# Aluminum Perforated Filter Return Grille (RAFM FIlter)





Detail of perforated hole pattern.

00006

0000

3/16"

-1/8"

7/16"

7/32"

# **Application**

Perforated return filter grilles are used as return units that match the appearance of the supply outlets. They are well suited for locations where the occupant can see into the duct, and can be mounted on the wall or in the ceiling.

### **Standard Features**

- · Extruded aluminum construction.
- Perforated face material is approximately 51% free area.
- Minimum grille size is 4" x 4".
- Choice of 1" or 2" deep filter.
- Grille is closed with 1/4 turn fastener.
- Standard finish is electrocoat acrylic baked enamel.
- Standard color is #11 bright white.
- · Choice of hinging along long or short side.
- Gasket around the edge of the mounting frame.

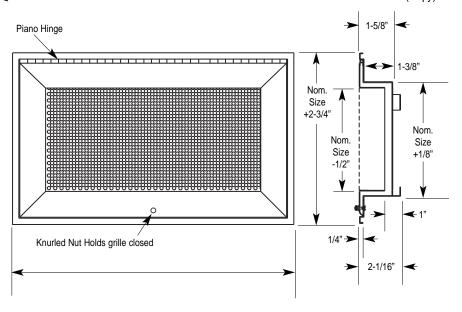
# **Optional Features**

• Also available without filter clips (Opt. H or J).

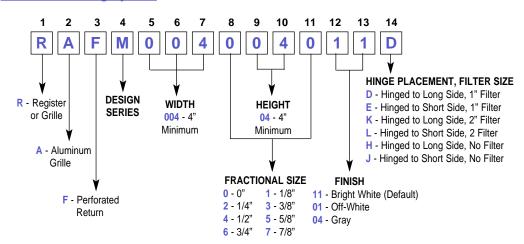
# **Sizing and Performance Notes**

 All grilles take the same filter size as grille nominal size, except as follows:

Nom. Size	To Fit	Takes this filter size
21" x 21"	24" x 24" T-bar	20" x 20"
21" x 45"	24" x 48" T-bar	20" x 20" (2 gty)



# **Model Numbering System**



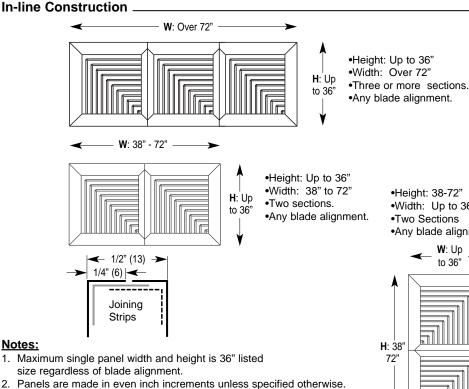
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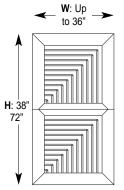
# Multi-Panel Construction for the following Registers & Grilles

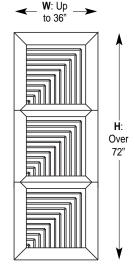
Stainless Steel Steel Aluminum RSSB, RTSB RLSB, RMSB, RKSB RASM, RNSM Single Deflection Double Deflection RSDB, RTDB RLDB, RMDB, RKDB RADM, RNDM 0° Fixed Return RSRB, RTRB RLRB, RMRB, RKRB RARM, RNRM 45° Fixed Return RSAB, RTAB RLAB, RMAB, RKAB RAAM, RNAM

### In-line Construction \_



- Any blade alignment
- •Width: Up to 36"
- Two Sections
- Any blade alignment





•Height: Over 72" •Width: Up to 36"

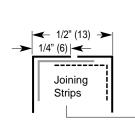
•Three or More Sections

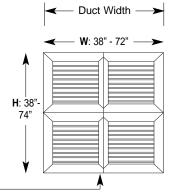
### Notes:

- 1. Maximum single panel width and height is 36" listed size regardless of blade alignment.
- 3. Front blade alignment is as pictured.
- 4. Grille height & width dimensions shown are listed size dimensions.
- 5. Panel flanges are sheared and aligned with joining strips.

# Ganged Construction \_\_\_\_\_

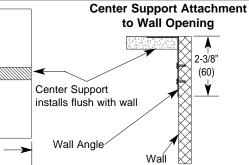
- 1. Maximum single panel width is 36" listed size.
- 2. Maximum single panel height is 36" listed size.
- 3. Panels will be made in even inch increments unless specified otherwise.
- 4. Front blade alignment is always parallel to center support.
- 5. Either the vertical or horizontal joint can be sheared down, but not both.
- 6. The center support can be aligned vertically or horizontally, depending on blade alignment desired. It is shown here mounted horizontally.
- 7. Grille height and width dimensions shown are listed size dimensions.
- 8. Metric dimensions are shown in millimeters.



