

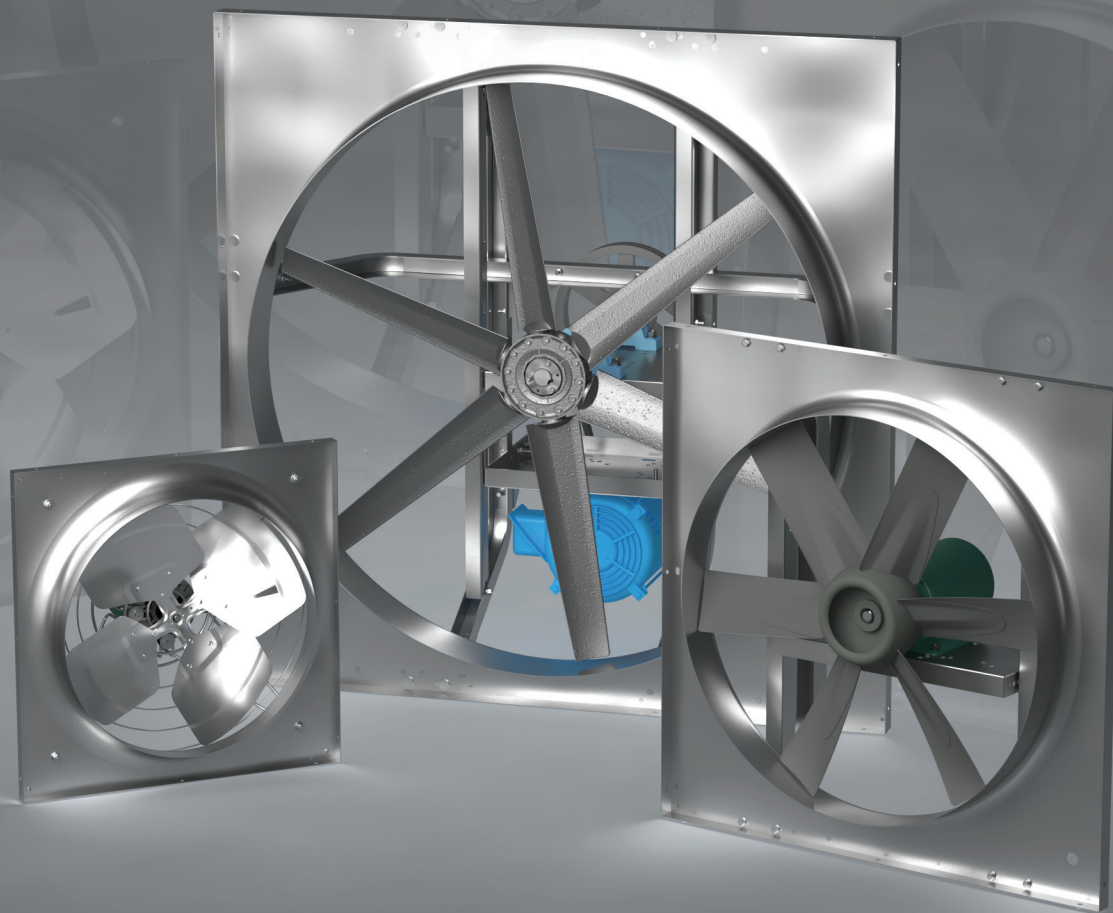
Sidewall Propeller Fans

Belt and Direct Drive

Exhaust, Supply and Reversible



BUILDING VALUE IN AIR.



July
2026

Sidewall propeller fans are ideal for high volumes of air and low pressure requirements. From general ventilation to industrial duty, Greenheck's range of construction and performance capabilities represents the most comprehensive sidewall propeller fan line in the industry.



- Exhaust or supply arrangements
- Fabricated steel, aluminum or cast aluminum propellers
- Drive frames and panels are constructed to match the level of duty and the motor size
- Three airflow directions: exhaust, supply and reversible
- Both belt drive and direct drive models
- Three levels of construction from commercial to industrial
- Multiple blade designs for low sound and optimum efficiency
- Typical installations include factories, warehouses, data centers, and parking garages



Greenheck Fan Corporation certifies that the SB, SBC, and S1 models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Sidewall Direct Drive, Sidewall Belt Drive, Sidewall Belt Driven Cast and Sidewall Cast models are listed for electrical (UL/cUL 705) File no. E40001

*UL is optional and must be specified

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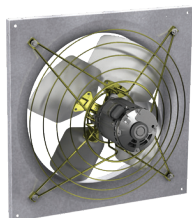
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Model Comparison																												
Model	Sizes	Location		Mounting			Airflow				Application					Drive Type	Propeller (blade) Type				Performance							
	Available Size Range (inches)	Outdoor	Indoor	Roof Curb	Base/Floor	Hanging	Wall	Ceiling Mounted	Exhaust	Supply	Reversible	Recirculate	General/Clean Air	Contaminated Air	Spark Resistant	Grease (UL/cUL 705)	Smoke Control (UL)	High Wind (150 mph)	High Temp (above 200°F)	Seismic Certification	Belt	Direct	Level 1 - L or H type	Level 2 - L or H type	Level 3 - L or H type	Level 3 - Cast Aluminum	Maximum Volume (cfm)	Maximum Static Pressure (in. wg)
SE, SS - 1	8 - 24	✓	✓			✓	✓		✓	✓			✓	✓	⦿					✓		✓	✓				7,115	1
SCR - 3	24 - 54	✓	✓			✓	✓		✓	✓	✓		✓	✓	✓					✓		✓				✓	45,000	0.5
SBE, SBS - 1	20 - 48	✓	✓			✓	✓		✓	✓			✓	✓						✓	✓		✓				30,000	0.75
SBE, SBS - 2	20 - 60	✓	✓			✓	✓		✓	✓			✓	✓						✓	✓			✓			53,000	1
SBE, SBS - 3	54 - 72	✓	✓			✓	✓		✓	✓			✓	✓						✓	✓				✓		90,500	1
SBCE, SBCE	24 - 72	✓	✓			✓	✓		✓	✓	✓		✓	✓	⦿					✓	✓				✓	✓	87,000	1

NOTE: ● - Cast aluminum blades and aluminum hub are spark resistant.

Direct Drive Fan Selection

Three propeller and drive frame combination levels are available with either an L or H type propeller. Models SE1 and SS1 are designed for smaller size applications where lower volumes and static pressures are found.



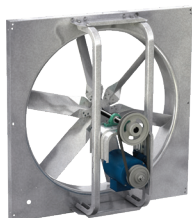
Level 1
Sizes 8 to 10



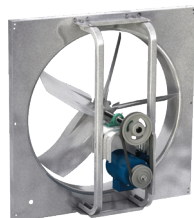
Level 1
Sizes 12 to 24

Belt Drive Fan Selection

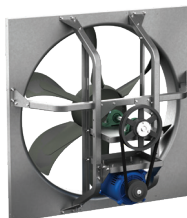
Three propeller drive frame construction levels are available with either an L or H type propeller. The application requirements for sound and static pressure determine propeller type. Propellers are available in fabricated steel or cast aluminum. C in model name indicates cast aluminum blades and hub.



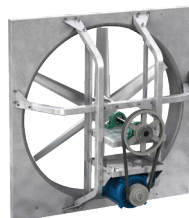
Level 1



Level 2



Level 3
Fabricated
Sizes 54 to 72



Level 3
Cast Aluminum
Sizes 54 to 72

Belt Drive Blade Designs



L Type



H Type

L Type Propeller

- Swept, steeply pitched blade design.
- Propellers typically run at lower RPMs and generate low sound levels.
- The best selection for sound critical applications or applications that require the best combination of both air and sound performance.
- Typically used when the static pressure is 0.5 in. wg or less.

H Type Propeller

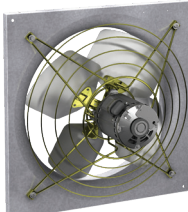
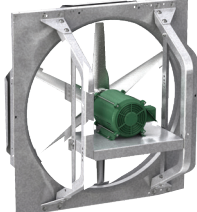
- Straight, moderately pitched blade.
- Designed for applications where static pressures are above 0.5 in. wg.
- These propellers typically run at higher RPMs and generate slightly higher sound levels than the "L" propellers.

Direct Drive

Construction and Material Data

All direct drive models are available in either exhaust or supply arrangements. Model SCR3 is the reversible fan model.

