

# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum



## INTRODUCTION

The AFS580/AFS585 return grilles are designed to fit most common commercial and architectural applications. The AFS580 offers fixed extruded aluminum blades with 3/4" blade spacing and 45° deflection. The AFS585 offers fixed extruded aluminum blades with 1/2" blade spacing and 45° deflection. Both grilles have a 1 1/4" extruded aluminum flange. The extruded aluminum blades enhance the overall look of the face of the grille resulting in a clean architectural appearance.

## MODELS

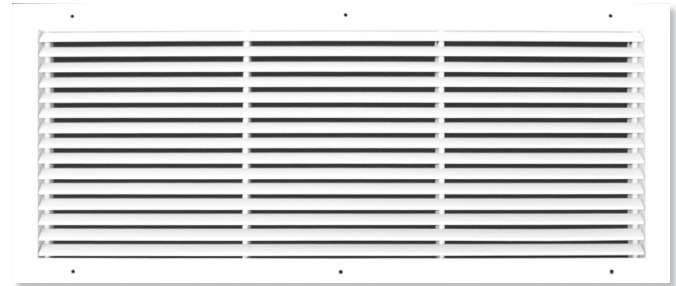
- AFS580 - Fixed blade aluminum return grille with 3/4" blade spacing
- AFS585 - Fixed blade aluminum return grille with 1/2" blade spacing

## FEATURES

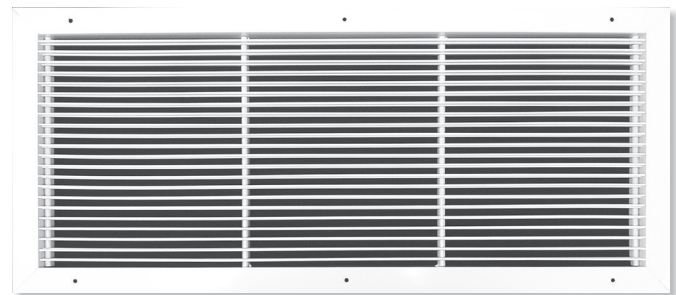
- 45° deflection on horizontal or vertical front blades
- 0° deflection on horizontal or vertical front blades
- Extruded aluminum construction
- Standard finish is #44 British White
- Optional finishes available

## ACCESSORIES

- Steel opposed blade damper (model OBD)
- Steel painted opposed blade damper (model POBD)
- Aluminum opposed blade damper (model 5OBD)
- Aluminum plaster frame (model 58PF)
- 1" or 2" filter frame - Minimum size is 8"x8" and maximum size is 48"x36" (model 5FF)
- Insect screen - 1/16" mesh
- Debris screen - 1/4" mesh

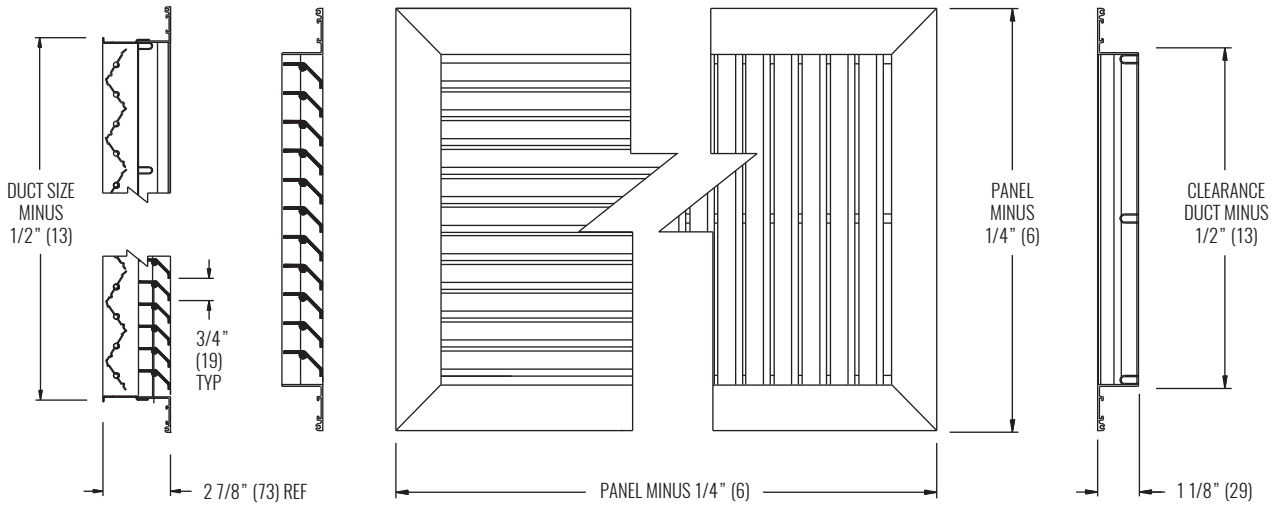


AFS580, 45° Deflection



AFS585, 0° Deflection

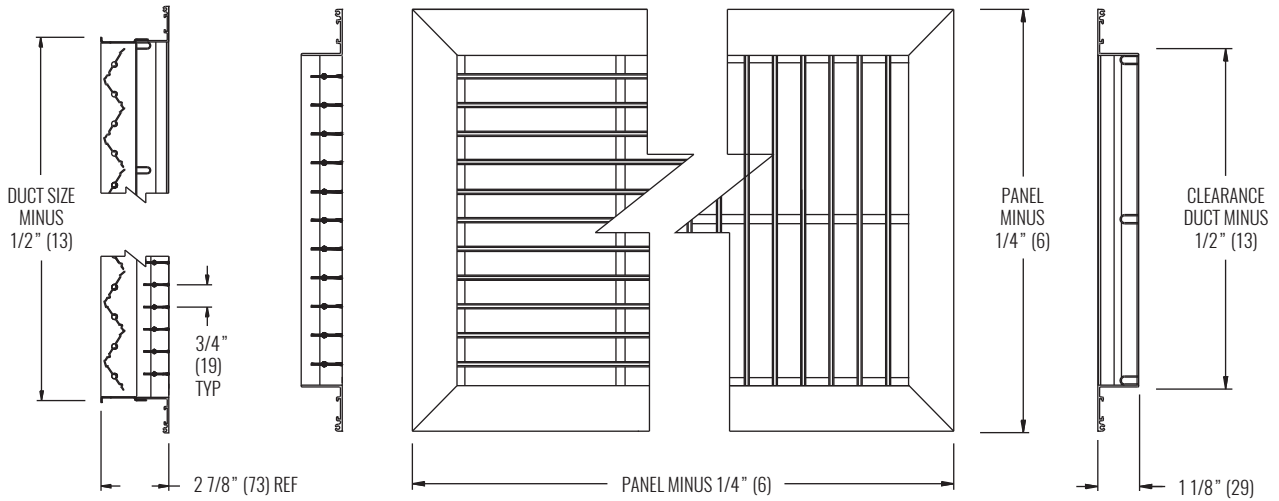
**DIMENSIONAL DATA | AFS580 | 45° DEFLECTION**



**FACE, SIDE, AND CROSS SECTION VIEWS**

NOTE: Dimensions in parentheses are mm.

**DIMENSIONAL DATA | AFS580 | 0° DEFLECTION**



**FACE, SIDE, AND CROSS SECTION VIEWS**

NOTE: Dimensions in parentheses are mm.

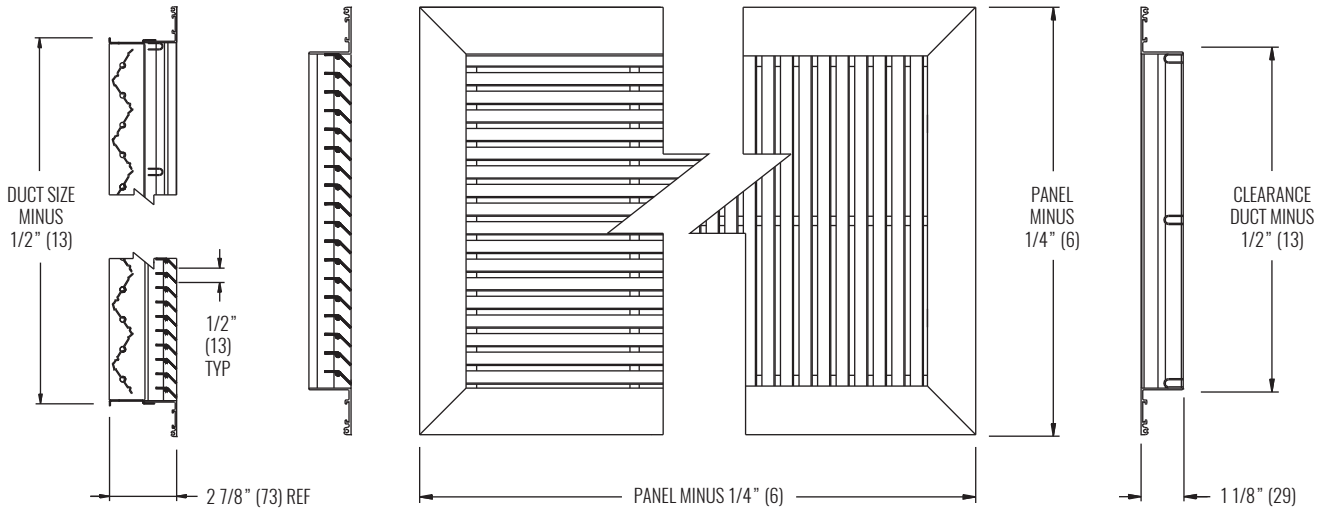
# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum



GRILLES | RETURN

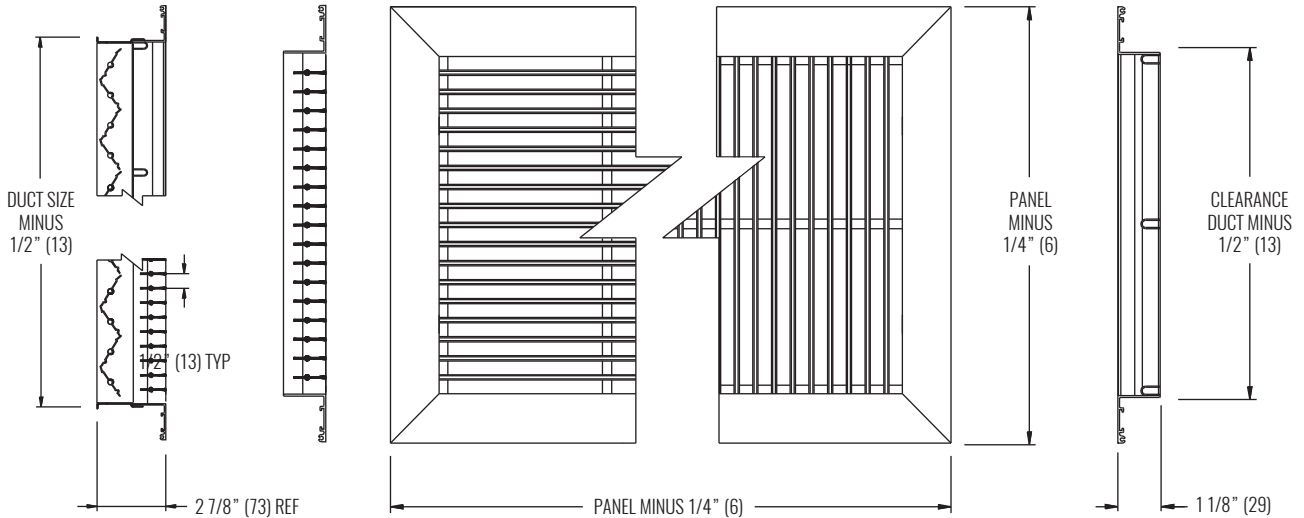
## DIMENSIONAL DATA | AFS585 | 45° DEFLECTION



FACE, SIDE, AND CROSS SECTION VIEWS

NOTE: Dimensions in parentheses are mm.

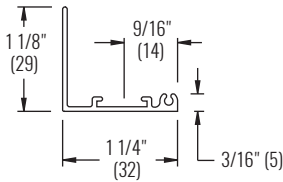
## DIMENSIONAL DATA | AFS585 | 0° DEFLECTION



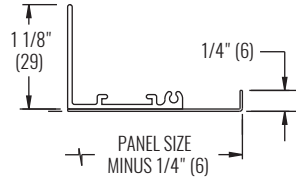
FACE, SIDE, AND CROSS SECTION VIEWS

NOTE: Dimensions in parentheses are mm.

