

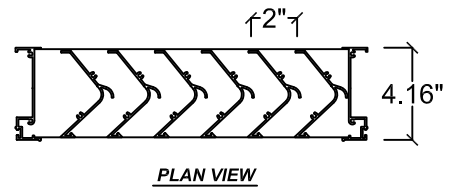
SUBMITTAL DATA

MODEL RD-4

4" WIND DRIVEN RAIN FIXED LOUVER

STANDARD CONSTRUCTION:

- FRAME: .081 Extruded Aluminum 4.16" Deep
- BLADES: .081 Extruded Aluminum on approximately 2" centers.
- EXTENDED SILL: .081 Extruded Aluminum, 5.25" Deep
- BIRDSCREEN: .75" x .051" Flattened Aluminum in removeable frame.
Screen is mounted as standard on inside (rear) as looking from exterior of building.
- FINISH: Mill Aluminum (Std)
- MINIMUM SIZE: 12"w x 12"h
- MAXIMUM SIZE: Factory Assembled 60"w x 96"h

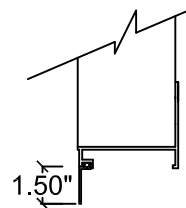
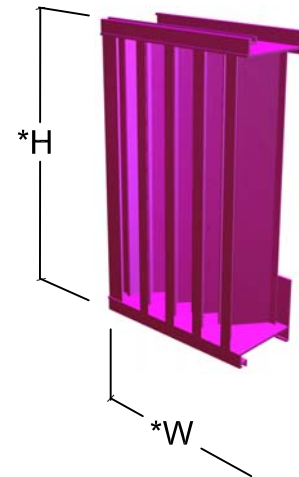


OPTIONS:

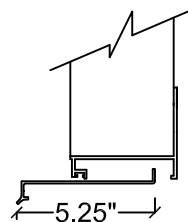
- Flanged Frame (1.50" std.), (1" std for shapes R_)
- Custom Flange (1", 2" , or 3"), (1.5", 2", or 3" for shapes R_)
- Extended Sill
- Glazing Adapter (.50" or .75")
- Insect Screen (Other Screen Available, See Screen Page)
- Filter Racks (no screen)
- Security Bars
- Hinged Sub Frame
- Welded Construction (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:

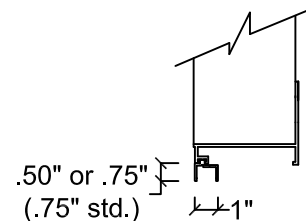
- Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
- Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-05 Standards
- Kynar 500®** or **HYLAR® 5000 70% TRINAR®** (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards
- Kynar 500®** or **HYLAR® 5000 (70% Tri-Escent II)** (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments creates subtle yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
- Clear Anodize 204 R-1 Class II** (AA-C22A31)(0.4 to 0.7 mil)
- Clear Anodize 215 R-1 Class I** (AA-C22A41)(>0.7 mil)
- Integral Color Anodize** (AA-C22A42)(>0.7 mil)
 - Clear coat available for all above finishes.
 - Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
 - Kynar® 500 is a registered trademark of Arkema.
 - ALUM*A*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
 - ACRA-BOND® ULTRA is a registered trademark of AkzoNobel



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



EXTENDED SILL (Standard)



OPTIONAL GLAZING ADAPTER

*W & H dimensions furnished approximately 1/4" under size.

Due to continuing research, United Enertech reserves the right to change specifications without notice.



3005 South Hickory Street
Chattanooga, Tennessee 37407
Tel: (423) 698-7715
Fax: (423) 698-6629
www.unitedenertech.com

MODEL RD-4 (4" WIND DRIVEN RAIN FIXED LOUVER)

DRAWN BY: MHM	DATE: 11-1-02	REV. DATE: 5-13-14	REV. NO. 2	APPROVED BY: BGT	DWG. NO.: A-16
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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

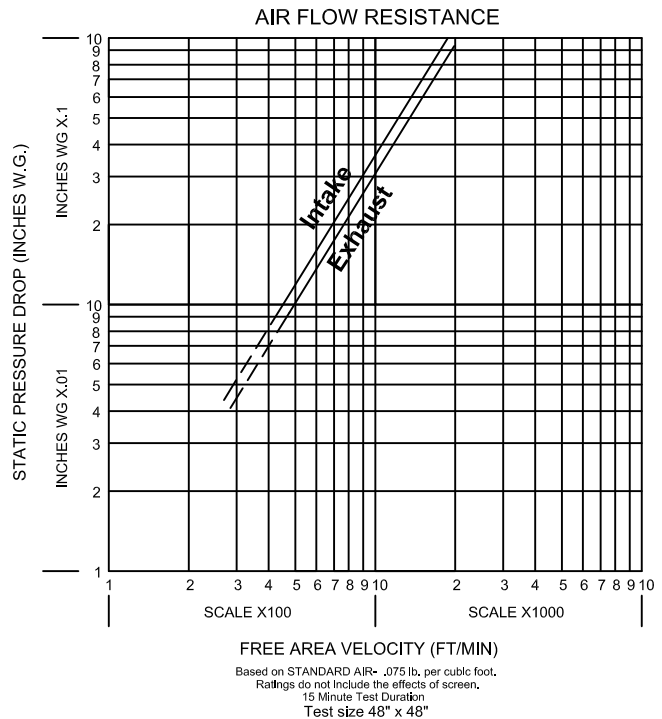
* Discharge Loss Intake	
Wind Velocity (mph)	Class
29	4
50	4

* 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.)

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



RD-4 FREE AREA CHART (SQURE 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
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	38.44	120