	Level 1		Reversible
Fan Sizes	8 - 12: D, G & E motor speeds (see page 22 for motor speed chart)	12 - 24: A, B & C motor speeds (see page 22 for motor speed chart)	24 - 54
Panel/Drive Frame	Galvanized steel with one-piece drawn venturi		Galvanized steel with one-piece drawn venturi, bolted structural steel channels and motor plate (paint optional)
	Zinc plated, heavy welded wire guard/support structure (paint optional)	Bolted structural steel channels and motor plate (paint optional)	
Propeller	Aluminum blades riveted to a steel hub		Heavy-duty, cast aluminum
Motors	Heavy-duty, permanently lubricated, sleeve bearing type	Ball bearing type	Heavy-duty, permanently lubricated Ball bearing type

Fan Size	Material Gauge				Max. Motor Frame Size	Approx. Weight (lbs.)	Model	
	Fan Panel	Drive Frame	Propeller Hub	Propeller Blade				
Level 1								
8	18	—**	—	—	48	15		
10	18	—**	—	—	48	16		
12	18	14**/*	—	—	48	20		
14	18	14*	—	—	56	27		
16	18	14*	—	—	56	30		
18	18	14*	—	—	56	35		
20	18	14*	—	—	145T	39		
24	18	14*	—	—	145T	45		
Reversible							Model SCR3	
24	16	12	Cast Aluminum Prop.	Cast Aluminum Prop.	184T	80		
30	16	12			184T	125		
36	16	12			215T	220		
42	14	10			254T	290		
48	14	10			254T	386		
54	14	10			256T	477		

Approximate weight does not include accessories.

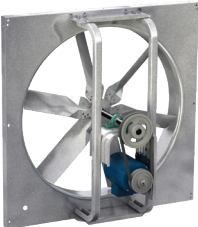
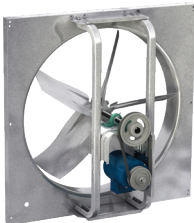
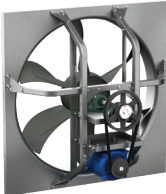
* A, B and C motor speeds only.

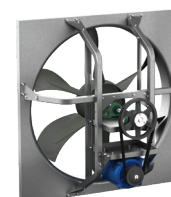
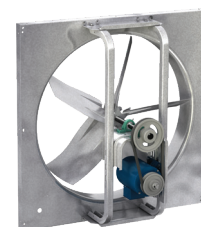
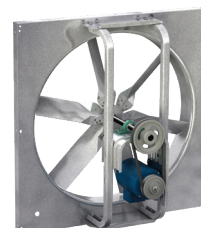
** D, G and E motor speeds have a wire frame rather than a drive frame.

Belt Drive

Construction and Material Data

	Level 1	Level 2	Level 3
Fan Sizes	20 - 48	20 - 60	54 - 72
Panel/Drive Frame	Galvanized steel with one-piece drawn venturi, bolted structural steel channels and one-piece motor/bearing plate (paint optional)		Galvanized steel with one-piece drawn venturi, bolted structural steel channels and two piece motor/bearing plate (all-welded panel/drive frame optional, paint optional)
Propeller	Galvanized steel, riveted blades (aluminum optional)	Reinforced galvanized steel, riveted blades, keyed hub (excluding the 2L)	SB - Heavy-duty, welded, reinforced, powder-coated steel blades. All with keyed hubs SBC - Heavy-duty, cast aluminum blades. All with keyed hubs
Bearings	Stamped steel pillow blocks up to size 36 and cast pillow blocks for size 42 and larger		Cast iron pillow blocks with grease fittings

Fan Size	Material Gauge						Shaft Size	Max Motor Frame Size	Approx. Weight (lbs.)	Model	
	Fan Panel	Drive Frame	Propeller								
			Hub	Blade							
			L	H	L	H					
Level 1											Model SB-1H
20	18	14		14	16	18	3/4	56	60		
24	18	14		14	16	18	3/4	56	70		
30	18	12	14	12	16		3/4	56	95		
36	18	12	14	12	16		3/4	145T	110		
42	16	12	12	10	14		1	145T	150		
48	16	12	12	10	14		1	145T	175		
Level 2											Model SB-2L
20	18	14		14	16	18	3/4	143T	65		
24	18	14		14	16	18	3/4	145T	75		
30	18	12	14	12	16		1	184T	100		
36	18	12	14	12	16		1	184T	115		
42	16	12	12	10	14		1-1/4	184T	160		
48	16	12	12	10	14		1-1/4	184T	260		
54	16	12	12	10	14		1-1/4	184T	315		
60	14	12		10	12		1-1/2	215T	370		
Level 3											Model SB-3L
54	14	10		10	14		1-1/2	254T	590		
60	14	10		3/16 in.	12		1-3/4	256T	755		
72	12	10		3/16 in.	12		2	256T	1050		



Approximate weight does not include accessories.

Electrical Accessories

Disconnect Switches

Toggle type and heavy-duty disconnect switches are available for positive electrical shut-off and safety in servicing fans. The following switches are available to meet individual electrical requirements and can be factory-mounted or shipped loose for field mounting. Wiring from the motor to the disconnect box is provided with factory-mounted disconnect switches.

- NEMA-1 - General purpose
- NEMA-3R - Rain Resistance
- NEMA-4 - Watertight
- NEMA-3R & NEMA-4 - Heavy-Duty
- NEMA-7 & 9 - for Class 1 and Class 2 hazardous locations and explosion-resistant applications.



NEMA-3R
and NEMA-1

UL/cUL 705

All belt and selected direct drive fans with TE standard efficiency, single-speed motors are available with the UL 705 listing for electrical.

Extended Wiring Pigtail

Available only in conjunction with factory-mounted disconnect switches. Liquid-tight wiring extends beyond the fan and allows direct hook-up to the power supply. This eliminates field wiring within the fan. Internal or external power supply can be specified.

End Switches

Factory-mounted end switches allow the damper to open completely before the fan is energized. This reduces back pressure and brake horsepower load on the fan motor at start-up. (Field-supplied motor starter with a relay is required to complete the wiring on a system using an end switch.)

One-Point Wiring

Available when the following items are selected:

- Common voltages on the motor and the actuator
- Disconnect mounted and wired
- Wall housing

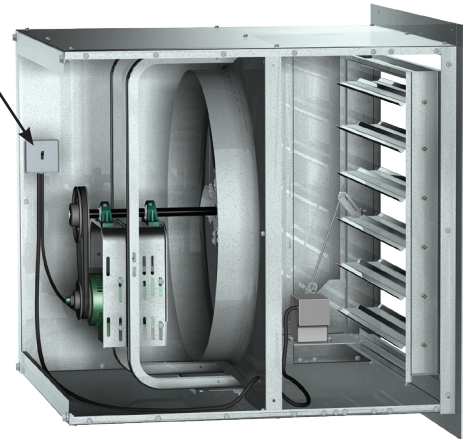
The wires are pulled from the motor and the actuator on the damper to the disconnect box. (Hardwiring of the components to the disconnect switch is by others.)

Exception: When a specific voltage is not available on the actuator, Greenheck will provide a hardwired transformer to the actuator. Greenheck will then pull the wires from the transformer to the disconnect box.

Motor Starters

Can be used to coordinate dampers, end switches and motor starting. They protect the motor, offer control options, and provide lockout/tagout features as well.

One-Point wiring
Junction Box or
Disconnect



Finish Options

Coatings

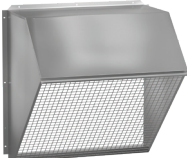
A variety of special coatings ranging from enamels to phenolics are available for decorative or protective purposes. When a special coating is selected for the fan, all accompanying accessory items are also coated unless specified. Consult your local representative for more details.

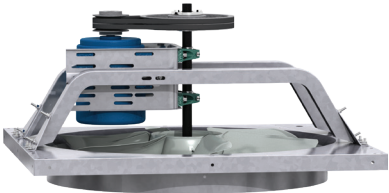
Welded and Painted Fan Construction

For applications where extra heavy construction is required, welded steel construction is available. With this option, all stationary connections which are normally bolted, are welded and coated with an industrial grade paint. This option applies to belt drive level 3 fans and direct drive level 2 and 3 fans only.

Seismic-Rated Fans

All certified sidewall propeller fans are tested and certified to the worst-case scenario seismic conditions for use anywhere in the United States. All fans are shaker table tested and certified to California HCAI seismic standards. For more information, see California HCAI certification - OSP-0356.

