

2022
PRODUCTS

Square Ceiling Diffuser

CANADA DUCT Ltd.
Product Catalogue

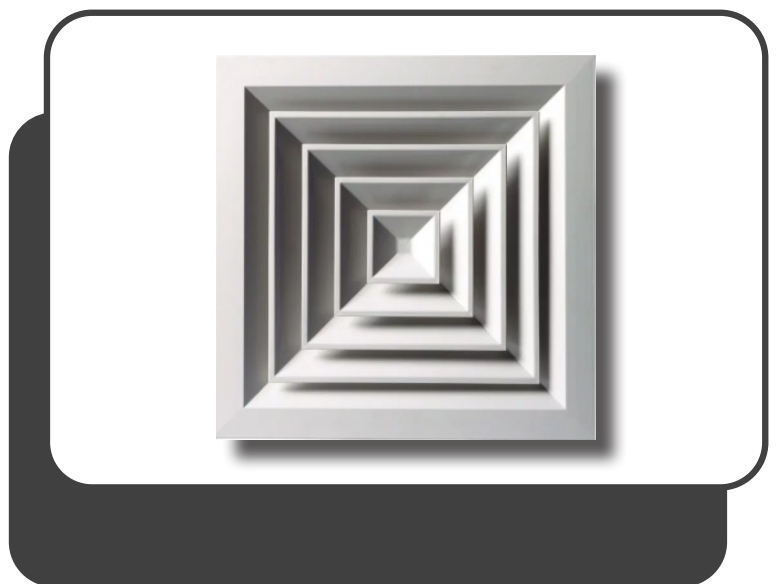


We Build Tomorrow's World



الكندية للقوى الكهربائية المتطورة

canadaducteg.com





Models

- SCD
- RCD



Finish

- Standard Finish - White

Square Ceiling Diffuser



Model Use

Canadaduct Model SCD /RCD Diffusers handle large amount of air for a given pressure drop and noise level.

Flow Pattern

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

Model Design

Flexible use with 1-,2-,3- or 4-way horizontal flow.

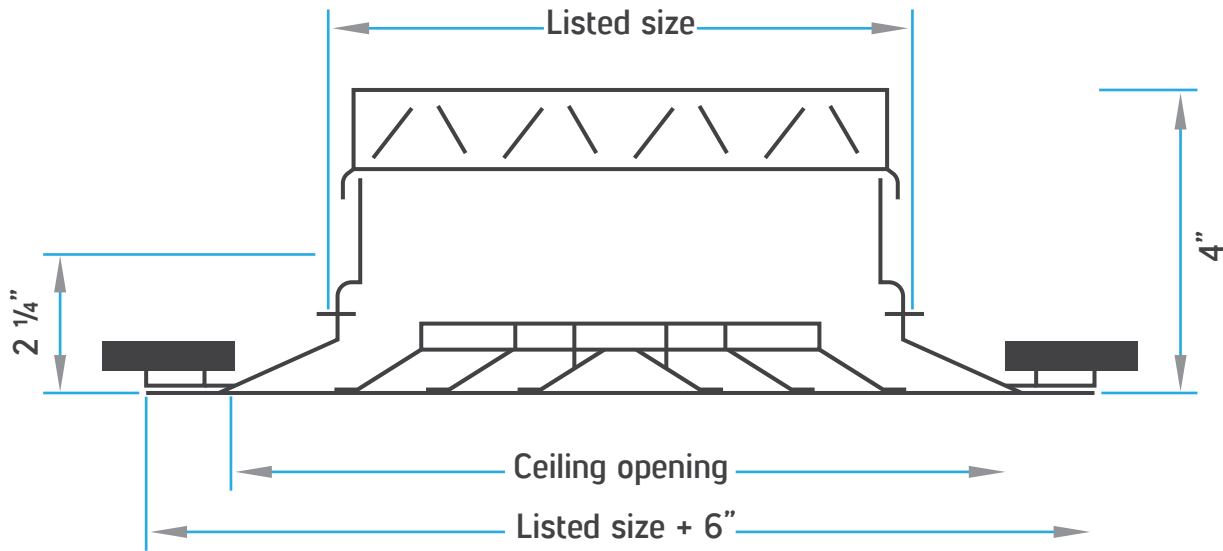
Appearance

Uniform face appearance with different neck sizes.

