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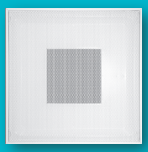
KRUEGER
Excellence in Air Distribution

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.

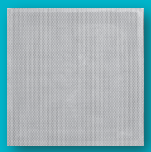
6600, 56600, 6600FR
These perforated supply ceiling diffusers feature face mounted deflectors with a round neck. Aluminum or steel perforated face is available. A fire rated variation is also available.

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.

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Introduction: 6300, 6390 Series

The 6300 series features modular air pattern controllers mounted to the backside of the perforated face and a molded fiberglass backpan prescored for spin in collars (provided by others) to help meet the stocking requirements independent of round duct connection size. The 6300 series exhibit typical isothermal throws of 10' to 13' for 4-way air distribution and 21' to 27' for 1-way air distribution. The vapor barrier created with the fiberglass backpan makes the 6300 series a great choice for ducted return air systems and high humidity environments. Matching return unit is the 6390 series.

MODELS

6300 - Steel Construction, Round Neck, Perforated, Face Mounted Deflectors, Supply Diffuser
6390 - Steel Construction, Square Neck, Perforated Return

FEATURES

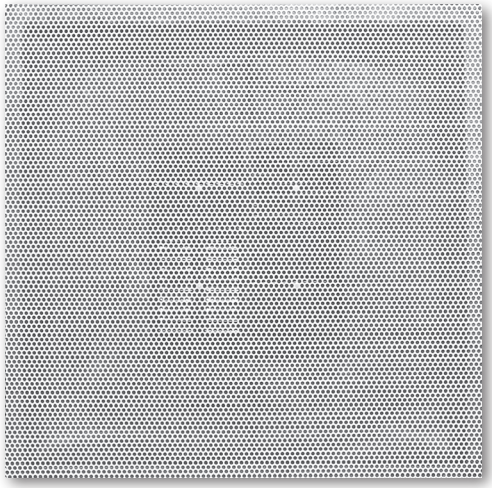
- Prescored fiberglass backpan for round spin-in collars (6" to 16", provided by others).
- Great choice for ducted return air systems.

PANEL SIZE

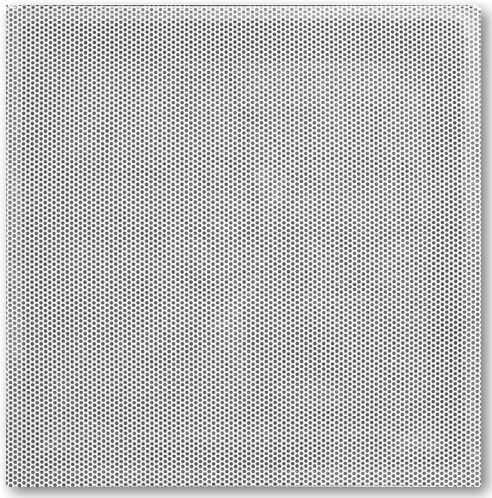
- 24"x24"

FINISHES

- Standard finish is #44 British White face and #35 Black backpan.
- Optional finishes available.



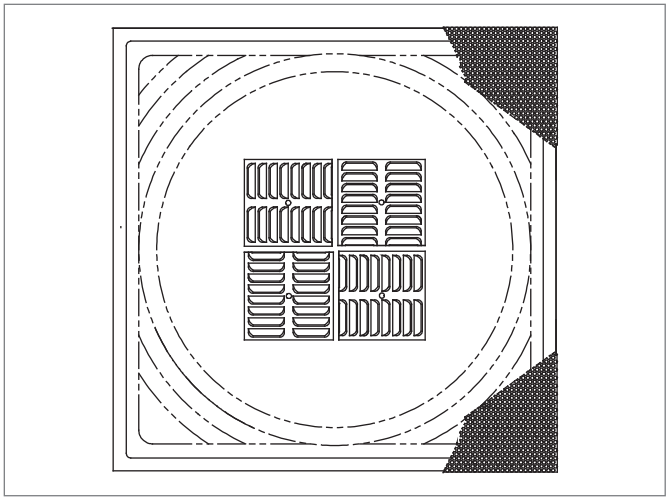
6300 (Supply)



