



1400, 1400FR, 51400, M1400 & M51400
These supply diffusers feature a round neck and four cones.



1400A & 51400A
These supply diffusers feature a round neck, four cones, and adjustable pattern controllers.



1450, 51450, M1450, & M51450
These supply diffusers feature a round neck and three cones.



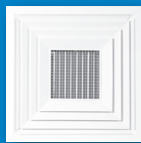
1450A & 51450A
These supply diffusers feature a round neck, three cones, and adjustable pattern controllers.



SH, 5SH, SHFR, MSH, SHV, 5SHV, SHR, 5SHR, SHRV, 5SHRV, SHFB, & 5SHFB
These supply diffusers feature a square neck, fixed louvered blades (1-way to 4-way), and removable core.



SHPC, 5SHPC, SHPCR, & 5SHPCR
These supply diffusers feature a square neck, fixed louvered blades (1-way to 4-way), removable core, and adjustable pattern controllers.



5SH/CAD & 5SHR/CAD
These supply diffusers feature fixed louvered blades with a center downblow.

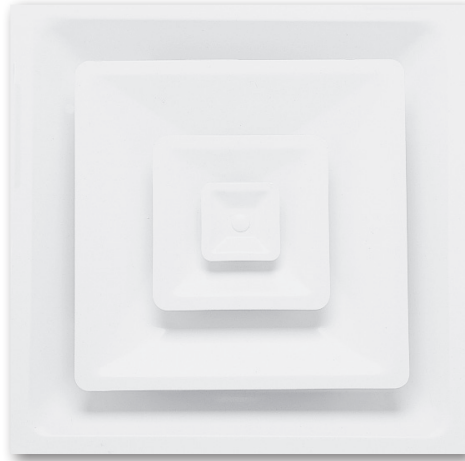


SHRPLQ
This supply diffuser features fixed louvered blades (1, 2, or 3 slots) with center plaque faceplate.



7000
This combination supply/return diffuser features fixed louvered blades with removable egg-crate center frame.

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1400

FEATURES

- Four cones for optimum airflow control.
- Great choice for variable air volume spaces.
- Cones feature a one-piece stamped construction without mitered joints.
- Round neck for easy connection to round duct.
- Anti-smudge design prevents smeared ceilings.
- Two earthquake tabs are standard.

ACCESSORIES

- Optional round damper.
- Optional insulated backpan.

FINISHES

- Standard finish is #44 British White.
- Optional finishes available.

Introduction: 1400 Series

The 1400 series are square face, 4-cone, round neck ceiling diffusers and are available in a variety of frame styles to help meet the architectural requirements of today's ceilings. The spacing of the inner cones in relation to the backpan result in a design possessing anti-smudge characteristics, preventing the buildup of particles on the ceiling, which is achieved by minimizing the low pressure region inherent to most 4-way directional blow diffusers. Also known as concentric cone diffusers, 1400s are constructed of one-piece stamped cones, which provide a clean, smooth appearance without mitered corner joints. The 1400 series is an excellent variable air volume diffuser as represented in its throw characteristics at lower airflows; at typical flow rates, isothermal throws of 9-16 feet make this diffuser ideal for mounting centrally in many spaces while providing high mixing rates in the space.

MODELS

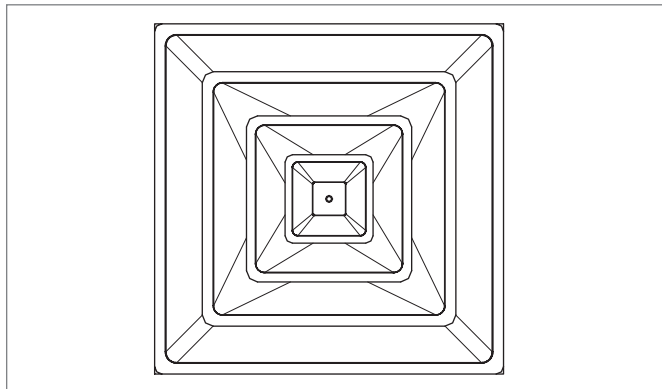
- 1400 - Steel Loupered Diffuser
- 51400 - Aluminum Loupered Diffuser (Safe for use in MRI rooms; F22 mounting hardware supplied by others.)
- 1400FR - Fire Rated, Steel Loupered Diffuser
- M1400 - Hard Metric Panel, Lay-in T-Bar, Steel Loupered Diffuser
- M51400 - Hard Metric Panel, Lay-in T-Bar, Aluminum Loupered Diffuser (Safe for use in MRI rooms; F22 mounting hardware supplied by others.)

PANEL SIZES

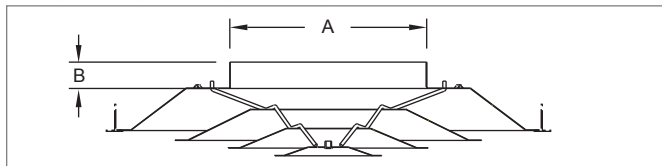
- 12"x12", 24"x24", and 24"x48"
- 300x300mm and 600x600mm

1400, 51400, M1400, M51400 Dimensional Information

1400, 51400, M1400, M51400, FACE VIEW



1400, 51400, M1400, M51400, CROSS SECTION



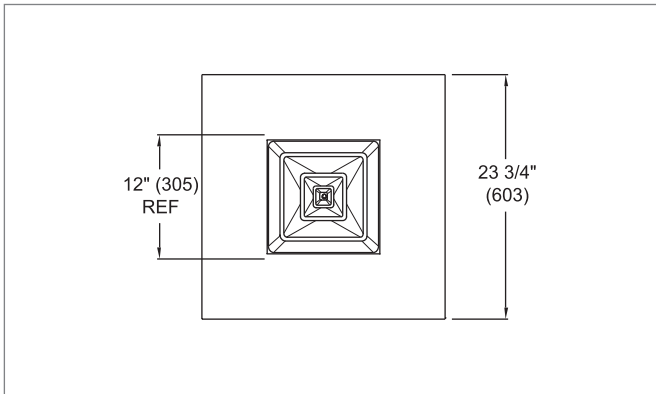
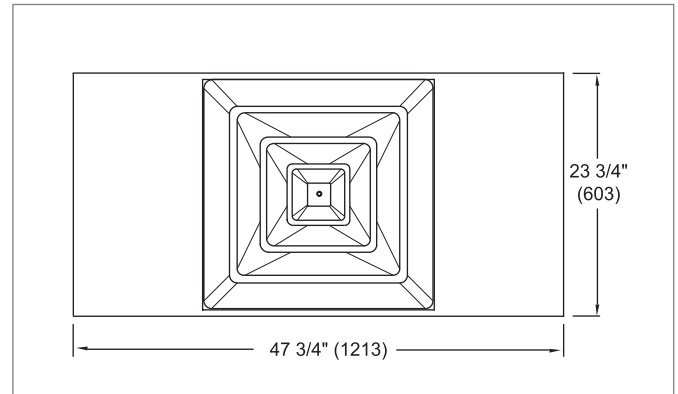
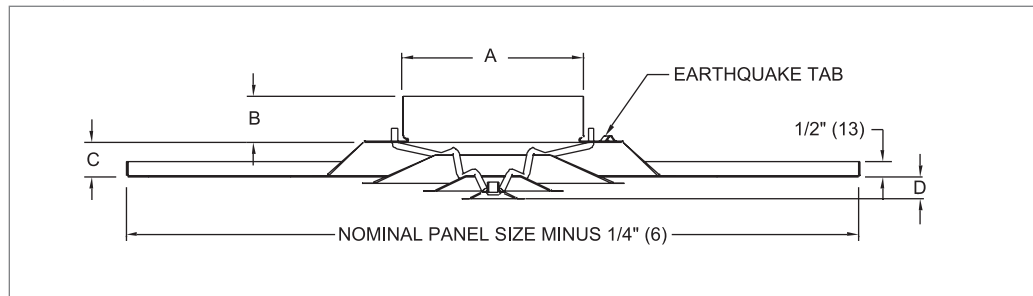
1400, 51400, M1400, M51400, 12"x12" & 300mm PANEL

