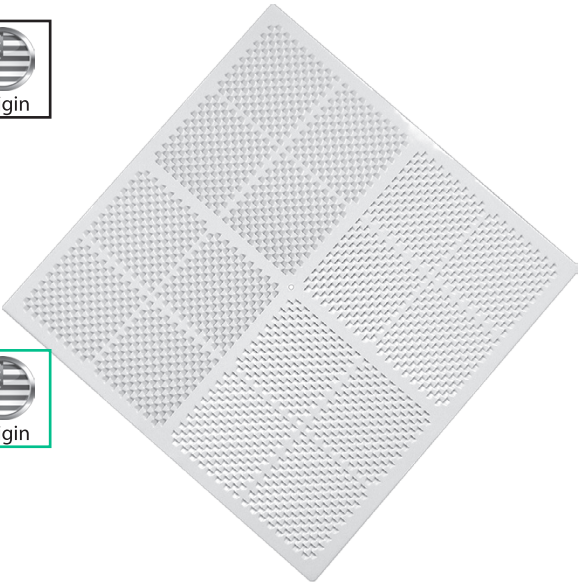


Series 440/A440 Surflo™ T-Bar Diffuser



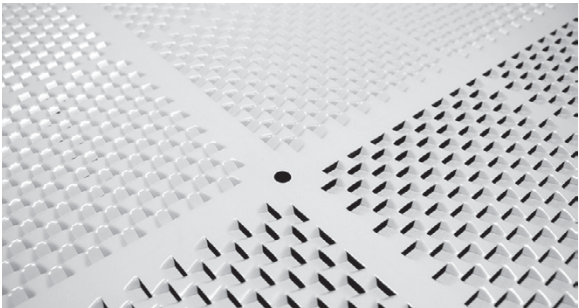
- ❑ Patented design; diffuses air along ceiling surface for superior distribution
- ❑ 1, 2, 3, 4-way or 2-way corner diffusion
- ❑ R1 insulation blanket
- ❑ Fixed 14" collar or no collar*
- ❑ Steel construction (440)
- ❑ Aluminum construction (A440)
- ❑ White finish
- ❑ Made in the U.S.A.



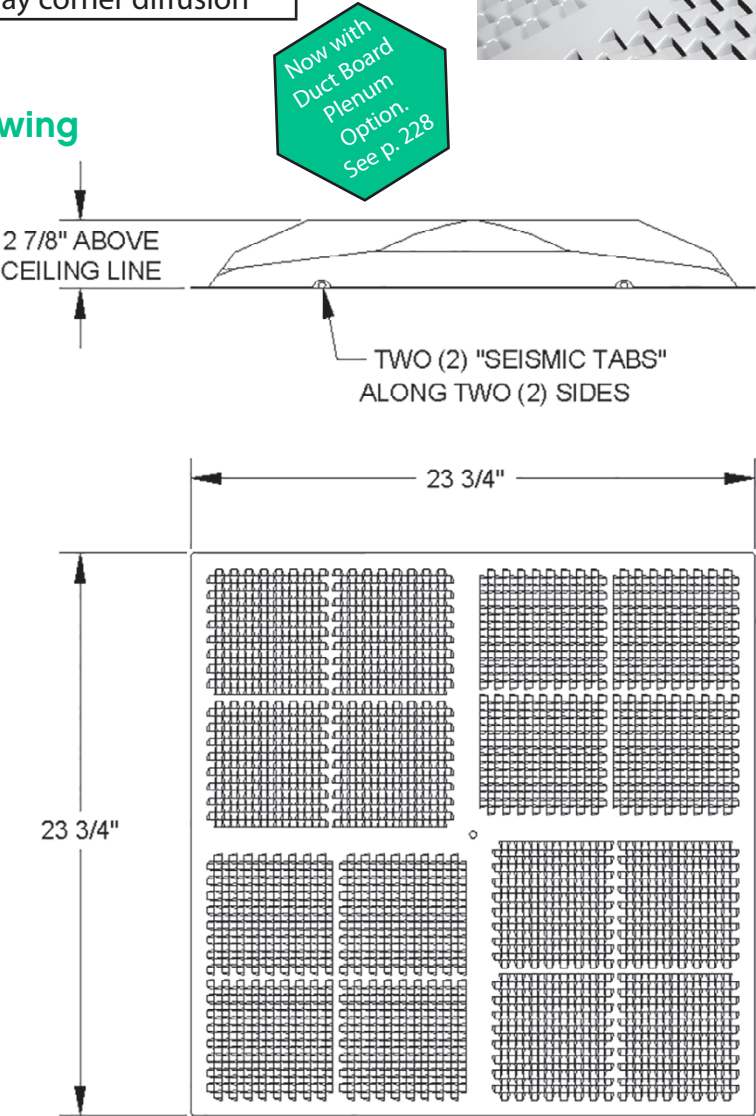
*Use Series 5400 collar for 6"-12" applications

