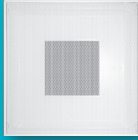




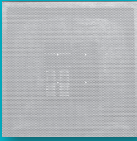

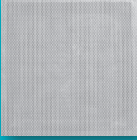



	<p><b>6100, 6150 56100, 56150</b> These perforated supply ceiling diffusers feature a neck mounted rotatable core with either a round or square neck. Aluminum or steel perforated face is available.</p>		<p><b>6490, 56490</b> These perforated ceiling returns feature a square neck. Aluminum or steel perforated face is available.</p>
	<p><b>6200, 56200 6200FR, 6290F</b> 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.</p>		<p><b>6600, 56600, 6600FR</b> 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.</p>
	<p><b>6500, 56500 6500FR, 6590FR</b> 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.</p>		<p><b>6690, 56690</b> These perforated ceiling returns feature a round neck. Aluminum or steel perforated face is available.</p>
	<p><b>6300</b> This perforated supply, ceiling diffuser features face mounted deflectors and a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>		<p><b>6790, 56790</b> These aluminum or steel perforated screen ceiling panels with no backpan are great for non-ducted return or exhaust applications.</p>
	<p><b>6390</b> This perforated return features a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>		<p><b>1100, 51100</b> 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.</p>
	<p><b>6400, 56400, 6400FR</b> 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.</p>		<p><b>1190, 51190</b> These architectural, perforated, ceiling returns feature a square or rectangular neck. Available in steel or aluminum construction.</p>

**6100, 56100 (Supply)**  
**6150, 56150 (Supply)**  
 Introduction ..... C1-4  
 Dimensional Information & Frame Styles.. C1-5  
 Reference Charts..... C1-6  
 Performance Data..... C1-9  
 Engineering Specifications..... C1-11

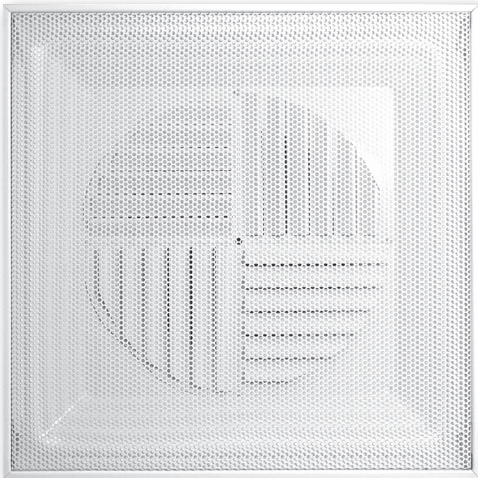
**6200, 56200, 6200FR (Supply)**  
**6290FR, 6290F (Return)**  
 Introduction ..... C1-12  
 Dimensional Information ..... C1-13  
 Frame Styles..... C1-14  
 Reference Charts..... C1-17  
 Performance Data..... C1-19  
 Engineering Specifications..... C1-41

**6500, 56500, 6500FR (Supply)**  
**6590FR (Return)**  
 Introduction ..... C1-12  
 Dimensional Information ..... C1-28  
 Frame Styles..... C1-29  
 Reference Charts..... C1-31  
 Performance Data..... C1-33  
 Engineering Specifications..... C1-43

