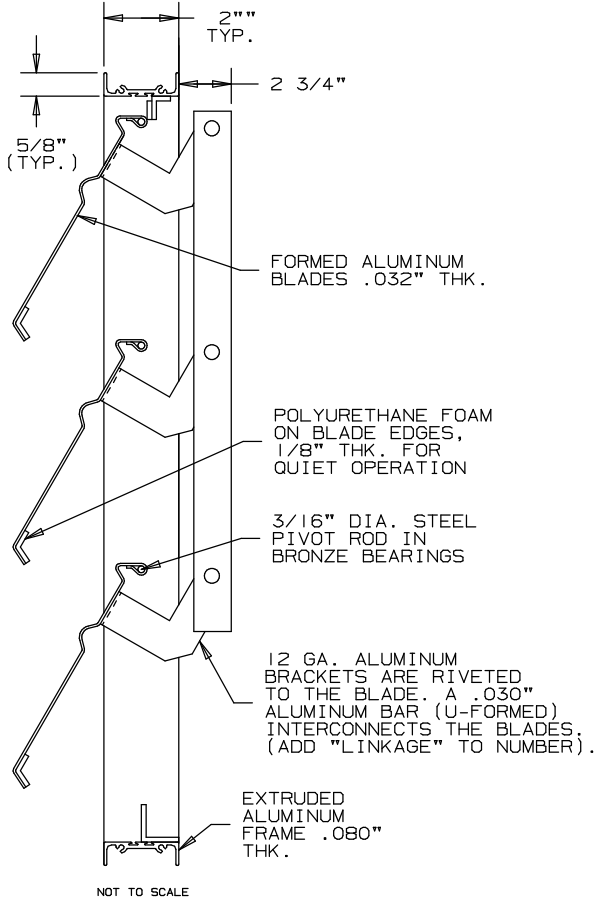


ARROW BACKDRAFT DAMPERS ALUMINUM

TYPE 500-B

LIGHT DUTY - PRESSURE RELIEF SHUTTERS



- MORE EFFICIENT
- CLOSES MORE POSITIVELY

SPECIFICATIONS

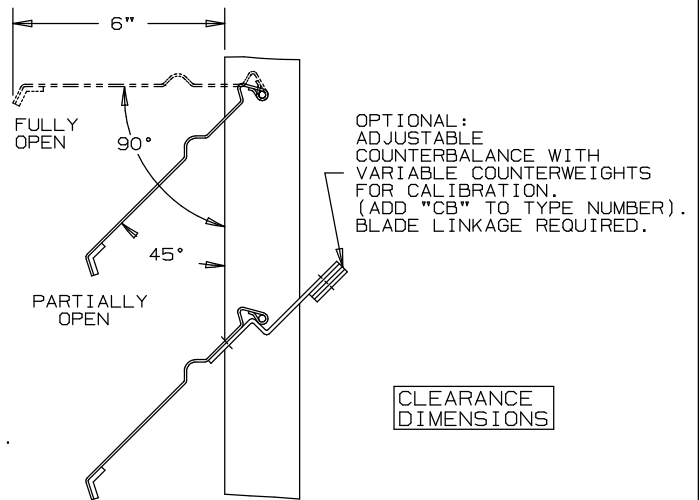
FRAME: STANDARD 5/8"x2"x5/8" EXTRUDED ALUMINUM CHANNEL, .093" THK.
 BLADE: .032" THICK ALUMINUM, FORMED OVER A 3/16" DIA. STEEL ROD.
 SEALS: POLYURETHANE FOAM AT BLADE EDGES, NONE AT JAMBS.
 BEARINGS: BRONZE OILITE.
 LINKAGE: ALUMINUM CHEVRON BRACKET WITH ALUMINUM LINKAGE BAR

OPTIONAL FEATURES:

- NO BLADE TO BLADE LINKAGE
- ADJUSTABLE COUNTERBALANCE (CB)
 - SPECIFY TO ASSIST OR RESIST OPENING, LINKAGE MUST BE USED.
- SCREEN - BIRD OR INSECT.

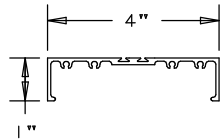
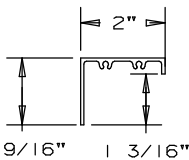
MAXIMUM PANEL SIZE: 48" W x 72" H.

SPECIFY AIR FLOW (AF) AS "HORIZONTAL", "VERTICAL UP" OR "VERTICAL DOWN"



TYPE 502-B
FLANGED FRAME
2" OR 4" DEEP, .080" THK.

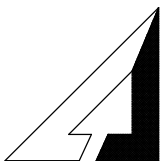
TYPE 501-B
CHANNEL FRAME
4" OR 6" DEEP, .080" THK.



FOR PERFORMANCE DATA
SEE REVERSE SIDE

NOMINAL DEDUCTIONS WILL BE MADE TO THE OPENING SIZE GIVEN.

