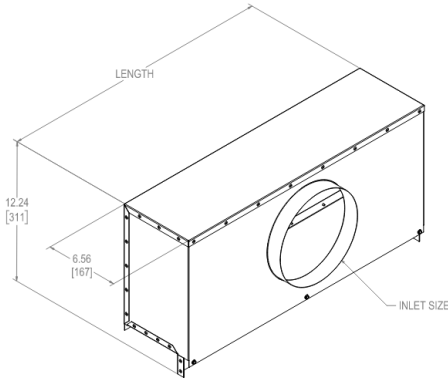


Flush Channel Plenum

The Flush Channel Plenum is designed to integrate seamlessly with the Node Flush Channel system which provides the diffuser portion of this plenum and diffuser combination. Integrating into the shadow gap between the Node channel and the ceiling surface, the Flush Channel Plenum provides 1-way or 2-way air distribution in a horizontal airflow pattern, providing exceptional thermal comfort and frequently achieving a minimum 80% on the Air Diffusion Performance Index (ADPI).



Product Features

- Shadow gap between Node Flush Channel and ceiling surface functions as diffuser slot
- Diffuser is hidden from sight
- Select Node devices can be co-located with the diffuser
- High thermal comfort
- Available in 2ft., 4ft., 5ft., 600mm, 1200mm, 1500mm, and custom lengths

Imperial Performance Data

FLC-D with ½ in. Slot Width, 1-Way Throw

2' Engineered Plenum

Inlet Size	Flow Rate (CFM)	50	60	70	80	90	100	110	120
	Flow Rate (CFM/ft)	25	30	35	40	45	50	55	60
6 in.	Throw at 150-100-50 (ft)	4-7-14	5-8-16	6-10-18	7-11-19	8-12-20	9-14-21	10-15-22	11-16-23
	Static Pressure (in. w.g.)	0.075	0.102	0.133	0.170	0.208	0.251	0.299	0.348
	Sound (NC)	24	28	31	33	35	37	39	41
8 in.	Throw at 150-100-50 (ft)	4-7-14	5-8-16	6-10-18	7-11-19	8-12-20	9-14-21	10-15-22	11-16-23
	Static Pressure (in. w.g.)	0.097	0.131	0.167	0.206	0.249	0.299	0.357	0.405
	Sound (NC)	<10	22	27	30	32	35	36	38
10 in.	Throw at 150-100-50 (ft)	4-7-14	5-8-16	6-10-18	7-11-19	8-12-20	9-14-21	10-15-22	11-16-23
	Static Pressure (in. w.g.)	0.075	0.102	0.136	0.170	0.210	0.251	0.299	0.348
	Sound (NC)	20	24	27	30	32	34	36	37
12 in.	Throw at 150-100-50 (ft)	4-7-14	5-8-16	6-10-18	7-11-19	8-12-20	9-14-21	10-15-22	11-16-23
	Static Pressure (in. w.g.)	0.072	0.100	0.131	0.165	0.204	0.247	0.290	0.339
	Sound (NC)	19	23	26	28	31	33	35	36

FLC-D with ½ in. Slot Width, 1-Way Throw

4' Engineered Plenum

Inlet Size	Flow Rate (CFM)	80	100	120	140	160	180	200	220	240
	Flow Rate (CFM/ft)	20	25	30	35	40	45	50	55	60
6 in.	Throw at 150-100-50 (ft)	3-8-16	5-12-18	8-14-20	10-15-22	13-16-23	14-17-25	15-18-26	16-19-27	16-20-28
	Static Pressure (in. w.g.)	0.073	0.105	0.141	0.186	0.236	0.293	0.348	0.416	0.484
	Sound (NC)	<10	18	25	30	34	35	39	41	43
8 in.	Throw at 150-100-50 (ft)	3-8-16	5-12-18	8-14-20	10-15-22	13-16-23	14-17-25	15-18-26	16-19-27	16-20-28
	Static Pressure (in. w.g.)	0.084	0.100	0.139	0.178	0.225	0.275	0.333	0.393	0.458
	Sound (NC)	<10	<10	28	30	33	35	37	39	41
10 in.	Throw at 150-100-50 (ft)	3-8-16	5-12-18	8-14-20	10-15-22	13-16-23	14-17-25	15-18-26	16-19-27	16-20-28
	Static Pressure (in. w.g.)	0.071	0.100	0.139	0.175	0.220	0.270	0.322	0.380	0.445
	Sound (NC)	<10	<10	21	26	31	34	36	39	40
12 in.	Throw at 150-100-50 (ft)	3-8-16	5-12-18	8-14-20	10-15-22	13-16-23	14-17-25	15-18-26	16-19-27	16-20-28
	Static Pressure (in. w.g.)	0.065	0.110	0.149	0.194	0.244	0.296	0.364	0.429	0.503
	Sound (NC)	<10	<10	20	30	31	36	37	39	40

