



EXTRUDED ALUMINUM STATIONARY LOUVER 4" (102) DEEP • DRAINABLE BLADE MODEL: 1604D

Model 1604D, Drainable blade type 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. Blades are reinforced with full length integral bosses for superior strength and the design provides good air performance through it's large free area as well as maximum protection against the elements. Model 1604D 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, Type 6063-T5 extruded aluminum, .080" (2.03) nominal wall thickness. Integral downspouts and caulking slot provided.
- BLADES:** Type 6063-T5 extruded aluminum, .080" (2.03) nominal wall thickness, with reinforcing bosses.
- BLADE ANGLE:** Fixed at 37 degrees.
- BLADE SPACING:** Approx. 4" (102) on centers.
- BLADE SUPPORT BRACKETS:** Concealed type, factory installed on rear of louver on maximum 60" (1524) centers. Reinforced with 1 1/2" x 2" (38 x 51) angle (adds approx. 2" [51] to overall louver depth).
- MULLIONS:** Concealed type allowing continuous line appearance up to 120" (3048) wide. Larger assemblies require separate visible frames with downspouts.
- 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).
- FINISH:** Mill.
- MINIMUM SIZE:** 12" W x 12" H (305 x 305).
- MAXIMUM SINGLE SECTION SIZE:** 120" W x 84" H (3048 x 2134) or 84" W x 120" H (2134 x 3048). 70 sq. ft. (6.5m²). Larger louvers will require field assembly of smaller sections.

OPTIONS:

- | | |
|---|---|
| ☐ FL Flanged Frame. | ☐ ESI Extended Sill. |
| ☐ BSSS Type 304 S.S. Bird Screen. | ☐ FR1 1" (25) Filter Rack. |
| ☐ BSN No Bird Screen. | ☐ FR2 2" (51) Filter Rack. |
| ☐ ISA Aluminum Insect Screen. | ☐ PAC Perimeter Anchor Clips. |
| ☐ ISSS Type 304 S.S. Insect Screen. | ☐ Other: _____ |
| ☐ WE Welded Construction. | |

OPTIONAL FINISHES:

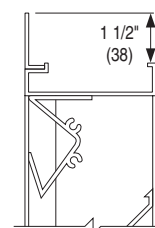
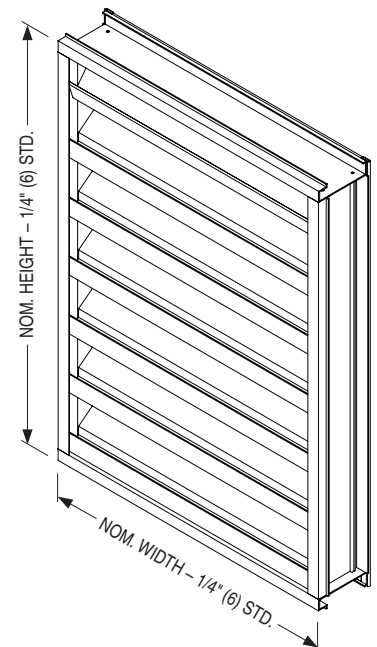
- ☐ **PC3** Powder Coat AAMA 2603. Color: _____.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15**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

Color Anodized:

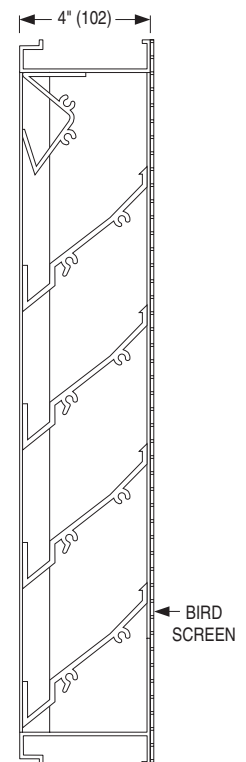
- | | |
|--|---|
| ☐ ANLB Light Bronze. | ☐ ANMB Medium Bronze. |
| ☐ ANDB Dark Bronze. | ☐ ANBK Black. |

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).



FLANGED FRAME (FL)
(OPTIONAL)



BIRD SCREEN

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE	B SERIES	SUPERSEDES	DRAWING NO.
10 - 1 - 21	1600	7 - 11 - 13	1604D

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Dimensions are in inches (mm).



