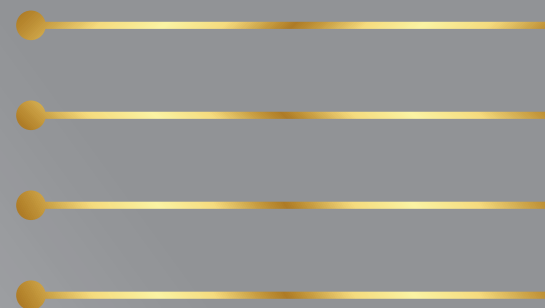


**Makkah**  
**For Air Outlets**



# مكة لمخارج الهواء

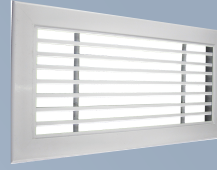
منذ عام ٢٠١٦



SQUARE CEILING  
DIFFUSER



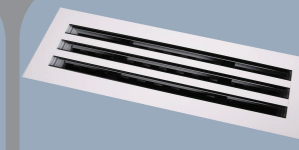
DOUBLE DEFLECTION  
GRILLE



LINEAR BAR GRILL



VOLUME DAMPER



slot

## نبذة عن نشاط الشركة

شركة مكة لمخارج الهواء هي شركة رائدة في تصنيع جميع مخارج ومجاري الهواء وقامت بالعديد من المشروعات المتميزة و التي نفذت أعلى مستويات الجودة وتعمل الشركة على تطوير منتجاتها وتحديث قطاعها لتستطيع المنافسة في السوق المحلي والدولي ويعد المصنع أحد المصانع حديثة النشأة التي تعمل على أخذ تدابير الأمن الصناعي والتقنية في الإعتبار حفاظاً على سلامة العمال و الفنيين

## شركاء النجاح

الميريلاند CIB بنك  
جامعة الدول العربيه QNB بنك  
كارفور ميراج مول

الجامعة البريطانية  
المدرسة الألمانية  
شركة اينى للغاز  
شركة ميرسك للشحن

الصالة المغطاه بالسادس من أكتوبر  
مجمع مولات غرب الشروق  
مجمع النيايه الإداريه بالسادس من أكتوبر  
مصنع افروس فارما للأدويه

٦ شارع عادل والي الكيلو ٢٦ طريق مصر اسكندرية الصحراوي المنطقة الصناعية ابو رواش

0233784458 - 01110026664 - 01018875264

www.makka-ac.com mailto:ceo@makka-ac.com

# Our Products

## Selection Guide

1-Square ceiling diffuser

**2-Round ceiling diffuser**

3-Swirl diffuser

4-Perforated ceiling diffuser

5-Linear slot diffuser

6-Linear ceiling diffuser

7-Linear bar grill

8-Register

9-Floor & Perforated floor grill

10-Transfer grill

11-Access panel

12-Louver

13-Sand trap louver

14-Jet nozzle

15-Ball jet nozzle

16-Drum jet nozzle

17-Disc valve

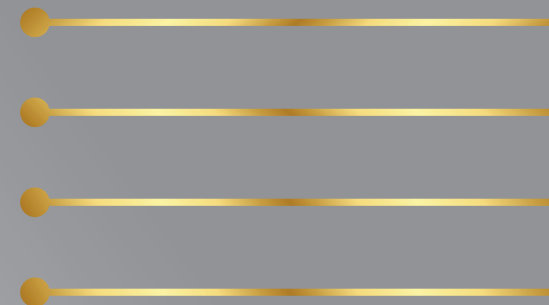
18-Non return dumper (shutter)

