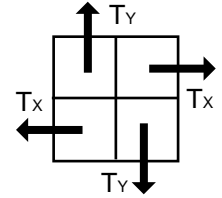


MCD Modular Ceiling Diffuser — Aluminum (Page 36, 37)

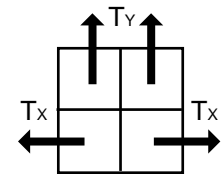
Four-Way

Face Velocity		500	600	700	800	900	1000	1200	1400	1600	1800	2000
<b>Pressure Loss</b>		.020	.020	.030	.040	.050	.060	.090	.120	.160	.200	.250
6 x 6 Ak .090	CFM Throw X/Y NC	45 1-3/1-3 <20	55 2-3/2-3 <20	65 2-4/2-4 <20	70 2-4/2-4 <20	80 3-5/3-5 <20	90 3-6/3-6 <20	110 3-7/3-7 21	125 4-8/4-8 24	145 4-9/4-9 28	160 5-10/5-10 31	180 6-11/6-11 34
8 x 8 Ak .150	CFM Throw X/Y NC	80 2-4/2-4 <20	95 2-4/2-4 <20	110 3-5/3-5 <20	130 3-6/3-6 <20	145 3-7/3-7 <20	160 4-7/4-7 <20	190 4-9/4-9 22	225 5-10/5-10 26	255 6-11/6-11 29	290 7-12/7-12 32	320 7-13/7-13 35
10 x 10 Ak .250	CFM Throw X/Y NC	130 2-5/2-5 <20	155 3-6/3-6 <20	180 3-7/3-7 <20	210 4-7/4-7 <20	235 4-8/4-8 <20	260 5-8/5-8 <20	310 6-10/6-10 23	365 7-11/7-11 27	415 8-13/8-13 30	470 9-14/9-14 33	520 10-15/10-15 36
12 x 12 Ak .370	CFM Throw X/Y NC	190 3-6/3-6 <20	230 3-7/3-7 <20	265 4-8/4-8 <20	305 5-9/5-9 <20	340 5-10/5-10 <20	380 6-11/6-11 <20	455 7-12/7-12 24	530 8-14/8-14 28	610 8-15/8-15 31	685 10-16/10-16 35	760 11-17/11-17 37
14 x 14 Ak .520	CFM Throw X/Y NC	260 3-7/3-7 <20	310 4-8/4-8 <20	365 5-9/5-9 <20	415 5-11/5-11 <20	470 6-12/6-12 <20	520 7-13/7-13 <20	625 8-14/8-14 25	730 9-15/9-15 29	830 11-16/11-16 32	935 12-18/12-18 35	1040 13-19/13-19 38
16 x 16 Ak .700	CFM Throw X/Y NC	350 4-8/4-8 <20	420 5-9/5-9 <20	490 5-11/5-11 <20	560 6-12/6-12 <20	630 7-14/7-14 <20	700 8-15/8-15 <20	840 9-17/9-17 26	980 11-19/11-19 30	1120 12-20/12-20 33	1260 14-21/14-21 36	1400 16-22/16-22 39
18 x 18 Ak .900	CFM Throw X/Y NC	450 4-9/4-9 <20	540 5-11/5-11 <20	630 6-12/6-12 <20	720 7-14/7-14 <20	810 8-15/8-15 <20	900 9-16/9-16 22	1080 11-18/11-18 27	1260 12-20/12-20 31	1440 14-22/14-22 34	1620 16-23/16-23 37	1800 18-24/18-24 40
20 x 20 Ak 1.100	CFM Throw X/Y NC	555 5-10/5-10 <20	665 6-12/6-12 <20	775 7-14/7-14 <20	890 8-16/8-16 <20	1000 9-17/9-17 21	1110 10-19/10-19 24	1330 12-21/12-21 28	1555 14-23/14-23 32	1775 16-25/16-25 36	2000 18-26/18-26 39	2220 20-27/20-27 42
22 x 22 Ak 1.330	CFM Throw X/Y NC	665 5-11/5-11 <20	800 6-13/6-13 <20	930 8-15/8-15 <20	1065 9-17/9-17 20	1195 10-18/10-18 23	1330 11-20/11-20 26	1595 13-23/13-23 30	1860 15-25/15-25 34	2130 18-27/18-27 38	2395 19-29/19-29 41	2660 22-30/22-30 44



