

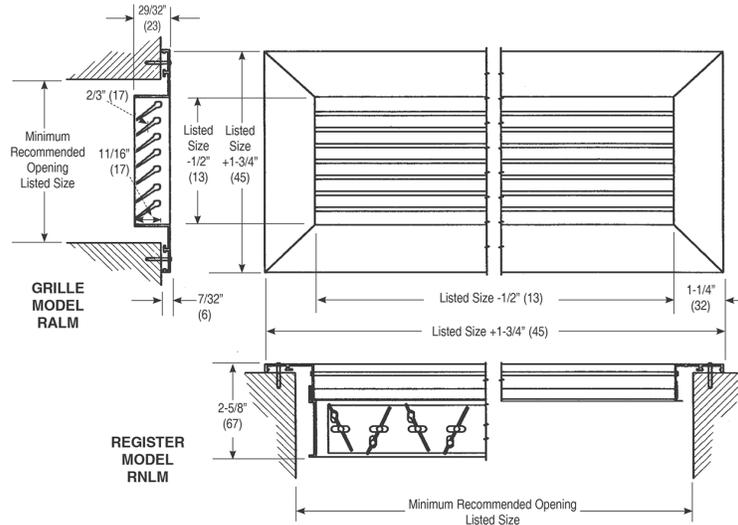
RETURN GRILLES and REGISTERS

The beautiful designed natural anodize extruded aluminum angle blade return air grille or register incorporates the following features.

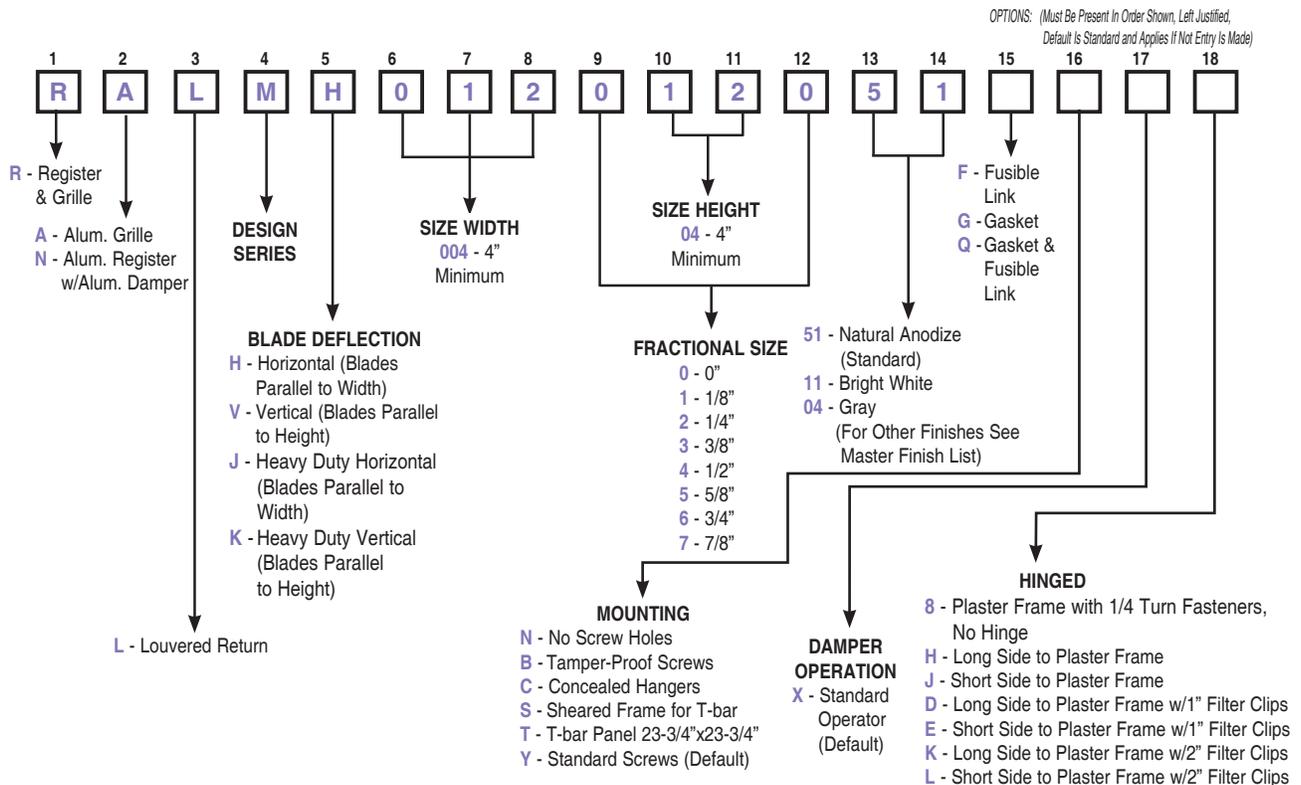
1. The frame is flat with sharp square edges to harmonize with modern aesthetical designs.
2. Angle blades that have clean, sharp lines that can be achieved by extrusions.
3. Slightly over lapped blades to practically eliminate see-through.

