MODEL NUMBERING SYSTEM - Eggcrate Return Air Registers and Grilles


RETURN AIR PERFORMANCE DATA - Models RAEA \& RAPA Eggcrate Return Air Registers and Grilles

| $\begin{gathered} \text { DUCT } \\ \text { VELOCITY } \end{gathered}$ | 200 FPM |  | 300 FPM |  | 400 FPM |  | 500 FPM |  | 600 FPM |  | 800 FPM |  | 1000 FPM |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { STATIC } \\ \text { PRESSURE } \\ \hline \end{gathered}$ | . 009 |  | . 016 |  | . 031 |  | . 048 |  | . 069 |  | . 123 |  | . 192 |  |
| WxH | CFM | NC | CFM | NC | CFM | NC | CFM | NC | CFM | NC | CFM | NC | CFM | NC |
| $6 \times 6$ | 50 | - | 75 | - | 100 | - | 125 | - | 150 | - | 200 | 22 | 250 | 30 |
| $8 \times 8$ | 89 | - | 133 | - | 178 | - | 222 | - | 266 | - | 355 | 24 | 444 | 32 |
| $10 \times 8$ | 111 | - | 167 | - | 222 | - | 278 | - | 333 | 15 | 444 | 25 | 555 | 33 |
| $10 \times 10$ | 139 | - | 208 | - | 278 | - | 347 | - | 416 | 16 | 555 | 26 | 694 | 34 |
| $12 \times 8$ | 133 | - | 200 | - | 267 | - | 333 | - | 400 | 16 | 533 | 26 | 667 | 34 |
| $12 \times 12$ | 200 | - | 300 | - | 400 | - | 500 | - | 600 | 18 | 800 | 28 | 1000 | 36 |
| $14 \times 10$ | 194 | - | 292 | - | 389 | - | 486 | - | 583 | 18 | 778 | 28 | 972 | 36 |
| $18 \times 10$ | 250 | - | 375 | - | 500 | - | 625 | - | 750 | 19 | 1000 | 29 | 1250 | 37 |
| $18 \times 12$ | 300 | - | 450 | - | 600 | - | 750 | - | 900 | 20 | 1200 | 30 | 1500 | 38 |
| $18 \times 18$ | 450 | - | 675 | - | 900 | - | 1125 | 15 | 1350 | 21 | 1800 | 31 | 2250 | 39 |
| $24 \times 12$ | 400 | - | 600 | - | 800 | - | 1000 | 15 | 1200 | 21 | 1600 | 31 | 2000 | 39 |
| $24 \times 18$ | 600 | - | 900 | - | 1200 | - | 1500 | 17 | 1800 | 23 | 2400 | 33 | 3000 | 41 |
| $24 \times 24$ | 800 | - | 1200 | - | 1600 | - | 2000 | 18 | 2400 | 24 | 3200 | 34 | 4000 | 42 |
| $30 \times 12$ | 500 | - | 750 | - | 1000 | - | 1250 | 16 | 1500 | 22 | 2000 | 32 | 2500 | 40 |
| $36 \times 12$ | 600 | - | 900 | - | 1200 | - | 1500 | 17 | 1800 | 23 | 2400 | 33 | 3000 | 41 |
| $36 \times 18$ | 900 | - | 1350 | - | 1800 | - | 2250 | 19 | 2700 | 25 | 3600 | 35 | 4500 | 43 |
| $36 \times 24$ | 1200 | - | 1800 | - | 2400 | - | 3000 | 20 | 3600 | 26 | 4800 | 36 | 6000 | 44 |
| $36 \times 36$ | 1800 | - | 2700 | - | 3600 | - | 4500 | 22 | 5400 | 28 | 7200 | 38 | 9000 | 46 |
| $48 \times 24$ | 1600 | - | 2400 | - | 3200 | - | 4000 | 21 | 4800 | 27 | 6400 | 37 | 8000 | 45 |
| $48 \times 36$ | 2400 | - | 3600 | - | 4800 | 15 | 6000 | 23 | 7200 | 29 | 9600 | 39 | 12000 | 47 |
| $48 \times 48$ | 3200 | - | 4800 | - | 6400 | 16 | 8000 | 24 | 9600 | 30 | 12800 | 40 | 16000 | 48 |


| 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 |
| $0^{\circ}$ Fixed Return | RSRB, RTRB | RLRB, RMRB, RKRB | RARM, RNRM |
| 45 |  |  |  |

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.
-Height: 38-72"
-Width: Up to 36"
-Two Sections -Any blade alignment

-Height: Over 72"
-Width: Up to 36 "
-Three or More Sections -Any blade alignment


## 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.


Cross-Sectional View of Center Support with Grilles Attached


## Multi-Panel Construction for the following Registers \& Grilles

| Louvered Return | $\frac{\underline{\text { RSLA }}}{}$ RSLA RTA |
| :--- | :--- |
| Perforated Return | RSFA, RTFA |

In-Line Construction

-Height: Over 96"
-Width: Up to $36^{\prime \prime}$
-Vertical Blade Alignment
-Three or more 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 ".
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 $48^{\prime \prime}$ listed size.
3. Maximum blade length on louvered face models is listed size $48^{\prime \prime}$.
4. Maximum single panel height is $36^{\prime \prime}$ 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.


## Cross-Sectional View of Center

 Support with Grilles Attached

## Multi-Panel In-Line Construction

## Notes:

1. Maximum single panel width and height is $48^{\prime \prime}$ 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: Up to 48"
-Width: 50" - 96"
-(Two Sections)
-Any Blade Alignment


A
H: (Up to 48")
$\downarrow$
-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).

## Multi-Panel Construction for M-Series Alum. R\&G

## 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 $36^{\prime \prime} \times 36^{\prime \prime}$ butting two or more grilles together.


74" HIGH GRILLE AND OVER (3 Or More Sections)

38' ${ }^{\prime \prime}$ TO 72" HIGH GRILLE


CROSS SECTION AT BUTT A-A

GRILLES AND REGISTERS HAVING FOUR SECTIONS AND OVER


CENTER SUPPORT ATTACHED
TO WALL OPENING BY CONTRACTOR
DETAIL AT "C"

## 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

Single Deflection Double Deflection $0^{\circ}$ Fixed Return $45^{\circ}$ Fixed Return Louvered Return Perforated Return
Steel
RSSB, RTSB
RSDB, RTDB
RSRB, RTRB
RSAB, RTAB
RSLA, RTLA
RSFA, RTFA

Aluminum
RASM, RNSM
RADM, RNDM
RARM, RNRM
RAAM, RNAM

-     -         -             - 

RAFM, RNFM

Stainless Steel
RLSB, RMSB, RKSB
RLDB, RMDB, RKDB
RLRB, RMRB, RKRB
RLAB, RMAB, RKAB
—————

## 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).