FLC-D with ½ in. Slot Width, 1-Way Throw

5' Engineered Plenum

Inlet Size	Flow Rate (CFM)	100	130	170	200	230	250	270	300
	Flow Rate (CFM/ft)	20	26	34	40	46	50	54	60
6 in.	Throw at 150-100-50 (ft)	3-6-16	4-10-19	7-14-22	10-16-24	12-18-26	13-19-27	14-20-28	16-21-29
	Static Pressure (in. w.g.)	0.051	0.080	0.125	0.163	0.206	0.237	0.270	0.322
	Sound (NC)	<10	15	23	28	32	35	37	40
8 in.	Throw at 150-100-50 (ft)	3-6-16	4-10-19	7-14-22	10-16-24	12-18-26	13-19-27	14-20-28	16-21-29
	Static Pressure (in. w.g.)	0.056	0.094	0.154	0.208	0.270	0.315	0.362	0.438
	Sound (NC)	<10	23	29	34	36	38	40	42
10 in.	Throw at 150-100-50 (ft)	3-6-16	4-10-19	7-14-22	10-16-24	12-18-26	13-19-27	14-20-28	16-21-29
	Static Pressure (in. w.g.)	0.051	0.080	0.123	0.161	0.201	0.232	0.264	0.313
	Sound (NC)	<10	12	20	25	30	32	35	38
12 in.	Throw at 150-100-50 (ft)	3-6-16	4-10-19	7-14-22	10-16-24	12-18-26	13-19-27	14-20-28	16-21-29
	Static Pressure (in. w.g.)	0.045	0.069	0.112	0.145	0.185	0.212	0.241	0.290
	Sound (NC)	<10	11	19	24	29	31	34	37

FLC-D with 1/2 in. Slot Width, 2-Way Throw

2' Engineered Plenum

Inlet Size	Flow Rate (CFM)	50	60	70	80	90	100	110	120	130	140	150
	Flow Rate (CFM/ft)	25	30	35	40	45	50	55	60	65	70	75
6 in.	Throw at 150-100-50 (ft)	2-4-10	2-5-12	3-7-14	4-8-16	5-9-17	6-10-18	7-11-19	8-12-20	8-13-20	9-14-21	10-15-22
	Static Pressure (in. w.g.)	0.029	0.041	0.054	0.070	0.088	0.106	0.129	0.152	0.174	0.201	0.229
	Sound (NC)	<10	<10	<10	<10	<10	12	15	18	20	22	24
8 in.	Throw at 150-100-50 (ft)	2-4-10	2-5-12	3-7-14	4-8-16	5-9-17	6-10-18	7-11-19	8-12-20	8-13-20	9-14-21	10-15-22
	Static Pressure (in. w.g.)	0.036	0.050	0.063	0.077	0.093	0.111	0.127	0.152	0.172	0.195	0.226
	Sound (NC)	<10	<10	<10	<10	<10	<10	22	23	26	27	29
10 in.	Throw at 150-100-50 (ft)	2-4-10	2-5-12	3-7-14	4-8-16	5-9-17	6-10-18	7-11-19	8-12-20	8-13-20	9-14-21	10-15-22
	Static Pressure (in. w.g.)	0.027	0.038	0.052	0.068	0.086	0.106	0.127	0.149	0.172	0.199	0.224
	Sound (NC)	<10	<10	<10	<10	<10	<10	12	15	17	19	21
12 in.	Throw at 150-100-50 (ft)	2-4-10	2-5-12	3-7-14	4-8-16	5-9-17	6-10-18	7-11-19	8-12-20	8-13-20	9-14-21	10-15-22
	Static Pressure (in. w.g.)	0.029	0.043	0.059	0.075	0.095	0.115	0.138	0.163	0.188	0.217	0.247
	Sound (NC)	<10	<10	<10	<10	12	15	17	19	21	23	25