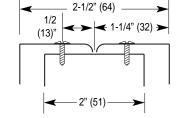


Duct

Height



# **Cross-Sectional View of Center** Support with Grilles Attached



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# Multi-Panel Construction for the following Registers & Grilles

Louvered Return Perforated Return

<u>Steel</u> RSLA, RTLA RSFA, RTFA

•Height: Over 72" •Width: Up to 48"

•Horizontal Blade Alignment •Three or More Sections

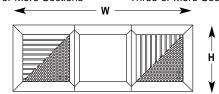
In-Line Construction.

•Height: Up to 36" •Width: Over 96"

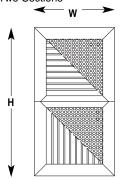
•Horizontal Blade Alignment •Three or More Sections

•Height: Up to 48" •Width: Over 72"

 Vertical Blade Alignment •Three or More Sections



- •Height: 38-72" •Width: Up to 48"
- Horizontal Blade Alignment
- Two Sections

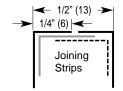


- •Height: 50-96" •Width: Up to 36"
- Vertical Blade Alignment
- Two Sections
- •Height: Over 96"
- •Width: Up to 36"
- •Vertical Blade Alignment
- •Three or more Sections

Duct

Height

- •Height: Up to 36" •Width: 50" to 96"
- •Horizontal Blade Alignment
- Two Sections
- •Height: Up to 48" •Width: 38" to 72"
- •Vertical Blade Alignment
- Two Sections



### Notes:

- 1. Panels will be made in even inch increments unless specified otherwise.
- 2. Dimensions shown are listed size dimensions.
- 3. Max. blade length on louvered face models is nominal 48".

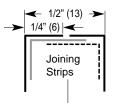
Wall Angle

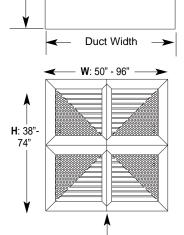
4. Panels are sheared and aligned with joining strips.

# Ganged Construction .

### Notes:

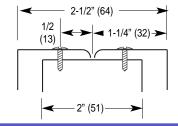
- 1. Either the vertical or horizontal joint can be sheared down, but not both.
- 2. Maximum single panel width is 48" listed size.
- Maximum blade length on louvered face models is listed size 48". 4. Maximum single panel height is 36"
- listed size. 5. Panels are made in even inch increments unless specified otherwise.
- 6. Blade alignment is always parallel to center support.
- 7. The center support can be aligned vertically or horizontally, depending on the blade alignment desired. It is shown here mounted horizontally.
- 8. Grille dimensions shown are listed size dimensions.





# Center Support Attachment to **Wall Opening** 2-3/8" (60)Center Support install flush with wall

**Cross-Sectional View of Center** Support with Grilles Attached



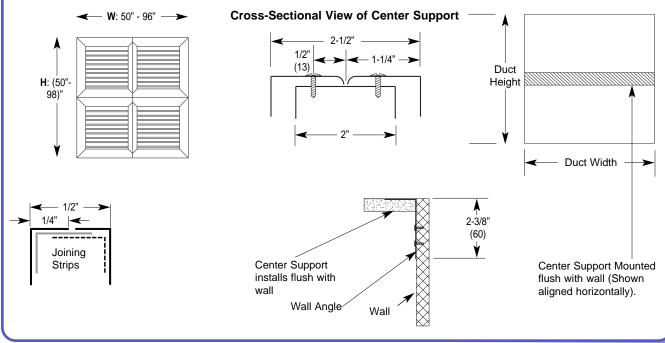


### **W** (Up to 48") Multi-Panel In-Line Construction •Height: 50-96" 1. Maximum single panel width and height is 48" nominal size, regardless •Width: Up to 48" of blade alignment. •Two Sections 2. Panels are made in even inch increments unless specified otherwise. •Any Blade Alignment 3. Front blade alignment is as pictured. **H** (50" 4. Grille dimensions shown are nominal dimensions. -96") 5. Panel flanges are sheared and aligned with joining strips. - 1/2" W (Up to 48") Joining •Height: Over 96" Strips •Width: Up to 48" •Three or more Sections Any Blade Alignment •Height: Up to 48" •Height: Up to 48" •Width: Over 96" •Width: 50" - 96" •Three or more Sections •(Two Sections) •Any Blade Alignment Any Blade Alignment W (Over 96") W (50" - 96") H: (Up to **H:** (Up to

## Notes:

- 1. Maximum single panel width and height are 48" nominal size.
- 2. Panels are made in even inch increments unless specified otherwise.
- 3. Front blade alignment is always parallel to center support.
- 4. Either the vertical or horizontal joint can be sheared down, but not both.
- 5. The center support can be aligned vertically or horizontally, depending on blade alignment desired.
- 6. Grille dimensions shown are nominal dimensions.