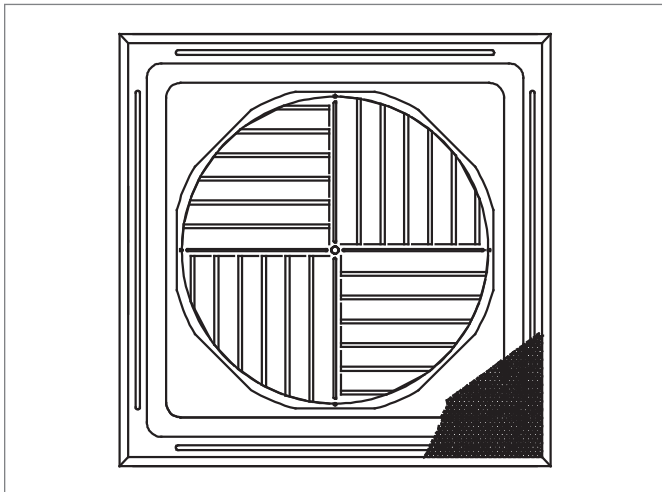
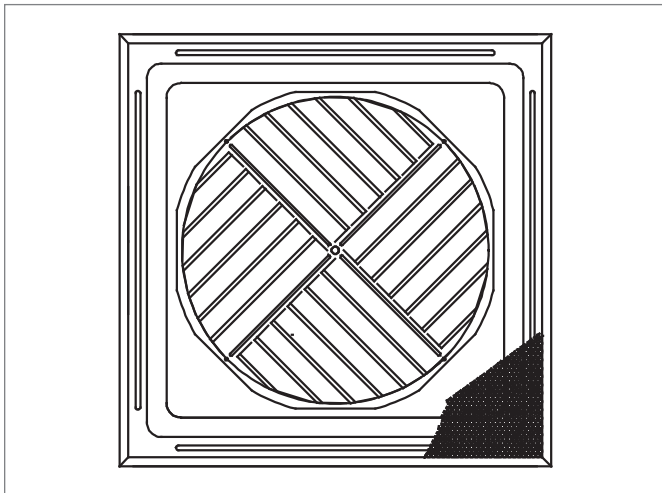
**6300 (Supply)**  
**6390 (Return)**  
 Introduction ..... C1-45  
 Dimensional Information ..... C1-46  
 Reference Charts..... C1-46  
 Performance Data..... C1-48  
 Engineering Specifications..... C1-51

**6400, 56400, 6400FR (Supply)**  
**6490, 56490 (Return)**  
 Introduction ..... C1-52  
 Dimensional Information ..... C1-53  
 Frame Styles..... C1-55  
 Reference Charts ..... C1-58  
 Performance Data..... C1-60  
 Engineering Specifications..... C1-93

**6600, 56600, 6600FR (Supply)**  
**6690, 56690 (Return)**  
 Introduction ..... C1-52  
 Dimensional Information ..... C1-75  
 Frame Styles..... C1-77  
 Reference Charts..... C1-80  
 Performance Data..... C1-82  
 Engineering Specifications..... C1-95



6100

**6100, 56100, 6150, 56150****Discharge Air Patterns****6100, 6150 SERIES, STANDARD DISCHARGE PATTERN****6100, 6150 SERIES, CORNER DISCHARGE PATTERN****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**

