

AIR THERM INC.

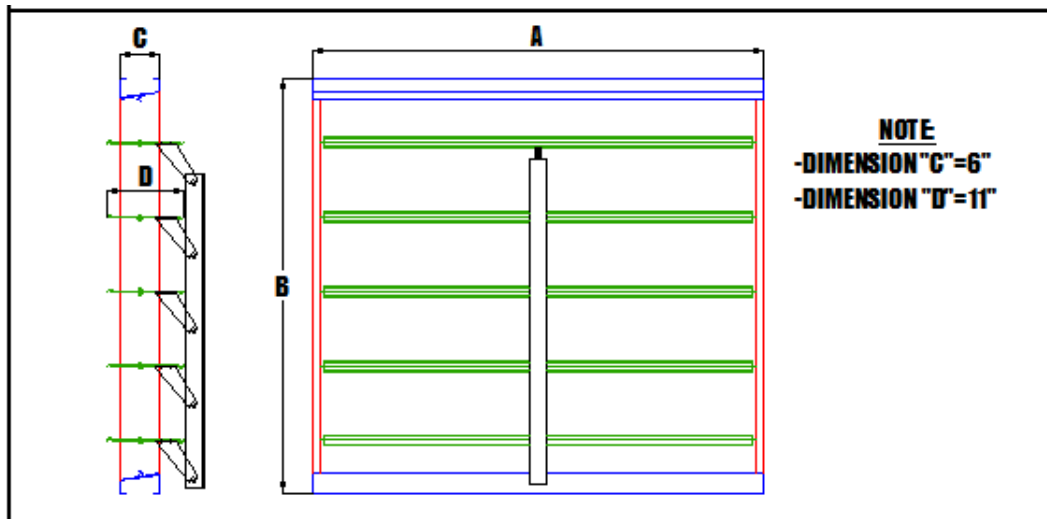
www.air-therm.com

TEL: (514) 482-2067

FAX: (514) 482-6806



AIR-THERM GRAVITEC THERMODYNAMIC NATURAL VENTILATION SPECIFICATION FOR WALL LOUVER TYPE AWL-ALUMINIUM



ITEM NO.	TAG	QUANTITY	"A" WIDE OPENING (IN.)	"B" HIGH OPENING (IN.)	NO. OF PANELS (WIDE X HIGH)	OPTIONS				COMMENTS
						CALL EXTENSION (YES/NO)	SCREEN OPTION (YES/NO/TYPE 1)	OPERATING LINK BRACKET (YES/NO/TYPE 1)	BEARING (YES/NO/TYPE 1)	

OPTIONAL ACTUATOR:
SPECIAL FINISH:

- FRAME: 6" DEEP CHANEL, 0.125" THICKNESS
6063-T5 EXTRUDED ALUMINIUM ALLOY.
- BLADES: 0.125" THICKNESS 6063-T5 EXTRUDED
ALUMINIUM ALLOY.
- FINISH: MILL
- SCREEN: (OPTIONAL) LOCATED ON EXTERIOR
- AXLES: 1/2" DIAMETER ALUMINIUM
- BEARINGS: DELRIN BUSHING
- LINKAGE: ALUMINIUM HIGH BRACKET
ALUMINIUM LINKAGE TIE-BAR
- DRIVING: 1) ACTUATOR (MECHANICAL) OR
2) LOCKING DEVICE (MANUAL)

Date: _____ AT-Code: _____
 Project: _____
 Client: _____
 Consulting Engineers: _____
 Order No.: _____

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 THIS DRAWING IS OUR PROPERTY : REPRODUCTION FORBIDDEN

EXTRUDED ALUMINIUM 11" DEEP, 90° ADJUSTABLE BLADE

Drn. By:	Dwg. No.:	Rev.
Date:		

