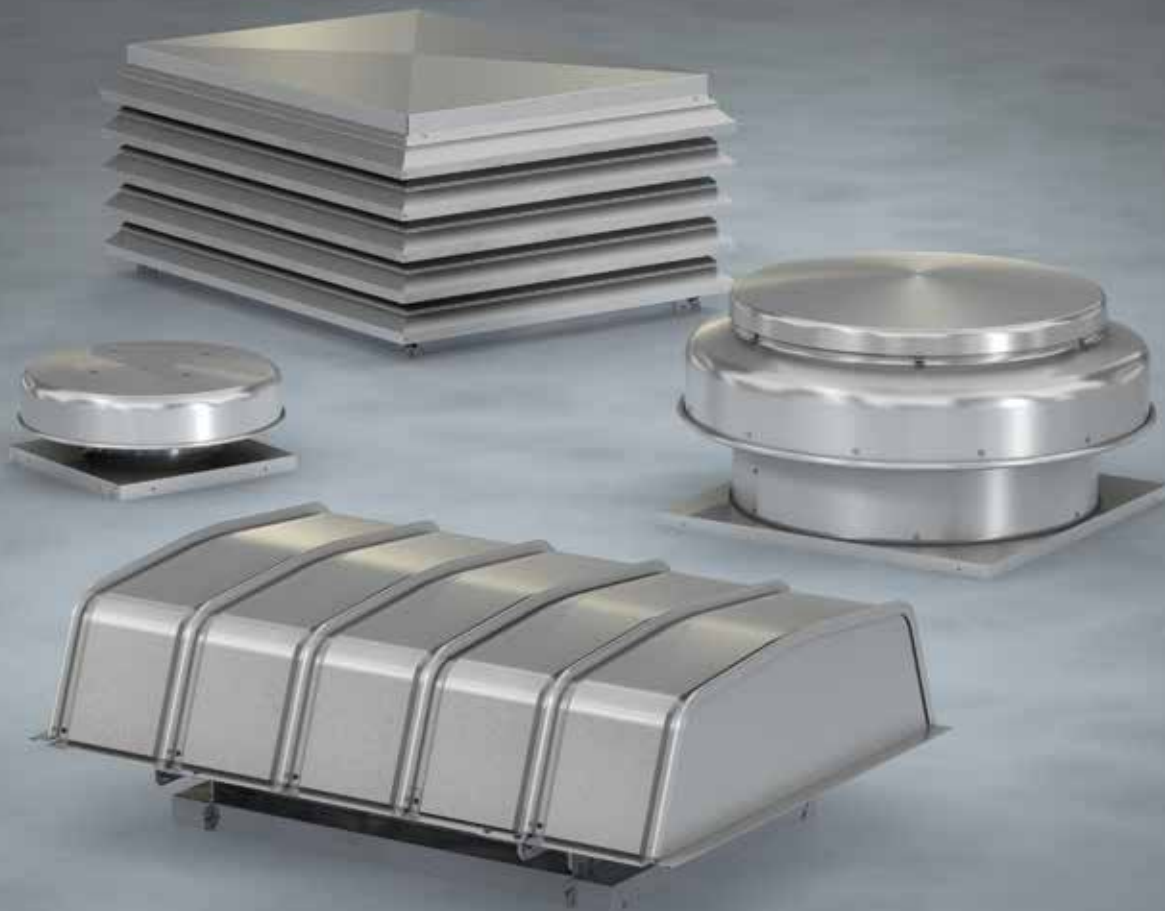


# Gravity Ventilators

## Models FGI/FGR, GRSI/GRSR, WIH/WRH

### Intake and Relief



BUILDING VALUE IN AIR.



May  
2021

Gravity ventilators allow air to enter or exhaust a building using the pressure in a building. The air inside a building will exhaust out as the pressure inside a building increases. Similarly, air enters the building through the gravity ventilator as the inside pressure decreases.

## Fabra Hood

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Designed for intake or relief applications, the fabra hood models FGI or FGR offer many important advantages over other gravity roof ventilators. These models are superior in load bearing strength, weather-resistance, dimensional flexibility and appearance.

|                                       |      |
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## Spun Aluminum

14



For natural gravity or positive pressure systems, the intake model GRSI or relief model GRSR offers excellent performance and durability. Featuring an exceptional low silhouette design and rugged construction, this model is both efficient and economical.

|                                       |       |
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## Louvered Penthouse

16



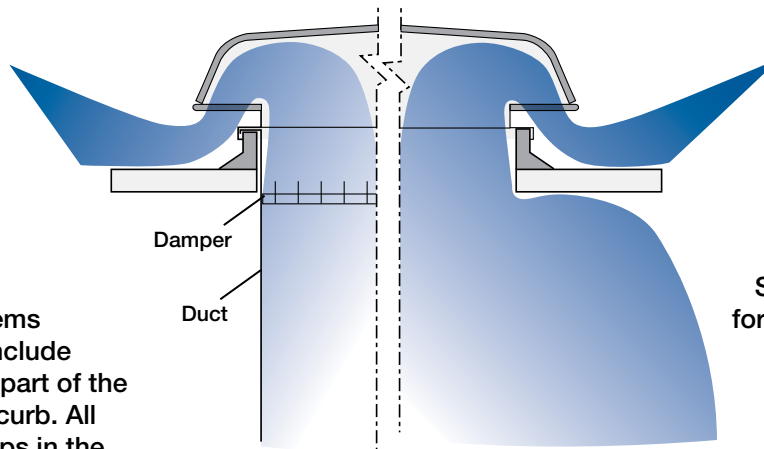
The WIH intake or WRH relief penthouse units offer an aesthetically pleasing design. This flexible design allows for units to be shipped in pre-assembled sections that can be easily assembled without special tools.

|                                       |       |
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## Model Comparison

| Model | Intake | Relief | High Wind | Performance          |                                  |
|-------|--------|--------|-----------|----------------------|----------------------------------|
|       |        |        |           | Maximum Volume (CFM) | Maximum Static Pressure (in. wg) |
| GRSI  | ✓      |        |           | 15,200               | 0.4                              |
| GRSR  |        | ✓      |           | 18,400               | 0.4                              |
| FGI   | ✓      |        | ✓         | 109,800              | 0.4                              |
| FGR   |        | ✓      | ✓         | 96,800               | 0.3                              |
| WIH   | ✓      |        |           | 40,000               | 0.1                              |
| WRH   |        | ✓      |           | 60,000               | 0.2                              |

## System Resistance



### Ducted Systems

Static pressure drops shown for ducted systems in this catalog do not include pressure drops for any part of the system below the roof curb. All additional pressure drops in the ducted system must be calculated by the system designer.

### Non-ducted Systems

Static pressure drops shown for non-ducted systems in this catalog include all entrance and discharge losses.

### Performance Data

Performance data shown on models include static pressure drops for both ducted and non-ducted systems. Pressure drop values as shown are lower for ducted systems than for non-ducted systems. The non-ducted pressure drop includes the sudden expansion at the throat for intake and sudden contraction loss at the throat for exhaust. These losses are not present when a duct is attached to the throat. Calculating total system resistance for

ducted systems also requires adding the pressure drop values shown to the combined total of the other losses in the system. A damper installed in either a ducted or non-ducted system will also require including additional pressure drop value. Where insect screens or filters are installed, the static pressure drops shown on page 6 should be included in system resistance calculations in lieu of standard cataloged pressure drops.



Fabra hoods are designed for intake (model FGI) or relief (model FGR) applications. The fabra hood design offers many important advantages not found in other gravity roof ventilators. Its design is superior in appearance, load-bearing strength, weather resistance, and dimensional flexibility.

### Appearance

The clean lines and uniform structural design of the fabra hood complement any building's appearance. The fabra hood is designed with a low profile to mount close to the roofline. The result is minimum impact on the building silhouette.

### Strength and Weather Resistance

These hoods are strong enough to handle the snow loads found in even the harshest of northern climates and have proven their ruggedness. The key to the fabra hood's strength and rigidity is in the design of the arched hood panels. Each panel provides structural support and is formed with interlocking edges. The result is a strong, rigid shell without the obstruction and performance losses of excessive internal support braces. The interlocking ribs also create tight, weather-resistant joints. No caulking or caps are required to seal out rain and snow.

### Third-Party Certified for High Wind

Miami-Dade, Notice of Acceptance NOA-19-0802.02  
Florida Product Approval (FLPA) - FL12917

- Highest industry rating

| Maximum High Wind Certifications Sizes |                   |                    |
|--|-------------------|--------------------|
| Model                                  | Throat Diameter   |                    |
|  | Width inches (mm) | Length inches (mm) |
| FGI                                    | 54 (1372)         | 54 (1372)          |
| FGR                                    | 66 (1676)         | 66 (1676)          |

- Fabra hoods are certified for static and cyclic wind loading and missile impact
- Designed to withstand wind loads of up to 70 psf (steel) and 40 psf (aluminum)
  - > No tie downs are needed
- Installation/mounting details are provided

### Performance

The rounded inner surfaces of the fabra hood's arched panels promote a smooth, uninterrupted airflow to reduce pressure losses. Cataloged performance data is assured through extensive air testing of both ducted and non-ducted installations with standard birdscreens in place. Intake and relief units differ in size and performance. It is important to note that the "free area" (the opening surrounding the throat) is larger for intake hoods. This larger free area (twice that of the throat) limits the entry of airborne debris and moisture by creating lower intake air velocities. Since relief units are not affected by velocity considerations, the free area is equal to the throat area. Consequently, the smaller overall dimensions of relief units result in lower cost.

### Broad Range of Sizes

Model FGI (intake) and FGR (relief) are available in throat sizes ranging from a minimum of 8 inches (203 mm) wide by 8 inches (203 mm) long to a maximum of 72 inches (1829 mm) wide by 180 inches (4572 mm) long. The complete range of suggested throat sizes is shown on pages 8-13. Other sizes are also available in increments of one inch within the limits shown.

### Shipping

Most fabra hoods ship assembled unless the dimensions are too large to fit in a semitrailer. See pages 8-13 for specific dimensional data.

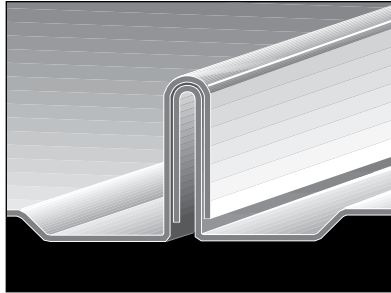
### Assembly

Hoods of long lengths can be constructed on the job site with the interlocking rib design. Where the appearance of a single unit is desired, large roof openings can be covered using a single hood. This also represents cost savings in working with a single roof penetration. Neither special tools nor training are required for assembly. See page 7 for details.

## Precision Formed Locking Rib System

Strength, weather tightness, and adjustable lengths are the primary advantages of the fabra hood's arched, interlocking hood panels. A single, precision roll forming operation creates the rib, the adjacent channel and the arch. All three features work in combination for rigidity and efficient water drainage.

Fabra hoods are available with hood panels and bases constructed of aluminum or galvanized steel as specified.



## Accessibility

Fabra hoods are designed for ease of access to allow inspection and maintenance of screens, filters, and dampers. There are two options for opening the hood:

1. Completely lift the hood off the base by removing the bolts on all the support members.
2. Hinged hood action allows the hood to swing up and over to lie on the roof deck by removing the end bolts on only one side of the support member.

**NOTE:** We do not recommend using this hinging function with larger hoods or prop any hood partway open for your safety. Take care to avoid handling an unbolted hood in strong winds, especially with larger size units.



### 1 Hood panels

Panels are arched and precision roll-formed for strength and weather tightness. The design and construction provides sufficient structural strength to allow inlet and outlet areas to be virtually unobstructed by support members.

### 2 Birdscreens

Standard birdscreens are constructed of 1/2-inch (13 mm) galvanized steel mesh for minimum airflow restriction.

### 3 Support members

Heavy-gauge galvanized steel support members provide additional structural strength as well as a hood/base interface. Larger hoods have truss braces added for increased strength.

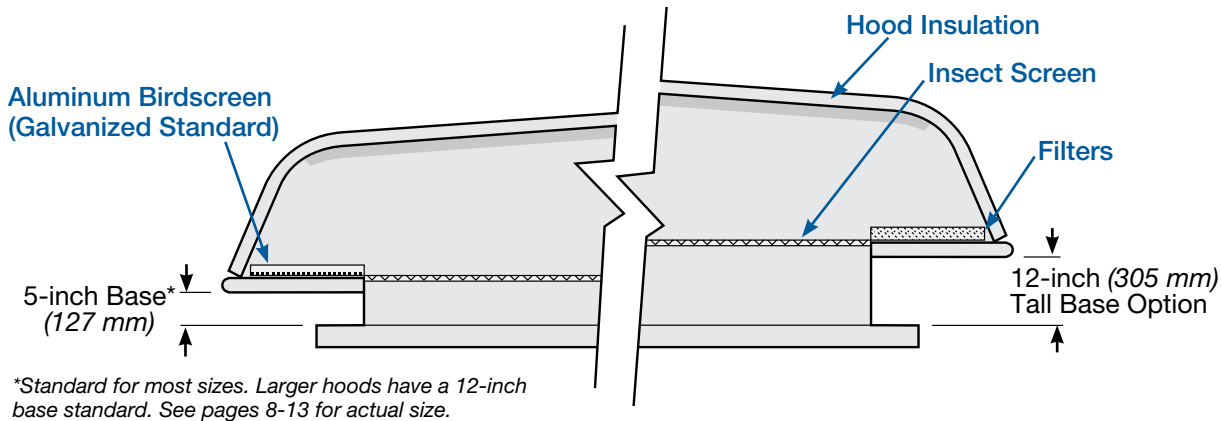
### 4 Standard base

The standard base height is 5 inches (127 mm) for most sizes. Bases include pre-punched mounting holes for ease of installation. The curb cap is 6 inches (152 mm) larger than the throat size to minimize airflow restrictions. Reinforced steel hood support members are securely attached to the base and direct hood loads to the roof curb. 12 inch (305 mm) bases are optional. See page 6 for details.

### 5 Vertical end panels

Vertical panels are fully locked into the hood's end panels.





### 12-inch tall bases

12-inch (305 mm) bases are recommended for intake applications to prevent moisture entry and for all applications where rain or snow may accumulate on the roof deck. A 12-inch (305 mm) base on larger-size units will provide more clearance space from the roof deck and allow for better airflow.

### Fiberglass hood insulation

Either 1/2-inch (13 mm) or 1-inch (25 mm) insulation can be factory applied to the underside of the hood to prevent condensation. Insulation is also factory applied to individual panels of large unassembled units.

**Aluminum birdscreen** 3/4 x 1-1/4 inch (19 mm x 32 mm) diamond shape is available in place of standard galvanized birdscreen.

### Tie-down points

Heavy-gauge galvanized steel tie-down points are available as cable attachment points at the ends of each hood support rail and prevent damage to the fabra hood in locations where unusually strong winds occur.

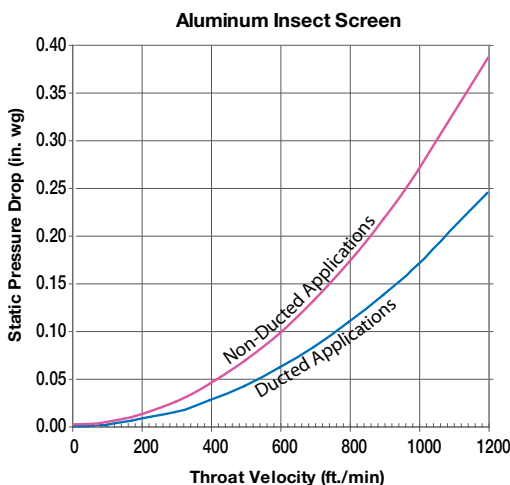
### Special coatings

Options are available for decorative or protective coatings purposes. Refer to the Performance Coatings brochure for complete coating options.

- Greenheck's **Permatector™** is the standard coating for steel products in both indoor and outdoor applications.
- Greenheck's **Hi-Pro Polyester** is formulated for exterior durability, color and gloss retention. Excellent for chemical applications.

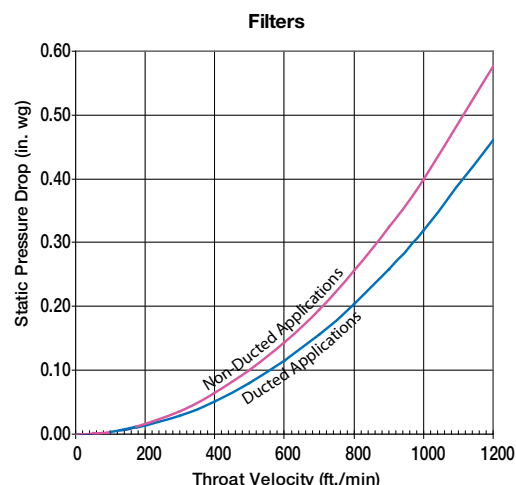
## Aluminum Insect Screen

A fine mesh aluminum insect screen tightly fitted to the top of the throat is available to prevent the entry of insects. (This is in addition to the standard birdscreen and is available on factory-assembled units only.) Use the curves on the graph below to determine the static pressure drop for units with an insect screen.



## Filters

Two-inch aluminum filters are available on model FGI (intake) for applications where foreign material must be removed from the airstream. Use the curves on the graph below to determine the static pressure drop for units with filters.





## Backdraft Dampers

Backdraft dampers are available for intake or relief with either gravity or motorized operation. Motorized dampers are recommended for all intake or low-velocity relief applications. Damper sizes are the same as throat sizes.



## Roof Curbs

Prefabricated roof curbs ensure compatibility between the gravity ventilator, curb, and roof opening. Curb extensions are also available. Curb models are available to meet a wide range of applications and varying roof architecture and construction. See the Greenheck Roof Curbs, Extensions and Equipment Supports catalog for complete details on these products.

## On-Site Assembly

Flexibility is a primary feature of the fabra hood design. Interlocking hood panels and extendible throats allow units to be constructed to long lengths. On-site assembly for these larger units is not difficult and offers several advantages.

For jobs with large throat sizes, assembling hoods on-site reduces costs. There is a cost-savings in carrying unassembled components to the roof versus the expense of cranes or other equipment involved in lifting a bulky assembled unit. The risk of damage in transporting large assembled units also is reduced; when assembled on the roof deck.

The space saved by a compact crate of knocked-down component parts also reduces shipping charges and final costs over large, fully assembled units.

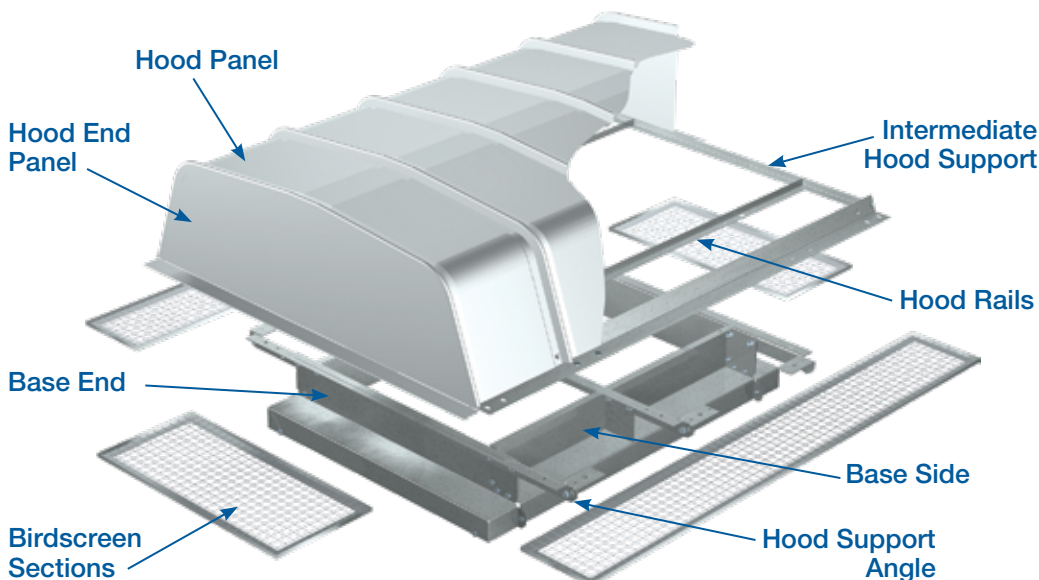
## Ease of Assembly

Hoods of any length can be constructed on the job site with ease. No special tools or training are required to assemble a Greenheck fabra hood.

