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6100, 6150 56100, 56150 These perforated

supply ceiling diffusers feature a neck mounted rotatable core with either a round or square



6490, 56490 These perforated

ceiling returns feature a or steel perforated face is available.



6200, 56200 6200FR, 6290F

supply, ceiling diffusers feature neck mounted curved blades with a 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 variation is also available.



6500, 56500 6500FR, 6590FR

supply, ceiling diffusers feature neck mounted curved blades with a round neck. Aluminum supply and return variations available.



6690, 56690

These perforated ceiling returns feature a 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



6790, 56790

These aluminum or steel perforated screen backpan are great for exhaust applications.



fiberglass backpan for field cutting. Available in steel construction



1100, 51100

These architectural, ceiling diffusers feature blades with a square or rectangular neck. Available in steel or A metric version is also



6400, 56400, 6400FR

supply ceiling diffusers feature face mounted as a fire rated variations are available.



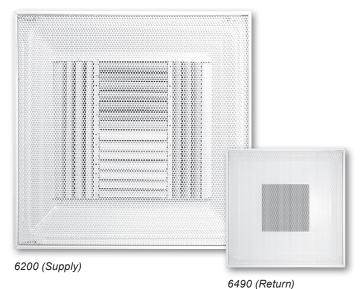
1190, 51190

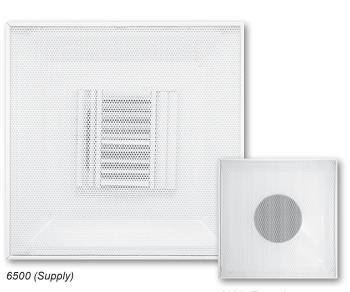
perforated, ceiling returns feature a square Available in steel or

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6200, 6500 | Curved Blade







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

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"
16"x16"
20"x20"
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.

6200FR, 6290FR | Curved Blade, Fire Rated



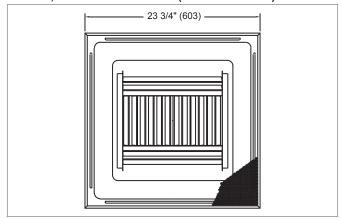
6200FR, 6290FR (Fire Rated Supply/Return) Dimensional Information

The 6200FR/6290FR offers the safety of fire rated performance with the proven 6200/6290 series diffuser. It is intended for use with Lay-in T-Bar application involving fire rated ceiling designs. It combines this flexibility with all of the features of the standard 6200/6290 and is available exclusively in steel.

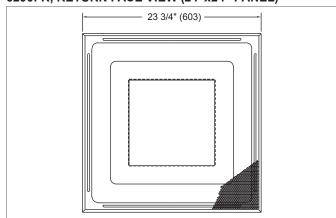
6200FR/6290FR comes standard as a UL 263 classified assembly which incorporates a 3-hour rated fire damper and a 1/2" thick ceramic fiber blanket.



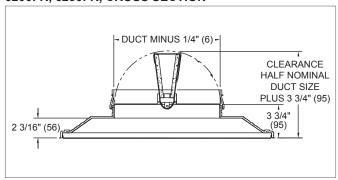
6200FR, SUPPLY FACE VIEW (24"x24" PANEL)



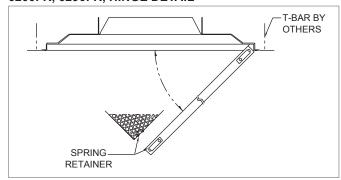
6290FR, RETURN FACE VIEW (24"x24" PANEL)



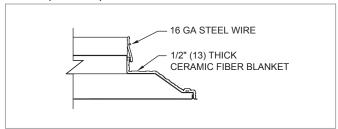
6200FR, 6290FR, CROSS SECTION



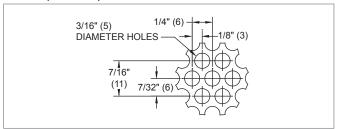
6200FR, 6290FR, HINGE DETAIL



6200FR, 6290FR, FIRE BLANKET DETAIL



6200FR, 6290FR, PERFORATION DETAIL



6200FR, 6290FR, AVAILABLE INLET SIZES

	INLET SIZES
NOMINAL PANEL 24" x 24" (610 x 610)	6" x 6" (152 x 152)
	8" x 8" (203 x 203)
	10" x 10" (254 x 254)
	12" x 12" (305 x 305)
	14" x 14" (356 x 356)

NOTE: Dimensions in parentheses are mm.

