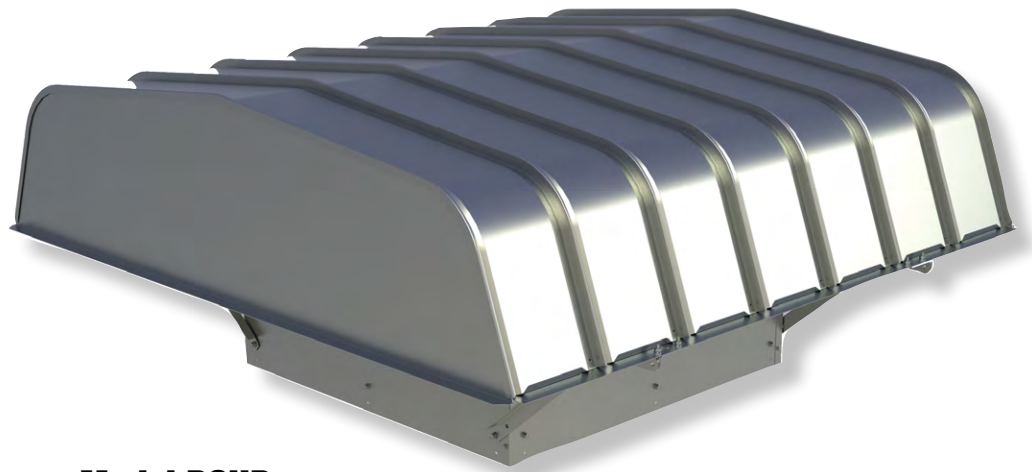


# AEROVENT

INDUSTRIAL VENTILATION SYSTEMS



**Model BSHD  
Direct Drive**

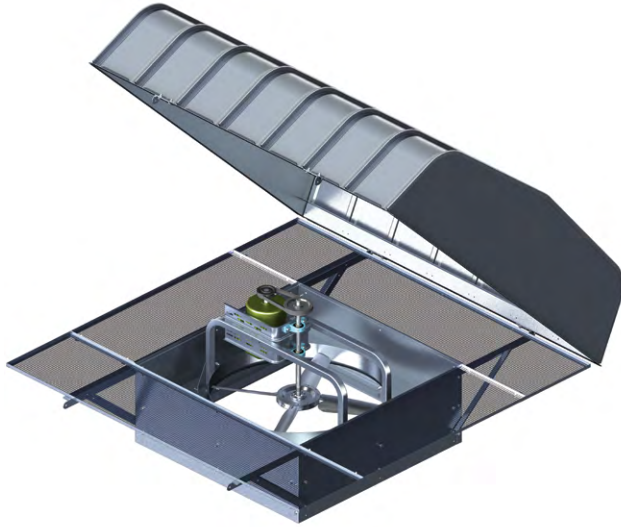
## **LOW PROFILE HOODED PROPELLER ROOF VENTILATORS**

**Models BSHD / BSHB**

# Hooded Roof Ventilators

## Models

**BSHD | BSHB**



**BSHB with Standard Birdscreen**



**Inter-locking Panels of Modular Hood**

Aerovent Low Profile Hooded Roof Ventilators provide cost effective, general purpose ventilation solutions for commercial and light industrial applications. The aesthetically pleasing modular hood design minimizes extension above the roof line. Both direct and belt driven models are available in exhaust and supply configurations. A wide array of adjustable pitch, cast aluminum propellers are available to meet specific performances and application requirements. Aerovent also offers a complete line of options and accessories such as roof curbs, backdraft dampers, disconnect switches and special coatings to maintain single source responsibility.

### Model BSHD and BSHB

Hooded non-filtered BSHD (direct drive) and BSHB (belt driven) are available for exhaust or supply service and feature a removable galvanized steel hood for cleaning and servicing the fan as well as a galvanized steel birdscreen.

### Sizes and Performance

#### Direct Drive

- Exhaust & Supply sizes from 14 to 48 inches
- Cast aluminum propellers available in a variety of blade angles
- Capacities from 940 CFM to 30,000 CFM
- Static pressure capability up to 1.00 inches w.g.

#### Belt Driven

- Exhaust & Supply sizes from 21 to 54 inches
- Cast aluminum propellers available in a variety of blade angles
- Capacities from 3,200 CFM to 46,500 CFM
- Static pressure capability up to 1.00 inches w.g.

**AEROVENT**   
INDUSTRIAL VENTILATION SYSTEMS

# Model Nomenclature

**BSHD - 24 - B - 1 - 05 - 25**

**Model** \_\_\_\_\_  
BSHD = Low Profile Hooded Propeller Roof Ventilator, Direct Drive  
BSHB = Low Profile Hooded Propeller Roof Ventilator, Belt Driven

**Fan Size** \_\_\_\_\_

**Propeller Type** \_\_\_\_\_  
B = Backswept

**Hub Designation** \_\_\_\_\_

**Blade Count** \_\_\_\_\_

**Blade Angle** \_\_\_\_\_

# Construction Features

## Modular Hood Design

The stackable hood panels allow for easy field assembly when necessary. The snap together rib design provides added strength and rigidity. Hoods are constructed of galvanized steel as standard.

## Birdscreen

Non-filtered units include galvanized steel birdscreen along the perimeter of the hood. Birdscreen can be easily removed for access to fan components.

## Propellers

Cast aluminum blades and hubs. Propellers on belt driven units shall be secured to the fan shaft with a taperlock bushing. Propellers on direct drive units shall be mounted directly on the motor shaft with a taperlock bushing.

## Mechanical Run Test & Final Vibration Check

All fans are assembled for a mechanical run test and final balance prior to shipment. Vibration readings are taken on both fan bearings in the axial, horizontal and vertical directions at the specified speed. Fans are balanced to 0.15 in./sec. peak or less.

## Bearings (BSHB only)

Cast iron pillow block bearings selected for L50 average life of 200,000 hours at maximum cataloged operating speeds.

## Shaft (BSHB only)

Shaft diameters are sized to have a first critical speed of at least 125% of the fan's maximum operating speed.

## Motors

ODP, TEFC and Explosion proof, single and three phase motors are carefully matched to the fan load.

## Drives (BSHB only)

Motor sheaves shall be of cast iron and supplied as variable pitch standard. Drives and belts shall be rated for 150% of the required motor HP.

