
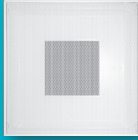




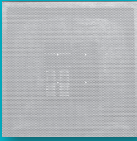

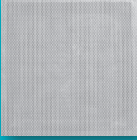





| | | | |
|---|--|---|--|
|  | <p>6100, 6150 56100, 56150 These perforated supply ceiling diffusers feature a neck mounted rotatable core with either a round or square neck. Aluminum or steel perforated face is available.</p> |  | <p>6490, 56490 These perforated ceiling returns feature a square neck. 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> |

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1100, 51100 (Supply)

1190, 51190 (Return)

| | |
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Introduction: 6790, 56790 Series

The 6790/56790 series perforated return panel is designed for non-ducted return or exhaust applications. This panel does not feature a backpan and is applicable for lay-in type ceilings. This series compliments the 6000 supply diffusers to maintain a consistent appearance within the space.

MODELS

6790 - Steel Perforated Return Panel
 56790 - Aluminum Perforated Return Panel

FEATURES

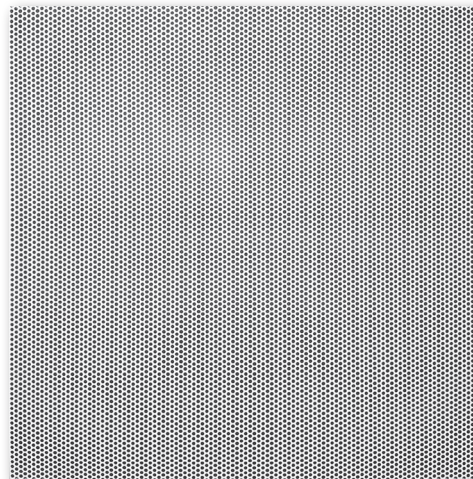
- Matches 6000 Series supply diffusers in appearance.
- Great choice for non-ducted return air systems.

PANEL SIZES

- 12"x12"
- 12"x24"
- 12"x48"
- 16"x16" (6790 Only)
- 20"x20" (6790 Only)
- 24"x24"
- 24"x48"

FINISHES

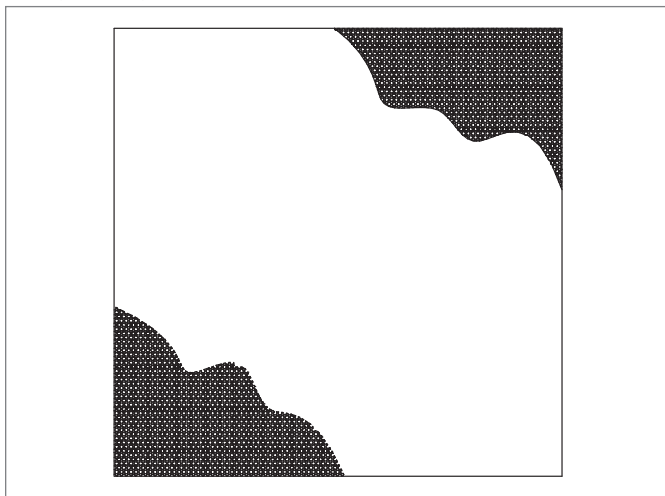
- Standard finish is #44 British White.
- Optional finishes available.



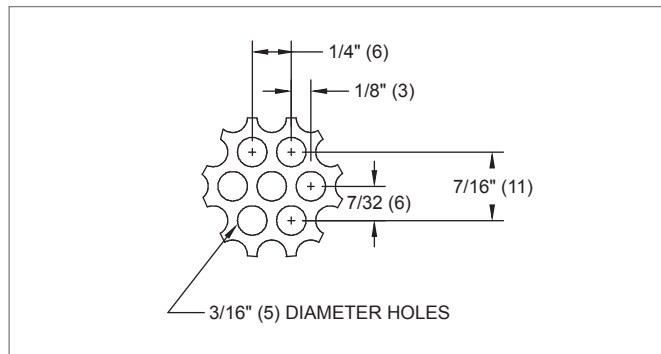
6790

6790, 56790 (Return) Dimensional Information

6790, 56790, FACE VIEW



6790, 56790, PERFORATION DETAIL

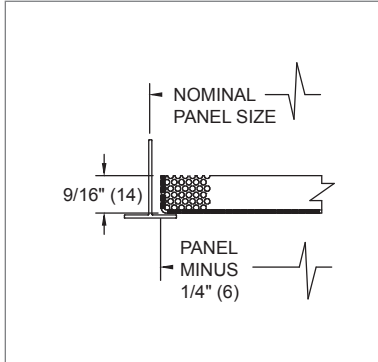


NOTE: Dimensions in parentheses are mm.

