

## ELF211D DRAINABLE THIN LINE STATIONARY LOUVER EXTRUDED ALUMINUM

### STANDARD CONSTRUCTION

#### FRAME

2" (51) deep 6063T5 extruded aluminum, .060" (1.5) nominal wall thickness. Downspouts and caulking surfaces provided.

#### BLADES

6063T5 extruded aluminum, .060" (1.5) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 27/16" (62) center to center.

#### SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

#### FINISH

Mill.

#### MINIMUM SIZE

6"w x 10"h (152 x 254).

#### APPROXIMATE SHIPPING WEIGHT

2 lbs. per sq. ft. (9.8 kg/m<sup>2</sup>).

#### MAXIMUM FACTORY ASSEMBLY SIZE

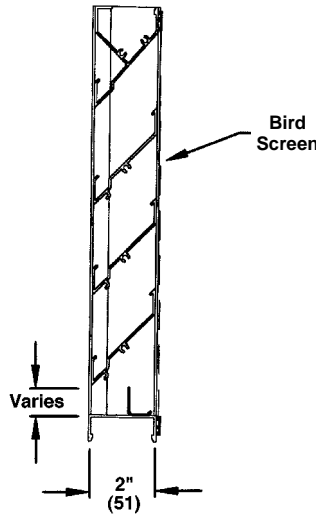
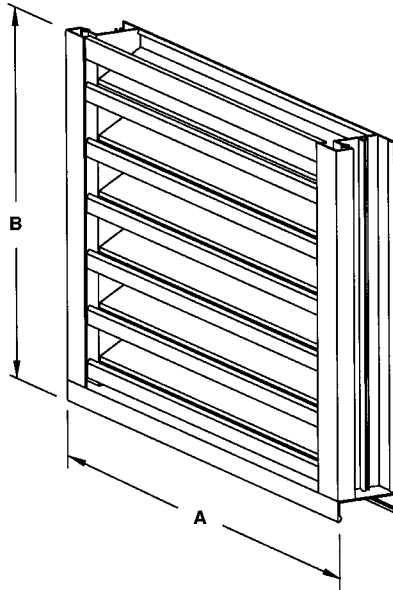
Shall be 75 sq. ft. (7m<sup>2</sup>) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

#### SUPPORTS

Louvers may be provided with rear mounted Hidden Vertical Blade Supports that increase overall louver depth depending on louver size, assembly configuration or wind-load.

Consult Ruskin for additional information.



### FEATURES

The ELF211D offers:

- 38% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled, hidden mullions allowing continuous blade appearance up to 120" (3048).
- All aluminum construction for low maintenance and high resistance to corrosion.

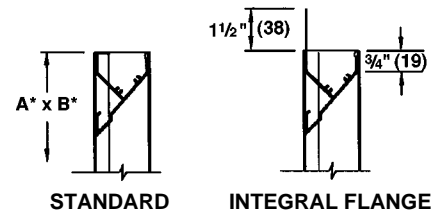
### VARIATIONS

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

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Ruskin for other special requirements.

### FRAME CONSTRUCTION



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		

# SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type. Louvers shall have a minimum of 38% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 2" (51) frame. Louver components (heads, jambs, sills, blades, and 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 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 ELF211D extruded 6063T5 aluminum alloy construction as follows:

Frame: 2" (51) deep .060" (1.5) wall thickness.

Blades: .060" (1.5) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 3<sup>3</sup>/<sub>16</sub>" (81) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Ruskin/Valspar Finishes Brochure.

