

HLC-CLF LAMINAR FLOW DIFFUSER PERFORMANCE DATA

(20-40 CFM/FT²) 16% FREE AREA

Table 1: Airflow Performance Data

AVERAGE VELOCITIES BELOW MODULES @ 10°F D.T.D. ¹						
FACE VELOCITY (CFM/FT ²) ²	DISTANCE BELOW FACE (FT)					
	1	2	3	4	5	6
20	53	55	53	53	49	42
25	62	64	69	67	58	48
30	71	72	72	71	61	50
35	78	78	79	78	71	60
40	87	89	88	86	80	73

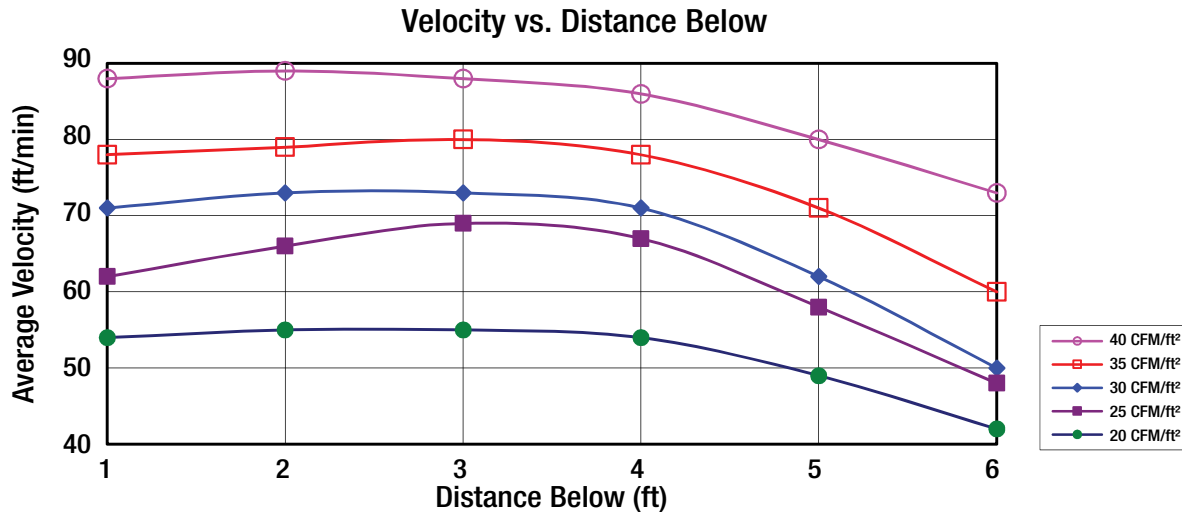


Table 2: Static Pressure & Noise Measurement

STATIC PRESSURE AND SOUND LEVEL		
CFM/FT ²	DUCT APPLICATION	
	STATIC PRESSURE ^{3,4}	N.C. LEVEL ^{4,5}
20	0.04	<15
25	0.05	20
30	0.08	24
35	0.11	31
40	0.14	35

1 = D.T.D. (Design Temperature Differential) is the difference between primary entering air temperature and designed room temperature.
 2 = Data reflects performance for standard 24" x 48" module with 9 3/4" dia. top inlet with volume adjustment valve in full open position.
 3 = Static pressure measured in inches of water.
 4 = The diffuser testing was performed in accordance with the ASHRAE 70 and 113.
 5 = N.C. Level reflects a 10 dB room attenuation (industry standard attenuation factor).

HLC-CLF LAMINAR FLOW DIFFUSER PERFORMANCE DATA
(45-65 CFM/FT²) 23% FREE AREA

Table 1: Airflow Performance Data

AVERAGE VELOCITIES BELOW MODULES @ 5°F D.T.D. ¹						
FACE VELOCITY (CFM/FT ²) ²	DISTANCE BELOW FACE (FT)					
	1	2	3	4	5	6
45	70	72	60	57	55	47
50	76	79	70	69	68	60
55	81	82	76	78	77	69
60	91	94	90	89	86	80
65	101	103	100	97	94	86