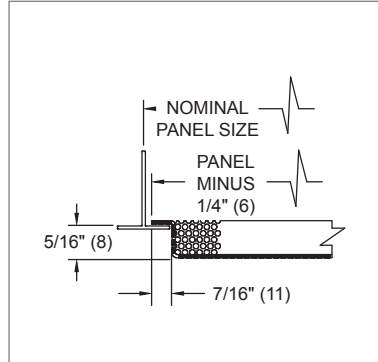
6790, 56790 | Perforated Return Panel

6790, 56790 (Return) Frame Styles

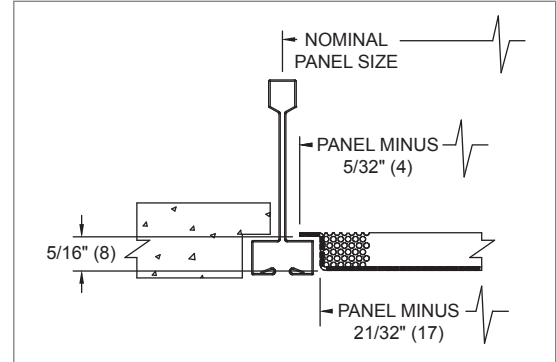
**6790, 56790,
FRAME 23, LAY-IN T-BAR**



**6790, 56790,
FRAME 30, DROP FACE**



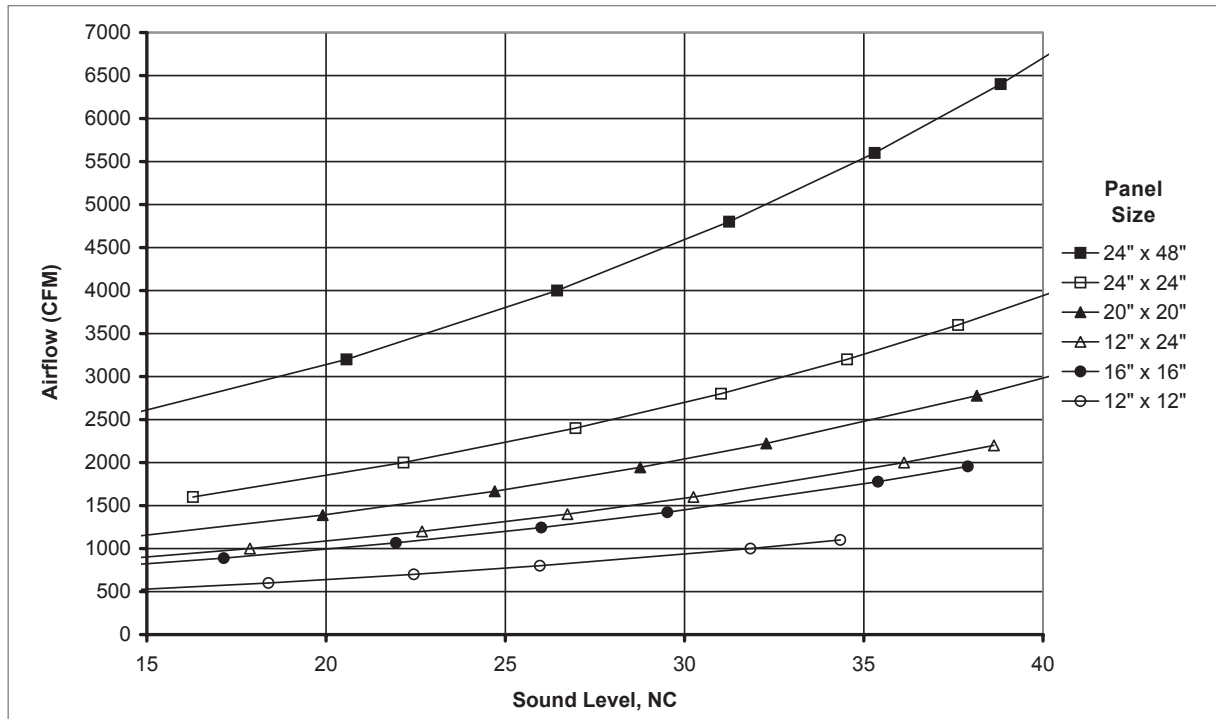
**6790, 56790,
FRAME 98, NARROW-T**



NOTE: Dimensions in parentheses are mm.

