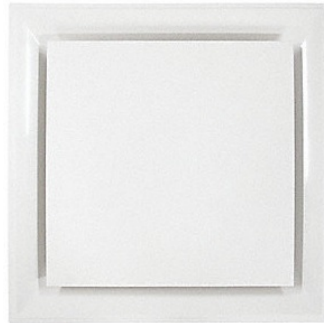




**Square Plaque Diffuser  
SPD**



### DESCRIPTION:

The Square Plaque Diffuser (SPD) has a flush appearance, making it ideal for architecturally-conscience commercial spaces, and provides industry-leading low pressure drop and sound generation with a 360° radial, horizontal air pattern for rapid mixing and optimal thermal comfort. The one-piece, aerodynamically optimized backpan maintains the horizontal air pattern even at low air volumes, making it a great choice for high turndown VAV applications. This versatile diffuser is easy to maintain, with little to no ceiling smudging and a tool-free removable face for quick access to dampers, accessories, and ductwork.

SPD : Square Plaque diffuser without damper, without insulated

SPD-D : Square Plaque diffuser with damper, without insulated

SPD-R6 : Square Plaque diffuser without damper, with insulated

SPD-DR6: Square Plaque diffuser with damper, with insulated

### CONSTRUCTION:

Metal Steel (SPD) - Standard

Aluminum (SPD-A) - Optional

### APPLICATION:

The SPD is compatible with a wide variety of ceiling systems, and is designed to deliver architectural appeal without sacrificing performance. The SPD is an excellent choice for VAV applications, providing a tight, horizontal airflow pattern, even at low air volumes.

### FINISHING:

- Powder coated in RAL9010 colour as standard. Other colours on request

### INSTALLATION:

- 24" x 24" T-bar lay-in

### ACCESSORIES:

- D: Damper
- PB: Plenum Box

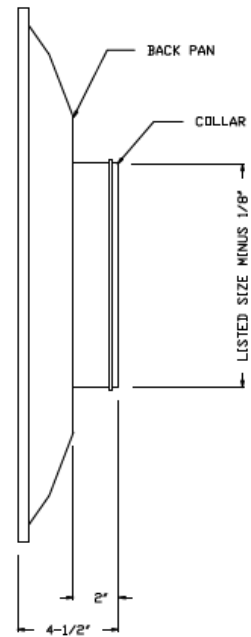
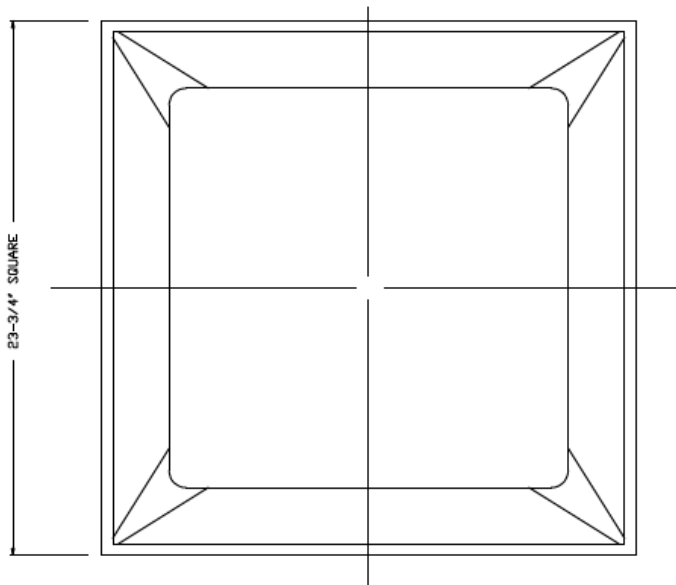


**STANDARD SIZES:**

TYPE SPD - AVAILABLE SIZES (in)	
	FRAME SIZE-MODULE
<b>Diameter</b>	<b>24" x 24"</b>
<b>6"</b>	<b>X</b>
<b>8"</b>	<b>X</b>
<b>10"</b>	<b>X</b>
<b>12"</b>	<b>X</b>
<b>14"</b>	<b>X</b>

