

ELM90HFA ADJUSTABLE LOUVER EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

6" (152) deep, 6063T6 extruded aluminum with .125" (3.2) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T6 extruded aluminum with .081" (2.1) nominal wall thickness. J-style blades are adjustable to 90° angle. Blade spacing is approximately 5" (127) center to center.

SCREEN

1/2" x .063" (13 x 1.6) aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

BEARINGS

Stainless steel sleeve pressed into frame.

AXLES

1/2" (13) plated steel hex.

FINISH

Mill.

LINKAGE

Concealed in frame.

ACTUATOR

Locking louver quadrant.

MINIMUM SIZE

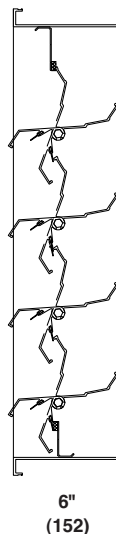
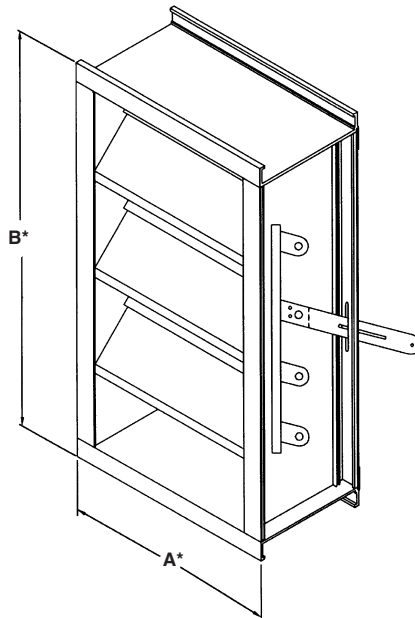
12"w x 16"h (305 x 406).

APPROXIMATE SHIPPING WEIGHT

4.5 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

60" x 96" (1524 x 2438) without seals. Louvers with jamb and optional blade seals shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.



FEATURES

The ELM90HFA offers:

- 74% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Low torque operation and architecturally pleasing appearance with low leakage performance.
- Hexagonal shaped axles assure positive blade alignment and low operating torque.
- Concealed blade linkage is protected from weather exposure and reduces required installation depth.
- Blade and jamb seal options provide tight blade-to-blade and blade-to-frame closure, allowing less than 4 cfm per sq. ft. at 1/2" pressure differential.

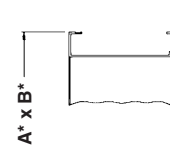
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

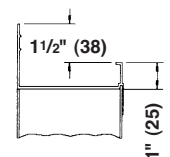
- Extended sill
- Front or rear security bars
- A variety of bird and insect screens
- Filter racks
- Selection of finishes: prime coat, 50% PVDF, 70% PVDF, epoxy, Pearledize 50 & 70, clear and color anodize. (Variation is possible with anodize colors.)
- Blade edge seals.
- Manual, electric or pneumatic actuators.

Consult Ruskin for other special requirements.

FRAME CONSTRUCTION



STANDARD



INTEGRAL
FLANGE

Dimensions in inches, parenthesis () indicate millimeters.

Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH/ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

