Model RD-4 Louver Performance Data

RD-4 Specifications

Furnish and install louver as hereinafter specified where shown on plans or as described in schedules. Louver shall be stationary type with vertical rain resistant style blades positioned on approximately 2" centers within a 4.162" deep frame. Louver frame and blade materials to be .081" thick 6063-T5 extruded aluminum. Sections up to maximum of 60"w x 96"h shall withstand wind loading of 30 lbs per square foot (PSF) (110 mph wind equivalent). Consult factory for welded construction and higher wind speeds. Louver shall have a minimum free area of 6.32 sq. ft. base on the standard 48"w x 48"h test specimen. Louver shall have a maximum static pressure drop of .23" (exhaust) & .31" (intake) water gauge based on 1000 FPM free area intake velocity. Louver shall carry a Class A water penetration classification base on a ventilation air core velocity of 484 FPM at a rainfall rate of 3" per hour and a 29 mph simulated wind velocity. Louver shall carry a class A water penetration classification based on a ventilation core velocity of 201 FPM at a rainfall rate of 8" per hour and a 50 mph simulated wind velocity.

Wind Driven Rain Performance

Test size 1m x 1m (39"x39") core
41.5"w x 41"h Nominal (1.05m x 1.04m)

75 mm/h (3in/h) Rainfall & 13 m/s (29 mph) Wind Velocity		
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
0.0 (0)	100.0	A
0.5 (126)	100.0	A
1.0 (199)	100.0	A
1.5 (291)	99.9	A
2.0 (390)	99.6	A
2.5 (484)	99.5	A
3.0 (587)	98.6	B
3.5 (672)	89.3	C

*Classes for maximum allowable water penetrations

200 mm/h (8in/h) Rainfall & 32 m/s (50 mph) Wind Velocity		
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
0.0 (0)	99.9	A
0.5 (119)	99.8	A
1.0 (201)	99.4	A
1.5 (274)	98.5	B
2.0 (386)	97.1	B
2.5 (473)	93.8	C
3.0 (570)	85.4	C
3.5 (694)	58.3	D

*Classes for maximum allowable water penetrations

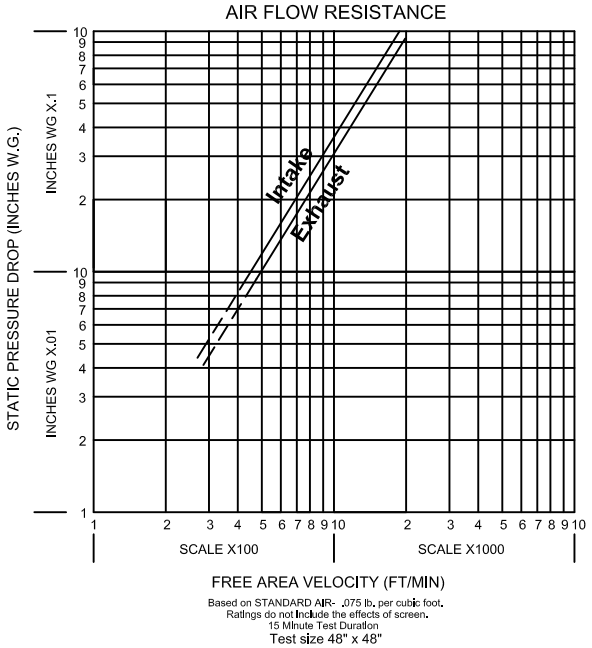
* Discharge Loss Intake	
Wind Velocity (mph)	Class
29	4
50	4

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 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 airflow.)



Based on STANDARD AIR- .075 lb. per cubic foot.
Ratings do not include the effects of screen.
15 Minute Test Duration
Test size 48" x 48"

RD-4 FREE AREA CHART (SQUARE FEET)

Louver Height	Louver Width In Inches																				Louver Height
Inches	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	Inches
12	0.18	0.29	0.40	0.51	0.62	0.73	0.84	0.95	1.05	1.16	1.27	1.38	1.49	1.60	1.71	1.82	1.93	2.04	2.15	12
18	0.44	0.70	0.96	1.23	1.49	1.76	2.02	2.29	2.55	2.82	3.08	3.35	3.61	3.88	4.14	4.41	4.67	4.93	5.20	18
24	0.63	1.01	1.39	1.77	2.15	2.53	2.91	3.29	3.67	4.05	4.43	4.81	5.19	5.57	5.95	6.33	6.71	7.09	7.47	24
30	0.89	1.43	1.97	2.52	3.06	3.60	4.14	4.68	5.22	5.77	6.31	6.85	7.39	7.93	8.47	9.02	9.56	10.10	10.64	30
36	1.10	1.76	2.43	3.09	3.76	4.43	5.09	5.76	6.43	7.09	7.76	8.42	9.09	9.76	10.42	11.09	11.75	12.42	13.09	36
42	1.26	2.03	2.79	3.56	4.32	5.09	5.85	6.62	7.39	8.15	8.92	9.68	10.45	11.21	11.98	12.74	13.51	14.28	15.04	42
48	1.36	2.19	3.02	3.84	4.67	5.50	6.32	7.15	7.98	8.81	9.63	10.46	11.29	12.11	12.94	13.77	14.59	15.42	16.25	48
54	1.56	2.50	3.45	4.40	5.34	6.29	7.23	8.18	9.13	10.07	11.02	11.96	12.91	13.86	14.80	15.75	16.69	17.64	18.59	54
60	1.82	2.93	4.03	5.14	6.24	7.35	8.46	9.56	10.67	11.77	12.88	13.99	15.09	16.20	17.30	18.41	19.52	20.62	21.73	60
66	2.01	3.23	4.45	5.67	6.89	8.12	9.34	10.56	11.78	13.00	14.22	15.44	16.66	17.88	19.11	20.33	21.55	22.77	23.99	66
72	2.13	3.42	4.72	6.01	7.30	8.60	9.89	11.18	12.48	13.77	15.06	16.36	17.65	18.94	20.24	21.53	22.82	24.12	25.41	72
78	2.27	3.65	5.04	6.42	7.80	9.18	10.56	11.94	13.32	14.70	16.08	17.47	18.85	20.23	21.61	22.99	24.37	25.75	27.13	78
84	2.41	3.87	5.33	6.80	8.26	9.72	11.18	12.65	14.11	15.57	17.03	18.50	19.96	21.42	22.88	24.35	25.81	27.27	28.74	84
90	2.54	4.09	5.63	7.18	8.72	10.27	11.81	13.36	14.90	16.45	17.99	19.54	21.08	22.62	24.17	25.71	27.26	28.80	30.35	90
96	2.73	4.38	6.04	7.70	9.35	11.01	12.67	14.32	15.98	17.63	19.29	20.95	22.60	24.26	25.92	27.57	29.23	30.89	32.54	96
102	2.87	4.61	6.36	8.10	9.85	11.59	13.33	15.08	16.82	18.57	20.31	22.05	23.80	25.54	27.29	29.03	30.77	32.52	34.26	102
108	2.98	4.80	6.61	8.42	10.24	12.05	13.86	15.68	17.49	19.30	21.12	22.93	24.74	26.55	28.37	30.18	31.99	33.81	35.62	108
114	3.09	4.97	6.84	8.72	10.60	12.48	14.35	16.23	18.11	19.99	21.86	23.74	25.62	27.50	29.37	31.25	33.13	35.01	36.88	114
120	3.22	5.18	7.13	9.09	11.05	13.00	14.96	16.92	18.87	20.83	22.78	24.74	26.70	28.65	30.61	32.57	34.52	36.48	38.44	120