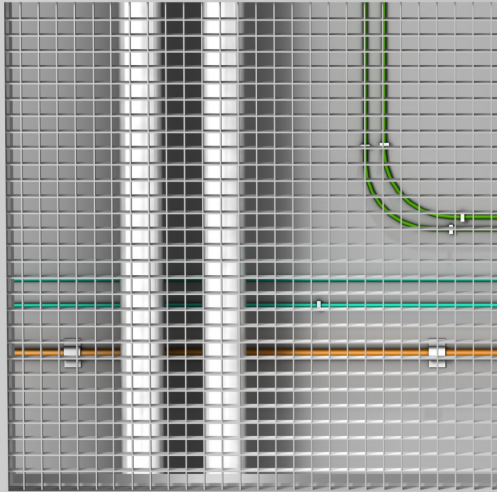


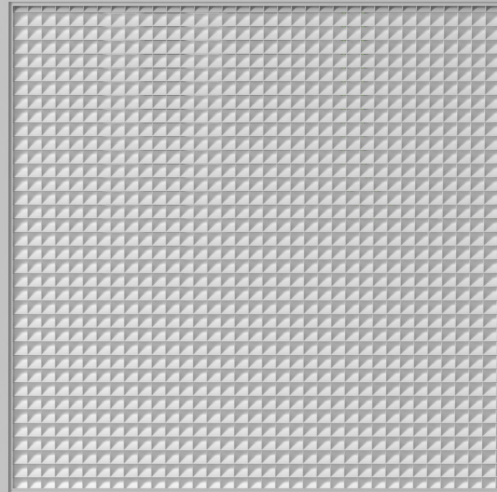
# 85 Series

## EGG CRATE RETURN GRILLE

The 85 series is a high-capacity return or exhaust outlet with a sight-resistant grille. The **45 degree angled core** allows this feature to fully conceal undesirable objects in the ceiling from occupant view.



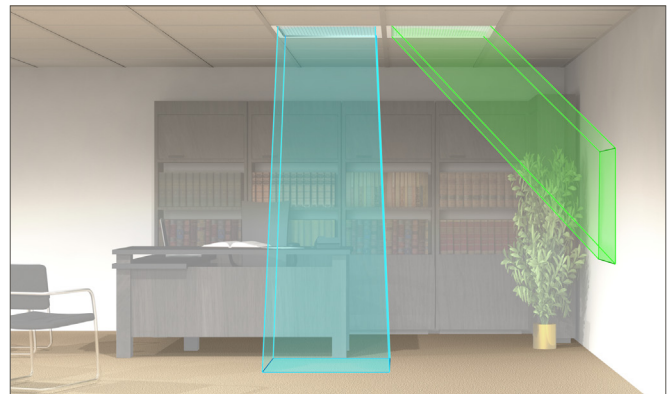
STANDARD EGG CRATE GRILLE



SIGHT-RESISTANT EGG CRATE GRILLE  
(85 SERIES)

When standing directly under a standard egg crate grille, cables and duct work can easily be seen, creating unsightly views (sight lines shown in blue).

The 85 Series egg crate return grille's deflection angle obstructs the occupant's sight line into the grille, adding an appealing aesthetic to the space (sight lines shown in green).



### OTHER FEATURES OF THE 85 SERIES:

- Low pressure drop and sound production
- Heavy gauge extruded aluminum borders and frame
- Ideal for pressurized ceiling returns or size restricted exhaust applications
- No light shield accessory or plenum required
- Durable white powder coat finish
- Available in various mounting styles