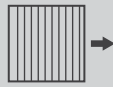

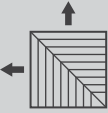
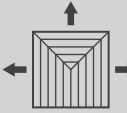
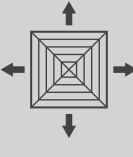
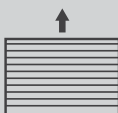
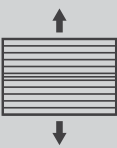
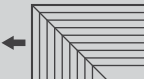
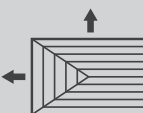
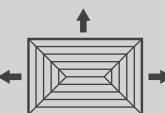
- Dimensions

- Nominal Size ϕ 14 - continued

الكندية القوي الكمبراية المتطورة



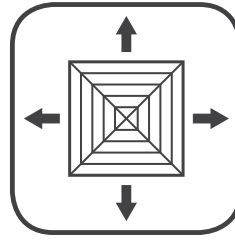
- Core Pattern Options

	1 - Way Discharge	2 - Way Discharge		3 - Way Discharge	4 - Way Discharge
SCD					
Pattern Type	1	21	22	3	4
RCD					
Pattern Type	1	21	22	3	4

CANADA DUCT Ltd.

- Performance data

- SCD / 4-way



الكفاءة القوية الحرارية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
6 x 6	CFM		50	60	70	80	90	100	120	140
	T	X	2-3	2-3	2-4	2-4	3-5	3-5	4-6	4-8
Y		2-3	2-3	2-4	2-4	3-5	3-5	4-6	4-8	
A _k = 0.10										
9 x 9	CFM		110	135	155	180	205	225	270	315
	T	X	2-4	2-4	3-5	3-5	4-6	5-8	5-9	6-11
Y		2-4	2-4	3-5	3-5	4-6	5-8	5-9	6-11	
A _k = 0.22										
12 x 12	CFM		200	240	280	320	360	400	480	560
	T	X	3-5	4-6	4-8	5-8	5-9	6-11	6-12	7-13
Y		3-5	4-6	4-8	5-8	5-9	6-11	6-12	7-13	
A _k = 0.40										
15 x 15	CFM		310	375	440	500	565	625	750	875
	T	X	4-6	4-8	5-9	6-11	6-11	6-12	8-15	10-18
Y		4-6	4-8	5-9	6-11	6-11	6-12	8-15	10-18	
A _k = 0.62										
18 x 18	CFM		450	540	630	720	810	900	1080	1260
	T	X	4-8	5-9	5-11	6-12	7-13	8-15	10-17	11-20
Y		4-8	5-9	5-11	6-12	7-13	8-15	10-17	11-20	
A _k = 0.90										
21 x 21	CFM		615	740	860	985	1110	1230	1475	1725
	T	X	5-9	6-11	7-13	8-14	9-15	9-17	11-21	13-25
Y		5-9	6-11	7-13	8-14	9-15	9-17	11-21	13-25	
A _k = 1.23										
24 x 24	CFM		800	960	1120	1275	1440	1600	1925	2240
	T	X	5-11	7-13	7-14	8-15	9-17	10-19	12-23	14-29
Y		5-11	7-13	7-14	8-15	9-17	10-19	12-23	14-29	
A _k = 1.60										

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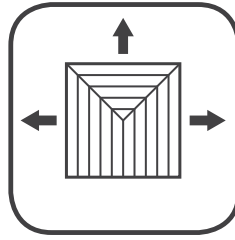
The minimum T Dimensions in feet is based on a VT of 200 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 100 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- SCD / 3-way



الخدمة القوي الكمبرائية المتطورة

Face Size "Inch"/Outlet Area "Inch"		V _k Outlet Velocity "FPM"							
		500	600	700	800	900	1000	1200	1400
		P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12
6 x 6	CFM	50	60	70	80	90	100	120	140
	T	X	2-4	2-4	3-5	3-5	4-7	4-7	5-9
Y		1-2	1-2	2-3	2-3	2-4	2-4	3-6	3-6
A _k = 0.10									
9 x 9	CFM	110	135	155	180	205	225	270	315
	T	X	2-4	3-6	4-7	4-8	5-9	5-9	6-12
Y		2-3	2-3	2-4	2-4	3-6	3-6	4-7	5-9
A _k = 0.22									
12 x 12	CFM	200	240	280	320	360	400	480	560
	T	X	4-7	5-9	6-10	6-10	6-11	7-13	9-16
Y		2-5	3-5	4-7	4-7	4-8	5-9	6-10	7-12
A _k = 0.40									
15 x 15	CFM	310	375	440	500	565	625	750	875
	T	X	4-8	6-11	7-13	8-14	8-15	9-16	11-19
Y		2-4	4-7	4-7	4-8	5-9	6-10	7-12	9-15
A _k = 0.62									
18 x 18	CFM	450	540	630	720	810	900	1080	1260
	T	X	4-9	6-11	7-13	9-15	10-18	11-20	13-24
Y		3-5	4-7	5-9	6-10	6-11	7-12	9-15	10-18
A _k = 0.90									
21 x 21	CFM	615	740	860	985	1110	1230	1475	1725
	T	X	5-11	7-13	11-19	11-20	12-21	12-23	16-29
Y		3-6	4-8	6-11	7-12	8-13	8-14	10-17	11-20
A _k = 1.23									
24 x 24	CFM	800	960	1120	1275	1440	1600	1925	2240
	T	X	7-14	9-16	11-19	13-21	14-24	16-27	17-31
Y		5-9	6-11	7-13	8-14	9-15	9-16	11-19	14-24
A _k = 1.60									

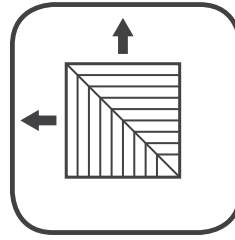
CANADA DUCT Ltd.

