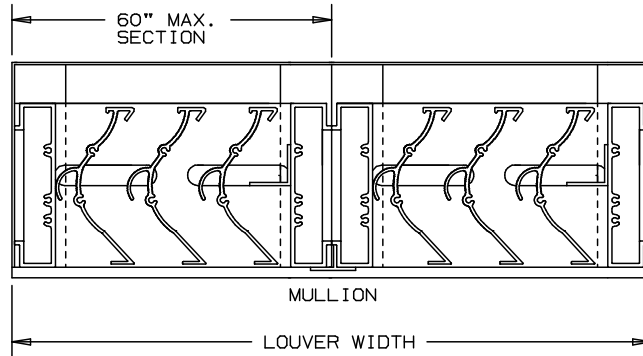
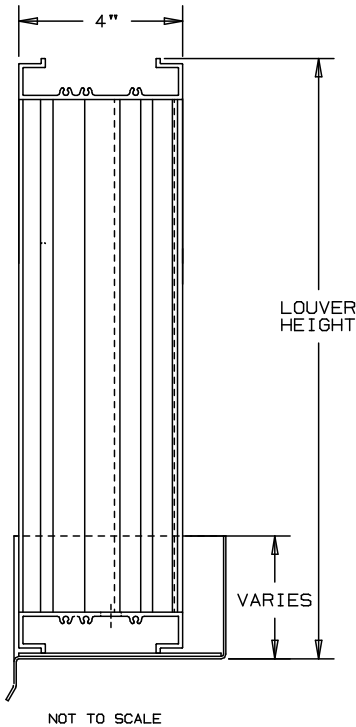


# ARROW

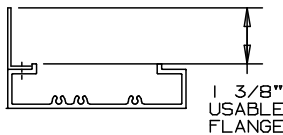
EXTRUDED ALUMINUM LOUVERS  
4" DEEP-STATIONARY-VERTICAL

# TYPE EA-475-DV

## RAIN RESISTANT STORM LOUVER



NOT TO SCALE



FLANGE FRAME  
OPTION

### SPECIFICATIONS

MATERIAL: EXTRUDED ALUMINUM 6063-T6/T52 ALLOY  
 FRAMES: .080" THICK NOMINAL.  
 BLADES: .080" THICK NOMINAL.  
 FACE OF LOUVER: BLADES ARE CONTAINED WITHIN JAMBS, SILL CONTAINS JAMBS, HEAD IS FLUSH WITH JAMBS. APPROXIMATE BLADE CENTERS 1 5/8".  
 SCREENS: WHEN INDICATED, IN A REMOVABLE FRAME.  
 BIRD SCREEN - 1/2" FLATTENED ALUMINUM, .051" THK.  
 OR - 1/2" SQ. MESH, INTERMEDIATE DOUBLE-CRIMPED ALUMINUM WIRE, .063 DIA.  
 OR - 18/16 MESH, .011" DIA. ALUMINUM WIRE, INSECT SCREEN.  
 DRAIN SILL PAN: .060" THICK FORMED ALUMINUM.  
 FINISH: \_\_\_\_\_  
 LOUVER SIZES: 12" x 12" MINIMUM PANEL SIZE.  
 60" x 96" MAXIMUM PANEL SIZE.

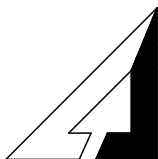
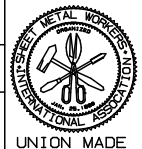
### LOUVER PERFORMANCE STATEMENT

