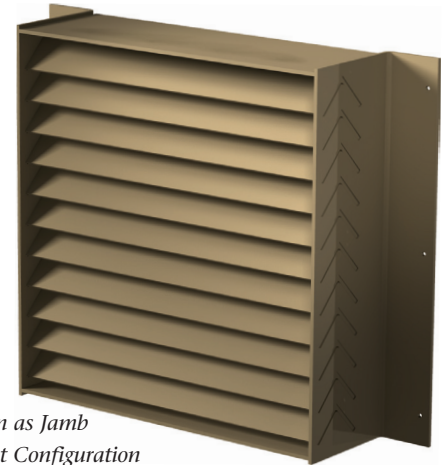


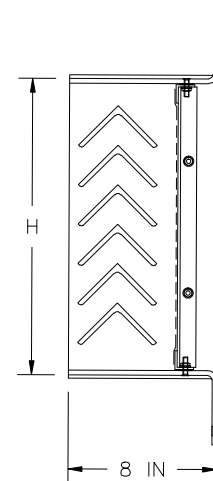


FABRICATED STEEL FEMA GRILLE

Visible Mullion Louver Type	AFG801
Material	Hot Rolled Steel
Stationary Blade	0.25 in. (6.35 mm)
Frame	0.25 in. (6.35 mm)
Louver Depth	8 in. (203.2 mm)
Free Area – 4 ft. x 4 ft. Unit	8.05 sq. ft. (0.75 m ²)
Percent Free Area	50.3%
Maximum Qualified Wind Design Load*	+/- 248 PSF (11.9 kPa)
Bird Screen	½ in. x 18 gauge expanded stainless steel
Construction	Welded
Options	
Finish	Liquid Urethane Paint 24 Standard Colors Only, 1 year warranty
	Powder Paint 24 Standard Colors Only, no warranty
Mounting	Flush/Recessed Deep Sleeve



*Shown as Jamb
Mount Configuration*



*Shown as Head & Sill
Mount Configuration*

RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules FEMA Louver Type AFG801 as designed and manufactured by The Airlite Company LLC, Schofield, Wisconsin. Louvers shall be UL Listed and complies with FEMA 320 and 361. Furnish louvers with bird screen, installation hardware and finishes as specified and as required for a complete installation.

SUBMITTALS

Manufacturer shall submit shop drawings incorporating key plans, elevations, sections and details showing profiles, angles and spacing of louver blades and frames; unit dimensions related to wall openings and construction; and, anchorage details and locations. For each type of product specified, submit free area, Provide samples of manufacturer's finish and color charts showing the standard colors available.

PRODUCTS

Louvers shall be FEMA Louver Type AFG801 with visible mullions and shall be UL Listed. Louvers shall be 8-inches (203 mm) deep and assembled entirely from hot rolled steel components. Blades and frames shall be 0.25-inch (6.35 mm) thick hot rolled steel. Blades shall be horizontal, inverted-V-type.

ALL-WELDED ASSEMBLY

Louver blades shall be joined to each jamb frame with two fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process. Each weld shall be a minimum of 1-inch (25.4 mm) in length with a minimum 1/8-inch (3.18 mm) leg. Frames shall be joined at each corner with a full-length GMAW fillet weld with a minimum 1/8-inch (3.18 mm) throat.

STRUCTURAL DESIGN CRITERIA

Manufacturer shall design and furnish all supports required to withstand a wind force of not less than 248 pounds per square foot and comply with FEMA 320 and 361 storm shelter and safe room standards (ICC 500) for debris impact. FEMA Grilles larger than 96-inches (244 cm) wide x 76-inches (193 cm) high or 76-inches (193 cm) wide x 120-inches (305 cm) high will be fabricated and installed in multiple sections. Louver blades, frames, mullions and anchorages shall be demonstrated to withstand the specified wind design load.