Nominal Neck Size	Actual Neck Size	1400 & M1400	51400 & M51400
	A	B	B
06	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
08	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)

1400, 51400, M1400, M51400, 24"x24" & 600mm PANEL

Nominal Neck Size	Actual Neck Size	1400 & M1400	51400 & M51400
	A	B	B
06	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
08	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)
10	9 7/8" (251)	1 1/2" (38)	1 1/2" (38)
12	11 7/8" (302)	1 1/2" (38)	1 1/2" (38)
14	13 7/8" (352)	1 1/2" (38)	1 1/2" (38)
15	14 7/8" (378)	1 1/2" (38)	1 1/2" (38)

NOTE: Dimensions in parentheses are mm.

1400, 51400 Oversize Dimensional Information
1400, 51400, FRAME 12, LAY-IN T-BAR: 24"x24" PANEL

1400, 51400 FRAME 23, LAY-IN T-BAR: 24"x48" PANEL

1400, 51400, CROSS SECTION, LAY-IN T-BAR: 24"x24" & 24"x48" PANEL

1400, 51400, FRAME 12, LAY-IN T-BAR: 24"x24" PANEL, OVERSIZE

Nominal Neck Size	Actual Neck Size	1400 Frame 12				51400 Frame 12		
		A	B	C	D	B	C	D
06	5 7/8" (149)	1 1/4" (32)	1 1/8" (29)	11/16" (17)	1 1/2" (38)	1 1/8" (29)	11/16" (17)	
08	7 7/8" (200)	1 1/4" (32)	1 1/8" (29)	11/16" (17)	1 1/2" (38)	1 1/8" (29)	11/16" (17)	

1400, 51400, FRAME 23, LAY-IN T-BAR: 24"x48" PANEL, OVERSIZE

Nominal Neck Size	Actual Neck Size	1400 Frame 23				51400 Frame 23		
		A	B	C	D	B	C	D
06	5 7/8" (149)	1 1/4" (32)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	
08	7 7/8" (200)	1 1/4" (32)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	
10	9 7/8" (251)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	
12	11 7/8" (302)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	
14	13 7/8" (352)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	
15	14 7/8" (378)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	1 1/2" (38)	2 3/8" (60)	1 3/8" (35)	

NOTE: Dimensions in parentheses are mm.

1400FR (Fire Rated) Dimensional Information

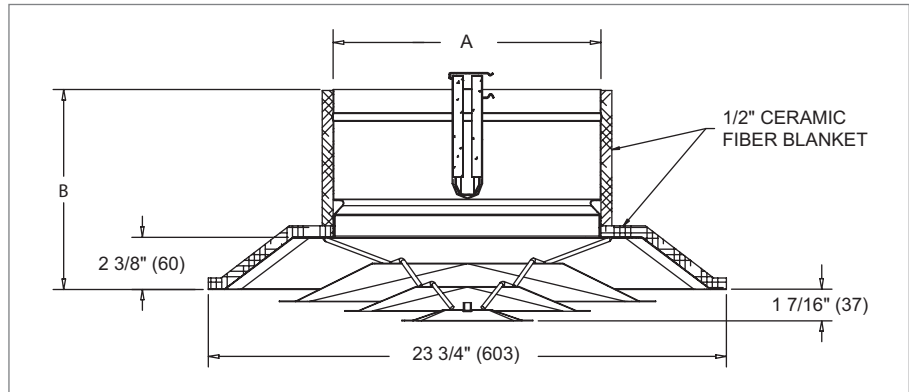
LOUVERED FACE DIFFUSERS

The 1400FR offers the safety of fire rated performance with the proven 1400 series diffuser. It is intended for use with Lay-in T-Bar application involving fire rated ceiling designs. It combines this flexibility with all of the features of the standard 1400 and is available exclusively in steel.

1400FR comes standard as a UL 263 classified assembly which incorporates a 3-hour rated fire damper and a 1/2" thick ceramic fiber blanket.



1400FR, FRAME 23, LAY-IN T-BAR: 24"x24" PANEL



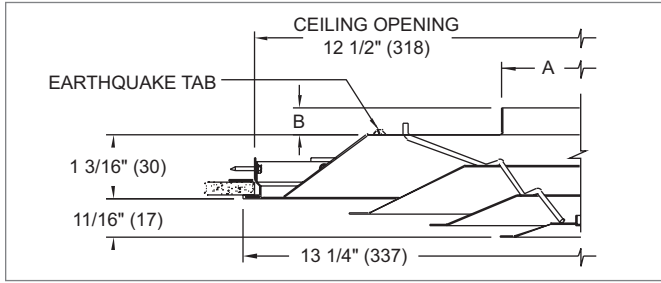
1400FR, FRAME 23, LAY-IN T-BAR: 24"x24" PANEL

Nominal Neck Size	Actual Neck Size	Height Above Ceiling
	A	B
06	5 7/8" (149)	10 1/16" (256)
08	7 7/8" (200)	9 15/16" (252)
10	9 7/8" (251)	10 7/16" (256)
12	11 7/8" (302)	12 7/16" (316)
14	13 7/8" (352)	12 7/16" (316)
15	14 7/8" (378)	15 7/16" (392)

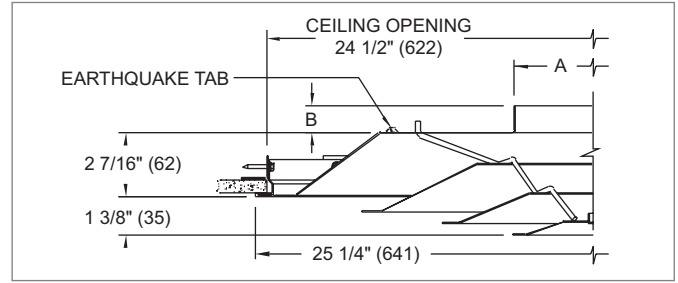
NOTES: Dimensions in parentheses are mm.
1400FR is available with Frame 23, 24"x24" lay-in panel only.