LOUVER MODEL EA-475-DV SHALL BE FABRICATED TO PROVIDE A MINIMUM FREE AREA (47%), 7.58 SQUARE FEET OF FREE AREA FOR A 48"x48" SIZE LOUVER. WITH .190 INCHES WATER GAUGE PRESSURE DROP AT 900 FPM FOR AIR INTAKE. IN ADDITION, THIS LOUVER MODEL IS ALSO TESTED TO THE AMCA 500-L-99 WIND DRIVEN RAIN TEST STANDARD. WHERE THE LOUVER IS SUBJECTED TO SIMULATED WIND DRIVEN RAIN. THE RESULT OF THIS TEST SHALL SHOW A CLASS "A" RATING HAVING (100%) EFFICIENCY AT 3 INCHES OF RAINFALL AT AN INTAKE VELOCITY OF 1844 FPM (13978 CFM) AT A WIND SPEED OF 29 MPH, AND 99.1% EFFICIENCY AT 8 INCHES OF RAINFALL AT AN INTAKE VELOCITY OF 1837 FPM (13924 CFM) AT WIND SPEED OF 50 MPH FOR A SIZE 48"x48".

FOR CERTIFIED RATINGS  
 AUTHORIZED BY AMCA  
 -SEE REVERSE SIDE

NOMINAL DEDUCTIONS WILL BE MADE TO THE OPENING SIZE GIVEN.

ITEM	QTY.	WIDTH	HEIGHT	WIDTH	HEIGHT	MULL	TYPE	LOC	
		OPENING SIZE		LOUVER SIZE					



ARROW UNITED INDUSTRIES  
 A DIVISION OF MESTEK, INC.

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AGENT: \_\_\_\_\_

ARCH./ENG.:

CONTR.:

PROJECT:

EDR: ECN: JOB:

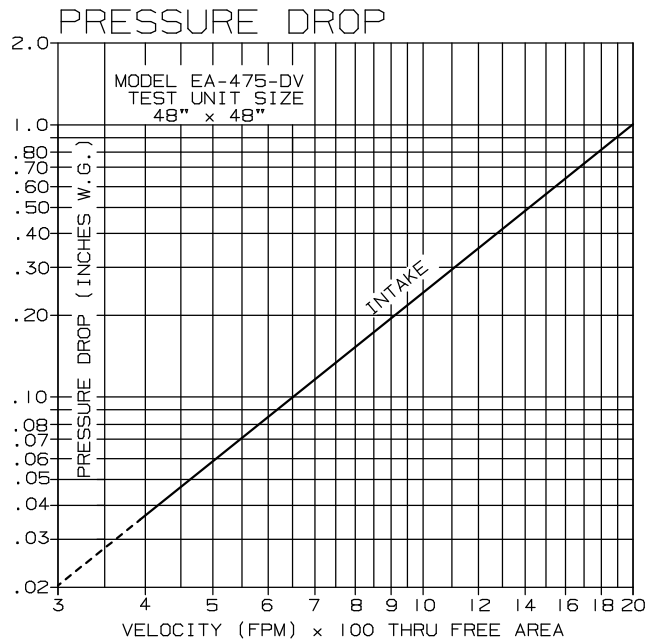
DATE: DWN.: DWG.:

# LOUVER MODEL EA-475-DV WIND DRIVEN RAIN RESISTANT LOUVER EXTRUDED ALUMINUM - STATIONARY

## PERFORMANCE DATA

TESTS OF A 48"×48" ACCORDING TO AMCA STANDARD 500-L-99  
SHOWS LESS THAN .260 INCHES WATER GAUGE PRESSURE DROP  
AT 1000 FPM (INTAKE).

RATINGS DO NOT INCLUDE EFFECTS OF BIRDSCREEN.