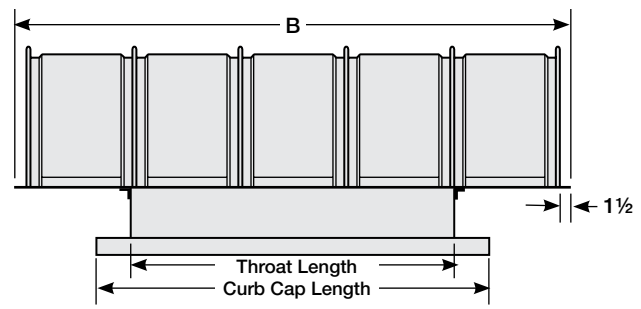
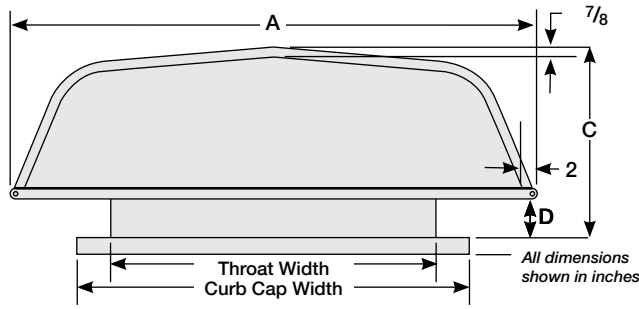
Assemble fabra hoods using these basic steps:

- Step 1** Base ends, base sides, and intermediate hood supports (when required) are placed in position and bolted together.
- Step 2** Attach hood support angles.
- Step 3** Tighten all fasteners and caulk all inside base corners.
- Step 4** Attach birdscreens to hood support angles.
- Step 5** Attach hood rails to hood support angles.
- Step 6** Assemble hood panels and end panels to hood rails.

All hardware comes with each unit along with complete, detailed, and well-illustrated instructions.



# Fabra Hood - Gravity Intake Model FGI

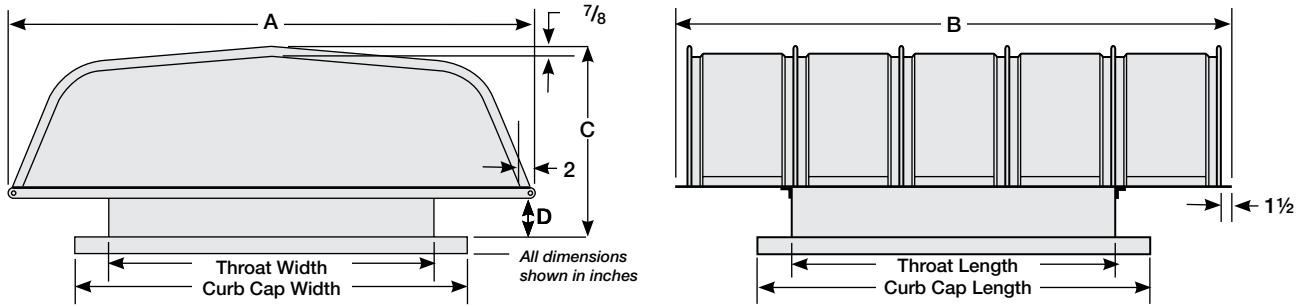


All dimensions shown in inches

| Dimensional Data |                       |                         |                                |       |        |                |             | Performance Data                                  |         |         |         |         |          |          |        | Shipped Assembled | Galvanized Unit Weight |
|------------------|-----------------------|-------------------------|--------------------------------|-------|--------|----------------|-------------|---|---------|---------|---------|---------|----------|----------|--------|-------------------|------------------------|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | Width | Length | Overall Height | Base Height | DUCTED STATIC PRESSURE DROP (in. wg)              |         |         |         |         |          |          |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | NON-DUCTED STATIC PRESSURE DROP (in. wg)          |         |         |         |         |          |          |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | HOOD INTAKE VELOCITY / THROAT VELOCITY (ft./min.) |         |         |         |         |          |          |        |                   |                        |
| ft <sup>2</sup>  | Inches                |                         |                                |       |        |                |             | 235/475   | 297/600 | 364/735 | 406/820 | 470/950 | 527/1065 | 604/1220 | POUNDS |                   |                        |
| 0.44             | 8 x 8                 | 14 x 14                 | 8 x 8                          | 22    | 27     | 14             | 5           | 211   | 267     | 327     | 364     | 422     | 474      | 542      | Yes    | 37                |                        |
| 0.67             | 8 x 12                | 14 x 18                 | 8 x 12                         | 22    | 27     | 14             | 5           | 316   | 401     | 490     | 546     | 633     | 710      | 813      | Yes    | 37                |                        |
| 1.00             | 8 x 18                | 14 x 24                 | 8 x 18                         | 22    | 39     | 14             | 5           | 475   | 601     | 735     | 820     | 949     | 1066     | 1220     | Yes    | 46                |                        |
| 1.33             | 8 x 24                | 14 x 30                 | 8 x 24                         | 22    | 39     | 14             | 5           | 633   | 802     | 980     | 1093    | 1266    | 1421     | 1627     | Yes    | 49                |                        |
| 1.67             | 8 x 30                | 14 x 36                 | 8 x 30                         | 22    | 51     | 14             | 5           | 791   | 1002    | 1225    | 1366    | 1582    | 1776     | 2033     | Yes    | 57                |                        |
| 1.00             | 12 x 12               | 18 x 18                 | 12 x 12                        | 26    | 27     | 14             | 5           | 475   | 601     | 735     | 820     | 949     | 1066     | 1220     | Yes    | 37                |                        |
| 1.50             | 12 x 18               | 18 x 24                 | 12 x 18                        | 26    | 39     | 14             | 5           | 712   | 902     | 1102    | 1229    | 1424    | 1598     | 1830     | Yes    | 46                |                        |
| 2.00             | 12 x 24               | 18 x 30                 | 12 x 24                        | 28    | 39     | 14             | 5           | 949   | 1202    | 1470    | 1639    | 1899    | 2131     | 2440     | Yes    | 49                |                        |
| 2.50             | 12 x 30               | 18 x 36                 | 12 x 30                        | 27    | 51     | 14             | 5           | 1187  | 1503    | 1837    | 2049    | 2374    | 2664     | 3050     | Yes    | 57                |                        |
| 3.00             | 12 x 36               | 18 x 42                 | 12 x 36                        | 31    | 51     | 14             | 5           | 1424  | 1804    | 2205    | 2459    | 2848    | 3197     | 3660     | Yes    | 63                |                        |
| 3.50             | 12 x 42               | 18 x 48                 | 12 x 42                        | 29    | 63     | 14             | 5           | 1662  | 2104    | 2572    | 2869    | 3323    | 3729     | 4270     | Yes    | 73                |                        |
| 4.00             | 12 x 48               | 18 x 54                 | 12 x 48                        | 33    | 63     | 14             | 5           | 1899  | 2405    | 2939    | 3279    | 3798    | 4262     | 4880     | Yes    | 79                |                        |
| 1.36             | 14 x 14               | 20 x 20                 | 14 x 14                        | 29    | 27     | 16             | 5           | 646   | 818     | 1000    | 1116    | 1292    | 1450     | 1660     | Yes    | 43                |                        |
| 1.75             | 14 x 18               | 20 x 24                 | 14 x 18                        | 28    | 39     | 16             | 5           | 831   | 1052    | 1286    | 1434    | 1662    | 1865     | 2135     | Yes    | 49                |                        |
| 2.33             | 14 x 24               | 20 x 30                 | 14 x 24                        | 32    | 39     | 16             | 5           | 1108  | 1403    | 1715    | 1913    | 2215    | 2486     | 2846     | Yes    | 55                |                        |
| 2.92             | 14 x 30               | 20 x 36                 | 14 x 30                        | 30    | 51     | 16             | 5           | 1385  | 1753    | 2143    | 2391    | 2769    | 3108     | 3558     | Yes    | 62                |                        |
| 3.50             | 14 x 36               | 20 x 42                 | 14 x 36                        | 36    | 51     | 16             | 5           | 1662  | 2104    | 2572    | 2869    | 3323    | 3729     | 4270     | Yes    | 70                |                        |
| 4.08             | 14 x 42               | 20 x 48                 | 14 x 42                        | 33    | 63     | 16             | 5           | 1938  | 2455    | 3001    | 3347    | 3877    | 4351     | 4981     | Yes    | 80                |                        |
| 4.67             | 14 x 48               | 20 x 54                 | 14 x 48                        | 38    | 63     | 16             | 5           | 2215  | 2806    | 3429    | 3825    | 4431    | 4972     | 5693     | Yes    | 87                |                        |
| 5.25             | 14 x 54               | 20 x 60                 | 14 x 54                        | 36    | 75     | 16             | 5           | 2492  | 3156    | 3858    | 4303    | 4985    | 5594     | 6405     | Yes    | 96                |                        |
| 1.78             | 16 x 16               | 22 x 22                 | 16 x 16                        | 30    | 39     | 16             | 5           | 844   | 1069    | 1306    | 1457    | 1688    | 1894     | 2169     | Yes    | 52                |                        |
| 2.22             | 16 x 20               | 22 x 26                 | 16 x 20                        | 31    | 39     | 16             | 5           | 1055  | 1336    | 1633    | 1821    | 2110    | 2368     | 2711     | Yes    | 54                |                        |
| 2.67             | 16 x 24               | 22 x 30                 | 16 x 24                        | 36    | 39     | 16             | 5           | 1266  | 1603    | 1960    | 2186    | 2532    | 2841     | 3253     | Yes    | 60                |                        |
| 3.33             | 16 x 30               | 22 x 36                 | 16 x 30                        | 34    | 51     | 16             | 5           | 1582  | 2004    | 2450    | 2732    | 3165    | 3552     | 4066     | Yes    | 68                |                        |
| 4.00             | 16 x 36               | 22 x 42                 | 16 x 36                        | 40    | 51     | 16             | 5           | 1899  | 2405    | 2939    | 3279    | 3798    | 4262     | 4880     | Yes    | 76                |                        |
| 4.67             | 16 x 42               | 22 x 48                 | 16 x 42                        | 38    | 63     | 16             | 5           | 2215  | 2806    | 3429    | 3825    | 4431    | 4972     | 5693     | Yes    | 87                |                        |
| 5.33             | 16 x 48               | 22 x 54                 | 16 x 48                        | 36    | 75     | 16             | 5           | 2532  | 3206    | 3919    | 4371    | 5064    | 5683     | 6506     | Yes    | 95                |                        |
| 6.00             | 16 x 54               | 22 x 60                 | 16 x 54                        | 40    | 75     | 16             | 5           | 2848  | 3607    | 4409    | 4918    | 5697    | 6393     | 7320     | Yes    | 104               |                        |
| 6.67             | 16 x 60               | 22 x 66                 | 16 x 60                        | 38    | 87     | 16             | 5           | 3165  | 4008    | 4899    | 5464    | 6330    | 7103     | 8133     | Yes    | 129               |                        |
| 7.33             | 16 x 66               | 22 x 72                 | 16 x 66                        | 42    | 87     | 16             | 5           | 3481  | 4409    | 5389    | 6011    | 6963    | 7814     | 8946     | Yes    | 136               |                        |
| 2.25             | 18 x 18               | 24 x 24                 | 18 x 18                        | 32    | 39     | 16             | 5           | 1068  | 1353    | 1653    | 1844    | 2136    | 2397     | 2745     | Yes    | 55                |                        |
| 3.00             | 18 x 24               | 24 x 30                 | 18 x 24                        | 40    | 39     | 16             | 5           | 1424  | 1804    | 2205    | 2459    | 2848    | 3197     | 3660     | Yes    | 64                |                        |
| 3.75             | 18 x 30               | 24 x 36                 | 18 x 30                        | 38    | 51     | 16             | 5           | 1780  | 2254    | 2756    | 3074    | 3560    | 3996     | 4575     | Yes    | 73                |                        |
| 4.50             | 18 x 36               | 24 x 42                 | 18 x 36                        | 36    | 63     | 16             | 5           | 2136  | 2705    | 3307    | 3688    | 4272    | 4795     | 5490     | Yes    | 83                |                        |
| 5.25             | 18 x 42               | 24 x 48                 | 18 x 42                        | 42    | 63     | 16             | 5           | 2492  | 3156    | 3858    | 4303    | 4985    | 5594     | 6405     | Yes    | 92                |                        |
| 6.00             | 18 x 48               | 24 x 54                 | 18 x 48                        | 40    | 75     | 16             | 5           | 2848  | 3607    | 4409    | 4918    | 5697    | 6393     | 7320     | Yes    | 101               |                        |
| 6.75             | 18 x 54               | 24 x 60                 | 18 x 54                        | 45    | 75     | 16             | 5           | 3204  | 4058    | 4960    | 5533    | 6409    | 7192     | 8235     | Yes    | 111               |                        |
| 7.50             | 18 x 60               | 24 x 66                 | 18 x 60                        | 43    | 87     | 16             | 5           | 3560  | 4509    | 5511    | 6147    | 7121    | 7991     | 9149     | Yes    | 136               |                        |
| 8.25             | 18 x 66               | 24 x 72                 | 18 x 66                        | 46    | 87     | 16             | 5           | 3916  | 4960    | 6063    | 6762    | 7833    | 8790     | 10064    | Yes    | 145               |                        |
| 9.00             | 18 x 72               | 24 x 78                 | 18 x 72                        | 45    | 99     | 16             | 5           | 4272  | 5411    | 6614    | 7377    | 8545    | 9590     | 10979    | Yes    | 155               |                        |
| 2.78             | 20 x 20               | 26 x 26                 | 20 x 20                        | 37    | 39     | 16             | 5           | 1319  | 1670    | 2041    | 2277    | 2637    | 2960     | 3389     | Yes    | 61                |                        |
| 3.33             | 20 x 24               | 26 x 30                 | 20 x 24                        | 44    | 39     | 16             | 5           | 1582  | 2004    | 2450    | 2732    | 3165    | 3552     | 4066     | Yes    | 69                |                        |
| 4.17             | 20 x 30               | 26 x 36                 | 20 x 30                        | 42    | 51     | 16             | 5           | 1978  | 2505    | 3062    | 3415    | 3956    | 4440     | 5083     | Yes    | 77                |                        |
| 5.00             | 20 x 36               | 26 x 42                 | 20 x 36                        | 40    | 63     | 16             | 5           | 2374  | 3006    | 3674    | 4098    | 4747    | 5328     | 6100     | Yes    | 89                |                        |
| 5.83             | 20 x 42               | 26 x 48                 | 20 x 42                        | 48    | 63     | 16             | 5           | 2769  | 3507    | 4287    | 4781    | 5538    | 6215     | 7116     | Yes    | 98                |                        |
| 6.67             | 20 x 48               | 26 x 54                 | 20 x 48                        | 44    | 75     | 16             | 5           | 3165  | 4008    | 4899    | 5464    | 6330    | 7103     | 8133     | Yes    | 107               |                        |
| 7.50             | 20 x 54               | 26 x 60                 | 20 x 54                        | 49    | 75     | 16             | 5           | 3560  | 4509    | 5511    | 6147    | 7121    | 7991     | 9149     | Yes    | 117               |                        |
| 8.33             | 20 x 60               | 26 x 66                 | 20 x 60                        | 47    | 87     | 16             | 5           | 3956  | 5010    | 6124    | 6830    | 7912    | 8879     | 10166    | Yes    | 143               |                        |
| 9.17             | 20 x 66               | 26 x 72                 | 20 x 66                        | 45    | 99     | 16             | 5           | 4352  | 5511    | 6736    | 7513    | 8703    | 9767     | 11183    | Yes    | 154               |                        |
| 10.00            | 20 x 72               | 26 x 78                 | 20 x 72                        | 49    | 99     | 16             | 5           | 4747  | 6012    | 7349    | 8196    | 9494    | 10655    | 12199    | Yes    | 162               |                        |
| 10.83            | 20 x 78               | 26 x 84                 | 20 x 78                        | 47    | 111    | 16             | 5           | 5143  | 6513    | 7961    | 8880    | 10286   | 11543    | 13216    | Yes    | 194               |                        |
| 11.67            | 20 x 84               | 26 x 90                 | 20 x 84                        | 51    | 111    | 16             | 5           | 5538  | 7014    | 8573    | 9563    | 11077   | 12431    | 14232    | Yes    | 203               |                        |

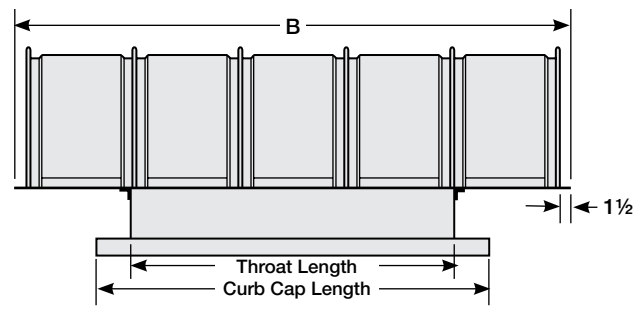
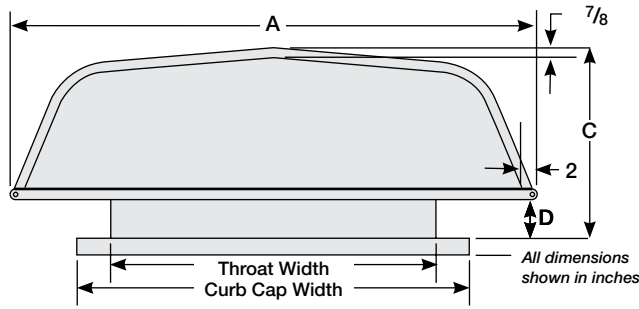


