

MODEL DCSED-5.1

5" DEEP WIND DRIVEN RAIN / HURRICANE LOUVER

MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE #: 23-0726.10 (EXPIRES 11-20-2028)
 FLORIDA BUILDING CODE PRODUCT APPROVAL #: FL15769.1-R3
 TEXAS DEPARTMENT OF INSURANCE EVALUATION I.D.: LVR-11

STANDARD CONSTRUCTION:

FRAME:

.081 Extruded Aluminum 5.10" Deep

BLADES:

.081 Extruded Aluminum

BIRDSCREEN:

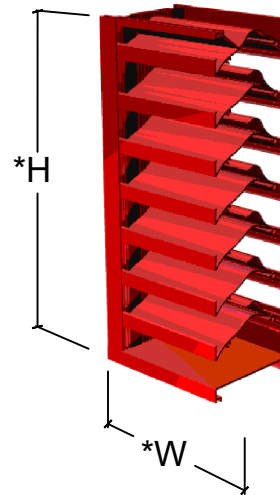
.50" x .050" Flattened Aluminum in removeable frame.
 Screen is mounted as standard on inside (rear) as looking from exterior of building.

FINISH:

Mill Aluminum (Std)

MINIMUM SIZE:

12"w x 12"h



OPTIONS:

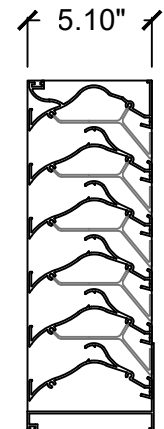
- Flanged Frame (1.5" std.)
- Custom Flange (1", 2", or 3")
- Extended Sill
- Insect Screen (Other Screens Available, See Screen Page)
- Filter Racks (no screen)
- Security Bars
- Rear mounted CD-151 damper (Complies with AMCA 550)

AVAILABLE FINISHES:

- Durable Polyester (AAMA 2604)
- 70% PVDF Fluoropolymer (AAMA 2605)
- Yellow Primer
- Clear Anodize
- Dark Bronze Anodize

MAXIMUM SIZE LIMITATIONS			
+/-60 psf maximum design pressure		+/-150 psf maximum design pressure	
single section	multi-section	single section	multi-section
72" w X 120"h	unlimited width X 120"h	72" w X 84"h	unlimited width X 84"h

NOTE: Please specify the following for proper construction of mounting hardware.
 Wall Thickness _____"
 Design Wind Load _____
 Substrate _____
 (Concrete or Steel)



Section View

Maximum Design Pressure Rating
 +150.0, -150.0 psf
 Large Missile Impact Resistance

Designed wind loads shall be determined as per section 1620 of the above mentioned code in accordance with ASCE 7-10 standard.

Tested In Accordance with AMCA 540 (BASIC PROTECTION)

Compliant with AMCA 550 when installed with rear mounted UE Model CD-151



*Width and Height dimensions are approximately 1/4" under listed size.



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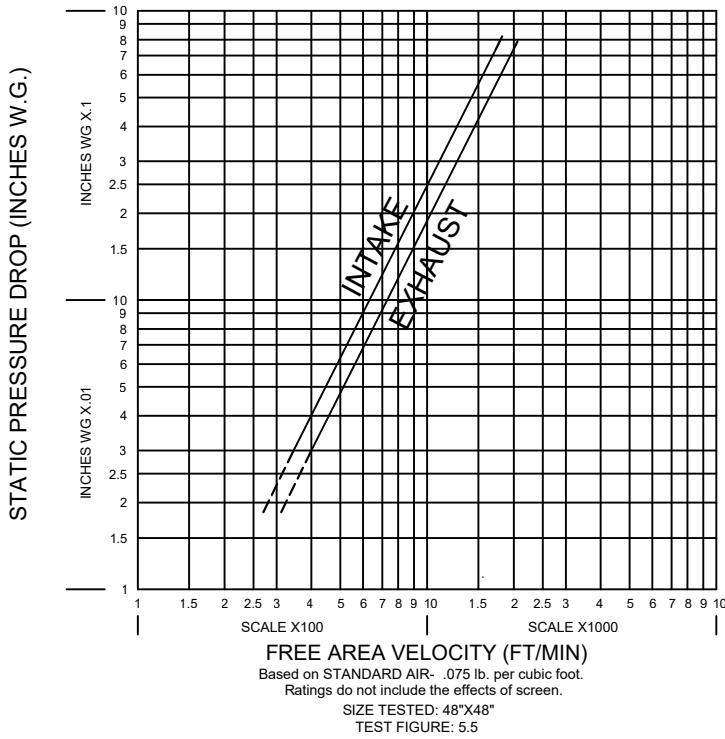
MODEL DCSED-5.1 (Wind Driven Rain/Hurricane Louver w/ multiple series drain)

DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
CLJ	October 2008	August 2019	12	BGT	A-23

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

Model DCSED-5.1 Louver Performance Data

Air Flow Resistance



Beginning point of **WATER PENETRATION** for **MODEL DCSED-5.1** lies above **1250 fpm** free area velocity at .01 oz. of water (penetration)

WIND DRIVEN RAIN

* 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.)