The minimum T Dimensions in feet is based on a VT of 170 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 85 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"



الكفاءة القوية الحرارية المتطورة

Face Size "Inch"/Outlet Area "Inch"		V_k Outlet Velocity "FPM"								
		500	600	700	800	900	1000	1200	1400	
		P_T Total Pressure "Inches water"								
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
6 x 6 $A_k = 0.10$	CFM	45	55	60	70	80	90	105	125	
	T	X	1-3	2-5	2-5	3-7	3-7	5-8	5-8	6-11
		Y	1-3	2-5	2-5	3-7	3-7	5-8	5-8	6-11
9 x 9 $A_k = 0.22$	CFM	95	115	135	155	175	195	235	275	
	T	X	4-6	4-6	5-7	5-8	6-10	6-11	8-13	9-14
		Y	4-6	4-6	5-7	5-8	6-10	6-11	8-13	9-14
12 x 12 $A_k = 0.40$	CFM	175	210	245	280	315	350	420	480	
	T	X	5-7	5-8	6-11	8-13	8-13	9-14	10-16	13-19
		Y	5-7	5-8	6-11	8-13	8-13	9-14	10-16	13-19
15 x 15 $A_k = 0.62$	CFM	275	330	385	440	495	550	660	775	
	T	X	5-9	7-12	8-13	9-14	10-16	11-18	13-21	15-25
		Y	5-9	7-12	8-13	9-14	10-16	11-18	13-21	15-25
18 x 18 $A_k = 0.90$	CFM	390	470	545	625	700	780	935	1090	
	T	X	7-12	9-14	10-15	10-16	12-19	14-22	16-25	18-29
		Y	7-12	9-14	10-15	10-16	12-19	14-22	16-25	18-29
21 x 21 $A_k = 1.23$	CFM	540	650	760	865	975	1080	1300	1515	
	T	X	8-13	10-15	12-18	13-21	15-23	17-28	20-32	22-35
		Y	8-13	10-15	12-18	13-21	15-23	17-28	20-32	22-35
24 x 24 $A_k = 1.60$	CFM	705	845	990	1130	1270	1410	1690	1950	
	T	X	9-16	11-18	13-21	15-24	17-27	19-29	22-34	25-38
		Y	9-16	11-18	13-21	15-24	17-27	19-29	22-34	25-38

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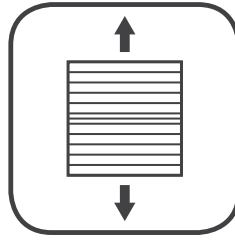
The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- SCD / 2-way, continued



الكندية للقوى الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V_k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P_T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
6 x 6	CFM		45	55	60	70	80	90	105	125
	T	X	—	—	—	—	—	—	—	—
		Y	3-5	3-5	4-7	4-7	5-8	5-8	6-9	9-13
$A_k = 0.10$										
9 x 9	CFM		95	115	135	155	175	195	235	275
	T	X	—	—	—	—	—	—	—	—
		Y	5-7	6-8	6-8	6-9	8-12	9-13	11-17	12-18
$A_k = 0.22$										
12 x 12	CFM		175	210	245	280	315	350	420	480
	T	X	—	—	—	—	—	—	—	—
		Y	4-7	6-9	9-13	10-15	11-17	12-18	14-20	17-23
$A_k = 0.40$										
15 x 15	CFM		275	330	385	440	495	550	660	775
	T	X	—	—	—	—	—	—	—	—
		Y	8-12	10-14	10-15	12-18	14-20	15-23	18-27	22-32
$A_k = 0.62$										
18 x 18	CFM		390	470	545	625	700	780	935	1080
	T	X	—	—	—	—	—	—	—	—
		Y	9-15	11-17	12-18	14-20	15-23	18-26	20-30	24-36
$A_k = 0.90$										
21 x 21	CFM		540	650	760	865	975	1080	1300	1515
	T	X	—	—	—	—	—	—	—	—
		Y	11-17	14-20	15-23	18-26	19-29	23-35	26-40	29-44
$A_k = 1.23$										
24 x 24	CFM		705	845	990	1130	1270	1410	1690	1950
	T	X	—	—	—	—	—	—	—	—
		Y	12-19	14-22	17-25	20-30	21-33	23-35	27-40	34-46
$A_k = 1.60$										

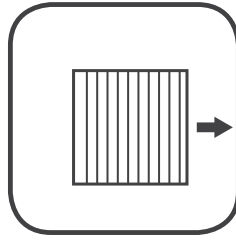
CANADA DUCT Ltd.