# Fabra Hood - Gravity Intake Model FGI



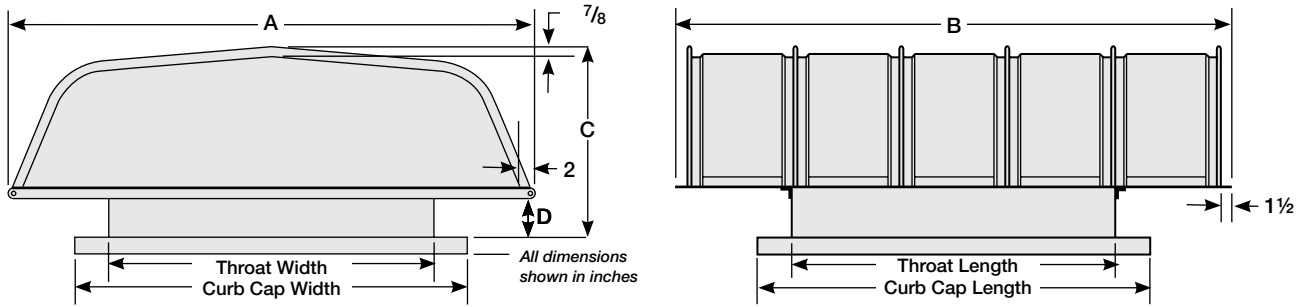
| Dimensional Data |                       |                         |                                | Performance Data |        |                |             |  |       |       |       |       |       |       | Shipped Assembled | Galvanized Unit Weight |  |         |         |         |         |          |          |
|------------------|-----------------------|-------------------------|--------------------------------|------------------|--------|----------------|-------------|--|-------|-------|-------|-------|-------|-------|-------------------|------------------------|--|---------|---------|---------|---------|----------|----------|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | Width            | Length | Overall Height | Base Height | DUCTED STATIC PRESSURE DROP (in. wg)     |       |       |       |       |       |       |                   |                        | 235/475  | 297/600 | 364/735 | 406/820 | 470/950 | 527/1065 | 604/1220 |
|                  |                       |                         |                                |                  |        |                |             | 0.030                                    | 0.047 | 0.071 | 0.089 | 0.119 | 0.149 | 0.196 |                   |                        |  |         |         |         |         |          |          |
|                  |                       |                         |                                |                  |        |                |             | NON-DUCTED STATIC PRESSURE DROP (in. wg) |       |       |       |       |       |       |                   |                        | HOOD INTAKE VELOCITY / THROAT VELOCITY (ft/min.) |         |         |         |         |          |          |
|                  |                       |                         |                                |                  |        |                |             | 0.053                                    | 0.085 | 0.127 | 0.158 | 0.212 | 0.267 | 0.350 |                   |                        |  |         |         |         |         |          |          |
|                  |                       |                         |                                | A                | B      | C              | D           | CFM                                      |       |       |       |       |       |       |                   |                        |  |         | POUNDS  |         |         |          |          |
| 4.00             | 24 x 24               | 30 x 30                 | 24 x 24                        | 52               | 39     | 19             | 5           | 1899                                     | 2405  | 2939  | 3279  | 3798  | 4262  | 4880  | Yes               | 82                     |  |         |         |         |         |          |          |
| 5.00             | 24 x 30               | 30 x 36                 | 24 x 30                        | 49               | 51     | 19             | 5           | 2374                                     | 3006  | 3674  | 4098  | 4747  | 5328  | 6100  | Yes               | 91                     |  |         |         |         |         |          |          |
| 6.00             | 24 x 36               | 30 x 42                 | 24 x 36                        | 47               | 63     | 19             | 5           | 2848                                     | 3607  | 4409  | 4918  | 5697  | 6393  | 7320  | Yes               | 104                    |  |         |         |         |         |          |          |
| 7.00             | 24 x 42               | 30 x 48                 | 24 x 42                        | 54               | 63     | 19             | 5           | 3323                                     | 4208  | 5144  | 5738  | 6646  | 7459  | 8539  | Yes               | 114                    |  |         |         |         |         |          |          |
| 8.00             | 24 x 48               | 30 x 54                 | 24 x 48                        | 52               | 75     | 19             | 5           | 3798                                     | 4809  | 5879  | 6557  | 7596  | 8524  | 9759  | Yes               | 125                    |  |         |         |         |         |          |          |
| 9.00             | 24 x 54               | 30 x 60                 | 24 x 54                        | 50               | 87     | 19             | 5           | 4272                                     | 5411  | 6614  | 7377  | 8545  | 9590  | 10979 | Yes               | 154                    |  |         |         |         |         |          |          |
| 10.00            | 24 x 60               | 30 x 66                 | 24 x 60                        | 55               | 87     | 19             | 5           | 4747                                     | 6012  | 7349  | 8196  | 9494  | 10655 | 12199 | Yes               | 163                    |  |         |         |         |         |          |          |
| 11.00            | 24 x 66               | 30 x 72                 | 24 x 66                        | 54               | 99     | 19             | 5           | 5222                                     | 6613  | 8083  | 9016  | 10444 | 11721 | 13419 | Yes               | 174                    |  |         |         |         |         |          |          |
| 12.00            | 24 x 72               | 30 x 78                 | 24 x 72                        | 58               | 99     | 19             | 5           | 5697                                     | 7214  | 8818  | 9836  | 11393 | 12786 | 14639 | Yes               | 185                    |  |         |         |         |         |          |          |
| 13.00            | 24 x 78               | 30 x 84                 | 24 x 78                        | 56               | 111    | 19             | 5           | 6171                                     | 7815  | 9553  | 10655 | 12343 | 13852 | 15859 | Yes               | 220                    |  |         |         |         |         |          |          |
| 14.00            | 24 x 84               | 30 x 90                 | 24 x 84                        | 60               | 111    | 19             | 5           | 6646                                     | 8417  | 10288 | 11475 | 13292 | 14917 | 17079 | Yes               | 230                    |  |         |         |         |         |          |          |
| 15.00            | 24 x 90               | 30 x 96                 | 24 x 90                        | 58               | 123    | 19             | 5           | 7121                                     | 9018  | 11023 | 12295 | 14242 | 15983 | 18299 | Yes               | 244                    |  |         |         |         |         |          |          |
| 6.25             | 30 x 30               | 36 x 36                 | 30 x 30                        | 60               | 51     | 19             | 5           | 2967                                     | 3757  | 4593  | 5123  | 5934  | 6659  | 7625  | Yes               | 108                    |  |         |         |         |         |          |          |
| 7.50             | 30 x 36               | 36 x 42                 | 30 x 36                        | 58               | 63     | 19             | 5           | 3560                                     | 4509  | 5511  | 6147  | 7121  | 7991  | 9149  | Yes               | 119                    |  |         |         |         |         |          |          |
| 8.75             | 30 x 42               | 36 x 48                 | 30 x 42                        | 57               | 75     | 19             | 5           | 4154                                     | 5260  | 6430  | 7172  | 8308  | 9323  | 10674 | Yes               | 131                    |  |         |         |         |         |          |          |
| 10.00            | 30 x 48               | 36 x 54                 | 30 x 48                        | 64               | 75     | 19             | 5           | 4747                                     | 6012  | 7349  | 8196  | 9494  | 10655 | 12199 | Yes               | 143                    |  |         |         |         |         |          |          |
| 11.25            | 30 x 54               | 36 x 60                 | 30 x 54                        | 62               | 87     | 19             | 5           | 5341                                     | 6763  | 8267  | 9221  | 10681 | 11987 | 13724 | Yes               | 174                    |  |         |         |         |         |          |          |
| 12.50            | 30 x 60               | 36 x 66                 | 30 x 60                        | 60               | 99     | 19             | 5           | 5934                                     | 7515  | 9186  | 10246 | 11868 | 13319 | 15249 | Yes               | 186                    |  |         |         |         |         |          |          |
| 13.75            | 30 x 66               | 36 x 72                 | 30 x 66                        | 66               | 99     | 19             | 5           | 6527                                     | 8266  | 10104 | 11270 | 13055 | 14651 | 16774 | Yes               | 200                    |  |         |         |         |         |          |          |
| 15.00            | 30 x 72               | 36 x 78                 | 30 x 72                        | 64               | 111    | 19             | 5           | 7121                                     | 9018  | 11023 | 12295 | 14242 | 15983 | 18299 | Yes               | 225                    |  |         |         |         |         |          |          |
| 16.25            | 30 x 78               | 36 x 84                 | 30 x 78                        | 69               | 111    | 19             | 5           | 7714                                     | 9769  | 11941 | 13319 | 15428 | 17314 | 19824 | Yes               | 251                    |  |         |         |         |         |          |          |
| 17.50            | 30 x 84               | 36 x 90                 | 30 x 84                        | 67               | 123    | 19             | 5           | 8308                                     | 10521 | 12860 | 14344 | 16615 | 18646 | 21349 | Yes               | 264                    |  |         |         |         |         |          |          |
| 18.75            | 30 x 90               | 36 x 96                 | 30 x 90                        | 72               | 123    | 19             | 5           | 8901                                     | 11272 | 13779 | 15368 | 17802 | 19978 | 22874 | Yes               | 278                    |  |         |         |         |         |          |          |
| 9.00             | 36 x 36               | 42 x 42                 | 36 x 36                        | 69               | 63     | 19             | 5           | 4272                                     | 5411  | 6614  | 7377  | 8545  | 9590  | 10979 | Yes               | 134                    |  |         |         |         |         |          |          |
| 10.50            | 36 x 42               | 42 x 48                 | 36 x 42                        | 67               | 75     | 19             | 5           | 4985                                     | 6312  | 7716  | 8606  | 9969  | 11188 | 12809 | Yes               | 147                    |  |         |         |         |         |          |          |
| 12.00            | 36 x 48               | 42 x 54                 | 36 x 48                        | 66               | 87     | 19             | 5           | 5697                                     | 7214  | 8818  | 9836  | 11393 | 12786 | 14639 | Yes               | 176                    |  |         |         |         |         |          |          |
| 13.50            | 36 x 54               | 42 x 60                 | 36 x 54                        | 73               | 87     | 19             | 5           | 6409                                     | 8116  | 9921  | 11065 | 12817 | 14384 | 16469 | Yes               | 196                    |  |         |         |         |         |          |          |
| 15.00            | 36 x 60               | 42 x 66                 | 36 x 60                        | 72               | 99     | 19             | 5           | 7121                                     | 9018  | 11023 | 12295 | 14242 | 15983 | 18299 | Yes               | 208                    |  |         |         |         |         |          |          |
| 16.50            | 36 x 66               | 42 x 72                 | 36 x 66                        | 78               | 99     | 19             | 5           | 7833                                     | 9920  | 12125 | 13524 | 15666 | 17581 | 20129 | Yes               | 224                    |  |         |         |         |         |          |          |
| 18.00            | 36 x 72               | 42 x 78                 | 36 x 72                        | 76               | 111    | 19             | 5           | 8545                                     | 10821 | 13227 | 14754 | 17090 | 19179 | 21959 | Yes               | 252                    |  |         |         |         |         |          |          |
| 19.50            | 36 x 78               | 42 x 84                 | 36 x 78                        | 74               | 123    | 19             | 5           | 9257                                     | 11723 | 14330 | 15983 | 18514 | 20777 | 23789 | Yes               | 280                    |  |         |         |         |         |          |          |
| 21.00            | 36 x 84               | 42 x 90                 | 36 x 84                        | 80               | 123    | 19             | 5           | 9969                                     | 12625 | 15432 | 17213 | 19938 | 22376 | 25618 | Yes               | 295                    |  |         |         |         |         |          |          |
| 22.50            | 36 x 90               | 42 x 96                 | 36 x 90                        | 78               | 135    | 19             | 5           | 10681                                    | 13527 | 16534 | 18442 | 21362 | 23974 | 27448 | Yes               | 311                    |  |         |         |         |         |          |          |
| 24.00            | 36 x 96               | 42 x 102                | 36 x 96                        | 83               | 135    | 19             | 5           | 11393                                    | 14428 | 17637 | 19672 | 22787 | 25572 | 29278 | Yes               | 324                    |  |         |         |         |         |          |          |
| 25.50            | 36 x 102              | 42 x 108                | 36 x 102                       | 81               | 147    | 19             | 5           | 12105                                    | 15330 | 18739 | 20901 | 24211 | 27170 | 31108 | No                | 340                    |  |         |         |         |         |          |          |
| 12.25            | 42 x 42               | 48 x 48                 | 42 x 42                        | 78               | 75     | 23             | 5           | 5815                                     | 7365  | 9002  | 10041 | 11631 | 13052 | 14944 | Yes               | 178                    |  |         |         |         |         |          |          |
| 14.00            | 42 x 48               | 48 x 54                 | 42 x 48                        | 76               | 87     | 23             | 5           | 6646                                     | 8417  | 10288 | 11475 | 13292 | 14917 | 17079 | Yes               | 221                    |  |         |         |         |         |          |          |
| 15.75            | 42 x 54               | 48 x 60                 | 42 x 54                        | 85               | 87     | 23             | 5           | 7477                                     | 9469  | 11574 | 12909 | 14954 | 16782 | 19214 | Yes               | 252                    |  |         |         |         |         |          |          |
| 17.50            | 42 x 60               | 48 x 66                 | 42 x 60                        | 83               | 99     | 23             | 5           | 8308                                     | 10521 | 12860 | 14344 | 16615 | 18646 | 21349 | Yes               | 261                    |  |         |         |         |         |          |          |
| 19.25            | 42 x 66               | 48 x 72                 | 42 x 66                        | 81               | 111    | 23             | 5           | 9138                                     | 11573 | 14146 | 15778 | 18277 | 20511 | 23484 | Yes               | 291                    |  |         |         |         |         |          |          |
| 21.00            | 42 x 72               | 48 x 78                 | 42 x 72                        | 88               | 111    | 23             | 5           | 9969                                     | 12625 | 15432 | 17213 | 19938 | 22376 | 25618 | Yes               | 320                    |  |         |         |         |         |          |          |
| 22.75            | 42 x 78               | 48 x 84                 | 42 x 78                        | 86               | 123    | 23             | 5           | 10800                                    | 13677 | 16718 | 18647 | 21600 | 24240 | 27753 | Yes               | 355                    |  |         |         |         |         |          |          |
| 24.50            | 42 x 84               | 48 x 90                 | 42 x 84                        | 84               | 135    | 23             | 5           | 11631                                    | 14729 | 18004 | 20081 | 23261 | 26105 | 29888 | Yes               | 373                    |  |         |         |         |         |          |          |
| 26.25            | 42 x 90               | 48 x 96                 | 42 x 90                        | 90               | 135    | 23             | 5           | 12461                                    | 15781 | 19290 | 21516 | 24923 | 27970 | 32023 | Yes               | 392                    |  |         |         |         |         |          |          |
| 28.00            | 42 x 96               | 48 x 102                | 42 x 96                        | 88               | 147    | 23             | 5           | 13292                                    | 16833 | 20576 | 22950 | 26584 | 29834 | 34158 | No                | 412                    |  |         |         |         |         |          |          |
| 29.75            | 42 x 102              | 48 x 108                | 42 x 102                       | 93               | 147    | 23             | 5           | 14123                                    | 17885 | 21862 | 24385 | 28246 | 31699 | 36293 | No                | 429                    |  |         |         |         |         |          |          |
| 31.50            | 42 x 108              | 48 x 114                | 42 x 108                       | 91               | 159    | 23             | 5           | 14954                                    | 18937 | 23148 | 25819 | 29907 | 33563 | 38428 | No                | 450                    |  |         |         |         |         |          |          |
| 16.00            | 48 x 48               | 54 x 54                 | 48 x 48                        | 86               | 87     | 25             | 5           | 7596                                     | 9619  | 11758 | 13114 | 15191 | 17048 | 19519 | Yes               | 257                    |  |         |         |         |         |          |          |
| 18.00            | 48 x 54               | 54 x 60                 | 48 x 54                        | 85               | 99     | 25             | 5           | 8545                                     | 10821 | 13227 | 14754 | 17090 | 19179 | 21959 | Yes               | 278                    |  |         |         |         |         |          |          |
| 20.00            | 48 x 60               | 54 x 66                 | 48 x 60                        | 94               | 99     | 25             | 5           | 9494                                     | 12024 | 14697 | 16393 | 18989 | 21310 | 24399 | Yes               | 299                    |  |         |         |         |         |          |          |
| 22.00            | 48 x 66               | 54 x 72                 | 48 x 66                        | 92               | 111    | 25             | 5           | 10444                                    | 13226 | 16167 | 18032 | 20888 | 23441 | 26838 | Yes               | 332                    |  |         |         |         |         |          |          |
| 24.00            | 48 x 72               | 54 x 78                 | 48 x 72                        | 90               | 123    | 25             | 5           | 11393                                    | 14428 | 17637 | 19672 | 22787 | 25572 | 29278 | Yes               | 353                    |  |         |         |         |         |          |          |
| 26.00            | 48 x 78               | 54 x 84                 | 48 x 78                        | 98               | 123    | 25             | 5           | 12343                                    | 15631 | 19106 | 21311 | 24685 | 27703 | 31718 | No                | 383                    |  |         |         |         |         |          |          |
| 28.00            | 48 x 84               | 54 x 90                 | 48 x 84                        | 92               | 135    | 25             | 5           | 13292                                    | 16833 | 20576 | 22950 | 26584 | 29834 | 34158 | No                | 412                    |  |         |         |         |         |          |          |
| 30.00            | 48 x 90               | 54 x 96                 | 48 x 90                        | 98               | 135    | 25             | 5           | 14242                                    | 18036 | 22046 | 24589 | 28483 | 31965 | 36598 | No                | 430                    |  |         |         |         |         |          |          |
| 32.00            | 48 x 96               | 54 x 102                | 48 x 96                        | 96               | 147    | 25             | 5           | 15191                                    | 19238 | 23515 | 26229 | 30382 | 34096 | 39038 | No                | 452                    |  |         |         |         |         |          |          |
| 34.00            | 48 x 102              | 54 x 108                | 48 x 102                       | 94               | 159    | 25             | 5           | 16140                                    | 20440 | 24985 | 27868 | 32281 | 36227 | 41478 | No                | 475                    |  |         |         |         |         |          |          |
| 36.00            | 48 x 108              | 54 x 114                | 48 x 108                       | 100              | 159    | 25             | 5           | 17090                                    | 21643 | 26455 | 29507 | 34180 | 38358 | 43917 | No                | 495                    |  |         |         |         |         |          |          |
| 38.00            | 48 x 114              | 54 x 120                | 48 x 114                       | 98               | 171    | 25             | 5           | 18039                                    | 22845 | 27924 | 31147 | 36079 | 40489 | 46357 | No                | 517                    |  |         |         |         |         |          |          |

