

	<p>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.</p>		<p>6490, 56490 These perforated ceiling returns feature a square neck. Aluminum or steel perforated face is available.</p>
	<p>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.</p>		<p>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.</p>
	<p>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.</p>		<p>6690, 56690 These perforated ceiling returns feature a round neck. Aluminum or steel perforated face is available.</p>
	<p>6300 This perforated supply, ceiling diffuser features face mounted deflectors and a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>		<p>6790, 56790 These aluminum or steel perforated screen ceiling panels with no backpan are great for non-ducted return or exhaust applications.</p>
	<p>6390 This perforated return features a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>		<p>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.</p>
	<p>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.</p>		<p>1190, 51190 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

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

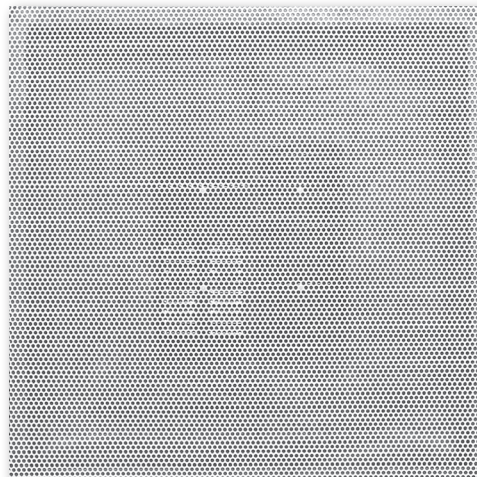
- Prescored fiberglass backpan for round spin-in collars (6" to 16", provided by others).
- Great choice for ducted return air systems.

PANEL SIZE

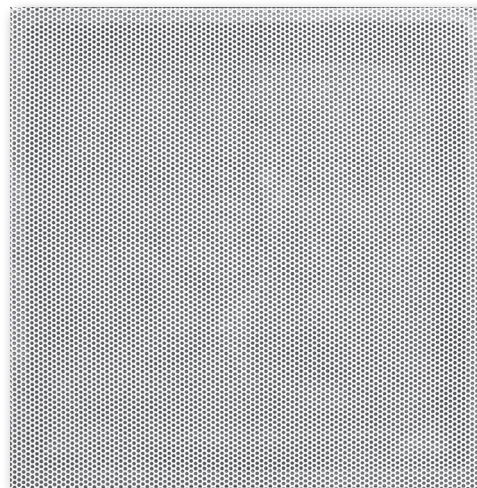
- 24"x24"

FINISHES

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



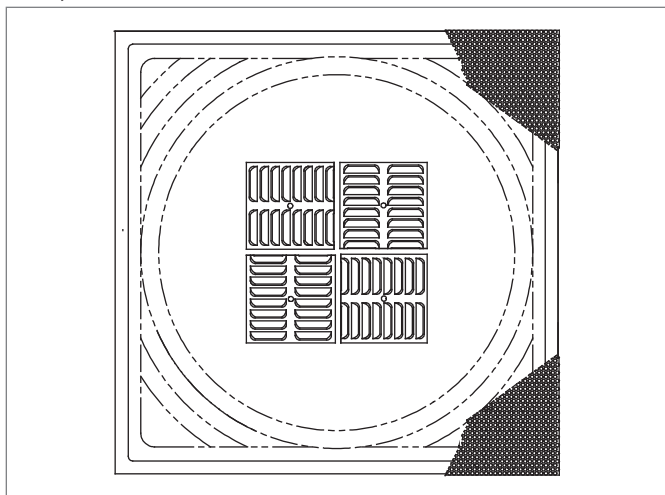
6300 (Supply)



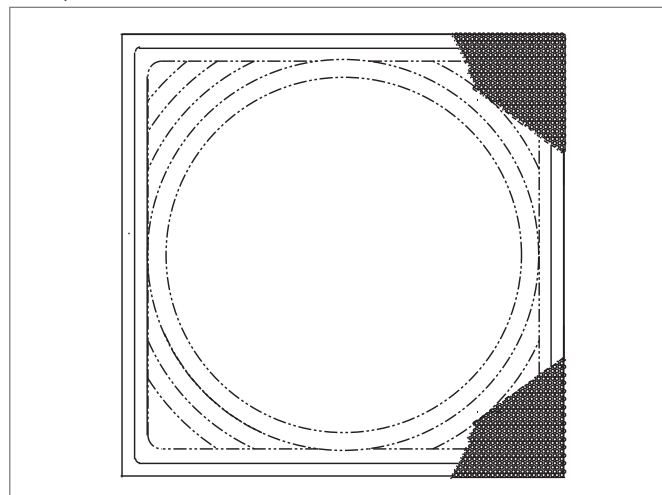
6390 (Return)

