



Hart & Cooley®
install confidence

Light Commercial Grilles, Registers & Diffusers

Edition 5

See
Inside
Front
Cover For
What's New...

LIGHT COMMERCIAL

	Product Information	Engineering Data
LIGHT COMMERCIAL CONSTRUCTION FEATURES	.5	
REGISTERS & GRILLES—STEEL		
821 Vertical Single Deflector, w/MS	.6	77-78
831 Horizontal Single Deflector, w/MS	.6	77-78
92HVO Double Deflector Horizontal Face	.7	77-78
92HVV Double Deflector Horizontal Face, w/OB	.7	77-78
92VHO Double Deflector Vertical Face	.8	77-78
92VHV Double Deflector Vertical Face, w/OB	.8	77-78
94 Return Horizontal	.9	.79
94HOV Return Horizontal, w/OB	.9	.79
94A Return Horizontal Deflected	.10	.79
94AHOV Return Horizontal Deflected, w/OB	.10	.79
96AFB Steel Fixed-Bar Filter Grille	.10	.79
98VOH/98VOHP Supply Grille With Deflectors	.11	77-78
9200V Opposed-Blade Damper	.11	
PFG Steel Perforated Face Grille	.11	.79
REGISTERS & GRILLES—ALUMINUM		
HX Horizontal Single Deflector	.12	80-81
HD Horizontal Single Deflector, w/OB	.12	80-81
HM Horizontal Single Deflector, w/MS	.13	80-81
HV Double Deflector Horizontal Face	.13	80-81
HVD Double Deflector Horizontal Face, w/OB	.14	80-81
VX Vertical Single Deflector	.14	80-81
VD Vertical Single Deflector, w/OB	.15	80-81
VM Vertical Single Deflector, w/MS	.15	80-81
VH Double Deflector Vertical Face	.16	80-81
VHD Double Deflector Vertical Face, w/OB	.16	80-81
CH1 Curved Blade One-Way Horizontal	.17	.82
CHD1 Curved Blade One-Way Horizontal, w/OB	.17	.82
CHM1 Curved Blade One-Way Horizontal, w/MS	.17	.82
CH2 Curved Blade Two-Way Horizontal	.18	.82
CHD2 Curved Blade Two-Way Horizontal, w/OB	.18	.82
CHM2 Curved Blade Two-Way Horizontal, w/MS	.18	.82
C3 Curved Blade Three-Way Horizontal	.19	.83
CD3 Curved Blade Three-Way Horizontal, w/OB	.19	.83
CM3 Curved Blade Three-Way Horizontal, w/MS	.19	.83
C4 Curved Blade Four-Way Horizontal	.20	.83
CD4 Curved Blade Four-Way Horizontal, w/OB	.20	.83
CM4 Curved Blade Four-Way Horizontal, w/MS	.20	.83
CH2CL Two-Way Corner, Down and Left	.21	.82
CH2CR Two-Way Corner, Down and Right	.21	.82
RCB/RCBD Curved Blade Return, w/OB	.22	.84
RCBF Curved Blade Filter Grille	.22	.84
RE5 1/2" Grid Core Return	.23	.85
RED5 1/2" Grid Core Return, w/OB	.23	.85
REF5 1/2" Grid Filter Grille	.24	.85
RH45 Fixed Horizontal Deflected	.24	.84
RHD45 Fixed Horizontal Deflected, w/OB	.25	.84
RHF45 Fixed Horizontal Deflected Filter Grille	.25	.84
RH90 Fixed Horizontal Return Grille	.26	.85
RHD90 Fixed Horizontal Return Grille, w/OB	.26	.85
TG/TGF Transfer Grille and Frame	.27	.86

Registers & Grilles - Steel

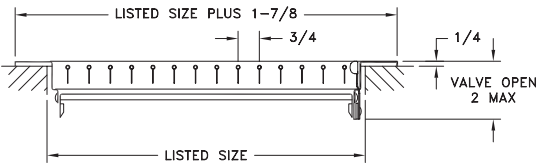


- 821**
- All-steel construction
 - Vertical adjustable face bars
 - Horizontal multi-shutter valve
 - Bright White finish

Note: Screw hole location details on page 117

821 Available Sizes (in.)												
HT	WIDTH											
	6	8	10	12	14	16	18	20	24	30	36	
4	X	X	X	X	X	X	X	X	X	X		
5			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	
10			X	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	
16						X	X	X	X	X		
18							X	X	X	X		
20								X				
24									X			

Contact factory for sizes not listed.

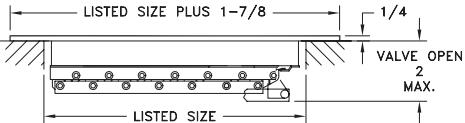


- 831**
- All-steel construction
 - Horizontal adjustable face bars
 - Vertical valve
 - Adjustable multi-shutter valve
 - Bright White finish
 - 3/4" fin spacing

Note: Screw hole location details on page 117

831 Available Sizes (in.)											
HT	WIDTH										
	8	10	12	14	16	20	24	30	32	36	
4	X	X	X	X							
6	X	X	X	X	X	X	X	X			
8		X	X	X	X	X	X	X			
10			X			X	X				
12						X				X	
14						X			X		

Contact factory for sizes not listed.

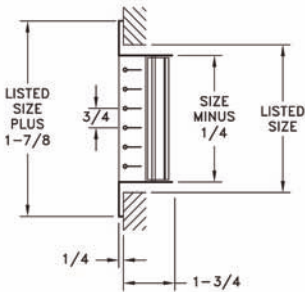




92HVO Grille

- All-steel construction
- Adjustable face bars may be set to any desired deflection
- Horizontal front bars
- Vertical second bars
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



92HVO Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

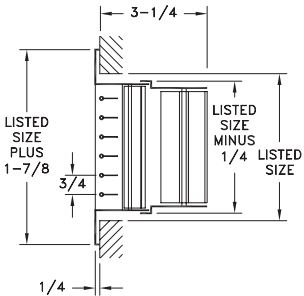
Contact factory for sizes not listed.



92HVV Register

- All-steel construction
- Horizontal front bars
- Vertical second bars
- Opposed-blade damper
- Adjustable face bars may be set to any desired deflection
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



92HVV Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

Contact factory for sizes not listed.