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

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

200 mm/h (8in/h) Rainfall & 32 m/s (50 mph) Wind Velocity		
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
0.0 (0)	98.3	B
0.49 (96)	98.0	B
1.10 (217)	97.0	B
1.47 (289)	97.0	B
1.92 (378)	96.3	B
2.53 (499)	95.3	B
2.89 (570)	94.2	C
3.43 (676)	88.9	C
3.89 (766)	85.2	C

*AMCA Classes for maximum allowable water penetrations

Test size 1m x 1m(39"x39")core
41½" w x 41" h Nominal (1.05m x 1.04m)

Louver Height Inches	DCSED-5.1 FREE AREA IN SQ. FT.										Louver Height Inches	
	Width - Inches											
	12	18	24	30	36	42	48	54	60	66	72	
12	0.34	0.55	0.75	0.96	1.17	1.38	1.58	1.79	2.00	2.21	2.42	12
18	0.54	0.87	1.20	1.54	1.87	2.20	2.53	2.87	3.20	3.53	3.86	18
24	0.77	1.24	1.71	2.19	2.66	3.13	3.60	4.08	4.55	5.02	5.49	24
30	0.94	1.53	2.11	2.69	3.27	3.85	4.43	5.02	5.60	6.18	6.76	30
36	1.15	1.85	2.56	3.27	3.97	4.68	5.38	6.09	6.80	7.50	8.21	36
42	1.45	2.34	3.24	4.13	5.02	5.92	6.81	7.70	8.60	9.49	10.38	42
48	1.63	2.63	3.63	4.63	5.64	6.64	7.64	8.64	9.64	10.64	11.65	48
54	1.83	2.96	4.08	5.21	6.34	7.46	8.59	9.71	10.84	11.97	13.09	54
60	2.06	3.33	4.59	5.86	7.13	8.39	9.66	10.93	12.19	13.46	14.73	60
66	2.24	3.61	4.99	6.36	7.74	9.11	10.49	11.86	13.24	14.62	15.99	66
72	2.44	3.94	5.44	6.94	8.44	9.94	11.44	12.94	14.44	15.94	17.44	72
78	2.74	4.43	6.12	7.80	9.49	11.18	12.86	14.55	16.24	17.92	19.61	78
84	2.92	4.71	6.51	8.31	10.10	11.90	13.69	15.49	17.29	19.08	20.88	84
90	3.12	5.04	6.96	8.88	10.80	12.72	14.64	16.56	18.48	20.40	22.32	90
96	3.35	5.41	7.47	9.53	11.59	13.65	15.71	17.77	19.83	21.90	23.96	96
102	3.53	5.70	7.86	10.03	12.20	14.37	16.54	18.71	20.88	23.05	25.22	102
108	3.80	6.14	8.49	10.83	13.17	15.51	17.85	20.19	22.53	24.87	27.21	108
114	4.03	6.51	8.99	11.48	13.96	16.44	18.92	21.40	23.88	26.36	28.84	114
120	4.21	6.80	9.39	11.98	14.57	17.16	19.75	22.34	24.93	27.52	30.11	120

