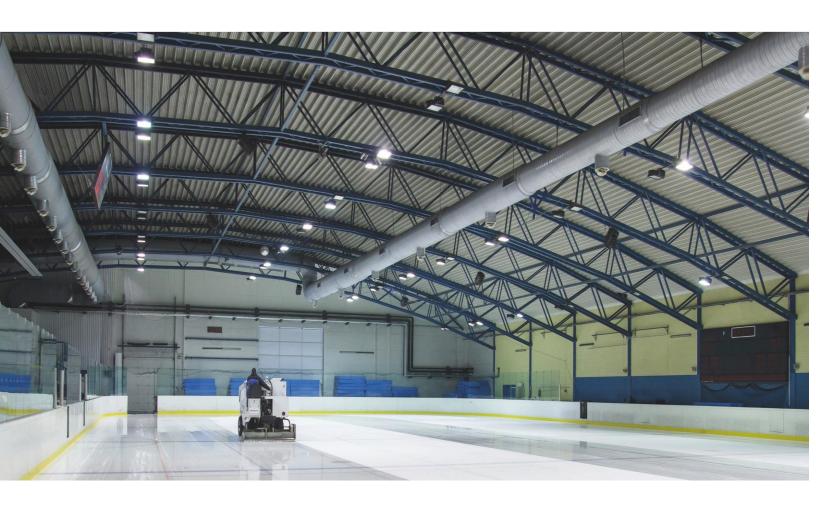
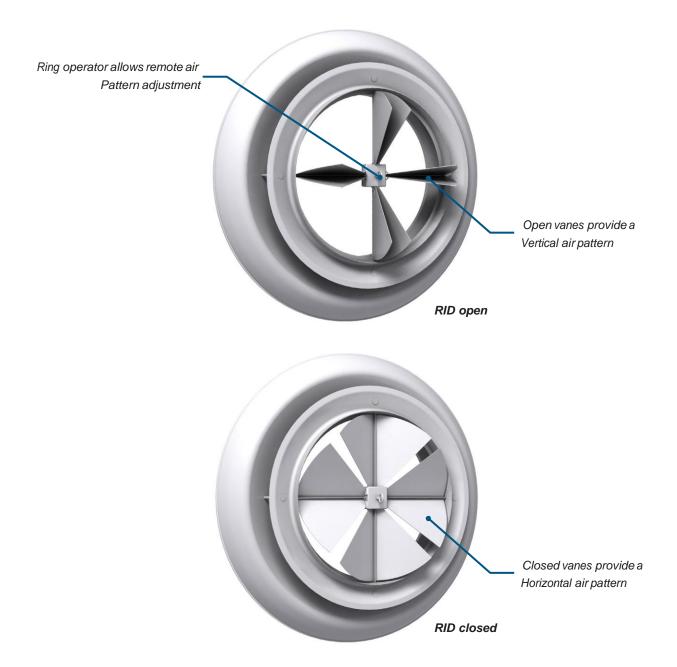
ROUND INDUSTRIAL DIFFUSER







The Round Industrial Diffuser (RID) is a high-capacity ceiling diffuser that features heavy-gauge, Stainless Steel 316 construction and fully adjustable airflow making it ideal for industrial applications with high ceilings.



ADJUSTABLE FOR HORIZONTAL AND VERTICAL AIR PATTERN

- + Designed for high ceiling installations, the RID features adjustable radial vanes with a ring operator to allow remote adjustment of the vanes with a pole operator.
- + Suitable for both heating and cooling applications, the RID can be adjusted between a full vertical or horizontal air pattern.
- At the full vertical setting the RID provides a long downward projection for effective heating and cooling from high mounting locations.





Horizontal airflow



TYPICAL APPLICATIONS

Heavy duty construction and the ability to change between a horizontal and vertical air pattern make the RID well suited for use in factories, warehouses, convention halls, shopping malls and other applications with high ceilings and variable conditions.

CONSTRUCTION

- + Size
 - 10 in.
 - 12 in.
 - 14 in.
 - 16 in.
 - 18 in.
 - 20 in.
 - 24 in.
 - 30 in.
 - 36 in.

Options

 Complete range of available accessory dampers, equalizing grids etc.