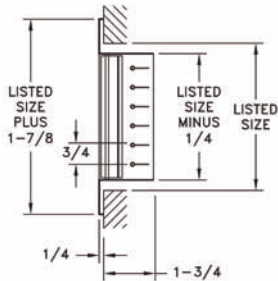
Registers & Grilles - Steel



92VHO Grille

- All-steel construction
- Vertical front bars
- Horizontal second bars
- Adjustable face bars may be set to any desired deflection
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



92VHO Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

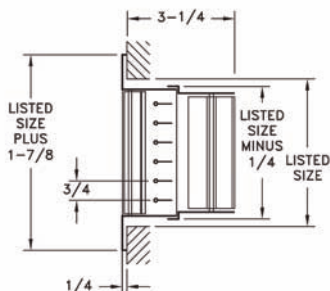
Contact factory for sizes not listed.



92VHV Register

- All-steel construction
- Vertical front bars
- Horizontal second bars
- Adjustable face bars may be set to any desired deflection
- Opposed-blade damper
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



92VHV Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

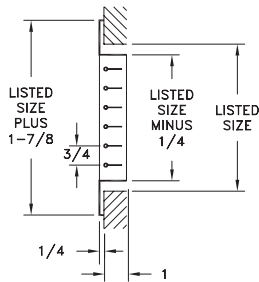
Contact factory for sizes not listed.



94 Grille

- All-steel construction
- Horizontal face bars set straight
- Face bars permanently fixed into a heavy steel frame at 90-degree angle from face
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



94 Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

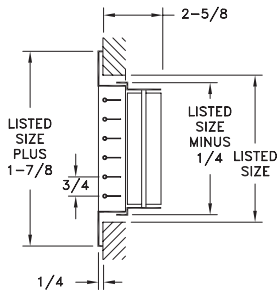
Contact factory for sizes not listed.



94HOV Register

- All-steel construction
- Horizontal face bars set straight
- Face bars permanently fixed into a heavy steel frame at 90-degree angle from face
- Opposed-blade damper
- Larger sizes available in multiple-piece construction
- Bright White finish

Note: Screw hole location details on page 117



94HOV Available Sizes (in.)																
HT	WIDTH															
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	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
20								X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X
26											X	X	X	X	X	X
28												X	X	X	X	X
30													X	X	X	X
32														X	X	X
34															X	X
36																X

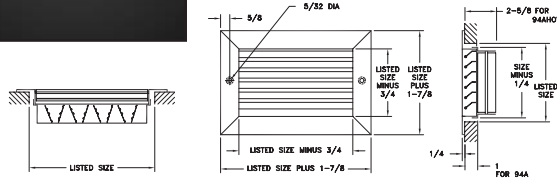
Contact factory for sizes not listed.

Registers & Grilles - Steel



94A Grille (No Damper)

- All-steel construction
- 3/4" spaced fins set at 35°, horizontal face bars set at 35°
- Larger sizes available in multiple-piece construction
- Also available as 94AT T-Bar Return Grille (see page 57)
- Bright White finish



94A Available Sizes (in.)																		
HT	WIDTH																	
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36		
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X			X	X	X	X	X	X	X	X	X	X	X	X		
10			X		X	X	X	X	X	X	X	X	X	X	X	X		
12				X		X	X	X	X	X	X	X	X	X	X	X		
14					X	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		
20								X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X		
26											X	X	X	X	X	X		
28												X	X	X	X	X		
30													X	X	X	X		
32														X	X	X		
34															X	X		
36																X		

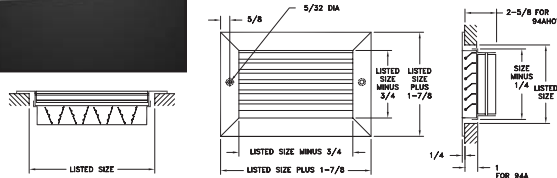
Contact factory for sizes not listed.

Note: Screw hole location details on page 117



94AHOV Register

- All-steel construction
- 3/4" spaced fins set at 35°, horizontal face bars set at 35°
- Opposed-blade damper
- Larger sizes available in multiple-piece construction
- Bright White finish



		94AHOV Available Sizes (in.)																
HT	WIDTH																	
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36		
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	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		
20								X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X		
26											X	X	X	X	X	X		
28												X	X	X	X	X		
30													X	X	X	X		
32														X	X	X		
34															X	X		
36																X		

Note: Screw hole location details on page 117



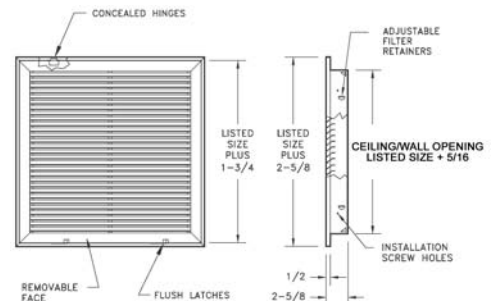
96AFB Fixed-Bar Filter Grille

- Steel construction
- Simplifies contractor installation
- Flush, removable face with concealed hinges
- Uses nominal 1" thick disposable filters (not included)
- 96AFB2 uses 2" thick disposable filters and is available by special order
- Equipped with adjustable filter retainers
- 3/4" spaced fins set at 35°
- Also available as 96AFBT T-Bar Fixed Bar Filter Grille (see page 88)
- Bright White finish

		96AFB Standard Sizes (in.)									
HT		WIDTH									
		10	12	14	16	18	20	24	25	30	36
10							X	X		X	
12			X				X	X		X	
14				X			X	X	X	X	
16					X		X	X	X		
18						X	X	X		X	
20	X	X	X	X			X	X	X	X	
24		X	X	X	X		X	X		X	X
25			X	X			X		X		
30				X			X	X		X	X
36											X

Contact factory for sizes not listed.

