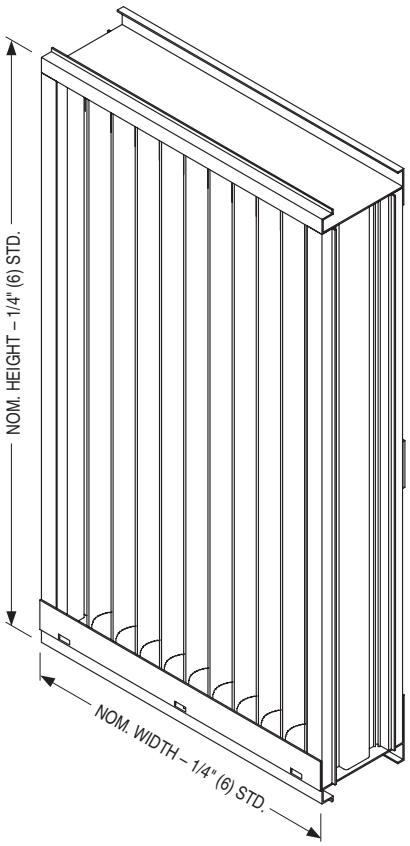
Nailor® Industries Inc.

EXTRUDED ALUMINUM STATIONARY LOUVER
HIGH VELOCITY WIND-DRIVEN RAIN AND IMPACT RESISTANT
5" (127) DEEP • VERTICAL BLADE
MODEL: 1605WDV

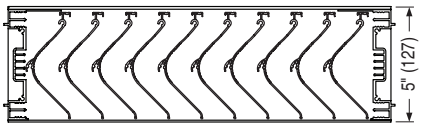
QUALIFICATIONS:

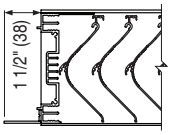
- **AMCA 500-L (Wind-Driven Rain, Water Penetration, Air Performance).**
- **AMCA 540 (Wind-Borne Debris Impact Test [Enhanced "Level E" Protection]).**
- **AMCA 550 (High Velocity Wind-Driven Rain Resistance Test).**
- **Wind load rating +/– 70 PSF.**



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 45 degrees.
BLADE SPACING:	Approximately 1 1/2" (38) on centers.
BLADE SUPPORT:	2.5" (64) strap every 60" (1524) or less in height.
SCREEN:	3/4" x .050 (19 x 1.3) expanded, flattened aluminum bird screen in removable frame, inside (rear) mount (adds approximately 3/8" [10] to louver depth).
FINISH:	Mill.
MINIMUM SIZE:	12" W x 12" H (305 x 305).
MAX. SINGLE SECTION SIZE:	72" W x 120" H (1829 x 3048) or 120" W x 72" H (3048 x 1829). 60 sq. ft. (5.6 m²). Larger louvers will require field assembly of smaller sections.
MAXIMUM SIZE:	Unlimited Width x 120" H (3048).





FLANGED FRAME (FL) (OPT.)

OPTIONS:

- ❑ **FL** Flanged Frame.
- ❑ **BSSS** Type 304 S.S. Bird Screen.
- ❑ **BSN** No Bird Screen.
- ❑ **ISA** Aluminum Insect Screen.
- ❑ **ISSS** Type 304 S.S. Insect Screen.
- ❑ **ESI** Extended Sill.
- ❑ **PASI** Sill Pan.
- ❑ **PAAA** Perimeter Anchor Angles (Aluminum, Continuous).
- ❑ Other: _____ .

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amca INTERNATIONAL LISTED — HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER *Enhanced Protection Level E* — See www.AMCA.org for all certified or listed products. This label does not signify AMCA airflow performance certification.

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.

SCHEDULE TYPE:	Page 1 of 3 Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**6 - 25 - 21**	**1600**	**4 - 19 - 21**	**1605WDV**

Nailor Industries Inc.