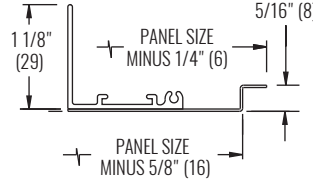
## DIMENSIONAL DATA | FRAMES & MOUNTINGS



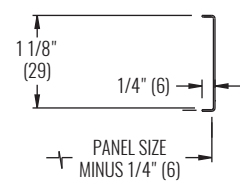
**FRAME 22,  
SURFACE MOUNT**



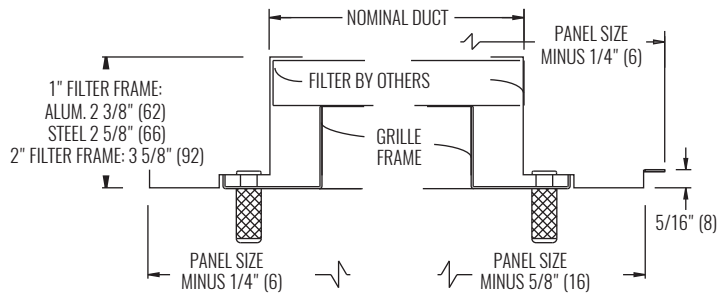
**FRAME 23,  
LAY-IN T-BAR**



**FRAME 98,  
NARROW-T**

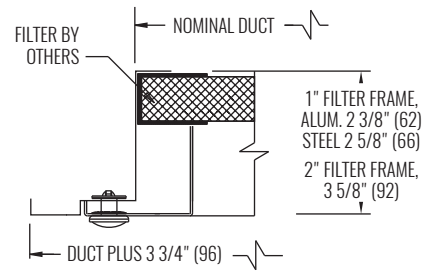


**FRAME FTB  
CHANNEL FRAME**

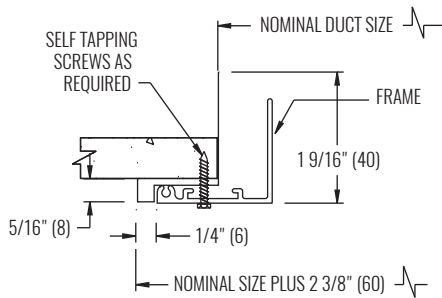


**FILTER FRAME MOUNT  
KNURLED KNOB, FRAME 23**

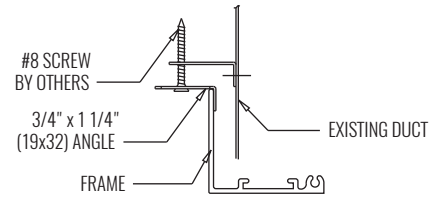
**FILTER FRAME MOUNT  
KNURLED KNOB, FRAME 98**



**FILTER FRAME MOUNT  
1/4 TURN FASTENER, FRAME 22**



**PLASTER FRAME**



**CONCEALED MOUNTING**

NOTE: Dimensions in parentheses are mm.

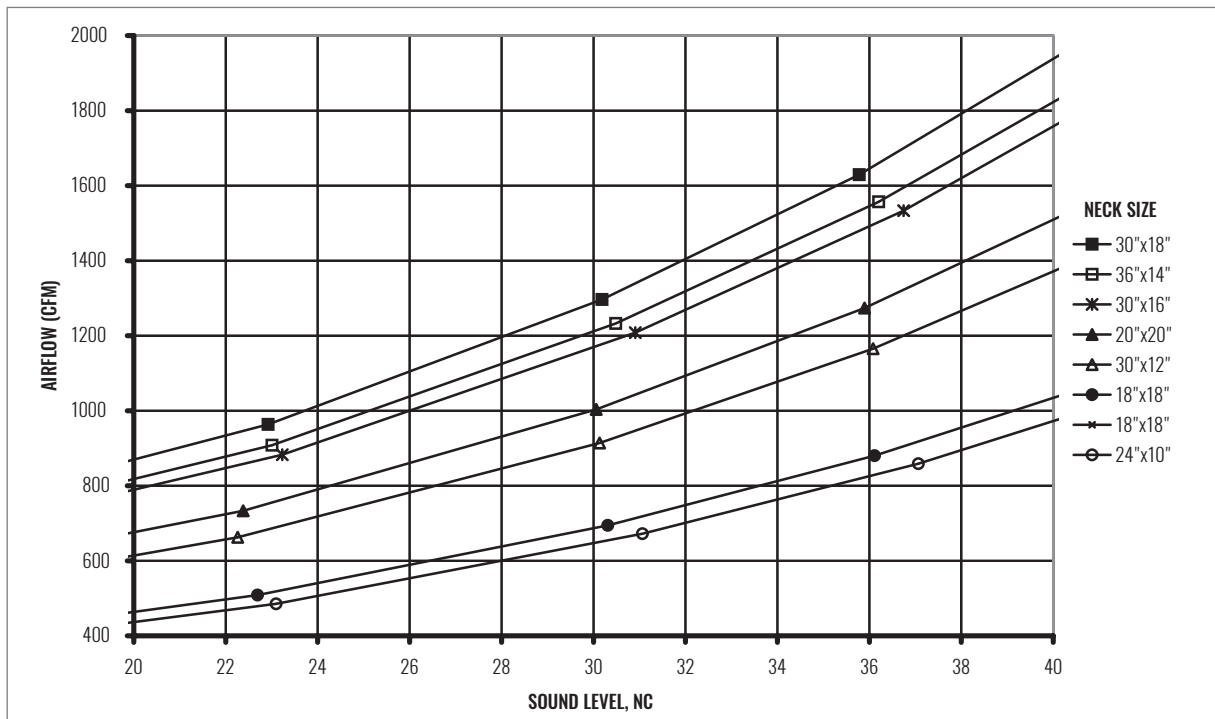
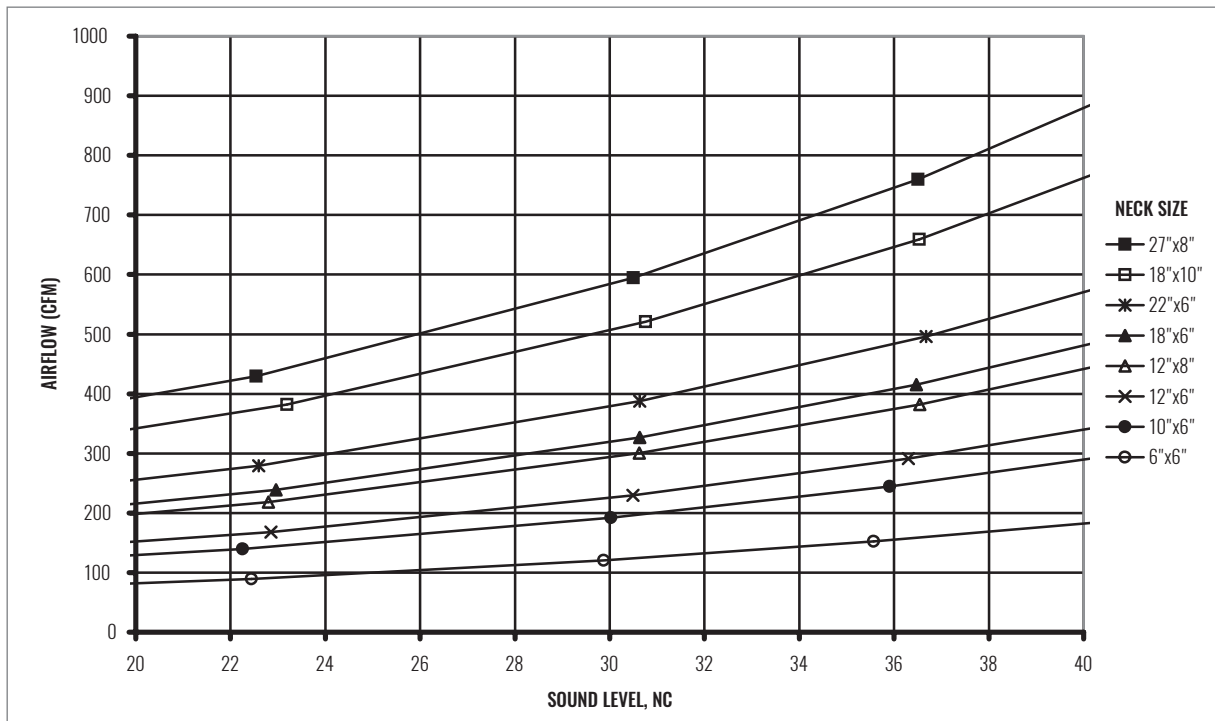
# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum

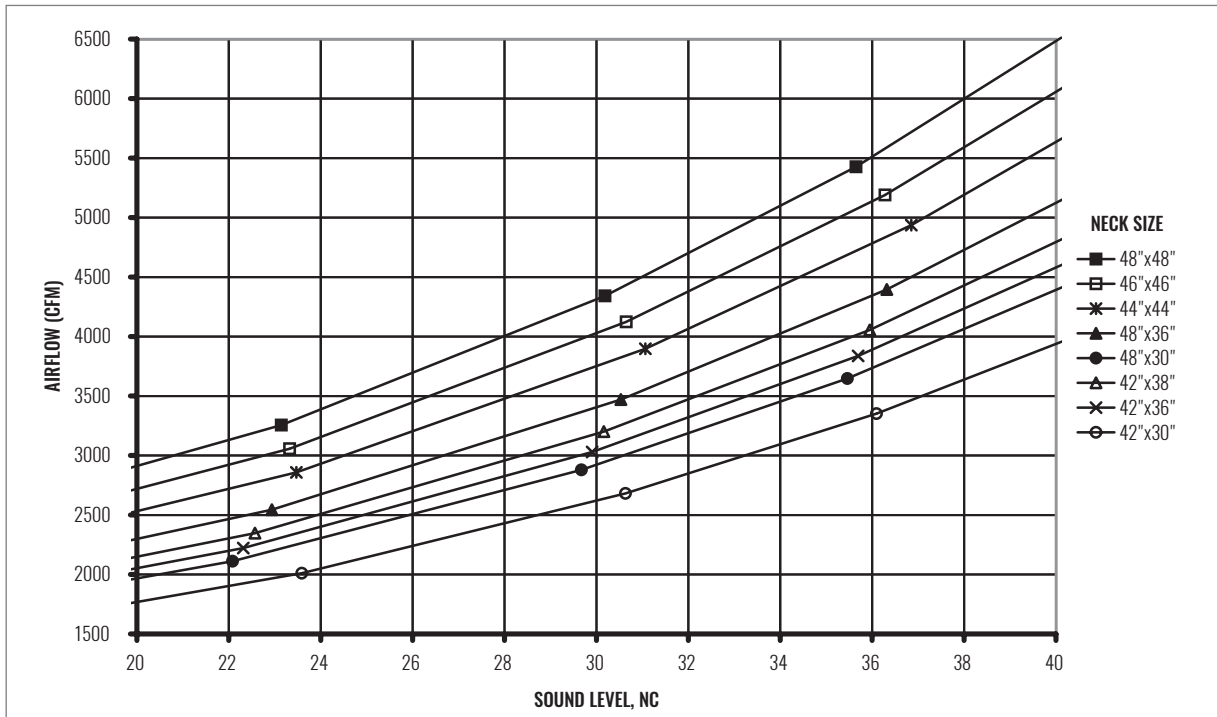
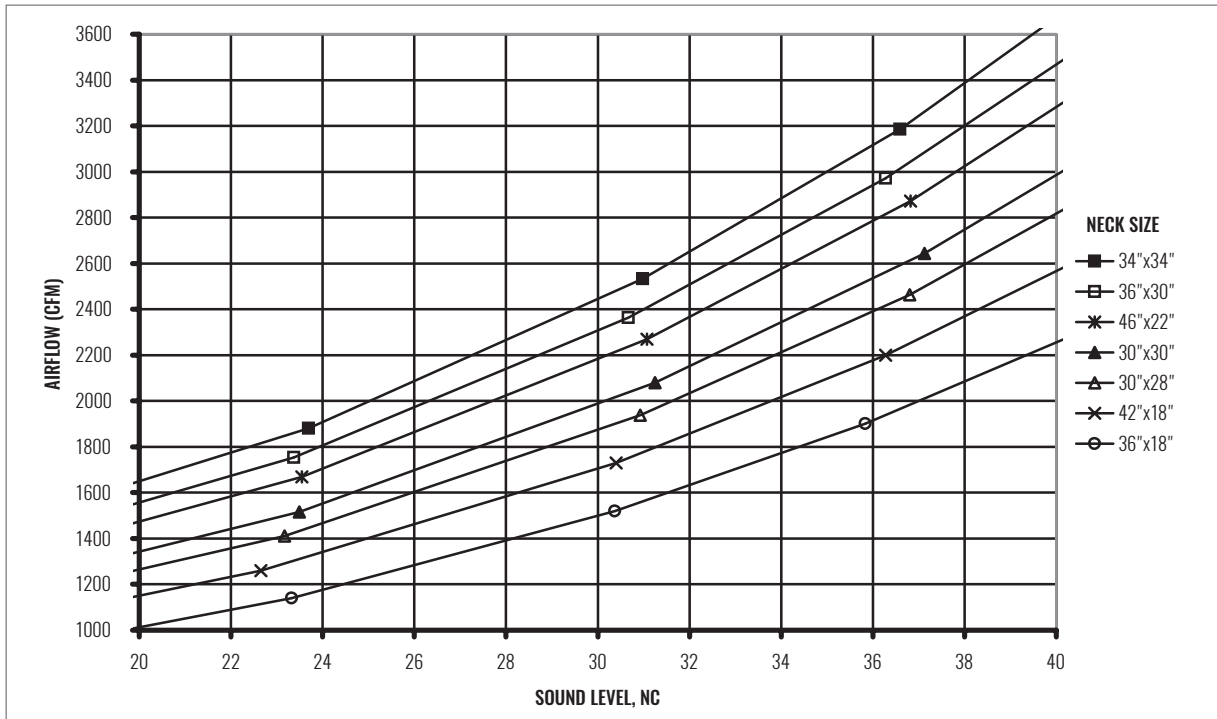


