

INTRODUCTION

The Krueger 1240/51240 series modular core diffusers are one of Krueger's most quiet and versatile diffusers, combining excellent performance with on-the-job flexibility. The 1240/51240 series diffusers exhibit typical isothermal throws of 20' to 30' for 4-way air distribution and 40' to 60' for 1-way air distribution. The modular cores in the neck maintain a tight horizontal air pattern at the ceiling from maximum to minimum CFM, making this series an excellent selection for variable air volume applications. The modular cores are factory set for a four-way air pattern, but may be field adjusted for 1-, 2- or 3-way air patterns. The modular capability makes the 1240/51240 ideal for installations with changing air pattern requirements such as tenant lease spaces.

MODELS

1240 - Modular Core Diffuser, Steel Construction

51240 - Modular Core Diffuser, Aluminum Construction

FEATURES

- Hand-removable modular cores.
- Variety of discharge air patterns.
- Air diffused through fixed vanes.

PANEL SIZE

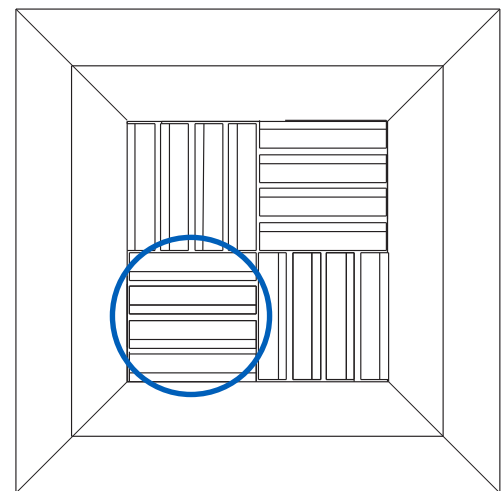
- 24"x24"

ACCESSORIES

- Optional Damper (Model OBD1240, 5OBD1240)
- Optional Straightening Grid (Model SSG)

FINISHES

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



The area encircled represents one core. Each core represents one quarter section of the diffuser.

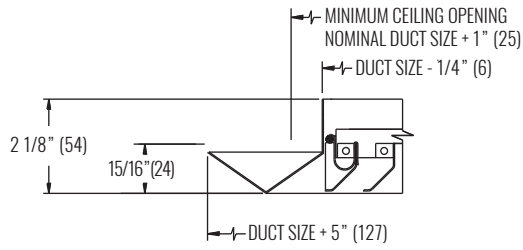
EXAMPLE: Two core throw will show two of the four cores facing in the same direction. Three core throw will show three of the four cores facing in the same direction. Reference page D1-6 for discharge air patterns.

1240, 51240 SERIES

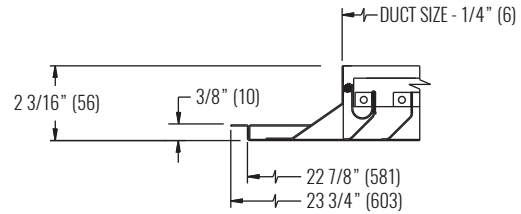
Diffuser | Modular Core



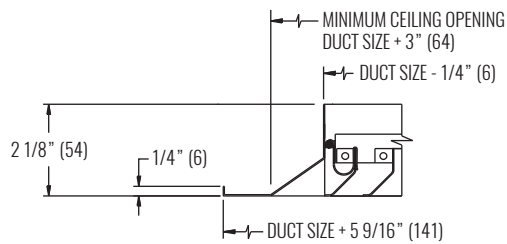
DIMENSIONAL DATA



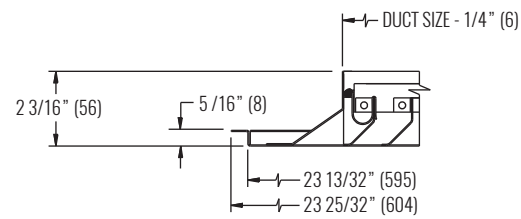
F21
SURFACE MOUNT - BEVELED



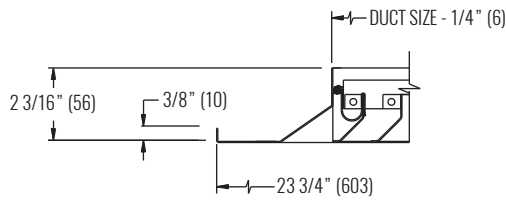
F30
DROP FACE



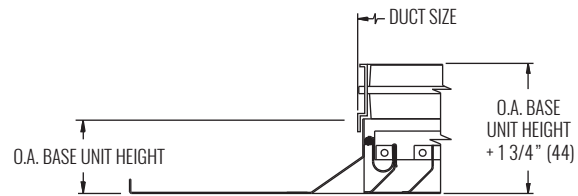
F22
SURFACE MOUNT - FLAT



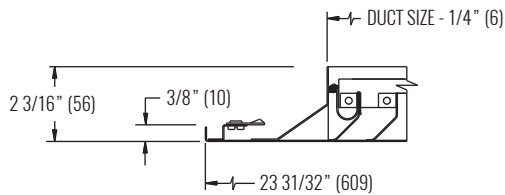
F98
NARROW-T



F23
LAY-IN T-BAR



DAMPER DETAIL

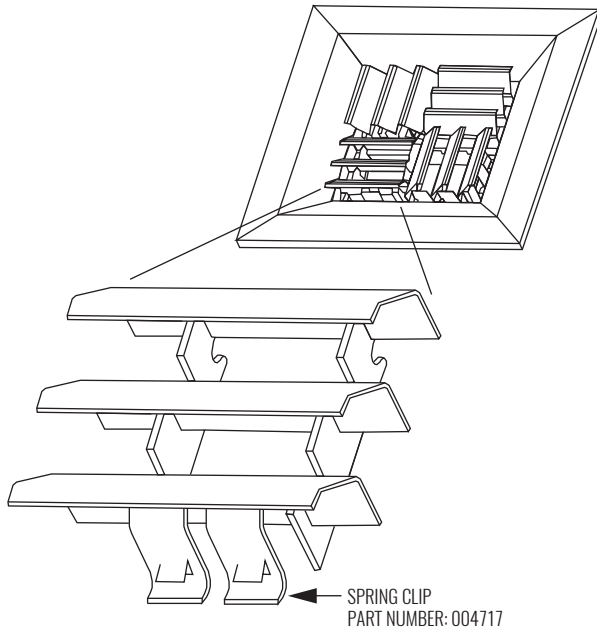


F29
CAMLOCK

NECK SIZE	AVAILABLE NECK SIZES					
	FRAME STYLE					
	SURFACE MOUNT		24" X 24" LAY-IN PANEL			
	F21	F22	F23	F29	F30	F98
6" x 6" (152 x 152)	•	•	•	•	•	•
8" x 8" (203 x 203)	•	•	•	•	•	•
10" x 10" (254 x 254)	•	•	•	•	•	•
12" x 12" (305 x 305)	•	•	•	•	•	•
14" x 14" (356 x 356)	•	•	•	•	•	•
16" x 16" (406 x 406)	•	•	•	•	•	•
18" x 18" (457 x 457)	•	•	•	•	•	•
20" x 20" (508 x 508)	•	•	•			
22" x 22" (559 x 559)	•	•				
24" x 24" (610 x 610)	•	•				

NOTES: Dimensions in parentheses are mm.
Dot indicates available neck sizes.

