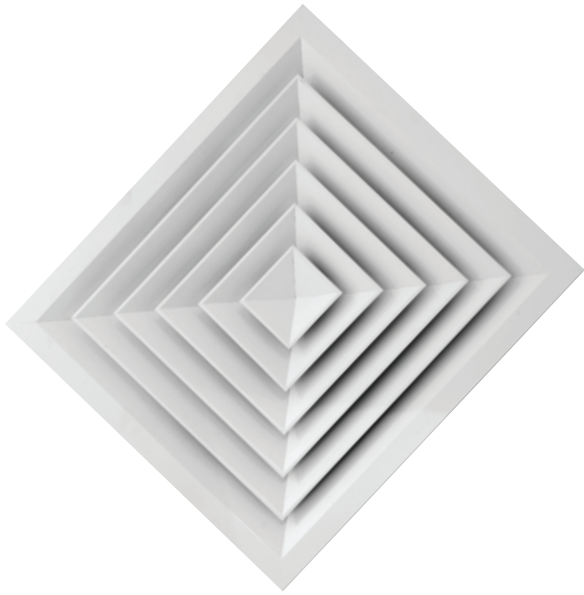




# CEILING DIFFUSER-LOUVERED FACE

## SQUARE

### CDP200



### APPLICATION

CDP series directional diffuser provides an aesthetically pleasing solution to air distribution requirements, regardless of room configuration

### FEATURED STANDARD CONSTRUCTION

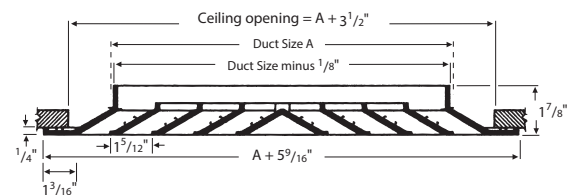
- **FRAME:** Constructed from heavy pressed aluminum material
- **CORE:** Constructed from pressed or welded aluminum depending on the size using a series of integral cross braces which interlock to secure discharge vanes and preclude rattling.
- **AIR PATTERN CORES:** Equipped with spring loaded latches, providing easy snap in/out core installation, no special tools required.
- **THROW:** 4 way throw
- **FINISHING:** RAL 9010

### OPTIONS

- Foam gasket on the back of the frame
- Square to round transition
- Any RAL color upon request
- Opposed blade damper -Model: (p. 2)
- Aluminum equalizing grid- Model: (p. 2)
- Plenum box (p. 3)

### STANDARD SIZES

Neck Size (inch)	Face Size (millimeter)	Frame Type
6 x 6	295 x 295	Pressed
9 x 9	370 x 370	Pressed
12 x 12	445 x 445	Pressed
15 x 15	520 x 520	Pressed
18 x 18	595 x 595	Pressed
18 x 18*	600 x 600	Welded
21 x 21*	675 x 675	Welded
24 x 24*	750 x 750	Welded





# CEILING DIFFUSER-LOUVERED FACE

## SQUARE

CDP200

### Opposed Blade Damper:



#### Features

The aluminum opposed blade damper has gang operated blades that move in opposite directions when adjusted. The damper blades are lever operated and can be set in any position. Each setting provides a uniform straight flow of air through the damper. The damper blades are extruded for strength and stiffness, and interlock to assure a minimum of air leakage when closed. The damper blade operating mechanism is at an inside corner of the damper frame.

### Aluminum Equilizing Grid:



#### Features

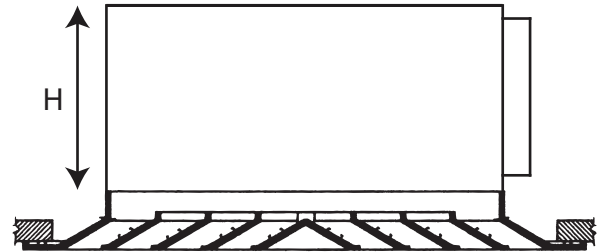
The aluminum equalizing grid for equalization of air flow, directional control and minor adjustments of air flow. Its is available as an accessory above the diffuser to provide uniform air flow over the surface of the diffuser face. The blades are individually adjustable one by one to allow additional control when needed.

