

# MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR<sup>2</sup> in lb.-ft.<sup>2</sup>. Tolerance: ±1/8"

| Size | No. of blades | Wheel weight | Wheel WR <sup>2</sup> | Bushing type | Shaft diameter | Bearings | Approximate bare fan weight |      |               |     |      |               | Housing gauge |
|------|---------------|--------------|-----------------------|--------------|----------------|----------|-----------------------------|------|---------------|-----|------|---------------|---------------|
|      |               |              |                       |              |                |          | 9-M                         | 9-R  | 9-S, 9-V, 9-D | 4-M | 4-R  | 4-S, 4-V, 4-D |               |
| 127  | 4             | 3.2          | 0.2                   | —            | 1              | A        | 121                         | 241  | 111           | 62  | 182  | 52            | 10            |
| 147  | 4             | 3.5          | 0.3                   | —            | 1              | A        | 130                         | 252  | 119           | 73  | 196  | 62            | 10            |
| 167  | 4             | 3.6          | 0.4                   | —            | 1              | A        | 165                         | 283  | 145           | 103 | 221  | 83            | 10            |
| 187  | 4             | 4.1          | 0.6                   | —            | 1              | A        | 176                         | 302  | 156           | 117 | 243  | 97            | 10            |
| 217  | 4             | 8.0          | 1.1                   | —            | 1              | A        | 212                         | 351  | 189           | 142 | 282  | 120           | 10            |
| 247  | 4             | 9.0          | 1.6                   | —            | 1              | A        | 296                         | 477  | 266           | 190 | 371  | 160           | 10            |
| 277  | 4             | 17.3         | 3.4                   | H            | 17/16          | A        | 329                         | 531  | 294           | 219 | 422  | 185           | 10            |
| 327  | 8             | 26.3         | 10                    | P1           | 17/16          | A        | 404                         | 669  | 362           | 281 | 546  | 239           | 10            |
| 367  | 8             | 44.5         | 19                    | Q1           | 11 1/16        | A        | 465                         | 757  | 418           | 338 | 630  | 292           | 10            |
| 427  | 8             | 61.5         | 36                    | Q1           | 1 15/16        | C        | 692                         | 1092 | 624           | 464 | 864  | 396           | 10            |
| 487  | 8             | 68.5         | 52                    | Q1           | 1 15/16        | C        | 748                         | 1202 | 673           | 525 | 978  | 450           | 10            |
| 547  | 8             | 115.5        | 102                   | Q1           | 2 3/16         | C        | 1070                        | 1754 | 966           | 860 | 1544 | 756           | 7             |
| 607  | 8             | 125.5        | 153                   | Q1           | 2 3/16         | C        | 1164                        | 1927 | 1048          | 965 | 1728 | 849           | 7             |

Bearing types: A—Link-Belt 200 Series. C—Link-Belt P300 Series. Wheel weight includes bushing. **nyb** reserves the right to substitute bearings of equal quality.

## MOTOR SIZE CAPABILITY

| Size | Arrangement 9   |                    | Arrangement 4   |                    |
|------|-----------------|--------------------|-----------------|--------------------|
|      | Maximum C-[N-W] | Maximum frame size | Maximum C-[N-W] | Maximum frame size |
| 127  | 13.9            | 145T               | 15.7            | 145T               |
| 147  | 13.9            | 182T               | 15.7            | 145T               |
| 167  | 13.9            | 184T               | 23.2            | 145T               |
| 187  | 13.9            | 184T               | 23.2            | 145T               |
| 217  | 13.9            | 184T               | 23.2            | 145T               |
| 247  | 19.7            | 213T               | 29.5            | 184T               |
| 277  | 19.7            | 213T               | 29.6            | 184T               |
| 327  | 19.7            | 215T               | 30.0            | 215T               |
| 367  | 19.7            | 215T               | 29.3            | 256T               |
| 427  | 27.7            | 254T               | 29.8            | 286T               |
| 487  | 27.7            | 256T               | 29.8            | 286T               |
| 547  | 29.9            | 256T               | 33.1            | 326T               |
| 607  | 29.9            | 256T               | N/A             | N/A                |

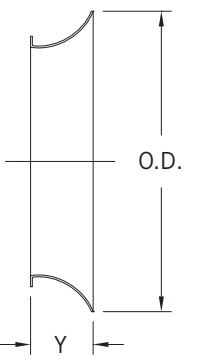
Arrangement 9 maximums are with or without weather cover.