Note: Screw hole location details on page 117



Engineering Data on Page 79

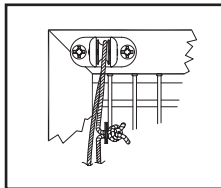


98VOH Ventilation Grille

- Steel construction
- Front bars are individually adjustable
- Horizontal blades are gang-operated to deflect air up or down thru face (no shut-off)
- Handle manually operated
- Bright White finish

		98VOH Available Sizes (in.)															
HT		WIDTH															
		10	12	14	16	18	20	22	24	26	28	30	32	34	36		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16				X	X	X	X	X	X	X	X	X	X	X	X	X	X
18					X	X	X	X	X	X	X	X	X	X	X	X	X
20						X	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
26									X	X	X	X	X	X	X	X	X
28										X	X	X	X	X	X	X	X
30											X	X	X	X	X	X	X
32												X	X	X	X	X	X
34													X	X	X	X	X
36														X	X	X	X

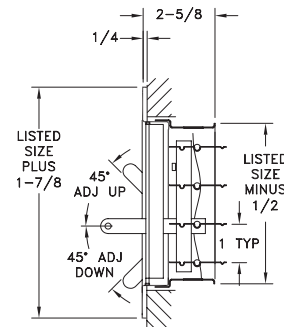
Note: Screw hole location details on page 117



Detail of optional pulley (98VOHP) for remote adjustment of deflection louvers. Field-installed center pulley over lever.

98VOHP Ventilation Grille

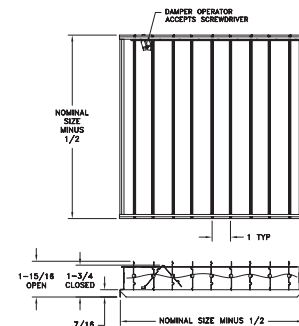
- Pulley field-mounted only
- Pulley assembly must be ordered separately
- Pulley operation allows air deflection adjustments from floor
- Two pulley assemble kits required for grilles over 24" wide



9200V Damper

- Steel construction
- Opposed-blade damper
- Controls the air volume from full flow to shut-off
- Mill finish

9200V Available Sizes (in.)	
Minimum: 6" x 4"	
Maximum: 24" x 24" One Piece	

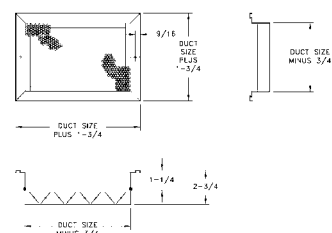


PFG Perforated Face Grille

- All steel construction
- Perforated face
- Optional opposed blade damper
- Optional T-Bar lay-in frames
- Bright white finish

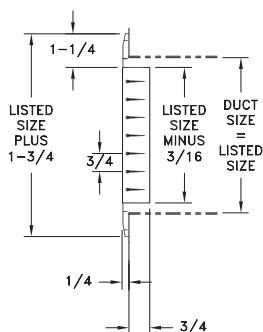
PFG Available Sizes (in.)	
Minimum: 6" x 4"	
Maximum: 48" x 48" One Piece	

Note: Screw hole location details on page 117





Note: Screw hole location details on page 117



HX Grille

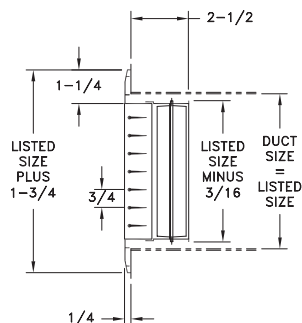
- Extruded aluminum construction
- Horizontal front bars
- Single row of individually adjustable horizontal face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish

[illegible]

Other sizes available upon request



Note: Screw hole location details on page 117



HD Register

- Extruded aluminum construction
- Single row of individually adjustable horizontal face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish

[illegible]

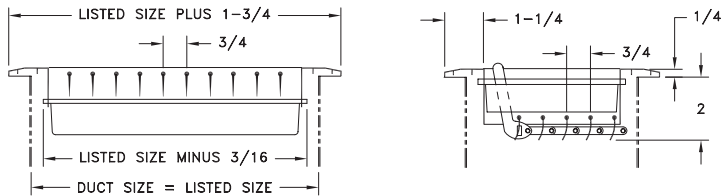
Other sizes available upon request



HM Register

- Extruded aluminum construction
- Single row of individually adjustable horizontal face bars
- Pivoted bars for easy positive setting
- Lever-operated, multi-shutter valve
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



HM Available Sizes (in.)	
HT	WIDTH
	6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36
4	X X X X X X X X X X X X X X X X
5	X X X X X X X X X X X X X X X X
6	X X X X X X X X X X X X X X X X
8	X X X X X X X X X X X X X X X X
10	X X X X X X X X X X X X X X X X
12	X X X X X X X X X X X X X X X X
14	X X X X X X X X X X X X X X X X
16	X X X X X X X X X X X X X X X X
18	X X X X X X X X X X X X X X X X
20	X X X X X X X X X X X X X X X X
22	X X X X X X X X X X X X X X X X
24	X X X X X X X X X X X X X X X X
26	X X X X X X X X X X X X X X X X
28	X X X X X X X X X X X X X X X X
30	X X X X X X X X X X X X X X X X
32	X X X X X X X X X X X X X X X X
34	X X X X X X X X X X X X X X X X
36	X X X X X X X X X X X X X X X X

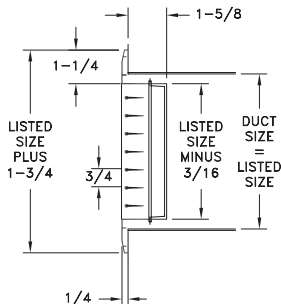
Other sizes available upon request



HV Grille

- Extruded aluminum construction
- Horizontal front bars
- Vertical second bars
- Two rows of individually adjusted face bars for horizontal and vertical deflection
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



HV Available Sizes (in.)	
HT	WIDTH
	6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
4	X X
5	X X
6	X X
8	X X
10	X X
12	X X
14	X X
16	X X
18	X X
20	X X
22	X X
24	X X
26	X X
28	X X
30	X X
32	X X
34	X X
36	X X
38	X X
40	X X
42	X X
44	X X
46	X X
48	X X