DIMENSIONAL DATA



To remove core, apply pressure towards the spring clip. When it has compressed completely, lift notched end of core away from frame rail.

NECK SIZE	CORE WIDTH	NO. OF BLADES	PART NUMBER
6" x 6" (152 x 152)	2.75"	3	0989800606
8" x 8" (203 x 203)	3.75"	4	0989800808
10" x 10" (254 x 254)	4.75"	5	0989801010
12" x 12" (305 x 305)	5.75"	6	0989801212
14" x 14" (356 x 356)	6.75"	7	0989801414
16" x 16" (406 x 406)	7.75"	8	0989801616
18" x 18" (457 x 457)	8.75"	9	0989801818
20" x 20" (508 x 508)	9.75"	10	0989802020
22" x 22" (559 x 559)	10.75"	11	0989802222
24" x 24" (610 x 610)	11.75"	12	0989802424

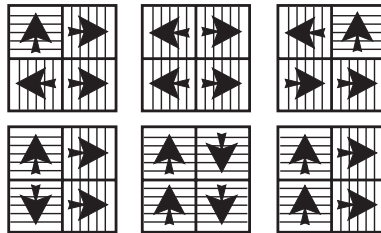
NOTE: Listed core assembly part numbers work on 1240, 1240P, and 1240PE series.

DISCHARGE AIR PATTERNS

**1 CORE THROW
(4-WAY THROW)**



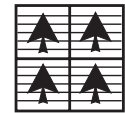
**2 CORE THROW
(2 OR 3-WAY THROW)**



**3 CORE THROW
(2-WAY THROW)**



**4 CORE THROW
(1-WAY THROW)**



NOTE: Reference page D1-3 for core detail.

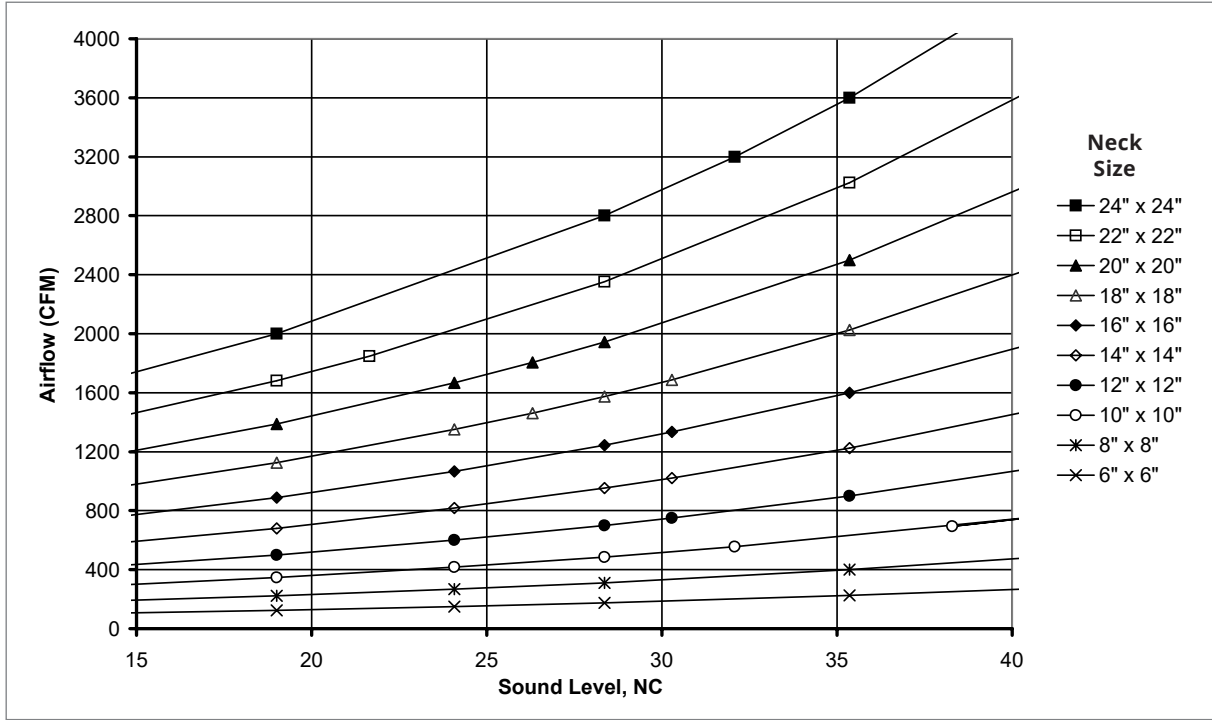
1240, 51240 SERIES

Diffuser | Modular Core



SOUND CHART | NO DAMPER

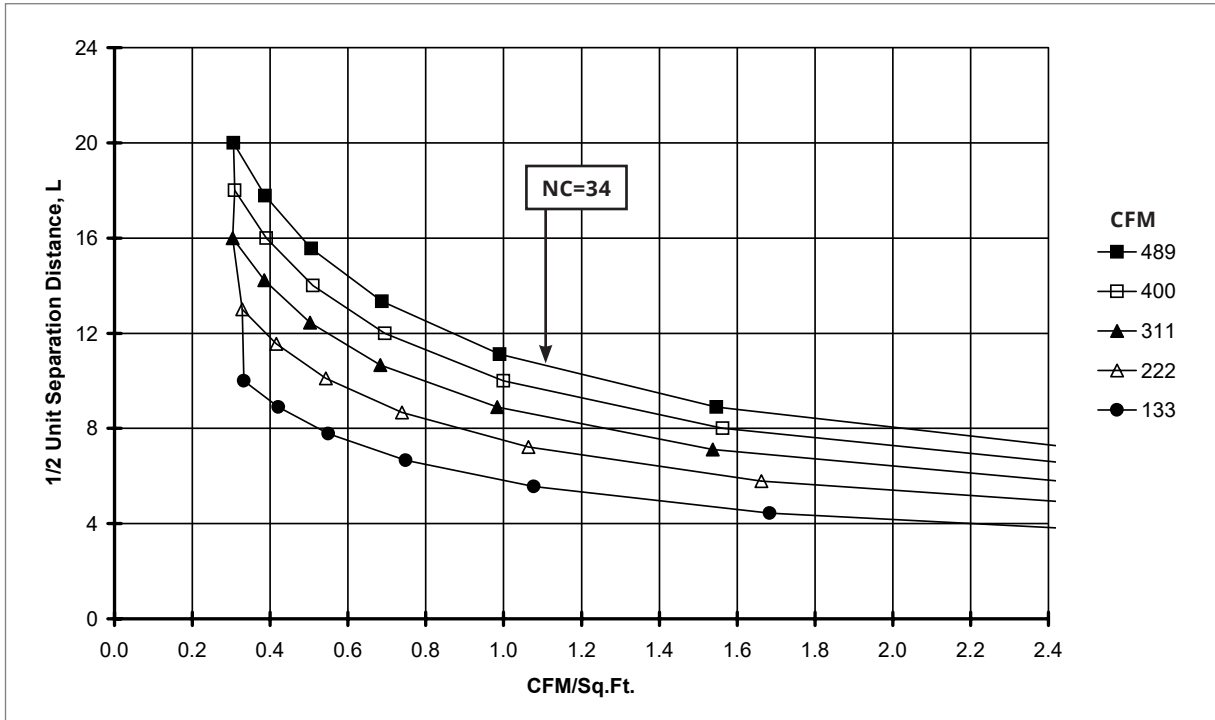
AIRFLOW VS. NC (NO DAMPER)