EXTRUDED ALUMINUM STATIONARY LOUVER

4" (102) DEEP • DRAINABLE BLADE

PERFORMANCE DATA

MODEL: 1604D

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	114	120
		0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
Height in Inches and Meters	12	0.31	0.50	0.68	0.87	1.06	1.24	1.43	1.62	1.80	1.99	2.18	2.36	2.55	2.74	2.92	3.11	3.30	3.48	3.67
	0.30	0.03	0.05	0.06	0.08	0.10	0.12	0.13	0.15	0.17	0.18	0.20	0.22	0.24	0.25	0.27	0.29	0.31	0.32	0.34
	18	0.54	0.87	1.20	1.52	1.85	2.18	2.50	2.83	3.16	3.48	3.81	4.14	4.47	4.79	5.12	5.45	5.77	6.10	6.43
	0.46	0.05	0.08	0.11	0.14	0.17	0.20	0.23	0.26	0.29	0.32	0.35	0.38	0.41	0.45	0.48	0.51	0.54	0.57	0.60
	24	0.78	1.24	1.71	2.18	2.64	3.11	3.58	4.04	4.51	4.98	5.44	5.91	6.38	6.85	7.31	7.78	8.25	8.71	9.18
	0.61	0.07	0.12	0.16	0.20	0.25	0.29	0.33	0.38	0.42	0.46	0.51	0.55	0.59	0.64	0.68	0.72	0.77	0.81	0.85
	30	1.06	1.69	2.33	2.97	3.60	4.24	4.87	5.51	6.14	6.78	7.41	8.05	8.69	9.32	9.96	10.59	11.23	11.86	12.50
	0.76	0.10	0.16	0.22	0.28	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.81	0.87	0.92	0.98	1.04	1.10	1.16
	36	1.29	2.07	2.84	3.62	4.39	5.17	5.95	6.72	7.50	8.27	9.05	9.82	10.60	11.37	12.15	12.93	13.70	14.48	15.25
	0.91	0.12	0.19	0.26	0.34	0.41	0.48	0.55	0.62	0.70	0.77	0.84	0.91	0.98	1.06	1.13	1.20	1.27	1.34	1.42
	42	1.57	2.52	3.46	4.41	5.35	6.30	7.24	8.18	9.13	10.07	11.02	11.96	12.91	13.85	14.79	15.74	16.68	17.63	18.57
	1.07	0.15	0.23	0.32	0.41	0.50	0.58	0.67	0.76	0.85	0.94	1.02	1.11	1.20	1.29	1.37	1.46	1.55	1.64	1.73
	48	1.81	2.89	3.98	5.06	6.14	7.23	8.26	9.40	10.48	11.57	12.65	13.74	14.82	15.90	16.99	18.07	19.16	20.24	21.33
	1.22	0.17	0.27	0.37	0.47	0.57	0.67	0.77	0.87	0.97	1.07	1.18	1.28	1.38	1.48	1.58	1.68	1.78	1.88	1.98
	54	2.04	3.27	4.49	5.71	6.94	8.16	9.39	10.61	11.84	13.06	14.28	15.51	16.73	17.96	19.18	20.41	21.63	22.86	24.08
	1.37	0.19	0.30	0.42	0.53	0.64	0.76	0.87	0.99	1.10	1.21	1.33	1.44	1.55	1.67	1.78	1.90	2.01	2.12	2.24
	60	2.32	3.72	5.11	6.50	7.89	9.29	10.68	12.07	13.47	14.86	16.25	17.65	19.04	20.43	21.83	23.22	24.61	26.01	27.40
	1.52	0.22	0.35	0.47	0.60	0.73	0.86	0.99	1.12	1.25	1.38	1.51	1.64	1.77	1.90	2.03	2.16	2.29	2.42	2.55
	66	2.56	4.09	5.62	7.15	8.69	10.22	11.75	13.29	14.82	16.35	17.89	19.42	20.95	22.49	24.02	25.55	27.09	28.62	30.15
	1.68	0.24	0.38	0.52	0.66	0.81	0.95	1.09	1.23	1.38	1.52	1.66	1.80	1.95	2.09	2.23	2.37	2.52	2.66	2.80
72	2.84	4.54	6.24	7.94	9.64	11.35	13.05	14.75	16.45	18.15	19.86	21.56	23.26	24.96	26.66	28.37	30.07	31.77	33.47	
1.83	0.26	0.42	0.58	0.74	0.90	1.05	1.21	1.37	1.53	1.69	1.84	2.00	2.16	2.32	2.48	2.64	2.79	2.95	3.11	
78	3.07	4.91	6.75	8.60	10.44	12.28	14.12	15.96	17.81	19.65	21.49	23.33	25.17	27.02	28.86	30.70	32.54	34.38	36.23	
1.98	0.29	0.46	0.63	0.80	0.97	1.14	1.31	1.48	1.65	1.83	2.00	2.17	2.34	2.51	2.68	2.85	3.02	3.19	3.37	
84	3.30	5.29	7.27	9.25	11.23	13.21	15.20	17.18	19.16	21.14	23.12	25.11	27.09	29.07	31.05	33.03	35.02	37.00	38.98	
2.13	0.31	0.49	0.68	0.86	1.04	1.23	1.41	1.60	1.78	1.96	2.15	2.33	2.52	2.70	2.88	3.07	3.25	3.44	3.62	
90	3.58	5.74	7.89	10.04	12.19	14.34	16.49	18.64	20.79	22.94	25.09	27.24	29.39	31.55	33.70	35.85	38.00	40.15	42.30	
2.29	0.33	0.53	0.73	0.93	1.13	1.33	1.53	1.73	1.93	2.13	2.33	2.53	2.73	2.93	3.13	3.33	3.53	3.73	3.93	
96	3.82	6.11	8.40	10.69	12.98	15.27	17.56	19.85	22.15	24.44	26.73	29.02	31.31	33.60	35.89	38.18	40.47	42.76	45.05	
2.44	0.35	0.57	0.78	0.99	1.21	1.42	1.63	1.84	2.06	2.27	2.48	2.70	2.91	3.12	3.33	3.55	3.76	3.97	4.19	
102	4.10	6.56	9.02	11.48	13.94	16.40	18.86	21.32	23.78	26.24	28.70	31.16	33.62	36.08	38.53	40.99	43.45	45.91	48.37	
2.59	0.38	0.61	0.84	1.07	1.29	1.52	1.75	1.98	2.21	2.44	2.67	2.89	3.12	3.35	3.58	3.81	4.04	4.27	4.49	
108	4.33	6.93	9.53	12.13	14.73	17.33	19.93	22.53	25.13	27.73	30.33	32.93	35.53	38.13	40.73	43.33	45.93	48.53	51.13	
2.74	0.40	0.64	0.89	1.13	1.37	1.61	1.85	2.09	2.33	2.58	2.82	3.06	3.30	3.54	3.78	4.03	4.27	4.51	4.75	
114	4.57	7.31	10.05	12.79	15.53	18.26	21.00	23.74	26.48	29.22	31.96	34.70	37.44	40.18	42.92	45.66	48.40	51.14	53.88	
2.90	0.42	0.68	0.93	1.19	1.44	1.70	1.95	2.21	2.46	2.71	2.97	3.22	3.48	3.73	3.99	4.24	4.50	4.75	5.01	
120	4.85	7.76	10.66	13.57	16.48	19.39	22.30	25.21	28.12	31.02	33.93	36.84	39.75	42.66	45.57	48.48	51.38	54.29	57.20	
3.05	0.45	0.72	0.99	1.26	1.53	1.80	2.07	2.34	2.61	2.88	3.15	3.42	3.69	3.96	4.23	4.50	4.77	5.04	5.31	