GRILLES | RETURN

## SOUND CHARTS | AFS580 | 45° DEFLECTION (NO DAMPER)



**SOUND CHARTS | AFS580 | 45° DEFLECTION (NO DAMPER)**



GRILLES | RETURN

## PERFORMANCE DATA | AFS580 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7		
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa								
6" x 6"	0.25	300	57	-0.035	12	152 x 152	0.02	1.52	27	-8.7	29	32	31	-	-	-		
		465	89	-0.084	22			2.36	42	-20.8	35	40	40	26	21	18		
		630	121	-0.154	30			3.20	57	-38.3	40	45	46	37	33	29		
		795	152	-0.245	36			4.04	72	-60.9	43	49	51	46	42	37		
		960	184	-0.357	40			4.88	87	-88.8	46	53	54	53	50	44		
10" x 6"	0.42	260	88	-0.026	11	254 x 152	0.04	1.32	41	-6.5	29	32	31	-	-	-		
		415	140	-0.067	22			2.11	66	-16.6	36	40	40	25	19	17		
		570	192	-0.126	30			2.90	91	-31.3	40	46	46	36	32	28		
		725	244	-0.204	36			3.68	115	-50.7	44	50	51	45	42	37		
		880	297	-0.300	41			4.47	140	-74.7	47	53	55	53	49	44		
12" x 6"	0.50	260	107	-0.026	12	305 x 152	0.05	1.32	50	-6.5	29	33	31	-	-	-		
		410	168	-0.065	23			2.08	79	-16.2	36	41	40	25	19	17		
		560	230	-0.121	30			2.84	108	-30.2	41	46	47	37	32	28		
		710	291	-0.195	36			3.61	137	-48.6	44	50	51	46	42	37		
		860	353	-0.286	41			4.37	166	-71.3	47	54	55	53	50	44		
12" x 8"	0.67	240	136	-0.022	11	305 x 203	0.06	1.22	64	-5.6	29	32	31	-	-	-		
		385	218	-0.057	23			1.96	103	-14.3	36	41	40	24	19	16		
		530	300	-0.109	31			2.69	142	-27.1	41	46	47	36	32	28		
		675	382	-0.176	37			3.43	180	-43.9	45	51	52	45	41	36		
		820	464	-0.260	41			4.17	219	-64.8	48	54	56	53	49	43		
18" x 6"	0.75	240	151	-0.022	12	457 x 152	0.07	1.22	71	-5.6	30	33	31	-	-	-		
		380	239	-0.056	23			1.93	113	-13.9	37	41	41	24	19	16		
		520	327	-0.105	31			2.64	154	-26.1	41	47	47	36	31	28		
		660	415	-0.169	36			3.35	196	-42.0	45	51	52	45	41	36		
		800	503	-0.248	41			4.06	237	-61.7	48	54	56	52	49	43		
22" x 6"	0.92	220	170	-0.019	11	559 x 152	0.09	1.12	80	-4.7	29	32	31	-	-	-		
		360	279	-0.050	23			1.83	132	-12.5	37	41	40	24	17	15		
		500	387	-0.097	31			2.54	183	-24.1	42	47	47	36	31	27		
		640	496	-0.159	37			3.25	234	-39.5	45	51	52	45	41	36		
		780	604	-0.236	42			3.96	285	-58.7	48	55	56	52	49	43		
18" x 10"	1.25	220	244	-0.019	12	457 x 254	0.12	1.12	115	-4.7	31	34	32	-	-	-		
		345	382	-0.046	23			1.75	180	-11.5	37	42	41	24	18	16		
		470	521	-0.086	31			2.39	246	-21.3	42	47	47	35	30	27		
		595	659	-0.137	37			3.02	311	-34.1	46	51	52	44	40	35		
		720	798	-0.201	41			3.66	377	-50.0	48	55	56	51	48	42		
27" x 8"	1.50	200	264	-0.015	11	686 x 203	0.14	1.02	125	-3.9	30	33	31	-	-	-		
		325	430	-0.041	23			1.65	203	-10.2	37	41	40	22	16	14		
		450	595	-0.078	31			2.29	281	-19.5	42	47	47	35	29	26		
		575	760	-0.128	37			2.92	359	-31.9	46	51	52	44	39	35		
		700	925	-0.190	41			3.56	437	-47.2	49	55	56	51	47	42		
24" x 10"	1.67	200	299	-0.015	11	610 x 254	0.15	1.02	141	-3.9	31	33	31	-	-	-		
		325	485	-0.041	23			1.65	229	-10.2	38	42	41	23	17	15		
		450	672	-0.078	31			2.29	317	-19.5	43	47	47	35	30	26		
		575	859	-0.128	37			2.92	405	-31.9	46	52	52	44	40	35		
		700	1045	-0.190	42			3.56	493	-47.2	49	55	56	52	48	42		
16" x 16"	1.78	200	323	-0.015	12	406 x 406	0.17	1.02	152	-3.9	31	33	32	-	-	-		
		315	509	-0.038	23			1.60	240	-9.6	38	41	41	22	16	14		
		430	694	-0.072	30			2.18	328	-17.8	42	47	47	34	29	25		
		545	880	-0.115	36			2.77	415	-28.6	46	51	52	43	38	34		
		660	1066	-0.169	41			3.35	503	-42.0	49	55	55	50	46	40		
18" x 18"	2.25	180	372	-0.013	-	457 x 457	0.21	0.91	176	-3.1	30	32	30	-	-	-		
		295	610	-0.034	22			1.50	288	-8.4	38	41	40	21	15	13		
		410	847	-0.065	30			2.08	400	-16.2	42	47	47	33	28	25		
		525	1085	-0.107	36			2.67	512	-26.6	46	51	52	43	38	33		
		640	1323	-0.159	41			3.25	624	-39.5	49	55	56	50	46	40		

NOTE: See notes on page J1-84.

## PERFORMANCE DATA | AFS580 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7		
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa								
30" x 12"	2.50	180	411	-0.13	11	762 x 305	0.23	0.91	194	-3.1	31	33	31	-	-	-		
		290	663	-0.33	22			1.47	313	-8.1	38	41	40	21	14	13		
		400	914	-0.62	30			2.03	431	-15.4	42	47	47	33	27	24		
		510	1165	-1.01	36			2.59	550	-25.1	46	51	52	42	37	33		
		620	1417	-1.49	41			3.15	669	-37.1	49	55	56	49	45	40		
20" x 20"	2.78	180	463	-0.13	11	508 x 508	0.26	0.91	219	-3.1	31	33	31	-	-	-		
		285	733	-0.31	22			1.45	346	-7.8	38	41	41	21	14	13		
		390	1004	-0.59	30			1.98	474	-14.7	43	47	47	33	27	24		
		495	1274	-0.95	36			2.51	601	-23.6	46	51	52	41	37	32		
30" x 16"	3.33	180	558	-0.13	12	762 x 406	0.31	0.91	263	-3.1	32	34	32	-	-	-		
		285	883	-0.31	23			1.45	417	-7.8	39	42	41	22	15	13		
		390	1208	-0.59	31			1.98	570	-14.7	43	48	48	34	28	25		
		495	1533	-0.95	37			2.51	724	-23.6	47	52	52	42	38	33		
		600	1859	-1.39	41			3.05	877	-34.7	50	55	56	50	46	40		
36" x 14"	3.50	180	584	-0.13	12	914 x 356	0.33	0.91	276	-3.1	32	34	32	-	-	-		
		280	908	-0.30	23			1.42	429	-7.6	39	42	41	21	15	13		
		380	1233	-0.56	30			1.93	582	-13.9	43	48	47	33	27	24		
		480	1557	-0.89	36			2.44	735	-22.2	47	52	52	41	37	32		
30" x 18"	3.75	180	631	-0.13	13	762 x 457	0.35	0.91	298	-3.1	32	35	33	-	-	-		
		275	964	-0.29	23			1.40	455	-7.3	39	42	41	21	14	13		
		370	1296	-0.53	30			1.88	612	-13.2	43	47	47	32	27	23		
		465	1629	-0.84	36			2.36	769	-20.8	46	51	52	41	36	32		
		560	1962	-1.21	40			2.84	926	-30.2	49	55	55	48	43	38		
36" x 18"	4.50	180	760	-0.13	13	914 x 457	0.42	0.91	359	-3.1	33	35	33	-	-	-		
		270	1140	-0.28	23			1.37	538	-7.0	39	43	41	21	15	13		
		360	1520	-0.50	30			1.83	717	-12.5	43	48	47	32	26	23		
		450	1900	-0.78	36			2.29	897	-19.5	47	52	52	40	35	31		
42" x 18"	5.25	160	791	-0.10	11	1067 x 457	0.49	0.81	373	-2.5	32	34	32	-	-	-		
		255	1260	-0.25	23			1.30	595	-6.3	39	42	41	20	13	12		
		350	1729	-0.47	30			1.78	816	-11.8	44	48	47	32	26	23		
		445	2199	-0.77	36			2.26	1038	-19.1	47	52	52	41	36	32		
		540	2668	-1.13	41			2.74	1259	-28.1	50	55	56	48	44	38		
30" x 28"	5.83	160	886	-0.10	12	762 x 711	0.54	0.81	418	-2.5	32	34	32	-	-	-		
		255	1411	-0.25	23			1.30	666	-6.3	39	43	41	21	14	12		
		350	1937	-0.47	31			1.78	914	-11.8	44	48	48	32	27	23		
		445	2463	-0.77	37			2.26	1162	-19.1	47	52	52	41	36	32		
30" x 30"	6.25	160	951	-0.10	12	762 x 762	0.58	0.81	449	-2.5	33	35	32	-	-	-		
		255	1515	-0.25	23			1.30	715	-6.3	40	43	42	21	14	12		
		350	2079	-0.47	31			1.78	981	-11.8	44	48	48	33	27	24		
		445	2644	-0.77	37			2.26	1248	-19.1	48	53	53	42	37	32		
		540	3208	-1.13	42			2.74	1514	-28.1	51	56	57	49	45	39		
46" x 22"	7.03	160	1068	-0.10	13	1168 x 559	0.65	0.81	504	-2.5	33	35	33	-	-	-		
		250	1669	-0.24	24			1.27	788	-6.0	40	43	42	21	14	12		
		340	2270	-0.45	31			1.73	1071	-11.1	44	48	48	32	26	23		
		430	2871	-0.72	37			2.18	1355	-17.8	48	53	53	41	36	32		
36" x 30"	7.50	160	1146	-0.10	13	914 x 762	0.70	0.81	541	-2.5	33	35	33	-	-	-		
		245	1754	-0.23	23			1.24	828	-5.8	40	43	42	20	14	12		
		330	2363	-0.42	31			1.68	1115	-10.5	44	48	48	32	26	23		
		415	2971	-0.67	36			2.11	1402	-16.6	47	52	52	40	35	31		
		500	3580	-0.97	41			2.54	1690	-24.1	50	56	56	47	43	37		

NOTE: See notes on page J1-84.



# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum

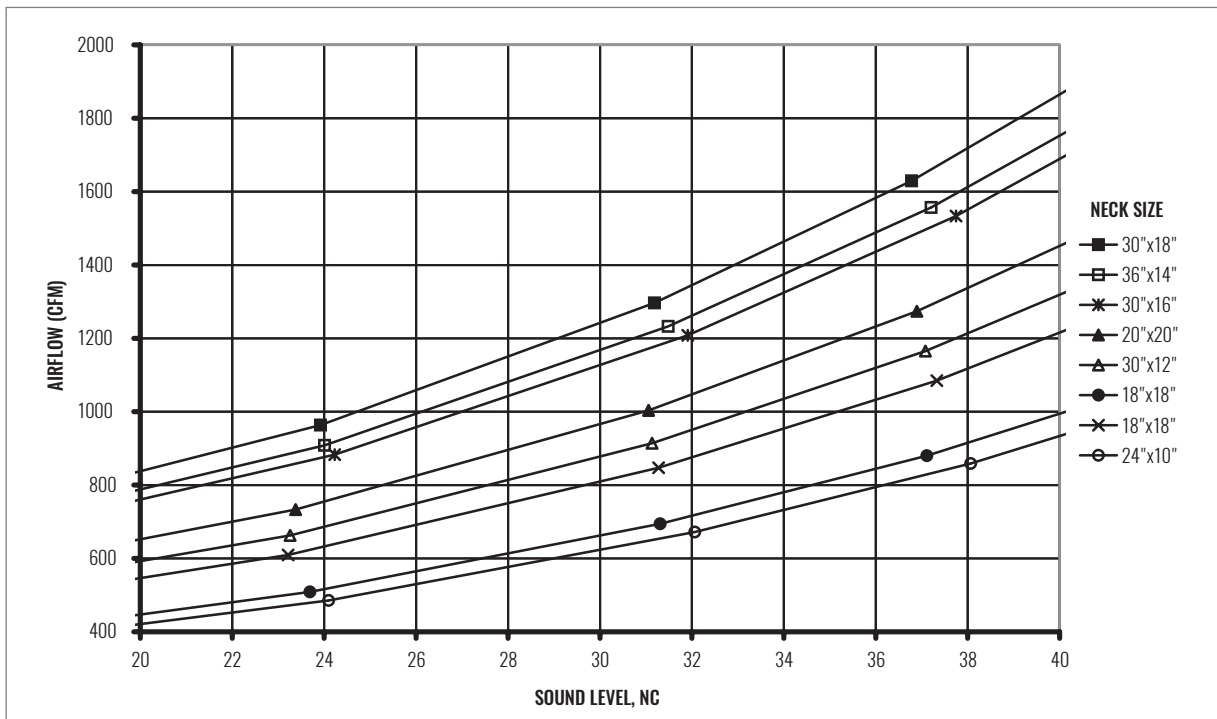
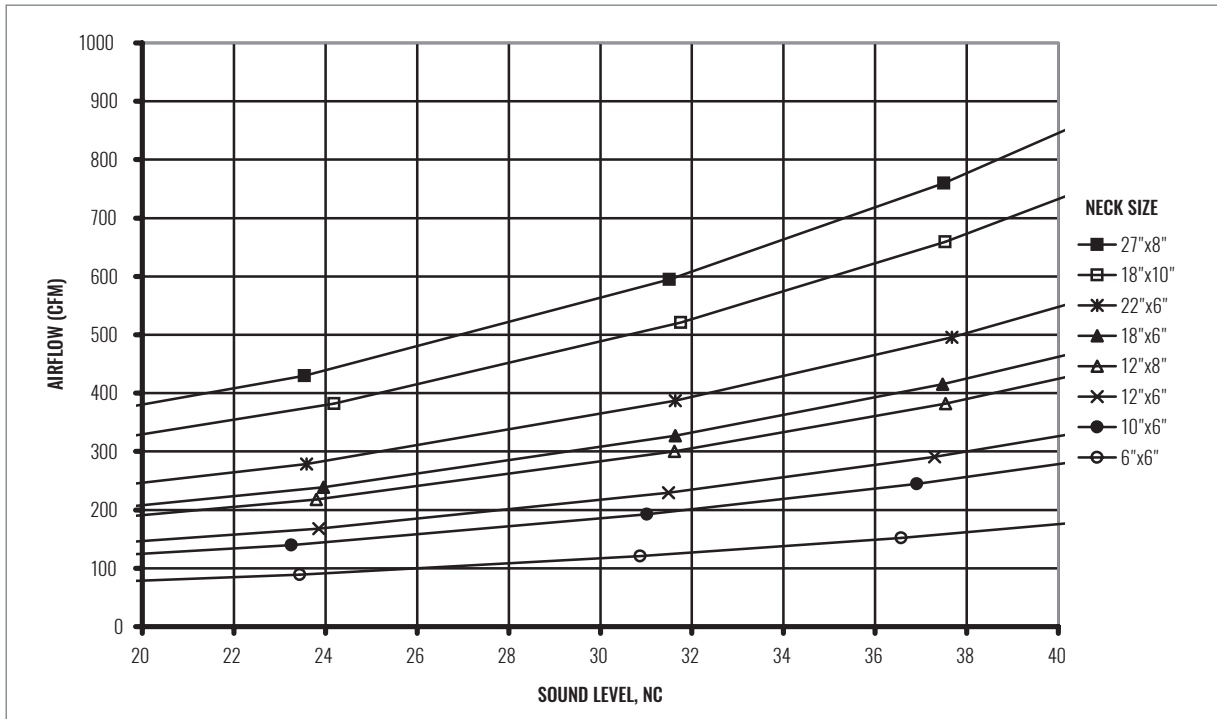


## PERFORMANCE DATA | AFS580 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB					
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7	
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa							
34" x 34"	8.03	160	1228	-.010	13	864 x 864	0.75	0.81	580	-2.5	34	36	33	-	-	-	
		245	1881	-.023	24			1.24	888	-5.8	40	43	42	21	14	12	
		330	2534	-.042	31			1.68	1196	-10.5	44	48	48	32	26	23	
		415	3186	-.067	37			2.11	1504	-16.6	48	53	52	40	35	31	
		500	3839	-.097	41			2.54	1812	-24.1	50	56	56	47	43	38	
42" x 30"	8.75	160	1341	-.010	14	1067 x 762	0.81	0.81	633	-2.5	34	36	34	-	-	-	
		240	2011	-.022	24			1.22	949	-5.6	40	43	42	20	14	12	
		320	2681	-.040	31			1.63	1265	-9.9	44	48	48	31	25	22	
		400	3352	-.062	36			2.03	1582	-15.4	48	52	52	39	34	30	
		480	4022	-.089	41			2.44	1898	-22.2	50	55	56	46	42	37	
48" x 30"	10.00	140	1344	-.008	11	1219 x 762	0.93	0.71	634	-1.9	33	34	32	-	-	-	
		220	2111	-.019	22			1.12	997	-4.7	39	42	41	18	11	-	
		300	2879	-.035	30			1.52	1359	-8.7	44	48	47	29	23	20	
		380	3647	-.056	35			1.93	1721	-13.9	47	52	52	38	33	29	
		460	4415	-.082	40			2.34	2084	-20.4	50	55	55	45	41	36	
42" x 36"	10.50	140	1414	-.008	11	1067 x 914	0.98	0.71	667	-1.9	33	34	32	-	-	-	
		220	2221	-.019	22			1.12	1048	-4.7	39	42	41	18	11	-	
		300	3029	-.035	30			1.52	1430	-8.7	44	48	47	30	24	21	
		380	3837	-.056	36			1.93	1811	-13.9	48	52	52	39	33	29	
		460	4645	-.082	40			2.34	2192	-20.4	50	55	56	46	41	36	
42" x 38"	11.08	140	1494	-.008	12	1067 x 965	1.03	0.71	705	-1.9	33	35	32	-	-	-	
		220	2348	-.019	23			1.12	1108	-4.7	40	43	41	18	11	-	
		300	3201	-.035	30			1.52	1511	-8.7	44	48	47	30	24	21	
		380	4055	-.056	36			1.93	1914	-13.9	48	52	52	39	33	29	
		460	4908	-.082	41			2.34	2317	-20.4	51	56	56	46	41	36	
48" x 36"	12.00	140	1619	-.008	12	1219 x 914	1.11	0.71	764	-1.9	33	35	32	-	-	-	
		220	2545	-.019	23			1.12	1201	-4.7	40	43	41	19	12	-	
		300	3470	-.035	31			1.52	1638	-8.7	45	48	48	30	24	21	
		380	4395	-.056	36			1.93	2074	-13.9	48	53	52	39	34	30	
		460	5321	-.082	41			2.34	2511	-20.4	51	56	56	46	42	37	
44" x 44"	13.44	140	1819	-.008	12	1118 x 1118	1.25	0.71	858	-1.9	34	35	33	-	-	-	
		220	2858	-.019	23			1.12	1349	-4.7	40	43	42	19	12	11	
		300	3897	-.035	31			1.52	1839	-8.7	45	49	48	31	25	22	
		380	4936	-.056	37			1.93	2330	-13.9	48	53	53	40	34	30	
		460	5975	-.082	42			2.34	2820	-20.4	51	56	57	47	42	37	
46" x 46"	14.69	140	1991	-.008	13	1168 x 1168	1.37	0.71	939	-1.9	34	36	33	-	-	-	
		215	3057	-.018	23			1.09	1443	-4.5	40	43	42	19	12	-	
		290	4124	-.033	31			1.47	1946	-8.1	45	49	48	30	24	21	
		365	5190	-.052	36			1.85	2449	-12.8	48	53	52	39	33	29	
		440	6256	-.075	41			2.24	2953	-18.7	51	56	56	46	41	36	
48" x 48"	16.00	140	2171	-.008	13	1219 x 1219	1.49	0.71	1024	-1.9	34	36	33	-	-	-	
		210	3256	-.017	23			1.07	1537	-4.3	40	43	42	19	11	-	
		280	4341	-.030	30			1.42	2049	-7.6	45	48	47	29	23	20	
		350	5426	-.047	36			1.78	2561	-11.8	48	52	52	38	32	28	
		420	6512	-.068	40			2.13	3073	-17.0	51	56	55	44	39	35	

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 program for performance data not shown, including octave band data.

