

MODEL XSD-55

2" DEEP WIND DRIVEN RAIN FIXED LOUVER

STANDARD CONSTRUCTION:

Frame: .060 Extruded Aluminum, 2.16" Deep

Blade: .060 Extruded Aluminum on approximately 0.938" centers.

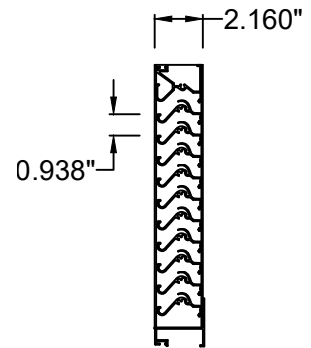
Birdscreen: .50" x .050" Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building.

Finish: Mill Aluminum (Std.)

Minimum Size: 12 x12

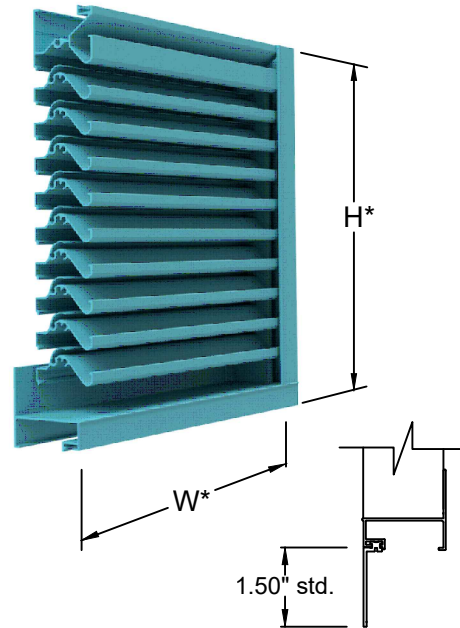
Maximum Single Section: 120"w x 84"h or 84"w x 120"h

Note: 10' max width



OPTIONS:

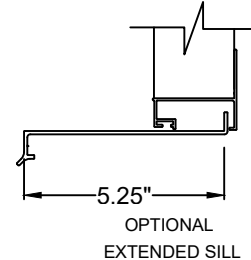
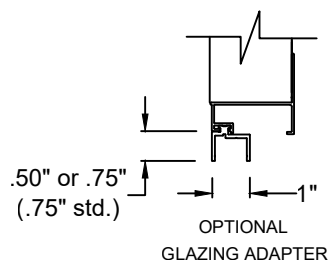
- ☐ Flanged Frame (1.50" std.), (1" std for shapes R_)
- ☐ Custom Flange (1", 2" , or 3"), (1.5", 2", or 3" for shapes R_)
- ☐ Extended Sill
- ☐ Glazing Adapter (.50" or .75")
- ☐ Insect Screen (Other Screens Available, See Screen Page)
- ☐ Filter Racks (no screen)
- ☐ Security Bars
- ☐ Hinged Sub Frame
- ☐ Welded Construction (Wind Load +/- 50 psf)
- ☐ Blank-off, Alum., non-insulated, no screen, non-removeable
- ☐ Blank-off, Alum., non-insulated, with bird screen or insect screen
- ☐ Blank-off, Alum., insulated double wall, with bird screen, removable
- ☐ Blank-off, Alum., insulated double wall, no screen, non-removeable



AVAILABLE FINISHES:

- ☐ Durable Polyester (AAMA 2604)
- ☐ 70% PVDF Fluoropolymer (AAMA 2605)
- ☐ Yellow Primer
- ☐ Clear Anodize
- ☐ Dark Bronze Anodize

OPTIONAL FLANGE
(except R_ Shapes, 1" optional std)