Option or Accessory	Page Number	Mounting Option				
		Standard Wall Mounting	Standard Horizontal Mounting	Wall Collar	Wall Housing	Filtered Supply Wall Housing
OSHA Motor Side Guard Protective guards of expanded metal screen in structural steel frames are available to completely enclose the motor and drive side of the fan.		✓		✓		
Weatherhood Weatherhoods shield wall openings and dampers from rain and snow. Weatherhoods are shipped unassembled in kit form for field assembly. Construction is of galvanized steel with wire mesh birdscreen. Mounting flanges have prepunched mounting holes. 45° turndown is for exhaust and 90° turndown is for exhaust and supply. Options include aluminum frame construction, insect screen, and painted finish. The weatherhood cannot be used with the damper guard option.		✓		✓	✓	✓
Damper Guard Damper guards meet the OSHA requirements to completely enclose the damper or wall openings on the discharge side of the fan. They are constructed of expanded galvanized steel screen in galvanized steel frames. Mounting flanges have prepunched mounting holes. Options include aluminum frame construction and painted finish. The damper guard cannot be used with the weatherhood option.		✓		✓	✓	✓
Dampers Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers are available for exhaust or supply configurations.		✓		✓	✓	✓

Mounting Option	Description	Page
Standard Wall Mounting 	Fan can be mounted directly to a wall.	9
Standard Horizontal Mounting 	Fan can be horizontally mounted to move air up or down.	9
Filtered Supply Wall Housing 	The filtered supply wall housing is a flexible and easy way to mount the fan for installations where filtering is required.	11
Wall Housing  Optional Accessories	The wall housing is the easiest and most flexible way to mount the sidewall propeller fan and all of its accessories.	12
Wall Collar  Optional Accessories	The wall collar is an easy way to mount the sidewall propeller fan and its accessories.	12

Standard Wall Mounting

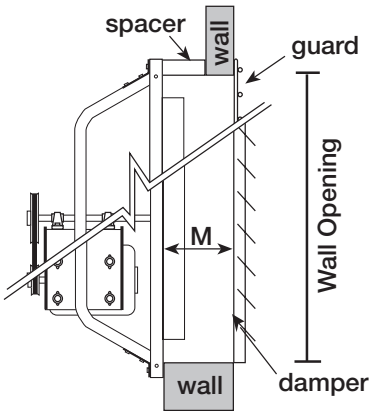
The split drawing (right) illustrates the typical ways of mounting fans directly to the wall when a wall housing or collar is not used.

For exhaust fans, there is a minimum dimension (M) which must be maintained between the propeller and damper or guard to achieve optimum performance (failure to meet this minimum dimension will result in loss of fan performance, increased noise and shortened fan and damper life). There is also a minimum required wall opening dimension (W.O.) to allow the venturi to fit into the wall opening.

The chart at far right provides the minimum “M” and wall opening dimensions.

This installation may require a spacer (by others) between the fan and wall to achieve the minimum “M” dimension.

Fans can be mounted directly to a wall only if the wall is of sufficient thickness to meet the minimum “M” dimension as shown here. If mounting to a wall through the face of the fan panel, holes will need to be appropriately drilled where required.



Fan Size	M	Wall Opening
8	6	10-1/2
10	6	12-1/2
12	7	14-1/2
14	8	16-1/2
16	9	18-1/2
18	10	20-1/2
20	12	22-1/2
24	13	26-1/2
30	13	32-1/2
36	14	38-1/2
42	15	44-1/2
48	16	50-1/2
54	17	57-1/2
60	19	63-1/2
72	19	74-1/2

All dimensions in inches.

Standard Horizontal Mounting

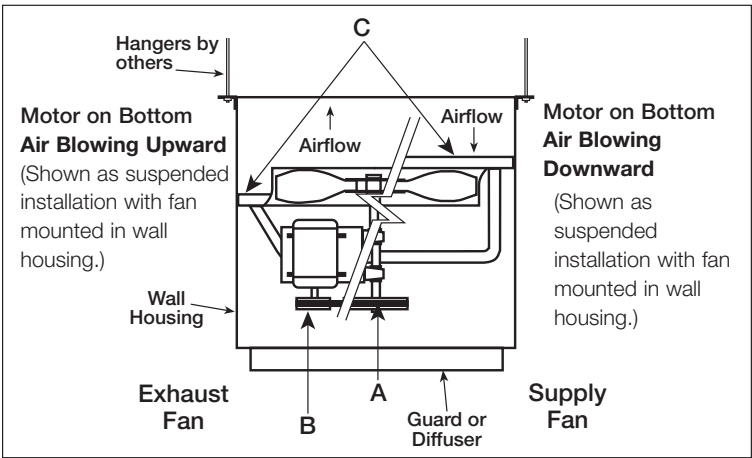
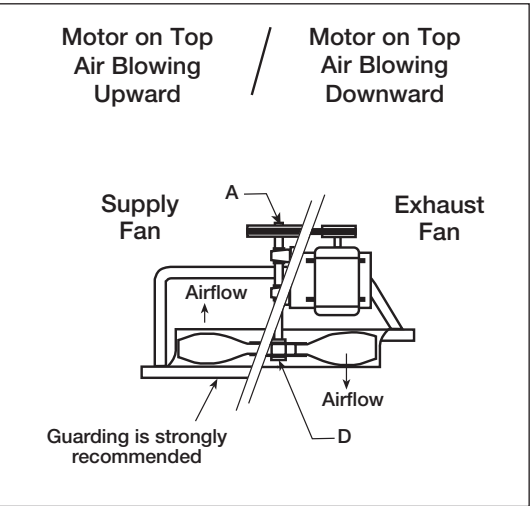
Modifications Shown in Diagrams	
A	Grooved shaft with snap rings (belt drive fans)
B	Motor pulley retaining hardware (belt drive fans with motor on bottom)
C	Reinforcing angles on fan panel (all fans with motor on bottom)
D	Propeller retaining hardware - not shown (direct drive fans with motor on top)

NOTE: Protective guarding is also required below the fan for safety. When guarding is not ordered with the fan, it must be supplied by the installer. When specifying a fan for horizontal mounting, the motor location (top or bottom) and airflow (upward or downward) are required information.

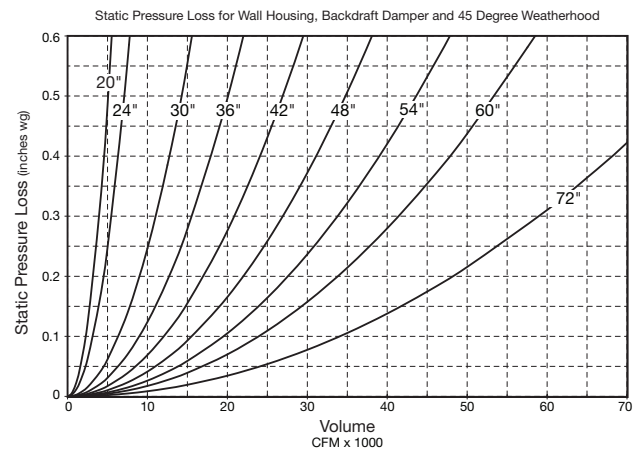
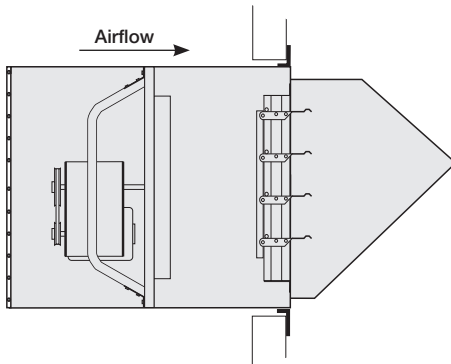
Horizontally-mounted fans are available for applications requiring vertical airflow.

Typical applications include mounting fans in ductwork or plenums as transfer fans or suspending them from the ceiling in a wall housing for use as recirculation fans. Both belt and direct drive fans can be horizontally mounted. Motors can be mounted on top or on bottom with airflow up or down. Specify configuration best suited for access and service.

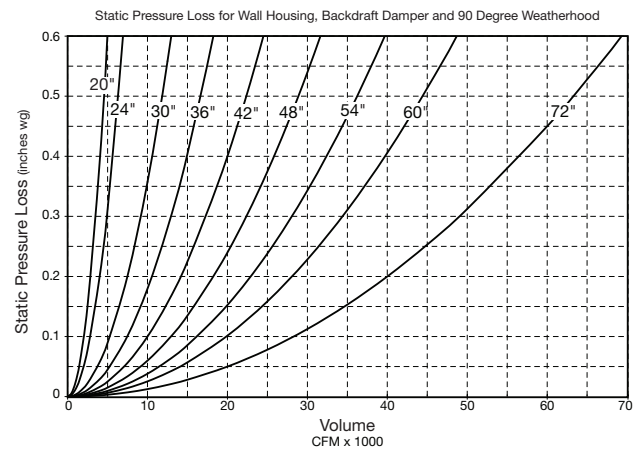
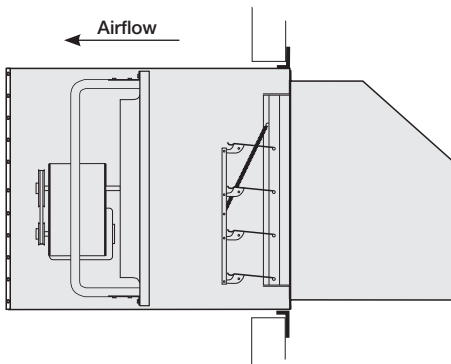
Horizontally-mounted fans are put under different stresses than fans mounted in a wall. Construction modifications are required depending on motor location (top or bottom) and whether the fan is belt or direct drive.