# Fabra Hood - Gravity Intake Model FGI



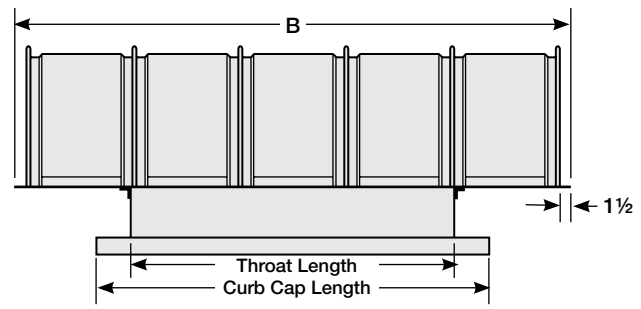
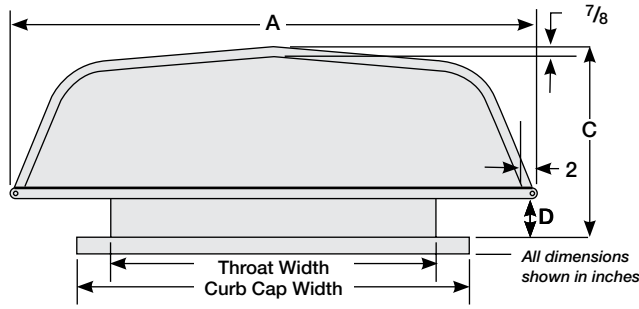
| Dimensional Data |                       |                         |                                | Performance Data |        |                |             |  |         |         |         |         |          |          | Shipped Assembled                                | Galvanized Unit Weight |     |        |
|------------------|-----------------------|-------------------------|--------------------------------|------------------|--------|----------------|-------------|--|---------|---------|---------|---------|----------|----------|--|------------------------|-----|--------|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | Width            | Length | Overall Height | Base Height | DUCTED STATIC PRESSURE DROP (in. wg)     |         |         |         |         |          |          |  |                        | CFM | POUNDS |
|                  |                       |                         |                                |                  |        |                |             | 0.030                                    | 0.047   | 0.071   | 0.089   | 0.119   | 0.149    | 0.196    |  |                        |     |        |
|                  |                       |                         |                                |                  |        |                |             | NON-DUCTED STATIC PRESSURE DROP (in. wg) |         |         |         |         |          |          |  |                        |     |        |
|                  |                       |                         |                                |                  |        |                |             | 0.053                                    | 0.085   | 0.127   | 0.158   | 0.212   | 0.267    | 0.350    | HOOD INTAKE VELOCITY / THROAT VELOCITY (ft/min.) |                        |     |        |
|                  |                       |                         |                                |                  |        |                |             | 235/475                                  | 297/600 | 364/735 | 406/820 | 470/950 | 527/1065 | 604/1220 |  |                        |     |        |
| Inches           |                       |                         |                                | A                | B      | C              | D           | CFM                                      |         |         |         |         |          |          |  |                        |     |        |
| 20.25            | 54 x 54               | 60 x 60                 | 54 x 54                        | 95               | 99     | 26             | 5           | 9613                                     | 12174   | 14881   | 16598   | 19226   | 21576    | 24704    | No   | 304                    |     |        |
| 22.50            | 54 x 60               | 60 x 66                 | 54 x 60                        | 105              | 99     | 26             | 5           | 10681                                    | 13527   | 16534   | 18442   | 21362   | 23974    | 27448    | No   | 341                    |     |        |
| 24.75            | 54 x 66               | 60 x 72                 | 54 x 66                        | 103              | 111    | 26             | 5           | 11749                                    | 14879   | 18188   | 20286   | 23499   | 26371    | 30193    | No   | 370                    |     |        |
| 27.00            | 54 x 72               | 60 x 78                 | 54 x 72                        | 101              | 123    | 26             | 5           | 12817                                    | 16232   | 19841   | 22131   | 25635   | 28769    | 32938    | No   | 394                    |     |        |
| 29.25            | 54 x 78               | 60 x 84                 | 54 x 78                        | 109              | 123    | 26             | 5           | 13886                                    | 17585   | 21495   | 23975   | 27771   | 31166    | 35683    | No   | 433                    |     |        |
| 31.50            | 54 x 84               | 60 x 90                 | 54 x 84                        | 107              | 135    | 26             | 5           | 14954                                    | 18937   | 23148   | 25819   | 29907   | 33563    | 38428    | No   | 457                    |     |        |
| 33.75            | 54 x 90               | 60 x 96                 | 54 x 90                        | 105              | 147    | 26             | 5           | 16022                                    | 20290   | 24801   | 27663   | 32044   | 35961    | 41173    | No   | 481                    |     |        |
| 36.00            | 54 x 96               | 60 x 102                | 54 x 96                        | 112              | 147    | 26             | 5           | 17090                                    | 21643   | 26455   | 29507   | 34180   | 38358    | 43917    | No   | 502                    |     |        |
| 38.25            | 54 x 102              | 60 x 108                | 54 x 102                       | 110              | 159    | 26             | 5           | 18158                                    | 22995   | 28108   | 31352   | 36316   | 40756    | 46662    | No   | 528                    |     |        |
| 40.50            | 54 x 108              | 60 x 114                | 54 x 108                       | 108              | 171    | 26             | 5           | 19226                                    | 24348   | 29762   | 33196   | 38452   | 43153    | 49407    | No   | 550                    |     |        |
| 42.75            | 54 x 114              | 60 x 120                | 54 x 114                       | 114              | 171    | 26             | 5           | 20294                                    | 25701   | 31415   | 35040   | 40589   | 45550    | 52152    | No   | 572                    |     |        |
| 25.00            | 60 x 60               | 66 x 66                 | 60 x 60                        | 104              | 111    | 29.5           | 5           | 11868                                    | 15030   | 18371   | 20491   | 23736   | 26638    | 30498    | No   | 379                    |     |        |
| 27.50            | 60 x 66               | 66 x 72                 | 60 x 66                        | 114              | 111    | 29.5           | 5           | 13055                                    | 16533   | 20209   | 22540   | 26110   | 29301    | 33548    | No   | 404                    |     |        |
| 30.00            | 60 x 72               | 66 x 78                 | 60 x 72                        | 112              | 123    | 29.5           | 5           | 14242                                    | 18036   | 22046   | 24589   | 28483   | 31965    | 36598    | No   | 429                    |     |        |
| 32.50            | 60 x 78               | 66 x 84                 | 60 x 78                        | 110              | 135    | 29.5           | 5           | 15428                                    | 19539   | 23883   | 26639   | 30857   | 34629    | 39648    | No   | 473                    |     |        |
| 35.00            | 60 x 84               | 66 x 90                 | 60 x 84                        | 119              | 135    | 29.5           | 5           | 16615                                    | 21042   | 25720   | 28688   | 33230   | 37293    | 42697    | No   | 500                    |     |        |
| 37.50            | 60 x 90               | 66 x 96                 | 60 x 90                        | 117              | 147    | 29.5           | 5           | 17802                                    | 22544   | 27557   | 30737   | 35604   | 39956    | 45747    | No   | 525                    |     |        |
| 40.00            | 60 x 96               | 66 x 102                | 60 x 96                        | 115              | 159    | 29.5           | 5           | 18989                                    | 24047   | 29394   | 32786   | 37978   | 42620    | 48797    | No   | 552                    |     |        |
| 42.50            | 60 x 102              | 66 x 108                | 60 x 102                       | 122              | 159    | 29.5           | 5           | 20176                                    | 25550   | 31231   | 34835   | 40351   | 45284    | 51847    | No   | 576                    |     |        |
| 45.00            | 60 x 108              | 66 x 114                | 60 x 108                       | 120              | 171    | 29.5           | 5           | 21362                                    | 27053   | 33068   | 36884   | 42725   | 47948    | 54897    | No   | 601                    |     |        |
| 47.50            | 60 x 114              | 66 x 120                | 60 x 114                       | 126              | 171    | 29.5           | 5           | 22549                                    | 28556   | 34906   | 38933   | 45098   | 50611    | 57947    | No   | 733                    |     |        |
| 50.00            | 60 x 120              | 66 x 126                | 60 x 120                       | 124              | 183    | 29.5           | 5           | 23736                                    | 30059   | 36743   | 40982   | 47472   | 53275    | 60996    | No   | 761                    |     |        |
| 30.25            | 66 x 66               | 72 x 72                 | 66 x 66                        | 113              | 123    | 29.5           | 5           | 14360                                    | 18186   | 22229   | 24794   | 28721   | 32232    | 36903    | No   | 431                    |     |        |
| 33.00            | 66 x 72               | 72 x 78                 | 66 x 72                        | 123              | 123    | 29.5           | 5           | 15666                                    | 19839   | 24250   | 27048   | 31332   | 35162    | 40258    | No   | 504                    |     |        |
| 35.75            | 66 x 78               | 72 x 84                 | 66 x 78                        | 121              | 135    | 29.5           | 5           | 16971                                    | 21492   | 26271   | 29302   | 33942   | 38092    | 43612    | No   | 555                    |     |        |
| 38.50            | 66 x 84               | 72 x 90                 | 66 x 84                        | 120              | 147    | 29.5           | 5           | 18277                                    | 23146   | 28292   | 31557   | 36553   | 41022    | 46967    | No   | 632                    |     |        |
| 41.25            | 66 x 90               | 72 x 96                 | 66 x 90                        | 128              | 147    | 29.5           | 5           | 19582                                    | 24799   | 30313   | 33811   | 39164   | 43952    | 50322    | No   | 643                    |     |        |
| 44.00            | 66 x 96               | 72 x 102                | 66 x 96                        | 126              | 159    | 29.5           | 5           | 20888                                    | 26452   | 32334   | 36065   | 41775   | 46882    | 53677    | No   | 663                    |     |        |
| 46.75            | 66 x 102              | 72 x 108                | 66 x 102                       | 133              | 159    | 29.5           | 5           | 22193                                    | 28105   | 34354   | 38319   | 44386   | 49812    | 57032    | No   | 726                    |     |        |
| 49.50            | 66 x 108              | 72 x 114                | 66 x 108                       | 131              | 171    | 29.5           | 5           | 23499                                    | 29759   | 36375   | 40573   | 46997   | 52742    | 60386    | No   | 753                    |     |        |
| 52.25            | 66 x 114              | 72 x 120                | 66 x 114                       | 129              | 183    | 29.5           | 5           | 24804                                    | 31412   | 38396   | 42827   | 49608   | 55673    | 63741    | No   | 784                    |     |        |
| 55.00            | 66 x 120              | 72 x 126                | 66 x 120                       | 136              | 183    | 29.5           | 5           | 26110                                    | 33065   | 40417   | 45081   | 52219   | 58603    | 67096    | No   | 823                    |     |        |
| 57.75            | 66 x 126              | 72 x 132                | 66 x 126                       | 134              | 195    | 36.5           | 12          | 27415                                    | 34719   | 42438   | 47335   | 54830   | 61533    | 70451    | No   | 900                    |     |        |
| 60.50            | 66 x 132              | 72 x 138                | 66 x 132                       | 132              | 207    | 36.5           | 12          | 28721                                    | 36372   | 44459   | 49589   | 57441   | 64463    | 73806    | No   | 916                    |     |        |
| 36.00            | 72 x 72               | 78 x 78                 | 72 x 72                        | 134              | 123    | 29.5           | 5           | 17090                                    | 21643   | 26455   | 29507   | 34180   | 38358    | 43917    | No   | 587                    |     |        |
| 39.00            | 72 x 78               | 78 x 84                 | 72 x 78                        | 132              | 135    | 29.5           | 5           | 18514                                    | 23446   | 28659   | 31966   | 37028   | 41555    | 47577    | No   | 641                    |     |        |
| 42.00            | 72 x 84               | 78 x 90                 | 72 x 84                        | 130              | 147    | 29.5           | 5           | 19938                                    | 25250   | 30864   | 34425   | 39876   | 44751    | 51237    | No   | 670                    |     |        |
| 45.00            | 72 x 90               | 78 x 96                 | 72 x 90                        | 136              | 159    | 29.5           | 5           | 21362                                    | 27053   | 33068   | 36884   | 42725   | 47948    | 54897    | No   | 733                    |     |        |
| 48.00            | 72 x 96               | 78 x 102                | 72 x 96                        | 136              | 171    | 29.5           | 5           | 22787                                    | 28857   | 35273   | 39343   | 45573   | 51144    | 58556    | No   | 771                    |     |        |
| 51.00            | 72 x 102              | 78 x 108                | 72 x 102                       | 135              | 171    | 29.5           | 5           | 24211                                    | 30661   | 37478   | 41802   | 48421   | 54341    | 62216    | No   | 791                    |     |        |
| 54.00            | 72 x 108              | 78 x 114                | 72 x 108                       | 136              | 183    | 29.5           | 5           | 25635                                    | 32464   | 39682   | 44261   | 51270   | 57537    | 65876    | No   | 811                    |     |        |
| 57.00            | 72 x 114              | 78 x 120                | 72 x 114                       | 136              | 195    | 29.5           | 5           | 27059                                    | 34268   | 41887   | 46720   | 54118   | 60734    | 69536    | No   | 848                    |     |        |
| 60.00            | 72 x 120              | 78 x 126                | 72 x 120                       | 136              | 207    | 29.5           | 5           | 28483                                    | 36071   | 44091   | 49179   | 56966   | 63930    | 73196    | No   | 886                    |     |        |
| 63.00            | 72 x 126              | 78 x 132                | 72 x 126                       | 136              | 207    | 36.5           | 12          | 29907                                    | 37875   | 46296   | 51638   | 59815   | 67127    | 76855    | No   | 934                    |     |        |
| 66.00            | 72 x 132              | 78 x 138                | 72 x 132                       | 136              | 219    | 36.5           | 12          | 31332                                    | 39678   | 48500   | 54097   | 62663   | 70323    | 80515    | No   | 973                    |     |        |
| 69.00            | 72 x 138              | 78 x 144                | 72 x 138                       | 136              | 219    | 36.5           | 12          | 32756                                    | 41482   | 50705   | 56556   | 65511   | 73520    | 84175    | No   | 976                    |     |        |
| 72.00            | 72 x 144              | 78 x 150                | 72 x 144                       | 136              | 231    | 36.5           | 12          | 34180                                    | 43285   | 52910   | 59015   | 68360   | 76716    | 87835    | No   | 1015                   |     |        |
| 75.00            | 72 x 150              | 78 x 156                | 72 x 150                       | 136              | 231    | 36.5           | 12          | 35604                                    | 45089   | 55114   | 61474   | 71208   | 79913    | 91495    | No   | 1116                   |     |        |
| 78.00            | 72 x 156              | 78 x 162                | 72 x 156                       | 136              | 243    | 36.5           | 12          | 37028                                    | 46893   | 57319   | 63933   | 74056   | 83109    | 95154    | No   | 1228                   |     |        |
| 81.00            | 72 x 162              | 78 x 168                | 72 x 162                       | 136              | 243    | 36.5           | 12          | 38452                                    | 48696   | 59523   | 66392   | 76905   | 86306    | 98814    | No   | 1351                   |     |        |
| 84.00            | 72 x 168              | 78 x 174                | 72 x 168                       | 136              | 255    | 36.5           | 12          | 39876                                    | 50500   | 61728   | 68851   | 79753   | 89502    | 102474   | No   | 1486                   |     |        |
| 87.00            | 72 x 174              | 78 x 180                | 72 x 174                       | 136              | 255    | 36.5           | 12          | 41301                                    | 52303   | 63932   | 71310   | 82601   | 92699    | 106134   | No   | 1634                   |     |        |
| 90.00            | 72 x 180              | 78 x 186                | 72 x 180                       | 136              | 267    | 36.5           | 12          | 42725                                    | 54107   | 66137   | 73768   | 85450   | 95895    | 109793   | No   | 1798                   |     |        |

# Fabra Hood - Gravity Relief Model FGR



| Dimensional Data |                       |                         |                                | Performance Data                         |        |                |             |       |       |       |       |       |       |       | Shipped Assembled | Galvanized Unit Weight |
|------------------|-----------------------|-------------------------|--------------------------------|--|--------|----------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------------------|------------------------|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | DUCTED STATIC PRESSURE DROP (in. wg)     |        |                |             |       |       |       |       |       |       |       |                   |                        |
|                  |                       |                         |                                | Width                                    | Length | Overall Height | Base Height | 0.024 | 0.043 | 0.060 | 0.084 | 0.107 | 0.136 | 0.160 |                   |                        |
|                  |                       |                         |                                | NON-DUCTED STATIC PRESSURE DROP (in. wg) |        |                |             |       |       |       |       |       |       |       |                   |                        |
|                  |                       |                         |                                | HOOD AND THROAT VELOCITY (ft./min.)      |        |                |             |       |       |       |       |       |       |       |                   |                        |
|                  |                       |                         |                                | A  | B      | C              | D           | 420   | 560   | 660   | 780   | 880   | 990   | 1075  |                   |                        |
| ft <sup>2</sup>  |                       |                         |                                | CFM                                      |        |                |             |       |       |       |       |       |       |       | POUNDS            |                        |
| 0.44             | 8 x 8                 | 14 x 14                 | 8 x 8                          | 22                                       | 27     | 14             | 5           | 186   | 248   | 294   | 346   | 391   | 440   | 478   | Yes               | 37                     |
| 0.67             | 8 x 12                | 14 x 18                 | 8 x 12                         | 22                                       | 27     | 14             | 5           | 279   | 372   | 441   | 520   | 586   | 661   | 717   | Yes               | 37                     |
| 1.00             | 8 x 18                | 14 x 24                 | 8 x 18                         | 22                                       | 39     | 14             | 5           | 418   | 559   | 661   | 779   | 880   | 991   | 1075  | Yes               | 46                     |
| 1.33             | 8 x 24                | 14 x 30                 | 8 x 24                         | 22                                       | 39     | 14             | 5           | 557   | 745   | 881   | 1039  | 1173  | 1321  | 1434  | Yes               | 48                     |
| 1.67             | 8 x 30                | 14 x 36                 | 8 x 30                         | 22                                       | 51     | 14             | 5           | 697   | 931   | 1101  | 1299  | 1466  | 1651  | 1792  | Yes               | 56                     |
| 1.00             | 12 x 12               | 18 x 18                 | 12 x 12                        | 26                                       | 27     | 14             | 5           | 418   | 559   | 661   | 779   | 880   | 991   | 1075  | Yes               | 37                     |
| 1.50             | 12 x 18               | 18 x 24                 | 12 x 18                        | 26                                       | 39     | 14             | 5           | 627   | 838   | 991   | 1169  | 1319  | 1486  | 1613  | Yes               | 46                     |
| 2.00             | 12 x 24               | 18 x 30                 | 12 x 24                        | 26                                       | 39     | 14             | 5           | 836   | 1117  | 1322  | 1559  | 1759  | 1982  | 2151  | Yes               | 48                     |
| 2.50             | 12 x 30               | 18 x 36                 | 12 x 30                        | 26                                       | 51     | 14             | 5           | 1045  | 1396  | 1652  | 1948  | 2199  | 2477  | 2688  | Yes               | 56                     |
| 3.00             | 12 x 36               | 18 x 42                 | 12 x 36                        | 26                                       | 51     | 14             | 5           | 1254  | 1676  | 1983  | 2338  | 2639  | 2972  | 3226  | Yes               | 58                     |
| 3.50             | 12 x 42               | 18 x 48                 | 12 x 42                        | 26                                       | 63     | 14             | 5           | 1463  | 1955  | 2313  | 2727  | 3079  | 3468  | 3764  | Yes               | 69                     |
| 4.00             | 12 x 48               | 18 x 54                 | 12 x 48                        | 26                                       | 63     | 14             | 5           | 1672  | 2234  | 2643  | 3117  | 3518  | 3963  | 4301  | Yes               | 71                     |
| 1.36             | 14 x 14               | 20 x 20                 | 14 x 14                        | 28                                       | 27     | 16             | 5           | 569   | 760   | 900   | 1061  | 1197  | 1349  | 1464  | Yes               | 42                     |
| 1.75             | 14 x 18               | 20 x 24                 | 14 x 18                        | 28                                       | 39     | 16             | 5           | 731   | 977   | 1157  | 1364  | 1539  | 1734  | 1882  | Yes               | 50                     |
| 2.33             | 14 x 24               | 20 x 30                 | 14 x 24                        | 28                                       | 39     | 16             | 5           | 975   | 1303  | 1542  | 1818  | 2052  | 2312  | 2509  | Yes               | 53                     |
| 2.92             | 14 x 30               | 20 x 36                 | 14 x 30                        | 28                                       | 51     | 16             | 5           | 1219  | 1629  | 1928  | 2273  | 2565  | 2890  | 3136  | Yes               | 60                     |
| 3.50             | 14 x 36               | 20 x 42                 | 14 x 36                        | 28                                       | 51     | 16             | 5           | 1463  | 1955  | 2313  | 2727  | 3079  | 3468  | 3764  | Yes               | 62                     |
| 4.08             | 14 x 42               | 20 x 48                 | 14 x 42                        | 28                                       | 63     | 16             | 5           | 1707  | 2281  | 2699  | 3182  | 3592  | 4046  | 4391  | Yes               | 74                     |
| 4.67             | 14 x 48               | 20 x 54                 | 14 x 48                        | 28                                       | 63     | 16             | 5           | 1951  | 2606  | 3084  | 3637  | 4105  | 4624  | 5018  | Yes               | 76                     |
| 5.25             | 14 x 54               | 20 x 60                 | 14 x 54                        | 28                                       | 75     | 16             | 5           | 2194  | 2932  | 3470  | 4091  | 4618  | 5202  | 5645  | Yes               | 87                     |
| 1.78             | 16 x 16               | 22 x 22                 | 16 x 16                        | 30                                       | 39     | 16             | 5           | 743   | 993   | 1175  | 1385  | 1564  | 1761  | 1912  | Yes               | 52                     |
| 2.22             | 16 x 20               | 22 x 26                 | 16 x 20                        | 30                                       | 39     | 16             | 5           | 929   | 1241  | 1469  | 1732  | 1955  | 2202  | 2390  | Yes               | 53                     |
| 2.67             | 16 x 24               | 22 x 30                 | 16 x 24                        | 30                                       | 39     | 16             | 5           | 1115  | 1489  | 1762  | 2078  | 2346  | 2642  | 2868  | Yes               | 55                     |
| 3.33             | 16 x 30               | 22 x 36                 | 16 x 30                        | 30                                       | 51     | 16             | 5           | 1393  | 1862  | 2203  | 2598  | 2932  | 3303  | 3584  | Yes               | 64                     |
| 4.00             | 16 x 36               | 22 x 42                 | 16 x 36                        | 30                                       | 51     | 16             | 5           | 1672  | 2234  | 2643  | 3117  | 3518  | 3963  | 4301  | Yes               | 66                     |
| 4.67             | 16 x 42               | 22 x 48                 | 16 x 42                        | 30                                       | 63     | 16             | 5           | 1951  | 2606  | 3084  | 3637  | 4105  | 4624  | 5018  | Yes               | 78                     |
| 5.33             | 16 x 48               | 22 x 54                 | 16 x 48                        | 30                                       | 63     | 16             | 5           | 2229  | 2979  | 3525  | 4156  | 4691  | 5284  | 5735  | Yes               | 80                     |
| 6.00             | 16 x 54               | 22 x 60                 | 16 x 54                        | 30                                       | 75     | 16             | 5           | 2508  | 3351  | 3965  | 4676  | 5277  | 5945  | 6452  | Yes               | 91                     |
| 6.67             | 16 x 60               | 22 x 66                 | 16 x 60                        | 31                                       | 75     | 16             | 5           | 2786  | 3724  | 4406  | 5195  | 5864  | 6605  | 7169  | Yes               | 95                     |
| 7.33             | 16 x 66               | 22 x 72                 | 16 x 66                        | 30                                       | 87     | 16             | 5           | 3065  | 4096  | 4846  | 5715  | 6450  | 7266  | 7886  | Yes               | 120                    |
| 2.25             | 18 x 18               | 24 x 24                 | 18 x 18                        | 32                                       | 39     | 16             | 5           | 940   | 1257  | 1487  | 1753  | 1979  | 2229  | 2419  | Yes               | 55                     |
| 3.00             | 18 x 24               | 24 x 30                 | 18 x 24                        | 32                                       | 39     | 16             | 5           | 1254  | 1676  | 1983  | 2338  | 2639  | 2972  | 3226  | Yes               | 57                     |
| 3.75             | 18 x 30               | 24 x 36                 | 18 x 30                        | 32                                       | 51     | 16             | 5           | 1567  | 2094  | 2478  | 2922  | 3298  | 3715  | 4032  | Yes               | 67                     |
| 4.50             | 18 x 36               | 24 x 42                 | 18 x 36                        | 32                                       | 51     | 16             | 5           | 1881  | 2513  | 2974  | 3507  | 3958  | 4458  | 4839  | Yes               | 69                     |
| 5.25             | 18 x 42               | 24 x 48                 | 18 x 42                        | 32                                       | 63     | 16             | 5           | 2194  | 2932  | 3470  | 4091  | 4618  | 5202  | 5645  | Yes               | 81                     |
| 6.00             | 18 x 48               | 24 x 54                 | 18 x 48                        | 33                                       | 63     | 16             | 5           | 2508  | 3351  | 3965  | 4676  | 5277  | 5945  | 6452  | Yes               | 84                     |
| 6.75             | 18 x 54               | 24 x 60                 | 18 x 54                        | 32                                       | 75     | 16             | 5           | 2821  | 3770  | 4461  | 5260  | 5937  | 6688  | 7258  | Yes               | 95                     |
| 7.50             | 18 x 60               | 24 x 66                 | 18 x 60                        | 34                                       | 75     | 16             | 5           | 3135  | 4189  | 4956  | 5845  | 6597  | 7431  | 8065  | Yes               | 99                     |
| 8.25             | 18 x 66               | 24 x 72                 | 18 x 66                        | 32                                       | 87     | 16             | 5           | 3448  | 4608  | 5452  | 6429  | 7256  | 8174  | 8871  | Yes               | 124                    |
| 9.00             | 18 x 72               | 24 x 78                 | 18 x 72                        | 35                                       | 87     | 16             | 5           | 3762  | 5027  | 5948  | 7013  | 7916  | 8917  | 9678  | Yes               | 129                    |
| 2.78             | 20 x 20               | 26 x 26                 | 20 x 20                        | 34                                       | 39     | 16             | 5           | 1161  | 1551  | 1836  | 2165  | 2443  | 2752  | 2987  | Yes               | 58                     |
| 3.33             | 20 x 24               | 26 x 30                 | 20 x 24                        | 34                                       | 39     | 16             | 5           | 1393  | 1862  | 2203  | 2598  | 2932  | 3303  | 3584  | Yes               | 60                     |
| 4.17             | 20 x 30               | 26 x 36                 | 20 x 30                        | 34                                       | 51     | 16             | 5           | 1742  | 2327  | 2754  | 3247  | 3665  | 4128  | 4480  | Yes               | 69                     |
| 5.00             | 20 x 36               | 26 x 42                 | 20 x 36                        | 34                                       | 51     | 16             | 5           | 2090  | 2793  | 3304  | 3896  | 4398  | 4954  | 5377  | Yes               | 71                     |
| 5.83             | 20 x 42               | 26 x 48                 | 20 x 42                        | 34                                       | 63     | 16             | 5           | 2438  | 3258  | 3855  | 4546  | 5131  | 5779  | 6273  | Yes               | 84                     |
| 6.67             | 20 x 48               | 26 x 54                 | 20 x 48                        | 36                                       | 63     | 16             | 5           | 2786  | 3724  | 4406  | 5195  | 5864  | 6605  | 7169  | Yes               | 89                     |
| 7.50             | 20 x 54               | 26 x 60                 | 20 x 54                        | 34                                       | 75     | 16             | 5           | 3135  | 4189  | 4956  | 5845  | 6597  | 7431  | 8065  | Yes               | 98                     |
| 8.33             | 20 x 60               | 26 x 66                 | 20 x 60                        | 37                                       | 75     | 16             | 5           | 3483  | 4654  | 5507  | 6494  | 7330  | 8256  | 8961  | Yes               | 104                    |
| 9.17             | 20 x 66               | 26 x 72                 | 20 x 66                        | 35                                       | 87     | 16             | 5           | 3831  | 5120  | 6058  | 7143  | 8063  | 9082  | 9857  | Yes               | 128                    |
| 10.00            | 20 x 72               | 26 x 78                 | 20 x 72                        | 38                                       | 87     | 16             | 5           | 4180  | 5585  | 6609  | 7793  | 8796  | 9908  | 10753 | Yes               | 135                    |
| 10.83            | 20 x 78               | 26 x 84                 | 20 x 78                        | 37                                       | 99     | 16             | 5           | 4528  | 6051  | 7159  | 8442  | 9529  | 10733 | 11649 | Yes               | 153                    |
| 11.67            | 20 x 84               | 26 x 90                 | 20 x 84                        | 39                                       | 99     | 16             | 5           | 4876  | 6516  | 7710  | 9092  | 10262 | 11559 | 12545 | Yes               | 158                    |

