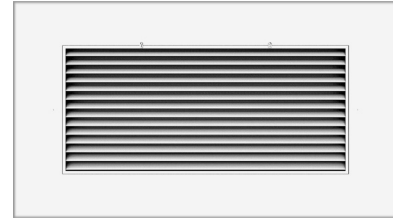


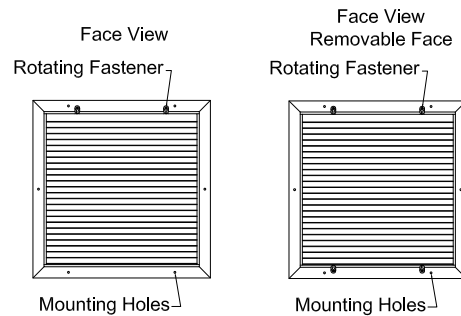
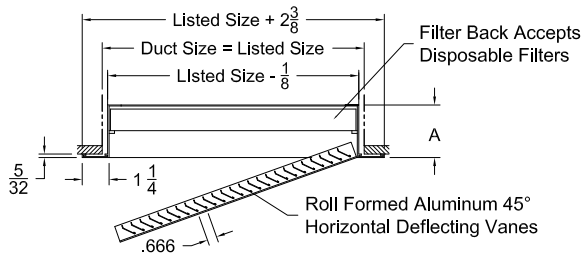
MODEL RHF

The RHF series of louvered filter grilles combines the advantages of rugged construction with attractive design and solid performance. The RHF series is available in aluminum (RHF), extruded aluminum (RHEF) and steel (SRHF) construction.

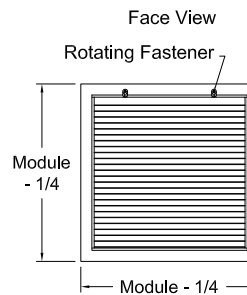
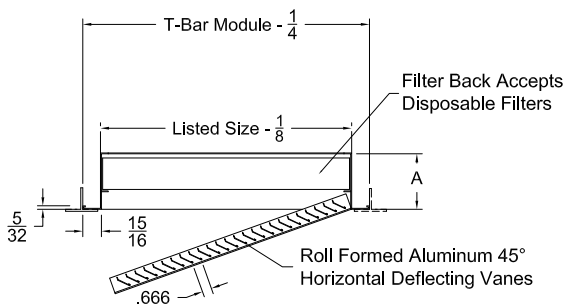


- Horizontal blades fixed at 40° deflection
- Optional stainless steel construction
- Hinged face for easy access to the filter
- Optional fully removable face
- Standard 1" filter rack
- Optional 2" filter rack

□ **Model: RHF-1 (Filter Return Grille - Surface Mount)**



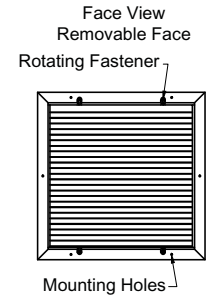
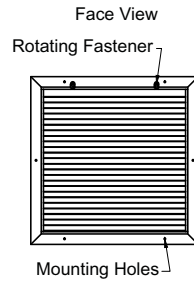
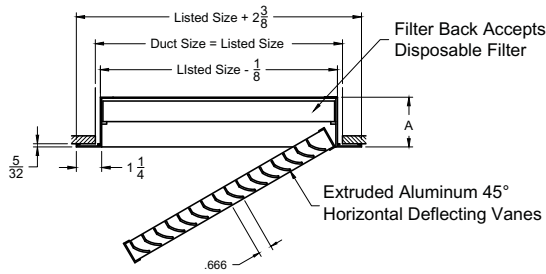
□ **Model: RHF-6 (Filter Return Grille - Lay in T-Bar)**



