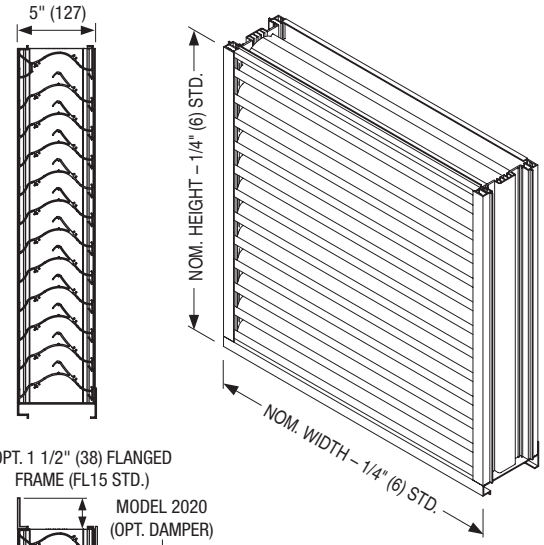
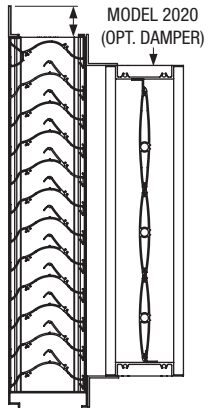
Nailor® Industries Inc.

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

Intertek

QUALIFICATIONS:
- **Florida Product Approval No. : 19273.2**
- **Intertek Listed Building Product: Exterior Louvers.**
- **Tested in accordance with: TAS-201 (Large Missile Impact Test), TAS-202 (Uniform Static Air Pressure Test), TAS-203 (Cyclic Wind Pressure Loading Test).**
- **AMCA 500-L (Wind-Driven Rain, Water Penetration, Airflow).**
- **AMCA 540 (Wind-Borne Debris Impact Test [Enhanced "Level E" Protection]).**
- **AMCA 550 (High Velocity Wind-Driven Rain Resistance Test [with optional Model 2020 damper in closed position]).**
- **Wind load rating +/– 50 PSF (standard) (up to +/– 150 PSF dependent on size and configuration).**





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, .080" (2.03) nominal wall thickness, with reinforcing bosses.
BLADE ANGLE:	Fixed at 30 degrees.
BLADE SPACING:	1.86" (47) 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:	108" W x 84" H (2743 x 2134) or 84" W x 120" H (2134 x 3048). 63 – 70 sq. ft. (5.9 – 6.5 m^2). Larger louvers will require field assembly of smaller sections.

OVERALL MAXIMUM SIZE: Unlimited Width x 120" H (3048).

OPTIONS:
- ❑ **FL15** Flanged Frame, 1 1/2" (38).
- ❑ **FL20** Flanged Frame, 2" (51).
- ❑ **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.
- ❑ 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.

OPT. FACTORY MOUNTED 2020 CONTROL DAMPER:
- Extruded Aluminum
- Opposed Airfoil Blades
- Concealed Linkage
- Silicone Blade Seal
- Cambered Stainless Steel Jamb Seals
- 1/2" (13) Plated Steel Axles

For Installation Instructions, see IOM-LOUVERINSTFPA.

Dimensions are in inches (mm).

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**11 - 22 - 24**	**1600F**	**1 - 30 - 24**	**1605WDF**

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

Nailor® Industries Inc.