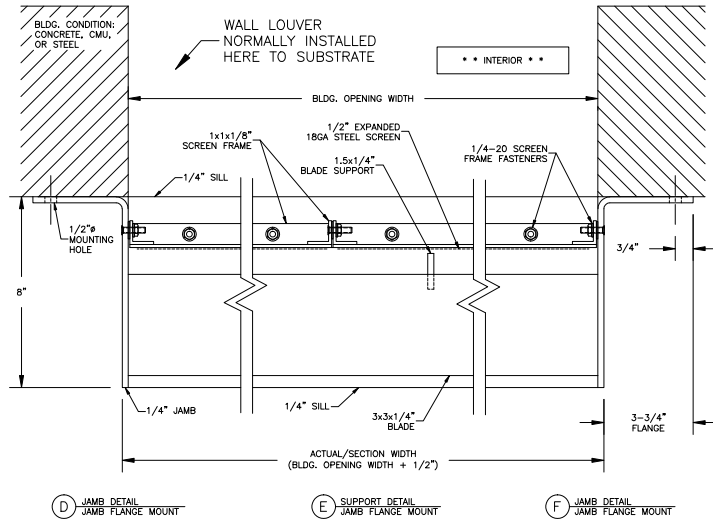
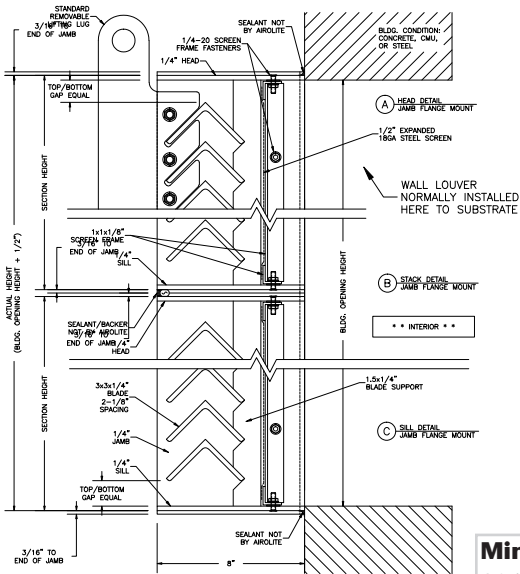
PERFORMANCE RATINGS

FREE AREA: 8.05 Square Feet (0.75 m²)

LOUVER TYPE AFG801 PRODUCT DESCRIPTION & DETAILS

AIROLITE LOUVER TYPE AFG801 is a 8-inch (203 mm) deep, severe duty fabricated steel grilled designed to protect exterior wall penetrations on FEMA 320 or 361 compliant storm shelters or safe rooms. Most frequently AFG801 is installed in front of wall louvers, but may be installed in front of any exterior wall penetration that requires protection. Design incorporates inverted V style blades which lend high free area and very little airflow resistance while providing maximum protection against extremely high wind loads and wind-borne debris. Louver Type AFG801 withstands wind loads up to 248 PSF and complies with FEMA 320 and 361 storm shelter and safe room standards (ICC 500) for debris impact, which simulates a 15 lb. 2 x 4 traveling at 100 MPH. Louver Type AFG801 is a UL Listed wind-storm rated assembly allowing the design professional to select and apply with confidence. Please contact your local Airolite representative or the factory for assistance with the layout or design of support systems when required.

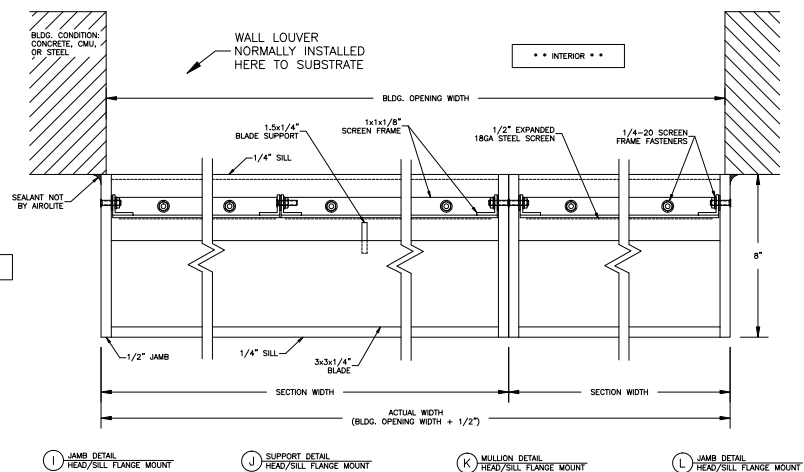
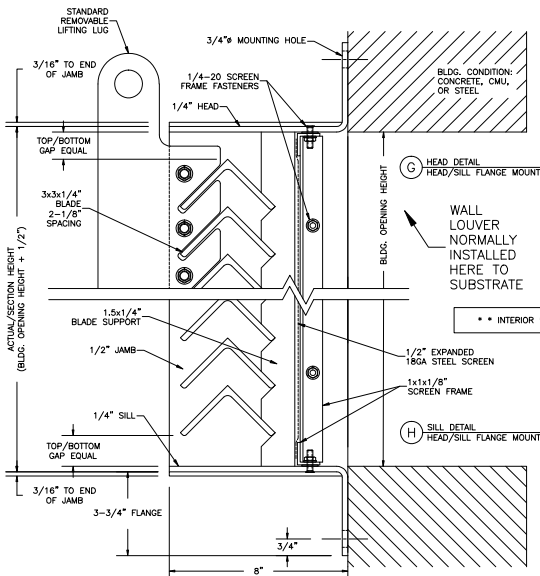
PRODUCT DETAILS - JAMB MOUNT