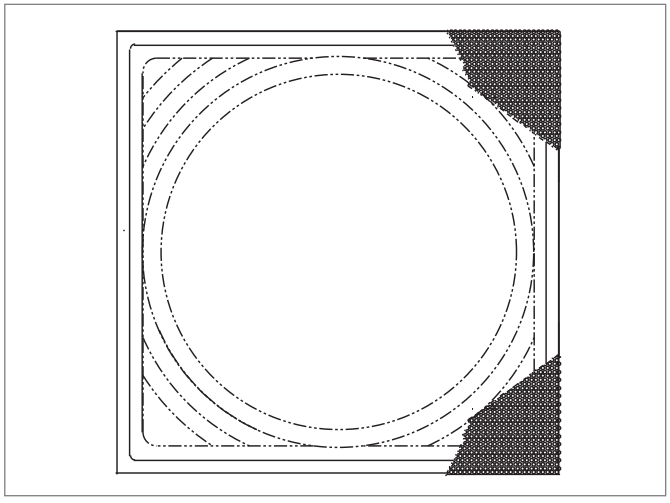
6390 (Return)

6300, 6390 Face Views

6300, SUPPLY FACE VIEW

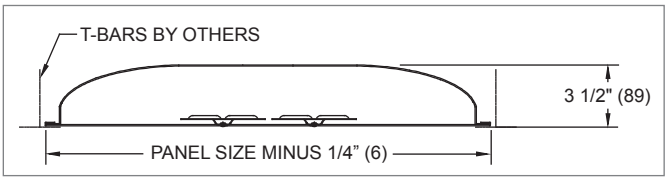


6390, RETURN FACE VIEW

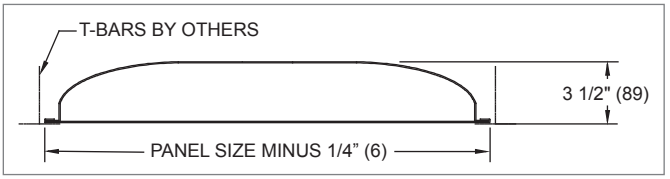


6300, 6390 (Supply/Return) Dimensional Information