## Plenum Box

With Plenum Box Side Inlet

Minimum Inlet Size= 4"

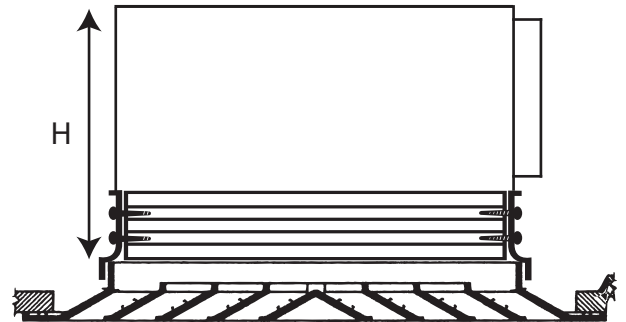
Height= Inlet + 2" + 1<sup>3</sup>/<sub>16</sub>"



With ADG & Plenum Box Side Inlet

Minimum Inlet Size= 4"

Height= Inlet + 2" + 3<sup>3</sup>/<sub>20</sub>"



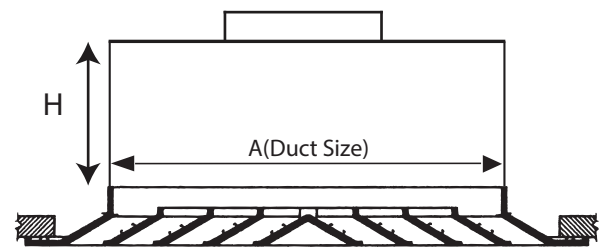
With Plenum Box Top Inlet

Minimum Inlet Size= 4"

Maximum Inlet Size= A(duct size) - 2"

From inlet 4" to 12" H= 6<sup>1</sup>/<sub>16</sub>"

for inlet >12" H= 9<sup>9</sup>/<sub>14</sub>"



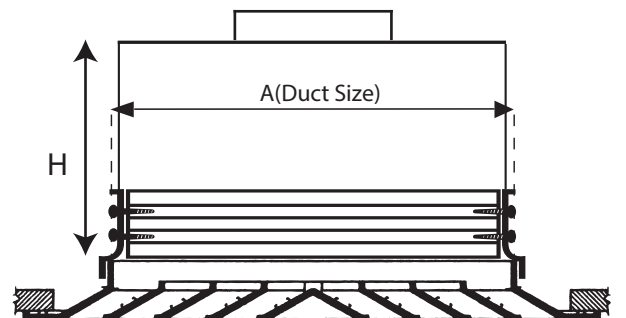
With ADG & Plenum Box Top Inlet

Minimum Inlet Size= 4"

Maximum Inlet Size= A(duct size) - 2"

From inlet 4" to 12" H= 6<sup>1</sup>/<sub>16</sub>"

for inlet >12" H= 9<sup>9</sup>/<sub>14</sub>"





# CEILING DIFFUSER-LOUVERED FACE

## SQUARE

CDP200 & CD200

### PERFORMANCE DATA

Size (inches)	Area Factor Ak	Neck Velocity FPM	200	300	400	500	600	700	800	900	1000	1100	1200
	Neck Area (Sq. Ft.)	Velocity Pressure (in. w.g.)	0.003	0.006	0.010	0.016	0.023	0.031	0.040	0.051	0.063	0.076	0.091

