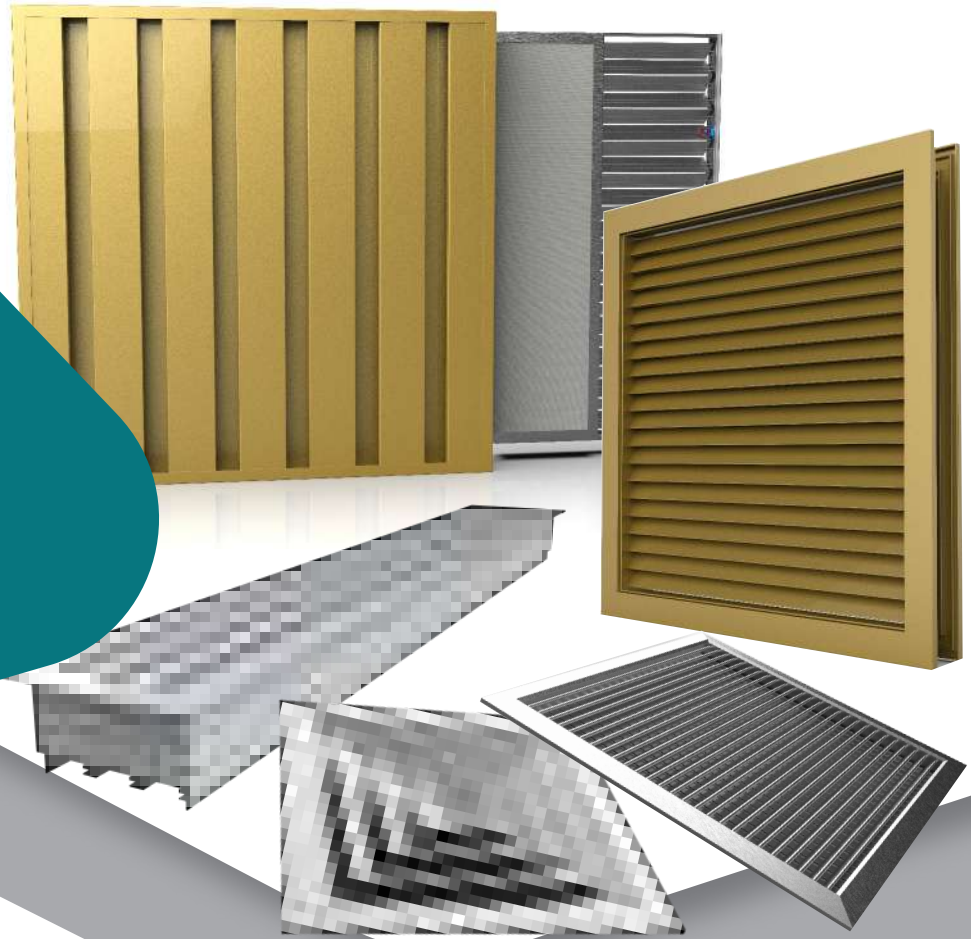




CASTLE
ENGINEERING
INDUSTRIES



AIR OUTLETS

AIR OUTLETS

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Ceiling Diffuser

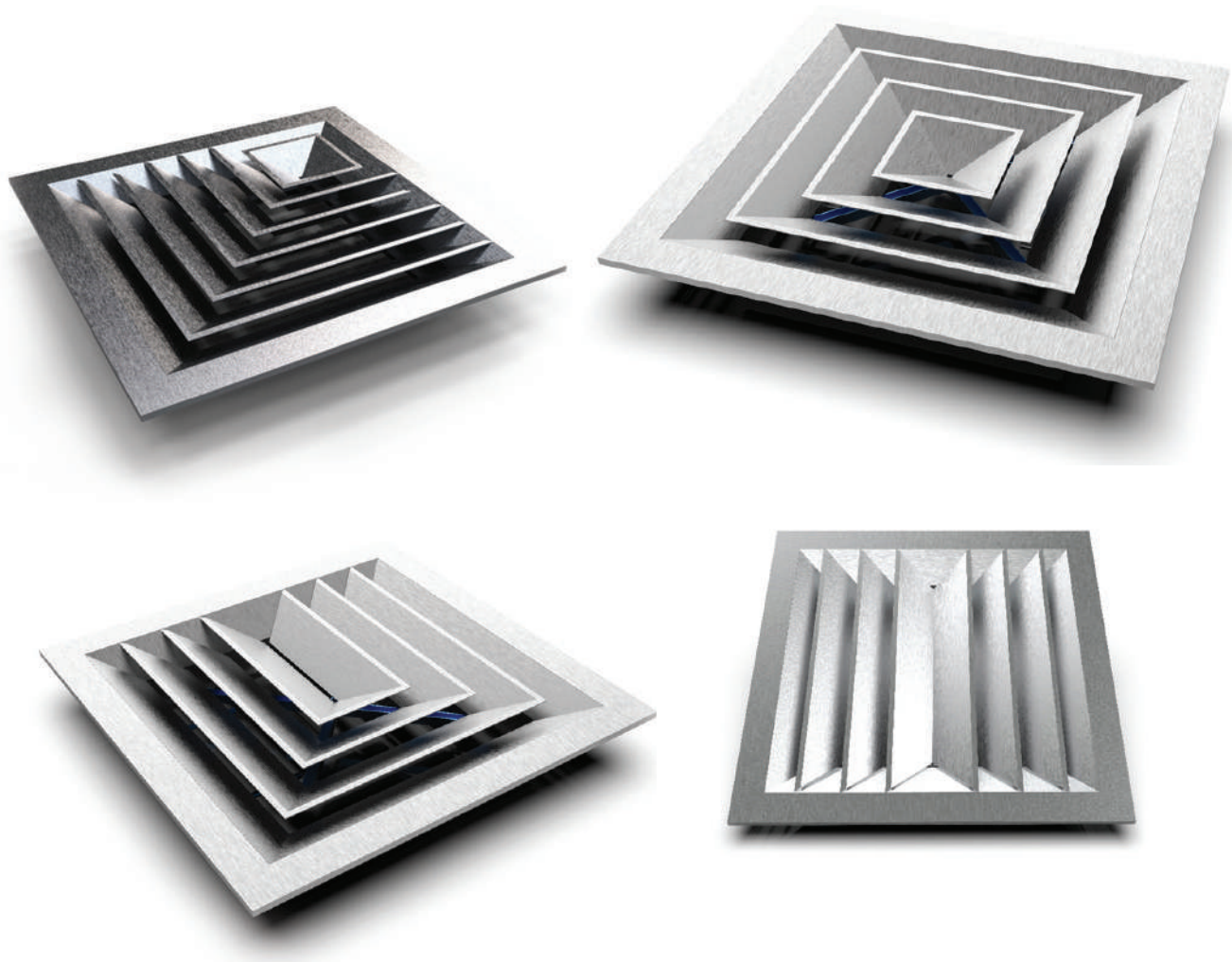
Chapter 1

Table Of Content:

- Description
- Standard Construction
- Dimensions
- Performance Data
- Accessories
- Installation Details

Description:

SCD type ceiling diffusers are crafted to accommodate a broad range of airflow and uphold superior air diffusion in occupied spaces. This series serves for supply, return, and exhaust air applications. Due to their horizontal discharge near the ceiling, they swiftly blend the warmest air in the room with the cooler primary air above the occupied zone. Consequently, these outlets excel in handling substantial air quantities with high temperature differentials. They boast an aesthetically pleasing design that seamlessly complements diverse ceiling types, harmonizing with architectural aesthetics.



Standard Construction:

Materials:

The frame and blades of the ceiling diffusers are constructed from extruded aluminium alloy profiles.

The inner core of the SCD type diffuser is fully detachable, facilitating easy installation into the plenum box. One side features a short aluminium pin secured in the hole on the frame, while the other side incorporates a long aluminium pin with a spring for adjustable removal of the inner core.

Damper:

The frame and blades are crafted from extruded aluminium alloy profiles. If a volume control damper is needed, it can be effortlessly attached to the top side of the diffuser using locking clips. Adjusting the damper blades and controlling the air volume is easily achieved by turning a screwdriver on the face of the diffuser.

Finish:

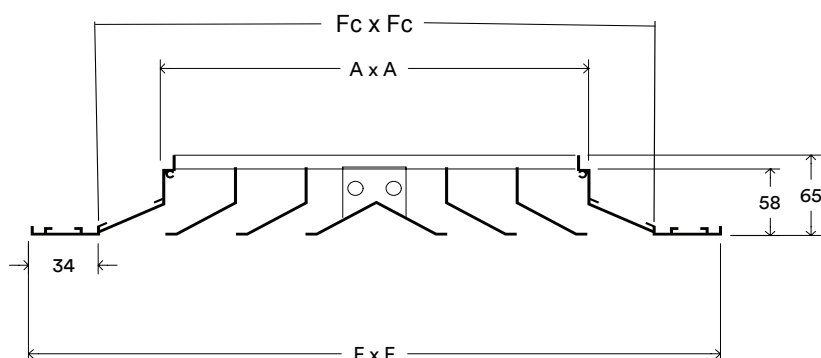
The standard coating finish is polyester powder coating in white colour RAL 9010 (Code: Z0). The volume control damper is coated with polyester powder in black colour.

Optional Finishes:

- Natural anodized aluminium finish, Code: Z1.
- Powder coating can be customized to any colour upon request, specified by Code: Z2



Dimensions:



Standard Dimensions:

(N) NOMINAL/LISTED SIZE		(A) ACTUAL NECK SIZE	(F) OUTER FRAME SIZE	(Fc) FALSE CEILING OPENING
mm	Inch	mm	mm	mm
150 x 150	6" x 6"	135 x 135	297 x 297	233 X 233
200 x 200	8" x 8"	185 x 185	347 x 347	283 x 283
225 x 225	9" x 9"	210 x 210	372 x 372	308 X 308
300 x 300	1 2" x 1 2"	285 x 285	447 x 447	383 X 383
375 x 375	1 5" x 1 5"	360 x 360	522 x 522	458 X 458
450 x 450	1 8" x 1 8"	435 x 435	597 x 597	533 X 533
500 x 500	20" x 20"	485 x 485	647 x 647	583 x 583
525 x 525	2 1" x 2 1"	510 x 510	672 x 672	608 X 608
600 x 600	24" x 24"	585 X 585	747 x 747	683 x 683

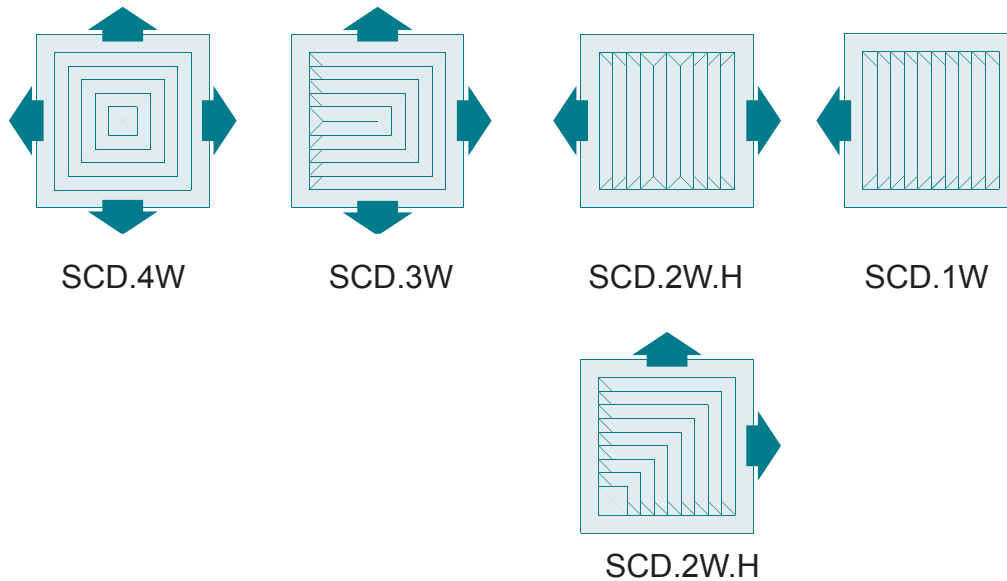
Selection procedures

- Recommended limit of air flow rate for each diffuser direction according to ceiling height (table 2).
- Note noise level from performance data diagrams and check the same with noise level recommendations table.
- Determine the total pressure drop from performance data

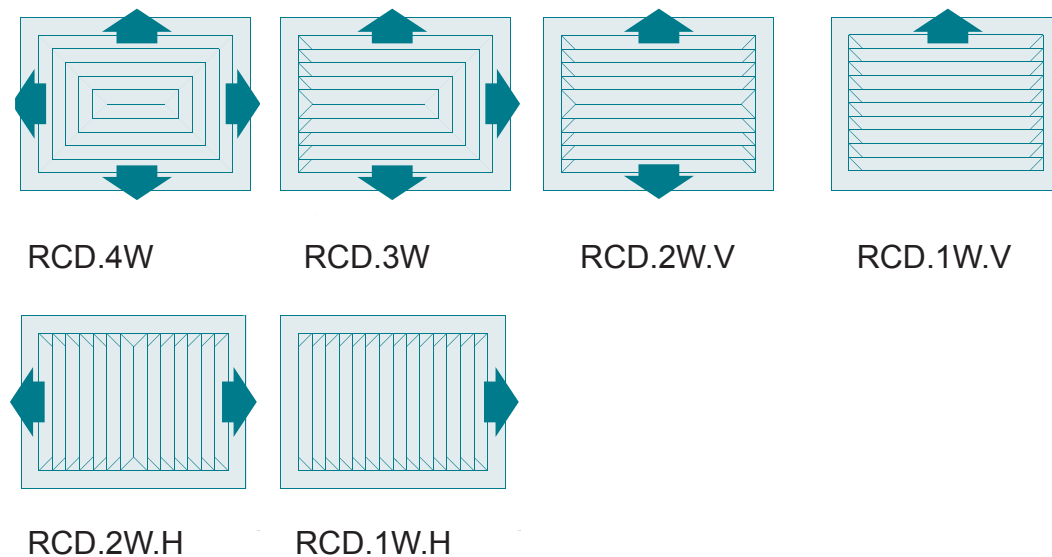
Ceiling Height (m)	Max. Flow Rate For each Diffuser Direction (L/s)	Max. Cooling Differential AT (°C)
2.5	100	11
3.0	200	13
3.5	350	15
4.0	500	16

DIFFERENT CORE PATTERN ARRANGEMENTS FOR BOTH SQUARE & RECTANGULAR DIFFUSERS

SQUARE DIFFUSERS MODELS:



RECTANGULAR DIFFUSERS MODELS:



- If the Ceiling Diffuser with Volume Control Damper you should put (S) before the model
- If the Ceiling Diffuser with Plenum Box you should put (P) After the model

Performance Data:

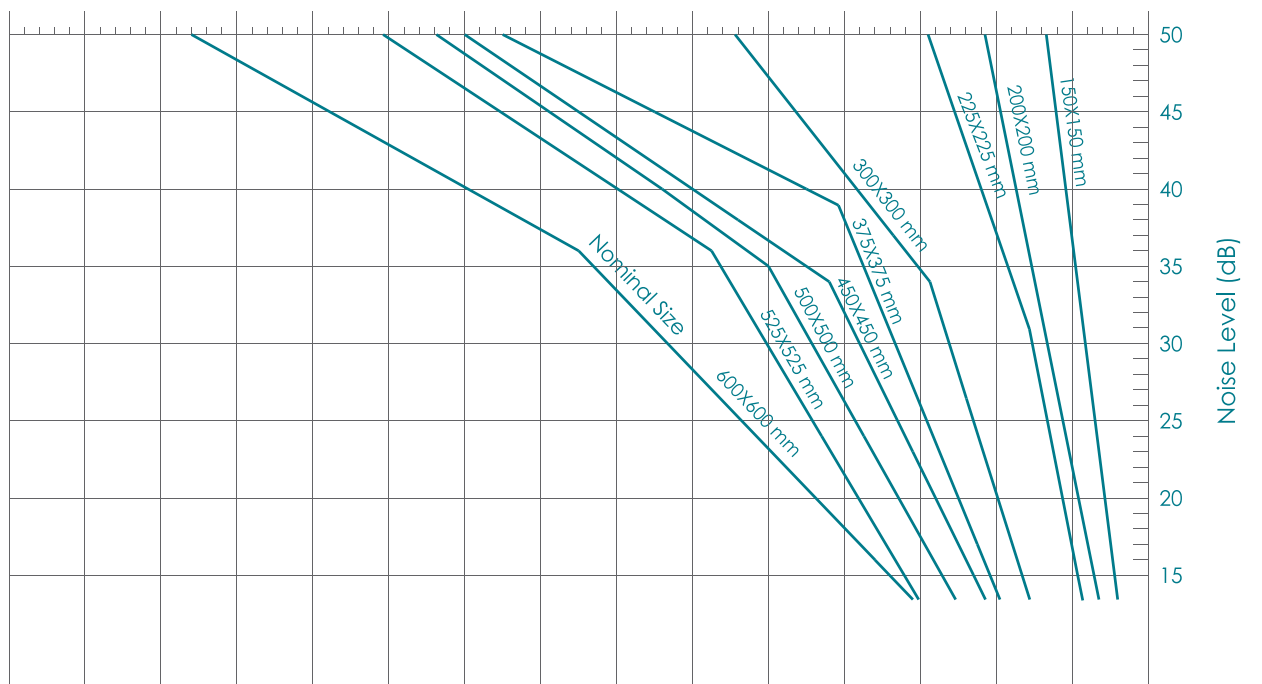
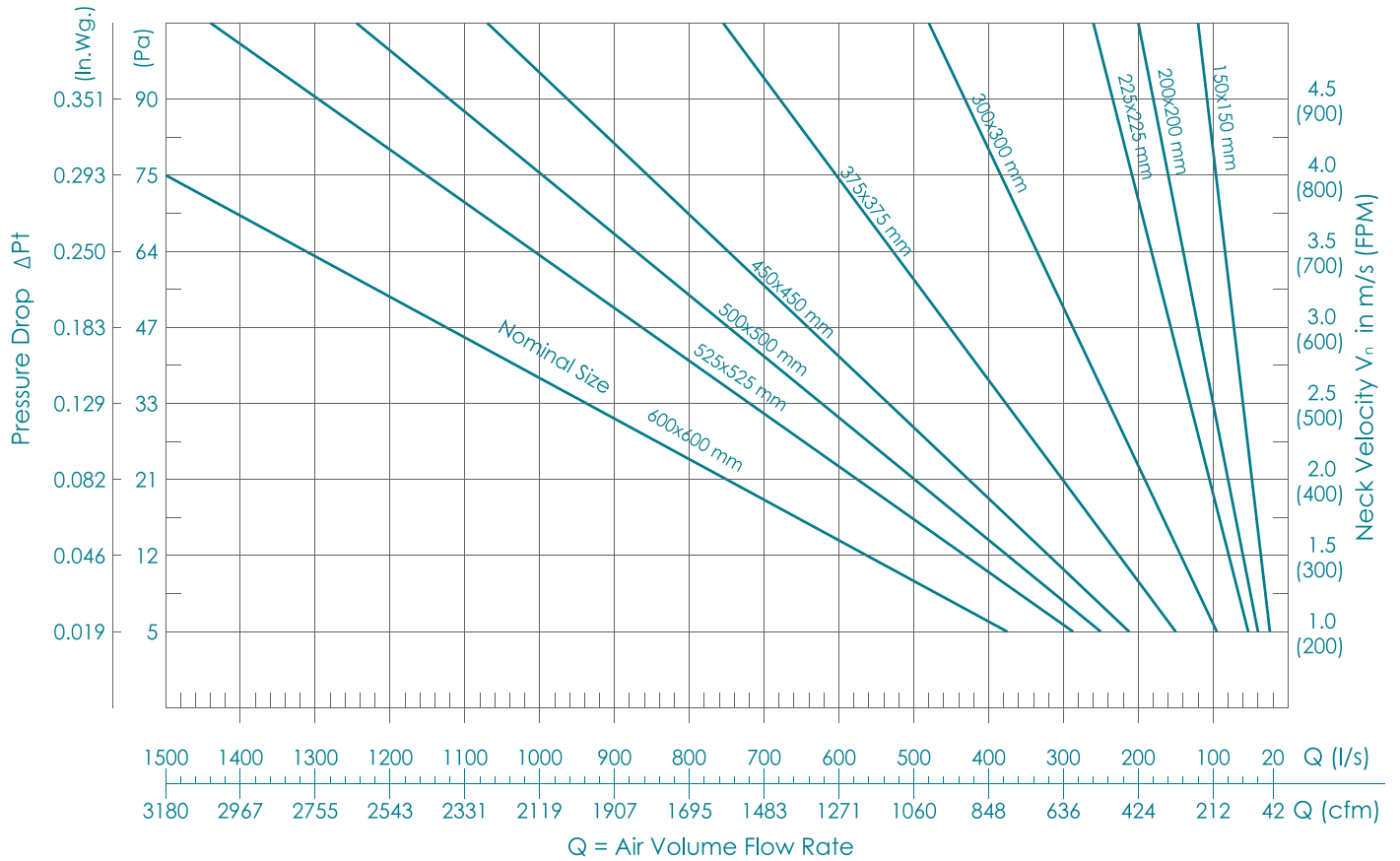
Effective Area Values for Square Ceiling Diffusers in (m²) Damper at fully open position

SIZE		1 Discharge-Way		2 Discharge-Way		3 Discharge-Way		4 Discharge-Way	
mm	Inch	Supply	Return	Supply	Return	Supply	Return	Supply	Return
150X150	6" x 6"	0.007	0.007	0.006	0.006	0.006	0.006	0.007	0.007
200X200	8" x 8"	-	-	-	-	0.011	0.010	0.013	0.011
225X225	9" x 9"	0.017	0.015	0.015	0.013	0.015	0.013	0.017	0.015
300X300	12" x 12"	0.032	0.026	0.030	0.024	0.030	0.024	0.032	0.026
375X375	15" x 15"	0.050	0.039	0.048	0.037	0.048	0.037	0.050	0.039
450X450	18" x 18"	0.074	0.055	0.071	0.053	0.071	0.053	0.074	0.055
500X500	20" x 20"	-	-	-	-	0.079	0.068	0.089	0.070
525X525	21" x 21"	0.102	0.074	0.099	0.072	0.099	0.072	0.102	0.074
600X600	24" x 24"	0.135	0.095	0.131	0.092	0.131	0.092	0.135	0.095

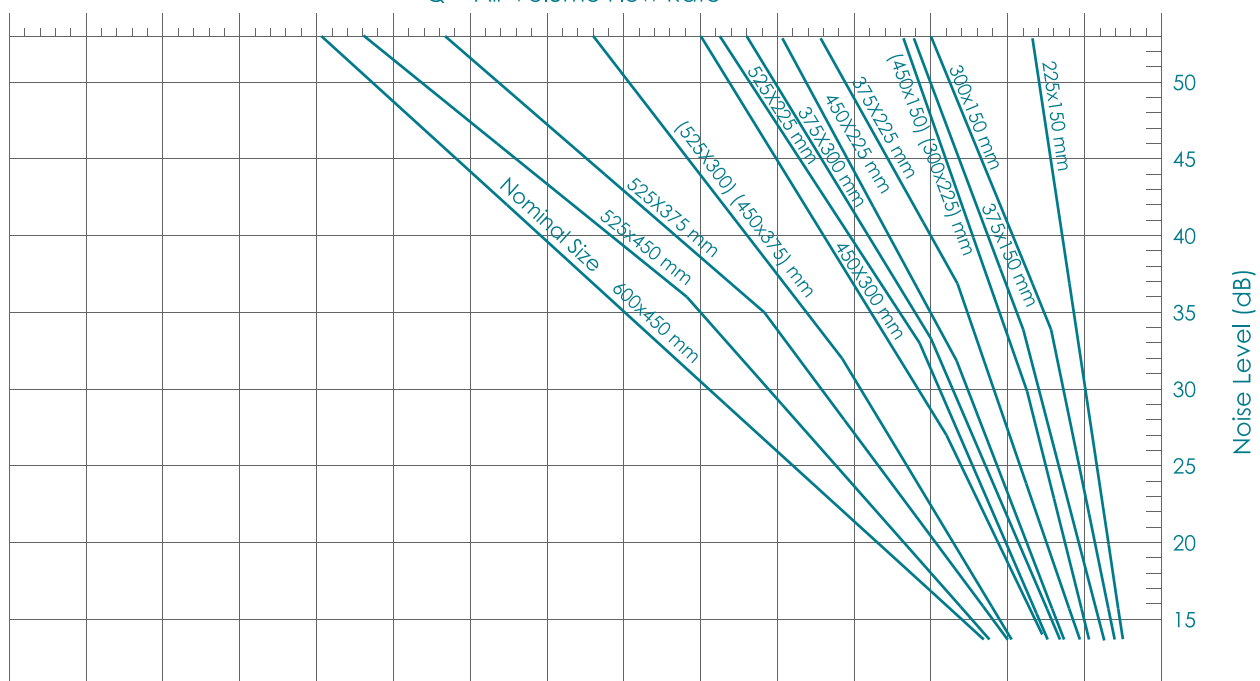
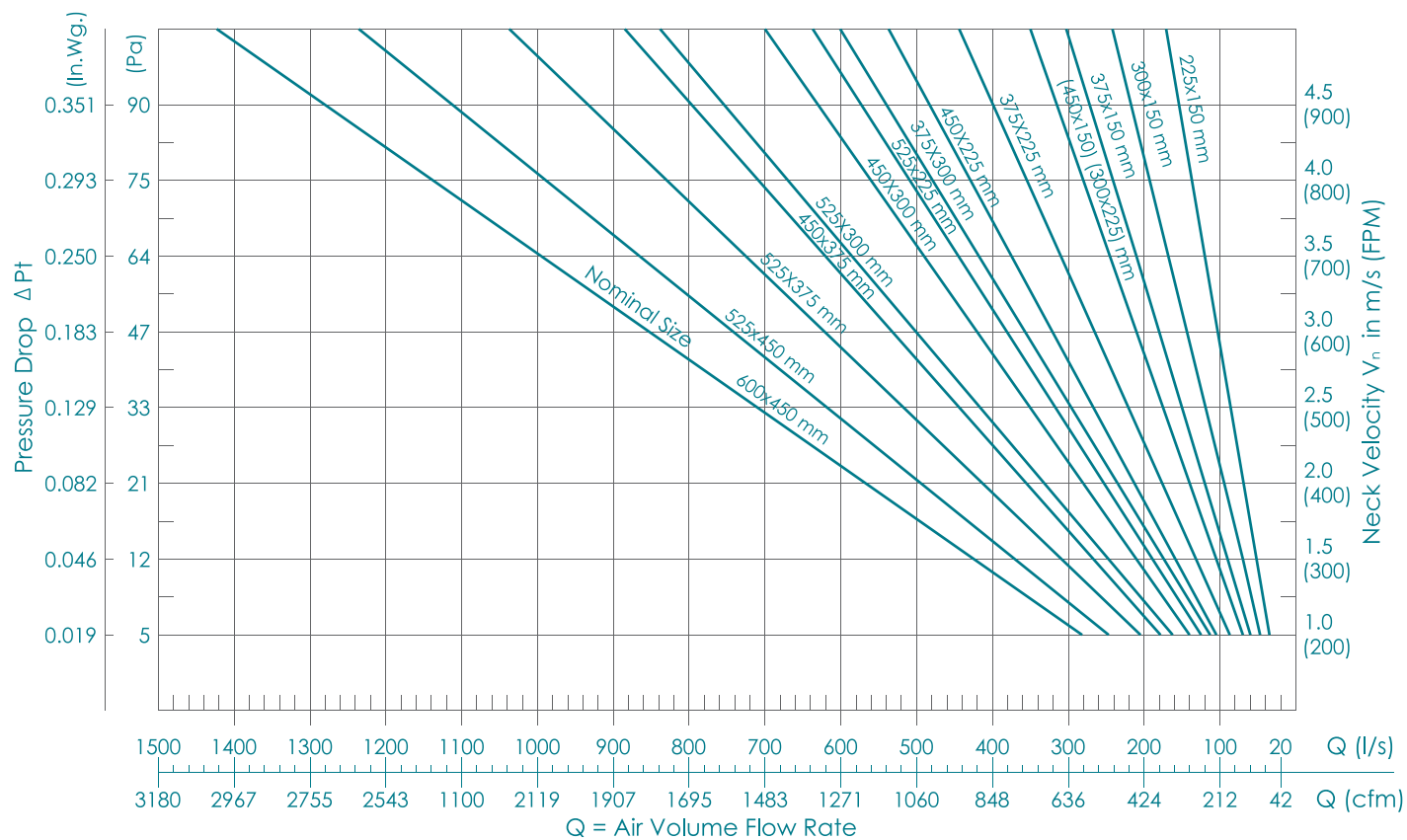
Effective Area Values for Rectangular Ceiling Diffusers in (m²) damper at fully open position

SIZE		1 Discharge-Way		2 Discharge-Way		3 Discharge-Way		4 Discharge-Way	
mm	Inch	Supply	Return	Supply	Return	Supply	Return	Supply	Return
225X150	9" x 6"	0.010	0.009	0.010	0.009	0.009	0.008	0.009	0.008
300X150	12" x 6"	0.014	0.010	0.014	0.010	0.011	0.010	0.011	0.010
300X225	12" x 9"	0.022	0.019	0.022	0.019	0.012	0.011	0.020	0.017
375X150	15" x 6"	0.018	0.015	0.018	0.015	-	-	0.016	0.014
375X225	15" x 9"	0.028	0.023	0.028	0.023	0.026	0.021	0.026	0.021
375X300	15" x 12"	0.039	0.030	0.039	0.030	0.037	0.029	-	-
450X150	18" x 6"	0.022	0.019	0.022	0.019	-	-	0.020	0.017
450X225	18" x 9"	0.034	0.026	0.034	0.026	0.031	0.025	0.031	0.025
450X300	18" x 12"	0.047	0.037	0.047	0.037	0.044	0.035	-	-
450X375	18" x 15"	-	-	-	-	0.058	0.044	0.058	0.044
525X225	21" x 9"	0.040	0.032	0.040	0.032	0.037	0.030	-	-
525X300	21" x 12"	0.056	0.043	0.056	0.043	-	-	0.052	0.040
525X375	21" x 15"	-	-	-	-	0.068	0.051	0.068	0.051
525X450	21" x 18"	-	-	-	-	0.083	0.061	0.083	0.061
600X450	24" x 18"	-	-	-	-	0.096	0.070	0.096	0.070