Other sizes available upon request

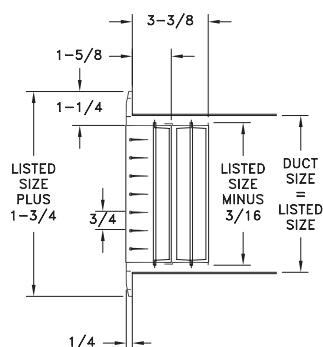
Registers & Grilles - Aluminum



HVD Register

- Extruded aluminum construction
- Two rows of individually adjusted face bars for horizontal and vertical deflection
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		HVD Available Sizes (in.)																							
HT		WIDTH																							
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48		
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X		
26											X	X	X	X	X	X	X	X	X	X	X	X	X		
28												X	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		
34															X	X	X	X	X	X	X	X	X		
36																X	X	X	X	X	X	X	X		
38																	X	X	X	X	X	X	X		
40																		X	X	X	X	X	X		
42																			X	X	X	X	X		
44																				X	X	X	X		
46																					X	X	X		
48																						X	X		

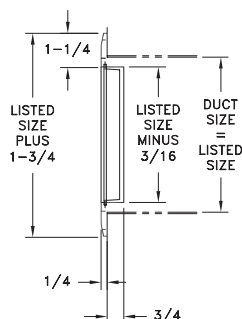
Other sizes available upon request



VX Grille

- Extruded aluminum construction
- Vertical front bars
- Single row of individually adjustable face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		VX Available Sizes (in.)																							
HT		WIDTH																							
		4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
24											X	X	X	X	X	X	X	X	X	X	X	X	X	X	
26												X	X	X	X	X	X	X	X	X	X	X	X	X	
28													X	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	
34																X	X	X	X	X	X	X	X	X	
36																	X	X	X	X	X	X	X	X	
38																		X	X	X	X	X	X	X	
40																			X	X	X	X	X	X	
42																				X	X	X	X	X	
44																					X	X	X	X	
46																						X	X	X	
48																							X	X	

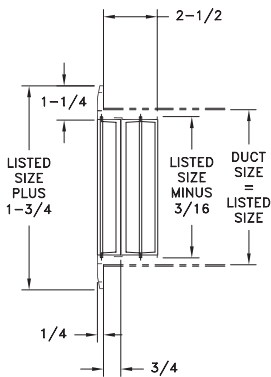
Other sizes available upon request



VD Register

- Extruded aluminum construction
- Vertical front bars
- Single row of individually adjustable face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		VD Available Sizes (in.)																							
HT		WIDTH																							
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48		
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X		
26											X	X	X	X	X	X	X	X	X	X	X	X	X		
28												X	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		
34															X	X	X	X	X	X	X	X	X		
36																X	X	X	X	X	X	X	X		
38																	X	X	X	X	X	X	X		
40																		X	X	X	X	X	X		
42																			X	X	X	X	X		
44																				X	X	X	X		
46																					X	X	X		
48																						X	X		

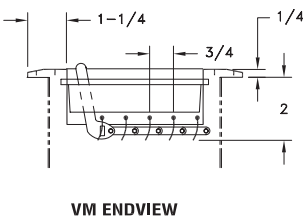
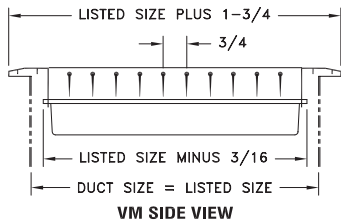
Other sizes available upon request



VM Register

- Extruded aluminum construction
- Vertical front bars
- Pivoted bars for easy positive setting
- Lever-operated, multi-shutter valve
- Single row of individually adjusted face bars
- Horizontal valve blades
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		VM Available Sizes (in.)															
HT		WIDTH															
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Other sizes available upon request

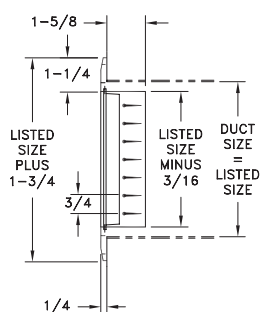
Registers & Grilles - Aluminum



VH Grille

- Extruded aluminum construction
- Vertical front bars
- Horizontal second bars
- Two rows of individually adjusted face bars for horizontal and vertical deflection
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		VH Available Sizes (in.)																					
HT		WIDTH																					
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26										X	X	X	X	X	X	X	X	X	X	X	X	X	X
28											X	X	X	X	X	X	X	X	X	X	X	X	X
30												X	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
36															X	X	X	X	X	X	X	X	X
38																X	X	X	X	X	X	X	X
40																	X	X	X	X	X	X	X
42																		X	X	X	X	X	X
44																			X	X	X	X	X
46																				X	X	X	X
48																						X	X

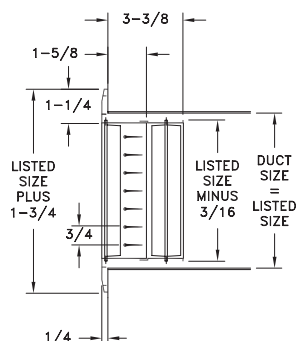
Other sizes available upon request



VHD Register

- Extruded aluminum construction
- Vertical front bars
- Horizontal second bars
- Two rows of individually adjusted face bars for horizontal and vertical deflection
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish

Note: Screw hole location details on page 117



		VHD Available Sizes (in.)																					
HT		WIDTH																					
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26										X	X	X	X	X	X	X	X	X	X	X	X	X	X
28											X	X	X	X	X	X	X	X	X	X	X	X	X
30												X	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
36															X	X	X	X	X	X	X	X	X
38																X	X	X	X	X	X	X	X
40																	X	X	X	X	X	X	X
42																		X	X	X	X	X	X
44																			X	X	X	X	X
46																				X	X	X	X
48																						X	X

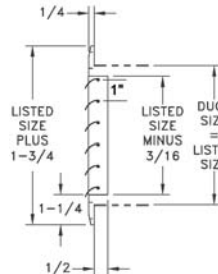
Other sizes available upon request



Note: Screw hole location details on page 117

CH1 Grille

- Extruded aluminum construction
- One-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



		CH1 Available Sizes (in.)																
HT		WIDTH																
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	X	X	X	X	X	X	X	X	X	X	X	X	
16						X	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	
22									X	X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	X	
26											X	X	X	X	X	X	X	
28												X	X	X	X	X	X	
30													X	X	X	X	X	
32														X	X	X	X	
34															X	X	X	
36																X	X	