EXHAUST FAN in Wall Housing with Gravity Damper and Weatherhood



SUPPLY FAN in Wall Housing with Gravity Damper and Weatherhood

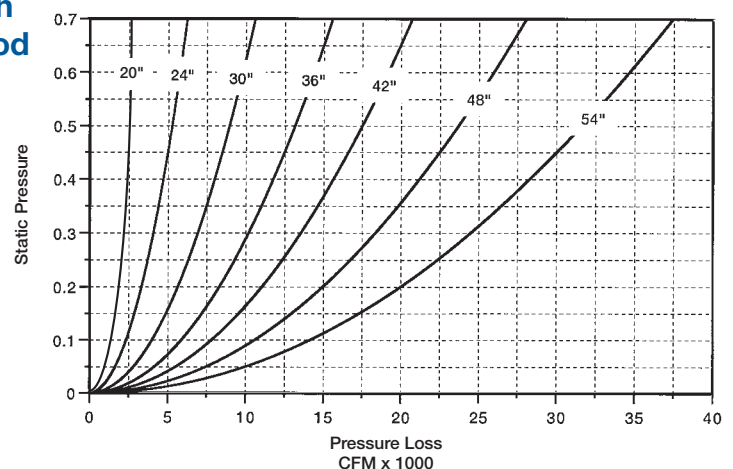


See section on page 12 about water ingress and mitigation on supply fans.

FILTERED SUPPLY FAN in Wall Housing with Filter Bank, Gravity Damper and Weatherhood



NOTE: This chart is for manual calculations only. CAPS® has filter losses built into the selection tool when the filtered housing option is selected.

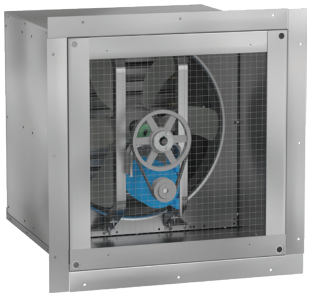


Filtered Supply Wall Housing Mounting

Filtered supply wall housings are available in six sizes for fans ranging from size 24 to 54 inches. They are designed with the draw-thru concept to achieve the highest filter and fan efficiencies.

Standard construction is galvanized steel (painted steel optional). Mounting flanges are factory installed for either flush exterior or flush interior mounting. Permanent 2-inch washable filters are accessed through a bolted panel and can be easily removed for cleaning.

All accessory items available with the standard wall housing can be used with the filtered supply wall housing.

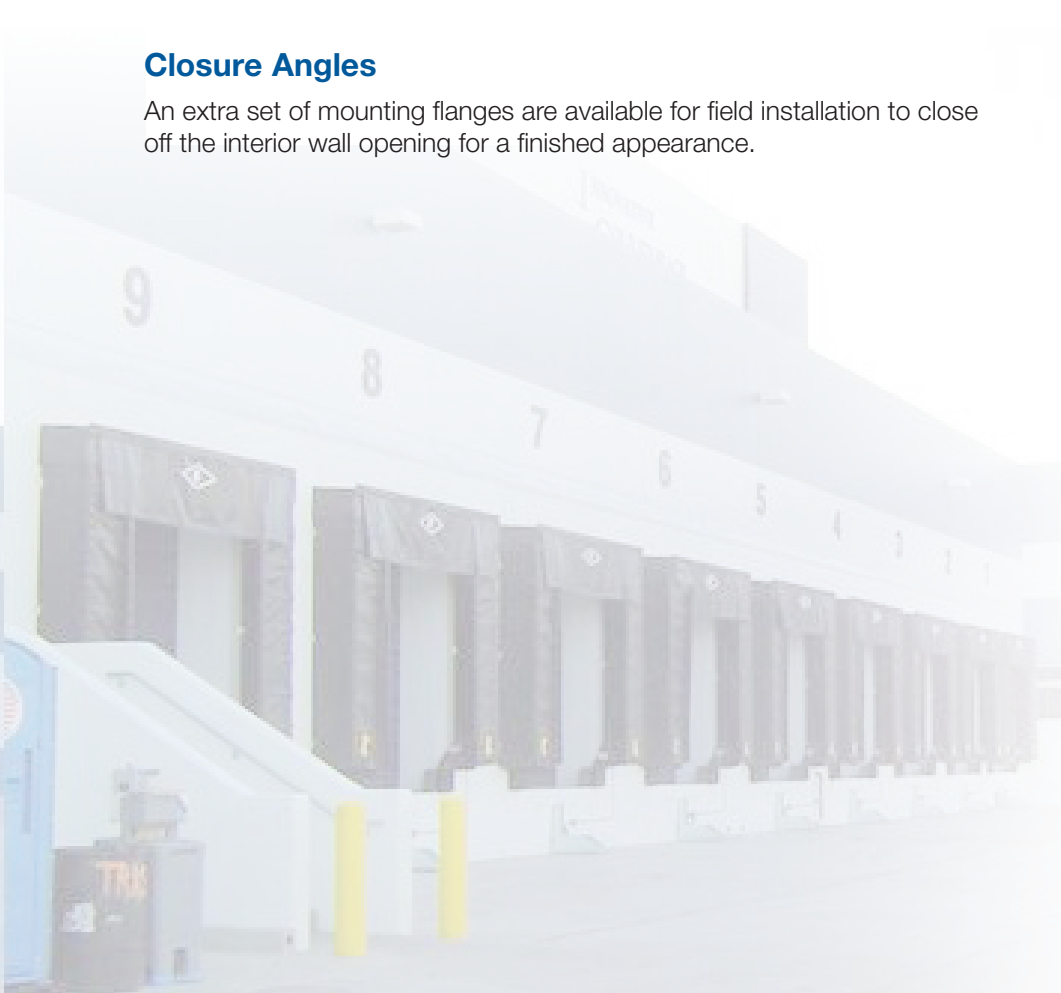
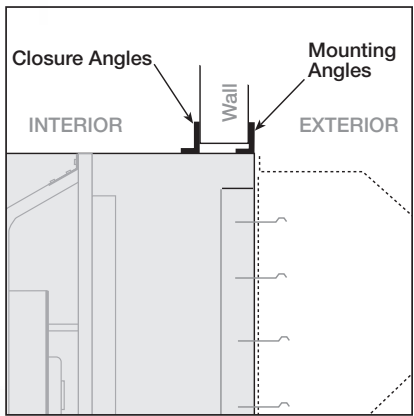


Size	Filter Size	Quantity
24	23-1/4 x 16-1/4	4
30	24-5/8 x 19-1/4	4
36	23-1/4 x 22-1/8	6
42	24-1/8 x 25-1/8	6
48	23-1/4 x 18-3/4	12
54	23-1/4 x 20-3/4	12

Filters are 2-inch nominal thickness. Above filter sizes are actual dimensions.
All dimensions in inches.

Closure Angles

An extra set of mounting flanges are available for field installation to close off the interior wall opening for a finished appearance.

