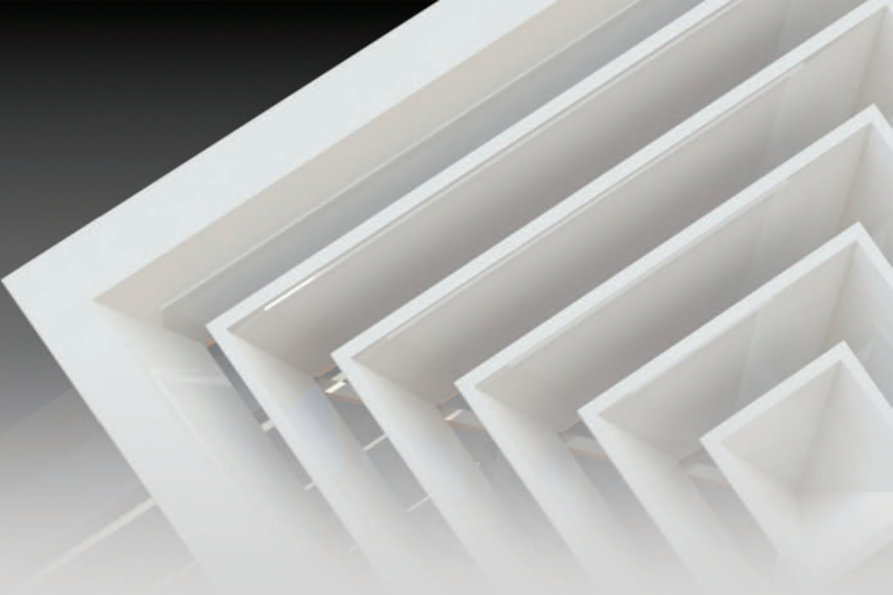
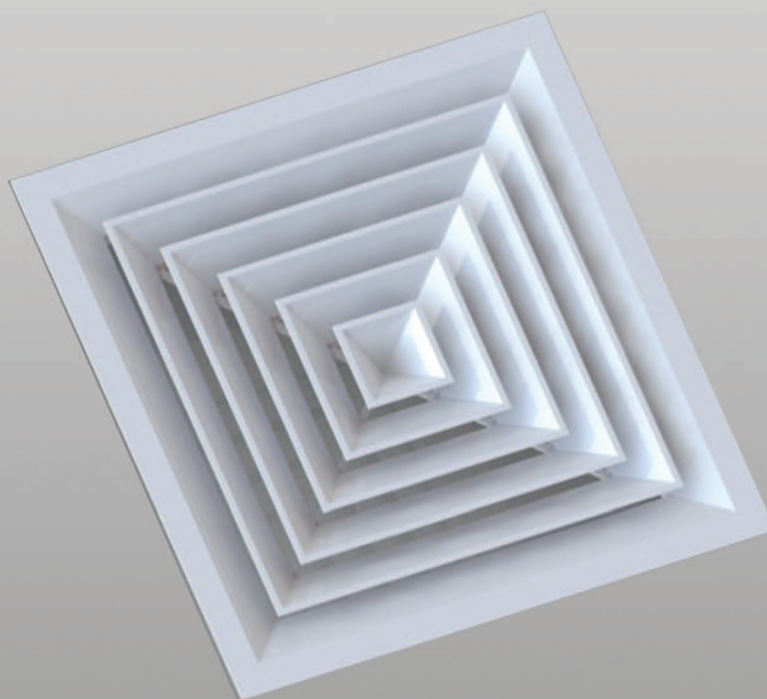


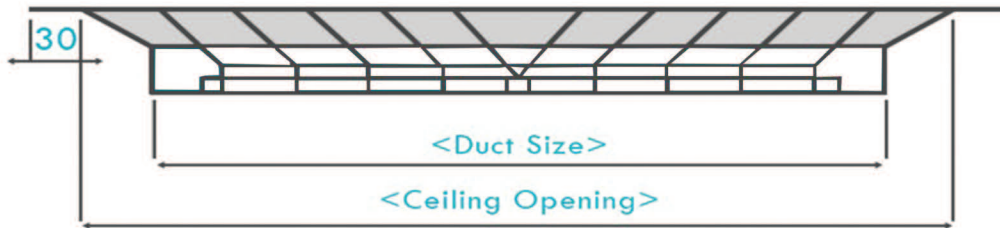


DIRECTIONAL CEILING DIFFUSER



Out standing technique for highest demands Unique in comfort, acousrics and design

Construction



Frame

Made from High quality extruded aluminum profile with 30 mm flange width.

Blade

Made from High quality extruded aluminum profile.

Damper frame and blades

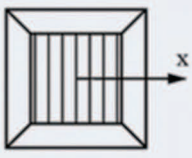
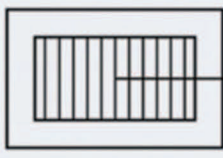
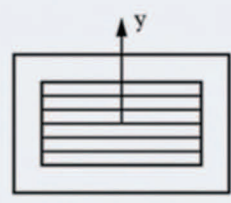
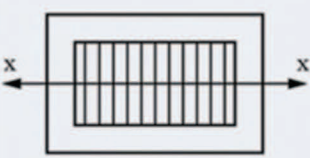
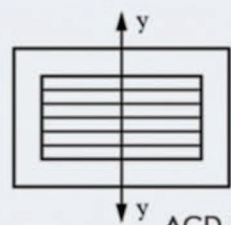
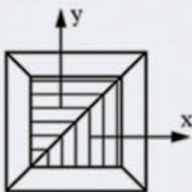
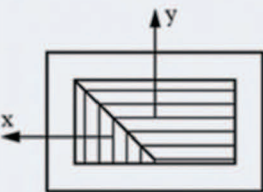
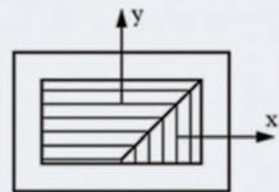
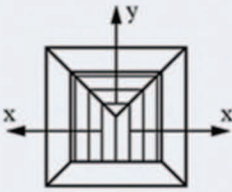
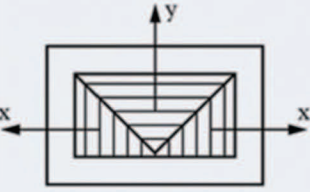
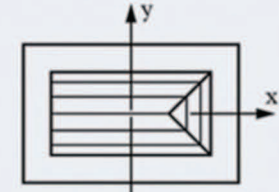
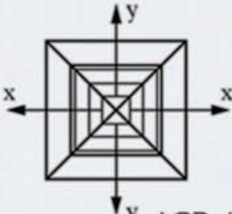
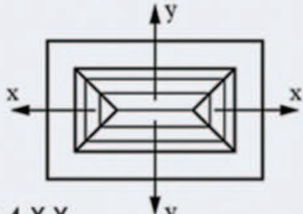
Made from High quality extruded aluminum profile.