Models

441/A441	1-way diffusion
442/A442	2-way diffusion
443/A443	3-way diffusion
444/A444	4-way diffusion
445/A445	2-way corner diffusion



Dimensional Drawing



Commercial
T-bar (lay-in)

Performance Data, Series 440/A440 (for models 442/A442, 443/A443, 444/A444)

Collar Size ↓	Neck Velocity →	250	350	450	550	650	750	850	1000	1200
6" Ak .43	Cfm	50	65	85	105	125	145	165	195	235
	Ps	<.01	<.01	.014	.021	.029	.036	.046	.065	.094
	Nc	< 20	<20	<20	<20	<20	23	27	31	35
	Throw (442)	4	5	6.5	8	10	11	13	15	17
	Throw (443)	3/4	3.5/5	4.5/6.5	6/8	7.5/10	8/11	9/13	11/15	12/17
	Throw (444)	3	3.5	4.5	6	7.5	8	9	11	12
7" Ak .48	Cfm	70	95	115	140	175	195	230	265	305
	Ps	<.01	.011	.016	.025	.034	.045	.058	.081	.117
	Nc	<20	<20	<20	<20	17	21	25	28	30
	Throw (442)	4.5	6.5	8	9	11	13	16	17	20
	Throw (443)	3.5/4.5	4.5/6.5	5.5/8	6.5/9	8/11	9/13	11/16	12/17	14/20
	Throw (444)	3.5	4.5	5.5	6.5	8	9	11	12	14
8" Ak .53	Cfm	90	115	155	195	230	265	300	350	410
	Ps	<.01	.012	.019	.029	.040	.054	.070	.098	.140
	Nc	<20	<20	<20	<20	21	26	31	34	37
	Throw (442)	5.5	7	9	11	14	16	19	21	23
	Throw (443)	4.5/5	5/7	6.5/9	8/11	9.5/14	11/16	13/19	15/21	17/23
	Throw (444)	4	5	6.5	8	9.5	11	13	15	17
9" Ak .575	Cfm	110	155	200	245	290	340	380	440	540
	Ps	<.01	.014	.023	.036	.051	.066	.086	.119	.172
	Nc	<20	<20	<20	<20	26	31	33	37	40
	Throw (442)	5.5	8	11	13	15	18	20	23	25
	Throw (443)	4.5/5	6/9	7.5/11	9/13	11/15	13/18	14/20	16/23	18/25
	Throw (444)	4	6	7.5	9	11	13	14	16	18
10" Ak .62	Cfm	135	190	245	300	355	400	460	540	660
	Ps	<.01	.014	.023	.036	.051	.066	.086	.119	.172
	Nc	<20	<20	<20	22	29	35	38	42	>45
	Throw (442)	6	8	11	14	17	19	21	25	26
	Throw (443)	4/6	6/8	8/11	10/14	12/17	13/19	15/21	18/25	19/26
	Throw (444)	4	6	8	10	12	13	15	18	19
12" Ak .70	Cfm	180	275	350	430	510	580	650	780	920
	Ps	.012	.024	.040	.059	.082	.110	.142	.195	.275
	Nc	<20	<20	22	28	35	39	44	>45	>45
	Throw (442)	8.5	11	14	17	19	23	25	26	27
	Throw (443)	5/8.5	7.5/11	10/14	12/17	14/19	16/23	18/25	19/26	20/27
	Throw (444)	35	7.5	10	11.5	14	16	18	19	20
14" Ak .75	Cfm	275	380	490	600	700	805	910	1075	1300
	Ps	.015	.031	.050	.075	.105	.137	.177	.245	.350
	Nc	<20	21	27	31	36	40	45	>45	>45
	Throw (442)	8.5	13	16	20	24	26	27	28	29
	Throw (443)	6/8.5	9/13	11/16	14/20	17/24	19/26	20/27	22/28	24/29
	Throw (444)	6	9	11	14	17	19	20	22	24

