

ELF211D

Drainable Thin Line Stationary Louver Extruded Aluminum



APPLICATION

The ELF211D is a 2" deep, extruded aluminum, mechanically fastened, thinline drainable, stationary louver designed to protect air intake and exhaust opening on exterior walls. This louver is designed with a drainable gutter system channeling water from the blades to downspouts in the jambs. Here, water is exhausted out of the front of the louver.

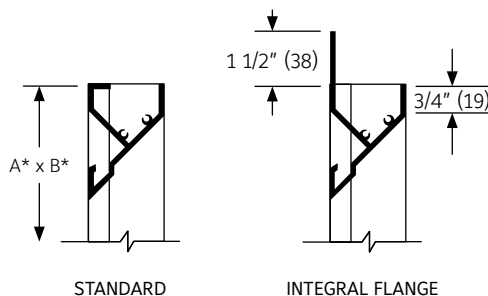
STANDARD CONSTRUCTION

Frame	2" (51) deep 6063T6 extruded aluminum, 0.060" (1.5) nominal wall thickness. Downspouts and caulking surfaces provided.
Blades	6063T6 extruded aluminum, 0.060" (1.5) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 2 7/16" (62) center to center.
Screen	5/8" x .040" (16 x 1.02) 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 ²).
Maximum Factory Assembly Size	Shall be 75 sq. ft. (7m ²) 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 windload.

FEATURES

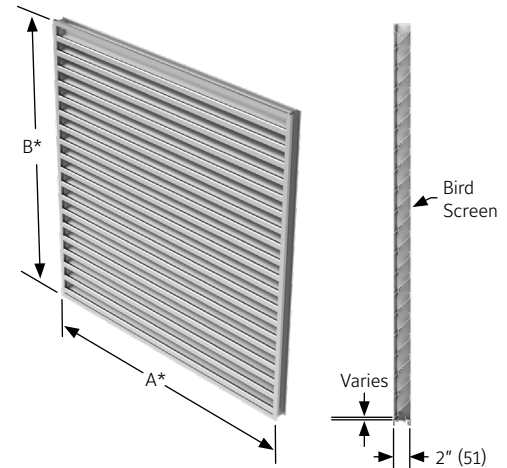
- ▶ 38% Free Area
- ▶ Performance publication ratings tested in accordance with AMCA Publication 511
- ▶ High performance frame system
- ▶ All aluminum construction for low maintenance and high resistance to corrosion
- ▶ Beginning point of water penetration at 0.01 oz/sq ft. is 1197 FPM
- ▶ Drain gutter in the head frame and each blade; downspouts in jambs and mullions to drain water and escape at the sill
- ▶ Windload 30 PSF

FRAME CONSTRUCTION



NOTES:

- Dimensions in inches, parenthesis () indicate millimeters.
- Units can be furnished actual size or with size deducts.



LOUVER VARIATIONS

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

- ▶ Extended sill
- ▶ Glazing frame
- ▶ Hinged frame
- ▶ Triangular or round design
- ▶ Front or rear security bars
- ▶ Filter racks
- ▶ Installation angles
- ▶ Universal sleeve
- ▶ Blank off panels
- ▶ A variety of bird and insect screens
- ▶ Optional finishes available at additional cost. Please see [Paint Finishes and Color Guide](#) and [Finish Type Model Chart](#) for more details. Contact louversales@ruskin.com with questions

Consult Ruskin for other special requirements.

