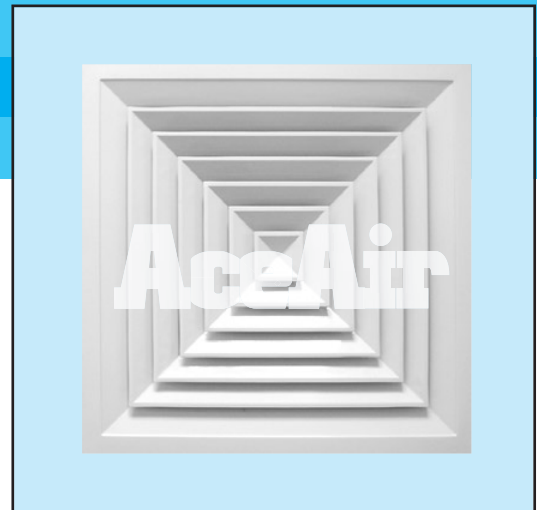


SQUARE CEILING DIFFUSER

TYPE JC



INTRODUCTION

The JC multicore square ceiling diffuser is a versatile form of air terminal offering 1 to 4 way horizontal air diffusion patterns. The diffuser is suitable for supply, return and exhaust air in cooling, heating and ventilation systems. It is widely used because it ensures maximum airflow at minimum noise level, and suitable for virtually any type of ceiling.

MATERIAL

- Extruded aluminium (JC-A)
- Galvanized steel (JC-S)

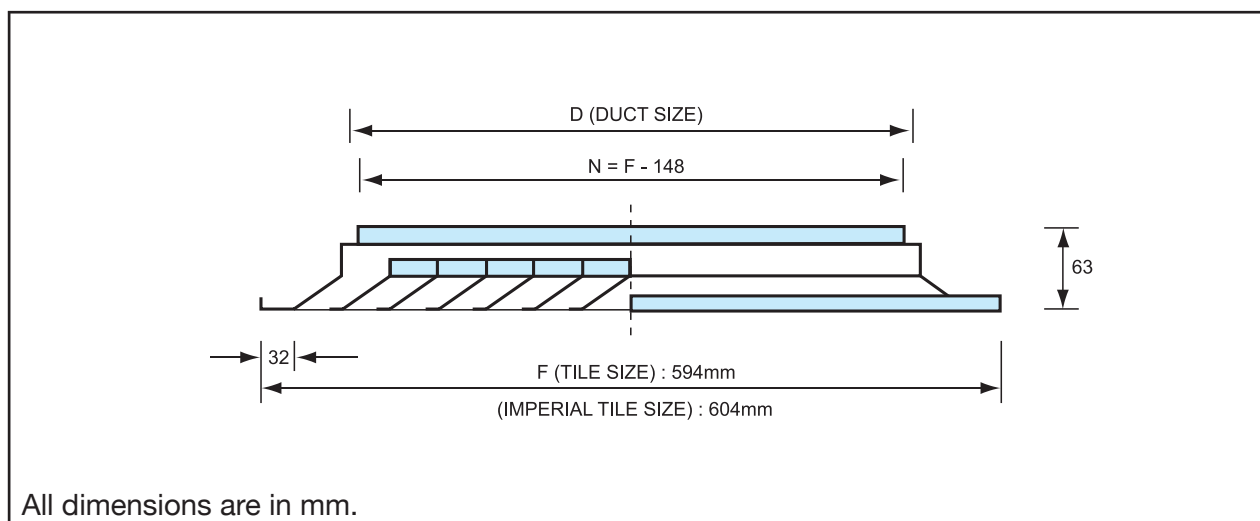
FINISH

Natural anodized for aluminium construction or white powder coated as standard. Other finishes are available as options.

FEATURES

- Directional core is removable providing access to accessories, connecting duct, and are interchangeable in the field for same size diffusers.
- Standard flat frame square JC diffuser is designed to replace standard tile ceiling panel or cover ceiling opening.
- Other frames are available on request. (For further details please contact ACE office.)

DIMENSION



PERFORMANCE DATA

SQUARE CEILING DIFFUSER - TYPE JC

NECK SIZE (mm)	SELECTION PARAMETER	NECK AIR VELOCITY (m/s)					
		1	1.5	2	2.5	3	3.5
	Pt Total Pressure (Pa)	2.5	5	8	14	20	27
150 x 150	Airflow Rate (l/s)	24	36	48	58	70	80
	Throw (m) Min-Max	0.4 - 1.2	0.6 - 2.0	1.2 - 3.2	1.4 - 3.8	1.9 - 4.0	2.0 - 4.5
	NR Level			19	22	25	28
225 x 225	Airflow Rate (l/s)	54	80	106	132	156	182
	Throw (m) Min-Max	0.4 - 2.0	1.1 - 3.2	1.4 - 4.0	1.7 - 4.4	2.1 - 4.8	2.6 - 5.2
	NR Level			20	23	26	30
300 x 300	Airflow Rate (l/s)	98	144	188	234	278	324
	Throw (m) Min-Max	0.8 - 3.0	1.2 - 4.0	1.6 - 4.6	2.2 - 5.0	2.9 - 5.6	3.2 - 6.2
	NR Level			21	25	29	34
375 x 375	Airflow Rate (l/s)	160	226	296	366	436	508
	Throw (m) Min-Max	1.0 - 3.6	1.6 - 4.4	2.2 - 5.2	3.0 - 5.8	3.5 - 6.5	4.2 - 7.2
	NR Level			22	27	33	37
450 x 450 Or Tile Size	Airflow Rate (l/s)	236	320	426	526	628	730
	Throw (m) Min-Max	1.4 - 4.2	2.0 - 5.0	2.8 - 5.8	3.4 - 6.5	4.0 - 7.0	4.5 - 7.8
	NR Level		19	24	30	35	39
525 x 525	Airflow Rate (l/s)	318	438	582	720	856	994
	Throw (m) Min-Max	1.6 - 4.6	2.2 - 5.3	3.2 - 6.0	4.0 - 7.2	4.2 - 7.8	4.6 - 8.2
	NR Level			26	33	37	41
600 x 600	Airflow Rate (l/s)	416	580	760	940	1120	1300
	Throw (m) Min-Max	1.8 - 4.8	2.8 - 5.9	3.8 - 6.8	4.3 - 7.4	4.6 - 8.2	5.0 - 9.0
	NR Level		22	28	35	38	43

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

EXTRACT PERFORMANCE DATA

Without	Pt Total Pressure (Pa)	3	6	10	17	24	32
OB Damper	NR Level	+3	+3	+3	+3	+4	+5
With OB	Pt Total Pressure (Pa)	3	6	11	19	27	35
Damper	NR Level	+3	+4	+4	+5	+8	+8

THROWS - Maximum and minimum throws are based on jet terminal velocities (V_t) of 0.25 and 0.75m/s respectively and correspond to average room air velocities (V_r) of 0.1 and 0.25m/s with a temperature differential of 11°C and room height of 2.7m. 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.

NOISE LEVELS - Noise data is expressed in terms of NR level with a room absorption factor of 8dB. Where dampers are fitted to the diffuser some allowance should be made for open or partially throttled blades.