

Model 1704D, drainable blade type formed louver, provides excellent weather protection in a 4" (102) deep frame, with good air performance and pleasing aesthetics that compliment any structure's exterior styling. Suitable for use in exhaust and low to medium velocity intake applications, the drainable blade design utilizes rain gutters that divert collected water down concealed side downspouts and out the sill. Galvanized steel construction is economical, yet durable and the design provides good air performance through it's 54% free area as well as excellent protection against the elements. Model 1704D is available with channel or flanged type frame to suit most architectural and mechanical installation requirements and is AMCA Licensed.

**STANDARD CONSTRUCTION:**

- FRAME:** 4" (102) deep, 20 ga. (1.0) formed galvanized steel.
- BLADES:** 20 ga. (1.0) formed galvanized steel. Drainable style.
- BLADE ANGLE:** Fixed at 45 degrees.
- BLADE SPACING:** Approx. 4" (102) on centers.
- SCREEN:** 1/2" x 1/2" x 19 ga. (13 x 13 x 1.0) galvanized bird screen in removable frame (adds approximately 3/8" [10] to louver depth).
- FINISH:** Mill.
- MINIMUM SIZE:** 12" wide x 12" high (305 x 305).
- MAXIMUM SINGLE SECTION SIZE:** 60" wide x 96" high (1524 x 2438). Larger louvers will require field assembly of smaller sections.

**OPTIONS:**

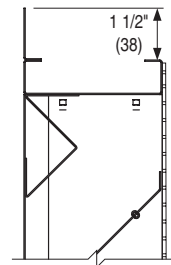
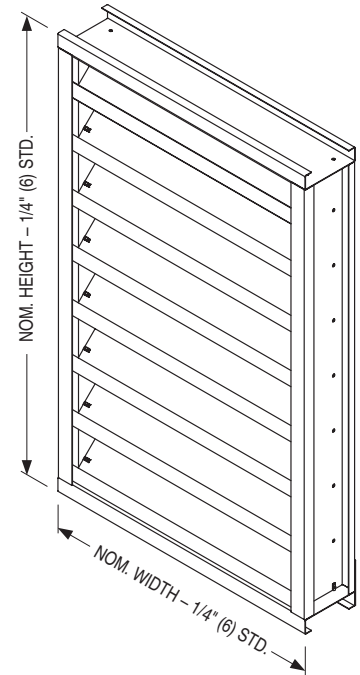
- FL15** Flanged Frame, 1 1/2" (38).
- FL20** Flanged Frame, 2" (51).
- BSA** Aluminum Bird Screen.
- BSSS** Type 304 S.S. Bird Screen.
- BSN** No Bird Screen.
- ISA** Aluminum Insect Screen.
- ISSS** Type 304 S.S. Insect Screen.
- 18GA** 18 Gauge Construction.
- 16GA** 16 Gauge Construction.
- 304** Type 304 S.S. Construction.
- 316** Type 316 S.S. Construction.
- WE** Welded Construction.
- ESI** Extended Sill.
- FR1** 1" (25) Filter Rack.
- FR2** 2" (51) Filter Rack.
- PACA** Perimeter Anchor Clips.

**OPTIONAL FINISHES:**

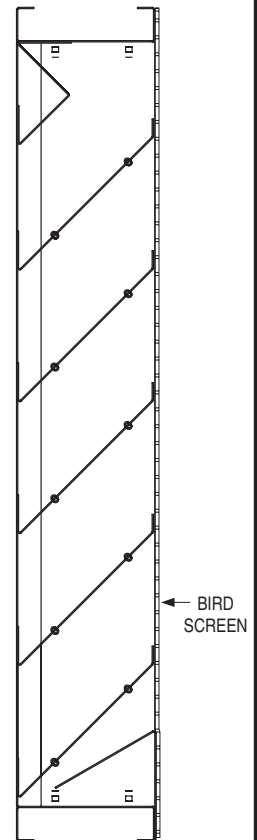
- PC3** Powder Coat AAMA 2603. Color: \_\_\_\_\_.
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: \_\_\_\_\_.
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: \_\_\_\_\_.
- PCC** Prime Coat.

