

FIXED LOUVER 4"

APPLICATION AND FEATURES

The MODEL EL-D-4 is a weather louver designed to protect the outside opening in building exterior walls. These louvers may be used for exhaust or intake air.

Standard Construction:

Frame: .081 Extruded Aluminum, 4-1/8" Deep

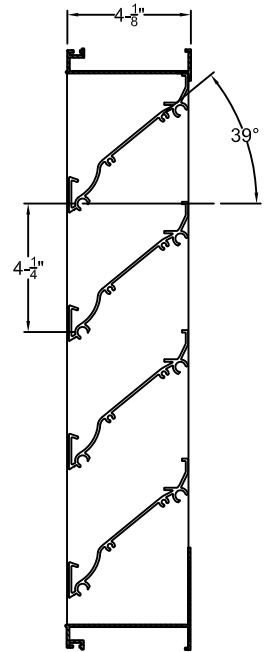
Blade: .081 Extruded Aluminum positioned on a 39° angle on approximately 4.25" centers

Birdscreen: 3/4" x .051" Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building.

Finish: Mill Aluminum (Std.)

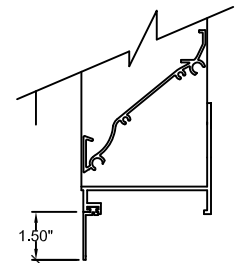
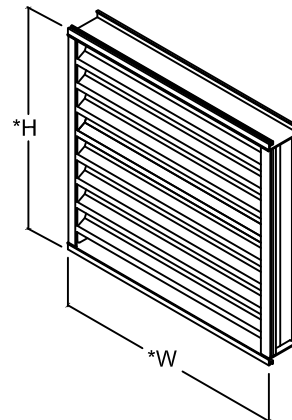
Minimum Size: 12 x 12

Maximum Single Section: 120"w x 84"h or 84"w x 120"h

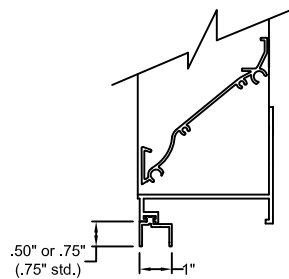


Options:

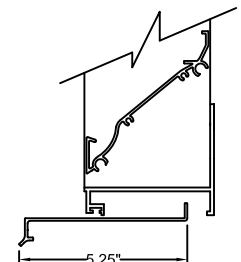
- Flanged Frame (1-1/2" std.)
- Custom Flange (1", 2", or 3")
- Glazing Adapter (1/2" or 3/4")
- Extended Sill
- Insect Screen
- Filter Racks
- Security Bars
- Hinged Sub Frame
- Welded Const. (wind load 50 p.s.f.)



OPTIONAL FLANGE



OPTIONAL GLAZING ADAPTER



OPTIONAL EXTENDED SILL

*Width and Height dimensions are approximately 1/4" under listed size

Finishes:

- Clear Anodize
- Integral Color Anodize
- Baked Powder Polyester
- Baked Powder Fluoropolymer 70%
- Baked Powder Clear Coat

Job Name:	<input type="checkbox"/> MODEL EL-D-4		
Location:			
Architect:	DRAWN BY: SB	DATE: June 2009	REV. DATE: 7-7-10
Engineer:	REV. NO. 2	APPROVED BY: SDC	DWG. NO.: E-1d
Contractor:			

Louver Selection and Application

EL-D-4 FREE AREA IN SQ. FT.