## FAN FLANGE DIMENSIONS

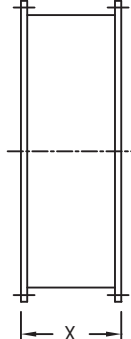
| Size | Flange gauge | Fan ID | Bolting circle |        |        | Flange OD | Flange holes* |              |
|------|--------------|--------|----------------|--------|--------|-----------|---------------|--------------|
|      |              |        | Min.           | Center | Max.   |           | No.           | Size†        |
| 127  | 10           | 12 1/4 | —              | 14     | —      | 14 7/8    | 8             | 7/16         |
| 147  | 10           | 14 1/4 | —              | 16     | —      | 16 7/8    | 8             | 7/16         |
| 167  | 10           | 16 1/4 | —              | 18     | —      | 18 7/8    | 8             | 7/16         |
| 187  | 10           | 18 1/4 | 19 5/8         | 20     | 20 3/8 | 21 1/4    | 8             | 7/16 x 13/16 |
| 217  | 10           | 21 1/4 | 22 5/8         | 23     | 23 3/8 | 24 1/4    | 8             | 7/16 x 13/16 |
| 247  | 10           | 24 3/8 | 25 3/4         | 26 1/8 | 26 1/2 | 27 3/8    | 8             | 7/16 x 13/16 |
| 277  | 10           | 27 3/8 | 28 3/4         | 29 1/8 | 29 1/2 | 30 3/8    | 8             | 7/16 x 13/16 |
| 327  | 10           | 32 1/2 | 33 7/8         | 34 1/4 | 34 5/8 | 35 1/2    | 16            | 7/16 x 13/16 |
| 367  | 10           | 36 1/2 | 38             | 38 3/8 | 38 3/4 | 40 1/4    | 16            | 7/16 x 13/16 |
| 427  | 1/4          | 42 3/4 | 44 3/4         | 45     | 45 5/8 | 47 1/8    | 16            | 9/16 x 1     |
| 487  | 1/4          | 48 3/4 | 50 3/4         | 51     | 51 5/8 | 53 1/8    | 16            | 9/16 x 1     |
| 547  | 1/4          | 55     | 57             | 57 3/8 | 57 7/8 | 59 1/2    | 16            | 9/16 x 1     |
| 607  | 1/4          | 61     | 63             | 63 3/8 | 63 7/8 | 65 1/2    | 16            | 9/16 x 1     |

\*Holes spaced equally, straddling centerline. †Sizes 18-60 have slotted holes.

| INLET BELL DIMENSIONS | Size   | Y      | O.D.   |
|-----------------------|--------|--------|--------|
|                       | 127    | 2 1/8  | 16 1/4 |
| 147                   | 2 1/2  | 19     |        |
| 167                   | 3      | 21 3/4 |        |
| 187                   | 3 1/4  | 24 1/4 |        |
| 217                   | 3 3/4  | 28 1/4 |        |
| 247                   | 4 1/8  | 32 1/8 |        |
| 277                   | 4 3/4  | 36 3/8 |        |
| 327                   | 5 3/4  | 43 1/2 |        |
| 367                   | 6 1/4  | 48 1/2 |        |
| 427                   | 7 1/4  | 56 3/4 |        |
| 487                   | 8 1/4  | 64 3/4 |        |
| 547                   | 9 1/4  | 73     |        |
| 607                   | 10 1/4 | 81     |        |



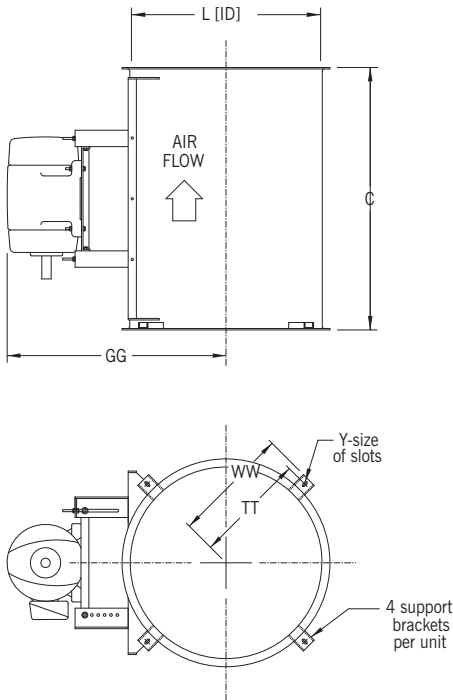
| INLET VANE DAMPER DIMENSIONS | Size | X |
|------------------------------|------|---|
|                              | 127  | 9 |
| 147                          | 9    |   |
| 167                          | 9    |   |
| 187                          | 10   |   |
| 217                          | 10   |   |
| 247                          | 10   |   |
| 277                          | 10   |   |
| 327                          | 10   |   |
| 367                          | 10   |   |
| 427                          | 11   |   |
| 487                          | 11   |   |
| 547                          | 11   |   |
| 607                          | 12   |   |



