

# MODEL DCD

## DIRECTIONAL CEILING DIFFUSER



### APPLICATION

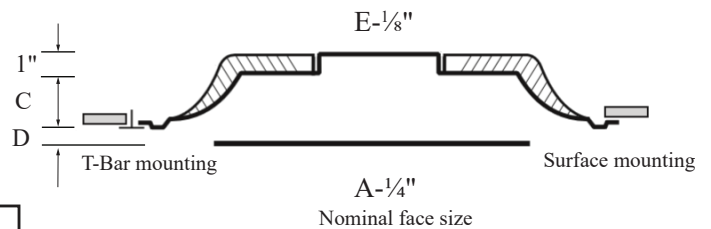
DCD are used for heating, ventilation and cooling. High diffusion induction rates result in rapid temperature and velocity equalization of the mixed air mass well above the zone of occupancy. The DCD perform efficiently with air loading of 6 to 30 air changes per hour (based on 10 ft. ceiling height), and sound level range of NC 25 to 35

### FEATURED STANDARD CONSTRUCTION

- Material : Constructed from stamped heavy gauge steel with removable core
- Mounting: Surface or Lay-in T-bar ceiling
- Neck: Round neck
- Collar: 1" height collar
- Finishing: RAL 9010

### OPTIONS

- Plaster and Drywall frame.
- Any size height collar.
- With Damper
- Fiber glass insulation exclusive for 24"x24" face size.
- Any RAL color upon request

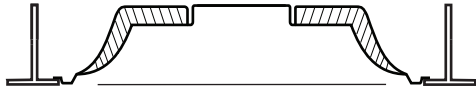


### STANDARD SIZES

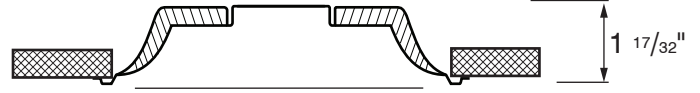
E: NECK SIZES (inch)	PRODUCT SIZES DETAILS		
	A	C	D
6	12"x12"	1 <sup>3</sup> / <sub>4</sub> "	7 <sup>1</sup> / <sub>16</sub> "
8	12"x12"	1 <sup>3</sup> / <sub>4</sub> "	7 <sup>1</sup> / <sub>16</sub> "
6	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
8	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
10	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
12	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
14	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "

# MODEL DCD DIRECTIONAL CEILING DIFFUSER

## INSTALLATION DETAILS

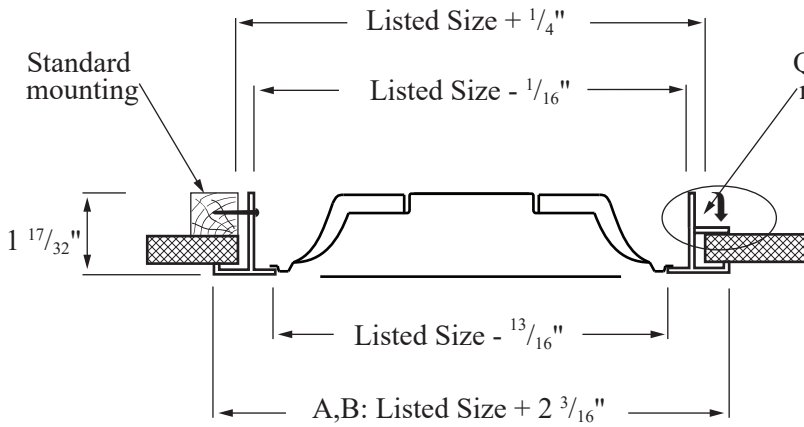


T-Bar mounting

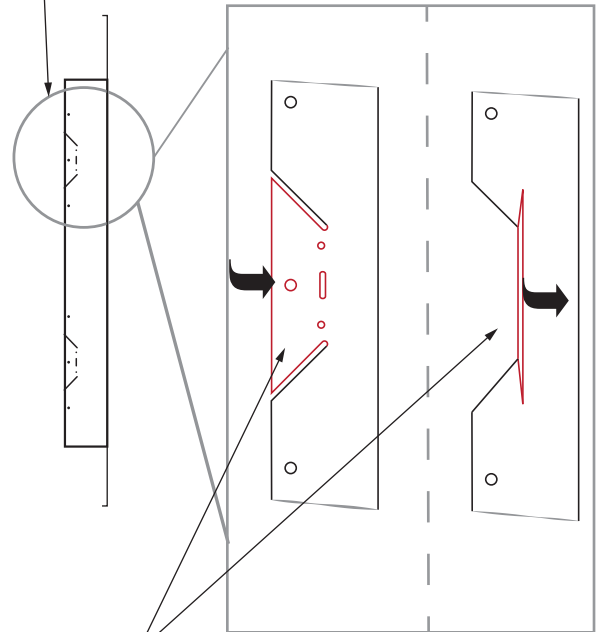
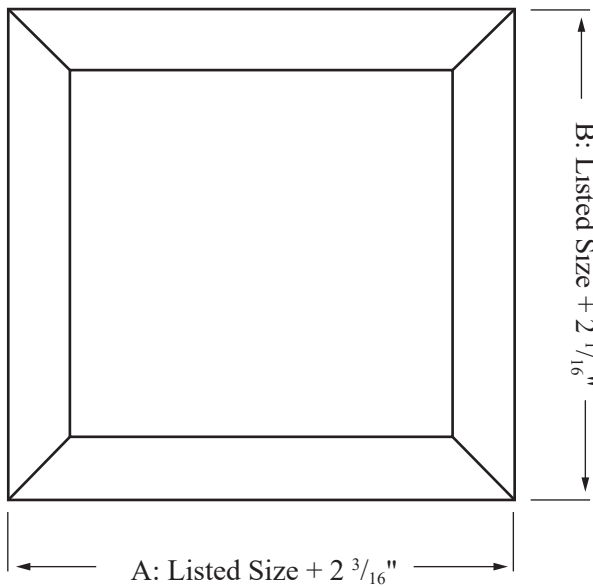


Surface mounting

### Plaster and Drywall frame:



Option



Depress quick-tabs to sandwich drywall



# DIRECTIONAL CEILING DIFFUSER SQUARE DCD

Listed Size	Neck Size (Inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1200	1400	1600
		Pv	0.010	0.016	0.022	0.031	0.041	0.062	0.090	0.122	0.160
12" x 12"	6	CFM	78	98	118	137	157	196	235	274	313
		Pt	0.05	0.07	0.10	0.14	0.18	0.29	0.41	0.58	0.72
		NC	<20	<20	<20	<20	<20	21	24	29	37
		Throw (ft)	2-3-6	3-4-7	4-5-9	4-5-10	5-6-11	6-8-12	7-9-13	8-10-15	9-11-16
	8	CFM	140	175	209	244	279	349	419	489	559
		Pt	0.07	0.10	0.15	0.21	0.29	0.42	0.62	0.84	1.00
		NC	<20	<20	<20	<20	<20	25	30	38	45
		Throw (ft)	2-4-7	3-5-9	4-7-10	5-8-11	6-9-12	7-10-14	8-12-17	10-12-18	11-14-20
24" x 24"	6	CFM	78	98	118	137	157	196	235	274	313
		Pt	0.02	0.03	0.04	0.05	0.08	0.1	0.14	0.19	0.24
		NC	<20	<20	<20	<20	<20	23	27	32	37
		Throw (ft)	1-2-4	2-3-4	2-3-5	2-3-6	3-4-7	4-5-8	4-6-9	4-7-10	6-8-14
	8	CFM	140	175	209	244	279	349	419	489	559
		Pt	0.02	0.03	0.04	0.06	0.08	0.11	0.17	0.23	0.29
		NC	<20	<20	<20	<20	<20	28	32	36	41
		Throw (ft)	2-3-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-11	6-8-14	7-9-14	7-10-14
	10	CFM	218	273	327	382	436	545	654	763	872
		Pt	0.03	0.04	0.06	0.08	0.11	0.18	0.24	0.35	0.48
		NC	<20	<20	<20	<20	23	29	36	40	44
		Throw (ft)	3-4-6	4-5-8	4-6-10	5-7-12	6-8-14	7-9-15	8-11-16	9-12-17	10-13-19
	12	CFM	314	393	471	550	628	785	941	1099	1256
		Pt	0.04	0.06	0.08	0.13	0.16	0.25	0.35	0.50	0.67
		NC	<20	<20	<20	21	24	31	38	43	47
		Throw (ft)	4-5-9	5-6-10	6-7-10	6-8-13	7-9-15	8-11-18	10-13-20	11-15-21	12-16-22
	14	CFM	428	535	640	748	855	1070	1283	1497	1710
		Pt	0.05	0.08	0.13	0.16	0.22	0.32	0.43	0.59	0.80
		NC	<20	<20	<20	22	27	34	40	43	47
		Throw (ft)	4-6-10	5-6-11	6-8-14	7-10-16	8-11-18	10-14-20	12-15-22	12-17-23	14-19-24

