ELF445DX / ELF445DXH

Drainable Stationary Louvers
Extruded Aluminum Louvers

RUSKIN
AUTHORITY IN AIR CONTROL

APPLICATION

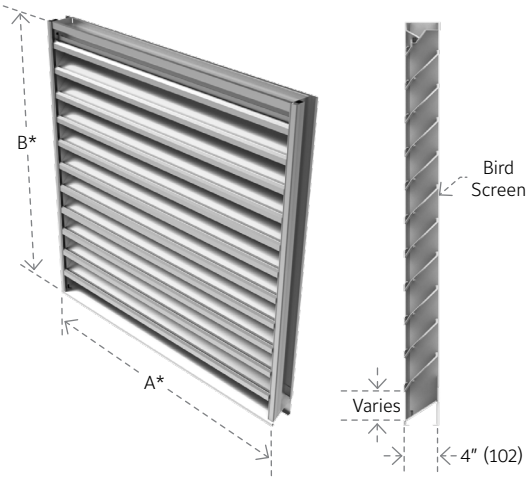
The ELF445DX/ELF445DXH are 4" deep, extruded aluminum, drainable, stationary louvers that are designed to protect air intake and exhaust openings on exterior walls. These louvers are designed with drainable gutter systems that channel water from the blades to downspouts in the jambs. Here, water is exhausted out of the front of the louvers.

STANDARD CONSTRUCTION

Frame	4" (102) deep, 6063T6 extruded aluminum. **ELF445DX** - .081" (2.1) nominal wall thickness. **ELF445DXH** - .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.
Blades	6063T6 extruded aluminum. **ELF445DX** - .081" (2.1) nominal wall thickness. **ELF445DXH** - .125" (3.2) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 4 (102)" 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	12"w x 12"h (305 x 305).
Approximate Shipping Weight	**ELF445DX** - 4 lbs./ft.^{2} (19.5 kg/m^2). **ELF445DXH** - 6 lbs./ft.^{2} (29.3 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 blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

FEATURES

- 52% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Beginning point of water penetration at .01 oz./sq.ft. is 1075 fpm (328 m/min).
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
- All aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.



5 YEAR LIMITED WARRANTY

ISO9001 CERTIFIED

LOUVER VARIATIONS

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

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Blank of panels.
- Universal sleeve.
- Frame caps.
- A variety of bird and insect screens.
- Please provide rough opening dimensions for "A" and "B" dimensions. unless ordered as actual size, the louver will be provided 1/2" (12) smaller than "A" and "B" dimensions provided.
- Optional finishes available at additional cost: Prime coat, 50% PVDF (modified fluoropolymer), Epoxy, Pearledize, 70% PVDF, Clear and Anodized finishes. (Some variation in anodize color consistency is possible).

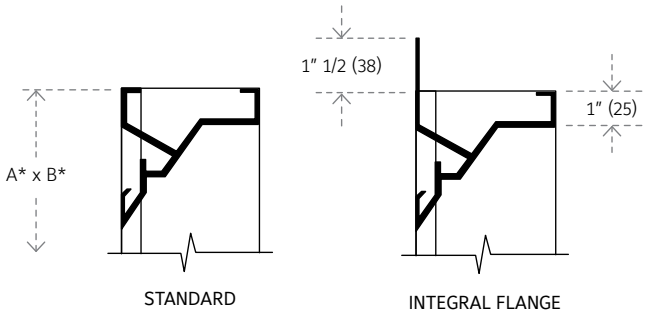
Consult Ruskin for other special requirements.

Note:
- Dimensions in inches, parenthesis ( ) indicate millimeters.
- Units furnished 1/4" (6) smaller than given opening dimensions.