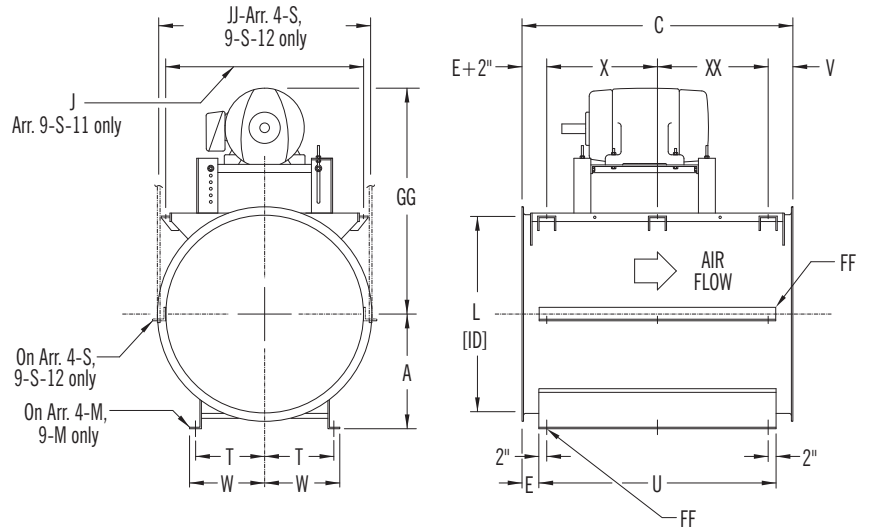
# DIMENSIONS

Dimensions should not be used for construction unless certified. See page 6 for available mounting positions. Note motor size capability on page 14. Tolerance:  $\pm 1/8''$ .

