

ACOUSTICAL CHARACTERISTICS

1. Insertion loss is not a function of duct length.
2. There is no validity in rating a length of flexible duct on the basis of db insertion loss per foot.

INSERTION LOSS OF 3½' LENGTH

OCTAVE BAND CENTER FREQ.	DUCT DIAMETER VERSUS INSERTION LOSS (IL) IN DECIBELS							
Hz	4"	6"	8"	10"	12"	14"	16"	20"
63	15	15	12	9	9	10	15	15
125	32	32	25	21	21	20	19	19
250	36	36	29	27	25	23	22	18
500	29	29	25	23	21	19	17	15
1000	25	25	21	19	18	17	18	16
2000	26	26	26	26	25	23	21	15
4000	22	21	17	14	12	9	9	6

INSERTION LOSS OF 7' LENGTH

OCTAVE BAND CENTER FREQ.	DUCT DIAMETER VERSUS INSERTION LOSS (IL) IN DECIBELS							
Hz	4"	6"	8"	10"	12"	14"	16"	20"
63	25	25	20	15	15	16	25	25
125	42	42	33	28	28	27	25	25
250	40	40	32	30	28	26	24	20
500	37	37	31	29	26	24	21	19
1000	33	38	32	29	27	26	28	24
2000	38	38	33	38	36	34	30	22
4000	35	33	27	22	18	14	14	9

The following table illustrates that the maximum amount of insertion loss will be accomplished in the first 3½' of a straight run. Beyond 3½' the insertion loss value diminishes.

OCTAVE BAND CENTER FREQUENCIES Hz

I.D.	LENGTH	63	125	250	500	1000	2000	4000
6"	3½'	15	32	36	29	25	26	21
6"	7'	25	42	40	37	38	38	33
6"	10'	27	47	43	39	41	42	48

ALSO CLASSIFIED BY Underwriters Laboratories Inc.
IN ACCORDANCE WITH AIR DIFFUSION COUNCIL
(ADC) FLEXIBLE DUCT PERFORMANCE AND
INSTALLATION STANDARDS (1991)



MODULAR METAL FABRICATORS INC.