Description



- The frame and blades are made from high quality extruded aluminum profiled construction with Powder coated color finish.
- Core can be easily removable and changeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Diffuser can be supplied with easily removable volume damper. Damper is fixed rigidly to the frame by aluminum rivets.
- Damper blades are separated from its frame by nylon bushes.
- The ceiling diffuser may be used as supply or return air diffuser according to the application design Supply ceiling diffuser and return ceiling diffuser can be supplied with volume damper to control static pressure and the air volume flow rate.
- Ceiling diffuser can be supplied with plenum box, which is manufactured from galvanized steel sheet as option.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular size and nonstandard size as option.
- Available one way, two ways, three ways and four.
- Powder coated color finish per RAL color codes as standard and flexibility of finish.

Core Pattern

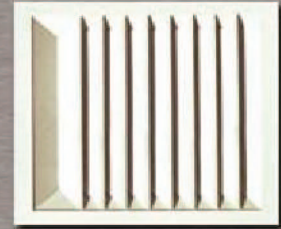
Air pattern	Square	Rectangular	
One way	 S1AX	 R1AX	 R1AY
two way	 ACD-2A-X	 ACD-2A-X	 ACD-2A-Y
two way corner	 ACD-2A-XY	 ACD-2A-XY	 ACD-X
three way	 ACD-3	 ACD-3-X	 ACD-3-Y
four way	 ACD-4	 ACD-4-X,Y	

Supply Air Square Ceiling Diffuser One Way Throw

Construction:

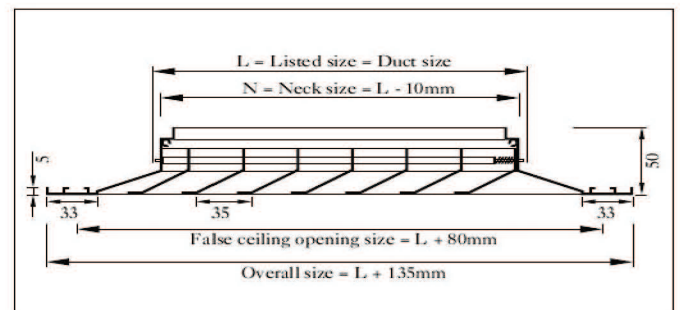
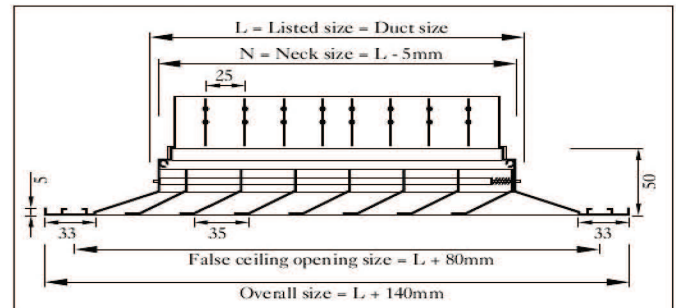
Frame and core: High quality extruded aluminum profile with 33 mm flange width.

Damper frame and core: High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.
- Discharges air horizontally in one way, either X or Y directions as per pattern arrangement.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular sizes as option.
- Suitable for flush mounting in lay in type ceiling.



Model CD1:

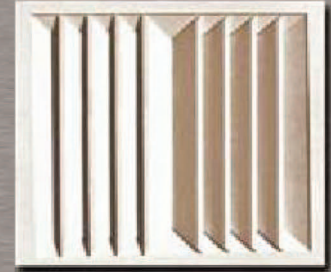
Same as CD1+D, but without opposed blade damper and foam gasket. Suitable for return air applications.

Supply Air Square Ceiling Diffuser Two Way Throw

Construction:

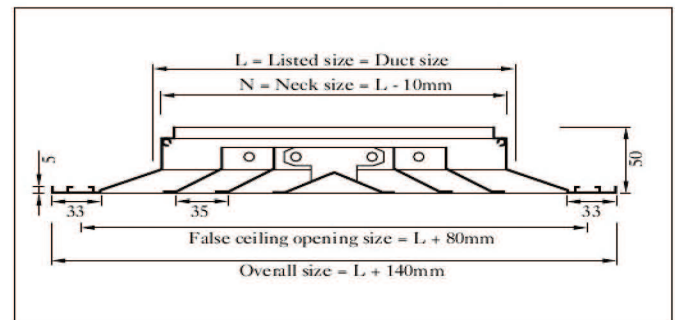
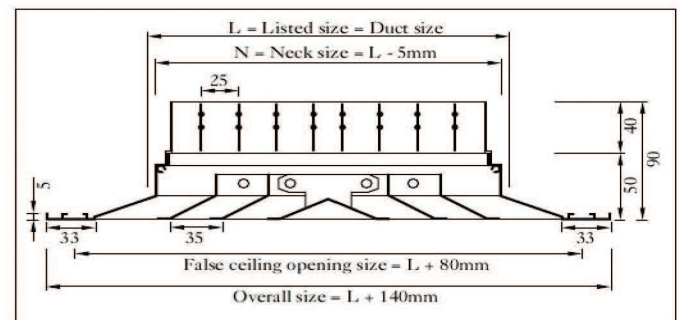
Frame and core: High quality extruded aluminum profile with 33 mm flange width.

Damper frame and core: High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.
- Discharges air in both the ways, either X or Y directions as per pattern arrangement.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular sizes as option.
- Suitable for flush mounting in lay in type ceiling.



Model CD2:

Same as CD2+D, but without opposed blade damper and foam gasket.

Suitable for return air applications.

