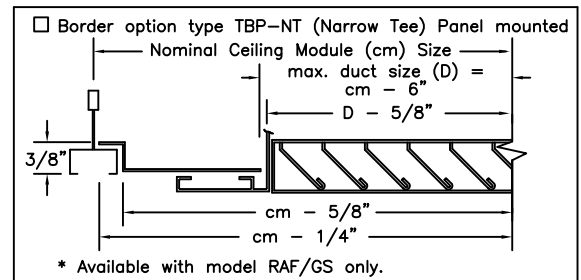
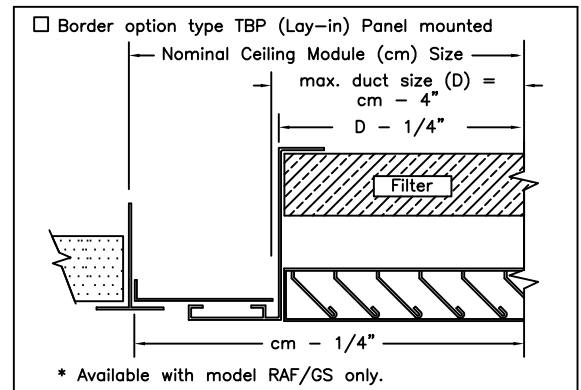
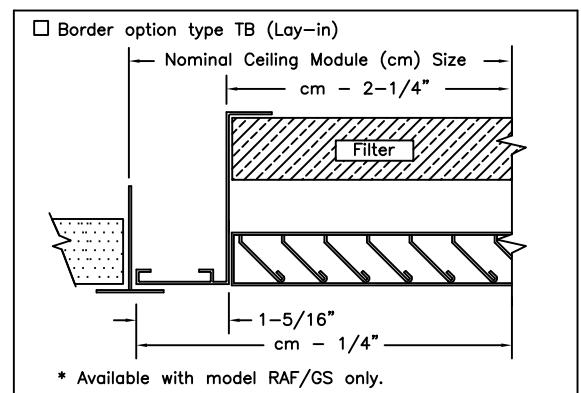
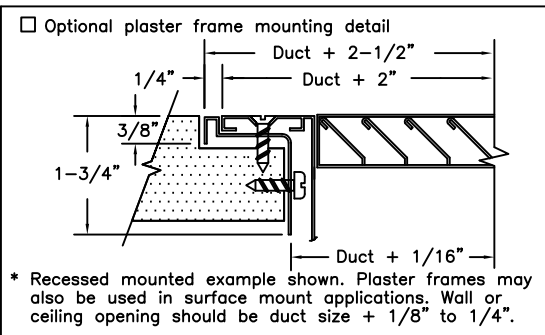
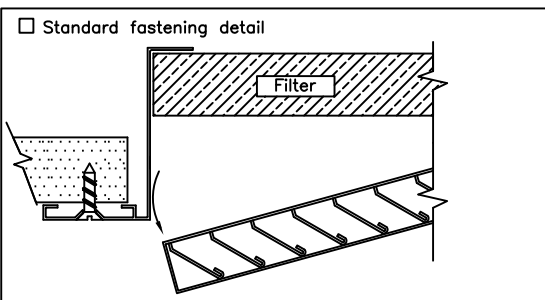
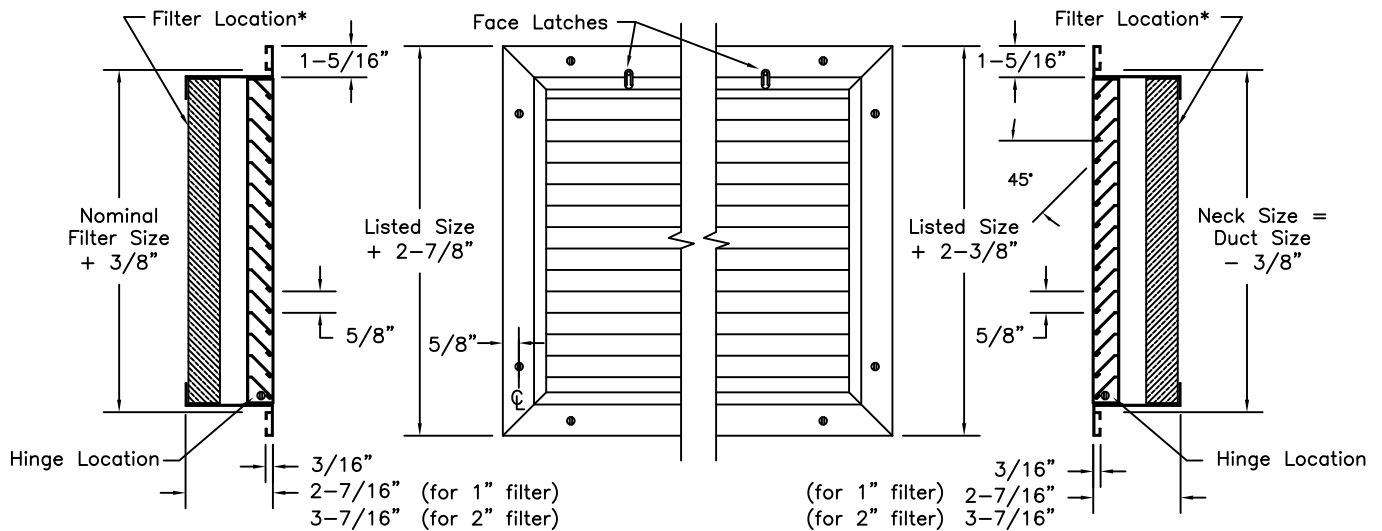