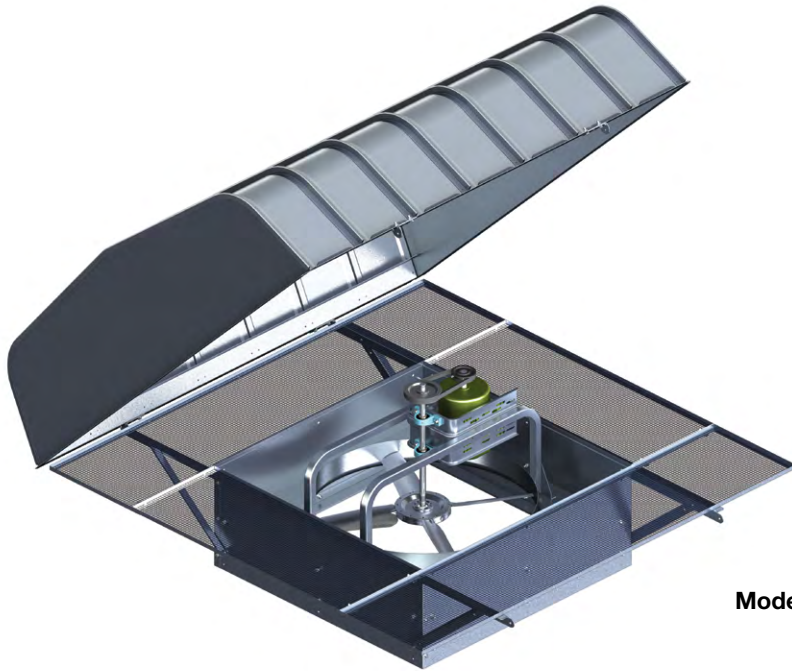
## Motor and Drive Frame

Support assemblies are constructed of heavy gauge galvanized or finish painted steel.

## Motor Access

Fans designed for exhaust and supply allow for service and are provided with convenient access to the motor from the roof.

# Hood Construction Features



**Model BSHB with  
Birdscreen**

The Aerovent modular hood provides numerous benefits over conventional sheet metal hood designs.

## Hood Construction

- The Aerovent modular hood design features ribbed panels, which provide added strength and rigidity. This is particularly important in climates where snow loads are a consideration.
- Hood profile allows rain and snow to run off.
- Hoods are galvanized steel as standard, but can also be constructed of aluminum or painted steel to accommodate specific application requirements.

## Easy Access

- Fan sizes 14 to 36 incorporate a pivoted hood design. By removing two fasteners, the hood can be opened up for convenient cleaning and service.
- Fan sizes 42 to 54 allow for the entire hood to be taken off by removing four fasteners.
- Exhaust and supply fans are constructed with motor and drive components easily accessible from the roof. There is no need to try and access components below the roof line or through an access door.
- Removable birdscreens can be removed with the hood still in place to allow for quick and easy inspection of the fan components without taking off the hood.

## Shipping Advantage

Most units ship fully assembled as standard (see chart below for specific models and sizes) to allow for fast and easy installation at the job site. Larger units ship knocked down to the job site as standard and can be easily assembled with standard tools. Aerovent does offer the option to ship larger units fully assembled to the job site (**standard freight rates do not apply**). Contact your local sales representative for more information.

| MODEL | FAN SIZE |    |    |    |    |    |    |    |    |    |
|-------|----------|----|----|----|----|----|----|----|----|----|
|       | 14       | 16 | 18 | 21 | 24 | 30 | 36 | 42 | 48 | 54 |
| BSHD  | F        | F  | F  | F  | F  | F  | F  | K  | K  | —  |
| BSHB  | —        | —  | —  | F  | F  | F  | F  | K  | K  | K  |

F = Ships Fully Assembled

K = Ships Knocked Down, Field Assembly Required



## Tall Base

Extended base section with access door and damper tray allows for easy access of motorized and non-motorized backdraft dampers for maintenance and cleaning. This option is advantageous over the standard fan with roof curb extension because the base ships as one piece.

## Curb Side Guard

Mounted to the curb side of the fan to allow for protection of personnel below fan in non-ducted installations. Aerovent recommends the use of a curb side guard on all non-ducted installations.

## Extended Lube Lines

Allow for easy lubrication of bearings on belt driven units without disassembly by extending polyethylene lines from fan bearings to exterior of base.

## Tie Downs

A quantity of four tie-down brackets are included to help secure the unit to the roof in areas with strong winds. Cables used for tie down are supplied by others.

## Aluminum Construction

Hood and exterior of base section are constructed of aluminum in lieu of standard galvanized steel.

## Insulated Hood

Inside of hood is lined with insulation to reduce sound and condensation from the hood.

## Insect Screen

An aluminum insect screen, placed between the fan base and the roof curb, prevents insects from entering the building.

## Single Point Wiring

Junction box on exterior of base houses disconnect switch and motorized damper wire connections. Available with tall base, motorized damper and wired disconnect switch only.

## Dampers

Used to keep unwanted air out of the building when the fan is not in use, dampers are available as either gravity operated or motorized.

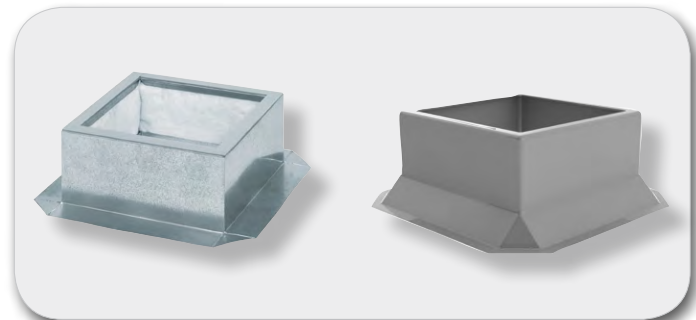
## Roof Curb Extensions

Extensions work to extend the height of the roof curb. Standard curb extension is galvanized steel, 13" high and has an 8" removable panel to provide access to the backdraft damper from the roof.



**NEMA 3R  
Disconnect Switch**

**NEMA 4  
Disconnect Switch**



**Self-Flashing  
Roof Curb**

**Standard (Canted)  
Roof Curb**

## Disconnect Switches

A NEMA 1, 3R, 4 or 7/9 disconnect switch is available for positive electrical shutoff of the fan and the protection of service personnel.

## Roof Curbs

Prefabricated roof curbs are available in heavy duty galvanized steel or aluminum in heights of 8", 12" or 18". The standard curb (canted) is provided with a factory installed wood nailer, while the optional self flashing design is provided with a  $\frac{3}{16}$ " polystyrene gasket. Both the standard curb and the self-flashing design are provided with  $1\frac{1}{2}$ " of insulation as standard and feature continuously welded seams for added rigidity and moisture protections.

# Direct Drive

## BSHD | Size 14

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 14B105    | 10          | 1/4      | 1750    | 0.10    | 11.7          | 940                              | 855   | 836   | 817   | 777   | 729   | 679   | 611   | 468   | 377   | 295   |       |
|           | 15          |          | 1750    | 0.15    | 13.8          | 1260                             | 1181  | 1161  | 1141  | 1101  | 1055  | 996   | 904   | 780   |       |       |       |
|           | 20          |          | 1750    | 0.19    | 15.1          | 1549                             | 1468  | 1447  | 1426  | 1382  | 1335  | 1275  | 1160  |       |       |       |       |
|           | 25          | 1/3      | 1750    | 0.25    | 16            | 1804                             | 1716  | 1693  | 1669  | 1618  | 1561  | 1488  | 1363  | 1205  |       |       |       |
|           | 30          |          | 1750    | 0.31    | 16.4          | 2021                             | 1912  | 1882  | 1852  | 1787  | 1710  | 1623  | 1501  | 1307  | 1037  |       |       |