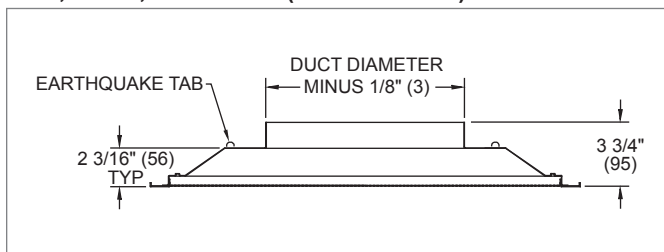
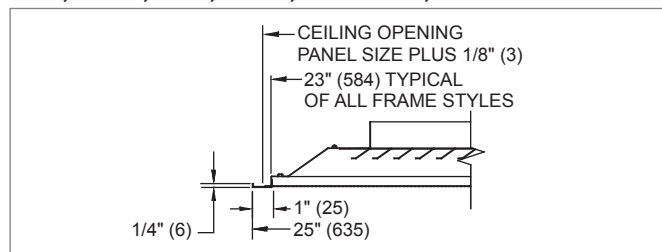
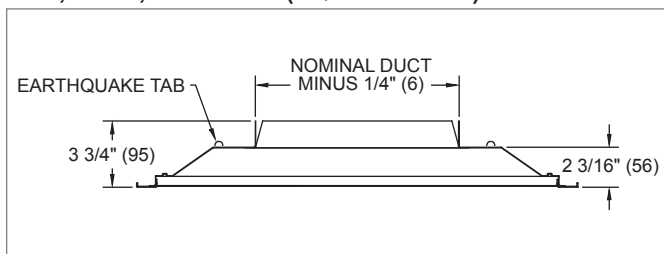
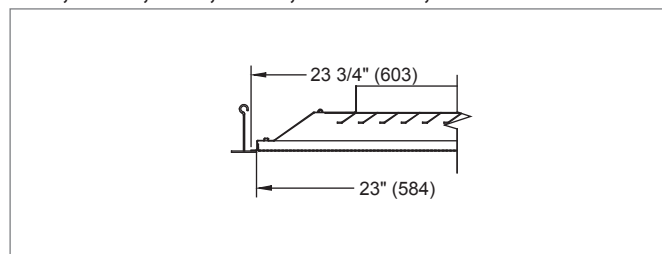
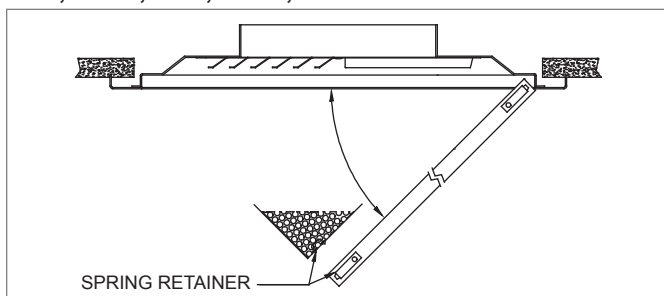
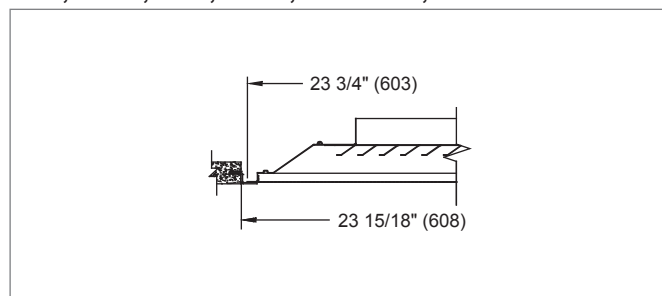
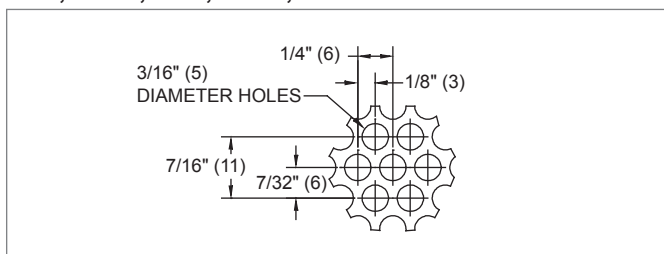
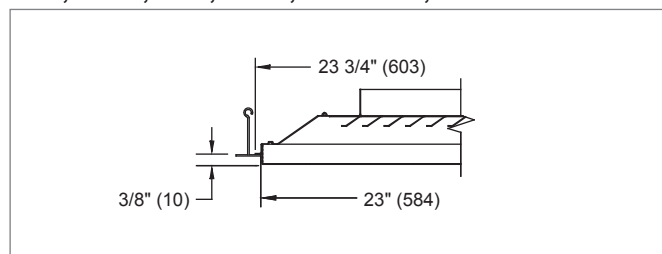
- 24"x24"