Selection Diagrams for 1,2,3 & 4 Way Rectangular Square Ceiling Diffuser



Selection Diagrams for 1,2,3 & 4 Way Rectangular Ceiling Diffuser



Tabular Selection for 4-way square ceiling diffusers model (SCD.4W)

SIZE mm	SIZE Inch	A eff. (m ²)	Vn FPM (m/s)	200 (10)	250 (125)	300 (15)	350 (175)	400 (2.0)	450 (2.25)	500 (2.5)	550 (2.75)	600 (3.0)	650 (3.25)	700 (3.5)
150 x 150	6" x 6"	0.007 S 0.007 R	L/S (CFM) Th. (m) Noise Level	23 (48) 0.6-0.9-1.6 <15	29 (61) 0.7-1.0-2.2 <15	34 (73) 0.9-1.2-2.8 <15	40 (85) 1.0-1.3-3.1 <15	46 (97) 1.1-1.5-3.5 16	51 (109) 1.2-1.7-3.6 19	57 (121) 1.4-2.1-3.8 21	63 (133) 1.5-2.4-4.0 24	69 (145) 1.7-2.9-4.3 26	74 (157) 1.9-3.1-4.4 28	80 (170) 2.3-3.5-4.6 31
200 x 200	8" x 8"	0.013 S 0.011 R	L/S (CFM) Th. (m) Noise Level	41 (86) 0.8-1.3-2.2 <15	51 (108) 0.9-1.4-2.4 <15	61 (129) 1.0-1.5-2.6 <15	71 (151) 1.2-1.6-3.2 15	81 (172) 1.5-1.8-3.8 17	91 (194) 1.6-2.0-4.0 20	102 (215) 1.7-2.1-4.4 22	112 (237) 1.8-2.4-4.6 25	122 (258) 1.9-2.8-5.0 27	132 (280) 2.1-3.1-5.1 29	142 (301) 2.4-3.6-5.2 32
225 x 225	9" x 9"	0.017 S 0.015 R	L/S (CFM) Th. (m) Noise Level	51 (109) 0.7-1.7-3.2 <15	64 (136) 0.9-1.8-3.4 <15	77 (163) 1.3-1.9-3.6 <15	90 (191) 1.5-2.0-4.0 15	103 (218) 1.7-2.2-4.5 18	116 (245) 1.8-2.3-4.6 21	129 (272) 1.9-2.4-4.7 24	141 (300) 2.0-2.9-5.0 28	154 (327) 2.2-3.6-5.3 31	167 (354) 2.4-3.8-5.4 33	180 (381) 2.9-4.2-5.6 35
300 x 300	12"x12"	0.032 S 0.026 R	L/S (CFM) Th. (m) Noise Level	91 (194) 1.1-1.7-3.3 <15	114 (242) 1.4-2.0-3.8 <15	137 (291) 1.7-2.3-4.5 <15	160 (339) 1.8-2.4-4.6 15	183 (388) 2.0-2.5-4.8 19	206 (436) 2.2-3.0-5.1 23	229 (484) 2.4-3.7-5.5 27	251 (533) 2.7-4.0-5.7 30	274 (581) 3.2-4.4-6.0 34	297 (630) 3.4-4.5-6.4 36	320 (678) 3.6-4.7-6.6 37
375 x 375	15"x15"	0.050 S 0.039 R	L/S (CFM) Th. (m) Noise Level	143 (303) 1.5-2.0-3.8 <15	179 (378) 1.7-2.4-4.2 <15	214 (454) 2.0-2.8-4.7 17	250 (530) 2.2-3.2-5.1 22	286 (605) 2.5-3.9-5.6 26	321 (681) 2.9-4.0-5.8 31	357 (757) 3.1-4.3-6.1 35	393 (832) 3.5-4.5-6.4 39	429 (908) 3.9-4.8-6.8 40	464 (984) 4.2-5.1-7.1 41	500 (1095) 4.5-5.3-7.5 42
450 x 450	18"x18"	0.074 S 0.055 R	L/S (CFM) Th. (m) Noise Level	206 (436) 1.7-2.3-4.5 <15	257 (545) 1.9-2.8-4.9 19	309 (654) 2.2-3.5-5.4 24	360 (763) 2.6-4.0-5.7 29	411 (872) 3.2-4.5-6.3 33	463 (981) 3.4-4.6-6.5 34	514 (1090) 3.7-4.8-6.7 38	566 (1199) 4.0-5.1-7.1 40	617 (1308) 4.4-5.4-7.5 41	669 (1417) 4.5-5.5-7.7 43	720 (1526) 4.7-5.6-8.0 45
500 x 500	20"x20"	0.089 S 0.070 R	L/S (CFM) Th. (m) Noise Level	254 (538) 1.8-2.4-4.8 <15	318 (673) 2.1-2.5-5.2 19	381 (807) 2.4-2.6-5.6 24	445 (942) 2.7-2.8-5.8 29	508 (1077) 3.3-3.4-6.2 35	572 (1211) 3.5-4.7-6.6 37	635 (1346) 3.9-5.0-6.9 39	699 (1480) 4.2-5.2-7.3 41	762 (1615) 4.5-5.5-7.7 44	826 (1749) 4.6-5.7-7.9 46	889 (1884) 4.9-6.0-8.3 49
525 x 525	21"x21"	0.102 S 0.074 R	L/S (CFM) Th. (m) Noise Level	281 (595) 1.9-2.9-4.8 <15	351 (744) 2.3-3.2-5.2 20	421 (893) 2.8-3.6-5.6 24	492 (1042) 3.1-4.0-6.0 30	562 (1191) 3.6-4.7-6.5 36	632 (1339) 3.9-4.9-6.7 38	702 (1488) 4.3-5.2-7.2 41	773 (1637) 4.5-5.4-7.5 43	843 (1786) 4.7-5.6-8.0 45	913 (1935) 4.8-5.9-8.3 48	983 (2084) 5.1-6.3-8.7 50
600 x 600	24"x24"	0.135 S 0.095 R	L/S (CFM) Th. (m) Noise Level	366 (775) 2.3-3.2-5.0 17	457 (969) 2.6-3.8-5.9 22	549 (1163) 3.3-4.5-6.3 27	640 (1356) 3.6-4.7-6.6 31	732 (1550) 4.2-5.1-7.2 36	823 (1744) 4.4-5.3-7.3 39	914 (1938) 4.6-5.5-7.6 41	1006 (2131) 4.8-5.7-8.0 44	1097 (2325) 5.0-5.9-8.7 46	1189 (2519) 5.1-6.2-9.1 49	1280 (2713) 5.3-6.6-9.5 52

Correction Multipliers and Values:

Damper Opening Position	Noise Level (Additional)	Pressure Drop ΔP_t (Multiplier)
25 % open	+ 10 dB	x 2.4
50 % open	+ 5 dB	x 1.4
100 % open	+ 0 dB	x 1.0

Noise level values are based on 10 dB room attenuation

S: Supply Air (Damper is fully open).

R: Return Air.

A eff: Effective Area.

Vn: Neck Velocity.

Pt: Total Pressure Drop.

TH: Throw distance measured at Terminal Velocity $V_t = 0.75, 0.50$ & 0.25 m/s respectively

Tabular Selection for 3-way square ceiling diffusers model (SCD.3W)

SIZE mm	SIZE Inch	A eff. (m ²)	Vn FPM (m/s) ΔP Inwg (Pa)	200 (10) 0.019 (5)	250 (125) 0.031 (8)	300 (15) 0.047 (12)	350 (175) 0.063 (16)	400 (2.0) 0.082 (21)	450 (2.25) 0.094 (24)	500 (2.5) 0.129 (33)	550 (2.75) 0.141 (36)	600 (3.0) 0.184 (47)	650 (3.25) 0.207 (53)	700 (3.5) 0.250 (64)
150 x 150	6" x 6"	0.006 S 0.006 R	L/S (CFM) Thx (m) Thy (m) Noise Level	24 (51) 0.7-1.0-1.6 0.8-1.1-2.3 <15	30 (64) 0.9-1.1-2.2 1.0-1.4-2.6 <15	38 (81) 1.1-1.2-2.9 1.2-1.8-3.2 <15	40 (85) 1.2-1.4-3.2 1.3-2.0-3.5 <15	48 (102) 1.3-1.6-3.6 1.5-2.3-3.8 16	54 (114) 1.4-1.8-3.8 1.6-2.5-4.1 19	60 (127) 1.6-2.1-4.0 1.7-2.8-4.5 21	66 (140) 1.7-2.5-4.2 1.9-3.0-4.6 24	72 (153) 1.8-2.7-4.5 2.2-3.2-4.8 26	78 (165) 2.0-3.0-4.6 2.3-3.4-4.9 28	84 (178) 2.3-3.3-4.8 2.5-3.6-5.0 31
200 x 200	8" x 8"	0.011 S 0.010 R	L/S (CFM) Thx (m) Thy (m) Noise Level	40 (85) 0.8-1.2-2.2 0.9-1.3-2.7 <15	50 (106) 1.0-1.4-2.4 1.1-1.6-3.0 <15	60 (127) 1.2-1.6-2.7 1.3-2.1-3.4 <15	70 (148) 1.3-1.7-3.3 1.5-2.3-3.7 15	80 (169) 1.4-1.9-3.9 1.7-2.6-4.2 17	90 (191) 1.5-2.1-4.2 1.9-2.7-4.5 20	100 (212) 1.7-2.3-4.5 2.0-2.9-5.1 22	110 (233) 1.8-2.6-4.7 2.2-3.1-5.3 25	120 (254) 2.0-2.8-4.9 2.4-3.4-5.5 27	130 (275) 2.2-3.2-5.0 2.5-3.5-5.7 29	140 (297) 2.4-3.4-5.2 2.6-3.7-6.0 32
225 x 225	9" x 9"	0.015 S 0.013 R	L/S (CFM) Thx (m) Thy (m) Noise Level	53 (112) 0.9-1.3-2.4 1.1-1.4-2.8 <15	68 (144) 1.1-1.5-2.9 1.2-1.7-3.5 <15	80 (170) 1.3-1.7-3.6 1.4-2.3-4.1 <15	92 (195) 1.5-1.9-4.0 1.7-2.6-4.5 15	105 (222) 1.7-2.2-4.4 2.0-3.0-4.9 18	118 (250) 1.8-2.4-4.7 2.1-3.2-5.1 21	130 (275) 1.9-2.5-5.0 2.3-3.5-5.3 24	143 (303) 2.2-3.1-5.1 2.6-4.0-5.7 28	160 (339) 2.4-3.7-5.3 2.9-4.4-6.2 31	170 (360) 2.6-3.9-5.5 3.5-4.8-6.6 33	185 (392) 2.9-4.2-5.7 4.2-5.1-7.2 35
300 x 300	12"x12"	0.030 S 0.024 R	L/S (CFM) Thx (m) Thy (m) Noise Level	95 (201) 1.2-1.5-3.1 1.3-1.8-3.7 <15	120 (254) 1.3-2.0-3.6 1.5-2.1-4.0 <15	140 (297) 1.6-2.5-4.5 2.1-2.4-4.7 <15	168 (356) 1.8-2.8-4.7 2.3-3.2-5.2 15	190 (402) 2.1-3.3-5.1 2.6-4.0-5.8 19	218 (462) 2.3-3.6-5.3 2.9-4.2-6.0 23	240 (509) 2.6-3.9-5.6 3.3-4.5-6.3 27	263 (557) 2.9-4.2-5.8 3.5-4.6-6.4 30	285 (604) 3.3-4.5-6.1 3.8-4.9-7.0 34	312 (661) 3.4-4.6-6.3 4.0-4.9-7.0 36	338 (716) 3.5-4.8-6.6 4.4-5.3-7.4 37
375 x 375	15"x15"	0.048 S 0.037 R	L/S (CFM) Thx (m) Thy (m) Noise Level	150 (317) 1.5-1.8-3.7 1.5-2.4-4.3 <15	188 (398) 1.7-2.2-4.2 2.0-3.1-4.7 <15	225 (477) 2.1-3.1-5.0 2.5-3.7-5.4 17	265 (562) 2.3-3.5-5.3 2.9-4.1-6.0 22	300 (636) 2.6-4.0-5.7 3.4-4.5-6.6 26	340 (720) 2.9-4.2-6.0 3.7-4.7-6.8 31	375 (795) 3.2-4.5-6.3 4.2-5.0-6.9 35	415 (879) 3.5-4.6-6.5 4.3-5.2-7.2 39	450 (954) 4.0-4.8-7.0 4.5-5.4-7.5 40	490 (1038) 4.2-5.2-7.2 4.6-5.5-7.7 41	528 (1119) 4.5-5.4-7.5 4.8-5.6-8.1 42
450 x 450	18"x18"	0.071 S 0.053 R	L/S (CFM) Thx (m) Thy (m) Noise Level	212 (449) 1.5-2.1-4.3 1.8-2.7-4.6 <15	268 (568) 1.8-2.7-4.6 2.4-3.4-5.2 19	320 (678) 2.3-3.6-5.3 3.0-4.1-5.9 24	373 (790) 2.7-4.0-5.6 3.4-4.4-6.4 29	425 (900) 3.4-4.4-6.3 3.9-4.8-7.0 34	480 (1017) 3.6-4.5-6.6 4.2-5.1-7.2 33	530 (1123) 3.9-4.7-6.9 4.4-5.1-7.2 38	588 (1246) 4.2-5.0-7.2 4.7-5.7-7.7 40	640 (1356) 4.5-5.4-7.5 4.8-5.9-8.1 41	695 (1473) 4.7-5.6-7.7 5.0-6.1-8.5 43	750 (1589) 4.9-5.8-8.1 5.3-6.3-9.0 45
500 x 500	20"x20"	0.079 S 0.068 R	L/S (CFM) Thx (m) Thy (m) Noise Level	250 (530) 1.7-2.6-4.5 2.0-3.3-5.1 <15	313 (663) 2.1-3.3-5.0 2.6-3.6-5.6 19	375 (795) 2.6-4.0-5.6 3.3-4.2-6.2 24	437 (926) 3.3-4.4-6.0 3.6-4.6-6.5 29	500 (1060) 3.6-4.8-6.5 4.2-5.3-7.1 35	560 (1187) 4.1-5.0-6.8 4.3-5.5-7.4 37	625 (1324) 4.2-5.1-7.1 4.6-5.7-7.8 39	685 (1452) 4.4-5.3-7.4 4.8-5.9-8.2 41	742 (1572) 4.6-5.5-7.8 5.1-6.0-8.5 44	810 (1716) 4.8-5.7-8.1 5.3-6.3-9.0 46	875 (1854) 5.0-6.0-8.4 5.6-6.6-9.5 49
525 x 525	21"x21"	0.099 S 0.072 R	L/S (CFM) Thx (m) Thy (m) Noise Level	287 (608) 2.0-2.8-4.8 2.3-3.5-5.4 <15	360 (762) 2.5-3.5-5.2 2.9-4.0-5.9 20	430 (911) 3.0-4.2-5.8 3.6-4.5-6.5 24	505 (1070) 3.4-4.5-6.2 4.0-5.0-6.8 30	575 (1218) 3.7-4.9-6.6 4.5-5.5-7.2 36	645 (1367) 4.0-5.1-7.0 4.6-5.7-7.6 38	720 (1526) 4.4-5.3-7.4 4.8-5.9-8.1 41	792 (1678) 4.6-5.5-7.7 5.1-6.1-8.5 43	860 (1822) 4.8-5.8-8.2 5.4-6.4-9.0 45	915 (1940) 5.0-6.0-8.5 5.5-6.7-9.4 48	1000 (2119) 5.2-6.3-8.7 5.7-7.0-9.8 50
600 x 600	24"x24"	0.131 S 0.092 R	L/S (CFM) Thx (m) Thy (m) Noise Level	375 (795) 2.4-3.3-5.2 2.6-4.0-6.0 17	470 (996) 2.8-3.8-5.6 3.2-4.2-6.5 22	560 (1187) 3.4-4.5-6.3 3.8-4.7-7.1 27	658 (1394) 3.7-4.8-6.8 4.1-5.1-7.5 31	750 (1589) 4.2-5.1-7.2 4.6-5.7-8.0 36	843 (1786) 4.4-5.3-7.5 4.7-6.0-8.3 39	940 (1992) 4.7-5.7-7.8 5.1-6.3-8.7 41	1031 (2185) 4.9-5.9-8.2 5.3-6.5-9.2 44	1120 (2373) 5.0-6.2-8.7 5.7-7.0-9.8 46	1220 (2585) 5.2-6.3-9.0 5.9-7.1-10.1 49	1312 (2780) 5.5-6.5-9.4 6.0-7.2-10.5 52

