



6100, 6150
56100, 56150
These perforated supply ceiling diffusers feature a neck mounted rotatable core with either a round or square neck. Aluminum or steel perforated face is available.



6490, 56490
These perforated ceiling returns feature a square neck. Aluminum or steel perforated face is available.



6200, 56200
6200FR, 6290F
These perforated supply, ceiling diffusers feature neck mounted curved blades with a square neck. Aluminum or steel perforated face is available. Fire rated or filter return variations available.



6600, 56600, 6600FR
These perforated supply ceiling diffusers feature face mounted deflectors with a round neck. Aluminum or steel perforated face is available. A fire rated variation is also available.



6500, 56500
6500FR, 6590FR
These perforated supply, ceiling diffusers feature neck mounted curved blades with a round neck. Aluminum or steel perforated face is available. Fire rated supply and return variations available.



6690, 56690
These perforated ceiling returns feature a round neck. Aluminum or steel perforated face is available.



6300
This perforated supply, ceiling diffuser features face mounted deflectors and a prescored fiberglass backpan for field cutting. Available in steel construction only.



6790, 56790
These aluminum or steel perforated screen ceiling panels with no backpan are great for non-ducted return or exhaust applications.



6390
This perforated return features a prescored fiberglass backpan for field cutting. Available in steel construction only.



1100, 51100
These architectural, perforated, supply ceiling diffusers feature neck mounted curved blades with a square or rectangular neck. Available in steel or aluminum construction. A metric version is also available.



6400, 56400, 6400FR
These perforated supply ceiling diffusers feature face mounted deflectors with a square neck. Aluminum or steel perforated face as well as a fire rated variations are available.



1190, 51190
These architectural, perforated, ceiling returns feature a square or rectangular neck. Available in steel or aluminum construction.

6100, 56100 (Supply)**6150, 56150 (Supply)**

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6790, 56790 (Return)

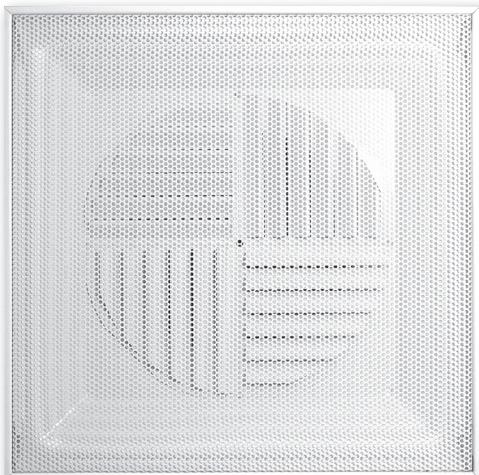
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C1 PERFORATED FACE DIFFUSERS