EXTRUDED ALUMINUM STATIONARY LOUVER
FLORIDA PRODUCT APPROVED
WIND-DRIVEN RAIN RESISTANT • 5" (127) DEEP
HORIZONTAL BLADE • PERFORMANCE DATA
MODEL: 1605WDF

C ETL LISTED US
Intertek

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
12 0.30	**0.27** 0.03	**0.43** 0.04	**0.60** 0.06	**0.76** 0.07	**0.93** 0.09	**1.09** 0.10	**1.26** 0.12	**1.42** 0.13	**1.59** 0.15	**1.75** 0.16	**1.92** 0.18	**2.08** 0.19	**2.25** 0.21	**2.41** 0.22	**2.58** 0.24	**2.74** 0.25	**2.91** 0.27
18 0.46	**0.47** 0.04	**0.76** 0.07	**1.05** 0.10	**1.34** 0.12	**1.63** 0.15	**1.92** 0.18	**2.20** 0.20	**2.49** 0.23	**2.78** 0.26	**3.07** 0.29	**3.36** 0.31	**3.65** 0.34	**3.94** 0.37	**4.23** 0.39	**4.51** 0.42	**4.80** 0.45	**5.09** 0.47
24 0.61	**0.74** 0.07	**1.19** 0.11	**1.65** 0.15	**2.10** 0.20	**2.56** 0.24	**3.01** 0.28	**3.46** 0.32	**3.92** 0.36	**4.37** 0.41	**4.82** 0.45	**5.28** 0.49	**5.73** 0.53	**6.19** 0.57	**6.64** 0.62	**7.09** 0.66	**7.55** 0.70	**8.00** 0.74
30 0.76	**0.94** 0.09	**1.52** 0.14	**2.10** 0.19	**2.68** 0.25	**3.25** 0.30	**3.83** 0.36	**4.41** 0.41	**4.99** 0.46	**5.56** 0.52	**6.14** 0.57	**6.72** 0.62	**7.30** 0.68	**7.87** 0.73	**8.45** 0.79	**9.03** 0.84	**9.61** 0.89	**10.18** 0.95
36 0.36	**1.15** 0.11	**1.85** 0.17	**2.55** 0.24	**3.25** 0.30	**3.95** 0.37	**4.65** 0.43	**5.35** 0.50	**6.05** 0.56	**6.76** 0.63	**7.46** 0.69	**8.16** 0.76	**8.86** 0.82	**9.56** 0.89	**10.26** 0.95	**10.96** 1.02	**11.66** 1.08	**12.37** 1.15
42 1.07	**1.35** 0.13	**2.17** 0.20	**3.00** 0.28	**3.82** 0.36	**4.65** 0.43	**5.47** 0.51	**6.30** 0.59	**7.12** 0.66	**7.95** 0.74	**8.77** 0.81	**9.60** 0.89	**10.42** 0.97	**11.25** 1.04	**12.07** 1.12	**12.90** 1.20	**13.72** 1.27	**14.55** 1.35
48 1.22	**1.62** 0.15	**2.61** 0.24	**3.60** 0.33	**4.59** 0.43	**5.58** 0.52	**6.57** 0.61	**7.59** 0.71	**8.55** 0.79	**9.54** 0.89	**10.53** 0.98	**11.52** 1.07	**12.51** 1.16	**13.5** 1.25	**14.49** 1.35	**15.48** 1.44	**16.47** 1.53	**17.46** 1.62
54 1.37	**1.82** 0.17	**2.93** 0.27	**4.05** 0.38	**5.16** 0.48	**6.27** 0.58	**7.39** 0.69	**8.50** 0.79	**9.62** 0.89	**10.73** 1.00	**11.84** 1.10	**12.96** 1.20	**14.07** 1.31	**15.18** 1.41	**16.30** 1.51	**17.41** 1.62	**18.53** 1.72	**19.64** 1.82
60 1.52	**2.02** 0.19	**3.26** 0.30	**4.50** 0.42	**5.73** 0.53	**6.97** 0.65	**8.21** 0.76	**9.45** 0.88	**10.68** 0.99	**11.92** 1.11	**13.16** 1.22	**14.40** 1.34	**15.63** 1.45	**16.87** 1.57	**18.11** 1.68	**19.35** 1.80	**20.58** 1.91	**21.82** 2.03