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

- U00** Exact Size.
- U38** Undersize 3/8" (9.5).
- U50** Undersize 1/2" (12.7).



OPT. FLANGED FRAME (FL15 STD.)



← BIRD SCREEN

|                       |
|-----------------------|
| <b>SCHEDULE TYPE:</b> |
| <b>PROJECT:</b>       |
| <b>ENGINEER:</b>      |
| <b>CONTRACTOR:</b>    |

Page 1 of 2  
 Dimensions are in inches (mm).

| DATE        | B SERIES | SUPERSEDES  | DRAWING NO. |
|-------------|----------|-------------|-------------|
| 3 - 12 - 24 | 1700     | 12 - 1 - 10 | 1704D       |

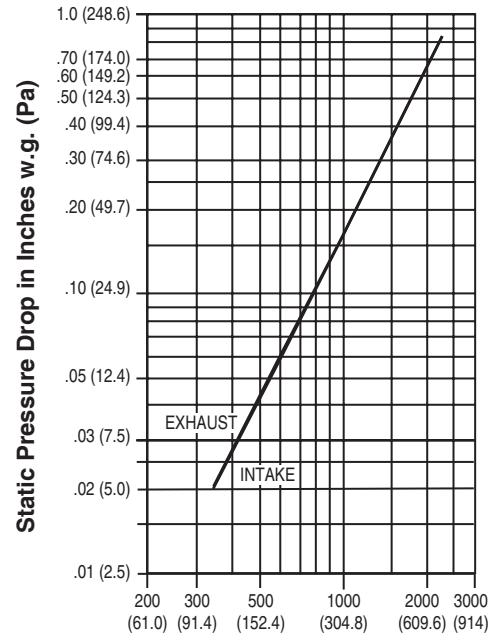


**FORMED STEEL STATIONARY LOUVER**  
**4" (102) DEEP • DRAINABLE BLADE**  
**PERFORMANCE DATA**  
**MODEL: 1704D**

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

|                             |      | Width in Inches and Meters |      |       |       |       |       |       |       |       |
|-----------------------------|------|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|
|                             |      | 12                         | 18   | 24    | 30    | 36    | 42    | 48    | 54    | 60    |
| Height in Inches and Meters | 12   | 0.38                       | 0.62 | 0.85  | 1.09  | 1.32  | 1.55  | 1.79  | 2.02  | 2.18  |
|                             | 0.30 | 0.04                       | 0.06 | 0.08  | 0.10  | 0.12  | 0.14  | 0.17  | 0.19  | 0.20  |
|                             | 18   | 0.58                       | 0.93 | 1.29  | 1.65  | 2.00  | 2.36  | 2.72  | 3.07  | 3.31  |
|                             | 0.46 | 0.05                       | 0.09 | 0.12  | 0.15  | 0.19  | 0.22  | 0.25  | 0.29  | 0.31  |
|                             | 24   | 0.88                       | 1.42 | 1.96  | 2.51  | 3.05  | 3.59  | 4.13  | 4.67  | 5.03  |
|                             | 0.61 | 0.08                       | 0.13 | 0.18  | 0.23  | 0.28  | 0.33  | 0.38  | 0.43  | 0.47  |
|                             | 30   | 1.08                       | 1.74 | 2.40  | 3.07  | 3.73  | 4.39  | 5.06  | 5.72  | 6.16  |
|                             | 0.76 | 0.10                       | 0.16 | 0.22  | 0.29  | 0.35  | 0.41  | 0.47  | 0.53  | 0.57  |
|                             | 36   | 1.28                       | 2.06 | 2.85  | 3.63  | 4.41  | 5.20  | 5.98  | 6.77  | 7.29  |
|                             | 0.91 | 0.12                       | 0.19 | 0.26  | 0.34  | 0.41  | 0.48  | 0.56  | 0.63  | 0.68  |
|                             | 42   | 1.58                       | 2.55 | 3.52  | 4.49  | 5.46  | 6.43  | 7.40  | 8.37  | 9.02  |
|                             | 1.07 | 0.15                       | 0.24 | 0.33  | 0.42  | 0.51  | 0.60  | 0.69  | 0.78  | 0.84  |
|                             | 48   | 1.77                       | 2.87 | 3.96  | 5.05  | 6.14  | 7.24  | 8.69  | 9.42  | 10.15 |
|                             | 1.22 | 0.16                       | 0.27 | 0.37  | 0.47  | 0.57  | 0.67  | 0.81  | 0.88  | 0.94  |
|                             | 54   | 2.08                       | 3.35 | 4.63  | 5.91  | 7.19  | 8.47  | 9.74  | 11.02 | 11.87 |
|                             | 1.37 | 0.19                       | 0.31 | 0.43  | 0.55  | 0.67  | 0.79  | 0.91  | 1.02  | 1.10  |