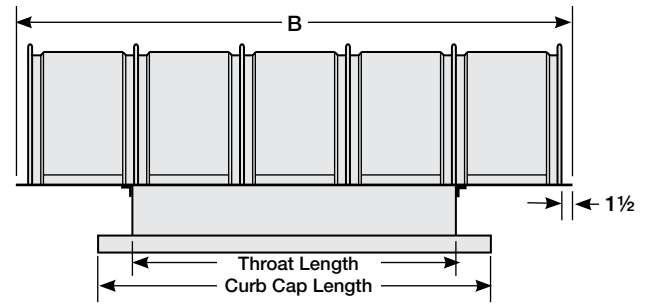
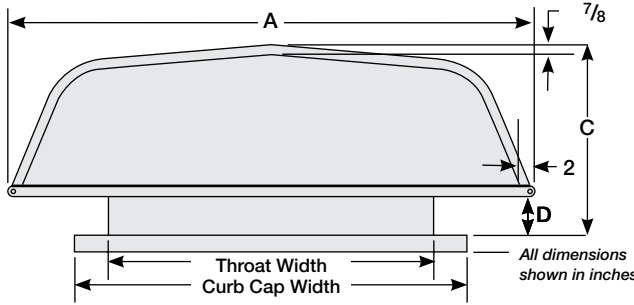
# Fabra Hood - Gravity Relief Model FGR



| Dimensional Data |                       |                         |                                |       |        |                |             | Performance Data                     |       |       |       |       |       |       | Shipped Assembled | Galvanized Unit Weight |  |  |  |  |  |  |
|------------------|-----------------------|-------------------------|--------------------------------|-------|--------|----------------|-------------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------------------|------------------------|--|--|--|--|--|--|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | Width | Length | Overall Height | Base Height | DUCTED STATIC PRESSURE DROP (in. wg) |       |       |       |       |       |       |                   |                        |  |  |  |  |  |  |
|                  |                       |                         |                                |       |        |                |             | 0.024                                | 0.043 | 0.060 | 0.084 | 0.107 | 0.136 | 0.160 |                   |                        | NON-DUCTED STATIC PRESSURE DROP (in. wg) |  |  |  |  |  |
|                  |                       |                         |                                |       |        |                |             | 0.042                                | 0.075 | 0.105 | 0.146 | 0.186 | 0.236 | 0.278 |                   |                        | HOOD AND THROAT VELOCITY (ft./min.)      |  |  |  |  |  |
|                  |                       |                         |                                | A     | B      | C              | D           | 420                                  | 560   | 660   | 780   | 880   | 990   | 1075  |                   |                        |  |  |  |  |  |  |
| ft <sup>2</sup>  | Inches                |                         |                                |       |        |                |             | CFM                                  |       |       |       |       |       |       | POUNDS            |                        |  |  |  |  |  |  |
| 4.00             | 24 x 24               | 30 x 30                 | 24 x 24                        | 38    | 39     | 19             | 5           | 1672                                 | 2234  | 2643  | 3117  | 3518  | 3963  | 4301  | Yes               | 69                     |  |  |  |  |  |  |
| 5.00             | 24 x 30               | 30 x 36                 | 24 x 30                        | 38    | 51     | 19             | 5           | 2090                                 | 2793  | 3304  | 3896  | 4398  | 4954  | 5377  | Yes               | 79                     |  |  |  |  |  |  |
| 6.00             | 24 x 36               | 30 x 42                 | 24 x 36                        | 40    | 51     | 19             | 5           | 2508                                 | 3351  | 3965  | 4676  | 5277  | 5945  | 6452  | Yes               | 84                     |  |  |  |  |  |  |
| 7.00             | 24 x 42               | 30 x 48                 | 24 x 42                        | 38    | 63     | 19             | 5           | 2926                                 | 3910  | 4626  | 5455  | 6157  | 6935  | 7527  | Yes               | 95                     |  |  |  |  |  |  |
| 8.00             | 24 x 48               | 30 x 54                 | 24 x 48                        | 42    | 63     | 19             | 5           | 3344                                 | 4468  | 5287  | 6234  | 7037  | 7926  | 8603  | Yes               | 102                    |  |  |  |  |  |  |
| 9.00             | 24 x 54               | 30 x 60                 | 24 x 54                        | 40    | 75     | 19             | 5           | 3762                                 | 5027  | 5948  | 7013  | 7916  | 8917  | 9678  | Yes               | 113                    |  |  |  |  |  |  |
| 10.00            | 24 x 60               | 30 x 66                 | 24 x 60                        | 44    | 75     | 19             | 5           | 4180                                 | 5585  | 6609  | 7793  | 8796  | 9908  | 10753 | Yes               | 120                    |  |  |  |  |  |  |
| 11.00            | 24 x 66               | 30 x 72                 | 24 x 66                        | 42    | 87     | 19             | 5           | 4598                                 | 6144  | 7269  | 8572  | 9675  | 10898 | 11829 | Yes               | 146                    |  |  |  |  |  |  |
| 12.00            | 24 x 72               | 30 x 78                 | 24 x 72                        | 45    | 87     | 19             | 5           | 5016                                 | 6702  | 7930  | 9351  | 10555 | 11889 | 12904 | Yes               | 152                    |  |  |  |  |  |  |
| 13.00            | 24 x 78               | 30 x 84                 | 24 x 78                        | 43    | 99     | 19             | 5           | 5434                                 | 7261  | 8591  | 10131 | 11434 | 12880 | 13979 | Yes               | 171                    |  |  |  |  |  |  |
| 14.00            | 24 x 84               | 30 x 90                 | 24 x 84                        | 46    | 99     | 19             | 5           | 5852                                 | 7819  | 9252  | 10910 | 12314 | 13871 | 15054 | Yes               | 178                    |  |  |  |  |  |  |
| 15.00            | 24 x 90               | 30 x 96                 | 24 x 90                        | 44    | 111    | 19             | 5           | 6269                                 | 8378  | 9913  | 11689 | 13194 | 14861 | 16130 | Yes               | 202                    |  |  |  |  |  |  |
| 6.25             | 30 x 30               | 36 x 36                 | 30 x 30                        | 44    | 51     | 19             | 5           | 2612                                 | 3491  | 4130  | 4870  | 5497  | 6192  | 6721  | Yes               | 88                     |  |  |  |  |  |  |
| 7.50             | 30 x 36               | 36 x 42                 | 30 x 36                        | 49    | 51     | 19             | 5           | 3135                                 | 4189  | 4956  | 5845  | 6597  | 7431  | 8065  | Yes               | 95                     |  |  |  |  |  |  |
| 8.75             | 30 x 42               | 36 x 48                 | 30 x 42                        | 46    | 63     | 19             | 5           | 3657                                 | 4887  | 5783  | 6819  | 7696  | 8669  | 9409  | Yes               | 107                    |  |  |  |  |  |  |
| 10.00            | 30 x 48               | 36 x 54                 | 30 x 48                        | 52    | 63     | 19             | 5           | 4180                                 | 5585  | 6609  | 7793  | 8796  | 9908  | 10753 | Yes               | 116                    |  |  |  |  |  |  |
| 11.25            | 30 x 54               | 36 x 60                 | 30 x 54                        | 49    | 75     | 19             | 5           | 4702                                 | 6283  | 7435  | 8767  | 9895  | 11146 | 12097 | Yes               | 128                    |  |  |  |  |  |  |
| 12.50            | 30 x 60               | 36 x 66                 | 30 x 60                        | 54    | 75     | 19             | 5           | 5225                                 | 6982  | 8261  | 9741  | 10995 | 12385 | 13441 | Yes               | 136                    |  |  |  |  |  |  |
| 13.75            | 30 x 66               | 36 x 72                 | 30 x 66                        | 51    | 87     | 19             | 5           | 5747                                 | 7680  | 9087  | 10715 | 12094 | 13623 | 14786 | Yes               | 162                    |  |  |  |  |  |  |
| 15.00            | 30 x 72               | 36 x 78                 | 30 x 72                        | 49    | 99     | 19             | 5           | 6269                                 | 8378  | 9913  | 11689 | 13194 | 14861 | 16130 | Yes               | 172                    |  |  |  |  |  |  |
| 16.25            | 30 x 78               | 36 x 84                 | 30 x 78                        | 53    | 99     | 19             | 5           | 6792                                 | 9076  | 10739 | 12663 | 14293 | 16100 | 17474 | Yes               | 191                    |  |  |  |  |  |  |
| 17.50            | 30 x 84               | 36 x 90                 | 30 x 84                        | 51    | 111    | 19             | 5           | 7314                                 | 9774  | 11565 | 13637 | 15393 | 17338 | 18818 | Yes               | 216                    |  |  |  |  |  |  |
| 18.75            | 30 x 90               | 36 x 96                 | 30 x 90                        | 54    | 111    | 19             | 5           | 7837                                 | 10472 | 12391 | 14611 | 16492 | 18577 | 20162 | Yes               | 223                    |  |  |  |  |  |  |
| 9.00             | 36 x 36               | 42 x 42                 | 36 x 36                        | 58    | 51     | 19             | 5           | 3762                                 | 5027  | 5948  | 7013  | 7916  | 8917  | 9678  | Yes               | 110                    |  |  |  |  |  |  |
| 10.50            | 36 x 42               | 42 x 48                 | 36 x 42                        | 54    | 63     | 19             | 5           | 4389                                 | 5865  | 6939  | 8182  | 9236  | 10403 | 11291 | Yes               | 119                    |  |  |  |  |  |  |
| 12.00            | 36 x 48               | 42 x 54                 | 36 x 48                        | 62    | 63     | 19             | 5           | 5016                                 | 6702  | 7930  | 9351  | 10555 | 11889 | 12904 | Yes               | 130                    |  |  |  |  |  |  |
| 13.50            | 36 x 54               | 42 x 60                 | 36 x 54                        | 58    | 75     | 19             | 5           | 5643                                 | 7502  | 8922  | 10520 | 11874 | 13375 | 14517 | Yes               | 142                    |  |  |  |  |  |  |
| 15.00            | 36 x 60               | 42 x 66                 | 36 x 60                        | 55    | 87     | 19             | 5           | 6269                                 | 8378  | 9913  | 11689 | 13194 | 14861 | 16130 | Yes               | 168                    |  |  |  |  |  |  |
| 16.50            | 36 x 66               | 42 x 72                 | 36 x 66                        | 61    | 87     | 19             | 5           | 6896                                 | 9216  | 10904 | 12858 | 14513 | 16348 | 17743 | Yes               | 178                    |  |  |  |  |  |  |
| 18.00            | 36 x 72               | 42 x 78                 | 36 x 72                        | 58    | 99     | 19             | 5           | 7523                                 | 10054 | 11895 | 14027 | 15832 | 17834 | 19356 | Yes               | 190                    |  |  |  |  |  |  |
| 19.50            | 36 x 78               | 42 x 84                 | 36 x 78                        | 63    | 96     | 19             | 5           | 8150                                 | 10891 | 12887 | 15196 | 17152 | 19320 | 20969 | Yes               | 211                    |  |  |  |  |  |  |
| 21.00            | 36 x 84               | 42 x 90                 | 36 x 84                        | 60    | 111    | 19             | 5           | 8777                                 | 11729 | 13878 | 16365 | 18471 | 20806 | 22582 | Yes               | 235                    |  |  |  |  |  |  |
| 22.50            | 36 x 90               | 42 x 96                 | 36 x 90                        | 64    | 111    | 19             | 5           | 9404                                 | 12567 | 14869 | 17534 | 19790 | 22292 | 24195 | Yes               | 244                    |  |  |  |  |  |  |
| 24.00            | 36 x 96               | 42 x 102                | 36 x 96                        | 62    | 123    | 19             | 5           | 10031                                | 13405 | 15861 | 18703 | 21110 | 23778 | 25808 | Yes               | 258                    |  |  |  |  |  |  |
| 25.50            | 36 x 102              | 42 x 108                | 36 x 102                       | 65    | 123    | 19             | 5           | 10658                                | 14242 | 16852 | 19872 | 22429 | 25265 | 27421 | Yes               | 266                    |  |  |  |  |  |  |
| 12.25            | 42 x 42               | 48 x 48                 | 42 x 42                        | 63    | 63     | 23             | 5           | 5120                                 | 6842  | 8096  | 9546  | 10775 | 12137 | 13173 | Yes               | 144                    |  |  |  |  |  |  |
| 14.00            | 42 x 48               | 48 x 54                 | 42 x 48                        | 60    | 75     | 23             | 5           | 5852                                 | 7819  | 9252  | 10910 | 12314 | 13871 | 15054 | Yes               | 157                    |  |  |  |  |  |  |
| 15.75            | 42 x 54               | 48 x 60                 | 42 x 54                        | 67    | 75     | 23             | 5           | 6583                                 | 8797  | 10409 | 12274 | 13853 | 15605 | 16936 | Yes               | 169                    |  |  |  |  |  |  |
| 17.50            | 42 x 60               | 48 x 66                 | 42 x 60                        | 64    | 87     | 23             | 5           | 7314                                 | 9774  | 11565 | 13637 | 15393 | 17338 | 18818 | Yes               | 197                    |  |  |  |  |  |  |
| 19.25            | 42 x 66               | 48 x 72                 | 42 x 66                        | 70    | 87     | 23             | 5           | 8046                                 | 10752 | 12722 | 15001 | 16932 | 19072 | 20700 | Yes               | 208                    |  |  |  |  |  |  |
| 21.00            | 42 x 72               | 48 x 78                 | 42 x 72                        | 67    | 99     | 23             | 5           | 8777                                 | 11729 | 13878 | 16365 | 18471 | 20806 | 22582 | Yes               | 222                    |  |  |  |  |  |  |
| 22.75            | 42 x 78               | 48 x 84                 | 42 x 78                        | 72    | 99     | 23             | 5           | 9509                                 | 12707 | 15035 | 17729 | 20010 | 22540 | 24463 | Yes               | 245                    |  |  |  |  |  |  |
| 24.50            | 42 x 84               | 48 x 90                 | 42 x 84                        | 69    | 111    | 23             | 5           | 10240                                | 13684 | 16191 | 19092 | 21550 | 24274 | 26345 | Yes               | 270                    |  |  |  |  |  |  |
| 26.25            | 42 x 90               | 48 x 96                 | 42 x 90                        | 67    | 123    | 23             | 5           | 10972                                | 14661 | 17348 | 20456 | 23089 | 26008 | 28227 | Yes               | 284                    |  |  |  |  |  |  |
| 28.00            | 42 x 96               | 48 x 102                | 42 x 96                        | 71    | 123    | 23             | 5           | 11703                                | 15639 | 18504 | 21820 | 24628 | 27741 | 30109 | Yes               | 296                    |  |  |  |  |  |  |
| 29.75            | 42 x 102              | 48 x 108                | 42 x 102                       | 69    | 135    | 23             | 5           | 12434                                | 16616 | 19661 | 23183 | 26167 | 29475 | 31991 | Yes               | 311                    |  |  |  |  |  |  |
| 31.50            | 42 x 108              | 48 x 114                | 42 x 108                       | 73    | 135    | 23             | 5           | 13166                                | 17594 | 20817 | 24547 | 27707 | 31209 | 33873 | Yes               | 321                    |  |  |  |  |  |  |
| 16.00            | 48 x 48               | 54 x 54                 | 48 x 48                        | 68    | 75     | 25             | 5           | 6687                                 | 8936  | 10574 | 12468 | 14073 | 15852 | 17205 | Yes               | 168                    |  |  |  |  |  |  |
| 18.00            | 48 x 54               | 54 x 60                 | 48 x 54                        | 76    | 75     | 25             | 5           | 7523                                 | 10054 | 11895 | 14027 | 15832 | 17834 | 19356 | Yes               | 187                    |  |  |  |  |  |  |
| 20.00            | 48 x 60               | 54 x 66                 | 48 x 60                        | 73    | 87     | 25             | 5           | 8359                                 | 11171 | 13217 | 15586 | 17591 | 19815 | 21506 | Yes               | 216                    |  |  |  |  |  |  |
| 22.00            | 48 x 66               | 54 x 72                 | 48 x 66                        | 79    | 87     | 25             | 5           | 9195                                 | 12288 | 14539 | 17144 | 19351 | 21797 | 23657 | Yes               | 246                    |  |  |  |  |  |  |
| 24.00            | 48 x 72               | 54 x 78                 | 48 x 72                        | 76    | 99     | 25             | 5           | 10031                                | 13405 | 15861 | 18703 | 21110 | 23778 | 25808 | Yes               | 242                    |  |  |  |  |  |  |
| 26.00            | 48 x 78               | 54 x 84                 | 48 x 78                        | 73    | 111    | 25             | 5           | 10867                                | 14522 | 17182 | 20261 | 22869 | 25760 | 27958 | Yes               | 281                    |  |  |  |  |  |  |
| 28.00            | 48 x 84               | 54 x 90                 | 48 x 84                        | 79    | 111    | 25             | 5           | 11703                                | 15639 | 18504 | 21820 | 24628 | 27741 | 30109 | Yes               | 319                    |  |  |  |  |  |  |
| 30.00            | 48 x 90               | 54 x 96                 | 48 x 90                        | 76    | 123    | 25             | 5           | 12539                                | 16756 | 19826 | 23378 | 26387 | 29723 | 32260 | Yes               | 310                    |  |  |  |  |  |  |
| 32.00            | 48 x 96               | 54 x 102                | 48 x 96                        | 81    | 123    | 25             | 5           | 13375                                | 17873 | 21148 | 24937 | 28146 | 31704 | 34410 | Yes               | 350                    |  |  |  |  |  |  |
| 34.00            | 48 x 102              | 54 x 108                | 48 x 102                       | 78    | 135    | 25             | 5           | 14211                                | 18990 | 22469 | 26495 | 29905 | 33686 | 36561 | Yes               | 367                    |  |  |  |  |  |  |
| 36.00            | 48 x 108              | 54 x 114                | 48 x 108                       | 83    | 135    | 25             | 5           | 15047                                | 20107 | 23791 | 28054 | 31665 | 35668 | 38711 | Yes               | 381                    |  |  |  |  |  |  |
| 38.00            | 48 x 114              | 54 x 120                | 48 x 114                       | 80    | 147    | 25             | 5           | 15883                                | 21224 | 25113 | 29612 | 33424 | 37649 | 40862 | No                | 398                    |  |  |  |  |  |  |