<b>6x6</b>	Ak=0.093 0.250	CFM	50	75	100	125	150	175	200	225	250	275	300
		Pt (in.w.g.)	0.014	0.032	0.056	0.087	0.127	0.171	0.220	0.281	0.348	0.420	0.500
		N.C.	< 15	< 15	< 15	17	23	28	32	35	38	41	43
		4 way- Throw	7-10	8-11	9-12	10-14	10-15	11-16	11-17	12-18	13-19	13-20	14-21
		Cfm per side A	13	19	25	31	38	44	50	56	63	69	75
		3way side A-Throw	7-10	8-11	9-12	10-14	10-15	11-16	11-17	12-18	13-19	13-20	14-21
		Cfm per side B	18	28	38	47	56	66	75	85	94	103	113
		3way side B-Throw	7-11	8-12	9-13	10-15	11-16	12-17	12-18	13-19	14-20	14-21	15-22
		S2-Throw	8-12	9-13	10-15	11-17	12-18	13-19	14-20	15-21	16-22	16-23	17-25
S1 - Throw	12-16	12-17	13-18	14-20	15-21	16-22	17-23	18-24	19-25	19-26	21-28		
<b>9x9</b>	Ak=0.199 0.562	CFM	112	170	225	280	335	395	450	505	563	620	675
		Pt (in.w.g.)	0.015	0.035	0.061	0.095	0.135	0.188	0.244	0.306	0.378	0.464	0.549
		N.C.	< 15	< 15	19	25	30	35	39	42	45	48	50
		4 way- Throw	8-13	10-15	11-17	13-18	15-20	16-22	17-24	18-26	19-28	20-30	21-31
		Cfm per side A	28	42	56	70	84	99	113	127	141	155	169
		3way side A-Throw	8-13	10-15	11-17	13-18	15-20	16-22	17-24	18-26	19-28	20-30	21-31
		Cfm per side B	42	64	84	105	127	148	169	189	211	232	253
		3way side B-Throw	9-14	11-16	12-19	14-21	17-23	17-25	18-27	20-29	21-31	22-32	23-34
		S2 & S2C-Throw	9-14	11-17	12-20	15-23	18-26	19-28	20-29	22-32	23-34	25-36	26-38
S1 - Throw	14-19	15-22	18-24	20-27	22-30	24-32	26-35	28-39	29-42	31-44	32-46		
<b>12x12</b>	Ak=0.375 1.00	CFM	200	300	400	500	600	700	800	900	1000	1100	1200
		Pt (in.w.g.)	0.016	0.038	0.065	0.102	0.145	0.200	0.260	0.330	0.407	0.495	0.590
		N.C.	< 15	< 15	22	28	33	36	40	43	46	48	50
		4 way- Throw	9-16	11-17	13-20	16-23	19-27	21-31	23-34	25-37	27-39	28-41	29-43
		Cfm per side A	50	75	100	125	150	175	200	225	250	275	300
		3way side A-Throw	9-16	11-17	13-20	16-23	19-27	21-31	23-34	25-37	27-39	28-41	29-43
		Cfm per side B	75	113	150	188	225	263	300	338	375	413	450
		3way side B-Throw	10-17	12-18	14-22	18-25	21-30	23-33	25-36	27-39	28-41	29-43	30-45
		S2 & S2C-Throw	11-17	13-19	14-23	20-28	23-33	25-35	27-39	30-42	32-44	34-45	36-48
S1 - Throw	17-24	19-25	20-30	25-36	29-39	31-42	34-45	36-48	37-50	39-52	41-54		
<b>15x15</b>	Ak=0.58 1.56	CFM	310	470	625	780	935	1095	1250	1405	1560	1715	1870
		Pt (in.w.g.)	0.016	0.038	0.065	0.102	0.145	0.200	0.260	0.330	0.407	0.495	0.590
		N.C.	< 15	< 15	23	29	35	40	44	47	49	51	53
		4 way- Throw	11-20	14-22	17-25	20-29	23-34	27-39	29-42	31-45	33-48	35-51	36-53
		Cfm per side A	78	118	156	195	234	274	313	351	391	430	469
		3way side A-Throw	11-20	14-22	17-25	20-29	23-34	27-39	29-42	31-45	33-48	35-51	36-53
		Cfm per side B	117	176	234	293	352	410	469	527	586	645	703
		3way side B-Throw	13-22	16-24	19-26	21-31	24-35	28-41	30-44	32-47	34-51	37-54	38-56
		S2 & S2C-Throw	14-23	17-25	20-28	23-33	26-38	30-44	33-47	35-50	37-55	40-58	43-61
S1 - Throw	20-30	23-32	27-35	30-40	32-49	38-52	41-55	43-58	46-62	49-67	52-72		