Disposable Filter Thickness	Dimension A
1	2 7/16
2	3 7/16

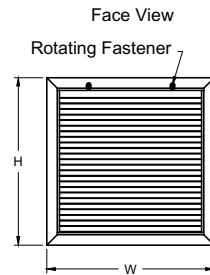
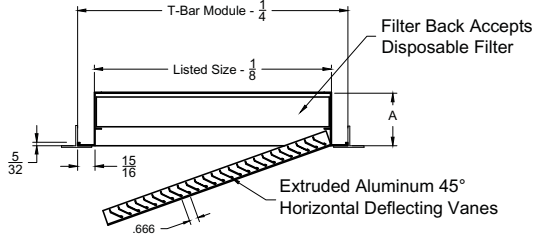
Disposable Filter Thickness	Dimension B
1	3 15/16
2	4 15/16

**Model: RHEF-1 (Filter Return Grille)
(Surface Mount)**

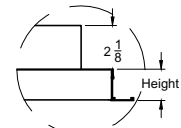


Disposable Filter Thickness	Dimension A
1	2 7/16
2	3 7/16

**Model: RHEF-6 (Filter Return Grille)
(Lay in T-Bar)**



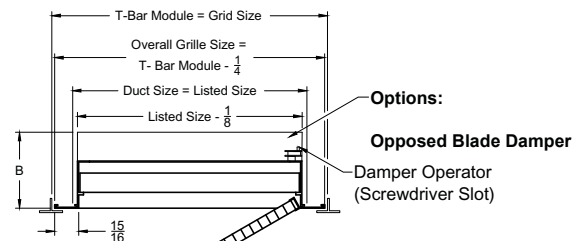
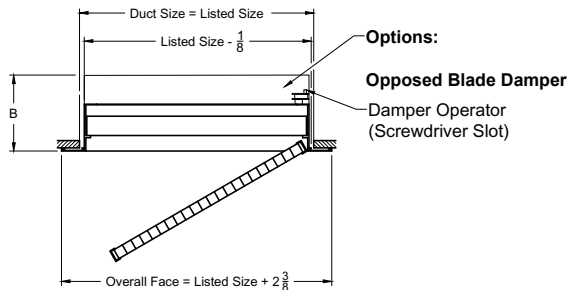
Disposable Filter Thickness	Dimension B
1	3 15/16
2	4 15/16



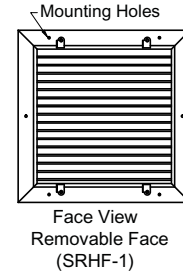
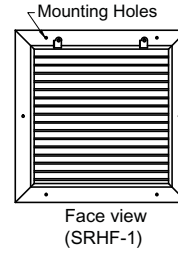
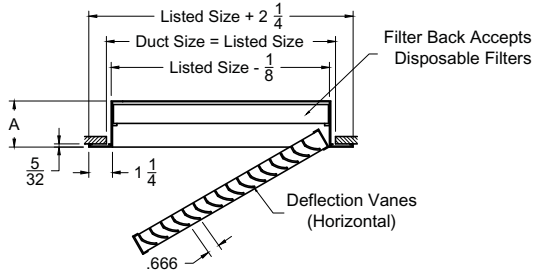
**TR (A)/TR Deep (B)
Transition Square/
Rectangular To Round**

Lay-in T-Bar Modules for RHEF - 6				
Module Size	12 x 12	24 x 12	24 x 24	48 x 24
Listed Size	10 x 10	22 x 10	22 x 22	46 x 22
Overall Dim. (W x H)	11 3/4 x 11 3/4	23 3/4 x 11 3/4	23 3/4 x 23 3/4	47 3/4 x 23 3/4

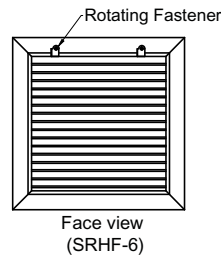
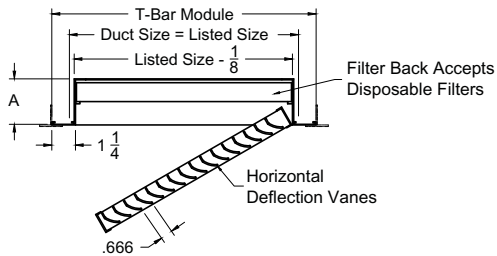
Damper Options:



Model: SRHF-1 (Filter Return Grille - Surface Mount)



Model: SRHF-6 (Filter Return Grille - Lay in T-Bar)

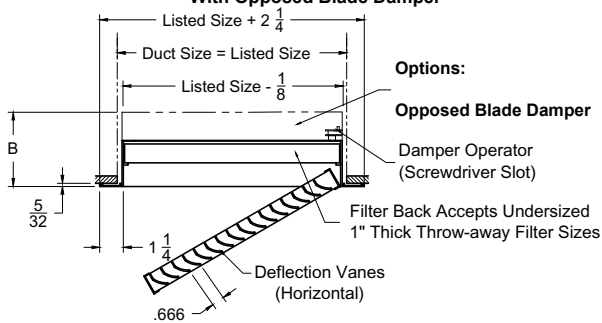


Disposable Filter Thickness	Dimension A
1	2 7/16
2	3 7/16

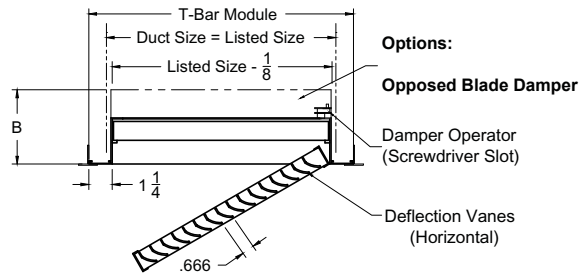
Disposable Filter Thickness	Dimension B
1	3 15/16
2	4 15/16

Lay-in T-bar Modules for SRHF - 6 and SRHFD - 6 Models								
12 x 12	24 x 12	36 x 12	48 x 12	24 x 24	36 x 24	48 x 24	36 x 36	48 x 48
Listed Size								
10 x 10	22 x 10	34 x 10	46 x 10	22 x 22	34 x 22	46 x 22	34 x 34	46 x 46

**Option: SRHF-1 (Register - Surface Mount)
With Opposed Blade Damper**



**Option: SRHF-6 (Register - Lay in T-Bar)
With Opposed Blade Damper**



SERIES RHF SPECIFICATIONS**RETURN FILTER GRILLE —
FIXED HORIZONTAL BLADE —
ALUMINUM/EXTRUDED
ALUMINUM/STEEL****Models RHF/RHEF/SRHF**

- Air inlets shall be model RHF/RHEF/SRHF manufactured by METALAIRE. Units shall be filter return or exhaust grilles of aluminum (RHF), extruded aluminum (RHEF) or steel (SRHF) construction and have a single set of fixed horizontal blades. The units shall include a hinged face and integral frame designed to accept a 1" thick (optional 2" thick) filter. The grille face shall be secured in place with thumb latches. The units shall be the size and quantity as outlined in the plans and specifications. The border shall be 1 1/4" wide with aerodynamically shaped deflector blades on 2/3" center set at 40°.
- Optional opposed blade damper shall be constructed of steel (Model OBD) or aluminum (Model OBDA).
- Damper must be operable from the face of the register.

Performance Specification

The manufacturer shall provide published performance data. Data shall be tested in accordance to ANSI/ASHRAE Standard 70-2006.

Paint Specification

Process shall be anodic electro-deposition using an anodic acrylic paint. Units shall undergo pre-treatment including a pressurized spray stage using an alkaline cleaner and a de-ionized water rinse.

