

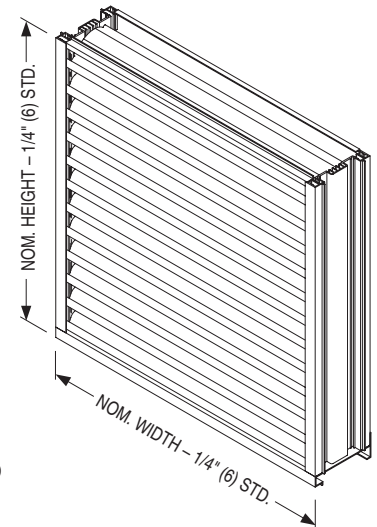


EXTRUDED ALUMINUM STATIONARY LOUVER
WIND-DRIVEN RAIN RESISTANT
5" (127) DEEP • HORIZONTAL BLADE
MODEL: 1605WD

Model 1605WD wind-driven rain horizontal drainable blade louver provides maximum weather protection in a 5" (127) deep frame, with pleasing sight-proof aesthetics that compliment any structure's exterior styling. Suitable for use in exhaust and low to medium velocity intake applications, the drainable head and drainable blade design divert collected water down concealed side downspouts and out the sill. Blades are reinforced with full length integral bosses for superior strength and the 5" (127) deep channel or optional flanged frame installs easily in most common wall configurations. Model 1605WD is AMCA Licensed for wind-driven rain and is engineered to be architecturally appealing as well as mechanically enduring.

STANDARD CONSTRUCTION:

- FRAME:** 5" (127) deep, Type 6063-T6 extruded aluminum, .080" (2.03) nominal wall thickness. Integral downspouts and caulking slot provided.
- BLADES:** Type 6063-T6 extruded aluminum, .060" (1.52) nominal wall thickness, with reinforcing bosses.
- BLADE ANGLE:** Fixed at 30 degrees.
- BLADE SPACING:** Approximately 2" (51) on centers.
- BLADE SUPPORT:** Concealed type, factory installed on rear of louver. Size varies based on design pressure, consult Nailor.
- SCREEN:** 5/8" x .050 (15.9 x 1.27) expanded, flattened aluminum bird screen in removable frame, inside (rear) mount (adds approx. 3/8" [10] to louver depth).
- FINISH:** Mill.
- MINIMUM SIZE:** 12" W x 12" H (305 x 305).
- MAX. SINGLE SECTION SIZE:** 120" W x 84" H (3048 x 2134) or 84" W x 120"H (2134 x 3048). 70 sq. ft. (6.5 m²). Larger louvers will require field assembly of smaller sections.



1 1/2" (38) FLANGED FRAME (FL) (OPT.)



OPTIONS:

- BSSS** Type 304 S.S. Bird Screen.
- BSN** No Bird Screen.
- ISA** Aluminum Insect Screen.
- ISSS** Type 304 S.S. Insect Screen.
- FL** Flanged Frame.
- ESI** Extended Sill.
- Other: _____.

OPTIONAL FINISHES:

- PC3** Powder Coat AAMA 2603. Color: _____.
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- PCC** Prime Coat.

- AN04** Clear Anodized 204-R1.
- AN15** Clear Anodized 215-R1.
- ANLB** Light Bronze.
- ANMB** Medium Bronze.
- ANDB** Dark Bronze.
- ANBK** Black.

For Installation Instructions, see IOM-LOUVERINSTFPA.

SCHEDULE TYPE:		Page 1 of 3			
PROJECT:		Dimensions are in inches (mm).			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	8 - 11 - 20	1600	1 - 22 - 18	1605WD	



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AIRFLOW/WATER PENETRATION DATA
for 48" x 48" (1219 x 1219) Louver Size

I N T A K E	Free Area %	47%
	Free Area sq. ft. (sq. m.)	7.59 (0.71)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	1250 fpm (381 m/min.)
	Air Volume at 1250 fpm Free Area Velocity	9,488 cfm (4477 l/s)
	Pressure Drop @ 1000 fpm	.22 in. w.g. (55 Pa)

NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.*Maximum Free Area Velocity tested is 1250 fpm. Beginning point of water penetration for this model is above 1250 fpm.

WIND DRIVEN RAIN PERFORMANCE

Core Ventilation	0	98	197	295	394	492	591	689
Rate in fpm (m/s)	(0.0)	(0.5)	(1.0)	(1.5)	(2.0)	(2.5)	(3.0)	(3.5)
Free Area Ventilation	0	206	419	628	838	1047	1257	1466
Rate in fpm (m/s)	(0.0)	(1.05)	(2.13)	(3.19)	(4.26)	(5.32)	(6.39)	(7.45)
Effectiveness Ratio (%)	100	100	100	100	100	99.6	99.5	99
Penetration Class	A	A	A	A	A	A	A	A

Test was based on a 39.375" x 39.375" (1.0 m x 1.0 m) core area louver tested at a rainfall rate of 3" per hour (76 mm/hour) with a wind velocity of **29 mph (13 m/s)**.

