



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

Model 1604DHP High Performance Drainable Blade Louvers provide air intake and exhaust opening protection with pleasing aesthetics that compliment any structure's exterior styling. Suitable for use in exhaust and high velocity intake applications, the design provides superior air performance through its high free area. Front rain gutters in each blade divert collected water down concealed side downspouts and out the sill. Blades are reinforced with full length integral bosses for superior strength and the 4" (102) deep channel or optional flanged and glazing adaptor frame installs easily in common wall configurations to suit most architectural and mechanical installation requirements. AMCA Licensed and Certified for Air Performance and Water Penetration.

STANDARD CONSTRUCTION:

- FRAME:** 4" (102) 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 31.5 degrees.
- BLADE SPACING:** Approximately 3" (76) 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).
- MAX. 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:

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

OPTIONAL FINISHES:

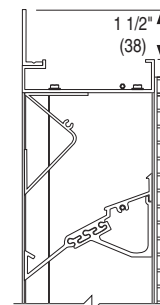
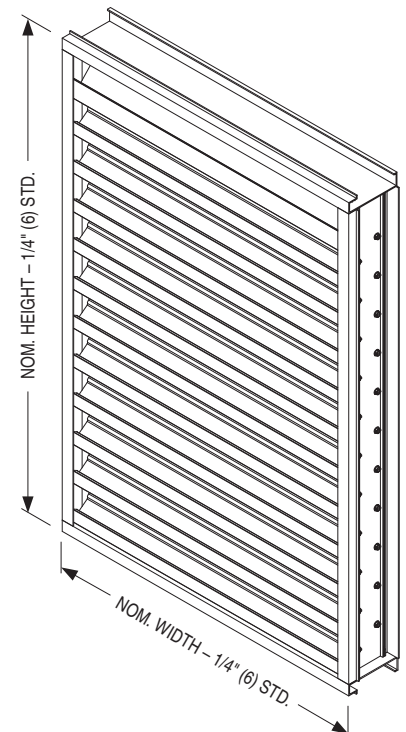
- ☐ **PC3** Powder Coat AAMA 2603. Color: _____.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15**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

Color Anodized:

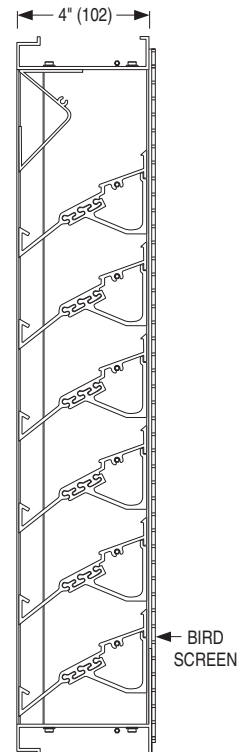
- | | |
|--|---|
| <input type="checkbox"/> ANLB Light Bronze. | <input type="checkbox"/> ANMB Medium Bronze. |
| <input type="checkbox"/> ANDB Dark Bronze. | <input type="checkbox"/> ANBK Black. |

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 - 19 - 15

1600

NEW

1604DHP

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Dimensions are in inches (mm).