6790, 56790 (Return) Reference Charts

AIRFLOW VS. NC LEVEL: 6790, 56790 (NO DAMPER)



PERFORATED FACE DIFFUSERS

6
7
9
0
-
5
6
7
9
0

6790, 56790 (Return) Performance Data
IP/METRIC DATA: 6790, 56790

| | IP Data | | | | NC | Metric Data | | | | Octave Band, dB | | | | | | |
|-----------|----------|----------|--------|--------|------|-------------|----------|-------|-------|-----------------|----|----|----|----|----|--|
| | Neck Vel | Air Flow | Pv | Ps | | Neck Vel | Air Flow | Pv | Ps | 2 | 3 | 4 | 5 | 6 | 7 | |
| | FPM | CFM | "WG | "WG | | m/s | L/s | Pa | Pa | | | | | | | |
| 12" x 12" | 200 | 200 | 0.003 | -0.013 | - | 1.02 | 94 | 0.6 | -3.2 | 44 | 14 | - | - | - | - | |
| | 300 | 300 | 0.006 | -0.029 | - | 1.52 | 142 | 1.4 | -7.1 | 46 | 20 | 11 | - | - | - | |
| | 400 | 400 | 0.010 | -0.051 | - | 2.03 | 189 | 2.5 | -12.7 | 47 | 24 | 17 | 15 | 11 | - | |
| | 500 | 500 | 0.016 | -0.079 | 14 | 2.54 | 236 | 3.9 | -19.8 | 48 | 28 | 22 | 20 | 17 | - | |
| | 600 | 600 | 0.022 | -0.114 | 18 | 3.05 | 283 | 5.6 | -28.5 | 49 | 31 | 26 | 24 | 22 | 12 | |
| | 700 | 700 | 0.031 | -0.156 | 22 | 3.56 | 330 | 7.6 | -38.8 | 50 | 33 | 29 | 27 | 26 | 19 | |
| | 800 | 800 | 0.040 | -0.203 | 26 | 4.06 | 378 | 9.9 | -50.7 | 51 | 35 | 31 | 30 | 30 | 24 | |
| | 1000 | 1000 | 0.062 | -0.318 | 32 | 5.08 | 472 | 15.5 | -79.2 | 52 | 39 | 36 | 35 | 36 | 33 | |
| 1100 | 1100 | 0.075 | -0.385 | 34 | 5.59 | 519 | 18.8 | -95.8 | 52 | 40 | 38 | 37 | 39 | 37 | | |
| 16" x 16" | 200 | 356 | 0.003 | -0.013 | - | 1.02 | 168 | 0.6 | -3.2 | 42 | 18 | - | - | - | - | |
| | 300 | 533 | 0.006 | -0.029 | - | 1.52 | 252 | 1.4 | -7.1 | 43 | 24 | 16 | 13 | - | - | |
| | 400 | 711 | 0.010 | -0.051 | 11 | 2.03 | 336 | 2.5 | -12.7 | 45 | 28 | 22 | 19 | 17 | - | |
| | 500 | 889 | 0.016 | -0.079 | 17 | 2.54 | 420 | 3.9 | -19.8 | 46 | 32 | 27 | 24 | 24 | 13 | |
| | 600 | 1067 | 0.022 | -0.114 | 22 | 3.05 | 503 | 5.6 | -28.5 | 46 | 35 | 30 | 28 | 29 | 20 | |
| | 700 | 1244 | 0.031 | -0.156 | 26 | 3.56 | 587 | 7.6 | -38.8 | 47 | 37 | 34 | 31 | 33 | 27 | |
| | 800 | 1422 | 0.040 | -0.203 | 30 | 4.06 | 671 | 9.9 | -50.7 | 48 | 39 | 36 | 34 | 36 | 32 | |
| | 1000 | 1778 | 0.062 | -0.318 | 35 | 5.08 | 839 | 15.5 | -79.2 | 49 | 42 | 41 | 39 | 43 | 41 | |
| 1100 | 1956 | 0.075 | -0.385 | 38 | 5.59 | 923 | 18.8 | -95.8 | 49 | 44 | 43 | 41 | 45 | 45 | | |
| 12" x 24" | 200 | 400 | 0.003 | -0.013 | - | 1.02 | 189 | 0.6 | -3.2 | 41 | 19 | - | - | - | - | |
| | 300 | 600 | 0.006 | -0.029 | - | 1.52 | 283 | 1.4 | -7.1 | 43 | 25 | 17 | 14 | 11 | - | |
| | 400 | 800 | 0.010 | -0.051 | 12 | 2.03 | 378 | 2.5 | -12.7 | 44 | 29 | 23 | 20 | 19 | - | |
| | 500 | 1000 | 0.016 | -0.079 | 18 | 2.54 | 472 | 3.9 | -19.8 | 45 | 33 | 28 | 25 | 25 | 15 | |
| | 600 | 1200 | 0.022 | -0.114 | 23 | 3.05 | 566 | 5.6 | -28.5 | 46 | 35 | 31 | 29 | 30 | 22 | |
| | 700 | 1400 | 0.031 | -0.156 | 27 | 3.56 | 661 | 7.6 | -38.8 | 47 | 38 | 35 | 32 | 34 | 28 | |