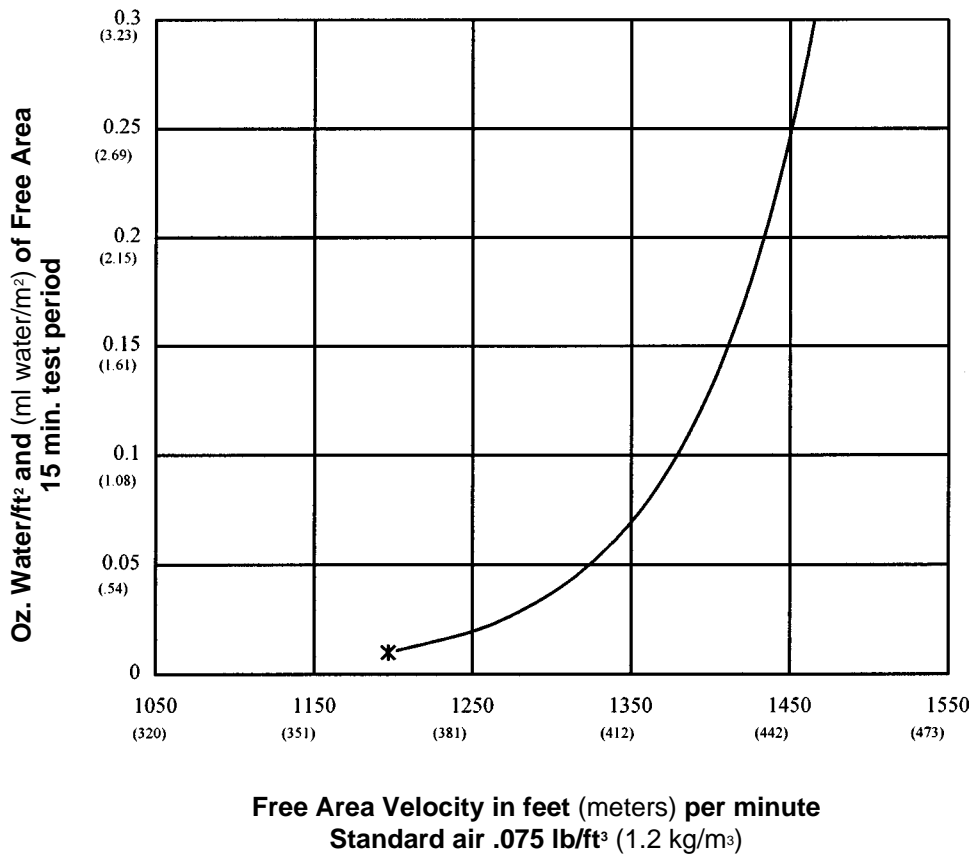
Published louver performance data derived from testing in accordance with AMCA 500 for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Ruskin model specified.

# PERFORMANCE DATA

## WATER PENETRATION

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1197 fpm (365 m/min).



Ruskin Company certifies that the 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 and water penetration ratings only.

# FREE AREA GUIDE

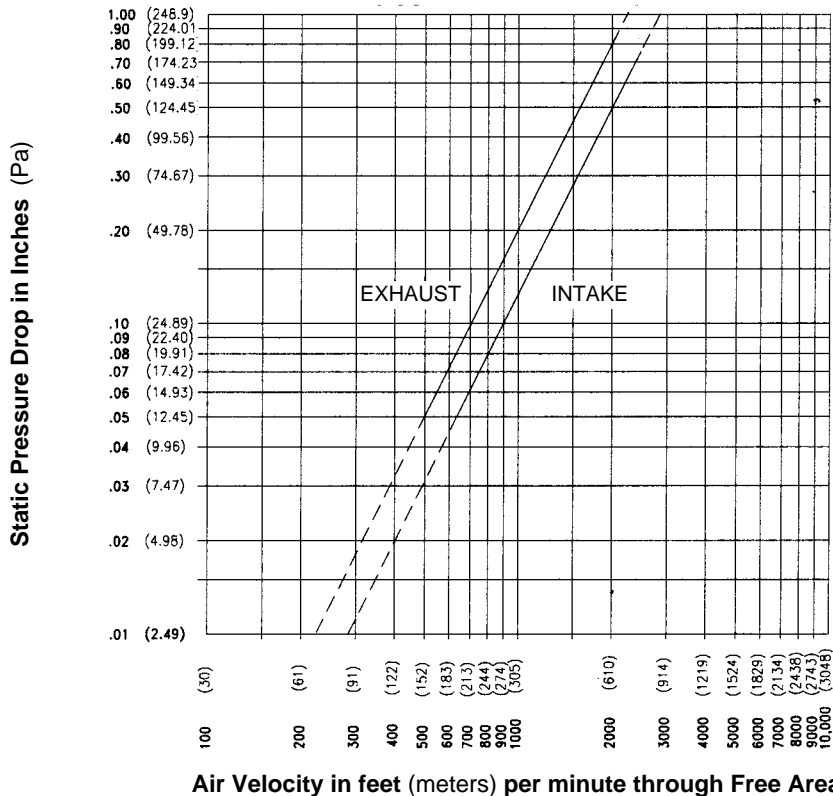
Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of ELF211D.