6300, 6390 Face Views

6300, SUPPLY FACE VIEW

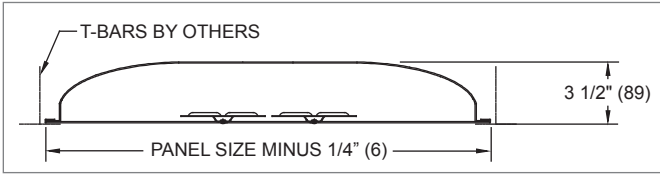


6390, RETURN FACE VIEW

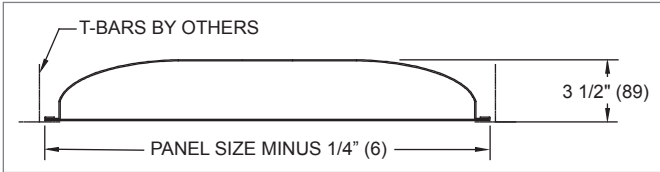


6300, 6390 (Supply/Return) Dimensional Information

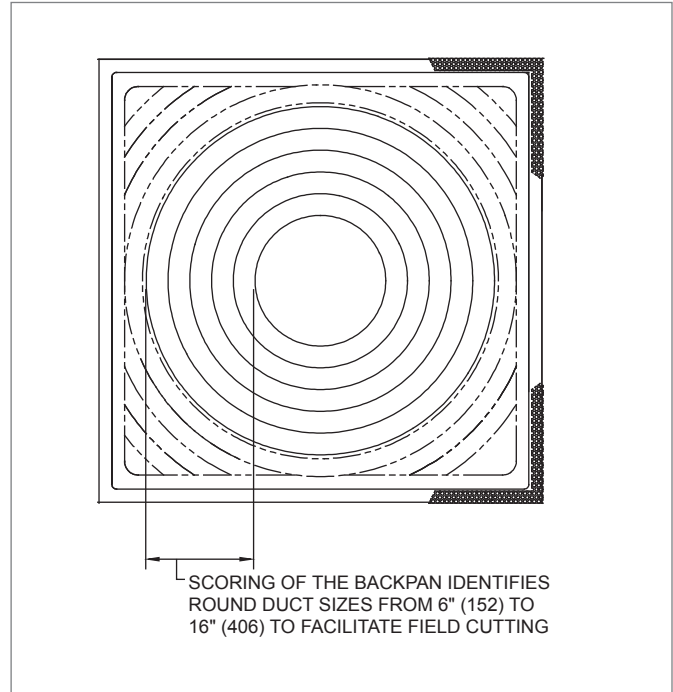
