

## Heavy Duty Backdraft Damper – Model SH2

**Design Features** – Airfoil blade heavy-duty backdraft damper designed for use with class I & class II fans.

**PLEASE SPECIFY HORIZONTAL OR VERTICAL AIR FLOW**

**STANDARD CONSTRUCTION**

**FRAME**

8" deep x 2" channel, 12 ga. Galvanized steel

**BLADES**

18 gauge galvanized, 5" to 6" wide (varies with height dimension)

**BLADE AXLES & BEARINGS**

AXLE – 1/2" plated steel shaft

BEARINGS – 1/2" Bore ball bearings

**LINKAGE**

Mounted at the center point of width dimension on face of blades

Dampers over 36" wide will have two sets of linkage

**SEAL**

Silicone blade & stainless steel jamb seals

**COUNTER WEIGHT**

Adjustable, on 10 ga galvanized aluminum bracket

**MAXIMUM VELOCITY & STATIC PRESSURE**

60" wide 4000 FPM @ 8" static pressure

48" wide 4000 FPM @ 9" static pressure

36" wide 4000 FPM @ 10" static pressure

24" wide 4000 FPM @ 12" static pressure

12" wide 4000 FPM @ 15" static pressure

**MAXIMUM TEMPERATURE**

250° F

**MAXIMUM SINGLE SECTION**

60"W x 96"H

**MINIMUM SIZE**

6"W x 8"H

**UNDERSIZED**

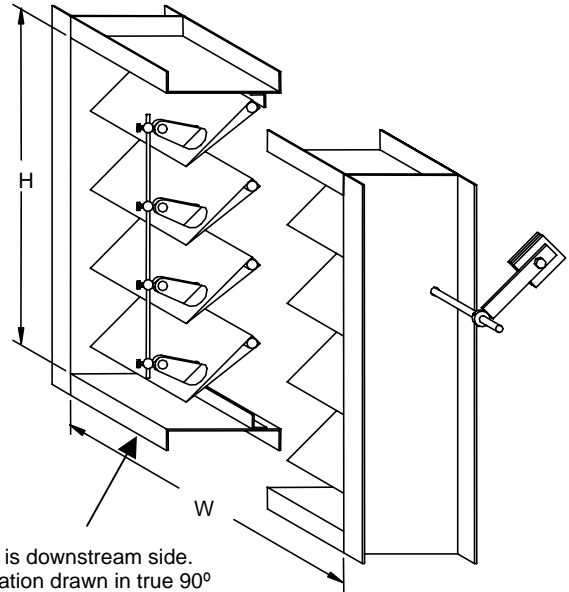
Dampers are sized on ACTUAL INSIDE DIMENSIONS

**FINISH**

Mill

**OPERATOR**

None



**OPTIONAL CONSTRUCTION**

**FRAME** – Available in stainless steel or aluminum up to 10 ga.

**BLADES** - Available in stainless steel or aluminum up to 14 ga. up to 8" wide

**SPECIFIED MATERIAL** – Available in stainless steel, aluminum or as requested

**SEALS** – Neoprene foam or polyurethane foam blade edge

**LINKAGE** – Concealed in jamb

**FINISH** – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat. For industrial special purpose coating, please consult factory.

**SPECIAL PURPOSE CONSTRUCTION**

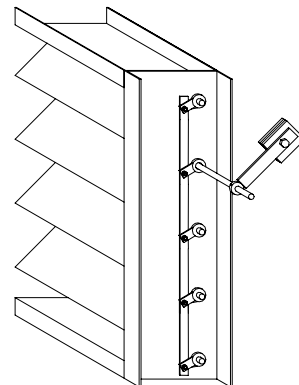
Bolt holes on front and rear flanges

Fully welded construction

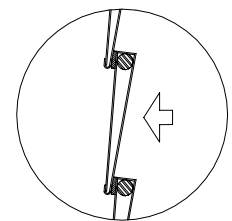
Security bars (mounted in sleeve)