66 1.68	**2.22** 0.21	**3.58** 0.33	**4.95** 0.46	**6.31** 0.59	**7.67** 0.71	**9.03** 0.84	**10.39** 0.97	**11.75** 1.09	**13.11** 1.22	**14.47** 1.34	**15.84** 1.47	**17.2** 1.60	**18.56** 1.72	**19.92** 1.85	**21.28** 1.98	**22.64** 2.10	**24.00** 2.23
72 1.83	**2.49** 0.23	**4.02** 0.37	**5.55** 0.52	**7.07** 0.66	**8.60** 0.80	**10.12** 0.94	**11.65** 1.08	**13.18** 1.22	**14.70** 1.37	**16.23** 1.51	**17.76** 1.65	**19.28** 1.79	**20.81** 1.93	**22.33** 2.07	**23.86** 2.22	**25.39** 2.36	**26.91** 2.50
78 1.98	**2.7** 0.25	**4.35** 0.40	**6.00** 0.56	**7.65** 0.71	**9.30** 0.86	**10.95** 1.02	**12.6** 1.17	**14.25** 1.32	**15.90** 1.48	**17.55** 1.63	**19.20** 1.78	**20.85** 1.94	**22.5** 2.09	**24.15** 2.24	**25.80** 2.40	**27.45** 2.55	**29.10** 2.70
84 2.13	**2.9** 0.27	**4.67** 0.43	**6.44** 0.60	**8.22** 0.76	**9.99** 0.93	**11.77** 1.09	**13.54** 1.26	**15.31** 1.42	**17.09** 1.59	**18.86** 1.75	**20.63** 1.92	**22.41** 2.08	**24.18** 2.25	**25.96** 2.41	**27.73** 2.58	**29.5** 2.74	**31.28** 2.91
90 2.29	**3.10** 0.29	**5.00** 0.46	**6.89** 0.64	**8.79** 0.82	**10.69** 0.99	**12.59** 1.17	**14.48** 1.35	**16.38** 1.52	**18.28** 1.70	**20.18** 1.87	**22.07** 2.05	**23.97** 2.23	**25.87** 2.40				
96 2.44	**3.30** 0.31	**5.32** 0.49	**7.34** 0.68	**9.37** 0.87	**11.39** 1.06	**13.41** 1.25	**15.43** 1.43	**17.45** 1.62	**19.47** 1.81	**21.49** 2.00	**23.51** 2.18	**25.54** 2.37	**27.56** 2.56				
102 2.59	**3.57** 0.33	**5.76** 0.53	**7.94** 0.74	**10.13** 0.94	**12.32** 1.14	**14.50** 1.35	**16.69** 1.55	**18.87** 1.75	**21.06** 1.96	**23.25** 2.16	**25.43** 2.36	**27.62** 2.57	**29.81** 2.77				
108 2.74	**3.77** 0.35	**6.08** 0.57	**8.39** 0.78	**10.70** 0.99	**13.01** 1.21	**15.32** 1.42	**17.63** 1.64	**19.94** 1.85	**22.25** 2.07	**24.56** 2.28	**26.87** 2.50	**29.18** 2.71	**31.49** 2.93				
114 2.90	**3.98** 0.37	**6.41** 0.60	**8.84** 0.82	**11.28** 1.05	**13.71** 1.27	**16.14** 1.50	**18.58** 1.73	**21.01** 1.95	**23.45** 2.18	**25.88** 2.40	**28.31** 2.63	**30.75** 2.86	**33.18** 3.08				
120 3.05	**4.18** 0.39	**6.73** 0.63	**9.29** 0.86	**11.85** 1.10	**14.41** 1.34	**16.96** 1.58	**19.52** 1.81	**22.08** 2.05	**24.64** 2.29	**27.19** 2.53	**29.75** 2.76	**32.31** 3.00	**34.87** 3.24				