6100, 56100, 6150, 56150 | Stamped Core

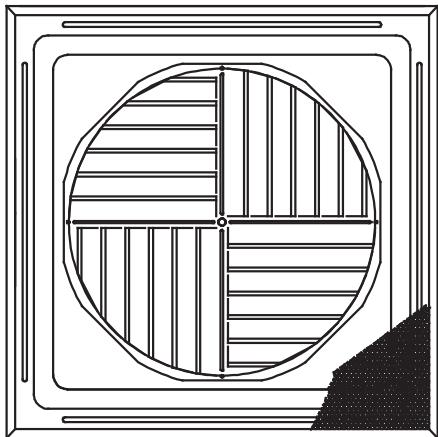


6100

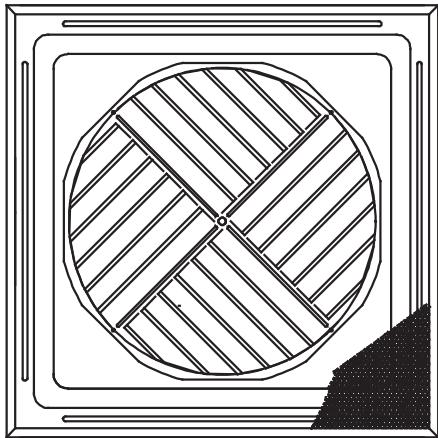
6100, 56100, 6150, 56150

Discharge Air Patterns

6100, 6150 SERIES, STANDARD DISCHARGE PATTERN



6100, 6150 SERIES, CORNER DISCHARGE PATTERN



6
1
0
0
-
6
1
5
0

Introduction: 6100, 56100, 6150, 56150 —

The 6100/6150 series perforated diffusers feature a unique, self-centering stamped core that rotates 45° for easy adjustment from cross flow to corner flow. The core is designed to maintain the set discharge air pattern while the individual blades may be easily adjusted if desired. The stamped curved blade core delivers pleasing aesthetics with a circle-in-square design and performance with typical isothermal throws of 8' - 17'. This design makes Krueger's 6100/6150 series diffuser an ideal choice for modular office spaces where room airflow patterns can be adjusted according to cubicle layout.

MODELS

