

MODEL CFL-D-4 HIGH PERFORMANCE COMBINATION LOUVER/DAMPER 4" [102mm]

STANDARD CONSTRUCTION:

- FRAME:** 0.081" [2.06mm] Extruded Aluminum 4.16" [106mm] deep.
- ADJUSTABLE BLADE:** 0.125" [3.18mm] Extruded Aluminum
- FIXED BLADE:** 0.081 [2.06mm] Extruded Aluminum Positioned on a 37° angle on approximately 3" [76mm] centers.
- LINKAGE:** Exposed
- BIRDSCREEN:**
3/4" X .051" [19.05mm x 1.30mm] Flattened Aluminum in Removable Frame. Screen is mounted on inside (rear) as looking from exterior of building.
- FINISH:** Mill aluminum (std.)

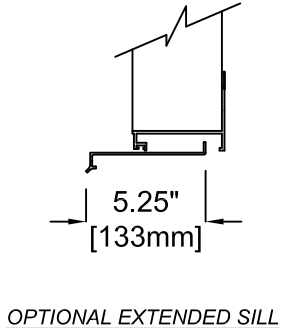
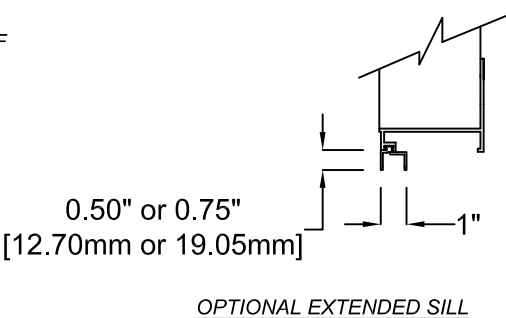
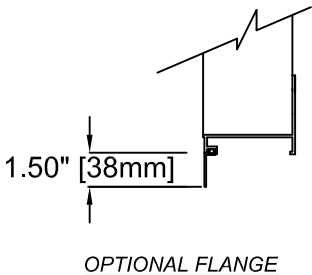
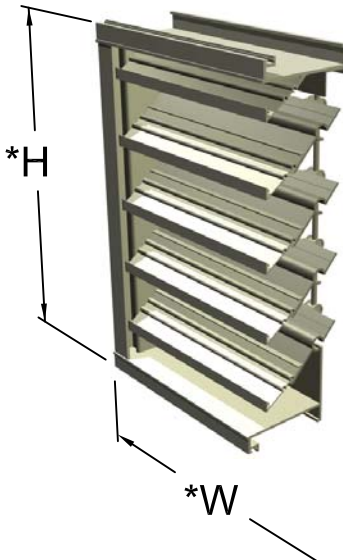
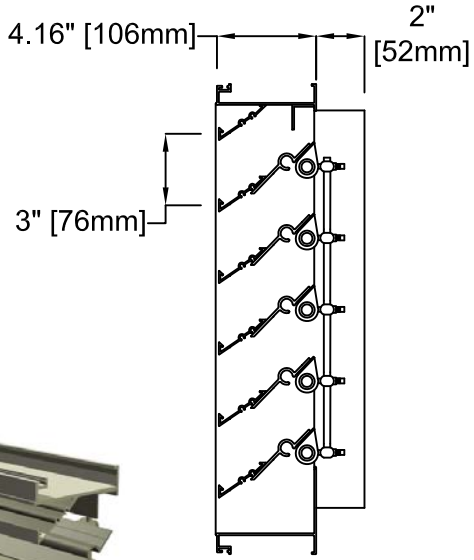
- MINIMUM SIZE:** 12"w x 12"h [305mm x 305mm]
- MAXIMUM SIZE:** Factory assembled multi-section max: 84"w x 120"h or 120"w x 84"h [2134mm x 3048mm or 3048mm x 2134mm]
48"w x 120"h single section [1219mm x 3048mm]
Larger sizes are field assembled.

OPTIONS:

- Flanged Frame (1.5" std.) [38mm]
- Custom Flange (1", 2", or 3") [25mm, 51mm, or 76mm]
- Glazing Adapter (0.50" [12.70mm] or 0.75" [19.05mm])
- Extended Sill
- Filter Racks (no screen)
- 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
- Actuator: See Actuator Selection Chart
- Blade Seals
- Jamb Seals
- Insect Screen
- Security Bars

AVAILABLE FINISHES:

- Powder Polyester TGIC** (2 coats) baked on at 410°F [210° C], 2.5 to 3.5 mils Meets AAMA-2603 Standards
- Powder Super durable polyester** (2 coats) baked on at 410°F [210° C], 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F [177° C], 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F [222° C], 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 [222°C], 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 [213° C], 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



*Width and Height dimensions are approximately 1/4" [6.35mm] under listed size.

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

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		MODEL CFL-D-4 (High Performance Combination Louver/Damper 4"[102mm])			
DRAWN BY: MHM	DATE: 6-8-10	REV. DATE: 4-12-13	REV. NO. 3	APPROVED BY: BGT	DWG. NO.: A-32

Louver Selection and Application

MODEL CFL-D-4 FREE AREA CHART (SQURE FEET)

Louver Height Inches	Louver Width In Inches									Louver Height Inches
	12	18	24	30	36	42	48	54	60	
12	0.49	0.73	0.98	1.22	1.47	1.71	1.96	2.20	2.45	12
18	0.73	1.10	1.47	1.84	2.20	2.57	2.94	3.30	3.67	18
24	0.98	1.47	1.96	2.45	2.94	3.43	3.92	4.41	4.90	24
30	1.22	1.84	2.45	3.06	3.67	4.28	4.90	5.51	6.12	30
36	1.47	2.20	2.94	3.67	4.41	5.14	5.88	6.61	7.34	36
42	1.71	2.57	3.43	4.28	5.14	6.00	6.85	7.71	8.57	42
48	1.96	2.94	3.92	4.90	5.88	6.85	7.83	8.81	9.79	48
54	2.20	3.30	4.41	5.51	6.61	7.71	8.81	9.91	11.02	54
60	2.45	3.67	4.90	6.12	7.34	8.57	9.79	11.02	12.24	60
66	2.69	4.04	5.39	6.73	8.08	9.42	10.77	12.12	13.46	66
72	2.94	4.41	5.88	7.34	8.81	10.28	11.75	13.22	14.69	72

CFL-D-4 Selection Examples

Example 1:

Airflow given as 10,000 cfm - select louver size

- A. Determine louver free area by dividing airflow by free area velocity (do not exceed 1250 fpm on intake louver application)

$$10,000 \text{ cfm} / 1250 \text{ fpm} = 8.0 \text{ sq.ft.}$$

Airflow F.A.V. Req'd. Louver Free Area

- B. Select a louver with at least the required louver free area from the Free Area Chart Above.

48"W x 54"H

8.81 ft. free area

1135 fpm free area velocity (10,000) cfm / 8.81 sq.ft. F.A.

(Other selections available - See Free Area Chart above.)

Example 2:

Louver size given 42"W x 72"H intake - determine maximum airflow.

- A. Use Free Area Chart to determine
Free Area = 10.28 sq. ft.

- B. Free Area x Free Area Velocity (do not exceed 1250 fpm on intake louver applications).

$$10.28 \text{ sq. ft.} \times 1250 \text{ fpm} = 12,850 \text{ cfm}$$

Free Area F.A.V. Max Airflow