1400, 51400, M1400, M51400 Frame Styles

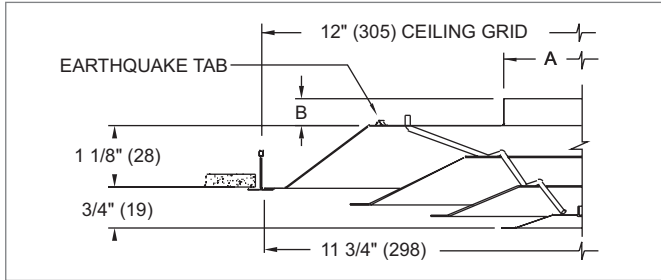
FRAME 22, SURFACE MOUNT, 12"x12" PANEL



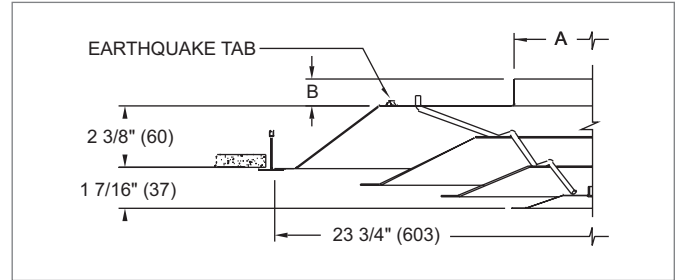
FRAME 22, SURFACE MOUNT, 24"x24" PANEL



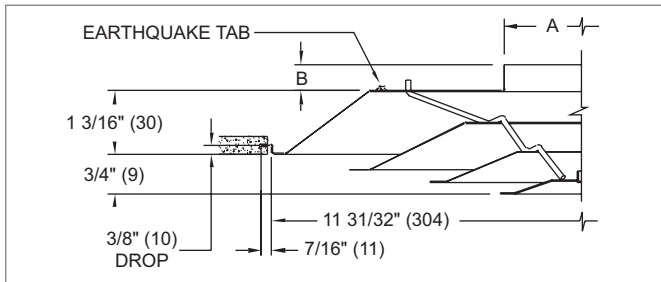
FRAME 23, LAY-IN T-BAR, 12"x12" PANEL



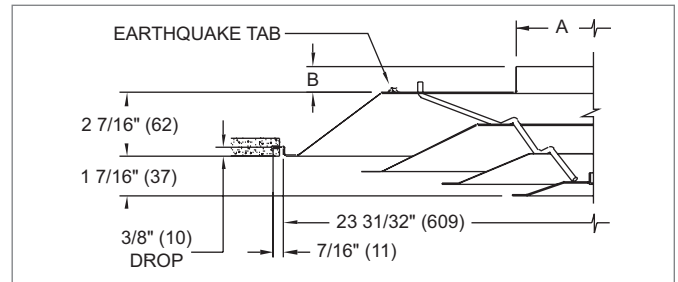
FRAME 23, LAY-IN T-BAR, 24"x24" PANEL



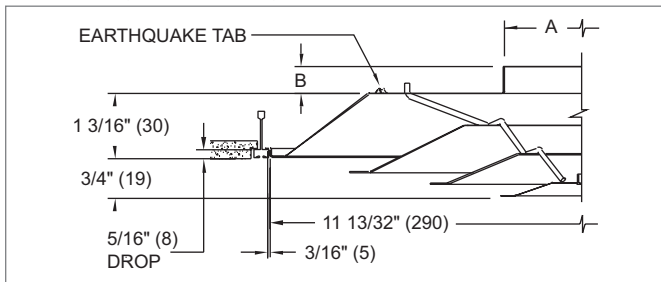
FRAME 27, SPLINE, 12"x12" PANEL



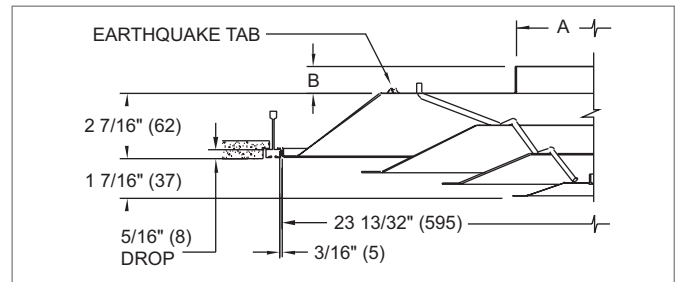
FRAME 27, SPLINE, 24"x24" PANEL



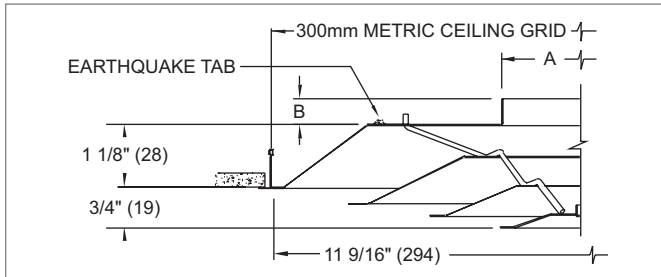
FRAME 98, NARROW-T, 12"x12" PANEL