- 6100 - Steel Construction, Round Neck, Perforated Supply Diffuser
- 6150 - Steel Construction, Square Neck, Perforated Supply Diffuser
- 56100 - Aluminum Perforation with Steel Backpan, Round Neck, Perforated Supply Diffuser
- 56150 - Aluminum Perforation with Steel Backpan, Square Neck, Perforated Supply Diffuser

FEATURES

- Unique self-centering stamped core; rotates 45° for easy adjustment from standard to corner discharge air patterns.
- Circle-in-square design enhances decor and blends with most ceiling tiles.
- Removable perforated face and core for ease of cleaning.
- Individually adjustable blades to maintain optimal performance positions.

PANEL SIZES

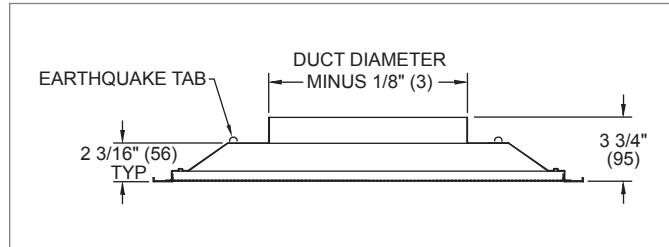
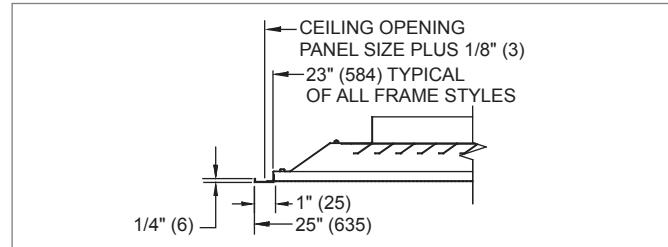
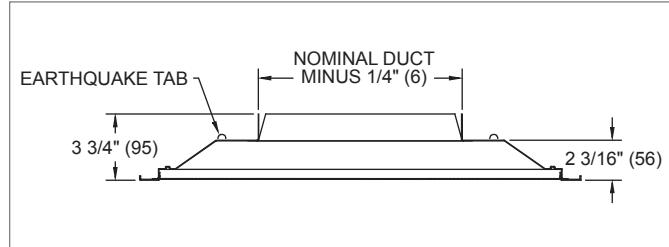
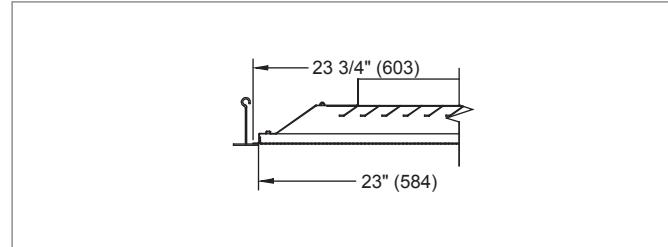
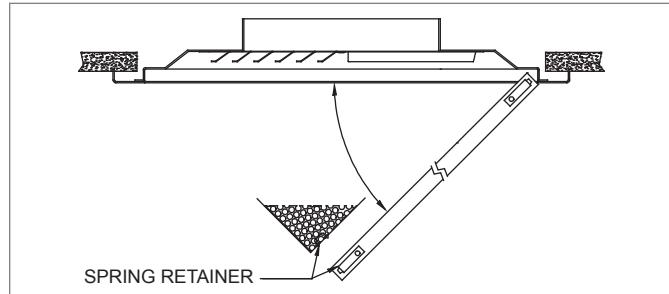
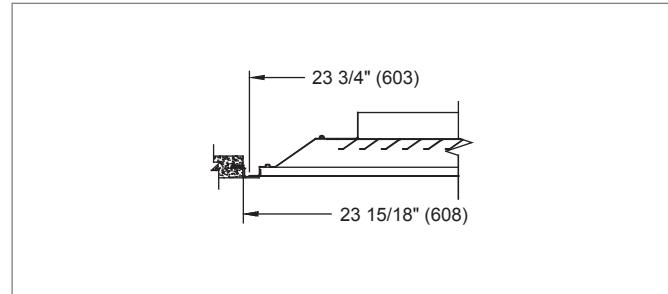
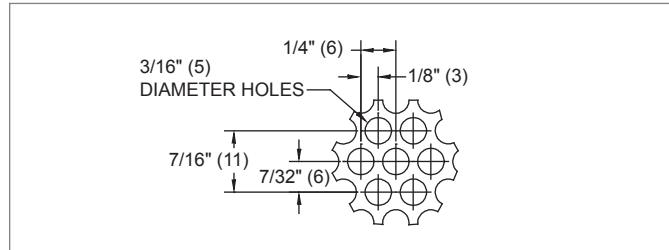
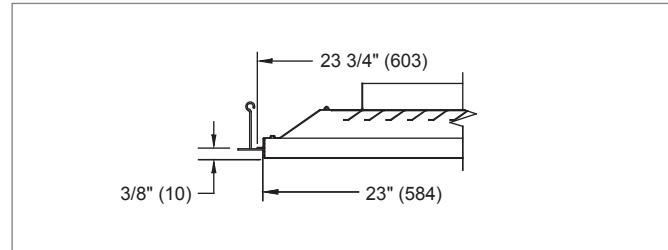
- 24"x24"