**SOUND CHARTS | AFS585 | 45° DEFLECTION (NO DAMPER)**



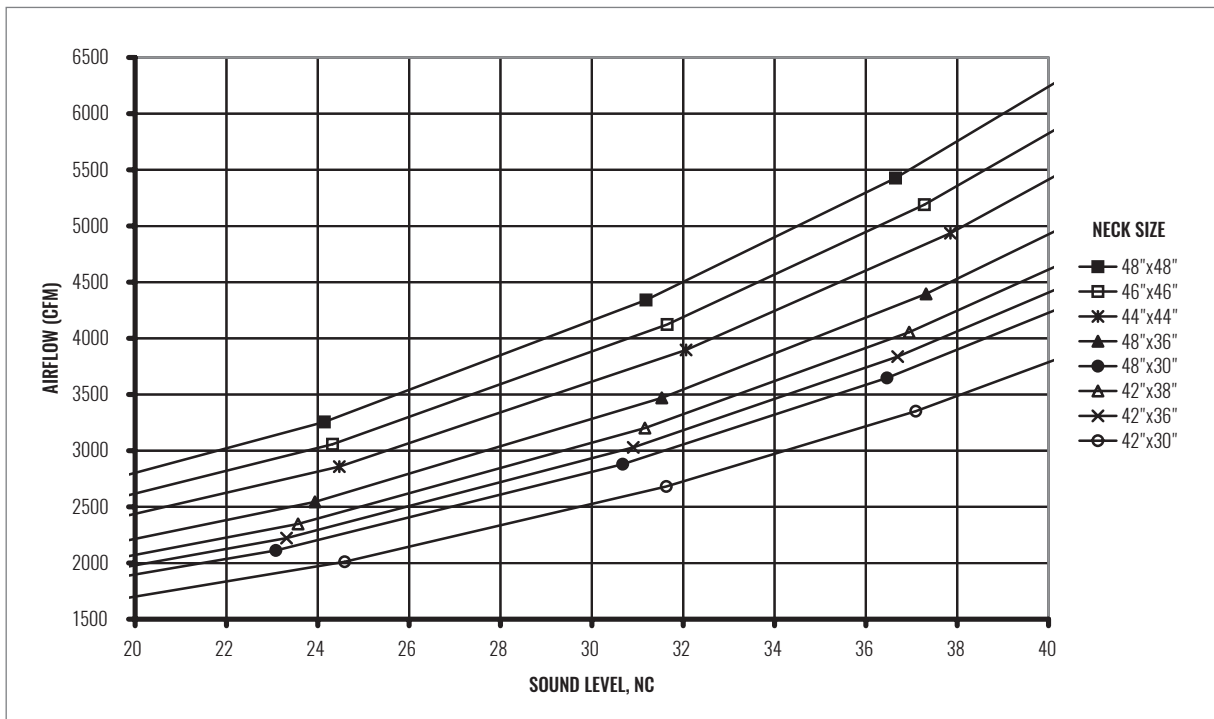
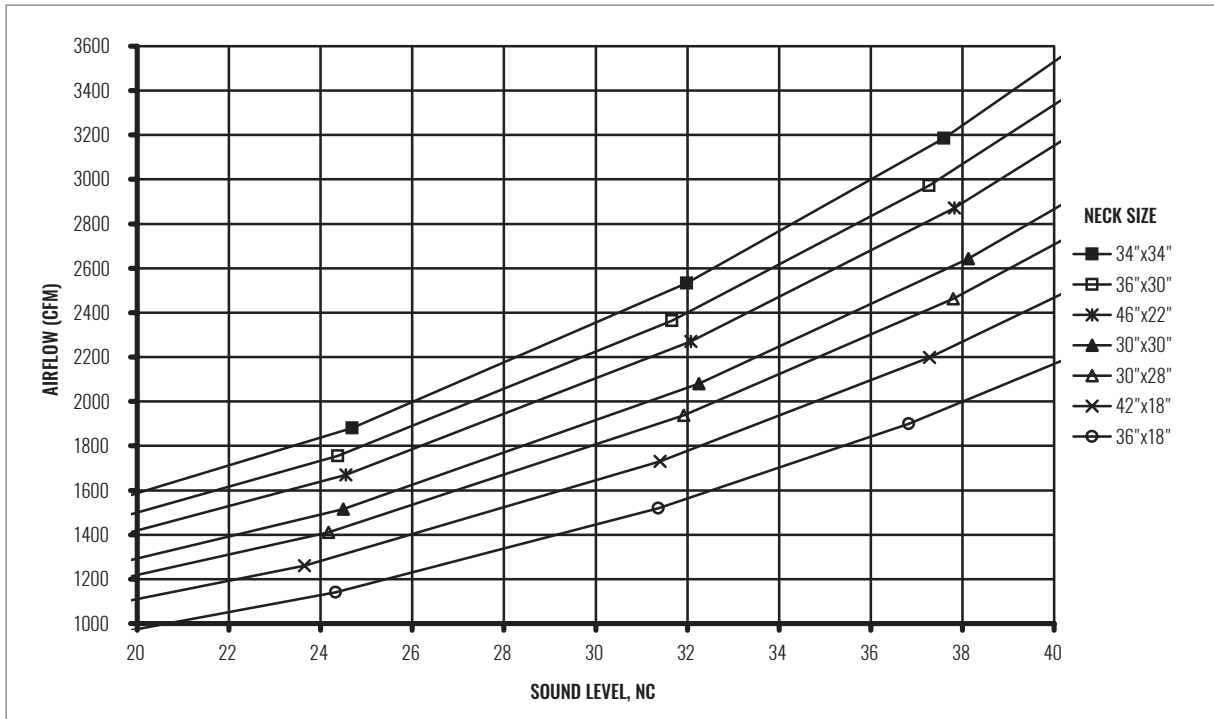
GRILLES | RETURN

# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum



## SOUND CHARTS | AFS585 | 45° DEFLECTION (NO DAMPER)



## PERFORMANCE DATA | AFS585 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps								
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa	2	3	4	5	6	7		
6" x 6"	0.25	300	57	-0.22	13	152 x 152	0.02	1.52	27	-5.6	30	33	32	11	-	-		
		465	89	-0.54	23			2.36	42	-13.4	36	41	41	27	22	19		
		630	121	-0.99	31			3.20	57	-24.7	41	46	47	38	34	30		
		795	152	-1.58	37			4.04	72	-39.3	44	50	52	47	43	38		
		960	184	-2.30	41			4.88	87	-57.3	47	54	55	54	51	45		
10" x 6"	0.42	260	88	-0.17	12	254 x 152	0.04	1.32	41	-4.2	30	33	32	-	-	-		
		415	140	-0.43	23			2.11	66	-10.7	37	41	41	26	20	18		
		570	192	-0.81	31			2.90	91	-20.2	41	47	47	37	33	29		
		725	244	-1.31	37			3.68	115	-32.7	45	51	52	46	43	38		
		880	297	-1.93	42			4.47	140	-48.1	48	54	56	54	50	45		
12" x 6"	0.50	260	107	-0.17	13	305 x 152	0.05	1.32	50	-4.2	30	34	32	-	-	-		
		410	168	-0.42	24			2.08	79	-10.4	37	42	41	26	20	18		
		560	230	-0.78	31			2.84	108	-19.5	42	47	48	38	33	29		
		710	291	-1.26	37			3.61	137	-31.3	45	51	52	47	43	38		
		860	353	-1.85	42			4.37	166	-45.9	48	55	56	54	51	45		
12" x 8"	0.67	240	136	-0.14	12	305 x 203	0.06	1.22	64	-3.6	30	33	32	-	-	-		
		385	218	-0.37	24			1.96	103	-9.2	37	42	41	25	20	17		
		530	300	-0.70	32			2.69	142	-17.5	42	47	48	37	33	29		
		675	382	-1.14	38			3.43	180	-28.3	46	52	53	46	42	37		
		820	464	-1.68	42			4.17	219	-41.8	49	55	57	54	50	44		
18" x 6"	0.75	240	151	-0.14	13	457 x 152	0.07	1.22	71	-3.6	31	34	32	-	-	-		
		380	239	-0.36	24			1.93	113	-9.0	38	42	42	25	20	17		
		520	327	-0.67	32			2.64	154	-16.8	42	48	48	37	32	29		
		660	415	-1.09	37			3.35	196	-27.1	46	52	53	46	42	37		
		800	503	-1.60	42			4.06	237	-39.8	49	55	57	53	50	44		
22" x 6"	0.92	220	170	-0.12	12	559 x 152	0.09	1.12	80	-3.0	30	33	32	-	-	-		
		360	279	-0.32	24			1.83	132	-8.1	38	42	41	25	18	16		
		500	387	-0.62	32			2.54	183	-15.5	43	48	48	37	32	28		
		640	496	-1.02	38			3.25	234	-25.4	46	52	53	46	42	37		
		780	604	-1.52	43			3.96	285	-37.8	49	56	57	53	50	44		
18" x 10"	1.25	220	244	-0.12	13	457 x 254	0.12	1.12	115	-3.0	32	35	33	-	-	-		
		345	382	-0.30	24			1.75	180	-7.4	38	43	42	25	19	17		
		470	521	-0.55	32			2.39	246	-13.7	43	48	48	36	31	28		
		595	659	-0.88	38			3.02	311	-22.0	47	52	53	45	41	36		
		720	798	-1.29	42			3.66	377	-32.2	49	56	57	52	49	43		
27" x 8"	1.50	200	264	-0.10	12	686 x 203	0.14	1.02	125	-2.5	31	34	32	-	-	-		
		325	430	-0.26	24			1.65	203	-6.6	38	42	41	23	17	15		
		450	595	-0.51	32			2.29	281	-12.6	43	48	48	36	30	27		
		575	760	-0.82	38			2.92	359	-20.5	47	52	53	45	40	36		
		700	925	-1.22	42			3.56	437	-30.4	50	56	57	52	48	43		
24" x 10"	1.67	200	299	-0.10	12	610 x 254	0.15	1.02	141	-2.5	32	34	32	-	-	-		
		325	485	-0.26	24			1.65	229	-6.6	39	43	42	24	18	16		
		450	672	-0.51	32			2.29	317	-12.6	44	48	48	36	31	27		
		575	859	-0.82	38			2.92	405	-20.5	47	53	53	45	41	36		
		700	1045	-1.22	43			3.56	493	-30.4	50	56	57	53	49	43		
16" x 16"	1.78	200	323	-0.10	13	406 x 406	0.17	1.02	152	-2.5	32	34	33	-	-	-		
		315	509	-0.25	24			1.60	240	-6.2	39	42	42	23	17	15		
		430	694	-0.46	31			2.18	328	-11.5	43	48	48	35	30	26		
		545	880	-0.74	37			2.77	415	-18.5	47	52	53	44	39	35		
		660	1066	-1.09	42			3.35	503	-27.1	50	56	56	51	47	41		
18" x 18"	2.25	180	372	-0.08	11	457 x 457	0.21	0.91	176	-2.0	31	33	31	-	-	-		
		295	610	-0.22	23			1.50	288	-5.4	39	42	41	22	16	14		
		410	847	-0.42	31			2.08	400	-10.4	43	48	48	34	29	26		
		525	1085	-0.69	37			2.67	512	-17.1	47	52	53	44	39	34		
		640	1323	-1.02	42			3.25	624	-25.4	50	56	57	51	47	41		

NOTE: See notes on page J1-89.

# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum



## PERFORMANCE DATA | AFS585 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7		
in	ft²	FPM	CFM	"WG	mm		m²	m/s	L/s	Pa								
30" x 12"	2.50	180	411	-0.08	12	762 x 305	0.23	0.91	194	-2.0	32	34	32	-	-	-		
		290	663	-0.21	23			1.47	313	-5.2	39	42	41	22	15	14		
		400	914	-0.40	31			2.03	431	-9.9	43	48	48	34	28	25		
		510	1165	-0.65	37			2.59	550	-16.2	47	52	53	43	38	34		
		620	1417	-0.96	42			3.15	669	-23.9	50	56	57	50	46	41		
20" x 20"	2.78	180	463	-0.08	12	508 x 508	0.26	0.91	219	-2.0	32	34	32	-	-	-		
		285	733	-0.20	23			1.45	346	-5.0	39	42	42	22	15	14		
		390	1004	-0.38	31			1.98	474	-9.5	44	48	48	34	28	25		
		495	1274	-0.61	37			2.51	601	-15.2	47	52	53	42	38	33		
		600	1544	-0.90	42			3.05	729	-22.4	50	56	56	50	46	40		
30" x 16"	3.33	180	558	-0.08	13	762 x 406	0.31	0.91	263	-2.0	33	35	33	-	-	-		
		285	883	-0.20	24			1.45	417	-5.0	40	43	42	23	16	14		
		390	1208	-0.38	32			1.98	570	-9.5	44	49	49	35	29	26		
		495	1533	-0.61	38			2.51	724	-15.2	48	53	53	43	39	34		
		600	1859	-0.90	42			3.05	877	-22.4	51	56	57	51	47	41		
36" x 14"	3.50	180	584	-0.08	13	914 x 356	0.33	0.91	276	-2.0	33	35	33	-	-	-		
		280	908	-0.20	24			1.42	429	-4.9	40	43	42	22	16	14		
		380	1233	-0.36	31			1.93	582	-9.0	44	49	48	34	28	25		
		480	1557	-0.57	37			2.44	735	-14.3	48	53	53	42	38	33		
		580	1881	-0.84	42			2.95	888	-20.9	50	56	57	50	45	40		
30" x 18"	3.75	180	631	-0.08	14	762 x 457	0.35	0.91	298	-2.0	33	36	34	-	-	-		
		275	964	-0.19	24			1.40	455	-4.7	40	43	42	22	15	14		
		370	1296	-0.34	31			1.88	612	-8.5	44	48	48	33	28	24		
		465	1629	-0.54	37			2.36	769	-13.4	47	52	53	42	37	33		
		560	1962	-0.78	41			2.84	926	-19.5	50	56	56	49	44	39		
36" x 18"	4.50	180	760	-0.08	14	914 x 457	0.42	0.91	359	-2.0	34	36	34	-	-	-		
		270	1140	-0.18	24			1.37	538	-4.5	40	44	42	22	16	14		
		360	1520	-0.32	31			1.83	717	-8.1	44	49	48	33	27	24		
		450	1900	-0.51	37			2.29	897	-12.6	48	53	53	41	36	32		
		540	2280	-0.73	41			2.74	1076	-18.1	50	56	56	48	44	39		
42" x 18"	5.25	160	791	-0.06	12	1067 x 457	0.49	0.81	373	-1.6	33	35	33	-	-	-		
		255	1260	-0.16	24			1.30	595	-4.0	40	43	42	21	14	13		
		350	1729	-0.31	31			1.78	816	-7.6	45	49	48	33	27	24		
		445	2199	-0.49	37			2.26	1038	-12.3	48	53	53	42	37	33		
		540	2668	-0.73	42			2.74	1259	-18.1	51	56	57	49	45	39		
30" x 28"	5.83	160	886	-0.06	13	762 x 711	0.54	0.81	418	-1.6	33	35	33	-	-	-		
		255	1411	-0.16	24			1.30	666	-4.0	40	44	42	22	15	13		
		350	1937	-0.31	32			1.78	914	-7.6	45	49	49	33	28	24		
		445	2463	-0.49	38			2.26	1162	-12.3	48	53	53	42	37	33		
		540	2989	-0.73	43			2.74	1411	-18.1	51	57	57	50	45	40		
30" x 30"	6.25	160	951	-0.06	13	762 x 762	0.58	0.81	449	-1.6	34	36	33	-	-	-		
		255	1515	-0.16	24			1.30	715	-4.0	41	44	43	22	15	13		
		350	2079	-0.31	32			1.78	981	-7.6	45	49	49	34	28	25		
		445	2644	-0.49	38			2.26	1248	-12.3	49	54	54	43	38	33		
		540	3208	-0.73	43			2.74	1514	-18.1	52	57	58	50	46	40		
46" x 22"	7.03	160	1068	-0.06	14	1168 x 559	0.65	0.81	504	-1.6	34	36	34	-	-	-		
		250	1669	-0.16	25			1.27	788	-3.9	41	44	43	22	15	13		
		340	2270	-0.29	32			1.73	1071	-7.2	45	49	49	33	27	24		
		430	2871	-0.46	38			2.18	1355	-11.5	49	54	54	42	37	33		
		520	3472	-0.67	42			2.64	1639	-16.8	52	57	57	49	45	39		
36" x 30"	7.50	160	1146	-0.06	14	914 x 762	0.70	0.81	541	-1.6	34	36	34	-	-	-		
		245	1754	-0.15	24			1.24	828	-3.7	41	44	43	21	15	13		
		330	2363	-0.27	32			1.68	1115	-6.8	45	49	49	33	27	24		
		415	2971	-0.43	37			2.11	1402	-10.7	48	53	53	41	36	32		
		500	3580	-0.62	42			2.54	1690	-15.5	51	57	57	48	44	38		