6300, CROSS SECTION, FRAME 23



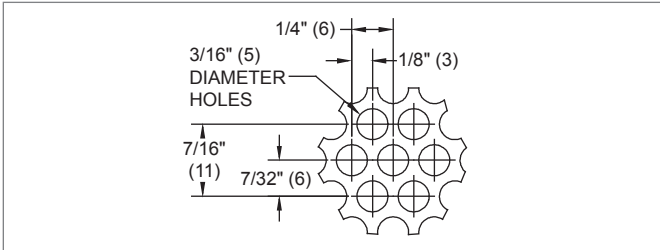
6390, CROSS SECTION, FRAME 23



6300, 6390, TOP VIEW, BACKPAN SCORING DETAIL



6300, 6390, PERFORATION DETAIL

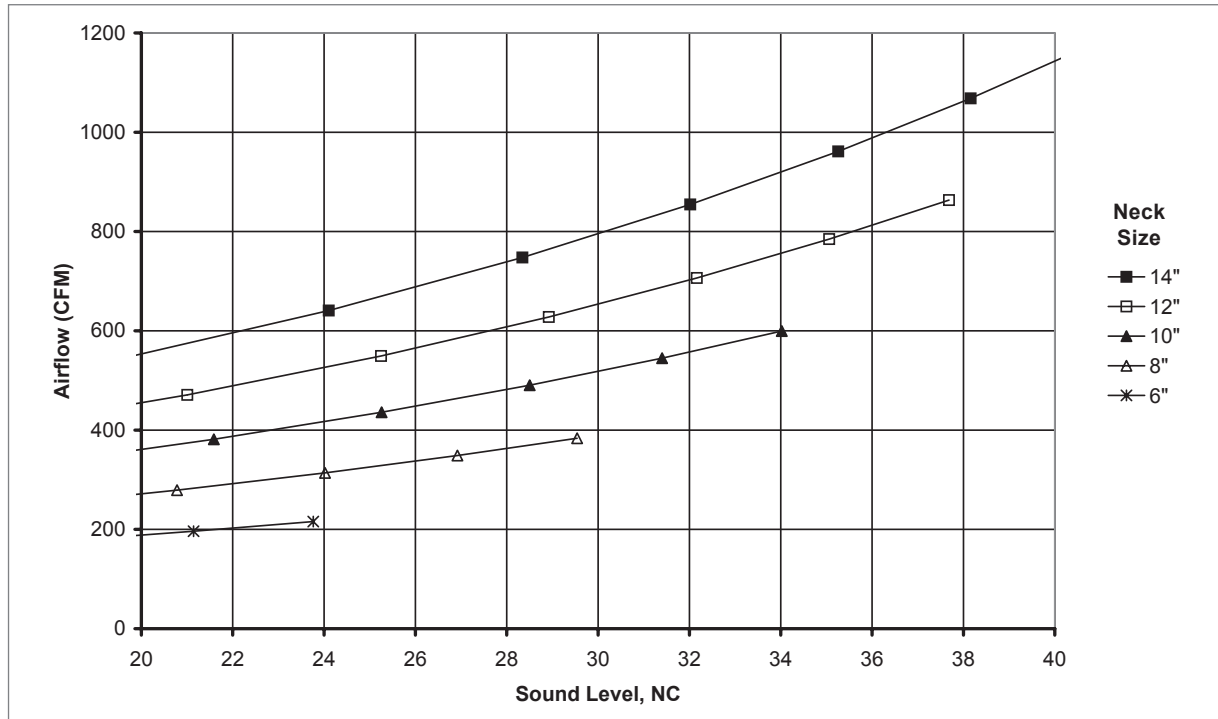


NOTE: Dimensions in parentheses are mm.

