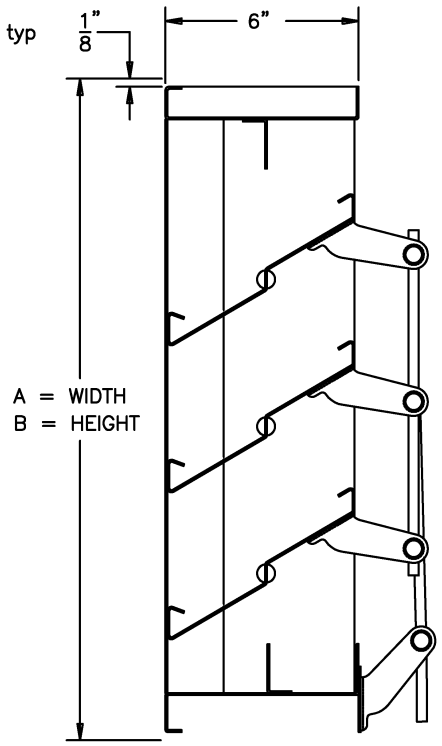
GALVANIZED STEEL, 6" DEEP, HEAVY GAUGE, DRAINABLE ADJUSTABLE TYPE BLADE



SECTION VIEW

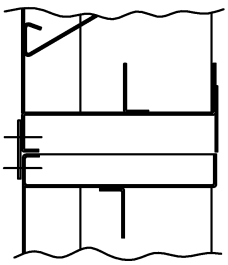
MODEL LF31A
STANDARD SPECIFICATIONS

FRAME:	6" DEEP CHANNEL, 16 GAUGE GALVANIZED STEEL.
BLADES:	16 GAUGE GALVANIZED STEEL.
SCREEN:	1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON EXTERIOR.
AXLES:	1/2" DIAMETER PLATED STEEL.
BEARINGS:	POLYMER PLASTICS SPLIT.
LINKAGE:	PLATED STEEL BRACKETS, BRASS BARRELS, AND 5/16" DIAMETER PLATED STEEL LINKAGE ROD.
ACTUATOR:	INDIVIDUAL PANEL WING NUT. SEE ACTUATOR BULLETIN FOR OTHER SELECTIONS.

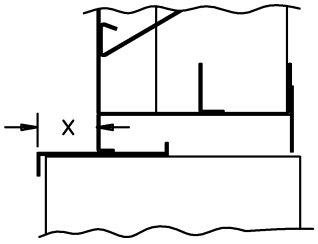
MAX PANEL SIZE: 60" X 96" W/O SEALS OR W/BLADE SEALS ONLY
48" X 96" WITH BLADE & JAMB SEALS.

MIN PANEL SIZE: 12" X 12".

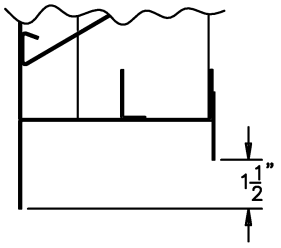
DIMENSIONS: "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING SIZES. LOUVERS ARE MADE 1/2" UNDERSIZE.



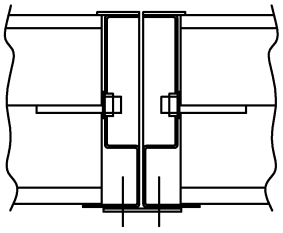
STANDARD HORIZONTAL MULLION



EXTENDED SILL OPTIONAL



FLANGED FRAME OPTIONAL (SILL SHOWN)



STANDARD VERTICAL MULLION

awv american warming and ventilating
A MESTEK COMPANY
7301 INTERNATIONAL DRIVE HOLLAND, OHIO
Phone (419) 865–5000 Fax (419) 865–1375

LF–31A ADJUSTABLE LOUVER

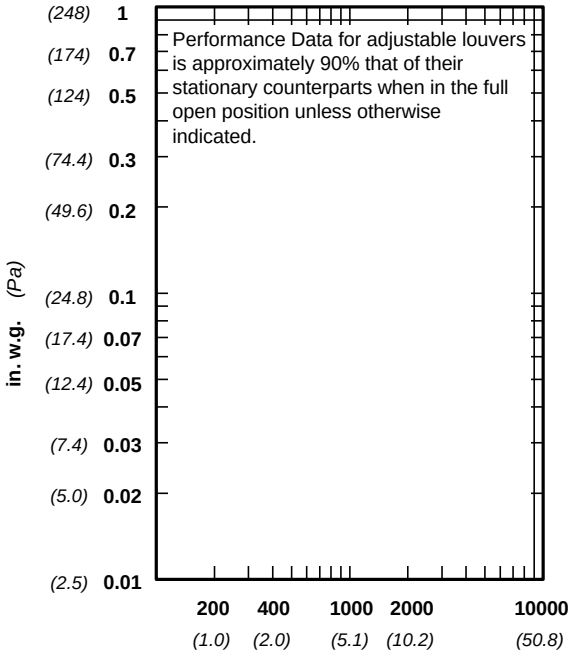
DRN. BY	DWG. NO.	REV.
JP	LF–31A	
DATE 12–7–00		

Water Penetration : Performance Data for adjustable louvers is approximately 90% that of their stationary counterparts when in the full open position unless otherwise indicated.