**ACCESSORIES**

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

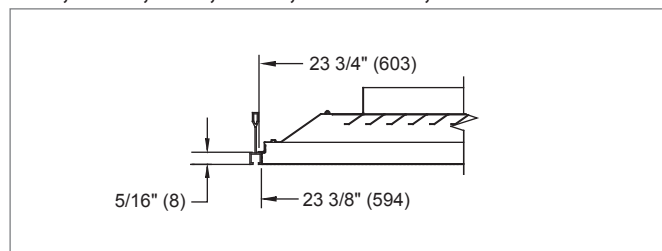
**FINISHES**

- 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**

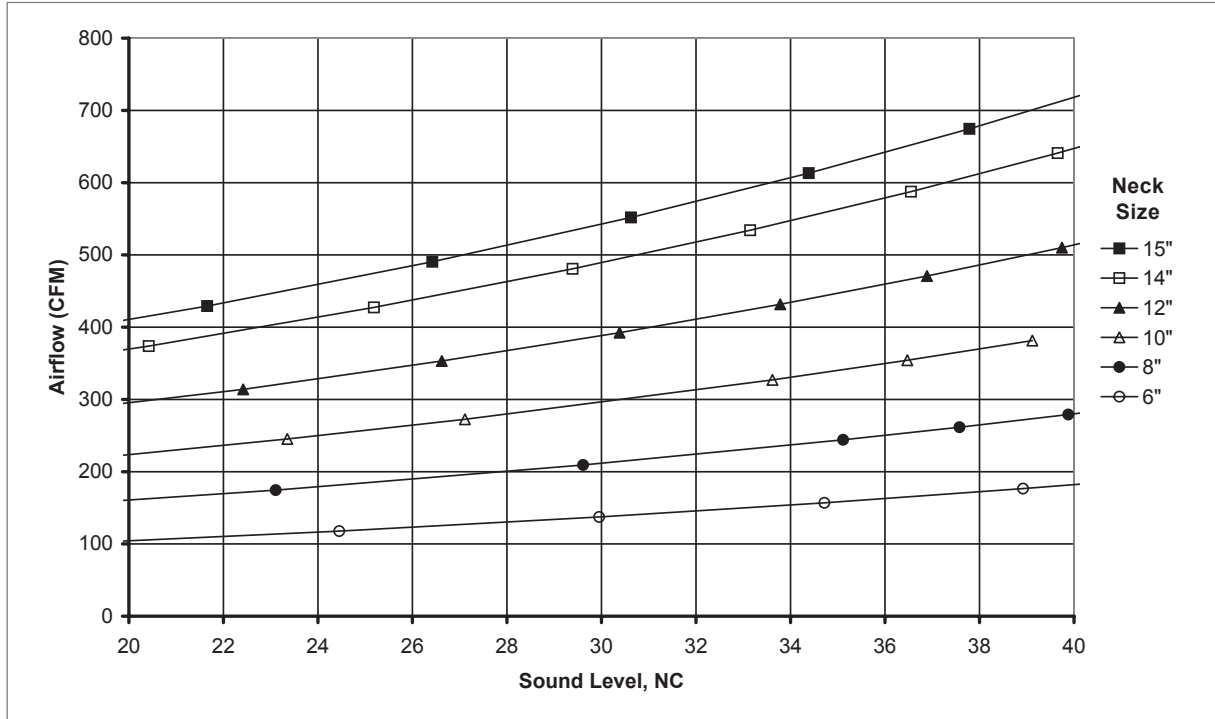
24" x 24" (610 x 610) Panel	
6100/56100 - Round	6150/56150 - Square