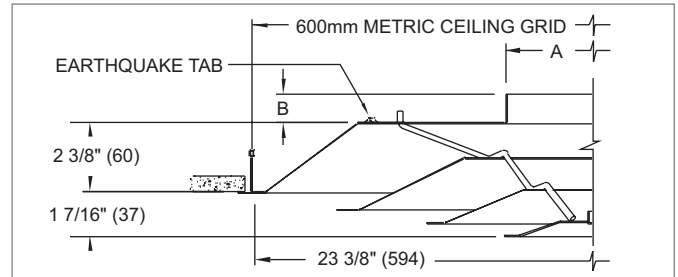
FRAME 98, NARROW-T, 24"x24" PANEL



FRAME 23, LAY-IN T-BAR, (300x300) METRIC



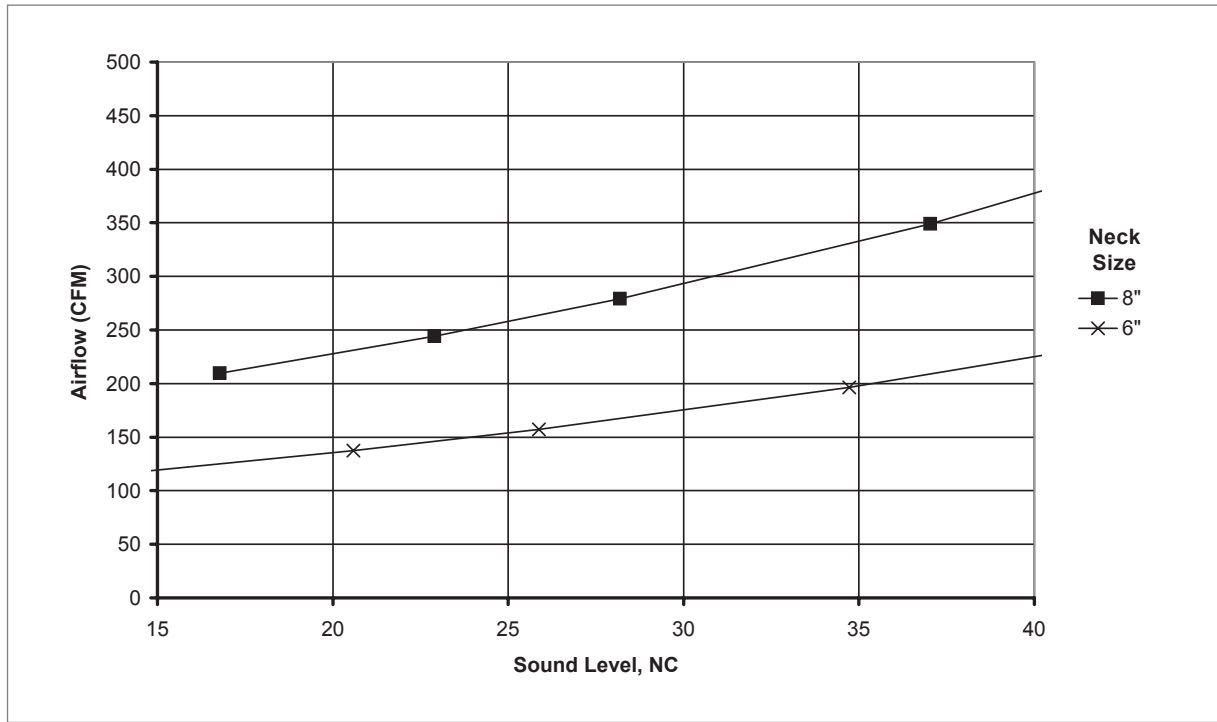
FRAME 23, LAY-IN T-BAR, (600x600) METRIC



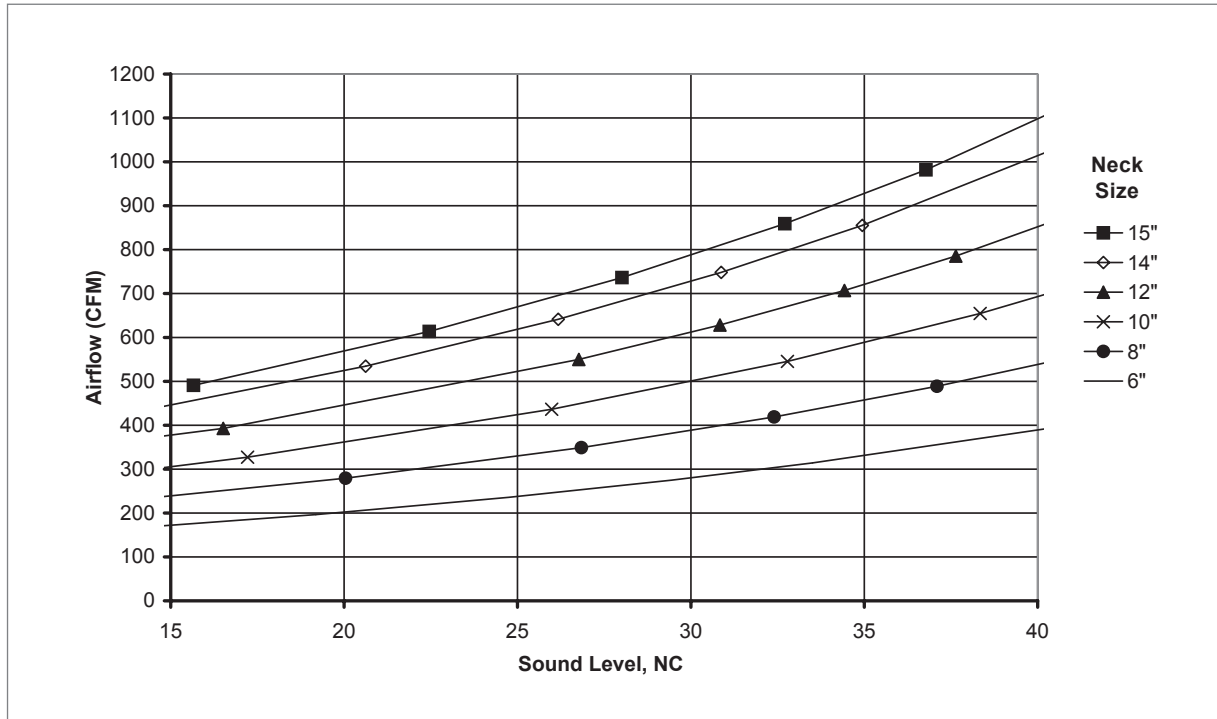
NOTES: Dimensions in parentheses are mm. For 'A' & 'B' dimensions, see page B1-5.
Frame 22 includes separate surface mounting frame, as shown in the frame details above.

1400, 51400, 1400FR, M1400, M51400 Reference Charts

AIRFLOW VS. NC LEVEL: 1400 SERIES, 12"x12" & 300x300mm PANEL (NO DAMPER)



AIRFLOW VS. NC LEVEL: 1400 SERIES, 24"x24" & 600x600mm PANEL (NO DAMPER)