| 60                          | 2.27 | 3.67                       | 5.07 | 6.47  | 7.87  | 9.27  | 10.67 | 12.07 | 13.00 |       |
| 1.52                        | 0.21 | 0.34                       | 0.47 | 0.60  | 0.73  | 0.86  | 0.99  | 1.12  | 1.21  |       |
| 66                          | 2.58 | 4.16                       | 5.75 | 7.33  | 8.92  | 10.50 | 12.09 | 13.67 | 14.73 |       |
| 1.68                        | 0.24 | 0.39                       | 0.53 | 0.68  | 0.83  | 0.98  | 1.12  | 1.27  | 1.37  |       |
| 72                          | 2.77 | 4.48                       | 6.19 | 7.89  | 9.60  | 11.31 | 13.01 | 14.72 | 15.86 |       |
| 1.83                        | 0.26 | 0.42                       | 0.57 | 0.73  | 0.89  | 1.05  | 1.21  | 1.37  | 1.47  |       |
| 78                          | 3.08 | 4.97                       | 6.86 | 8.75  | 10.64 | 12.54 | 14.43 | 16.32 | 17.58 |       |
| 1.98                        | 0.29 | 0.46                       | 0.64 | 0.81  | 0.99  | 1.16  | 1.34  | 1.52  | 1.63  |       |
| 84                          | 3.27 | 5.29                       | 7.30 | 9.31  | 11.33 | 13.34 | 15.36 | 17.37 | 18.71 |       |
| 2.13                        | 0.30 | 0.49                       | 0.68 | 0.87  | 1.05  | 1.24  | 1.43  | 1.61  | 1.74  |       |
| 90                          | 3.57 | 5.77                       | 7.97 | 10.17 | 12.37 | 14.57 | 16.77 | 18.97 | 20.44 |       |
| 2.29                        | 0.33 | 0.54                       | 0.74 | 0.95  | 1.15  | 1.35  | 1.56  | 1.76  | 1.90  |       |
| 96                          | 3.77 | 6.09                       | 8.41 | 10.74 | 13.06 | 15.38 | 17.70 | 20.02 | 21.57 |       |
| 2.44                        | 0.35 | 0.57                       | 0.78 | 1.00  | 1.21  | 1.43  | 1.64  | 1.86  | 2.00  |       |

**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.

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

|  |                      |
|--|----------------------|
| Free Area %  | 54%                  |
| Free Area sq. ft. (sq. m.)   | 8.69 (0.81)          |
| Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration) | 990 fpm (302 m/min.) |
| Air Volume at 990 fpm  | 8,603 cfm (4060 l/s) |
| Free Area Velocity   |                      |
| Pressure Drop @990 fpm   | .16 in. w.g. (40 Pa) |

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



Nailor Industries Inc. certifies that the Model 1704D 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.



|                       |                                |                 |                   |                    |
|-----------------------|--------------------------------|-----------------|-------------------|--------------------|
| <b>SCHEDULE TYPE:</b> | Page 2 of 2                    |                 |                   |                    |
| <b>PROJECT:</b>       | Dimensions are in inches (mm). |                 |                   |                    |
| <b>ENGINEER:</b>      | <b>DATE</b>                    | <b>B SERIES</b> | <b>SUPERSEDES</b> | <b>DRAWING NO.</b> |
| <b>CONTRACTOR:</b>    | 3 - 12 - 24                    | 1700            | 12 - 1 - 10       | 1704D              |