**Multi-Panel Ganged Construction** 



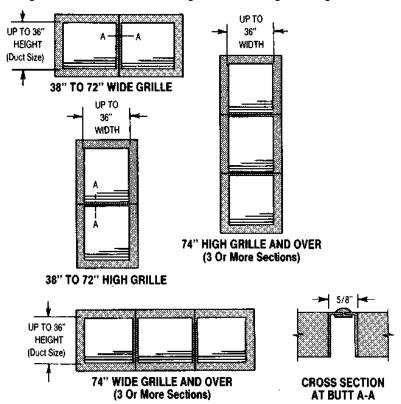
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# Multi-Panel Construction for M-Series Alum, R&G PARISES

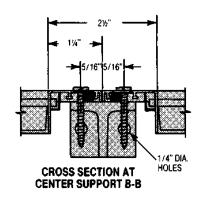
# All Sections of Butted Grilles or Registers will be made in Listed Sizes as Standard.

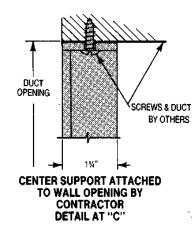
# STANDARD REGISTERS AND GRILLES

Applies to all models except louvered return air registers and grilles and door partition grilles. Registers and grilles over 36" x 36" butting two or more grilles together.



# **GRILLES AND REGISTERS HAVING FOUR SECTIONS AND OVER**





# DUCT OPENING LISTED SIZE CENTER SUPPORT (Flush With Wall) DUCT OPENING

### NOTES:

Extruded aluminum supporting members with mounting angles, are furnished where required.

Center support may run vertically or horizontally, depending upon combination of grilles used.

Combination of panels will be furnished to fit duct opening with satisfactory clearance.

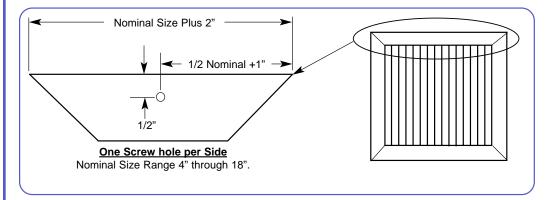


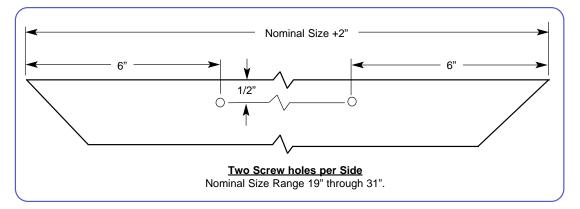
# Screw Hole Location for the following Registers & Grilles

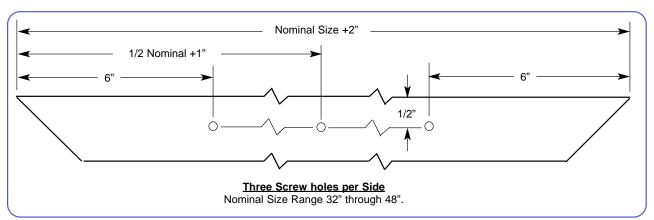
	<u>Steel</u>	<u>Aluminum</u>	Stainless Steel
Single Deflection	RSSB, RTSB	RASM, RNSM	RLSB, RMSB, RKSB
Double Deflection	RSDB, RTDB	RADM, RNDM	RLDB, RMDB, RKDB
0° Fixed Return	RSRB, RTRB	RARM, RNRM	RLRB, RMRB, RKRB
45° Fixed Return	RSAB, RTAB	RAAM, RNAM	RLAB, RMAB, RKAB
Louvered Return	RSLA, RTLA		
Perforated Return	RSFA. RTFA	RAFM. RNFM	

### Notes:

- · Screw holes on the face are standard on Registers and Grilles.
- Steel R&G can be ordered without screw holes, for use with concealed hangers (Opt. N).
- The screw holes is 5/32" in diameter.
- Each Register or Grille is provided with the appropriate number of screws as standard.
- The standard screw is #8 x 1-1/4" pan head screw, with a flat blade head.
- Tamper-proof screws are available as an option (Opt. B).







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