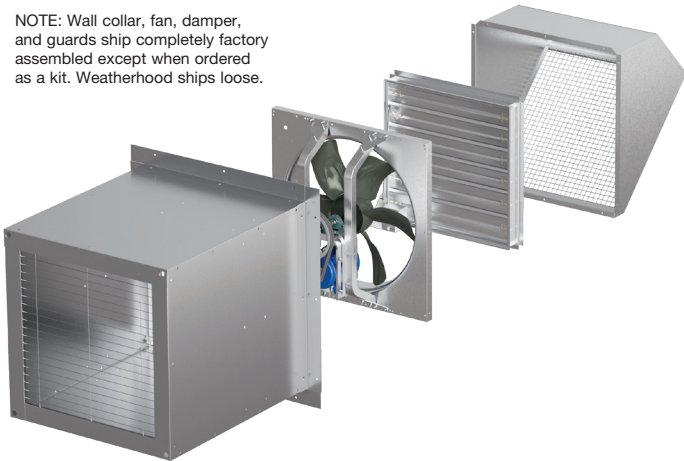


Wall Housing Mounting

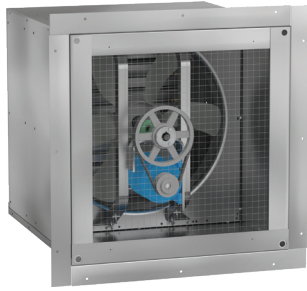
Wall housings are the safest, most efficient and sturdy platform for mounting sidewall propeller fans and their optional accessories. Wall housings allow for a wide range of mounting arrangements to meet specific applications. It is constructed of galvanized steel (painted steel optional) with heavy-gauge mounting flanges and prepunched mounting holes. Protective guards of welded steel wire completely protect the drive side of the wall housing. Guards are coated with Permatector™, a thermal setting polyester urethane. Other paint finishes are also available. Wall housing guards that meet OSHA requirements are also available.

The wall housing is designed to reduce installation time and provide maximum installation flexibility. Attached accessories such as backdraft dampers, guards, and weatherhoods may mount to either end. As a result, a wide variety of configurations are available to accommodate the needs of the system designer.

NOTE: Wall collar, fan, damper, and guards ship completely factory assembled except when ordered as a kit. Weatherhood ships loose.



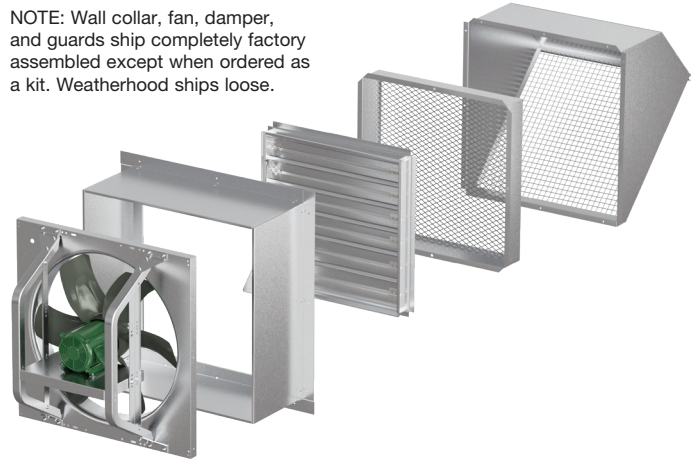
Wall housing or wall collar should be tipped slightly to the outside for water drainage.



Wall Collar Mounting

Wall collars offer an alternate method for mounting sidewall propeller fans and the optional accessories shown here. Standard construction is of galvanized steel (painted steel is optional) with heavy-gauge mounting flanges and prepunched mounting holes.

NOTE: Wall collar, fan, damper, and guards ship completely factory assembled except when ordered as a kit. Weatherhood ships loose.



Water Ingress and Mitigation

Fans installed to supply air into a building carry the inherent risk of supplying moisture into the building as well. Rain, snow, driving wind, and cold temperature frosting can all contribute to the possibility of unwanted moisture entering the building.

The amount of water captured is dependent on air velocity, water droplet size, length of event, wind strength and wind direction. Because of these variables some degree of water entrainment can occur. Caution should be exercised when supplying air with a sidewall propeller fan.

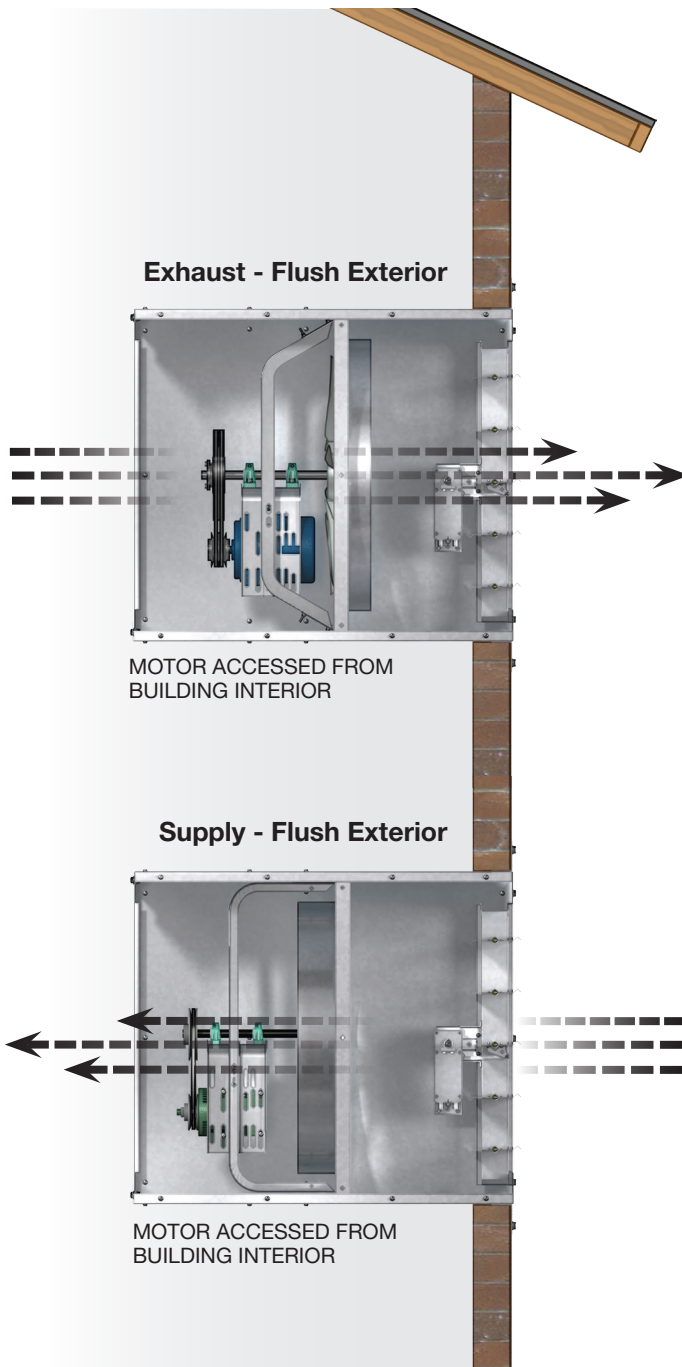
- Weatherhoods and louvers are recommended to reduce the likelihood of water entering a building through the fan opening.
- Installing the fan with a slight slope toward the outside (1/8 inch per foot or more) will minimize water ingress to the building.
- Air velocities below 500 ft/min reduce the risk of rain ingress; however snow can be captured at much lower rates.
- Installation orientation consideration - mounting a fan on west or south side of a building increases potential for driving rain/moisture. Consider the north or east side for supply air fan mounting.
- Consider mounting under an eave with a rain gutter if fan will be mounted near the roofline.

Sidewall propeller housings can be oriented in eight horizontal and eight vertical configurations. The two main considerations for determining which orientation the project requires are:

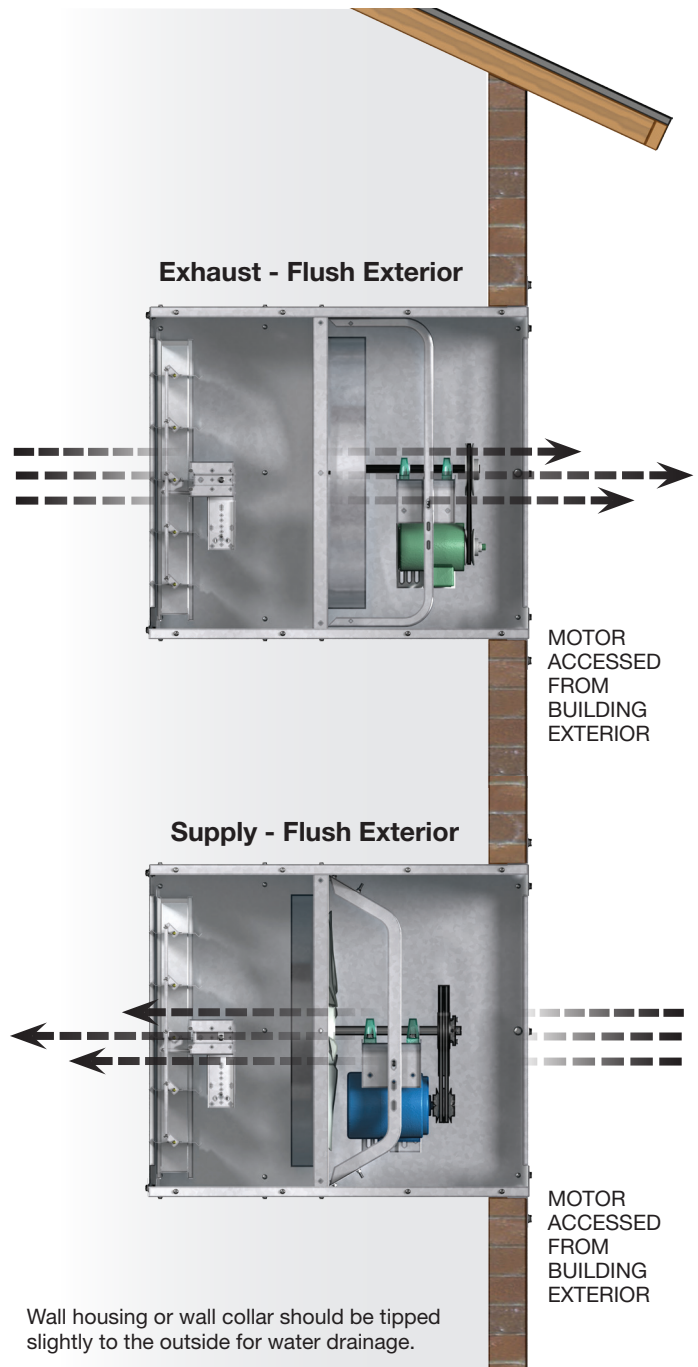
1. Will the fan and housing be placed inside the building or outside of the building?
2. How will the motor and drives be most easily accessed, from inside of the building or from outside of the building?