PERFORATED FACE DIFFUSERS

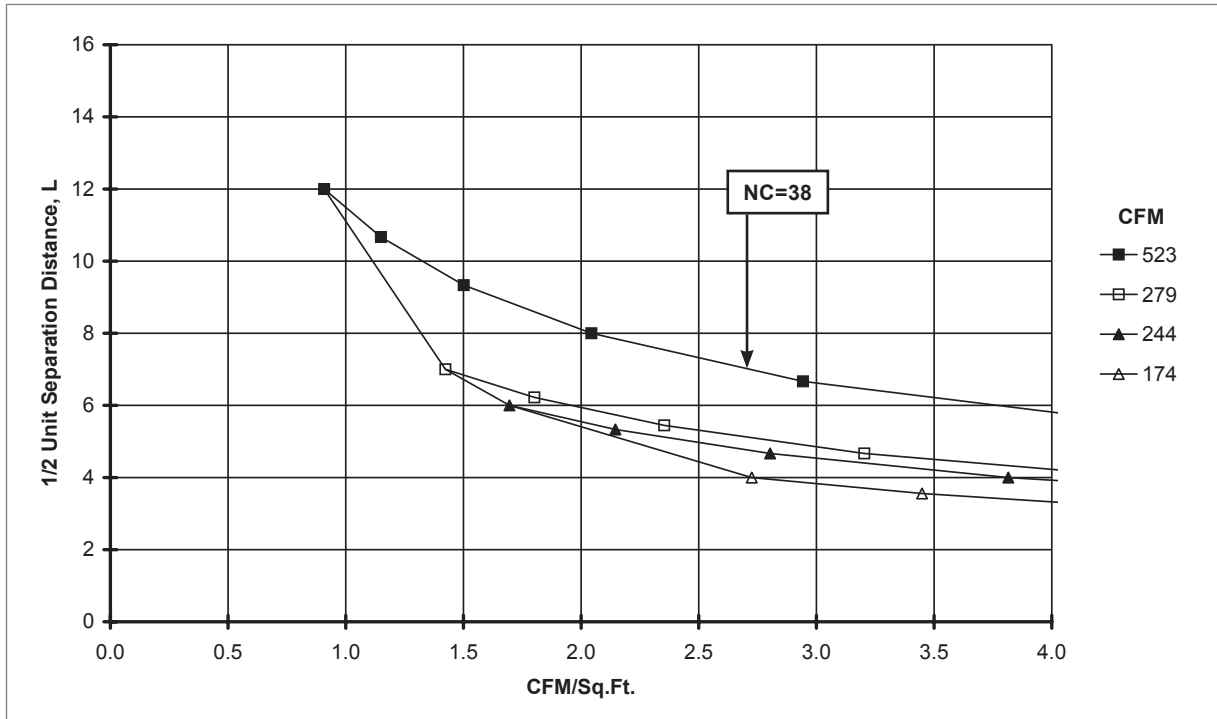
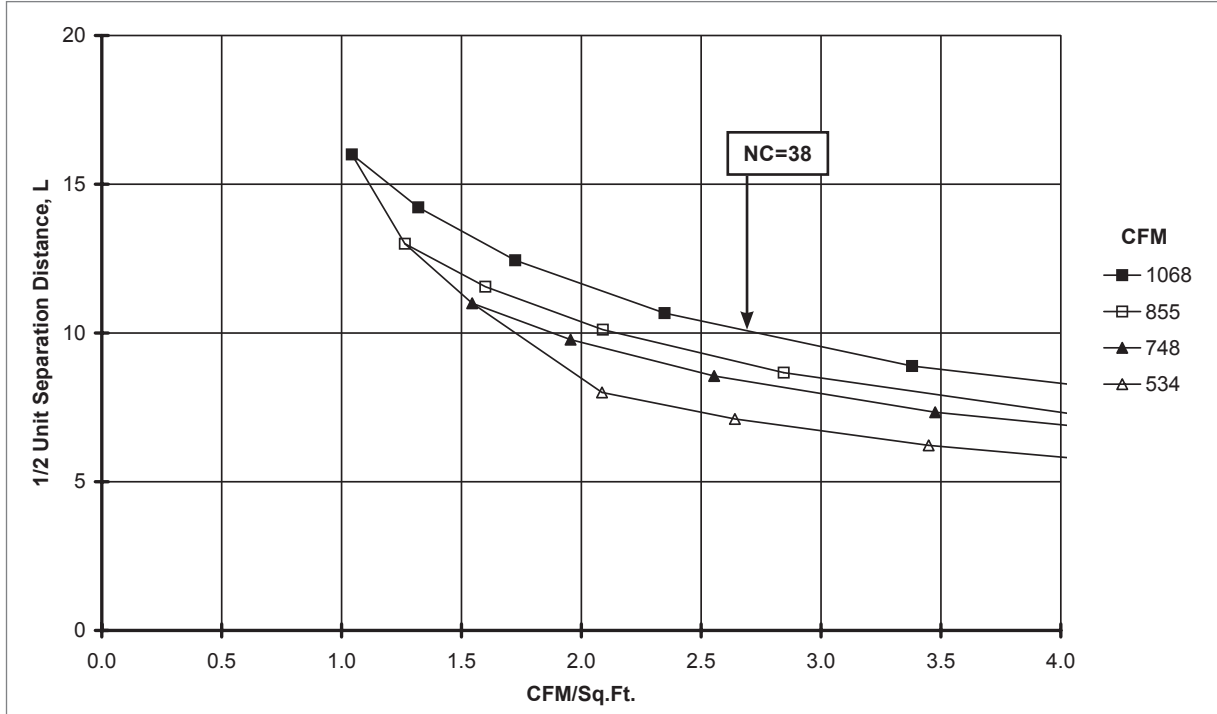
6300 (Supply) Reference Chart

AIRFLOW VS. NC LEVEL: 6300 (NO DAMPER)



6300-16300

© KRUEGER 2012

6300 (Supply) Reference Charts
SPACING FOR 80% ADPI: 6300, 24"x24" PANEL, 8" NECK, 4-WAY (NO DAMPER)

SPACING FOR 80% ADPI: 6300, 24"x24" PANEL, 14" 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.