EXTRUDED ALUMINUM STATIONARY LOUVER
HIGH VELOCITY WIND-DRIVEN RAIN AND IMPACT RESISTANT
5" (127) DEEP • VERTICAL BLADE • PERFORMANCE DATA
MODEL: 1605WDV

FREE AREA in Square Feet and Square Meters

Height in Inches and Meters	Width in Inches and Meters																	
	12 / 0.30	18 / 0.46	24 / 0.61	30 / 0.76	36 / 0.91	42 / 1.07	48 / 1.22	54 / 1.37	60 / 1.52	66 / 1.68	72 / 1.83	78 / 1.98	84 / 2.13	90 / 2.29	96 / 2.44	102 / 2.59	108 / 2.74	114 / 2.90	120 / 3.05
12 / 0.30	0.28 / 0.03	0.51 / 0.05	0.74 / 0.07	0.96 / 0.09	1.19 / 0.11	1.42 / 0.13	1.65 / 0.15	1.87 / 0.17	2.10 / 0.20	2.33 / 0.22	2.55 / 0.24	2.78 / 0.26	3.01 / 0.28	3.24 / 0.30	3.46 / 0.32	3.69 / 0.34	3.92 / 0.36	4.14 / 0.38	4.37 / 0.41
18 / 0.46	0.49 / 0.05	0.89 / 0.08	1.28 / 0.12	1.68 / 0.16	2.07 / 0.19	2.47 / 0.23	2.86 / 0.27	3.26 / 0.30	3.65 / 0.34	4.05 / 0.38	4.44 / 0.41	4.83 / 0.45	5.23 / 0.49	5.62 / 0.52	6.02 / 0.56	6.41 / 0.60	6.81 / 0.63	7.20 / 0.67	7.60 / 0.71
24 / 0.61	0.63 / 0.06	1.14 / 0.11	1.65 / 0.15	2.15 / 0.20	2.66 / 0.25	3.17 / 0.29	3.67 / 0.34	4.18 / 0.39	4.69 / 0.44	5.19 / 0.48	5.70 / 0.53	6.20 / 0.58	6.71 / 0.62	7.22 / 0.67	7.72 / 0.72	8.23 / 0.76	8.74 / 0.81	9.24 / 0.86	9.75 / 0.91
30 / 0.76	0.84 / 0.08	1.52 / 0.14	2.19 / 0.20	2.87 / 0.27	3.54 / 0.33	4.21 / 0.39	4.89 / 0.45	5.56 / 0.52	6.24 / 0.58	6.91 / 0.64	7.58 / 0.70	8.26 / 0.77	8.93 / 0.83	9.61 / 0.89	10.28 / 0.96	10.96 / 1.02	11.63 / 1.08	12.30 / 1.14	12.98 / 1.21
36 / 0.36	1.05 / 0.10	1.89 / 0.18	2.74 / 0.25	3.58 / 0.33	4.42 / 0.41	5.26 / 0.49	6.10 / 0.57	6.95 / 0.65	7.79 / 0.72	8.63 / 0.80	9.47 / 0.88	10.31 / 0.96	11.15 / 1.04	12.00 / 1.11	12.84 / 1.19	13.68 / 1.27	14.52 / 1.35	15.36 / 1.43	16.21 / 1.51
42 / 1.07	1.26 / 0.12	2.27 / 0.21	3.28 / 0.30	4.29 / 0.40	5.30 / 0.49	6.31 / 0.59	7.32 / 0.68	8.33 / 0.77	9.34 / 0.87	10.35 / 0.96	11.36 / 1.06	12.37 / 1.15	13.38 / 1.24	14.39 / 1.34	15.39 / 1.43	16.40 / 1.52	17.41 / 1.62	18.42 / 1.71	19.43 / 1.81
48 / 1.22	1.47 / 0.14	2.65 / 0.25	3.83 / 0.36	5.00 / 0.46	6.18 / 0.57	7.36 / 0.68	8.53 / 0.79	9.71 / 0.90	10.89 / 1.01	12.07 / 1.12	13.24 / 1.23	14.42 / 1.34	15.60 / 1.45	16.77 / 1.56	17.95 / 1.67	19.13 / 1.78	20.31 / 1.89	21.48 / 2.00	22.66 / 2.11