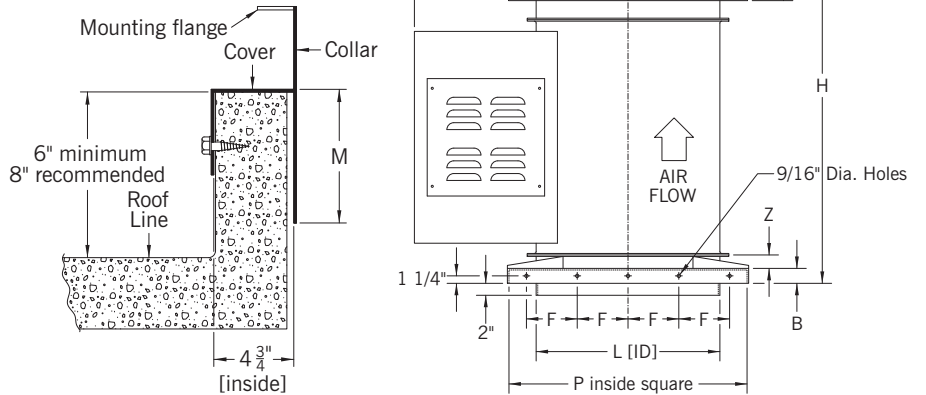
## ARRANGEMENTS 4-V AND 9-V



## ARRANGEMENTS 4-M AND 9-M, 4-S AND 9-S, 4-D AND 9-D



## ARRANGEMENTS 4-R AND 9-R [roof-mounted] with exhaust-type stack hood.



## DIMENSIONS [INCHES]

| Size | A                              | B                             | C  | E                             | F                              | FF*                            | G                              | GG [max.]                      | H                               | J                              | JJ                             | L                              | M                             | P                              | R  | S                              | T                              | TT                             | U                              | V                              | W                              | WW                             | Y   |
|------|--------------------------------|-------------------------------|----|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|--------------------------------|----|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---|
| 127  | 8 <sup>3</sup> / <sub>4</sub>  | 2 <sup>1</sup> / <sub>2</sub> | 25 | 3 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>  | 9 <sup>1</sup> / <sub>16</sub> | 25 <sup>1</sup> / <sub>4</sub> | 23 <sup>5</sup> / <sub>8</sub> | 46 <sup>3</sup> / <sub>4</sub>  | 19 <sup>5</sup> / <sub>8</sub> | 14 <sup>1</sup> / <sub>4</sub> | 12 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub> | 22                             | 14 | 17 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>  | 9 <sup>3</sup> / <sub>8</sub>  | 18 <sup>1</sup> / <sub>2</sub> | 4 <sup>1</sup> / <sub>4</sub>  | 5 <sup>1</sup> / <sub>2</sub>  | 10 <sup>5</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 147  | 9 <sup>3</sup> / <sub>4</sub>  | 2 <sup>1</sup> / <sub>2</sub> | 25 | 3 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>  | 9 <sup>1</sup> / <sub>16</sub> | 26 <sup>1</sup> / <sub>4</sub> | 26                             | 47 <sup>3</sup> / <sub>4</sub>  | 19 <sup>5</sup> / <sub>8</sub> | 16 <sup>1</sup> / <sub>4</sub> | 14 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub> | 24                             | 15 | 19 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>  | 10 <sup>3</sup> / <sub>8</sub> | 18 <sup>1</sup> / <sub>2</sub> | 4 <sup>1</sup> / <sub>4</sub>  | 6 <sup>1</sup> / <sub>2</sub>  | 11 <sup>5</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 167  | 11 <sup>1</sup> / <sub>4</sub> | 2 <sup>1</sup> / <sub>2</sub> | 32 | 3 <sup>1</sup> / <sub>4</sub> | 5                              | 9 <sup>1</sup> / <sub>16</sub> | 27 <sup>1</sup> / <sub>4</sub> | 27                             | 55 <sup>3</sup> / <sub>4</sub>  | 19 <sup>5</sup> / <sub>8</sub> | 18 <sup>3</sup> / <sub>4</sub> | 16 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub> | 26 <sup>1</sup> / <sub>8</sub> | 16 | 21 <sup>1</sup> / <sub>4</sub> | 6 <sup>1</sup> / <sub>4</sub>  | 11 <sup>3</sup> / <sub>8</sub> | 25 <sup>1</sup> / <sub>2</sub> | 11 <sup>1</sup> / <sub>4</sub> | 7 <sup>1</sup> / <sub>2</sub>  | 12 <sup>5</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 187  | 12 <sup>1</sup> / <sub>2</sub> | 2 <sup>1</sup> / <sub>2</sub> | 32 | 3 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>  | 9 <sup>1</sup> / <sub>16</sub> | 28 <sup>1</sup> / <sub>2</sub> | 28                             | 57 <sup>3</sup> / <sub>4</sub>  | 19 <sup>5</sup> / <sub>8</sub> | 20 <sup>3</sup> / <sub>4</sub> | 18 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub> | 28 <sup>1</sup> / <sub>8</sub> | 18 | 23 <sup>1</sup> / <sub>4</sub> | 6 <sup>3</sup> / <sub>4</sub>  | 12 <sup>3</sup> / <sub>8</sub> | 25 <sup>1</sup> / <sub>2</sub> | 11 <sup>1</sup> / <sub>4</sub> | 8                              | 13 <sup>5</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 217  | 14 <sup>1</sup> / <sub>2</sub> | 2 <sup>1</sup> / <sub>2</sub> | 32 | 3 <sup>1</sup> / <sub>4</sub> | 6                              | 9 <sup>1</sup> / <sub>16</sub> | 29 <sup>3</sup> / <sub>4</sub> | 29 <sup>1</sup> / <sub>2</sub> | 60 <sup>3</sup> / <sub>4</sub>  | 19 <sup>5</sup> / <sub>8</sub> | 23 <sup>3</sup> / <sub>4</sub> | 21 <sup>1</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub> | 31 <sup>1</sup> / <sub>8</sub> | 21 | 26 <sup>1</sup> / <sub>4</sub> | 7 <sup>7</sup> / <sub>8</sub>  | 13 <sup>7</sup> / <sub>8</sub> | 25 <sup>1</sup> / <sub>2</sub> | 11 <sup>1</sup> / <sub>4</sub> | 9 <sup>1</sup> / <sub>8</sub>  | 15 <sup>1</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 247  | 16 <sup>1</sup> / <sub>2</sub> | 2 <sup>1</sup> / <sub>2</sub> | 38 | 3 <sup>1</sup> / <sub>4</sub> | 7                              | 9 <sup>1</sup> / <sub>16</sub> | 37 <sup>3</sup> / <sub>4</sub> | 36 <sup>1</sup> / <sub>8</sub> | 73 <sup>3</sup> / <sub>4</sub>  | 24 <sup>7</sup> / <sub>8</sub> | 28 <sup>1</sup> / <sub>8</sub> | 24 <sup>3</sup> / <sub>8</sub> | 4 <sup>1</sup> / <sub>2</sub> | 34 <sup>1</sup> / <sub>4</sub> | 23 | 29 <sup>3</sup> / <sub>8</sub> | 9                              | 15 <sup>1</sup> / <sub>2</sub> | 31 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub>  | 10 <sup>1</sup> / <sub>4</sub> | 16 <sup>3</sup> / <sub>4</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 277  | 19                             | 2 <sup>1</sup> / <sub>2</sub> | 38 | 3 <sup>1</sup> / <sub>4</sub> | 8                              | 9 <sup>1</sup> / <sub>16</sub> | 39 <sup>1</sup> / <sub>4</sub> | 37 <sup>5</sup> / <sub>8</sub> | 75 <sup>3</sup> / <sub>4</sub>  | 24 <sup>7</sup> / <sub>8</sub> | 31 <sup>1</sup> / <sub>8</sub> | 27 <sup>3</sup> / <sub>8</sub> | 4 <sup>1</sup> / <sub>2</sub> | 37 <sup>1</sup> / <sub>4</sub> | 25 | 32 <sup>3</sup> / <sub>8</sub> | 10 <sup>1</sup> / <sub>4</sub> | 17                             | 31 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub>  | 11 <sup>1</sup> / <sub>2</sub> | 18 <sup>1</sup> / <sub>4</sub> | 9 <sup>1</sup> / <sub>16</sub> x1                             |
| 327  | 22 <sup>1</sup> / <sub>4</sub> | 3                             | 40 | 4 <sup>1</sup> / <sub>4</sub> | 9                              | 9 <sup>1</sup> / <sub>16</sub> | 41 <sup>3</sup> / <sub>4</sub> | 40 <sup>1</sup> / <sub>4</sub> | 80 <sup>1</sup> / <sub>4</sub>  | 24 <sup>7</sup> / <sub>8</sub> | 36 <sup>1</sup> / <sub>4</sub> | 32 <sup>1</sup> / <sub>2</sub> | 5                             | 41 <sup>3</sup> / <sub>4</sub> | 26 | 37 <sup>1</sup> / <sub>4</sub> | 11 <sup>3</sup> / <sub>4</sub> | 20 <sup>3</sup> / <sub>8</sub> | 31 <sup>1</sup> / <sub>2</sub> | 11 <sup>1</sup> / <sub>2</sub> | 13 <sup>1</sup> / <sub>4</sub> | 21 <sup>7</sup> / <sub>8</sub> | 3 <sup>4</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>2</sub> |
| 367  | 24 <sup>3</sup> / <sub>4</sub> | 3                             | 40 | 4 <sup>1</sup> / <sub>4</sub> | 10 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>16</sub> | 43 <sup>3</sup> / <sub>4</sub> | 42 <sup>1</sup> / <sub>4</sub> | 85 <sup>1</sup> / <sub>4</sub>  | 24 <sup>7</sup> / <sub>8</sub> | 40 <sup>1</sup> / <sub>4</sub> | 36 <sup>1</sup> / <sub>2</sub> | 5                             | 46 <sup>3</sup> / <sub>8</sub> | 31 | 41 <sup>1</sup> / <sub>2</sub> | 13 <sup>1</sup> / <sub>2</sub> | 22 <sup>3</sup> / <sub>8</sub> | 31 <sup>1</sup> / <sub>2</sub> | 11 <sup>1</sup> / <sub>2</sub> | 15                             | 23 <sup>7</sup> / <sub>8</sub> | 3 <sup>4</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>2</sub> |
