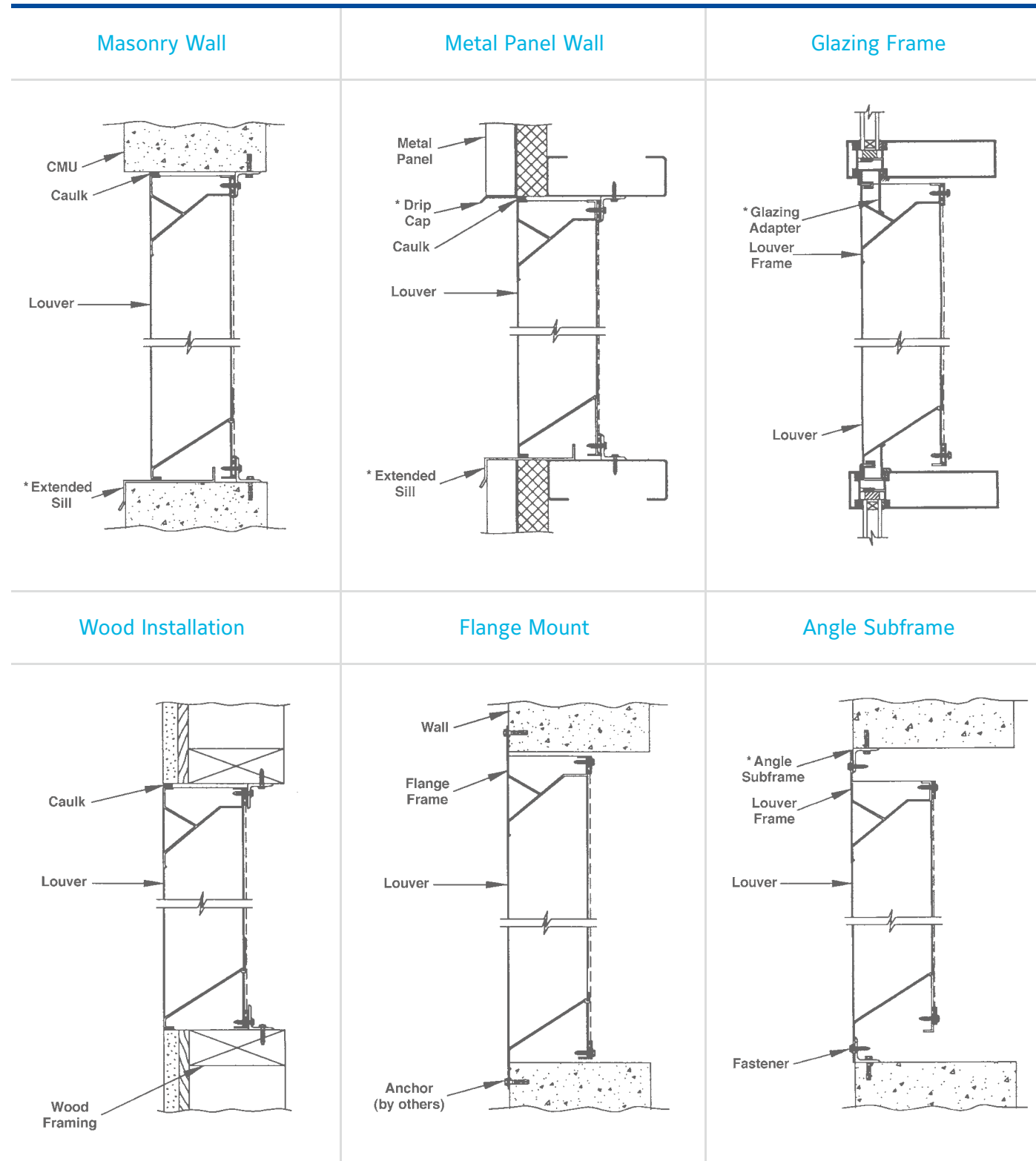


TYPICAL INSTALLATION DETAILS



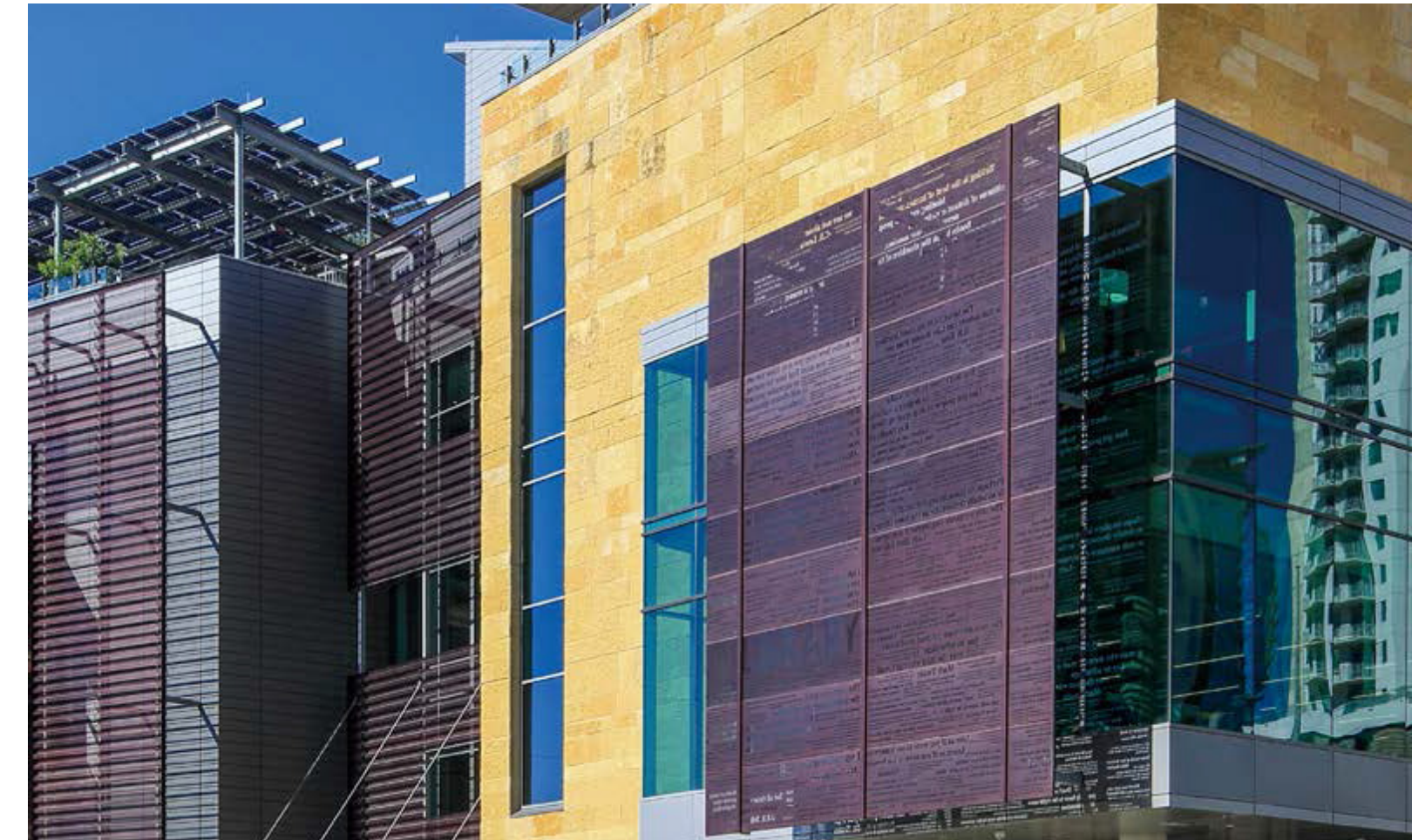
*Accessories at additional cost. Caulk and anchors are not provided by *Ruskin*®.

Johnson Controls:

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers and manufacturing. With a global team of 105,000 experts in more than 150 countries and over 130 years of innovation, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, York®, *Metasys*®, *Ruskin*®, Titus®, Frick®, Penn®, Sabroe®, Simplex®, Ansul® and Grinnell®.

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ELF837 STATIONARY LOUVER



EXTRUDED ALUMINUM

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The power behind your mission



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STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T6 extruded aluminum, .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T6 extruded aluminum with .081" (2.1) nominal wall thickness. Blades are positioned at 37½° angle and spaced approximately 4¾" (127) center to center.