Minimum Section Size:
12 in. (30 cm) W x 9 in. (23 cm) H

Maximum Section Size:
96 in. (244 cm) W or 120 in. (305 cm) H
(one dimension limited to 76 in.)

PRODUCT DETAILS - HEAD & SILL MOUNT



Minimum Section Size:
12 in. (30 cm) W x 9 in. (23 cm) H

Maximum Section Size:
96 in. (244 cm) W or 120 in. (305 cm) H
(one dimension limited to 76 in.)

LOUVER TYPE AFG801 PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver Height Inches	Louver Width Inches																	
	12	24	30	36	42	48	54	60	66	72	76	84	90	96	102	108	116	120
12	0.36	0.81	1.04	1.26	1.49	1.72	1.94	2.17	2.40	2.62	2.77	3.08	3.30	3.53	3.75	3.98	4.28	4.43
18	0.52	1.19	1.52	1.85	2.18	2.51	2.84	3.17	3.50	3.83	4.05	4.49	4.82	5.16	5.49	5.82	6.26	6.48
24	0.77	1.75	2.23	2.72	3.21	3.70	4.18	4.67	5.16	5.65	5.97	6.62	7.11	7.60	8.08	8.57	9.22	9.55
30	1.02	2.31	2.95	3.60	4.24	4.88	5.53	6.17	6.82	7.46	7.89	8.75	9.39	10.04	10.68	11.33	12.18	12.61
36	1.27	2.87	3.67	4.47	5.27	6.07	6.87	7.67	8.47	9.27	9.81	10.88	11.68	12.48	13.28	14.08	15.15	15.68
42	1.52	3.43	4.39	5.35	6.30	7.26	8.22	9.17	10.13	11.09	11.73	13.00	13.96	14.92	15.88	16.83	18.11	18.75
48	1.68	3.80	4.87	5.93	6.99	8.05	9.11	10.18	11.24	12.30	13.01	14.42	15.48	16.55	17.61	18.67	20.08	20.79
54	1.93	4.37	5.58	6.80	8.02	9.24	10.46	11.68	12.89	14.11	14.93	16.55	17.77	18.99	20.20	21.42	23.05	23.86
60	2.18	4.93	6.30	7.68	9.05	10.43	11.80	13.18	14.55	15.93	16.84	18.68	20.05	21.43	22.80	24.18	26.01	26.93
66	2.43	5.49	7.02	8.55	10.08	11.61	13.15	14.68	16.21	17.74	18.76	20.80	22.34	23.87	25.40	26.93	28.97	29.99
72	2.67	6.05	7.74	9.43	11.11	12.80	14.49	16.18	17.87	19.56	20.68	22.93	24.62	26.31	28.00	29.69	31.94	33.06
76	2.84	6.42	8.22	10.01	11.80	13.59	15.39	17.18	18.97	20.77	21.96	24.35	26.14	27.94	29.73	31.52	33.91	35.11
84	3.09	6.98	8.93	10.88	12.83	14.78	16.73	18.68	20.63	22.58	23.88							
90	3.33	7.55	9.65	11.76	13.86	15.97	18.08	20.18	22.29	24.39	25.80							
96	3.58	8.11	10.37	12.63	14.90	17.16	19.42	21.68	23.95	26.21	27.72							
102	3.83	8.67	11.09	13.51	15.93	18.35	20.76	23.18	25.60	28.02	29.63							
108	4.08	9.23	11.81	14.38	16.96	19.53	22.11	24.68	27.26	29.84	31.55							
116	4.33	9.79	12.52	15.26	17.99	20.72	23.45	26.19	28.92	31.65	33.47							
120	4.49	10.17	13.00	15.84	18.68	21.51	24.35	27.19	30.02	32.86	34.75							

Anchor/Fastener Requirements-Jamb Mount

Substrate Type	Anchor/Fastener Type	Min. Edge Distance	Min. Embedment
Concrete (min. 3000 psi)	1/2 in. Red Head SS LDT	3.25 in.	2.5 in.
CMU (grout-filled, min. 1500 psi)	1/2 in. Red Head SS LDT	3.25 in.	2.5 in.
Steel (min. Fy 65,000 psi)	1/2 in. SS Bolt (tap or nut)	1.00 in.	0.25 in.