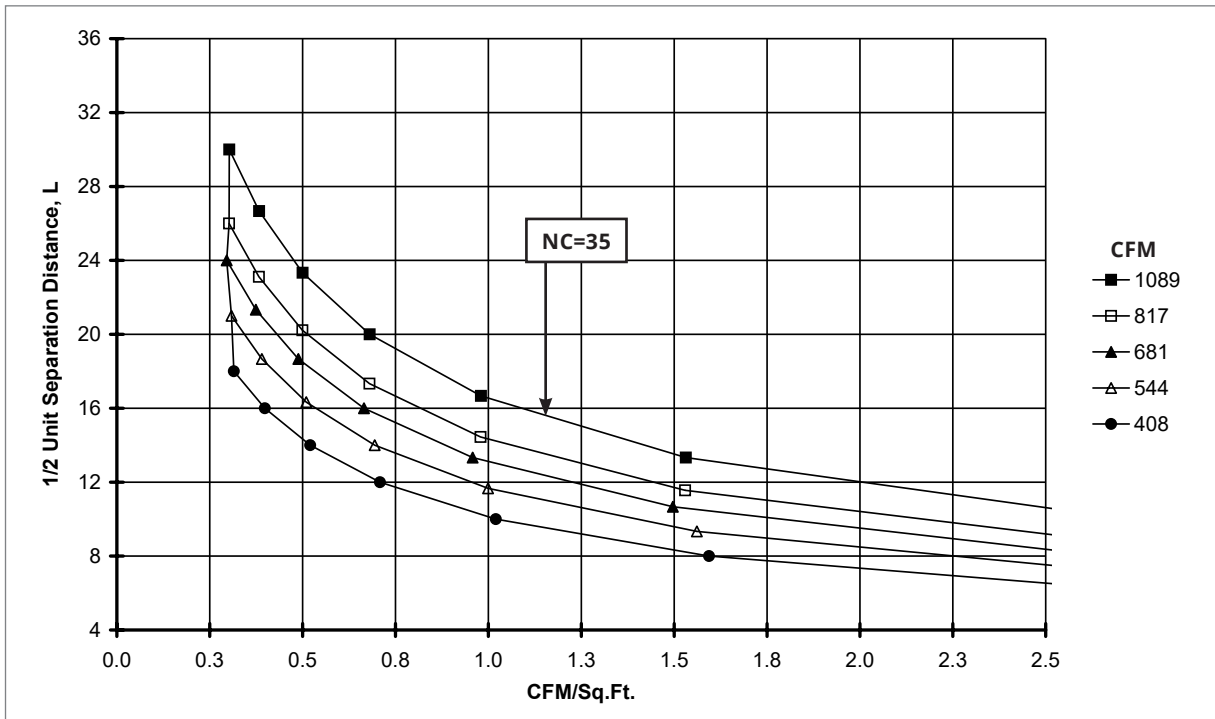
DIFFUSERS | MODULAR CORE

ADPI CHARTS | NO DAMPER

DIFFUSER SPACING FOR 80% ADPI: 8"x8" NECK, 4-WAY (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: 14"x14" NECK, 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.