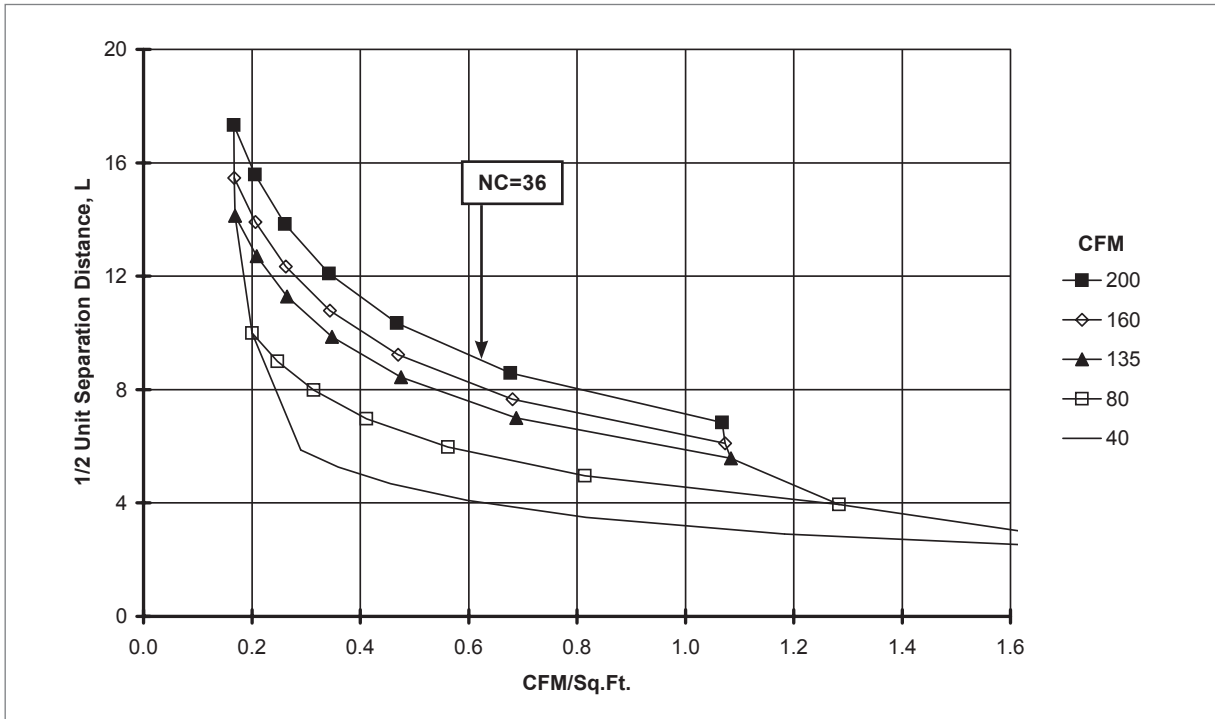


LOUVERED FACE DIFFUSERS

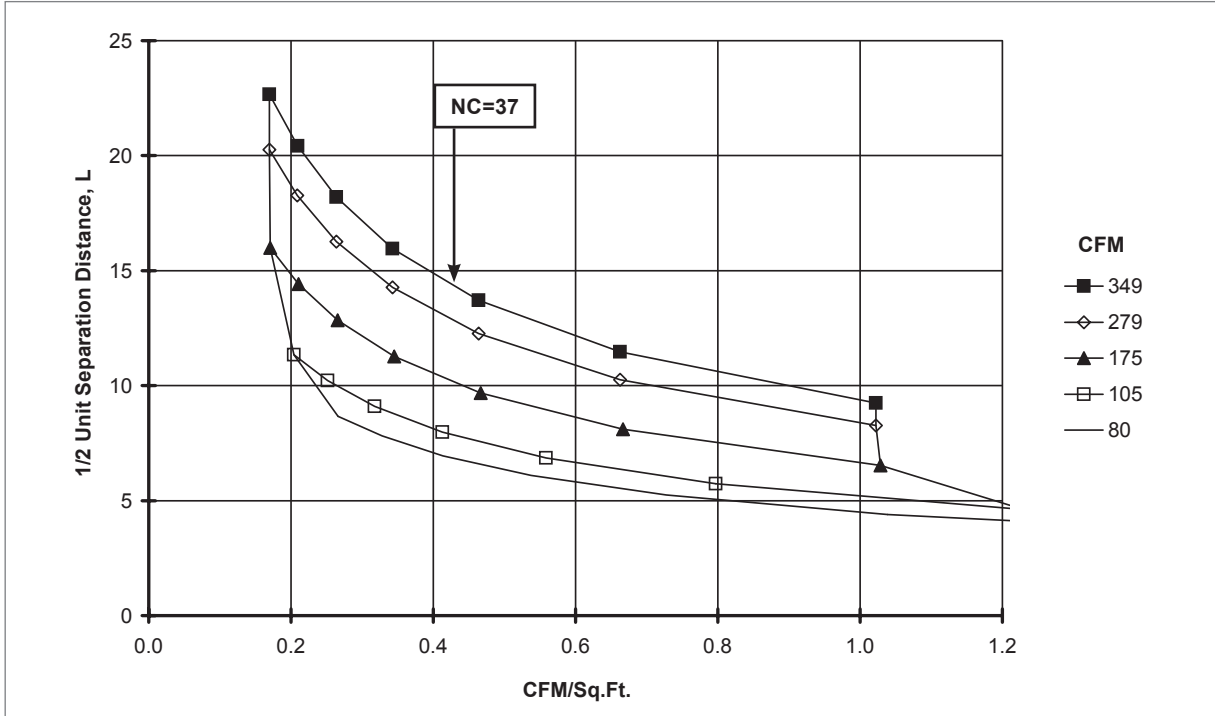
1400-51400-1400FR-M1400-M51400

1400, 51400, M1400, M51400 Reference Charts: Horizontal Throw

DIFFUSER SPACING FOR 80% ADPI: 1400 SERIES, 12"x12" & 300x300mm PANEL, 6" INLET, 4-WAY (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: 1400 SERIES, 12"x12" & 300x300mm PANEL, 8" INLET, 4-WAY (NO DAMPER)