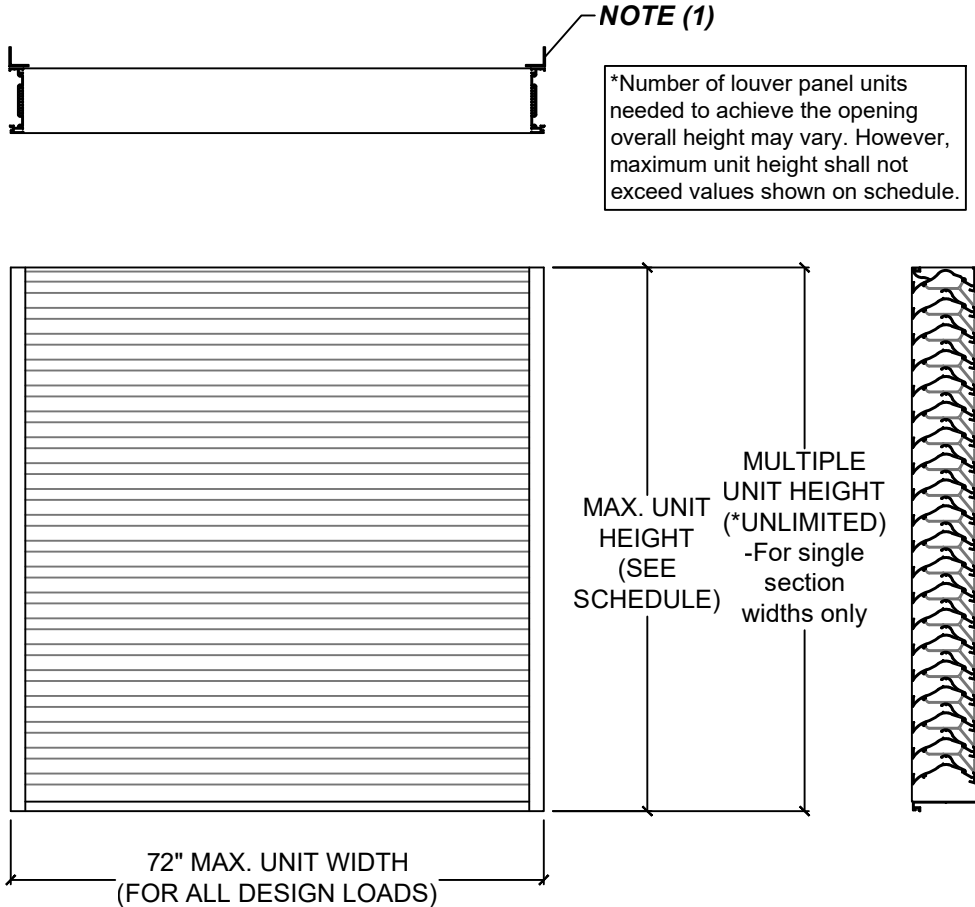


United Enertech Corp. certifies that the louver DCSED-5.1 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA certified rating seal applies to water penetration, air performance, and wind driven rain.

TAS 100(A)-95 WIND DRIVEN RAIN RESISTANCE TEST (LOUVER WITH OPTIONAL CD-151)

WIND VELOCITY MPH (KPH)	RAIN FALL RATE IN./HR. (MM/HR.)	ALLOWABLE PENETRATION OZ (ML)	ACTUAL PENETRATION OZ (ML)
35 (56)	8.8 (224)	0	0
70 (113)	8.8 (224)	0	0
90 (145)	8.8 (224)	1.44 (42.6)	0
110 (177)	8.8 (224)	0.48 (14.2)	0

Model DCSED-5.1 Single Unit Installation



DESIGN WIND LOAD (PSF)	MAX. UNIT HEIGHT
40	120"
45	120"
50	120"
55	120"
60	120"
65	120"
70	120"
75	119"
80	115"
85	112"
90	108"
95	106"
100	103"
105	100"
110	98"
115	96"
120	94"
125	92"
130	90"
135	89"
140	87"
145	85"
150	84"

Notes:

(1) 1.5" x 1.5" x .125" alum. continuous vertical angle attached to louver jambs with .25"Ø x .75" long tek screws, 8" o.c., and attached to substrate as listed in the table below.

ANCHOR SPACING SCHEDULE AT JAMBS WITH (1.5" X 1.5" X .125" ALUM. ANGLE)				
DESIGN WIND LOAD (PSF)	SINGLE UNIT WIDTH	MAXIMUM FASTENER SPACING (in.)		
		.25"Ø X 2" LONG TAPCONS TO CONCRETE	.25"Ø X 2" LONG TAPCONS TO CMU BLOCK	.25"Ø X 1" LONG TEK SCREWS TO STEEL
75 OR LESS	48	8" o.c.	4" o.c.	8" o.c.
	60	8" o.c.	3" o.c.	8" o.c.
	72	8" o.c.	3" o.c.	8" o.c.
> 75 TO 110	48	8" o.c.	3" o.c.	8" o.c.
	60	8" o.c.	3" o.c.**	8" o.c.
	72	7" o.c.	3" o.c.	7 1/2" o.c.
> 110 TO 150	48	8" o.c.	3" o.c.*	8" o.c.
	60	6-1/2" o.c.	N/A	6-1/2" o.c.
	72	5" o.c.	N/A	5-1/2" o.c.

*Limited to 114 PSF design pressure rating

**Limited to 91 PSF design pressure rating

FOR MULTIPLE SECTION WIDTHS, PLEASE CONSULT FACTORY.
MORE INFORMATION AVAILABLE ON NOA DRAWINGS.
(APPROVAL NO. 18-0911.02)