**Definition of Units:**

- CFM - Cubic Feet per Minute (air)
- fpm - Velocity of air stream in Feet Per Minute
- Pv - Velocity pressure (inches of water column)
- Pt - Total pressure (inches of water column)
- Ps - Static pressure = Pt - Pv (inches of water column)
- Throw - Isothermal horizontal throw (supply air temperature the same as average room air temperature) values are for 150 fpm - 100 fpm - 75 fpm velocities respectively.
- NC - Noise criterion, sound pressure level. NC ratings are based on sound power level (Lw) RE: 10E-12 watts minus a 10 dB room attenuation in all octave bands
- Ak - Area Factors
- Performance Data is Based on ASHREA 70-06

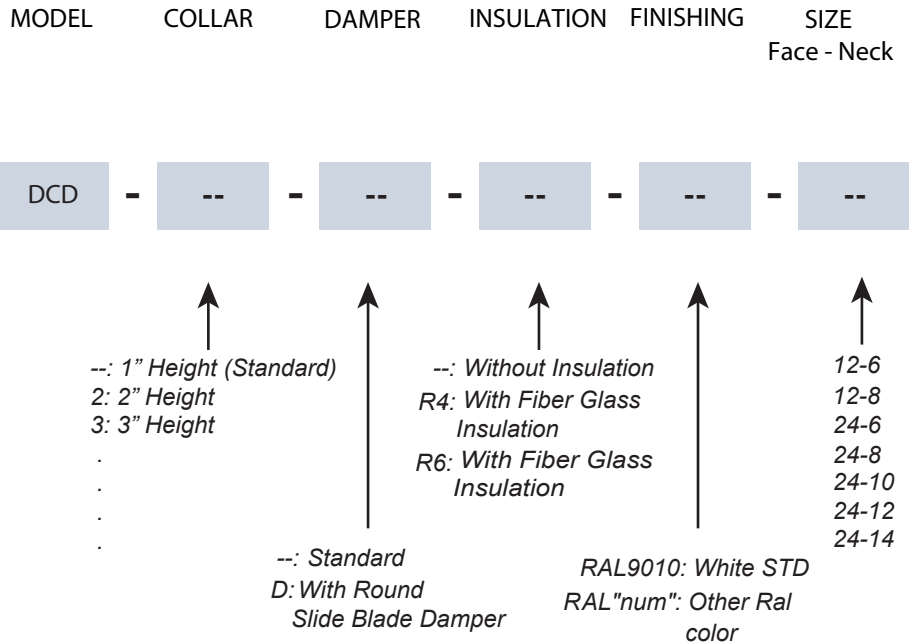


# DIRECTIONAL CEILING DIFFUSER

## SQUARE

### DCD

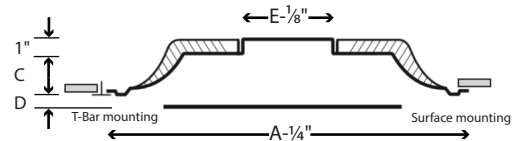
## ORDERING INFORMATION



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

### STANDARD SIZES

E: NECK SIZES (inch)	PRODUCT SIZES DETAILS		
	A	C	D
6	12"x12"	1¾"	7/16"
8	12"x12"	1¾"	7/16"
6	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7/8"
8	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7/8"
10	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7/8"
12	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7/8"
14	24"x24"	2 <sup>7</sup> / <sub>8</sub> "	7/8"



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