## Performance Data

| Core Area<br>sq. ft. | Nominal Size |       |       | Core Velocity<br>Velocity Pressure<br>Negative s.p. | 100            | 200            | 300            | 400            | 500            | 600            | 700            |
|----------------------|--------------|-------|-------|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                      |              |       |       |   | 0.001<br>0.010 | 0.002<br>0.034 | 0.006<br>0.068 | 0.010<br>0.112 | 0.016<br>0.166 | 0.022<br>0.228 | 0.031<br>0.298 |
| 0.15                 | 7x4          |       |       | cfm   | 15             | 30             | 45             | 60             | 75             | 90             | 105            |
|                      | 6x5          |       |       | NC  | —              | —              | —              | 15             | 21             | 26             | 30             |
| 0.18                 | 8x4          | 6x6   |       | cfm   | 18             | 36             | 54             | 72             | 90             | 108            | 126            |
|                      | 7x5          |       |       | NC  | —              | —              | —              | 16             | 22             | 27             | 31             |
| 0.22                 | 10x4         | 7x6   |       | cfm   | 22             | 44             | 66             | 88             | 110            | 132            | 154            |
|                      | 8x5          |       |       | NC  | —              | —              | —              | 16             | 22             | 27             | 32             |
| 0.26                 | 12x4         | 8x6   |       | cfm   | 26             | 52             | 78             | 104            | 130            | 156            | 182            |
|                      | 10x5         |       |       | NC  | —              | —              | —              | 17             | 23             | 28             | 32             |
| 0.3                  | 14x4         |       |       | cfm   | 30             | 60             | 90             | 120            | 150            | 180            | 210            |
|                      |              |       |       | NC  | —              | —              | —              | 18             | 24             | 28             | 33             |
| 0.34                 | 16x4         | 10x6  |       | cfm   | 34             | 68             | 102            | 136            | 170            | 204            | 238            |
|                      | 12x5         |       |       | NC  | —              | —              | —              | 18             | 24             | 29             | 33             |
| 0.39                 | 18x4         | 12x6  |       | cfm   | 39             | 78             | 117            | 156            | 195            | 234            | 273            |
|                      | 14x5         | 8x8   |       | NC  | —              | —              | —              | 18             | 24             | 29             | 34             |
| 0.46                 | 20x4         | 14x6  |       | cfm   | 46             | 92             | 138            | 184            | 230            | 276            | 322            |
|                      | 16x5         | 10x8  |       | NC  | —              | —              | —              | 19             | 25             | 30             | 34             |
| 0.52                 | 24x4         | 16x6  |       | cfm   | 52             | 104            | 156            | 208            | 260            | 312            | 364            |
|                      | 18x5         |       |       | NC  | —              | —              | —              | 19             | 26             | 30             | 35             |
| 0.6                  | 28x4         | 18x6  | 10x10 | cfm   | 60             | 120            | 180            | 240            | 300            | 360            | 420            |
|                      | 20x5         | 12x8  |       | NC  | —              | —              | —              | 20             | 26             | 31             | 35             |
| 0.69                 | 30x4         | 20x6  | 12x10 | cfm   | 69             | 138            | 207            | 276            | 345            | 414            | 483            |
|                      | 24x5         | 14x8  |       | NC  | —              | —              | —              | 20             | 27             | 31             | 36             |
| 0.81                 | 36x4         | 22x6  | 14x10 | cfm   | 81             | 162            | 243            | 324            | 405            | 486            | 567            |
|                      | 28x5         | 16x8  |       | NC  | —              | —              | —              | 21             | 27             | 32             | 36             |
| 0.9                  | 40x4         | 26x6  | 16x10 | cfm   | 90             | 180            | 270            | 360            | 450            | 540            | 630            |
|                      | 30x5         | 18x8  | 12x12 | NC  | —              | —              | —              | 21             | 27             | 32             | 37             |