6" (152)	6"x6" (152x152)
8" (203)	8"x8" (203x203)
10" (254)	10"x10" (254x254)
12" (305)	-
14" (356)	-
15" (381)	-

NOTES: Dimensions in parentheses are mm.  
 Dash indicates not applicable.

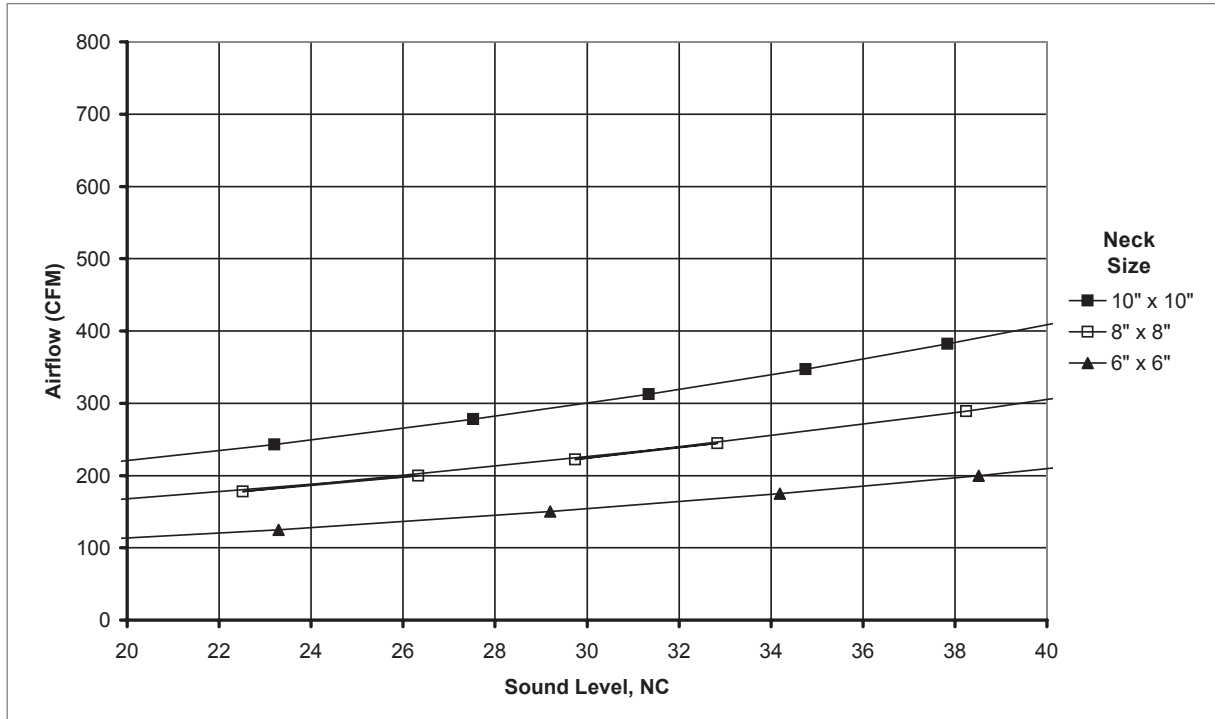
**6100, 56100, 6150, 56150, FRAME 98, NARROW-T**