6300 (Supply) Performance Data: Horizontal Throw
IP/METRIC DATA: 6300, 24"x24" PANEL, 1 - 3-WAY (NO DAMPER)

	IP Data					Metric Data				
	Neck Vel	Air Flow	1-Way Throw	2-Way Throw	3-Way Throw	Neck Vel	Air Flow	1-Way Throw	2-Way Throw	3-Way Throw
	FPM	CFM	ft	ft	ft	m/s	L/s	m	m	m
6"	300	59	0 - 1 - 3	0 - 0 - 2	0 - 0 - 2	1.52	28	0.1 - 0.2 - 0.9	0.1 - 0.1 - 0.6	0.1 - 0.1 - 0.5
	400	78	1 - 1 - 5	0 - 1 - 3	0 - 1 - 3	2.03	37	0.2 - 0.4 - 1.6	0.1 - 0.2 - 1.0	0.1 - 0.2 - 0.8
	500	98	1 - 2 - 6	1 - 1 - 5	0 - 1 - 4	2.54	46	0.3 - 0.6 - 2.0	0.2 - 0.4 - 1.5	0.1 - 0.3 - 1.2
	600	118	1 - 3 - 8	1 - 2 - 6	1 - 2 - 5	3.05	56	0.4 - 0.9 - 2.4	0.2 - 0.6 - 1.8	0.2 - 0.5 - 1.4
	700	137	2 - 4 - 9	1 - 3 - 7	1 - 2 - 5	3.56	65	0.6 - 1.2 - 2.8	0.3 - 0.8 - 2.2	0.3 - 0.6 - 1.6
	800	157	2 - 5 - 10	1 - 3 - 8	1 - 3 - 6	4.06	74	0.7 - 1.6 - 3.1	0.4 - 1.0 - 2.4	0.4 - 0.8 - 1.9
	900	177	3 - 6 - 12	2 - 4 - 9	2 - 3 - 7	4.57	83	0.9 - 1.8 - 3.5	0.6 - 1.3 - 2.6	0.5 - 1.0 - 2.1
	1000	196	4 - 6 - 13	2 - 5 - 9	2 - 4 - 8	5.08	93	1.1 - 2.0 - 3.9	0.7 - 1.5 - 2.7	0.6 - 1.2 - 2.3
	1100	216	5 - 7 - 14	3 - 6 - 9	2 - 4 - 8	5.59	102	1.4 - 2.2 - 4.3	0.8 - 1.7 - 2.9	0.7 - 1.3 - 2.6
8"	300	105	0 - 1 - 4	0 - 1 - 2	0 - 1 - 2	1.52	49	0.1 - 0.3 - 1.2	0.1 - 0.2 - 0.7	0.1 - 0.2 - 0.6
	400	140	1 - 2 - 7	0 - 1 - 4	0 - 1 - 4	2.03	66	0.2 - 0.5 - 2.1	0.1 - 0.3 - 1.3	0.1 - 0.3 - 1.1
	500	174	1 - 3 - 9	1 - 2 - 7	1 - 1 - 5	2.54	82	0.4 - 0.8 - 2.6	0.2 - 0.5 - 2.1	0.2 - 0.4 - 1.6
	600	209	2 - 4 - 10	1 - 2 - 8	1 - 2 - 6	3.05	99	0.5 - 1.2 - 3.1	0.3 - 0.7 - 2.5	0.3 - 0.6 - 1.9
	700	244	2 - 5 - 12	1 - 3 - 9	1 - 3 - 7	3.56	115	0.7 - 1.7 - 3.7	0.5 - 1.0 - 2.9	0.4 - 0.8 - 2.2
	800	279	3 - 7 - 14	2 - 4 - 11	2 - 4 - 8	4.06	132	1.0 - 2.1 - 4.2	0.6 - 1.3 - 3.3	0.5 - 1.1 - 2.5
	900	314	4 - 8 - 16	2 - 6 - 11	2 - 5 - 9	4.57	148	1.2 - 2.4 - 4.7	0.7 - 1.7 - 3.5	0.6 - 1.4 - 2.8
	1000	349	5 - 9 - 17	3 - 7 - 12	3 - 5 - 10	5.08	165	1.5 - 2.6 - 5.2	0.9 - 2.1 - 3.6	0.8 - 1.6 - 3.1