ACCESSORIES

- Optional Round Damper
- Optional Opposed Blade Damper (Model OBD)

FINISHES

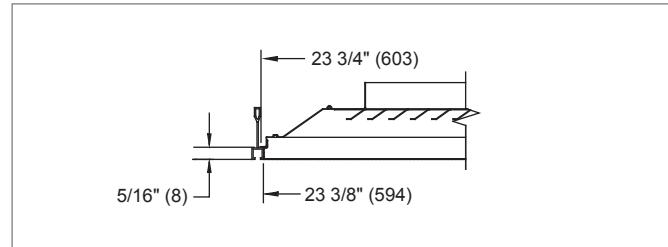
- Standard finish is #44 British White.
- Optional finishes available.

6100, 56100, 6150, 56150 (Supply) Dimensional Information & Frame Styles
6100, 56100, SIDE VIEW (ROUND NECK)

6100, 56100, 6150, 56150, FRAME 20, SURFACE MOUNT

6150, 56150, SIDE VIEW (SQUARE NECK)

6100, 56100, 6150, 56150, FRAME 23, LAY-IN T-BAR

6100, 56100, 6150, 56150, HINGE DETAIL

6100, 56100, 6150, 56150, FRAME 27, SPLINE

6100, 56100, 6150, 56150, PERFORATION DETAIL

6100, 56100, 6150, 56150, FRAME 30, DROP FACE

6100, 56100, 6150, 56150, AVAILABLE SIZES

24" x 24" (610 x 610) Panel	
6100/56100 - Round	6150/56150 - Square
6" (152)	6"x6" (152x152)
8" (203)	8"x8" (203x203)
10" (254)	10"x10" (254x254)
12" (305)	-
14" (356)	-
15" (381)	-

NOTES: Dimensions in parentheses are mm.

Dash indicates not applicable.