## BSHD | Size 16

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 16B105    | 10          | 1/4      | 1750    | 0.16    | 15            | 1376                             | 1276  | 1253  | 1229  | 1182  | 1131  | 1074  | 986   | 843   | 665   | 557   |       |
|           | 15          |          | 1750    | 0.25    | 17.1          | 1850                             | 1756  | 1732  | 1708  | 1660  | 1611  | 1556  | 1448  | 1280  | 1123  |       |       |
|           | 20          | 1/3      | 1750    | 0.34    | 18.8          | 2275                             | 2179  | 2154  | 2129  | 2078  | 2025  | 1967  | 1857  | 1647  | 1484  |       |       |
|           | 25          | 1/2      | 1750    | 0.43    | 20            | 2648                             | 2542  | 2514  | 2486  | 2428  | 2366  | 2298  | 2168  | 1940  | 1750  |       |       |
|           | 30          |          | 1750    | 0.54    | 20            | 2961                             | 2835  | 2800  | 2765  | 2691  | 2612  | 2522  | 2370  | 2132  | 1894  | 1560  |       |

## BSHD | Size 18

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 18B105    | 10          | 1/3      | 1750    | 0.25    | 18.1          | 1927                             | 1807  | 1778  | 1750  | 1695  | 1638  | 1576  | 1472  | 1304  | 1109  | 909   | 662   |
|           | 15          | 1/2      | 1750    | 0.40    | 21            | 2594                             | 2484  | 2455  | 2427  | 2370  | 2313  | 2253  | 2151  | 1929  | 1750  | 1550  |       |
|           | 20          |          | 1750    | 0.54    | 23            | 3190                             | 3078  | 3048  | 3018  | 2958  | 2897  | 2833  | 2726  | 2480  | 2262  | 2064  |       |
|           | 25          | 3/4      | 1750    | 0.70    | 25            | 3710                             | 3586  | 3553  | 3520  | 3452  | 3382  | 3308  | 3183  | 2911  | 2667  | 2435  |       |
|           | 30          |          | 1750    | 0.87    | 25            | 4140                             | 3993  | 3954  | 3914  | 3831  | 3744  | 3649  | 3479  | 3203  | 2921  | 2629  |       |

## BSHD | Size 21

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 21B105    | 10          | 1/2      | 1750    | 0.44    | 23            | 2984                             | 2835  | 2798  | 2761  | 2689  | 2617  | 2542  | 2422  | 2200  | 1985  | 1726  | 1264  |
|           | 15          | 3/4      | 1750    | 0.69    | 27            | 4032                             | 3892  | 3855  | 3819  | 3746  | 3674  | 3600  | 3484  | 3245  | 2970  | 2739  | 1972  |
|           | 20          | 1        | 1750    | 0.99    | 30            | 4956                             | 4814  | 4776  | 4738  | 4662  | 4585  | 4507  | 4383  | 4139  | 3824  | 3551  | 3002  |
|           | 25          | 1 1/2    | 1750    | 1.28    | 31            | 5754                             | 5598  | 5557  | 5515  | 5432  | 5346  | 5257  | 5116  | 4836  | 4497  | 4190  | 3562  |
|           | 30          | 2        | 1750    | 1.58    | 32            | 6402                             | 6220  | 6173  | 6125  | 6026  | 5923  | 5816  | 5639  | 5299  | 4962  | 4597  | 3761  |

## BSHD | Size 24

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 24B105    | 10          | 3/4      | 1750    | 0.69    | 31            | 4349                             | 4163  | 4116  | 4069  | 3977  | 3884  | 3790  | 3644  | 3375  | 3094  | 2810  | 2111  |
|           | 15          | 1        | 1750    | 1.13    | 32            | 5892                             | 5716  | 5670  | 5624  | 5532  | 5439  | 5346  | 5201  | 4933  | 4602  | 4277  | 3656  |
|           | 20          | 1 1/2    | 1750    | 1.58    | 33            | 7240                             | 7060  | 7012  | 6964  | 6869  | 6772  | 6674  | 6522  | 6245  | 5902  | 5524  | 4853  |
|           | 25          | 2        | 1750    | 2.07    | 34            | 8390                             | 8191  | 8140  | 8089  | 7985  | 7880  | 7772  | 7603  | 7292  | 6920  | 6517  | 5743  |
|           | 30          | 3        | 1750    | 2.60    | 34            | 9306                             | 9085  | 9028  | 8970  | 8852  | 8729  | 8603  | 8404  | 8014  | 7625  | 7209  | 6222  |

**NOTES:**

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sone at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

# Direct Drive

## BSHD | Size 30

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 30B105    | 10          | 1/2      | 1160    | 0.40    | 22            | 5423                             | 4972  | 4849  | 4724  | 4469  | 4207  | 3924  | 3446  | 2510  | 1513  | 665   |       |  |
|           | 15          | 3/4      | 1160    | 0.66    | 23            | 7373                             | 6925  | 6808  | 6689  | 6441  | 6172  | 5881  | 5421  | 4588  | 3353  |       |       |  |
|           | 20          | 1        | 1160    | 0.96    | 24            | 9039                             | 8579  | 8461  | 8340  | 8089  | 7818  | 7524  | 7047  | 6169  | 5086  |       |       |  |
|           | 25          | 1 1/2    | 1160    | 1.31    | 24            | 10423                            | 9951  | 9826  | 9698  | 9431  | 9132  | 8809  | 8349  | 7360  | 6107  |       |       |  |
|           | 30          | 2        | 1160    | 1.72    | 25            | 11527                            | 11025 | 10891 | 10753 | 10458 | 10130 | 9811  | 9329  | 8030  |       |       |       |  |

## BSHD | Size 36

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 36B206    | 10          | 1        | 1160    | 0.94    | 32            | 8787                             | 8263  | 8126  | 7986  | 7700  | 7396  | 7067  | 6533  | 5582  | 4467  | 3280  |       |  |
|           | 15          | 1 1/2    | 1160    | 1.47    | 36            | 11846                            | 11360 | 11228 | 11093 | 10816 | 10527 | 10221 | 9712  | 8753  | 7761  | 6368  | 2787  |  |
|           | 20          | 2        | 1160    | 2.14    | 38            | 14596                            | 14098 | 13962 | 13824 | 13541 | 13246 | 12937 | 12439 | 11483 | 10427 | 9153  | 4546  |  |
|           | 25          | 3        | 1160    | 2.97    | 40            | 17026                            | 16468 | 16323 | 16177 | 15876 | 15564 | 15239 | 14723 | 13767 | 12602 | 11091 |       |  |
|           | 30          | 5        | 1160    | 3.96    | 41            | 19023                            | 18431 | 18276 | 18119 | 17795 | 17457 | 17095 | 16494 | 15551 | 14012 | 11994 |       |  |

