

## MODEL XSD-180

## HIGH PERFORMANCE SIGHT PROOF FIXED LOUVER

### STANDARD CONSTRUCTION:

#### FRAME:

.081 Extruded Aluminum 7" (178mm) Deep

#### BLADES:

.081" (2mm) Extruded Aluminum on approximately 2.188" (56mm) centers.

#### BIRDSCREEN:

0.75" x 0.051" [19.05mm x 1.30mm] Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building.

#### FINISH:

Mill Aluminum (Std)

#### MINIMUM SIZE:

12"w x 12"h (305mm x 305mm)

#### MAXIMUM SIZE:

Factory Assembled 120"w x 84"h or 84"w x 120"h  
(3048mm x 2134mm or 2134mm x 3048mm)  
(Limited to 40 sq. ft. if powder coated or painted)

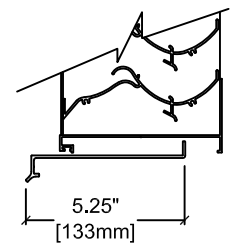
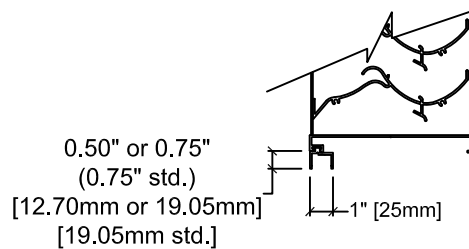
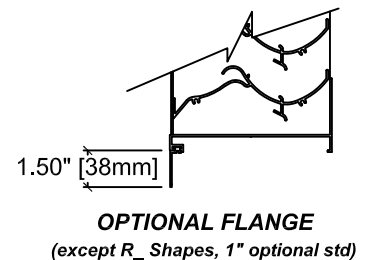
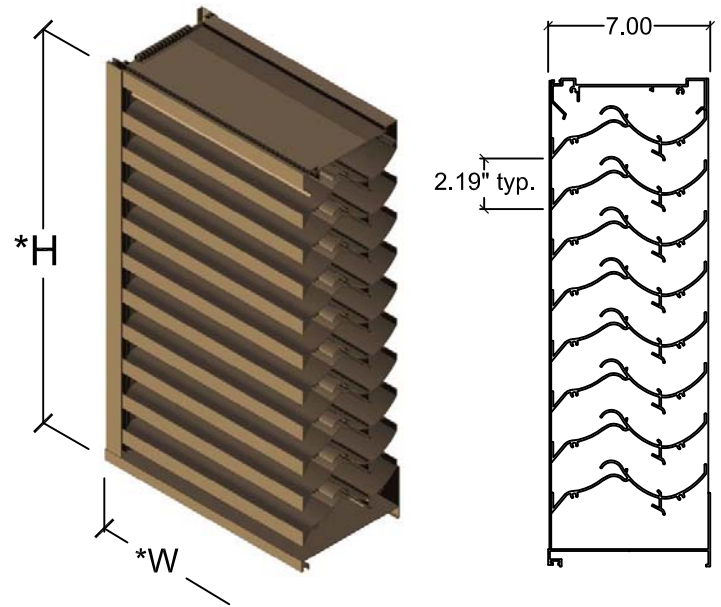
**Note:** Drainable blade louvers should be limited to 10' maximum section widths (no more than 10' between vertical downspouts) to enable the drainable design to function effectively.

### OPTIONS:

- Flanged Frame (1.50" std. [38mm] ), (1" std. [25mm] for shapes R\_ )
- Custom Flange (1", 2" , or 3" [25mm, 51mm, or 76mm], (1.5", 2", or 3" for shapes R\_ )
- Extended Sill [38mm, 51mm, 76mm]
- Glazing Adapter (.50" or .75") [12.7mm or 19.1mm]
- Insect Screen (Other Screens Available, See Screen Page)
- Filter Racks (no screen)
- Security Bars
- Hinged Sub Frame
- Welded Construction (Wind Load +/- 50 psf)
- Blank-off, Alum., non-insulated, no screen, non-removeable
- Blank-off, Alum., non-insulated, with bird screen or insect screen
- Blank-off, Alum., insulated double wall, with bird screen, removable
- Blank-off, Alum., insulated double wall, no screen, non-removeable

### AVAILABLE FINISHES:

- Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
- Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- AAMA 2605 Powder** 1 or 2 coats, 100% Thermoset Fluoropolymer Resin (FEVE) Powder Coat, Dry Film thickness: 2 mils Meets AAMA-2604-05 Standards equivalent to Kynar 500 / Hylar 500)
- Kynar 500®** or **HYLAR® 5000 70% TRINAR®** (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards
- Kynar 500®** or **HYLAR® 5000 (70% Tri-Escnt II)** (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments creates subtle yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
- Clear Anodize** 204 R-1 Class II (AA-C22A31)(0.4 to 0.7 mil)
- Clear Anodize** 215 R-1 Class I (AA-C22A41)(>0.7 mil)
- Integral Color Anodize** (AA-C22A42)(>0.7 mil)
  - Clear coat available for all above finishes.
  - Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
  - Kynar® 500 is a registered trademark of Arkema.
  - ACRA-BOND® ULTRA is a registered trademark of AkzoNobel



\*Width and Height dimensions are approximately 1/4" (6mm) under listed size.