6100, 56100, 6150, 56150, FRAME 98, NARROW-T


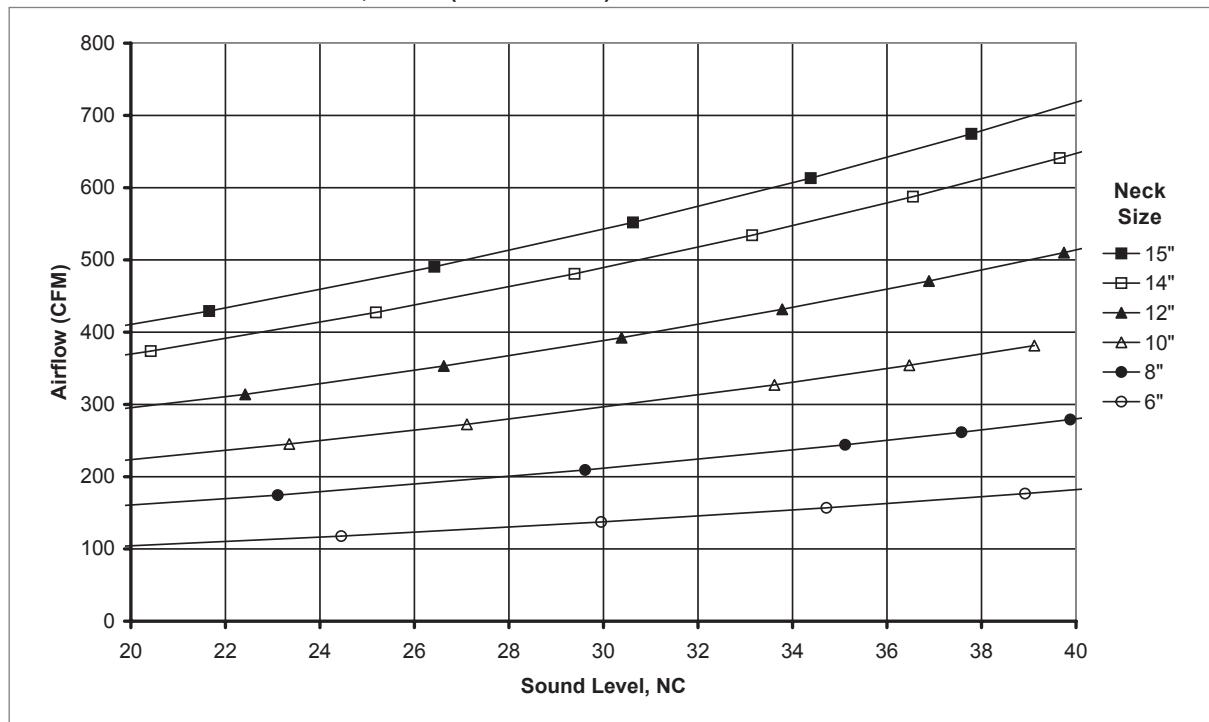
C1 PERFORATED FACE DIFFUSERS

6100, 56100, 6150, 56150 | Stamped Core

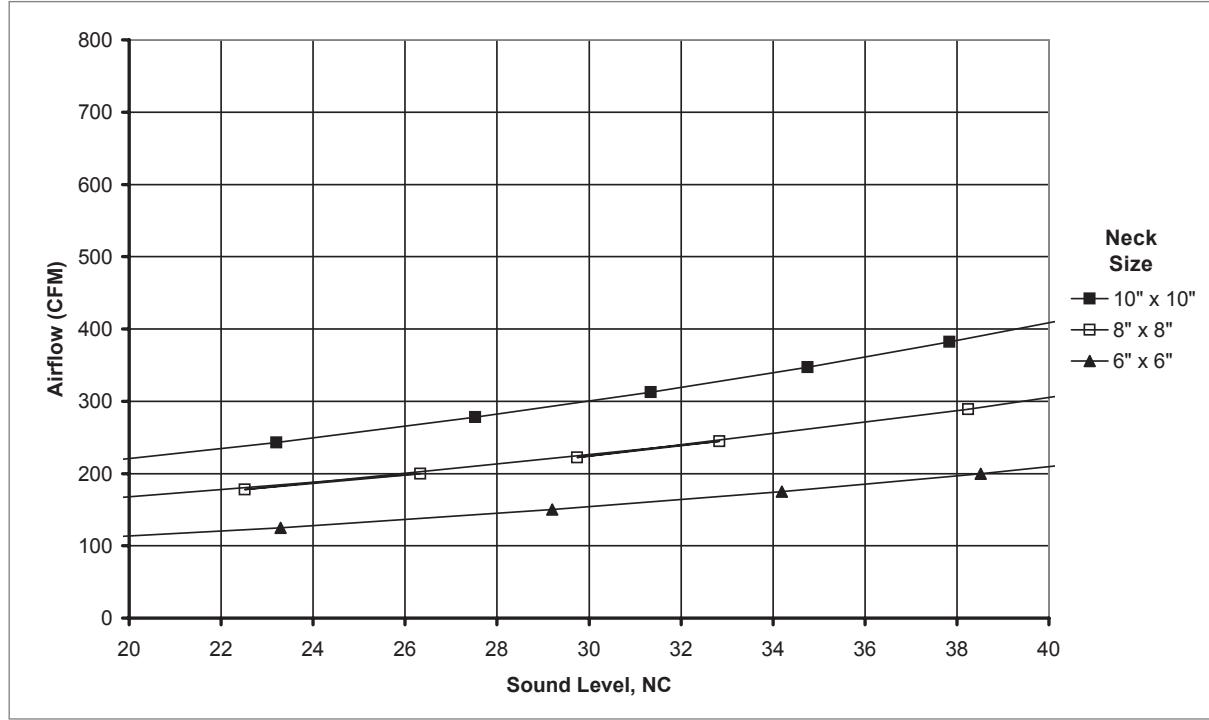


6100, 56100, 6150, 56150 (Supply) Reference Charts

AIRFLOW VS. NC LEVEL: 6100, 56100 (NO DAMPER)