Three-Way

Face Velocity		500	600	700	800	900	1000	1200	1400	1600	1800	2000
<b>Pressure Loss</b>		.020	.020	.030	.040	.050	.060	.090	.120	.160	.200	.250
6 x 6 Ak .090	CFM Throw NC	45 1-3/2-5 <20	55 2-3/3-5 <20	65 2-4/3-6 <20	70 2-4/3-6 <20	80 3-5/5-8 <20	90 3-6/5-9 <20	110 3-7/5-11 21	125 4-8/6-12 24	145 4-9/6-14 28	160 5-10/8-15 31	180 6-11/9-17 34
8 x 8 Ak .150	CFM Throw NC	80 2-4/3-6 <20	95 2-4/3-6 <20	110 3-5/5-8 <20	130 3-6/5-9 <20	145 3-7/5-11 <20	160 4-7/6-11 <20	190 4-9/6-14 22	225 5-10/8-15 26	255 6-11/9-17 29	290 7-12/11-18 32	320 7-13/11-20 35
10 x 10 Ak .250	CFM Throw NC	130 2-5/3-8 <20	155 3-6/5-9 <20	180 3-7/5-11 <20	210 4-7/6-11 <20	235 4-8/6-12 <20	260 5-8/8-12 <20	310 6-10/9-15 23	365 7-11/11-17 27	415 8-13/12-20 30	470 9-14/14-21 33	520 10-15/15-23 36
12 x 12 Ak .370	CFM Throw NC	190 3-6/5-9 <20	230 3-7/5-11 <20	265 4-8/6-12 <20	305 5-9/8-14 <20	340 5-10/8-15 <20	380 6-11/9-17 20	455 7-12/11-18 24	530 8-14/12-21 28	610 9-15/14-23 31	685 10-16/15-24 35	760 11-17/17-26 37
14 x 14 Ak .520	CFM Throw NC	260 3-7/5-11 <20	310 4-8/6-12 <20	365 5-9/8-14 <20	415 5-11/8-17 <20	470 6-12/9-18 <20	520 7-13/11-20 20	625 8-14/12-21 25	730 9-15/14-23 29	830 11-16/17-24 32	935 12-18/18-27 35	1040 13-19/20-29 38
16 x 16 Ak .700	CFM Throw NC	350 4-8/6-12 <20	420 5-9/8-14 <20	490 5-11/8-17 <20	560 6-12/9-18 <20	630 7-14/11-21 <20	700 8-15/12-23 21	840 9-17/14-26 26	980 11-19/17-29 30	1120 12-20/18-30 33	1260 14-21/21-32 36	1400 16-22/24-33 39
18 x 18 Ak .900	CFM Throw NC	450 4-9/6-14 <20	540 5-11/8-17 <20	630 6-12/9-18 <20	720 7-14/11-21 <20	810 8-15/12-23 20	900 9-16/14-24 22	1080 11-18/17-27 27	1260 12-20/18-30 31	1440 14-22/21-33 34	1620 16-23/24-35 37	1800 18-24/27-36 40
20 x 20 Ak 1.100	CFM Throw NC	555 5-10/8-15 <20	665 6-12/9-18 <20	775 7-14/11-21 <20	890 8-16/12-24 <20	1000 9-17/14-26 21	1110 10-19/15-29 24	1330 12-21/18-32 28	1555 14-23/21-35 32	1775 16-25/24-38 36	2000 18-26/27-39 39	2220 20-27/30-41 42
22 x 22 Ak 1.330	CFM Throw NC	665 5-11/8-17 <20	800 6-11/3/9-20 <20	930 8-15/12-23 <20	1065 9-17/14-26 20	1195 10-18/15-27 23	1330 11-20/17-30 26	1595 13-23/20-35 30	1860 15-25/23-38 34	2130 18-27/27-41 38	2395 19-29/29-44 41	2660 22-30/33-45 44



NOTES: The minimum Throw Dimension is based on a terminal velocity of 250 FPM. The maximum Throw Dimension is based on a terminal velocity of 125 FPM.  
NC re 10db room Attenuation (LW10<sup>-12</sup>W)

ECBXT (Page 70)

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
22 x 22 Ak 1.343	CFM Pt	537 .028	537 .042	672 .059	806 .077	940 .098	1074 .121	1209 .146	1343 .203	1612 .267	1880 .339	2149 .419	2417 .505

- NOTES:
1. ECBXT diffuser boxes Tested with all valves fully open.
  2. Pt = Total Pressure is the sum of static pressure and velocity pressure.
  3. Ak is the effective area of the diffuser face.
  4. Tests conducted in accordance with ASHRAE 70-1991.