FREE AREA GUIDE

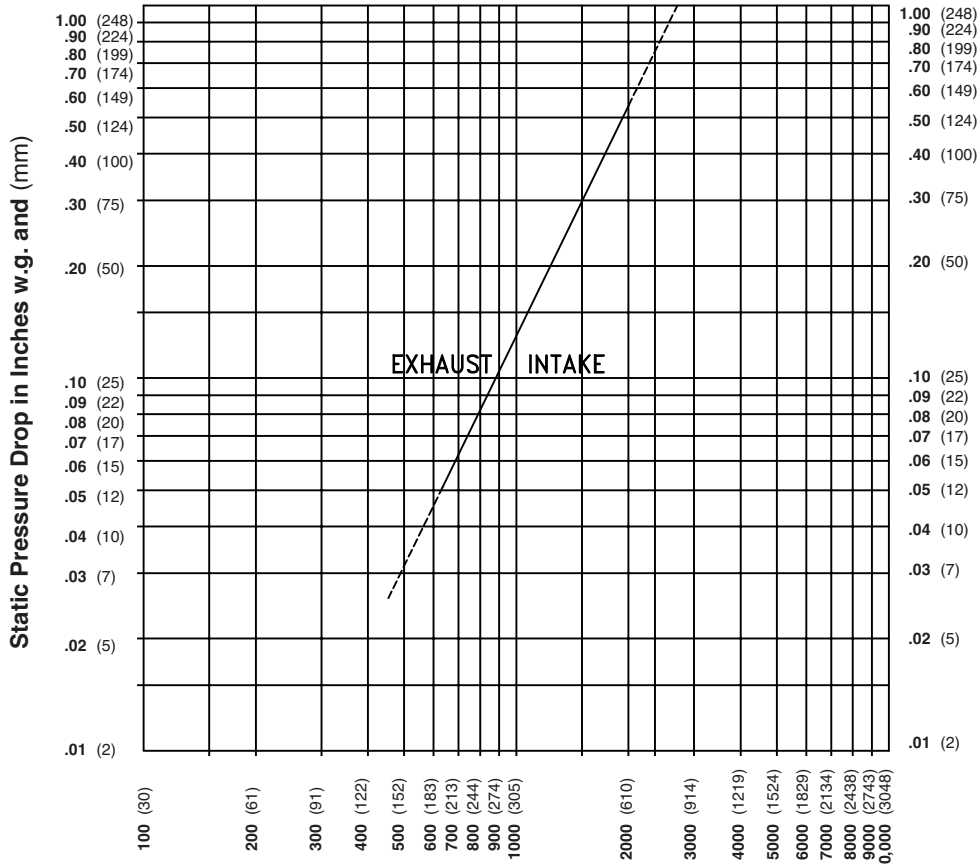
Free Area Guide shows free area in ft² and m² for various sizes of ELM90HFA.

Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.43	0.68	0.94	1.19	1.45	1.71	1.96	2.22	2.47	2.65	2.90	3.16	3.41	3.67	3.93	4.18	4.44	4.69	4.95
0.30	0.04	0.06	0.09	0.11	0.13	0.16	0.18	0.21	0.23	0.25	0.27	0.29	0.32	0.34	0.37	0.39	0.41	0.44	0.46
18	0.76	1.22	1.68	2.14	2.59	3.05	3.51	3.97	4.43	4.73	5.19	5.65	6.10	6.56	7.02	7.48	7.94	8.39	8.85
0.46	0.07	0.11	0.16	0.20	0.24	0.28	0.33	0.37	0.41	0.44	0.48	0.53	0.57	0.61	0.65	0.70	0.74	0.78	0.82
24	1.14	1.82	2.51	3.19	3.87	4.56	5.24	5.92	6.61	7.06	7.75	8.43	9.11	9.80	10.48	11.16	11.85	12.53	13.21
0.61	0.11	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.61	0.66	0.72	0.78	0.85	0.91	0.97	1.04	1.10	1.17	1.23
30	1.52	2.42	3.33	4.24	5.15	6.06	6.97	7.88	8.79	9.39	10.30	11.21	12.12	13.03	13.94	14.85	15.76	16.67	17.58
0.76	0.14	0.23	0.31	0.39	0.48	0.56	0.65	0.73	0.82	0.87	0.96	1.04	1.13	1.21	1.30	1.38	1.47	1.55	1.63
36	1.83	2.93	4.02	5.12	6.22	7.32	8.41	9.51	10.61	11.34	12.44	13.53	14.63	15.73	16.83	17.92	19.02	20.12	21.22
0.91	0.17	0.27	0.37	0.48	0.58	0.68	0.78	0.88	0.99	1.05	1.16	1.26	1.36	1.46	1.56	1.67	1.77	1.87	1.97
42	2.24	3.59	4.94	6.29	7.63	8.98	10.33	11.67	13.02	13.92	15.27	16.61	17.96	19.31	20.65	22.00	23.35	24.69	26.04
1.07	0.21	0.33	0.46	0.58	0.71	0.84	0.96	1.09	1.21	1.29	1.42	1.55	1.67	1.80	1.92	2.05	2.17	2.30	2.42
48	2.58	4.13	5.68	7.23	8.78	10.33	11.87	13.42	14.97	16.00	17.55	19.10	20.65	22.20	23.75	25.30	26.85	28.39	29.94
1.22	0.24	0.38	0.53	0.67	0.82	0.96	1.10	1.25	1.39	1.49	1.63	1.78	1.92	2.06	2.21	2.35	2.50	2.64	2.78
54	2.96	4.73	6.51	8.28	10.06	11.83	13.60	15.38	17.15	18.34	20.11	21.88	23.66	25.43	27.21	28.98	30.76	32.53	34.31
1.37	0.28	0.44	0.61	0.77	0.94	1.10	1.27	1.43	1.60	1.71	1.87	2.04	2.20	2.37	2.53	2.70	2.86	3.03	3.19
60	3.33	5.33	7.33	9.33	11.33	13.33	15.33	17.33	19.33	20.67	22.67	24.67	26.67	28.67	30.67	32.67	34.67	36.67	38.67
1.52	0.31	0.50	0.68	0.87	1.05	1.24	1.43	1.61	1.80	1.92	2.11	2.29	2.48	2.67	2.85	3.04	3.22	3.41	3.60
66	3.65	5.84	8.02	10.21	12.40	14.59	16.78	18.97	21.15	22.61	24.80	26.99	29.18	31.37	33.56	35.74	37.93	40.12	42.31
1.68	0.34	0.54	0.75	0.95	1.15	1.36	1.56	1.76	1.97	2.10	2.31	2.51	2.71	2.92	3.12	3.32	3.53	3.73	3.93
72	4.06	6.50	8.94	11.38	13.82	16.25	18.69	21.13	23.57	25.19	27.63	30.07	32.51	34.94	37.38	39.82	42.26	44.70	47.13
1.83	0.38	0.60	0.83	1.06	1.28	1.51	1.74	1.97	2.19	2.34	2.57	2.80	3.02	3.25	3.48	3.70	3.93	4.16	4.38
78	4.40	7.04	9.68	12.32	14.96	17.60	20.24	22.88	25.52	27.28	29.92	32.56	35.20	37.84	40.48	43.12	45.76	48.40	51.04
1.98	0.41	0.65	0.90	1.15	1.39	1.64	1.88	2.13	2.37	2.54	2.78	3.03	3.27	3.52	3.76	4.01	4.26	4.50	4.75
84	4.78	7.64	10.51	13.37	16.24	19.10	21.97	24.83	27.70	29.61	32.47	35.34	38.21	41.07	43.94	46.80	49.67	52.53	55.40
2.13	0.44	0.71	0.98	1.24	1.51	1.78	2.04	2.31	2.58	2.75	3.02	3.29	3.55	3.82	4.09	4.35	4.62	4.89	5.15
90	5.15	8.24	11.33	14.43	17.52	20.61	23.70	26.79	29.88	31.94	35.03	38.12	41.21	44.31	47.40	50.49	53.58	56.67	59.76
2.29	0.48	0.77	1.05	1.34	1.63	1.92	2.20	2.49	2.78	2.97	3.26	3.55	3.83	4.12	4.41	4.70	4.98	5.27	5.56
96	5.47	8.75	12.02	15.30	18.58	21.86	25.14	28.42	31.70	33.89	37.17	40.45	43.73	47.00	50.28	53.56	56.84	60.12	63.40
2.44	0.51	0.81	1.12	1.42	1.73	2.03	2.34	2.64	2.95	3.15	3.46	3.76	4.07	4.37	4.68	4.98	5.29	5.59	5.90