SCREEN

¾" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately ½" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

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

APPROXIMATE SHIPPING WEIGHT

4 lbs. per sq. ft. (19.5 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 75 sq. ft. (7m²) 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 blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Ruskin for additional information.

Dimensions in parenthesis () indicate millimeters.

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

ALL STATED SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION.

FEATURES

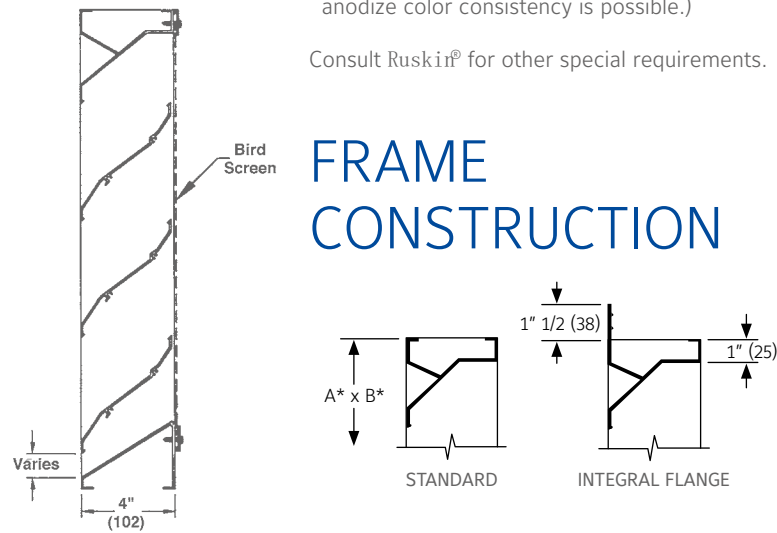
- The ELF837 offers:
 - 52% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Architecturally styled hidden mullions allowing continuous line appearance.
 - Aluminum construction for low maintenance and high resistance to corrosion.
 - Low pressure drop and low water penetration.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- 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 variations in anodize color consistency is possible.)

Consult Ruskin® for other special requirements.

FRAME CONSTRUCTION



*Units furnished ¼" (6) smaller than given opening dimensions.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 52% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) 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 10 feet (3) 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 ELF837 extruded 6063T6 aluminum alloy construction as follows:

FRAME

4" (102) deep, .081" (2.1) wall thickness.

BLADES

.081" (2.1) nominal wall thickness. Blades are positioned at 37½° angle and spaced approximately 4¾" (121) center to center.

SCREEN

¾" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

FINISH

Select finish specification from Ruskin Finishes Brochure.

PERFORMANCE DATA

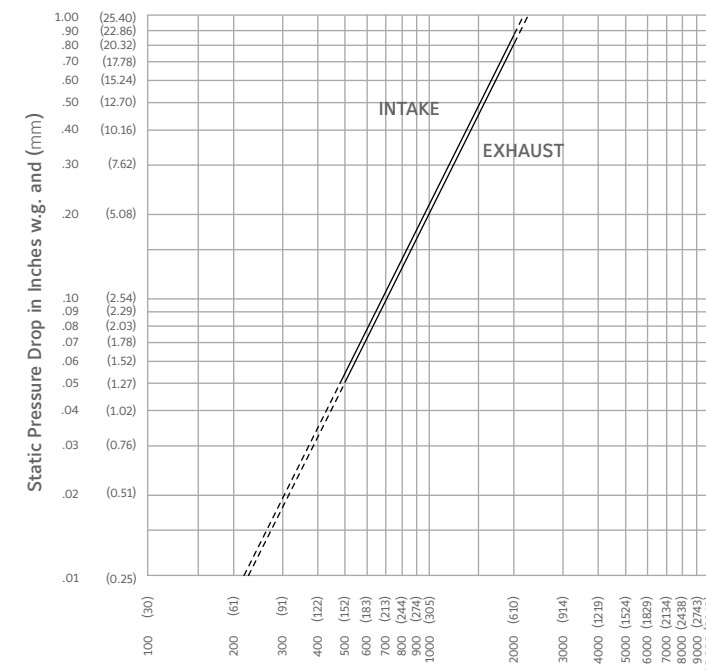
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

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 Titus Gulf LCC certifies that the ELF837 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 Certified Ratings Program. The AMCA Certified Ratings Seal applies to water penetration ratings and air performance ratings only.



