



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 9" H (305 x 229).
- 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:

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

OPTIONAL FINISHES:

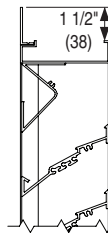
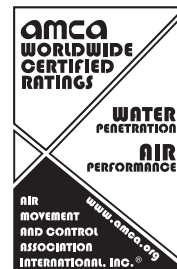
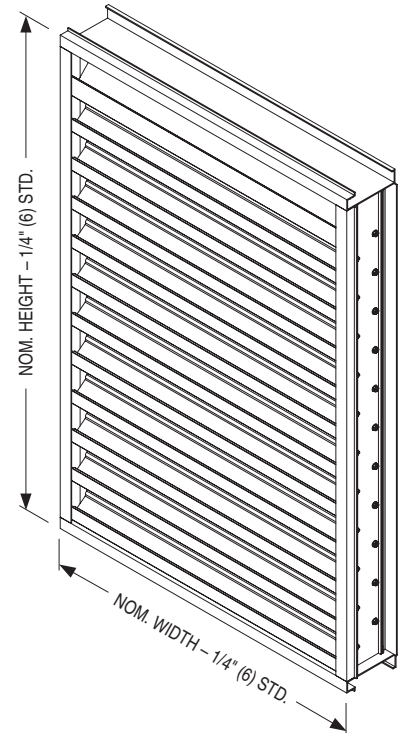
- PC3** Powder Coat AAMA 2603. Color: _____.
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- PCC** Prime Coat.
- AN04** Clear Anodized 204-R1.
- AN15** Clear Anodized 215-R1.

Color Anodized:

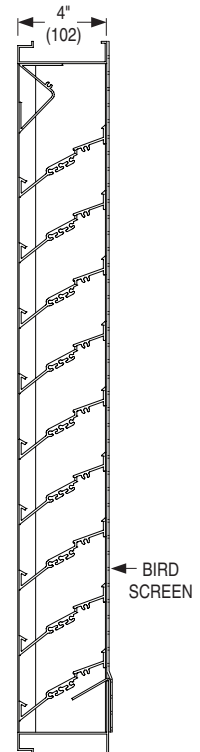
- ANLB** Light Bronze.
- ANMB** Medium Bronze.
- ANDB** Dark Bronze.
- ANBK** Black.

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).



OPT. FLANGED FRAME (FL15 STD.)



SCHEDULE TYPE:
PROJECT:
ENGINEER:
CONTRACTOR:

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

DATE	B SERIES	SUPERSEDES	DRAWING NO.
4 - 22 - 24	1600	3 - 12 - 24	1604DHP



**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	0.32	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	0.03	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	0.38
	18	0.46	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	0.69
	24	0.61	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	1.02
	30	0.76	1.13	1.84	2.55	3.26	3.97	4.68	5.39	6.10	6.57	7.28	7.99	8.70	9.41	10.12	10.83	11.54	12.25	12.96	13.67
	0.76	0.10	0.17	0.24	0.30	0.37	0.43	0.50	0.57	0.61	0.68	0.74	0.81	0.87	0.94	1.01	1.07	1.14	1.20	1.27	1.34
	36	0.36	1.40	2.28	3.16	4.04	4.92	5.80	6.68	7.56	8.15	9.03	9.91	10.79	11.67	12.55	13.43	14.31	15.19	16.07	16.95
	0.36	0.13	0.21	0.29	0.38	0.46	0.54	0.62	0.70	0.76	0.84	0.92	1.00	1.08	1.17	1.25	1.33	1.41	1.49	1.57	1.65
	42	1.07	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	1.99
	48	1.22	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	2.30
	54	1.37	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	2.63
	60	1.52	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	2.95
	66	1.68	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	3.27
72	1.83	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	3.59	
78	1.98	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	3.91	
84	2.13	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	4.24	
90	2.29	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	39.43	41.84	44.25	46.66	
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	3.21	3.43	3.65	3.87	4.09	4.31	4.53	
96	2.44	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	37.06	39.64	42.23	44.81	47.40	50.00	
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	4.88	
102	2.59	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	39.49	42.24	44.99	47.74	50.49	53.24	
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	3.92	4.17	4.42	4.67	4.92	5.17	
108	2.74	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	41.93	44.85	47.77	50.69	53.61	56.53	
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	3.89	4.16	4.43	4.70	4.97	5.24	5.51	
114	2.90	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	47.47	50.56	53.65	56.74	59.83	
2.90	0.46	0.75	1.03	1.32	1.61	1.90	2.19	2.47	2.69	2.97	3.26	3.55	3.84	4.13	4.42	4.71	5.00	5.29	5.58	5.87	
120	3.05	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	46.83	50.10	53.37	56.64	59.91	63.18	
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	4.95	5.25	5.55	5.85	6.15	



SCHEDULE TYPE:	Page 2 of 3			
PROJECT:	Dimensions are in inches (mm).			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	4 - 22 - 24	1600	3 - 12 - 24	1604DHP



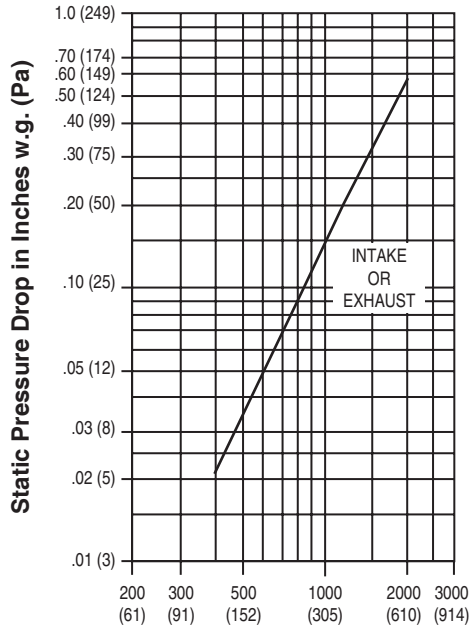
**EXTRUDED ALUMINUM STATIONARY LOUVER
4" (102) DEEP • HIGH PERFORMANCE
DRAINABLE BLADE • PERFORMANCE DATA
MODEL: 1604DHP**

**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)
	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.

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 that the Model 1604DHP 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.



SCHEDULE TYPE:	Page 3 of 3			
PROJECT:	Dimensions are in inches (mm).			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	4 - 22 - 24	1600	3 - 12 - 24	1604DHP