## BSHD | Size 42

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 42B304    | 10          | 1        | 860     | 0.78    | 22            | 11261                            | 10399 | 10175 | 9947  | 9461  | 8924  | 8348  | 7419  | 5596  | 3480  |       |       |  |
|           | 15          | 1 1/2    | 860     | 1.23    | 24            | 14461                            | 13556 | 13309 | 13056 | 12536 | 11992 | 11423 | 10561 | 9032  | 6631  |       |       |  |
|           | 20          | 2        | 860     | 1.76    | 25            | 17166                            | 16191 | 15927 | 15657 | 15111 | 14549 | 13968 | 13077 | 11555 | 9450  |       |       |  |
|           | 25          | 3        | 860     | 2.40    | 26            | 19351                            | 18309 | 18038 | 17762 | 17193 | 16584 | 15983 | 15062 | 13369 | 11035 |       |       |  |
|           | 30          | 3        | 860     | 3.15    | 28            | 21041                            | 19978 | 19696 | 19407 | 18783 | 18133 | 17513 | 16469 | 14372 |       |       |       |  |

## BSHD | Size 48

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 48B304    | 10          | 1 1/2    | 860     | 1.13    | 27            | 16183                            | 14996 | 14685 | 14365 | 13675 | 12890 | 12065 | 10811 | 8375  | 5000  |       |       |  |
|           | 15          | 2        | 860     | 1.82    | 29            | 20820                            | 19571 | 19230 | 18882 | 18169 | 17422 | 16646 | 15501 | 13576 | 10685 |       |       |  |
|           | 20          | 3        | 860     | 2.67    | 30            | 24650                            | 23299 | 22950 | 22597 | 21871 | 21099 | 20327 | 19172 | 17227 | 14599 |       |       |  |
|           | 25          | 5        | 860     | 3.69    | 32            | 27651                            | 26299 | 25944 | 25582 | 24820 | 24008 | 23219 | 22002 | 19739 | 16744 |       |       |  |
|           | 30          | 5        | 860     | 4.88    | 34            | 29962                            | 28614 | 28245 | 27856 | 27001 | 26140 | 25325 | 23865 | 20709 |       |       |       |  |

### NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sone at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

# Belt Driven

## BSHB | Size 21

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 21B105    | 20          | 1/4      | 1142    | 0.27    | 14.4          | 3234                             | 3007  | 2948  | 2885  | 2745  | 2559  | 2378  | 2143  |       |       |       |       |  |
|           | 25          |          | 1048    | 0.27    | 12.9          | 3446                             | 3171  | 3094  | 3011  | 2804  | 2585  | 2386  | 2028  |       |       |       |       |  |
|           | 30          |          | 977     | 0.28    | 12.2          | 3574                             | 3221  | 3109  | 2986  | 2744  | 2478  | 2187  |       |       |       |       |       |  |
|           | 20          | 1/3      | 1252    | 0.36    | 17.1          | 3546                             | 3340  | 3287  | 3232  | 3116  | 2980  | 2807  | 2565  | 2191  |       |       |       |  |
|           | 25          |          | 1150    | 0.36    | 15.5          | 3781                             | 3534  | 3467  | 3397  | 3238  | 3038  | 2840  | 2568  |       |       |       |       |  |
|           | 30          |          | 1072    | 0.36    | 14            | 3921                             | 3607  | 3517  | 3414  | 3193  | 2967  | 2724  | 2306  |       |       |       |       |  |
|           | 20          | 1/2      | 1438    | 0.54    | 23            | 4072                             | 3895  | 3849  | 3803  | 3708  | 3608  | 3498  | 3289  | 2933  | 2616  |       |       |  |
|           | 25          |          | 1320    | 0.54    | 20            | 4340                             | 4128  | 4072  | 4014  | 3893  | 3758  | 3594  | 3326  | 2928  |       |       |       |  |
|           | 30          |          | 1231    | 0.55    | 17.9          | 4503                             | 4236  | 4163  | 4086  | 3911  | 3718  | 3528  | 3217  | 2612  |       |       |       |  |
|           | 20          | 3/4      | 1646    | 0.81    | 28            | 4661                             | 4509  | 4469  | 4428  | 4347  | 4265  | 4179  | 4040  | 3741  | 3424  | 3154  |       |  |
|           | 25          |          | 1511    | 0.83    | 28            | 4968                             | 4785  | 4737  | 4688  | 4588  | 4483  | 4370  | 4169  | 3782  | 3437  | 3060  |       |  |
|           | 30          |          | 1409    | 0.83    | 23            | 5154                             | 4925  | 4863  | 4800  | 4667  | 4518  | 4345  | 4099  | 3650  | 3149  |       |       |  |

## BSHB | Size 24

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 24B105    | 20          | 1/3      | 1067    | 0.36    | 14.5          | 4414                             | 4107  | 4025  | 3940  | 3749  | 3510  | 3272  | 2944  |       |       |       |       |  |
|           | 25          |          | 977     | 0.36    | 12.6          | 4684                             | 4313  | 4210  | 4099  | 3833  | 3549  | 3273  | 2777  |       |       |       |       |  |
|           | 30          |          | 908     | 0.36    | 11.8          | 4829                             | 4365  | 4219  | 4064  | 3754  | 3381  | 2959  |       |       |       |       |       |  |
|           | 20          | 1/2      | 1226    | 0.54    | 18.2          | 5072                             | 4807  | 4738  | 4668  | 4521  | 4359  | 4164  | 3842  | 3363  | 2467  |       |       |  |
|           | 25          |          | 1122    | 0.55    | 15.8          | 5379                             | 5061  | 4977  | 4889  | 4699  | 4471  | 4219  | 3859  | 3132  |       |       |       |  |
|           | 30          |          | 1043    | 0.55    | 15            | 5547                             | 5155  | 5046  | 4927  | 4657  | 4394  | 4084  | 3565  |       |       |       |       |  |
|           | 20          | 3/4      | 1403    | 0.83    | 23            | 5804                             | 5575  | 5515  | 5455  | 5333  | 5206  | 5069  | 4830  | 4366  | 3951  | 3473  |       |  |
|           | 25          |          | 1285    | 0.83    | 20            | 6160                             | 5886  | 5814  | 5741  | 5590  | 5425  | 5237  | 4913  | 4386  | 3811  |       |       |  |
|           | 30          |          | 1194    | 0.83    | 18.6          | 6350                             | 6015  | 5924  | 5830  | 5624  | 5386  | 5161  | 4778  | 4024  |       |       |       |  |
|           | 20          | 1        | 1544    | 1.08    | 28            | 6388                             | 6181  | 6127  | 6073  | 5963  | 5851  | 5735  | 5548  | 5161  | 4745  | 4370  |       |  |
|           | 25          |          | 1414    | 1.10    | 24            | 6779                             | 6531  | 6466  | 6401  | 6268  | 6128  | 5978  | 5719  | 5226  | 4750  | 4227  |       |  |
|           | 30          |          | 1314    | 1.10    | 22            | 6988                             | 6687  | 6607  | 6524  | 6351  | 6157  | 5939  | 5631  | 5020  | 4304  |       |       |  |

### NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.



# Belt Driven

## BSHB | Size 30

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 30B105    | 20          | 1/2      | 962     | 0.55    | 17            | 7496                             | 6935  | 6786  | 6629  | 6286  | 5906  | 5501  | 4831  | 2688  |       |       |       |
|           | 25          |          | 868     | 0.55    | 15.1          | 7799                             | 7144  | 6958  | 6746  | 6332  | 5850  | 5266  | 4151  |       |       |       |       |
|           | 30          |          | 794     | 0.55    | 13.6          | 7890                             | 7099  | 6858  | 6633  | 6069  |       |       |       |       |       |       |       |
|           | 20          | 3/4      | 1102    | 0.83    | 21            | 8587                             | 8102  | 7976  | 7848  | 7576  | 7279  | 6956  | 6438  | 5468  | 3917  |       |       |
|           | 25          |          | 994     | 0.83    | 18.3          | 8931                             | 8371  | 8219  | 8061  | 7701  | 7338  | 6953  | 6224  | 4617  |       |       |       |
|           | 30          |          | 908     | 0.83    | 16.9          | 9023                             | 8358  | 8166  | 7956  | 7555  | 7083  | 6383  |       |       |       |       |       |
|           | 20          | 1        | 1212    | 1.10    | 25            | 9444                             | 9005  | 8892  | 8778  | 8542  | 8290  | 8019  | 7576  | 6768  | 5854  | 4431  |       |
|           | 25          |          | 1094    | 1.10    | 22            | 9830                             | 9327  | 9192  | 9054  | 8760  | 8422  | 8095  | 7559  | 6402  |       |       |       |
|           | 30          |          | 1000    | 1.10    | 19.6          | 9937                             | 9343  | 9181  | 9006  | 8624  | 8268  | 7835  | 6875  |       |       |       |       |
|           | 20          | 1 1/2    | 1388    | 1.65    | 33            | 10815                            | 10434 | 10337 | 10239 | 10040 | 9834  | 9619  | 9273  | 8632  | 7934  | 7166  | 4761  |
|           | 25          |          | 1252    | 1.65    | 27            | 11249                            | 10815 | 10701 | 10585 | 10344 | 10090 | 9804  | 9363  | 8587  | 7588  | 6349  |       |
|           | 30          |          | 1144    | 1.65    | 24            | 11368                            | 10858 | 10722 | 10581 | 10279 | 9944  | 9626  | 9117  | 7748  |       |       |       |
|           | 20          | 2        | 1527    | 2.20    | 39            | 11898                            | 11553 | 11465 | 11376 | 11198 | 11016 | 10829 | 10535 | 9995  | 9399  | 8763  | 7323  |
|           | 25          |          | 1378    | 2.20    | 33            | 12381                            | 11990 | 11888 | 11784 | 11571 | 11350 | 11119 | 10727 | 10073 | 9322  | 8406  |       |
|           | 30          |          | 1259    | 2.20    | 29            | 12511                            | 12052 | 11930 | 11806 | 11548 | 11266 | 10961 | 10529 | 9650  |       |       |       |
|           | 20          | 3        | 1748    | 3.29    | 47            | 13620                            | 13320 | 13243 | 13167 | 13012 | 12856 | 12698 | 12456 | 12029 | 11561 | 11053 | 9951  |
|           | 25          |          | 1578    | 3.30    | 41            | 14178                            | 13839 | 13751 | 13663 | 13482 | 13297 | 13106 | 12809 | 12245 | 11672 | 11071 | 9516  |
|           | 30          |          | 1442    | 3.31    | 37            | 14329                            | 13932 | 13829 | 13724 | 13508 | 13284 | 13046 | 12653 | 12020 | 11289 | 10201 |       |

## BSHB | Size 36

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 36B206    | 20          | 3/4      | 844     | 0.82    | 21            | 10620                            | 9899  | 9698  | 9489  | 9036  | 8518  | 7953  | 7009  | 4022  |       |       |       |
|           | 25          |          | 757     | 0.83    | 19            | 11111                            | 10219 | 9973  | 9713  | 9145  | 8479  | 7615  | 5610  |       |       |       |       |
|           | 30          |          | 688     | 0.83    | 17.2          | 11283                            | 10209 | 9877  | 9546  | 8820  | 7479  |       |       |       |       |       |       |
|           | 20          | 1        | 929     | 1.10    | 25            | 11690                            | 11045 | 10868 | 10686 | 10300 | 9878  | 9404  | 8632  | 7001  | 3953  |       |       |
|           | 25          |          | 834     | 1.10    | 22            | 12241                            | 11443 | 11227 | 11003 | 10524 | 9994  | 9388  | 8201  | 4752  |       |       |       |
|           | 30          |          | 758     | 1.10    | 20            | 12430                            | 11478 | 11207 | 10904 | 10318 | 9570  | 8316  |       |       |       |       |       |
|           | 20          | 1 1/2    | 1063    | 1.65    | 32            | 13376                            | 12824 | 12674 | 12521 | 12204 | 11869 | 11511 | 10913 | 9792  | 8455  | 6217  |       |
|           | 25          |          | 954     | 1.65    | 27            | 14003                            | 13314 | 13132 | 12946 | 12556 | 12139 | 11692 | 10937 | 9237  | 6249  |       |       |
|           | 30          |          | 867     | 1.65    | 25            | 14218                            | 13403 | 13181 | 12951 | 12431 | 11915 | 11381 | 9863  |       |       |       |       |
|           | 20          | 2        | 1170    | 2.20    | 39            | 14722                            | 14229 | 14094 | 13958 | 13678 | 13386 | 13081 | 12591 | 11652 | 10612 | 9394  | 4838  |
|           | 25          |          | 1050    | 2.20    | 32            | 15412                            | 14791 | 14629 | 14463 | 14122 | 13763 | 13383 | 12769 | 11548 | 9881  | 7068  |       |
|           | 30          |          | 954     | 2.20    | 29            | 15645                            | 14912 | 14717 | 14515 | 14086 | 13601 | 13134 | 12369 | 10019 |       |       |       |
|           | 20          | 3        | 1339    | 3.28    | 50            | 16849                            | 16427 | 16312 | 16195 | 15957 | 15713 | 15461 | 15068 | 14356 | 13543 | 12654 | 10558 |
|           | 25          |          | 1202    | 3.30    | 42            | 17643                            | 17105 | 16966 | 16825 | 16537 | 16240 | 15931 | 15443 | 14553 | 13513 | 12168 | 7690  |
|           | 30          |          | 1092    | 3.30    | 37            | 17908                            | 17276 | 17110 | 16940 | 16590 | 16220 | 15806 | 15174 | 14050 | 11944 |       |       |
|           | 20          | 5        | 1588    | 5.47    | 75            | 19982                            | 19637 | 19542 | 19446 | 19250 | 19051 | 18848 | 18537 | 17994 | 17414 | 16781 | 15341 |
|           | 25          |          | 1425    | 5.50    | 62            | 20916                            | 20466 | 20351 | 20234 | 19998 | 19758 | 19512 | 19131 | 18460 | 17736 | 16943 | 14959 |
|           | 30          |          | 1295    | 5.51    | 51            | 21237                            | 20710 | 20573 | 20435 | 20153 | 19861 | 19560 | 19077 | 18181 | 17348 | 16079 |       |