DISCHARGE LOSS COEFFICIENT CLASS (INTAKE): 3. (Discharge Loss Coefficient Classification is as follows: 1=0.4 and above, 2=0.3 to 0.399, 3 = 0.2 to 0.299, 4 = 0.199 and below.)

Core Ventilation	0	98	197	295	394	492	591	689
Rate in fpm (m/s)	(0.0)	(0.5)	(1.0)	(1.5)	(2.0)	(2.5)	(3.0)	(3.5)
Free Area Ventilation	0	206	419	628	838	1047	1257	1466
Rate in fpm (m/s)	(0.0)	(1.05)	(2.13)	(3.19)	(4.26)	(5.32)	(6.39)	(7.45)
Effectiveness Ratio (%)	100	99.6	99.3	99.2	98.6	98.1	97.7	96.4
Penetration Class	A	A	A	A	B	B	B	B

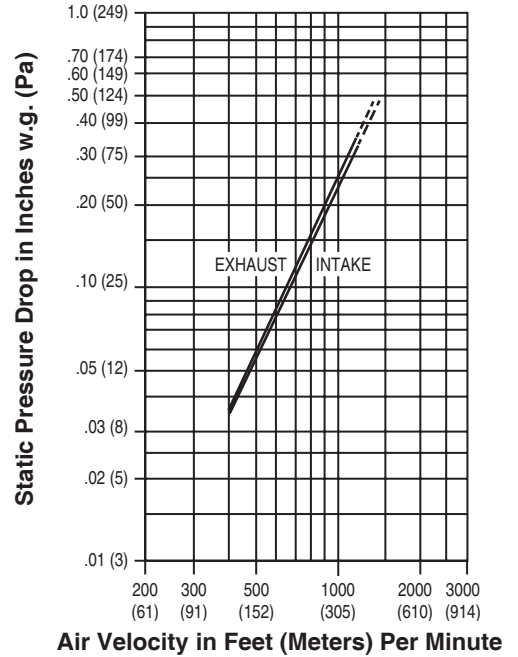
Test was based on a 39.375" x 39.375" (1.0 m x 1.0 m) core area louver tested at a rainfall rate of 8" per hour (203 mm/hour) with a wind velocity of **50 mph (22 m/s)**.

DISCHARGE LOSS COEFFICIENT CLASS (INTAKE): 3. (Discharge Loss Coefficient Classification is as follows: 1=0.4 and above, 2=0.3 to 0.399, 3 = 0.2 to 0.299, 4 = 0.199 and below.)



Nailor Industries Inc. certifies the Model 1605WD 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. Seal applies to air performance, water penetration and wind driven rain performance ratings.

PRESSURE DROP



Air Velocity in Feet (Meters) Per Minute Through Free Area
 Louver test size: 48" x 48" (1219 x 1219 mm).
 Standard air density @ 0.075 lbs/ft³.
 Tested to AMCA Fig. 5.5 – 6.5.

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FREE AREA in Square Feet and Square Meters