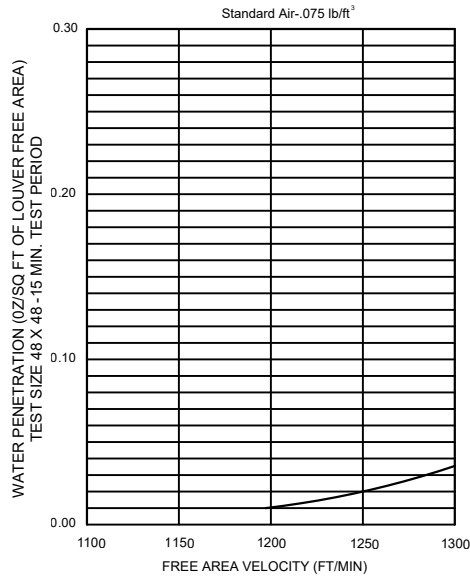
*Width and Height dimensions are approximately 1/4" under listed size.

Due to continuing research, S&P reserves the right to change specifications without notice.

MODEL XSD-55 (2" Deep Wind-Driven Rain Louver)					
DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
CLJ	November 2017	March 2026	1		A-16b

PERFORMANCE DATA

WATER PENETRATION



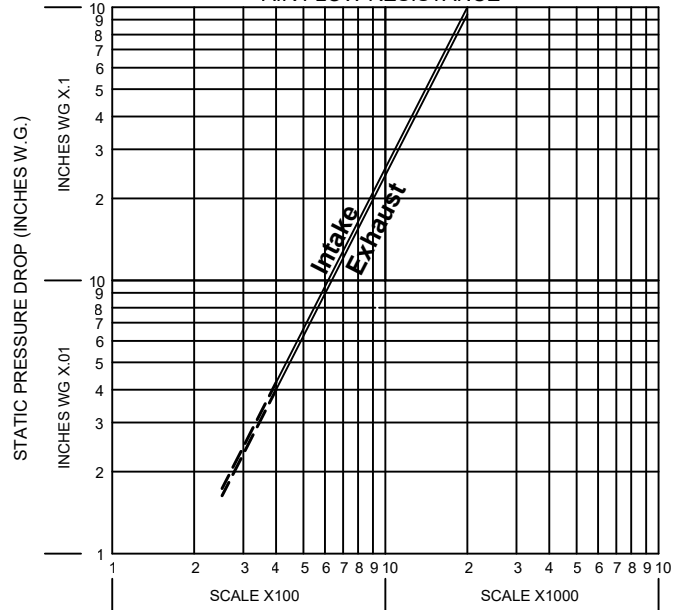
Beginning point of WATER PENETRATION

is

1195 fpm

free area velocity at .01 oz. of water penetration

AIR FLOW RESISTANCE



Based on STANDARD AIR-.075 lb. per cubic foot.

Ratings do not include the effects of screen.

Test size 48" x 48"

XSD-55 FREE AREA IN SQ. FT.

