ROUND CEILING DIFFUSER

TYPE RD

INTRODUCTION

The RD round ceiling diffuser is a ceiling diffuser with a graceful exterior. The diffuser offers a 360° horizontal or vertical air diffusion pattern. It ensures maximum airflow at minimum noise level. It is widely used in plaster or metal ceiling and is easy to match with other round ceiling fittings. It is suitable for supply, return and exhaust air in cooling, heating and ventilation systems.

MATERIAL

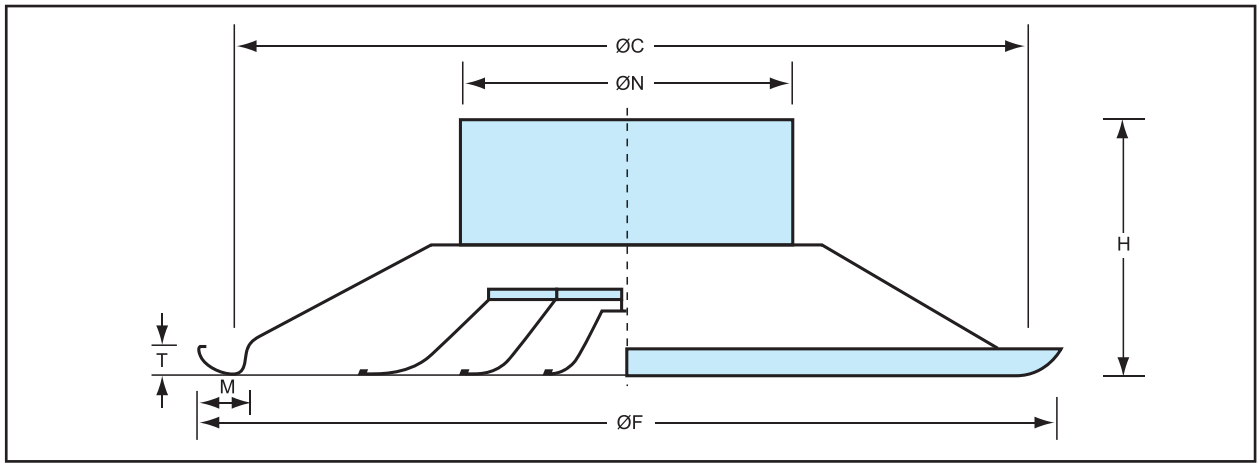
High quality aluminium sheet.

FINISH

White powder coated as standard. Other finishes are available as options. (For further details, please contact ACE office)

FEATURES

- Centre core is removable providing access to accessories and for easy installation.
- Centre core is adjustable to provide horizontal or vertical air pattern.



DIMENSION

SIZE	ØN	ØF	H	M	T	ØC
6	145	320	95	26	10	285
8	195	412	110	34	13	360
10	245	480	110	34	13	425
12	295	550	140	38	13	495
14	345	595	145	38	13	545
16	395	682	148	40	13	635

All dimensions are in mm.

PERFORMANCE DATA

ROUND CEILING DIFFUSER - TYPE RD

SIZE	SELECTION PARAMETER	NECK AIR VELOCITY (m/s)								
		3	3.5	4	4.5	5	5.5	6	7	8
6	Airflow Rate (l/s)	54	63	73	81	91	100	109	127	145
	Throw (m) Min-Max	0.6-1.2	0.7-1.5	0.8-1.7	0.9-1.9	1.0-2.1	1.1-2.3	1.2-2.5	1.4-2.9	1.6-3.3
	Projection (m)	3.6	4	4.3	4.5	4.7	5	5.2	5.7	6.1
	Pressure Loss (Pa)	13	18	24	30	37	44	53	72	94
	NR Level		16	21	24	28	31	34	40	44
8	Airflow Rate (l/s)	97	114	130	146	162	179	202	224	256
	Throw (m) Min-Max	0.8-1.7	0.9-1.9	1.1-2.2	1.2-2.5	1.4-2.8	1.5-3.0	1.6-3.3	1.9-3.9	2.2-4.4
	Projection (m)	4.7	5.2	5.5	6	6.2	6.5	6.7	7.3	7.9
	Pressure Loss (Pa)	11	16	21	26	32	41	50	64	84
	NR Level	17	21	25	28	31	35	37	41	44
10	Airflow Rate (l/s)	152	177	203	228	252	279	304	355	405
	Throw (m) Min-Max	1.0-2.1	1.2-2.4	1.4-2.8	1.5-3.1	1.7-3.5	1.9-3.8	2.1-4.2	2.4-4.9	2.7-5.5
	Projection (m)	5.8	6.4	6.8	7.3	7.7	8.1	8.5	9.2	10.4
	Pressure Loss (Pa)	9	13	17	21	25	33	39	52	68
	NR Level	16	22	26	30	33	36	39	44	48
12	Airflow Rate (l/s)	219	255	292	328	366	401	438	511	585
	Throw (m) Min-Max	1.2-2.5	1.4-2.9	1.6-3.3	1.8-3.7	2.1-4.6	2.3-4.6	2.5-5.0	2.9-5.8	3.3-6.7
	Projection (m)	6.9	7.6	8.2	8.8	9.5	10.4	11.4	12.1	12.8
	Pressure Loss (Pa)	9	12	16	21	25	30	37	51	66
	NR Level	18	23	27	31	35	38	41	46	50
14	Airflow Rate (l/s)	253	298	336	378	425	463	505	588	673
	Throw (m) Min-Max	1.3-2.8	1.5-3.2	1.8-3.6	2.0-4.1	2.3-5.1	2.5-5.3	2.8-5.5	3.2-6.4	3.6-7.4
	Projection (m)	8	9	9	10	11	12	13	14	15
	Pressure Loss (Pa)	12	18	25	35	42	51	61	78	88
	NR Level	20	25	30	34	39	42	45	51	55
16	Airflow Rate (l/s)	327	395	470	527	589	650	706	823	1000
	Throw (m) Min-Max	2.3-4.0	2.5-4.5	3.3-5.2	3.7-6.0	4.1-6.5	4.4-6.5	4.8-7.9	6.0-9.0	7-12
	Projection (m)	10	11	12	13	14	15	17	18	19
	Pressure Loss (Pa)	14	20	30	37	48	58	68	80	92
	NR Level	22	27	32	34	37	39	41	45	50

Performance data is tested basing on A. D. C. standard

THROWS - Maximum and minimum throws are based on jet terminal velocities (Vt) of 0.25 and 0.75m/s respectively and correspond to average room air velocities (Vr) of 0.1 and 0.25m/s with a ceiling jet at a height of 3m and an 11˚C cooling differential. Where the application height differs from this, throw selections should be adjusted accordingly; that is increasing the throw by 1m for every 1m increase in height. For exposed duct applications the throws should be reduced by a factor of 0.7.

PROJECTION - Projection data is based on a recessed core setting producing a vertical free jet at a heating differential of 10˚C and a terminal velocity of 0.5m/s.

NOISE LEVELS - Noise data is based on a flush core setting and is expressed in term of NR level with a room absorption factor of 8dB.