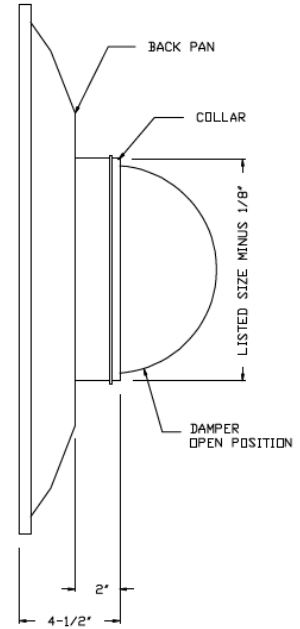
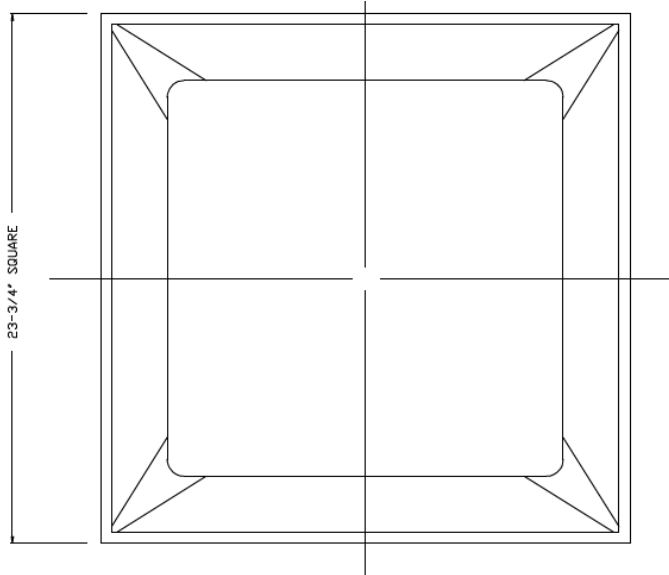
**TECHNICAL DRAWINGS:**

**SQUARE PLAQUE DIFFUSER WITHOUT DAMPER**

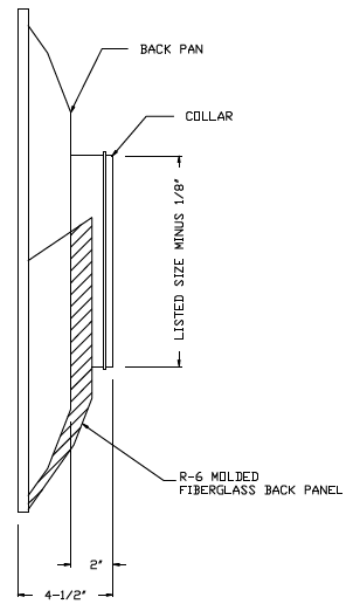
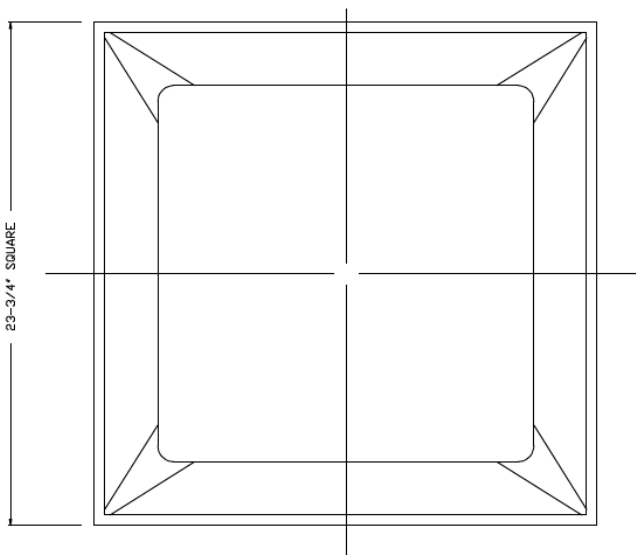