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

Tabular Selection for 2-way square ceiling diffusers model (SCD.2W)

SIZE mm	SIZE Inch	A eff. (m ²)	Vn FPM (m/s) ΔP Inwg (Pa)	200 (10) 0.019 (5)	250 (125) 0.031 (8)	300 (15) 0.047 (12)	350 (175) 0.063 (16)	400 (2.0) 0.082 (21)	450 (2.25) 0.094 (24)	500 (2.5) 0.129 (33)	550 (2.75) 0.141 (36)	600 (3.0) 0.184 (47)	650 (3.25) 0.207 (53)	700 (3.5) 0.250 (64)
150 x 150	6" x 6"	0.006 S 0.006 R	L/S (CFM) Th. (m) Noise Level	24 (51) 0.8-1.0-2.5 <15	30 (64) 1.0-1.4-2.9 <15	38 (81) 1.2-2.0-3.5 <15	40 (85) 1.5-2.3-3.9 <15	48 (102) 1.8-2.6-4.3 16	54 (114) 2.2-3.0-4.0 19	60 (127) 2.4-3.3-4.4 21	66 (140) 2.6-3.5-4.7 24	72 (153) 2.8-3.7-5.1 26	78 (153) 3.1-3.8-5.4 28	84 (178) 3.4-3.9-5.8 31
225 x 225	9" x 9"	0.015 S 0.013 R	L/S (CFM) Th. (m) Noise Level	53 (112) 1.0-1.7-3.3 <15	68 (144) 1.3-2.1-3.8 <15	80 (170) 1.6-2.6-4.5 <15	92 (195) 1.9-2.9-4.7 15	105 (222) 2.3-3.3-5.1 18	118 (250) 2.6-3.7-5.4 21	130 (275) 2.9-4.2-5.7 24	143 (303) 3.1-4.3-6.0 28	160 (339) 3.3-4.5-6.3 31	170 (360) 3.5-4.6-6.5 33	185 (392) 3.9-4.8-6.9 35
300 x 300	12"x12"	0.030 S 0.024 R	L/S (CFM) Th. (m) Noise Level	95 (201) 1.7-2.3-4.2 <15	120 (254) 2.0-2.6-4.5 <15	140 (297) 2.3-3.3-5.2 <15	168 (356) 2.6-3.7-5.6 15	190 (402) 3.1-4.2-6.0 19	218 (462) 3.4-4.5-6.3 23	240 (509) 3.7-4.9-6.6 27	263 (557) 3.9-5.0-6.9 30	285 (604) 4.2-5.1-7.3 34	312 (661) 4.3-5.5-7.6 36	338 (716) 4.5-5.9-7.9 37
375 x 375	15"x15"	0.048 S 0.037 R	L/S (CFM) Th. (m) Noise Level	150 (317) 2.0-2.8-4.7 <15	188 (398) 2.7-3.5-5.2 <15	225 (477) 3.0-4.2-5.7 17	265 (562) 3.5-4.5-6.1 22	300 (636) 4.0-4.8-6.6 26	340 (720) 4.2-5.2-7.0 31	375 (795) 4.5-5.5-7.5 35	415 (879) 4.6-5.4-7.7 39	450 (954) 4.8-5.9-8.1 40	490 (1038) 4.9-6.1-8.4 41	528 (1119) 5.1-6.3-8.7 42
450 x 450	18"x18"	0.071 S 0.053 R	L/S (CFM) Th. (m) Noise Level	212 (449) 2.3-3.4-5.1 <15	268 (568) 2.9-3.8-5.6 19	320 (678) 3.3-4.4-6.3 24	373 (790) 3.7-4.7-6.7 29	425 (900) 4.2-5.1-7.2 34	480 (1017) 4.5-5.4-7.8 33	530 (1123) 4.8-5.7-8.1 38	588 (1246) 4.9-6.0-8.3 40	640 (1356) 5.1-6.3-8.6 41	695 (1473) 5.4-6.6-9.2 43	750 (1589) 5.7-6.9-9.8 45
525 x 525	21"x21"	0.099 S 0.072 R	L/S (CFM) Th. (m) Noise Level	287 (608) 2.7-3.8-5.7 <15	360 (762) 3.2-4.2-6.3 20	430 (911) 3.8-4.7-6.9 24	505 (1070) 4.3-5.2-7.4 30	575 (1218) 4.8-5.7-7.9 36	645 (1367) 4.9-5.9-8.0 38	720 (1526) 5.0-6.0-8.3 41	792 (1678) 5.1-6.2-8.5 43	860 (1822) 5.2-6.4-8.7 45	915 (1940) 5.6-6.9-9.5 48	1000 (2119) 6.0-7.5-10.3 50
600 x 600	24"x24"	0.131 S 0.092 R	L/S (CFM) Th. (m) Noise Level	375 (795) 2.8-4.1-6.0 17	470 (996) 3.5-4.6-6.5 22	560 (1187) 4.3-5.1-7.1 27	658 (1394) 4.6-5.5-7.6 31	750 (1589) 5.1-6.0-8.5 36	843 (1786) 5.3-6.3-9.1 39	940 (1992) 5.5-6.6-9.5 41	1031 (2185) 5.7-6.8-10.2 44	1120 (2373) 6.0-7.3-10.4 46	1220 (2585) 6.3-7.6-10.8 49	1312 (2780) 6.6-7.9-11.3 52

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

Tabular Selection for 1-way square ceiling diffusers model (SCD.1W)

SIZE mm	SIZE Inch	A eff. (m ²)	Vn FPM (m/s) ΔPt Inwg (Pa)	200 (10) 0.019 (5)	250 (125) 0.031 (8)	300 (15) 0.047 (12)	350 (175) 0.063 (16)	400 (2.0) 0.082 (21)	450 (2.25) 0.094 (24)	500 (2.5) 0.129 (33)	550 (2.75) 0.141 (36)	600 (3.0) 0.184 (47)	650 (3.25) 0.207 (53)	700 (3.5) 0.250 (64)
150 x 150	6" x 6"	0.007 S 0.007 R	L/S (CFM) Th. (m) Noise Level	24 (51) 1.3-1.7-3.7 <15	30 (64) 1.4-2.2-4.1 <15	38 (81) 1.6-2.8-4.3 <15	40 (85) 1.8-2.9-4.5 <15	48 (102) 2.8-3.6-4.9 16	54 (114) 3.0-3.8-5.3 19	60 (127) 3.2-4.0-5.7 21	66 (140) 3.4-4.3-6.1 24	72 (153) 3.6-4.5-6.4 26	78 (153) 3.8-4.7-6.6 28	84 (178) 3.9-4.8-6.8 31
225 x 225	9" x 9"	0.017 S 0.015 R	L/S (CFM) Th. (m) Noise Level	53 (112) 1.8-2.3-4.6 <15	68 (144) 2.1-2.8-4.8 <15	80 (170) 2.2-3.4-5.2 <15	92 (195) 2.3-3.7-5.5 15	105 (222) 3.3-4.4-6.0 18	118 (250) 3.6-4.6-6.5 21	130 (275) 3.9-4.8-7.0 24	143 (303) 4.2-5.1-7.3 28	160 (339) 4.5-5.4-7.6 31	170 (360) 4.6-5.5-7.9 33	185 (392) 4.8-5.7-8.2 35
300 x 300	12"x12"	0.032 S 0.026 R	L/S (CFM) Th. (m) Noise Level	95 (201) 2.3-3.6-5.3 <15	120 (254) 2.7-3.9-5.4 <15	140 (297) 3.1-4.3-5.8 <15	168 (356) 3.3-4.5-6.2 15	190 (402) 4.4-5.1-7.0 19	218 (462) 4.6-5.4-7.3 23	240 (509) 4.8-5.7-7.8 27	263 (557) 4.9-5.9-8.3 30	285 (604) 5.1-6.0-8.8 34	312 (661) 5.3-6.4-9.1 36	338 (716) 5.5-6.6-9.5 37
375 x 375	15"x15"	0.050 S 0.039 R	L/S (CFM) Th. (m) Noise Level	150 (317) 2.6-3.9-6.0 <15	188 (398) 3.2-4.3-6.3 <15	225 (477) 3.7-4.6-6.7 17	265 (562) 3.9-4.8-6.9 22	300 (636) 4.8-5.7-7.8 26	340 (720) 5.0-6.0-8.3 31	375 (795) 5.1-6.3-8.7 35	415 (879) 5.4-6.5-9.2 39	450 (954) 5.7-7.1-9.8 40	490 (1038) 5.8-7.3-10.1 41	528 (1119) 6.0-7.5-10.5 42
450 x 450	18"x18"	0.074 S 0.055 R	L/S (CFM) Th. (m) Noise Level	212 (449) 3.3-4.5-6.3 <15	268 (568) 3.8-4.8-6.8 19	320 (678) 4.3-5.2-7.3 24	373 (790) 4.5-5.5-7.5 29	425 (900) 5.1-6.3-8.0 34	480 (1017) 5.4-6.5-8.8 33	530 (1123) 5.7-7.0-9.7 38	588 (1246) 6.0-7.3-10.3 40	640 (1356) 6.3-7.5-10.6 41	695 (1473) 6.5-7.7-11.1 43	750 (1589) 6.6-8.1-11.5 45
525 x 525	21"x21"	0.102 S 0.074 R	L/S (CFM) Th. (m) Noise Level	287 (608) 3.7-4.8-6.6 <15	360 (762) 4.1-5.1-7.0 20	430 (911) 4.6-5.5-7.4 24	505 (1070) 4.7-5.8-7.6 30	575 (1218) 5.3-6.6-9.5 36	645 (1367) 5.6-7.1-10 38	720 (1526) 6.0-7.5-10.3 41	792 (1678) 6-4-7.7-10.9 43	860 (1822) 6.7-8.1-11.5 45	915 (1940) 7.0-8.6-12 48	1000 (2119) 7.0-9.0-12.5 50
600 x 600	24"x24"	0.135 S 0.095 R	L/S (CFM) Th. (m) Noise Level	375 (795) 4.3-5.1-7.2 17	470 (996) 4.6-5.5-7.8 22	560 (1187) 4.9-6.1-8.5 27	658 (1394) 5.1-6.3-8.8 31	750 (1589) 5.7-7.3-10 36	843 (1786) 6.1-7.6-10.6 39	940 (1992) 6.7-7.8-11.3 41	1031 (2185) 6.9-8.2-11.7 44	1120 (2373) 7.2-8.7-12.2 46	1220 (2585) 7.4-9.1-12.6 49	1312 (2780) 7.6-9.5-13.1 52

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

Tabular Selection for 4-way rectangular ceiling diffusers model (RCD.4W)