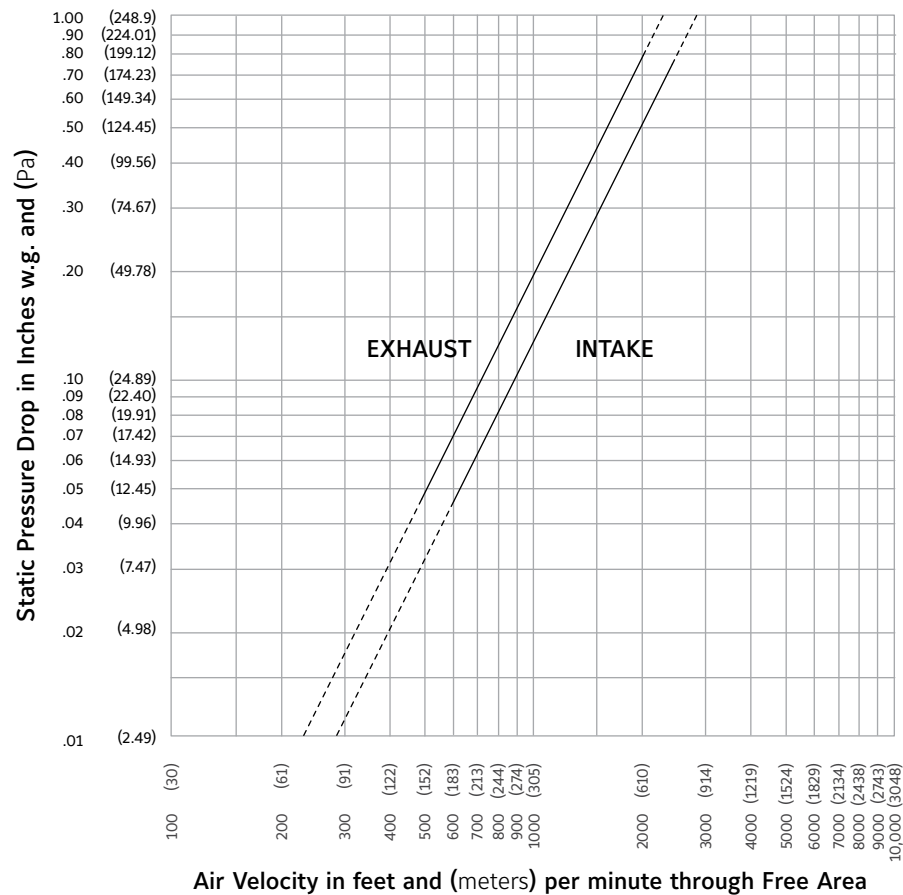
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of ELF211D.