SAP



# CEILING DIFFUSER-LOUVERED FACE

## SQUARE

CDP200 & CD200

### PERFORMANCE DATA

Size (inches)	Area Factor Ak	Neck Velocity FPM	200	300	400	500	600	700	800	900	1000	1100	1200
	Neck Area (Sq. Ft.)	Velocity Pressure (in. w.g.)	0.003	0.006	0.010	0.016	0.023	0.031	0.040	0.051	0.063	0.076	0.091

<b>18x18</b>	<b>Ak=0.85 2.25</b>	CFM	450	675	900	1125	1350	1575	1800	2025	2250	2475	2700
		Pt (in.w.g.)	0.016	0.038	0.065	0.102	0.145	0.200	0.260	0.330	0.407	0.495	0.590
		N.C.	< 15	15	24	31	38	43	47	50	52	54	56
		4 way- row	15-25	19-28	22-32	25-35	28-38	31-43	34-49	37-56	39-59	41-62	43-64
		Cfm per side A	113	169	225	281	338	394	450	506	563	619	675
		3way side A- row	15-25	19-28	22-32	25-35	28-38	31-43	34-49	37-56	39-59	41-62	43-64
		Cfm per side B	168	253	338	372	506	591	675	760	844	928	1012
		3way side B- row	17-27	21-31	23-35	28-39	32-42	35-49	38-55	41-61	44-66	46-68	47-69
		S2 & S2C- row	17-28	22-34	24-37	29-41	34-44	38-52	42-60	45-66	48-72	50-74	53-78
S1 - row	26-38	30-43	33-47	39-51	45-55	49-65	52-75	56-84	60-90	64-94	68-98		
<b>21x21*</b>	<b>Ak=1.15 3.06</b>	CFM	610	920	1225	1530	1835	2140	2450	2755	3060	3365	3670
		Pt (in.w.g.)	0.016	0.038	0.065	0.102	0.146	0.201	0.262	0.333	0.410	0.496	0.591
		N.C.	16	23	29	35	41	46	49	52	55	57	59
		4 way- row	24-30	27-36	30-41	33-45	36-50	38-54	41-58	44-62	46-65	48-68	50-71
		Cfm per side A	152	230	306	383	463	535	613	689	765	841	918
		3way side A- row	24-30	27-36	30-41	33-45	36-50	38-54	41-58	44-62	46-65	48-68	50-71
		Cfm per side B	230	345	459	574	686	803	919	1033	1148	1262	1376
		3way side B- row	27-33	30-39	33-45	36-49	39-54	43-60	46-65	49-69	52-72	54-75	56-78
		S2 & S2C- row	27-34	31-42	34-49	37-53	41-59	45-65	49-70	52-74	55-77	58-80	61-83
S1 - row	38-47	41-55	44-62	48-67	51-72	55-78	58-83	61-87	64-90	67-93	70-96		
<b>24x24*</b>	<b>Ak=1.15 4.00</b>	CFM	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800
		Pt (in.w.g.)	0.016	0.038	0.066	0.104	0.148	0.202	0.264	0.334	0.412	0.500	0.592
		N.C.	21	27	33	39	45	49	51	54	57	59	61
		4 way- row	27-35	30-42	33-47	37-52	40-57	44-62	47-66	50-70	53-74	56-78	58-82
		Cfm per side A	200	300	400	500	600	700	800	900	1000	1100	1200
		3way side A- row	27-35	30-42	33-47	37-52	40-57	44-62	47-66	50-70	53-74	56-78	58-82
		Cfm per side B	300	450	600	750	900	1050	1200	1350	1500	1650	1800
		3way side B- row	28-37	32-44	36-51	39-56	43-61	47-66	50-71	54-76	57-80	59-84	61-86
		S2 & S2C- row	28-38	33-47	37-56	42-61	46-66	51-72	55-77	59-82	62-86	65-90	67-93
S1 - row	40-51	43-59	47-68	52-73	57-79	62-85	66-90	70-95	73-99	76-104	78-108		