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

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
Height in Inches and Meters	12	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
	0.30	0.32	0.52	0.71	0.91	1.11	1.31	1.51	1.71	1.86	2.06	2.26	2.46	2.65	2.85	3.05	3.25	3.45	3.65	3.85
	0.46	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.28	0.30	0.32	0.34	0.36
	18	0.59	0.96	1.33	1.70	2.06	2.43	2.80	3.17	3.45	3.82	4.19	4.56	4.93	5.30	5.67	6.03	6.40	6.77	7.14
	0.46	0.05	0.09	0.12	0.16	0.19	0.23	0.26	0.29	0.32	0.35	0.39	0.42	0.46	0.49	0.53	0.56	0.59	0.63	0.66
	24	0.86	1.40	1.94	2.48	3.02	3.56	4.10	4.64	5.04	5.58	6.12	6.66	7.20	7.74	8.28	8.82	9.36	9.90	10.44
	0.61	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.47	0.52	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97
	30	1.40	2.28	3.16	4.04	4.92	5.80	6.68	7.56	8.22	9.10	9.98	10.86	11.74	12.62	13.51	14.39	15.27	16.15	17.03
	0.76	0.13	0.21	0.29	0.38	0.46	0.54	0.62	0.70	0.76	0.85	0.93	1.01	1.09	1.17	1.25	1.34	1.42	1.50	1.58
	36	1.94	3.16	4.39	5.61	6.83	8.05	9.27	10.49	11.41	12.63	13.85	15.07	16.29	17.51	18.73	19.95	21.17	22.39	23.62
	0.36	0.18	0.29	0.41	0.52	0.63	0.75	0.86	0.97	1.06	1.17	1.29	1.40	1.51	1.63	1.74	1.85	1.97	2.08	2.19
	42	1.67	2.72	3.77	4.82	5.87	6.93	7.98	9.03	9.81	10.87	11.92	12.97	14.02	15.07	16.12	17.17	18.22	19.27	20.32
	1.07	0.16	0.25	0.35	0.45	0.55	0.64	0.74	0.84	0.91	1.01	1.11	1.20	1.30	1.40	1.50	1.59	1.69	1.79	1.89
	48	1.94	3.16	4.39	5.61	6.83	8.05	9.11	10.49	11.41	12.63	13.85	15.07	16.29	17.51	18.73	19.95	21.17	22.39	23.62
	1.22	0.18	0.29	0.41	0.52	0.63	0.75	0.85	0.97	1.06	1.17	1.29	1.40	1.51	1.63	1.74	1.85	1.97	2.08	2.19
	54	2.21	3.61	5.00	6.39	7.78	9.17	10.56	11.95	13.00	14.39	15.78	17.17	18.56	19.95	21.34	22.74	24.13	25.52	26.91
	1.37	0.21	0.33	0.46	0.59	0.72	0.85	0.98	1.11	1.21	1.34	1.47	1.60	1.72	1.85	1.98	2.11	2.24	2.37	2.50
	60	2.49	4.05	5.61	7.17	8.73	10.29	11.86	13.42	14.59	16.15	17.71	19.27	20.83	22.40	23.96	25.52	27.08	28.64	30.20
	1.52	0.23	0.38	0.52	0.67	0.81	0.96	1.10	1.25	1.36	1.50	1.65	1.79	1.94	2.08	2.23	2.37	2.52	2.66	2.81
	66	2.76	4.49	6.22	7.95	9.68	11.42	13.15	14.88	16.18	17.91	19.64	21.38	23.11	24.84	26.57	28.30	30.04	31.77	33.50
	1.68	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.50	1.66	1.82	1.99	2.15	2.31	2.47	2.63	2.79	2.95	3.11
	72	3.03	4.93	6.83	8.73	10.64	12.54	14.44	16.34	17.77	19.67	21.58	23.48	25.38	27.28	29.18	31.09	32.99	34.89	36.79
	1.83	0.28	0.46	0.63	0.81	0.99	1.16	1.34	1.52	1.65	1.83	2.00	2.18	2.36	2.53	2.71	2.89	3.06	3.24	3.42
	78	3.30	5.37	7.44	9.52	11.59	13.66	15.73	17.81	19.36	21.43	23.51	25.58	27.65	29.72	31.80	33.87	35.94	38.02	40.09
	1.98	0.31	0.50	0.69	0.88	1.08	1.27	1.46	1.65	1.80	1.99	2.18	2.38	2.57	2.76	2.95	3.15	3.34	3.53	3.72
	84	3.57	5.81	8.06	10.30	12.54	14.78	17.03	19.27	20.95	23.20	25.44	27.68	29.92	32.17	34.41	36.65	38.90	41.14	43.38
	2.13	0.33	0.54	0.75	0.96	1.17	1.37	1.58	1.79	1.95	2.15	2.36	2.57	2.78	2.99	3.20	3.41	3.61	3.82	4.03
	90	3.84	6.25	8.67	11.08	13.49	15.91	18.32	20.73	22.54	24.96	27.37	29.78	32.20	34.61	37.02	39.44	41.85	44.26	46.68
	2.29	0.36	0.58	0.81	1.03	1.25	1.48	1.70	1.93	2.09	2.32	2.54	2.77	2.99	3.22	3.44	3.66	3.89	4.11	4.34
	96	4.11	6.70	9.28	11.86	14.45	17.03	19.61	22.20	24.14	26.72	29.30	31.89	34.47	37.05	39.64	42.22	44.80	47.39	49.97
	2.44	0.38	0.62	0.86	1.10	1.34	1.58	1.82	2.06	2.24	2.48	2.72	2.96	3.20	3.44	3.68	3.92	4.16	4.40	4.64
	102	4.38	7.14	9.89	12.65	15.40	18.15	20.91	23.66	25.73	28.48	31.23	33.99	36.74	39.50	42.25	45.00	47.76	50.51	53.27
	2.59	0.41	0.66	0.92	1.17	1.43	1.69	1.94	2.20	2.39	2.65	2.90	3.16	3.41	3.67	3.93	4.18	4.44	4.69	4.95
	108	4.65	7.58	10.50	13.43	16.35	19.28	22.20	25.12	27.32	30.24	33.17	36.09	39.01	41.94	44.86	47.79	50.71	53.64	56.56
	2.74	0.43	0.70	0.98	1.25	1.52	1.79	2.06	2.33	2.54	2.81	3.08	3.35	3.62	3.90	4.17	4.44	4.71	4.98	5.25
	114	4.93	8.02	11.11	14.21	17.30	20.40	23.49	26.59	28.91	32.00	35.10	38.19	41.29	44.38	47.48	50.57	53.67	56.76	59.86
	2.90	0.46	0.75	1.03	1.32	1.61	1.90	2.18	2.47	2.69	2.97	3.26	3.55	3.84	4.12	4.41	4.70	4.99	5.27	5.56
	120	5.20	8.46	11.73	14.99	18.26	21.52	24.79	28.05	30.50	33.77	37.03	40.30	43.56	46.82	50.09	53.35	56.62	59.88	63.15
	3.05	0.48	0.79	1.09	1.39	1.70	2.00	2.30	2.61	2.83	3.14	3.44	3.74	4.05	4.35	4.65	4.96	5.26	5.56	5.87