**NOTES:**

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

# Belt Driven

## BSHB | Size 42

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 42B304    | 20          | 1        | 735     | 1.10    | 20            | 14671                            | 13503 | 13185 | 12864 | 12199 | 11509 | 10815 | 9723  |       |       |       |       |  |
|           | 25          |          | 664     | 1.10    | 17.3          | 14941                            | 13561 | 13186 | 12789 | 12013 | 11182 | 10285 | 8435  |       |       |       |       |  |
|           | 30          |          | 606     | 1.10    | 15.6          | 14826                            | 13223 | 12762 | 12322 | 11297 | 10084 |       |       |       |       |       |       |  |
|           | 20          | 1 1/2    | 842     | 1.65    | 24            | 16806                            | 15808 | 15537 | 15261 | 14701 | 14123 | 13525 | 12616 | 11028 | 8610  |       |       |  |
|           | 25          |          | 760     | 1.65    | 21            | 17101                            | 15911 | 15598 | 15277 | 14589 | 13914 | 13206 | 12065 |       |       |       |       |  |
|           | 30          |          | 694     | 1.65    | 19.5          | 16979                            | 15627 | 15242 | 14837 | 14060 | 13179 | 12152 |       |       |       |       |       |  |
|           | 20          | 2        | 926     | 2.20    | 28            | 18483                            | 17587 | 17345 | 17098 | 16595 | 16084 | 15557 | 14741 | 13363 | 11860 | 9615  |       |  |
|           | 25          |          | 836     | 2.20    | 25            | 18811                            | 17737 | 17457 | 17172 | 16578 | 15948 | 15336 | 14367 | 12574 |       |       |       |  |
|           | 30          |          | 764     | 2.21    | 23            | 18692                            | 17480 | 17152 | 16801 | 16070 | 15369 | 14561 | 13154 |       |       |       |       |  |
|           | 20          | 3        | 1060    | 3.29    | 35            | 21158                            | 20389 | 20183 | 19973 | 19543 | 19103 | 18659 | 17977 | 16791 | 15588 | 14344 | 10625 |  |
|           | 25          |          | 957     | 3.30    | 31            | 21533                            | 20602 | 20362 | 20119 | 19623 | 19108 | 18560 | 17748 | 16345 | 14800 | 12823 |       |  |
|           | 30          |          | 874     | 3.30    | 28            | 21383                            | 20339 | 20063 | 19779 | 19173 | 18531 | 17918 | 16921 | 14889 |       |       |       |  |
|           | 20          | 5        | 1257    | 5.49    | 46            | 25090                            | 24455 | 24285 | 24113 | 23762 | 23403 | 23037 | 22478 | 21531 | 20543 | 19530 | 17484 |  |
|           | 25          |          | 1135    | 5.51    | 41            | 25539                            | 24759 | 24560 | 24359 | 23952 | 23537 | 23114 | 22449 | 21296 | 20153 | 18917 | 16091 |  |
|           | 30          |          | 1036    | 5.50    | 37            | 25347                            | 24477 | 24251 | 24021 | 23549 | 23054 | 22521 | 21716 | 20385 | 18759 | 16957 |       |  |

## BSHB | Size 48

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 48B304    | 20          | 1 1/2    | 733     | 1.65    | 23            | 21010                            | 19409 | 18990 | 18558 | 17648 | 16750 | 15844 | 14451 | 10791 |       |       |       |
|           | 25          |          | 658     | 1.65    | 20            | 21156                            | 19338 | 18824 | 18292 | 17262 | 16138 | 14914 | 12456 |       |       |       |       |
|           | 30          |          | 599     | 1.65    | 18.6          | 20869                            | 18731 | 18120 | 17531 | 16009 | 14138 |       |       |       |       |       |       |
|           | 20          | 2        | 807     | 2.20    | 27            | 23131                            | 21686 | 21311 | 20930 | 20134 | 19306 | 18490 | 17258 | 14995 |       |       |       |
|           | 25          |          | 724     | 2.20    | 24            | 23278                            | 21646 | 21206 | 20738 | 19781 | 18841 | 17813 | 16125 |       |       |       |       |
|           | 30          |          | 660     | 2.20    | 22            | 22994                            | 21126 | 20556 | 20002 | 18890 | 17404 | 15702 |       |       |       |       |       |
|           | 20          | 3        | 924     | 3.31    | 33            | 26485                            | 25232 | 24910 | 24584 | 23920 | 23229 | 22504 | 21432 | 19641 | 17734 | 14980 |       |
|           | 25          |          | 829     | 3.31    | 30            | 26654                            | 25248 | 24877 | 24498 | 23689 | 22849 | 22037 | 20732 | 18283 | 14669 |       |       |
|           | 30          |          | 755     | 3.30    | 27            | 26303                            | 24734 | 24279 | 23788 | 22813 | 21863 | 20665 | 18489 |       |       |       |       |
|           | 20          | 5        | 1095    | 5.50    | 45            | 31386                            | 30336 | 30068 | 29798 | 29251 | 28695 | 28129 | 27237 | 25718 | 24203 | 22696 | 18854 |
|           | 25          |          | 983     | 5.51    | 39            | 31605                            | 30433 | 30130 | 29821 | 29189 | 28527 | 27822 | 26771 | 24997 | 23036 | 20738 |       |
|           | 30          |          | 895     | 5.51    | 36            | 31181                            | 29893 | 29543 | 29180 | 28381 | 27539 | 26748 | 25477 | 22595 |       |       |       |
|           | 20          | 7 1/2    | 1254    | 8.27    | 56            | 35943                            | 35030 | 34798 | 34564 | 34093 | 33617 | 33133 | 32397 | 31104 | 29775 | 28461 | 25815 |
|           | 25          |          | 1125    | 8.26    | 49            | 36171                            | 35154 | 34892 | 34628 | 34091 | 33540 | 32973 | 32064 | 30533 | 29001 | 27329 | 23391 |
|           | 30          |          | 1025    | 8.27    | 44            | 35710                            | 34602 | 34308 | 34007 | 33376 | 32682 | 31946 | 30884 | 29036 | 26553 | 23772 |       |

