

2022  
PRODUCTS

## Circular Ceiling Diffuser

**CANADA DUCT** Ltd.

Product Catalogue



الكندية للقوى الكهربائية المتطورة

canadaducteg.com





### Models

- CCD-A
- CCD-B



### Finish

- Standard Finish - White

# Circular Ceiling Diffuser



## Model Use

Canada Duct Model CCD Diffusers used for supply or Exhaust applications.

## Flow Pattern

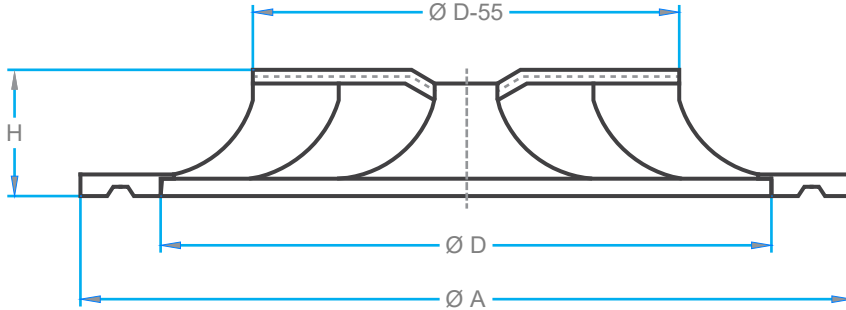
Maintains an unbroken horizontal flow pattern from maximum cfm down to minimum.

## Two Types

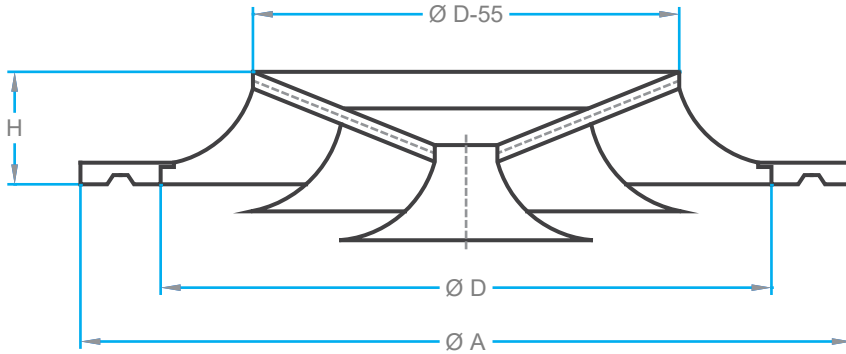
CCD Diffusers appears with two different types Fixed Diffuser Ring & Fixed Diffuser cone-form Rings.

**- Dimensions**

- Type (A) - Fixed Diffuser Rings



- Type (B) - Fixed Diffuser Cone Form Rings



Size	D (mm)	A (mm)	H (mm)
Ø 6	192	220	30
Ø 8	248	300	45
Ø 10	304	356	60
Ø 12	360	412	75
Ø 14	416	468	90
Ø 16	472	542	98
Ø 18	528	598	112
Ø 20	584	654	126

**CANADA DUCT Ltd.**

### – Performance data

الخصائص القوية للصمامات المتطورة

- Type (A) – Fixed Diffuser Rings

Neck Size "Inch"		$V_K$ Outlet Velocity "FPM"								
		400	500	600	700	800	900	1000	1200	1400
		$P_T$ Total Pressure "Inches water"								
		0.025	0.04	0.057	0.077	0.099	0.12	0.15	0.22	0.30
Ø 6	CFM	80	100	120	135	155	175	195	235	275
	T	2-4	3-5	3-5	4-6	4-6	5-7	5-7	6-8	6-8
	NC	< 20	< 20	< 20	< 20	23	26	30	35	40
Ø 8	CFM	140	175	210	245	280	315	350	420	490
	T	3-5	4-6	4-7	5-7	6-8	6-8	7-9	7-10	8-11
	NC	< 20	< 20	21	26	31	34	37	44	48
Ø 10	CFM	220	275	325	380	435	490	545	655	765
	T	5-7	5-8	6-9	7-9	8-10	8-11	9-12	10-13	11-14
	NC	< 20	< 20	< 20	21	26	30	33	39	45
Ø 12	CFM	315	395	470	550	630	705	785	940	1100
	T	5-7	6-9	7-10	8-11	9-12	10-13	10-14	11-15	13-16
	NC	< 20	< 20	< 20	22	26	30	33	39	45
Ø 14	CFM	430	535	640	750	855	965	1070	1285	1500
	T	6-8	7-10	8-11	9-12	10-13	11-15	12-16	13-17	15-19
	NC	< 20	< 20	23	28	32	36	40	46	49
Ø 16	CFM	560	700	840	980	1120	1260	1400	1680	1960
	T	7-10	8-12	10-13	11-15	12-16	13-17	14-18	15-20	17-21
	NC	< 20	< 20	22	27	31	35	39	44	49
Ø 18	CFM	710	885	1060	1240	1415	1595	1770	2125	2480
	T	7-11	9-12	10-14	12-16	13-17	14-19	16-20	18-22	19-24
	NC	< 20	< 20	21	26	30	34	37	43	48
Ø 20	CFM	870	1090	1310	1525	1745	1960	2180	2615	3050
	T	8-12	10-14	12-16	14-17	15-19	16-21	17-22	19-24	21-26
	NC	< 20	< 20	21	26	30	34	38	43	48