The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"



الكيفية القوي الكمبرانية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
6 x 6	CFM		45	55	60	70	80	90	105	125
	T	X	3-5	4-7	5-8	6-9	8-10	9-12	10-14	12-18
A _k = 0.10		Y	—	—	—	—	—	—	—	
9 x 9	CFM		95	115	135	155	175	195	235	275
	T	X	6-9	7-10	9-13	10-14	11-17	13-19	15-21	18-26
A _k = 0.22		Y	—	—	—	—	—	—	—	
12 x 12	CFM		175	210	245	280	315	350	420	480
	T	X	8-12	10-14	12-18	13-19	15-21	18-26	21-31	24-36
A _k = 0.40		Y	—	—	—	—	—	—	—	
15 x 15	CFM		275	330	385	440	495	550	660	775
	T	X	10-16	13-19	14-22	18-26	19-29	21-31	25-37	30-43
A _k = 0.62		Y	—	—	—	—	—	—	—	
18 x 18	CFM		390	470	545	625	700	780	935	1090
	T	X	13-21	15-23	18-26	19-29	22-33	25-38	29-42	35-46
A _k = 0.90		Y	—	—	—	—	—	—	—	
21 x 21	CFM		540	650	760	865	975	1080	1300	1515
	T	X	14-23	17-25	21-30	24-36	27-40	30-43	34-48	39-54
A _k = 1.23		Y	—	—	—	—	—	—	—	
24 x 24	CFM		705	845	990	1130	1270	1410	1690	1950
	T	X	20-29	23-33	24-36	27-40	30-44	35-48	39-54	43-60
A _k = 1.60		Y	—	—	—	—	—	—	—	

CANADA DUCT Ltd.

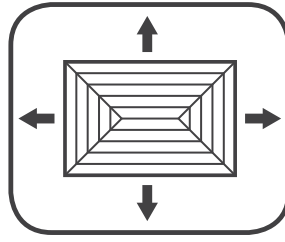
The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- RCD / 4-way

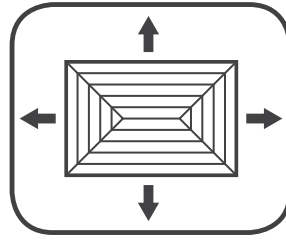


الكندية للقوى الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V_k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P_T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
9 x 6	CFM		75	90	105	120	135	150	180	210
	T	X	1-3	1-3	2-4	2-4	3-5	3-5	4-6	4-6
A _k = 0.15		Y	2-4	3-5	3-5	4-6	4-6	4-8	5-9	6-11
12 x 6	CFM		100	120	140	160	180	200	240	280
	T	X	1-3	1-3	2-4	2-4	2-4	3-5	4-6	4-8
A _k = 0.20		Y	3-5	4-6	4-8	4-8	5-9	6-11	7-13	8-15
12 x 9	CFM		150	180	210	240	270	300	360	420
	T	X	2-4	2-4	3-5	4-6	4-7	4-8	5-9	6-11
A _k = 0.30		Y	3-5	3-5	4-6	4-8	5-10	6-11	6-12	7-13
15 x 9	CFM		185	225	265	300	340	375	450	525
	T	X	2-4	2-4	3-5	4-6	4-6	4-8	5-9	5-9
A _k = 0.37		Y	4-6	4-6	5-9	6-11	6-12	8-14	8-15	9-17
18 x 9	CFM		225	270	315	360	405	450	540	630
	T	X	2-4	2-4	3-5	4-6	4-6	4-8	5-9	5-10
A _k = 0.45		Y	4-6	5-9	6-11	6-12	8-14	8-15	10-19	11-23
21 x 9	CFM		265	320	370	425	475	530	635	740
	T	X	2-4	2-4	3-5	4-6	4-8	4-8	5-9	6-17
A _k = 0.53		Y	5-9	6-11	8-14	8-15	10-18	10-19	11-21	13-25
15 x 12	CFM		250	300	350	400	450	500	600	700
	T	X	3-5	3-5	4-6	4-8	5-9	6-11	6-12	7-13
A _k = 0.50		Y	4-6	4-8	5-9	6-11	6-12	7-13	8-15	10-18
18 x 21	CFM		295	355	415	475	535	595	715	835
	T	X	2-4	3-5	4-6	4-8	5-9	6-11	6-12	8-14
A _k = 0.59		Y	4-8	5-9	6-11	7-13	8-14	8-15	10-18	11-21

CANADA DUCT Ltd.