RHF MODEL NUMBER SPECIFICATION

RETURN FILTER GRILLE — FIXED HORIZONTAL BLADES — SURFACE MOUNT

Model		Neck											
RHF-1	Aluminum		6	8	10	12	14	16	18	20	22	24	26
RHEF-1	Extruded Aluminum	4	X	X	X	X	X	X	X	X	X	X	X
SRHF-1	Steel	5	X	X	X	X	X	X	X	X	X	X	X
		6	X	X	X	X	X	X	X	X	X	X	X
		8	X	X	X	X	X	X	X	X	X	X	X
		10	X	X	X	X	X	X	X	X	X	X	X
		12	X	X	X	X	X	X	X	X	X	X	X
		14	X	X	X	X	X	X	X	X	X	X	X
		16	X	X	X	X	X	X	X	X	X	X	X
		18	X	X	X	X	X	X	X	X	X	X	X
		20	X	X	X	X	X	X	X	X	X	X	X
		22	X	X	X	X	X	X	X	X	X	X	X
		24	X	X	X	X	X	X	X	X	X	X	X
		26	X	X	X	X	X	X	X	X	X	X	X
		28	X	X	X	X	X	X	X	X	X	X	X
		30	X	X	X	X	X	X	X	X	X	X	X
		32	X	X	X	X	X	X	X	X	X	X	X
		34	X	X	X	X	X	X	X	X	X	X	X
		36	X	X	X	X	X	X	X	X	X	X	X
		38	X	X	X	X	X	X	X	X	X	X	X
		40	X	X	X	X	X	X	X	X	X	X	X
		42	X	X	X	X	X	X	X	X	X	X	X
		44	X	X	X	X	X	X	X	X	X	X	X
		46	X	X	X	X	X	X	X	X	X	X	X
		48	X	X	X	X	X	X	X	X	X	X	X

Available Finishes		Available Accessories	
Standard		OBD	Steel Opposed Blade Damper
01	White	OBDA	Aluminum Opposed Blade Damper
Optional		L9	Equalizing Grid
02	Satin Silver	PF	Plaster Frame
03	Black	LIPF	Lay-in Plaster Frame
24	Mill (Aluminum Construction Only)	IS	Insect Screen
28	Custom Color	TR	Square to Round Transition
		TR Deep	Deep Square to Round Transition

Available Options	
NSH	No Screw Holes
CM	Concealed Mounting
FF	2" Filter Frame

RHF MODEL NUMBER SPECIFICATION

RETURN FILTER GRILLE — FIXED HORIZONTAL BLADES — SURFACE MOUNT

Model		Neck										
		28	30	32	34	36	38	40	42	44	46	48
RHF-1	Aluminum											
RHEF-1	Extruded Aluminum	4	X	X	X	X	X	X	X	X	X	X
SRHF-1	Steel	5	X	X	X	X	X	X	X	X	X	X
		6	X	X	X	X	X	X	X	X	X	X
		8	X	X	X	X	X	X	X	X	X	X
		10	X	X	X	X	X	X	X	X	X	X
		12	X	X	X	X	X	X	X	X	X	X
		14	X	X	X	X	X	X	X	X	X	X
		16	X	X	X	X	X	X	X	X	X	X
		18	X	X	X	X	X	X	X	X	X	X
		20	X	X	X	X	X	X	X	X	X	X
		22	X	X	X	X	X	X	X	X	X	X
		24	X	X	X	X	X	X	X	X	X	X
		26	X	X	X	X	X	X	X	X	X	X
		28	X	X	X	X	X	X	X	X	X	X
		30	X	X	X	X	X	X	X	X	X	X
		32	X	X	X	X	X	X	X	X	X	X
		34	X	X	X	X	X	X	X	X	X	X
		36	X	X	X	X	X	X	X	X	X	X
		38	X	X	X	X	X	X	X	X	X	X
		40	X	X	X	X	X	X	X	X	X	X
		42	X	X	X	X	X	X	X	X	X	X
		44	X	X	X	X	X	X	X	X	X	X
		46	X	X	X	X	X	X	X	X	X	X
		48	X	X	X	X	X	X	X	X	X	X