	1100	384	6 - 9 - 19	4 - 7 - 13	3 - 6 - 11	5.59	181	1.8 - 2.9 - 5.8	1.1 - 2.3 - 3.8	0.9 - 1.7 - 3.4
10"	300	164	1 - 1 - 5	0 - 1 - 3	0 - 1 - 3	1.52	77	0.2 - 0.4 - 1.5	0.1 - 0.2 - 0.9	0.1 - 0.2 - 0.8
	400	218	1 - 2 - 9	1 - 1 - 5	1 - 1 - 5	2.03	103	0.3 - 0.7 - 2.6	0.2 - 0.4 - 1.7	0.2 - 0.3 - 1.4
	500	273	2 - 3 - 11	1 - 2 - 8	1 - 2 - 6	2.54	129	0.5 - 1.1 - 3.3	0.3 - 0.6 - 2.6	0.2 - 0.5 - 2.0
	600	327	2 - 5 - 13	1 - 3 - 10	1 - 3 - 8	3.05	154	0.7 - 1.5 - 3.9	0.4 - 0.9 - 3.1	0.3 - 0.8 - 2.3
	700	382	3 - 7 - 15	2 - 4 - 12	2 - 3 - 9	3.56	180	0.9 - 2.1 - 4.6	0.6 - 1.3 - 3.6	0.5 - 1.1 - 2.7
	800	436	4 - 9 - 17	2 - 5 - 13	2 - 5 - 10	4.06	206	1.2 - 2.6 - 5.2	0.7 - 1.7 - 4.1	0.6 - 1.4 - 3.1
	900	491	5 - 10 - 19	3 - 7 - 14	3 - 6 - 12	4.57	231	1.5 - 3.0 - 5.9	0.9 - 2.1 - 4.3	0.8 - 1.7 - 3.5
	1000	545	6 - 11 - 22	4 - 8 - 15	3 - 6 - 13	5.08	257	1.9 - 3.3 - 6.6	1.2 - 2.6 - 4.6	1.0 - 2.0 - 3.9
	1100	600	8 - 12 - 24	5 - 9 - 16	4 - 7 - 14	5.59	283	2.3 - 3.6 - 7.2	1.4 - 2.8 - 4.8	1.2 - 2.1 - 4.3
12"	300	235	1 - 2 - 6	0 - 1 - 4	0 - 1 - 3	1.52	111	0.2 - 0.5 - 1.8	0.1 - 0.3 - 1.1	0.1 - 0.2 - 0.9
	400	314	1 - 3 - 10	1 - 2 - 7	1 - 1 - 5	2.03	148	0.4 - 0.8 - 3.1	0.2 - 0.5 - 2.0	0.2 - 0.4 - 1.6
	500	392	2 - 4 - 13	1 - 3 - 10	1 - 2 - 8	2.54	185	0.6 - 1.3 - 3.9	0.3 - 0.8 - 3.1	0.3 - 0.6 - 2.3
	600	471	3 - 6 - 16	2 - 4 - 12	1 - 3 - 9	3.05	222	0.8 - 1.8 - 4.7	0.5 - 1.1 - 3.7	0.4 - 0.9 - 2.8
	700	549	4 - 8 - 18	2 - 5 - 14	2 - 4 - 11	3.56	259	1.1 - 2.5 - 5.5	0.7 - 1.5 - 4.3	0.6 - 1.3 - 3.3
	800	628	5 - 10 - 21	3 - 7 - 16	2 - 5 - 12	4.06	296	1.4 - 3.1 - 6.3	0.9 - 2.0 - 4.9	0.7 - 1.6 - 3.7
	900	706	6 - 12 - 23	4 - 8 - 17	3 - 7 - 14	4.57	333	1.8 - 3.5 - 7.1	1.1 - 2.5 - 5.2	0.9 - 2.1 - 4.2
	1000	785	7 - 13 - 26	5 - 10 - 18	4 - 8 - 15	5.08	370	2.3 - 3.9 - 7.9	1.4 - 3.1 - 5.5	1.1 - 2.3 - 4.7
	1100	863	9 - 14 - 28	6 - 11 - 19	5 - 8 - 17	5.59	407	2.7 - 4.3 - 8.7	1.7 - 3.4 - 5.7	1.4 - 2.6 - 5.2