4' Engineered Plenum

Inlet Size	Flow Rate (CFM)	80	100	120	140	160	180	200	220	240
	Flow Rate (CFM/ft)	20	25	30	35	40	45	50	55	60
6 in.	Throw at 150-100-50 (ft)	1-2-9	2-4-11	2-5-14	3-7-15	4-9-16	5-10-17	7-11-18	8-12-19	9-14-20
	Static Pressure (in. w.g.)	0.026	0.042	0.055	0.068	0.089	0.110	0.134	0.157	0.183
	Sound (NC)	<10	<10	<10	15	19	24	26	29	31
8 in.	Throw at 150-100-50 (ft)	1-2-9	2-4-11	2-5-14	3-7-15	4-9-16	5-10-17	7-11-18	8-12-19	9-14-20
	Static Pressure (in. w.g.)	0.029	0.045	0.058	0.076	0.094	0.120	0.141	0.173	0.202
	Sound (NC)	<10	<10	<10	<10	24	26	28	30	32
10 in.	Throw at 150-100-50 (ft)	1-2-9	2-4-11	2-5-14	3-7-15	4-9-16	5-10-17	7-11-18	8-12-19	9-14-20
	Static Pressure (in. w.g.)	0.029	0.042	0.058	0.076	0.094	0.115	0.139	0.165	0.194
	Sound (NC)	<10	<10	<10	<10	<10	20	22	26	27
12 in.	Throw at 150-100-50 (ft)	1-2-9	2-4-11	2-5-14	3-7-15	4-9-16	5-10-17	7-11-18	8-12-19	9-14-20
	Static Pressure (in. w.g.)	0.029	0.045	0.060	0.081	0.100	0.126	0.149	0.183	0.212
	Sound (NC)	<10	<10	<10	<10	<10	23	24	27	29

5' Engineered Plenum

Inlet Size	Flow Rate (CFM)	100	130	180	210	230	250	280	300
	Flow Rate (CFM/ft)	20	26	36	42	46	50	56	60
6 in.	Throw at 150-100-50 (ft)	1-2-8	1-3-12	3-6-17	4-8-18	5-10-19	5-12-19	7-13-21	8-14-21
	Static Pressure (in. w.g.)	0.025	0.040	0.074	0.098	0.118	0.136	0.170	0.192
	Sound (NC)	<10	<10	15	20	23	26	29	32
8 in.	Throw at 150-100-50 (ft)	1-2-8	1-3-12	3-6-17	4-8-18	5-10-19	5-12-19	7-13-21	8-14-21
	Static Pressure (in. w.g.)	0.025	0.038	0.069	0.092	0.109	0.127	0.156	0.179
	Sound (NC)	<10	<10	<10	21	23	25	28	30
10 in.	Throw at 150-100-50 (ft)	1-2-8	1-3-12	3-6-17	4-8-18	5-10-19	5-12-19	7-13-21	8-14-21
	Static Pressure (in. w.g.)	0.022	0.038	0.067	0.087	0.103	0.118	0.143	0.161
	Sound (NC)	<10	<10	12	16	19	22	26	28
12 in.	Throw at 150-100-50 (ft)	1-2-8	1-3-12	3-6-17	4-8-18	5-10-19	5-12-19	7-13-21	8-14-21
	Static Pressure (in. w.g.)	0.031	0.054	0.098	0.130	0.152	0.179	0.219	0.248
	Sound (NC)	<10	<10	15	19	21	24	27	29

Performance Notes

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of testing for Rating the Performance of Air Outlets and Inlets."
2. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
3. Throw data is based on supply air and room air being at isothermal conditions.
4. NC values are based on room absorption of 10 dB re 10⁻¹² watts and one diffuser.