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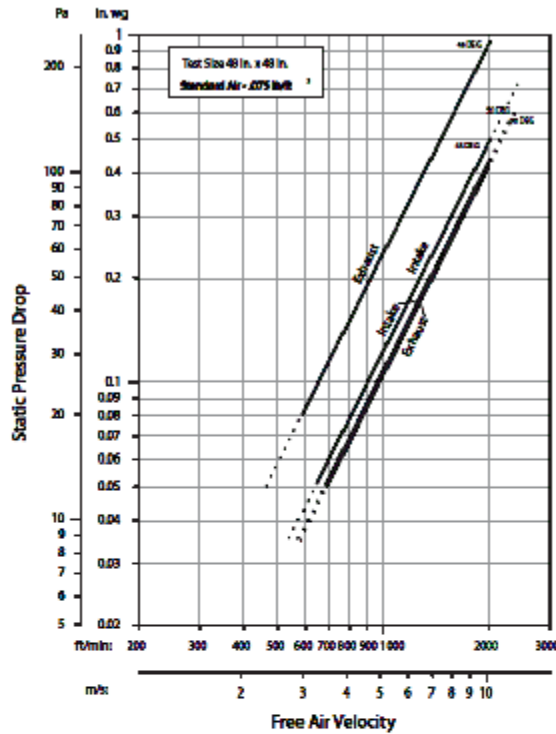
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TECHNICAL SPECIFICATIONS:

- MAXIMUM PANEL SIZE: 96" (HEIGHT) x 68"
- DIMENSIONS "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZE. LOUVERS ARE MADE 1/4"
- PERCENT FREE AREA: 90%
- FREE AREA VELOCITY AT BEGINNING POINT OF WATER PENETRATION - 0.01 oz H₂O/sq.ft.:
1.069 fpm (5.43 m/s)
- AIR VOLUME FLOW RATE AT BEGINNING POINT OF WATER PENETRATION - 4 ft x 4 ft UNIT:
6.75 cfm (3.19 cum/s)
- PRESSURE DROP AT BEGINNING POINT OF WATER PENETRATION: 0.12 in. H₂O (0.040 kPa)
- INDUSTRIAL QUALITY HARDWARE.

AIRFLOW RESISTANCE (Standard Air - .075 lbs/ cu. ft.)



LOUVER PERFORMANCE RATINGS FREE AREA CHART - 90° OPEN (Given in sq. feet and sq. m)

		WIDTH (In. and mm)				
		24 610	36 914	48 1219	60 1524	67 1702
HEIGHT (in. and mm)	24 610	3.6 0.33	5.4 0.50	7.2 0.67	9.0 0.84	10.1 0.93
	36 914	5.4 0.50	8.1 0.75	10.8 1.00	13.5 1.25	15.1 1.40
	48 1219	7.2 0.67	10.8 1.00	14.4 1.34	18.0 1.67	20.1 1.87
	60 1524	9.0 0.84	13.5 1.25	18.0 1.67	22.5 2.09	25.1 2.33
	72 1829	10.8 1.00	16.2 1.50	21.6 2.01	27.0 2.51	30.2 2.80
	84 2134	12.6 1.17	18.9 1.76	25.2 2.34	31.5 2.93	35.2 3.27
	96 2438	14.4 1.34	21.6 2.01	28.8 2.67	36.0 3.34	40.2 3.73

NOTE:

Openings that require multiple louver panels in both width and height will require internal structural supports. It is recommended that large openings be divided with structural members so that the louvers will span either width or height with a single panel. Unusually high wind loading may require structural supports on non-multiple wide and multiple high assemblies. Structural supports and mounting accessories are not supplied by Air-Therm Inc.