		Width in Inches and Meters																		
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Height in Inches and Meters	12	0.27	0.43	0.60	0.76	0.93	1.09	1.26	1.42	1.59	1.75	1.92	2.08	2.25	2.41	2.58	2.74	2.91	3.07	3.24
	0.30	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.22	0.24	0.25	0.27	0.29	0.30
	18	0.47	0.76	1.05	1.34	1.63	1.92	2.20	2.49	2.78	3.07	3.36	3.65	3.94	4.23	4.51	4.80	5.09	5.38	5.67
	0.46	0.04	0.07	0.10	0.12	0.15	0.18	0.20	0.23	0.26	0.29	0.31	0.34	0.37	0.39	0.42	0.45	0.47	0.50	0.53
	24	0.74	1.19	1.65	2.10	2.56	3.01	3.46	3.92	4.37	4.82	5.28	5.73	6.19	6.64	7.09	7.55	8.00	8.45	8.91
	0.61	0.07	0.11	0.15	0.20	0.24	0.28	0.32	0.36	0.41	0.45	0.49	0.53	0.57	0.62	0.66	0.70	0.74	0.79	0.83
	30	0.94	1.52	2.10	2.68	3.25	3.83	4.41	4.99	5.56	6.14	6.72	7.30	7.87	8.45	9.03	9.61	10.18	10.76	11.34
	0.76	0.09	0.14	0.19	0.25	0.30	0.36	0.41	0.46	0.52	0.57	0.62	0.68	0.73	0.79	0.84	0.89	0.95	1.00	1.05
	36	1.15	1.85	2.55	3.25	3.95	4.65	5.35	6.05	6.76	7.46	8.16	8.86	9.56	10.26	10.96	11.66	12.37	13.07	13.77
	0.91	0.11	0.17	0.24	0.30	0.37	0.43	0.50	0.56	0.63	0.69	0.76	0.82	0.89	0.95	1.02	1.08	1.15	1.21	1.28
	42	1.35	2.17	3.00	3.82	4.65	5.47	6.30	7.12	7.95	8.77	9.60	10.42	11.25	12.07	12.90	13.72	14.55	15.37	16.20
	1.07	0.13	0.20	0.28	0.36	0.43	0.51	0.59	0.66	0.74	0.81	0.89	0.97	1.04	1.12	1.20	1.27	1.35	1.43	1.50
	48	1.62	2.61	3.60	4.59	5.58	6.57	7.59	8.55	9.54	10.53	11.52	12.51	13.50	14.49	15.48	16.47	17.46	18.45	19.44
	1.22	0.15	0.24	0.33	0.43	0.52	0.61	0.71	0.79	0.89	0.98	1.07	1.16	1.25	1.35	1.44	1.53	1.62	1.71	1.81
	54	1.82	2.93	4.05	5.16	6.27	7.39	8.50	9.62	10.73	11.84	12.96	14.07	15.18	16.30	17.41	18.53	19.64	20.75	21.87
	1.37	0.17	0.27	0.38	0.48	0.58	0.69	0.79	0.89	1.00	1.10	1.20	1.31	1.41	1.51	1.62	1.72	1.82	1.93	2.03
60	2.02	3.26	4.50	5.73	6.97	8.21	9.45	10.68	11.92	13.16	14.40	15.63	16.87	18.11	19.35	20.58	21.82	23.06	24.30	
1.52	0.19	0.30	0.42	0.53	0.65	0.76	0.88	0.99	1.11	1.22	1.34	1.45	1.57	1.68	1.80	1.91	2.03	2.14	2.26	
66	2.22	3.58	4.95	6.31	7.67	9.03	10.39	11.75	13.11	14.47	15.84	17.20	18.56	19.92	21.28	22.64	24.00	25.36	26.73	
1.68	0.21	0.33	0.46	0.59	0.71	0.84	0.97	1.09	1.22	1.34	1.47	1.60	1.72	1.85	1.98	2.10	2.23	2.36	2.48	
72	2.49	4.02	5.55	7.07	8.60	10.12	11.65	13.18	14.70	16.23	17.76	19.28	20.81	22.33	23.86	25.39	26.91	28.44	29.97	
1.83	0.23	0.37	0.52	0.66	0.80	0.94	1.08	1.22	1.37	1.51	1.65	1.79	1.93	2.07	2.22	2.36	2.50	2.64	2.78	
78	2.70	4.35	6.00	7.65	9.30	10.95	12.60	14.25	15.90	17.55	19.20	20.85	22.50	24.15	25.80	27.45	29.10	30.75	32.40	
1.98	0.25	0.40	0.56	0.71	0.86	1.02	1.17	1.32	1.48	1.63	1.78	1.94	2.09	2.24	2.40	2.55	2.70	2.86	3.01	
84	2.90	4.67	6.44	8.22	9.99	11.77	13.54	15.31	17.09	18.86	20.63	22.41	24.18	25.96	27.73	29.50	31.28	33.05	34.82	
2.13	0.27	0.43	0.60	0.76	0.93	1.09	1.26	1.42	1.59	1.75	1.92	2.08	2.25	2.41	2.58	2.74	2.91	3.07	3.24	
90	3.10	5.00	6.89	8.79	10.69	12.59	14.48	16.38	18.28	20.18	22.07	23.97	25.87							
2.29	0.29	0.46	0.64	0.82	0.99	1.17	1.35	1.52	1.70	1.87	2.05	2.23	2.40							
96	3.30	5.32	7.34	9.37	11.39	13.41	15.43	17.45	19.47	21.49	23.51	25.54								
2.44	0.31	0.49	0.68	0.87	1.06	1.25	1.43	1.62	1.81	2.00	2.18	2.37	2.56							
102	3.57	5.76	7.94	10.13	12.32	14.50	16.69	18.87	21.06	23.25	25.43	27.62	29.81							
2.59	0.33	0.53	0.74	0.94	1.14	1.35	1.55	1.75	1.96	2.16	2.36	2.57	2.77							
108	3.77	6.08	8.39	10.70	13.01	15.32	17.63	19.94	22.25	24.56	26.87	29.18	31.49							
2.74	0.35	0.57	0.78	0.99	1.21	1.42	1.64	1.85	2.07	2.28	2.50	2.71	2.93							
114	3.98	6.41	8.84	11.28	13.71	16.14	18.58	21.01	23.45	25.88	28.31	30.75	33.18							
2.90	0.37	0.60	0.82	1.05	1.27	1.50	1.73	1.95	2.18	2.40	2.63	2.86	3.08							
120	4.18	6.73	9.29	11.85	14.41	16.96	19.52	22.08	24.64	27.19	29.75	32.31	34.87							
3.05	0.39	0.63	0.86	1.10	1.34	1.58	1.81	2.05	2.29	2.53	2.76	3.00	3.24							



SCHEDULE TYPE:

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CONTRACTOR:

Page 3 of 3
 Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 11 - 20

1600

1 - 22 - 18

1605WD