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

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FRAME CONSTRUCTION



FREE AREA GUIDE

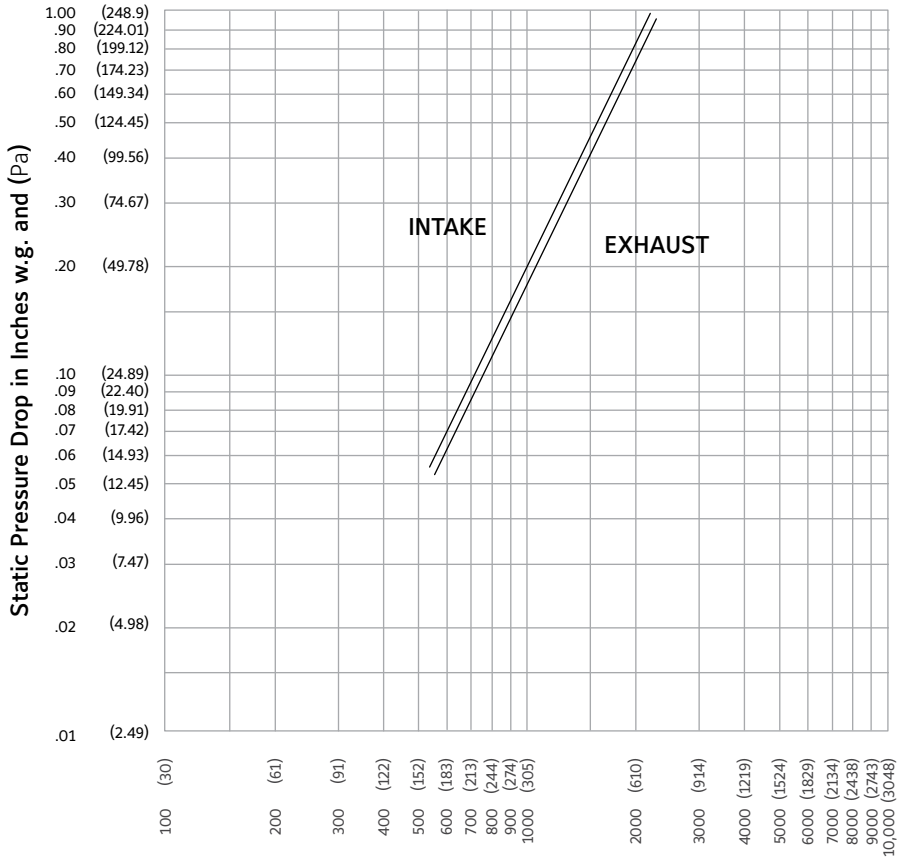
Free Area Guide shows free area in ft² and m² for various sizes of ELF445DX and ELF445DXH.