Available Finishes		Available Accessories	
Standard		OBD	Steel Opposed Blade Damper
01	White	OBDA	Aluminum Opposed Blade Damper
Optional		L9	Equalizing Grid
02	Satin Silver	PF	Plaster Frame
03	Black	LIPF	Lay-in Plaster Frame
24	Mill (Aluminum Construction Only)	IS	Insect Screen
28	Custom Color	TR	Square to Round Transition
		TR Deep	Deep Square to Round Transition

Available Options	
NSH	No Screw Holes
CM	Concealed Mounting
FF	2" Filter Frame

SERIES RHF MODEL NUMBER SPECIFICATION FILTER RETURN GRILLE - FIXED HORIZONTAL BLADES - LAY-IN

Model		Neck										Module		
RHF-6	Aluminum	6	8	10	12	14	16	18	20	22	24			
RHEF-6	Extruded Aluminum	4	X	X									12 x 12	
SRHF-6	Steel	6	X	X										
		8	X	X										
		10			X									24 x 12
		4	X	X	X	X	X	X	X	X				
		6	X	X	X	X	X	X	X	X				
		8	X	X	X	X	X	X	X	X				
		10									X			24 x 24
		4	X	X	X	X	X	X	X	X				
		6	X	X	X	X	X	X	X	X				
		8	X	X	X	X	X	X	X	X				
		10	X	X	X	X	X	X	X	X				
		12	X	X	X	X	X	X	X	X				
		14	X	X	X	X	X	X	X	X				
		16	X	X	X	X	X	X	X	X				
		18	X	X	X	X	X	X	X	X				
		20	X	X	X	X	X	X	X	X				
		22									X			
		4	X	X	X	X	X	X	X	X	X	48 x 24		
		6	X	X	X	X	X	X	X	X	X			
		8	X	X	X	X	X	X	X	X	X			
		10	X	X	X	X	X	X	X	X	X			
		12	X	X	X	X	X	X	X	X	X			
		14	X	X	X	X	X	X	X	X	X			
		16	X	X	X	X	X	X	X	X	X			
		18	X	X	X	X	X	X	X	X	X			
		20	X	X	X	X	X	X	X	X	X			

Available Finishes		Available Accessories	
Standard		OBD	Steel Opposed Blade Damper
01	White	OBDA	Aluminum Opposed Blade Damper
Optional		L9	Equalizing Grid
02	Satin Silver	PF	Plaster Frame
03	Black	LIPF	Lay-in Plaster Frame
24	Mill (Aluminum Construction Only)	IS	Insect Screen
28	Custom Color	TR	Square to Round Transition
		TR Deep	Deep Square to Round Transition

RHF MODEL NUMBER SPECIFICATION

FILTER RETURN GRILLE — FIXED HORIZONTAL BLADES — LAY-IN

Model		Neck											46	Module
RHF-6	Aluminum	26	28	30	32	34	36	38	40	42	44			
RHEF-6	Extruded Aluminum	4	X	X	X	X	X	X	X	X	X	X	48 x 24	
SRHF-6	Steel	6	X	X	X	X	X	X	X	X	X			
		8	X	X	X	X	X	X	X	X	X			
		10	X	X	X	X	X	X	X	X	X			
		12	X	X	X	X	X	X	X	X	X			
		14	X	X	X	X	X	X	X	X	X			
		16	X	X	X	X	X	X	X	X	X			
		18	X	X	X	X	X	X	X	X	X			
		20	X	X	X	X	X	X	X	X	X			
		22										X		

Available Finishes		Available Accessories	
Standard		OBD	Steel Opposed Blade Damper
01	White	OBDA	Aluminum Opposed Blade Damper
Optional		L9	Equalizing Grid
02	Satin Silver	PF	Plaster Frame
03	Black	LIPF	Lay-in Plaster Frame
24	Mill (Aluminum Construction Only)	IS	Insect Screen
28	Custom Color	TR	Square to Round Transition
		TR Deep	Deep Square to Round Transition