6200FR, DISCHARGE AIR PATTERNS



6290FR | Curved Blade, Fire Rated



6290FR (Fire Rated Return) Performance Data •

IP/METRIC DATA: 6290FR RETURN, 24"x24" PANEL (NO DAMPER)

	IP Data					Metric	c Data		ļ						
	Neck Air Vel Flow		Pv Ps		Neck Vel	Air Flow	Pv	Ps	Octave Band, dB						
	FPM	CFM	"WG	"WG	NC	m/s	L/s	Pa	Pa	2	3	4	5	6	7
6" x 6"	300	75	0.006	-0.006	-	1.52	35	1.4	-1.6	38	13	-	-	-	-
	400	100	0.010	-0.012		2.03	47	2.5	-2.9	40	18	11	-	-	-
	500	125	0.016	-0.018	-	2.54	59	3.9	-4.5	42	22	16	-	-	<u> </u>
	600	150	0.022	-0.026	-	3.05	71	5.6	-6.5	43	25	20	-	-	-
	700	175	0.031	-0.035	-	3.56	83	7.6	-8.8	44	27	23	13	-	-
	800	200	0.040	-0.046	-	4.06	94	9.9	-11.5	45	29	25	16	-	-
	900	225	0.051	-0.058	12	4.57	106	12.6	-14.5	46	31	28	19	-	-
	1000	250	0.062	-0.072	14	5.08	118	15.5	-17.9	47	33	30	21	-	-
	1100	275	0.075	-0.087	16	5.59	130	18.8	-21.7	48	35	32	23	13	-
	300	133	0.006	-0.010	-	1.52	63	1.4	-2.6	39	15	-	-	-	-
	400	178	0.010	-0.018	-	2.03	84	2.5	-4.5	41	20	14	-	-	-
	500	222	0.016	-0.029	-	2.54	105	3.9	-7.1	43	24	18	-	-	-
8"	600	267	0.022	-0.041	-	3.05	126	5.6	-10.2	44	27	22	15	-	-
X	700	311	0.031	-0.056	12	3.56	147	7.6	-13.9	45	30	25	18	-	-
8"	800	356	0.040	-0.073	15	4.06	168	9.9	-18.2	46	32	28	21	13	_
	900	400	0.051	-0.092	18	4.57	189	12.6	-23.0	47	34	31	24	16	_
	1000	444	0.062	-0.114	20	5.08	210	15.5	-28.4	48	36	33	26	19	-
	1100	489	0.075	-0.138	22	5.59	231	18.8	-34.4	49	37	35	28	22	14
	300	208	0.006	-0.015	-	1.52	98	1.4	-3.8	40	17	-	-	-	-
	400	278	0.010	-0.027		2.03	131	2.5	-6.7	42	22	16	-	-	-
	500	347	0.016	-0.042		2.54	164	3.9	-10.5	44	26	21	14	-	-
10"	600	417	0.022	-0.061	14	3.05	197	5.6	-15.1	45	29	24	19	12	-
Х	700	486	0.031	-0.082	17	3.56	229	7.6	-20.5	46	31	28	22	16	-
10"	800	556	0.040	-0.108	20	4.06	262	9.9	-26.8	47	34	30	25	20	11
	900	625	0.051	-0.136	22	4.57	295	12.6	-33.9	48	36	33	28	23	15
	1000	694	0.062	-0.168	25	5.08	328	15.5	-41.9	49	37	35	30	26	20
	1100	764	0.075	-0.204	27	5.59	361	18.8	-50.7	50	39	37	32	29	23
	300	300	0.006	-0.021	-	1.52	142	1.4	-5.3	41	19	12	-	-	<u> -</u>
	400	400	0.010	-0.037	-	2.03	189	2.5	-9.3	43	24	18	13	-	<u> </u>
	500	500	0.016	-0.059	13	2.54	236	3.9	-14.6	45	27	22	18	13	-
12"	600	600	0.022	-0.084	17	3.05	283	5.6	-21.0	46	30	26	22	18	<u> </u>
X	700	700	0.031	-0.115	21	3.56	330	7.6	-28.6	47	33	29	25	22	14
12"	800	800	0.040	-0.150	23	4.06	378	9.9	-37.3	48	35	32	28	26	19
	900	900	0.051	-0.190	26	4.57	425	12.6	-47.3	49	37	34	31	29	23
	1000	1000	0.062	-0.234	28	5.08	472	15.5	-58.3	50	39	37	34	32	28
	1100	1100	0.075	-0.283	30	5.59	519	18.8	-70.6	51	40	39	36	35	31
	300	408	0.006	-0.028	- 40	1.52	193	1.4	-7.0	41	20	13	-	-	<u> </u>
	400	544	0.010	-0.050	12	2.03	257	2.5	-12.4	44	25	19	15	11	<u> </u>
4.411	500	681	0.016	-0.078	16	2.54	321	3.9	-19.4	45	29	24	21	18	-
14"	600	817	0.022	-0.112	20	3.05	385	5.6	-28.0	47	32	28	25	23	14
X	700	953	0.031	-0.153	24	3.56	450	7.6	-38.1	48	34	31	28	27	20
14"	800	1089	0.040	-0.200	27	4.06	514	9.9	-49.8	49	36	33	31	31	26
	900	1225	0.051	-0.253	29	4.57	578	12.6	-63.0	50	38	36	34	34	30
	1000	1361	0.062	-0.312	31	5.08	642	15.5	-77.8	51	40	38	36	37	34
	1100	1497	0.075	-0.378	33	5.59	707	18.8	-94.1	51	42	40	39	40	38

