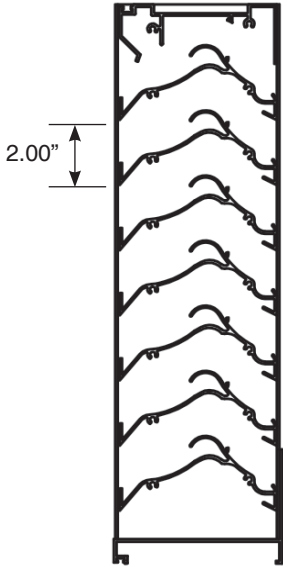


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Section View

Model FRWC Standard Specifications

Frame: .081 extruded aluminum 5.1" deep

Blades: .063 extruded aluminum on approximately 2" centers

Screen: 3/4" x .051 flattened aluminum in removable frame.

Screen is mounted as standard on inside (rear) as looking from exterior of building.

Finish: mill aluminum (standard)

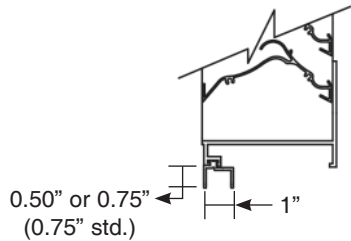
Maximum Panel Size: 120"w x 84"h x 84"w x 120"h

Minimum Panel Size: 12"w x 12"h

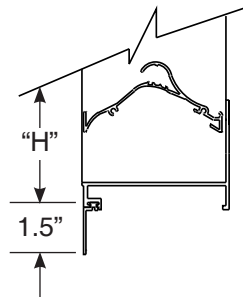
Note: Drainable blade louvers should be limited to 10' maximum section widths (no more that 10' between vertical downspouts) to enable the drainable design to function effectively.

Options (at additional cost)

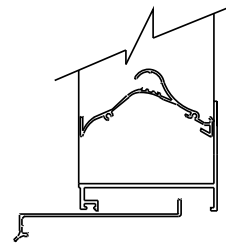
- Filter Racks
 - Security Bars
 - Special Shapes
 - Variety of Screens
 - Sub-Frames
 - Selection of finishes; prime coat, kynar, baked enamel, clear and color anodize, epoxy and heresite.
- Consult Carnes for other special requirements.



Glazing Adapter
Optional



Flanged Frame
Optional



Extended Sill
Optional

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

Tag	Qty.	Size		Frame	Variations
		Width	Height		

Project
Arch./Engr.
Representative

Location
Contractor
Date

Performance Data

Test Size 1m x 1m (39" x 39") core
41-5/8" w x 41-7/8" h Nominal (1.057m x 1.063m)

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	2	3
50	2	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	.0199 and below

(the higher the coefficient, the less resistance to air flow)

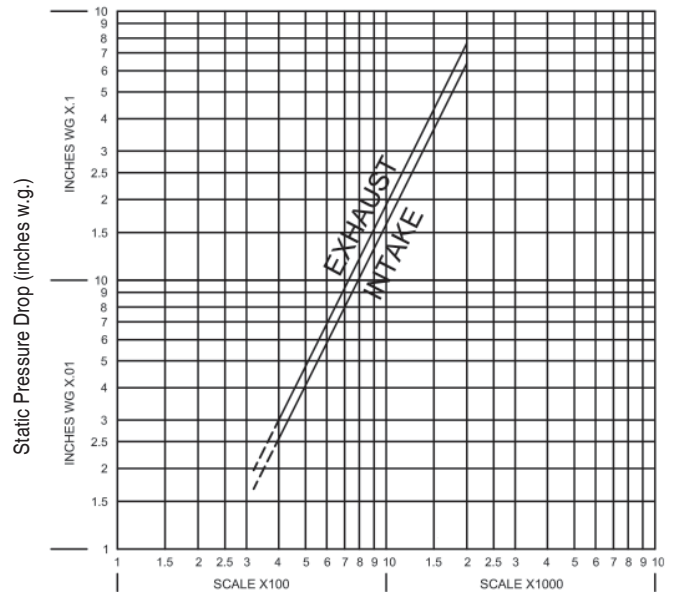
75 mm/h (3 in/h) Rainfall & 13 m/s (29 mph) Wind Velocity				
Core Velocity fpm (m/s)	Ventilation Air Flow cfm (m ³ /s)	Free Area Velocity fpm (m/s)	Effectiveness	AMCA Effectiveness Class
0 (0.0)	0 (0.00)	0 (0.0)	100.0	A
132 (0.7)	1421 (0.67)	258 (1.3)	100.0	A
197 (1.0)	2121 (1.00)	386 (2.0)	100.0	A
287 (1.5)	3089 (1.46)	562 (2.9)	100.0	A
382 (1.9)	4112 (1.94)	748 (3.8)	100.0	A
468 (2.4)	5038 (2.38)	916 (4.7)	99.2	A
583 (3.0)	6275 (2.96)	1141 (5.8)	97.9	B
678 (3.4)	7298 (3.44)	1327 (6.7)	96.1	B

202.4 mm/h (8 in/h) Rainfall & 22 m/s (50 mph) Wind Velocity				
Core Velocity fpm (m/s)	Ventilation Air Flow cfm (m ³ /s)	Free Area Velocity fpm (m/s)	Effectiveness	AMCA Effectiveness Class
0 (0.0)	0 (0.00)	0 (0.0)	97.4	B
85 (0.4)	915 (0.43)	166 (0.8)	96.9	B
187 (0.9)	2013 (0.95)	366 (1.9)	96.6	B
285 (1.4)	3068 (1.45)	558 (2.8)	97.2	B
396 (2.0)	4263 (2.01)	775 (3.9)	96.8	B
493 (2.5)	5307 (2.50)	965 (4.9)	96.5	B
572 (2.9)	6157 (2.91)	1119 (5.7)	96.3	B
674 (3.4)	7255 (3.42)	1319 (6.7)	95.7	B