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	0.30	0.47	0.65	0.82	0.99	1.16	1.33	1.51	1.68	1.85	2.02	2.19	2.37	2.54	2.71	2.88	3.05	3.23	3.40
0.30	0.03	0.04	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.17	0.19	0.20	0.22	0.24	0.25	0.27	0.28	0.30	0.32
18	0.53	0.84	1.14	1.45	1.75	2.05	2.36	2.66	2.97	3.27	3.58	3.88	4.18	4.49	4.79	5.10	5.40	5.71	6.01
0.46	0.05	0.08	0.11	0.13	0.16	0.19	0.22	0.25	0.28	0.30	0.33	0.36	0.39	0.42	0.45	0.47	0.50	0.53	0.56
24	0.66	1.04	1.42	1.79	2.17	2.55	2.93	3.31	3.68	4.06	4.44	4.82	5.19	5.57	5.95	6.33	6.71	7.08	7.46
0.61	0.06	0.10	0.13	0.17	0.20	0.24	0.27	0.31	0.34	0.38	0.41	0.45	0.48	0.52	0.55	0.59	0.62	0.66	0.69
30	0.89	1.40	1.91	2.42	2.93	3.44	3.95	4.46	4.97	5.48	5.99	6.50	7.01	7.52	8.03	8.54	9.05	9.56	10.07
0.76	0.08	0.13	0.18	0.23	0.27	0.32	0.37	0.42	0.46	0.51	0.56	0.60	0.65	0.70	0.75	0.79	0.84	0.89	0.94
36	1.02	1.60	2.19	2.77	3.36	3.94	4.52	5.11	5.69	6.27	6.86	7.44	8.02	8.61	9.19	9.77	10.36	10.94	11.52
0.91	0.09	0.15	0.20	0.26	0.31	0.37	0.42	0.47	0.53	0.58	0.64	0.69	0.75	0.80	0.85	0.91	0.96	1.02	1.07
42	1.25	1.97	2.68	3.40	4.12	4.83	5.55	6.26	6.98	7.70	8.41	9.13	9.84	10.56	11.27	11.99	12.71	13.42	14.14
1.07	0.12	0.18	0.25	0.32	0.38	0.45	0.52	0.58	0.65	0.72	0.78	0.85	0.92	0.98	1.05	1.12	1.18	1.25	1.31
48	1.38	2.17	2.96	3.75	4.54	5.33	6.12	6.91	7.70	8.48	9.27	10.06	10.85	11.64	12.43	13.22	14.01	14.80	15.59
1.22	0.13	0.20	0.28	0.35	0.42	0.50	0.57	0.64	0.72	0.79	0.86	0.94	1.01	1.08	1.16	1.23	1.30	1.38	1.45
54	1.61	2.53	3.46	4.38	5.30	6.22	7.14	8.06	8.99	9.91	10.83	11.75	12.67	13.59	14.51	15.44	16.36	17.28	18.20
1.37	0.15	0.24	0.32	0.41	0.49	0.58	0.66	0.75	0.84	0.92	1.01	1.09	1.18	1.26	1.35	1.44	1.52	1.61	1.69
60	1.74	2.74	3.73	4.73	5.72	6.72	7.71	8.71	9.70	10.70	11.69	12.69	13.68	14.68	15.67	16.67	17.66	18.66	19.65
1.52	0.16	0.25	0.35	0.44	0.53	0.62	0.72	0.81	0.90	0.99	1.09	1.18	1.27	1.36	1.46	1.55	1.64	1.74	1.83
66	1.97	3.10	4.23	5.35	6.48	7.61	8.74	9.86	10.99	12.12	13.25	14.37	15.50	16.63	17.76	18.88	20.01	21.14	22.26
1.68	0.18	0.29	0.39	0.50	0.60	0.71	0.81	0.92	1.02	1.13	1.23	1.34	1.44	1.55	1.65	1.76	1.86	1.97	2.07
72	2.20	3.46	4.72	5.98	7.24	8.50	9.76	11.02	12.28	13.54	14.80	16.06	17.32	18.58	19.84	21.10	22.36	23.62	24.88
1.83	0.21	0.32	0.44	0.56	0.67	0.79	0.91	1.03	1.14	1.26	1.38	1.49	1.61	1.73	1.85	1.96	2.08	2.20	2.31
78	2.33	3.67	5.00	6.33	7.67	9.00	10.33	11.66	13.00	14.33	15.66	17.00	18.33	19.66	21.00	22.33	23.66	25.00	26.33
1.98	0.22	0.34	0.46	0.59	0.71	0.84	0.96	1.08	1.21	1.33	1.46	1.58	1.70	1.83	1.95	2.08	2.20	2.32	2.45
84	2.56	4.03	5.50	6.96	8.43	9.89	11.36	12.82	14.29	15.75	17.22	18.68	20.15	21.61	23.08	24.55	26.01	27.48	28.94
2.13	0.24	0.37	0.51	0.65	0.78	0.92	1.06	1.19	1.33	1.47	1.60	1.74	1.87	2.01	2.15	2.28	2.42	2.56	2.69
90	2.69	4.23	5.77	7.31	8.85	10.39	11.93	13.46	15.00	16.54	18.08	19.62	21.16	22.70	24.24	25.78	27.31	28.85	30.39
2.29	0.25	0.39	0.54	0.68	0.82	0.97	1.11	1.25	1.40	1.54	1.68	1.82	1.97	2.11	2.25	2.40	2.54	2.68	2.83