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 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

R

C1 PERFORATED FACE DIFFUSERS

6200FR, 6290FR | Curved Blade, Fire Rated



6200FR, 6290FR (Fire Rated Supply/Return) Suggested Specification & Configuration

6200FR

The perforated face fire rated supply diffuser shall be Krueger model 6200FR. The diffuser must be UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories <u>Fire Resistance Directory</u>. The diffuser shall be tested in accordance with UL 263 and must meet NFPA 90 requirements. The diffuser must be able to operate in three-hour fire-rated, exposed grid suspended ceiling. 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.

6290FR

The perforated face fire rated return diffuser shall be Krueger model 6290FR. The diffuser must be UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories Fire Resistance Directory. The diffuser shall be tested in accordance with UL 263 and must meet NFPA 90 requirements. The diffuser must be able to operate in three-hour fire-rated, exposed grid suspended ceiling. 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 return diffuser shall match the Krueger model 6200FR diffuser in appearance. The perforated face must be easily removable from the backpan.

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.

1. SERIES: (XXXXXX)

6200FR - Perforated, Square Neck with Backpan Mounted Adjustable Curved Blades, Steel Fire Rated Supply Diffuser

6290FR - Perforated, Square Neck, Steel Fire Rated Return

2. PATTERN: (XXX)

01 - 1-Way

02 - 2-Way

03 - 3-Way 04 - 4-Way

02C - 2-Way Corner

90 - Return

3. WIDTH: SQUARE NECK ONLY (XX)

6" - 14" in 2" Increments

4. HEIGHT: SQUARE NECK ONLY (XX)

6" - 14" in 2" Increments

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

6. PANEL: (XX)x(XX)

24"x24"

7. FINISH: (XX)

01 - Mill

10 - Alumican

35 - Black

44 - British White