# Fabra Hood - Gravity Relief Model FGR



| Dimensional Data |                       |                         |                                |       |        |                |             | Performance Data                         |       |       |       |       |       |       |        | Shipped Assembled | Galvanized Unit Weight |
|------------------|-----------------------|-------------------------|--------------------------------|-------|--------|----------------|-------------|--|-------|-------|-------|-------|-------|-------|--------|-------------------|------------------------|
| Throat Area      | Throat Width x Length | Curb Cap Width x Length | Optional Damper Width x Length | Width | Length | Overall Height | Base Height | DUCTED STATIC PRESSURE DROP (in. wg)     |       |       |       |       |       |       |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | 0.024                                    | 0.043 | 0.060 | 0.084 | 0.107 | 0.136 | 0.160 |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | NON-DUCTED STATIC PRESSURE DROP (in. wg) |       |       |       |       |       |       |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | 0.042                                    | 0.075 | 0.105 | 0.146 | 0.186 | 0.236 | 0.278 |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | HOOD AND THROAT VELOCITY (ft./min.)      |       |       |       |       |       |       |        |                   |                        |
|                  |                       |                         |                                |       |        |                |             | 420                                      | 560   | 660   | 780   | 880   | 990   | 1075  |        |                   |                        |
| ft <sup>2</sup>  | Inches                |                         |                                |       |        |                |             | CFM                                      |       |       |       |       |       |       | POUNDS |                   |                        |
| 20.25            | 54 x 54               | 60 x 60                 | 54 x 54                        | 85    | 75     | 26             | 5           | 8464                                     | 11310 | 13382 | 15780 | 17811 | 20063 | 21775 | Yes    | 223               |                        |
| 22.50            | 54 x 60               | 60 x 66                 | 54 x 60                        | 81    | 87     | 26             | 5           | 9404                                     | 12567 | 14869 | 17534 | 19790 | 22292 | 24195 | Yes    | 266               |                        |
| 24.75            | 54 x 66               | 60 x 72                 | 54 x 66                        | 78    | 99     | 26             | 5           | 10345                                    | 13824 | 16356 | 19287 | 21769 | 24521 | 26614 | Yes    | 285               |                        |
| 27.00            | 54 x 72               | 60 x 78                 | 54 x 72                        | 85    | 99     | 26             | 5           | 11285                                    | 15080 | 17843 | 21040 | 23748 | 26751 | 29034 | Yes    | 300               |                        |
| 29.25            | 54 x 78               | 60 x 84                 | 54 x 78                        | 82    | 111    | 26             | 5           | 12225                                    | 16337 | 19330 | 22794 | 25727 | 28980 | 31453 | Yes    | 345               |                        |
| 31.50            | 54 x 84               | 60 x 90                 | 54 x 84                        | 88    | 111    | 26             | 5           | 13166                                    | 17594 | 20817 | 24547 | 27707 | 31209 | 33873 | Yes    | 363               |                        |
| 33.75            | 54 x 90               | 60 x 96                 | 54 x 90                        | 85    | 123    | 26             | 5           | 14106                                    | 18850 | 22304 | 26301 | 29686 | 33438 | 36292 | Yes    | 380               |                        |
| 36.00            | 54 x 96               | 60 x 102                | 54 x 96                        | 90    | 123    | 26             | 5           | 15047                                    | 20107 | 23791 | 28054 | 31665 | 35668 | 38711 | Yes    | 396               |                        |
| 38.25            | 54 x 102              | 60 x 108                | 54 x 102                       | 87    | 135    | 26             | 5           | 15987                                    | 21364 | 25278 | 29807 | 33644 | 37897 | 41131 | Yes    | 416               |                        |
| 40.50            | 54 x 108              | 60 x 114                | 54 x 108                       | 85    | 147    | 26             | 5           | 16928                                    | 22620 | 26765 | 31561 | 35623 | 40126 | 43550 | No     | 433               |                        |
| 42.75            | 54 x 114              | 60 x 120                | 54 x 114                       | 90    | 147    | 26             | 5           | 17868                                    | 23877 | 28252 | 33314 | 37602 | 42355 | 45970 | No     | 450               |                        |
| 25.00            | 60 x 60               | 66 x 66                 | 60 x 60                        | 90    | 87     | 29.5           | 5           | 10449                                    | 13963 | 16521 | 19482 | 21989 | 24769 | 26883 | Yes    | 284               |                        |
| 27.50            | 60 x 66               | 66 x 72                 | 60 x 66                        | 87    | 99     | 29.5           | 5           | 11494                                    | 15360 | 18174 | 21430 | 24188 | 27246 | 29571 | Yes    | 304               |                        |
| 30.00            | 60 x 72               | 66 x 78                 | 60 x 72                        | 94    | 99     | 29.5           | 5           | 12539                                    | 16756 | 19826 | 23378 | 26387 | 29723 | 32260 | Yes    | 320               |                        |
| 32.50            | 60 x 78               | 66 x 84                 | 60 x 78                        | 91    | 111    | 29.5           | 5           | 13584                                    | 18152 | 21478 | 25326 | 28586 | 32200 | 34948 | Yes    | 367               |                        |
| 35.00            | 60 x 84               | 66 x 90                 | 60 x 84                        | 97    | 111    | 29.5           | 5           | 14629                                    | 19548 | 23130 | 27275 | 30785 | 34677 | 37636 | Yes    | 387               |                        |
| 37.50            | 60 x 90               | 66 x 96                 | 60 x 90                        | 94    | 123    | 29.5           | 5           | 15674                                    | 20945 | 24782 | 29223 | 32984 | 37154 | 40324 | Yes    | 403               |                        |
| 40.00            | 60 x 96               | 66 x 102                | 60 x 96                        | 91    | 135    | 29.5           | 5           | 16719                                    | 22341 | 26434 | 31171 | 35183 | 39631 | 43013 | Yes    | 423               |                        |
| 42.50            | 60 x 102              | 66 x 108                | 60 x 102                       | 97    | 135    | 29.5           | 5           | 17763                                    | 23737 | 28087 | 33119 | 37382 | 42108 | 45701 | No     | 444               |                        |
| 45.00            | 60 x 108              | 66 x 114                | 60 x 108                       | 94    | 147    | 29.5           | 5           | 18808                                    | 25134 | 29739 | 35067 | 39581 | 44584 | 48389 | No     | 460               |                        |
| 47.50            | 60 x 114              | 66 x 120                | 60 x 114                       | 99    | 147    | 29.5           | 5           | 19853                                    | 26530 | 31391 | 37016 | 41780 | 47061 | 51078 | No     | 479               |                        |
| 50.00            | 60 x 120              | 66 x 126                | 60 x 120                       | 96    | 159    | 29.5           | 5           | 20898                                    | 27926 | 33043 | 38964 | 43979 | 49538 | 53766 | No     | 496               |                        |
| 30.25            | 66 x 66               | 72 x 72                 | 66 x 66                        | 95    | 99     | 29.5           | 5           | 12643                                    | 16895 | 19991 | 23573 | 26607 | 29971 | 32528 | No     | 322               |                        |
| 33.00            | 66 x 72               | 72 x 78                 | 66 x 72                        | 103   | 99     | 29.5           | 5           | 13793                                    | 18431 | 21808 | 25716 | 29026 | 32695 | 35486 | No     | 342               |                        |
| 35.75            | 66 x 78               | 72 x 84                 | 66 x 78                        | 99    | 111    | 29.5           | 5           | 14942                                    | 19967 | 23626 | 27859 | 31445 | 35420 | 38443 | No     | 388               |                        |
| 38.50            | 66 x 84               | 72 x 90                 | 66 x 84                        | 96    | 123    | 29.5           | 5           | 16092                                    | 21503 | 25443 | 30002 | 33864 | 38144 | 41400 | No     | 410               |                        |
| 41.25            | 66 x 90               | 72 x 96                 | 66 x 90                        | 103   | 123    | 29.5           | 5           | 17241                                    | 23039 | 27260 | 32145 | 36282 | 40869 | 44357 | No     | 430               |                        |
| 44.00            | 66 x 96               | 72 x 102                | 66 x 96                        | 100   | 135    | 29.5           | 5           | 18390                                    | 24575 | 29078 | 34288 | 38701 | 43594 | 47314 | No     | 449               |                        |
| 46.75            | 66 x 102              | 72 x 108                | 66 x 102                       | 106   | 135    | 29.5           | 5           | 19540                                    | 26111 | 30895 | 36431 | 41120 | 46318 | 50271 | No     | 471               |                        |
| 49.50            | 66 x 108              | 72 x 114                | 66 x 108                       | 103   | 147    | 29.5           | 5           | 20689                                    | 27647 | 32713 | 38574 | 43539 | 49043 | 53228 | No     | 489               |                        |
| 52.25            | 66 x 114              | 72 x 120                | 66 x 114                       | 109   | 147    | 29.5           | 5           | 21839                                    | 29183 | 34530 | 40717 | 45958 | 51767 | 56185 | No     | 509               |                        |
| 55.00            | 66 x 120              | 72 x 126                | 66 x 120                       | 106   | 159    | 29.5           | 5           | 22988                                    | 30719 | 36347 | 42860 | 48376 | 54492 | 59143 | No     | 530               |                        |
| 57.75            | 66 x 126              | 72 x 132                | 66 x 126                       | 103   | 171    | 36.5           | 12          | 24137                                    | 32255 | 38165 | 45003 | 50795 | 57217 | 62100 | No     | 595               |                        |
| 60.50            | 66 x 132              | 72 x 138                | 66 x 132                       | 108   | 171    | 36.5           | 12          | 25287                                    | 33791 | 39982 | 47146 | 53214 | 59941 | 65057 | No     | 616               |                        |
| 36.00            | 72 x 72               | 78 x 78                 | 72 x 72                        | 112   | 99     | 29.5           | 5           | 15047                                    | 20107 | 23791 | 28054 | 31665 | 35668 | 38711 | No     | 365               |                        |
| 39.00            | 72 x 78               | 78 x 84                 | 72 x 78                        | 108   | 111    | 29.5           | 5           | 16301                                    | 21783 | 25774 | 30392 | 34303 | 38640 | 41937 | No     | 412               |                        |
| 42.00            | 72 x 84               | 78 x 90                 | 72 x 84                        | 105   | 123    | 29.5           | 5           | 17555                                    | 23458 | 27756 | 32730 | 36942 | 41612 | 45163 | No     | 434               |                        |
| 45.00            | 72 x 90               | 78 x 96                 | 72 x 90                        | 112   | 123    | 29.5           | 5           | 18808                                    | 25134 | 29739 | 35067 | 39581 | 44584 | 48389 | No     | 457               |                        |
| 48.00            | 72 x 96               | 78 x 102                | 72 x 96                        | 109   | 135    | 29.5           | 5           | 20062                                    | 26809 | 31721 | 37405 | 42219 | 47557 | 51615 | No     | 479               |                        |
| 51.00            | 72 x 102              | 78 x 108                | 72 x 102                       | 115   | 135    | 29.5           | 5           | 21316                                    | 28485 | 33704 | 39743 | 44858 | 50529 | 54841 | No     | 497               |                        |
| 54.00            | 72 x 108              | 78 x 114                | 72 x 108                       | 112   | 147    | 29.5           | 5           | 22570                                    | 30161 | 35686 | 42081 | 47497 | 53501 | 58067 | No     | 519               |                        |
| 57.00            | 72 x 114              | 78 x 120                | 72 x 114                       | 109   | 159    | 29.5           | 5           | 23824                                    | 31836 | 37669 | 44419 | 50136 | 56474 | 61293 | No     | 541               |                        |
| 60.00            | 72 x 120              | 78 x 126                | 72 x 120                       | 115   | 159    | 29.5           | 5           | 25078                                    | 33512 | 39652 | 46757 | 52774 | 59446 | 64519 | No     | 607               |                        |
| 63.00            | 72 x 126              | 78 x 132                | 72 x 126                       | 112   | 171    | 36.5           | 12          | 26332                                    | 35187 | 41634 | 49094 | 55413 | 62418 | 67745 | No     | 629               |                        |
| 66.00            | 72 x 132              | 78 x 138                | 72 x 132                       | 117   | 171    | 36.5           | 12          | 27586                                    | 36863 | 43617 | 51432 | 58052 | 65390 | 70971 | No     | 648               |                        |
| 69.00            | 72 x 138              | 78 x 144                | 72 x 138                       | 114   | 183    | 36.5           | 12          | 28840                                    | 38538 | 45599 | 53770 | 60690 | 68363 | 74197 | No     | 670               |                        |
| 72.00            | 72 x 144              | 78 x 150                | 72 x 144                       | 119   | 183    | 36.5           | 12          | 30093                                    | 40214 | 47582 | 56108 | 63329 | 71335 | 77423 | No     | 690               |                        |
| 75.00            | 72 x 150              | 78 x 156                | 72 x 150                       | 117   | 195    | 36.5           | 12          | 31347                                    | 41890 | 49564 | 58446 | 65968 | 74307 | 80649 | No     | 759               |                        |
| 78.00            | 72 x 156              | 78 x 162                | 72 x 156                       | 121   | 195    | 36.5           | 12          | 32601                                    | 43565 | 51547 | 60784 | 68607 | 77280 | 83875 | No     | 834               |                        |
| 81.00            | 72 x 162              | 78 x 168                | 72 x 162                       | 118   | 207    | 36.5           | 12          | 33855                                    | 45241 | 53530 | 63121 | 71245 | 80252 | 87101 | No     | 918               |                        |
| 84.00            | 72 x 168              | 78 x 174                | 72 x 168                       | 116   | 219    | 36.5           | 12          | 35109                                    | 46916 | 55512 | 65459 | 73884 | 83224 | 90327 | No     | 1010              |                        |
| 87.00            | 72 x 174              | 78 x 180                | 72 x 174                       | 120   | 219    | 36.5           | 12          | 36363                                    | 48592 | 57495 | 67797 | 76523 | 86197 | 93553 | No     | 1111              |                        |
| 90.00            | 72 x 180              | 78 x 186                | 72 x 180                       | 118   | 231    | 36.5           | 12          | 37617                                    | 50268 | 59477 | 70135 | 79161 | 89169 | 96779 | No     | 1222              |                        |



# Spun Aluminum Model GRSI/GRSR/GRSF



## Construction Features

When you buy a Greenheck gravity ventilator, you receive a ventilator with the industry's best performance and durability for intake (model GRSI) or relief (model GRSR) for natural gravity or positive pressure systems. Exceptional low silhouette design and construction features make this unit a rugged, efficient, and economical air inlet or outlet.

- Broadest performance in the industry, up to 18,400 cfm (31,300 m<sup>3</sup>/hr)
- Most advanced weather protection of any ventilator in its class
- Greenheck subjects these products to extensive life testing, ensuring the ventilator will provide years of reliable performance

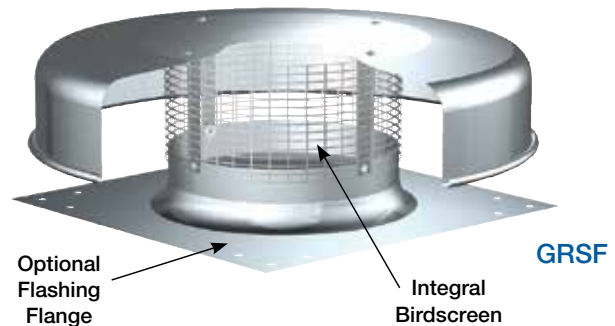
- All aluminum exterior for corrosion-resistant construction
- Integral birdscreen to prevent the entry of birds and/or small objects
- Built-in curb cap with pre-punched holes for easy attachment to roof curbs
- Optional built-in flashing flange (model GRSF) with pre-punched holes for quick and easy installations without a roof curb.

Use the GRS with the following accessories:

Gravity or motorized dampers to ensure weather tightness.

Prefab curbs to reduce installation time.

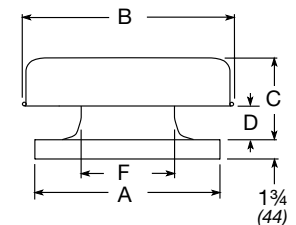
Protective coatings to extend the life of the unit or blend its color with other equipment.