**CANADA DUCT** Ltd.

**- Performance data**

- Type (B) – Fixed Diffuser Cone Form Rings

Neck Size "Inch"		$V_K$ Outlet Velocity "FPM"								
		400	500	600	700	800	900	1000	1200	1400
		$P_T$ Total Pressure "Inches water"								
		0.021	0.033	0.047	0.064	0.084	0.106	0.131	0.189	0.257
Ø 6	CFM	80	100	120	140	160	180	200	235	275
	T	2-5	3-6	3-7	4-7	5-8	5-8	6-9	7-9	7-10
	NC	< 20	< 20	20	25	29	32	35	41	45
Ø 8	CFM	140	175	210	245	280	315	350	420	490
	T	3-6	4-7	4-9	5-10	6-10	6-8	7-11	9-12	10-13
	NC	< 20	< 20	21	26	30	33	36	42	47
Ø 10	CFM	220	275	325	380	435	490	545	655	765
	T	4-7	5-9	6-11	7-12	7-13	8-13	9-14	11-16	12-17
	NC	< 20	< 20	22	27	31	34	37	43	47
Ø 12	CFM	315	390	470	550	630	705	785	940	1100
	T	4-9	6-11	7-13	8-14	9-15	10-16	11-17	13-19	14-20
	NC	< 20	< 20	23	27	31	35	38	43	48
Ø 14	CFM	425	530	635	745	850	955	1060	1270	1490
	T	5-10	6-13	8-15	9-17	10-18	12-19	13-20	15-20	17-23
	NC	< 20	< 20	23	28	32	35	39	44	49
Ø 16	CFM	560	700	840	980	1120	1260	1400	1680	1960
	T	6-12	7-15	9-18	10-19	12-20	13-22	15-23	18-25	19-27
	NC	< 20	< 20	24	28	32	36	39	45	49
Ø 18	CFM	710	885	1060	1240	1415	1595	1770	2125	2480
	T	7-13	8-17	10-20	12-21	13-23	15-24	17-26	20-28	21-30
	NC	< 20	< 20	24	29	33	36	40	45	50
Ø 20	CFM	870	1100	1310	1525	1750	1960	2180	2615	3050
	T	7-15	6-19	11-22	13-24	15-25	17-27	10-28	22-31	24-34
	NC	< 20	< 20	25	29	33	37	40	45	50

**CANADA DUCT Ltd.**

## - Selection Procedure

الخدمة القوي الصيانة المتطورة

1. Determine the required CFM per each outlet as per cooling Load Calculation.
2. Determine the type of Rings from page (2).  
Example : "Type (A) - Fixed Rings. "
3. Determine the recommended Outlet Velocity  $V_K$  according to application as per following Table.
4. Select the suitable size that give the required CFM at recommended outlet velocity from performance data tables.

Application	$V_K$ Outlet Velocity "FPM"
Broadcast Studios	300-500
Residences	500-750
Apartments	500-750
Mosques , Churches	500-750
Hotel Bedrooms	500-750
Theaters	500-750
Private Offices, Acoustically Treated	500-750
Private Offices, not Treated	500-750
General Offices	500-800
Dept. Stores	1000-1250

Table (1) – Recommended Outlet Velocity \*

\* Table 20—Carrier Handbook - Part 2. Air Distribution - Chapter 3. Room Air Distribution—p.72

**- Selection Procedure Example**

1. Required 350 CFM as per cooling load calculations.
2. Required Type (A) - Fixed Rings Diffuser.
3. The recommended outlet velocity ranges from 500 - 750 FPM.
4. The size of air outlet :
  - A. Ø 10 " at 700 FPM.
  - B. Ø 12 " at 500 FPM.

Neck Size "Inch"		V <sub>K</sub> Outlet Velocity "FPM"				
		400	500	600	700	800
		P <sub>T</sub> Total Pressure "Inches water"				
		0.025	0.040	0.057	0.077	0.099
Ø 10	CFM	220	275	325	380	435
	T	5-7	5-8	6-9	7-9	8-10
	NC	< 20	< 20	< 20	21	26
Ø 12	CFM	315	395	470	550	630
	T	5-7	6-9	7-10	8-11	9-12
	NC	< 20	< 20	< 20	22	26

**CANADA DUCT Ltd.**



## - How to oprder

الخدمة القوي الكهربائية المتطورة

<b>Type</b>	CCD - A	CCD-A CCD-B	Fixed Diffuser Rings Fixed Diffuser Cone-Form Rings	<b>CANADA DUCT Ltd.</b>
<b>Size</b>	∅ 10	∅ " Inch "		
<b>Finish</b>	1	0 Aluminum 1 White Color 2 Other Colors		
<b>Damper</b>	0	0 Without Damper 1 With Damper		

### Diffusers & Grills

- Square Ceiling Diffuser
- Circular Ceiling Diffuser
- Jet Diffuser
- Eye Ball Diffuser
- Swirl Diffuser
- Perforated Ceiling Diffuser
- Disc Valve Diffuser
- Linear Slot Diffuser
- Linear Bar Grill
- Supply / Return Grills

### Louvers

- Aluminum Louvers
- Sand Trap Louvers

### Dampers

- Volume Damper
- Fire Damper
- Smoke Motorized Damper
- Shutter Damper

### Special Parts

- Sound Attenuator
- Plenum Box

### Duct Works

- Galvanized Steel Duct
- Black Steel Duct
- Stainless Steel Duct
- Spiral Duct
- Flexible Duct
- Canvas
- Flanges

Other Products are provided by

**CANADA DUCT Ltd.**

[canadaducteg.com](http://canadaducteg.com)