Pressure Drop

Free Area : 8.17 sq ft (0.759 sq m) = 51% for 48" x 48" (1.22m x 1.22m) test size

INTAKE PRESSURE DROP



VELOCITY THROUGH FREE AREA fpm (m/s)

standard air- .075 lbs per cu ft

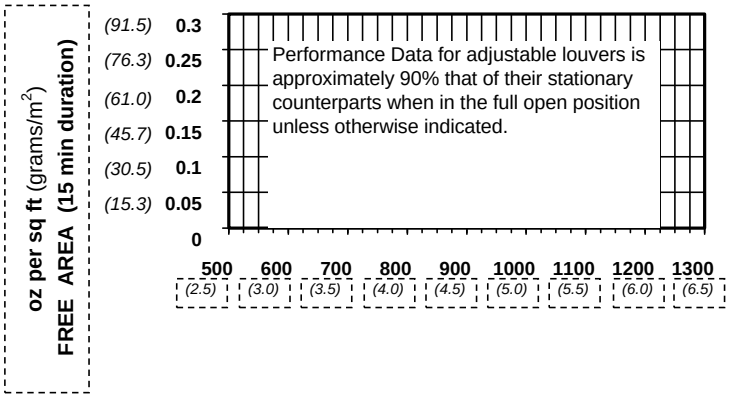
Ratings do not include the effect of a wire bird screen

Test based on a 48" x 48" test size per AMCA Standard 51

FREE AREA IN SQUARE FEET (sq meters)

HEIGHT \ WIDTH								
in. *mm*	**12** *305*	**18** *457*	**24** *610*	**30** *762*	**36** *914*	**42** *1067*	**48** *1219*	**60** *1524*
12 *305*	**0.21** *0.020*	**0.37** *0.034*	**0.52** *0.048*	**0.68** *0.063*	**0.84** *0.078*	**0.99** *0.092*	**1.15** *0.107*	**1.46** *0.136*
24 *610*	**0.54** *0.050*	**0.93** *0.086*	**1.33** *0.124*	**1.72** *0.160*	**2.11** *0.196*	**2.51** *0.233*	**2.90** *0.269*	**3.69** *0.343*
36 *914*	**1.03** *0.096*	**1.78** *0.165*	**2.53** *0.235*	**3.28** *0.305*	**4.03** *0.374*	**4.78** *0.444*	**5.53** *0.514*	**7.04** *0.654*
48 *1219*	**1.52** *0.141*	**2.63** *0.244*	**3.74** *0.347*	**4.84** *0.450*	**5.95** *0.553*	**7.06** *0.656*	**8.17** *0.759*	**10.38** *0.964*
60 *1524*	**1.85** *0.172*	**3.20** *0.297*	**4.54** *0.422*	**5.89** *0.547*	**7.23** *0.672*	**8.58** *0.797*	**9.92** *0.922*	**12.61** *1.172*
72 *1829*	**2.34** *0.217*	**4.04** *0.375*	**5.75** *0.534*	**7.45** *0.692*	**9.15** *0.850*	**10.85** *1.008*	**12.56** *1.167*	**15.96** *1.483*
84 *2134*	**2.83** *0.263*	**4.89** *0.454*	**6.95** *0.646*	**9.01** *0.837*	**11.07** *1.028*	**13.13** *1.220*	**15.19** *1.411*	**19.31** *1.794*
96 *2438*	**3.16** *0.294*	**5.46** *0.507*	**7.75** *0.720*	**10.05** *0.934*	**12.35** *1.147*	**14.65** *1.361*	**16.94** *1.574*	**21.54** *2.001*

WATER PENETRATION



Leakage:

We have shown two leakage values for the louver sizes below. The upper values with blade seals, and lower values are with optional blade and jamb seals. Values were derived from tests performed in accordance with AMCA 500. Values are in total (CFM) at 1 in wg differential pressure.

HEIGHT		WIDTH					
		SEALS	12	24	36	48	60
	12	BLADE	82	122	162	202	242
		BLD & JMB	27	40	55	72	n/a
	24	BLADE	176	256	337	417	497
		BLD & JMB	77	111	142	178	n/a
	36	BLADE	281	414	548	681	814
		BLD & JMB	126	177	228	288	n/a
	48	BLADE	375	549	722	896	1070
		BLD & JMB	169	237	303	380	n/a
	60	BLADE	480	707	933	1130	1387
		BLD & JMB	215	303	389	490	n/a
	72	BLADE	574	841	1108	1375	1642
		BLD & JMB	258	361	464	582	n/a
	84	BLADE	678	999	1319	1639	1959
		BLD & JMB	304	427	519	692	n/a
	96	BLADE	772	1133	1493	1854	2215
		BLD & JMB	347	487	625	785	n/a

TOTAL LEAKAGE IN SCFM @ 1 IN wg DP

CLOSING TORQUE IN inch/pounds

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 maximum panel size to be reduced, chek with factory beofre ordering Structural supports and mounting accessories are not supplied by AWV as a standard.

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. The factors shown are to be used with the data shown in our louver actuator selection guide found in our louver actuator price list.

HEIGHT		WIDTH					
		SEALS	12	24	36	48	60
	12	BLADE	12	29	45	61	77
		BLD & JMB	20	45	70	90	n/a
	24	BLADE	34	77	120	164	208
		BLD & JMB	58	121	181	245	n/a
	36	BLADE	61	141	220	299	378
		BLD & JMB	105	198	294	446	n/a
	48	BLADE	82	119	295	402	509
		BLD & JMB	142	296	445	599	n/a
	60	BLADE	110	253	395	538	681
		BLD & JMB	179	395	595	799	n/a
	72	BLADE	131	301	471	641	811
		BLD & JMB	226	470	708	953	n/a
	84	BLADE	159	365	569	776	983
		BLD & JMB	275	569	858	1156	n/a
	96	BLADE	180	413	646	879	1112
		BLD & JMB	310	645	971	1308	n/a