**NOTES:**

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

# Belt Driven

## BSHB | Size 54

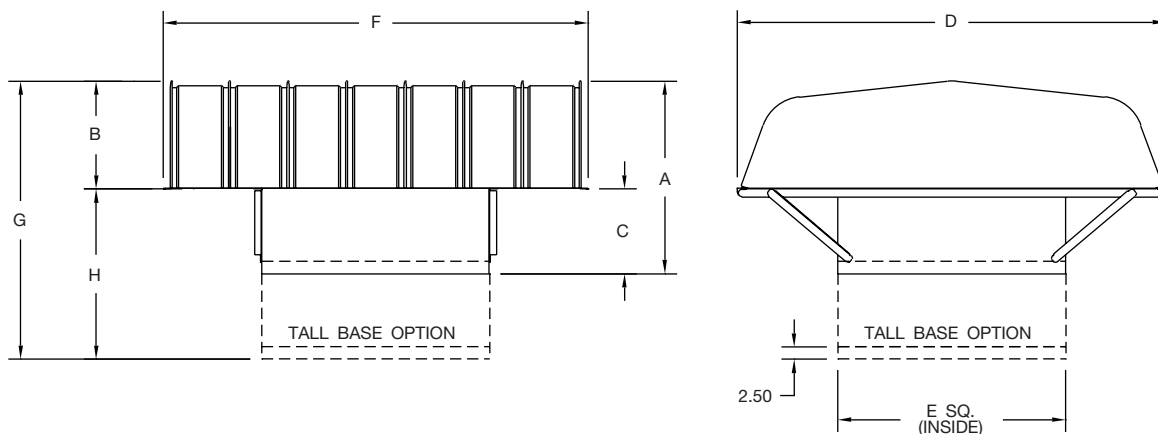
| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |             |          |         |         |               | 0.000                            | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |  |
| 54B406    | 20          | 1 1/2    | 554     | 1.65    | 25            | 23999                            | 22006 | 21481 | 20957 | 19904 | 18784 | 17510 | 15282 |       |       |       |       |  |
|           | 25          |          | 498     | 1.65    | 23            | 24681                            | 22403 | 21733 | 21018 | 19635 | 17980 | 16078 |       |       |       |       |       |  |
|           | 30          |          | 453     | 1.65    | 21            | 24739                            | 21844 | 20874 | 19882 | 17564 |       |       |       |       |       |       |       |  |
|           | 20          | 2        | 610     | 2.20    | 29            | 26425                            | 24633 | 24159 | 23682 | 22731 | 21769 | 20749 | 18998 | 15144 |       |       |       |  |
|           | 25          |          | 549     | 2.21    | 27            | 27208                            | 25177 | 24619 | 24008 | 22732 | 21451 | 19944 | 17308 |       |       |       |       |  |
|           | 30          |          | 498     | 2.19    | 24            | 27197                            | 24784 | 23857 | 22985 | 21108 | 18932 |       |       |       |       |       |       |  |
|           | 20          | 3        | 698     | 3.30    | 38            | 30237                            | 28691 | 28284 | 27872 | 27039 | 26208 | 25374 | 24070 | 21539 | 18377 | 9755  |       |  |
|           | 25          |          | 628     | 3.31    | 33            | 31124                            | 29378 | 28911 | 28429 | 27379 | 26254 | 25177 | 23297 | 19444 |       |       |       |  |
|           | 30          |          | 570     | 3.30    | 31            | 31129                            | 29156 | 28539 | 27765 | 26203 | 24585 | 22748 |       |       |       |       |       |  |
|           | 20          | 5        | 828     | 5.51    | 52            | 35868                            | 34584 | 34248 | 33908 | 33217 | 32517 | 31814 | 30764 | 28971 | 26970 | 24655 | 17186 |  |
|           | 25          |          | 744     | 5.50    | 46            | 36873                            | 35422 | 35042 | 34654 | 33854 | 33006 | 32065 | 30668 | 28192 | 25206 | 21270 |       |  |
|           | 30          |          | 676     | 5.51    | 41            | 36918                            | 35327 | 34876 | 34394 | 33233 | 31866 | 30599 | 28456 |       |       |       |       |  |
|           | 20          | 7 1/2    | 948     | 8.27    | 65            | 41066                            | 39956 | 39667 | 39375 | 38782 | 38179 | 37569 | 36649 | 35119 | 33562 | 31891 | 27937 |  |
|           | 25          |          | 852     | 8.26    | 57            | 42225                            | 40969 | 40644 | 40314 | 39640 | 38943 | 38222 | 37029 | 34991 | 32868 | 30378 | 23766 |  |
|           | 30          |          | 774     | 8.26    | 53            | 42270                            | 40913 | 40541 | 40154 | 39322 | 38334 | 37126 | 35444 | 32357 | 28796 |       |       |  |
|           | 20          | 10       | 1043    | 11.01   | 76            | 45182                            | 44178 | 43918 | 43656 | 43123 | 42582 | 42034 | 41202 | 39808 | 38418 | 37001 | 33859 |  |
|           | 25          |          | 938     | 11.03   | 68            | 46487                            | 45352 | 45060 | 44765 | 44163 | 43546 | 42913 | 41925 | 40073 | 38251 | 36313 | 31646 |  |
|           | 30          |          | 852     | 11.02   | 61            | 46529                            | 45312 | 44985 | 44647 | 43934 | 43162 | 42256 | 40619 | 38073 | 35146 | 31899 |       |  |

**NOTES:**

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.



## Models BSHD | BSHB



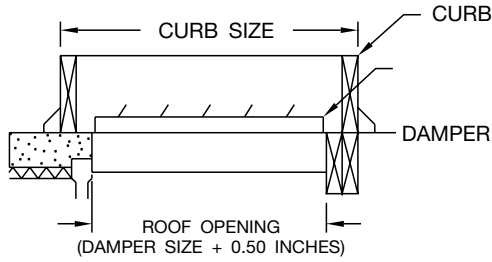
| SIZE | A     | B     | C     | D      | E     | F      | G     | H     |
|------|-------|-------|-------|--------|-------|--------|-------|-------|
| 14   | 21.75 | 11.75 | 10.00 | 40.00  | 21.50 | 39.00  | 39.25 | 27.50 |
| 16   | 21.75 | 11.75 | 10.00 | 40.00  | 24.50 | 39.00  | 39.25 | 27.50 |
| 18   | 22.75 | 12.75 | 10.00 | 48.00  | 26.50 | 51.00  | 40.25 | 27.50 |
| 21   | 26.75 | 15.75 | 11.00 | 54.00  | 29.50 | 51.00  | 44.25 | 28.50 |
| 24   | 28.75 | 17.75 | 11.00 | 66.00  | 32.50 | 63.00  | 46.25 | 28.50 |
| 30   | 33.75 | 19.75 | 14.00 | 75.00  | 40.50 | 75.00  | 51.25 | 31.50 |
| 36   | 39.25 | 21.75 | 17.50 | 88.00  | 46.50 | 87.00  | 56.75 | 35.00 |
| 42   | 42.25 | 23.75 | 18.50 | 86.00  | 52.50 | 99.00  | 59.75 | 36.00 |
| 48   | 43.25 | 23.75 | 19.50 | 93.00  | 58.50 | 111.00 | 60.75 | 37.00 |
| 54   | 46.25 | 23.75 | 22.50 | 112.00 | 64.50 | 111.00 | 63.75 | 40.00 |

**NOTE:**

1. Dimensions are not to be used for construction.

# Accessories

## Roof Curb

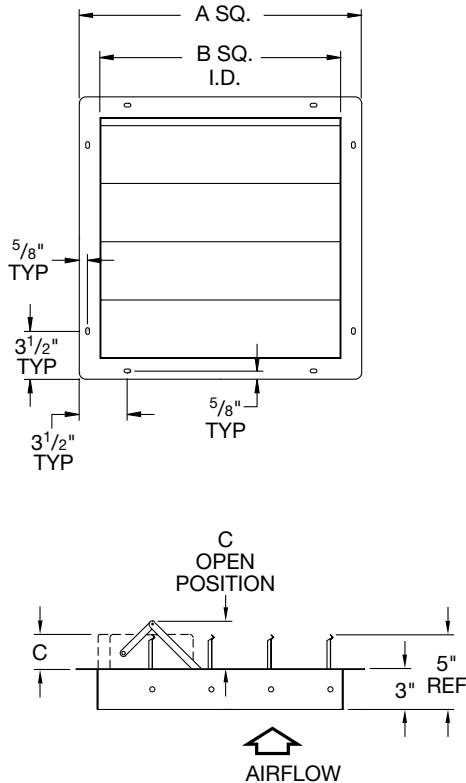


| SIZE | CANTED CURB SIZE | SELF-FLASHING CURB SIZE |
|------|------------------|-------------------------|
| 14   | 20.00 x 20.00    | 20.50 x 20.50           |
| 16   | 23.00 x 23.00    | 23.50 x 23.50           |
| 18   | 25.00 x 25.00    | 25.50 x 25.50           |
| 21   | 28.00 x 28.00    | 28.50 x 28.50           |
| 24   | 31.00 x 31.00    | 31.50 x 31.50           |
| 30   | 39.00 x 39.00    | 39.50 x 39.50           |
| 36   | 45.00 x 45.00    | 45.50 x 45.50           |
| 42   | 51.00 x 51.00    | 51.50 x 51.50           |
| 48   | 57.00 x 57.00    | 57.50 x 57.50           |
| 54   | 63.00 x 63.00    | 63.50 x 63.50           |