**Notes:**

Static Pressure is in Inch of Water, Air volume is in CFM.

NC values were determined by subtracting 10 dB from the sound power level for room absorption.

Throw data is presented for terminal velocities of 100 and 50 ft./min. Throw values are given for Isothermal conditions.

Laboratory tests were performed in accordance with ASHRAE Standard 70-1991.

(\*) Size not available for CDP



**Model : CDP200 & CD200**

**WITH ROUND NECK**

**PERFORMANCE DATA**

SIZE (inches)	Area Factor Ak Neck Area (Sq. Ft.)	NECK VELOCITY (FPM)	300	400	500	600	700	800	900	1000	1100
<b>6x6 Dia 6"</b>	<b>Ak=0.093 0.195</b>	<b>CFM</b>	<b>59</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>156</b>	<b>176</b>	<b>195</b>	<b>215</b>
		<b>Pt (in.w.g.)</b>	0.019	0.034	0.053	0.076	0.106	0.137	0.171	0.209	0.254
		<b>N.C.</b>	< 15	< 15	15	18	22	26	29	33	38
		<b>4 way- Throw</b>	7-11	8-12	9-14	9-15	10-16	10-17	11-18	12-19	12-20
<b>9x9 Dia 6"</b>	<b>Ak=0.199 0.195</b>	<b>CFM</b>	<b>59</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>156</b>	<b>176</b>	<b>195</b>	<b>215</b>
		<b>Pt (in.w.g.)</b>	0.019	0.034	0.053	0.076	0.106	0.137	0.171	0.209	0.254
		<b>N.C.</b>	< 15	< 15	<15	17	21	25	29	32	37
		<b>4 way- Throw</b>	8-11	9-12	10-14	10-15	11-16	11-17	12-18	13-19	13-20
<b>9x9 Dia 8"</b>	<b>Ak=0.199 0.35</b>	<b>CFM</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>245</b>	<b>280</b>	<b>315</b>	<b>350</b>	<b>385</b>
		<b>Pt (in.w.g.)</b>	0.014	0.024	0.035	0.053	0.073	0.095	0.119	0.147	0.178
		<b>N.C.</b>	< 15	<15	<15	17	20	25	29	32	35
		<b>4 way- Throw</b>	8-13	9-14	10-15	11-16	12-17	13-18	14-19	15-21	16-22
<b>12x12 Dia 6"</b>	<b>Ak=0.375 0.195</b>	<b>CFM</b>	<b>59</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>156</b>	<b>176</b>	<b>195</b>	<b>215</b>
		<b>Pt (in.w.g.)</b>	0.019	0.034	0.053	0.076	0.106	0.137	0.171	0.209	0.254
		<b>N.C.</b>	< 15	< 15	<15	17	21	25	29	32	37
		<b>4 way- Throw</b>	8-11	9-12	10-14	10-15	11-16	11-17	12-18	13-19	13-20
<b>12x12 Dia 8"</b>	<b>Ak=0.375 0.350</b>	<b>CFM</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>245</b>	<b>280</b>	<b>315</b>	<b>350</b>	<b>385</b>
		<b>Pt (in.w.g.)</b>	0.014	0.024	0.035	0.053	0.073	0.095	0.119	0.147	0.178
		<b>N.C.</b>	< 15	<15	<15	17	20	25	29	32	35
		<b>4 way- Throw</b>	8-13	9-14	10-15	11-16	12-17	13-18	14-19	15-21	16-22
<b>12x12 Dia 10"</b>	<b>Ak=0.375 0.545</b>	<b>CFM</b>	<b>164</b>	<b>218</b>	<b>273</b>	<b>327</b>	<b>380</b>	<b>436</b>	<b>491</b>	<b>545</b>	<b>600</b>
		<b>Pt (in.w.g.)</b>	0.017	0.031	0.049	0.070	0.094	0.124	0.157	0.193	0.234
		<b>N.C.</b>	< 15	<15	<15	18	21	24	29	33	36
		<b>4 way- Throw</b>	8-15	9-16	10-17	11-18	12-19	13-21	15-23	17-25	19-27
<b>12x12 Dia 12"</b>	<b>Ak=0.375 0.785</b>	<b>CFM</b>	<b>236</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>707</b>	<b>785</b>	<b>864</b>
		<b>Pt (in.w.g.)</b>	0.023	0.041	0.063	0.092	0.125	0.164	0.207	0.255	0.309
		<b>N.C.</b>	< 15	<15	20	26	29	32	35	38	41
		<b>4 way- Throw</b>	9-16	11-17	12-19	14-21	16-24	18-27	19-29	21-32	23-35