Width – Inches and Meters

Height – Inches and Meters

HEIGHT	12 0.30	18 0.45	24 0.60	30 0.75	36 0.90	42 1.05	48 1.20	54 1.35	60 1.50	66 1.65	72 1.80	78 1.95	84 2.10	90 2.25	96 2.40	102 2.55	108 2.70	114 2.85	120 3.00
12 0.30	**0.26** 0.02	**0.42** 0.04	**0.58** 0.05	**0.74** 0.07	**0.90** 0.08	**1.05** 0.10	**1.21** 0.11	**1.37** 0.13	**1.53** 0.14	**1.69** 0.16	**1.84** 0.17	**2.00** 0.19	**2.16** 0.20	**2.32** 0.22	**2.48** 0.23	**2.64** 0.25	**2.79** 0.26	**2.95** 0.27	**3.11** 0.29
18 0.45	**0.44** 0.04	**0.71** 0.07	**0.98** 0.09	**1.24** 0.12	**1.51** 0.14	**1.78** 0.17	**2.04** 0.19	**2.31** 0.21	**2.57** 0.24	**2.84** 0.26	**3.11** 0.29	**3.37** 0.31	**3.64** 0.34	**3.91** 0.36	**4.71** 0.39	**4.44** 0.41	**4.71** 0.44	**4.97** 0.46	**5.24** 0.49
24 0.60	**0.78** 0.07	**1.25** 0.12	**1.72** 0.16	**2.18** 0.20	**2.65** 0.25	**3.12** 0.29	**3.59** 0.33	**4.06** 0.38	**4.53** 0.42	**4.99** 0.46	**5.46** 0.51	**5.93** 0.55	**6.40** 0.59	**6.87** 0.64	**7.33** 0.68	**7.80** 0.73	**8.27** 0.77	**8.74** 0.81	**9.21** 0.86
30 0.75	**0.96** 1.11	**1.54** 1.81	**2.11** 2.50	**2.69** 3.20	**3.27** 3.89	**3.84** 4.58	**4.42** 5.28	**5.00** 5.97	**5.57** 6.67	**6.15** 7.36	**6.72** 8.05	**7.30** 8.75	**7.88** 9.44	**8.45** 10.14	**9.03** 10.83	**9.61** 11.52	**10.18** 12.22	**10.76** 12.91	**11.34** 13.61
36 0.90	**1.30** 0.12	**2.07** 0.19	**2.85** 0.27	**3.63** 0.34	**4.41** 0.41	**5.19** 0.48	**5.97** 0.55	**6.74** 0.63	**7.52** 0.70	**8.30** 0.77	**9.08** 0.84	**9.86** 0.92	**10.63** 0.99	**11.41** 1.06	**12.19** 1.13	**12.97** 1.21	**13.75** 1.28	**14.52** 1.35	**15.30** 1.42
42 1.05	**1.48** 0.14	**2.36** 0.22	**3.25** 0.30	**4.14** 0.38	**5.02** 0.47	**5.91** 0.55	**6.80** 0.63	**7.68** 0.71	**8.57** 0.80	**9.45** 0.88	**10.34** 0.96	**11.23** 1.04	**12.11** 1.13	**13.00** 1.21	**13.89** 1.29	**14.77** 1.37	**15.66** 1.46	**16.55** 1.54	**17.43** 1.62
48 1.20	**1.81** 0.17	**2.90** 0.27	**3.99** 0.37	**5.08** 0.47	**6.17** 0.57	**7.25** 0.67	**8.34** 0.78	**9.43** 0.88	**10.52** 0.98	**11.61** 1.08	**12.69** 1.18	**13.78** 1.28	**14.87** 1.38	**15.96** 1.48	**17.05** 1.59	**18.14** 1.69	**19.22** 1.79	**20.31** 1.89	**21.40** 1.99
54 1.35	**1.99** 0.19	**3.19** 0.30	**4.39** 0.41	**5.58** 0.52	**6.78** 0.63	**7.98** 0.74	**9.17** 0.85	**10.37** 0.96	**11.56** 1.08	**12.76** 1.19	**13.96** 1.30	**15.15** 1.41	**16.35** 1.52	**17.55** 1.63	**18.74** 1.74	**19.94** 1.85	**21.14** 1.97	**22.33** 2.08	**23.53** 2.19
60 1.50	**2.33** 0.22	**3.73** 0.35	**5.13** 0.48	**6.52** 0.61	**7.92** 0.74	**9.32** 0.87	**10.72** 1.00	**12.12** 1.13	**13.52** 1.26	**14.91** 1.39	**16.31** 1.52	**17.71** 1.65	**19.11** 1.78	**20.51** 1.91	**21.90** 2.04	**23.30** 2.17	**24.70** 2.30	**26.10** 2.43	**27.50** 2.56
66 1.65	**2.51** 0.23	**4.02** 0.37	**5.52** 0.51	**7.03** 0.65	**8.54** 0.79	**10.04** 0.93	**11.55** 1.07	**13.06** 1.21	**14.56** 1.35	**16.07** 1.49	**17.57** 1.63	**19.08** 1.77	**20.59** 1.91	**22.09** 2.05	**23.60** 2.19	**25.11** 2.33	**26.61** 2.47	**28.12** 2.62	**29.63** 2.76
72 1.80	**2.85** 0.26	**4.55** 0.42	**6.26** 0.58	**7.97** 0.74	**9.68** 0.90	**11.39** 1.06	**13.10** 1.22	**14.80** 1.38	**16.51** 1.54	**18.22** 1.69	**19.93** 1.85	**21.64** 2.01	**23.34** 2.17	**25.05** 2.33	**26.76** 2.49	**28.47** 2.65	**30.18** 2.81	**31.88** 2.97	**33.59** 3.12
78 1.95	**3.03** 0.28	**4.84** 0.45	**6.66** 0.62	**8.48** 0.79	**10.29** 0.96	**12.11** 1.13	**13.93** 1.30	**15.74** 1.46	**17.56** 1.63	**19.37** 1.80	**21.19** 1.97	**23.01** 2.14	**24.82** 2.31	**26.64** 2.48	**28.46** 2.65	**30.27** 2.82	**32.09** 2.98	**33.91** 3.15	**35.72** 3.32
84 2.10	**3.36** 0.31	**5.38** 0.50	**7.40** 0.69	**9.42** 0.88	**11.44** 1.06	**13.45** 1.25	**15.47** 1.44	**17.49** 1.63	**19.51** 1.81	**21.53** 2.00	**23.54** 2.19	**25.56** 2.38	**27.58** 2.57	**29.60** 2.75	**31.62** 2.94	**33.64** 3.13	**35.65** 3.32	**37.67** 3.50	**39.69** 3.69
90 2.25	**3.54** 0.33	**5.67** 0.53	**7.80** 0.73	**9.92** 0.92	**12.05** 1.12	**14.18** 1.32	**16.30** 1.52	**18.43** 1.71	**20.55** 1.91	**22.68** 2.11	**24.81** 2.31	**26.93** 2.50	**29.06** 2.70	**31.19** 2.90	**33.31** 3.10	**35.44** 3.30	**37.57** 3.49	**39.69** 3.69	**41.82** 3.89
96 2.40	**3.88** 0.36	**6.21** 0.58	**8.54** 0.79	**10.86** 1.01	**13.19** 1.23	**15.52** 1.44	**17.85** 1.66	**20.18** 1.88	**22.51** 2.09	**24.83** 2.31	**27.16** 2.53	**29.49** 2.74	**31.82** 2.96	**34.15** 3.18	**36.47** 3.39	**38.80** 3.61	**41.13** 3.83	**43.46** 4.04	**45.79** 4.26
102 2.55	**4.06** 0.38	**6.50** 0.60	**8.93** 0.83	**11.37** 1.06	**13.81** 1.28	**16.24** 1.51	**18.68** 1.74	**21.12** 1.96	**23.55** 2.19	**25.99** 2.42	**28.42** 2.64	**30.86** 2.87	**33.30** 3.10	**35.73** 3.32	**38.17** 3.55	**40.61** 3.78	**43.04** 4.00	**45.48** 4.23	**47.92** 4.46
108 2.70	**4.40** 0.41	**7.03** 0.65	**9.67** 0.90	**12.31** 1.14	**14.95** 1.39	**17.59** 1.64	**20.23** 1.88	**22.86** 2.13	**25.50** 2.37	**28.14** 2.62	**30.78** 2.86	**33.42** 3.11	**36.05** 3.35	**38.69** 3.60	**41.33** 3.84	**43.97** 4.09	**46.61** 4.33	**49.24** 4.58	**51.88** 4.83
114 2.85	**4.58** 0.43	**7.32** 0.68	**10.07** 0.94	**12.82** 1.19	**15.56** 1.45	**18.31** 1.70	**21.06** 1.96	**23.80** 2.21	**26.55** 2.47	**29.29** 2.72	**32.04** 2.98	**34.79** 3.24	**37.53** 3.49	**40.28** 3.75	**43.03** 4.00	**45.77** 4.26	**48.52** 4.51	**51.27** 4.77	**54.01** 5.02
120 3.00	**4.91** 0.46	**7.86** 0.73	**10.81** 1.01	**13.76** 1.28	**16.71** 1.55	**19.65** 1.83	**22.60** 2.10	**25.55** 2.38	**28.50** 2.65	**31.45** 2.92	**34.39** 3.20	**37.34** 3.47	**40.29** 3.75	**43.24** 4.02	**46.19** 4.30	**49.14** 4.57	**52.08** 4.84	**55.03** 5.12	**57.98** 5.39