Supply Air Square Ceiling Diffuser Two Way Corner Throw

Construction:

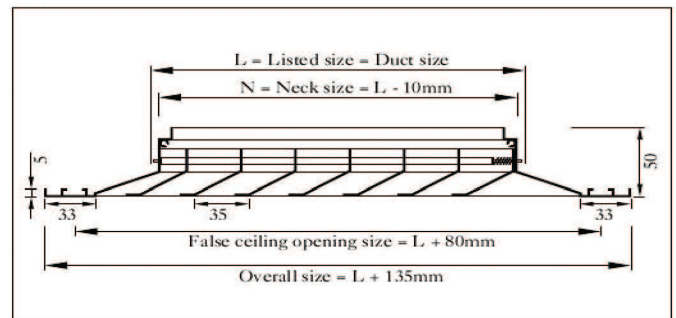
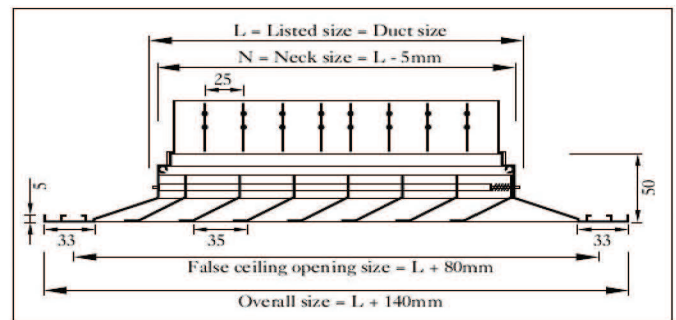
Frame and core: High quality extruded aluminum profile with 33 mm flange width.

Damper frame and core: High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.
- Discharges air in one way, equally in X or Y direction.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular sizes as option.
- Suitable for flush mounting in lay in type ceiling.



Model CD2C:

Same as CD2C+D, but without opposed blade damper and foam gasket. Suitable for return air applications.

Supply Air Square Ceiling Diffuser Three Way Throw

Construction:

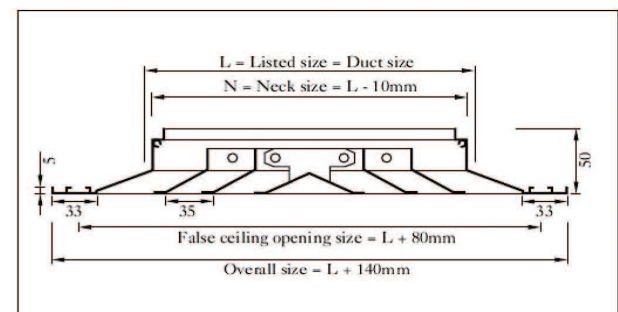
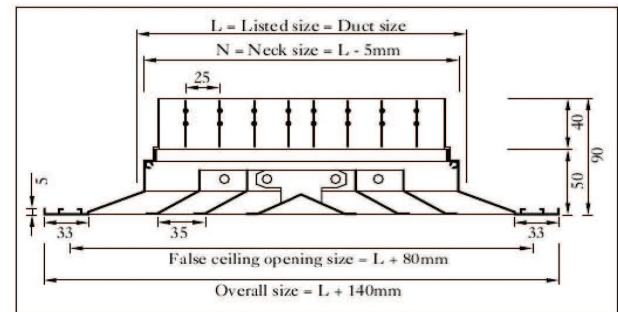
Frame and core: High quality extruded aluminum profile with 33 mm flange width.

Damper frame and core: High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.
- Frame with multicore assembly. discharges air horizontally in three directions.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular sizes as option.
- Suitable for flush mounting in lay in type ceiling.



Model CD3:

Same as CD3+D, but without opposed blade damper and foam gasket.
Suitable for return air applications.

Supply Air Square Ceiling Diffuser Four Way Throw

Construction:

Frame and core: High quality extruded aluminum profile with 33 mm flange width.

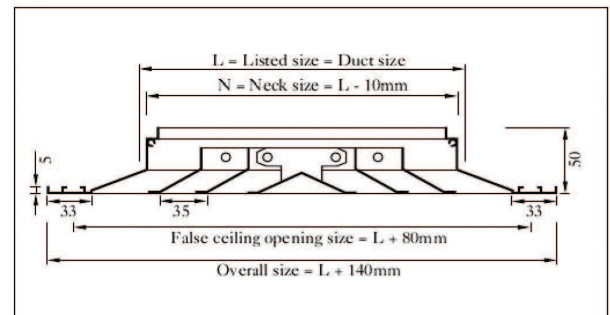
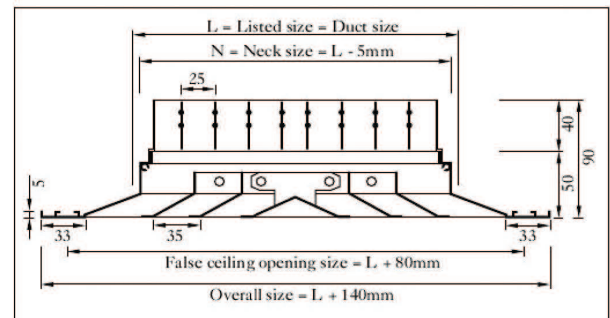
Damper frame and core: : High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.

Optional diffuser frame: Stamped aluminum core.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Diffusers shall be coned type with each cone manufactured by extruded aluminum louvered profiles or one piece die formed aluminum construction - arranged in concentric cones to deflect air equally in four directions.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.
- Discharge air equally in four horizontal directions.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Available in rectangular sizes as option.



Model CD4:

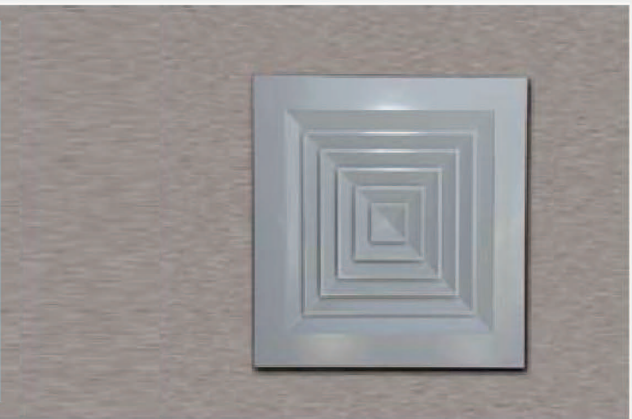
Same as CD4+D, but without opposed blade damper and foam gasket.
Suitable for return air applications.

Anti – Smudge Ceiling Diffuser

Construction:

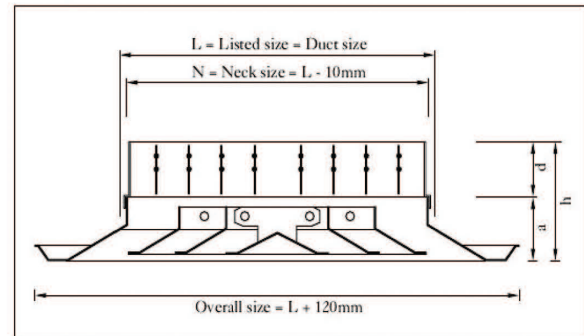
Frame and core: High quality die formed aluminum construction as standard. High quality extruded aluminum profiles as option.