SERIES RHF PERFORMANCE DATA

MODEL RHF, RHEF, SRHF

Size	Duct Area ft ²	Nk Vel	200	300	400	500	600	700	800	900	1000
		Ps	-.009	-.020	-.036	-.056	-.081	-.110	-.143	-.181	-.223
06x06	.25	CFM	39	58	77	96	115	134	153	172	191
		NC	-	-	15	20	25	29	32	35	38
08x06	.33	CFM	53	79	106	132	159	185	212	238	265
		NC	-	-	16	21	26	30	34	37	39
10x06	.42	CFM	69	103	137	171	205	239	273	307	341
		NC	-	-	17	23	27	31	35	38	40
08x08	.44	CFM	75	112	149	186	223	260	297	334	371
		NC	-	12	18	23	28	32	36	39	41
12x06	.50	CFM	83	124	165	206	247	288	329	370	411
		NC	-	12	18	23	28	32	36	39	41
16x06 12x08	.67	CFM	115	172	229	286	343	400	457	514	571
		NC	-	12	19	25	30	34	37	40	43
10x10	.69	CFM	119	178	237	296	355	414	473	532	591
		NC	-	12	19	25	30	34	37	40	43
12x10 20x06	.83	CFM	145	217	289	361	433	505	577	649	721
		NC	-	13	20	26	31	35	38	41	44
24x06 12x12	1.00	CFM	177	265	353	441	529	617	705	793	881
		NC	-	14	21	27	32	36	39	42	45
14x14	1.36	CFM	245	367	489	611	733	855	977	1099	1221
		NC	-	15	22	28	33	37	40	43	46
18x12 36x06	1.50	CFM	271	406	541	676	811	946	1081	1216	1351
		NC	-	16	23	29	33	37	41	44	47
18x16 24x12	2.00	CFM	365	547	729	911	1093	1275	1457	1639	1821
		NC	11	17	24	30	35	39	42	45	48
18x18	2.25	CFM	415	622	829	1036	1243	1450	1657	1864	2071
		NC	11	17	25	31	35	39	43	46	48
30x12	2.50	CFM	459	688	917	1146	1375	1604	1833	2062	2291
		NC	12	18	25	31	36	40	43	46	49
20x20	2.78	CFM	515	772	1029	1286	1543	1800	2057	2314	2571
		NC	12	18	26	31	36	40	43	47	49
24x18 36x12	3.00	CFM	551	826	1101	1376	1651	1926	2201	2476	2751
		NC	13	19	26	32	36	40	44	47	50
22x22	3.36	CFM	629	943	1257	1571	1885	2199	2513	2827	3141
		NC	13	19	27	32	37	41	44	47	50
48x12 24x24	4.00	CFM	752	1127	1503	1878	2254	2630	3005	3381	3756
		NC	-	20	28	33	38	42	46	49	51

CONTINUED

SERIES RHF PERFORMANCE DATA

MODEL RHF, RHEF, SRHF

Size	Duct Area ft ²	Nk Vel	200	300	400	500	600	700	800	900	1000
		Ps	-.009	-.020	-.036	-.056	-.081	-.110	-.143	-.181	-.223
48x18 36x24	6.00	CFM	1133	1699	2265	2831	3397	3963	4529	5095	5661
		NC	11	22	29	35	40	44	47	50	53
48x24 36x32	8.00	CFM	1527	2290	3053	3816	4579	5342	6105	6868	7631
		NC	13	24	31	37	42	46	49	52	55
48x36	12.00	CFM	2315	3472	4629	5786	6943	8100	9257	10414	11571
		NC	14	25	32	38	43	47	50	53	56
48x48	16.00	CFM	3102	4653	6204	7755	9306	10857	12408	13959	15510
		NC	16	26	33	39	44	48	51	54	57

PERFORMANCE NOTES FOR SERIES RHF, RHEF, SRHF

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (Air)

Nk Vel Neck velocity of air stream in Feet Per Minute

Ps Negative Static pressure (inches of water column)

NC Noise criterion, sound pressure level. NC ratings are based on sound power level (Lw)

RE: 10^{-12} watts minus a 10dB room attenuation in all octave bands.