Metric Performance Data

FLC-D with 13mm Slot Width, 1-Way Throw

600mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	24	28	33	38	42	47	52	57
	Flow Rate (l/s/m)	39	47	55	63	71	79	87	94
150 mm	Throw at 0.75-0.50-0.25 (m)	1.2-2.1-4.3	1.5-2.4-4.9	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.7-4.3-6.4	3.0-4.6-6.7	3.4-4.9-7.0
	Static Pressure (Pa)	19	25	33	42	52	62	74	87
	Sound (NC)	24	28	31	33	35	37	39	41
200 mm	Throw at 0.75-0.50-0.25 (m)	1.2-2.1-4.3	1.5-2.4-4.9	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.7-4.3-6.4	3.0-4.6-6.7	3.4-4.9-7.0
	Static Pressure (Pa)	24	33	42	51	62	74	89	101
	Sound (NC)	<10	22	27	30	32	35	36	38
250 mm	Throw at 0.75-0.50-0.25 (m)	1.2-2.1-4.3	1.5-2.4-4.9	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.7-4.3-6.4	3.0-4.6-6.7	3.4-4.9-7.0
	Static Pressure (Pa)	19	25	34	42	52	62	74	87
	Sound (NC)	20	24	27	30	32	34	36	37
300 mm	Throw at 0.75-0.50-0.25 (m)	1.2-2.1-4.3	1.5-2.4-4.9	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.7-4.3-6.4	3.0-4.6-6.7	3.4-4.9-7.0
	Static Pressure (Pa)	18	25	33	41	51	61	72	84
	Sound (NC)	19	23	26	28	31	33	35	36

1200mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	38	47	57	66	76	85	94	104	113
	Flow Rate (l/s/m)	31	39	47	55	63	71	79	87	94
150 mm	Throw at 0.75-0.50-0.25 (m)	0.9-2.4-4.9	1.5-3.7-5.5	2.4-4.3-6.1	3.0-4.6-6.7	4.0-4.9-7.0	4.3-5.2-7.6	4.6-5.5-7.9	4.9-5.8-8.2	4.9-6.1-8.5
	Static Pressure (Pa)	18	26	35	46	59	73	87	104	121
	Sound (NC)	<10	18	25	30	34	35	39	41	43
200 mm	Throw at 0.75-0.50-0.25 (m)	0.9-2.4-4.9	1.5-3.7-5.5	2.4-4.3-6.1	3.0-4.6-6.7	4.0-4.9-7.0	4.3-5.2-7.6	4.6-5.5-7.9	4.9-5.8-8.2	4.9-6.1-8.5
	Static Pressure (Pa)	21	25	35	44	56	68	83	98	114
	Sound (NC)	<10	<10	28	30	33	35	37	39	41
250 mm	Throw at 0.75-0.50-0.25 (m)	0.9-2.4-4.9	1.5-3.7-5.5	2.4-4.3-6.1	3.0-4.6-6.7	4.0-4.9-7.0	4.3-5.2-7.6	4.6-5.5-7.9	4.9-5.8-8.2	4.9-6.1-8.5
	Static Pressure (Pa)	18	25	35	44	55	67	80	94	111
	Sound (NC)	<10	<10	21	26	31	34	36	39	40
300 mm	Throw at 0.75-0.50-0.25 (m)	0.9-2.4-4.9	1.5-3.7-5.5	2.4-4.3-6.1	3.0-4.6-6.7	4.0-4.9-7.0	4.3-5.2-7.6	4.6-5.5-7.9	4.9-5.8-8.2	4.9-6.1-8.5
	Static Pressure (Pa)	16	27	37	48	61	74	91	107	125
	Sound (NC)	<10	<10	20	30	31	36	37	39	40