Velocity vs. Distance Below

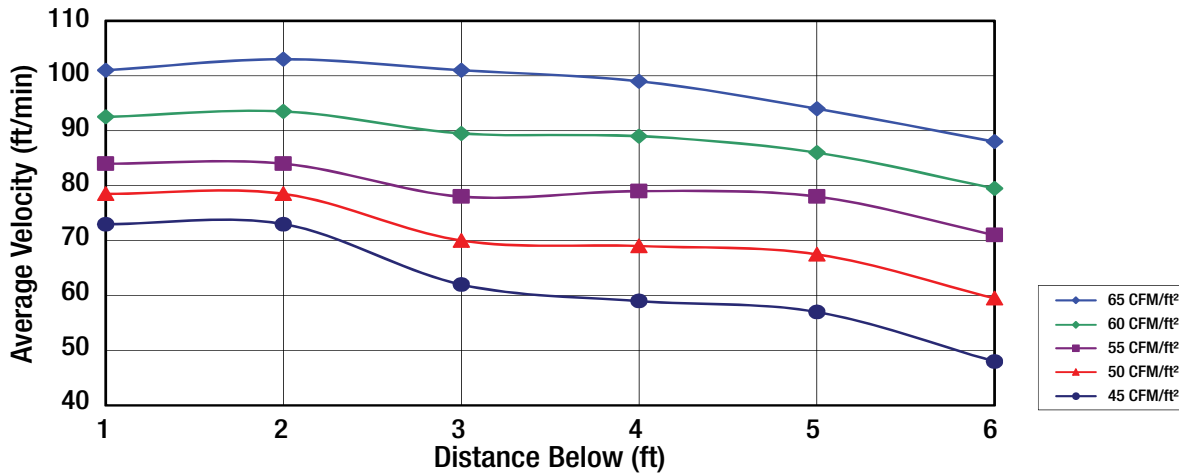


Table 2: Static Pressure & Noise Measurement

STATIC PRESSURE AND SOUND LEVEL		
CFM/FT ²	DUCT APPLICATION	
	STATIC PRESSURE ^{3,4}	N.C. LEVEL ^{4,5}
45	0.14	35
50	0.18	39
55	0.20	41
60	0.24	42
65	0.27	45

1 = D.T.D. (Design Temperature Differential) is the difference between primary entering air temperature and designed room temperature.
 2 = Data reflects performance for standard 24" x 48" module with 9 3/4" dia. top inlet with volume adjustment valve in full open position.
 3 = Static pressure measured in inches of water.
 4 = The diffuser testing was performed in accordance with the ANSI/ASHRAE Standard 70 and 113.
 5 = N.C. Level reflects a 10 dB room attenuation (industry standard attenuation factor).

HLC-CLF LAMINAR FLOW DIFFUSER PERFORMANCE DATA (70-130 CFM/FT²) 51% FREE AREA

Table 1: Airflow Performance Data

AVERAGE VELOCITIES BELOW MODULES @ 5°F D.T.D. ¹						
FACE VELOCITY (CFM/FT ²) ²	DISTANCE BELOW FACE (FT)					
	1	2	3	4	5	6
70	106	109	107	96	93	75
80	118	125	121	106	97	85
90	135	138	132	123	114	108
100	151	156	155	146	129	118
110	171	169	168	160	141	126
120	181	181	179	170	160	150
130	189	194	193	183	171	158

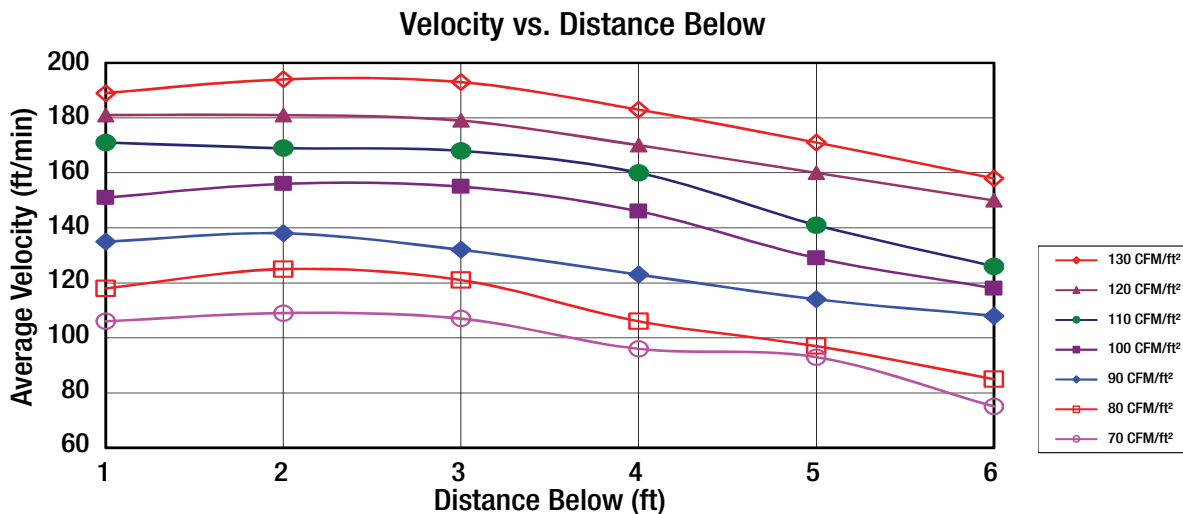


Table 2: Static Pressure & Noise Measurement

STATIC PRESSURE AND SOUND LEVEL		
CFM/FT ²	DUCT APPLICATION	
	STATIC PRESSURE ³	N.C. LEVEL ^{4,5}
70	0.13	39
80	0.18	43
90	0.21	47
100	0.27	48
110	0.32	50
120	0.38	53
130	0.45	55

1 = D.T.D. (Design Temperature Differential) is the difference between primary entering air temperature and designed room temperature.
 2 = Data reflects performance for standard 24" x 48" module with 13 3/4" dia. top inlet with volume adjustment valve in full open position.
 3 = Static pressure measured in inches of water.
 4 = The sound generation testing was performed in accordance with ANSI Standard S12.31-1990 "Precision Methods for the Determination of Sound Power Levels of Broad-Band Noise Sources in Reverberation Rooms."
 5 = N.C. Level reflects a 10 dB room attenuation (industry standard attenuation factor).