Louver Height Inches	Width - Inches																		Louver Height Inches	
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114		120
12	0.26	0.41	0.57	0.73	0.89	1.05	1.20	1.36	1.52	1.68	1.83	1.99	2.15	2.31	2.47	2.62	2.78	2.94	3.10	12
18	0.45	0.73	1.01	1.28	1.56	1.84	2.11	2.39	2.67	2.95	3.22	3.50	3.78	4.05	4.33	4.61	4.89	5.16	5.44	18
24	0.71	1.14	1.57	2.01	2.44	2.88	3.31	3.75	4.18	4.61	5.05	5.48	5.92	6.35	6.79	7.22	7.65	8.09	8.52	24
30	0.99	1.60	2.21	2.82	3.43	4.04	4.65	5.26	5.87	6.48	7.09	7.70	8.31	8.92	9.53	10.14	10.75	11.36	11.97	30
36	1.17	1.89	2.61	3.33	4.05	4.77	5.49	6.21	6.93	7.65	8.37	9.09	9.81	10.53	11.25	11.97	12.69	13.41	14.13	36
42	1.44	2.33	3.21	4.10	4.99	5.87	6.76	7.65	8.53	9.42	10.31	11.19	12.08	12.96	13.85	14.74	15.62	16.51	17.40	42
48	1.63	2.63	3.64	4.64	5.64	6.65	7.65	8.65	9.66	10.66	11.66	12.67	13.67	14.67	15.68	16.68	17.68	18.69	19.69	48
54	1.89	3.05	4.22	5.38	6.54	7.71	8.87	10.03	11.19	12.36	13.52	14.68	15.85	17.01	18.17	19.34	20.50	21.66	22.83	54
60	2.00	3.23	4.46	5.70	6.93	8.16	9.39	10.62	11.85	13.08	14.32	15.55	16.78	18.01	19.24	20.47	21.71	22.94	24.17	60
66	2.17	3.50	4.84	6.17	7.50	8.84	10.17	11.51	12.84	14.18	15.51	16.84	18.18	19.51	20.85	22.18	23.51	24.85	26.18	66
72	2.62	4.24	5.86	7.47	9.09	10.70	12.32	13.93	15.55	17.16	18.78	20.39	22.01	23.62	25.24	26.85	28.47	30.08	31.70	72
78	2.80	4.52	6.24	7.96	9.69	11.41	13.13	14.85	16.57	18.30	20.02	21.74	23.46	25.18	26.90	28.63	30.35	32.07	33.79	78
84	3.07	4.97	6.86	8.75	10.64	12.53	14.43	16.32	18.21	20.10	21.99	23.88	25.78	27.67	29.56	31.45	33.34	35.24	37.13	84
90	3.26	5.26	7.27	9.28	11.28	13.29	15.29	17.30	19.30	21.31	23.31	25.32	27.32	29.33	31.34	33.34	35.35	37.35	39.36	90
96	3.52	5.69	7.86	10.03	12.20	14.37	16.53	18.70	20.87	23.04	25.21	27.38	29.55	31.71	33.88	36.05	38.22	40.39	42.56	96
102	3.81	6.15	8.50	10.84	13.19	15.53	17.87	20.22	22.56	24.91	27.25	29.59	31.94	34.28	36.63	38.97	41.31	43.66	46.00	102
108	3.98	6.43	8.88	11.32	13.77	16.22	18.67	21.12	23.57	26.02	28.46	30.91	33.36	35.81	38.26	40.71	43.15	45.60	48.05	108
114	4.26	6.88	9.50	12.12	14.74	17.36	19.98	22.60	25.22	27.84	30.47	33.09	35.71	38.33	40.95	43.57	46.19	48.81	51.43	114
120	4.44	7.17	9.90	12.64	15.37	18.10	20.83	23.57	26.30	29.03	31.76	34.49	37.23	39.96	42.69	45.42	48.16	50.89	53.62	120

EL-D-4 Selection and Examples

Example 1:

Airflow given as 10,000 cfm - select louver size

A. Determine louver free area by dividing airflow by free area velocity (do not exceed 1125 fpm on intake louver application).

$$10,000 \text{ cfm} / 1125 \text{ fpm} = 8.89 \text{ sq.ft.}$$

$$\text{Airflow} / \text{Velocity} = \text{Free Area}$$

B. Select a louver size with at least the required free area from the chart above (8.89 sq.ft.).

90" wide x 30" high EL-D-4 louver = 8.92 sq.ft.
(other selections available, see chart above)

Example 2:

Louver size given as 48" wide x 48" high, determine max airflow.

A. Use free area chart to determine free area

$$48" \times 48" = 7.65 \text{ sq.ft.}$$

B. Multiply free area by velocity (do not exceed 1125 fpm on intake louver applications).

$$7.65 \text{ sq.ft.} \times 1125 \text{ fpm} = 8,606 \text{ cfm}$$

$$\text{Free Area} \times \text{Max. Free Area Velocity} = \text{Max. Airflow}$$