# Model : CDP200 & CD200

## WITH ROUND NECK

### PERFORMANCE DATA

SIZE (inches)	Area Factor Ak Neck Area (Sq. Ft.)	NECK VELOCITY FPM	300	400	500	600	700	800	900	1000	1100
<b>18x18 Dia 6"</b>	<b>Ak=0.85 0.195</b>	<b>CFM</b>	<b>59</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>156</b>	<b>176</b>	<b>195</b>	<b>215</b>
		<b>Pt (in.w.g.)</b>	0.019	0.034	0.053	0.076	0.106	0.137	0.171	0.209	0.254
		<b>N.C.</b>	< 15	< 15	<15	17	21	25	29	32	37
		<b>4 way- Throw</b>	8-11	9-12	10-14	10-15	11-16	11-17	12-18	13-19	13-20
<b>18x18 Dia 8"</b>	<b>Ak=0.85 0.350</b>	<b>CFM</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>245</b>	<b>280</b>	<b>315</b>	<b>350</b>	<b>385</b>
		<b>Pt (in.w.g.)</b>	0.014	0.024	0.035	0.053	0.073	0.095	0.119	0.147	0.178
		<b>N.C.</b>	< 15	<15	<15	17	20	25	29	32	35
		<b>4 way- Throw</b>	8-13	9-14	10-15	11-16	12-17	13-18	14-19	15-21	16-22
<b>18x18 Dia 10"</b>	<b>Ak=0.85 0.545</b>	<b>CFM</b>	<b>164</b>	<b>218</b>	<b>273</b>	<b>327</b>	<b>380</b>	<b>436</b>	<b>491</b>	<b>545</b>	<b>600</b>
		<b>Pt (in.w.g.)</b>	0.017	0.031	0.049	0.070	0.094	0.124	0.157	0.193	0.234
		<b>N.C.</b>	< 15	<15	<15	18	21	24	29	33	36
		<b>4 way- Throw</b>	8-15	9-16	10-17	11-18	12-19	13-21	15-23	17-25	19-27
<b>18x18 Dia 12"</b>	<b>Ak=0.85 0.785</b>	<b>CFM</b>	<b>236</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>707</b>	<b>785</b>	<b>864</b>
		<b>Pt (in.w.g.)</b>	0.023	0.041	0.063	0.092	0.125	0.164	0.207	0.255	0.309
		<b>N.C.</b>	< 15	<15	20	26	29	32	35	38	41
		<b>4 way- Throw</b>	9-16	11-17	12-19	14-21	16-24	18-27	19-29	21-32	23-35
<b>18x18 Dia 14"</b>	<b>Ak=0.85 1.07</b>	<b>CFM</b>	<b>321</b>	<b>428</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>	<b>1176</b>
		<b>Pt (in.w.g.)</b>	0.039	0.069	0.108	0.155	0.212	0.277	0.35	0.432	0.523
		<b>N.C.</b>	< 15	18	23	27	32	35	38	42	45
		<b>4 way- Throw</b>	10-17	11-18	13-20	16-23	19-27	21-31	23-34	25-36	27-38
<b>18x18 Dia 16"</b>	<b>Ak=0.85 1.768</b>	<b>CFM</b>	<b>530</b>	<b>707</b>	<b>884</b>	<b>1060</b>	<b>1237</b>	<b>1414</b>	<b>1590</b>	<b>1767</b>	<b>1944</b>
		<b>Pt (in.w.g.)</b>	0.049	0.087	0.136	0.196	0.267	0.349	0.441	0.545	0.659
		<b>N.C.</b>	15	20	25	30	34	37	40	44	47
		<b>4 way- Throw</b>	14-22	17-25	20-29	23-34	27-39	29-42	31-45	33-48	35-51