Horizontal mount up flow or down flow configurations

For higher velocities & temperatures, please consult factory



**Concealed Linkage (Optional)**

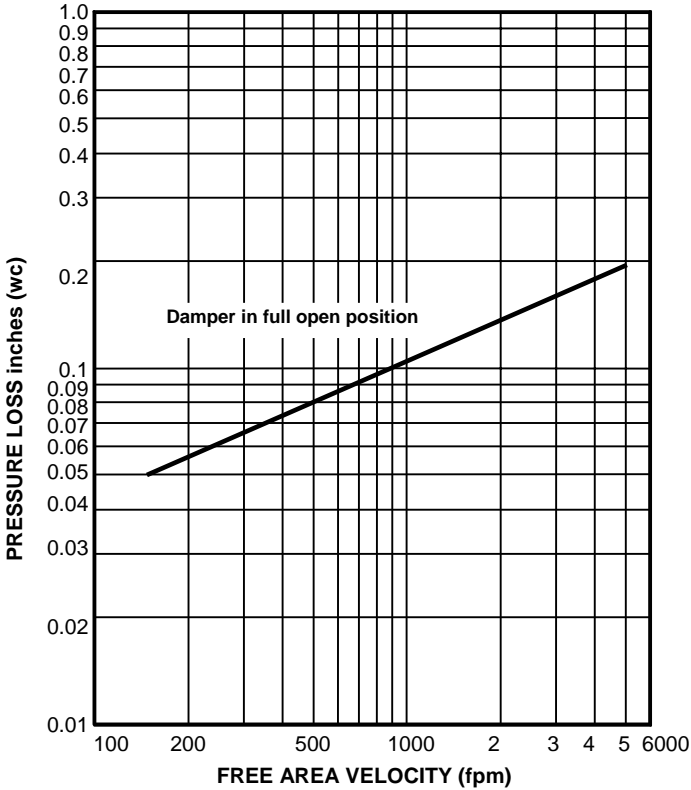


**Blade Edge Seal**

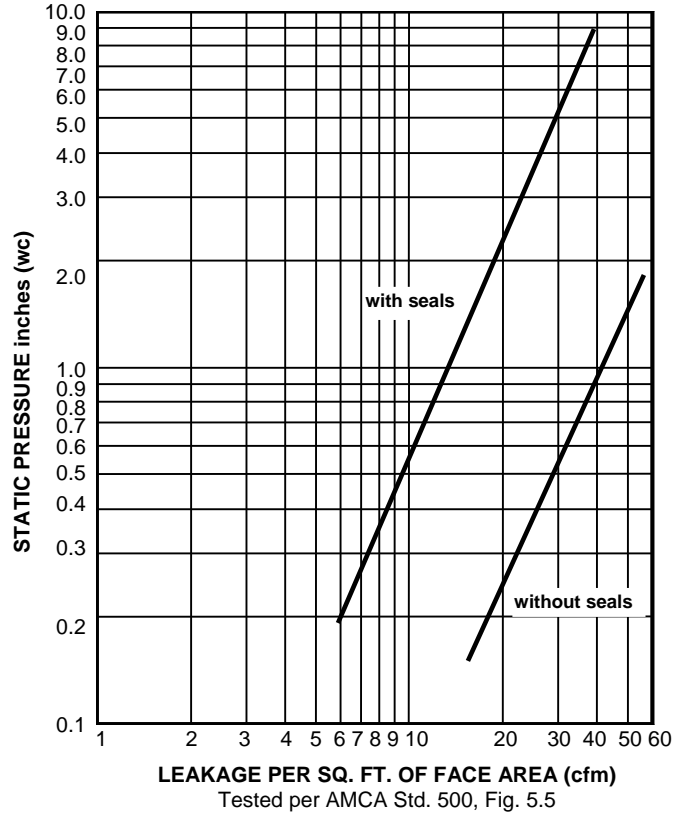
DATE	ARCHITECT/ENGINEER			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

All tests performed at an independent laboratory and based on AMCA standards for air performance.

**AIR PERFORMANCE**



**AIR LEAKAGE**



Tested per AMCA Std. 500, Fig. 5.5

**SH-2 Performance Data**

Damper Width Inches	Max. Pressure	Maximum System Velocity	Leakage w/ seals / sq. ft.	Leakage w/out seals / sq. ft.
60"	9" w.g.	4000 fpm	13 cfm	40 cfm
48"	8" w.g.	4000 fpm	13 cfm	40 cfm
36"	10" w.g.	4000 fpm	13 cfm	50 cfm
24"	12" w.g.	4000 fpm	15 cfm	60 cfm
12"	15" w.g.	4000 fpm	18 cfm	100 cfm

\* Leakage information based on 1" w.g. static pressure.

**FREE AREA CALCULATIONS WIDTH**

Inches	12	16	20	24	28	32	36	40	44	48
12	0.50	0.70	0.90	1.10	1.30	1.50	1.70	1.90	2.10	2.30
16	0.75	1.05	1.35	1.65	1.95	2.25	2.55	2.85	3.15	3.45
20	0.95	1.33	1.72	2.10	2.48	2.86	3.24	3.62	4.00	4.38
24	1.16	1.62	2.08	2.54	3.01	3.47	3.93	4.39	4.86	5.32
28	1.36	1.90	2.45	2.99	3.53	4.08	4.62	5.17	5.71	6.25
32	1.61	2.25	2.90	3.54	4.18	4.83	5.47	6.12	6.76	7.40
36	1.81	2.54	3.26	3.99	4.71	5.44	6.16	6.89	7.61	8.34
40	2.02	2.82	3.63	4.43	5.24	6.05	6.85	7.66	8.47	9.27
44	2.22	3.11	3.99	4.88	5.77	6.66	7.54	8.43	9.32	10.21
48	2.47	3.46	4.44	5.43	6.42	7.41	8.39	9.38	10.37	11.36
52	2.67	3.74	4.81	5.88	6.95	8.02	9.08	10.15	11.22	12.29
56	2.88	4.03	5.18	6.33	7.48	8.63	9.78	10.93	12.08	13.23
60	3.08	4.31	5.54	6.77	8.00	9.23	10.47	11.70	12.93	14.16
64	3.33	4.66	5.99	7.32	8.65	9.98	11.32	12.65	13.98	15.31
68	3.53	4.94	6.36	7.77	9.18	10.59	12.01	13.42	14.83	16.24
72	3.73	5.23	6.72	8.22	9.71	11.20	12.70	14.19	15.68	17.18
76	3.98	5.58	7.17	8.77	10.36	11.95	13.55	15.14	16.73	18.33
80	4.19	5.86	7.54	9.21	10.89	12.56	14.24	15.91	17.59	19.26
84	4.39	6.15	7.90	9.66	11.42	13.17	14.93	16.68	18.44	20.20
88	4.59	6.43	8.27	10.11	11.94	13.78	15.62	17.46	19.29	21.13
92	4.84	6.78	8.72	10.66	12.59	14.53	16.47	18.41	20.34	22.28
96	5.05	7.07	9.08	11.10	13.12	15.14	17.16	19.18	21.20	23.22