Due to continuing research, United Enertech reserves the right to change specifications without notice.

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		<b>MODEL XSD-180 (7" Deep, Multiple-Series Drain Wind Driven Rain Louver)</b>			
DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
CLJ	October 2018			JAS	<b>A-16c</b>

# Performance Data

Test size 1m x 1m (39"x39")core  
41-5/8"w x 41-7/8"h Nominal (1.057m x 1.063m)

Wind Driven Rain Penetration Classes	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

* Discharge Loss Intake		
Wind Velocity (mph)	Class	
	Intake	Exhaust
29	3	3
50	3	3

\* Discharge loss coefficient is the theoretical air flow of an opening divided by the actual flow rate of a louver the same size.

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	.0199 and below

(the higher the coefficient, the less resistance to airflow.)

75 mm/h (3 in/h) Rainfall & 13 m/s (29 mph) Wind Velocity				
Core Velocity fpm (m/s)	Ventilation Airflow cfm (m³/s)	Free Area Velocity fpm (m/s)	Effectiveness	AMCA Effectiveness Class
489 (2.5)	5264 (2.48)	957 (4.9)	100.0	A
591 (3.0)	6362 (3.00)	1157 (5.9)	99.9	A
688 (3.5)	7406 (3.50)	1346 (6.8)	99.4	A
788 (4.0)	8482 (4.00)	1542 (7.8)	98.1	B

202.4 mm/h (8 in/h) Rainfall & 22 m/s (50 mph) Wind Velocity				
Core Velocity fpm (m/s)	Ventilation Airflow cfm (m³/s)	Free Area Velocity fpm (m/s)	Effectiveness	AMCA Effectiveness Class
407 (2.1)	4381 (2.07)	797 (4.0)	99.9	A
488 (2.5)	5253 (2.48)	955 (4.9)	99.9	A
590 (3.0)	6351 (3.00)	1155 (5.9)	99.3	A
685 (3.5)	7373 (3.48)	1341 (6.8)	95.9	B

Beginning point of WATER PENETRATION  
lies above

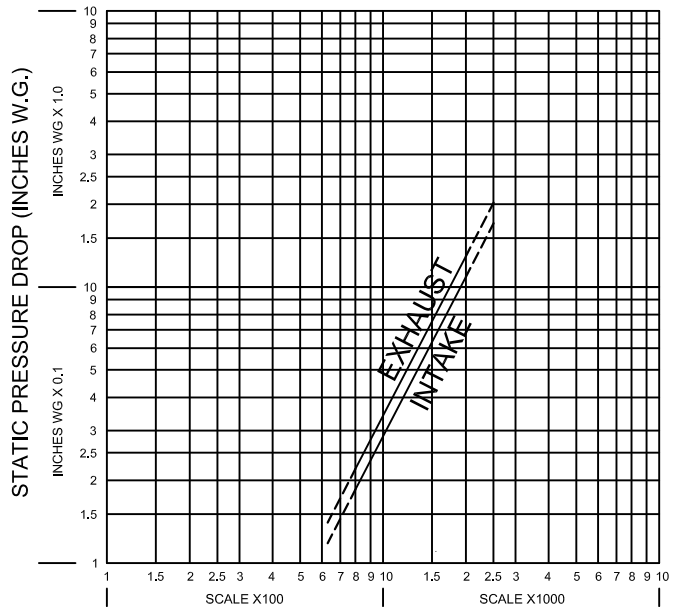
**1250 fpm**

free area velocity at .01 oz. of water penetration

# XSD-180 Specifications

Furnish and install louver as hereinafter specified where shown on plans or as described in schedules. Louver shall be stationary type with horizontal rain resistant style blades positioned on approximately 2.19" centers within 7" deep frame. Louver frame materials to be .081" thick 6063-T5 extruded aluminum. Louver blade materials to be .081" thick 6063-T5 extruded aluminum. Sections up to max of 84" w x 120" h shall withstand wind loading of 30 lbs/sq. ft. (110 mph wind equivalent). Consult factory for welded construction and higher wind speeds. Louver shall have a minimum free area of 7.13 sq. ft. based on the standard 48" w x 48" h test specimen. Louver shall have a maximum static pressure drop of 0.28" (intake) & 0.34" (exhaust) water gage based on 1000 FPM free area velocity. Louver shall carry a Class A water penetration classification based on a ventilation air core velocity of 688 FPM at a rainfall rate of 3" per hour and a 29 mph simulated wind velocity and a Class A water penetration classification based on a ventilation air core velocity of 590 FPM at a rainfall of 8" per hour and a 50 mph simulated wind velocity.