54 / 1.37	1.68 / 0.16	3.03 / 0.28	4.37 / 0.41	5.72 / 0.53	7.06 / 0.66	8.41 / 0.78	9.75 / 0.91	11.09 / 1.03	12.44 / 1.16	13.78 / 1.28	15.13 / 1.41	16.47 / 1.53	17.82 / 1.66	19.16 / 1.78	20.51 / 1.91	21.85 / 2.03	23.20 / 2.16	24.54 / 2.28	25.89 / 2.40
60 / 1.52	1.89 / 0.18	3.40 / 0.32	4.92 / 0.46	6.43 / 0.60	7.94 / 0.74	9.45 / 0.88	10.97 / 1.02	12.48 / 1.16	13.99 / 1.30	15.50 / 1.44	17.02 / 1.58	18.53 / 1.72	20.04 / 1.86	21.55 / 2.00	23.07 / 2.14	24.58 / 2.28	26.09 / 2.42	27.60 / 2.56	29.12 / 2.70
66 / 1.68	2.10 / 0.20	3.78 / 0.35	5.46 / 0.51	7.14 / 0.66	8.82 / 0.82	10.50 / 0.98	12.18 / 1.13	13.86 / 1.29	15.54 / 1.44	17.22 / 1.60	18.90 / 1.76	20.58 / 1.91	22.26 / 2.07	23.94 / 2.22	25.62 / 2.38	27.30 / 2.54	28.98 / 2.69	30.66 / 2.85	32.34 / 3.00
72 / 1.83	2.31 / 0.21	4.16 / 0.39	6.01 / 0.56	7.85 / 0.73	9.70 / 0.90	11.55 / 1.07	13.40 / 1.24	15.24 / 1.42	17.09 / 1.59	18.94 / 1.76	20.79 / 1.93	22.64 / 2.10	24.48 / 2.27	26.33 / 2.45	28.18 / 2.62	30.03 / 2.79	31.88 / 2.96	33.72 / 3.13	35.57 / 3.30
78 / 1.98	2.52 / 0.23	4.53 / 0.42	6.55 / 0.61	8.57 / 0.80	10.58 / 0.98	12.60 / 1.17	14.61 / 1.36	16.63 / 1.54	18.64 / 1.73	20.66 / 1.92	22.67 / 2.11								
84 / 2.13	2.73 / 0.25	4.91 / 0.46	7.10 / 0.66	9.28 / 0.86	11.46 / 1.06	13.64 / 1.27	15.83 / 1.47	18.01 / 1.67	20.19 / 1.88	22.38 / 2.08	24.56 / 2.28								
90 / 2.29	2.94 / 0.27	5.29 / 0.49	7.64 / 0.71	9.99 / 0.93	12.34 / 1.15	14.69 / 1.36	17.04 / 1.58	19.39 / 1.80	21.75 / 2.02	24.10 / 2.24	26.45 / 2.46								
96 / 2.44	3.15 / 0.29	5.67 / 0.53	8.19 / 0.76	10.70 / 0.99	13.22 / 1.23	15.74 / 1.46	18.26 / 1.70	20.78 / 1.93	23.30 / 2.16	25.81 / 2.40	28.33 / 2.63								
102 / 2.59	3.36 / 0.31	6.04 / 0.56	8.73 / 0.81	11.42 / 1.06	14.10 / 1.31	16.79 / 1.56	19.47 / 1.81	22.16 / 2.06	24.85 / 2.31	27.53 / 2.56	30.22 / 2.81								
108 / 2.74	3.57 / 0.33	6.42 / 0.60	9.27 / 0.86	12.13 / 1.13	14.98 / 1.39	17.84 / 1.66	20.69 / 1.92	23.54 / 2.19	26.40 / 2.45	29.25 / 2.72	32.11 / 2.98								
114 / 2.90	3.78 / 0.35	6.80 / 0.63	9.82 / 0.91	12.84 / 1.19	15.86 / 1.47	18.88 / 1.75	21.91 / 2.04	24.93 / 2.32	27.95 / 2.60	30.97 / 2.88	33.99 / 3.16								
120 / 3.05	3.99 / 0.37	7.18 / 0.67	10.36 / 0.96	13.55 / 1.26	16.74 / 1.56	19.93 / 1.85	23.12 / 2.15	26.31 / 2.44	29.50 / 2.74	32.69 / 3.04	35.88 / 3.33								