DIFFUSERS | MODULAR CORE

1240, 51240 SERIES

Diffuser | Modular Core



DIFFUSERS | MODULAR CORE

PERFORMANCE DATA | 1-CORE, NO DAMPER

NECK SIZE	IP DATA					NC	METRIC DATA					OCTAVE BAND, dB						
	NECK VEL	AIR FLOW	Ps	Pt	1-CORE THROW		NECK VEL	AIR FLOW	Ps	Pt	1-CORE THROW							
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m	2	3	4	5	6	7	
6" x 6"	300	75	0.005	0.011	3 - 6 - 8	-	1.52	35	1.3	2.7	1.0 - 1.7 - 2.4	23	20	12	-	-	-	
	400	100	0.009	0.019	5 - 6 - 9	-	2.03	47	2.3	4.8	1.6 - 1.9 - 2.7	29	25	19	-	-	-	
	500	125	0.014	0.030	6 - 7 - 10	-	2.54	59	3.6	7.5	1.8 - 2.2 - 3.1	32	29	24	13	-	-	
	600	150	0.021	0.043	6 - 8 - 11	12	3.05	71	5.2	10.7	1.9 - 2.4 - 3.4	36	33	29	19	14	-	
	700	175	0.028	0.059	7 - 8 - 12	16	3.56	83	7.0	14.6	2.1 - 2.6 - 3.6	38	35	32	24	20	11	
	800	200	0.037	0.077	7 - 9 - 13	20	4.06	94	9.2	19.1	2.2 - 2.7 - 3.9	41	38	36	29	25	17	
	900	225	0.047	0.097	8 - 10 - 14	23	4.57	106	11.6	24.2	2.4 - 2.9 - 4.1	43	40	38	32	29	23	
	1000	250	0.058	0.120	8 - 10 - 14	26	5.08	118	14.3	29.8	2.5 - 3.1 - 4.3	45	42	41	36	33	28	
	1100	275	0.070	0.145	9 - 11 - 15	29	5.59	130	17.3	36.1	2.6 - 3.2 - 4.6	46	43	43	39	36	32	
8" x 8"	300	133	0.008	0.013	4 - 7 - 10	-	1.52	63	1.9	3.3	1.3 - 2.2 - 3.2	26	24	16	-	-	-	
	400	178	0.013	0.023	7 - 9 - 12	-	2.03	84	3.3	5.8	2.1 - 2.6 - 3.7	31	29	23	11	-	-	
	500	222	0.021	0.036	8 - 10 - 13	12	2.54	105	5.2	9.1	2.4 - 2.9 - 4.1	34	33	29	18	12	-	
	600	267	0.030	0.053	9 - 10 - 15	17	3.05	126	7.5	13.1	2.6 - 3.2 - 4.5	38	36	33	24	19	-	
	700	311	0.041	0.071	9 - 11 - 16	21	3.56	147	10.2	17.8	2.8 - 3.4 - 4.8	40	39	37	29	24	17	
	800	356	0.053	0.093	10 - 12 - 17	25	4.06	168	13.3	23.2	3.0 - 3.7 - 5.2	43	41	40	34	29	23	
	900	400	0.068	0.118	10 - 13 - 18	28	4.57	189	16.8	29.4	3.2 - 3.9 - 5.5	45	44	43	38	34	28	
	1000	444	0.084	0.146	11 - 13 - 19	31	5.08	210	20.8	36.3	3.3 - 4.1 - 5.8	47	45	46	41	38	33	
	1100	489	0.101	0.177	12 - 14 - 20	34	5.59	231	25.2	43.9	3.5 - 4.3 - 6.1	48	47	48	44	41	37	
10" x 10"	300	208	0.011	0.016	5 - 9 - 13	-	1.52	98	2.6	4.0	1.6 - 2.8 - 4.0	27	27	20	-	-	-	
	400	278	0.019	0.029	9 - 11 - 15	-	2.03	131	4.7	7.1	2.6 - 3.2 - 4.6	32	32	27	15	-	-	
	500	347	0.029	0.045	10 - 12 - 17	16	2.54	164	7.3	11.2	3.0 - 3.6 - 5.1	36	36	32	22	16	-	
	600	417	0.042	0.065	11 - 13 - 18	21	3.05	197	10.5	16.1	3.2 - 4.0 - 5.6	39	39	37	28	22	14	
	700	486	0.057	0.088	12 - 14 - 20	25	3.56	229	14.3	21.9	3.5 - 4.3 - 6.1	42	42	41	33	28	21	
	800	556	0.075	0.115	12 - 15 - 21	29	4.06	262	18.6	28.6	3.7 - 4.6 - 6.5	44	44	44	38	33	27	
	900	625	0.095	0.145	13 - 16 - 23	32	4.57	295	23.6	36.2	4.0 - 4.9 - 6.9	46	46	47	42	38	33	
	1000	694	0.117	0.179	14 - 17 - 24	35	5.08	328	29.1	44.6	4.2 - 5.1 - 7.2	48	48	49	45	41	37	
	1100	764	0.142	0.217	14 - 18 - 25	38	5.59	361	35.2	54.0	4.4 - 5.4 - 7.6	50	50	52	48	45	42	
12" x 12"	300	300	0.014	0.020	6 - 11 - 16	-	1.52	142	3.5	4.9	1.9 - 3.4 - 4.8	28	29	23	-	-	-	
	400	400	0.025	0.035	10 - 13 - 18	13	2.03	189	6.3	8.8	3.2 - 3.9 - 5.5	33	34	30	18	11	-	
	500	500	0.039	0.055	12 - 14 - 20	19	2.54	236	9.8	13.7	3.5 - 4.3 - 6.1	37	38	35	26	19	-	
	600	600	0.057	0.079	13 - 16 - 22	24	3.05	283	14.1	19.7	3.9 - 4.8 - 6.7	41	41	40	32	26	18	
	700	700	0.077	0.108	14 - 17 - 24	28	3.56	330	19.3	26.9	4.2 - 5.1 - 7.3	43	44	44	37	31	25	
	750	750	0.089	0.124	14 - 18 - 25	30	3.81	354	22.1	30.8	4.3 - 5.3 - 7.5	44	45	45	39	34	28	
	800	800	0.101	0.141	15 - 18 - 26	32	4.06	378	25.1	35.1	4.5 - 5.5 - 7.8	46	47	47	41	36	31	
	900	900	0.128	0.178	16 - 19 - 27	35	4.57	425	31.8	44.4	4.8 - 5.8 - 8.2	48	49	50	45	41	36	
	1000	1000	0.158	0.220	17 - 20 - 29	38	5.08	472	39.3	54.8	5.0 - 6.1 - 8.7	50	51	52	48	44	41	
14" x 14"	300	408	0.019	0.024	7 - 13 - 18	-	1.52	193	4.6	6.0	2.3 - 3.9 - 5.6	29	31	25	12	-	-	
	400	544	0.033	0.043	12 - 15 - 21	16	2.03	257	8.2	10.7	3.7 - 4.5 - 6.4	34	36	32	21	13	-	
	500	681	0.052	0.067	14 - 17 - 24	22	2.54	321	12.8	16.7	4.1 - 5.1 - 7.2	38	40	38	28	21	12	
	600	817	0.074	0.097	15 - 18 - 26	27	3.05	385	18.5	24.1	4.5 - 5.6 - 7.9	42	43	42	34	28	20	
	700	953	0.101	0.132	16 - 20 - 28	31	3.56	450	25.1	32.7	4.9 - 6.0 - 8.5	44	46	46	39	34	27	
	750	1021	0.116	0.151	17 - 20 - 29	33	3.81	482	28.9	37.6	5.1 - 6.2 - 8.8	46	47	48	42	36	31	
	800	1089	0.132	0.172	17 - 21 - 30	35	4.06	514	32.8	42.8	5.2 - 6.4 - 9.1	47	49	49	44	39	34	
	900	1225	0.167	0.217	18 - 22 - 32	38	4.57	578	41.6	54.1	5.6 - 6.8 - 9.6	49	51	52	48	43	39	
	1000	1361	0.206	0.268	19 - 24 - 33	41	5.08	642	51.3	66.8	5.9 - 7.2 - 10.1	51	53	55	51	47	44	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10⁻¹² 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.