Flush Exterior - Motor and Drive Accessed From

Inside of Building - Damper Outside



Outside of Building - Damper Inside



Mounting Options

Flush Interior

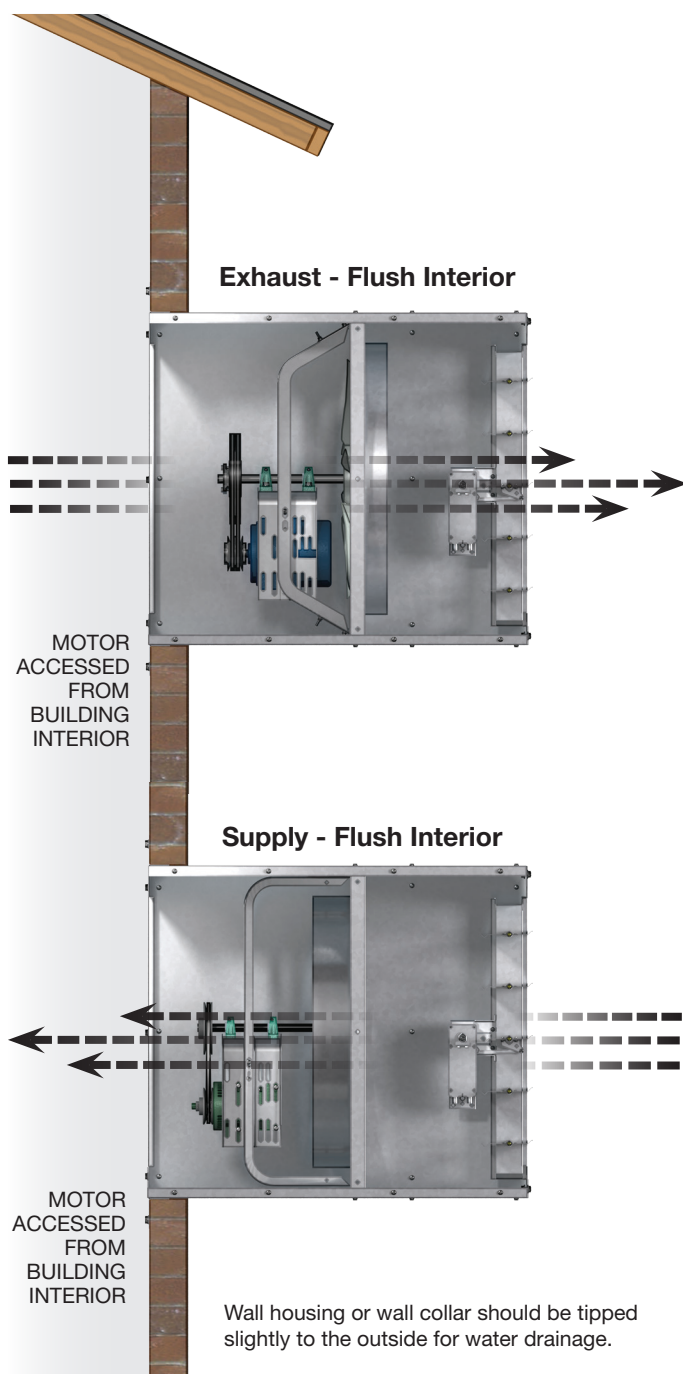
Flush Interior: The fan and housing will be outside the building and the end of the housing will be flush with the interior wall.

Flush Exterior: The fan and housing will be inside the building and the end of the housing will be flush with the exterior wall.

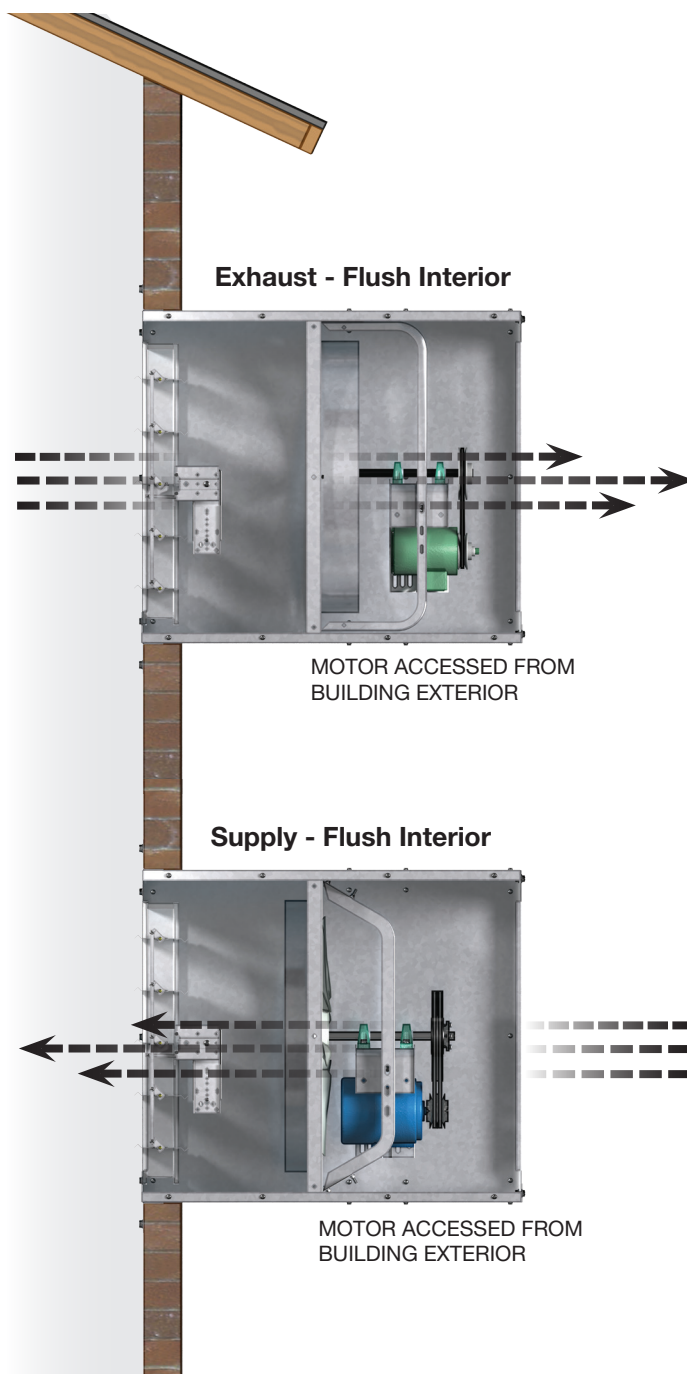
Motor Access: The motor and drives can be placed on either side of the propeller for access to grease bearings, check or change belts, and inspect the motor/wiring connections. Failure to assess the best access point can place maintenance personnel in extreme danger if they must reach through the propeller.