## FREE AREA

		FREE AREA ( SQ. FT. )								
		WIDTH								
		12"	18"	24"	30"	36"	42"	48"	54"	60"
HEIGHT	12"	.33	.56	.78	.99	1.25	1.48	1.69	1.94	2.17
	24"	.74	1.24	1.73	2.21	2.77	3.27	3.75	4.31	4.82
	36"	1.15	1.91	2.68	3.42	4.29	5.07	5.81	6.67	7.46
	48"	1.55	2.59	3.63	4.63	5.81	6.87	7.58	9.04	10.11
	60"	1.96	3.27	4.58	5.84	7.33	8.67	9.93	11.40	12.75
	72"	2.36	3.95	5.53	7.05	8.85	10.47	11.99	13.76	15.40
	84"	2.77	4.63	6.48	8.26	10.37	12.26	14.05	16.13	18.04
	96"	3.18	5.30	7.44	9.47	11.89	14.06	16.11	18.49	20.69

# LOUVER MODEL EA-475-DV

## PERFORMANCE DATA

### WIND DRIVEN RAINWATER PENETRATION TEST CONDUCTED TO AMCA STANDARD 500-L-99

TEST SIZE 1M x 1M (39.37" x 39.37") CORE AREA, NOMINAL  
LOUVER FREE AREA 5.75 SQUARE FEET

CORE VENTILATION (M/S)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	RAINFALL/MPH
FPM	0	98	197	295	394	492	591	689	787	886	985	3 IN/HR RAINFALL AND 29 MPH VELOCITY
FREE AREA VENTILATION (CFM)											10603	
FREE AREA VELOCITY (FPM)											1844	
EFFECTIVE RATING CLASS	A	A	A	A	A	A	A	A	A	A	A	8 IN/HR RAINFALL AND 50 MPH VELOCITY
FPM									797	883	982	
FREE AREA VENTILATION (CFM)									8572	9503	10563	
FREE AREA VELOCITY (FPM)									1491	1653	1837	
EFFECTIVE RATING CLASS	A	A	A	A	A	A	A	A	A	A	A	

DISCHARGE COEFFICIENT  
INTAKE  $C_d = 0.26$  (CLASS 3)

WIND DRIVEN RAIN PENETRATION CLASSIFICATIONS	
CLASS	EFFECTIVENESS %
A	I TO 0.99%
B	0.989 TO 0.95%
C	0.949 TO 0.80%
D	BELOW 0.80%

DISCHARGE LOSS COEFFICIENT CLASSIFICATIONS	
CLASS	DISCHARGE LOSS COEFFICIENT
1	0.4 AND ABOVE
2	0.3 TO 0.399
3	0.2 TO 0.299
4	0.199 AND BELOW

CLASS 1 LOSS COEFFICIENT HAS THE LEAST RESISTANCE TO AIRFLOW.

- CORE AREA IS THE FRONT OPENING OF A LOUVER ASSEMBLY WITH THE BLADES REMOVED.
- CORE AREA VELOCITY IS THE AIRFLOW RATE THROUGH THE LOUVER DIVIDED BY THE CORE AREA (39.37"x39.37").
- FREE AREA IS THE MINIMUM AREA THROUGH WHICH AIR CAN PASS. IT IS DETERMINED BY MULTIPLYING THE SUM OF THE MINIMUM DISTANCES BETWEEN INTERMEDIATE BLADES, TOP BLADE AND HEAD, BOTTOM BLADE AND SILL, BY THE MINIMUM DISTANCE BETWEEN JAMBS.
- DISCHARGE LOSS COEFFICIENT IS CALCULATED BY DIVIDING A LOUVER ACTUAL AIRFLOW RATE VS. A THEORETICAL AIRFLOW FOR THE OPENING, PROVIDING AN INDICATION OF THE LOUVER AIR FLOW CHARACTERISTICS.



ARROW UNITED CERTIFIES THAT THE MODEL EA-475-DV SHOWN HEREIN IS LICENSED TO BEAR THE AMCA SEAL. THE RATINGS SHOWN ARE BASED ON TESTS AND PROCEDURES PERFORMED IN ACCORDANCE WITH THE AMCA PUBLICATION 511 AND COMPLY WITH THE REQUIREMENTS OF THE AMCA CERTIFIED RATINGS PROGRAM. THE AMCA CERTIFIED RATINGS SEAL APPLIES TO AIR PERFORMANCE AND WIND DRIVEN RAIN RATINGS ONLY.