| 427  | 28 <sup>3</sup> / <sub>4</sub> | 3                             | 43 | 4 <sup>1</sup> / <sub>4</sub> | 12                             | 3 <sup>4</sup> / <sub>16</sub> | 51                             | 47 <sup>5</sup> / <sub>8</sub> | 91 <sup>1</sup> / <sub>4</sub>  | 43                             | 46 <sup>1</sup> / <sub>2</sub> | 42 <sup>3</sup> / <sub>4</sub> | 5                             | 52 <sup>5</sup> / <sub>8</sub> | 34 | 47 <sup>3</sup> / <sub>4</sub> | 15                             | 25 <sup>1</sup> / <sub>2</sub> | 34 <sup>1</sup> / <sub>2</sub> | 4 <sup>1</sup> / <sub>2</sub>  | 16 <sup>1</sup> / <sub>2</sub> | 27                             | 3 <sup>4</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>2</sub> |
| 487  | 32 <sup>3</sup> / <sub>4</sub> | 3                             | 43 | 4 <sup>1</sup> / <sub>4</sub> | 13                             | 3 <sup>4</sup> / <sub>16</sub> | 54                             | 50 <sup>5</sup> / <sub>8</sub> | 97 <sup>1</sup> / <sub>4</sub>  | 43                             | 52 <sup>1</sup> / <sub>2</sub> | 48 <sup>3</sup> / <sub>4</sub> | 5                             | 58 <sup>5</sup> / <sub>8</sub> | 40 | 53 <sup>3</sup> / <sub>4</sub> | 16 <sup>3</sup> / <sub>4</sub> | 28 <sup>1</sup> / <sub>2</sub> | 34 <sup>1</sup> / <sub>2</sub> | 4 <sup>1</sup> / <sub>2</sub>  | 18 <sup>1</sup> / <sub>4</sub> | 30                             | 3 <sup>4</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>2</sub> |
| 547  | 37                             | 3                             | 47 | 4 <sup>1</sup> / <sub>4</sub> | 14                             | 3 <sup>4</sup> / <sub>16</sub> | 59 <sup>1</sup> / <sub>4</sub> | 53 <sup>3</sup> / <sub>4</sub> | 104 <sup>1</sup> / <sub>4</sub> | 45 <sup>3</sup> / <sub>4</sub> | 59 <sup>7</sup> / <sub>8</sub> | 55                             | 5                             | 64 <sup>7</sup> / <sub>8</sub> | 43 | 60                             | 18 <sup>3</sup> / <sub>4</sub> | 32 <sup>1</sup> / <sub>4</sub> | 38 <sup>1</sup> / <sub>2</sub> | 5 <sup>1</sup> / <sub>4</sub>  | 20 <sup>1</sup> / <sub>4</sub> | 33 <sup>3</sup> / <sub>4</sub> | 1x2   |
| 607  | 41                             | 3                             | 47 | 4 <sup>1</sup> / <sub>4</sub> | 14 <sup>1</sup> / <sub>2</sub> | 3 <sup>4</sup> / <sub>16</sub> | 62 <sup>1</sup> / <sub>4</sub> | 56 <sup>3</sup> / <sub>4</sub> | 108 <sup>1</sup> / <sub>4</sub> | 45 <sup>3</sup> / <sub>4</sub> | 65 <sup>7</sup> / <sub>8</sub> | 61                             | 5                             | 70 <sup>7</sup> / <sub>8</sub> | 47 | 66                             | 20 <sup>3</sup> / <sub>4</sub> | 35 <sup>1</sup> / <sub>4</sub> | 38 <sup>1</sup> / <sub>2</sub> | 5 <sup>1</sup> / <sub>4</sub>  | 22 <sup>1</sup> / <sub>4</sub> | 36 <sup>3</sup> / <sub>4</sub> | 1x2   |

\*FF: Mounting hole size; Sizes 127-487 use two holes per side; Sizes 547 and 607 use three holes per side. Dimensions X and XX pertain to Sizes 547 and 607 only: X = 17<sup>1</sup>/<sub>4</sub>", XX = 18<sup>1</sup>/<sub>4</sub>". Z = 2" on Sizes 127-227, 3" on Sizes 327-607.

The New York Blower Company has a policy of continual product improvement and reserves the right to change designs and specifications without notice.