Flush Interior - Motor and Drive Accessed From

Inside of Building - Damper Outside



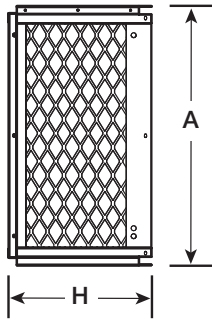
Outside of Building - Damper Inside



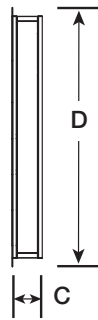
Options and Accessories

Guard / Weatherhood Dimensions

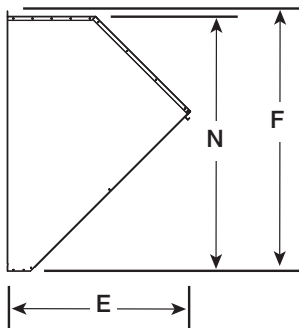
OSHA Motor Side Guard



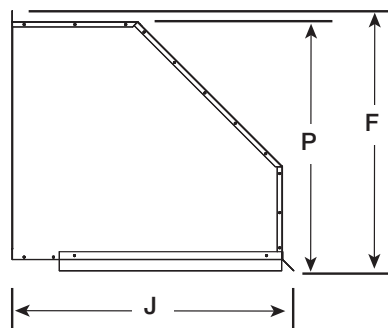
Damper Guard



45° Weatherhood



90° Weatherhood



Size	OSHA Motor Side Guard			Galvanized Steel Gauge (ga) Thickness
	A	Supply	Exhaust	
8	13-1/8	9-5/8	9-5/8	18
10	15-1/4	10	10	18
12	18	12	12	18
14	20-1/8	12	12	18
16	22-1/8	12	12	18
18	24-1/8	12	12	18
20	26-1/8	22	17-3/4	18
24	32-1/8	22-3/4	19-3/4	18
30	38-1/8	26	21-1/2	18
36	44-1/8	31-1/4	24-1/4	18
42	50-1/8	33-1/4	27	18
48	56-1/8	34-3/4	29-1/4	18
54	62-1/8	39	34	16
60	68-1/8	39	30	16
72	74-1/8	39	34	16

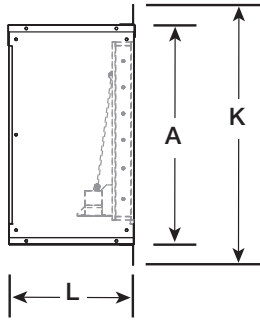
Size	Damper Guard		Damper	Weatherhood							Galvanized Steel Gauge (ga) Thickness
	C	D		E	J	N	P	Width	F 45°	F 90°	
8	5-1/2	10-1/4	10	13-1/4	16-3/8	11-1/4	12	10-1/2	12	12-3/4	18
10	6-1/2	12-1/4	12	14-7/8	18-1/2	13-3/8	14	12-1/2	14-1/4	14-7/8	18
12	5-1/4	14-1/4	14	16-3/8	20-3/8	15-5/8	16-3/8	14-1/2	16-7/8	17-1/2	18
14	6-1/4	16-1/4	16	17-1/2	22-1/2	17-5/8	18-3/8	16-1/2	18-7/8	19-1/2	18
16	6-3/4	18-1/4	18	19-3/8	25	19-5/8	20-3/8	18-1/2	20-7/8	21-1/2	18
18	6	20-1/4	20	22	27-1/2	21-5/8	22-3/8	20-1/2	22-7/8	23-1/2	18
20	6-1/2	22-1/4	22	24-3/4	29-3/4	23-5/8	24-3/8	22-1/2	24-7/8	25-5/8	18
24	6-1/4	26-1/4	26	26-7/8	36	30-3/8	31-3/4	29-1/8	31-3/4	33-1/8	18
30	6-1/2	32-1/4	32	29-1/8	40-1/8	36-1/2	37-7/8	35-1/8	37-7/8	39-1/4	18
36	6-3/4	38-1/4	38	33	45-1/2	42-1/2	43-7/8	41-1/8	43-7/8	45-1/4	18
42	10	44-1/4	44	35-3/4	49-1/4	48-1/2	49-7/8	47-1/8	49-7/8	51-1/4	18
48	9	50-1/4	50	40-3/8	55-1/2	54-5/8	56	53-1/4	56	57-3/8	18
54	7-1/2	56-1/4	56	44-3/4	61-1/4	60-7/8	62-1/4	59-1/2	62-1/4	63-5/8	16
60	7-1/4	62-1/4	62	48-3/8	66-1/2	67	68-3/8	65-5/8	68-3/8	69-3/4	16
72	7-1/2	74-1/4	74	53-1/4	72-1/8	79-1/2	80-7/8	78-1/8	80-3/4	82-1/8	16

All dimensions in inches.

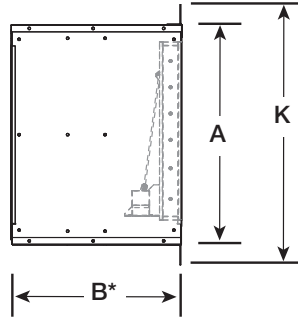
Options and Accessories

Wall Collar / Wall Housing Dimensions

Wall Collar

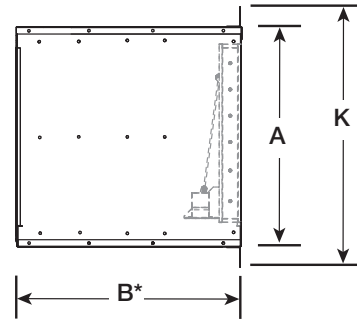


Short Wall Housing



* B - Short Wall Housing: B dimension will increase by 6 inches when a long wall housing is selected or a motorized backdraft damper is specified. For complete dimensional information refer to submittal. All dimensions given in inches.

Long Wall Housing

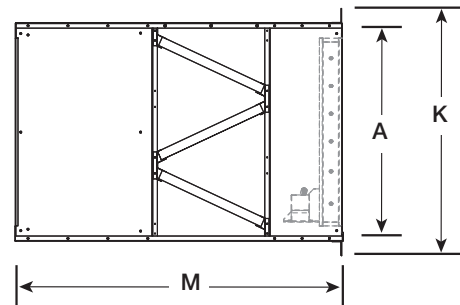


* B - Short Wall Housing: B dimension will increase by 6 inches when a long wall housing is selected or a motorized backdraft damper is specified. For complete dimensional information refer to submittal. All dimensions given in inches.

Size	Wall Collar and Wall Housings						Galvanized Steel Gauge (ga) Thickness
	A	B*	K	L	M	W.O.	
8	13-1/4	19	16-1/4	16-1/8	—	14-1/4	18
10	15-1/4	19	18-1/4	16-1/8	—	16-1/4	18
12	18-1/4	23	21-1/4	16-1/8	—	19-1/4	18
14	20-1/4	26	23-1/4	18-3/8	—	21-1/4	18
16	22-1/4	27	25-1/4	18-3/8	—	23-1/4	18
18	24-1/4	28	27-1/4	18-3/8	—	25-1/4	18
20	26-1/4	32	29-1/4	18-3/8	—	27-1/4	18
24	32-1/4	37	38-1/4	18-3/8	63	33-3/4	18
30	38-1/4	38	44-1/4	18-3/8	65	39-3/4	18
36	44-1/4	39	50-1/4	18-3/4	67-1/4	45-3/4	18
42	50-3/8	44	56-3/8	18-3/4	72-7/8	51-3/4	18
48	56-3/8	44	62-3/8	18-7/8	72-7/8	57-3/4	18
54	62-3/8	52	68-3/8	20-1/8	79-11/16	63-3/4	18
60	68-3/8	54	74-3/8	21	—	69-3/4	16
72	83-1/8	60	89-1/8	22	—	84-3/4	12

All dimensions in inches.

Filtered Wall Housing



Backdraft Dampers

Used as a stand-alone accessory or in conjunction with a wall housing or wall collar accessory, backdraft dampers are available for exhaust or supply configurations. Backdraft dampers are constructed with aluminum or galvanized frames and blades and vinyl blade seals. Actuators are available in 24, 115, 208, 230, or 460 volts. Actuators for 50-cycle voltages are also available.

Backdraft damper model availability will be limited if fan velocity exceeds maximum damper catalog velocity.



WD-320/430 Series



EM-31 Series

Commercial Control Dampers

Used as a stand-alone accessory or in conjunction with a wall housing or wall collar accessory, commercial control dampers are available for exhaust or supply configurations. Commercial control dampers are constructed with galvanized or aluminum frames and galvanized or stainless steel blades and stainless steel blade seals. Actuators are available in 24, 115, 208, 230, or 460 volts. Actuators for 50-cycle voltages are also available.