- Anchors or fasteners into building substrate are not supplied by Greenheck.
- Anchors or fasteners into building substrate are to be located on 12 in. centers or 9 in. centers if panels width exceeds 84 in.

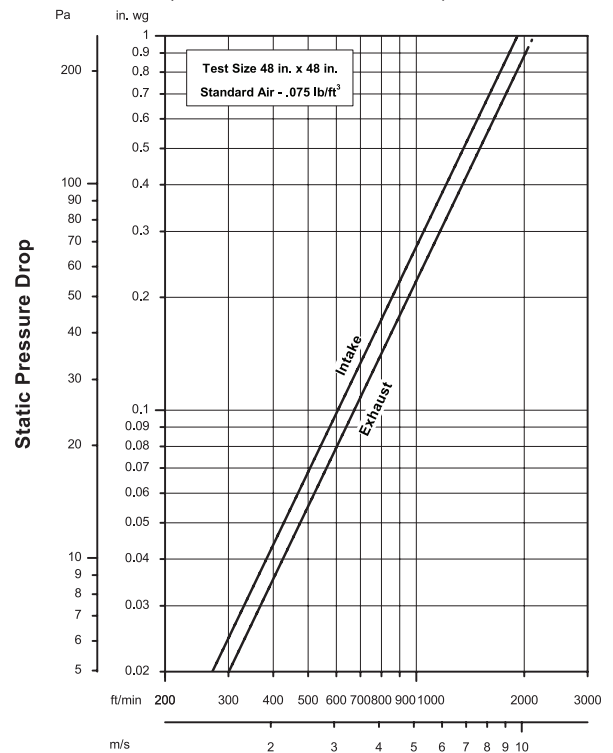
Anchor/Fastener Requirements-Head & Sill Mount

Substrate Type	Anchor/Fastener Type	Min. Edge Distance	Min. Embedment
Concrete (min. 3000 psi)	3/4 in. SS Thread Rod in Red Head C6 Epoxy	3.25 in.	6.75 in.
CMU (grout-filled, min. 1500 psi)	3/4 in. SS Thru Bolt & Plate Washer	3.25 in.	All
Steel (min. Fy 65,000 psi)	1/2 in. SS Bolt (tap or nut)	1.00 in.	0.25 in.

- Anchors or fasteners into building substrate are not supplied by Greenheck.
- Anchors or fasteners into building substrate are to be located on 24 in. centers or 18 in. centers if both width is greater than 60 in. AND height is greater than 76 in.

AIRFLOW RESISTANCE

(Standard Air - .075 lb./ft.³)



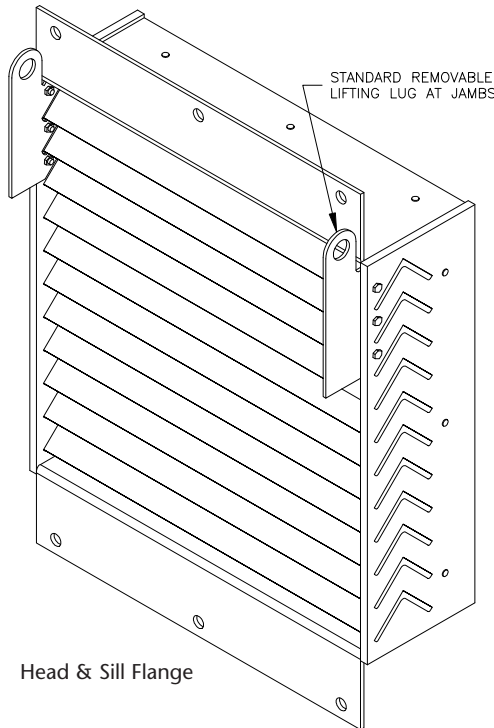
Free Air Velocity

Louver Type AFG801 resistance to airflow varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than the average velocity through the overall louver size.