PRESSURE DROP



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

Note: Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of ELF837.

HEIGHT	Width – Inches and Meters																			
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	
12	0.19	0.30	0.41	0.52	0.64	0.75	0.86	0.97	1.09	1.20	1.31	1.42	1.53	1.65	1.76	1.87	1.98	2.10	2.21	
18	0.39	0.62	0.86	1.09	1.33	1.56	1.80	2.03	2.26	2.50	2.73	2.97	3.20	3.44	3.67	3.91	4.14	4.37	4.61	
24	0.79	1.26	1.73	2.20	2.67	3.14	3.61	4.08	4.55	5.02	5.50	5.97	6.44	6.91	7.38	7.85	8.32	8.79	9.26	
30	0.99	1.58	2.17	2.77	3.36	3.95	4.55	5.14	5.73	6.33	6.92	7.51	8.11	8.70	9.29	9.88	10.48	11.07	11.66	
36	1.19	1.91	2.62	3.34	4.05	4.77	5.48	6.20	6.91	7.63	8.34	9.06	9.77	10.49	11.20	11.92	12.63	13.35	14.06	
42	1.40	2.23	3.07	3.91	4.74	5.58	6.42	7.26	8.09	8.93	9.77	10.60	11.44	12.28	13.11	13.95	14.79	15.63	16.46	
48	1.79	2.86	3.94	5.01	6.09	7.16	8.23	9.31	10.38	11.45	12.53	13.60	14.68	15.75	16.82	17.90	18.97	20.05	21.12	
54	1.99	3.19	4.38	5.58	6.78	7.97	9.17	10.36	11.56	12.76	13.95	15.15	16.34	17.54	18.74	19.93	21.13	22.32	23.52	
60	2.20	3.51	4.83	6.15	7.47	8.79	10.10	11.42	12.74	14.06	15.38	16.69	18.01	19.33	20.65	21.97	23.28	24.60	25.92	
66	2.40	3.84	5.28	6.72	8.16	9.60	11.04	12.48	13.92	15.36	16.80	18.24	19.68	21.12	22.56	24.00	25.44	26.88	28.32	
72	2.79	4.47	6.15	7.82	9.50	11.18	12.85	14.53	16.21	17.88	19.56	21.24	22.92	24.59	26.27	27.95	29.62	31.30	32.98	
78	3.00	4.80	6.60	8.39	10.19	11.99	13.79	15.59	17.39	19.19	20.99	22.78	24.58	26.38	28.18	29.98	31.78	33.58	35.37	
84	3.20	5.12	7.04	8.96	10.88	12.80	14.73	16.65	18.57	20.49	22.41	24.33	26.25	28.17	30.09	32.01	33.93	35.85	37.77	
90	3.40	5.45	7.49	9.53	11.58	13.62	15.66	17.70	19.75	21.79	23.83	25.87	27.92	29.96	32.00	34.05	36.09	38.13	40.17	
96	3.80	6.08	8.36	10.64	12.92	15.20	17.48	19.76	22.04	24.31	26.59	28.87	31.15	33.43	35.71	37.99	40.27	42.55	44.83	
102	4.00	6.40	8.81	11.21	13.61	16.01	18.41	20.81	23.21	25.62	28.02	30.42	32.82	35.22	37.62	40.02	42.43	44.83	47.23	
108	4.21	6.73	9.25	11.78	14.30	16.82	19.35	21.87	24.39	26.92	29.44	31.96	34.49	37.01	39.54	42.06	44.58	47.11	49.63	
114	4.41	7.05	9.70	12.35	14.99	17.64	20.28	22.93	25.57	28.22	30.86	33.51	36.16	38.80	41.45	44.09	46.74	49.38	52.03	
120	4.80	7.69	10.57	13.45	16.33	19.22	22.10	24.98	27.86	30.74	33.63	36.51	39.39	42.27	45.16	48.04	50.92	53.80	56.69	
3.00	0.45	0.71	0.98	1.25	1.52	1.79	2.06	2.32	2.59	2.86	3.13	3.40	3.66	3.93	4.20	4.47	4.74	5.00	5.27	

WATER PENETRATION