SIZE	A eff. (m ²)	Vn FPM (m/s)	200 (10)	250 (125)	300 (15)	350 (175)	400 (20)	450 (225)	500 (25)	550 (275)	600 (30)	650 (325)	700 (35)
mm	Inch	ΔP _{inwg} (Pa)	0.019 (5)	0.031 (8)	0.047 (12)	0.063 (16)	0.082 (21)	0.094 (24)	0.129 (33)	0.141 (36)	0.184 (47)	0.207 (53)	0.250 (64)
225 x 150	9" x 6"	L/S (CFM) Thx (m) Thy (m) Noise Level	35 (74) 0.5-0.8-1.6 1.1-1.3-2.6 1.1-1.5-3.9 <15	43 (91) 0.7-1.0-2.2 1.2-1.5-3.9 <15	52 (110) 0.9-1.1-2.9 1.3-1.7-4.2 1.5-2.1-4.3 15	60 (127) 1.0-1.3-3.3 1.5-2.1-4.3 1.7-2.6-4.4 17	70 (148) 1.1-1.6-3.7 1.7-2.6-4.4 1.9-2.9-4.9 20	79 (167) 1.2-1.9-3.8 1.8-3.2-4.6 2.1-3.3-5.0 23	91 (193) 1.3-2.1-3.9 1.9-3.6-4.8 2.4-3.7-5.2 26	95 (201) 1.5-2.4-4.2 2.4-3.9-5.2 2.8	103 (218) 1.7-2.8-4.4 2.9-4.1-5.4 31	111 (235) 1.9-3.2-4.5 2.3-4.2-5.6 34	120 (254) 2.2-3.4-4.6 3.6-4.3-5.9 37
300 x 150	12" x 6"	L/S (CFM) Thx (m) Thy (m) Noise Level	47 (100) 0.5-0.8-1.6 1.1-1.6-2.9 1.1-1.5-3.9 <15	49 (104) 0.7-1.0-2.2 1.4-1.8-3.5 1.4-1.8-3.5 <15	70 (148) 0.9-1.1-2.9 1.6-1.9-4.3 1.6-1.9-4.3 16	82 (174) 1.0-1.3-3.3 1.7-2.4-4.5 1.7-2.4-4.5 19	95 (201) 1.1-1.6-3.7 1.9-2.9-4.9 1.9-2.9-4.9 22	105 (222) 1.2-1.9-3.8 2.1-3.3-5.0 2.1-3.3-5.0 25	120 (254) 1.3-2.1-3.9 2.4-3.7-5.2 2.8	130 (275) 1.5-2.4-4.2 2.7-3.9-5.7 31	143 (303) 1.7-2.8-4.4 3.1-4.2-6.1 34	156 (330) 1.9-3.2-4.5 3.7-4.4-6.3 36	168 (356) 2.2-3.4-4.6 4.1-4.5-6.4 37
300 x 225	12" x 9"	L/S (CFM) Thx (m) Thy (m) Noise Level	70 (148) 0.8-1.3-2.4 1.5-2.1-3.6 1.5-2.1-3.6 15	87 (184) 1.2-1.4-2.7 1.8-2.4-4.2 1.8-2.4-4.2 15	105 (222) 1.4-1.6-3.5 2.1-2.3-4.4 2.1-2.3-4.4 16	123 (261) 1.5-1.9-4.0 2.2-2.4-4.6 2.2-2.4-4.6 19	140 (297) 1.6-2.3-4.5 2.3-3.6-5.1 2.3-3.6-5.1 23	157 (333) 1.7-2.6-4.6 2.5-3.9-5.4 2.5-3.9-5.4 27	175 (371) 1.9-2.9-4.7 3.0-4.4-5.9 3.0-4.4-5.9 30	192 (407) 2.1-3.2-5.0 3.2-4.6-6.2 3.2-4.6-6.2 33	210 (445) 2.3-3.6-5.3 3.5-4.8-6.7 35	223 (473) 2.6-3.9-5.5 4.0-5.5-6.5 37	245 (519) 2.9-4.3-5.8 4.7-6.2-6.9 40
375 x 225	15" x 9"	L/S (CFM) Thx (m) Thy (m) Noise Level	87 (184) 0.8-1.3-2.4 1.6-2.2-3.7 1.6-2.2-3.7 15	110 (233) 1.2-1.4-2.7 1.8-2.4-4.2 1.8-2.4-4.2 15	131 (278) 1.4-1.6-3.5 2.2-2.6-4.8 2.2-2.6-4.8 18	156 (331) 1.5-1.9-4.0 2.3-3.1-5.0 2.3-3.1-5.0 21	177 (375) 1.6-2.3-4.5 2.4-3.7-5.3 2.4-3.7-5.3 24	199 (422) 1.7-2.6-4.6 2.7-4.0-5.6 2.7-4.0-5.6 27	220 (466) 1.9-2.9-4.7 3.0-4.4-5.9 3.0-4.4-5.9 31	243 (515) 2.1-3.2-5.0 3.2-4.6-6.2 3.2-4.6-6.2 34	265 (562) 2.3-3.6-5.3 3.5-4.8-6.7 37	287 (608) 2.6-3.9-5.5 3.9-4.9-7.0 39	310 (657) 2.9-4.3-5.8 4.3-5.1-7.3 41
450 x 225	18" x 9"	L/S (CFM) Thx (m) Thy (m) Noise Level	105 (222) 0.8-1.3-2.4 1.6-2.2-3.7 1.6-2.2-3.7 15	132 (280) 1.2-1.4-2.7 1.9-2.6-4.5 1.9-2.6-4.5 15	160 (339) 1.4-1.6-3.5 2.3-2.9-5.2 2.3-2.9-5.2 18	186 (394) 1.5-1.9-4.0 2.4-3.5-5.5 2.4-3.5-5.5 22	213 (451) 1.6-2.3-4.5 2.5-4.2-5.6 2.5-4.2-5.6 25	240 (509) 1.7-2.6-4.6 3.0-4.3-5.8 3.0-4.3-5.8 28	267 (566) 1.9-2.9-4.7 3.5-4.4-6.2 3.5-4.4-6.2 32	294 (623) 2.1-3.2-5.0 3.7-4.7-6.5 3.7-4.7-6.5 35	320 (678) 2.3-3.6-5.3 4.2-5.1-6.9 4.2-5.1-6.9 37	328 (695) 2.6-3.9-5.5 4.3-5.2-7.2 4.3-5.2-7.2 40	375 (795) 2.9-4.3-5.8 4.5-5.3-7.4 4.5-5.3-7.4 42
525 x 225	21" x 9"	L/S (CFM) Thx (m) Thy (m) Noise Level	125 (265) 0.8-1.3-2.4 1.6-2.2-3.7 1.6-2.2-3.7 15	157 (333) 1.2-1.4-2.7 1.9-2.6-4.5 1.9-2.6-4.5 15	190 (403) 1.4-1.6-3.5 2.2-2.6-4.8 2.2-2.6-4.8 19	221 (468) 1.5-1.9-4.0 2.5-3.9-5.8 2.5-3.9-5.8 22	253 (536) 1.6-2.3-4.5 3.2-4.5-6.2 3.2-4.5-6.2 26	285 (604) 1.7-2.6-4.6 3.5-4.7-6.5 3.5-4.7-6.5 29	317 (672) 1.9-2.9-4.7 3.8-5.1-6.8 3.8-5.1-6.8 33	350 (742) 2.1-3.2-5.0 4.2-5.2-7.1 4.2-5.2-7.1 35	381 (807) 2.3-3.6-5.3 4.5-5.3-7.4 4.5-5.3-7.4 38	413 (875) 2.6-3.9-5.5 4.6-5.4-7.6 4.6-5.4-7.6 40	445 (943) 2.9-4.3-5.8 4.7-5.6-8.0 4.7-5.6-8.0 43
375 x 300	15" x 12"	L/S (CFM) Thx (m) Thy (m) Noise Level	113 (239) 1.1-1.6-3.3 1.6-2.2-3.7 1.6-2.2-3.7 15	143 (303) 1.4-2.0-3.8 2.0-3.2-4.8 2.0-3.2-4.8 15	174 (369) 1.7-2.4-4.4 2.5-3.9-5.3 2.5-3.9-5.3 20	204 (432) 1.9-2.8-4.7 2.7-4.2-5.6 2.7-4.2-5.6 22	253 (536) 2.1-3.3-5.1 3.2-4.5-6.2 3.2-4.5-6.2 26	265 (562) 2.4-3.6-5.3 3.5-4.7-6.5 3.5-4.7-6.5 29	296 (627) 2.7-3.9-5.6 4.2-5.1-6.9 4.2-5.1-6.9 33	326 (691) 3.0-4.2-5.8 4.3-5.2-7.1 4.3-5.2-7.1 35	357 (756) 3.3-4.5-6.1 4.5-5.3-7.4 4.5-5.3-7.4 38	387 (820) 3.5-4.7-6.3 4.6-5.5-7.6 4.6-5.5-7.6 40	418 (886) 3.7-4.9-6.6 4.7-5.9-8.0 4.7-5.9-8.0 43
450 x 300	18" x 12"	L/S (CFM) Thx (m) Thy (m) Noise Level	140 (297) 1.1-1.6-3.3 1.6-2.2-3.7 1.6-2.2-3.7 15	175 (371) 1.4-2.0-3.8 1.9-3.0-4.8 1.9-3.0-4.8 16	210 (445) 1.7-2.4-4.4 2.5-3.5-5.3 2.5-3.5-5.3 20	245 (519) 1.9-2.8-4.7 2.7-4.0-5.6 2.7-4.0-5.6 23	280 (593) 2.1-3.3-5.1 3.2-4.5-6.0 3.2-4.5-6.0 27	315 (667) 2.4-3.6-5.3 3.5-4.6-6.4 3.5-4.6-6.4 30	350 (742) 2.7-3.9-5.6 3.9-4.8-6.9 3.9-4.8-6.9 33	385 (816) 3.0-4.2-5.8 4.2-5.1-7.2 4.2-5.1-7.2 36	420 (890) 3.3-4.5-6.1 4.5-5.3-7.4 4.5-5.3-7.4 39	455 (964) 3.5-4.7-6.3 4.6-5.5-7.7 4.6-5.5-7.7 41	490 (1038) 3.7-4.9-6.6 4.7-5.6-8.0 4.7-5.6-8.0 44
450 x 375	18" x 15"	L/S (CFM) Thx (m) Thy (m) Noise Level	178 (377) 1.4-1.9-3.9 1.8-2.3-4.4 1.8-2.3-4.4 15	222 (470) 1.7-2.4-4.4 2.0-2.9-4.9 2.0-2.9-4.9 16	265 (562) 2.1-2.9-4.9 2.3-3.5-5.4 2.3-3.5-5.4 20	310 (657) 2.3-3.4-5.2 2.6-4.0-5.7 2.6-4.0-5.7 23	355 (752) 2.5-3.9-5.6 3.2-4.5-6.0 3.2-4.5-6.0 27	400 (848) 2.9-4.1-6.0 3.5-4.6-6.4 3.5-4.6-6.4 30	445 (943) 3.3-4.3-6.5 3.9-4.8-6.8 3.9-4.8-6.8 33	487 (1032) 3.6-4.5-6.6 4.2-5.0-7.2 4.2-5.0-7.2 36	532 (1127) 3.9-4.8-6.8 4.5-5.3-7.4 4.5-5.3-7.4 39	576 (1221) 4.3-5.0-7.2 4.6-5.5-7.6 4.6-5.5-7.6 41	620 (1314) 4.7-5.3-7.6 4.8-5.7-7.8 4.8-5.7-7.8 44
525 x 375	21" x 15"	L/S (CFM) Thx (m) Thy (m) Noise Level	205 (434) 1.4-1.9-3.9 1.8-2.6-4.9 1.8-2.6-4.9 15	257 (545) 1.7-2.4-4.4 2.1-3.2-5.2 2.1-3.2-5.2 19	309 (655) 2.1-2.9-4.9 2.5-3.9-5.6 2.5-3.9-5.6 21	361 (765) 2.3-3.4-5.2 3.0-4.3-6.2 3.0-4.3-6.2 24	412 (873) 2.5-3.9-5.6 3.6-4.7-6.6 3.6-4.7-6.6 28	465 (985) 2.9-4.1-6.0 3.9-4.8-6.8 3.9-4.8-6.8 31	517 (1096) 3.3-4.3-6.5 4.2-5.1-7.1 4.2-5.1-7.1 35	569 (1206) 3.6-4.5-6.6 4.5-5.4-7.4 4.5-5.4-7.4 37	619 (1312) 3.9-4.8-6.8 4.8-5.7-7.7 4.8-5.7-7.7 39	673 (1426) 4.3-5.0-7.2 4.9-5.8-8.0 4.9-5.8-8.0 42	725 (1536) 4.7-5.3-7.6 5.1-6.0-8.4 5.1-6.0-8.4 44
525 x 450	21" x 18"	L/S (CFM) Thx (m) Thy (m) Noise Level	247 (523) 1.7-2.3-4.6 2.0-2.6-4.9 2.0-2.6-4.9 15	309 (655) 2.0-2.9-5.0 2.2-3.4-5.3 2.2-3.4-5.3 19	370 (784) 2.3-3.6-5.4 2.5-4.2-5.7 2.5-4.2-5.7 22	433 (918) 2.8-4.2-5.9 3.0-4.5-6.2 3.0-4.5-6.2 26	495 (1049) 3.5-4.6-6.4 3.6-4.8-6.7 3.6-4.8-6.7 29	556 (1178) 3.7-5.0-6.9 4.0-5.0-6.9 4.0-5.0-6.9 32	620 (1314) 4.0-5.5-7.5 4.5-5.6-7.6 4.5-5.6-7.6 36	680 (1441) 4.3-5.6-7.7 4.6-5.7-7.8 4.6-5.7-7.8 38	740 (1568) 4.6-5.7-8.0 4.8-5.8-8.2 4.8-5.8-8.2 41	800 (1695) 4.9-6.0-8.4 5.1-6.3-8.7 5.1-6.3-8.7 43	865 (1833) 4.9-5.8-8.2 5.1-6.3-8.7 5.1-6.3-8.7 46
600 x 450	24" x 18"	L/S (CFM) Thx (m) Thy (m) Noise Level	282 (598) 1.7-2.3-4.6 2.3-2.9-5.1 2.3-2.9-5.1 16	353 (748) 2.0-2.9-5.0 2.6-3.6-5.6 2.6-3.6-5.6 19	425 (900) 2.3-3.6-5.4 2.9-4.4-6.1 2.9-4.4-6.1 23	495 (1050) 2.8-4.2-5.9 3.5-4.8-6.5 3.5-4.8-6.5 26	567 (1200) 3.5-4.6-6.4 4.2-5.1-7.1 4.2-5.1-7.1 29	640 (1356) 3.7-5.0-6.9 4.3-5.2-7.5 4.3-5.2-7.5 32	708 (1500) 4.0-5.5-7.5 4.5-5.6-7.9 4.5-5.6-7.9 36	781 (1655) 4.3-5.6-7.7 4.8-5.6-8.2 4.8-5.6-8.2 39	853 (1810) 4.6-5.7-8.0 5.1-6.1-8.4 5.1-6.1-8.4 42	923 (1955) 4.8-5.8-8.2 5.3-6.3-8.7 5.3-6.3-8.7 45	995 (2110) 4.9-5.9-8.2 5.5-6.6-9.0 5.5-6.6-9.0 48

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

Tabular Selection for 3-way rectangular ceiling diffusers model (RCD.3W)

