

	<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>

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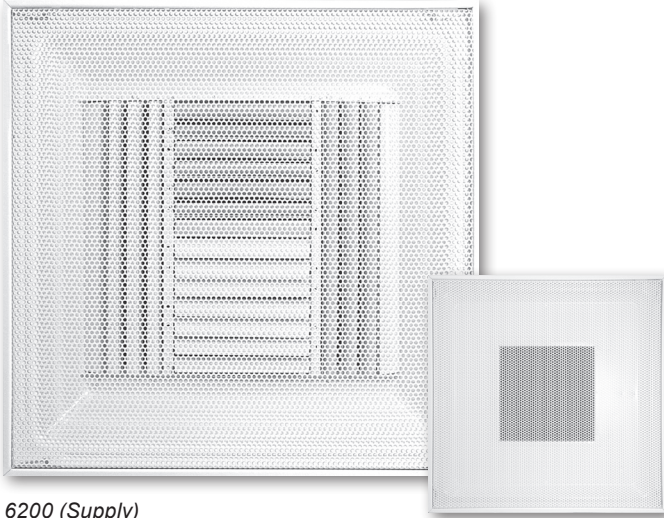
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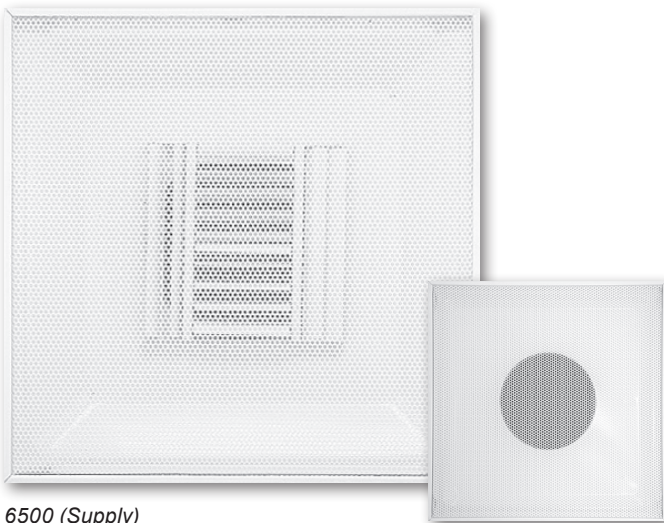
**6600, 56600, 6600FR (Supply)**  
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PERFORATED FACE DIFFUSERS



6200 (Supply)

6490 (Return)  
See page C1-52 for more information.



6500 (Supply)

6690 (Return)  
See page C1-52 for more information.

**Introduction: 6200, 6500 Series**

The 6200/6500 series perforated diffusers use blade-type pattern deflectors mounted on the backpan and are available in pre-selected 1, 2, 3, or 4-way blow patterns. Individually adjustable curved blades allow field adjustment of the air pattern in each direction, which may be field set to any position between a vertical throw and a tight ceiling, long throw pattern. The pattern deflectors on the backpan create aspiration of secondary air through the perforated face where it is mixed with primary air that is then discharged through the perforated face. This aspiration and mixing effect reduces the discharge air temperature to avoid cold air drafts. Additionally, it removes smudging material from the secondary air by impingement on the perforated face. Ceiling smudging of adjacent, hard to clean ceiling surfaces is greatly reduced. The 6200/6500 series diffusers exhibit typical isothermal throws of 8' to 20' for 4-way air distribution and 21' to 50' for 1-way air distribution making this diffuser an excellent choice for irregular room shapes. Matching returns are the 6490 and 6690 series.

**MODELS**

- 6200 - Steel Construction, Square Neck, Supply Diffuser
- 6200FR - Fire Rated, Steel Construction, Square Neck, Supply Diffuser
- 6290F - Steel Construction, Designed for Standard 20"x20"x1" Filter (By Others), Square Neck, Filter Return
- 6290FR - Fire Rated, Steel Construction, Square Neck Return
- 56200 - Aluminum Perforation with Steel Backpan, Square Neck, Supply Diffuser
- 6500 - Steel Construction, Round Neck, Supply Diffuser
- 6500FR - Fire Rated, Steel Construction, Round Neck, Supply Diffuser
- 56500 - Aluminum Perforation with Steel Backpan, Round Neck, Supply Diffuser
- 6590FR - Fire Rated, Steel Construction, Round Neck Return

**FEATURES**

- Individually adjustable curved blade pattern deflectors for horizontal to vertical throw.
- Variety of air discharge patterns available.
- Removable perforated face and core for easy cleaning.