MODEL RAF/FS (For Nom. Filter Size)

MODEL RAF/GS (For Nom. Duct Size)



CONSTRUCTION NOTES:

- **Frame:** Heavy rollformed aluminum or thick extruded aluminum for units with either width or height 18 inches or larger. Frame is assembled using corner clips to assure hairline mitered corners and is designed to accommodate 1" thick disposable filters by others or 1" thick washable filter medium provided at the factory.
- **Blades:** Heavy rollformed aluminum. Each blade is permanently fixed at 45° in all aluminum core frame.
- **Finish:** Powder coat baked enamel in the following colors;
 - White.
 - Special (specify _____)
- **Sizes:** 6" x 6" minimum, 48" x 48" maximum.
- **Optional Construction:**
 - Model RAFGS-2/RAFFS-2: 2" Thick Filter Depth (filter not included)

NOTE: ALL DRAWINGS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

TITLE:

ALUMINUM RETURN FILTER
MODEL RAF



DRN BY: CV	DATE: 09/16/99	SCALE: NTS	DRAWING NO.:
CKD BY: AV	DATE: 2/28/12	REV: E	RAF



RA, RAF/FS, RAF/GS, RAOB Returns

Neck Vel.	FPM	300	400	450	500	550	600	650	700	750	800	900
Neck Size	Ps	.020	.030	.040	.040	.050	.060	.070	.080	.090	.110	.130
6 x 6" Ak = .17	CFM	50	70	75	85	95	100	110	120	125	135	155
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	20	25
8 x 6" Ak = .22	CFM	65	90	100	110	120	130	145	155	165	175	200
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	20	25
10 x 6" Ak = .29	CFM	85	115	130	145	160	175	190	205	220	230	260
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	20	30
10 x 8" Ak = .40	CFM	120	160	180	200	220	240	260	280	300	320	360
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	30	40
12 x 6" Ak = .36	CFM	108	145	160	180	200	215	235	250	270	290	325
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	20	30
12 x 8" Ak = .48	CFM	145	190	215	240	265	290	315	335	360	385	430
	NC	<20	<20	<20	<20	<20	<20	<20	<20	20	30	40
12 x 10" Ak = .61	CFM	185	245	275	305	335	365	395	425	460	490	550
	NC	<20	<20	<20	<20	<20	<20	<20	20	30	30	40
12 x 12" Ak = .74	CFM	220	295	335	370	405	445	480	520	555	590	665
	NC	<20	<20	<20	<20	<20	<20	20	30	30	30	40
16 x 16" Ak = 1.32	CFM	395	530	595	660	725	790	860	925	990	1055	1190
