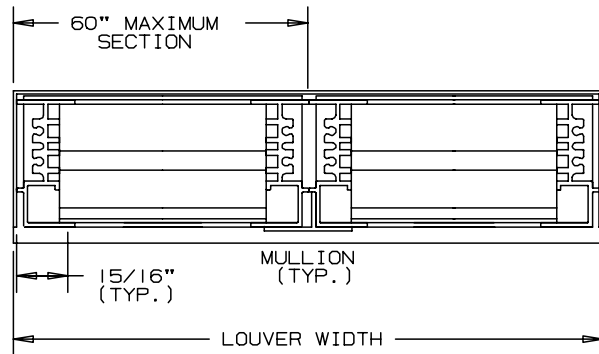
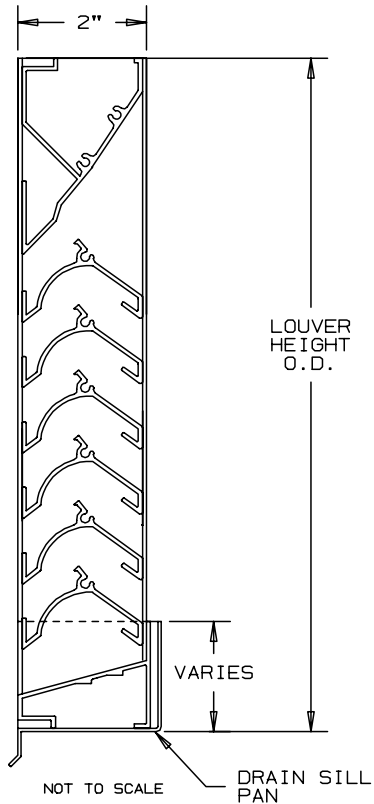


# ARROW

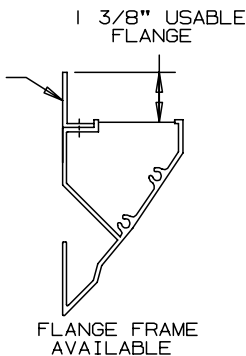
EXTRUDED ALUMINUM LOUVERS  
2" DEEP - STATIONARY HORIZONTAL

# TYPE EA-210-D

## RAIN RESISTANT STORM LOUVER



FLANGE FRAME  
AVAILABLE ON  
(3) SIDES  
FRONT FACE ONLY,  
NOT AT SILL



FLANGE FRAME  
AVAILABLE

NOMINAL DEDUCTIONS WILL BE MADE TO THE OPENING SIZE GIVEN.

### SPECIFICATIONS

MATERIAL: EXTRUDED ALUMINUM 6063-T6/T52 ALLOY  
FRAMES: .063" THICK NOMINAL.  
BLADES: .063" THICK NOMINAL.  
FACE OF LOUVER: HEAD AND BLADES CONTAINED WITHIN THE JAMBS.  
SILL CONTAINS JAMBS.  
APPROXIMATE BLADE CENTERS 1".  
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-210-D SHALL BE FABRICATED TO PROVIDE A MINIMUM FREE AREA (43.3%), 6.93 SQUARE FEET OF FREE AREA FOR A 48"x48" SIZE LOUVER, WITH .38 INCHES WATER GAUGE PRESSURE DROP AT 1000 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 (99.7%) EFFICIENCY AT 3 INCHES OF RAINFALL AT AN INTAKE VELOCITY OF 435 FPM (3015 CFM) AT A WIND SPEED OF 29 MPH AND (99.2%) EFFICIENCY AT 8" RAINFALL AT AN INTAKE VELOCITY OF 240 FPM (1663 CFM) AT A WIND SPEED OF 50 MPH FOR A SIZE 48"x48" LOUVER.

