

**FEMA-5**  
**5" Deep Aluminum FEMA Louver/Grille**

**APPLICATION AND DESIGN**

The **FEMA-5** is a heavy duty, 5.5" [140mm] deep aluminum louver/grille designed to protect exterior wall openings against severe circumstances on FEMA 320 or 361 compliant safe rooms and storm shelters. Usually the FEMA-5 is mounted in front of wall louvers, but can be installed in front of exterior wall openings that require protection. Grille design consists of inverted "V" blades which provide high free area and relatively low pressure drop. The FEMA-5 provides the ultimate protection against high wind loads and wind-borne debris and is designed to comply with **FEMA 361 third edition, and ICC 500-2014** storm shelter and safe room standards. Model FEMA-5 is built to withstand wind loads of up to +/- **300 psf** and has 53% free area.

**STANDARD CONSTRUCTION**

**Frame:** 5.5" [140mm] deep x 0.25" [6.35mm] aluminum channel frame with blade braces placed at a maximum of 30" [762mm] on center.

**Blades:** 3" x 3" x .25" aluminum, welded in place [76.2mm x 76.2mm x 6.35mm]

**Screen:** 0.50" [1.27mm] x 18 ga. galvanized steel

**Finish:** Mill

**Minimum Size:** 12" [304.8mm] w x 12" h [304.8mm]

**Maximum Single Section Size:**

60" w [1524mm] x \*\*96" h [2286mm]

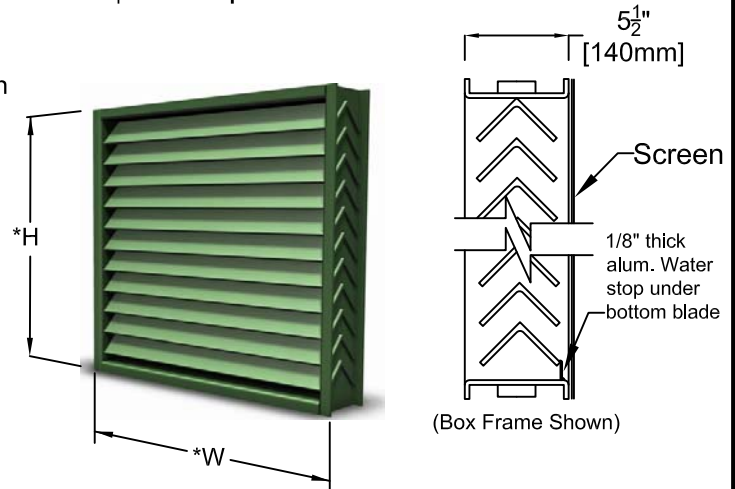
(Limited to 23 sq. ft. if powder coated or painted)

**Maximum Multi-Section Size:**

\*Unlimited multi-section width x \*\*96" h [2286mm]

**\*Note: Flanged frame louvers max. size: 60"w x 96"h (no multi-section)**

**\*\*Note: Box frame louvers over 60" in height require 8" deep jambs and blade braces (where applicable)**



The Model FEMA-5 complies with FEMA 361 and ICC 500 storm shelter and safe room standards.



UL File No. R27241

**OPTIONS**

Stainless Steel Screen

**AVAILABLE FINISHES:**

- Powder Polyester TGIC
- Powder Super durable polyester
- Acrylic baked enamel (ACRA-BOND® ULTRA)
- Kynar® (ALUM\*A\*STAR®)
- Kynar 500® or HYLAR® 5000 70% TRINAR®
- Kynar 500® or HYLAR® 5000 (70% Tri-Escent II)

- Clear coat available for all above finishes.
- Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
- Kynar® 500 is a registered trademark of Arkema.
- ALUM\*A\*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
- ACRA-BOND® ULTRA is a registered trademark of AkzoNobel

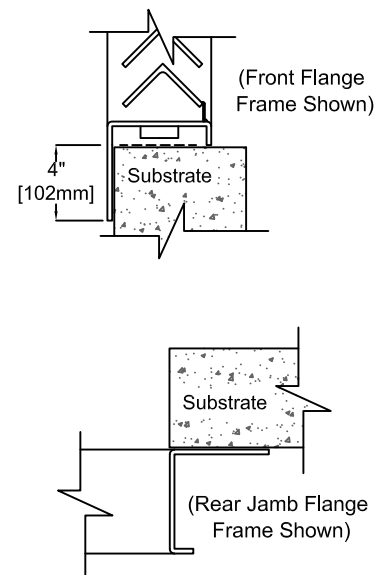
**SUBSTRATE (Select One)**

- Concrete
- Steel
- Wood
- Grout-Filled CMU (flanged frame only)

See Installation Instructions for specific details on fasteners mounting hardware.

**MOUNTING TYPE**

- BOX FRAME
  - HEAD/SILL ANGLES (STD.)
  - JAMB ANGLES
- 4" FLANGE FRAME
  - FRONT PERIMETER (STD.)
  - REAR JAMB ONLY



\*Dimensions are 1/4" [6.35mm] undersized (standard)

Job Name:	<input type="checkbox"/> <b>MODEL: FEMA-5</b>		
Location:	DRAWN BY: CLJ	DATE: 9-5-12	REV. DATE: 8-31-20
Architect:	REV. NO. 8	DWG. NO.: A-20	
Engineer:			
Contractor:			

## SUGGESTED SPECIFICATION

Finish and install FEMA-5 Louver as hereinafter specified where shown on plans or as described in schedules. Louver shall be impact tested in accordance with FEMA 361 third edition / ICC-500-2014 for Windstorm-rated Assemblies. These units shall ship as a completed assembly. Louver frame and blades are to be a minimum of 0.25" aluminum. Units are to have 18 ga steel expanded screen located behind the blades for added protection. The units are to ship from the factory with (specifier select type of finish desired) finish. Louver shall be by United Enertech, model FEMA-5.

## PERFORMANCE DATA

**FEMA-5 FREE AREA IN SQ. FT.**

Louver Height Inches	Width - Inches									Louver Height Inches
	12	18	24	30	36	42	48	54	60	
12	0.34	0.55	0.76	0.97	1.18	1.40	1.61	1.82	2.03	12
18	0.56	0.91	1.27	1.62	1.97	2.33	2.68	3.03	3.39	18
24	0.78	1.28	1.77	2.27	2.76	3.26	3.75	4.25	4.74	24
30	1.01	1.64	2.28	2.91	3.55	4.19	4.82	5.46	6.09	30
36	1.25	2.03	2.82	3.61	4.40	5.18	5.97	6.76	7.55	36
42	1.51	2.47	3.42	4.38	5.33	6.28	7.24	8.19	9.15	42
48	1.74	2.83	3.93	5.02	6.12	7.21	8.31	9.41	10.50	48
54	1.96	3.20	4.43	5.67	6.91	8.14	9.38	10.62	11.86	54
60	2.18	3.56	4.94	6.32	7.70	9.07	10.45	11.83	13.21	60
66	2.41	3.93	5.46	6.98	8.50	10.02	11.55	13.07	14.59	66
72	2.69	4.38	6.08	7.78	9.48	11.17	12.87	14.57	16.26	72
78	2.91	4.75	6.59	8.43	10.26	12.10	13.94	15.78	17.62	78
84	3.13	5.11	7.09	9.07	11.05	13.03	15.01	16.99	18.97	84
90	3.36	5.48	7.60	9.72	11.84	13.96	16.08	18.20	20.32	90
96	3.58	5.84	8.11	10.37	12.63	14.89	17.15	19.42	21.68	96

**PRESSURE DROP**