Notes:

Static Pressure is in Inch of Water, Air volume is in CFM.

NC values were determined by subtracting 10 dB from the sound power level for room absorption.

Throw data is presented for terminal velocities of 100 and 50 ft./min.

Throw values are given for Isothermal conditions.

Laboratory tests were performed in accordance with ASHRAE Standard 70-1991.

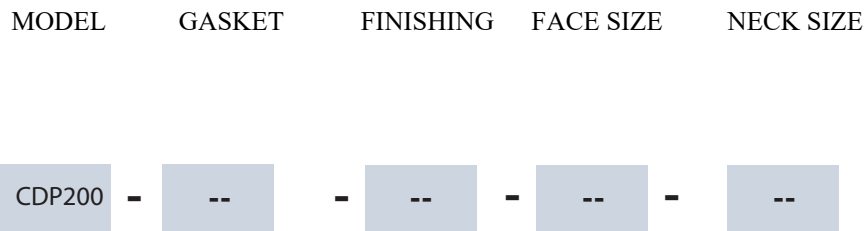


# CEILING DIFFUSER-LOUVERED FACE

## SQUARE

### CDP200

### ORDERING INFORMATION



↑  
RAL 9010: White  
RAL "num": Other Ral  
color

↑  
--: For Neck (6 to 18)  
F60: Optional For Neck (18)

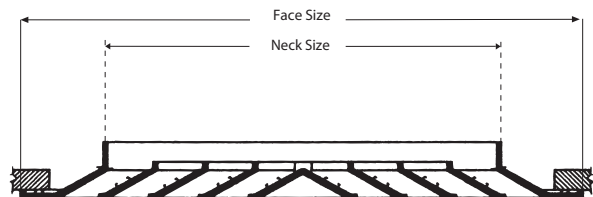
↑  
--: Without Foam Gasket  
G: Foam Gasket

- 6 x 6
- 9 x 9
- 12 x 12
- 15 x 15
- 18 x 18
- 21 x 21
- 24 x 24

N.B: - For more information, please check the submittal sheet

### STANDARD SIZES

Neck Size (inch)	Face Size (millimeter)	Frame Type
6 x 6	295 x 295	Pressed
9 x 9	370 x 370	Pressed
12 x 12	445 x 445	Pressed
15 x 15	520 x 520	Pressed
18 x 18	595 x 595	Pressed
18 x 18*	600 x 600	Welded
21 x 21*	675 x 675	Welded
24 x 24*	750 x 750	Welded



N.B: - For non standard sizes, please consult our engineers