



**EXTRUDED ALUMINUM COMBINATION LOUVER/DAMPER**  
**6" (152) DEEP • DRAINABLE BLADE**  
**OPERABLE AIRFOIL DAMPER**  
**MODEL: 1606CDAF**

Nailor Model 1606CDAF is an extruded aluminum combination louver and damper that incorporates front stationary drainable blades and rear adjustable airfoil blades all within a single frame. The design provides efficient air performance and aesthetics that compliment any building exterior, while providing tight shut-off when no airflow is required. The drainable blades provide excellent weather protection for exhaust and low to medium velocity intake air applications by utilizing rain gutters to divert collected water down concealed side downspouts and out the sill. Blades are reinforced with full length integral bosses for strength. Model 1606CDAF is available with channel or flanged type frame to suit most installation requirements, and is licensed by AMCA for assured performance.

**STANDARD CONSTRUCTION:**

- FRAME:** 6" (152) deep type 6063-T6 extruded aluminum, .080" (2.03) nominal wall thickness. Integral downspouts and caulking slot provided.
- BLADES:** Front stationary blades: drainable style, type 6063-T6 extruded aluminum, .080" (2.03) nominal wall thickness. Rear operable blades: Airfoil style, type 6063-T6 extruded aluminum.
- BLADE ANGLE:** Front blades fixed at 45 degrees.
- BLADE SPACING:** Approx. 5 1/2" (140) on centers.
- BLADE SEALS:** Santoprene. Mechanically locked in place.
- JAMB SEALS:** Cambered stainless steel.
- BEARINGS:** 1/2" (13) dia. Celcon®.
- AXLES:** 1/2" (13) dia. plated steel double bolted to blades.
- LINKAGE:** Concealed in frame.
- SCREEN:** 3/4" x .051 (19 x 1.3) expanded, flattened aluminum bird screen in removable frame, inside (rear) mount (adds approximately 3/8" [10] to louver depth).
- ACTUATOR:** Hand locking louver quadrant.
- FINISH:** Mill.
- MINIMUM SIZE:** 12" W x 12" H (305 x 305).
- MAX. SINGLE SECTION SIZE:** 60" W x 120" H (1524 x 3048). Larger sizes will be manufactured in sections with visible mullion side frame (downspouts are concealed) for field assembly.

**OPTIONS:**

- |                                                                      |                                                                        |
|----------------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> <b>FL15</b> Flanged Frame, 1 1/2" (38) std. | <input type="checkbox"/> <b>ESI</b> Extended Sill.                     |
| <input type="checkbox"/> <b>FL20</b> Flanged Frame, 2" (51).         | <input type="checkbox"/> <b>FR1</b> Filter Rack, 1" (25).              |
| <input type="checkbox"/> <b>BSSS</b> Type 304 S.S. Bird Screen.      | <input type="checkbox"/> <b>FR2</b> Filter Rack, 2" (51).              |
| <input type="checkbox"/> <b>BSN</b> No Bird Screen.                  | <input type="checkbox"/> <b>PAC</b> Perimeter Anchor Clips.            |
| <input type="checkbox"/> <b>ISA</b> Aluminum Insect Screen.          | <input type="checkbox"/> <b>PASI</b> Sill Pan.                         |
| <input type="checkbox"/> <b>ISSS</b> Type 304 S.S. Insect Screen.    | <input type="checkbox"/> <b>ACT</b> Electric Actuator. Specify: _____. |
| <input type="checkbox"/> <b>WE</b> Welded Construction.              | <input type="checkbox"/> <b>Other:</b> _____.                          |

**OPTIONAL FINISHES:**

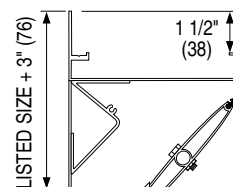
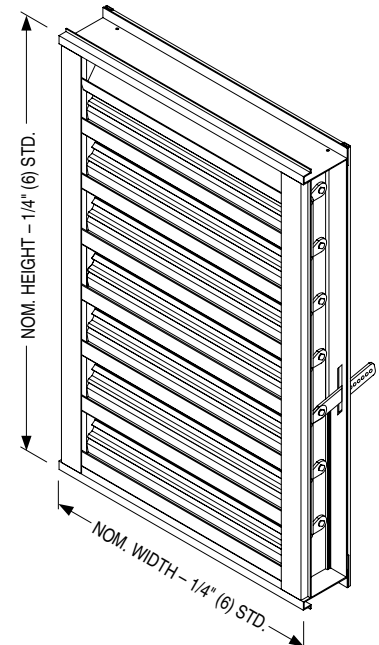
- ☐ **PC3** Powder Coat AAMA 2603. Color: \_\_\_\_\_.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: \_\_\_\_\_.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: \_\_\_\_\_.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15** Clear Anodized 215-R1.