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

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

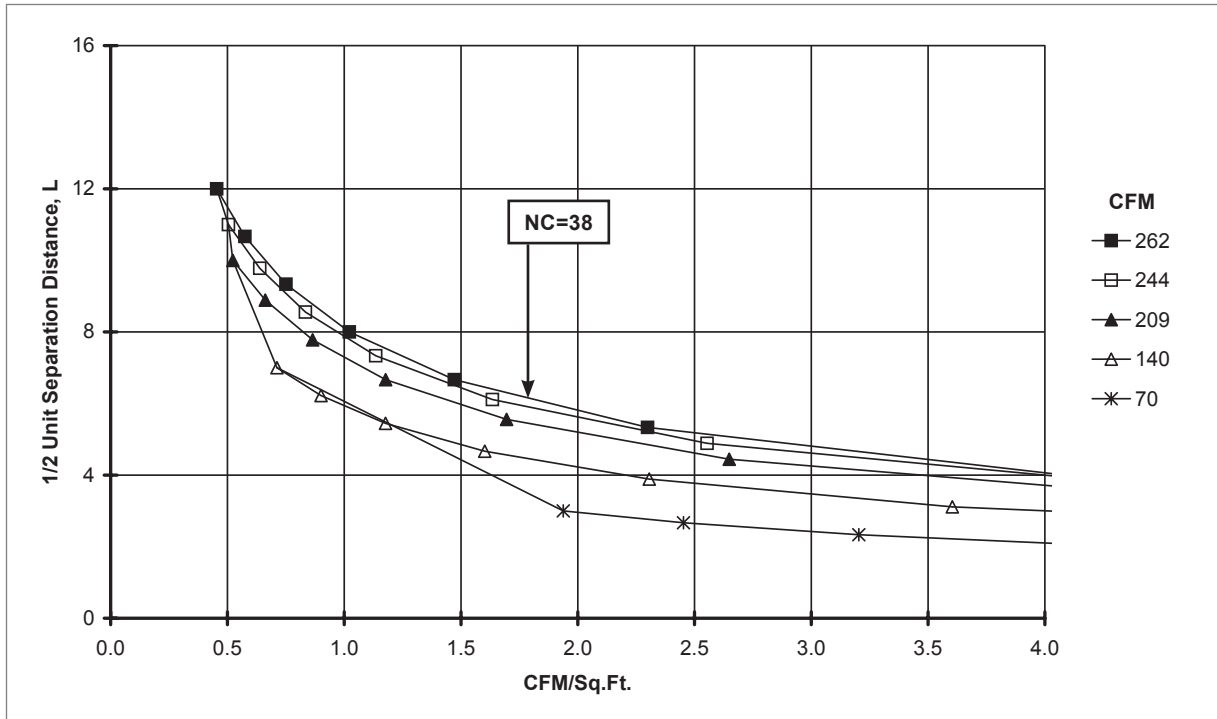
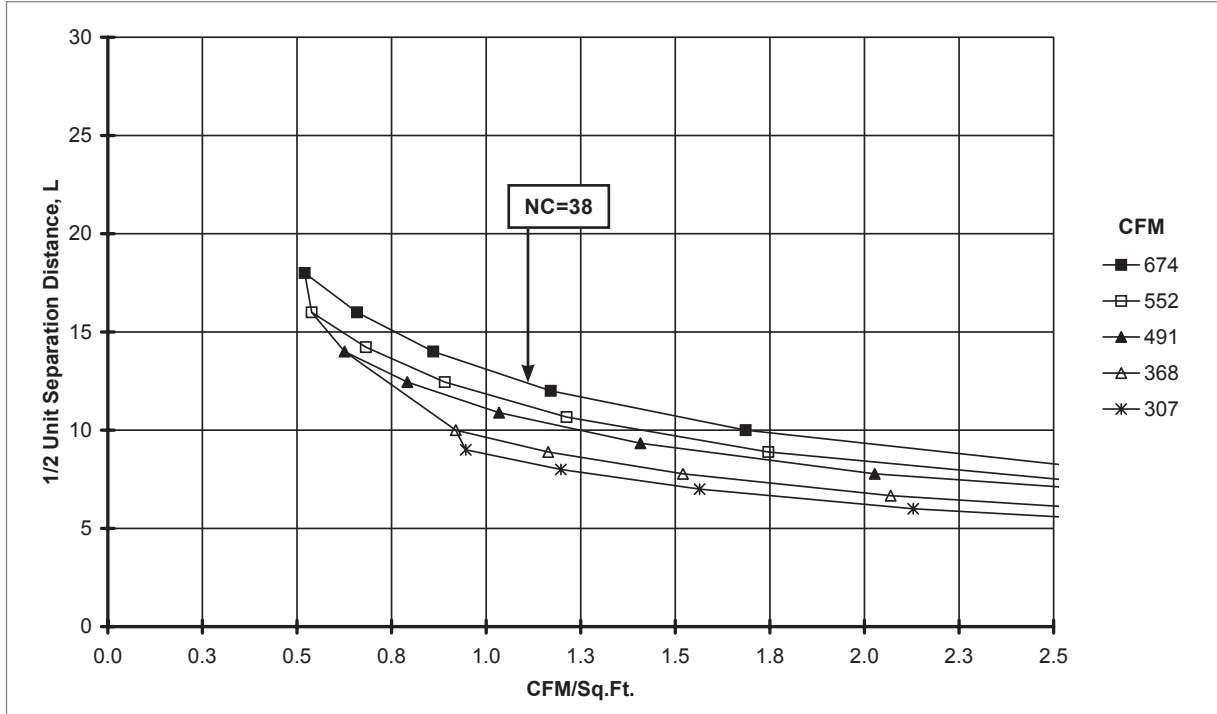