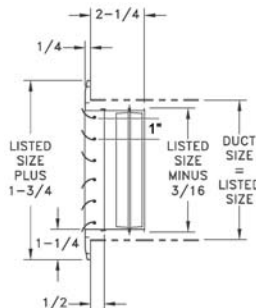
Other sizes available upon request



Note: Screw hole location details on page 117

CHD1 Register

- Extruded aluminum construction
- One-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish



		CHD1 Available Sizes (in.)																
HT		WIDTH																
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	X	X	X	X	X	X	X	X	X	X	X	X	
16						X	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	
22									X	X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	X	
26											X	X	X	X	X	X	X	
28												X	X	X	X	X	X	
30													X	X	X	X	X	
32														X	X	X	X	
34															X	X	X	
36																X	X	

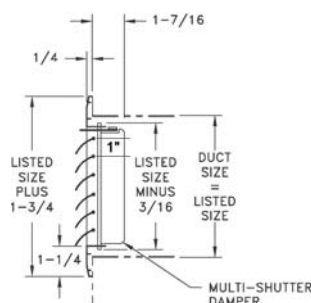
Other sizes available upon request



Note: Screw hole location details on page 117

CHM1 Register

- Extruded aluminum construction
- One-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Multi-shutter valve
- Bright White or Satin Anodized finish



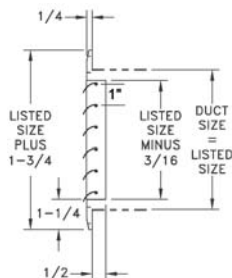
		CHM1 Available Sizes (in.)																
HT		WIDTH																
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	X	X	X	X	X	X	X	X	X	X	X	X	
16						X	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	
22									X	X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	X	
26											X	X	X	X	X	X	X	
28												X	X	X	X	X	X	
30													X	X	X	X	X	
32														X	X	X	X	
34															X	X	X	
36																X	X	

Other sizes available upon request



CH2 Grille

- Extruded aluminum construction
- Two-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

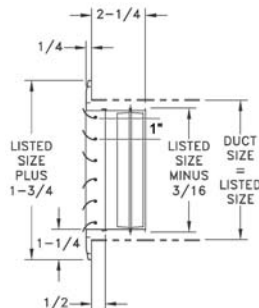
[illegible]

Other sizes available upon request



CHD2 Register

- Extruded aluminum construction
- Two-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

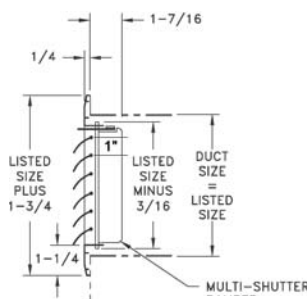
[illegible]

Other sizes available upon request



CHM2 Register

- Extruded aluminum construction
- Two-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Multi-shutter valve
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

[illegible]

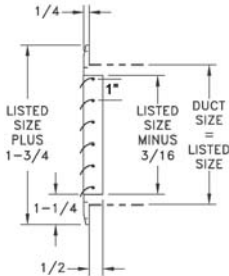
Other sizes available upon request



Note: Screw hole location details on page 117

C3 Grille

- Extruded aluminum construction
- Three-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



		C3 Available Sizes (in.)																																			
		WIDTH																																			
HT		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36																				
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
8			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
10				X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
12					X	X	X	X	X	X	X	X	X	X	X	X	X																				
14						X	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																				
20									X	X	X	X	X	X	X	X	X																				
22										X	X	X	X	X	X	X	X																				
24											X	X	X	X	X	X	X																				
26												X	X	X	X	X	X																				
28													X	X	X	X	X																				
30														X	X	X	X																				
32															X	X	X																				
34																X	X																				
36																	X																				

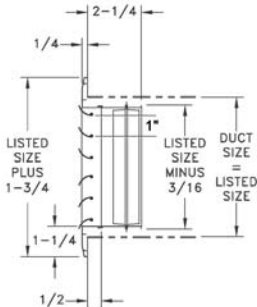
Other sizes available upon request



Note: Screw hole location details on page 117

CD3 Register

- Extruded aluminum construction
- Three-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish



		CD3 Available Sizes (in.)																																			
		WIDTH																																			
HT		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36																				
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
14					X	X	X	X	X	X	X	X	X	X	X	X	X																				
16						X	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																				
22									X	X	X	X	X	X	X	X	X																				
24										X	X	X	X	X	X	X	X																				
26											X	X	X	X	X	X	X																				
28												X	X	X	X	X	X																				
30													X	X	X	X	X																				
32														X	X	X	X																				
34															X	X	X																				
36																X	X																				

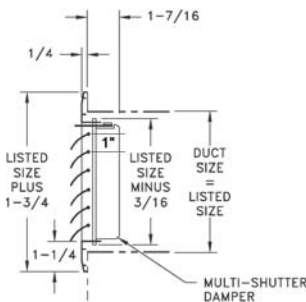
Other sizes available upon request



Note: Screw hole location details on page 117

CM3 Register

- Extruded aluminum construction
- Three-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Multi-shutter valve
- Bright White or Satin Anodized finish



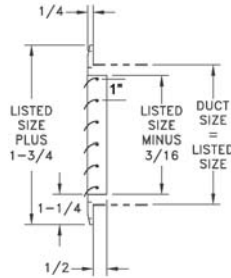
CM3 Available Sizes (in.)																																					
		WIDTH																																			
HT		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36																				
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
8			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
10				X	X	X	X	X	X	X	X	X	X	X	X	X	X																				
12					X	X	X	X	X	X	X	X	X	X	X	X	X																				
14						X	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																				
20									X	X	X	X	X	X	X	X	X																				
22										X	X	X	X	X	X	X	X																				
24											X	X	X	X	X	X	X																				
26												X	X	X	X	X	X																				
28													X	X	X	X	X																				
30														X	X	X	X																				
32															X	X	X																				
34																X	X																				
36																	X																				

Registers & Grilles - Aluminum



C4 Grille

- Extruded aluminum construction
- Four-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

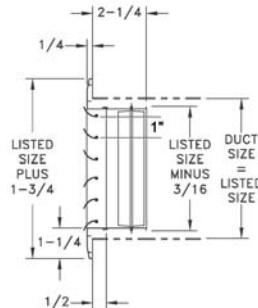
		C4 Available Sizes (in.)																		
HT		WIDTH																		
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36			
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X			
14					X	X	X	X	X	X	X	X	X	X	X	X	X			
16						X	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			
22									X	X	X	X	X	X	X	X	X			
24										X	X	X	X	X	X	X	X			
26											X	X	X	X	X	X	X			
28												X	X	X	X	X	X			
30													X	X	X	X	X			
32														X	X	X	X			
34															X	X	X			
36																X	X			