SQUARE PLAQUE DIFFUSER WITH DAMPER

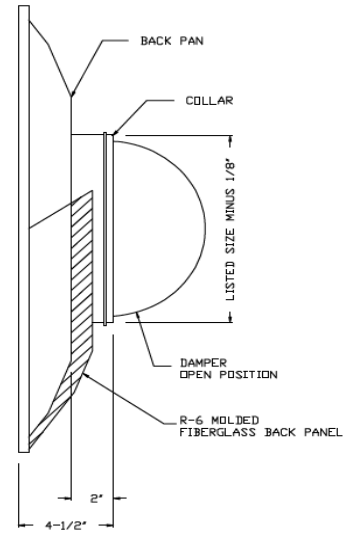
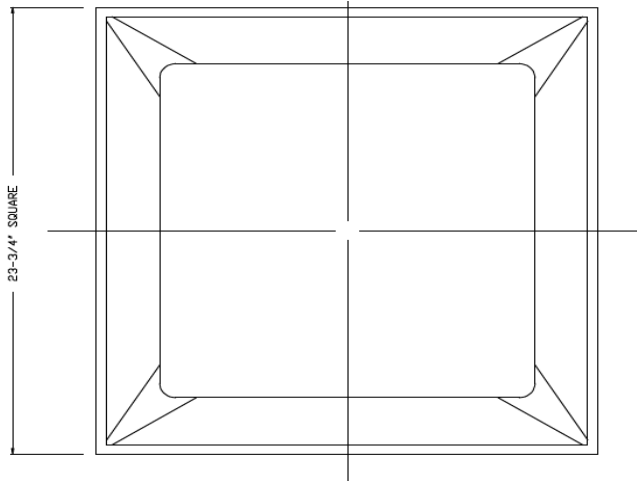


SQUARE PLAQUE DIFFUSER WITH INSULATED





SQUARE PLAQUE DIFFUSER WITH INSULATED, WITH DAMPER





SQUARE CEILING PLAQUE DIFFUSER PERFORMANCE DATA:

Model SPD , SPD-D , SPD-R6 , SPD-DR6

Panel Size	Neck Size	Area Ak	Inlet Velocity	400	500	600	700	800	900	1000	1200
24x24	6"	.196 .077	CFM	80	100	120	135	155	175	195	235
			Ps T	.003	.004	.006	.006	.008	.011	.014	.021
			hrow	4	6	7	8	8	9	9	10
			NC	<15	<15	<15	<15	15	18	21	26
24x24	8"	.349 .136	CFM	140	175	210	245	280	315	350	420
			Ps T	.007	.012	.017	.023	.030	.038	.047	.067
			hrow	6	7	9	10	11	12	13	14
			NC	<15	<15	<15	17	21	25	28	34
24x24	10"	.545 .213	CFM	220	275	325	380	435	490	545	655
			Ps	.016	.025	.034	.047	.061	.078	.096	.139
			Throw	7	9	11	13	14	15	16	17
			NC	<15	<15	15	21	26	30	33	37
24x24	12"	.785 .307	CFM	315	395	470	55	63	725	785	940
			Ps	.027	.042	.059	.081	.107	.133	.165	.236
			Throw	9	11	13	15	17	18	19	21
			NC	<15	<15	17	22	27	30	33	38
24x24	14"	1.069 .418	CFM	430	535	640	750	855	960	1070	1285
			Ps	.031	.049	.069	.095	.124	.156	.194	.280
			Throw	10	13	15	18	20	21	22	24
			NC	<15	<15	20	25	30	33	36	40
24x24	15"	1.227 .479	CFM	490	615	735	860	980	1105	1225	1475
			Ps T	.038	.060	.86	.117	.152	.194	.238	.345
			hrow	11	14	16	19	21	23	24	26
			NC	<15	<15	20	27	32	35	37	41

Performance Notes

All Units have been tested in accordance with ANSI / ASHR AE 70-2006. Data in table is derived from such testing. Ps - Static pressure required to obtain listed cfm, units of inches water gauge (in. wg.).

NC - Calculated noise criteria using 10 dB per octave room attenuation (dimensional).

Throw - Non-isothermal horizontal throw, in feet, for a terminal velocity of 50 fpm.

Ak - Area Factors

Inlet Velocity = fpm (Feet Per Minute)



ORDER CODE

SPD	-	1	8"	RAL9010	T	24" x 24"
			inlet			
						Frame size Outsize
SPD = 1 SPD-D = 2 SPD-R6 = 3 SPD-DR6 = 4						T: T-Bar Lay-in
6" 8" 10" 12" 14"						00: Without Coating  RAL----: Powder Coating