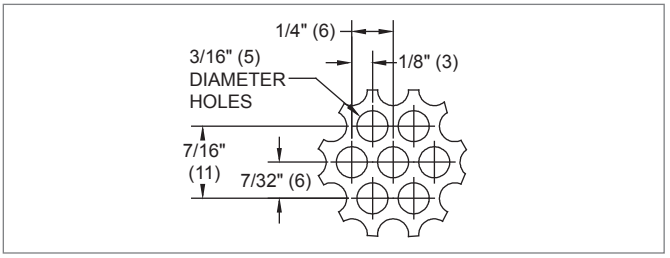
6300, CROSS SECTION, FRAME 23



6390, CROSS SECTION, FRAME 23

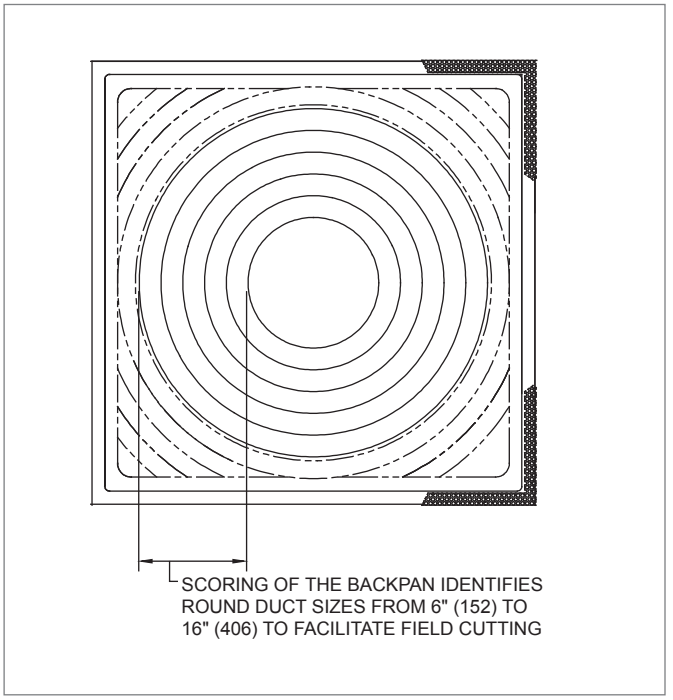


6300, 6390, PERFORATION DETAIL



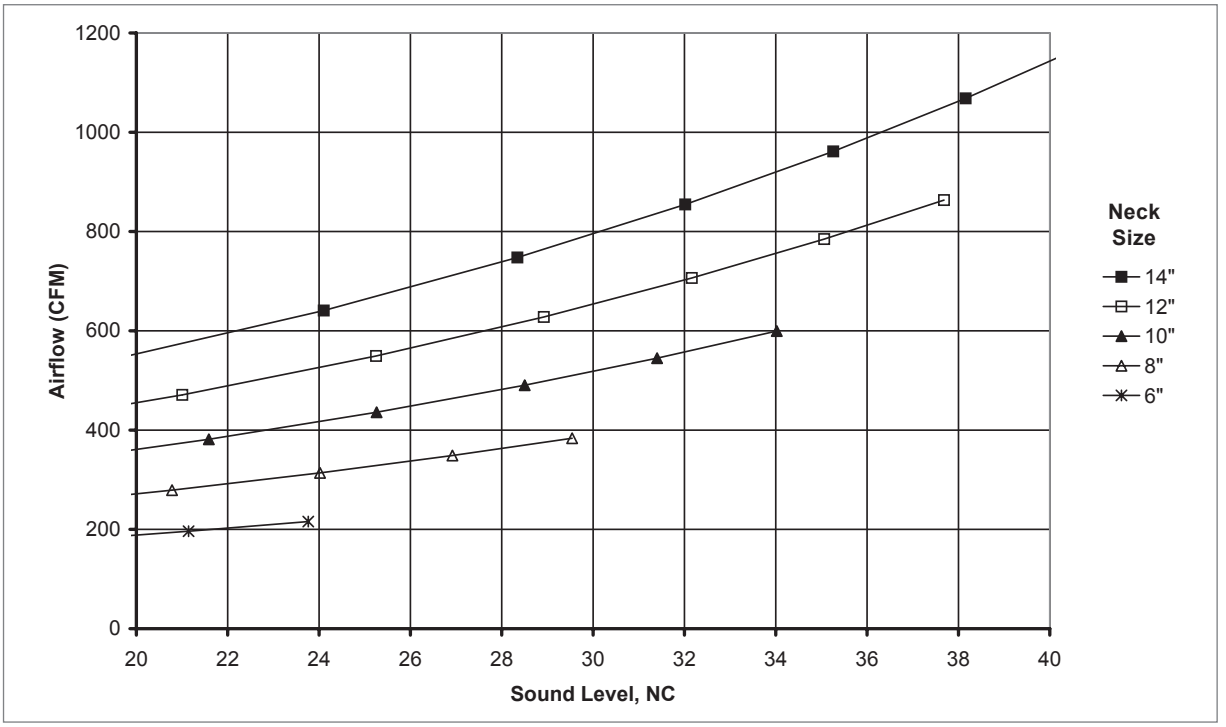
NOTE: Dimensions in parentheses are mm.