NOTE: The angle blade return is standard with the blades in a horizontal position. It is, however, available with the blades in a vertical position by substituting a "V" at the end of the model number.

Example: RALAV



MODEL NUMBERING SYSTEM - M-Series Aluminum Louvered Return Registers and Grilles



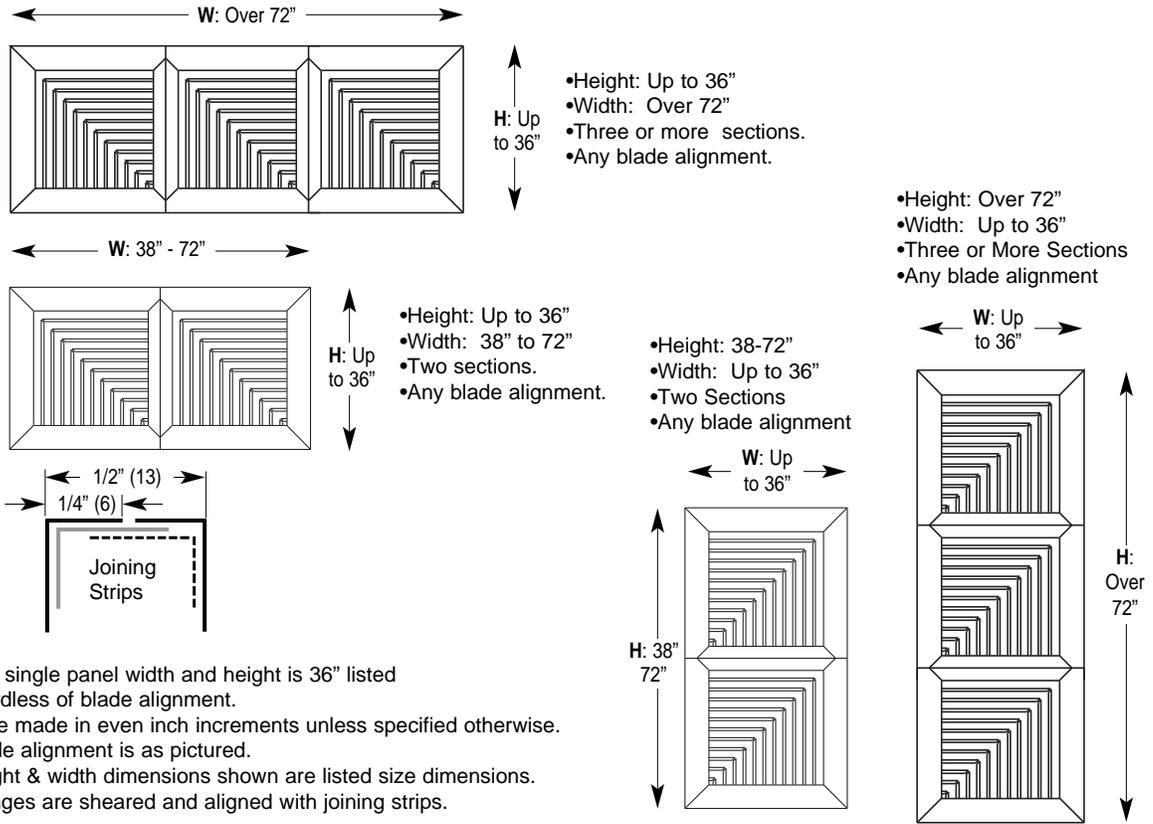
MODELS: RALM, RNLM								
SIZE W x H	Area* Sq. Ft.	AIR CAPACITY CFM						
		300 FPM	400 FPM	500 FPM	600 FPM	700 FPM	800 FPM	900 FPM
10 x 6	.26	78	104	130	156	182	208	234
12 x 6	.32	96	128	160	192	224	256	288
10 x 8	.36	108	144	180	216	252	288	324
12 x 8	.43	129	172	215	258	301	344	387
18 x 6	.48	144	192	240	288	336	384	432
12 x 12	.67	201	268	335	402	469	536	603
18 x 12	1.02	306	408	510	612	714	816	918
24 x 12	1.35	405	540	675	810	945	1080	1215
18 x 18	1.55	465	620	775	930	1085	1240	1395
30 x 12	1.69	507	676	845	1014	1183	1352	1521
24 x 18	2.05	615	820	1025	1230	1435	1640	1845
30 x 18	2.61	783	1044	1305	1566	1827	2088	2349
24 x 24	2.77	831	1108	1385	1662	1939	2216	2493
36 x 18	3.13	939	1252	1565	1878	2191	2504	2817
30 x 24	3.50	1050	1400	1750	2100	2450	2800	3150
36 x 24	4.21	1263	1684	2105	2526	2947	3368	3789
36 x 30	5.29	1587	2116	2645	3174	3703	4332	4761
48 x 24	5.55	1665	2220	2775	3330	3885	4440	4995
48 x 30	6.98	2094	2792	3490	4188	4886	5584	6282
48 x 36	8.38	2514	3352	4190	5028	5866	6704	7542