**AIRFLOW VS. NC LEVEL: 6150, 56150 (NO DAMPER)**



PERFORATED FACE DIFFUSERS

6100-6150

**6100, 56100 (Supply) Reference Charts**
**SPACING FOR 80% ADPI: 6100, 56100, 8" NECK, 4-WAY (NO DAMPER)**

**SPACING FOR 80% ADPI: 6100, 56100, 15" NECK, 4-WAY (NO DAMPER)**


NOTES: Charts are at 20 BTUH/ft<sup>2</sup> loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

**6100, 56100 (Supply) Performance Data: Horizontal Throw**
**IP/METRIC DATA: 6100, 56100 (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	2	3	4	5	6	7	
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m							
6"	200	39	0.020	0.022	0 - 1 - 2	-	1.02	19	4.9	5.6	0.1 - 0.2 - 0.7	16	15	12	-	-	-	
	300	59	0.045	0.050	1 - 1 - 4	-	1.52	28	11.1	12.5	0.2 - 0.4 - 1.1	25	24	22	19	12	-	
	400	78	0.079	0.089	1 - 2 - 5	-	2.03	37	19.8	22.3	0.3 - 0.7 - 1.5	31	31	29	27	21	11	
	500	98	0.124	0.140	2 - 3 - 6	18	2.54	46	30.9	34.8	0.5 - 0.9 - 1.9	35	36	35	32	28	21	
	600	118	0.179	0.201	2 - 4 - 7	24	3.05	56	44.5	50.1	0.7 - 1.1 - 2.3	39	41	39	37	34	29	
	700	137	0.243	0.274	3 - 4 - 8	30	3.56	65	60.6	68.2	0.9 - 1.3 - 2.5	42	44	43	41	39	35	
	800	157	0.318	0.358	3 - 5 - 9	35	4.06	74	79.1	89.1	1.0 - 1.5 - 2.7	45	47	46	44	43	41	
	900	177	0.402	0.453	4 - 6 - 9	39	4.57	83	100.2	112.7	1.1 - 1.7 - 2.9	47	50	49	47	47	46	
	950	186	0.448	0.504	4 - 6 - 10	41	4.83	88	111.6	125.6	1.2 - 1.8 - 3.0	48	51	50	49	48	48	
8"	200	70	0.020	0.022	0 - 1 - 3	-	1.02	33	4.9	5.6	0.1 - 0.2 - 1.0	19	17	15	13	-	-	
	300	105	0.045	0.050	1 - 2 - 5	-	1.52	49	11.1	12.5	0.2 - 0.5 - 1.5	28	27	25	24	18	-	
	400	140	0.079	0.089	1 - 3 - 7	15	2.03	66	19.8	22.3	0.4 - 1.0 - 2.0	33	34	32	31	27	17	
	500	174	0.124	0.140	2 - 4 - 8	23	2.54	82	30.9	34.8	0.7 - 1.3 - 2.5	38	39	38	37	34	26	
	600	209	0.179	0.201	3 - 5 - 10	30	3.05	99	44.5	50.1	1.0 - 1.5 - 3.0	42	43	42	41	39	34	
	700	244	0.243	0.274	4 - 6 - 11	35	3.56	115	60.6	68.2	1.2 - 1.8 - 3.4	45	47	46	45	44	40	
	750	262	0.279	0.314	4 - 6 - 12	38	3.81	123	69.6	78.3	1.3 - 1.9 - 3.5	46	48	48	47	46	43	
	800	279	0.318	0.358	4 - 7 - 12	40	4.06	132	79.1	89.1	1.3 - 2.0 - 3.6	48	50	49	49	48	46	
	850	296	0.359	0.404	5 - 7 - 12	42	4.32	140	89.3	100.6	1.4 - 2.1 - 3.7	49	51	51	50	50	49	
10"	200	109	0.020	0.022	0 - 1 - 4	-	1.02	51	4.9	5.6	0.1 - 0.3 - 1.2	21	19	18	17	-	-	
	300	164	0.045	0.050	1 - 2 - 6	-	1.52	77	11.1	12.5	0.3 - 0.7 - 1.9	30	29	28	27	22	-	
	400	218	0.079	0.089	2 - 4 - 8	19	2.03	103	19.8	22.3	0.5 - 1.2 - 2.5	36	36	35	34	31	21	
	450	245	0.101	0.113	2 - 5 - 9	23	2.29	116	25.0	28.2	0.7 - 1.4 - 2.8	38	38	38	37	35	26	
	500	273	0.124	0.140	3 - 5 - 10	27	2.54	129	30.9	34.8	0.8 - 1.6 - 3.1	40	41	40	40	38	30	
	600	327	0.179	0.201	4 - 6 - 12	34	3.05	154	44.5	50.1	1.2 - 1.9 - 3.8	44	45	45	45	44	38	
	650	354	0.210	0.236	4 - 7 - 13	36	3.30	167	52.2	58.8	1.4 - 2.0 - 4.1	46	47	47	47	46	41	