19-Volume damper

20-Fire damper

21-Smoke damper

22-Duct access door

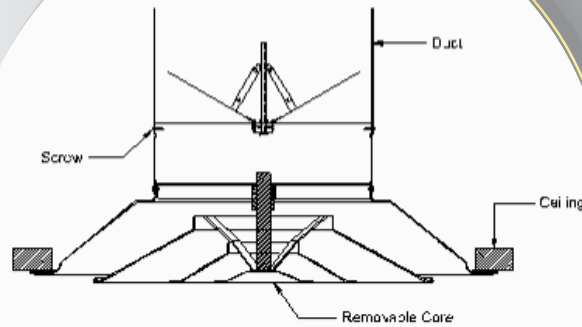
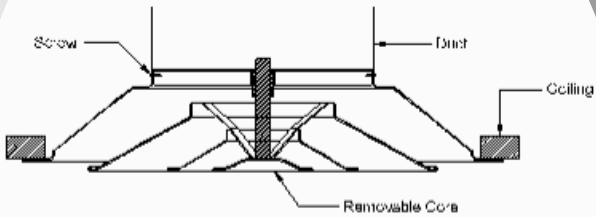


# ROUND CEILING DIFFUSER (RCD)

Round Ceiling Diffuser Return  
(RCDR)



Round Ceiling Diffuser Supply  
(RCDS)



## Product Description

Aluminum alloy constructed round ceiling diffuser can be used as a supply or exhaust in cool-ing, heating or ventilation application, with fully adjustable cores to provide horizontal or verti-cal air pattern, removable inner core permit easy installation and access to duct.

Butterfly damper used for supply and its D shaped blade can adjust the air volume by regulat-ing the inner screw with screw driver.

## Standard Sizes

SIZE	Neck		Face		Height H		CFM Range
	Inch	mm	Inch	mm	Inch	mm	
ø6"	5 5/8	144	12 3/4	325	2 3/8	60	60-315
ø8"	7 1/2	190	16 7/8	430	2 3/4	70	105-560
ø10"	9 1/2	240	20 7/8	530	3 1/2	90	165-870
ø12"	11 5/8	294	25 1/4	640	4 1/2	115	235-1255
ø14"	13 1/2	344	28 3/8	720	4 1/2	115	320-1710
ø16"	15 5/8	396	31 1/8	790	5 1/2	140	420-2240
ø18"	17 1/2	444	34 3/8	873	6	153	530-2830



