

CD51 LOW LEAKAGE CONTROL DAMPER EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

5" x 1" x 6063T5 extruded aluminum hat channel with .125" minimum wall thickness (127 x 25 x 3.2). Low profile 5" x 1/2" (127 x 13) top and bottom frames on dampers 12" (305) high and less. Mounting flanges on both sides of frame.

BLADES

6" (152) wide, 6063T5 heavy gage extruded aluminum .125" (3.2) thick.

LINKAGE

Concealed in frame.

AXLES

1/2" (13) plated steel hex.

BEARINGS

Molded synthetic.

SEALS

Blade edge – Extruded vinyl for -50°F to +250°F.
Jamb – Flexible metal compressible type.

CONTROL SHAFT

Removable, 1/2" (13) diameter shaft extends 6" (152) beyond frame.

FINISH

Mill.

MINIMUM SIZE

Single blade – 6"w x 5"h (152 x 127).
Two blade, opposed action – 6"w x 9"h (152 x 229).

MAXIMUM SIZE

Single blade – 48"w x 72"h (1219 x 1829).
Multiple Section Assembly – Unlimited size.

FEATURES

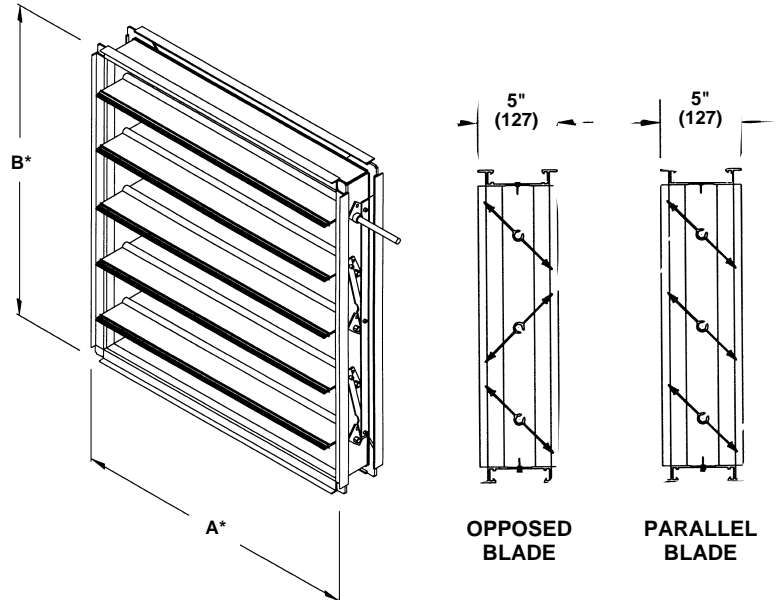
Ruskin's all aluminum damper for medium and low pressure commercial HVAC systems offers low leakage with a standard, commercial built damper. The CD51 can be utilized in systems calling for less than 10 cfm/sq. ft. at 4" w.g. The CD51 is structurally designed for velocities to 2000 fpm.

Linkage is concealed in the frame out of the airstream for low maintenance and reduced air turbulence. Hexagonal axles ensure a positive lock with blades.

NOTE: Dimensions shown in parenthesis () indicate millimeters.

*Units furnished approximately 1/4" (6) smaller than given opening dimensions.

†Jackshaft used only on multiple section dampers.



VARIATIONS

Variations to the CD51 basic design are available at additional cost. They include:

- Anodize and special finishes
- Pneumatic or electric actuators
- SP100 Switch Package
- Front or rear flange frame
- Face and bypass mixing damper assemblies

QTY.	OPENING DIM.		FRAME STYLE			ACTUATORS	VARIATIONS
	A*	B*	STD.	Front Flange FF	Rear Flange RF	E - Elec. P - Pneu.	
JOB CONTRACTOR			LOCATION				

SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, LOW LEAKAGE DAMPER at pressure differences from 1 in. w.g. through 4 in. w.g. Low leakage dampers shall meet the following minimum construction standards: Frames shall be 5" x 1" x .125" (127 x 25 x 3.2) minimum thickness 6063T5 extruded aluminum hat channel with hat mounting flanges on both sides of the frame. Each corner shall be reinforced with two die formed internal braces and machine staked for maximum rigidity. Blades shall be flat type extruded aluminum (maximum 6" depth) with .125" (3.2) thickness.