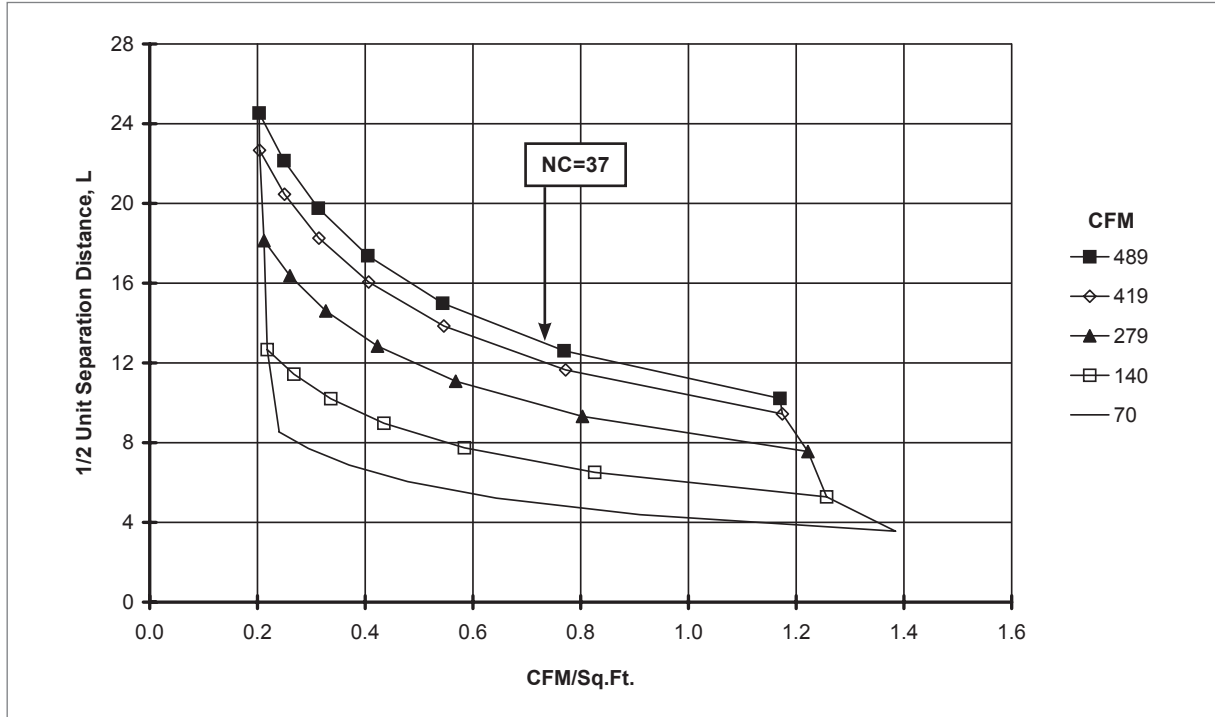


NOTES: Charts are at 20 BTUH/ft² loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

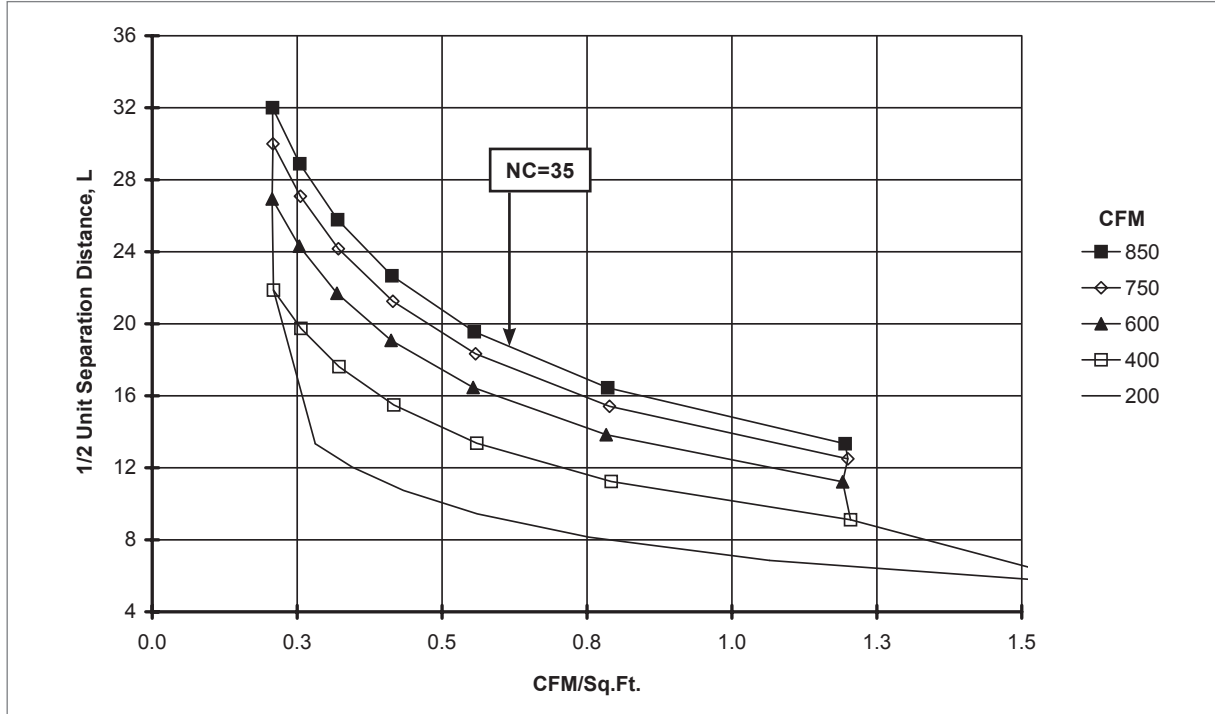
1400, 51400, 1400FR, M1400, M51400 Reference Charts: Horizontal Throw

DIFFUSER SPACING FOR 80% ADPI: 1400 SERIES, 24"x24" & 600x600mm PANEL, 8" INLET, 4-WAY (NO DAMPER)

LOUVERED FACE DIFFUSERS



DIFFUSER SPACING FOR 80% ADPI: 1400 SERIES, 24"x24" & 600x600mm PANEL, 14" INLET, 4-WAY (NO DAMPER)



NOTES: Charts are at 20 BTUH/ft² loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

1
4
0
0
-
5
1
4
0
0

1400, 51400, 1400FR, M1400, M51400 Performance Data: Horizontal Throw
IP/METRIC DATA: 1400, 51400, M1400, M51400, 12"x12" & 300x300mm PANEL (NO DAMPER)

	IP Data					NC	Metric Data					Octave Band, dB						
	Neck Vel	Air Flow	Pt	Ps	Throw		Neck Vel	Air Flow	Pt	Ps	Throw	2	3	4	5	6	7	
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m							
6" Dia.	200	39	.009	0.006	1 - 1 - 4	-	1.02	19	2.2	1.6	0.2 - 0.4 - 1.3	21	-	-	-	-	-	
	400	79	.036	0.026	2 - 4 - 8	-	2.03	37	8.9	6.4	0.7 - 1.3 - 2.5	31	26	17	15	-	-	
	600	118	.081	0.058	4 - 6 - 10	14	3.05	56	20.1	14.5	1.3 - 1.9 - 3.1	37	35	27	26	23	-	
	700	137	.110	0.079	5 - 7 - 11	21	3.56	65	27.3	19.7	1.5 - 2.3 - 3.3	40	38	31	30	29	11	
	800	157	.143	0.103	6 - 8 - 12	26	4.06	74	35.6	25.7	1.7 - 2.5 - 3.5	41	41	34	34	35	18	
	1000	196	.224	0.161	7 - 9 - 13	35	5.08	93	55.7	40.2	2.2 - 2.8 - 4.0	45	47	40	40	44	30	
	1200	236	.322	0.232	8 - 10 - 14	42	6.10	111	80.2	57.9	2.5 - 3.1 - 4.3	48	51	44	45	51	39	
	1400	275	.438	0.316	9 - 11 - 15	45	6.60	120	94.1	67.9	2.6 - 3.2 - 4.5	49	53	46	47	55	43	
8" Dia.	200	70	.013	0.010	1 - 2 - 6	-	1.02	33	3.2	2.6	0.2 - 0.5 - 1.7	23	15	-	-	-	-	
	300	105	.029	0.023	2 - 4 - 9	-	1.52	49	7.2	5.8	0.5 - 1.2 - 2.6	29	25	16	-	-	-	
	500	175	.081	0.065	5 - 7 - 12	-	2.54	82	20.1	16.2	1.4 - 2.2 - 3.7	37	37	28	24	17	-	
	700	244	.158	0.127	7 - 10 - 15	23	3.56	115	39.3	31.7	2.0 - 3.0 - 4.4	42	44	37	33	31	20	
	800	279	.206	0.166	8 - 11 - 16	28	4.06	132	51.3	41.4	2.3 - 3.3 - 4.7	44	47	40	37	37	27	
	900	314	.261	0.210	9 - 12 - 17	33	4.57	148	65.0	52.4	2.6 - 3.5 - 5.0	46	50	43	40	42	33	
	1000	349	.322	0.260	9 - 12 - 17	37	5.08	165	80.2	64.7	2.9 - 3.7 - 5.3	47	52	46	43	46	38	
	1200	419	.464	0.374	11 - 13 - 19	44	6.10	198	115.5	93.1	3.3 - 4.1 - 5.8	50	57	51	48	54	48	
1400	489	.631	0.509	12 - 15 - 21	50	7.11	231	157.2	126.8	3.6 - 4.4 - 6.3	52	60	54	52	60	56		