SCHEDULE TYPE:

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CONTRACTOR:

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Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

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1604DHP

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

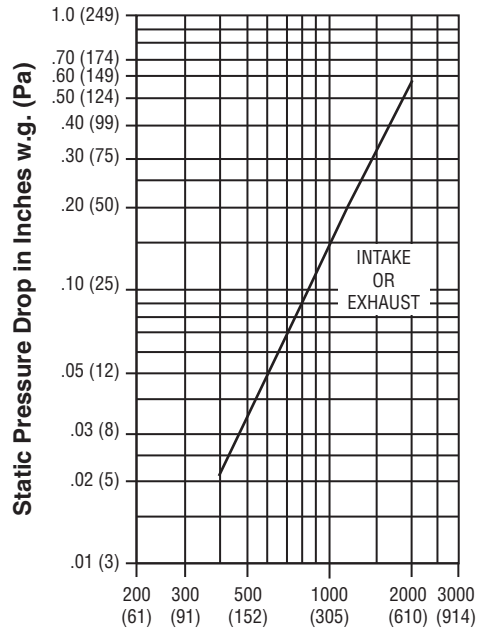
I N T A K E	Free Area %	57%
	Free Area sq. ft. (sq. m.)	9.11 (0.85)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	954 fpm (291 m/min.)
	Air Volume at 954 fpm	8,691 cfm (4101 l/s)
	Free Area Velocity	
	Pressure Drop @ 954 fpm	.14 in. w.g. (35 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 1604DHP 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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