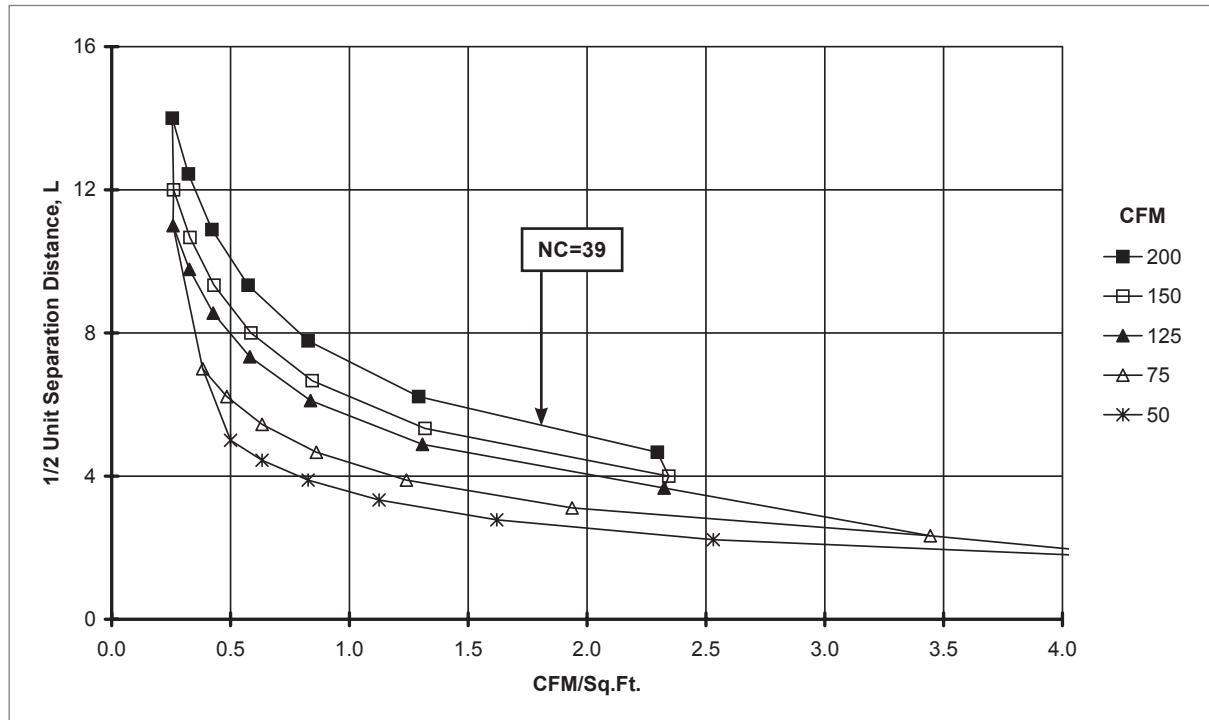


AIRFLOW VS. NC LEVEL: 6150, 56150 (NO DAMPER)

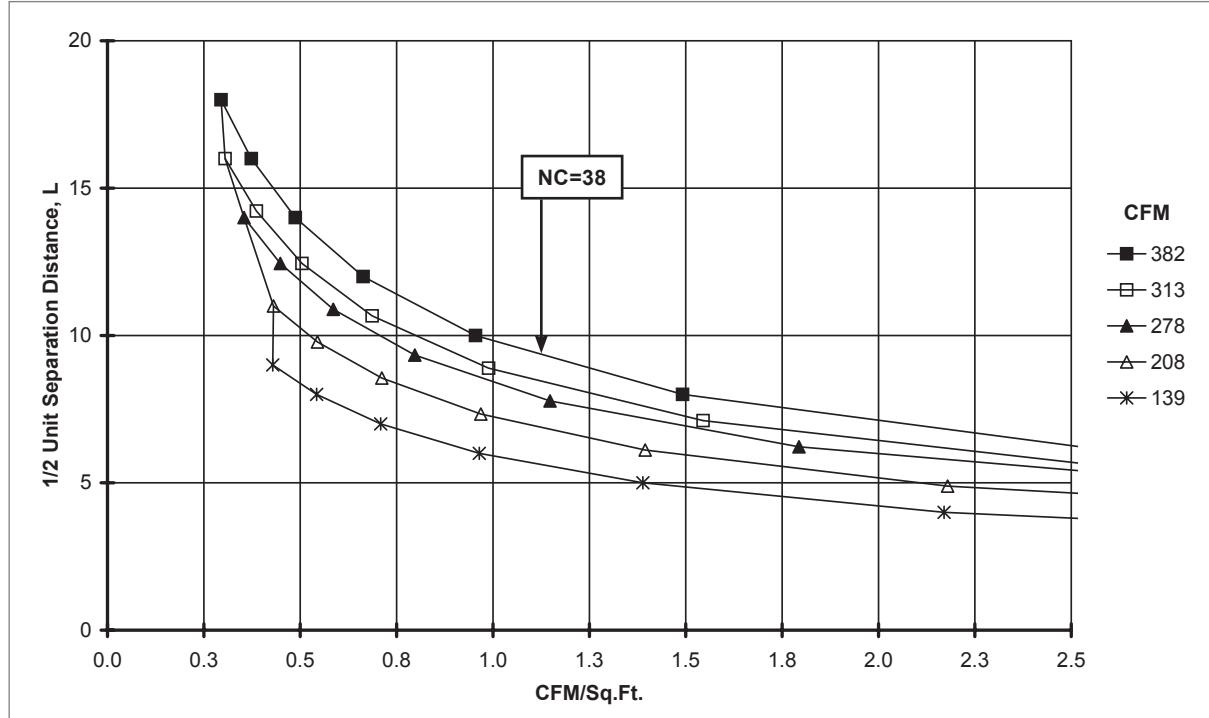


6150, 56150 (Supply) Reference Charts

SPACING FOR 80% ADPI: 6150, 56150, 6"x6" NECK, 4-WAY (NO DAMPER)



SPACING FOR 80% ADPI: 6150, 56150, 10"x10" 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.