PRESSURE DROP



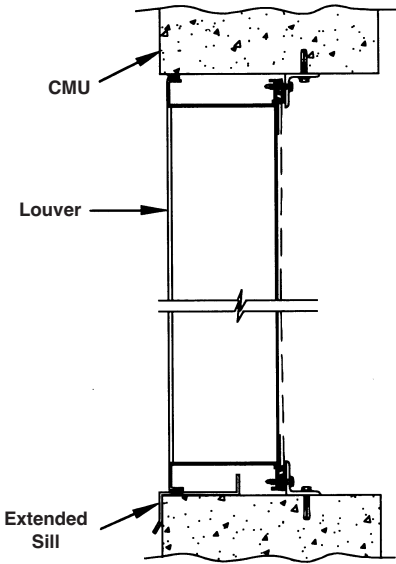
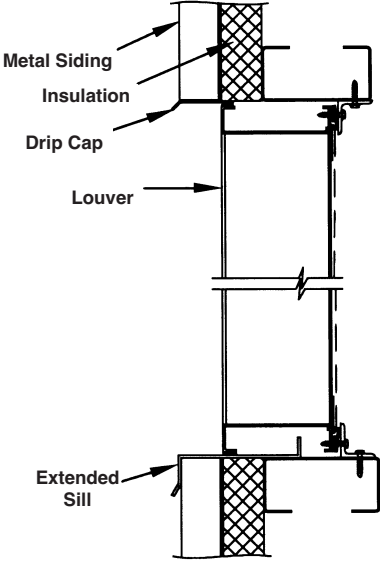
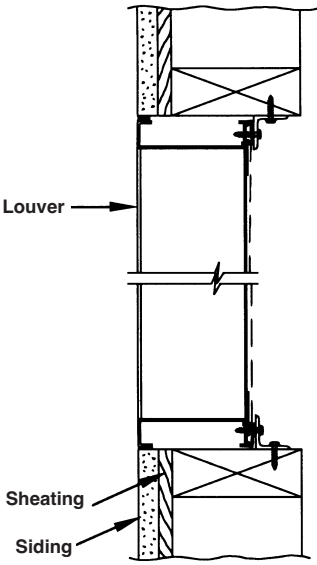
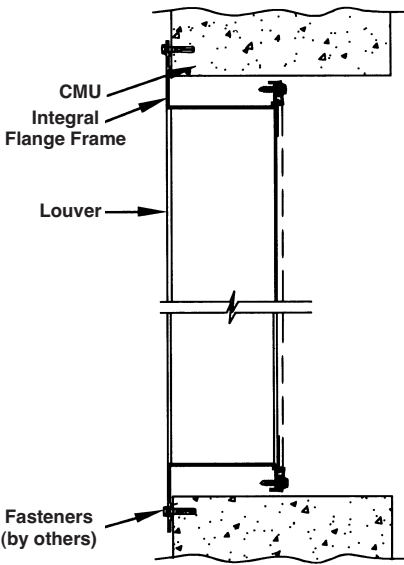
Ruskin Company certifies that the ELM90HFA louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings.

Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area

(Data corrected to standard air density and AMCA figure or figures tested to 5.5)

TYPICAL INSTALLATION DETAILS

Masonry Wall 	Metal Panel Wall 
Wood Installation 	Flange Mount 

Accessories at additional cost.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be adjustable type entirely contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 5 ft. (1530) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa, equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Ruskin Model ELM90HFA 6063T6 extruded aluminum alloy construction as follows:

Frame: .125" (3.2) extruded aluminum (ELM90HFA).

Blades: .081" (2.1) wall thickness.

Screen: 1/2" x .063" (13 x 1.6) aluminum bird screen in removable frame.

Finish: Select finish specification from Ruskin Finishes Brochure.