- RCD / 4-way, continued



الكندية للقوى الكمبرائية المتطورة

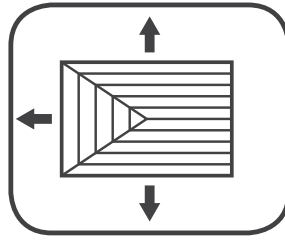
Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
21 x 12	CFM		345	415	485	555	625	690	830	970
	T	X	3-5	3-5	4-6	4-8	4-8	5-9	6-11	7-13
A _k = 0.69		Y	5-9	6-11	7-13	8-14	8-15	10-18	11-21	14-26
24 x 12	CFM		400	480	560	640	720	800	960	1140
	T	X	2-4	4-6	4-6	4-8	4-8	5-9	6-12	5-14
A _k = 0.80		Y	6-11	7-13	8-14	9-16	10-18	11-21	14-26	15-29
18 x 15	CFM		375	450	525	600	675	750	900	1050
	T	X	4-6	4-8	5-9	6-11	6-12	7-13	8-15	9-17
A _k = 0.75		Y	4-8	5-9	6-11	6-12	8-14	8-15	10-18	10-19
15 x 15	CFM		500	600	700	800	900	1000	1200	1400
	T	X	4-6	4-8	5-9	6-11	6-12	7-13	8-15	10-18
A _k = 0.62		Y	6-11	6-12	8-14	9-17	10-18	1-21	13-25	15-29
24 x 18	CFM		600	720	840	960	1080	1200	1440	1680
	T	X	4-8	5-9	6-11	6-12	7-14	8-15	10-18	11-21
A _k = 1.20		Y	6-11	6-12	7-14	8-15	10-19	11-21	13-23	15-27

CANADA DUCT Ltd.

The minimum T Dimensions in feet is based on a VT of 200 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 100 with a VR of 35 FPM .

- VT Terminal Velocity "FPM"
- VK Outlet Velocity "FPM"
- VR Room Velocity "FPM"
- T Throw "Feet"
- AK Outlet Area "Feet²"
- NC re 8db room
- PT Total Pressure "Inch Water"
- PS Static Pressure "Inch Water"

- RCD / 3-way

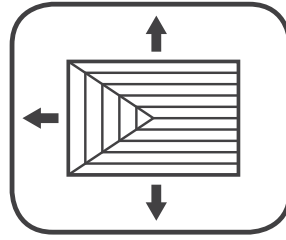


الكندية للقوى الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
9 x 6 A _k = 0.15	CFM		75	90	105	120	135	150	180	210
	T	X	3-5	3-5	3-6	4-8	5-9	6-10	6-11	7-12
Y		1-2	1-2	2-3	2-3	2-4	2-4	2-4	3-6	
12 x 6 A _k = 0.20	CFM		100	120	140	160	180	200	240	280
	T	X	3-5	4-7	4-7	5-9	6-10	6-11	8-14	9-16
Y		1-2	1-2	1-2	2-3	2-3	2-4	3-6	4-7	
12 x 9 A _k = 0.30	CFM		150	180	210	240	270	300	360	420
	T	X	4-7	4-8	5-9	6-11	7-13	8-14	9-15	10-18
Y		2-3	2-3	2-4	3-6	4-7	4-8	4-8	5-9	
15 x 9 A _k = 0.37	CFM		185	225	265	300	340	375	450	525
	T	X	4-8	5-9	6-10	7-12	8-14	9-16	11-19	11-20
Y		2-3	2-4	2-4	2-4	3-6	4-7	4-8	4-8	
18 x 9 A _k = 0.45	CFM		225	270	315	360	405	450	540	630
	T	X	4-8	6-10	6-11	7-13	9-15	10-18	11-19	13-23
Y		1-2	2-3	2-4	3-6	3-6	4-7	4-8	5-9	
21 x 9 A _k = 0.53	CFM		265	320	370	425	475	530	635	740
	T	X	5-9	6-11	8-14	9-15	10-16	10-18	12-21	14-24
Y		2-3	2-3	2-4	3-6	4-7	4-7	4-8	4-8	
15 x 12 A _k = 0.50	CFM		250	300	350	400	450	500	600	700
	T	X	5-9	6-10	6-11	7-13	9-15	9-16	11-20	13-23
Y		1-4	3-6	3-6	4-7	4-8	5-9	6-10	6-11	
18 x 21 A _k = 0.59	CFM		295	355	415	475	535	595	715	835
	T	X	6-10	6-11	7-13	8-14	9-15	11-20	12-22	15-26
Y		2-4	2-4	3-6	3-6	4-7	5-9	6-10	7-12	

CANADA DUCT Ltd.