Width – Inches and Meters

	HEIGHT	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
		0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	3.00
Height – Inches and Meters	12 0.30	0.15 0.01	0.25 0.02	0.35 0.03	0.44 0.04	0.54 0.05	0.63 0.06	0.73 0.07	0.82 0.08	0.92 0.09	1.01 0.09	1.11 0.10	1.20 0.11	1.30 0.12	1.39 0.13	1.49 0.14	1.58 0.15	1.68 0.16	1.77 0.16	1.87 0.17
	18 0.45	0.31 0.03	0.50 0.05	0.69 0.06	0.88 0.08	1.07 0.10	1.26 0.12	1.45 0.14	1.64 0.15	1.83 0.17	2.03 0.19	2.22 0.21	2.41 0.22	2.60 0.24	2.79 0.26	2.98 0.28	3.17 0.29	3.36 0.31	3.55 0.33	3.74 0.35
	24 0.60	0.54 0.05	0.87 0.08	1.20 0.11	1.53 0.14	1.86 0.17	2.19 0.20	2.52 0.23	2.86 0.27	3.19 0.30	3.52 0.33	3.85 0.36	4.18 0.39	4.51 0.42	4.84 0.45	5.17 0.48	5.50 0.51	5.83 0.54	6.17 0.57	6.50 0.60
	30 0.75	0.69 0.06	1.12 0.10	1.55 0.14	1.97 0.18	2.40 0.22	2.83 0.26	3.25 0.30	3.68 0.34	4.10 0.38	4.53 0.42	4.96 0.46	5.38 0.50	5.81 0.54	6.24 0.58	6.66 0.62	7.09 0.66	7.52 0.70	7.94 0.74	8.37 0.78
	36 0.90	0.92 0.09	1.49 0.14	2.05 0.19	2.62 0.24	3.19 0.30	3.76 0.35	4.32 0.40	4.89 0.45	5.46 0.51	6.02 0.56	6.59 0.61	7.16 0.67	7.72 0.72	8.29 0.77	8.86 0.82	9.42 0.88	9.99 0.93	10.56 0.98	11.12 1.03
	42 1.05	1.08 0.10	1.74 0.16	2.40 0.22	3.06 0.28	3.73 0.35	4.39 0.41	5.05 0.47	5.71 0.53	6.37 0.59	7.04 0.65	7.70 0.72	8.36 0.78	9.02 0.84	9.69 0.90	10.35 0.96	11.01 1.02	11.67 1.09	12.34 1.15	13.00 1.21
	48 1.20	1.30 0.12	2.11 0.20	2.91 0.27	3.71 0.35	4.52 0.42	5.32 0.49	6.12 0.57	6.92 0.64	7.73 0.72	8.53 0.79	9.33 0.87	10.13 0.94	10.94 1.02	11.74 1.09	12.54 1.17	13.35 1.24	14.15 1.32	14.95 1.39	15.75 1.47
	54 1.35	1.46 0.14	2.36 0.22	3.26 0.30	4.15 0.39	5.05 0.47	5.95 0.55	6.85 0.64	7.75 0.72	8.64 0.80	9.54 0.89	10.44 0.97	11.34 1.05	12.24 1.14	13.14 1.22	14.03 1.31	14.93 1.39	15.83 1.47	16.73 1.56	17.63 1.64
	60 1.50	1.61 0.15	2.61 0.24	3.60 0.33	4.60 0.43	5.59 0.52	6.58 0.61	7.58 0.70	8.57 0.80	9.56 0.89	10.56 0.98	11.55 1.07	12.54 1.17	13.54 1.26	14.53 1.35	15.52 1.44	16.52 1.54	17.51 1.63	18.51 1.72	19.50 1.81
	66 1.65	1.84 0.17	2.98 0.28	4.11 0.38	5.24 0.49	6.38 0.59	7.51 0.70	8.65 0.80	9.78 0.91	10.91 1.02	12.05 1.12	13.18 1.23	14.32 1.33	15.45 1.44	16.58 1.54	17.72 1.65	18.85 1.75	19.99 1.86	21.12 1.96	22.25 2.07
	72 1.80	2.00 0.19	3.23 0.30	4.46 0.41	5.69 0.53	6.92 0.64	8.14 0.76	9.37 0.87	10.60 0.99	11.83 1.10	13.06 1.21	14.29 1.33	15.52 1.44	16.75 1.56	17.98 1.67	19.21 1.79	20.44 1.90	21.67 2.02	22.90 2.13	24.13 2.24
	78 1.95	2.23 0.21	3.60 0.33	4.97 0.46	6.34 0.59	7.71 0.72	9.08 0.84	10.44 0.97	11.81 1.10	13.18 1.23	14.55 1.35	15.92 1.48	17.29 1.61	18.66 1.74	20.03 1.86	21.40 1.99	22.77 2.12	24.14 2.25	25.51 2.37	26.88 2.50
	84 2.10	2.38 0.22	3.85 0.36	5.31 0.49	6.78 0.63	8.24 0.77	9.71 0.90	11.17 1.04	12.64 1.18	14.10 1.31	15.57 1.45	17.03 1.58	18.50 1.72	19.96 1.86	21.43 1.99	22.89 2.13	24.36 2.27	25.83 2.40	27.29 2.54	28.76 2.67
	90 2.25	2.61 0.24	4.21 0.39	5.82 0.54	7.43 0.69	9.03 0.84	10.64 0.99	12.24 1.14	13.85 1.29	15.45 1.44	17.06 1.59	18.67 1.74	20.27 1.89	21.88 2.03	23.48 2.18	25.09 2.33	26.69 2.48	28.30 2.63	29.91 2.78	31.51 2.93
	96 2.40	2.76 0.26	4.47 0.42	6.17 0.57	7.87 0.73	9.57 0.89	11.27 1.05	12.97 1.21	14.67 1.36	16.37 1.52	18.07 1.68	19.78 1.84	21.48 2.00	23.18 2.16	24.88 2.31	26.58 2.47	28.28 2.63	29.98 2.79	31.68 2.95	33.38 3.10
	102 2.55	2.99 0.28	4.83 0.45	6.68 0.62	8.52 0.79	10.36 0.96	12.20 1.13	14.04 1.31	15.88 1.48	17.72 1.65	19.57 1.82	21.41 1.99	23.25 2.16	25.09 2.33	26.93 2.50	28.77 2.68	30.62 2.85	32.46 3.02	34.30 3.19	36.14 3.36
	108 2.70	3.15 0.29	5.08 0.47	7.02 0.65	8.96 0.83	10.90 1.01	12.83 1.19	14.77 1.37	16.71 1.55	18.64 1.73	20.58 1.91	22.52 2.09	24.45 2.27	26.39 2.45	28.33 2.63	30.26 2.81	32.20 2.99	34.14 3.17	36.08 3.36	38.01 3.54
	114 2.85	3.38 0.31	5.45 0.51	7.53 0.70	9.61 0.89	11.69 1.09	13.76 1.28	15.84 1.47	17.92 1.67	19.99 1.86	22.07 2.05	24.15 2.25	26.23 2.44	28.30 2.63	30.38 2.83	32.46 3.02	34.54 3.21	36.61 3.41	38.69 3.60	40.77 3.79
	120 3.00	3.53 0.33	5.70 0.53	7.88 0.73	10.05 0.93	12.22 1.14	14.39 1.34	16.57 1.54	18.74 1.74	20.91 1.94	23.09 2.15	25.26 2.35	27.43 2.55	29.60 2.75	31.78 2.96	33.95 3.16	36.12 3.36	38.30 3.56	40.47 3.76	42.64 3.97