Damper frame and core: : High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- Outer cone design minimizes smudging by reducing the dust accumulation on the ceiling around the diffuser.
- The frame and core are of high quality stamped aluminum construction as standard or high quality extruded aluminum profiles as option with the advantages of corrosion resistance and rigidity.
- Louvered type core is fixed to the frame with aluminum pins loaded with steel springs. Complete inner core assembly can be easily removed to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from the frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the inner core.
- Discharge air equally in four horizontal directions.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.



Standard finishes:

- Natural aluminum anodized finish.
- Powder coated color finish as per RAL color codes.
- Flexibility of finishing is available as option.

Model CD4(AS):

- Same as CD4+D(AS) but without damper and foam gasket.
- Also available in one way, two way and three way throws.

Rectangular Ceiling Diffuser

Construction:

Frame and core: High quality extruded aluminum profile with 33 mm flange width.

Damper frame and core: : High quality extruded aluminum profile with natural aluminum finish. Black matt finish as option.



Description:

- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Diffusers shall be coned type with each cone manufactured by extruded aluminum louvered profiles, arranged in concentric cones to deflect air equally in four directions.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- This product can be manufactured for one, two, three and four way throws.
- Diffusers are available in rectangular sizes as per clients choice.

Model CD4R:

Construction same as CD4R+D without opposed blade damper and foam gasket.

Ceiling Tile Replacement Diffuser

Construction:

Frame and core: High quality die formed aluminum sheets with suitable flange as outer frame.

Damper frame and blades: High quality extruded aluminum profile with natural finish. Black matt finish as option.



Description:

- The basic concept of having CD module type is to replace a ceiling tile by diffuser of any neck size. Thus the alignment of tiles are not altered.
- The frame and blades are of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Diffusers are coned type, each cone is manufactured as one piece die formed aluminum construction arranged in concentric pattern to deflect air in four directions.
- 3 way, 2 way, 1 way, cones are available as option and are manufactured of high quality extruded aluminum.
- Louvered type core is fixed to the outer frame, which has a constant outer size (600mm x 600mm) for different neck sizes, with steel springs core can be easily removable and interchangeable to allow for maximum flexibility in installation, maintenance and damper adjustment.
- Damper is fixed rigidly to the frame by aluminum rivets. Fixing by spring clips as option.
- Damper blades are separated from its frame by nylon bushes.
- Opposed blade damper is screw operated from the face opening of the diffuser after removing the internal core. Lever operated damper as option.

- Discharge air equally in four horizontal directions.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.



S.No	Neck Size (in mm)	Outer flange size (in mm)
1.	150 x 150	600 x 600
2.	225 x 225	600 x 600
3.	300 x 300	600 x 600
4.	375 x 375	600 x 600
5.	450 x 450	600 x 600

Models	
CDM-4	4 way
CDM-3	3 way
CDM-2	2 way
CDM-1	1 way

Finishes:

- Natural aluminum anodized finish.
- Powder coated color finish as per RAL color codes.

CD Module return diffusers are available without damper and foam gasket for return air applications.

Adjustable Core

- Diffuser core can be easily removable and changeable to allow for maximum flexibility



Panel Diffuser

- Diffuser core is fixed to the outer frame. Which has a constant outer size (600 mm × 600 mm) for different neck size. With steel springs core can be easily removable and inter - changeable to allow for maximum flexibility in installation. Maintenance and damper adjustment.



Supply Ceiling Diffuser - One Way

Neck size in mm x mm	Neck vel in m/sec	1	1.5	2	2.5	3	3.5
150 x 150	Cfm	47.	72.	95.	119.	144.	167.
	M ³ /sec.	.023	.034	.045	.056	.068	.079
	Ps in mm H ₂ O	.69	1.05	2.11	3.54	4.98	6.44
	Throw in m	1.3-2-2.7	2-2.8-3.6	2.8-3.7-4.4	3.3-4.2-4.9	4-4.7-5.9	4.4-5.5-6.2
	NC	<15	16.	21.	27.	34.	39.
225 x 225	Cfm	108.	161.	214.	269.	322.	375.
	M ³ /sec.	.051	.076	.101	.127	.152	.177
	Ps in mm H ₂ O	.69	1.37	2.8	4.26	6.05	8.23
	Throw in m	1.3-2-2.7	2.0-2.8-3.9	2.9-3.7-5.2	3.8-5.3-6.8	5.1-7-9.3	7-8.6-11.6
	NC	<15	17.	24.	30.	36.	41.
300 x 300	Cfm	191.	286.	381.	476.	572.	667.
	M ³ /sec.	.09	.135	.18	.225	.27	.31
	Ps in mm H ₂ O	.69	1.75	3.17	5.31	7.46	10.4
	Throw in m	2.4-3.5-5.5	3.6-5.0-7.1	4.8-5.9-8.8	5.7-7.2-9.8	6.3-7.4-11	7-8.6-12.5
	NC	<15	17.	26.	33.	38.	43.
375 x 375	Cfm	299.	447.	595.	745.	893.	1,042.
	M ³ /sec.	.141	.211	.281	.352	.422	.492
	Ps in mm H ₂ O	1.03	2.09	3.52	5.66	8.18	11.46
	Throw in m	2.7-4.1-6.2	4.6-6.4-8.8	6.2-7.3-10.6	7.2-8.7-12.5	7.8-9-7-14.5	8.6-10.5-15.6
	NC	<15	18.	28.	35.	40.	44.
450 x 450	Cfm	430.	644.	858.	1,071.	1,287.	1,501.
	M ³ /sec.	.203	.304	.405	.506	.608	.709
	Ps in mm H ₂ O	1.03	2.09	3.86	6.38	9.24	11.46
	Throw in m	3.5-5.2-8.5	5.3-7.4-10.6	7.9-9.1-12.8	10.5-15	9.7-11.8-17	10.5-13-18
	NC	<15	20.	30.	36.	41.	44.
525 x 525	Cfm	585.	875.	1,165.	1,461.	1,757.	2,033.
	M ³ /sec.	.276	.413	.55	.69	.83	.96
	Ps in mm H ₂ O	1.03	2.45	4.22	6.74	9.6	11.83
	Throw in m	4.1-5.8-9.5	6-8.8-12.6	8.4-10.2-15	9.8-12-17.4	10.9-14-20	12-14.8-21.5
	NC	15.	23.	32.	37.	42.	45.
600 x 600	Cfm	762.	1,143.	1,524.	1,906.	2,287.	2,668.
	M ³ /sec.	.36	.54	.72	.9	1.08	1.26
	Ps in mm H ₂ O	1.03	2.45	4.22	6.74	9.6	11.83
	Throw in m	4.5-6.5-11.6	6.7-9.1-14	9.1-12-17.1	10.5-14-20	12-16-23	12.8-17.2-24
	NC	16.	26.	33.	38.	42.	45.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Supply Ceiling Diffuser - Two Way

