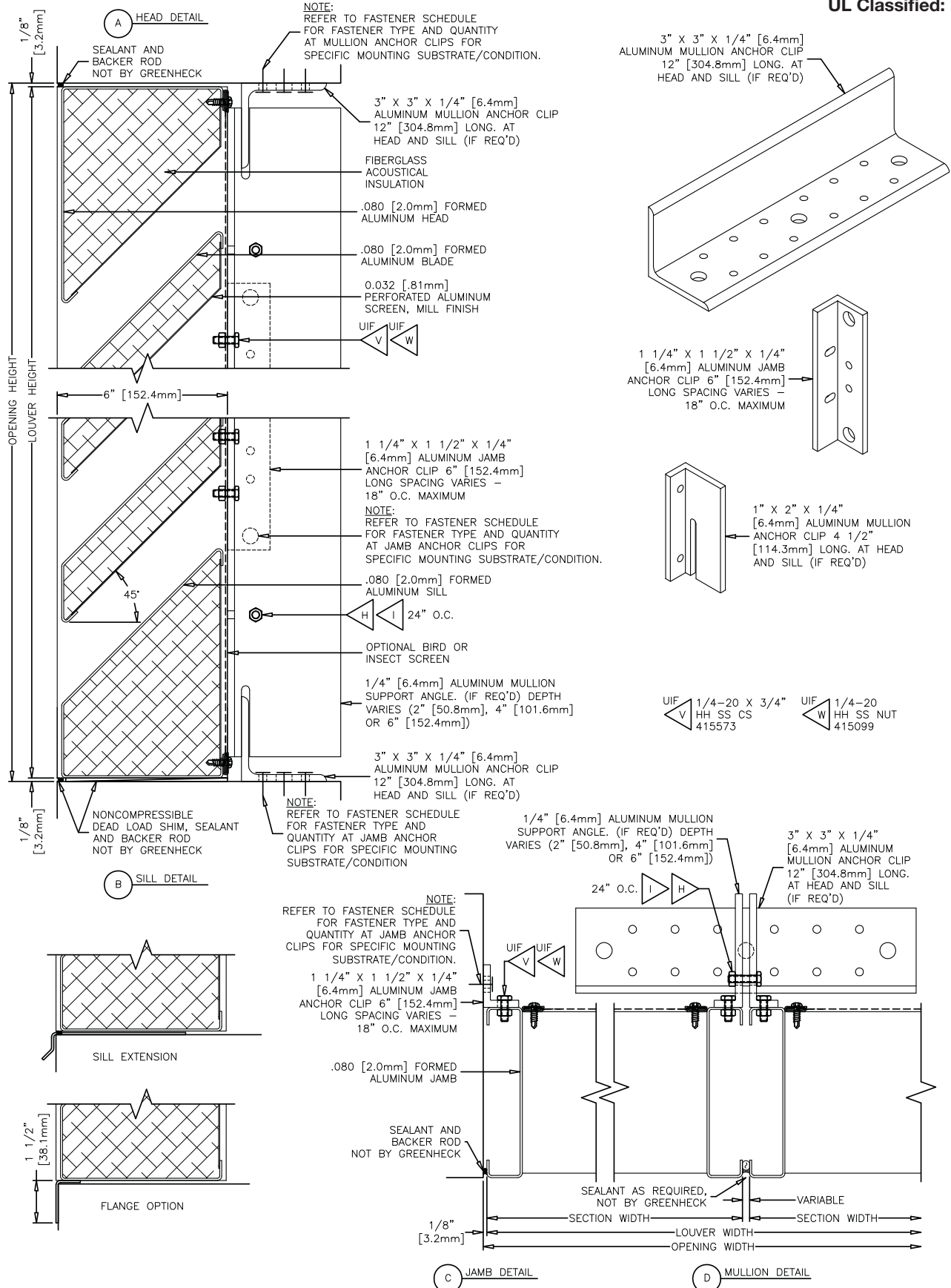
#### GENERAL NOTES:

- 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

# AFJ-601X

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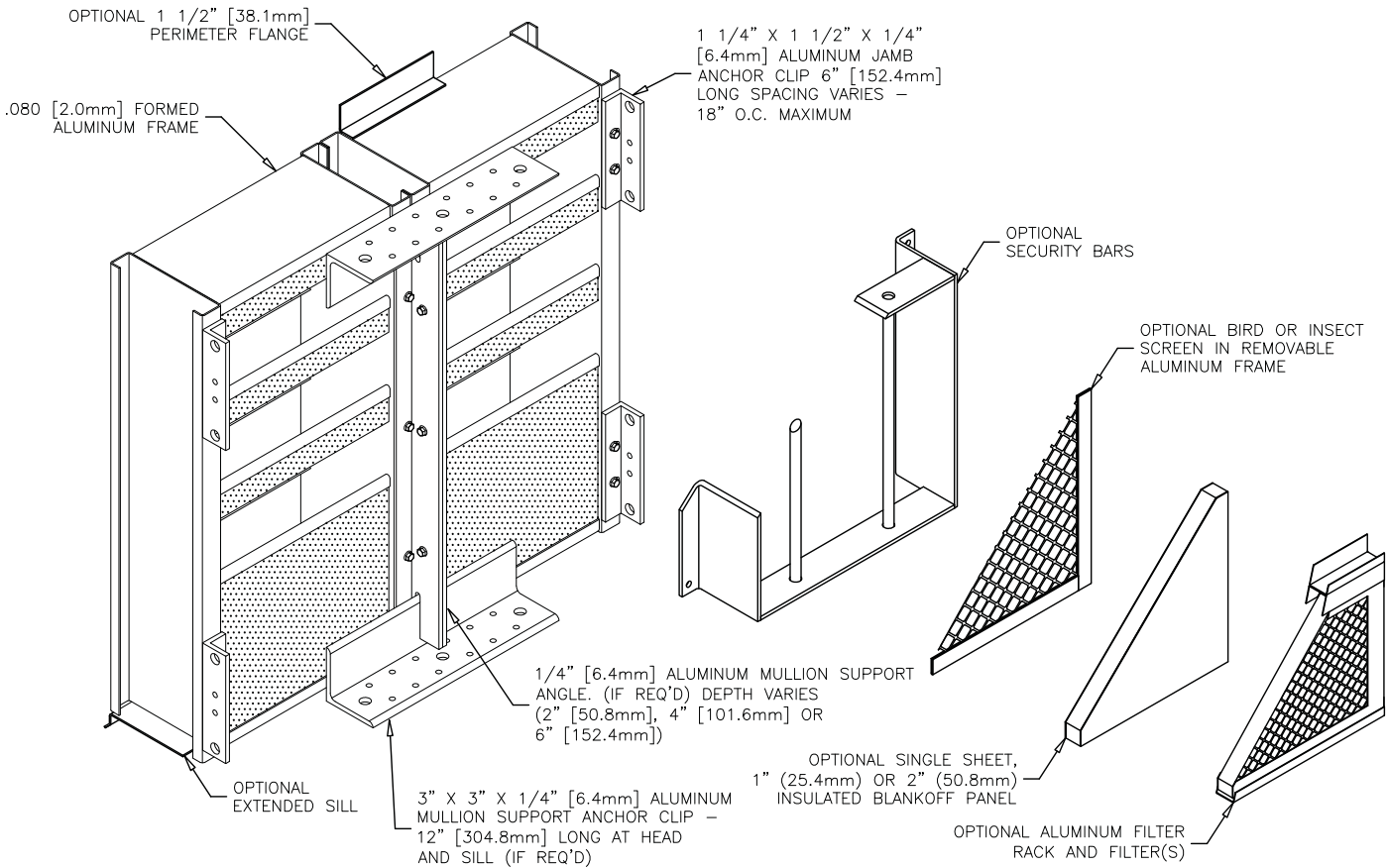


# OPTION DRAWINGS

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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®, 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.