# Round Ceiling Diffuser Supply RCDS (Performance Data)

NECK SIZE (inches)	NECK AREA (Sq. Ft.)	NECK VELOCITY (FPM)		300	400	500	600	700	800	900	1000	1100	1200	1400	1600
		Velocity Pressure		0.006	0.010	0.016	0.023	0.031	0.040	0.051	0.063	0.075	0.090	0.122	0.160
6 Dia.	0.196	Air Flow. CFM		60	80	100	120	135	155	175	195	215	235	275	315
		Total Pressure	H	0.024	0.041	0.065	0.093	0.126	0.162	0.207	0.255	0.304	0.365	0.494	0.648
			V	0.035	0.058	0.093	0.133	0.180	0.232	0.296	0.365	0.435	0.522	0.708	0.928
		Radius of Diff., Feet		2-3	2-4	3-5	3-5	4-6	4-6	5-7	5-7	5-7	6-8	6-8	7-9
		NC		<20	<20	<20	<20	<20	23	26	30	33	35	40	44
8 Dia.	0.349	Air Flow. CFM		105	140	175	210	245	280	315	350	385	420	490	560
		Total Pressure	H	0.017	0.029	0.046	0.066	0.088	0.114	0.145	0.180	0.214	0.257	0.348	0.456
			V	0.026	0.044	0.070	0.101	0.136	0.176	0.224	0.277	0.330	0.396	0.537	0.704
		Radius of Diff., Feet		2-4	3-5	4-6	4-7	5-7	6-8	6-8	7-9	7-10	7-10	8-11	9-12
		NC		<20	<20	<20	21	26	31	34	37	40	44	48	>50
10 Dia.	0.545	Air Flow. CFM		165	220	275	325	380	435	490	545	600	655	765	870
		Total Pressure	H	0.017	0.028	0.044	0.063	0.085	0.110	0.140	0.173	0.206	0.248	0.335	0.44
			V	0.025	0.041	0.066	0.095	0.128	0.165	0.210	0.260	0.309	0.371	0.503	0.659
		Radius of Diff., Feet		3-6	5-7	5-8	6-9	7-9	8-10	8-11	9-12	9-12	10-13	11-14	12-15
		NC		<20	<20	<20	<20	21	26	30	33	36	39	44	48
12 Dia.	0.785	Air Flow. CFM		235	315	395	470	550	630	705	785	865	940	1100	1255
		Total Pressure	H	0.015	0.025	0.040	0.057	0.077	0.099	0.126	0.156	0.185	0.222	0.301	0.395
			V	0.022	0.036	0.058	0.083	0.112	0.144	0.184	0.227	0.270	0.324	0.439	0.576
		Radius of Diff., Feet		4-6	5-7	6-9	7-10	8-11	9-12	10-13	10-14	11-14	11-15	13-16	14-18
		NC		<20	<20	<20	<20	22	26	30	33	36	39	45	49
14 Dia.	1.07	Air Flow. CFM		320	430	535	640	750	855	965	1070	1175	1285	1500	1710
		Total Pressure	H	0.014	0.024	0.038	0.055	0.074	0.096	0.122	0.151	0.180	0.216	0.293	0.384
			V	0.022	0.036	0.058	0.083	0.112	0.144	0.184	0.227	0.270	0.324	0.439	0.576
		Radius of Diff., Feet		4-7	6-8	7-10	8-11	9-12	10-13	11-15	12-16	13-16	13-17	15-19	16-23
		NC		<20	<20	<20	23	28	32	36	40	43	46	>50	>50
16 Dia.	1.40	Air Flow. CFM		420	560	700	840	980	1120	1260	1400	1540	1680	1960	2240
		Total Pressure	H	0.014	0.023	0.037	0.053	0.071	0.092	0.117	0.145	0.173	0.207	0.281	0.368
			V	0.021	0.035	0.056	0.080	0.108	0.139	0.177	0.219	0.260	0.312	0.423	0.555
		Radius of Diff., Feet		5-7	7-10	8-12	10-13	11-15	12-16	13-17	14-18	15-19	15-20	17-21	19-23
		NC		<20	<20	<20	22	27	31	35	39	42	44	49	>50
18 Dia.	1.77	Air Flow. CFM		530	710	885	1060	1240	1415	1595	1770	1945	2125	2480	2830
		Total Pressure	H	0.014	0.022	0.036	0.051	0.069	0.089	0.114	0.140	0.167	0.201	0.272	0.357
			V	0.022	0.037	0.059	0.084	0.114	0.147	0.187	0.231	0.275	0.330	0.448	0.587
		Radius of Diff., Feet		6-8	7-11	9-12	10-14	12-16	13-17	14-19	16-20	16-21	18-22	19-24	21-25
		NC		<20	<20	<20	21	26	30	34	37	40	43	48	>50
20 Dia.	2.18	Air Flow. CFM		655	870	1090	1310	1525	1745	1960	2180	2400	2615	3050	3490
		Total Pressure	H	0.012	0.021	0.033	0.047	0.064	0.082	0.105	0.129	0.154	0.185	0.250	0.328
			V	0.023	0.039	0.062	0.090	0.121	0.156	0.199	0.246	0.293	0.351	0.476	0.624
		Radius of Diff., Feet		6-9	8-12	10-14	12-16	14-17	15-19	16-21	17-22	18-23	19-24	21-26	23-28
		NC		<20	<20	<20	21	26	30	34	38	40	43	48	>50