SIZE mm	Inch	A eff. (m ²)	Vn FPM (m/s) ΔPt inwg (Pa)	200 (0.019 (5))	250 (0.031 (8))	300 (0.047 (12))	350 (0.063 (16))	400 (0.082 (21))	450 (0.094 (24))	500 (0.129 (33))	550 (0.141 (36))	600 (0.184 (47))	650 (0.207 (53))	700 (0.250 (64))	(3.5)
225 x 150	9" x 6"	0.009 S 0.008 R	L/S (CFM)	35 (74)	43 (91)	52 (110)	60 (127)	70 (148)	79 (167)	91 (193)	95 (201)	103 (218)	111 (235)	120 (254)	(3.5)
			Thx (m)	0.5-0.8-1.6	0.7-1.0-2.2	0.9-1.1-2.9	1.0-1.3-3.3	1.1-1.6-3.7	1.2-1.9-3.8	1.3-2.1-3.9	1.5-2.4-4.2	1.7-2.8-4.4	1.9-3.2-4.5	2.2-3.4-4.6	
			Thy (m)	1.1-1.3-2.6	1.2-1.5-3.9	1.3-1.7-4.2	1.5-2.1-4.3	1.7-2.6-4.4	1.8-3.2-4.6	1.9-3.6-4.8	2.4-3.9-5.2	2.9-4.1-5.4	3.3-4.2-5.6	3.6-4.3-5.9	
			Noise Level	<15	<15	15	17	20	23	26	28	31	34	37	
300 x 150	12" x 6"	0.011 S 0.010 R	L/S (CFM)	47 (100)	49 (104)	70 (148)	82 (174)	95 (201)	105 (222)	120 (254)	130 (275)	143 (303)	156 (330)	168 (356)	(3.5)
			Thx (m)	0.5-0.8-1.6	0.7-1.0-2.2	0.9-1.1-2.9	1.0-1.3-3.3	1.1-1.6-3.7	1.2-1.9-3.8	1.3-2.1-3.9	1.5-2.4-4.2	1.7-2.8-4.4	1.9-3.2-4.5	2.2-3.4-4.6	
			Thy (m)	1.1-1.6-2.9	1.4-1.8-3.5	1.6-1.9-4.3	1.7-2.4-4.5	1.9-2.9-4.9	2.1-3.3-5.0	2.4-3.7-5.2	2.7-3.9-5.7	3.1-4.2-6.1	3.7-4.4-6.3	4.1-4.5-6.4	
			Noise Level	<15	<15	16	19	22	25	28	31	34	36	37	
300 x 225	12" x 9"	0.012 S 0.011 R	L/S (CFM)	70 (148)	87 (184)	105 (222)	123 (261)	140 (297)	157 (333)	175 (371)	192 (407)	210 (445)	223 (473)	245 (519)	(3.5)
			Thx (m)	0.8-1.3-2.4	1.2-1.4-2.7	1.4-1.6-3.5	1.5-1.9-4.0	1.6-2.3-4.5	1.7-2.6-4.6	1.9-2.9-4.7	2.1-3.2-5.0	2.3-3.6-5.3	2.6-3.9-5.5	2.9-4.3-5.8	
			Thy (m)	1.5-2.1-3.6	1.8-2.2-4.0	2.1-2.3-4.4	2.2-2.4-4.6	2.3-3.6-5.1	2.5-3.9-5.4	2.9-4.3-5.8	3.3-4.5-6.0	3.7-4.8-6.2	4.0-5.5-6.5	4.7-6.2-6.9	
			Noise Level	<15	<15	16	20	23	27	30	33	35	37	40	
375 x 225	15" x 9"	0.026 S 0.021 R	L/S (CFM)	87 (184)	110 (233)	131 (278)	156 (331)	177 (375)	199 (422)	220 (466)	243 (515)	265 (562)	287 (608)	310 (657)	(3.5)
			Thx (m)	0.8-1.3-2.4	1.2-1.4-2.7	1.4-1.6-3.5	1.5-1.9-4.0	1.6-2.3-4.5	1.7-2.6-4.6	1.9-2.9-4.7	2.1-3.2-5.0	2.3-3.6-5.3	2.6-3.9-5.5	2.9-4.3-5.8	
			Thy (m)	1.6-2.2-3.7	1.8-2.4-4.2	2.2-2.6-4.8	2.3-3.1-5.0	2.4-3.7-5.3	2.7-4.0-5.6	3.0-4.4-5.9	3.2-4.6-6.2	3.5-4.8-6.7	3.9-4.9-7.0	4.3-5.1-7.3	
			Noise Level	<15	<15	18	21	24	27	31	34	37	39	41	
450 x 225	18" x 9"	0.031 S 0.025 R	L/S (CFM)	105 (222)	132 (280)	160 (339)	186 (394)	213 (451)	240 (509)	267 (566)	294 (623)	320 (678)	328 (695)	375 (795)	(3.5)
			Thx (m)	0.8-1.3-2.4	1.2-1.4-2.7	1.4-1.6-3.5	1.5-1.9-4.0	1.6-2.3-4.5	1.7-2.6-4.6	1.9-2.9-4.7	2.1-3.2-5.0	2.3-3.6-5.3	2.6-3.9-5.5	2.9-4.3-5.8	
			Thy (m)	1.6-2.3-4.1	1.9-2.6-4.5	2.3-2.9-5.2	2.4-3.5-5.5	2.5-4.2-5.6	3.0-4.3-5.8	3.5-4.4-6.2	3.7-4.7-6.5	4.2-5.1-6.9	4.3-5.2-7.2	4.5-5.3-7.4	
			Noise Level	<15	<15	18	22	25	28	32	34	37	40	42	
525 x 225	21" x 9"	0.037 S 0.030 R	L/S (CFM)	125 (265)	157 (333)	190 (403)	221 (468)	253 (536)	285 (604)	317 (672)	350 (742)	381 (807)	413 (875)	445 (943)	(3.5)
			Thx (m)	0.8-1.3-2.4	1.2-1.4-2.7	1.4-1.6-3.5	1.5-1.9-4.0	1.6-2.3-4.5	1.7-2.6-4.6	1.9-2.9-4.7	2.1-3.2-5.0	2.3-3.6-5.3	2.6-3.9-5.5	2.9-4.3-5.8	
			Thy (m)	1.6-2.2-4.5	1.8-2.7-4.8	2.2-3.5-5.3	2.5-3.9-5.8	3.2-4.5-6.2	3.5-4.7-6.5	3.8-5.1-6.8	4.2-5.2-7.1	4.5-5.3-7.4	4.6-5.4-7.6	4.7-5.6-8.0	
			Noise Level	<15	<15	19	22	26	29	33	35	38	40	43	
375 x 300	15" x 12"	0.037 S 0.029 R	L/S (CFM)	113 (239)	143 (303)	174 (369)	204 (432)	253 (536)	265 (562)	296 (627)	326 (691)	357 (756)	387 (820)	418 (886)	(3.5)
			Thx (m)	1.1-1.6-3.3	1.4-2.0-3.8	1.7-2.4-4.4	1.9-2.8-4.7	2.1-3.3-5.1	2.4-3.6-5.3	2.7-3.9-5.6	3.0-4.2-5.8	3.3-4.5-6.1	3.5-4.7-6.3	3.7-4.9-6.6	
			Thy (m)	1.6-2.6-4.5	2.0-3.2-4.8	2.5-3.9-5.3	2.7-4.2-5.6	3.2-4.5-6.2	3.5-4.7-6.5	4.2-5.1-6.9	4.3-5.2-7.1	4.5-5.3-7.4	4.6-5.5-7.6	4.7-5.9-8.0	
			Noise Level	<15	15	20	22	26	29	33	35	38	40	43	
450 x 300	18" x 12"	0.044 S 0.035 R	L/S (CFM)	140 (297)	175 (371)	210 (445)	245 (519)	280 (593)	315 (667)	350 (742)	385 (816)	420 (890)	455 (964)	490 (1038)	(3.5)
			Thx (m)	1.1-1.6-3.3	1.4-2.0-3.8	1.7-2.4-4.4	1.9-2.8-4.7	2.1-3.3-5.1	2.4-3.6-5.3	2.7-3.9-5.6	3.0-4.2-5.8	3.3-4.5-6.1	3.5-4.7-6.3	3.7-4.9-6.6	
			Thy (m)	1.6-2.6-4.5	1.9-3.0-4.8	2.5-3.5-5.3	2.7-4.0-5.6	3.2-4.5-6.0	3.5-4.6-6.4	3.9-4.8-6.9	4.2-5.1-7.2	4.5-5.4-7.2	4.6-5.5-7.7	4.7-5.6-7.9	
			Noise Level	<15	16	20	23	27	30	33	36	39	41	44	
450 x 375	18" x 15"	0.058 S 0.044 R	L/S (CFM)	178 (377)	222 (470)	265 (562)	310 (657)	355 (752)	400 (848)	445 (943)	487 (1032)	532 (1127)	576 (1221)	620 (1314)	(3.5)
			Thx (m)	1.4-1.9-3.9	1.7-2.4-4.4	2.1-2.9-4.9	2.3-3.4-5.2	2.5-3.9-5.6	2.9-4.1-6.0	3.3-4.3-6.5	3.6-4.5-6.6	3.9-4.8-6.8	4.3-5.0-7.2	4.7-5.3-7.6	
			Thy (m)	1.8-2.3-4.4	2.0-2.9-4.9	2.3-3.5-5.4	2.6-4.0-5.7	3.2-4.5-6.0	3.5-4.6-6.4	3.9-4.8-6.8	4.2-5.1-7.1	4.5-5.3-7.4	4.6-5.5-7.6	4.8-5.7-7.8	
			Noise Level	<15	<15	18	22	25	29	32	35	38	40	43	
525 x 375	21" x 15"	0.068 S 0.051 R	L/S (CFM)	205 (434)	257 (545)	309 (655)	361 (765)	412 (873)	465 (985)	517 (1096)	569 (1206)	619 (1312)	673 (1426)	725 (1536)	(3.5)
			Thx (m)	1.4-1.9-3.9	1.7-2.4-4.4	2.1-2.9-4.9	2.3-3.4-5.2	2.5-3.9-5.6	2.9-4.1-6.0	3.3-4.3-6.5	3.6-4.5-6.6	3.9-4.8-6.8	4.3-5.0-7.2	4.7-5.3-7.6	
			Thy (m)	1.8-2.6-4.9	2.1-3.2-5.2	2.5-3.9-5.6	3.0-4.3-6.2	3.6-4.7-6.6	3.9-4.8-6.8	4.2-5.1-7.1	4.5-5.4-7.4	4.8-5.7-7.7	4.9-5.8-8.0	5.1-6.0-8.4	
			Noise Level	<15	19	21	24	28	31	35	37	39	42	44	
525 x 450	21" x 18"	0.083 S 0.061 R	L/S (CFM)	247 (523)	309 (655)	370 (784)	433 (918)	495 (1049)	556 (1178)	620 (1314)	680 (1441)	740 (1568)	800 (1695)	865 (1833)	(3.5)
			Thx (m)	1.7-2.3-4.6	2.0-2.9-5.0	2.3-3.6-5.4	2.8-4.2-5.9	3.5-4.6-6.4	3.7-5.0-6.9	4.0-5.5-7.5	4.3-5.6-7.7	4.6-5.7-8.0	4.8-5.2-8.1	4.9-5.8-8.2	
			Thy (m)	2.0-2.6-4.9	2.2-3.4-5.3	2.5-4.2-5.7	3.0-4.5-6.2	3.6-4.8-6.7	4.0-5.0-6.9	4.5-5.6-7.6	4.6-5.7-7.8	4.8-5.8-8.2	4.9-6.0-8.4	5.1-6.3-8.7	
			Noise Level	<15	19	22	26	29	32	36	38	41	43	46	
600 x 450	24" x 18"	0.096 S 0.070 R	L/S (CFM)	282 (598)	353 (748)	425 (900)	495 (1050)	567 (1200)	640 (1356)	708 (1500)	781 (1655)	853 (1810)	923 (1955)	995 (2110)	(3.5)
			Thx (m)	1.7-2.3-4.6	2.0-2.9-5.0	2.3-3.6-5.4	2.8-4.2-5.9	3.5-4.6-6.4	3.7-5.0-6.9	4.0-5.5-7.5	4.3-5.6-7.7	4.6-5.7-8.0	4.8-5.8-8.1	4.9-5.9-8.2	
			Thy (m)	2.3-2.9-5.1	2.6-3.6-5.6	2.9-4.4-6.1	3.5-4.8-6.5	4.2-5.1-7.1	4.3-5.2-7.5	4.5-5.3-7.9	4.8-5.6-8.2	5.1-6.1-8.4	5.3-6.3-8.7	5.5-6.6-9.0	
			Noise Level	16	19	23	26	29	32	36	39	42	45	48	

Tabulated data are subject to the same corrections as in the 4way square diffusers page

Tabular Selection for 2-way rectangular ceiling diffusers model (RCD.2W)

SIZE mm	SIZE Inch	A _{eff.} (m ²)	V _n FPM (m/s) P _{inwg} (Pa)	200 (1.0) 0.019 (5)	250 (1.25) 0.031 (8)	300 (1.5) 0.047 (12)	350 (1.75) 0.063 (16)	400 (2.0) 0.082 (21)	450 (2.25) 0.094 (24)	500 (2.5) 0.129 (33)	550 (2.75) 0.141 (36)	600 (3.0) 0.184 (47)	650 (3.25) 0.207 (53)	700 (3.5) 0.250 (64)
225 x 150	9" x 6"	0.010 S 0.009 R	L/S (CFM) Th. (m) Noise Level	35 (74) 0.8-1.6-3.7 <15	43 (91) 1.1-2.0-3.8 <15	52 (110) 1.4-2.5-4.0 15	60 (127) 1.7-2.9-4.3 17	70 (148) 2.1-3.6-4.5 20	79 (167) 2.2-3.7-4.6 23	91 (193) 2.3-3.8-4.8 26	95 (201) 2.7-3.9-5.1 28	103 (218) 3.3-4.0-5.8 31	111 (235) 3.4-4.1-6.0 34	120 (254) 3.5-4.2-6.3 37
300 x 150	12"x 8"	0.014 S 0.010 R	L/S (CFM) Th. (m) Noise Level	47 (100) 1.1-1.7-3.7 <15	49 (104) 1.3-2.2-3.9 <15	70 (148) 1.6-2.6-4.2 16	82 (174) 1.8-3.0-4.6 19	95 (201) 2.2-3.6-5.1 22	105 (222) 2.4-3.8-5.3 25	120 (254) 2.6-4.2-5.6 28	130 (275) 3.0-4.3-5.8 31	143 (303) 3.5-4.4-6.2 34	156 (330) 3.6-4.5-6.4 36	168 (356) 3.8-4.6-6.7 37
375 x 150	15"x 6"	0.018 S 0.015 R	L/S (CFM) Th. (m) Noise Level	60 (127) 1.2-2.1-4.0 <15	75 (159) 1.6-2.5-4.2 <15	90 (191) 2.1-3.0-4.5 16	105 (222) 2.3-3.5-4.8 20	120 (254) 2.6-4.0-5.3 22	135 (286) 2.7-4.1-5.6 26	150 (318) 2.9-4.3-6.1 28	165 (350) 3.3-4.4-6.3 31	180 (381) 3.7-4.5-6.5 34	195 (413) 3.8-4.6-6.7 36	210 (445) 3.9-4.8-7.1 38
450 x 150	18"x 6"	0.022 S 0.019 R	L/S (CFM) Th. (m) Noise Level	70 (148) 1.2-2.1-3.9 <15	87 (184) 1.6-2.5-4.4 <15	105 (222) 2.1-3.0-4.9 16	123 (261) 2.4-3.5-5.2 20	140 (297) 2.7-4.0-5.6 23	157 (333) 2.9-4.2-5.9 27	175 (371) 3.2-4.5-6.3 30	192 (407) 3.5-4.6-6.5 33	210 (445) 3.9-4.7-6.9 35	223 (473) 4.0-5.0-7.3 37	245 (519) 4.1-5.1-7.4 40
300 x 225	12"x 9"	0.022 S 0.019 R	L/S (CFM) Th. (m) Noise Level	70 (148) 1.3-2.2-4.0 <15	87 (184) 1.6-2.6-4.4 <15	105 (222) 2.2-3.1-4.9 16	123 (261) 2.5-3.5-5.3 20	140 (297) 2.8-4.1-5.7 23	157 (333) 3.1-4.3-6.0 27	175 (371) 3.3-4.6-6.4 30	192 (407) 3.6-4.7-6.6 33	210 (445) 3.9-4.8-7.1 35	223 (473) 4.0-5.0-7.3 37	245 (519) 4.2-5.2-7.5 40
375 x 225	15"x 9"	0.028 S 0.023 R	L/S (CFM) Th. (m) Noise Level	87 (184) 1.4-2.3-4.2 <15	110 (233) 1.7-2.7-4.5 <15	131 (278) 2.3-3.2-5.1 18	156 (331) 2.6-3.7-5.5 21	177 (375) 2.9-4.3-5.9 24	199 (422) 3.2-4.4-6.3 27	220 (466) 3.6-4.7-6.7 31	243 (515) 3.8-4.8-6.8 34	265 (562) 4.1-5.1-7.1 37	287 (608) 4.2-5.2-7.4 39	310 (657) 4.4-5.3-7.7 41
450 x 225	18"x 9"	0.034 S 0.026 R	L/S (CFM) Th. (m) Noise Level	105 (222) 1.6-2.4-4.4 <15	132 (280) 1.9-2.9-4.7 <15	160 (339) 2.3-3.5-5.3 18	186 (394) 2.7-4.0-5.5 22	213 (451) 3.2-4.5-6.0 25	240 (509) 3.5-4.6-6.4 28	267 (566) 3.9-4.7-6.8 32	294 (623) 4.2-5.0-7.1 34	320 (678) 4.5-5.3-7.5 37	328 (695) 4.6-5.5-7.7 40	375 (795) 4.8-5.6-8.1 42
525 x 225	21"x 9"	0.040 S 0.032 R	L/S (CFM) Th. (m) Noise Level	125 (265) 1.6-2.5-4.5 <15	157 (333) 2.0-3.2-5.0 <15	190 (403) 2.5-3.9-5.6 19	221 (468) 3.0-4.1-5.9 22	253 (536) 3.5-4.4-6.3 26	285 (604) 3.7-4.7-6.6 29	317 (672) 4.1-5.0-7.1 33	350 (742) 4.3-5.3-7.4 35	381 (807) 4.5-5.6-7.9 38	413 (875) 4.6-5.7-8.1 40	445 (943) 4.8-5.9-8.3 43
375 x 300	15"x 12"	0.039 S 0.030 R	L/S (CFM) Th. (m) Noise Level	113 (239) 1.6-2.5-4.4 <15	143 (303) 2.0-3.1-4.8 15	174 (369) 2.5-3.6-5.3 20	204 (432) 2.8-4.1-5.7 22	235 (498) 3.3-4.5-6.2 26	265 (562) 3.6-4.7-7.0 29	296 (627) 3.9-5.1-7.8 33	326 (691) 4.2-5.2-7.9 35	357 (756) 4.5-5.3-8.1 38	387 (820) 4.6-5.5-8.2 40	418 (886) 4.8-5.7-8.3 43
450 x 300	18"x 12"	0.047 S 0.037 R	L/S (CFM) Th. (m) Noise Level	140 (297) 1.9-2.6-4.7 <15	175 (371) 2.2-3.5-5.1 15	210 (445) 2.5-4.2-5.6 20	245 (519) 3.0-4.4-6.0 22	280 (593) 3.5-4.6-6.5 26	315 (667) 4.0-5.1-6.8 30	350 (742) 4.5-5.4-7.2 33	385 (816) 4.6-5.5-7.7 36	420 (890) 4.8-5.7-8.3 39	455 (964) 4.9-6.0-8.4 41	490 (1038) 5.1-6.3-8.6 44
525 x 300	21"x 12"	0.056 S 0.043 R	L/S (CFM) Th. (m) Noise Level	163 (345) 2.1-2.8-4.8 <15	205 (434) 2.7-3.5-5.3 16	252 (534) 3.1-4.1-5.8 20	290 (615) 3.5-4.4-6.4 24	330 (699) 3.9-4.7-7.0 27	374 (793) 4.2-5.1-7.2 31	415 (879) 4.5-5.4-7.5 34	460 (975) 4.6-5.7-7.8 37	500 (1060) 4.8-6.0-8.3 40	542 (1148) 5.1-6.2-8.7 42	585 (1240) 5.5-6.4-9.1 45