6300, 6390, TOP VIEW, BACKPAN SCORING DETAIL



6300 (Supply) Reference Chart

AIRFLOW VS. NC LEVEL: 6300 (NO DAMPER)



6390 (Return) Performance Data

IP/METRIC DATA: 6390, 24"x24" PANEL (NO DAMPER)

	IP Data					Metric Data										
	Neck Vel	Air Flow	Pv	Ps	NC	Neck Vel	Air Flow	Pv	Ps	Octave Band, dB						
	FPM	CFM	"WG	"WG		m/s	L/s	Pa	Pa	2	3	4	5	6	7	
6"	300	59	0.006	-0.006	-	1.52	28	1.4	-1.4	-	-	-	-	-	-	
	400	78	0.010	-0.010	-	2.03	37	2.5	-2.4	12	-	-	-	-	-	
	500	98	0.016	-0.015	-	2.54	46	3.9	-3.8	17	12	-	-	-	-	
	600	118	0.022	-0.022	-	3.05	56	5.6	-5.5	20	16	14	-	-	-	
	700	137	0.031	-0.030	-	3.56	65	7.6	-7.5	23	20	17	-	-	-	
	800	157	0.040	-0.039	-	4.06	74	9.9	-9.8	26	23	20	-	-	-	
	900	177	0.051	-0.050	-	4.57	83	12.6	-12.3	28	25	22	13	-	-	
	1000	196	0.062	-0.061	-	5.08	93	15.5	-15.2	31	27	24	15	-	-	
	1100	216	0.075	-0.074	-	5.59	102	18.8	-18.4	32	29	26	18	-	-	
8"	300	105	0.006	-0.006	-	1.52	49	1.4	-1.4	-	-	-	-	-	-	
	400	140	0.010	-0.010	-	2.03	66	2.5	-2.5	13	-	-	-	-	-	
	500	174	0.016	-0.016	-	2.54	82	3.9	-3.9	17	13	11	-	-	-	
	600	209	0.022	-0.022	-	3.05	99	5.6	-5.6	21	17	15	-	-	-	
	700	244	0.031	-0.031	-	3.56	115	7.6	-7.6	24	20	18	-	-	-	
	800	279	0.040	-0.040	-	4.06	132	9.9	-9.9	27	23	21	11	-	-	
	900	314	0.051	-0.062	-	4.57	148	12.6	-15.5	29	26	23	14	-	-	
	1000	349	0.062	-0.062	-	5.08	165	15.5	-15.5	31	28	25	16	-	-	
	1100	384	0.075	-0.076	-	5.59	181	18.8	-18.8	33	30	27	19	11	-	
10"	300	164	0.006	-0.006	-	1.52	77	1.4	-1.4	-	-	-	-	-	-	
	400	218	0.010	-0.010	-	2.03	103	2.5	-2.5	14	-	-	-	-	-	
	500	273	0.016	-0.016	-	2.54	129	3.9	-4.0	18	13	12	-	-	-	
	600	327	0.022	-0.023	-	3.05	154	5.6	-5.7	22	17	15	-	-	-	
	700	382	0.031	-0.031	-	3.56	180	7.6	-7.8	25	21	18	-	-	-	
	800	436	0.040	-0.041	-	4.06	206	9.9	-10.2	27	23	21	11	-	-	
	900	491	0.051	-0.064	-	4.57	231	12.6	-15.9	30	26	24	14	-	-	
	1000	545	0.062	-0.064	-	5.08	257	15.5	-15.9	32	28	26	17	-	-	
	1100	600	0.075	-0.077	-	5.59	283	18.8	-19.3	34	30	28	19	11	-	
12"	300	235	0.006	-0.006	-	1.52	111	1.4	-1.5	-	-	-	-	-	-	
	400	314	0.010	-0.011	-	2.03	148	2.5	-2.6	14	-	-	-	-	-	
	500	392	0.016	-0.016	-	2.54	185	3.9	-4.1	19	14	12	-	-	-	
	600	471	0.022	-0.024	-	3.05	222	5.6	-5.9	22	18	16	-	-	-	
	700	549	0.031	-0.032	-	3.56	259	7.6	-8.0	25	21	19	-	-	-	
	800	628	0.040	-0.042	-	4.06	296	9.9	-10.5	28	24	22	12	-	-	
	900	706	0.051	-0.066	-	4.57	333	12.6	-16.4	30	26	24	15	-	-	
	1000	785	0.062	-0.066	-	5.08	370	15.5	-16.4	32	29	26	18	-	-	
	1100	863	0.075	-0.080	-	5.59	407	18.8	-19.8	34	31	28	20	11	-	
14"	300	320	0.006	-0.006	-	1.52	151	1.4	-1.5	-	-	-	-	-	-	
	400	427	0.010	-0.011	-	2.03	202	2.5	-2.7	15	-	-	-	-	-	
	500	534	0.016	-0.017	-	2.54	252	3.9	-4.2	19	14	12	-	-	-	
	600	641	0.022	-0.024	-	3.05	302	5.6	-6.1	23	18	16	-	-	-	
	700	748	0.031	-0.033	-	3.56	353	7.6	-8.3	26	21	19	-	-	-	
	800	855	0.040	-0.043	-	4.06	403	9.9	-10.8	28	24	22	13	-	-	
	900	961	0.051	-0.068	-	4.57	454	12.6	-16.9	31	27	25	15	-	-	
	1000	1068	0.062	-0.068	-	5.08	504	15.5	-16.9	33	29	27	18	-	-	
	1100	1175	0.075	-0.082	-	5.59	555	18.8	-20.5	35	31	29	21	11	-	
16"	300	419	0.006	-0.006	-	1.52	198	1.4	-1.6	-	-	-	-	-	-	
	400	558	0.010	-0.011	-	2.03	263	2.5	-2.8	15	-	-	-	-	-	
	500	698	0.016	-0.018	-	2.54	329	3.9	-4.4	19	14	13	-	-	-	
	600	837	0.022	-0.025	-	3.05	395	5.6	-6.3	23	18	17	-	-	-	
	700	977	0.031	-0.035	-	3.56	461	7.6	-8.6	26	21	20	-	-	-	
	800	1116	0.040	-0.045	-	4.06	527	9.9	-11.2	29	24	22	13	-	-	
	900	1256	0.051	-0.070	-	4.57	593	12.6	-17.5	31	27	25	16	-	-	
	1000	1395	0.062	-0.070	-	5.08	658	15.5	-17.5	33	29	27	19	-	-	
	1100	1535	0.075	-0.085	-	5.59	724	18.8	-21.2	35	31	29	21	11	-	