- RCD / 3-way, continued



الكندية القوي الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
18 x 15	CFM		375	459	525	600	675	750	900	1050
	T	X	6-10	7-12	7-13	9-15	11-19	12-21	7-13	15-26
A _k = 0.75		Y	3-6	4-7	4-7	5-9	6-10	6-11	7-13	8-14
21 x 15	CFM		435	525	610	695	785	870	1045	1200
	T	X	6-11	7-13	9-15	10-18	12-21	13-23	15-26	17-31
A _k = 0.87		Y	3-6	4-7	4-8	5-9	6-10	6-11	7-12	8-14
21 x 18	CFM		525	630	735	840	945	1050	1260	1470
	T	X	6-11	7-13	9-15	10-18	11-20	13-22	15-26	17-30
A _k = 1.05		Y	3-6	4-7	4-8	6-10	6-11	7-12	8-14	9-16
24 x 18	CFM		600	720	840	960	1080	1200	1440	1680
	T	X	7-13	9-15	10-18	13-22	14-24	15-26	19-32	23-37
A _k = 1.20		Y	4-7	4-8	5-9	6-11	7-12	8-13	10-17	12-20

CANADA DUCT Ltd.

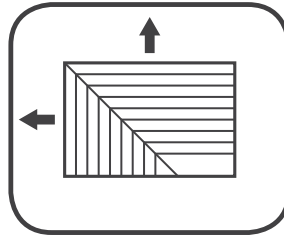
The minimum T Dimensions in feet is based on a VT of 170 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 85 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- RCD / 2-way

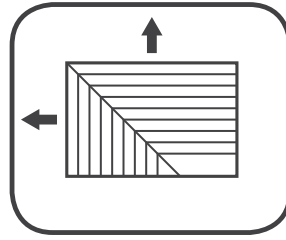


الكندية للقوى الكمبرائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V_k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P_T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
9 x 6 $A_k = 0.13$	CFM		65	80	95	105	120	130	160	185
	T	X	2-4	3-5	4-6	4-6	5-7	5-7	6-9	6-10
Y		3-5	4-7	5-8	5-8	6-11	6-11	8-13	9-14	
12 x 6 $A_k = 0.17$	CFM		90	105	120	140	160	175	210	245
	T	X	2-4	3-5	3-5	4-6	5-7	5-7	5-8	6-11
Y		3-6	5-8	6-11	7-12	8-13	9-14	10-15	13-20	
15 x 6 $A_k = 0.22$	CFM		110	130	155	175	200	220	265	310
	T	X	2-4	3-5	3-5	4-6	5-7	5-8	6-9	6-10
Y		5-8	6-10	7-12	8-13	10-15	11-17	13-20	15-24	
12 x 9 $A_k = 0.26$	CFM		130	155	180	210	235	260	310	365
	T	X	4-6	4-6	5-7	5-8	6-10	6-11	8-13	11-17
Y		5-7	5-8	6-10	6-11	8-12	9-14	10-16	14-21	
15 x 9 $A_k = 0.32$	CFM		165	195	230	260	295	325	390	460
	T	X	4-6	5-7	6-8	6-9	6-11	7-12	9-14	10-15
Y		6-10	6-11	8-12	10-14	10-16	12-19	14-22	16-25	
18 x 9 $A_k = 0.39$	CFM		195	235	275	310	350	390	470	545
	T	X	4-6	5-7	5-7	5-8	6-10	7-12	8-13	9-15
Y		6-11	8-13	9-14	10-15	11-18	13-21	16-25	19-29	
21 x 9 $A_k = 0.45$	CFM		230	275	320	365	410	455	545	635
	T	X	4-6	5-7	6-8	6-9	6-10	6-11	8-13	10-15
Y		8-13	10-15	11-17	12-19	13-21	15-24	18-29	22-34	
15 x 12 $A_k = 0.43$	CFM		220	260	305	350	390	435	525	610
	T	X	5-7	5-8	6-10	7-12	8-13	9-14	11-18	13-20
Y		5-8	6-11	8-13	9-14	10-16	12-19	14-22	16-25	

CANADA DUCT Ltd.

- RCD / 2-way, continued



الكندية للقوى الكهربائية المتطورة

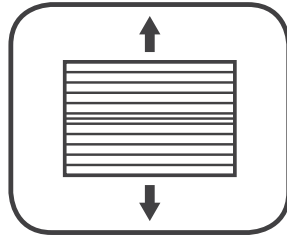
Face Size "Inch"/Outlet Area "Inch"			V_k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P_T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
18 x 12	CFM		260	315	370	420	475	525	630	735
	T	X	4-7	5-8	6-10	7-12	9-14	10-15	12-18	14-20
$A_k = 0.52$		Y	6-11	8-13	9-14	11-17	13-21	14-22	17-26	21-30
21 x 15	CFM		380	455	530	605	685	760	915	1060
	T	X	6-10	6-11	8-13	9-14	10-16	12-19	13-21	15-26
$A_k = 0.76$		Y	8-13	9-14	11-18	13-20	15-24	16-26	19-29	22-33
24 x 15	CFM		440	525	615	700	790	875	1050	1225
	T	X	4-9	6-1	8-13	9-14	10-16	12-19	14-22	16-25
$A_k = 0.87$		Y	8-14	10-16	13-20	15-24	16-26	19-29	22-34	25-38

CANADA DUCT Ltd.

