

Round Ceiling Diffuser



Model RF round diffusers are recommended for heating, ventilating and cooling. 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. Model RF, RS round diffusers perform efficiently with air loading of 6 to 24 air changes per hour (base on 10 ft. ceiling height), and sound level range of NC 25-35.

Features

- Fixed air pattern with flush core.
- Removable centre core for adjustments easily.
- Diffuser are equipped with margins designed to minimize smudging.
- Duct rings for mounting furnished as standard. Diffuser outer shell fastens directly to duct ring with concealed fasteners margins fit tight to ceiling for optimum ceiling appearance. Cost saving results from less installation time.

Finish

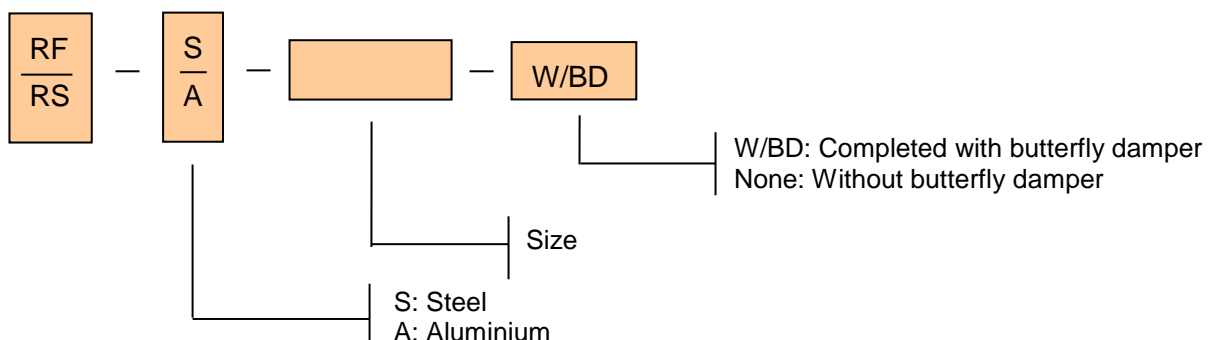
- Steel construction.
Standard finish is white baked enamel. Special colour finishes are available to match architectural requirements.
- Aluminium construction.
Standard finish is white baked enamel. Special colour finishes are available.

Accessories

- Butterfly damper (BD)

Damper for mounting in diffuser neck or duct
Continuously adjustable from full open to full closed through diffuser face.

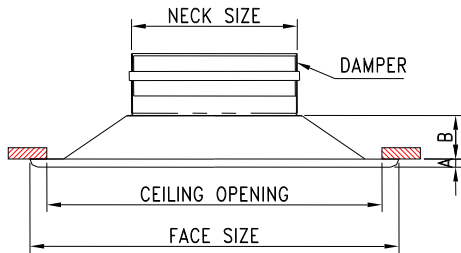
Order Code



Round Ceiling Diffuser

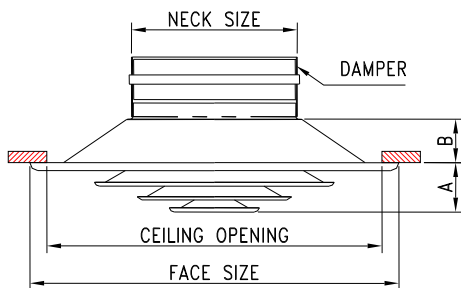
Dimension

Flush Face Type (RF)



Face Size Diameter (mm)	Neck Size Diameter (mm)	Ceiling Opening Diameter (mm)	A (mm)	B (mm)
320	150	280	6.4	44
430	200	370	9.5	59
540	250	470	9.5	75
650	300	565	9.5	89
750	350	650	15.9	108
860	400	750	18	121
1005	450	870	20.6	137
1100	500	930	37	152

Steeped-Down Face type (RS)



Face Size Diameter (mm)	Neck Size Diameter (mm)	Ceiling Opening Diameter (mm)	A (mm)	B (mm)
320	150	280	35	44
430	200	370	43	59
540	250	470	62	75
650	300	565	71	89
750	350	650	78	108
860	400	750	98	121
1005	450	870	110	137

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Performance Data

Neck Size (mm)	Neck Area (m ²)	Neck Velocity (m/s)	2	2.5	3	3.5	4	4.5
		Velocity	2.5	4	6	8	10	13
		Pressure (Pa)						
		Total Pressure	Horizontal					
		Vertical	5	9	12	16	21	27
		Pressure	7	11	16	21	27	35
150	0.018	m ³ /s	0.04	0.05	0.06	0.07	0.08	0.09
		Throw (m)	.5-.5-1	.5-1-1	.5-1-1.5	.5-1-2	1-1.5-2	1-1.5-2.5
		NC Value	-	14	17	22	26	29
200	0.03	m ³ /s	0.07	0.08	0.1	0.12	0.13	0.15
		Throw (m)	.5-1-1	.5-1-1.5	1-1-2.	1-1.5-2	1-1.5-3	1-2-3.
		NC Value	-	15	18	23	28	31
250	0.05	m ³ /s	0.1	0.13	0.16	0.18	0.21	0.23
		Throw (m)	.5-1-1.5	1-1-2.	1-1.5-2	1-2-3.	1-2-3-5	1.5-2.5-4
		NC Value	-	16	21	24	29	32
300	0.07	m ³ /s	0.15	0.18	0.22	0.26	0.3	0.33
		Throw (m)	1-1-2.	1-1.5-2	1-2-3.	1.5-2-3.5	1.5-2.5-4	2-3-5.
		NC Value	-	17	22	26	30	34
350	0.1	m ³ /s	0.2	0.25	0.3	0.35	0.4	0.45
		Throw (m)	1-1.5-2.5	1-2-3.	1.5-2.5-3.5	1.5-2.5-4	2-3-5.	2.5-3.5-6
		NC Value	-	18	23	27	31	35
400	0.13	m ³ /s	0.26	0.33	0.4	0.46	0.53	0.59
		Throw (m)	1-1.5-3	1.5-2.5-4	1.5-2.5-4.5	2-3-5.	2-3-5-6	2.5-4-6.5
		NC Value	-	19	23	28	32	36
450	0.16	m ³ /s	0.34	0.42	0.5	0.59	0.67	0.75
		Throw (m)	1-2-3.	1.5-2.5-3	2-3-5.	2-3.5-6	2.5-4-6.5	3-5-7.
		NC Value	-	20	25	29	34	38
500	0.16	m ³ /s	-	0.49	0.6	0.69	0.78	0.89
		Throw (m)	-	1.5-2.5-4.5	2-3-5.	2/3/2006	2.5-3.5-7.5	3-5-8.
		NC Value	-	20	20	25	29	33

NOTES ON PERFORMANCE DATA:

Throw value shown are based on terminal velocities of 0.75m/s, 0.5m/s, 0.25m/s.

NC values are based on room attenuation of 10 dB when 10⁻¹² watts is used as a reference.