Neck size in mm x mm	Neck vel in m/sec	1	1.5	2	2.5	3	3.5
150 x 150	Cfm	47.	72.	95.	119.	144.	167.
	M ³ /sec.	.023	.034	.045	.056	.068	.079
	Ps in mm H ₂ O	.64	.87	2.02	3.41	4.83	6.1
	Throw in m	1.3-2-2.7	2-2.8-3.6	2.8-3.7-4.4	3.2-4-4.8	3.8-4.5-5.6	4.1-5.2-6
	NC	<15	16.	21.	27.	34.	39.
225 x 225	Cfm	108.	161.	214.	269.	322.	375.
	M ³ /sec.	.051	.076	.101	.127	.152	.177
	Ps in mm H ₂ O	.64	1.29	2.7	4.1	5.86	7.77
	Throw in m	1.3-2-2.7	2-2.8-3.9	2.8-3.7-5.1	3.7-5.2-6.6	4.8-6.7-9	6.7-8.2-11
	NC	<15	17.	24.	30.	36.	41.
300 x 300	Cfm	191.	286.	381.	476.	572.	667.
	M ³ /sec.	.09	.135	.18	.225	.27	.315
	Ps in mm H ₂ O	.64	1.64	3.05	5.1	7.23	9.81
	Throw in m	2.4-3.5-5.5	3.6-4.9-7	4.7-5.8-8.6	5.5-6.9-9.5	5.9-7.1-11	6.7-8.4-12
	NC	<15	17.	26.	33.	38.	43.
375 x 375	Cfm	299.	447.	595.	745.	893.	1,042.
	M ³ /sec.	.141	.211	.281	.352	.422	.492
	Ps in mm H ₂ O	.96	1.96	3.71	5.5	7.92	10.81
	Throw in m	2.7-4.1-6.2	4.6-6.3-8.7	6.1-7.2-10.4	6.9-8.4-12.1	7.4-9.3-14	8.1-10-14.9
	NC	<15	18.	28.	35.	40.	44.
450 x 450	Cfm	430.	644.	858.	1,071.	1,287.	1,501.
	M ³ /sec.	.203	.304	.405	.506	.608	.709
	Ps in mm H ₂ O	.96	1.96	4.06	6.68	8.9	12.16
	Throw in m	3.4-5.1-8.5	5.3-7.4-10	8.3-10-15	8-10.2-14.6	9.3-11-16.3	10-12.3-17
	NC	<15	20.	30.	36.	41.	44.
525 x 525	Cfm	585.	875.	1,165.	1,461.	1,757.	2,033.
	M ³ /sec.	.276	.413	.55	.69	.83	.96
	Ps in mm H ₂ O	.96	2.29	4.06	6.49	9.31	11.1
	Throw in m	4.1-5.8-9.5	6-8.7-12.6	8.3-10-15	9.5-11.8-17	10.4-13.4-19	11.6-14.1-20
	NC	15.	23.	32.	37.	42.	45.
600 x 600	Cfm	762.	1,143.	1,524.	1,906.	2,287.	2,668.
	M ³ /sec.	.36	.54	.72	.9	1.08	1.26
	Ps in mm H ₂ O	.96	2.29	4.06	6.49	9.31	11.1
	Throw in m	4.5-6.5-11	6.6-9-14	9-11.8-16.9	10.2-13.6-19	11.4-15.2-22	12.2-16-23
	NC	16.	26.	33.	38.	42.	45.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Supply Ceiling Diffuser - Three Way

Neck size in mm x mm	Neck vel in m/sec	1	1.5	2	2.5	3	3.5
150 x 150	Total CFM	47.	72.	95.	119.	144.	167.
	Total M ³ / Sec	.023	.034	.045	.056	.068	.079
	M ³ / Sec each side of X	.008	.013	.017	.021	.025	.03
	M ³ / Sec in Y side	.007	.008	.011	.014	.018	.019
	Ps in mm of H ₂ O	.56	.85	1.72	2.87	4.06	5.29
	Throw in each side of X	1.2-1.8-2.4	1.8-2.4-3.1	2.4-3.1-3.7	2.7-3.4-4	3.1-3.7-4.6	3.4-4.3-4.9
	Throw in Y side	1.2-1.8-2.5	1.8-2.6-3.4	2.6-3.4-4.0	3.0-3.7-4.4	3.5-4.1-5.0	3.7-4.7-5.4
	N C	<15	16.	21.	27.	34.	39.
225 x 225	Total CFM	108.	161.	214.	269.	322.	375.
	Total M ³ / Sec	.051	.076	.101	.127	.152	.177
	M ³ / Sec each side of X	.019	.028	.038	.048	.057	.066
	M ³ / Sec in Y side	.013	.02	.025	.031	.038	.047
	Ps in mm of H ₂ O	.56	1.12	2.29	3.45	4.92	5.84
	Throw in each side of X	1.2-1.8-2.4	1.8-2.4-3.4	2.4-3.1-4.3	3.1-4.3-5.5	4.0-5.5-7.3	5.5-6.7-9.1
	Throw in Y side	1.2-1.8-2.5	1.8-2.6-3.7	2.6-3.4-4.7	3.4-4.8-6.1	4.4-6.1-8.2	6.1-7.5-10.1
	N C	<15	17.	24.	30.	36.	41.
300 x 300	Total CFM	191.	286.	381.	476.	572.	667.
	Total M ³ / Sec	.09	.135	.18	.225	.27	.315
	M ³ / Sec each side of X	.033	.051	.068	.084	.101	.118
	M ³ / Sec in Y side	.024	.033	.044	.057	.068	.079
	Ps in mm of H ₂ O	.56	1.45	2.59	4.36	6.08	8.48
	Throw in each side of X	2.1-3.1-4.9	3.1-4.3-6.1	4.0-4.9-7.3	4.6-5.8-7.9	4.9-5.8-9.1	5.5-6.7-9.8
	Throw in Y side	2.1-3.3-5.2	3.4-4.6-6.5	4.3-5.4-8.0	5.1-6.3-8.5	5.4-6.6-10.1	6.2-7.7-10.6
	N C	<15	17.	26.	33.	38.	43.
375 x 375	Total CFM	299.	447.	595.	745.	893.	1,042.
	Total M ³ / Sec	.141	.211	.281	.352	.422	.492
	M ³ / Sec each side of X	.053	.079	.105	.132	.158	.185
	M ³ / Sec in Y side	.035	.053	.071	.088	.106	.122
	Ps in mm of H ₂ O	.84	1.7	2.87	4.59	6.66	9.35
	Throw in each side of X	2.4-3.7-5.5	4.0-5.5-7.6	5.2-6.1-8.8	5.8-7.0-10.1	6.1-7.6-11.3	6.7-8.2-12.2
	Throw in Y side	2.5-3.9-5.8	4.3-5.9-8.2	5.6-6.7-9.4	6.4-7.6-10.9	6.7-8.3-12.5	7.4-9.1-13.4
	N C	<15	18.	28.	35.	40.	44.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Supply Ceiling Diffuser - Three Way