The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

- | | | | | | |
|----|-------------------------|----|----------------------------------|----|------------------------------|
| VT | Terminal Velocity "FPM" | T | Throw "Feet" | PT | Total Pressure "Inch Water" |
| VK | Outlet Velocity "FPM" | AK | Outlet Area "Feet ² " | PS | Static Pressure "Inch Water" |
| VR | Room Velocity "FPM" | NC | re 8db room | | |

- RCD / 2-way, continued

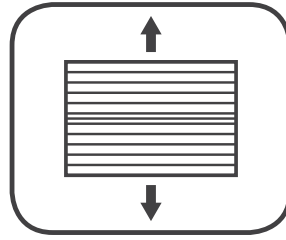


الكندية للتقوى الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
9 x 6 A _k = 0.13	CFM		65	80	95	105	120	130	160	185
	T	X	—	—	—	—	—	—	—	—
Y		3-5	3-5	5-7	6-8	7-10	7-10	8-12	10-14	
12 x 6 A _k = 0.17	CFM		90	105	120	140	160	175	210	245
	T	X	—	—	—	—	—	—	—	—
Y		3-5	5-7	6-8	6-9	7-10	8-12	10-14	12-18	
15 x 6 A _k = 0.22	CFM		110	130	155	175	200	220	265	310
	T	X	—	—	—	—	—	—	—	—
Y		4-6	6-8	6-9	7-10	9-13	10-14	10-15	13-19	
12 x 9 A _k = 0.26	CFM		130	155	180	210	235	260	310	365
	T	X	—	—	—	—	—	—	—	—
Y		5-7	6-8	6-9	8-12	10-14	10-14	11-17	14-21	
15 x 9 A _k = 0.32	CFM		165	195	230	260	295	325	390	460
	T	X	—	—	—	—	—	—	—	—
Y		6-8	7-10	8-12	9-13	10-15	12-18	14-20	16-24	
18 x 9 A _k = 0.39	CFM		195	235	275	310	350	390	470	545
	T	X	—	—	—	—	—	—	—	—
Y		6-9	8-12	9-13	10-14	11-17	13-9	15-21	17-25	
21 x 9 A _k = 0.45	CFM		230	275	320	365	410	455	545	635
	T	X	—	—	—	—	—	—	—	—
Y		7-10	8-12	9-13	11-16	12-18	14-20	16-24	19-27	
15 x 12 A _k = 0.43	CFM		220	260	305	350	390	435	525	610
	T	X	—	—	—	—	—	—	—	—
Y		6-9	8-12	10-14	10-15	12-18	14-20	15-24	18-27	

CANADA DUCT Ltd.

- RCD / 2-way, continued



الكندية للتقوى الكهربائية المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
18 x 12	CFM		260	315	370	420	475	525	630	735
	T	X	—	—	—	—	—	—	—	—
A _k = 0.52		Y	7-11	9-13	11-15	12-18	13-19	15-21	18-26	20-29
21 x 15	CFM		380	455	530	605	685	760	915	1060
	T	X	—	—	—	—	—	—	—	—
A _k = 0.76		Y	9-13	10-15	12-18	14-20	15-23	17-25	20-30	23-34
24 x 15	CFM		440	525	615	700	790	875	1050	1225
	T	X	—	—	—	—	—	—	—	—
A _k = 0.87		Y	8-14	11-16	13-19	15-21	17-25	19-29	22-33	25-38
21 x 18	CFM		460	550	640	735	825	915	1100	1280
	T	X	—	—	—	—	—	—	—	—
A _k = 0.91		Y	10-15	11-17	13-19	16-22	19-25	20-28	23-33	26-38

CANADA DUCT Ltd.

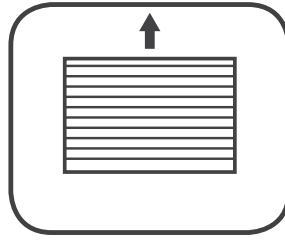
The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet2"
NC re 8db room

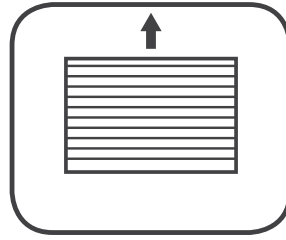
PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- RCD / 1-way



Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
9 x 6 A _k = 0.13	CFM		65	80	95	105	120	130	160	185
	T	X	5-8	6-9	7-11	8-12	9-13	10-15	12-18	15-21
		Y	—	—	—	—	—	—	—	—
12 x 6 A _k = 0.17	CFM		90	105	120	140	160	175	210	245
	T	X	5-8	6-9	9-13	9-14	10-15	12-18	14-20	17-25
		Y	—	—	—	—	—	—	—	—
15 x 6 A _k = 0.22	CFM		110	130	155	175	200	220	265	310
	T	X	5-8	7-10	9-13	10-15	12-18	14-20	16-24	18-27
		Y	—	—	—	—	—	—	—	—
12 x 9 A _k = 0.26	CFM		130	155	180	210	235	260	310	365
	T	X	7-10	8-12	10-14	11-17	12-18	14-20	17-25	19-29
		Y	—	—	—	—	—	—	—	—
15 x 9 A _k = 0.32	CFM		165	195	230	260	295	325	390	460
	T	X	9-13	10-14	11-17	12-18	15-23	17-25	20-30	22-33
		Y	—	—	—	—	—	—	—	—
18 x 9 A _k = 0.39	CFM		195	235	275	310	350	390	470	545
	T	X	9-13	10-15	12-18	14-20	16-24	18-26	20-30	25-37
		Y	—	—	—	—	—	—	—	—
21 x 9 A _k = 0.45	CFM		230	275	320	365	410	455	545	635
	T	X	10-14	11-17	13-19	15-23	18-26	19-29	22-32	26-39
		Y	—	—	—	—	—	—	—	—
15 x 12 A _k = 0.43	CFM		220	260	305	350	390	435	525	610
	T	X	10-14	11-17	13-19	15-23	18-26	19-29	22-32	26-39
		Y	—	—	—	—	—	—	—	—

- RCD / 1-way, continued



الكنديّة للفنوي الكهربائيّة المتطورة

Face Size "Inch"/Outlet Area "Inch"			V _k Outlet Velocity "FPM"							
			500	600	700	800	900	1000	1200	1400
			P _T Total Pressure "Inches water"							
		0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	
18 x 12	CFM		260	315	370	420	475	525	630	735
	T	X	10-15	12-18	14-20	17-25	19-27	21-30	25-36	28-41
A _k = 0.52		Y	—	—	—	—	—	—	—	—
21 x 15	CFM		380	455	530	605	685	760	915	1060
	T	X	13-19	15-21	18-26	19-29	22-34	25-38	29-42	34-46
A _k = 0.76		Y	—	—	—	—	—	—	—	—
24 x 15	CFM		440	525	615	700	790	875	1050	1225
	T	X	14-22	16-24	18-27	21-31	24-36	27-40	30-43	35-47
A _k = 0.87		Y	—	—	—	—	—	—	—	—
21 x 18	CFM		460	550	640	735	825	915	1100	1280
	T	X	14-20	16-24	19-29	22-32	24-36	26-39	30-43	35-47
A _k = 0.91		Y	—	—	—	—	—	—	—	—

CANADA DUCT Ltd.

The minimum T Dimensions in feet is based on a VT of 135 FPM with a VR of 65 FPM , The Maximum T Dimension In feet is based on a VT of 65 with a VR of 35 FPM .

VT Terminal Velocity "FPM"
VK Outlet Velocity "FPM"
VR Room Velocity "FPM"

T Throw "Feet"
AK Outlet Area "Feet²"
NC re 8db room

PT Total Pressure "Inch Water"
PS Static Pressure "Inch Water"

- Selection Procedure

الخدمة القوية الكهربائية المتطورة

1. Determine the required CFM per each outlet as per cooling Load Calculation.
2. Determine the type of pattern from table in page (3).
Example : "4-way, 2-way-21,...etc. "
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.

	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	500-800
General Offices	1000-1250
Dept. Stores	1500

Table (1) – Recommended Outlet Velocity *

- Selection Procedure Example

1. Required 250 CFM as per cooling load calculations.
2. Required 4-way pattern type.
3. The recommended outlet velocity ranges from 500 – 750 FPM.
4. The size of air outlet can 12 X 12 at 700 FPM or 15 X 15 at 500 FPM velocity.

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

Face Size "Inch" /Outlet Area "Inch"			V _K Outlet Velocity "FPM"			
			500	600	700	800
			P _T Total Pressure "Inches water"			
			0.02	0.02	0.03	0.04
6 x 6	CFM		50	60	70	80
	T	X	2-3	2-3	2-4	2-4
A _K = 0.10		Y	2-3	2-3	2-4	2-4
9 x 9	CFM		110	135	155	180
	T	X	2-4	2-4	3-5	3-5
A _K = 0.22		Y	2-4	2-4	3-5	3-5
12 x 12	CFM		200	240	280	320
	T	X	3-5	4-6	4-8	5-8
A _K = 0.40		Y	3-5	4-6	4-8	5-8
15 x 15	CFM		310	375	440	500
	T	X	4-6	4-8	5-9	6-11
A _K = 0.62		Y	4-6	4-8	5-9	6-11

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- How to order

	SCD	SCD Square Ceiling Diffuser RCD Rectangular Ceiling Diffuser
Pattern	4	Pattern Type at page (3)
Size	24 x 24	L X W " Inch"
Finish	1	0 Aluminum 1 White Color 2 Other Colors
Damper	0	0 Without Damper 1 With Damper

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الخدمة القوية الكهربائية المتطورة

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

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