* "Anemometer Effective Area" — Anemometer held directly against face.

Multi-Panel Construction for the following Registers & Grilles

	Steel	Stainless Steel	Aluminum
Single Deflection	RSSB, RTSB	RLSB, RMSB, RKSB	RASM, RNSM
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



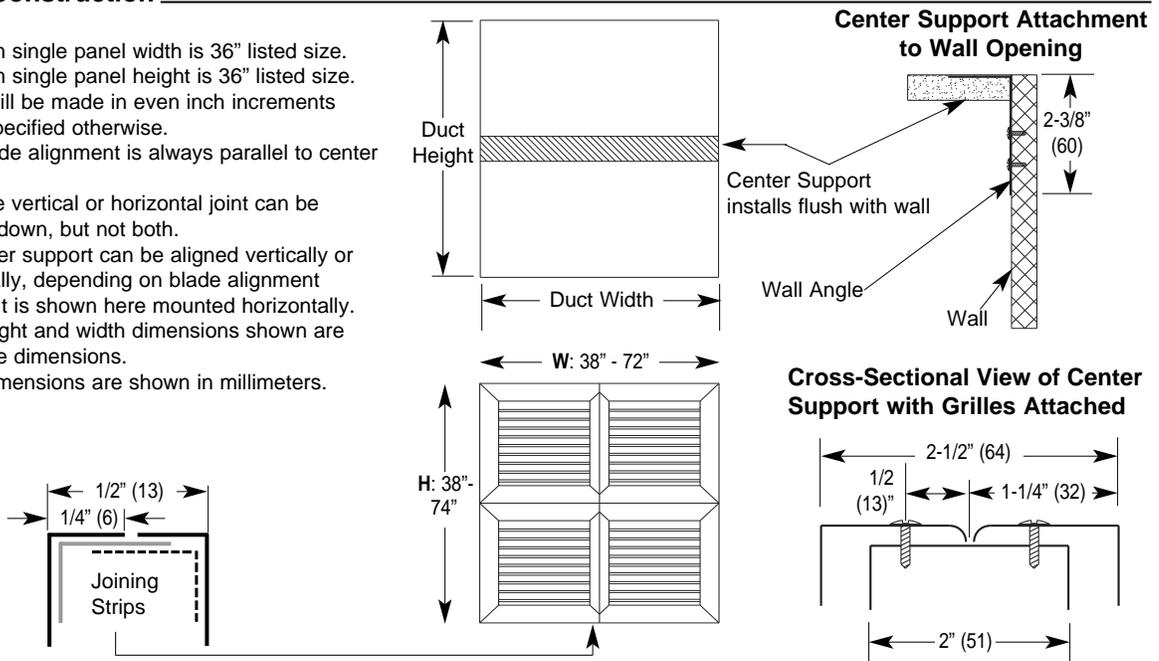
Notes:

1. Maximum single panel width and height is 36" listed size regardless of blade alignment.
2. Panels are made in even inch increments unless specified otherwise.
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

Notes:

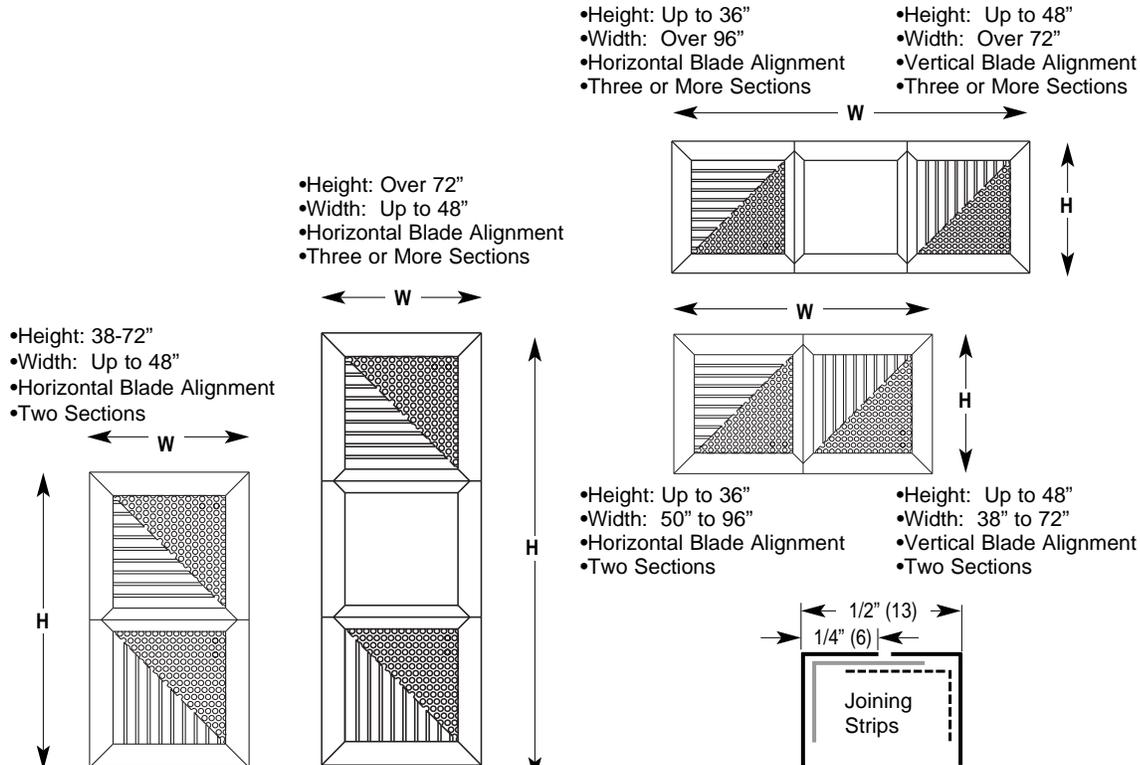
1. Maximum single panel width is 36" listed size.
2. Maximum single panel height is 36" listed size.
3. Panels will be made in even inch increments unless specified otherwise.
4. Front blade alignment is always parallel to center support.
5. Either the vertical or horizontal joint can be sheared down, 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.