**Color Anodized:**

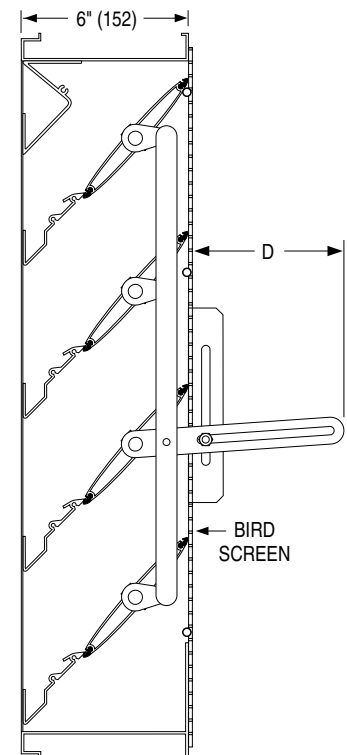
- |                                                    |                                                     |
|----------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> <b>ANLB</b> Light Bronze. | <input type="checkbox"/> <b>ANMB</b> Medium Bronze. |
| <input type="checkbox"/> <b>ANDB</b> Dark Bronze.  | <input type="checkbox"/> <b>ANBK</b> Black.         |

**OPTIONAL W x H SIZING** (1/4" [6.5] Undersize standard):

- |                                                            |                                                           |
|------------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> <b>U00</b> Exact Size.            | <input type="checkbox"/> <b>U38</b> Undersize 3/8" (9.5). |
| <input type="checkbox"/> <b>U50</b> Undersize 1/2" (12.7). |                                                           |



OPT. FLANGED  
FRAME (FL15 STD.)



D = 6" (152) with Manual HLLQ  
D = 9" (229) with Actuator

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Page 1 of 3  
Dimensions are in inches (mm).

| DATE        | B SERIES | SUPERSEDES  | DRAWING NO. |
|-------------|----------|-------------|-------------|
| 6 - 10 - 25 | 1600     | 1 - 19 - 24 | 1606CDAF    |



**EXTRUDED ALUMINUM COMBINATION LOUVER/DAMPER**  
**6" (152) DEEP • DRAINABLE BLADE**  
**OPERABLE AIRFOIL BLADE**  
**PERFORMANCE DATA**  
**MODEL: 1606CDAF**