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

Tabular Selection for 1-way rectangular ceiling diffusers model (RCD.1W)

SIZE mm	Inch	A eff. (m ²)	Vn FPM (m/s) ΔP in wg (Pa)	200 (10)	250 (12.5)	300 (15)	350 (17.5)	400 (20)	450 (22.5)	500 (25)	550 (27.5)	600 (30)	650 (32.5)	700 (35)
				0.019 (5)	0.031 (8)	0.047 (12)	0.063 (16)	0.082 (21)	0.094 (24)	0.129 (33)	0.141 (36)	0.184 (47)	0.207 (53)	0.250 (64)
225 x 150	9" x 6"	0.010 S 0.009 R	L/S (CFM) Th. (m) Noise Level	35 (74) 1.1-1.6-4.2 <15	43 (91) 1.3-2.5-4.3 <15	52 (110) 1.6-3.7-4.6 15	60 (127) 2.3-3.9-5.0 17	70 (148) 3.2-4.1-5.5 20	79 (167) 3.4-4.2-5.6 23	91 (193) 3.6-4.3-6.2 26	95 (201) 3.8-4.4-6.3 28	103 (218) 4.1-4.8-6.5 31	111 (235) 4.2-5.0-6.8 34	120 (254) 4.3-5.3-7.2 37
300 x 150	12" x 8"	0.014 S 0.010 R	L/S (CFM) Th. (m) Noise Level	47 (100) 1.4-1.9-4.5 <15	49 (104) 1.7-2.4-4.7 <15	70 (148) 2.1-3.9-5.0 16	82 (174) 2.7-4.2-5.5 19	95 (201) 3.6-4.5-6.0 22	105 (222) 3.7-4.6-6.5 25	120 (254) 3.9-4.7-7.0 28	130 (275) 4.2-4.8-7.1 31	143 (303) 4.5-5.0-7.3 34	156 (330) 4.6-5.3-7.5 36	168 (356) 4.7-5.7-7.9 37
375 x 150	15" x 6"	0.018 S 0.015 R	L/S (CFM) Th. (m) Noise Level	60 (127) 1.6-2.4-4.7 <15	75 (159) 1.9-3.2-5.1 <15	90 (191) 2.3-4.1-5.4 16	105 (222) 2.9-4.4-5.8 20	120 (254) 3.6-4.7-6.3 22	135 (286) 3.8-4.8-6.6 26	150 (318) 3.9-4.9-7.2 28	165 (350) 4.3-5.1-7.3 31	180 (381) 4.7-5.4-7.5 34	195 (413) 4.8-5.6-7.7 36	210 (445) 4.9-6.0-8.1 38
450 x 150	18" x 6"	0.022 S 0.019 R	L/S (CFM) Th. (m) Noise Level	70 (148) 1.7-2.5-4.7 <15	87 (184) 2.1-3.3-5.1 <15	105 (222) 2.5-4.1-5.6 16	123 (261) 3.2-4.4-6.1 20	140 (297) 3.9-4.8-6.6 23	157 (333) 4.0-4.9-7.1 27	175 (371) 4.1-5.0-7.5 30	192 (407) 4.5-5.3-7.6 33	210 (445) 4.9-5.7-7.8 35	223 (473) 5.0-6.0-8.1 37	245 (519) 5.1-6.3-8.5 40
300 x 225	12" x 9"	0.022 S 0.019 R	L/S (CFM) Th. (m) Noise Level	70 (148) 1.8-2.5-4.8 <15	87 (184) 2.2-3.3-5.2 <15	105 (222) 2.6-4.2-5.7 16	123 (261) 3.2-4.5-6.2 20	140 (297) 3.9-4.8-6.6 23	157 (333) 4.0-4.9-7.1 27	175 (371) 4.2-5.1-7.6 30	192 (407) 4.6-5.4-7.7 33	210 (445) 5.0-5.8-7.9 35	223 (473) 5.1-6.2-8.2 37	245 (519) 5.2-6.4-8.6 40
375 x 225	15" x 9"	0.028 S 0.023 R	L/S (CFM) Th. (m) Noise Level	87 (184) 1.9-2.9-5.1 <15	110 (233) 2.3-3.6-5.4 <15	131 (278) 2.8-4.4-5.9 18	156 (331) 3.4-4.8-6.4 21	177 (375) 4.1-5.1-6.9 24	199 (422) 4.3-5.2-7.3 27	220 (466) 4.5-5.4-7.8 31	243 (515) 4.7-5.7-8.1 34	265 (562) 5.1-6.0-8.4 37	287 (608) 5.2-6.3-8.6 39	310 (657) 5.3-6.6-9.0 41
450 x 225	18" x 9"	0.034 S 0.026 R	L/S (CFM) Th. (m) Noise Level	105 (222) 2.3-3.3-5.1 <15	132 (280) 2.7-3.9-5.7 <15	160 (339) 3.3-4.5-6.3 18	186 (394) 3.7-4.9-6.7 22	213 (451) 4.2-5.1-7.2 25	240 (509) 4.5-5.4-7.6 28	267 (566) 4.8-5.7-8.1 32	294 (623) 4.9-5.9-8.2 34	320 (678) 5.1-6.3-8.4 37	328 (695) 5.3-6.6-9.0 40	375 (795) 5.6-6.9-9.7 42
525 x 225	21" x 9"	0.040 S 0.032 R	L/S (CFM) Th. (m) Noise Level	125 (265) 2.4-3.5-5.3 <15	157 (333) 3.0-4.1-5.8 <15	190 (403) 3.5-4.7-6.5 19	221 (468) 3.9-5.0-6.9 22	253 (536) 4.4-5.4-7.4 26	285 (604) 4.7-5.7-7.8 29	317 (672) 5.0-6.0-8.3 33	350 (742) 5.1-6.2-8.5 35	381 (807) 5.3-6.5-8.9 38	413 (875) 5.4-6.7-9.4 40	445 (943) 5.6-7.1-10 43
375 x 300	15" x 12"	0.039 S 0.030 R	L/S (CFM) Th. (m) Noise Level	113 (239) 2.4-3.5-5.3 <15	143 (303) 2.9-4.0-5.7 15	174 (369) 3.5-4.7-6.3 20	204 (432) 3.9-5.0-6.8 22	235 (498) 4.4-5.4-7.4 26	265 (562) 4.5-5.6-7.8 29	296 (627) 4.8-5.7-8.3 33	326 (691) 5.1-5.9-8.6 35	357 (756) 5.3-6.2-8.9 38	387 (820) 5.4-6.5-9.3 40	418 (886) 5.6-6.9-9.8 43
450 x 300	18" x 12"	0.047 S 0.037 R	L/S (CFM) Th. (m) Noise Level	140 (297) 2.5-3.9-5.7 <15	175 (371) 3.2-4.3-6.2 15	210 (445) 3.9-4.8-6.9 20	245 (519) 4.1-5.2-7.4 22	280 (593) 4.4-5.7-7.9 26	315 (667) 4.7-5.9-8.3 30	350 (742) 5.1-6.2-8.7 33	385 (816) 5.4-6.6-9.0 36	420 (890) 5.8-7.0-9.4 39	455 (964) 5.9-7.1-9.8 41	490 (1038) 6.0-7.2-10.4 44
525 x 300	21" x 12"	0.056 S 0.043 R	L/S (CFM) Th. (m) Noise Level	163 (345) 3.0-4.3-5.7 <15	205 (434) 3.7-4.7-6.2 16	252 (534) 4.2-5.2-6.9 20	290 (615) 4.5-5.3-7.4 24	330 (699) 4.8-5.7-8.0 27	374 (793) 5.1-6.1-8.5 31	415 (879) 5.5-6.4-9.0 34	460 (975) 5.6-6.7-9.5 37	500 (1060) 5.8-7.0-10.1 40	542 (1148) 6.1-7.2-10.4 42	585 (1240) 6.4-7.5-10.7 45

Tabulated data are subject to the same corrections as in the 4way square diffusers page.

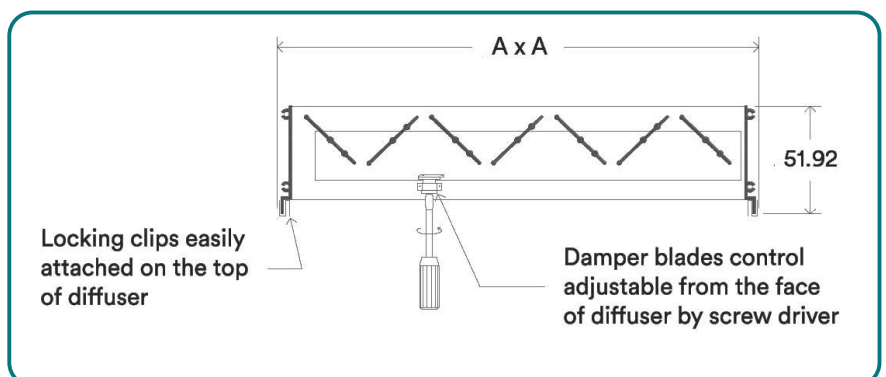
ACCESSORIES:

A) VOLUME CONTROL DAMPER

Damper with Opposing Blades

- Crafted from premium Extruded Aluminium Profiles, both the frame and blades boast high-quality construction.
- Engineered for optimal functionality, the blades rotate in opposite directions.
- The blades feature a unique design with an overlapping lip, ensuring a secure and tight closure.
- Typically, the opposed blade damper is affixed to the diffuser using “S” clips for a secure attachment.
- Nylon bushes separate the blades from the frame, offering a seamless assembly that guarantees a quiet and rattle-free performance while preventing corrosion.
- The standard surface finish for the damper is the natural Aluminium Mill Finish. Upon request, a matte black powder coating colour is also available as an optional feature.

• The adjustment of the damper blade position, ranging from fully open to fully closed, is conveniently achieved using a screwdriver. This can be done by removing the inner core, as illustrated in the accompanying figure



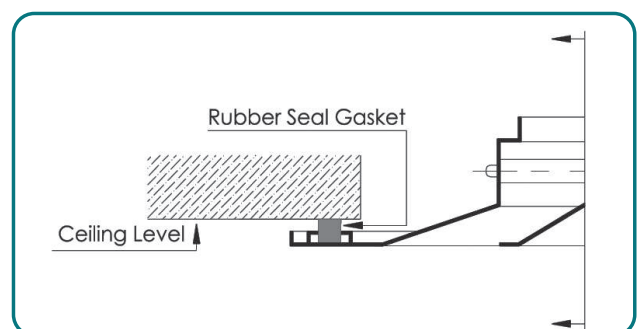
Rubber Gasket (Optional)

Gasket Type: Single Sided Self - Adhesive Foam.

Function of the Gasket: Sealing.

Benefits of the Gasket:

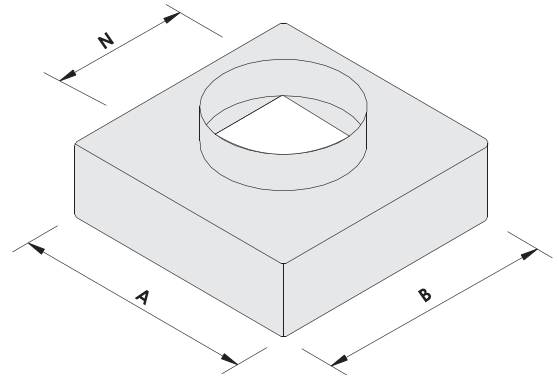
- Mitigates diffuser rattling.
 - Reduces air infiltration.
 - Prevents leaks and minimizes pressure losses.
 - Accommodates irregularities in the ceiling.
 - Simple application, whether on-site or in the factory.
- Applied along the perimeter of the backside of the diffuser, serving as an air seal to prevent pressurized air from escaping from the sides of the diffuser when secured to the ceiling



B) Plenum Box (Optional)

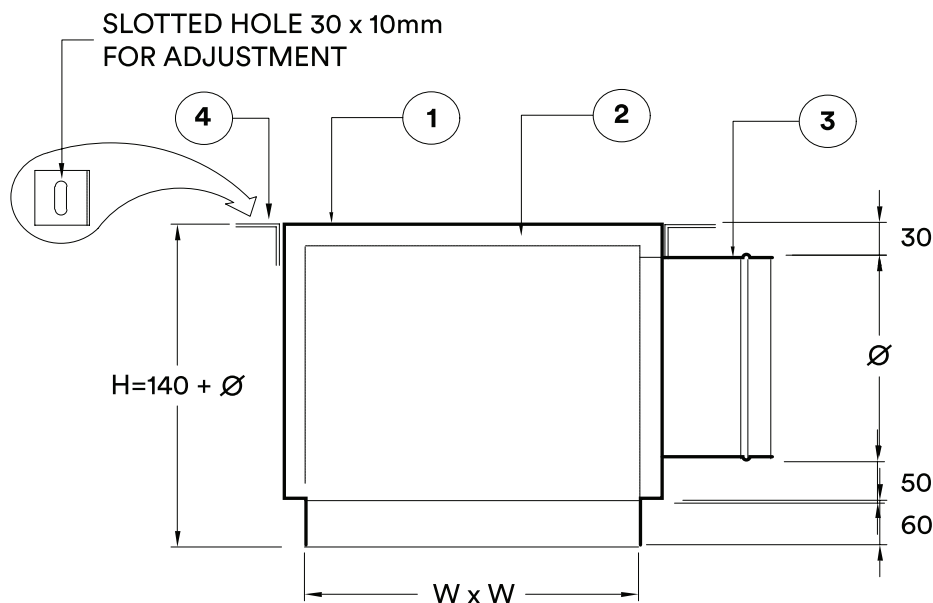
- With round neck

Neck Adaptors that are field installed to allow easy connection to Round rigid duct.