FRWC/FSWC Specifications

Furnish and install louver as hereinafter specified where shown on plans or as described in schedules. Louver shall be stationary type with horizontal rain resistant style blades positioned on approximately 2" centers within 5" deep frame. Louver frame materials to be .081" thick 6063-T5 extruded aluminum. Louver blade materials to be .063" thick 6063-T5 extruded aluminum. Sections up to maximum of 84" w x 120" h shall withstand wind loading of 30 lbs/sq.ft. (110 mph wind equivalent). Consult factory for welded construction and higher wind speeds. Louver shall have a minimum free area of 7.38 sq.ft. based on the standard 48" w x 48" h test specimen. Louver shall have a maximum static pressure drop of 0.17" (intake) and 0.19" (exhaust) water gauge based on 1000 FPM free area intake velocity. Louver shall carry a Class A water penetration classification based on a ventilation core of 472 FPM at a rainfall rate of 3" per hour and a 29 mph simulated wind velocity.

Air Flow Resistance



FREE AREA VELOCITY (ft/min)

Based on standard air -.075 lbs per cu ft
Ratings do not include the effects of a wire birdscreen
Tested on a 48" x 48"
AMCA Figure 5.5



The Carnes Company certifies that the model FRWC/FSWC louver 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 and wind driven rain.

Free Area in Square Feet

HEIGHT INCHES	WIDTH IN INCHES																		
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	0.31	0.50	0.68	0.87	1.06	1.25	1.44	1.63	1.82	2.01	2.20	2.39	2.57	2.76	2.95	3.14	3.33	3.52	3.71
18	0.48	0.77	1.06	1.35	1.65	1.94	2.23	2.52	2.82	3.11	3.40	3.70	3.99	4.28	4.57	4.87	5.16	5.45	5.74
24	0.67	1.08	1.49	1.91	2.32	2.73	3.14	3.55	3.97	4.38	4.79	5.20	5.61	6.03	6.44	6.85	7.26	7.68	8.09
30	0.97	1.56	2.15	2.75	3.34	3.93	4.53	5.12	5.72	6.31	6.90	7.50	8.09	8.69	9.28	9.87	10.47	11.06	11.66
36	1.13	1.83	2.53	3.23	3.92	4.62	5.32	6.02	6.72	7.41	8.11	8.81	9.51	10.20	10.90	11.60	12.30	12.99	13.69
42	1.40	2.27	3.13	4.00	4.86	5.72	6.59	7.45	8.32	9.18	10.04	10.91	11.77	12.64	13.50	14.36	15.23	16.09	16.96
48	1.57	2.54	3.51	4.48	5.44	6.41	7.38	8.35	9.31	10.28	11.25	12.22	13.19	14.15	15.12	16.09	17.06	18.02	18.99
54	1.77	2.85	3.94	5.03	6.11	7.20	8.29	9.38	10.46	11.55	12.64	13.72	14.81	15.90	16.99	18.07	19.16	20.25	21.33
60	2.06	3.33	4.60	5.87	7.14	8.41	9.68	10.94	12.21	13.48	14.75	16.02	17.29	18.56	19.83	21.10	22.37	23.63	24.90
66	2.23	3.60	4.98	6.35	7.72	9.09	10.47	11.84	13.21	14.59	15.96	17.33	18.70	20.08	21.45	22.82	24.19	25.57	26.94
72	2.42	3.92	5.41	6.90	8.39	9.89	11.38	12.87	14.36	15.85	17.35	18.84	20.33	21.82	23.31	24.81	26.30	27.79	29.28
78	2.72	4.39	6.07	7.74	9.42	11.09	12.76	14.44	16.11	17.79	19.46	21.13	22.81	24.48	26.16	27.83	29.50	31.18	32.85
84	2.89	4.67	6.44	8.22	10.00	11.78	13.56	15.33	17.11	18.89	20.67	22.44	24.22	26.00	27.78	29.55	31.33	33.11	34.89
90	3.08	4.98	6.88	8.77	10.67	12.57	14.47	16.36	18.26	20.16	22.05	23.95	25.85	27.74	29.64	31.54	33.44	35.33	37.23
96	3.38	5.46	7.54	9.62	11.69	13.77	15.85	17.93	20.01	22.09	24.17	26.25	28.33	30.40	32.48	34.56	36.64	38.72	40.80
102	3.55	5.73	7.91	10.10	12.28	14.46	16.64	18.83	21.01	23.19	25.37	27.56	29.74	31.92	34.10	36.29	38.47	40.65	42.84
108	3.74	6.04	8.35	10.65	12.95	15.25	17.55	19.86	22.16	24.46	26.76	29.06	31.37	33.67	35.97	38.27	40.57	42.88	45.18
114	4.04	6.52	9.00	11.49	13.97	16.46	18.94	21.42	23.91	26.39	28.88	31.36	33.84	36.33	38.81	41.30	43.78	46.26	48.75
120	4.21	6.79	9.38	11.97	14.56	17.14	19.73	22.32	24.91	27.49	30.08	32.67	35.26	37.85	40.43	43.02	45.61	48.20	50.78