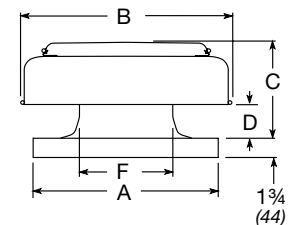
| Dimensions |              |               |              |              |              |               |                          |                |                  |             |
|------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------------------|----------------|------------------|-------------|
| Model Size | A            | B             | C            | D            | E            | F             | Damper Size              | Curb Thickness | Shroud Thickness | Unit Weight |
| 8          | 19<br>(483)  | 20½<br>(521)  | 7¼<br>(184)  | 1½<br>(38)   | 20¼<br>(514) | 8¼<br>(210)   | 8 x 8<br>(203 x 203)     | 0.051<br>(1.3) | 0.051<br>(1.3)   | 7<br>(3)    |
| 10         | 19<br>(483)  | 20½<br>(521)  | 7¼<br>(197)  | 2<br>(51)    | 20¼<br>(514) | 10¼<br>(260)  | 10 x 10<br>(254 x 254)   | 0.051<br>(1.3) | 0.051<br>(1.3)   | 8<br>(4)    |
| 12         | 22<br>(559)  | 29<br>(737)   | 10<br>(254)  | 3½<br>(89)   | 23¼<br>(591) | 12¼<br>(311)  | 12 x 12<br>(305 x 305)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 10<br>(5)   |
| 15         | 22<br>(559)  | 29<br>(737)   | 10<br>(254)  | 3½<br>(89)   | 23¼<br>(591) | 14¼<br>(362)  | 16 x 16<br>(406 x 406)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 13<br>(6)   |
| 16         | 26<br>(660)  | 29<br>(737)   | 11<br>(279)  | 4¼<br>(108)  | 27¼<br>(692) | 16¼<br>(413)  | 16 x 16<br>(406 x 406)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 16<br>(7)   |
| 18         | 30<br>(762)  | 35½<br>(902)  | 9¼<br>(248)  | 1¼<br>(44)   | 31¼<br>(794) | 20¼<br>(514)  | 18 x 18<br>(457 x 457)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 19<br>(9)   |
| 20         | 30<br>(762)  | 35½<br>(902)  | 11¼<br>(286) | 3¼<br>(95)   | 31¼<br>(794) | 20¼<br>(514)  | 18 x 18<br>(457 x 457)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 24<br>(11)  |
| 24         | 34<br>(864)  | 38¼<br>(972)  | 11<br>(279)  | 4<br>(102)   | 35¼<br>(895) | 24¼<br>(622)  | 24 x 24<br>(610 x 610)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 29<br>(13)  |
| 30         | 40<br>(1016) | 48<br>(1219)  | 18¼<br>(476) | 5¼<br>(138)  | -            | 30¼<br>(775)  | 30 x 30<br>(762 x 762)   | 0.064<br>(1.6) | 0.064<br>(1.6)   | 35<br>(16)  |
| 36         | 46<br>(1168) | 56¼<br>(1441) | 21¼<br>(540) | 10<br>(254)  | -            | 36¼<br>(927)  | 36 x 36<br>(914 x 914)   | 0.064<br>(1.6) | 0.080<br>(2.0)   | 45<br>(20)  |
| 42         | 52<br>(1321) | 63¼<br>(1607) | 24¼<br>(616) | 11¼<br>(286) | -            | 42¼<br>(1089) | 42 x 42<br>(1067 x 1067) | 0.064<br>(1.6) | 0.080<br>(2.0)   | 60<br>(27)  |
| 48         | 58<br>(1473) | 72<br>(1829)  | 26¼<br>(667) | 11¼<br>(286) | -            | 48¼<br>(1232) | 48 x 48<br>(1219 x 1219) | 0.064<br>(1.6) | 0.080<br>(2.0)   | 80<br>(36)  |

All dimensions are in inches (millimeters) and the weight in pounds (kilograms). NOTE: Sizes GRS-8 through 24 have a one-piece cover and shroud. Access is gained through the removal of screws. Sizes GRS-30 through 48 have a removable cover, separate from the shroud, to facilitate maintenance and servicing of dampers.

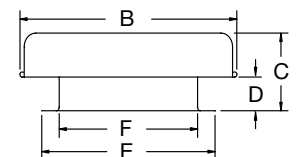
### GRSI/GRSR Sizes 8 - 24



### GRSI/GRSR - Sizes 30 - 48



### GRSF - Sizes 8 - 24 with Optional Flashing Flange



## Performance

Performance data for these units was obtained through actual testing. The information is presented in capacity versus total pressure drop through the GRS. Total pressure drop includes the static and velocity pressure drops. To find the static drop alone, use the following equations.

$$\text{Throat Velocity} = \left[ \frac{\text{CFM}}{\text{Throat Area}} \right]$$

$$\text{Static Pressure} = \left[ \text{Total Pressure} \right] - \left[ \text{Velocity Pressure} \right]$$

$$\text{Velocity Pressure (in. wg)*} = \left[ \frac{\text{Throat Velocity}}{4008.6} \right]^2$$

\*1 inch wg = 249 Pa

The data is presented for both discharge and intake units. The intake velocity of the intake unit should not exceed 600 feet per minute. Above this velocity, airborne particles may be carried into the building. The table below displays the maximum recommended values for the respective intake units. In areas where snow depths may be a problem, 12 inch (305 mm) or higher curbs are recommended.

|                   |                           | Volume (CFM) |                                |                              |      |      |      |       |       |       |       | Recommended Maximum Intake Capacities  |                 |      |
|-------------------|---------------------------|--------------|--------------------------------|------------------------------|------|------|------|-------|-------|-------|-------|--|-----------------|------|
|                   |                           | GRSI Size    | Throat Area (ft <sup>2</sup> ) | Total Pressure Drop (in. wg) |      |      |      |       |       |       |       | Intake Area (ft <sup>2</sup> )   | Max. CFM Intake |      |
|                   |                           |              |                                | 0.04                         | 0.06 | 0.08 | 0.10 | 0.15  | 0.20  | 0.25  | 0.30  |  |                 | 0.35 |
| <b>Model GRSI</b> | <b>Intake Performance</b> | 8            | 0.37                           | 178                          | 218  | 252  | 282  | 345   | 398   | 445   | 488   | 527  | 1.30            | 780  |
|                   |                           | 10           | 0.57                           | 279                          | 342  | 395  | 442  | 541   | 624   | 698   | 765   | 826  | 1.72            | 1032 |
|                   |                           | 12           | 0.82                           | 400                          | 490  | 566  | 633  | 775   | 895   | 1001  | 1097  | 1184   | 2.52            | 1512 |
|                   |                           | 15           | 1.12                           | 553                          | 677  | 782  | 874  | 1071  | 1237  | 1383  | 1515  | 1636   | 2.57            | 1542 |
|                   |                           | 16           | 1.45                           | 742                          | 908  | 1049 | 1173 | 1436  | 1658  | 1854  | 2031  | 2194   | 3.02            | 1812 |
|                   |                           | 18           | 1.83                           | 901                          | 1104 | 1274 | 1425 | 1745  | 2015  | 2253  | 2468  | 2665   | 3.42            | 2052 |
|                   |                           | 20           | 2.25                           | 1096                         | 1343 | 1550 | 1733 | 2123  | 2452  | 2741  | 3002  | 3243   | 4.43            | 2658 |
|                   |                           | 24           | 3.24                           | 1542                         | 1888 | 2180 | 2438 | 2985  | 3447  | 3854  | 4222  | 4560   | 4.95            | 2970 |
|                   |                           | 30           | 5.03                           | 2013                         | 2465 | 2847 | 3183 | 3898  | 4501  | 5032  | 5512  | 5954   | 7.49            | 4496 |
|                   |                           | 36           | 7.29                           | 2921                         | 3577 | 4130 | 4618 | 5656  | 6531  | 7301  | 7998  | 8639   | 10.2            | 6111 |
|                   |                           | 42           | 9.77                           | 3911                         | 4791 | 5532 | 6185 | 7574  | 8746  | 9779  | 10712 | 11570  | 12.0            | 7159 |
|                   |                           | 48           | 12.8                           | 5139                         | 6294 | 7268 | 8126 | 9952  | 11491 | 12848 | 14074 | 15201  | 15.5            | 9286 |
| <b>Model GRSR</b> | <b>Relief Performance</b> | GRSR Size    | Throat Area (ft <sup>2</sup> ) | Total Pressure Drop (in. wg) |      |      |      |       |       |       |       | Table is based on 600 ft/min. maximum intake velocity. Above these values (numbers in gray), provisions should be made to contain incoming moisture. |                 |      |
|                   |                           |              |                                | 0.04                         | 0.06 | 0.08 | 0.10 | 0.15  | 0.20  | 0.25  | 0.30  |  |                 | 0.35 |
|                   |                           | 8            | 0.37                           | 231                          | 282  | 326  | 365  | 446   | 516   | 576   | 631   |  |                 | 682  |
|                   |                           | 10           | 0.57                           | 331                          | 406  | 468  | 524  | 641   | 741   | 828   | 907   |  |                 | 980  |
|                   |                           | 12           | 0.82                           | 468                          | 573  | 662  | 740  | 907   | 1047  | 1171  | 1282  |  |                 | 1385 |
|                   |                           | 15           | 1.12                           | 663                          | 811  | 937  | 1048 | 1283  | 1481  | 1656  | 1814  |  |                 | 1960 |
|                   |                           | 16           | 1.45                           | 870                          | 1065 | 1230 | 1375 | 1685  | 1945  | 2175  | 2382  |  |                 | 2573 |
|                   |                           | 18           | 1.83                           | 1060                         | 1298 | 1499 | 1676 | 2052  | 2370  | 2649  | 2902  |  |                 | 3135 |
|                   |                           | 20           | 2.25                           | 1284                         | 1572 | 1815 | 2029 | 2486  | 2870  | 3209  | 3515  |  |                 | 3797 |
|                   |                           | 24           | 3.24                           | 1879                         | 2301 | 2657 | 2971 | 3638  | 4201  | 4697  | 5145  |  |                 | 5558 |
|                   |                           | 30           | 5.03                           | 2281                         | 2794 | 3226 | 3607 | 4418  | 5101  | 5703  | 6247  | 6748   |                 |      |
|                   |                           | 36           | 7.29                           | 3279                         | 4016 | 4637 | 5184 | 6349  | 7331  | 8197  | 8979  | 9699   |                 |      |
|                   |                           | 42           | 9.77                           | 4672                         | 5722 | 6607 | 7387 | 9047  | 10447 | 11680 | 12795 | 13820  |                 |      |
|                   |                           | 48           | 12.8                           | 6211                         | 7607 | 8783 | 9820 | 12027 | 13888 | 15527 | 17009 | 18372  |                 |      |

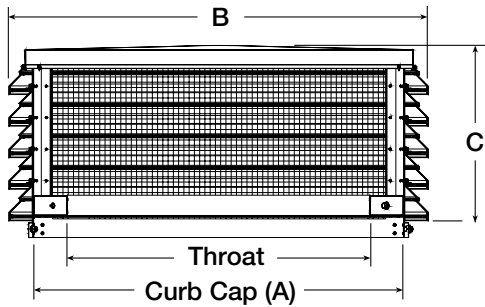
# Louvered Penthouse Models WIH/WRH



Greenheck designs penthouse units for use in gravity intake or relief applications where aesthetics are important.

- Clean horizontal lines blend perfectly with modern architecture.
- The unique louver design offers a low pressure drop, low hood height, and maintains a maximum weather resistance.
- All-aluminum construction assures lasting durability and appearance.
- The removable cover is equipped with insulation to prevent condensation.

## DIMENSIONAL DRAWING FOR CHARTS



The flexible design of WIH (intake) and WRH (relief) models allow for shipment in pre-assembled sections. These sections are easy to assemble on the jobsite without special tools. All required fasteners and complete assembly instructions are shipped with each unit.

Options include a variety of bird and insect screens, dampers, roof curbs, special finishes and factory assembled based on shipping limitations.

Use these tables for specific product dimensions

| Dimensional & Performance Data |                         |         |         |        |                   | Intake (WIH) Volume (CFM)  |      |      |      |      |      | Relief (WRH) Volume (CFM)     |      |      |      |      |      |                               |
|--------------------------------|-------------------------|---------|---------|--------|-------------------|----------------------------|------|------|------|------|------|-------------------------------|------|------|------|------|------|-------------------------------|
|                                |                         |         |         |        |                   | Dimensions (inches)        |      |      |      |      |      | Total Pressure Drop (in. wg*) |      |      |      |      |      | Total Pressure Drop (in. wg*) |
| Throat                         | Area (ft <sup>2</sup> ) | A       | B       | C      | Number of Louvers | .008                       | .029 | .045 | .065 | .088 | .115 | .025                          | .055 | .075 | .098 | .125 | .154 | .221                          |
|                                |                         |         |         |        |                   | THROAT VELOCITY (ft./min.) |      |      |      |      |      | THROAT VELOCITY (ft./min.)    |      |      |      |      |      |                               |
|                                |                         |         |         |        |                   | 200                        | 400  | 500  | 600  | 700  | 800  | 400                           | 600  | 700  | 800  | 900  | 1000 | 1200                          |
| 12 x 12                        | 1.00                    | 20 x 20 | 26 x 26 | 12 1/4 | 3                 | 200                        | 400  | 500  | 600  | 700  | 800  | 400                           | 600  | 700  | 800  | 900  | 1000 | 1200                          |
| 12 x 14                        | 1.20                    | 20 x 22 | 26 x 28 | 12 1/4 | 3                 | 240                        | 480  | 600  | 720  | 840  | 960  | 480                           | 720  | 840  | 960  | 1080 | 1200 | 1440                          |
| 12 x 16                        | 1.30                    | 20 x 24 | 26 x 30 | 12 1/4 | 3                 | 260                        | 520  | 650  | 780  | 910  | 1040 | 520                           | 780  | 910  | 1040 | 1170 | 1300 | 1560                          |
| 12 x 18                        | 1.50                    | 20 x 26 | 26 x 32 | 12 1/4 | 3                 | 300                        | 600  | 750  | 900  | 1050 | 1200 | 600                           | 900  | 1050 | 1200 | 1350 | 1500 | 1800                          |
| 12 x 22                        | 1.80                    | 20 x 30 | 26 x 36 | 12 1/4 | 3                 | 360                        | 720  | 900  | 1080 | 1260 | 1440 | 720                           | 1080 | 1260 | 1440 | 1620 | 1800 | 2160                          |
| 12 x 24                        | 2.00                    | 20 x 32 | 26 x 38 | 12 1/4 | 3                 | 400                        | 800  | 1000 | 1200 | 1400 | 1600 | 800                           | 1200 | 1400 | 1600 | 1800 | 2000 | 2400                          |
| 14 x 14                        | 1.36                    | 22 x 22 | 28 x 28 | 12 1/4 | 3                 | 272                        | 544  | 680  | 816  | 952  | 1088 | 544                           | 816  | 952  | 1088 | 1224 | 1360 | 1632                          |
| 14 x 16                        | 1.55                    | 22 x 24 | 28 x 30 | 12 1/4 | 3                 | 310                        | 620  | 775  | 930  | 1085 | 1240 | 620                           | 930  | 1085 | 1240 | 1395 | 1550 | 1860                          |
| 14 x 18                        | 1.75                    | 22 x 26 | 28 x 32 | 12 1/4 | 3                 | 350                        | 700  | 875  | 1050 | 1225 | 1400 | 700                           | 1050 | 1225 | 1400 | 1575 | 1750 | 2100                          |
| 14 x 20                        | 1.95                    | 22 x 28 | 28 x 34 | 12 1/4 | 3                 | 390                        | 780  | 975  | 1170 | 1365 | 1560 | 780                           | 1170 | 1365 | 1560 | 1755 | 1950 | 2340                          |
| 14 x 24                        | 2.34                    | 22 x 32 | 28 x 38 | 12 1/4 | 3                 | 468                        | 936  | 1170 | 1404 | 1638 | 1872 | 936                           | 1404 | 1638 | 1872 | 2106 | 2340 | 2808                          |
| 14 x 28                        | 2.70                    | 22 x 36 | 28 x 42 | 12 1/4 | 3                 | 540                        | 1080 | 1350 | 1620 | 1890 | 2160 | 1080                          | 1620 | 1890 | 2160 | 2430 | 2700 | 3240                          |
| 16 x 16                        | 1.78                    | 24 x 24 | 30 x 30 | 12 1/4 | 3                 | 356                        | 712  | 890  | 1068 | 1246 | 1424 | 712                           | 1068 | 1246 | 1424 | 1602 | 1780 | 2136                          |
| 16 x 20                        | 2.22                    | 24 x 28 | 30 x 34 | 12 1/4 | 3                 | 444                        | 888  | 1110 | 1332 | 1554 | 1776 | 888                           | 1332 | 1554 | 1776 | 1998 | 2220 | 2664                          |
| 16 x 24                        | 2.68                    | 24 x 30 | 30 x 36 | 12 1/4 | 3                 | 536                        | 1072 | 1340 | 1608 | 1876 | 2144 | 1072                          | 1608 | 1876 | 2144 | 2412 | 2680 | 3216                          |
| 16 x 28                        | 3.11                    | 24 x 36 | 30 x 42 | 12 1/4 | 3                 | 622                        | 1244 | 1555 | 1866 | 2177 | 2488 | 1244                          | 1866 | 2177 | 2488 | 2799 | 3110 | 3732                          |
| 16 x 30                        | 3.33                    | 24 x 38 | 30 x 44 | 12 1/4 | 3                 | 666                        | 1332 | 1665 | 1998 | 2331 | 2664 | 1328                          | 1992 | 2324 | 2656 | 2988 | 3320 | 3984                          |
| 16 x 32                        | 3.55                    | 24 x 40 | 30 x 46 | 12 1/4 | 3                 | 710                        | 1420 | 1775 | 2130 | 2485 | 2840 | 1420                          | 2130 | 2485 | 2840 | 3195 | 3550 | 4260                          |
| 18 x 18                        | 2.25                    | 26 x 26 | 32 x 32 | 12 1/4 | 3                 | 450                        | 900  | 1125 | 1350 | 1575 | 1800 | 900                           | 1350 | 1575 | 1800 | 2025 | 2250 | 2700                          |
| 18 x 24                        | 3.00                    | 26 x 32 | 32 x 38 | 12 1/4 | 3                 | 600                        | 1200 | 1500 | 1800 | 2100 | 2400 | 1200                          | 1800 | 2100 | 2400 | 2700 | 3000 | 3600                          |
| 18 x 26                        | 3.25                    | 26 x 34 | 32 x 40 | 12 1/4 | 3                 | 650                        | 1300 | 1625 | 1950 | 2275 | 2600 | 1300                          | 1950 | 2275 | 2600 | 2925 | 3250 | 3900                          |
| 18 x 30                        | 3.74                    | 26 x 38 | 32 x 44 | 12 1/4 | 4                 | 748                        | 1496 | 1870 | 2244 | 2618 | 2992 | 1496                          | 2004 | 2618 | 2992 | 3366 | 3740 | 4488                          |
| 18 x 32                        | 4.00                    | 26 x 40 | 32 x 46 | 12 1/4 | 4                 | 800                        | 1600 | 2000 | 2400 | 2800 | 3200 | 1600                          | 2400 | 2800 | 3200 | 3600 | 4000 | 4800                          |
| 18 x 36                        | 4.50                    | 26 x 44 | 32 x 50 | 16     | 4                 | 900                        | 1800 | 2250 | 2700 | 3150 | 3600 | 1800                          | 2700 | 3150 | 3600 | 4050 | 4500 | 5400                          |
| 22 x 22                        | 3.37                    | 30 x 30 | 36 x 36 | 16     | 4                 | 674                        | 1348 | 1685 | 2022 | 2359 | 2696 | 1348                          | 2022 | 2359 | 2696 | 3033 | 3370 | 4044                          |
| 22 x 26                        | 3.97                    | 30 x 34 | 36 x 40 | 16     | 4                 | 794                        | 1588 | 1985 | 2382 | 2779 | 3176 | 1588                          | 2382 | 2779 | 3176 | 3573 | 3970 | 4764                          |
| 22 x 30                        | 4.60                    | 30 x 38 | 36 x 44 | 16     | 4                 | 920                        | 1840 | 2300 | 2760 | 3220 | 3680 | 1840                          | 2760 | 3220 | 3680 | 4140 | 4600 | 5520                          |
| 22 x 36                        | 5.50                    | 30 x 44 | 36 x 50 | 16     | 5                 | 1100                       | 2200 | 2750 | 3300 | 3850 | 4400 | 2200                          | 3300 | 3850 | 4400 | 4950 | 5500 | 6600                          |
| 22 x 40                        | 6.10                    | 30 x 48 | 36 x 54 | 16     | 5                 | 1220                       | 2440 | 3050 | 3660 | 4270 | 4880 | 2440                          | 3660 | 4270 | 4880 | 5490 | 6100 | 7320                          |
| 22 x 44                        | 6.73                    | 30 x 52 | 36 x 58 | 16     | 5                 | 1346                       | 2692 | 3365 | 4038 | 4711 | 5384 | 2692                          | 4038 | 4711 | 5384 | 6057 | 6730 | 8076                          |
| 24 x 24                        | 4.00                    | 32 x 32 | 38 x 38 | 16     | 4                 | 800                        | 1600 | 2000 | 2400 | 2800 | 3200 | 1600                          | 2400 | 2800 | 3200 | 3600 | 4000 | 4800                          |
| 24 x 30                        | 5.00                    | 32 x 38 | 38 x 44 | 16     | 5                 | 1000                       | 2000 | 2500 | 3000 | 3500 | 4000 | 2000                          | 3000 | 3500 | 4000 | 4500 | 5000 | 6000                          |
| 24 x 36                        | 6.00                    | 32 x 44 | 38 x 50 | 16     | 5                 | 1200                       | 2400 | 3000 | 3600 | 4200 | 4800 | 2400                          | 3600 | 4200 | 4800 | 5400 | 6000 | 7200                          |
| 24 x 40                        | 6.67                    | 32 x 48 | 38 x 54 | 16     | 5                 | 1334                       | 2668 | 3335 | 4002 | 4669 | 5336 | 2668                          | 4002 | 4669 | 5336 | 6003 | 6670 | 8004                          |
| 24 x 44                        | 7.35                    | 32 x 52 | 38 x 58 | 19 1/4 | 5                 | 1470                       | 2940 | 3675 | 4410 | 5145 | 5880 | 2940                          | 4410 | 5145 | 5880 | 6615 | 7350 | 8820                          |
| 24 x 48                        | 8.00                    | 32 x 56 | 38 x 62 | 19 1/4 | 5                 | 1600                       | 3200 | 4000 | 4800 | 5600 | 6400 | 3200                          | 4800 | 5600 | 6400 | 7200 | 8000 | 9600                          |

\*Total pressure drop includes velocity pressure losses at outlet of throat, but does not include birdscreen loss. Increase the total pressure drop with a 1.15 multiplier to allow for birdscreen pressure drop.