Neck size in mm x mm	Neck vel in m/sec	1	1.5	2	2.5	3	3.5
450 x 450	Total CFM	430.	644.	858.	1,071.	1,287.	1,501.
	Total M ³ / Sec	.203	.304	.405	.506	.608	.709
	M ³ / Sec each side of X	.076	.114	.151	.19	.228	.267
	M ³ / Sec in Y side	.051	.076	.103	.126	.152	.175
	Ps in mm of H ₂ O	.84	1.7	3.16	5.16	7.52	10.51
	Throw in each side of X	3.1-4.6-7.6	4.6-6.4-9.1	6.6-7.6-10.7	6.7-8.5-12.2	7.6-9.2-13.4	8.2-10.1-14
	Throw in Y side	3.2-4.9-8.1	4.9-6.8-9.5	7.2-8.7-12.5	7.2-9.2-13.4	8.3-10.2-15.4	9.1-11.3-15.6
	N C	<15	20.	30.	36.	41.	44.
525 x 525	Total CFM	585.	875.	1,165.	1,461.	1,757.	2,033.
	Total M ³ / Sec	.276	.413	.55	.69	.83	.96
	M ³ / Sec each side of X	.103	.155	.206	.259	.311	.36
	M ³ / Sec in Y side	.07	.103	.138	.172	.208	.24
	Ps in mm of H ₂ O	.84	1.99	3.5	5.46	7.82	9.65
	Throw in each side of X	3.7-5.2-8.5	5.2-7.6-11	7.0-8.5-12.5	7.9-9.8-14	8.5-11-15.9	9.5-11.6-16.8
	Throw in Y side	3.9-5.6-9.2	5.6-8.2-11.9	7.6-9.3-13.7	8.5-10.4-5.4	9.4-12.5-17.7	10.6-13.1-17.8
	N C	15.	23.	32.	37.	42.	45.
600 x 600	Total CFM	762.	1,143.	1,524.	1,906.	2,287.	2,668.
	Total M ³ / Sec	.36	.54	.72	.9	1.08	1.26
	M ³ / Sec each side of X	.135	.202	.27	.338	.405	.472
	M ³ / Sec in Y side	.09	.136	.18	.224	.27	.316
	Ps in mm of H ₂ O	.84	1.99	3.5	5.46	7.82	9.65
	Throw in each side of X	4-5.8-10.4	5.8-8-12.2	7.6-10-14.3	8.5-11.3-16.1	9.4-12.5-18	10-13.4-19.5
	Throw in Y side	4.2-6.2-10.7	6.2-8.3-13.1	8.4-10.9-15.4	1-17.6 10.2-14.0-20		11.2-15.0-21.6
	N C	16.	26.	33.	38.	42.	45.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Supply Ceiling Diffuser - Four Way

Neck size in mm x mm	Neck vel in m/sec	1	1.5	2	2.5	3	3.5
150 x 150	Cfm	47.	72.	95.	119.	144.	167.
	M ³ /sec.	.023	.034	.045	.056	.068	.079
	Ps in mm H ₂ O	.51	.76	1.52	2.54	3.56	4.57
	Throw in m	1.2-1.8-2.4	1.8-2.4-3.1	2.4-3.1-3.7	2.7-3.4-4	3.1-3.7-4.6	3.4-4.3-4.9
	NC	<15	16.	21.	27.	34.	39.
225 x 225	Cfm	108.	161.	214.	269.	322.	375.
	M ³ /sec.	.051	.076	.101	.127	.152	.177
	Ps in mm H ₂ O	.51	1.	2.03	3.05	4.32	5.84
	Throw in m	1.2-1.8-2.4	1.8-2.4-3.4	2.4-3.1-4.3	3.1-4.3-5.5	4-5.5-7.3	5.5-6.7-9.1
	NC	<15	17.	24.	30.	36.	41.
300 x 300	Cfm	191.	286.	381.	476.	572.	667.
	M ³ /sec.	.09	.135	.18	.225	.27	.315
	Ps in mm H ₂ O	.51	1.27	2.29	3.81	5.33	7.37
	Throw in m	2.1-3.1-4.9	3.1-4.3-6.1	4.0-4.9-7.3	4.6-5.8-7.9	4.9-5.8-9.1	5.5-6.7-9.8
	NC	<15	17.	26.	33.	38.	43.
375 x 375	Cfm	299.	447.	595.	745.	893.	1,042.
	M ³ /sec.	.141	.211	.281	.352	.422	.492
	Ps in mm H ₂ O	.76	1.52	2.54	4.06	5.84	8.13
	Throw in m	2.4-3.7-5.5	4.0-5.5-7.6	5.2-6.1-8.8	5.8-7-10.1	6.1-7.6-11.3	6.7-8.2-12.2
	NC	<15	18.	28.	35.	40.	44.
450 x 450	Cfm	430.	644.	858.	1,071.	1,287.	1,501.
	M ³ /sec.	.203	.304	.405	.506	.608	.709
	Ps in mm H ₂ O	.76	1.52	2.79	4.57	6.6	9.14
	Throw in m	3.1-4.6-7.6	4.6-6.4-9.1	5.6-7.6-10.7	6.7-8.5-12.2	7.6-9.2-13.4	8.2-10.1-14
	NC	<15	20.	30.	36.	41.	44.
525 x 525	Cfm	585.	875.	1,165.	1,461.	1,757.	2,033.
	M ³ /sec.	.276	.413	.55	.69	.83	.96
	Ps in mm H ₂ O	.76	1.78	3.05	4.83	6.86	8.39
	Throw in m	3.7-5.2-8.5	5.2-7.6-11	7.0-8.5-12.5	7.9-9.8-14	8.5-11-15.9	9.5-11.6-16.8
	NC	15.	23.	32.	37.	42.	45.
600 x 600	Cfm	762.	1,143.	1,524.	1,906.	2,287.	2,668.
	M ³ /sec.	.36	.54	.72	.9	1.08	1.26
	Ps in mm H ₂ O	.76	1.78	3.05	4.83	6.86	8.39
	Throw in m	4-5.8-10.4	5.8-8-12.2	7.6-10-14.3	8.5-11.3-16.1	9.4-12.5-18	10-13.4-19.5
	NC	16.	26.	33.	38.	42.	45.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Return Ceiling Diffuser - One Way