6150, 56150 (Supply) Performance Data: Horizontal Throw

IP/METRIC DATA: 6150, 56150 (NO DAMPER)

IP Data					NC	Metric Data					Octave Band, dB						
Neck Vel	Air Flow	Ps	Pt	4-way Throw		Neck Vel	Air Flow	Ps	Pt	4-way Throw	m	2	3	4	5	6	7
FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m	2	3	4	5	6	7	
6" x 6"	100	25	0.005	0.005	0 - 0 - 1	-	0.51	12	1.2	1.3	0.0 - 0.1 - 0.4	-	-	-	-	-	-
	200	50	0.019	0.022	1 - 1 - 5	-	1.02	24	4.8	5.4	0.2 - 0.4 - 1.4	18	16	13	11	-	-
	300	75	0.043	0.049	1 - 3 - 7	-	1.52	35	10.7	12.1	0.4 - 1.0 - 2.1	26	25	23	21	15	-
	400	100	0.077	0.087	3 - 5 - 9	16	2.03	47	19.1	21.6	0.8 - 1.4 - 2.7	32	32	30	28	24	14
	500	125	0.120	0.135	4 - 6 - 11	23	2.54	59	29.8	33.7	1.1 - 1.7 - 3.3	36	37	36	34	31	23
	600	150	0.172	0.195	5 - 7 - 12	29	3.05	71	42.9	48.5	1.4 - 2.1 - 3.6	40	42	40	39	36	31
	700	175	0.235	0.265	5 - 8 - 13	34	3.56	83	58.5	66.1	1.6 - 2.4 - 3.9	43	45	44	43	41	37
	800	200	0.307	0.347	6 - 9 - 14	39	4.06	94	76.3	86.3	1.8 - 2.7 - 4.2	46	48	48	46	45	43
	900	225	0.388	0.439	7 - 10 - 15	42	4.57	106	96.6	109.2	2.1 - 3.1 - 4.4	48	51	50	49	49	48
8" x 8"	100	44	0.006	0.006	0 - 0 - 2	-	0.51	21	1.5	1.6	0.1 - 0.1 - 0.6	-	-	-	-	-	-
	200	89	0.023	0.026	1 - 2 - 6	-	1.02	42	5.8	6.4	0.3 - 0.6 - 1.8	20	18	17	15	-	-
	300	133	0.052	0.058	2 - 4 - 9	13	1.52	63	13.0	14.4	0.6 - 1.3 - 2.7	29	28	27	26	20	-
	450	200	0.118	0.131	4 - 7 - 14	26	2.29	94	29.4	32.5	1.3 - 2.1 - 4.1	37	37	37	36	33	24
	400	178	0.093	0.103	3 - 6 - 12	23	2.03	84	23.2	25.7	1.0 - 1.8 - 3.7	35	35	34	33	29	19
	550	244	0.176	0.195	6 - 8 - 15	33	2.79	115	43.8	48.5	1.7 - 2.5 - 4.6	41	42	42	41	39	32
	500	222	0.146	0.161	5 - 8 - 15	30	2.54	105	36.2	40.1	1.5 - 2.3 - 4.4	39	40	39	39	36	28
	650	289	0.246	0.272	7 - 10 - 17	38	3.30	136	61.2	67.8	2.0 - 3.0 - 5.0	45	46	46	45	44	39
	700	311	0.285	0.316	7 - 11 - 17	41	3.56	147	71.0	78.6	2.1 - 3.2 - 5.2	46	48	47	47	47	43
10" x 10"	100	69	0.007	0.008	0 - 1 - 2	-	0.51	33	1.8	1.9	0.1 - 0.2 - 0.7	-	-	-	-	-	-
	200	139	0.029	0.031	1 - 2 - 8	-	1.02	66	7.1	7.7	0.3 - 0.7 - 2.3	23	20	19	19	11	-
	300	208	0.064	0.070	2 - 5 - 11	18	1.52	98	16.0	17.4	0.7 - 1.7 - 3.4	31	30	29	29	24	11
	350	243	0.088	0.095	3 - 7 - 13	23	1.78	115	21.8	23.7	1.0 - 2.0 - 4.0	34	33	33	33	29	17
	400	278	0.114	0.124	4 - 8 - 15	28	2.03	131	28.5	31.0	1.3 - 2.3 - 4.6	37	37	36	36	33	23
	450	313	0.145	0.157	5 - 8 - 17	31	2.29	147	36.0	39.2	1.7 - 2.6 - 5.1	39	39	39	39	37	28
	500	347	0.179	0.194	6 - 9 - 18	35	2.54	164	44.5	48.4	1.9 - 2.9 - 5.5	41	42	42	42	40	32
	550	382	0.216	0.235	7 - 10 - 19	38	2.79	180	53.8	58.5	2.1 - 3.1 - 5.8	43	44	44	44	43	36
	600	417	0.257	0.280	8 - 11 - 20	41	3.05	197	64.1	69.6	2.3 - 3.4 - 6.0	45	46	46	47	46	40