Neck Damper Mechanisms (optional)

1) PB1

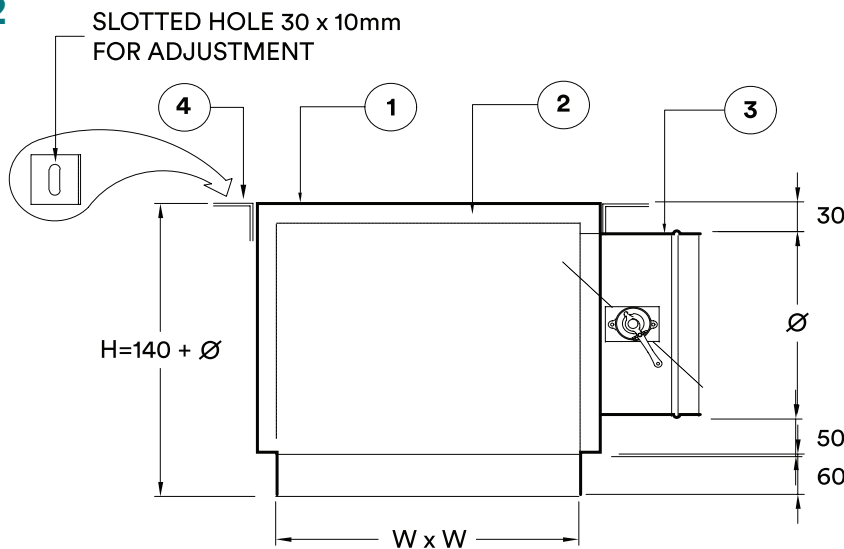


- 1-Casing
- 2-Acoustic Lining
- 3-Spigot Inlet
- 4 -Hanging Bracket

Standard Construction:

The standard construction is crafted from galvanized steel sheet Ga.24, compliant with ASTM A653 and featuring lock-forming quality. It includes a 25mm thick acoustic lining with a density of 48kg/m³. The exposed surface of the acoustic lining is reinforced with a robust black Woven Glass Fibres Fabric (WGF) facing to prevent fiberglass erosion. Notably, the spigot inlet in this configuration does not incorporate a balancing damper.

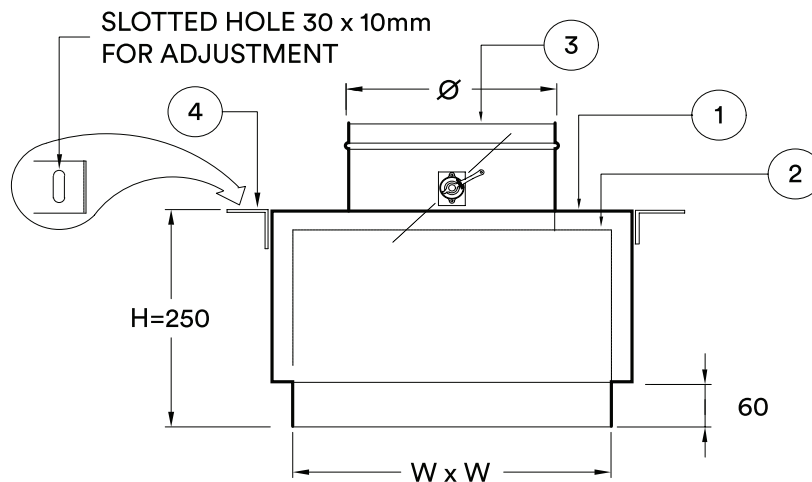
2) PB2



- 1-Casing
- 2-Acoustic Lining
- 3-Spigot Inlet + Damper
- 4 -Hanging Bracket

The standard construction is composed of galvanized steel sheet Ga.24, adhering to ASTM A653 standards and exhibiting lock-forming quality. It incorporates a 25mm thick acoustic lining with a density of 48kg/m³. The exposed surface of the acoustic lining is fortified with a durable black Woven Glass Fiber Fabric (WGF) facing to prevent fiberglass erosion. A noteworthy feature is the inclusion of a spigot inlet with a balancing damper, securely affixed on the side of the plenum box. This configuration proves to be an excellent solution for situations with limited space where a top connection is not feasible.

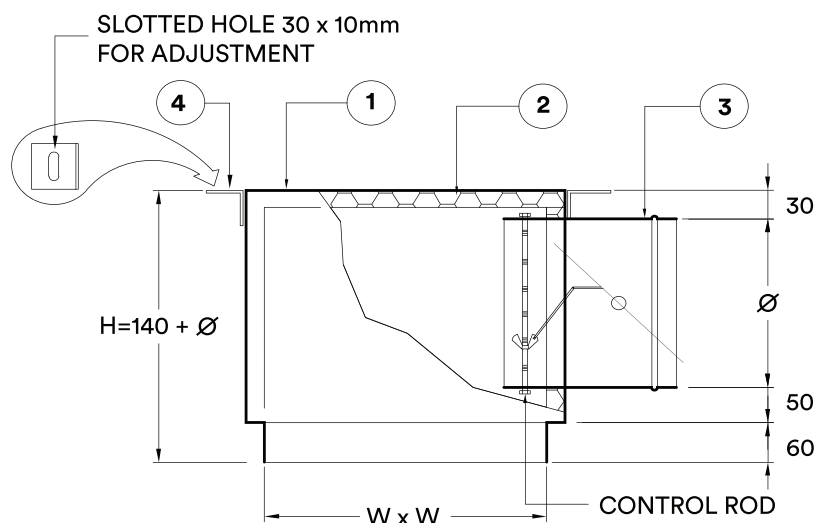
3) PB3



- 1-Casing
- 2-Acoustic Lining
- 3-Spigot Inlet + Damper
- 4 -Hanging Bracket

The standard construction is composed of galvanized steel sheet Ga.24, adhering to ASTM A653 standards and exhibiting lock-forming quality. It incorporates a 25mm thick acoustic lining with a density of 48kg/m³. The exposed surface of the acoustic lining is fortified with a durable black Woven Glass Fiber Fabric (WGF) facing to prevent fiberglass erosion. A noteworthy feature is the inclusion of a spigot inlet with a balancing damper, securely affixed on the top side of the plenum box. This configuration proves to be an excellent solution for situations with limited space where a side connection is not feasible.

4) PB4



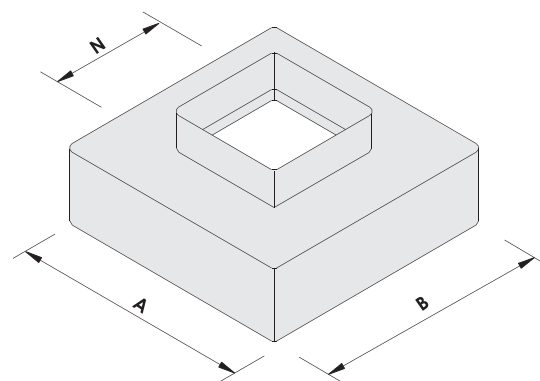
- 1-Casing
- 2-Acoustic Lining
- 3-Spigot Inlet + Damper
- 4 -Hanging Bracket

Standard Construction:

The standard build comprises galvanized steel sheet Ga.24, compliant with ASTM A653 specifications, featuring lock-forming quality and a 25mm thick acoustic lining with a density of 48kg/m³. The exposed surface of the acoustic lining is reinforced with a robust black Woven Glass Fiber Fabric (WGF) facing to prevent fiberglass erosion. Additionally, the spigot inlet, equipped with a built-in balancing damper, is adjustable directly from the face of the diffuser.

• With square neck

Neck Adaptors that are field installed to allow easy connection to square duct,
It could be aside inlet as the customer preferences



Diffuser Sizes		Adaptor Sizes	
mm	Inch	A (mm)	B (mm)
150 x 150	6" x 6"	142	142
225 x 225	9" x 9"	217	217
300 x 300	12" x 12"	292	292
375 x 375	15" x 15"	367	367
450 x 450	18" x 18"	442	442
525 x 525	21" x 21"	517	517
600 x 600	24" x 24"	592	592

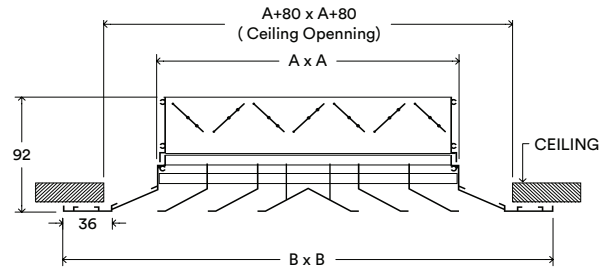
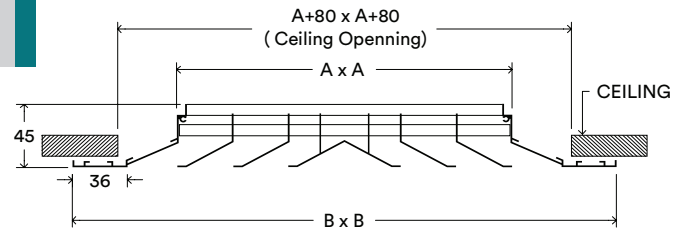
The neck size "N" to be specified by customer.

Installation Details:

Flush Mounting in Ceiling

Square Ceiling Diffuser Without
Volume Control Damper

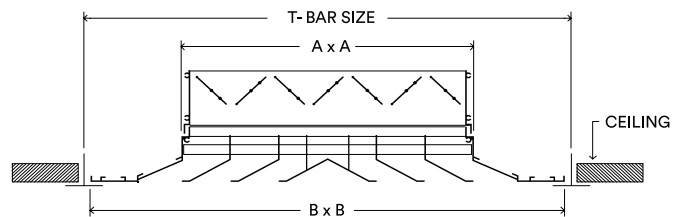
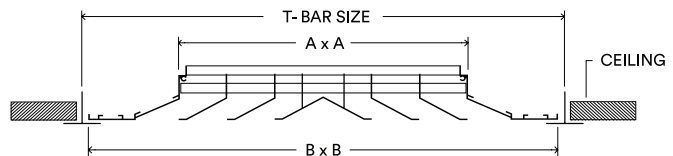
Square Ceiling Diffuser with Volume
Control Damper



Lay in Ceiling T-Bar

Square Ceiling Diffuser With-
out Volume Control Damper

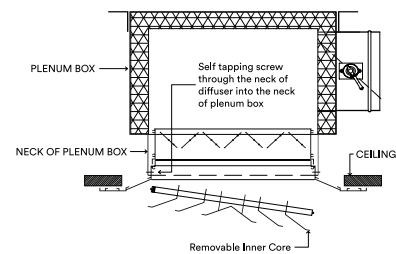
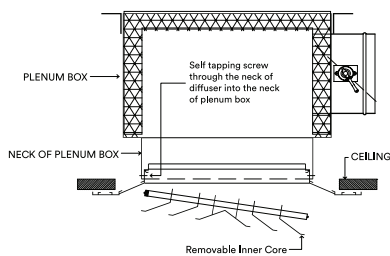
Square Ceiling Diffuser with Volume
Control Damper



Flush Mounting in Ceiling

Fixing To Plenum Box Without
Volume Control Damper

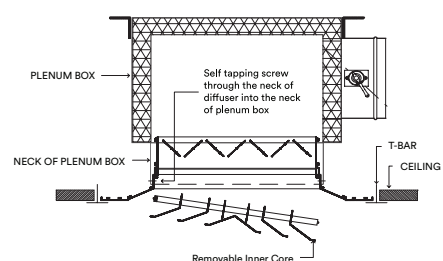
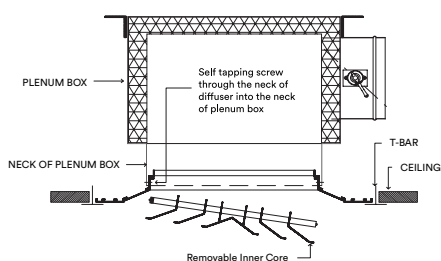
Fixing To Plenum Box with
Volume Control Damper



Lay in Ceiling T-Bar

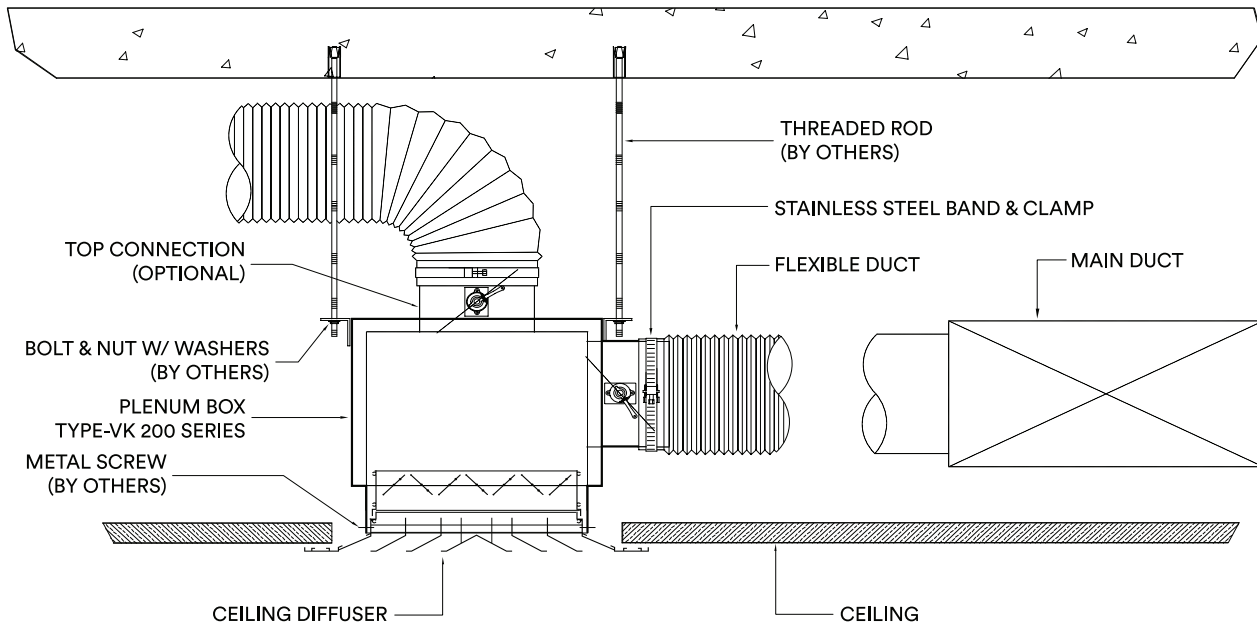
Fixing To Plenum Box With-
out Volume Control Damper

Fixing To Plenum Box with
Volume Control Damper



Installation Details:

Fixing Plenum Boxes For Ceiling Diffusers With Slap and Duct





CASTLE
ENGINEERING
INDUSTRIES

Contact Us

Address: 28km, Alex-Cairo Desert Road,
Abu Rawash Industrial Zone, Giza, Egypt.

Email: sales@castle-ei.com

Tel: +202 353 94394

Mob: +20 1288012995

Mob: +20 1281217517

Mob: +20 1273637171

Contact



Location