Other sizes available upon request



CD4 Register

- Extruded aluminum construction
- Four-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Opposed-blade damper
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

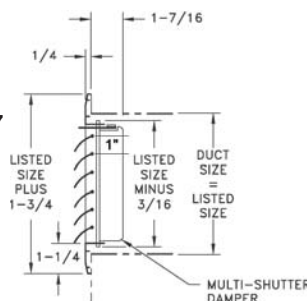
		CD4 Available Sizes (in.)																
HT	WIDTH																	
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	X	X	X	X	X	X	X	X	X	X	X		
16						X	X	X	X	X	X	X	X	X	X	X		
18							X	X	X	X	X	X	X	X	X	X		
20								X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X		
26											X	X	X	X	X	X		
28												X	X	X	X	X		
30													X	X	X	X		
32														X	X	X		
34															X	X		
36																X		

Other sizes available upon request



CM4 Register

- Extruded aluminum construction
- Four-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Multi-shutter valve
- Bright White or Satin Anodized finish



Note: Screw hole location details on page 117

CM4 Available Sizes (in.)																			
HT	WIDTH																		
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36			
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X			
12				X	X	X	X	X	X	X	X	X	X	X	X	X			
14					X	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			
20								X	X	X	X	X	X	X	X	X			
22									X	X	X	X	X	X	X	X			
24										X	X	X	X	X	X	X			
26											X	X	X	X	X	X			
28												X	X	X	X	X			
30													X	X	X	X			
32														X	X	X			
34															X	X			
36																X			

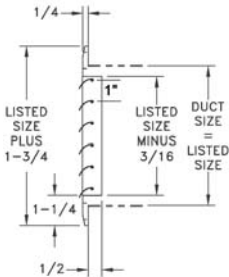
Other sizes available upon request



Note: Screw hole location details on page 117

CH2CL Grille

- Extruded aluminum construction
- Two-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



		CH2CL Available Sizes (in.)																
HT		WIDTH																
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	X	X	X	X	X	X	X	X	X	X	X	X	
16						X	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	
22									X	X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	X	
26											X	X	X	X	X	X	X	
28												X	X	X	X	X	X	
30													X	X	X	X	X	
32														X	X	X	X	
34															X	X	X	
36																X	X	

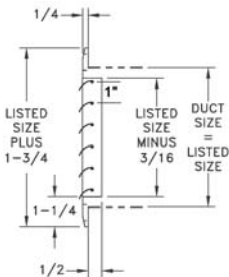
Other sizes available upon request



Note: Screw hole location details on page 117

CH2CR Grille

- Extruded aluminum construction
- Two-way deflection
- Individually adjustable curved-face bars
- Pivoted bars for easy positive setting
- Bright White or Satin Anodized finish



		CH2CR Available Sizes (in.)																
HT		WIDTH																
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	X	X	X	X	X	X	X	X	X	X	X	X	
16						X	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	
22									X	X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	X	
26											X	X	X	X	X	X	X	
28												X	X	X	X	X	X	
30													X	X	X	X	X	
32														X	X	X	X	
34															X	X	X	
36																X	X	

Other sizes available upon request

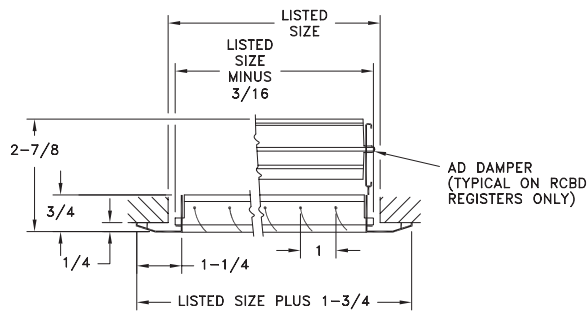
Registers & Grilles - Aluminum



Blades at 40° angle

RCB Grille RCBD Register

- Extruded aluminum construction
- Curved blades fixed on one-inch spacing
- Opposed-blade damper
- Bright White or Satin Anodized finish



RCB, RCBD Available Sizes (in.)																									
HT	WIDTH																								
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48			
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X		
26											X	X	X	X	X	X	X	X	X	X	X	X	X		
28												X	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		
34															X	X	X	X	X	X	X	X	X		
36																X	X	X	X	X	X	X	X		
38																	X	X	X	X	X	X	X		
40																		X	X	X	X	X	X		
42																			X	X	X	X	X		
44																				X	X	X	X		
46																					X	X	X		
48																							X		

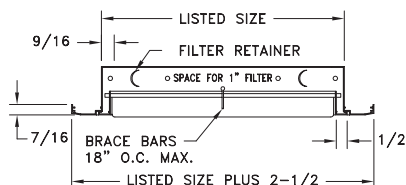
Other sizes available upon request



Blades at 40° angle

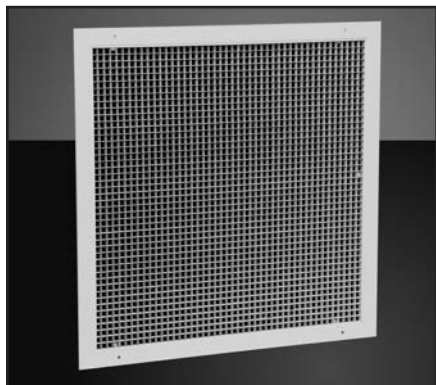
RCBF Filter Grille

- Extruded aluminum construction
- Horizontal curved blades
- Utilizes RCB grille
- Hinged on bottom edge
- Accommodates standard 1" thick disposable filter (not included)
- Filter grilles equipped with spring fasteners
- Filters not furnished
- Bright White or Satin Anodized finish