1500mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	47	61	80	94	109	118	127	142
	Flow Rate (l/s/m)	31	41	53	63	72	79	85	94
150 mm	Throw at 0.75-0.50-0.25 (m)	0.9-1.8-4.9	1.2-3.0-5.8	2.1-4.3-6.7	3.0-4.9-7.3	3.7-5.5-7.9	4.0-5.8-8.2	4.3-6.1-8.5	4.9-6.4-8.8
	Static Pressure (Pa)	13	20	31	41	51	59	67	80
	Sound (NC)	<10	15	23	28	32	35	37	40
200 mm	Throw at 0.75-0.50-0.25 (m)	0.9-1.8-4.9	1.2-3.0-5.8	2.1-4.3-6.7	3.0-4.9-7.3	3.7-5.5-7.9	4.0-5.8-8.2	4.3-6.1-8.5	4.9-6.4-8.8
	Static Pressure (Pa)	14	23	38	52	67	78	90	109
	Sound (NC)	<10	23	29	34	36	38	40	42
250 mm	Throw at 0.75-0.50-0.25 (m)	0.9-1.8-4.9	1.2-3.0-5.8	2.1-4.3-6.7	3.0-4.9-7.3	3.7-5.5-7.9	4.0-5.8-8.2	4.3-6.1-8.5	4.9-6.4-8.8
	Static Pressure (Pa)	13	20	31	40	50	58	66	78
	Sound (NC)	<10	12	20	25	30	32	35	38
300 mm	Throw at 0.75-0.50-0.25 (m)	0.9-1.8-4.9	1.2-3.0-5.8	2.1-4.3-6.7	3.0-4.9-7.3	3.7-5.5-7.9	4.0-5.8-8.2	4.3-6.1-8.5	4.9-6.4-8.8
	Static Pressure (Pa)	11	17	28	36	46	53	60	72
	Sound (NC)	<10	11	19	24	29	31	34	37

FLC-D with 13mm Slot Width, 2-Way Throw

600mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	24	28	33	38	42	47	52	57	61	66	71
	Flow Rate (l/s/m)	39	47	55	63	71	79	87	94	102	110	118
150 mm	Throw at 0.75-0.50-0.25 (m)	0.6-1.2-3.0	0.6-1.5-3.7	0.9-2.1-4.3	1.2-2.4-4.9	1.5-2.7-5.2	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.4-4.0-6.1	2.7-4.3-6.4	3.0-4.6-6.7
	Static Pressure (Pa)	7	10	14	17	22	26	32	38	43	50	57
	Sound (NC)	<10	<10	<10	<10	<10	12	15	18	20	22	24
200 mm	Throw at 0.75-0.50-0.25 (m)	0.6-1.2-3.0	0.6-1.5-3.7	0.9-2.1-4.3	1.2-2.4-4.9	1.5-2.7-5.2	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.4-4.0-6.1	2.7-4.3-6.4	3.0-4.6-6.7
	Static Pressure (Pa)	9	12	16	19	23	28	32	38	43	48	56
	Sound (NC)	<10	<10	<10	<10	<10	<10	22	23	26	27	29
250 mm	Throw at 0.75-0.50-0.25 (m)	0.6-1.2-3.0	0.6-1.5-3.7	0.9-2.1-4.3	1.2-2.4-4.9	1.5-2.7-5.2	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.4-4.0-6.1	2.7-4.3-6.4	3.0-4.6-6.7
	Static Pressure (Pa)	7	10	13	17	21	26	32	37	43	50	56
	Sound (NC)	<10	<10	<10	<10	<10	<10	12	15	17	19	21
300 mm	Throw at 0.75-0.50-0.25 (m)	0.6-1.2-3.0	0.6-1.5-3.7	0.9-2.1-4.3	1.2-2.4-4.9	1.5-2.7-5.2	1.8-3.0-5.5	2.1-3.4-5.8	2.4-3.7-6.1	2.4-4.0-6.1	2.7-4.3-6.4	3.0-4.6-6.7
	Static Pressure (Pa)	7	11	15	19	24	29	34	41	47	54	61
	Sound (NC)	<10	<10	<10	<10	12	15	17	19	21	23	25