NOTE: See notes on page J1-89.

## PERFORMANCE DATA | AFS585 | 45° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps								
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa	2	3	4	5	6	7		
34" x 34"	8.03	160	1228	-0.06	14	864 x 864	0.75	0.81	580	-1.6	35	37	34	-	-	-		
		245	1881	-0.15	25			1.24	888	-3.7	41	44	43	22	15	13		
		330	2534	-0.27	32			1.68	1196	-6.8	45	49	49	33	27	24		
		415	3186	-0.43	38			2.11	1504	-10.7	49	54	53	41	36	32		
		500	3839	-0.62	42			2.54	1812	-15.5	51	57	57	48	44	39		
42" x 30"	8.75	160	1341	-0.06	15	1067 x 762	0.81	0.81	633	-1.6	35	37	35	-	-	-		
		240	2011	-0.14	25			1.22	949	-3.6	41	44	43	21	15	13		
		320	2681	-0.26	32			1.63	1265	-6.4	45	49	49	32	26	23		
		400	3352	-0.40	37			2.03	1582	-9.9	49	53	53	40	35	31		
48" x 30"	10.00	140	1344	-0.05	12	1219 x 762	0.93	0.71	634	-1.2	34	35	33	-	-	-		
		220	2111	-0.12	23			1.12	997	-3.0	40	43	42	19	12	-		
		300	2879	-0.22	31			1.52	1359	-5.6	45	49	48	30	24	21		
		380	3647	-0.36	36			1.93	1721	-9.0	48	53	53	39	34	30		
		460	4415	-0.53	41			2.34	2084	-13.1	51	56	56	46	42	37		
42" x 36"	10.50	140	1414	-0.05	12	1067 x 914	0.98	0.71	667	-1.2	34	35	33	-	-	-		
		220	2221	-0.12	23			1.12	1048	-3.0	40	43	42	19	12	11		
		300	3029	-0.22	31			1.52	1430	-5.6	45	49	48	31	25	22		
		380	3837	-0.36	37			1.93	1811	-9.0	49	53	53	40	34	30		
42" x 38"	11.08	140	1494	-0.05	13	1067 x 965	1.03	0.71	705	-1.2	34	36	33	-	-	-		
		220	2348	-0.12	24			1.12	1108	-3.0	41	44	42	19	12	11		
		300	3201	-0.22	31			1.52	1511	-5.6	45	49	48	31	25	22		
		380	4055	-0.36	37			1.93	1914	-9.0	49	53	53	40	34	30		
		460	4908	-0.53	42			2.34	2317	-13.1	52	57	57	47	42	37		
48" x 36"	12.00	140	1619	-0.05	13	1219 x 914	1.11	0.71	764	-1.2	34	36	33	-	-	-		
		220	2545	-0.12	24			1.12	1201	-3.0	41	44	42	20	13	11		
		300	3470	-0.22	32			1.52	1638	-5.6	46	49	49	31	25	22		
		380	4395	-0.36	37			1.93	2074	-9.0	49	54	53	40	35	31		
44" x 44"	13.44	140	1819	-0.05	13	1118 x 1118	1.25	0.71	858	-1.2	35	36	34	-	-	-		
		220	2858	-0.12	24			1.12	1349	-3.0	41	44	43	20	13	12		
		300	3897	-0.22	32			1.52	1839	-5.6	46	50	49	32	26	23		
		380	4936	-0.36	38			1.93	2330	-9.0	49	54	54	41	35	31		
		460	5975	-0.53	43			2.34	2820	-13.1	52	57	58	48	43	38		
46" x 46"	14.69	140	1991	-0.05	14	1168 x 1168	1.37	0.71	939	-1.2	35	37	34	-	-	-		
		215	3057	-0.12	24			1.09	1443	-2.9	41	44	43	20	13	11		
		290	4124	-0.21	32			1.47	1946	-5.2	46	50	49	31	25	22		
		365	5190	-0.33	37			1.85	2449	-8.3	49	54	53	40	34	30		
48" x 48"	16.00	140	2171	-0.05	14	1219 x 1219	1.49	0.71	1024	-1.2	35	37	34	-	-	-		
		210	3256	-0.11	24			1.07	1537	-2.7	41	44	43	20	12	11		
		280	4341	-0.20	31			1.42	2049	-4.9	46	49	48	30	24	21		
		350	5426	-0.31	37			1.78	2561	-7.6	49	53	53	39	33	29		
		420	6512	-0.44	41			2.13	3073	-11.0	52	57	56	45	40	36		

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 program for performance data not shown, including octave band data.

GRILLES | RETURN

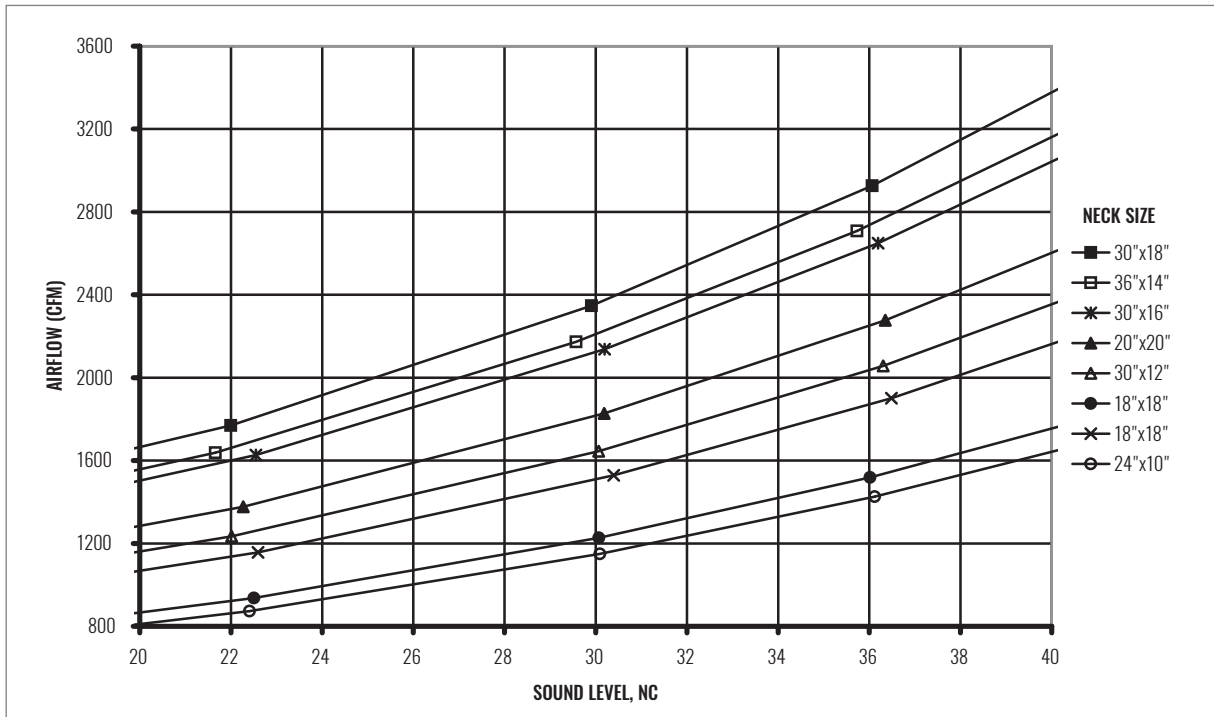
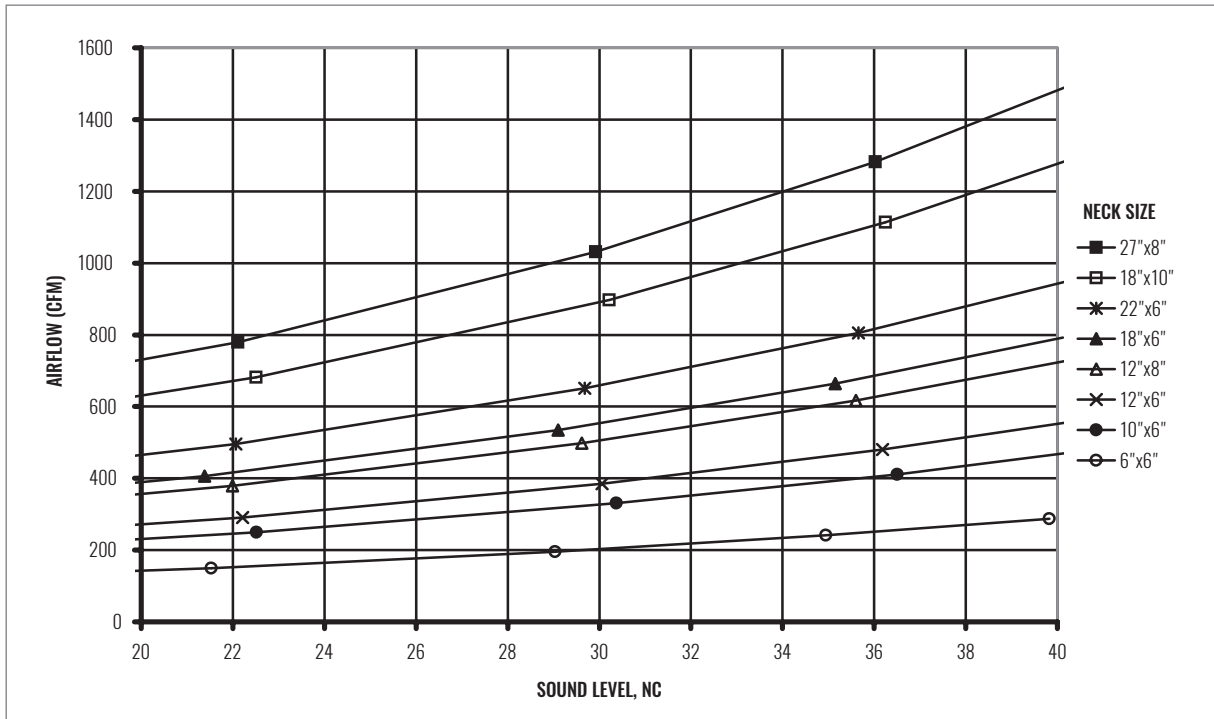
# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum

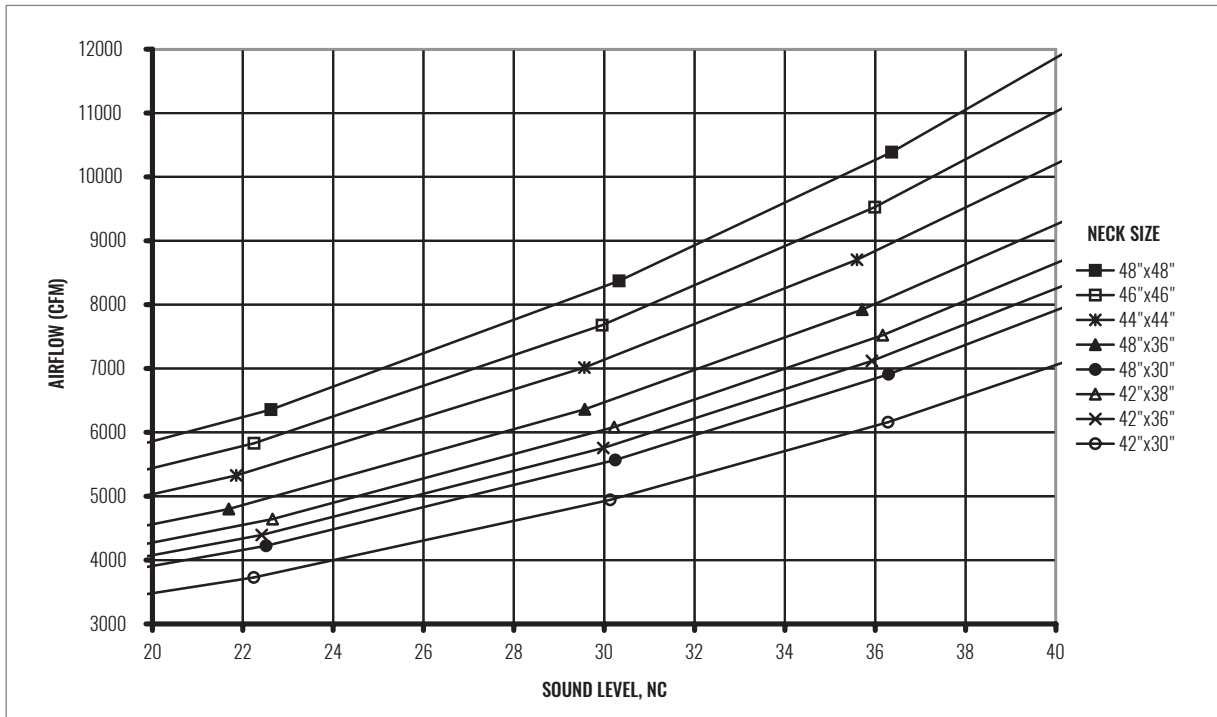
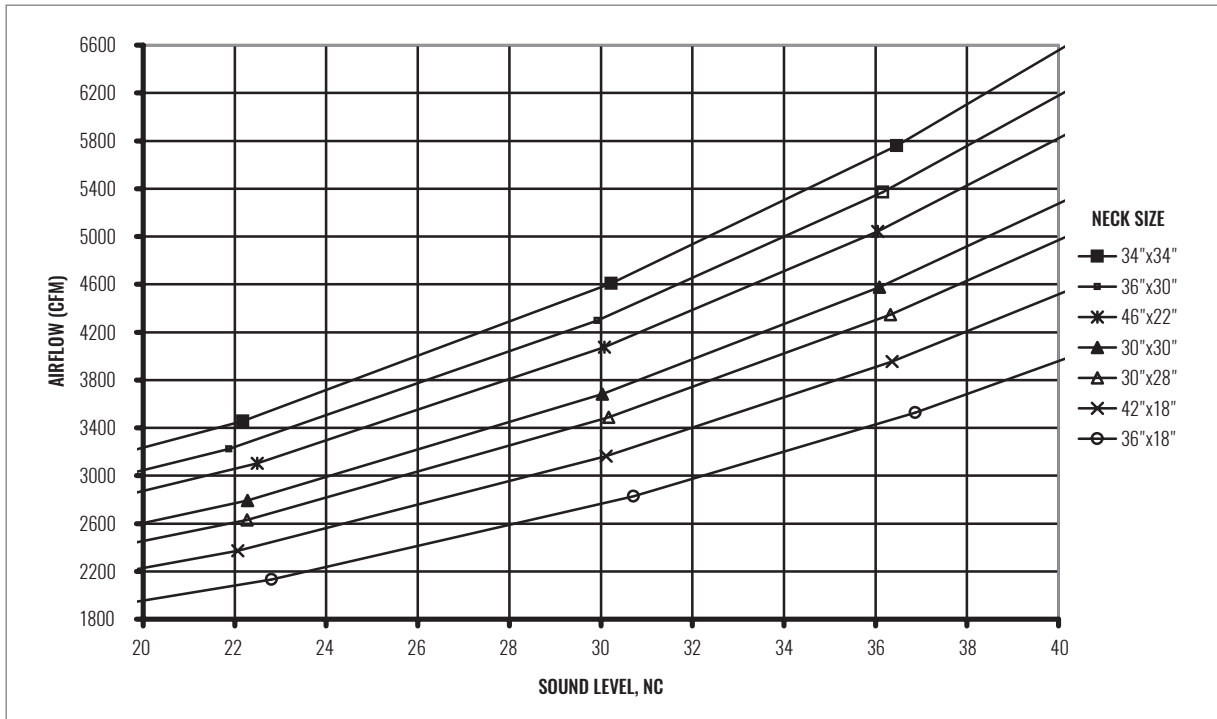


GRILLES | RETURN

## SOUND CHARTS | AFS580, AFS585 | 0° DEFLECTION (NO DAMPER)



**SOUND CHARTS | AFS580, AFS585 | 0° DEFLECTION (NO DAMPER)**



GRILLES | RETURN



# AFS580 / AFS585

Return Grille | Architectural, Extruded Aluminum



## PERFORMANCE DATA | AFS580, AFS585 | 0° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7		
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa								
6" x 6"	0.25	540	103	-0.24	11	152 x 152	0.02	2.74	49	-6.0	38	28	15	-	-	-		
		780	149	-0.50	22			3.96	70	-12.4	40	36	31	20	15	13		
		1020	195	-0.85	29			5.18	92	-21.3	42	42	43	31	20	22		
		1260	241	-1.30	35			6.40	114	-32.4	43	46	52	40	23	29		
		1500	287	-1.85	40			7.62	136	-46.0	44	50	60	47	26	35		
10" x 6"	0.42	500	169	-0.21	12	254 x 152	0.04	2.54	80	-5.1	40	29	14	-	-	-		
		740	250	-0.45	23			3.76	118	-11.2	43	37	31	21	17	14		
		980	330	-0.79	30			4.98	156	-19.6	44	43	43	32	21	23		
		1220	411	-1.22	37			6.20	194	-30.4	45	48	53	41	25	31		
		1460	492	-1.75	42			7.42	232	-43.6	46	52	61	48	28	37		
12" x 6"	0.50	480	197	-0.19	11	305 x 152	0.05	2.44	93	-4.7	41	29	13	-	-	-		
		710	291	-0.41	22			3.61	137	-10.3	43	37	30	20	17	13		
		940	386	-0.73	30			4.78	182	-18.1	45	43	42	31	21	23		
		1170	480	-1.12	36			5.94	226	-28.0	46	48	52	40	25	30		
		1400	574	-1.61	41			7.11	271	-40.0	47	52	60	47	28	36		
12" x 8"	0.67	460	261	-0.17	11	305 x 203	0.06	2.34	123	-4.3	42	29	13	-	11	-		
		670	379	-0.37	22			3.40	179	-9.2	44	37	29	19	17	13		
		880	498	-0.64	30			4.47	235	-15.8	46	43	41	30	22	22		
		1090	617	-0.97	36			5.54	291	-24.3	47	48	50	39	25	29		
		1300	736	-1.39	41			6.60	348	-34.5	48	52	58	46	28	35		
18" x 6"	0.75	440	277	-0.16	11	457 x 152	0.07	2.24	131	-4.0	42	29	11	-	-	-		
		645	406	-0.34	21			3.28	191	-8.5	44	37	28	18	17	12		
		850	535	-0.59	29			4.32	252	-14.8	46	43	40	29	22	21		
		1055	663	-0.91	35			5.36	313	-22.7	47	48	49	38	25	28		
		1260	792	-1.30	40			6.40	374	-32.4	48	52	57	45	28	34		
22" x 6"	0.92	440	341	-0.16	12	559 x 152	0.09	2.24	161	-4.0	43	29	12	-	11	-		
		640	496	-0.34	22			3.25	234	-8.4	45	38	28	18	18	13		
		840	651	-0.58	30			4.27	307	-14.4	47	44	40	29	22	22		
		1040	806	-0.89	36			5.28	380	-22.1	48	48	50	38	26	29		
		1240	961	-1.26	41			6.30	453	-31.4	49	52	57	45	29	35		
18" x 10"	1.25	420	465	-0.14	12	457 x 254	0.12	2.13	220	-3.6	44	30	12	-	12	-		
		615	681	-0.31	23			3.12	322	-7.7	47	38	28	18	19	13		
		810	898	-0.54	30			4.11	424	-13.4	48	44	40	30	23	22		
		1005	1114	-0.83	36			5.11	526	-20.6	49	49	50	38	27	29		
		1200	1330	-1.18	41			6.10	628	-29.4	50	53	57	46	30	35		
27" x 8"	1.50	400	529	-0.13	11	686 x 203	0.14	2.03	249	-3.3	45	30	-	-	12	-		
		590	780	-0.29	22			3.00	368	-7.1	47	38	27	17	19	12		
		780	1031	-0.50	30			3.96	487	-12.4	49	44	39	29	23	22		
		970	1282	-0.77	36			4.93	605	-19.2	50	49	49	38	27	29		
		1160	1533	-1.10	41			5.89	724	-27.5	51	53	57	45	30	35		
24" x 10"	1.67	400	597	-0.13	12	610 x 254	0.15	2.03	282	-3.3	45	30	11	-	13	-		
		585	874	-0.28	22			2.97	412	-7.0	48	39	27	18	19	13		
		770	1150	-0.49	30			3.91	543	-12.1	49	45	39	29	24	22		
		955	1426	-0.75	36			4.85	673	-18.6	50	49	49	38	27	29		
		1140	1703	-1.07	41			5.79	804	-26.6	51	53	57	45	30	35		
16" x 16"	1.78	400	646	-0.13	12	406 x 406	0.17	2.03	305	-3.3	46	31	11	-	13	-		
		580	937	-0.28	23			2.95	442	-6.9	48	39	27	18	19	13		
		760	1227	-0.47	30			3.86	579	-11.8	49	45	39	29	24	22		
		940	1518	-0.73	36			4.78	716	-18.1	51	49	48	37	27	29		
		1120	1809	-1.03	41			5.69	854	-25.6	52	53	56	44	30	35		
18" x 18"	2.25	380	785	-0.12	12	457 x 457	0.21	1.93	371	-3.0	47	31	-	-	13	-		
		560	1157	-0.26	23			2.84	546	-6.4	49	39	27	17	20	13		
		740	1529	-0.45	30			3.76	722	-11.2	50	45	39	29	24	22		
		920	1901	-0.69	36			4.67	897	-17.3	52	50	49	37	28	29		
		1100	2273	-0.99	41			5.59	1073	-24.7	53	54	56	45	31	35		

NOTE: See notes on page J1-94.