PRESSURE DROP



Ratings do not include the effect of a bird screen.

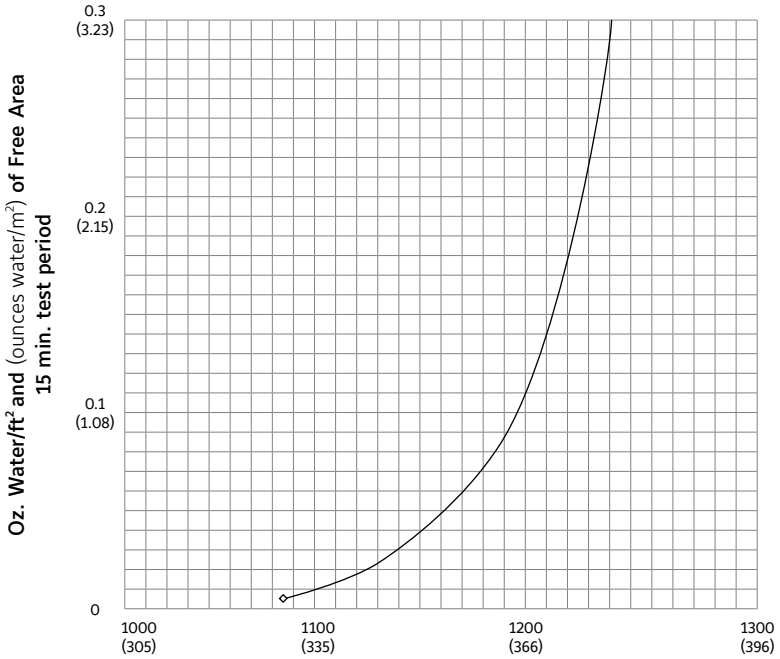
Ruskin Manufacturing Company certifies that the ELF445DX and ELF445DXH Louvers shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

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.

Water penetration
Test size 48" wide X 48" high (1219 X 1219)
Beginning point of water penetration at .01 oz./sq.ft.
is 1075 fpm (328 m/min).



SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type with drain gutters in each blade and 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 drainable 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 windload of 20 lbs. per sq. ft. (.96KPa) (equivalent of a 90 mph wind [145 KPH] wind–specifier may substitute any loading required).

Louvers shall be Ruskin model ELF445DX or ELF445DXH extruded 6063T6 aluminum construction as follows:

Frame: 4" (102) deep, ELF445DX – .081" (2.1) wall thickness.
ELF445DXH – .125" (3.2) nominal wall thickness.

Blades: ELF445DX – .081" (2.1) wall thickness.
ELF445DXH – .125" (3.2) wall thickness.
Drainable blades are positioned at 45° angle and spaced approximately 4" (102) center to center.

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

Finish: Select finish specification from Ruskin Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration 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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AUTHORITY IN AIR CONTROL

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