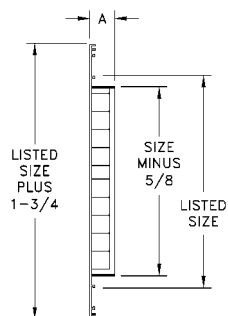
		RCBF Available Sizes (in.)																							
		WIDTH																							
HT		6	8	10	12	14	16	18	20	22	24	25	26	28	30	32	34	36	38	40	42	44	46	48	
6	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
8	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
10				X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
12					X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
14						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18								X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
20							X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22									X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
24										X		X	X	X	X	X	X	X	X	X	X	X	X	X	
25									X			X													
26												X	X	X	X	X	X	X	X	X	X	X	X	X	
28													X	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	
34																	X	X	X	X	X	X	X	X	
36																		X	X	X	X	X	X	X	
38																			X	X	X	X	X	X	
40																				X	X	X	X	X	
42																					X	X	X	X	
44																						X	X	X	
46																							X	X	
48																								X	

Other sizes available upon request



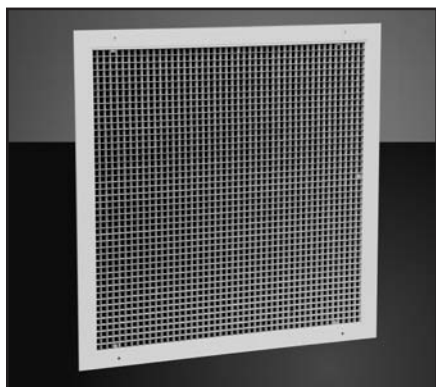
RE5 Grille

- All-aluminum construction
- Grid core $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ "
- Square core design with extruded aluminum frame
- Bright White or Mill finish



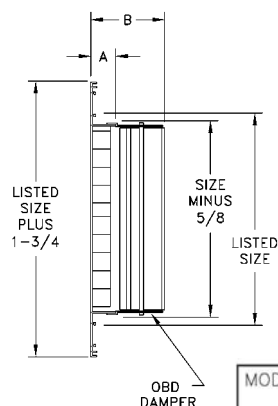
MODEL	GRID CORE DIMENSIONS	A
RE5	$\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{1}{2}$	1-1/16
RE510	$\frac{1}{2}$ x $\frac{1}{2}$ x 1	1-9/16
RE1	1 x 1 x 1	1-9/16

		RE5 Available Sizes (in.)																					
HT		WIDTH																					
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X
26											X	X	X	X	X	X	X	X	X	X	X	X	X
28												X	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
34															X	X	X	X	X	X	X	X	X
36																X	X	X	X	X	X	X	X
38																	X	X	X	X	X	X	X
40																		X	X	X	X	X	X
42																			X	X	X	X	X
44																				X	X	X	X
46																					X	X	X
48																						X	X



RED5 Register

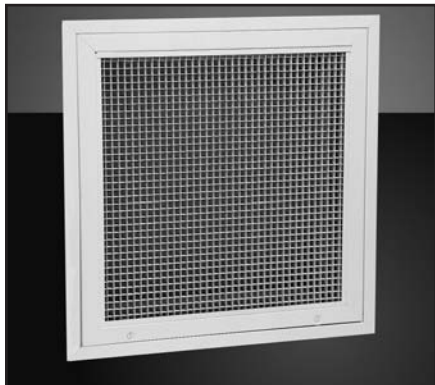
- All-aluminum construction
- Opposed-blade damper galvanized
- Square core design with extruded aluminum construction
- Bright White or Mill finish



MODEL	GRID CORE DIMENSIONS	A	B
RE5	$\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{1}{2}$	1-1/16	2-3/8
RE510	$\frac{1}{2}$ x $\frac{1}{2}$ x 1	1-9/16	2-7/8
RE1	1 x 1 x 1	1-9/16	2-7/8

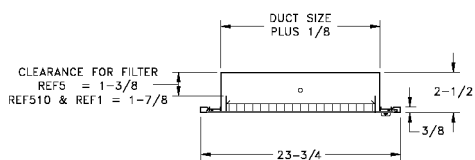
		RED5 Available Sizes (in.)																					
HT		WIDTH																					
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X
26											X	X	X	X	X	X	X	X	X	X	X	X	X
28												X	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
34															X	X	X	X	X	X	X	X	X
36																X	X	X	X	X	X	X	X
38																	X	X	X	X	X	X	X
40																		X	X	X	X	X	X
42																			X	X	X	X	X
44																				X	X	X	X
46																					X	X	X
48																						X	X

Registers & Grilles - Aluminum



REF5 Filter Grille, Grid Core

- All-aluminum construction
- 1/2" x 1/2" x 1/2" square core design
- Accommodates standard 1" thick disposable filter (not included)
- Filter grilles equipped with knurled knob fasteners
- Bright White or Mill finish

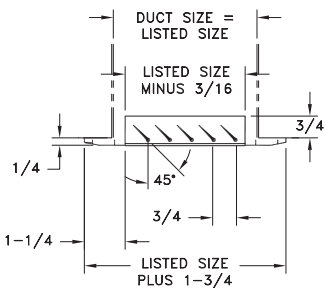


		REF5 Available Sizes (in.)																		
HT	WIDTH																			
	6	8	10	12	14	16	18	20	22	24	25	26	28	30	32	34	36			
4	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			
5	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			
6	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			
8		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			
10			X	X	X	X	X	X	X	X		X	X	X	X	X	X			
12				X	X	X	X	X	X	X		X	X	X	X	X	X			
14					X	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			
20								X	X	X		X	X	X	X	X	X			
22									X	X		X	X	X	X	X	X			
24										X		X	X	X	X	X	X			
25								X			X									
26												X	X	X	X	X	X			
28													X	X	X	X	X			
30														X	X	X	X			
32															X	X	X			
34																X	X			
36																	X			



RH45 Grille

- Extruded aluminum construction
- Horizontal bars at 45 degrees
- Face bars permanently fixed into heavy aluminum frames at a 45-degree angle
- Bright White or Satin Anodized finish



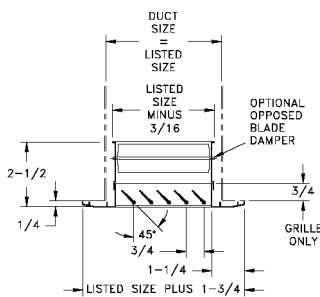
		RH45 Available Sizes (in.)																						
HT	WIDTH																							
	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24											X	X	X	X	X	X	X	X	X	X	X	X	X	X
26												X	X	X	X	X	X	X	X	X	X	X	X	X
28													X	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
34																X	X	X	X	X	X	X	X	X
36																	X	X	X	X	X	X	X	X
38																		X	X	X	X	X	X	X
40																			X	X	X	X	X	X
42																				X	X	X	X	X
44																					X	X	X	X
46																						X	X	X
48																							X	X