SCHEDULE TYPE:	Page 2 of 3 Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**11 - 22 - 24**	**1600F**	**1 - 30 - 24**	**1605WDF**

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

Nailor® Industries Inc.

EXTRUDED ALUMINUM STATIONARY LOUVER
FLORIDA PRODUCT APPROVED
WIND-DRIVEN RAIN RESISTANT • 5" (127) DEEP
HORIZONTAL BLADE • PERFORMANCE DATA
MODEL: 1605WDF

Intertek

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

	Free Area %	47%
	Free Area sq. ft. (sq. m.)	7.59 (0.71)
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	9,488 cfm (4477 l/s)
INTAKE	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 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

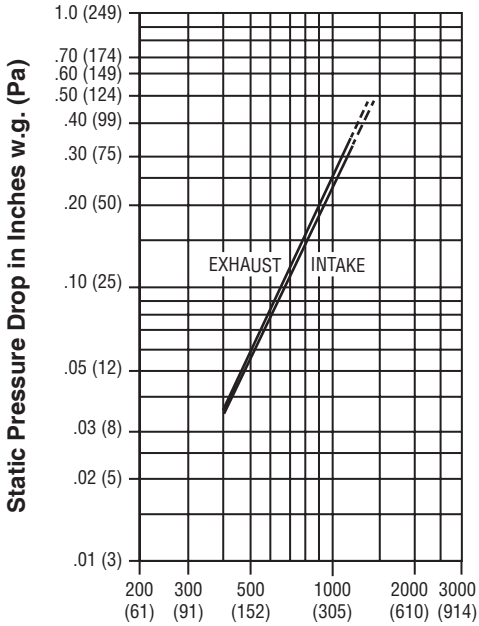
Core Ventilation	0	110	195	279	396	499	585	700	783	884	981
Rate in fpm (m/s)	(0.0)	(0.56)	(0.99)	(1.42)	(2.01)	(2.53)	(2.97)	(3.56)	(3.98)	(4.49)	(4.98)
Free Area Ventilation	0	216	382	547	776	978	1147	1372	1535	1733	1923
Rate in fpm (m/s)	(0.0)	(1.10)	(1.94)	(2.78)	(3.94)	(4.97)	(5.83)	(6.97)	(7.80)	(8.80)	(9.77)
Effectiveness Ratio (%)	100	100	100	100	100	99.6	99.5	99	97.3	94	91.4
Penetration Class	A	A	A	A	A	A	A	A	B	C	C

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	91	198	298	410	487	593	686	785	887	992
Rate in fpm (m/s)	(0.0)	(0.46)	(1.01)	(1.51)	(2.08)	(2.47)	(3.01)	(3.48)	(3.99)	(4.51)	(5.04)
Free Area Ventilation	0	178	388	584	804	955	1162	1345	1539	1739	1944
Rate in fpm (m/s)	(0.0)	(0.90)	(1.97)	(2.97)	(4.08)	(4.85)	(5.90)	(6.83)	(7.82)	(8.94)	(9.88)
Effectiveness Ratio (%)	100	99.6	99.3	99.2	98.6	98.1	97.7	96.4	93.4	89.8	85.5
Penetration Class	A	A	A	A	B	B	B	B	C	C	C

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.)

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 that the Model 1605WDVF shown herein is licensed to bear the AMCA Certified Ratings Program 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 Program Seal applies to Air Performance, Water Penetration, and Wind-Driven Rain performance ratings.

Louvers were tested in accordance with AMCA Standard 500-L.

HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY CLOSED 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 1605WDVF shown herein is approved to bear the AMCA International 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 International Listing Label program. The AMCA International Listing Label applies to pressure cycle tested wind-borne debris impact resistant louvers rated for "Enhanced Protection" and +/- 50PSF with a minimum blade span of less than 12 in. (305mm) and a maximum unsupported blade span of 52 in. (1321 mm) and to High Velocity Wind-Driven Rain Resistant Louvers tested in the fully open position that permits airflow through a louver.

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**11 - 22 - 24**	**1600F**	**1 - 30 - 24**	**1605WDF**

Dimensions are in inches (mm).

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.