Neck size in mm x mm	Neck vel in m/sec	1	1.25	1.5	1.75	2	2.25	3	3.5	4
150 x 150	Cfm	49.0	61.0	74.0	85.0	97.0	123.0	146.0	171.0	195.0
	M ³ /sec	0.023	0.0	0.035	0.04	0.046	0.058	0.069	0.081	0.092
	Ps in mm H ₂ O	0.65	1.0	1.51	2.06	2.66	4.25	6.12	8.54	11.18
	NC	<15	<15	<15	<15	19.0	25.00	30.0	34.0	40.0
225 x 225	Cfm	108.0	135.0	163.0	188.0	216.0	271.0	324.0	379.0	432.0
	M ³ /sec	0.051	0.064	0.077	0.089	0.102	0.128	0.153	0.179	0.204
	Ps in mm H ₂ O	0.7	1.14	1.72	2.25	3.04	4.71	6.79	9.65	12.57
	NC	<15	<15	<15	16.0	21.0	28.0	34.0	40.0	45.0
300 x 300	Cfm	193.0	239.0	286.0	335.0	381.0	476.0	572.0	667.0	762.0
	M ³ /sec	0.09	0.113	0.135	0.158	0.18	0.225	0.27	0.315	0.36
	Ps in mm H ₂ O	0.81	1.26	1.85	2.51	3.34	5.25	7.61	10.47	13.97
	NC	<15	<15	16.0	21.0	25.0	32.0	38.0	43.0	48.0
375 x 375	Cfm	298.0	372.0	449.0	521.0	597.0	747.0	896.0	1,046.0	1,194.0
	M ³ /sec	0.141	0.176	0.212	0.246	0.282	0.353	0.423	0.494	0.564
	Ps in mm H ₂ O	0.91	1.42	2.11	2.85	3.79	5.93	8.7	11.85	15.64
	NC	<15	<15	19.0	25.0	32.0	38.0	43.0	47.0	51.0
450 x 450	Cfm	430.0	538.0	646.0	752.0	860.0	1,076.0	1,289.0	1,505.0	1,719.0
	M ³ /sec	0.203	0.254	0.305	0.355	0.406	0.508	0.609	0.711	0.812
	Ps in mm H ₂ O	0.99	1.52	2.27	3.09	4.14	6.46	9.24	12.95	17.04
	NC	<15	17.0	24.0	31.0	36.0	40.0	45.0	48.0	52.0
525 x 525	Cfm	584.0	730.0	877.0	1023.00	1,168.0	1,461.0	1,753.0	2,045.0	2,337.0
	M ³ /sec	0.276	0.345	0.414	0.483	0.552	0.96	0.828	0.966	1.104
	Ps in mm H ₂ O	1.06	1.66	2.45	3.33	4.44	6.99	10.05	13.78	18.44
	NC	18.0	25.0	30.0	36.0	40.0	44.0	47.0	51.0	55.0
600 x 600	Cfm	762.0	953.0	1,143.0	1,334.0	1,524.0	1,905.0	2,287.0	2,668.0	3,049.0
	M ³ /sec	0.36	0.45	0.54	0.63	0.72	0.9	1.08	1.26	1.44
	Ps in mm H ₂ O	1.16	1.82	2.64	3.65	4.79	7.54	10.87	15.16	20.12
	NC	23.0	30.0	36.0	40.0	42.0	46.0	49.0	54.0	58.0

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Return Ceiling Diffuser - Two Way

Neck size in mm x mm	Neck vel in m/sec	1	1.25	1.5	1.75	2	2.25	3	3.5	4
150 x 150	Cfm	49.0	61.0	74.0	85.0	97.0	123.0	146.0	171.0	195.0
	M ³ /sec	0.023	0.029	0.035	0.04	0.046	0.058	0.069	0.081	0.092
	Ps in mm H ₂ O	0.65	1.04	1.49	2.04	2.61	4.17	6	8.34	10.77
	NC	<15	<15	<15	<15	19.0	25.00	30.0	34.0	40.0
225 x 225	Cfm	108.0	135.0	163.0	188.0	216.0	271.0	324.0	379.0	432.0
	M ³ /sec	0.051	0.064	0.077	0.089	0.102	0.128	0.153	0.179	0.204
	Ps in mm H ₂ O	0.7	1.14	1.69	2.22	2.98	4.62	6.67	9.42	12.12
	NC	<15	<15	<15	16.0	21.0	28.0	34.0	40.0	45.0
300 x 300	Cfm	193.0	239.0	286.0	335.0	381.0	476.0	572.0	667.0	762.0
	M ³ /sec	0.09	0.113	0.135	0.158	0.18	0.225	0.27	0.315	0.36
	Ps in mm H ₂ O	0.8	1.26	1.83	2.48	3.28	5.15	7.47	10.23	13.46
	NC	<15	<15	16.0	21.0	25.0	32.0	38.0	43.0	48.0
375 x 375	Cfm	298.0	372.0	449.0	521.0	597.0	747.0	896.0	1,046.0	1,194.0
	M ³ /sec	0.141	0.176	0.212	0.246	0.282	0.353	0.423	0.494	0.564
	Ps in mm H ₂ O	0.9	1.41	2.09	2.82	3.72	5.81	8.54	11.58	15.07
	NC	<15	<15	19.0	25.0	32.0	38.0	43.0	47.0	51.0
450 x 450	Cfm	430.0	538.0	646.0	752.0	860.0	1,076.0	1,289.0	1,505.0	1,719.0
	M ³ /sec	0.203	0.254	0.305	0.355	0.406	0.508	0.609	0.711	0.812
	Ps in mm H ₂ O	0.98	1.52	2.25	3.06	4.07	6.33	9.07	12.66	16.42
	NC	<15	17.0	24.0	31.0	36.0	40.0	45.0	48.0	52.0
525 x 525	Cfm	584.0	730.0	877.0	102.3	1,168.0	1,461.0	1,753.0	2,045.0	2,337.0
	M ³ /sec	0.276	0.345	0.414	0.483	0.552	0.69	0.828	0.966	1.104
	Ps in mm H ₂ O	1.06	1.65	2.43	3.29	4.36	6.86	9.86	13.46	17.77
	NC	18.0	25.0	30.0	36.0	40.0	44.0	47.0	51.0	55.0
600 x 600	Cfm	762.0	953.0	1,143.0	1,334.0	1,524.0	1,905.0	2,287.0	2,668.0	3,049.0
	M ³ /sec	0.36	0.45	0.54	0.63	0.72	0.9	1.08	1.26	1.44
	Ps in mm H ₂ O	1.16	1.81	2.62	3.62	4.7	7.39	10.67	14.81	19.39
	NC	23.0	30.0	36.0	40.0	42.0	46.0	49.0	54.0	58.0