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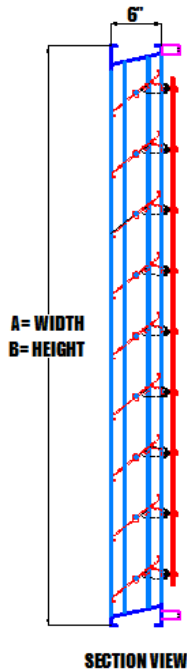
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EXTRUDED ALUMINIUM, 6" DEEP, 40° ADJUSTABLE ADJUSTABLE LOUVERS

INFORMATION



- FRAME: 6" DEEP CHANEL, 0.125" THICKNESS 6063-T5 EXTRUDED ALUMINIUM ALLOY.
- BLADES: 0.125" THICKNESS 6063-T5 EXTRUDED ALUMINIUM ALLOY.
- FINISH: MILL
- SCREEN: (OPTIONAL) LOCATED ON EXTERIOR
- AXLES: 1/2" DIAMETER ALUMINIUM
- BEARINGS: DELRIN BUSHING
- LINKAGE: PLATED STEEL HIGH BRACKET, 5/16" DIA. PLATED STEEL LINKAGE ROD
- DRIVING: ACTUATOR (MECHANICAL) OR CHAIN (MANUAL)

- MAXIMUM PANEL SIZE: 96" (HEIGHT) x 60" (WIDTH)
- MINIMUM PANEL SIZE: 12" x 12"

- DIMENSIONS "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZE. LOUVERS ARE MADE 1/4" UNDERSIZE

- INDUSTRIAL QUALITY HARDWARE.

HEIGHT IN INCHES		WIDTH IN INCHES			
		12"	24"	36"	48"
12"	SEALS	71	99	125	162
	NONE	28	36	45	65
24"	SEALS	182	228	295	382
	NONE	87	94	121	140
36"	SEALS	282	382	502	622
	NONE	108	157	208	266
48"	SEALS	382	512	672	832
	NONE	145	210	278	342
60"	SEALS	482	655	879	1082
	NONE	188	273	361	446
72"	SEALS	542	758	1049	1303
	NONE	222	311	430	534
84"	SEALS	642	949	1269	1603
	NONE	—	—	—	—
96"	SEALS	732	1079	1429	1773
	NONE	—	—	—	—

HEIGHT IN INCHES		WIDTH IN INCHES			
		12"	24"	36"	48"
12"	SEALS	10	23	36	49
	NONE	24	49	74	95
24"	SEALS	20	64	99	134
	NONE	69	138	203	270
36"	SEALS	55	119	183	247
	NONE	138	256	375	497
48"	SEALS	74	160	246	333
	NONE	165	344	504	670
60"	SEALS	89	215	330	446
	NONE	247	462	677	898
72"	SEALS	118	256	393	531
	NONE	295	550	806	1087
84"	SEALS	143	310	477	644
	NONE	—	—	—	—
96"	SEALS	162	351	541	730
	NONE	—	—	—	—

HEIGHT (in. and mm)	WIDTH (in. and mm)			
	12"	24"	36"	48"
12"	306	610	914	1219
24"	157	149	241	333
36"	102	143	211	285
48"	147	386	625	873
60"	193	505	818	1130
72"	238	624	1010	1396
84"	284	743	1202	1662
96"	329	862	1396	1927

Free Area
(Given in sq. feet and sq. meters)

LEAKAGE:

We have shown two leakage values. The higher values are without seals, lower values are with operational blade and jamb seals. Values shown are at 1 in. wg differential pressure

OPERATING FORCE FACTOR:

Louvers are normally operated by applying a force to the blade to blade linkage whereas dampers are driven through the blade axles. Because of this fact, simple operating torques cannot be published.

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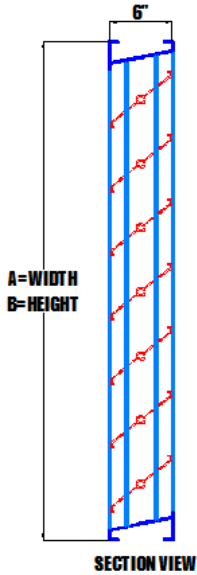
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EXTRUDED ALUMINIUM, 6" DEEP, 45° FIXED STATIONARY LOUVERS

INFORMATION



-FRAME: 6" DEEP CHANEL, 0.125" THICKNESS 6063-T5 EXTRUDED ALUMINIUM ALLOY.

-BLADES: 0.125" THICKNESS 6063-T5 EXTRUDED ALUMINIUM ALLOY.