Multi-Panel Construction for the following Registers & Grilles

Steel
 Louvered Return RSLA, RTLA
 Perforated Return RSFA, RTFA

In-Line Construction



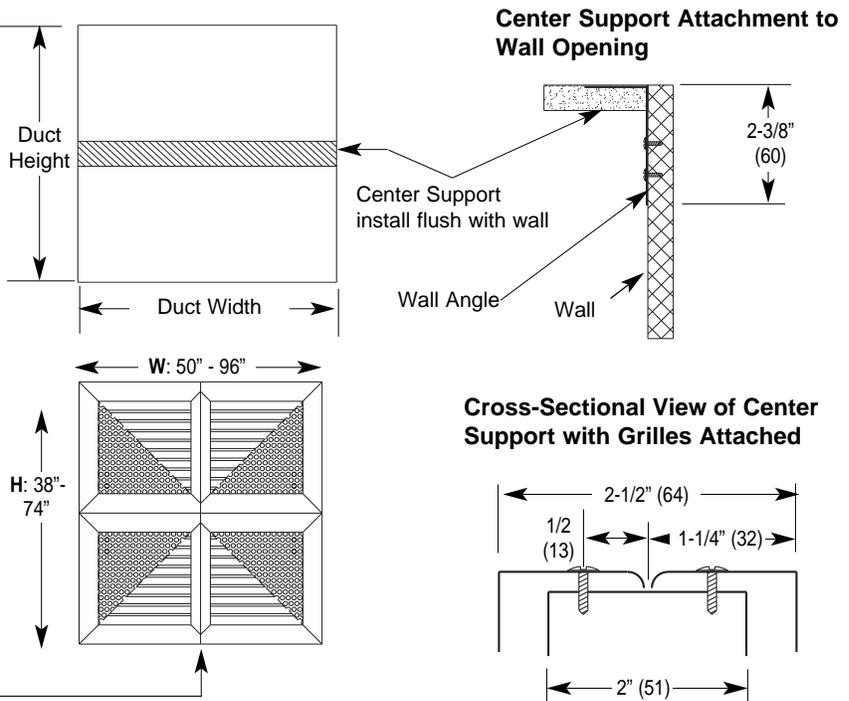
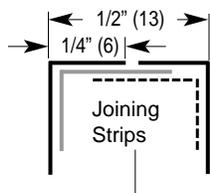
Notes:

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".
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.
3. 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.

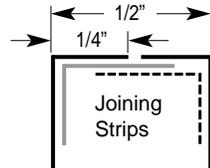
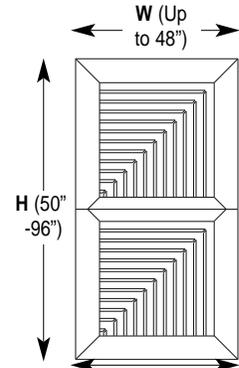


Multi-Panel In-Line Construction

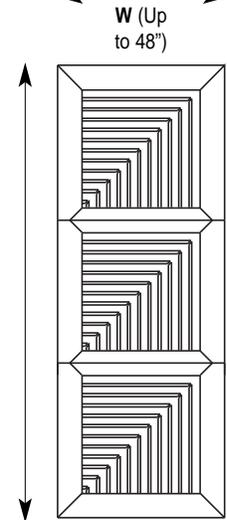
Notes:

1. Maximum single panel width and height is 48" nominal size, regardless of blade alignment.
2. Panels are made in even inch increments unless specified otherwise.
3. Front blade alignment is as pictured.
4. Grille dimensions shown are nominal dimensions.
5. Panel flanges are sheared and aligned with joining strips.