Blade edge seals shall be extruded vinyl double edge design with inflatable pocket which enables air pressure from either direction to assist in blade to blade seal off. Blades seals shall be mechanically locked in extruded blade slots, yet shall be easily replaceable in field. Adhesive or clip-on type blade seals are not acceptable. Bearings shall be non-corrosive molded synthetic. Axles shall be square or hexagonal (round not acceptable) to provide positive locking connection to blades and linkage. Linkage shall be concealed in frame. Literature shall include performance data developed from testing in accordance with AMCA Standard 500 in an AMCA APPROVED LABORATORY. Dampers shall be in all respects equivalent to Ruskin Model CD51.

TYPICAL MODEL CD51 INSTALLATION

Two 1/2" hat mounting flanges are provided around damper perimeter for easy and economical installation. Damper may be quickly installed in ductwork by use of sheet metal screws. Dampers must be installed square and free from racking. Actuator must be installed on the linkage side of the damper. Opposed blade dampers must be operated from a power blade.

For complete assembly and installation instructions details refer to the Ruskin "Standard Multiple Section Control Damper Details" and "Induct Mount Control Dampers Installation Instructions."

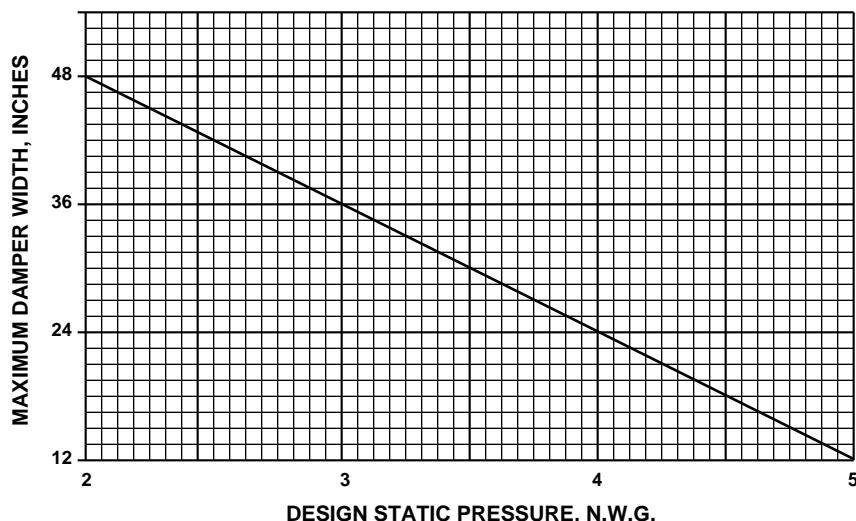
NOTE: The CD51 is not recommended for installation for blades running vertically.

BRACING OF MULTIPLE SECTION DAMPER ASSEMBLIES

The CD51 is intended to be self supporting only in its largest single section size. Multiple section damper assemblies may require bracing to support the weight of the assembly and to hold against system pressure. Ruskin recommends appropriate bracing to support the damper horizontally at least once for every 8' of damper width and bracing of vertical assemblies and higher system pressures may require more bracing.

The CD51 is designed for installation with blades running horizontally. Installation with blades running vertically is not recommended.

CD51 PRESSURE LIMITATIONS



CD51 LEAKAGE

DAMPER WIDTH, IN.	LEAKAGE CFM/SQ. FT.
48	3.2
36	1.6
24	2.2
12	3.2

LEAKAGE INFORMATION AT PRESSURE
DIFFERENTIAL OF 1" W.G.

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