**PANEL SIZES**

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

**ACCESSORIES**

- Optional Round Damper
- Optional Opposed Blade Damper (Model OBD)
- Optional Straightening Grid
- Optional Insulated Backpan

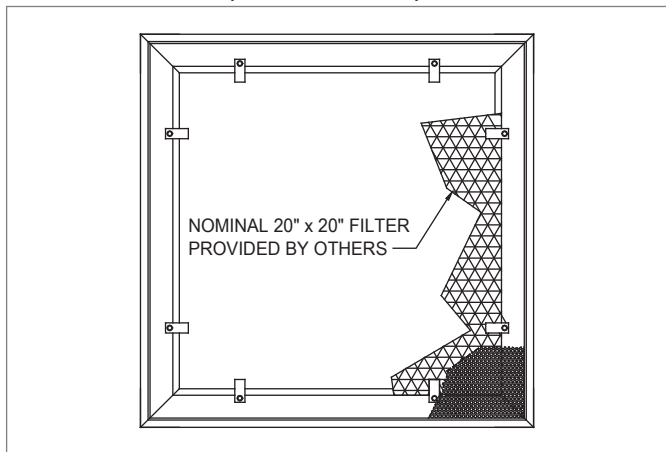
**FINISHES**

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

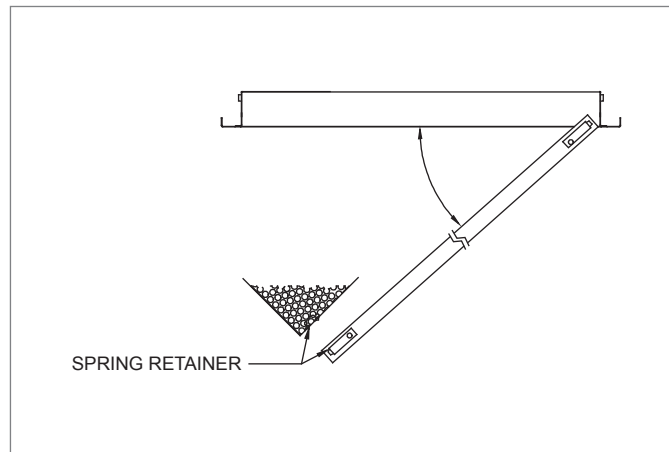
6200-6500

**6290F (Filter Frame Return) Dimensional Information & Frame Styles**

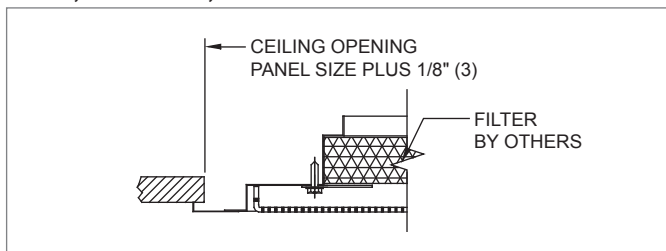
**6290F, FACE VIEW (24"x24" PANEL)**



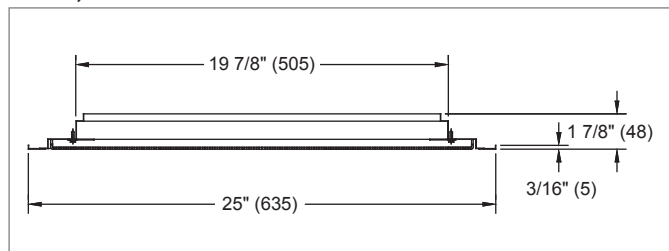
**6290F, HINGE DETAIL**



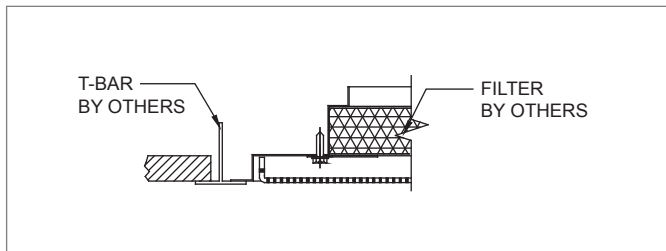
**6290F, FRAME 20, SURFACE MOUNT**



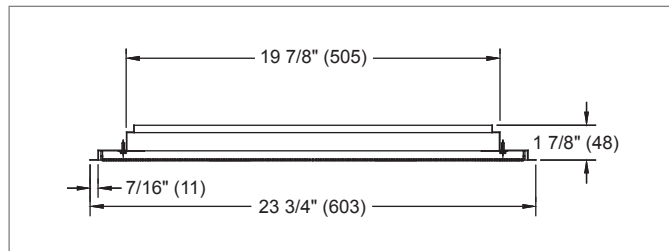
**6290F, FRAME 20 CROSS SECTION**



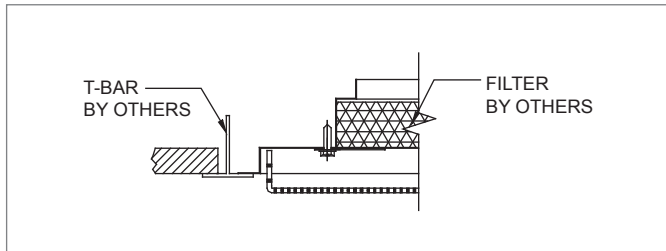
**6290F, FRAME 23, LAY-IN T-BAR**



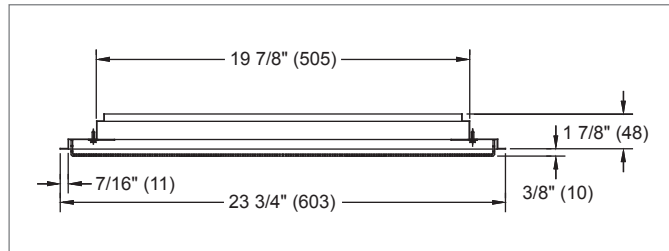
**6290F, FRAME 23 CROSS SECTION**



**6290F, FRAME 30, DROP FACE**



**6290F, FRAME 27 CROSS SECTION**



NOTE: Dimensions in parentheses are mm.

PERFORATED FACE DIFFUSERS

6290F

**6290F (Filter Frame Return) Performance Data**

IP/METRIC DATA: 6290F RETURN, 20"x20" NECK, 24"x24" PANEL ONLY (NO DAMPER)

	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						
<b>20" x 20"</b>	300	833	0.006	-0.056	<b>13</b>	1.52	393	1.4	-13.9	43	23	17	15	15	-
	400	1111	0.010	-0.099	<b>19</b>	2.03	524	2.5	-24.7	45	28	23	22	23	14
	500	1389	0.016	-0.155	<b>24</b>	2.54	655	3.9	-38.5	47	31	27	27	29	23
	600	1667	0.022	-0.223	<b>28</b>	3.05	787	5.6	-55.5	48	35	31	31	34	30
	700	1944	0.031	-0.303	<b>31</b>	3.56	918	7.6	-75.5	49	37	34	35	39	36
	800	2222	0.040	-0.396	<b>34</b>	4.06	1049	9.9	-98.6	50	39	37	38	42	41
	900	2500	0.051	-0.501	<b>36</b>	4.57	1180	12.6	-124.8	51	41	39	40	46	46
	1000	2778	0.062	-0.619	<b>38</b>	5.08	1311	15.5	-154.1	52	43	41	43	49	50
	1100	3056	0.075	-0.749	<b>40</b>	5.59	1442	18.8	-186.4	53	45	43	45	52	54

NOTES: NC values are based on octave band 2 - 7 sound power levels 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. See Krueger's selection software for performance data not shown, including octave band data.