										 UNION MADE
ITEM	QTY.	WIDTH	HEIGHT	WIDTH	HEIGHT	MULL	COUNTER BALANCE	AIR FLOW (DIRECTION)		
		OPENING SIZE		DAMPER SIZE						



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AGENT: _____

ARCH./ENG.:

CONTR.:

PROJECT:

EDR: ECN: JOB:

DATE: DWN.: DWG.:

ARROW MODEL 500 BACKDRAFT DAMPER PERFORMANCE DATA

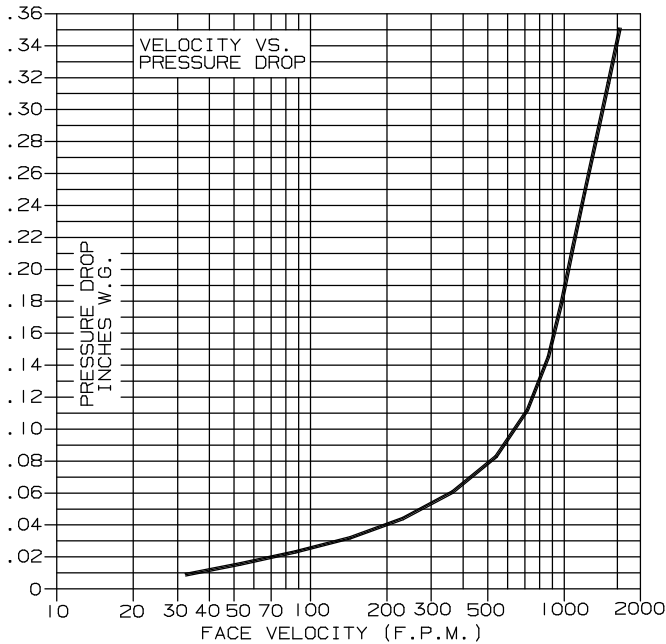
WITHOUT DUCTWORK

DAMPER INSTALLED PER AMCA 500 FIG. 5.4 (FACE MOUNTED TO A PLENUM).

PRESSURE IS CORRECTED TO .075 LB./CU.FT. AIR DENSITY.

OPERATIONAL PRESSURES

START TO OPEN - .01 INCHES W.G.
FULLY OPEN - .35 INCHES W.G.



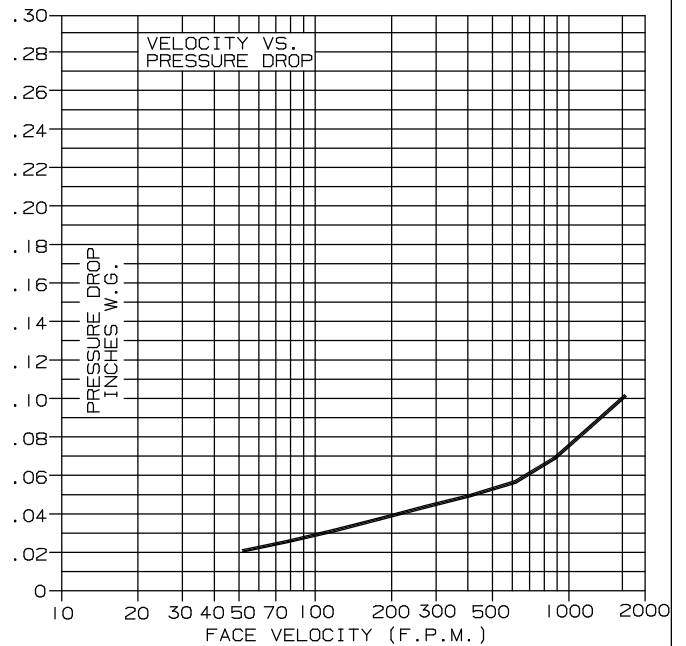
WITH DUCTWORK

DAMPER INSTALLED PER AMCA 500 FIG. 5.3 (DUCTWORK INSTALLED UPSTREAM AND DOWNSTREAM OF DAMPER).

PRESSURE IS CORRECTED TO .075 LB./CU. FT. AIR DENSITY.

OPERATIONAL PRESSURES

START TO OPEN - .01 INCHES W.G.
FULLY OPEN - .06 INCHES W.G.



TYPICAL PERFORMANCE FOR MODEL 500 BACKDRAFT DAMPER SIZE TESTED 42" x 42", FURNISHED WITH COUNTERWEIGHT TO ASSIST OPENING.

AIR LEAKAGE

AIR LEAKAGE QUANTITIES SHOWN IN THE CHART ARE RESULTS OF TESTS PER AMCA STANDARD 500 AND ARE SHOWN AT .10" W.G. DIFFERENTIAL PRESSURE AND CORRECTED TO .075 LB./CU.FT. AIR DENSITY.

TOTAL CFM AIR LEAKAGE AT .10" STATIC PRESSURE DIFFERENTIAL THROUGH CLOSED DAMPER.

		DAMPER WIDTH (INCHES)						
		12"	18"	24"	30"	36"	42"	48"
DAMPER HEIGHT (INCHES)	12"	6.6	9.9	13.2	16.5	19.8	23.1	26.4
	24"	13.2	19.8	26.4	33.0	39.6	46.2	52.8
	36"	19.8	29.7	39.6	49.5	59.4	69.3	79.2
	48"	26.4	39.6	52.8	66.0	79.2	92.4	105.6
	60"	33.0	49.5	66.0	82.5	99.0	115.5	132.0
	72"	39.6	59.4	79.2	99.0	118.8	138.6	158.4

FOR DETERMINING LEAKAGE VALUES GREATER THAN .10" W.G. TO A MAXIMUM 2" W.G. USE THE MULTIPLIER CORRECTION CHART BELOW.

STATIC PRESSURE (IN)	.2	.3	.4	.5	1.0	1.5	2.0
MULTIPLIER CORRECTION FACTOR	1.07	1.12	1.19	1.24	1.66	1.92	2.10

MAXIMUM PANEL SIZE LIMIT 48" x 72".

AIR LEAKAGE RATINGS ARE BASED ON AMCA STANDARD 500 USING TEST SET UP FIG. 5.4 WITH DAMPER IN THE CLOSED POSITION WITHOUT THE AID OF A COUNTERWEIGHT OR OTHER MECHANICAL MEANS TO PROVIDE CLOSING TORQUE, FOR A SIZE 42" x 42" DAMPER WITH BLADE & JAMB SEALS.