PERFORMANCE DATA | 1-CORE, NO DAMPER

NECK SIZE	IP DATA					NC	METRIC DATA					OCTAVE BAND, dB						
	NECK VEL	AIR FLOW	1-CORE THROW		NECK VEL		AIR FLOW	1-CORE THROW										
			Ps	Pt				Ps	Pt	1-CORE THROW								
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m	2	3	4	5	6	7	
16" x 16"	300	533	0.024	0.029	9 - 15 - 21	-	1.52	252	5.9	7.3	2.6 - 4.5 - 6.3	30	33	28	14	-	-	
	400	711	0.042	0.052	14 - 17 - 24	18	2.03	336	10.4	12.9	4.2 - 5.2 - 7.3	35	38	35	24	15	-	
	500	889	0.065	0.081	16 - 19 - 27	24	2.54	420	16.3	20.2	4.7 - 5.8 - 8.2	39	42	40	31	24	15	
	600	1067	0.094	0.117	17 - 21 - 30	29	3.05	503	23.5	29.1	5.2 - 6.3 - 9.0	43	45	44	37	30	23	
	700	1244	0.128	0.159	18 - 23 - 32	33	3.56	587	31.9	39.5	5.6 - 6.9 - 9.7	45	48	48	42	36	30	
	750	1333	0.147	0.182	19 - 23 - 33	35	3.81	629	36.7	45.4	5.8 - 7.1 - 10.0	46	49	50	44	39	33	
	800	1422	0.168	0.207	20 - 24 - 34	37	4.06	671	41.7	51.7	6.0 - 7.3 - 10.4	48	50	51	46	41	36	
	900	1600	0.212	0.263	21 - 26 - 36	40	4.57	755	52.8	65.4	6.3 - 7.8 - 11.0	50	52	54	50	45	41	
	1000	1778	0.262	0.324	22 - 27 - 38	43	5.08	839	65.2	80.7	6.7 - 8.2 - 11.6	52	54	57	54	49	46	
18" x 18"	300	675	0.029	0.035	10 - 17 - 23	12	1.52	319	7.3	8.7	2.9 - 5.1 - 7.1	31	34	29	16	-	-	
	400	900	0.052	0.062	16 - 19 - 27	20	2.03	425	12.9	15.4	4.7 - 5.8 - 8.2	36	39	36	26	17	-	
	500	1125	0.081	0.097	18 - 21 - 30	26	2.54	531	20.2	24.1	5.3 - 6.5 - 9.2	40	43	42	33	26	17	
	600	1350	0.117	0.139	19 - 23 - 33	31	3.05	637	29.1	34.7	5.8 - 7.1 - 10.1	43	47	46	39	32	25	
	650	1463	0.137	0.164	20 - 24 - 35	33	3.30	690	34.2	40.7	6.1 - 7.4 - 10.5	45	48	48	42	35	29	
	700	1575	0.159	0.190	21 - 25 - 36	35	3.56	743	39.6	47.2	6.3 - 7.7 - 10.9	46	49	50	44	38	32	
	750	1688	0.183	0.218	21 - 26 - 37	37	3.81	796	45.5	54.2	6.5 - 8.0 - 11.3	47	51	52	46	41	35	
	800	1800	0.208	0.248	22 - 27 - 38	39	4.06	850	51.8	61.7	6.7 - 8.2 - 11.7	48	52	53	48	43	38	
	900	2025	0.263	0.314	23 - 29 - 41	42	4.57	956	65.5	78.1	7.1 - 8.7 - 12.4	51	54	56	52	47	44	
20" x 20"	200	556	0.016	0.018	5 - 11 - 21	-	1.02	262	3.9	4.6	1.4 - 3.2 - 6.5	25	28	21	-	-	-	
	300	833	0.036	0.041	11 - 18 - 26	14	1.52	393	8.9	10.3	3.2 - 5.6 - 7.9	32	36	31	18	-	-	
	400	1111	0.063	0.073	17 - 21 - 30	22	2.03	524	15.8	18.2	5.3 - 6.5 - 9.2	37	41	38	28	19	-	
	500	1389	0.099	0.114	19 - 24 - 34	28	2.54	655	24.6	28.5	5.9 - 7.2 - 10.2	41	45	44	35	27	19	
	600	1667	0.142	0.165	21 - 26 - 37	33	3.05	787	35.4	41.0	6.5 - 7.9 - 11.2	44	48	48	41	34	27	
	650	1806	0.167	0.193	22 - 27 - 38	35	3.30	852	41.6	48.2	6.7 - 8.3 - 11.7	46	49	50	43	37	31	
	700	1944	0.194	0.224	23 - 28 - 40	37	3.56	918	48.2	55.9	7.0 - 8.6 - 12.1	47	51	52	46	40	34	
	800	2222	0.253	0.293	25 - 30 - 43	41	4.06	1049	63.0	73.0	7.5 - 9.2 - 13.0	49	53	55	50	45	40	
	900	2500	0.320	0.371	26 - 32 - 45	44	4.57	1180	79.8	92.3	7.9 - 9.7 - 13.7	51	55	58	54	49	46	
22" x 22"	100	336	0.005	0.005	1 - 3 - 12	-	0.51	159	1.2	1.3	0.4 - 0.9 - 3.6	13	17	-	-	-	-	
	200	672	0.019	0.021	5 - 12 - 23	-	1.02	317	4.7	5.3	1.6 - 3.6 - 7.1	25	30	23	-	-	-	
	300	1008	0.043	0.048	12 - 20 - 29	15	1.52	476	10.6	12.0	3.6 - 6.2 - 8.7	33	37	33	20	-	-	
	400	1344	0.076	0.086	19 - 23 - 33	23	2.03	635	18.9	21.3	5.8 - 7.1 - 10.1	38	42	40	29	21	11	
	500	1681	0.118	0.134	21 - 26 - 37	30	2.54	793	29.5	33.4	6.5 - 8.0 - 11.3	42	46	45	37	29	21	
	550	1849	0.143	0.162	22 - 27 - 39	32	2.79	872	35.7	40.4	6.8 - 8.4 - 11.8	43	48	48	40	33	25	
	600	2017	0.170	0.193	23 - 29 - 41	35	3.05	952	42.4	48.0	7.1 - 8.7 - 12.3	45	49	50	43	36	29	
	700	2353	0.232	0.263	25 - 31 - 44	39	3.56	1110	57.8	65.4	7.7 - 9.4 - 13.3	47	52	53	48	42	36	
	800	2689	0.303	0.343	27 - 33 - 47	43	4.06	1269	75.4	85.4	8.2 - 10.1 - 14.3	50	54	57	52	46	42	
24" x 24"	100	400	0.006	0.006	3 - 8 - 18	-	0.51	189	1.4	1.5	1.0 - 2.3 - 5.5	14	18	-	-	-	-	
	200	800	0.022	0.025	13 - 18 - 26	-	1.02	378	5.6	6.2	4.1 - 5.5 - 7.8	26	31	24	-	-	-	
	300	1200	0.050	0.056	18 - 22 - 31	17	1.52	566	12.5	13.9	5.5 - 6.7 - 9.5	33	38	34	21	12	-	
	400	1600	0.089	0.099	21 - 26 - 36	25	2.03	755	22.3	24.7	6.3 - 7.8 - 11.0	38	43	41	31	22	12	
	500	2000	0.140	0.155	23 - 29 - 40	31	2.54	944	34.8	38.7	7.1 - 8.7 - 12.3	42	47	47	38	31	22	
	550	2200	0.169	0.188	24 - 30 - 42	34	2.79	1038	42.1	46.8	7.4 - 9.1 - 12.9	44	49	49	41	34	27	
	600	2400	0.201	0.224	26 - 31 - 44	36	3.05	1133	50.1	55.7	7.8 - 9.5 - 13.5	45	50	51	44	37	31	
	700	2800	0.274	0.304	28 - 34 - 48	41	3.56	1321	68.2	75.8	8.4 - 10.3 - 14.5	48	53	55	49	43	38	
	800	3200	0.358	0.398	30 - 36 - 51	44	4.06	1510	89.1	99.0	9.0 - 11.0 - 15.6	50	55	58	54	48	44	

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10⁻¹² 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.