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

LOUVERED FACE DIFFUSERS

 1
4
0
0
-
5
1
4
0
0

1400, 51400, 1400FR, M1400, M51400 Performance Data: Horizontal Throw

IP/METRIC DATA: 1400, 51400, 1400FR, M1400, M51400, 24"x24" & 600x600mm PANEL (NO DAMPER)

LOUVERED FACE DIFFUSERS

	IP Data					NC	Metric Data					Octave Band, dB						
	Neck Vel	Air Flow	Pt	Ps	Throw		Neck Vel	Air Flow	Pt	Ps	Throw	2	3	4	5	6	7	
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m							
6" Dia.	400	79	.016	0.006	2 - 4 - 7	-	2.03	37	4.1	1.6	0.6 - 1.1 - 2.2	15	13	16	-	-	-	
	600	118	.037	0.015	4 - 6 - 9	-	3.05	56	9.2	3.6	1.1 - 1.7 - 2.7	26	24	25	22	-	-	
	800	157	.066	0.026	5 - 7 - 10	12	4.06	74	16.4	6.5	1.5 - 2.2 - 3.1	35	31	32	30	18	-	
	1000	196	.103	0.041	6 - 8 - 11	19	5.08	93	25.6	10.1	1.9 - 2.5 - 3.5	41	36	37	37	29	14	
	1200	236	.148	0.058	7 - 9 - 13	25	6.10	111	36.9	14.5	2.2 - 2.7 - 3.8	46	41	41	42	39	22	
	1400	275	.202	0.079	8 - 10 - 14	29	7.11	130	50.2	19.8	2.4 - 2.9 - 4.1	50	45	45	46	46	28	
	1600	314	.263	0.104	8 - 10 - 14	34	8.13	148	65.6	25.8	2.5 - 3.1 - 4.4	54	48	48	50	53	33	
	2000	393	.412	0.162	9 - 11 - 16	40	10.16	185	102.5	40.4	2.8 - 3.5 - 4.9	60	54	53	57	64	43	
	2200	432	.498	0.196	10 - 12 - 17	43	11.18	204	124.0	48.9	3.0 - 3.7 - 5.2	63	56	55	60	69	46	
8" Dia.	200	70	.006	0.003	1 - 2 - 5	-	1.02	33	1.4	0.8	0.2 - 0.5 - 1.5	-	-	-	-	-	-	
	400	140	.023	0.013	3 - 5 - 10	-	2.03	66	5.7	3.2	0.9 - 1.5 - 2.9	20	18	20	15	-	-	
	600	209	.051	0.029	5 - 7 - 12	11	3.05	99	12.8	7.2	1.5 - 2.3 - 3.6	31	28	29	27	12	-	
	800	279	.091	0.051	7 - 10 - 14	20	4.06	132	22.7	12.8	2.0 - 2.9 - 4.2	40	35	36	35	26	12	
	1000	349	.142	0.080	8 - 11 - 15	27	5.08	165	35.5	19.9	2.5 - 3.3 - 4.6	46	41	41	42	38	21	
	1200	419	.205	0.115	10 - 12 - 17	32	6.10	198	51.1	28.7	2.9 - 3.6 - 5.1	51	46	45	47	47	29	
	1400	489	.279	0.157	10 - 13 - 18	37	7.11	231	69.5	39.1	3.2 - 3.9 - 5.5	55	50	48	52	54	35	
	1600	559	.365	0.205	11 - 14 - 19	41	8.13	264	90.8	51.0	3.4 - 4.2 - 5.9	59	53	51	56	61	40	
	1800	628	.461	0.259	12 - 14 - 20	45	9.14	297	114.9	64.6	3.6 - 4.4 - 6.2	62	56	54	59	67	45	
10" Dia.	200	109	.008	0.005	1 - 2 - 6	-	1.02	51	1.9	1.3	0.3 - 0.6 - 1.9	-	-	-	-	-	-	
	400	218	.031	0.021	4 - 6 - 12	-	2.03	103	7.7	5.2	1.1 - 1.9 - 3.7	24	22	23	19	-	-	
	500	273	.048	0.033	5 - 8 - 14	12	2.54	129	12.0	8.1	1.6 - 2.3 - 4.1	30	27	28	26	-	-	
	600	327	.070	0.047	6 - 9 - 15	17	3.05	154	17.3	11.7	1.9 - 2.8 - 4.5	35	32	32	31	18	-	
	800	436	.124	0.084	8 - 12 - 17	26	4.06	206	30.8	20.9	2.5 - 3.7 - 5.2	43	39	39	40	33	17	
	1000	545	.193	0.131	10 - 14 - 19	33	5.08	257	48.1	32.6	3.1 - 4.1 - 5.8	50	45	44	46	44	27	
	1200	654	.278	0.188	12 - 15 - 21	38	6.10	309	69.3	46.9	3.7 - 4.5 - 6.4	55	49	48	51	53	34	
	1400	764	.379	0.256	13 - 16 - 23	43	7.11	360	94.3	63.9	4.0 - 4.9 - 6.9	59	53	51	56	61	40	
	1600	873	.495	0.335	14 - 17 - 24	47	8.13	412	123.1	83.4	4.2 - 5.2 - 7.3	63	56	54	60	67	46	
12" Dia.	200	157	.010	0.008	1 - 2 - 7	-	1.02	74	2.5	1.9	0.3 - 0.7 - 2.3	-	-	-	-	-	-	
	300	236	.023	0.017	2 - 5 - 11	-	1.52	111	5.7	4.3	0.7 - 1.6 - 3.4	19	17	19	14	-	-	
	500	393	.064	0.048	6 - 9 - 16	17	2.54	185	15.9	12.0	1.9 - 2.8 - 4.9	33	30	30	29	14	-	
	700	550	.125	0.095	9 - 13 - 19	27	3.56	259	31.1	23.5	2.6 - 3.9 - 5.8	43	39	38	39	31	16	
	800	628	.163	0.123	10 - 14 - 20	31	4.06	297	40.7	30.7	3.0 - 4.4 - 6.2	47	42	41	43	38	22	
	900	707	.207	0.156	11 - 15 - 22	34	4.57	334	51.5	38.9	3.4 - 4.7 - 6.6	50	45	44	46	44	27	
	1000	785	.255	0.193	12 - 16 - 23	38	5.08	371	63.6	48.0	3.8 - 4.9 - 7.0	53	48	46	49	49	31	
	1200	942	.368	0.278	14 - 18 - 25	43	6.10	445	91.5	69.2	4.4 - 5.4 - 7.6	58	52	50	55	58	38	
	1400	1100	.500	0.378	16 - 19 - 27	48	7.11	519	124.6	94.2	4.8 - 5.8 - 8.2	62	56	54	59	66	45	
14" Dia.	200	214	.013	0.011	1 - 3 - 9	-	1.02	101	3.3	2.7	0.4 - 0.8 - 2.6	-	-	11	-	-	-	
	300	321	.030	0.024	3 - 6 - 13	-	1.52	151	7.4	6.0	0.8 - 1.9 - 3.9	22	20	21	17	-	-	
	400	428	.053	0.043	5 - 9 - 17	14	2.03	202	13.1	10.6	1.5 - 2.6 - 5.1	30	27	27	26	-	-	
	500	535	.082	0.067	7 - 11 - 19	21	2.54	252	20.5	16.6	2.2 - 3.3 - 5.7	36	33	32	32	18	-	
	600	641	.118	0.096	9 - 13 - 21	26	3.05	303	29.5	23.9	2.6 - 3.9 - 6.3	41	37	36	37	27	14	
	700	748	.161	0.130	10 - 15 - 22	31	3.56	353	40.1	32.5	3.1 - 4.6 - 6.8	46	41	40	42	35	20	
	800	855	.210	0.170	12 - 17 - 24	35	4.06	404	52.4	42.4	3.5 - 5.1 - 7.3	49	44	43	46	42	26	
	1000	1069	.329	0.266	14 - 19 - 27	42	5.08	505	81.8	66.3	4.4 - 5.7 - 8.1	56	50	48	52	53	35	
	1200	1283	.473	0.383	17 - 21 - 29	47	6.10	605	117.8	95.5	5.1 - 6.3 - 8.9	61	55	52	57	62	42	
15" Dia.	200	245	.015	0.012	1 - 3 - 9	-	1.02	116	3.7	3.1	0.4 - 0.9 - 2.8	12	11	12	-	-	-	
	300	368	.033	0.028	3 - 7 - 14	-	1.52	174	8.3	6.9	0.9 - 2.0 - 4.2	23	21	21	18	-	-	
	400	491	.059	0.049	5 - 9 - 18	16	2.03	232	14.7	12.2	1.6 - 2.8 - 5.5	31	28	28	27	-	-	
	500	614	.092	0.077	8 - 12 - 20	22	2.54	290	23.0	19.1	2.3 - 3.5 - 6.2	37	34	33	33	20	-	
	600	736	.133	0.111	9 - 14 - 22	28	3.05	347	33.1	27.5	2.8 - 4.2 - 6.7	42	38	37	39	29	16	
	700	859	.181	0.151	11 - 16 - 24	33	3.56	405	45.1	37.5	3.3 - 4.9 - 7.3	47	42	41	43	37	22	
	800	982	.237	0.197	12 - 18 - 26	37	4.06	463	58.9	49.0	3.8 - 5.5 - 7.8	50	45	44	47	44	27	
	1000	1227	.370	0.307	15 - 20 - 29	44	5.08	579	92.0	76.5	4.7 - 6.2 - 8.7	57	51	49	53	55	36	
	1200	1473	.532	0.442	18 - 22 - 31	49	6.10	695	132.5	110.2	5.5 - 6.7 - 9.5	62	56	53	59	64	44	

