

## INTRODUCTION

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

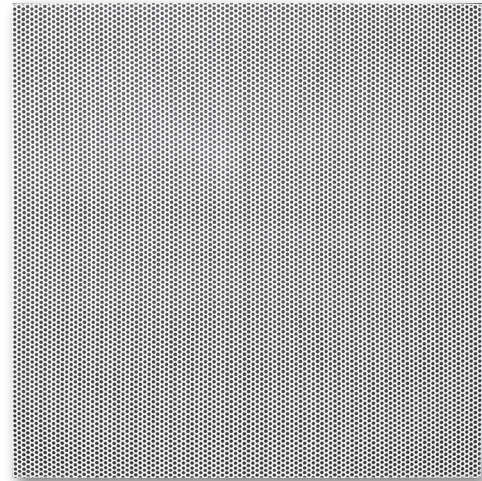
- Matches 6000 Series supply diffusers in appearance.
- Great choice for non-ducted return air systems.

## PANEL SIZES

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

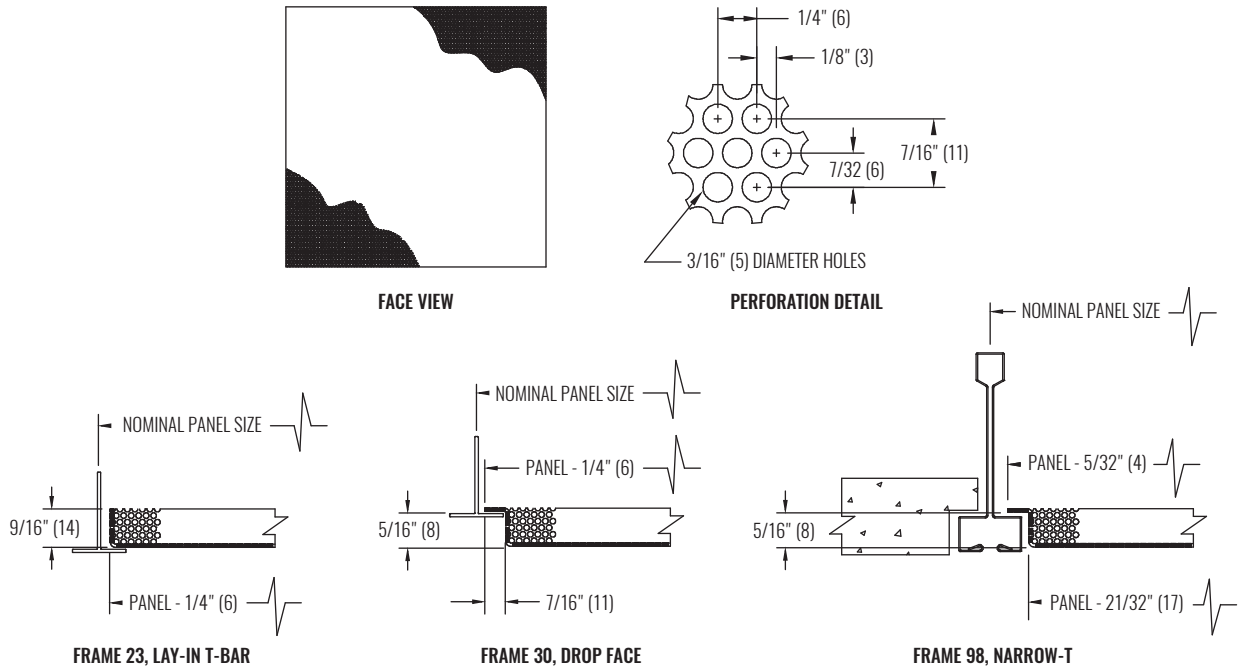
## FINISHES

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



6790

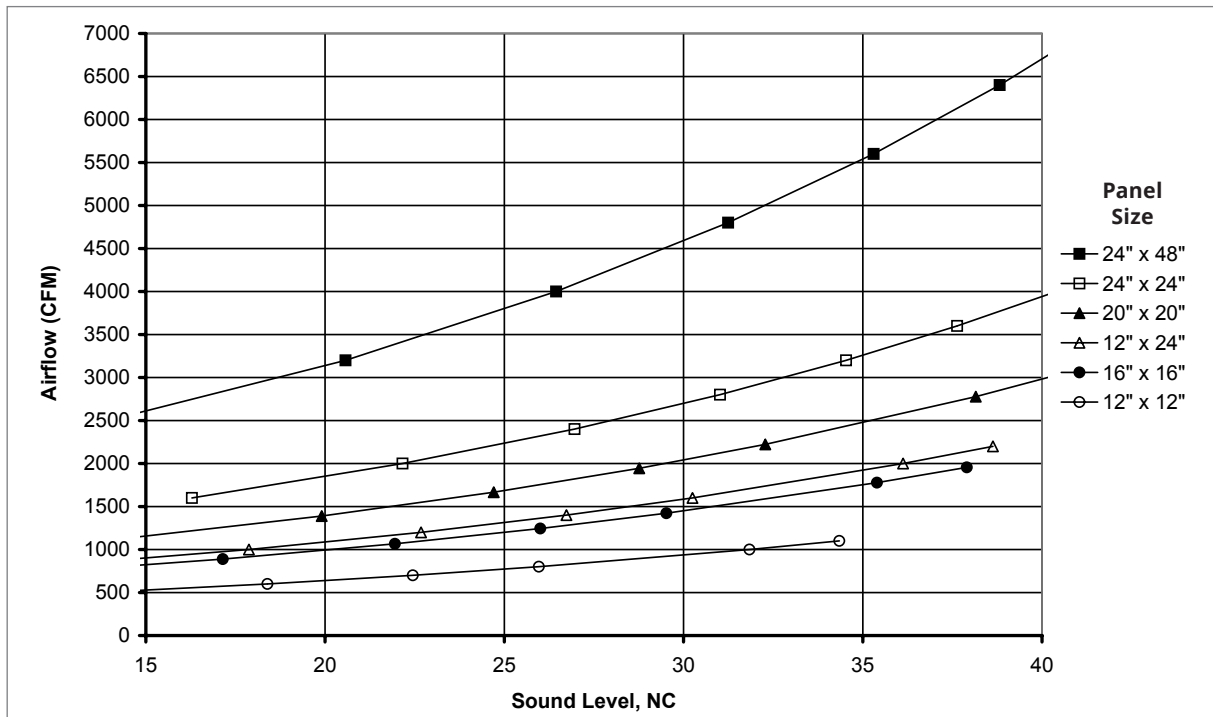
## DIMENSIONAL DATA



NOTE: Dimensions in parentheses are mm.

## SOUND CHART | NO DAMPER

AIRFLOW VS. NC LEVEL



## PERFORMANCE DATA

NECK SIZE	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	

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 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.

DIFFUSERS | PERFORATED

# 6790, 56790

Diffuser | Perforated, Return Panel



## ENGINEERING 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.

SAMPLE CONFIGURATION: 6790 - F23 - 24x48 - 44