DIFFUSERS | MODULAR CORE

1240, 51240 SERIES

Diffuser | Modular Core



PERFORMANCE DATA | 2-, 3-, 4-CORE, NO DAMPER

DIFFUSERS | MODULAR CORE

NECK SIZE	IP DATA					METRIC DATA				
	NECK VEL	AIR FLOW	2-CORE THROW	3-CORE THROW	4-CORE THROW	NECK VEL	AIR FLOW	2-CORE THROW	3-CORE THROW	4-CORE THROW
	FPM	CFM	ft	ft	ft	m/s	L/s	m	m	m
6" x 6"	300	75	6-8-11	7-9-13	9-11-16	1.52	35	1.8-2.4-3.4	2.1-2.7-3.9	2.7-3.3-4.7
	400	100	7-9-13	9-10-15	10-13-18	2.03	47	2.3-2.8-3.9	2.6-3.2-4.5	3.1-3.8-5.4
	500	125	8-10-14	10-12-17	12-14-20	2.54	59	2.5-3.1-4.4	2.9-3.5-5.0	3.5-4.3-6.1
	600	150	9-11-16	10-13-18	13-16-22	3.05	71	2.8-3.4-4.8	3.2-3.9-5.5	3.8-4.7-6.7
	700	175	10-12-17	11-14-20	14-17-24	3.56	83	3.0-3.7-5.2	3.4-4.2-5.9	4.2-5.1-7.2
	800	200	11-13-18	12-15-21	15-18-25	4.06	94	3.2-3.9-5.5	3.7-4.5-6.3	4.4-5.4-7.7
	900	225	11-14-19	13-16-22	16-19-27	4.57	106	3.4-4.2-5.9	3.9-4.8-6.7	4.7-5.8-8.2
	1000	250	12-14-20	13-17-23	16-20-28	5.08	118	3.6-4.4-6.2	4.1-5.0-7.1	5.0-6.1-8.6
8" x 8"	1100	275	12-15-21	14-17-24	17-21-30	5.59	130	3.8-4.6-6.5	4.3-5.3-7.4	5.2-6.4-9.0
	300	133	8-11-15	9-12-17	12-15-21	1.52	63	2.4-3.2-4.5	2.8-3.7-5.2	3.6-4.4-6.3
	400	178	10-12-17	11-14-20	14-17-24	2.03	84	3.0-3.7-5.2	3.5-4.2-6.0	4.2-5.1-7.3
	500	222	11-14-19	13-16-22	15-19-27	2.54	105	3.4-4.1-5.8	3.9-4.7-6.7	4.7-5.7-8.1
	600	267	12-15-21	14-17-24	17-21-29	3.05	126	3.7-4.5-6.4	4.2-5.2-7.3	5.1-6.3-8.9
	700	311	13-16-23	15-18-26	18-22-32	3.56	147	4.0-4.9-6.9	4.6-5.6-7.9	5.5-6.8-9.6
	800	356	14-17-24	16-20-28	19-24-34	4.06	168	4.3-5.2-7.4	4.9-6.0-8.5	5.9-7.3-10.3
	900	400	15-18-26	17-21-30	21-25-36	4.57	189	4.5-5.5-7.8	5.2-6.3-9.0	6.3-7.7-10.9
10" x 10"	1000	444	16-19-27	18-22-31	22-27-38	5.08	210	4.8-5.8-8.3	5.5-6.7-9.5	6.6-8.1-11.5
	1100	489	16-20-29	19-23-33	23-28-40	5.59	231	5.0-6.1-8.7	5.7-7.0-9.9	6.9-8.5-12.0
	300	208	10-13-19	11-15-21	15-18-26	1.52	98	3.0-4.0-5.7	3.5-4.6-6.5	4.5-5.6-7.9
	400	278	12-15-21	14-17-25	17-21-30	2.03	131	3.8-4.6-6.5	4.3-5.3-7.5	5.2-6.4-9.1
	500	347	14-17-24	16-19-28	19-24-33	2.54	164	4.2-5.2-7.3	4.8-5.9-8.4	5.9-7.2-10.1
	600	417	15-19-26	17-21-30	21-26-37	3.05	197	4.6-5.7-8.0	5.3-6.5-9.2	6.4-7.9-11.1
	700	486	16-20-28	19-23-33	23-28-39	3.56	229	5.0-6.1-8.6	5.7-7.0-9.9	6.9-8.5-12.0
	800	556	18-21-30	20-25-35	24-30-42	4.06	262	5.3-6.5-9.2	6.1-7.5-10.6	7.4-9.1-12.8
12" x 12"	900	625	19-23-32	21-26-37	26-32-45	4.57	295	5.7-6.9-9.8	6.5-7.9-11.2	7.9-9.6-13.6
	1000	694	20-24-34	22-28-39	27-33-47	5.08	328	6.0-7.3-10.3	6.8-8.4-11.8	8.3-10.1-14.3
	1100	764	21-25-36	24-29-41	29-35-49	5.59	361	6.3-7.7-10.8	7.2-8.8-12.4	8.7-10.6-15.0
	300	300	12-16-22	14-18-26	18-22-31	1.52	142	3.6-4.8-6.8	4.1-5.5-7.8	5.4-6.7-9.4
	400	400	15-18-26	17-21-30	21-25-36	2.03	189	4.5-5.5-7.8	5.2-6.3-9.0	6.3-7.7-10.9
	500	500	17-20-29	19-23-33	23-28-40	2.54	236	5.1-6.2-8.8	5.8-7.1-10.0	7.0-8.6-12.2
	600	600	18-22-32	21-26-36	25-31-44	3.05	283	5.5-6.8-9.6	6.3-7.8-11.0	7.7-9.4-13.3
	700	700	20-24-34	23-28-39	27-33-47	3.56	330	6.0-7.3-10.4	6.9-8.4-11.9	8.3-10.2-14.4
14" x 14"	750	750	20-25-35	23-29-40	28-35-49	3.81	354	6.2-7.6-10.7	7.1-8.7-12.3	8.6-10.5-14.9
	800	800	21-26-36	24-30-42	29-36-51	4.06	378	6.4-7.8-11.1	7.3-9.0-12.7	8.9-10.9-15.4
	900	900	22-27-39	26-31-44	31-38-54	4.57	425	6.8-8.3-11.8	7.8-9.5-13.5	9.4-11.5-16.3
	1000	1000	24-29-41	27-33-47	33-40-57	5.08	472	7.2-8.8-12.4	8.2-10.0-14.2	9.9-12.2-17.2
	300	408	14-18-26	16-21-30	21-26-36	1.52	193	4.2-5.6-7.9	4.8-6.4-9.1	6.3-7.8-11.0
	400	544	17-21-30	20-24-34	24-30-42	2.03	257	5.3-6.5-9.1	6.0-7.4-10.5	7.3-9.0-12.7
	500	681	19-24-34	22-27-39	27-33-47	2.54	321	5.9-7.2-10.2	6.8-8.3-11.7	8.2-10.0-14.2
	600	817	21-26-37	24-30-42	30-36-51	3.05	385	6.5-7.9-11.2	7.4-9.1-12.8	9.0-11.0-15.5
14" x 14"	700	953	23-28-40	26-32-46	32-39-55	3.56	450	7.0-8.6-12.1	8.0-9.8-13.9	9.7-11.9-16.8
	750	1021	24-29-41	27-33-47	33-40-57	3.81	482	7.2-8.9-12.5	8.3-10.1-14.3	10.0-12.3-17.4
	800	1089	25-30-43	28-34-49	34-42-59	4.06	514	7.5-9.1-12.9	8.6-10.5-14.8	10.4-12.7-18.0
	900	1225	26-32-45	30-37-52	36-44-63	4.57	578	7.9-9.7-13.7	9.1-11.1-15.7	11.0-13.5-19.0
	1000	1361	27-34-48	31-39-54	38-47-66	5.08	642	8.4-10.2-14.5	9.6-11.7-16.6	11.6-14.2-20.1