**6200, 56200, 6290F (Supply/Filter Frame Return) Suggested Specification & Configuration**
**1. SERIES: (XXXXX)**

- 6200 - Square Neck, Steel Perforated Supply Diffuser with Backpan Mounted Adjustable Curved Blades
- 56200 - Square Neck, Aluminum Perforated Face, Steel Backpan Supply Diffuser with Backpan Mounted Adjustable Curved Blades
- 6290F - Square Neck, Steel Perforated Filter Frame Return

**2. PATTERN: (XXX)**

- 01 - 1-Way
- 02 - 2-Way
- 03 - 3-Way
- 04 - 4-Way
- 02C - 2-Way Corner
- 90F - Steel Filter Frame Return

**3. DIM 1 x DIM 2: (XX)x(XX) \***

- 6"x6"
- 8"x8"
- 10"x10"
- 12"x12"
- 14"x14"
- 16"x16"
- 20"x20" (6290F Only)

**4. FRAME: (XXX) \*\***

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

**5. PANEL: (XX)x(XX)**

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

**6. ACCESSORIES: (XX)**

- 00 - None
- IB - Insulated Backpan

**7. FINISH: (XX)**

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

\* See chart on page C1-13 for available neck sizes.

\*\* When specifying 6290F, neck dimensions must be 20"x20" with 24"x24" panel and frames F20, F23, or F30.

**6200, 56200**

The perforated face supply diffuser shall be Krueger model 6200 (steel perforated face) or 56200 (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 constructed of heavy gage steel and provide a square neck.

The diffuser shall have individually adjustable curved blade deflectors mounted at the neck of the diffuser. The curved blade deflectors shall allow vertical or 1, 2, 3, or 4-way horizontal projection of air in to the room. The perforated face must be easily removable from the backpan for access to the adjustable curved blades for adjustments and 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.

**6290F**

The perforated face return diffuser shall be Krueger model 6290F (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 heavy gage steel and provide a square or neck. The unit must be able to accept a 20"x20"x1" filter.

The return diffuser shall match the Krueger model 6200 (steel perforated face) supply diffuser in appearance. The perforated face must be easily removable from the backpan for access to the filter (by others).

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.