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 level 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. The throw values given for 4-Way Throw is for [Total CFM/4] CFM per side (L/s). See Krueger's selection software for performance data not shown, including octave band data.

6100, 56100, 6150, 56150 (Supply) Suggested Specification & Configuration
1. SERIES: (XXXX)

- 6100 - One-piece Core Mounted to Backpan, Steel Perforated Face, Round Neck Supply Diffuser
- 6150 - One-piece Core Mounted to Backpan, Steel Perforated Face, Square Neck Supply Diffuser
- 56100 - One-piece Core Mounted to Backpan, Aluminum Perforated Face, Round Neck Supply Diffuser
- 56150 - One-piece Core Mounted to Backpan, Aluminum Perforated Face, Square Neck Supply Diffuser

2. PATTERN: (XX)

- SB - Standard Blow
- CB - Corner Blow

3A. (FOR 6100/56100 ONLY)
WIDTH: ROUND NECK ONLY (XX)

6" - 14" in 2" Increments or 15"

3B. (FOR 6150/56150 ONLY)
HEIGHT: SQUARE NECK ONLY (XX)x(XX)

6"x6"
8"x8"
10"x10"

4. FRAME: (XXX)

- F20 - Surface Mount
- F23 - Lay-in T-Bar
- F27 - Spline
- F30 - Drop Face
- F98 - Narrow-T

5. PANEL: (XX)x(XX)

24"x24"

6. FINISH: (XX)

- 01 - Mill
- 03 - Black Backpan with British White Face
- 10 - Alumican
- 35 - Black
- 44 - British White

NOTE: Damper not included in configuration code.

6100, 56100

The perforated face diffuser shall be Krueger model 6100 (steel perforated face) or 56100 (aluminum perforated face). The diffusers shall have a perforated face with 3/16" diameter holes on 1/4" centers resulting in a 51% free area. The diffuser backpan shall be one piece stamped construction of heavy gage steel and have a round neck.

Diffusers must discharge in the horizontal plane of the room and provide protection against smudging. The diffuser shall have a self-centering stamped core that can easily rotate from a cross flow pattern to a corner flow pattern without need for repainting the interior of the backpan. The perforated face must be easily removable from the backpan for access to the core for rotation and blade adjustments or access to the damper.

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

6150, 56150

The perforated face diffuser shall be Krueger model 6150 (steel perforated face) or 56150 (aluminum perforated face). The diffusers shall have a perforated face with 3/16" diameter holes on 1/4" centers resulting in a 51% free area. The diffuser backpan shall be one piece stamped construction of heavy gage steel and have a square neck.

Diffusers must discharge in the horizontal plane of the room and provide protection against smudging. The diffuser shall have a self-centering stamped core that can easily rotate from a cross flow pattern to a corner flow pattern without need for repainting the interior of the backpan. The perforated face must be easily removable from the backpan for access to the core for rotation and blade adjustments or access to the damper.

Optional opposed-blade damper (OBD) 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.