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. 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.

PERFORMANCE DATA | 2-, 3-, 4-CORE, NO DAMPER

NECK SIZE	IP DATA					METRIC DATA				
	NECK VEL	AIR FLOW	2-CORE THROW	3-CORE THROW	4-CORE THROW	NECK VEL	AIR FLOW	2-CORE THROW	3-CORE THROW	4-CORE THROW
	FPM	CFM	ft	ft	ft	m/s	L/s	m	m	m
16" x 16"	300	533	16 - 21 - 30	18 - 24 - 34	24 - 29 - 41	1.52	252	4.8 - 6.4 - 9.1	5.5 - 7.3 - 10.4	7.2 - 8.9 - 12.6
	400	711	20 - 24 - 34	23 - 28 - 39	28 - 34 - 48	2.03	336	6.0 - 7.4 - 10.5	6.9 - 8.5 - 12.0	8.4 - 10.3 - 14.5
	500	889	22 - 27 - 38	25 - 31 - 44	31 - 38 - 53	2.54	420	6.7 - 8.3 - 11.7	7.7 - 9.5 - 13.4	9.4 - 11.5 - 16.2
	600	1067	24 - 30 - 42	28 - 34 - 48	34 - 41 - 58	3.05	503	7.4 - 9.1 - 12.8	8.5 - 10.4 - 14.7	10.3 - 12.6 - 17.8
	700	1244	26 - 32 - 45	30 - 37 - 52	36 - 45 - 63	3.56	587	8.0 - 9.8 - 13.8	9.1 - 11.2 - 15.8	11.1 - 13.6 - 19.2
	750	1333	27 - 33 - 47	31 - 38 - 54	38 - 46 - 65	3.81	629	8.3 - 10.1 - 14.3	9.5 - 11.6 - 16.4	11.5 - 14.0 - 19.9
	800	1422	28 - 34 - 49	32 - 39 - 56	39 - 48 - 68	4.06	671	8.5 - 10.5 - 14.8	9.8 - 12.0 - 16.9	11.8 - 14.5 - 20.5
	900	1600	30 - 36 - 52	34 - 42 - 59	41 - 51 - 72	4.57	755	9.1 - 11.1 - 15.7	10.4 - 12.7 - 18.0	12.6 - 15.4 - 21.8
18" x 18"	1000	1778	31 - 38 - 54	36 - 44 - 62	44 - 53 - 75	5.08	839	9.5 - 11.7 - 16.5	10.9 - 13.4 - 18.9	13.2 - 16.2 - 22.9
	300	675	18 - 24 - 34	20 - 27 - 38	27 - 33 - 47	1.52	319	5.4 - 7.2 - 10.2	6.2 - 8.2 - 11.7	8.1 - 10.0 - 14.1
	400	900	22 - 27 - 39	26 - 31 - 44	31 - 38 - 54	2.03	425	6.8 - 8.3 - 11.8	7.8 - 9.5 - 13.5	9.4 - 11.5 - 16.3
	500	1125	25 - 31 - 43	29 - 35 - 50	35 - 42 - 60	2.54	531	7.6 - 9.3 - 13.1	8.7 - 10.6 - 15.1	10.5 - 12.9 - 18.3
	600	1350	27 - 34 - 47	31 - 38 - 54	38 - 47 - 66	3.05	637	8.3 - 10.2 - 14.4	9.5 - 11.7 - 16.5	11.5 - 14.1 - 20.0
	650	1463	28 - 35 - 49	33 - 40 - 56	40 - 48 - 68	3.30	690	8.7 - 10.6 - 15.0	9.9 - 12.1 - 17.2	12.0 - 14.7 - 20.8
	700	1575	30 - 36 - 51	34 - 41 - 59	41 - 50 - 71	3.56	743	9.0 - 11.0 - 15.6	10.3 - 12.6 - 17.8	12.5 - 15.3 - 21.6
	750	1688	31 - 37 - 53	35 - 43 - 61	42 - 52 - 74	3.81	796	9.3 - 11.4 - 16.1	10.6 - 13.0 - 18.4	12.9 - 15.8 - 22.4
20" x 20"	800	1800	32 - 39 - 55	36 - 44 - 63	44 - 54 - 76	4.06	850	9.6 - 11.8 - 16.6	11.0 - 13.5 - 19.0	13.3 - 16.3 - 23.1
	900	2025	34 - 41 - 58	38 - 47 - 66	47 - 57 - 81	4.57	956	10.2 - 12.5 - 17.6	11.7 - 14.3 - 20.2	14.1 - 17.3 - 24.5
	200	556	9 - 20 - 30	11 - 23 - 35	15 - 30 - 42	1.02	262	2.6 - 6.0 - 9.2	3.5 - 6.9 - 10.6	4.5 - 9.0 - 12.8
	300	833	20 - 26 - 37	23 - 30 - 43	30 - 37 - 52	1.52	393	6.0 - 8.0 - 11.3	6.9 - 9.2 - 13.0	9.0 - 11.1 - 15.7
	400	1111	25 - 30 - 43	28 - 35 - 49	34 - 42 - 60	2.03	524	7.5 - 9.2 - 13.1	8.6 - 10.6 - 15.0	10.5 - 12.8 - 18.1
	500	1389	28 - 34 - 48	32 - 39 - 55	39 - 47 - 67	2.54	655	8.4 - 10.3 - 14.6	9.7 - 11.8 - 16.7	11.7 - 14.3 - 20.3
	600	1667	30 - 37 - 53	35 - 43 - 60	42 - 52 - 73	3.05	787	9.2 - 11.3 - 16.0	10.6 - 13.0 - 18.3	12.8 - 15.7 - 22.2
	650	1806	32 - 39 - 55	36 - 44 - 63	44 - 54 - 76	3.30	852	9.6 - 11.8 - 16.7	11.0 - 13.5 - 19.1	13.3 - 16.3 - 23.1
22" x 22"	700	1944	33 - 40 - 57	38 - 46 - 65	46 - 56 - 79	3.56	918	10.0 - 12.2 - 17.3	11.4 - 14.0 - 19.8	13.9 - 17.0 - 24.0
	800	2222	35 - 43 - 61	40 - 49 - 70	49 - 60 - 84	4.06	1049	10.7 - 13.1 - 18.5	12.2 - 15.0 - 21.2	14.8 - 18.1 - 25.7
	900	2500	37 - 46 - 64	43 - 52 - 74	52 - 63 - 89	4.57	1180	11.3 - 13.9 - 19.6	13.0 - 15.9 - 22.4	15.7 - 19.2 - 27.2