Terminal velocity = 75 fpm

Performance Data. Series 440/A440 (for models 441/A441 and 445/A445)

Collar Size ↓	Neck Velocity →	250	350	450	550	650	750	850	1000	1200
6" Ak .43	Cfm	50	65	85	105	125	145	165	195	235
	Ps	<.01	<.01	.014	.021	.029	.036	.046	.065	.094
	Nc	< 20	<20	<20	<20	<20	23	27	31	35
	Throw (441)	5.5	7	9.5	11	14	16	18	22	24
	Throw (445)	4	5	6.5	8	10	11	13	15	17
7" Ak .48	Cfm	70	95	120	150	180	205	230	270	310
	Ps	<.01	.011	.016	.025	.034	.045	.058	.081	.117
	Nc	<20	<20	<20	<20	<20	24	28	30	33
	Throw (441)	6.5	8.5	11	15	17	19	22	24	26
	Throw (445)	4.5	6	8	10	12	13	16	17	19
8" Ak .53	Cfm	85	120	150	190	220	260	300	350	410
	Ps	<.01	.012	.019	.029	.040	.054	.070	.098	.140
	Nc	<20	<20	<20	<20	21	26	31	34	37
	Throw (441)	7	10	13	16	18	21	25	29	31
	Throw (445)	5	7	9.5	12	13	15	18	21	23
9" Ak .575	Cfm	110	155	200	245	295	330	365	450	550
	Ps	<.01	.014	.023	.036	.051	.066	.086	.119	.172
	Nc	<20	<20	<20	<20	26	31	33	37	41
	Throw (441)	6	10	14	18	22	24	27	29	31
	Throw (445)	7	7.5	10	13	16	17	19	20	22
10" Ak .62	Cfm	140	180	245	300	360	410	450	550	650
	Ps	<.01	.017	.028	.043	.069	.078	.102	.140	.205
	Nc	<20	<20	<20	22	29	35	38	42	>45
	Throw (441)	9	12	16	20	24	27	30	32	34
	Throw (445)	6.5	9	11	14	17	19	21	23	24
12" Ak .70	Cfm	190	245	350	450	530	590	660	780	920
	Ps	.012	.024	.040	.059	.082	.110	.142	.195	.275
	Nc	<20	<20	22	28	35	39	44	>45	>45
	Throw (441)	10	13	19	25	30	32	33	34	34
	Throw (445)	7.5	9	14	17	21	23	24	25	26
14" Ak .75	Cfm	285	375	480	590	695	800	900	1075	1275
	Ps	.015	.031	.050	.075	.105	.137	.177	.245	.350
	Nc	<20	21	27	31	36	40	45	>45	>45
	Throw (441)	8	13	22	26	28	30	31	32	33
	Throw (445)	6	10	16	20	22	24	26	28	30

Terminal velocity = 75 fpm

Ak = Effective Area. The calculated area of the outlet based on average, measured velocity between fins. Measured in square feet.
Neck Velocity = Velocity of air flow through the nominal area of the duct connection to the diffuser assembly. Measured in feet per minute.

Cfm = Air flow rate. Volume of air moving past a given plane per unit of time. Measured in cubic feet per minute.

Ps = Static Pressure. The normal, outward force of air within a duct. Measured in inches of H₂O.

Nc = Discharge acoustical noise, based on 10 dB room absorption. Measured to the nearest 1.0 dB

Throw = Distance the air stream travels from the outlet to a point where terminal velocity is reached. Measured in feet.