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

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Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

10 - 1 - 21

1600

7 - 11 - 13

1604D



EXTRUDED ALUMINUM STATIONARY LOUVER 4" (102) DEEP • DRAINABLE BLADE PERFORMANCE DATA MODEL: 1604D

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

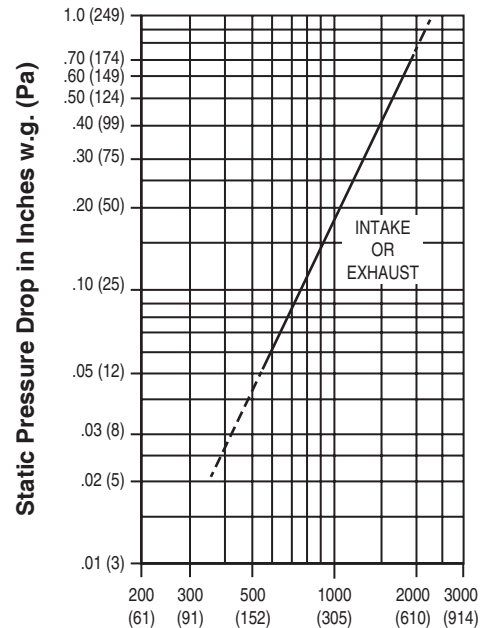
I N T A K E	Free Area %	52%
	Free Area sq. ft. (sq. m.)	8.26 (0.77)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	906 fpm (276 m/min.)
	Air Volume at 906 fpm Free Area Velocity	7484 cfm (3532 l/s)
	Pressure Drop @ 906 fpm	.15 in. w.g. (37 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 the Model 1604D 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 ratings and water penetration ratings.

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.

SCHEDULE TYPE:

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Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
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