NC Data based upon 10dB room attenuation  
All pressure are in inches of water

# Round Ceiling Diffuser Return RCDR (Performance Data)

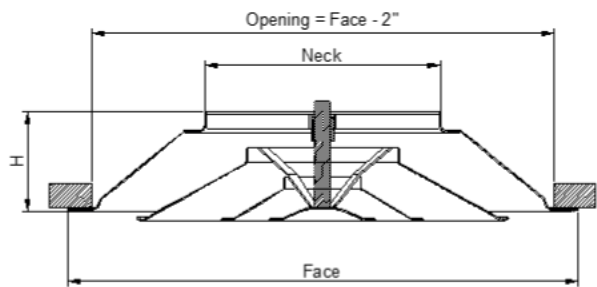
NECK SIZE (inches)	NECK AREA (Sq. Ft.)	NECK VELOCITY (FPM)	300	400	500	600	700	800	900	1000	1100	1200	1400	1600
		Velocity Pressure (in. w.g.)	0.006	0.010	0.016	0.023	0.031	0.040	0.051	0.063	0.075	0.090	0.122	0.160
6 Dia.	0.196	CFM	60	80	100	120	135	155	175	195	215	235	275	315
		Negative SP (in. w.g.)	0.022	0.037	0.059	0.084	0.114	0.146	0.187	0.230	0.275	0.330	0.446	0.586
		NC	<20	<20	<20	<20	21	25	28	32	34	37	42	46
8 Dia.	0.349	CFM	105	140	175	210	245	280	315	350	385	420	490	560
		Negative SP (in. w.g.)	0.013	0.023	0.037	0.052	0.068	0.089	0.113	0.140	0.167	0.200	0.271	0.355
		NC	<20	<20	<20	23	28	32	34	37	41	46	>50	>50
10 Dia.	0.545	CFM	165	220	275	325	380	435	490	545	600	655	765	870
		Negative SP (in. w.g.)	0.013	0.022	0.034	0.048	0.065	0.084	0.107	0.132	0.157	0.190	0.256	0.336
		NC	<20	<20	<20	<20	23	28	32	35	38	41	46	50
12 Dia.	0.785	CFM	235	315	395	470	550	630	705	785	865	940	1100	1255
		Negative SP (in. w.g.)	0.011	0.018	0.029	0.041	0.055	0.071	0.090	0.112	0.132	0.158	0.215	0.282
		NC	<20	<20	<20	<20	24	28	32	35	38	41	47	>50
14 Dia.	1.07	CFM	320	430	535	640	750	855	965	1070	1175	1285	1500	1710
		Negative SP (in. w.g.)	0.010	0.017	0.026	0.038	0.052	0.067	0.085	0.106	0.126	0.151	0.205	0.269
		NC	<20	<20	20	25	30	34	38	42	45	48	>50	>50
16 Dia.	1.40	CFM	420	560	700	840	980	1120	1260	1400	1540	1680	1960	2240
		Negative SP (in. w.g.)	0.010	0.016	0.025	0.036	0.048	0.062	0.079	0.098	0.118	0.140	0.191	0.25
		NC	<20	<20	<20	24	29	33	37	41	44	46	>50	>50
18 Dia.	1.77	CFM	530	710	885	1060	1240	1415	1595	1770	1945	2125	2480	2830
		Negative SP (in. w.g.)	0.010	0.014	0.024	0.034	0.046	0.059	0.076	0.092	0.110	0.133	0.180	0.236
		NC	<20	<20	<20	23	28	32	36	39	43	45	50	>50
20 Dia.	2.18	CFM	655	870	1090	1310	1525	1745	1960	2180	2400	2615	3050	3490
		Negative SP (in. w.g.)	0.007	0.013	0.020	0.029	0.040	0.050	0.065	0.079	0.095	0.114	0.154	0.202
		NC	<20	<20	<20	23	28	32	36	40	43	45	50	>50

-NC Data based upon 10dB room attenuation

-All pressure are in inches of water

# Installation

Round ceiling diffuser return connected with duct by screw



Round ceiling diffuser supply connected with duct by screw