	NC	<20	<20	<20	20	30	30	30	30	35	35	50
18 x 6" Ak = .550	CFM	165	220	250	275	300	330	360	385	415	440	495
	NC	<20	<20	<20	<20	<20	<20	<20	20	30	30	40
18 x 10" Ak = .91	CFM	275	365	410	455	500	545	590	635	680	730	820
	NC	<20	<20	<20	<20	<20	20	30	30	30	30	40
18 x 12" Ak = 1.12	CFM	335	450	505	560	615	670	730	785	840	895	1005
	NC	<20	<20	<20	<20	20	30	30	30	30	35	40
18 x 18" Ak = 1.73	CFM	520	690	780	865	950	1040	1125	1210	1295	1385	1550
	NC	<20	<20	<20	20	30	30	30	35	35	35	40
24 x 12" Ak 1.52	CFM	455	610	685	760	835	910	990	1065	1140	1215	1370
	NC	<20	<20	<20	20	30	30	30	35	35	35	40
24 x 18" Ak 2.35	CFM	705	940	1055	1175	1290	1410	1525	1645	1765	1880	2115
	NC	<20	<20	<20	30	30	30	35	35	40	40	50
24 x 24" Ak = 3.15	CFM	945	1260	1420	1575	1735	1890	2045	2205	2365	2520	2835
	NC	<20	<20	30	30	30	35	35	35	40	40	50
30 x 12" Ak = 1.93	CFM	580	770	870	965	1060	1160	1255	1350	1445	1545	1735
	NC	<20	<20	<20	30	30	30	30	35	35	40	50
30 x 18" Ak = 2.93	CFM	880	1170	1320	1465	1610	1760	1905	2050	2200	2345	2635
	NC	<20	<20	30	30	30	30	35	40	40	40	50
30 x 24" Ak = 3.97	CFM	1190	1590	1785	1985	2185	2380	2580	2780	2975	3175	3575
	NC	<20	<20	30	30	30	35	40	40	40	50	50
30 x 30" Ak = 5.00	CFM	1500	2000	2250	3500	2750	3000	3250	3500	3750	4000	4500
	NC	<20	30	30	30	35	35	40	40	50	50	50
36 x 18" Ak = 3.55	CFM	1065	1420	1600	1775	1950	2130	2310	2485	2660	2840	3195
	NC	<20	<20	30	30	30	35	35	40	40	40	50
36 x 24" Ak = 4.84	CFM	1450	1935	2180	2420	2660	2905	3145	3390	3630	3870	4355
	NC	<20	30	30	30	35	35	40	40	50	50	50
36 x 30" Ak = 6.10	CFM	1830	2440	2745	3050	3355	3660	3965	4270	4575	4880	5490
	NC	<20	30	30	35	35	40	40	50	50	50	50
48 x 24" Ak = 6.53	CFM	1960	2610	2940	3265	3590	3920	4245	4570	4900	5225	5875
	NC	<20	30	30	35	35	40	40	50	50	50	50
48 x 26" Ak = 7.50	CFM	2250	3000	3375	3750	4125	4500	4875	5250	5625	6000	6750
	NC	<20	30	30	35	40	40	50	50	50	50	50
48 x 30" Ak = 8.10	CFM	2430	3240	3645	4050	4455	4860	5265	5670	6075	6480	7290
	NC	<20	30	30	35	40	40	50	50	50	50	50

Notes:

1. NC sound data based on sound power level re: 10 - 12 watts and 8db room attenuation.
2. For filter models add .050 to Ps for filter resistance.