- Height: 50-96"
- Width: Up to 48"
- Two Sections
- Any Blade Alignment

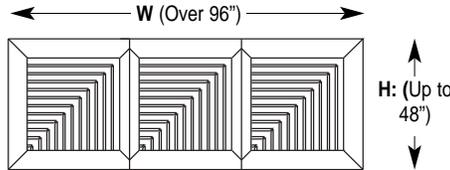
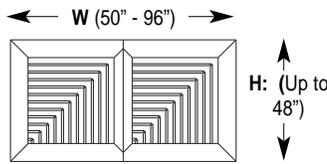


- Height: Over 96"
- Width: Up to 48"
- Three or more Sections
- Any Blade Alignment



- Height: Up to 48"
- Width: 50" - 96"
- (Two Sections)
- Any Blade Alignment

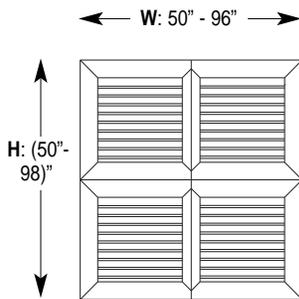
- Height: Up to 48"
- Width: Over 96"
- Three or more Sections
- Any Blade Alignment



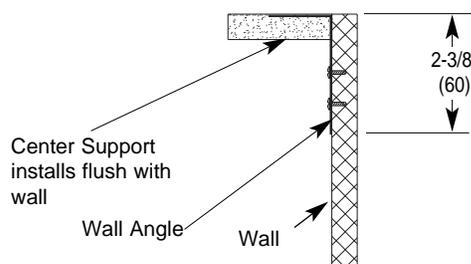
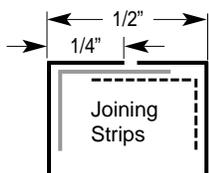
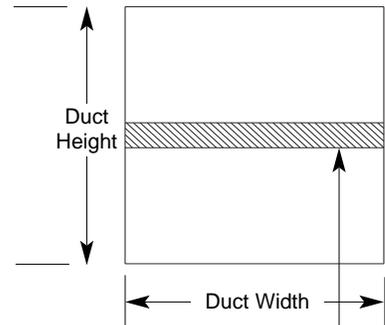
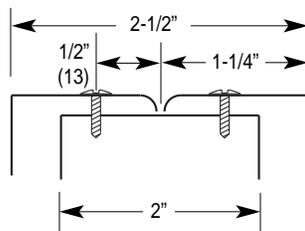
Multi-Panel Ganged Construction

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.



Cross-Sectional View of Center Support



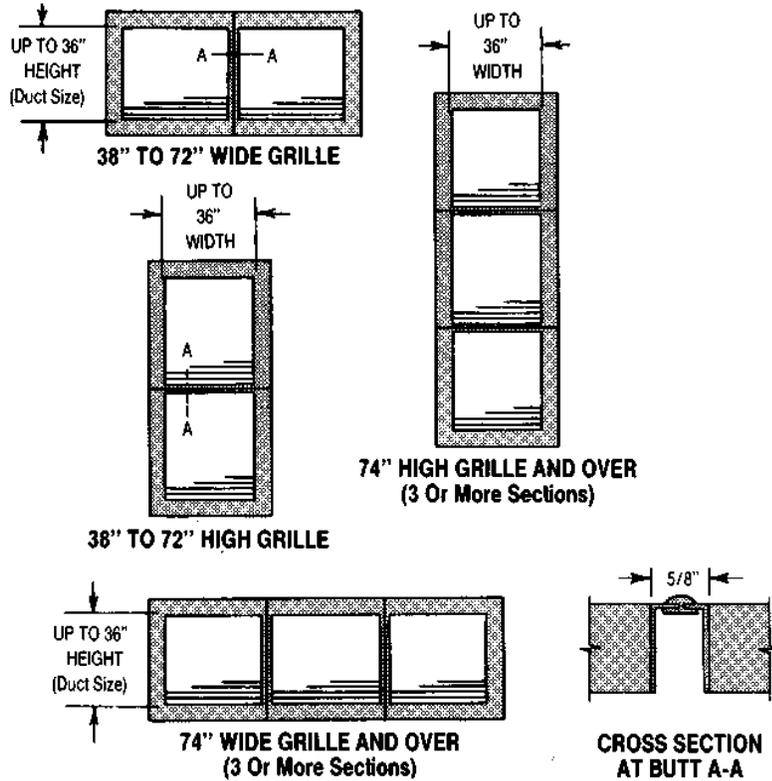
Center Support Mounted flush with wall (Shown aligned horizontally).