**FREE AREA in Square Feet and Square Meters**

|                             |             | Width in Inches and Meters |              |              |               |               |               |               |               |               |
|-----------------------------|-------------|----------------------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                             |             | 12<br>0.30                 | 18<br>0.46   | 24<br>0.61   | 30<br>0.76    | 36<br>0.91    | 42<br>1.07    | 48<br>1.22    | 54<br>1.37    | 60<br>1.52    |
| Height in Inches and Meters | 12<br>0.30  | 0.27<br>0.03               | 0.44<br>0.04 | 0.61<br>0.06 | 0.78<br>0.07  | 0.95<br>0.09  | 1.12<br>0.10  | 1.28<br>0.12  | 1.45<br>0.14  | 1.62<br>0.15  |
|                             | 18<br>0.46  | 0.48<br>0.04               | 0.78<br>0.07 | 1.09<br>0.10 | 1.39<br>0.13  | 1.69<br>0.16  | 1.99<br>0.18  | 2.29<br>0.21  | 2.59<br>0.24  | 2.90<br>0.27  |
|                             | 24<br>0.61  | 0.69<br>0.06               | 1.13<br>0.10 | 1.56<br>0.15 | 2.00<br>0.19  | 2.43<br>0.23  | 2.87<br>0.27  | 3.30<br>0.31  | 3.73<br>0.35  | 4.17<br>0.39  |
|                             | 30<br>0.76  | 0.95<br>0.09               | 1.54<br>0.14 | 2.13<br>0.20 | 2.72<br>0.25  | 3.31<br>0.31  | 3.91<br>0.36  | 4.50<br>0.42  | 5.09<br>0.47  | 5.68<br>0.53  |
|                             | 36<br>0.91  | 1.19<br>0.11               | 1.93<br>0.18 | 2.68<br>0.25 | 3.42<br>0.32  | 4.17<br>0.39  | 4.91<br>0.46  | 5.66<br>0.53  | 6.40<br>0.59  | 7.15<br>0.66  |
|                             | 42<br>1.07  | 1.33<br>0.12               | 2.16<br>0.20 | 2.99<br>0.28 | 3.83<br>0.36  | 4.66<br>0.43  | 5.49<br>0.51  | 6.32<br>0.59  | 7.16<br>0.66  | 7.99<br>0.74  |
|                             | 48<br>1.22  | 1.58<br>0.15               | 2.56<br>0.24 | 3.55<br>0.33 | 4.53<br>0.42  | 5.52<br>0.51  | 6.50<br>0.60  | 7.33<br>0.68  | 8.47<br>0.79  | 9.46<br>0.88  |
|                             | 54<br>1.37  | 1.79<br>0.17               | 2.91<br>0.27 | 4.02<br>0.37 | 5.14<br>0.48  | 6.26<br>0.58  | 7.38<br>0.69  | 8.50<br>0.79  | 9.62<br>0.89  | 10.73<br>1.00 |
|                             | 60<br>1.52  | 2.03<br>0.19               | 3.30<br>0.31 | 4.58<br>0.43 | 5.85<br>0.54  | 7.12<br>0.66  | 8.39<br>0.78  | 9.66<br>0.90  | 10.93<br>1.02 | 12.21<br>1.13 |
|                             | 66<br>1.68  | 2.28<br>0.21               | 3.70<br>0.34 | 5.13<br>0.48 | 6.55<br>0.61  | 7.98<br>0.74  | 9.40<br>0.87  | 10.83<br>1.01 | 12.25<br>1.14 | 13.68<br>1.27 |
|                             | 72<br>1.83  | 2.52<br>0.23               | 4.10<br>0.38 | 5.68<br>0.53 | 7.26<br>0.67  | 8.84<br>0.82  | 10.42<br>0.97 | 11.99<br>1.11 | 13.57<br>1.26 | 15.15<br>1.41 |
|                             | 78<br>1.98  | 2.60<br>0.24               | 4.23<br>0.39 | 5.86<br>0.54 | 7.49<br>0.70  | 9.11<br>0.85  | 10.74<br>1.00 | 12.37<br>1.15 | 14.00<br>1.30 | 15.63<br>1.45 |
|                             | 84<br>2.13  | 2.81<br>0.26               | 4.57<br>0.42 | 6.33<br>0.59 | 8.10<br>0.75  | 9.86<br>0.92  | 11.62<br>1.08 | 13.38<br>1.24 | 15.14<br>1.41 | 16.90<br>1.57 |
|                             | 90<br>2.29  | 3.03<br>0.28               | 4.92<br>0.46 | 6.81<br>0.63 | 8.70<br>0.81  | 10.60<br>0.98 | 12.49<br>1.16 | 14.38<br>1.34 | 16.28<br>1.51 | 18.17<br>1.69 |
|                             | 96<br>2.44  | 3.45<br>0.32               | 5.61<br>0.52 | 7.77<br>0.72 | 9.92<br>0.92  | 12.08<br>1.12 | 14.24<br>1.32 | 16.40<br>1.52 | 18.56<br>1.72 | 20.72<br>1.92 |
|                             | 102<br>2.59 | 3.64<br>0.34               | 5.92<br>0.55 | 8.20<br>0.76 | 10.48<br>0.97 | 12.76<br>1.19 | 15.04<br>1.40 | 17.32<br>1.61 | 19.60<br>1.82 | 21.88<br>2.03 |
|                             | 108<br>2.74 | 3.89<br>0.36               | 6.32<br>0.59 | 8.75<br>0.81 | 11.19<br>1.04 | 13.62<br>1.27 | 16.05<br>1.49 | 18.49<br>1.72 | 20.92<br>1.94 | 23.35<br>2.17 |
|                             | 114<br>2.90 | 4.13<br>0.38               | 6.72<br>0.62 | 9.31<br>0.86 | 11.89<br>1.10 | 14.48<br>1.35 | 17.07<br>1.59 | 19.65<br>1.83 | 22.24<br>2.07 | 24.83<br>2.31 |
|                             | 120<br>3.05 | 4.38<br>0.41               | 7.12<br>0.66 | 9.86<br>0.92 | 12.60<br>1.17 | 15.34<br>1.43 | 18.08<br>1.68 | 20.82<br>1.93 | 23.56<br>2.19 | 26.30<br>2.44 |