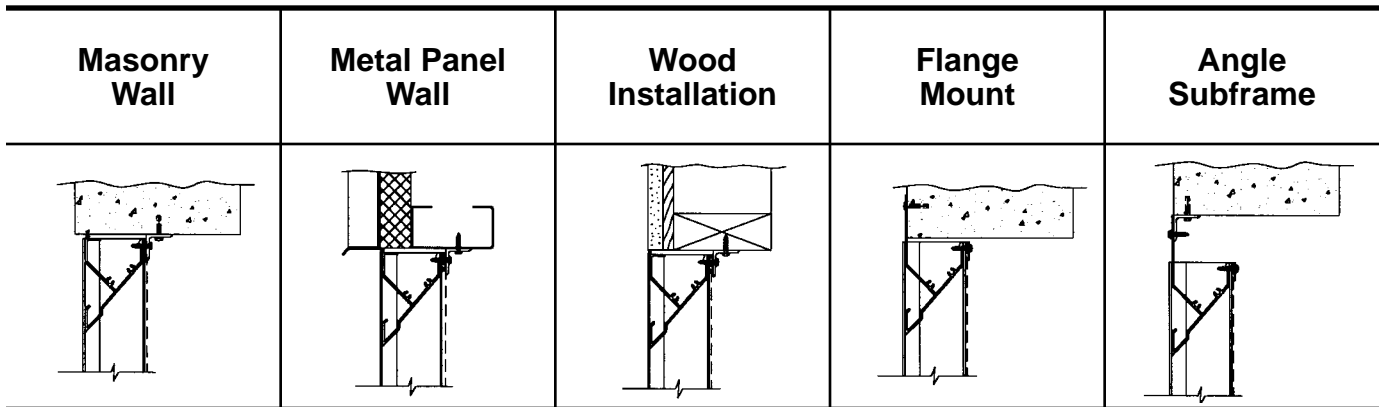
Width – Inches and Meters

## PRESSURE DROP

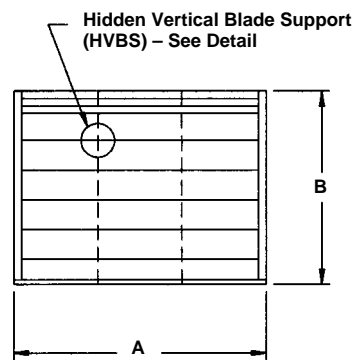


Ratings do not include the effect of a bird screen.

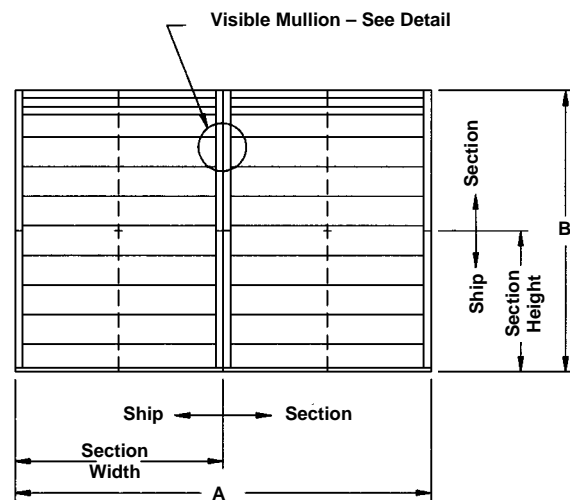
## TYPICAL INSTALLATION DETAILS



## STANDARD CONSTRUCTION DETAILS



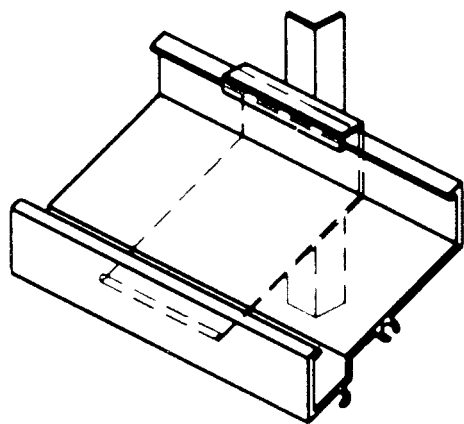
SINGLE SECTION ASSEMBLY



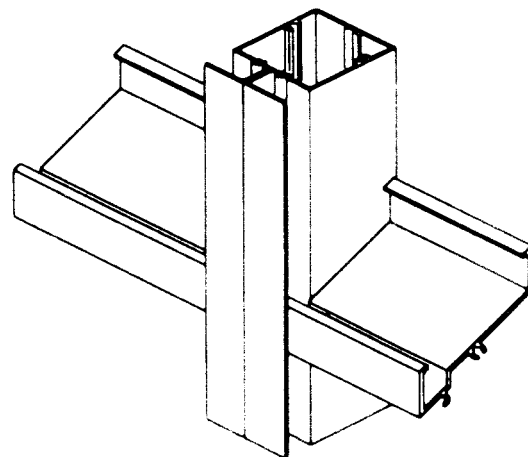
MULTIPLE SECTION ASSEMBLY  
(2 X 2 Assembly Shown)

### NOTES:

1. Max. section size is 120" wide x 90" high or 90" wide x 120" high. Louvers larger than these sizes will be provided in multiple sections for field assembly.
2. Hidden Vertical Blade Support (HVBS) depth and c-c spacing varies depending on louver size, assembly configuration or windload.



Hidden Vertical Blade Support (HVBS)



Visible Mullions on Multiple Section Junctions

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