Sq. & Rect. Registers & Grilles

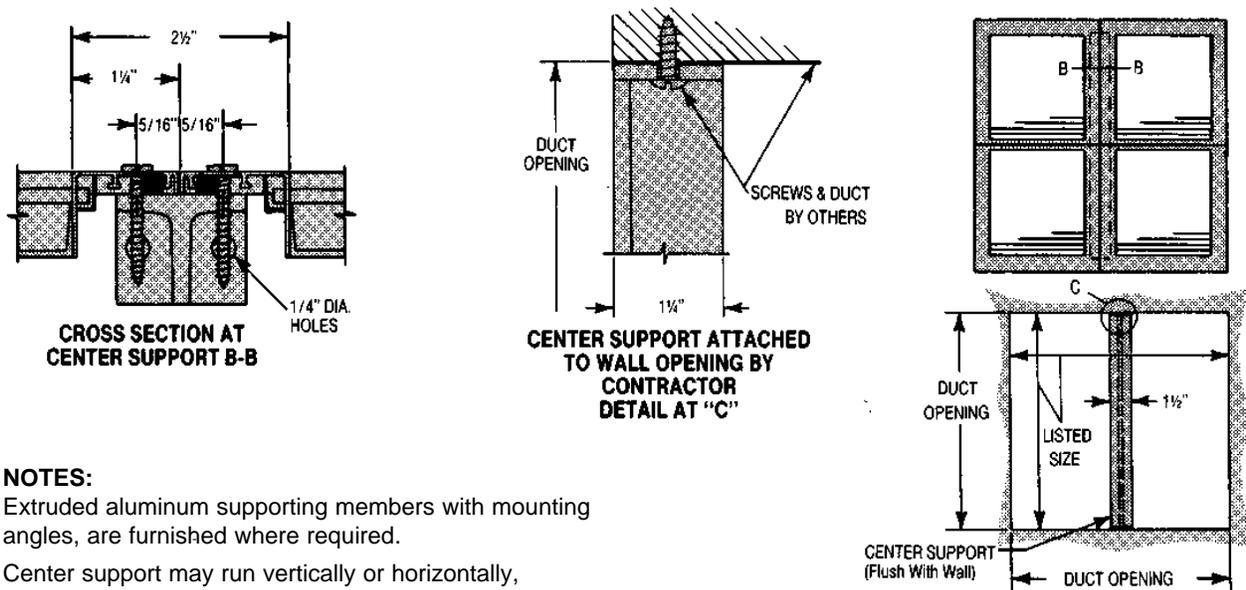
All Sections of Butted Grilles or Registers will be made in Listed Sizes as Standard.

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



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.

