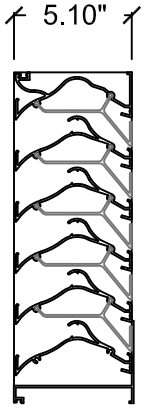
SUBMITTAL DATA

MODEL DCSED-5.1 — 5" DEEP WIND DRIVEN RAIN / HURRICANE LOUVER

MIAMI-DADE APPROVED
MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE #: 18-0911.02 (EXPIRES 11-20-2019)
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:
.75" x .051" 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

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)

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

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

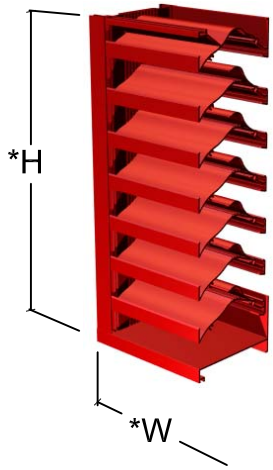
NOTE: Please specify the following for proper construction of mounting hardware.
Wall Thickness_____"
Design Wind Load_____
Substrate_____
(Concrete or Steel)

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
- ☐ **Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-05 Standards
- ☐ **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-Escent 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.
- ALUM*A*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
- ACRA-BOND® ULTRA is a registered trademark of AkzoNobel

amca CERTIFIED RATINGS — WATER PENETRATION — AIR PERFORMANCE — WIND DRIVEN RAIN — AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.



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

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

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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	December 2018	11	BGT	A-23

Model DCSED-5.1 Louver Performance Data

Louver Height Inches	DCSED-5.1 FREE AREA IN SQ. FT. Width - Inches											Louver Height 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 base 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.

The Beginning point of WATER PENETRATION lies above

1250 FPM

free area velocity at .01 oz. of water penetration

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

WIND DRIVEN RAIN

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

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

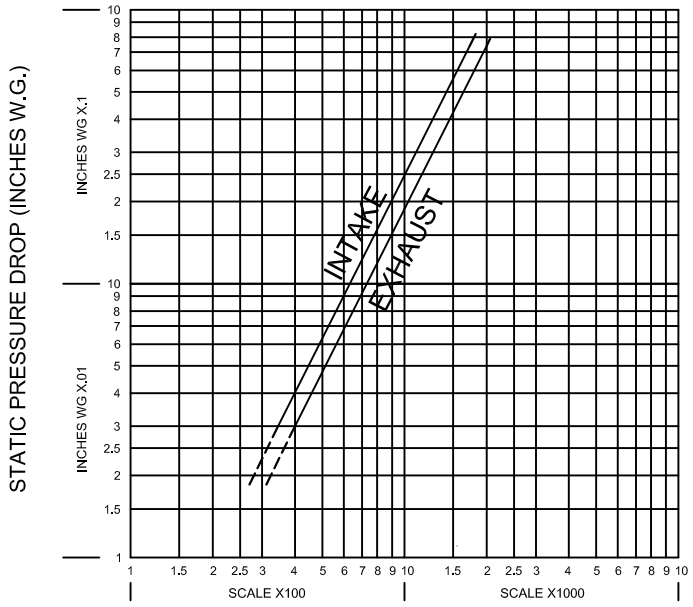
	200 mm/h (8in/h) Rainfall & 32 m/s (50 mph) Wind Velocity	
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
0.0 (0)	98.3	B
0.49 (96)	98.0	B
1.10 (217)	97.0	B
1.47 (289)	97.0	B
1.92 (378)	96.3	B
2.53 (499)	95.3	B
2.89 (570)	94.2	C
3.43 (676)	88.9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

*AMCA Classes for maximum allowable water penetrations

Test size 1m x 1m(39"x39")core

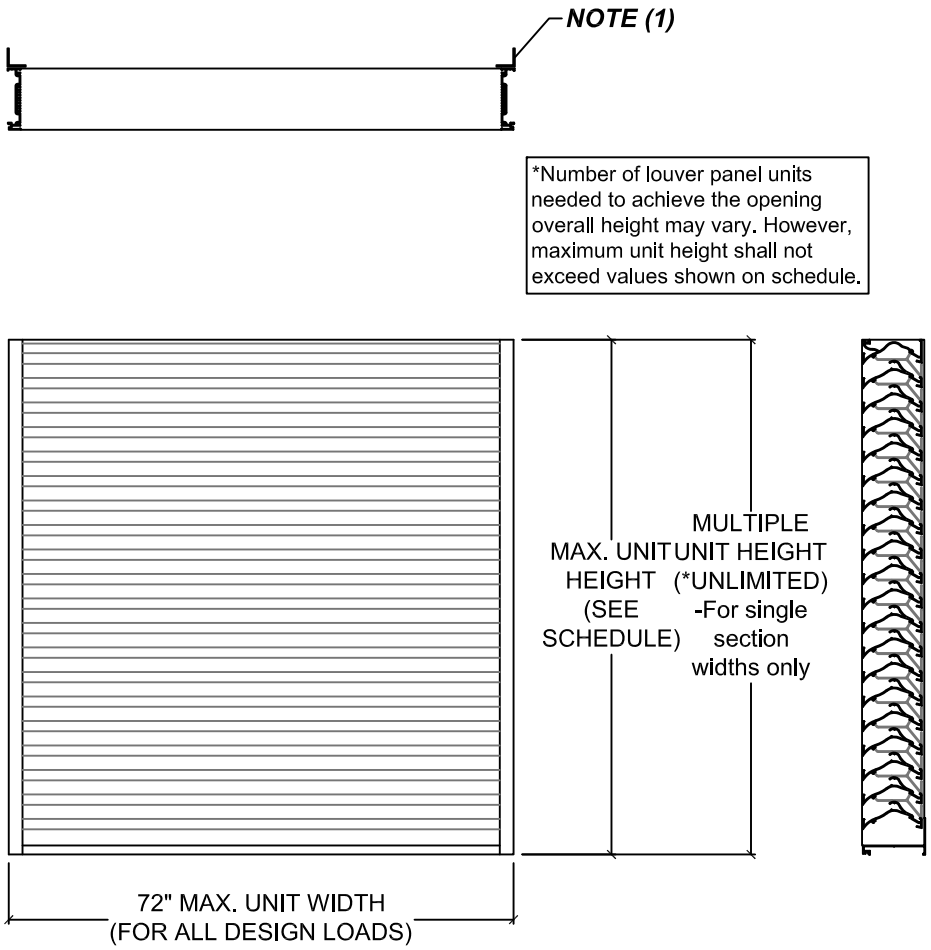
41½"w x 41"h Nominal(1.05m x 1.04m)

Air Flow Resistance



Based on STANDARD AIR- .075 lb. per cubic foot.
Ratings do not include the effects of screen.
SIZE TESTED: 48"X48"
TEST FIGURE: 5.5

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)