## PERFORMANCE DATA | AFS580, AFS585 | 0° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7		
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa								
30" x 12"	2.50	360	823	-0.11	11	762 x 305	0.23	1.83	388	-2.6	47	30	-	-	13	-		
		540	1234	-0.24	22			2.74	582	-6.0	49	39	26	16	20	12		
		720	1645	-0.43	30			3.66	777	-10.6	51	45	38	28	24	21		
		900	2057	-0.66	36			4.57	971	-16.5	52	50	48	37	28	29		
		1080	2468	-0.96	41			5.49	1165	-23.8	53	54	56	44	31	35		
20" x 20"	2.78	360	926	-0.11	11	508 x 508	0.26	1.83	437	-2.6	47	30	-	-	13	-		
		535	1377	-0.23	22			2.72	650	-5.8	49	39	26	16	20	12		
		710	1827	-0.41	30			3.61	862	-10.3	51	45	38	28	25	21		
		885	2277	-0.64	36			4.50	1075	-16.0	52	50	48	37	28	29		
30" x 16"	3.33	360	1115	-0.11	12	762 x 406	0.31	1.83	526	-2.6	48	31	-	-	14	-		
		525	1626	-0.23	23			2.67	768	-5.6	50	39	26	16	20	12		
		690	2137	-0.39	30			3.51	1009	-9.7	52	45	38	27	25	21		
		855	2648	-0.60	36			4.34	1250	-14.9	53	50	47	36	29	28		
		1020	3160	-0.85	41			5.18	1491	-21.3	54	54	55	43	32	34		
36" x 14"	3.50	340	1103	-0.09	11	914 x 356	0.33	1.73	520	-2.4	48	30	-	-	13	-		
		505	1638	-0.21	22			2.57	773	-5.2	50	39	24	15	20	11		
		670	2173	-0.37	30			3.40	1026	-9.2	52	45	37	26	25	20		
		835	2708	-0.57	36			4.24	1278	-14.2	53	50	46	35	28	28		
30" x 18"	3.75	340	1191	-0.09	11	762 x 457	0.35	1.73	562	-2.4	48	30	-	-	14	-		
		505	1769	-0.21	22			2.57	835	-5.2	51	39	25	15	20	11		
		670	2348	-0.37	30			3.40	1108	-9.2	52	45	37	27	25	21		
		835	2926	-0.57	36			4.24	1381	-14.2	53	50	47	36	29	28		
		1000	3504	-0.82	41			5.08	1654	-20.4	54	54	55	43	32	34		
36" x 18"	4.50	340	1436	-0.09	12	914 x 457	0.42	1.73	678	-2.4	49	31	-	-	14	-		
		505	2132	-0.21	23			2.57	1006	-5.2	51	40	26	16	21	12		
		670	2829	-0.37	31			3.40	1335	-9.2	53	46	38	28	26	22		
		835	3526	-0.57	37			4.24	1664	-14.2	54	51	47	37	30	29		
42" x 18"	5.25	320	1581	-0.08	11	1067 x 457	0.49	1.63	746	-2.1	49	31	-	-	14	-		
		480	2372	-0.19	22			2.44	1119	-4.7	52	39	24	15	21	11		
		640	3163	-0.34	30			3.25	1493	-8.4	53	46	37	26	26	21		
		800	3953	-0.53	36			4.06	1866	-13.1	55	51	46	36	30	28		
		960	4744	-0.76	41			4.88	2239	-18.8	56	55	54	43	33	34		
30" x 28"	5.83	320	1771	-0.08	11	762 x 711	0.54	1.63	836	-2.1	50	31	-	-	15	-		
		475	2629	-0.19	22			2.41	1241	-4.6	52	40	24	15	21	11		
		630	3487	-0.33	30			3.20	1646	-8.1	54	46	36	26	26	21		
		785	4345	-0.51	36			3.99	2051	-12.6	55	51	46	35	30	28		
30" x 30"	6.25	320	1901	-0.08	12	762 x 762	0.58	1.63	897	-2.1	50	31	-	-	15	-		
		470	2792	-0.18	22			2.39	1318	-4.5	52	40	24	15	21	11		
		620	3684	-0.32	30			3.15	1738	-7.9	54	46	36	26	26	21		
		770	4575	-0.49	36			3.91	2159	-12.1	55	51	45	35	30	28		
		920	5466	-0.69	41			4.67	2580	-17.3	56	54	53	42	33	34		
46" x 22"	7.03	320	2137	-0.08	12	1168 x 559	0.65	1.63	1008	-2.1	51	32	-	-	15	-		
		465	3105	-0.18	22			2.36	1465	-4.4	53	40	24	15	22	11		
		610	4073	-0.31	30			3.10	1922	-7.6	54	46	36	26	26	20		
		755	5042	-0.47	36			3.84	2379	-11.6	56	51	45	34	30	28		
36" x 30"	7.50	300	2148	-0.07	11	914 x 762	0.70	1.52	1014	-1.8	51	31	-	-	15	-		
		450	3222	-0.17	22			2.29	1521	-4.1	53	40	23	14	21	11		
		600	4296	-0.30	30			3.05	2028	-7.4	55	46	35	25	26	20		
		750	5370	-0.46	36			3.81	2534	-11.5	56	51	45	35	30	28		
		900	6444	-0.66	41			4.57	3041	-16.5	57	55	53	42	33	34		

NOTE: See notes on page J1-94.

## PERFORMANCE DATA | AFS580, AFS585 | 0° DEFLECTION (NO DAMPER)

		IP DATA				NC	METRIC DATA					OCTAVE BAND, dB					
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	NOM DUCT		DUCT AREA	NECK VEL	AIRFLOW	Ps	2	3	4	5	6	7	
in	ft <sup>2</sup>	FPM	CFM	"WG	mm		m <sup>2</sup>	m/s	L/s	Pa							
34" x 34"	8.03	300	2303	-0.07	11	864 x 864	0.75	1.52	1087	-1.8	51	31	-	-	15	-	
		450	3455	-0.17	22			2.29	1631	-4.1	53	40	23	14	22	11	
		600	4607	-0.30	30			3.05	2174	-7.4	55	46	36	26	27	21	
		750	5758	-0.46	36			3.81	2718	-11.5	56	51	45	35	30	28	
		900	6910	-0.66	42			4.57	3261	-16.5	57	55	53	42	33	34	
42" x 30"	8.75	300	2514	-0.07	11	1067 x 762	0.81	1.52	1186	-1.8	51	31	-	-	15	-	
		445	3729	-0.16	22			2.26	1760	-4.0	54	40	23	14	22	11	
		590	4944	-0.29	30			3.00	2333	-7.1	55	46	35	25	27	20	
		735	6158	-0.44	36			3.73	2906	-11.0	56	51	45	34	30	28	
		880	7373	-0.64	41			4.47	3480	-15.8	57	55	53	42	33	34	
48" x 30"	10.00	300	2879	-0.07	12	1219 x 762	0.93	1.52	1359	-1.8	52	32	-	-	16	-	
		440	4223	-0.16	23			2.24	1993	-4.0	54	40	23	14	22	11	
		580	5567	-0.28	30			2.95	2627	-6.9	56	46	35	25	27	20	
		720	6910	-0.43	36			3.66	3261	-10.6	57	51	45	34	31	28	
		860	8254	-0.61	41			4.37	3895	-15.1	58	55	52	41	34	33	
42" x 36"	10.50	300	3029	-0.07	12	1067 x 914	0.98	1.52	1430	-1.8	52	32	-	-	16	-	
		435	4392	-0.16	22			2.21	2073	-3.9	54	40	23	14	22	11	
		570	5756	-0.27	30			2.90	2716	-6.6	56	46	35	25	27	20	
		705	7119	-0.41	36			3.58	3360	-10.2	57	51	44	33	31	27	
		840	8482	-0.58	41			4.27	4003	-14.4	58	55	51	41	33	33	
42" x 38"	11.08	300	3201	-0.07	12	1067 x 965	1.03	1.52	1511	-1.8	52	32	-	-	16	-	
		435	4642	-0.16	23			2.21	2191	-3.9	54	41	23	14	23	11	
		570	6082	-0.27	30			2.90	2870	-6.6	56	47	35	25	27	20	
		705	7523	-0.41	36			3.58	3550	-10.2	57	51	44	34	31	27	
		840	8963	-0.58	41			4.27	4230	-14.4	58	55	52	41	34	33	
48" x 36"	12.00	280	3239	-0.06	11	1219 x 914	1.11	1.42	1528	-1.6	52	31	-	-	15	-	
		415	4800	-0.14	22			2.11	2265	-3.5	55	40	21	13	22	-	
		550	6362	-0.25	30			2.79	3002	-6.2	56	46	34	24	27	19	
		685	7923	-0.39	36			3.48	3739	-9.6	57	51	43	33	31	27	
		820	9484	-0.55	41			4.17	4476	-13.7	58	55	51	40	34	33	
44" x 44"	13.44	280	3637	-0.06	11	1118 x 1118	1.25	1.42	1717	-1.6	53	32	-	-	16	-	
		410	5326	-0.14	22			2.08	2514	-3.4	55	40	21	13	22	-	
		540	7015	-0.24	30			2.74	3311	-6.0	57	46	33	24	27	19	
		670	8703	-0.37	36			3.40	4108	-9.2	58	51	43	33	31	27	
		800	10392	-0.53	41			4.06	4904	-13.1	59	55	50	40	34	32	
46" x 46"	14.69	280	3981	-0.06	12	1168 x 1168	1.37	1.42	1879	-1.6	53	32	-	-	16	-	
		410	5830	-0.14	22			2.08	2751	-3.4	55	41	22	13	23	11	
		540	7678	-0.24	30			2.74	3624	-6.0	57	47	34	24	27	20	
		670	9527	-0.37	36			3.40	4496	-9.2	58	51	43	33	31	27	
		800	11375	-0.53	41			4.06	5369	-13.1	59	55	51	40	34	33	
48" x 48"	16.00	280	4341	-0.06	12	1219 x 1219	1.49	1.42	2049	-1.6	54	33	-	-	17	-	
		410	6357	-0.14	23			2.08	3000	-3.4	56	41	22	13	23	11	
		540	8372	-0.24	30			2.74	3951	-6.0	57	47	34	25	28	20	
		670	10388	-0.37	36			3.40	4902	-9.2	59	52	43	33	32	27	
		800	12403	-0.53	41			4.06	5854	-13.1	60	56	51	40	35	33	

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 program for performance data not shown, including octave band data.

**ENGINEERING SPECIFICATION & CONFIGURATION**
**AFS580, AFS585**

The return grille shall be a Krueger model AFS580 (3/4" blade spacing) or AFS585 (1/2" blade spacing). This grille must have extruded aluminum blades resulting in a fixed deflection of 45° or 0°. The extruded aluminum blades shall be constructed of no less than 0.040 - 0.050 thick aluminum. The blades must be held in place by mullions placed behind the grille and welded or crimped to the frame. The extruded aluminum frame must be constructed of no less than 0.040 - 0.050 thick aluminum with countersunk screw holes. This frame must also produce a border of 1 1/4" around all sides of the grille with mitered corners.

Optional damper shall be available made of heavy gage steel (OBD) or aluminum (5OBD) and operable from the face of the return grille.

**PERFORMANCE**

The manufacturer shall provide published performance data for the grille. The grille 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: (XXXXXX)**

AFS580 - Fixed single deflection, 3/4" blade spacing aluminum return grille

AFS585 - Fixed single deflection, 1/2" blade spacing aluminum return grille

**2. PATTERN: (XX)**

H - 45° horizontal front blades

V - 45° vertical front blades

HZ - 0° horizontal front blades

VZ - 0° vertical front blades

**3. WIDTH: (XX) \***

6" - 240" in 1/4" increments

**4. HEIGHT: (XX) \***

4" - 240" in 1/4" increments

**5. FRAME STYLE: (XXX)**

F22 - Surface mount

F23 - Lay-in T-bar

F98 - Narrow-T

FTB - Channel frame \*

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

NONE            24"x24"

24"x12"        48"x24"

**7. FASTENING METHOD: (XX)**

00 - No screw holes

01 - Standard screw holes

02 - Concealed mounting \*\*

03 - Knurled knob ‡

08 - 1/4 turn fasteners ‡

**8. DAMPER: (XX)**

00 - No damper

01 - Steel opposed blade damper (model OBD)

15 - Aluminum opposed blade damper (model 5OBD)

**9. ACCESSORIES: (XX) (XX)**

00 - No accessories    IS - Insect screen, 1/16" mesh ◊

01 - Plaster frame      DS - Debris screen, 1/4" mesh ◊

04 - 1" filter frame ◊

05 - 2" filter frame ◊

**10. FINISH: (XX) \*\*\***

01 - Mill

10 - Alumican

35 - Black

44 - British White

\* Maximum grille size is 240"x96" or 96"x240".

FTB channel frame not available on grilles larger than 48"x48".

\*\* Concealed mounting not available on grilles larger than 36"x36" or Patterns H or V.

\*\*\* Off White and Anodized finishes available.

‡ Knurled knob and 1/4 turn fasteners only available with filter frame accessories.

◊ Accessories 04, 05, IS, and DS not available on grilles larger than 48"x48".

**SAMPLE CONFIGURATION: AFS580 - H - 12x24 - F23 - 12"x24" - 00 - 00 - 00 - 44**