FOR CERTIFIED RATINGS  
AUTHORIZED BY AMCA  
- SEE REVERSE SIDE

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



**ARROW UNITED INDUSTRIES**  
A DIVISION OF MESTEK, INC.  
450 RIVERSIDE DRIVE  
WYALUSING, PA 18853  
TEL: (570) 746-1888 FAX: (570) 746-9286  
WEB ADDRESS: WWW.ARROWUNITED.COM

ARCH./ENG. :  
CONTR. :  
PROJECT :  
EDR: ECN: JOB:  
DATE: DWN. : DWG. :

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

# LOUVER MODEL EA-210-D

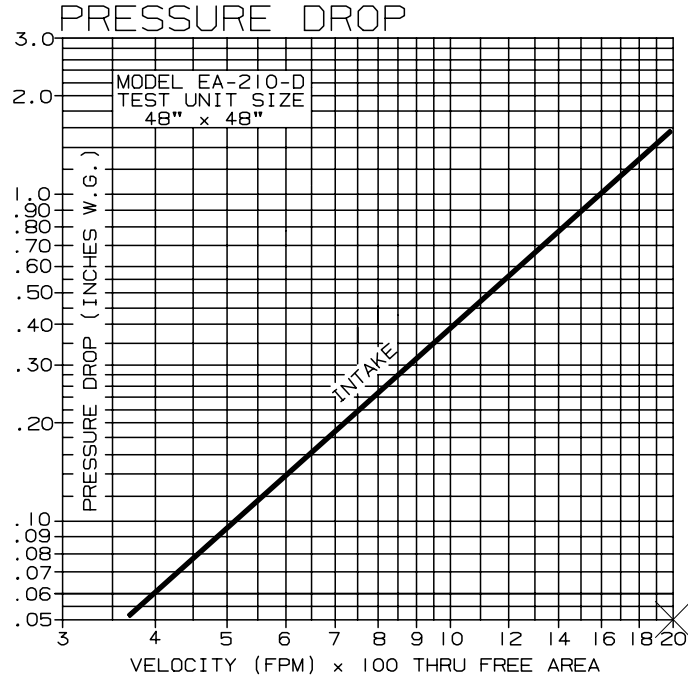
## WIND DRIVEN RAIN RESISTANT LOUVER

### EXTRUDED ALUMINUM - STATIONARY

## PERFORMANCE DATA

TESTS OF A 48" x 48" ACCORDING TO AMCA STANDARD 500-L-99  
LESS THAN .38 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"	.28	.45	.62	.79	.95	1.12	1.29	1.46	1.62
	24"	.71	1.13	1.55	1.97	2.39	2.81	3.23	3.65	4.07
	36"	1.14	1.81	2.48	3.15	3.83	4.50	5.17	5.84	6.52
	48"	1.56	2.49	3.41	4.34	5.26	6.19	6.93	8.04	8.96
	60"	1.99	3.17	4.35	5.52	6.70	7.88	9.56	10.23	11.41
	72"	2.42	3.85	5.28	6.71	8.14	9.56	10.99	12.42	13.85
	84"	2.85	4.53	6.21	7.89	9.57	11.25	12.93	14.62	16.30
	96"	3.27	5.21	7.14	9.07	11.01	12.94	14.88	16.81	18.74

# LOUVER MODEL EA-210-D

## 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 5.24 SQUARE FEET

CORE VENTILATION (M/S)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	RAINFALL/MPH
FPM	0	133	212	296	383	491	581	668	3 IN/HR RAINFALL AND 29 MPH VELOCITY
FREE AREA VENTILATION (CFM)	0	1431	2279	3188	4128	5291	6259	7192	
FREE AREA VELOCITY (FPM)	-	273	435	608	788	1010	1194	1373	
EFFECTIVE RATING CLASS	A	A	A	B	B	C	D	D	8 IN/HR RAINFALL AND 50 MPH VELOCITY
FPM	0	117	195	280	386	461	569	695	
FREE AREA VENTILATION (CFM)	0	1261	2095	3013	4157	4964	6123	7483	
FREE AREA VELOCITY (FPM)	-	240	400	575	793	947	1169	1428	
EFFECTIVE RATING CLASS	A	A	B	B	B	C	C	D	

DISCHARGE COEFFICIENT  
INTAKE  $C_d = 0.19$  (CLASS 4)

WIND DRIVEN RAIN PENETRATION CLASSIFICATIONS	
CLASS	EFFECTIVENESS %
A	1 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-210-D 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.