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

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1400, 51400 Suggested Specification & Configuration

- 1. SERIES: (XXXXX)**
 1400 - 4-Cone, Steel Ceiling Diffuser
 51400 - 4-Cone, Aluminum Ceiling Diffuser
- 2. PATTERN: (XX)**
 04 - 4-Way
- 3. ROUND NECK: (XX)**
 6", 8", 10", 12", 14", or 15"
- 4. FRAME: (XXX)**
 F12 - 12" Module in 24", F23 Panel*
 F22 - Surface Mount**
 F23 - Lay-in T-Bar
 F27 - Spline
 F98 - Narrow-T
- 5. PANEL: (XX)x(XX)**
 12"x12"
 24"x24"
 24"x48"
- 6. ACCESSORIES: (XX)**
 00 - No Accessories
 IB - Insulated Blanket***
 R6 - Molded Insulation***
- 7. FINISH: (XX)**
 01 - Mill
 10 - Alumican
 35 - Black
 44 - British White

Round damper not included in configuration code.

* *Frame 12 (F12) available with 6" and 8" neck dimensions only.*

** *Frame 22 (F22) includes separate aluminum plaster frame shipped loose for field installation.*

*** *Frame 23 (F23), 24" x 24" panel with 6", 8", 10", or 12" neck dimensions only.*

1400, 51400

The drop cone, square face diffuser shall be Krueger model 1400 (steel) or 51400 (aluminum). The 51400 shall be constructed of 100% aluminum. The 1400 and 51400 models shall be constructed of four precision die-stamped cones. The back cone shall have an integrally drawn neck for duct connections on 24"x24" and 24"x48" panel sized units. Fabricated collars are only acceptable on 12"x12" panel sized units. The inner cone assembly shall be welded to the back cone and have a hole with removable plug for easy optional damper adjustment. The surface mount 1400 and 51400 shall ship with an auxiliary aluminum surface mounting frame for easy installation. Diffusers shall be constructed of 22 gage steel (1400) or 0.040" aluminum (51400) and include integral earthquake tabs.

Optional round damper shall be constructed of heavy gage steel. Damper shall be operable from the face of the diffuser.

PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH

The paint finish shall be #44 British White and be an anodic acrylic paint, baked at 315° for 30 minutes. The paint thickness shall be 0.8 - 1.0 mils, gloss at 60° per ASTM D523-89 of 50 - 85%, pencil hardness per ASTM D3363-92A of HB - H, crosshatch adhesion per ASTM D3359-83 of 4B - 5B, impact per ASTM D2794-93 of direct impact >100 in/lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.