1200mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	38	47	57	66	76	85	94	104	113
	Flow Rate (l/s/m)	31	39	47	55	63	71	79	87	94
150 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.7	0.6-1.2-3.4	0.6-1.5-4.3	0.9-2.1-4.6	1.2-2.7-4.9	1.5-3.0-5.2	2.1-3.4-5.5	2.4-3.7-5.8	2.7-4.3-6.1
	Static Pressure (Pa)	7	10	14	17	22	27	33	39	46
	Sound (NC)	<10	<10	<10	15	19	24	26	29	31
200 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.7	0.6-1.2-3.4	0.6-1.5-4.3	0.9-2.1-4.6	1.2-2.7-4.9	1.5-3.0-5.2	2.1-3.4-5.5	2.4-3.7-5.8	2.7-4.3-6.1
	Static Pressure (Pa)	7	11	14	19	23	30	35	43	50
	Sound (NC)	<10	<10	<10	<10	24	26	28	30	32
250 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.7	0.6-1.2-3.4	0.6-1.5-4.3	0.9-2.1-4.6	1.2-2.7-4.9	1.5-3.0-5.2	2.1-3.4-5.5	2.4-3.7-5.8	2.7-4.3-6.1
	Static Pressure (Pa)	7	10	14	19	23	29	35	41	48
	Sound (NC)	<10	<10	<10	<10	<10	20	22	26	27
300 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.7	0.6-1.2-3.4	0.6-1.5-4.3	0.9-2.1-4.6	1.2-2.7-4.9	1.5-3.0-5.2	2.1-3.4-5.5	2.4-3.7-5.8	2.7-4.3-6.1
	Static Pressure (Pa)	7	11	15	20	25	31	37	46	53
	Sound (NC)	<10	<10	<10	<10	<10	23	24	27	29

1500mm Engineered Plenum

Inlet Size	Flow Rate (l/s)	47	61	85	99	109	118	132	142
	Flow Rate (l/s/m)	31	41	57	66	72	79	88	94
150 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.4	0.3-0.9-3.7	0.9-1.8-5.2	1.2-2.4-5.5	1.5-3.0-5.8	1.5-3.7-5.8	2.1-4.0-6.4	2.4-4.3-6.4
	Static Pressure (Pa)	6	10	18	24	29	34	42	48
	Sound (NC)	<10	<10	15	20	23	26	29	32
200 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.4	0.3-0.9-3.7	0.9-1.8-5.2	1.2-2.4-5.5	1.5-3.0-5.8	1.5-3.7-5.8	2.1-4.0-6.4	2.4-4.3-6.4
	Static Pressure (Pa)	6	9	17	23	27	32	39	44
	Sound (NC)	<10	<10	<10	21	23	25	28	30
250 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.4	0.3-0.9-3.7	0.9-1.8-5.2	1.2-2.4-5.5	1.5-3.0-5.8	1.5-3.7-5.8	2.1-4.0-6.4	2.4-4.3-6.4
	Static Pressure (Pa)	6	9	17	22	26	29	36	40
	Sound (NC)	<10	<10	12	16	19	22	26	28
300 mm	Throw at 0.75-0.50-0.25 (m)	0.3-0.6-2.4	0.3-0.9-3.7	0.9-1.8-5.2	1.2-2.4-5.5	1.5-3.0-5.8	1.5-3.7-5.8	2.1-4.0-6.4	2.4-4.3-6.4
	Static Pressure (Pa)	8	13	24	32	38	44	54	62
	Sound (NC)	<10	<10	15	19	21	24	27	29

Performance Notes

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of testing for Rating the Performance of Air Outlets and Inlets."
2. Throw values are measured in meters for terminal velocities of 0.75 m/s (minimum), 0.50 m/s (middle), and 0.25 m/s (maximum).
3. Throw data is based on supply air and room air being at isothermal conditions.
4. NC values are based on room absorption of 10 dB re 10-12 watts and one diffuser.