ROUND DIFFUSER

SERIES : ACD – 1

ACD Supply Diffusers are recommended for heating, ventilation and cooling, and are equipped with flush cores for matching architectural requirements for flush appearance. High diffusion induction rates result in rapid temperature and velocity equalization of the mixed air mass well above the zone of occupancy. Horizontal performance assures confident use of cooling temperature differentials of 30 F and greater, at predicted low air motion (35 fpm) in the zone of occupancy.

FEATURES

* Fixed air pattern with flush core. 360 degree air pattern with wide performance range.
* Removable center core affords access to accessories & fixing. All accessory adjustments easily made without disturbing ceiling or removing diffuser.
* Core are interchangeable with stepped-down core in the field without disturbing ceiling.
* Diffusers are equipped with margins designed to minimize smudging. Minimum dirt development on ceiling in normal applications.
* Diffusers are constructed of aluminium.
* Oven baked hardened finish to matching ceiling surface. Special colour finishes are applied over baked finish and are avaliable to matching architectural requirements.

  Price including standard powder coating finish (RAL 9010, RAL 9016 Black, White, Other colour can be supplied on request at extra 10% additional charges.)

BUTTERFLY DAMPER

SERIES : D1

* Economical air volume control device.
* Installs directly behind Round Ceiling Diffusers.
* Screw Driver operated damper assembly provides full range volume control.
* Damper is constructed of steel.

ALUMINIUM ROUND CEILING DIFFUSER						
Unit	6	8	10	12	14	18
BASE SIZE	Ø 300mm	Ø 350mm	Ø 400mm	Ø 450mm	Ø 500mm	Ø 600mm
NECK SIZE	Ø 150mm	Ø 200mm	Ø 250mm	Ø 300mm	Ø 350mm	Ø 450mm

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PERFORMANCE TABLE FOR ACD - 1

SIZE	NECK VELOCITY (m/s)	1	2	3	4	5
6	AIR VOLUME (L/s)	18	35	53	70	88
	TOTAL PRESSURE LOSS (Pa)	2	9	21	37	58
Ø 300mm (BASE) Ø 150mm (NECK)	DIFF.RADIUS (M)	0.5-1	0.8-1.5	1-2.1	1.5-3	2.0-4
	NC RATING	---	---	18	26	34
8	AIR VOLUME (L/s)	31	63	94	126	157
	TOTAL PRESSURE LOSS (Pa)	2	9	21	31	40
Ø 350mm (BASE) Ø 200mm (NECK)	DIFF.RADIUS (M)	0.5-1	0.9-1.8	1.5-3	2-4	2.5-5
	NC RATING	---	18	21	31	40
10	AIR VOLUME (L/s)	49	98	147	196	245
	TOTAL PRESSURE LOSS (Pa)	2	9	21	34	43
Ø 400mm (BASE) Ø 250mm (NECK)	DIFF.RADIUS (M)	0.6-1.2	1.1-2.3	1.8-3.6	2.4-4.8	3.2-6.5
	NC RATING	---	---	25	35	43
12	AIR VOLUME (L/s)	71	141	212	282	353
	TOTAL PRESSURE LOSS (Pa)	2	9	21	37	58
Ø 450mm (BASE) Ø 300mm (NECK)	DIFF.RADIUS (M)	0.7-1.5	1.4-2.8	2.1-4.2	2.8-5.6	4-8
	NC RATING	---	18	29	39	46
14	AIR VOLUME (L/s)	96	192	288	384	481
	TOTAL PRESSURE LOSS (Pa)	3	12	27	48	75
Ø 500mm (BASE) Ø 350mm (NECK)	DIFF.RADIUS (M)	0.9-1.9	1.8-3.6	2.7-5.4	3.6-7.2	5.2-10
	NC RATING	---	19	31	41	48
18	AIR VOLUME (L/s)	159	318	477	636	795
	TOTAL PRESSURE LOSS (Pa)	4	18	41	72	112
Ø 600mm (BASE) Ø 450mm (NECK)	DIFF.RADIUS (M)	1.3-2.5	2.5-5	3.8-7.6	5-10	6-12
	NC RATING	---	21	35	45	53

Maximum throw and minimum throw were based on terminal velocity of 0.25 m/s and 0.1 m/s room velocity.

Noise Criteria (NC) values were taken in a reverberant room of 8db room effect.

Total Pressure With Damper

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