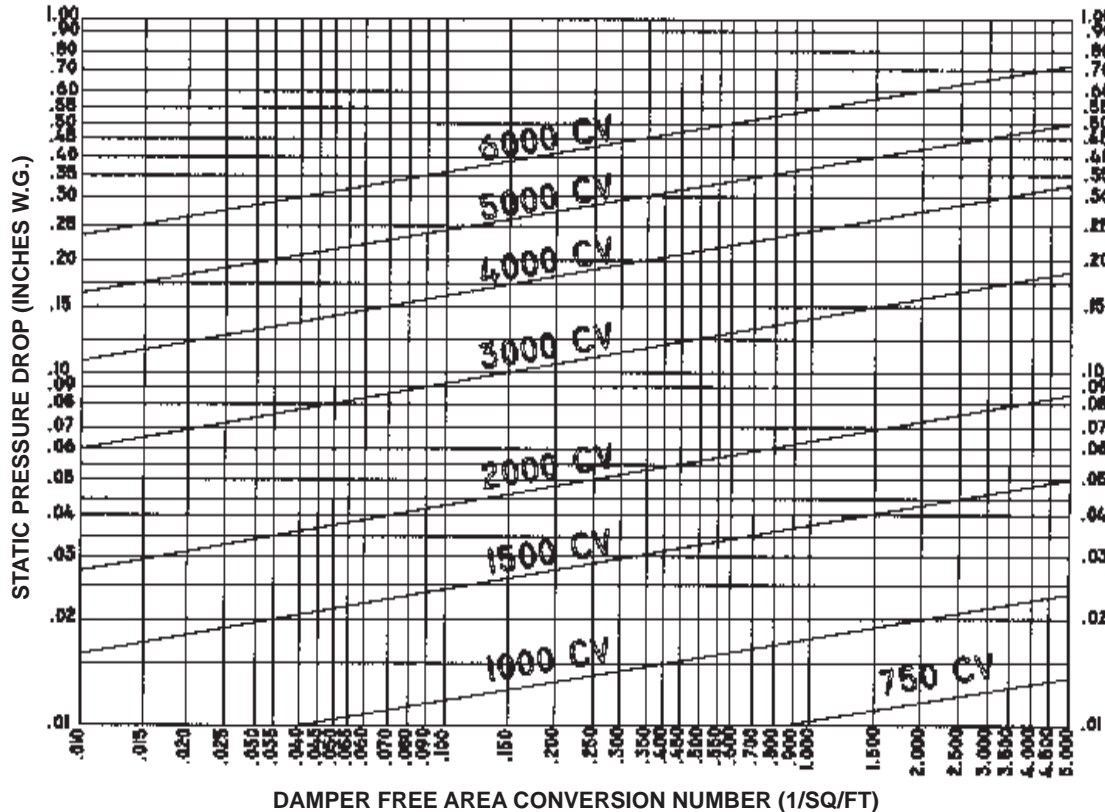


FIRE/SMOKE DAMPER FREE AREA CONVERSION (1/FA)

		WIDTH (INCHES)								
		8	12	16	20	24	28	30	32	36
HEIGHT (INCHES)	8	4.75	2.85	2.05	1.60	1.30	1.20	1.10	1.05	1.00
	10	4.00	2.35	1.70	1.35	1.10	.920	.850	.825	.810
	12	3.35	2.05	1.45	1.15	.920	.775	.730	.710	.650
	14	2.60	1.60	1.15	.880	.720	.590	.565	.555	.500
	16	2.20	1.35	.925	.720	.590	.500	.465	.455	.400
	20	1.70	1.00	.725	.565	.465	.390	.365	.350	.310
	24	1.40	.835	.600	.465	.380	.325	.300	.285	.250
	28	1.15	.680	.485	.375	.310	.265	.245	.230	.205
	32	.995	.595	.425	.330	.275	.230	.215	.200	.180
	36	.880	.530	.380	.295	.240	.205	.190	.180	.160

Free area factors listed are for standard type "A" sleeves. For "D" type sleeves, free area conversion number is equal to 1/nominal duct area.

PRESSURE DROP TABLE



TO DETERMINE DAMPER PRESSURE DROP:

1. Establish the free area conversion number (FA): Use the free area conversion table to determine the free area conversion number based on the damper width x height.
(Example: 24"w x 24"h damper = .38 FA)
2. Establish the conversion velocity (CV): Use the formula: $CV = CFM \times FA$.
(Example: $CV = 4000 \text{ CFM} \times .38 \text{ FA}$) ($CV = 1520 \text{ FPM}$)
3. Determine the pressure drop: Using the pressure drop table find the free area conversion number (.38) on the bottom line of the table.
4. Project a line vertically locating the conversion velocity previously determined.
5. Project this intersect horizontally to the left or right and read the pressure drop in inches of water.
(Example: .03 inches W.G.)