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HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

SCHEDULE TYPE:	Page 2 of 3 Dimensions are in inches (mm).			
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5" (127) DEEP • VERTICAL BLADE • PERFORMANCE DATA
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AIRFLOW / WATER PENETRATION DATA
for 48" x 48" (1219 x 1219) Louver Size

	Free Area %	53%
	Free Area sq. ft. (sq. m.)	8.53 (0.79)
INTAKE	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.)*
INTAKE	Air Volume at 1250 fpm Free Area Velocity	10,663 cfm (5032 l/s)
INTAKE	Pressure Drop @ 1250 fpm	.29 in. w.g. (72 Pa)

NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the beginning point of 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

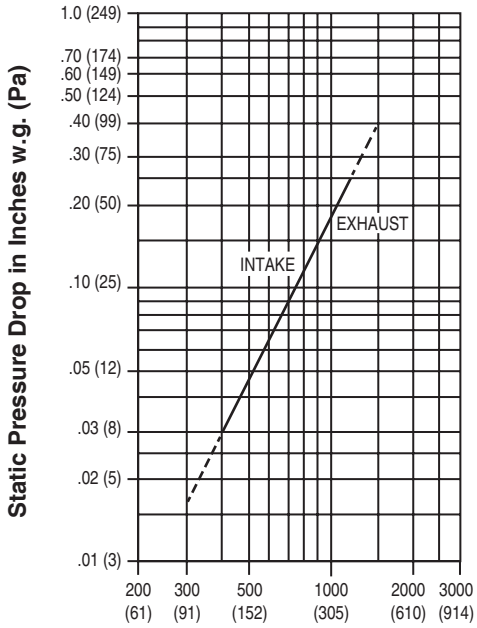
Core Ventilation Rate in fpm (m/s)	0 (0.00)	110 (0.56)	195 (0.99)	279 (1.42)	396 (2.01)	497 (2.52)	588 (2.99)	701 (3.56)	781 (3.97)	891 (4.53)	984 (5.00)
Free Area Ventilation Rate in fpm (m/s)	0 (0.00)	208 (1.06)	368 (1.87)	526 (2.67)	747 (3.79)	938 (4.77)	1109 (5.63)	1323 (6.72)	1474 (7.49)	1681 (8.54)	1857 (9.43)
Effectiveness Ratio (%)	100	100	100	100	100	100	100	100	100	100	100
Penetration Class	A	A	A	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): 2. (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 Rate in fpm (m/s)	0 (0.00)	88 (0.45)	199 (1.01)	301 (1.53)	400 (2.03)	485 (2.46)	590 (3.00)	687 (3.49)	787 (4.00)	883 (4.49)	987 (5.01)
Free Area Ventilation Rate in fpm (m/s)	0 (0.00)	166 (0.84)	375 (1.91)	568 (2.89)	755 (3.84)	915 (4.65)	1113 (5.65)	1296 (6.58)	1485 (7.54)	1666 (8.46)	1862 (9.46)
Effectiveness Ratio (%)	100	100	100	100	100	100	100	100	100	100	100
Penetration Class	A	A	A	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 8" per hour (203 mm/hour) with a wind velocity of **50 mph (22 m/s).**
DISCHARGE LOSS COEFFICIENT CLASS (INTAKE): 2. (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.)

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.

Nailor Industries Inc. certifies the Model 1605WDV 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.

HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products
This label does not signify AMCA airflow performance certification.

Nailor Industries Inc. certifies that the 1605WDV shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers. The AMCA Listing Label applies to High Velocity Wind Driven Rain Resistant Louvers.

SCHEDULE TYPE:	Page 3 of 3 Dimensions are in inches (mm).			
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