# **MODEL 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 361-2021**, **and ICC 500-2023** 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 CONSTRUCTON

**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

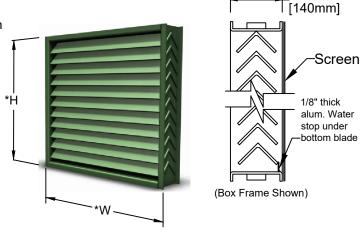
(no multi-section)

☐ Stainless Steel Screen

**OPTIONS** 

\*\*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** 

# SUBSTRATE (Select One)

☐ Concrete

☐ Steel

☐ Wood

 $\ \ \square$  Grout-Filled CMU (flanged frame only)

See Installation Instructions for specific details on fasteners mounting hardware.

# (Front Flange Frame Shown) Substrate

# AVAILABLE FINISHES:

☐ Durable Polyester (AAMA 2604)

☐ 70% PVDF Fluoropolymer (AAMA 2605)

### **MOUNTING TYPE**

□ BOX FRAME

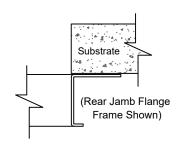
☐ HEAD/SILL ANGLES (STD.)

☐ JAMB ANGLES

☐ 4" FLANGE FRAME

☐ FRONT PERIMETER (STD.)

☐ REAR JAMB ONLY



\*Dimensions are  $\frac{1}{4}$ " [6.35mm] undersized (standard)



Due to continuing research, United Enertech reserves the right to change specifications without notice.

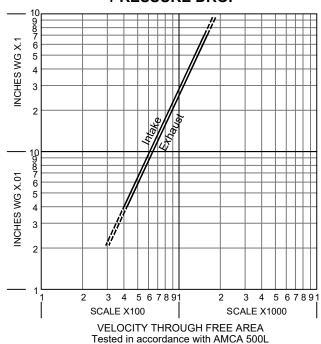
# SUGGESTED SPECIFICATION

Funish 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 361-2021/ ICC-500-2023 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	Width - Inches									Louver
Height - Inches	Height Inches										Height
		12	18	24	30	36	42	48	54	60	Inches
	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



# Beginning point of WATER PENETRATION is 677 fpm

the maximum recommended FREE AREA VELOCITY