Other sizes available upon request



RHD45 Register

- Extruded aluminum construction
- Horizontal bars at 45 degrees
- Face bars permanently fixed into heavy aluminum frames at a 45-degree angle
- Opposed-blade damper
- Bright White or Satin Anodized finish



RHD45 Available Sizes (in.)																									
HT	WIDTH																								
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48			
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
20								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
22									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
24										X	X	X	X	X	X	X	X	X	X	X	X	X	X		
26											X	X	X	X	X	X	X	X	X	X	X	X	X		
28												X	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		
34															X	X	X	X	X	X	X	X	X		
36																X	X	X	X	X	X	X	X		
38																	X	X	X	X	X	X	X		
40																		X	X	X	X	X	X		
42																			X	X	X	X	X		
44																				X	X	X	X		
46																					X	X	X		
48																						X	X		

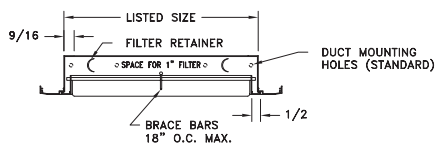
Other sizes available upon request



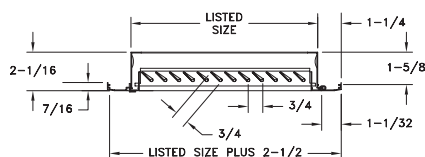
RHF45 Filter Grille

- Extruded aluminum construction
- Horizontal bars at 45 degrees
- Hinged on the bottom edge
- Accommodates standard 1" thick disposable filter (not included)
- RHF45 utilizes the RH45 extruded aluminum grille
- Filter grilles equipped with spring fasteners
- Bright White or Satin Anodized finish

Note: CFM capacity is equal to the filter capacity rating of two CFM per square inch of gross filter area.



RHF45 END VIEW



RHF45 SIDE VIEW

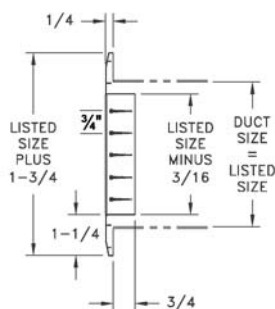
		RHF45 Available Sizes (in.)																							
HT		WIDTH																							
		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48		
6	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
10				X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
12					X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
14						X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
16							X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
18								X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
20									X	X		X	X	X	X	X	X	X	X	X	X	X	X		
22										X		X	X	X	X	X	X	X	X	X	X	X	X		
24											X	X	X	X	X	X	X	X	X	X	X	X	X		
26									X			X	X	X	X	X	X	X	X	X	X	X	X		
28											X	X	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		
34															X	X	X	X	X	X	X	X	X		
36																X	X	X	X	X	X	X	X		
38																	X	X	X	X	X	X	X		
40																		X	X	X	X	X	X		
42																			X	X	X	X	X		
44																				X	X	X	X		
46																					X	X	X		
48																						X	X		

Other sizes available upon request



RH90 Grille

- Extruded aluminum construction
- Face bars permanently fixed into heavy aluminum frames at a 90-degree angle from face
- Bright White or Satin Anodized finish

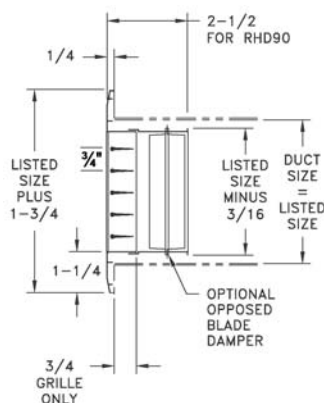
[illegible]

Other sizes available upon request



RHD90 Register

- Extruded aluminum construction
- Face bars permanently fixed into heavy aluminum frames at a 90-degree angle from face
- Opposed-blade damper
- Bright White or Satin Anodized finish

[illegible]



TG Transfer Grille

- Extruded aluminum construction
- Vision proof
- Inverted "Y" type grille bar for best vision proof quality and airflow
- Excellent for installation in doors or partitions
- Bright White or Satin Anodized finish

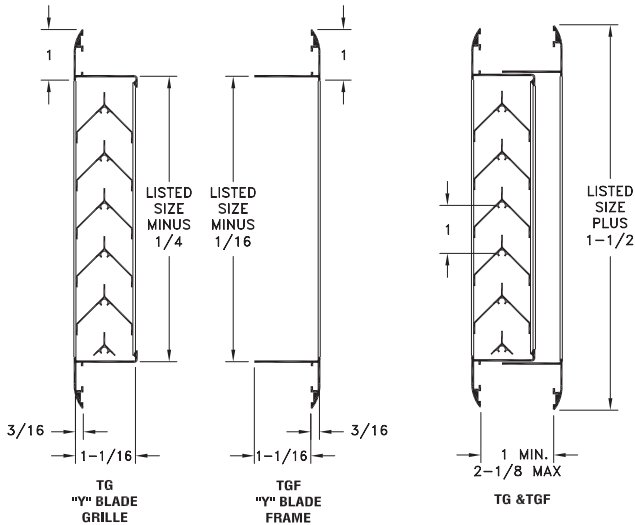


TGF Transfer Grille Frame

- Extruded aluminum construction

Note: When framing both sides of the door or partition opening, use the TGF frame with the TG Grille. Adjustable from 1" to 2 1/8" door thickness.

TG/TGF Transfer Grille with Transfer Grille Frame



TG/TGF Available Sizes (in.)																	
HT	WIDTH																
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10			X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12				X	X	X	X	X	X	X	X	X	X	X	X	X	
14					X	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	
20								X	X	X	X	X	X	X	X	X	
22									X	X	X	X	X	X	X	X	
24										X	X	X	X	X	X	X	
26											X	X	X	X	X	X	
28												X	X	X	X	X	
30													X	X	X	X	
32														X	X	X	
34																X	
36																X	

Other sizes available upon request