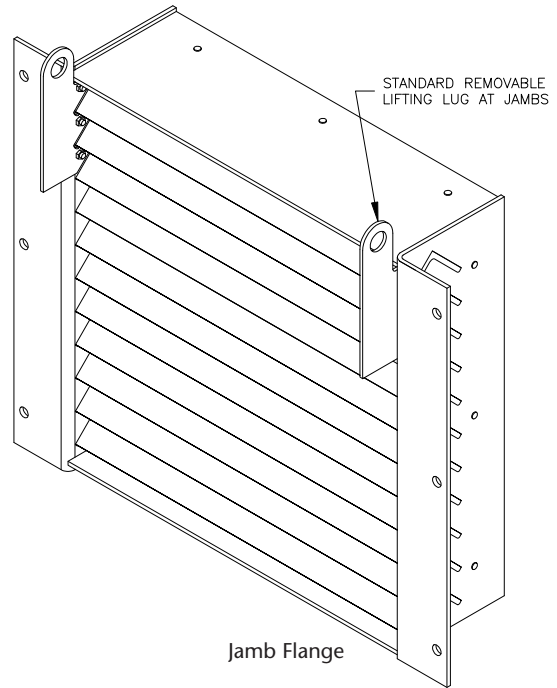
LOUVER TYPE AFG801 FLUSH MOUNT OPTIONS

FLUSH MOUNT OPTION

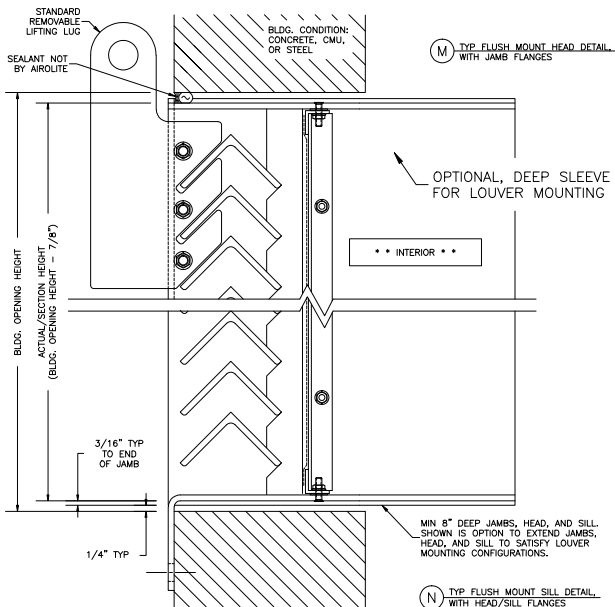
Airolite can also offer the AFG801FEMA louver in a recessed/flush mounting configuration should the standard cantilever style mount configuration not be suitable. The size restrictions and/or installation details referenced herein that pertain to the cantilever mounting configuration(s) are applicable for the recessed/flush mounting configuration. If desired, Airolite can also factory install nearly any Airolite louver model within the flush/recessed mount optional deep sleeve.



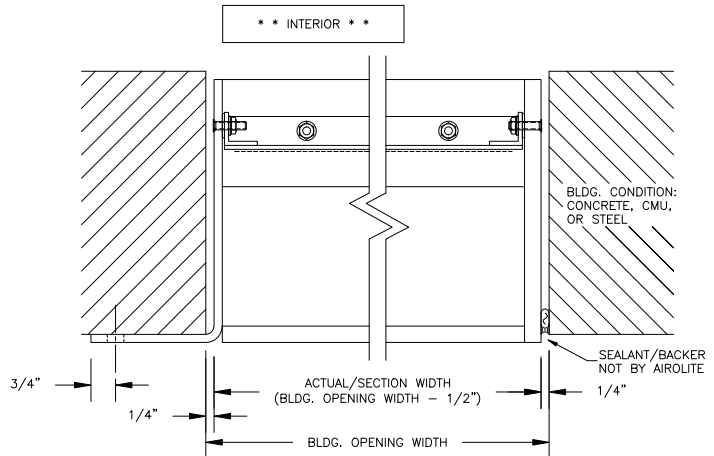
Head & Sill Flange



Jamb Flange



N TYP FLUSH MOUNT SILL DETAIL WITH HEAD/SILL FLANGES



P TYP FLUSH MOUNT JAMB DETAIL WITH JAMB FLANGES

Q TYP FLUSH MOUNT JAMB DETAIL WITH HEAD/SILL FLANGES



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