Width - Inches

Louver Height Inches	XSD-55 FREE AREA IN SQ. FT.																				Louver Height Inches
	Width - Inches																				
	Width																				
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120		
12	0.24	0.43	0.59	0.76	0.92	1.09	1.25	1.42	1.58	1.74	1.91	2.07	2.24	2.40	2.56	2.73	2.89	3.06	3.22	12	
18	0.46	0.75	1.03	1.31	1.60	1.88	2.16	2.45	2.73	3.02	3.30	3.58	3.87	4.15	4.44	4.72	5.00	5.29	5.57	18	
24	0.65	1.05	1.45	1.85	2.26	2.66	3.06	3.46	3.86	4.26	4.66	5.06	5.46	5.87	6.27	6.67	7.07	7.47	7.87	24	
30	0.84	1.35	1.87	2.38	2.90	3.42	3.93	4.45	4.96	5.48	5.99	6.51	7.03	7.54	8.06	8.57	9.09	9.60	10.12	30	
36	1.04	1.67	2.31	2.95	3.59	4.23	4.86	5.50	6.14	6.78	7.42	8.06	8.69	9.33	9.97	10.61	11.25	11.88	12.52	36	
42	1.23	1.99	2.75	3.50	4.26	5.02	5.78	6.54	7.29	8.05	8.81	9.57	10.33	11.08	11.84	12.60	13.36	14.11	14.87	42	
48	1.40	2.26	3.12	3.97	4.83	5.69	6.55	7.41	8.27	9.13	9.99	10.85	11.71	12.57	13.43	14.29	15.15	16.01	16.87	48	
54	1.61	2.60	3.59	4.58	5.57	6.56	7.55	8.54	9.52	10.51	11.50	12.49	13.48	14.47	15.46	16.45	17.44	18.43	19.42	54	
60	1.78	2.87	3.96	5.06	6.15	7.25	8.34	9.43	10.53	11.62	12.71	13.81	14.90	16.00	17.09	18.18	19.28	20.37	21.46	60	
66	2.00	3.23	4.47	5.70	6.93	8.16	9.39	10.62	11.86	13.09	14.32	15.55	16.78	18.01	19.25	20.48	21.71	22.94	24.17	66	
72	2.16	3.49	4.82	6.15	7.49	8.82	10.15	11.48	12.81	14.14	15.47	16.80	18.13	19.46	20.79	22.12	23.45	24.78	26.12	72	
78	2.38	3.84	5.31	6.77	8.23	9.70	11.16	12.62	14.09	15.55	17.01	18.48	19.94	21.40	22.87	24.33	25.79	27.26	28.72	78	
84	2.55	4.12	5.68	7.25	8.82	10.39	11.95	13.52	15.09	16.66	18.22	19.79	21.36	22.93	24.50	26.06	27.63	29.20	30.77	84	
90	2.77	4.48	6.18	7.89	9.59	11.30	13.01	14.71	16.42	18.12	19.83	21.53	23.24								
96	2.93	4.74	6.54	8.35	10.15	11.96	13.76	15.57	17.37	19.17	20.98	22.78	24.59								
102	3.15	5.09	7.02	8.96	10.90	12.84	14.77	16.71	18.65	20.59	22.52	24.46	26.40								
108	3.32	5.36	7.40	9.44	11.48	13.53	15.57	17.61	19.65	21.69	23.73	25.78	27.82								
114	3.54	5.72	7.90	10.08	12.26	14.44	16.62	18.80	20.98	23.16	25.34	27.52	29.70								
120	3.70	5.98	8.26	10.54	12.82	15.10	17.37	19.65	21.93	24.21	26.49	28.77	31.05								

WIND-DRIVEN RAIN

75 mm/h (3 in/h) Rainfall & 13 m/s (29 mph) Wind Velocity

Core Velocity fpm (m/s)	Ventilation Airflow cfm (m ³ /s)	Free Area Velocity fpm (m/s)	Effectiveness	Effectiveness Class
0 (0.0)	0 (0.00)	0 (0.0)	98.1	B
99 (0.5)	1066 (0.50)	194 (1.0)	95.2	B
196 (1.0)	2110 (1.00)	384 (1.9)	92.4	C
291 (1.5)	3132 (1.48)	570 (2.9)	89.8	C
395 (2.0)	4252 (2.01)	773 (3.9)	85.1	C

Test size 1m x 1m (39"x39")core

41-5/8"w x 41-13/16"h Nominal (1.057m x 1.062m)

Wind Driven Rain Penetration Classes

Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

* Discharge Loss Intake

Wind Velocity (mph)	Class	
	Intake	Exhaust
29	3	3
50	3	3

* Discharge loss coefficient is the theoretical air flow of an opening divided by the actual flow rate of a louver the same size.

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

(the higher the coefficient, the less resistance to airflow.)

202.4 mm/h (8 in/h) Rainfall & 22 m/s (50 mph) Wind Velocity

Core Velocity fpm (m/s)	Ventilation Airflow cfm (m ³ /s)	Free Area Velocity fpm (m/s)	Effectiveness	Effectiveness Class
0 (0.0)	0 (0.00)	0 (0.0)	87.8	C
94 (0.5)	1012 (0.48)	184 (0.9)	86.0	C
196 (1.0)	2110 (1.00)	384 (1.9)	83.9	C
298 (1.5)	3208 (1.51)	583 (3.0)	82.3	C