	100	336	2 - 5 - 22	3 - 7 - 25	4 - 9 - 33	0.51	159	0.7 - 1.6 - 6.6	1.0 - 2.2 - 7.6	1.2 - 2.8 - 9.9
	200	672	10 - 22 - 33	13 - 25 - 38	16 - 33 - 46	1.02	317	2.9 - 6.6 - 10.2	3.8 - 7.6 - 11.6	4.9 - 9.9 - 14.1
	300	1008	22 - 29 - 41	25 - 33 - 47	33 - 40 - 57	1.52	476	6.6 - 8.8 - 12.4	7.6 - 10.1 - 14.3	9.9 - 12.2 - 17.3
	400	1344	27 - 33 - 47	31 - 38 - 54	38 - 46 - 66	2.03	635	8.3 - 10.2 - 14.4	9.5 - 11.6 - 16.5	11.5 - 14.1 - 20.0
	500	1681	31 - 37 - 53	35 - 43 - 61	42 - 52 - 73	2.54	793	9.3 - 11.4 - 16.1	10.6 - 13.0 - 18.4	12.9 - 15.8 - 22.3
24" x 24"	550	1849	32 - 39 - 55	37 - 45 - 64	44 - 54 - 77	2.79	872	9.7 - 11.9 - 16.9	11.1 - 13.7 - 19.3	13.5 - 16.5 - 23.4
	600	2017	33 - 41 - 58	38 - 47 - 66	46 - 57 - 80	3.05	952	10.2 - 12.4 - 17.6	11.6 - 14.3 - 20.2	14.1 - 17.3 - 24.4
	700	2353	36 - 44 - 63	41 - 51 - 72	50 - 61 - 87	3.56	1110	11.0 - 13.4 - 19.0	12.6 - 15.4 - 21.8	15.2 - 18.7 - 26.4
	800	2689	39 - 47 - 67	44 - 54 - 77	54 - 66 - 93	4.06	1269	11.7 - 14.4 - 20.3	13.4 - 16.5 - 23.3	16.3 - 20.0 - 28.2
	100	400	6 - 14 - 26	8 - 18 - 30	10 - 23 - 36	0.51	189	1.9 - 4.2 - 7.8	2.5 - 5.5 - 9.0	3.2 - 7.1 - 10.9
	200	800	21 - 26 - 36	24 - 30 - 42	29 - 36 - 51	1.02	378	6.4 - 7.8 - 11.1	7.3 - 9.0 - 12.7	8.9 - 10.9 - 15.4
	300	1200	26 - 32 - 45	30 - 36 - 51	36 - 44 - 62	1.52	566	7.8 - 9.6 - 13.6	9.0 - 11.0 - 15.6	10.9 - 13.3 - 18.8
	400	1600	30 - 36 - 52	34 - 42 - 59	41 - 51 - 72	2.03	755	9.1 - 11.1 - 15.7	10.4 - 12.7 - 18.0	12.6 - 15.4 - 21.8
24" x 24"	500	2000	33 - 41 - 58	38 - 47 - 66	46 - 57 - 80	2.54	944	10.1 - 12.4 - 17.5	11.6 - 14.2 - 20.1	14.0 - 17.2 - 24.3
	550	2200	35 - 43 - 60	40 - 49 - 69	48 - 59 - 84	2.79	1038	10.6 - 13.0 - 18.4	12.2 - 14.9 - 21.1	14.7 - 18.0 - 25.5
	600	2400	36 - 45 - 63	42 - 51 - 72	51 - 62 - 88	3.05	1133	11.1 - 13.6 - 19.2	12.7 - 15.6 - 22.0	15.4 - 18.8 - 26.7
	700	2800	39 - 48 - 68	45 - 55 - 78	55 - 67 - 95	3.56	1321	12.0 - 14.7 - 20.7	13.7 - 16.8 - 23.8	16.6 - 20.4 - 28.8
	800	3200	42 - 52 - 73	48 - 59 - 84	58 - 72 - 101	4.06	1510	12.8 - 15.7 - 22.2	14.7 - 18.0 - 25.4	17.8 - 21.8 - 30.8

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. 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.

DIFFUSERS | MODULAR CORE

1240, 51240 SERIES

Diffuser | Modular Core



ENGINEERING SPECIFICATION & CONFIGURATION

1240, 51240

The modular core diffuser shall be Krueger model 1240 (steel) or 51240 (aluminum). The 1240 and 51240 models shall have a tapered backpan resulting in a square neck. The core of the diffuser shall be made up of 4 independent fixed blade modules that can be easily removed without the use of special tools for 1-, 2-, 3-, or 4-way discharge air pattern adjustments or damper access.

Optional opposed blade damper (OBD1240) 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°F 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.

1. SERIES: (XXXXX)

1240 - Steel, Modular Core Diffuser
51240 - Aluminum, Modular Core Diffuser

2. WIDTH: SQUARE NECK ONLY (XX) *

6" - 24" in 2" Increments

3. HEIGHT: SQUARE NECK ONLY (XX) *

6" - 24" in 2" Increments

4. FRAME: (XXX)

F21 - Surface Mount - Beveled
F22 - Surface Mount - Flat
F23 - Lay-in T-Bar
F29 - Camlock
F30 - Drop Face
F98 - Narrow-T

5. PANEL: (XX)x(XX)

NONE
24"x24"

6. FINISH: (XX)

01 - Mill
10 - Alumican
35 - Black
44 - British White

Damper not included in configuration code.

* Neck Sizes of 22" and 24" are only available for Frame 21 and Frame 22.

SAMPLE CONFIGURATION: 1240 - 14x14 - F21 - NONE - 44