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Return Ceiling Diffuser - Three Way

Neck size in mm x mm	Neck vel in m/sec	1	1.25	1.5	1.75	2
150 x 150	CFM	49.	61.	74.	85.	97.
	M ³ /sec.	.023	.029	.035	.04	.046
	Ps in mm H ₂ O	.7	1.12	1.48	2.02	2.59
	NC	<15	<15	<15	<15	19.
225 x 225	CFM	108.	135.	163.	188.	216.
	M ³ /sec.	.051	.064	.077	.089	.102
	Ps in mm H ₂ O	.76	1.23	1.68	2.2	2.96
	NC	<15	<15	<15	16.	21.
300 x 300	CFM	193.	239.	286.	335.	381.
	M ³ /sec.	.09	.113	.135	.158	.18
	Ps in mm H ₂ O	.87	1.36	1.82	2.46	3.25
	NC	<15	<15	16.	21.	25.
375 x 375	CFM	298.	372.	449.	521.	597.
	M ³ /sec.	.141	.176	.212	.246	.282
	Ps in mm H ₂ O	.98	1.53	2.07	2.79	3.69
	NC	<15	<15	19.	25.	32.
450 x 450	CFM	430.	538.	646.	752.	860.
	M ³ /sec.	.203	.254	.305	.355	.406
	Ps in mm H ₂ O	1.07	1.63	2.22	3.03	4.04
	NC	<15	17.	24.	31.	36.
525 x 525	CFM	584.	730.	877.	102.3	1,168.
	M ³ /sec.	.276	.345	.414	.483	.552
	Ps in mm H ₂ O	1.14	1.79	2.41	3.26	4.33
	NC	18.	25.	30.	36.	40.
600 x 600	CFM	762.	953.	1,143.	1,334.	1,524.
	M ³ /sec.	.36	.45	.54	.63	.72
	Ps in mm H ₂ O	1.25	1.97	2.59	3.58	4.67
	NC	23.	30.	36.	40.	42.

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Return Ceiling Diffuser - Four Way

Neck size in mm x mm	Neck vel in m/sec	1	1.25	1.5	1.75	2	2.25	3	3.5	4
150 x 150	Cfm	49.0	61.0	74.0	85.0	97.0	132.0	146.0	171.0	195.0
	M ³ /sec	0.023	0.029	0.035	0.04	0.046	0.058	0.069	0.081	0.092
	Ps in mm H ₂ O	0.64	1.02	1.45	1.89	2.51	4.01	5.72	7.9	10.16
	NC	<15	<15	<15	<15	19.0	25.0	30.0	34.0	40.0
225 x 225	Cfm	108.0	135.0	163.0	188.0	216.0	271.0	324.0	379.0	432.0
	M ³ /sec	0.051	0.064	0.077	0.089	0.102	0.128	0.153	0.179	0.204
	Ps in mm H ₂ O	0.69	1.12	1.65	2.16	2.87	4.44	6.35	8.89	11.43
	NC	<15	<15	<15	16.0	21.0	28.0	34.0	40.0	45.0
300 x 300	Cfm	193.0	239.0	286.0	335.0	381.0	476.0	572.0	667.0	762.0
	M ³ /sec	0.09	0.113	0.135	0.158	0.18	0.225	0.27	0.315	0.36
	Ps in mm H ₂ O	0.79	1.24	1.78	2.41	3.15	4.95	7.11	9.65	12.7
	NC	<15	<15	16.0	21.0	25.0	32.0	38.0	43.0	48.0
375 x 375	Cfm	298.0	372.0	449.0	521.0	597.0	747.0	896.0	1,046.0	1,194.0
	M ³ /sec	0.141	0.176	0.212	0.246	0.282	0.353	0.423	0.494	0.564
	Ps in mm H ₂ O	0.89	1.39	2.03	2.74	3.58	5.93	8.13	10.9	14.22
	NC	<15	<15	19.0	25.0	32.0	38.0	43.0	47.0	51.0
450 x 450	Cfm	430.00	538.0	646.0	752.0	860.0	1,076.0	1,289.0	1,505.0	1,719.0
	M ³ /sec	0.203	0.254	0.305	0.355	0.406	0.508	0.609	0.711	0.812
	Ps in mm H ₂ O	0.97	1.49	2.18	2.97	3.91	6.09	8.64	11.94	15.49
	NC	<15	17.0	24.0	31.0	36.0	40.0	45.0	48.0	52.0
525 x 525	Cfm	584.00	730.0	877.0	1023.00	1,168.0	1,461.0	1,753.0	2,045.0	2,337.0
	M ³ /sec	0.276	0.345	0.414	0.483	0.552	0.69	0.828	0.966	1.104
	Ps in mm H ₂ O	1.04	1.63	2.36	3.2	4.19	6.6	9.39	12.7	16.76
	NC	18.0	25.0	30.0	36.0	40.0	44.0	47.0	51.0	55.0
600 x 600	Cfm	762.0	953.0	1,143.0	1,334.0	1,524.0	1,905.0	2,287.0	2,668.0	3,049.0
	M ³ /sec	0.36	0.45	0.54	0.63	0.72	0.9	1.08	1.26	1.44
	Ps in mm H ₂ O	1.14	1.78	2.54	3.51	4.52	7.11	10.16	13.9	18.29
	NC	23.0	30.0	36.0	40.0	42.0	46.0	49.0	54.0	58.0

- Neck velocity is measured in m/sec.
- Ps: static pressure loss across the diffuser in mm of H₂O.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Noise criteria (NC) based on a room attenuation of 10 db.

Plenum Box



- Plenum box manufactured from galvanized steel 22 or 20 gauges as standard and non standard gauges are available with flexibility of manufactured
- Plenum box supplied with round neck and internal insulation as standard
- Round neck manufactured from galvanized steel 22 or 20 gauges with standard length 100 mm and variable diameter
- Round neck may be supplied with round volume control damper as option

How To Order