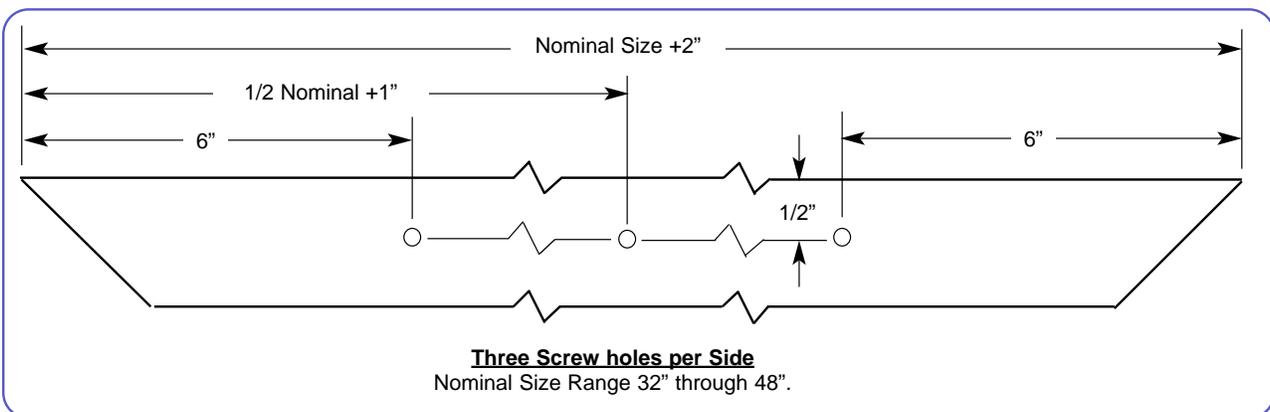
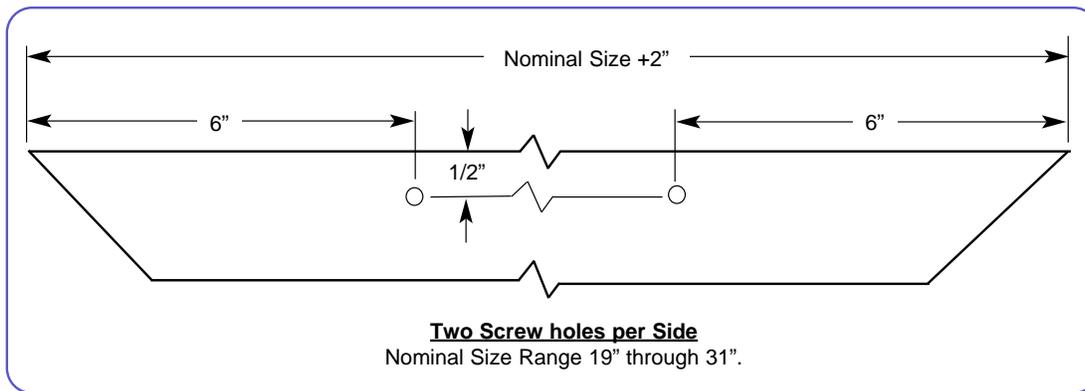
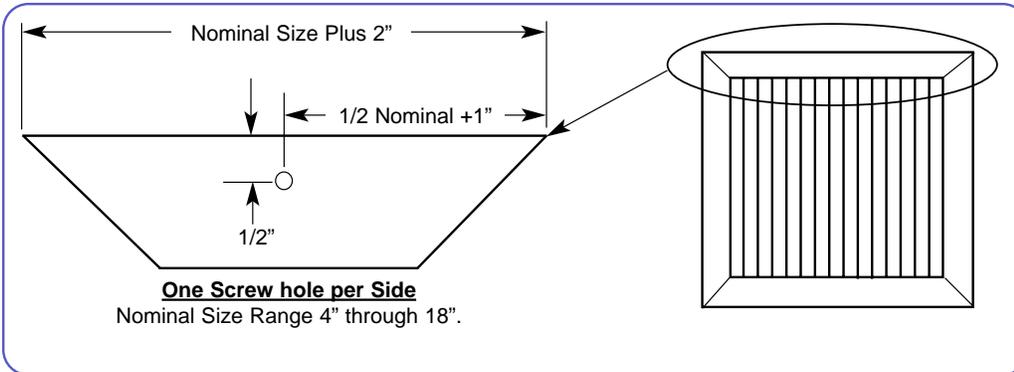
Combination of panels will be furnished to fit duct opening with satisfactory clearance.

Screw Hole Location for the following Registers & Grilles

	<u>Steel</u>	<u>Aluminum</u>	<u>Stainless Steel</u>
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).



Sq. & Rect. Registers & Grilles