# Louvered Penthouse Models WIH/WRH

## Construction Features

### Weather Shield

The interior vertical edge of the curb cap forms the throat and weather shield. Each corner is shielded to prevent leakage.



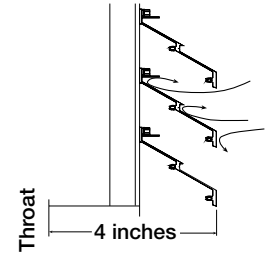
The louvers are mounted 4 inches from the roof opening for added weather protection.

### Multi-section hood covers

The multi-sect covers allow for easy access inside to perform maintenance of components such as insect screens, birdscreens, and dampers.

### Weather-Resistant Louver Blades

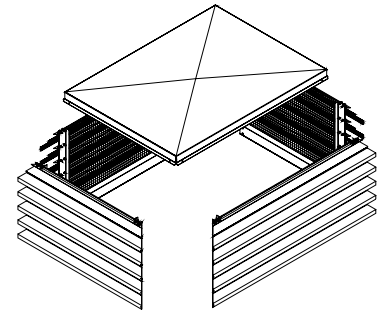
Each unit features weather-resistant aluminum louver blades with mitered corners. The sturdy extruded aluminum louver blade has a material thickness of 0.080 inches.



### Assembled Sides and Cover

The unit has four side sections and a reinforced cover. A factory-assembled side consists of the curb cap, vertical supports, and the number of louvers required for the specified height.

The sides are joined at the four corners by stainless steel screws in each louver. These screws are countersunk to maintain the appearance of the mitered corner. The cover is securely fastened to the unit by stainless steel fasteners.



Note: Please consult factory for other sizes

| Dimensional & Performance Data |                         |          |          |        |                   | Intake (WIH) Volume (CFM)     |       |       |       |       |       | Relief (WRH) Volume (CFM)     |       |       |       |       |       |       |
|--------------------------------|-------------------------|----------|----------|--------|-------------------|-------------------------------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|
| Dimensions (inches)            |                         |          |          |        |                   | Total Pressure Drop (in. wg*) |       |       |       |       |       | Total Pressure Drop (in. wg*) |       |       |       |       |       |       |
|                                |                         |          |          |        |                   | .008                          | .029  | .045  | .065  | .088  | .115  | .025                          | .055  | .075  | .098  | .125  | .154  | .221  |
|                                |                         |          |          |        |                   | THROAT VELOCITY (ft./min.)    |       |       |       |       |       | THROAT VELOCITY (ft./min.)    |       |       |       |       |       |       |
| Throat                         | Area (ft <sup>2</sup> ) | A        | B        | C      | Number of Louvers | 200                           | 400   | 500   | 600   | 700   | 800   | 400                           | 600   | 700   | 800   | 900   | 1000  | 1200  |
| 28 x 28                        | 5.44                    | 36 x 36  | 42 x 42  | 19 3/4 | 5                 | 1088                          | 2176  | 2720  | 3264  | 3808  | 4352  | 2176                          | 3264  | 3808  | 4352  | 4896  | 5440  | 6528  |
| 28 x 36                        | 7.00                    | 36 x 44  | 42 x 50  | 19 3/4 | 5                 | 1400                          | 2800  | 3500  | 4200  | 4900  | 5600  | 2800                          | 4200  | 4900  | 5600  | 6300  | 7000  | 8400  |
| 28 x 40                        | 7.80                    | 36 x 48  | 42 x 54  | 19 3/4 | 5                 | 1560                          | 3900  | 4680  | 5460  | 6240  | 7020  | 3120                          | 4680  | 5460  | 6240  | 7020  | 7800  | 9360  |
| 28 x 44                        | 8.55                    | 36 x 52  | 42 x 58  | 19 3/4 | 5                 | 1710                          | 3420  | 4275  | 5130  | 5985  | 6840  | 3420                          | 5130  | 5985  | 6840  | 7695  | 8550  | 10260 |
| 28 x 50                        | 9.75                    | 36 x 58  | 42 x 64  | 19 3/4 | 5                 | 1950                          | 3900  | 4875  | 5850  | 6825  | 7800  | 3900                          | 5850  | 6825  | 7800  | 8775  | 9750  | 11700 |
| 28 x 56                        | 10.9                    | 36 x 64  | 42 x 70  | 23 1/2 | 6                 | 2180                          | 4360  | 5450  | 6540  | 7630  | 8720  | 4360                          | 6540  | 7630  | 8720  | 9810  | 10900 | 13080 |
| 32 x 32                        | 7.10                    | 40 x 40  | 46 x 46  | 19 3/4 | 5                 | 1420                          | 2840  | 3550  | 4260  | 4970  | 5680  | 2840                          | 4260  | 4970  | 5680  | 6390  | 7100  | 8520  |
| 32 x 36                        | 8.00                    | 40 x 44  | 46 x 50  | 19 3/4 | 5                 | 1600                          | 3200  | 4000  | 4800  | 5600  | 6400  | 3200                          | 4800  | 5600  | 6400  | 7200  | 8000  | 9600  |
| 32 x 40                        | 8.90                    | 40 x 48  | 46 x 54  | 19 3/4 | 5                 | 1780                          | 3560  | 4450  | 5340  | 6230  | 7120  | 3560                          | 5340  | 6230  | 7120  | 8010  | 8900  | 10680 |
| 32 x 48                        | 10.7                    | 40 x 56  | 46 x 62  | 23 1/2 | 6                 | 2140                          | 4280  | 5350  | 6420  | 7490  | 8560  | 4280                          | 6420  | 7490  | 8560  | 9630  | 10700 | 12840 |
| 32 x 54                        | 12.0                    | 40 x 62  | 46 x 68  | 23 1/2 | 6                 | 2400                          | 4800  | 6000  | 7200  | 8400  | 9600  | 4800                          | 7200  | 8400  | 9600  | 10800 | 12000 | 14400 |
| 32 x 64                        | 14.2                    | 40 x 72  | 46 x 78  | 27 1/4 | 7                 | 2840                          | 5680  | 7100  | 8520  | 9940  | 11360 | 5680                          | 8520  | 9940  | 11360 | 12780 | 14200 | 17040 |
| 36 x 36                        | 9.00                    | 44 x 44  | 50 x 50  | 19 3/4 | 5                 | 1800                          | 3600  | 4500  | 5400  | 6300  | 7200  | 3600                          | 5400  | 6300  | 7200  | 8100  | 9000  | 10800 |
| 36 x 40                        | 10.0                    | 44 x 48  | 50 x 54  | 23 1/2 | 6                 | 2000                          | 4000  | 5000  | 6000  | 7000  | 8000  | 4000                          | 6000  | 7000  | 8000  | 9000  | 10000 | 12000 |
| 36 x 48                        | 12.0                    | 44 x 56  | 50 x 62  | 23 1/2 | 6                 | 2400                          | 4800  | 6000  | 7200  | 8400  | 9600  | 4800                          | 7200  | 8400  | 9600  | 10800 | 12000 | 14400 |
| 36 x 54                        | 13.5                    | 44 x 62  | 50 x 68  | 23 1/2 | 6                 | 2700                          | 5400  | 6750  | 8100  | 9950  | 10800 | 5400                          | 8100  | 9450  | 10800 | 12150 | 13500 | 16200 |
| 36 x 60                        | 15.0                    | 44 x 68  | 50 x 74  | 27 1/4 | 6                 | 3000                          | 6000  | 7500  | 9000  | 10500 | 12000 | 6000                          | 9000  | 10500 | 12000 | 13500 | 15000 | 18000 |
| 36 x 72                        | 18.0                    | 44 x 80  | 50 x 86  | 27 1/4 | 7                 | 3600                          | 7200  | 9000  | 10800 | 12600 | 14400 | 7200                          | 10800 | 12600 | 14400 | 16200 | 18000 | 21600 |
| 42 x 42                        | 12.3                    | 50 x 50  | 56 x 56  | 23 1/2 | 6                 | 2450                          | 4900  | 6125  | 7350  | 8575  | 9800  | 4900                          | 7350  | 8575  | 9800  | 11025 | 12250 | 14700 |
| 42 x 48                        | 14.0                    | 50 x 56  | 56 x 62  | 27 1/4 | 7                 | 2800                          | 5600  | 7000  | 8400  | 9800  | 11200 | 5600                          | 8400  | 9800  | 11200 | 12600 | 14100 | 16800 |
| 42 x 54                        | 15.8                    | 50 x 62  | 56 x 68  | 27 1/4 | 7                 | 3150                          | 6300  | 7875  | 9450  | 11025 | 12600 | 6300                          | 9450  | 11025 | 12600 | 14175 | 15750 | 18900 |
| 42 x 60                        | 17.5                    | 50 x 68  | 56 x 74  | 31     | 8                 | 3500                          | 7000  | 8750  | 10500 | 12250 | 14000 | 7000                          | 10500 | 12250 | 14000 | 15750 | 17500 | 21000 |
| 42 x 72                        | 21.0                    | 50 x 80  | 56 x 86  | 31     | 8                 | 4200                          | 8400  | 10500 | 12600 | 14700 | 16800 | 8400                          | 12600 | 14700 | 16800 | 18900 | 21000 | 25200 |
| 42 x 84                        | 24.5                    | 50 x 92  | 56 x 98  | 34 3/4 | 9                 | 4900                          | 9800  | 12250 | 14700 | 17150 | 19600 | 9800                          | 14700 | 17150 | 19600 | 22050 | 24500 | 29400 |
| 48 x 48                        | 16.0                    | 56 x 56  | 62 x 62  | 27 1/4 | 7                 | 3200                          | 6400  | 8000  | 9600  | 11200 | 12800 | 6400                          | 9600  | 11200 | 12800 | 14400 | 16000 | 19200 |
| 48 x 54                        | 18.0                    | 56 x 62  | 62 x 68  | 27 1/4 | 8                 | 3600                          | 7200  | 9000  | 10800 | 12600 | 14400 | 7200                          | 10800 | 12600 | 14400 | 16200 | 18000 | 21600 |
| 48 x 64                        | 21.4                    | 56 x 72  | 62 x 78  | 31     | 8                 | 4280                          | 8560  | 10700 | 12840 | 14980 | 17120 | 8560                          | 12840 | 14980 | 17120 | 19260 | 21400 | 25680 |
| 48 x 72                        | 24.0                    | 56 x 80  | 62 x 86  | 34 3/4 | 9                 | 4800                          | 9600  | 12000 | 14400 | 16800 | 19200 | 9600                          | 14400 | 16800 | 19200 | 21600 | 24000 | 28800 |
| 48 x 84                        | 28.0                    | 56 x 92  | 62 x 98  | 34 3/4 | 10                | 5600                          | 11200 | 14000 | 16800 | 19600 | 22400 | 11200                         | 16800 | 19600 | 22400 | 25200 | 28000 | 33600 |
| 48 x 96                        | 32.0                    | 56 x 104 | 62 x 110 | 38 1/2 | 10                | 6400                          | 12800 | 16000 | 19200 | 22400 | 25600 | 12800                         | 19200 | 22400 | 25600 | 28800 | 32000 | 38400 |
| 54 x 54                        | 20.3                    | 62 x 62  | 68 x 68  | 31     | 8                 | 4050                          | 8100  | 10125 | 12150 | 14175 | 16200 | 8100                          | 12150 | 14175 | 16200 | 18225 | 20250 | 24300 |
| 54 x 60                        | 22.0                    | 62 x 68  | 68 x 74  | 31     | 9                 | 4400                          | 8800  | 11000 | 13200 | 15400 | 17600 | 8800                          | 13200 | 15400 | 17600 | 19800 | 22000 | 26400 |
| 54 x 72                        | 27.0                    | 62 x 80  | 68 x 86  | 34 3/4 | 10                | 5400                          | 10800 | 13500 | 16200 | 18900 | 21600 | 10800                         | 16200 | 18900 | 21600 | 24300 | 27000 | 32400 |
| 54 x 84                        | 31.5                    | 62 x 92  | 68 x 98  | 38 1/2 | 10                | 6300                          | 12600 | 15750 | 18900 | 22050 | 25200 | 12600                         | 18900 | 22050 | 25200 | 28350 | 31500 | 37800 |
| 54 x 96                        | 36.0                    | 62 x 104 | 68 x 110 | 38 1/2 | 11                | 7200                          | 14400 | 18000 | 21600 | 25200 | 28800 | 14400                         | 21600 | 25200 | 28800 | 32400 | 36000 | 43200 |
| 60 x 108                       | 40.5                    | 62 x 116 | 68 x 122 | 42 1/2 | 11                | 8100                          | 16200 | 20250 | 24300 | 28350 | 32400 | 16200                         | 24300 | 28350 | 32400 | 36450 | 40500 | 48600 |
| 60 x 60                        | 25.0                    | 68 x 68  | 74 x 74  | 34 3/4 | 9                 | 5000                          | 10000 | 12500 | 15000 | 17500 | 20000 | 10000                         | 15000 | 17500 | 20000 | 22500 | 25000 | 30000 |
| 60 x 72                        | 30.0                    | 68 x 80  | 74 x 86  | 38 1/2 | 10                | 6000                          | 12000 | 15000 | 18000 | 21000 | 24000 | 12000                         | 18000 | 21000 | 24000 | 27000 | 30000 | 36000 |
| 60 x 84                        | 35.0                    | 68 x 92  | 74 x 98  | 42 1/2 | 11                | 7000                          | 14000 | 17500 | 21000 | 24500 | 28000 | 14000                         | 21000 | 24500 | 28000 | 31500 | 35000 | 42000 |
| 60 x 96                        | 40.0                    | 68 x 104 | 74 x 110 | 42 1/2 | 12                | 8000                          | 16000 | 20000 | 24000 | 28000 | 32000 | 16000                         | 24000 | 28000 | 32000 | 36000 | 40000 | 48000 |
| 60 x 108                       | 45.0                    | 68 x 116 | 74 x 122 | 46     | 13                | 9000                          | 18000 | 22500 | 27000 | 31500 | 36000 | 18000                         | 27000 | 31500 | 36000 | 40500 | 45000 | 54000 |
| 60 x 120                       | 50.0                    | 68 x 128 | 74 x 134 | 46     | 13                | 10000                         | 20000 | 25000 | 30000 | 35000 | 40000 | 20000                         | 30000 | 35000 | 40000 | 45000 | 50000 | 60000 |

## Fabra Hood - FGI/FGR



Gravity roof ventilators shall be constructed of heavy-gauge aluminum or galvanized steel as specified.

Hoods shall be constructed of precision-formed, arched panels with interlocking seams.

Bases shall be constructed so that the curb cap is 6 inches (152 mm) larger than the throat size.

Standard base height shall be 5 inches (127 mm) for most sizes. Optional 12-inch (305 mm) bases shall be furnished as specified for intake applications to restrict the entry of moisture and for all applications where rain and/or snow may accumulate on the roof deck.

Hood support members shall be constructed of galvanized steel and fastened so that the hood can be either removed completely from the base or hinged open.

Birdscreens constructed of 1/2-inch (13 mm) galvanized steel mesh shall be mounted horizontally across the intake/discharge area of the hood.

Gravity hoods shall be fabra hood model FGI for intake or model FGR for relief as manufactured by Greenheck Fan Corporation of Schofield, Wisconsin and/or in Rocklin, California, USA.

## Spun Aluminum Gravity Roof Ventilator - GRSI/GRSR/GRSF



Exterior construction shall be heavy-gauge aluminum windband with a rolled bead.

Curb cap shall be constructed of heavy-gauge aluminum and includes a one-piece spun venturi.

Curb cap shall be pre-punched for mounting.

Internal components shall be constructed of rigid galvanized steel and include birdscreen.

Gravity ventilator shall be models GRSI, GRSR or GRSF as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin, USA.



## Louvered Penthouse - WIH/WRH



Models WIH and WRH shall be low silhouette louvered penthouse units for intake or relief applications.

Construction shall be all aluminum to assure lasting durability and appearance.

Unit shall have a removable aluminum cover for internal access and shall be lined with fiberglass insulation to prevent condensation.

Cover shall be securely fastened to the unit by corrosion-resistant fasteners.

Birdscreen shall be constructed of 1/2-inch (13 mm) mesh securely mounted across intake/relief openings.

Units shall feature a weather-resistant 0.080-inch (2 mm) aluminum louver with mitered corners.

Louvers shall be mounted 4 inches (102 mm) from the throat for maximum weather protection.

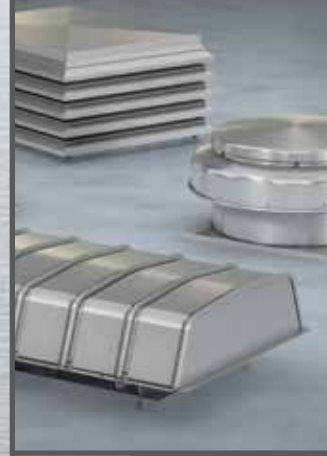
Louver design shall result in low pressure drops, low hood heights and maintain maximum weather resistance.

Louvered penthouses shall be models WIH or WRH shall be manufactured by Greenheck Fan Corporation, in Schofield, Wisconsin and/or in Rocklin, California, USA.

## Quick Delivery and Quick Build Program

Gravity models are available for shipment to your job site in less than 24 hours from our strategically located warehouses or available on our Quick Build program.

| Model | Size                     | Best Available Program |
|-------|--------------------------|------------------------|
| GRS   | 8 through 30             | In Stock               |
| GRSF  | 8, 10, 12                |                        |
| GRS   | 36 through 48            | 1 Day                  |
| GRSF  | 15 through 24            |                        |
| FGI   | 10 x 10 through 72 x 180 | 5 Days                 |
| FGR   | 10 x 10 through 72 x 180 |                        |



## Computer Aided Product Selection

All Greenheck products are supported by the industry's best product literature, electronic media and two product selection tools – CAPS®, our computer aided product selection software program and eCAPS®, our online selection tool. These programs will guide you from initial design through detailed submittals.



And, of course, you can always count on the personal service and expertise of our national and international representative organization. To locate your nearest Greenheck representative call 715-359-6171 or visit our website at [www.greenheck.com](http://www.greenheck.com)

## Building Value in Air

Greenheck delivers value to mechanical engineers by helping them solve virtually any air quality challenges their clients face with a comprehensive selection of

top quality, innovative air-related equipment. We offer extra value to contractors by providing easy-to-install, competitively priced, reliable products that arrive on time.

And building owners and occupants value the energy efficiency, low maintenance and quiet dependable operation they experience long after the construction project ends.

## Our Commitment

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*

Product warranties can be found online at [Greenheck.com](http://Greenheck.com), either on the specific product page or in the literature section of the website at [Greenheck.com/Resources/Library/Literature](http://Greenheck.com/Resources/Library/Literature).