**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Page 2 of 3  
Dimensions are in inches (mm).

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

**6 - 10 - 25**

**1600**

**1 - 19 - 24**

**1606CDAF**



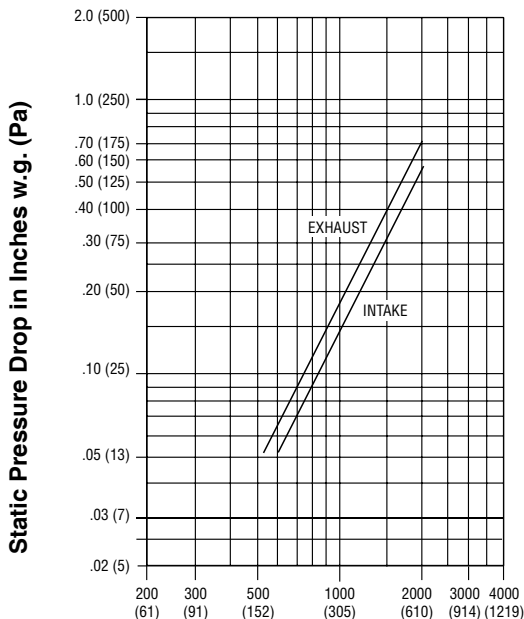
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**6" (152) DEEP • DRAINABLE BLADE**  
**OPERABLE AIRFOIL BLADE**  
**PERFORMANCE DATA**  
**MODEL: 1606CDAF**

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

|        |                                                                                                                       |                       |
|--------|-----------------------------------------------------------------------------------------------------------------------|-----------------------|
| INTAKE | Free Area %                                                                                                           | 46%                   |
|        | Free Area sq. ft. (sq. m.)                                                                                            | 7.34 (0.68)           |
|        | Free Area Velocity at Point of Beginning Water Penetration<br>at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration) | 1144 fpm (349 m/min.) |
|        | Air Volume at 1144 fpm / Free Area Velocity                                                                           | 8397 cfm (3963 l/s)   |
|        | Pressure Drop @ 1144 fpm                                                                                              | .19 in. w.g. (47 Pa)  |

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

**PRESSURE DROP**



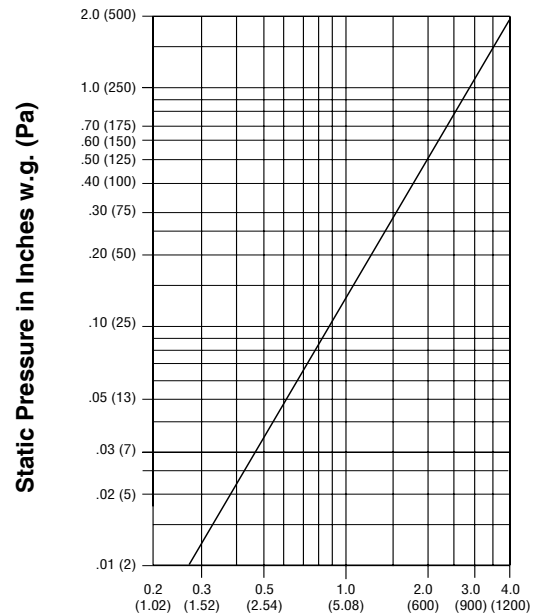
**Air Velocity in Feet (Meters) Per Minute Through Free Area**

Louver test size: 48" x 48" (1219 x 1219 mm).

Standard air density @ 0.075 lbs/ft<sup>3</sup>.

Tested to AMCA Fig. 5.5 – 6.5.

**AIR LEAKAGE (Damper fully closed)**



**Leakage in CFM/ft<sup>2</sup> (L/s/m<sup>2</sup>)**

Louver test size: 48" x 48" (1219 x 1219 mm).



Nailor Industries Inc. certifies that the Model 1606CDAF 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 Water Penetration and Air Performance ratings.

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



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Page 3 of 3  
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