14"	300	320	1 - 3 - 10	1 - 2 - 6	1 - 1 - 5	1.52	151	0.3 - 0.8 - 3.1	0.2 - 0.5 - 1.9	0.2 - 0.4 - 1.6
	400	427	2 - 4 - 14	1 - 3 - 11	1 - 2 - 8	2.03	202	0.6 - 1.4 - 4.1	0.4 - 0.8 - 3.2	0.3 - 0.7 - 2.5
	500	534	3 - 7 - 17	2 - 4 - 13	2 - 4 - 10	2.54	252	0.9 - 2.1 - 5.2	0.6 - 1.3 - 4.1	0.5 - 1.1 - 3.1
	600	641	4 - 10 - 20	3 - 6 - 16	2 - 5 - 12	3.05	302	1.4 - 3.1 - 6.2	0.8 - 1.9 - 4.9	0.7 - 1.6 - 3.7
	700	748	6 - 12 - 24	4 - 8 - 18	3 - 7 - 14	3.56	353	1.9 - 3.6 - 7.3	1.1 - 2.6 - 5.3	0.9 - 2.1 - 4.3
	800	855	8 - 14 - 27	5 - 11 - 19	4 - 8 - 16	4.06	403	2.4 - 4.1 - 8.3	1.5 - 3.2 - 5.7	1.2 - 2.5 - 4.9
	900	961	10 - 15 - 31	6 - 12 - 20	5 - 9 - 18	4.57	454	3.1 - 4.7 - 9.3	1.9 - 3.6 - 6.1	1.6 - 2.8 - 5.5
	1000	1068	11 - 17 - 34	8 - 13 - 21	6 - 10 - 20	5.08	504	3.5 - 5.2 - 10.4	2.3 - 4.1 - 6.4	1.9 - 3.1 - 6.2
	1100	1175	13 - 19 - 38	9 - 15 - 22	7 - 11 - 22	5.59	555	3.8 - 5.7 - 11.4	2.8 - 4.5 - 6.7	2.3 - 3.4 - 6.8
16"	300	419	1 - 3 - 12	1 - 2 - 7	1 - 1 - 6	1.52	198	0.4 - 0.9 - 3.5	0.2 - 0.5 - 2.2	0.2 - 0.4 - 1.8
	400	558	2 - 5 - 16	1 - 3 - 12	1 - 3 - 9	2.03	263	0.7 - 1.6 - 4.7	0.4 - 1.0 - 3.7	0.4 - 0.8 - 2.8
	500	698	4 - 8 - 19	2 - 5 - 15	2 - 4 - 12	2.54	329	1.1 - 2.4 - 5.9	0.7 - 1.5 - 4.6	0.5 - 1.2 - 3.5
	600	837	5 - 12 - 23	3 - 7 - 18	3 - 6 - 14	3.05	395	1.6 - 3.5 - 7.1	1.0 - 2.2 - 5.6	0.8 - 1.8 - 4.2
	700	977	7 - 14 - 27	4 - 10 - 20	4 - 8 - 16	3.56	461	2.1 - 4.1 - 8.3	1.3 - 2.9 - 6.1	1.1 - 2.4 - 4.9
	800	1116	9 - 16 - 31	6 - 12 - 21	5 - 9 - 19	4.06	527	2.8 - 4.7 - 9.5	1.7 - 3.7 - 6.5	1.4 - 2.8 - 5.6
	900	1256	12 - 18 - 35	7 - 14 - 23	6 - 10 - 21	4.57	593	3.5 - 5.3 - 10.7	2.2 - 4.2 - 6.9	1.8 - 3.2 - 6.3
	1000	1395	13 - 19 - 39	9 - 15 - 24	7 - 12 - 23	5.08	658	3.9 - 5.9 - 11.8	2.7 - 4.6 - 7.3	2.2 - 3.5 - 7.0
	1100	1535	14 - 21 - 43	11 - 17 - 25	8 - 13 - 25	5.59	724	4.3 - 6.5 - 13.0	3.2 - 5.1 - 7.7	2.6 - 3.9 - 7.8

PERFORATED FACE DIFFUSERS

6300

NOTE: See page C1-50 for notes.

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.