## Air Flow Resistance



FREE AREA VELOCITY (FT/MIN)

Based on STANDARD AIR-.075 lb. per cubic foot.  
Ratings do not include the effects of screen.

SIZE TESTED: 48"X48"

AMCA Figure 5.5

## XSD-180 FREE AREA IN SQ. FT.

Louver Height Inches	XSD-180 FREE AREA IN SQ. FT.																		Louver Height Inches	
	Width - Inches																			
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114		120
12	0.23	0.39	0.54	0.69	0.84	0.99	1.14	1.29	1.44	1.28	6.69	4.92	5.09	0.50	0.69	0.88	1.07	1.26	1.45	12
18	0.46	0.75	1.03	1.32	1.60	1.89	2.17	2.46	2.74	2.41	10.64	7.43	7.75	0.96	1.32	1.68	2.03	2.39	2.75	18
24	0.68	1.10	1.52	1.94	2.36	2.78	3.20	3.62	4.03	3.59	14.18	9.94	10.40	1.41	1.94	2.46	2.99	3.52	4.05	24
30	0.88	1.43	1.97	2.52	3.06	3.61	4.15	4.69	5.24	4.62	18.13	12.44	13.04	1.83	2.51	3.20	3.89	4.57	5.26	30
36	1.09	1.77	2.44	3.11	3.78	4.46	5.13	5.80	6.47	5.69	22.07	14.94	15.68	2.26	3.11	3.95	4.80	5.65	6.50	36
42	1.31	2.12	2.93	3.73	4.54	5.35	6.16	6.96	7.77	6.82	26.02	17.44	18.34	2.71	3.73	4.75	5.77	6.78	7.80	42
48	1.52	2.46	3.39	4.33	5.26	6.20	7.13	8.07	9.00	7.94	29.56	19.94	20.98	3.14	4.32	5.50	6.68	7.86	9.03	48
54	1.73	2.79	3.86	4.92	5.99	7.05	8.12	9.18	10.25	9.01	33.51	22.45	23.63	3.58	4.92	6.26	7.60	8.94	10.28	54
60	1.94	3.13	4.32	5.51	6.70	7.89	9.09	10.28	11.47	10.07	37.46	24.95	26.27	4.01	5.51	7.01	8.51	10.01	11.51	60
66	2.16	3.49	4.82	6.15	7.48	8.81	10.14	11.47	12.80	11.23	41.40	27.46	28.93	4.47	6.15	7.82	9.50	11.17	12.85	66
72	2.38	3.84	5.31	6.77	8.24	9.70	11.16	12.63	14.09	12.41	44.95	29.96	31.59	4.92	6.77	8.61	10.45	12.30	14.14	72
78	2.58	4.17	5.76	7.35	8.94	10.53	12.12	13.71	15.30	13.44	48.90	32.46	34.22	5.34	7.34	9.34	11.35	13.35	15.35	78
84	2.79	4.51	6.23	7.94	9.66	11.38	13.10	14.81	16.53	14.51	52.84	34.96	36.87	5.77	7.94	10.10	12.26	14.42	16.59	84
90	3.01	4.86	6.72	8.57	10.42	12.27	14.13	15.98	17.83	15.64	56.79	37.47	39.52							
96	3.22	5.20	7.18	9.16	11.14	13.12	15.10	17.08	19.06	16.76	60.33	39.97	42.17							
102	3.43	5.54	7.65	9.76	11.87	13.98	16.09	18.20	20.30	17.83	64.28	42.47	44.81							
108	3.63	5.87	8.11	10.34	12.58	14.82	17.05	19.29	21.53	18.89	68.23	44.97	47.45							
114	3.86	6.23	8.61	10.98	13.36	15.73	18.11	20.48	22.86	20.05	72.17	47.48	50.12							
120	4.08	6.59	9.10	11.60	14.11	16.62	19.13	21.64	24.15	21.23	75.72	49.99	52.77							



United Enertech Corp. certifies that the louver XSD-180 shown herein is licensed to bear the AMCA 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 rating seal applies to water penetration, air performance and wind driven rain.