PRESSURE DROP

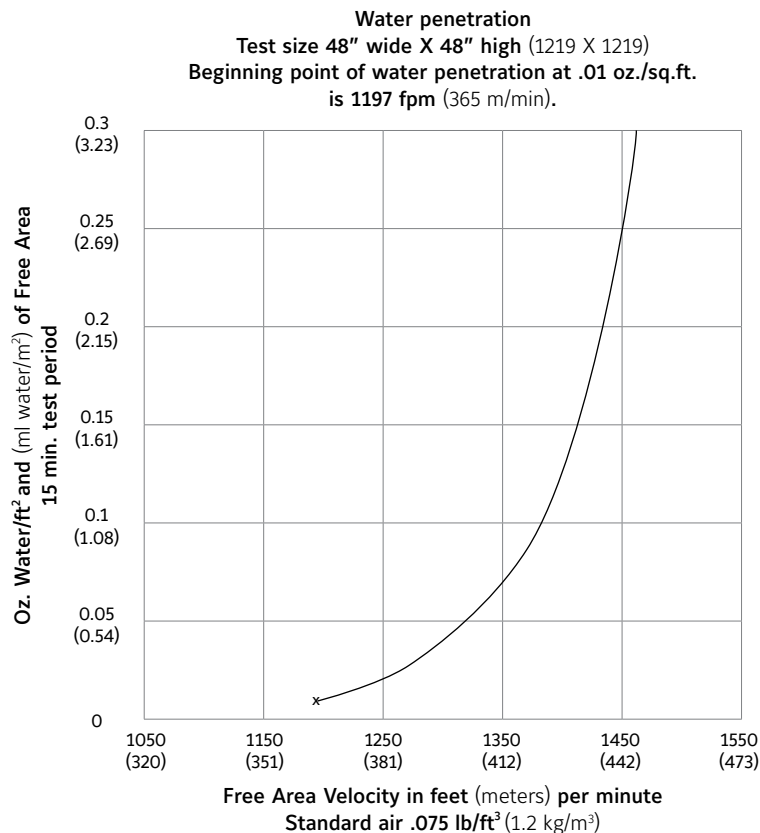


Ratings do not include the effect of a bird screen.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500-L is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.



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.

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 30 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 6063T6 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 2 7/16" (62) center to center.

Screen: 5/8" x 0.40" (16 x 1.02) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Ruskin Finishes Brochure.

Published louver performance data derived from testing in accordance with AMCA 500-L 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.

LINKS TO IMPORTANT DOCUMENTS

Document Title
Paint Finishes and Color Guide
Limited Warranty Document



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