QUALIFICATIONS:
• Florida Product Approval.
• ETL Listed Product: 106225.
• 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 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 caulk 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: 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: 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 m²)
SECTION SIZE: (2134 x 3048) with optional Model 2020 damper). Larger louvers will require field assembly of smaller sections.
OVERALL MAXIMUM SIZE: Unlimited Width x 120" H (3048).

OPTIONS:
- ADA Aluminum Airfoil Damper.
- 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.

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.
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) |
| 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 | 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
Rate in fpm (m/s) (0.0) (0.5) (1.0) (1.5) (2.0) (2.5) (3.0) (3.5)
Free Area Ventilation
Rate in fpm (m/s) (0.0) (1.05) (2.13) (3.19) (4.26) (5.32) (6.39) (7.45)
Effective Area 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.)

Free Area Ventilation
Rate in fpm (m/s) (0.0) (1.05) (2.13) (3.19) (4.26) (5.32) (6.39) (7.45)
Effective Area Ratio (%) 100 99.6 99.3 99.2 98.6 98.1 97.7 96.4
Penetration Class A A B B 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): 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 the Model 1605WDF 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.

Nailor Industries Inc. certifies that the 1605WDF 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.
**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 |
|-----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|
| 0.30                        | 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 |
| 0.39                        | 0.26 | 0.41 | 0.57 | 0.73 | 0.89 | 1.06 | 1.22 | 1.38 | 1.55 | 1.72 | 1.88 | 2.05 | 2.22 | 2.38 | 2.55 | 2.71 |
| 0.46                        | 0.24 | 0.39 | 0.54 | 0.70 | 0.85 | 1.01 | 1.17 | 1.33 | 1.50 | 1.66 | 1.83 | 1.99 | 2.16 | 2.32 | 2.49 | 2.65 |
| 0.76                        | 0.22 | 0.37 | 0.52 | 0.68 | 0.83 | 0.99 | 1.15 | 1.31 | 1.47 | 1.63 | 1.79 | 1.95 | 2.11 | 2.27 | 2.44 | 2.60 |
| 1.06                        | 0.20 | 0.35 | 0.50 | 0.65 | 0.81 | 0.97 | 1.13 | 1.29 | 1.45 | 1.61 | 1.77 | 1.93 | 2.09 | 2.25 | 2.41 | 2.57 |
| 1.37                        | 0.19 | 0.34 | 0.49 | 0.64 | 0.79 | 0.95 | 1.11 | 1.27 | 1.43 | 1.59 | 1.75 | 1.91 | 2.07 | 2.23 | 2.39 | 2.55 |
| 2.22                        | 0.15 | 0.29 | 0.44 | 0.59 | 0.74 | 0.89 | 1.05 | 1.21 | 1.37 | 1.53 | 1.69 | 1.85 | 2.01 | 2.17 | 2.33 | 2.49 |
| 3.23                        | 0.12 | 0.26 | 0.41 | 0.56 | 0.71 | 0.86 | 1.02 | 1.18 | 1.34 | 1.50 | 1.66 | 1.82 | 1.98 | 2.14 | 2.30 | 2.46 |
| 4.34                        | 0.09 | 0.23 | 0.38 | 0.53 | 0.68 | 0.83 | 0.99 | 1.15 | 1.31 | 1.47 | 1.63 | 1.79 | 1.95 | 2.11 | 2.27 | 2.43 |
| 5.55                        | 0.07 | 0.21 | 0.36 | 0.51 | 0.66 | 0.81 | 0.97 | 1.13 | 1.29 | 1.45 | 1.61 | 1.77 | 1.93 | 2.09 | 2.25 | 2.41 |
| 6.86                        | 0.05 | 0.19 | 0.34 | 0.49 | 0.64 | 0.79 | 0.95 | 1.11 | 1.27 | 1.43 | 1.59 | 1.75 | 1.91 | 2.07 | 2.23 |

**EXTRUDED ALUMINUM STATIONARY LOUVER**

**WIND-DRIVEN RAIN RESISTANT • 5” (127) DEEP**

**HORIZONTAL BLADE • PERFORMANCE DATA**

**MODEL: 1605WDF**

**ENGINEER:**

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

**DATE:**

**B SERIES:**

**SUPERSEDES:**

**DRAWING NO.:**

12/22/18

1600F

NEW

1605WDF

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

1605WDF January, 2018