| 1.07                 | 48x4         | 30x6  | 14x12 | cfm   | 107            | 214            | 321            | 428            | 535            | 642            | 749            |
|                      | 36x5         | 18x10 |       | NC  | —              | —              | —              | 22             | 28             | 33             | 37             |
| 1.18                 | 34x6         | 20x10 | 14x14 | cfm   | 118            | 236            | 354            | 472            | 590            | 708            | 826            |
|                      | 24x8         | 16x12 |       | NC  | —              | —              | —              | 22             | 28             | 33             | 38             |
| 1.34                 | 60x4         | 36x6  | 18x12 | cfm   | 134            | 268            | 402            | 536            | 670            | 804            | 938            |
|                      | 48x5         | 22x10 | 16x14 | NC  | —              | —              | 15             | 23             | 29             | 34             | 38             |
| 1.6                  | 72x4         | 24x10 | 18x14 | cfm   | 160            | 320            | 480            | 640            | 800            | 960            | 1120           |
|                      | 30x8         | 22x12 | 16x16 | NC  | —              | —              | 16             | 23             | 30             | 34             | 39             |
| 1.8                  | 60x5         | 36x8  | 24x12 | 18x16   | cfm            | 180            | 360            | 540            | 720            | 900            | 1080           |
|                      | 48x6         | 30x10 | 20x14 |   | NC             | —              | —              | 16             | 24             | 30             | 35             |
| 2.08                 | 72x5         | 40x8  | 30x12 | 20x16   | cfm            | 208            | 416            | 624            | 832            | 1040           | 1248           |
|                      | 60x6         | 36x10 | 24x14 | 18x18   | NC             | —              | —              | 17             | 24             | 30             | 35             |
| 2.45                 | 72x6         | 32x12 | 24x16 |   | cfm            | 245            | 490            | 735            | 980            | 1225           | 1470           |
|                      | 48x8         | 26x14 | 20x18 |   | NC             | —              | —              | 17             | 25             | 31             | 36             |
| 2.78                 | 36x12        | 26x16 | 22x20 |   | cfm            | 278            | 556            | 834            | 1112           | 1390           | 1668           |
|                      | 30x14        | 24x18 |       |   | NC             | —              | —              | 18             | 25             | 32             | 36             |
| 3.11                 | 60x8         | 40x12 | 30x16 | 22x22   | cfm            | 311            | 622            | 933            | 1244           | 1555           | 1866           |
|                      | 48x10        | 36x14 | 26x18 |   | NC             | —              | —              | 18             | 26             | 32             | 37             |
| 3.61                 | 72x8         | 48x12 | 30x18 |   | cfm            | 361            | 722            | 1083           | 1444           | 1805           | 2166           |
|                      | 60x10        | 36x16 | 24x24 |   | NC             | —              | —              | 19             | 26             | 32             | 37             |
| 4.29                 | 48x14        | 32x20 |       |   | cfm            | 429            | 858            | 1287           | 1716           | 2145           | 2574           |
|                      | 36x18        | 28x24 |       |   | NC             | —              | —              | 19             | 27             | 33             | 38             |
| 4.65                 | 72x10        | 36x20 |       |   | cfm            | 465            | 930            | 1395           | 1860           | 2325           | 2790           |
|                      | 48x16        | 30x24 |       |   | NC             | —              | —              | 20             | 27             | 33             | 38             |
| 5.58                 | 72x12        | 48x18 |       |   | cfm            | 558            | 1116           | 1674           | 2232           | 2790           | 3348           |
|                      | 60x14        | 36x24 |       |   | NC             | —              | —              | 20             | 28             | 34             | 39             |
| 6.25                 | 72x14        | 48x20 |       |   | cfm            | 625            | 1250           | 1875           | 2500           | 3125           | 3750           |
|                      | 60x16        | 30x30 |       |   | NC             | —              | —              | 21             | 28             | 34             | 39             |

### Performance Notes

1. Tested in accordance with ASHRAE Standard 70-2006, *Method of Testing for Rating the Performance of Air Outlets and Inlets*.
2. Airflow is in cfm.
3. All pressures are in in. w.g.
4. NC values are based on room absorption of 10 dB re 10<sup>-12</sup> watts and one grille.
5. Blanks (—) indicate an NC level below 15.