	700	382	0.243	0.274	5 - 7 - 14	39	3.56	180	60.6	68.2	1.5 - 2.2 - 4.2	47	49	49	49	48	44	
	750	409	0.279	0.314	5 - 8 - 14	42	3.81	193	69.6	78.3	1.6 - 2.4 - 4.4	49	50	50	50	51	47	
12"	200	157	0.020	0.022	1 - 1 - 5	-	1.02	74	4.9	5.6	0.2 - 0.4 - 1.4	23	21	20	20	13	-	
	300	235	0.045	0.050	1 - 3 - 7	12	1.52	111	11.1	12.5	0.4 - 0.8 - 2.3	32	30	30	30	25	12	
	400	314	0.079	0.089	2 - 5 - 10	22	2.03	148	19.8	22.3	0.6 - 1.4 - 3.0	37	37	37	37	34	24	
	450	353	0.101	0.113	3 - 6 - 11	27	2.29	167	25.0	28.2	0.8 - 1.7 - 3.4	40	40	40	40	38	29	
	500	392	0.124	0.140	3 - 6 - 12	30	2.54	185	30.9	34.8	1.0 - 1.9 - 3.8	42	42	42	43	41	34	
	550	432	0.150	0.169	4 - 7 - 14	34	2.79	204	37.4	42.1	1.2 - 2.1 - 4.1	44	45	45	45	44	38	
	600	471	0.179	0.201	5 - 7 - 15	37	3.05	222	44.5	50.1	1.4 - 2.3 - 4.5	46	47	47	48	47	41	
	650	510	0.210	0.236	5 - 8 - 16	40	3.30	241	52.2	58.8	1.6 - 2.5 - 4.9	47	49	49	50	50	45	
	700	549	0.243	0.274	6 - 9 - 17	42	3.56	259	60.6	68.2	1.8 - 2.6 - 5.1	49	50	51	51	52	48	
14"	200	214	0.020	0.022	1 - 2 - 7	-	1.02	101	4.9	5.6	0.3 - 0.6 - 2.0	25	22	22	22	16	-	
	300	320	0.045	0.050	2 - 4 - 10	15	1.52	151	11.1	12.5	0.6 - 1.4 - 3.0	33	32	32	32	28	15	
	350	374	0.061	0.068	3 - 6 - 11	20	1.78	176	15.1	17.1	0.8 - 1.7 - 3.5	36	35	35	36	33	21	
	400	427	0.079	0.089	4 - 7 - 13	25	2.03	202	19.8	22.3	1.1 - 2.0 - 4.0	39	39	39	40	37	27	
	450	481	0.101	0.113	4 - 7 - 15	29	2.29	227	25.0	28.2	1.4 - 2.2 - 4.5	41	41	41	43	41	32	
	500	534	0.124	0.140	5 - 8 - 16	33	2.54	252	30.9	34.8	1.7 - 2.5 - 5.0	44	44	44	45	44	36	
	550	588	0.150	0.169	6 - 9 - 17	37	2.79	277	37.4	42.1	1.8 - 2.7 - 5.2	46	46	46	48	47	40	
	600	641	0.179	0.201	7 - 10 - 18	40	3.05	302	44.5	50.1	2.0 - 3.0 - 5.5	47	48	49	50	50	44	
	650	694	0.210	0.236	7 - 11 - 19	43	3.30	328	52.2	58.8	2.2 - 3.2 - 5.7	49	50	51	52	52	47	
15"	200	245	0.020	0.022	1 - 2 - 7	-	1.02	116	4.9	5.6	0.3 - 0.6 - 2.1	25	23	22	23	17	-	
	250	307	0.031	0.035	1 - 3 - 9	-	1.27	145	7.7	8.7	0.4 - 1.0 - 2.7	30	28	28	29	24	-	
	300	368	0.045	0.050	2 - 5 - 10	16	1.52	174	11.1	12.5	0.6 - 1.5 - 3.2	34	32	32	33	29	16	
	350	429	0.061	0.068	3 - 6 - 12	22	1.78	203	15.1	17.1	0.9 - 1.9 - 3.7	37	36	36	37	34	23	
	400	491	0.079	0.089	4 - 7 - 14	26	2.03	231	19.8	22.3	1.1 - 2.1 - 4.3	40	39	39	41	38	28	
	450	552	0.101	0.113	5 - 8 - 16	31	2.29	260	25.0	28.2	1.5 - 2.4 - 4.8	42	42	42	44	42	33	
	500	613	0.124	0.140	6 - 9 - 17	34	2.54	289	30.9	34.8	1.8 - 2.7 - 5.3	44	44	45	46	45	38	
	550	674	0.150	0.169	6 - 10 - 18	38	2.79	318	37.4	42.1	2.0 - 2.9 - 5.6	46	47	47	49	48	42	
	600	736	0.179	0.201	7 - 10 - 19	41	3.05	347	44.5	50.1	2.1 - 3.2 - 5.9	48	49	49	51	51	45	

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<sup>-12</sup> 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: (XXXXX)**

- 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.