PERFORMANCE DATA

	Neck Velocity (fpm)		400	500	600	700	800	900	1000	1200	1400	1600
Size	Velocity Pressure (in. w.g.)		.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
10	Total Pressure (in. w.g.)	٧	.013	.021	.030	.040	.053	.067	.082	.118	.160	.210
		Н	.023	.036	.052	.070	.091	.115	.143	.205	.280	.358
	Flow Rate (cfm)		220	270	330	380	435	490	545	655	765	870
	Radius of Diffusion (ft.)	Н	4	5	6	7	8	10	10	12	14	15
	Throw (ft.)	٧	4-14	5-17	6-19	7-23	9-28	10-31	11-36	16-52	19-63	22-72
	Sound (NC)		15	19	23	27	33	37	40	43	47	53
	Total Pressure (in. w.g.)	٧	.012	.019	.028	.037	.049	.062	.076	.110	.148	.195
	FI D ((()	Н	.020	.032	.046	.062	.080	.102	.125	.180	.245	.318
12	Flow Rate (cfm)		315	390 5	470 7	550 8	630 9	705 11	785 12	940	1100 16	1255 18
	Radius of Diffusion (ft.) Throw (ft.)	H V	5 4-15	5-17	6-22	8-25	9-31	10-34	11-37	13 17-55	21-69	25-81
	Sound (NC)	V	15	19	23	27	33	37	39	45	51	54
	Total Pressure (in. w.g.)	V	.012	.019	.027	.036	.047	.060	.074	.106	.144	.188
14	Total Fressure (III. W.g.)	H	.020	.032	.046	.062	.080	.102	.125	.180	.245	.318
	Flow Rate (cfm)		425	530	635	745	850	955	1060	1270	1490	1695
	Radius of Diffusion (ft.)	Н	6	6	8	10	11	12	13	16	17	20
	Throw (ft.)	٧	5-17	6-18	7-23	8-26	10-32	11-36	12-38	18-60	22-72	27-87
	Sound (NC)	-	15	19	22	28	34	39	42	47	52	56
	Total Pressure (in. w.g.)	٧	.012	.018	.026	.035	.046	.058	.072	.103	.140	.183
16	, , ,	Н	.020	.032	.046	.062	.080	.102	.185	.180	.245	.318
	Flow Rate (cfm)		560	700	840	980	1120	1260	1400	1680	1960	2240
	Radius of Diffusion (ft.)	Н	6	7	9	10	12	14	14	17	20	22
	Throw (ft.)	٧	5-17	6-19	7-23	9-29	10-33	11-36	12-41	18-62	23-75	28-94
	Sound (NC)		16	19	23	28	32	38	42	47	51	55
18	Total Pressure (in. w.g.)	٧	.011	.018	.025	.034	.045	.056	.070	.099	.135	.177
		Н	.020	.032	.046	.062	.080	.102	.125	.180	.245	.318
	Flow Rate (cfm)		710	885	1060	1240	1420	1590	1770	2120	2480	2830
	Radius of Diffusion (ft.)	H V	6	8	10	12	13	15	16	19	22	24
	Throw (ft.) Sound (NC)	V	5-17 16	7-21 19	8-25 25	9-29 32	10-33 35	11-37 38	13-42 42	20-65 47	24-77 52	28-93 56
	Total Pressure (in. w.g.)	V	.011	.017	.024	.033	.043	.054	.067	.096	.130	.170
20	Total Fressure (III. W.g.)	H	.019	.030	.024	.058	.043	.096	.120	.170	.235	.305
	Flow Rate (cfm)		875	1100	1310	1530	1750	1970	2190	2610	3060	3500
	Radius of Diffusion (ft.)	н	7	9	11	13	14	16	17	21	24	27
	Throw (ft.)	٧	6-17	7-22	8-25	9-30	11-34	12-38	13-43	20-67	25-80	30-98
	Sound (NC)		16	19	26	33	36	39	43	48	52	56
	Total Pressure (in. w.g.)	V	.011	.017	.023	.031	.042	.053	.065	.094	.128	.167
24		Н	.019	.030	.043	.058	.076	.096	.120	.170	.235	.305
	Flow Rate (cfm)		1260	1570	1880	2200	2510	2820	3140	3770	4400	5020
	Radius of Diffusion (ft.)	Н	8	10	13	15	16	19	21	24	28	31
	Throw (ft.)	٧	6-18	7-23	8-27	10-31	11-36	12-39	14-46	22-70	26-83	32-105
	Sound (NC)		19	23	27	33	36	39	43	48	54	59
30	Total Pressure (in. w.g.)	٧	.010	.016	.023	.031	.041	.052	.064	.092	.125	.162
	Flow Pote (of-es)	Н	.020	.031 2450	.045 2940	.060 3430	.078 3920	.100 4410	.123 4900	.176 5880	.240 6860	.313 7840
	Flow Rate (cfm)	ш	1960					-	4900 24		34	
	Radius of Diffusion (ft.) Throw (ft.)	H V	10 6-19	12 7-23	15 9-27	18 10-32	20 11-36	23 13-42	24 14-47	29 22-72	27-85	38 33-110
	Sound (NC)	V	15	21	9-27 26	29	33	36	38	43	47	50
	Total Pressure	٧	.010	.016	.023	.031	.041	.052	.064	.092	.125	.162
36	Iolai Flessule											
	Flow Pata of m	Н	.015	.024	.036	.047	.062	.079	.098	.139	.189	.247
	Flow Rate, cfm Radius of Diffusion, ft	Н	2820 11	3520 14	4230 17	4930 20	5630 23	6340 26	7040 29	8450 34	9850 39	11260 46
	Projection, ft	V	6-19	7-24	9-29	10-33	11-37	13-43	15-61	24-78	27-98	35-115
	Frojection, It	NC	23	29	33	37	41	44	46	24-76 51	55	58
		NC	23	29	33	3/	41	44	40	31	55	38

Performance Notes:

- Tested in accordance with ASHRAE Standard 70 2006
 Method of Testing for Rating the Performance of Air
 Outlets and Inlets.
- 2. Airflow is in cubic feet per minute.
- 3. All pressures are in in. w.g.
- 4. Vertical Projections are to terminal velocities of 50 fpm. Minimum projections are with a 40 °F heating temperature
- differential and maximum projections are with a 20 $^{\circ}\text{F}$ cooling temperature differential.
- 5. Horizontal throws are to a terminal velocity of 50 fpm with a 20 °F cooling temperature differential.
- NC values are based on a room absorption of 10 dB re 10⁻¹² watts and one diffuser.
- NC Values based on a horizontal pattern (center closed).
 For vertical pattern (center open) use the following correction.

Size Correction

10 - 24 subtract 3 NC 30,36 no correction

8. Blanks "-" indicate an NC level below 15.



DIFFUSERS

Product Improvement is a continuing endeavor at BADRY. Therefore, specifications are subject to change without notice. Consult your BADRY Sales Representative for current specifications or more detailed information. Not all products may be available in all geographic areas. All goods described in this document are warranted as described in the Limited Warranty shown at www.badrygroup.com/Air.Ducts. Our complete product catalog can be viewed online.

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