| | 800 | 1600 | 0.040 | -0.203 | 30 | 4.06 | 755 | 9.9 | -50.7 | 47 | 40 | 37 | 35 | 38 | 34 | |
| | 1000 | 2000 | 0.062 | -0.318 | 36 | 5.08 | 944 | 15.5 | -79.2 | 48 | 43 | 42 | 40 | 44 | 43 | |
| 1100 | 2200 | 0.075 | -0.385 | 39 | 5.59 | 1038 | 18.8 | -95.8 | 49 | 45 | 44 | 42 | 47 | 46 | | |
| 20" x 20" | 200 | 556 | 0.003 | -0.013 | - | 1.02 | 262 | 0.6 | -3.2 | 39 | 21 | 12 | - | - | - | |
| | 300 | 833 | 0.006 | -0.029 | - | 1.52 | 393 | 1.4 | -7.1 | 41 | 27 | 20 | 16 | 15 | - | |
| | 400 | 1111 | 0.010 | -0.051 | 14 | 2.03 | 524 | 2.5 | -12.7 | 42 | 32 | 26 | 23 | 23 | - | |
| | 500 | 1389 | 0.016 | -0.079 | 20 | 2.54 | 655 | 3.9 | -19.8 | 43 | 35 | 31 | 28 | 29 | 19 | |
| | 600 | 1667 | 0.022 | -0.114 | 25 | 3.05 | 787 | 5.6 | -28.5 | 44 | 38 | 34 | 32 | 34 | 27 | |
| | 700 | 1944 | 0.031 | -0.156 | 29 | 3.56 | 918 | 7.6 | -38.8 | 45 | 40 | 37 | 35 | 38 | 33 | |
| | 800 | 2222 | 0.040 | -0.203 | 32 | 4.06 | 1049 | 9.9 | -50.7 | 45 | 42 | 40 | 38 | 42 | 38 | |
| | 1000 | 2778 | 0.062 | -0.318 | 38 | 5.08 | 1311 | 15.5 | -79.2 | 46 | 46 | 45 | 43 | 48 | 47 | |
| 1100 | 3056 | 0.075 | -0.385 | 41 | 5.59 | 1442 | 18.8 | -95.8 | 47 | 47 | 47 | 45 | 50 | 51 | | |
| 24" x 24" | 200 | 800 | 0.003 | -0.013 | - | 1.02 | 378 | 0.6 | -3.2 | 38 | 23 | 15 | - | - | - | |
| | 300 | 1200 | 0.006 | -0.029 | - | 1.52 | 566 | 1.4 | -7.1 | 39 | 30 | 23 | 19 | 19 | - | |
| | 400 | 1600 | 0.010 | -0.051 | 16 | 2.03 | 755 | 2.5 | -12.7 | 41 | 34 | 29 | 25 | 27 | 15 | |
| | 500 | 2000 | 0.016 | -0.079 | 22 | 2.54 | 944 | 3.9 | -19.8 | 42 | 37 | 34 | 30 | 33 | 24 | |
| | 600 | 2400 | 0.022 | -0.114 | 27 | 3.05 | 1133 | 5.6 | -28.5 | 42 | 40 | 37 | 34 | 38 | 32 | |
| | 700 | 2800 | 0.031 | -0.156 | 31 | 3.56 | 1321 | 7.6 | -38.8 | 43 | 43 | 40 | 38 | 42 | 38 | |
| | 800 | 3200 | 0.040 | -0.203 | 35 | 4.06 | 1510 | 9.9 | -50.7 | 44 | 45 | 43 | 41 | 46 | 43 | |
| | 900 | 3600 | 0.051 | -0.258 | 38 | 4.57 | 1699 | 12.6 | -64.1 | 44 | 46 | 46 | 43 | 49 | 48 | |
| 1000 | 4000 | 0.062 | -0.318 | 40 | 5.08 | 1888 | 15.5 | -79.2 | 45 | 48 | 48 | 46 | 52 | 52 | | |
| 24" x 48" | 100 | 800 | 0.001 | -0.003 | - | 0.51 | 378 | 0.2 | -0.8 | 31 | 18 | - | - | - | - | |
| | 200 | 1600 | 0.003 | -0.013 | - | 1.02 | 755 | 0.6 | -3.2 | 34 | 28 | 21 | 15 | 16 | - | |
| | 300 | 2400 | 0.006 | -0.029 | 13 | 1.52 | 1133 | 1.4 | -7.1 | 36 | 34 | 29 | 24 | 27 | 13 | |
| | 400 | 3200 | 0.010 | -0.051 | 21 | 2.03 | 1510 | 2.5 | -12.7 | 37 | 39 | 35 | 31 | 35 | 25 | |
| | 500 | 4000 | 0.016 | -0.079 | 26 | 2.54 | 1888 | 3.9 | -19.8 | 38 | 42 | 39 | 36 | 41 | 34 | |
| | 600 | 4800 | 0.022 | -0.114 | 31 | 3.05 | 2265 | 5.6 | -28.5 | 39 | 45 | 43 | 40 | 46 | 41 | |
| | 700 | 5600 | 0.031 | -0.156 | 35 | 3.56 | 2643 | 7.6 | -38.8 | 40 | 47 | 46 | 43 | 50 | 48 | |
| | 800 | 6400 | 0.040 | -0.203 | 39 | 4.06 | 3020 | 9.9 | -50.7 | 40 | 49 | 49 | 46 | 54 | 53 | |
| 900 | 7200 | 0.051 | -0.258 | 42 | 4.57 | 3398 | 12.6 | -64.1 | 41 | 51 | 51 | 49 | 57 | 58 | | |