NOTES: SUPPLY DIFFUSERS
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, re 10^{-12} Watts. Dash in space denotes a NC 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 1-Way Throw is for [Total CFM] CFM per side (L/s). The throw values given for 2-Way Throw is for [Total CFM/2] CFM per side (L/s). The throw values given for 3-Way Throw is for [Total CFM/3] CFM per side (L/s). 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.

NOTES: RETURNS
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.

6300, 6390 (Supply/Return) Suggested Specification & Configuration

1. **SERIES: (XXXX)**
   6300 - Perforated, Prescored for Round Neck with Face Mounted Deflectors and Fiberglass Backpan, Steel Face Supply Diffuser
   6390 - Perforated, Prescored, Fiberglass Backpan, Steel Face Return Diffuser

2. **PATTERN: (XX)**
   04 - 4-Way
   90 - Return

3. **FRAME: (XXX)**
   F23 - Lay-in T-Bar

4. **PANEL: (XX)x(XX)**
   24”x24”

5. **FINISH: (XX)**
   03 - Black Interior and Deflectors; British White Face

6300
The perforated face supply diffuser shall be Krueger model 6300 with a steel 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 constructed of fiberglass with an R value of 4.2 and provide prescored cutouts for easy installation of the spin-in duct connector.

The diffuser shall have 4 separate pattern deflectors mounted on the back of the perforated face and be field adjustable (after spin-in is attached) to provide vertical or 1, 2, 3, or 4-way horizontal projection of air in to the room. The perforated face must be attached to the backpan and non-removable.

6390
The perforated face return diffuser shall be Krueger model 6390 with a steel 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 constructed of fiberglass with an R value of 4.2 and provide prescored cutouts for easy installation of the spin-in duct connector.

The return diffuser shall match the Krueger model 6300 supply diffuser in appearance. The perforated face must be attached to the backpan and non-removable.

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 (on the perforated face only) 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.

SAMPLE CONFIGURATION: 6300 - 04 - F23 - 24x24 - 03