-FINISH: MILL

-SCREEN: (OPTIONAL) LOCATED ON EXTERIOR

-MAXIMUM PANEL SIZE: 96" (HEIGHT) x 144" (WIDTH)
MINIMUM PANEL SIZE: 12" x 12"

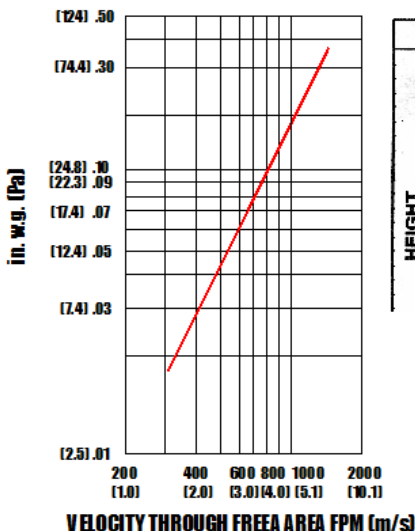
-DIMENSIONS "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZE. LOUVERS ARE MADE 1/4" UNDERSIZE.

**-PANELS OVER 48" WIDE WILL HAVE A VERTICAL INTERIOR BLADE SUPPORT AT CENTER OF PANELS.
PANELS OVER 96" WIDE WILL HAVE TWO VERTICAL INTERIOR BLADE SUPPORTS**

-INDUSTRIAL QUALITY HARDWARE.

Water Penetration : .01 oz. (3.0 g.) at 646 fpm (3.28 m/s) recommended free area velocity
Pressure Drop : .07 in. wg. (17.5 Pa) at 646 fpm (3.28 m/s) and 5220 SCFM (2.46 scm/s)
Free Area : 8.08 sq ft (0.751 sq m)= 50% for 48" X 48" (1.22 m X 1.22 m) test size

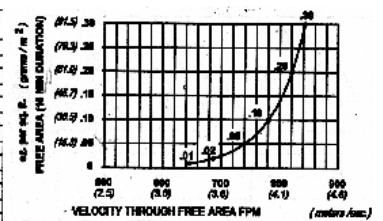
PRESSURE DROP



LOUVER FREE AREA IN SQUARE FEET (sq. m)

HEIGHT	WIDTH													
	12	24	36	48	60	72	84	96	108	120	132	144		
12	238	476	714	952	1190	1428	1666	1904	2142	2380	2618	2856		
24	476	952	1428	1904	2380	2856	3332	3808	4284	4760	5236	5712		
36	714	1428	2142	2856	3570	4284	5000	5712	6426	7140	7854	8568		
48	952	1904	2856	3808	4760	5712	6664	7616	8568	9520	10472	11424		
60	1190	2380	3570	4760	5950	7140	8330	9520	10710	11900	13090	14280		
72	1428	2856	4284	5712	7140	8568	10000	11428	12856	14284	15712	17140		
84	1666	3332	5000	6664	8330	10000	11666	13332	15000	16666	18332	20000		
96	1904	3808	5712	7616	9520	11424	13328	15232	17136	19040	20944	22848		
108	2142	4284	6426	8568	10710	12852	15000	17148	19296	21444	23592	25740		
120	2380	4760	7140	9520	11900	14280	16660	19040	21420	23800	26180	28560		
132	2618	5236	7854	10472	13110	15748	18386	21024	23662	26300	28938	31576		
144	2856	5712	8568	11424	14280	17136	20000	22864	25728	28592	31456	34320		

LOUVER WATER PENETRATION



Both maximum recommended free area velocity and beginning of water penetration are 646 fpm at standard air -.075 lbs/cu ft

NOTE:

Openings that require multiple louver panels in both width and height will require internal structural supports. It is recommended that large openings be divided with structural members so that the louvers will span either width or height with a single panel. Unusually high wind loading may require structural supports on non-multiple wide and multiple high assemblies.

-Structural supports and mounting accessories are not supplied by Air-Therm Inc.