PERFORATED FACE DIFFUSERS

 6
7
9
0
-
5
6
7
9
0

NOTES: 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 701, ISO Standard 5219, and ISO Standard 3741. 16"x16" and 20"x20" not available for model 56790. See Krueger's selection software for performance data not shown, including octave band data.

6790, 56790 (Return) Suggested Specification & Configuration

6790, 56790

The perforated return panel shall be Krueger model 6790 (steel perforated panel) or 56790 (aluminum perforated panel). The panel shall have a perforated face with 3/16" diameter holes on 1/4" centers resulting in a 51% free area.

The return diffuser shall match the Krueger 6000 series diffusers in appearance.

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)

- 6790 - Non-Ducted, Perforated Steel Return Panel
- 56790 - Non-Ducted, Perforated Aluminum Return Panel

2. FRAME: (XXX)

- F23 - Lay-in T-Bar
- F30 - Drop Face
- F98 - Narrow-T

3. PANEL: (XX)x(XX)

- 12"x12"
- 12"x24"
- 12"x48"
- 16"x16" *
- 20"x20" *
- 24"x24"
- 24"x48"

4. FINISH: (XX)

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

* Size only available for model 6790.

PERFORATED FACE DIFFUSERS

6
7
9
0
-
5
6
7
9
0

SAMPLE CONFIGURATION: 6790 - F23 - 24x48 - 44