



## **DESCRIPTION:**

FR series are a 1-way return air grille used to cover floor openings. The heavy gauge steel face allows for 1-way airflow and is durable for home foot traffic. Our product is constructed to ensure maximum airflow and compliment your home decor. Using our product to outfit your ventilation system will improve your home air circulation.

## **MATERIAL:**

All-steel construction.

## **FUNCTION:**

- Provides firm, smooth surface.
- Extremely rigid.
- Free area averages over 75%.

## **FINISHING:**

- White or brown powder-coating finish.
- Any colors you would like (4 weeks more).

### **INSTALLATION:**

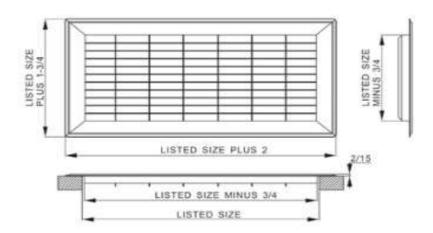
Install with fins upward or downward for best duct concealment.



# STANDARD SIZES (in):

|        | AVAILABLE SIZES (in.) - Always width x height |    |    |    |    |    |    |    |    |    |    |
|--------|---|----|----|----|----|----|----|----|----|----|----|
|        | WIDHT   |    |    |    |    |    |    |    |    |    |    |
| HEIGHT | 8   | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 25 | 30 | 36 |
| 4      | Х   | Х  | X  | Х  |    | X  |    | Х  |    | Х  |    |
| 6      |   | Х  | Х  | Х  | Х  | Х  | Х  | Х  |    | Х  | Х  |
| 8      | Х   | Х  | Х  | Х  | Х  | Х  | Х  | Х  |    | Х  |    |
| 9      |   |    | Х  |    |    |    |    |    |    |    |    |
| 10     |   | Х  | Х  | Х  | Х  | Х  | Х  | Х  |    | Х  |    |
| 12     |   |    | Х  | Х  | Х  | Х  | Х  | Х  |    | Х  |    |
| 14     |   |    |    | Х  | Х  |    | Х  | Х  |    | Х  |    |
| 16     |   |    |    |    | Х  |    | Х  | Х  |    | Х  |    |
| 18     |   |    |    |    |    | Х  |    | Х  |    | Х  |    |
| 20     |   |    |    |    |    |    | Х  | Х  | Х  | Х  |    |
| 24     |   |    |    |    |    |    |    | Х  |    | Х  | Х  |

## FR - DRAWINGS:





## **PERFORMANCE DATA**

| Outlet Size | 6x 6          | 4x8   | 4x10  | 4x12  | 8x8   | 6x12  | 6x14  | 4x24  | 8x12  |  |
|-------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Area        | 0.250         | 0.260 | 0.278 | 0.333 | 0.444 | 0.500 | 0.583 | 0.667 | 0.667 |  |
| CFM         | Face Velocity |       |       |       |       |       |       |       |       |  |
| 50          | 200           |       |       |       |       |       |       |       |       |  |
| 75          | 300           | 289   | 270   | 225   |       |       |       |       |       |  |
| 100         | 400           | 385   | 360   | 300   | 225   | 200   |       |       |       |  |
| 125         | 500           | 481   | 450   | 375   | 282   | 250   | 215   |       |       |  |
| 150         | 600           | 577   | 540   | 450   | 338   | 300   | 258   | 225   | 225   |  |
| 200         |               | 769   | 720   | 600   | 450   | 400   | 343   | 300   | 300   |  |
| 250         |               |       |       | 750   | 563   | 500   | 429   | 375   | 375   |  |
| 300         |               |       |       |       | 675   | 600   | 515   | 450   | 450   |  |
| 350         |               |       |       |       | 788   | 700   | 600   | 525   | 525   |  |
| 400         |               |       |       |       |       |       | 686   | 600   | 600   |  |
| 450         |               |       |       |       |       |       | 772   | 675   | 675   |  |

| Outlet Size | 10x10         | 8x14  | 10x14 | 6x24  | 12x12  | 6x30  | 8x24  | 12x18 | 12x30 |  |
|-------------|---------------|-------|-------|-------|--------|-------|-------|-------|-------|--|
| Area        | 0.694         | 0.778 | 0.972 | 1.000 | 1.0 00 | 1.250 | 1.333 | 1.500 | 2.500 |  |
| CFM         | Face Velocity |       |       |       |        |       |       |       |       |  |
| 150         | 216           |       |       |       |        |       |       |       |       |  |
| 200         | 288           | 257   | 206   | 200   | 200    |       |       |       |       |  |
| 250         | 360           | 321   | 257   | 250   | 250    | 200   |       |       |       |  |
| 300         | 432           | 386   | 309   | 300   | 300    | 240   | 225   | 200   |       |  |
| 400         | 576           | 514   | 411   | 400   | 400    | 320   | 300   | 267   |       |  |
| 500         | 720           | 643   | 514   | 500   | 500    | 400   | 375   | 333   | 200   |  |
| 600         |               | 771   | 617   | 600   | 600    | 480   | 450   | 400   | 240   |  |
| 700         |               |       | 720   | 700   | 700    | 560   | 525   | 467   | 280   |  |
| 800         |               |       |       |       |        | 640   | 600   | 533   | 320   |  |
| 900         |               |       |       |       |        | 720   | 675   | 600   | 360   |  |
| 1000        |               |       |       |       |        |       |       | 667   | 400   |  |

| Outlet Size | 18x18         | 20x20 | 18x24 | 18x30 | 24x24 | 18x36 | 20 x 36 | 24x30 | 24x36 |  |
|-------------|---------------|-------|-------|-------|-------|-------|---------|-------|-------|--|
| Area        | 2.250         | 2.778 | 3.000 | 3.750 | 4.000 | 4.500 | 5.000   | 5.000 | 6.000 |  |
| CFM         | Face Velocity |       |       |       |       |       |         |       |       |  |
| 500         | 222           |       |       |       |       |       |         |       |       |  |
| 600         | 267           | 216   | 200   |       |       |       |         |       |       |  |
| 700         | 311           | 252   | 233   |       |       |       |         |       |       |  |
| 800         | 356           | 288   | 267   | 213   | 200   |       |         |       |       |  |
| 900         | 400           | 324   | 300   | 240   | 225   | 200   |         |       |       |  |
| 1000        | 444           | 360   | 333   | 267   | 250   | 222   | 200     | 200   |       |  |
| 1500        | 667           | 540   | 500   | 400   | 375   | 333   | 300     | 300   | 250   |  |
| 2000        |               | 720   | 667   | 533   | 500   | 444   | 400     | 400   | 333   |  |
| 2500        | ·             | ·     | ·     | 667   | 625   | 556   | 500     | 500   | 417   |  |
| 3000        |               |       |       |       |       | 667   | 600     | 600   | 500   |  |
| 4000        |               |       |       |       |       |       |         |       | 667   |  |

#### Notes:

Neck Velocity - The neck veloci ty is in feet per minute Face Velocity - The discharge veloci ty is in feet per minute

Ps - Static pressure readings are in inches water gauge.

Throw - Throw indicated are based on total number of feet of projected air when a terminal velocity of 50 feet per minute is reached. Values reflect side louver throw and center louver throw respectively. Throw should extend at least 75% of the distance from the face of the gri lle to the wal I opposi te the outlet. Throws are based on a 9 foot ceiling height. Spread - Horizontal spread is measured in feet per minute



## **ORDER CODES**