**NOTE:**

1. Curbs have 1 1/2" thick insulation, wood nailer (canted) or 3/16" polystyrene gasket (self-flashing) and damper tray as standard. A 12" high curb is required when using a motorized damper.

## Backdraft Damper



| SIZE | A SQ. | B SQ. | C    | NO. OF PANELS |
|------|-------|-------|------|---------------|
| 14   | 16.00 | 13.50 | 6.00 | 1             |
| 16   | 19.00 | 16.50 | 6.00 | 1             |
| 18   | 21.00 | 18.50 | 6.00 | 1             |
| 21   | 24.00 | 21.50 | 6.00 | 1             |
| 24   | 27.00 | 24.50 | 6.00 | 1             |
| 30   | 35.00 | 32.50 | 6.00 | 1             |
| 36   | 41.00 | 38.50 | 7.50 | 1             |
| 42   | 47.00 | 44.50 | 7.50 | 2             |
| 48   | 53.00 | 50.50 | 7.50 | 2             |
| 54   | 59.00 | 56.50 | 7.50 | 2             |

**NOTES:**

1. Exhaust damper shown (with front flange).
2. Supply damper has rear flange.



## Material Specifications

| FAN SIZE | GAUGE OF MATERIAL |      |      |      |           |      |             |      |                |                | SHAFT SIZE (IN.)               |
|----------|-------------------|------|------|------|-----------|------|-------------|------|----------------|----------------|--------------------------------|
|          | FAN HOUSING       |      | HOOD |      | FAN PANEL |      | DRIVE FRAME |      | PROPELLERS     |                |                                |
|          | BSHD              | BSHB | BSHD | BSHB | BSHD      | BSHB | BSHD        | BSHB | BSHD           | BSHB           |                                |
| 14       | 18                | —    | 22   | —    | 16        | —    | 14          | —    | DIE CAST ALUM. | —              | —                              |
| 16       | 18                | —    | 22   | —    | 16        | —    | 14          | —    |                | —              | —                              |
| 18       | 18                | —    | 22   | —    | 16        | —    | 14          | —    |                | —              | —                              |
| 21       | 18                | 18   | 22   | 22   | 16        | 16   | 14          | 14   |                | DIE CAST ALUM. | 1                              |
| 24       | 18                | 18   | 22   | 22   | 14        | 14   | 12          | 14   |                |                | 1                              |
| 30       | 18                | 18   | 22   | 22   | 14        | 14   | 12          | 12   |                |                | 1                              |
| 36       | 18                | 18   | 22   | 22   | 14        | 14   | 12          | 12   |                |                | 1                              |
| 42       | 16                | 16   | 22   | 22   | 12        | 12   | 10          | 12   |                |                | 1 <sup>3</sup> / <sub>16</sub> |
| 48       | 16                | 16   | 22   | 22   | 12        | 12   | 10          | 12   |                |                | 1 <sup>7</sup> / <sub>16</sub> |
| 54       | —                 | 16   | —    | 22   | —         | 12   | —           | 10   |                | —              | 1 <sup>7</sup> / <sub>16</sub> |

\* All gauges are minimums.

## Shipping Weights

| FAN SIZE | BSHD | BSHB |
|----------|------|------|
| 14       | 155  | —    |
| 16       | 165  | —    |
| 18       | 173  | —    |
| 21       | 208  | 212  |
| 24       | 307  | 276  |
| 30       | 386  | 399  |
| 36       | 520  | 524  |
| 42       | 660  | 689  |
| 48       | 776  | 812  |
| 54       | ---  | 942  |

\* Weights are only approximate and do not include accessories. Consult Fan Selector Program for actual shipping weights.



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## Models BSHD | BSHB

Low Profile Hooded Propeller Roof Ventilators, shall be Model BSHD direct drive or BSHB belt driven as manufactured by Aerovent, Minneapolis, Minnesota.

**PERFORMANCE** — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

**CONSTRUCTION** — Fan curb caps shall be constructed of heavy gauge galvanized steel or painted steel for durability and appearance. Curb caps shall have a deep formed inlet venturi for efficient airflow and pre-punched holes for easy mounting to the roof curb. Hood and hood support mechanisms shall be heavy gauge galvanized steel. Motor mount assemblies shall be constructed of heavy gauge galvanized or finish painted steel.

**PROPELLERS** — Propellers shall be constructed of cast aluminum blades and hubs. Propellers on direct drive units shall be mounted directly on the motor shaft with a taperlock bushing. Propellers on belt driven units shall be secured to the fan shaft with a taperlock bushing.

**SHAFTS (BSHB Only)** — Shafts shall be AISI 1045 cold rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

**BEARINGS (BSHB Only)** — Bearings are to be pillow block, heavy-duty, anti-friction, self-aligning, grease lubricated, ball type. Each fan's bearings are sized with a minimum average life, per AFBMA, in excess of 200,000 hours when operating at the maximum RPM of the fan size.

**DRIVES (BSHB Only)** — Motor sheaves shall be cast iron, and supplied as variable pitch standard. Drives and belts shall be rated for a minimum of 150% of the required motor HP.

**MOTORS** — All motors shall be single phase or three phase induction, permanently lubricated, heavy-duty, ball bearing type, closely matched to the fan load and provided at the voltage, phase, hertz, and enclosure as provided on the fan schedule.

**FINISH AND COATING** — Fans shall have galvanized steel or finish painted steel curb caps, motor supports, hoods and hood supports.

**ACCESSORIES** — When specified, accessories such as backdraft and motorized dampers, curb extension, roof curbs and disconnect switches shall be provided by Aerovent to maintain one source responsibility.

**FACTORY RUN TEST** — All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each propeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

**GUARANTEE** — The manufacturer shall guarantee the workmanship and materials for its direct drive BSHD and belt driven BSHB low profile hooded propeller roof ventilators for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

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**PROPELLER FANS | TUBEAXIAL & VANEAXIAL FANS | CENTRIFUGAL FANS & BLOWERS | ROOF VENTILATORS  
INDUSTRIAL AIR HANDLERS | AIR MAKE-UP | FIBERGLASS FANS | CUSTOM FANS**



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