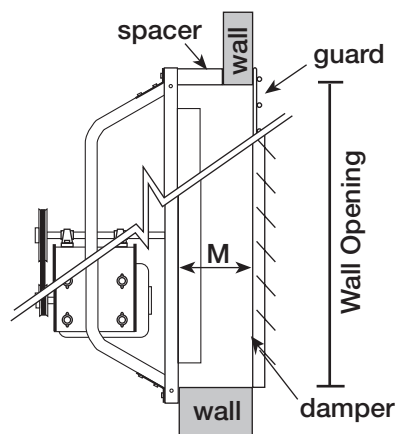
VCD-20/30/40 Series

Damper Availability	BD-320	EM-31	VCD-20	VCD-23	VCD-33	VCD-34	VCD-42	VCD-43	WD-320	WD-430
Exhaust	●	○	●	●	○	○	○	○	●	
Supply			●	●	○	○	○	○		●

○ Ship Loose Only ● Factory Attached or Ship Loose

Size	M	Wall Opening
8	6	10-1/2 x 10-1/2
10	6	12-1/2 x 12-1/2
12	7	14-1/2 x 14-1/2
14	8	16-1/2 x 16-1/2
16	9	18-1/2 x 18-1/2
18	10	20-1/2 x 20-1/2
20	12	22-1/2 x 22-1/2
24	13	26-1/2 x 26-1/2
30	13	32-1/2 x 32-1/2
36	14	38-1/2 x 38-1/2
42	15	44-1/2 x 44-1/2
48	16	50-1/2 x 50-1/2
54	17	57-1/2 x 57-1/2
60	19	63-1/2 x 63-1/2
72	19	74-1/2 x 74-1/2

All dimensions in inches.



Volume control dampers that are ordered with explosion proof (EXP) actuators will affect overall length of long wall housing depending on fan size and actuator; consult factory.

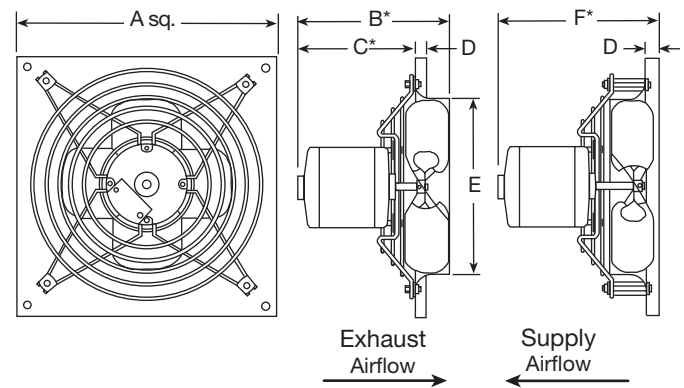
Direct Drive

Dimensional Data

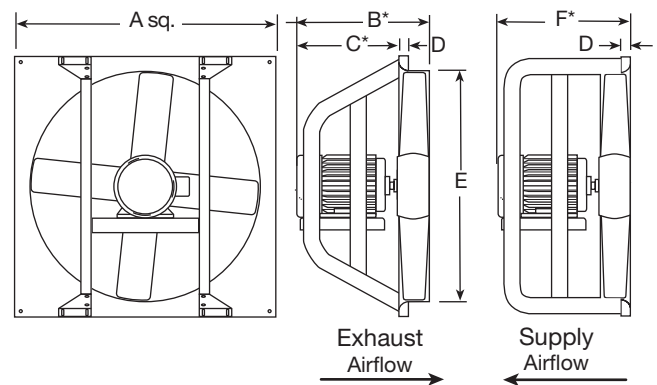
Fan Size	A Sq.	B*	C*	D	E	F*	Damper Size
Level 1							
8	13	7	5	1	8-3/8	8	10 x 10
10	15	8-3/4	5	1	10-3/8	8	12 x 12
12	18	10-3/4	8-1/4	1	12-3/8	13-1/8	14 x 14
14	20	11-1/4	8-1/2	1	14-3/8	14-1/4	16 x 16
16	22	11-3/4	8-7/8	1	16-3/8	14	18 x 18
18	24	14	10-7/8	1	18-3/8	14-1/4	20 x 20
20	26	17-1/4	11	1	20-1/2	18	22 x 22
24	32	20	12-5/8	1-1/4	24-3/8	21	26 x 26
Reversible							
24	32	20	13-1/2	1-1/4	24-5/8	—	26 x 26
30	38	20-1/2	16-3/8	1-1/4	30-3/4	—	32 x 32
36	44	20-1/2	16-3/8	2	36-5/8	—	38 x 38
42	50	26	18-1/4	2	42-5/8	—	44 x 44
48	56	26-5/8	20-5/8	2	49	—	50 x 50
54	62	28	22-7/16	2	55-3/8	—	56 x 56

*Varies with motor selection. All dimensions in inches.

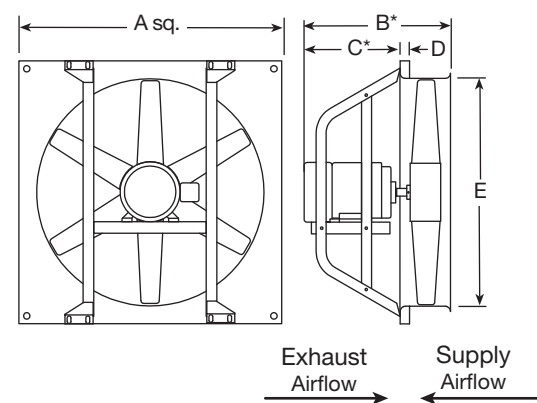
Level 1: Sizes 8 - 12



Level 1: Sizes 12 - 24



Reversible



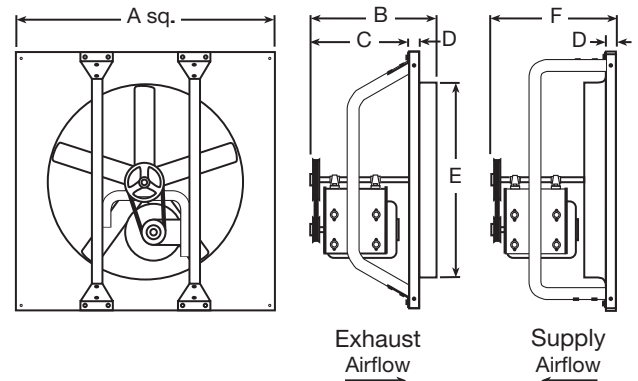
Belt Drive

Dimensional Data

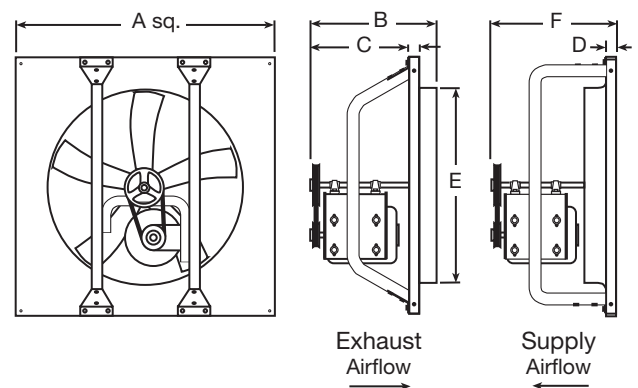
Fan Size	A Sq.	B	C	D	E	F	Damper Size
Level 1							
20	26	19-1/2	16-1/4	1	20-1/2	20	22 x 22
24	32	19-1/2	16-1/8	1-1/4	24-5/8	20	26 x 26
30	38	22-1/2	18-1/4	1-1/4	30-5/8	21	32 x 32
36	44	21-1/2	16-1/2	2	36-5/8	23	38 x 38
42	50	25	20	2	42-3/4	23	44 x 44
48	56	25	19	2	48-3/4	23	50 x 50
Level 2							
20	26	19-1/2	16-1/4	1	20-1/2	20	22 x 22
24	32	19-1/2	16-1/8	1-1/4	24-5/8	20	26 x 26
30	38	21-1/2	17-1/4	1-1/4	30-5/8	21	32 x 32
36	44	21-1/2	16-1/2	2	36-5/8	22	38 x 38
42	50	25	20	2	42-3/4	25-1/2	44 x 44
48	56	25	19	2	48-3/4	25-1/2	50 x 50
54	62	26	20-1/2	2	55-1/4	24	56 x 56
60	68	28	21-7/16	2	61-1/4	24	62 x 62
Level 3							
54	62	35-3/4	30-1/4	2	55-1/4	36-1/4	56 x 56
60	68	35	28-7/16	2	61-1/4	35-1/2	62 x 62
72	82	35	28-1/4	2-1/8	73-1/4	35-1/2	74 x 74

All dimensions in inches.

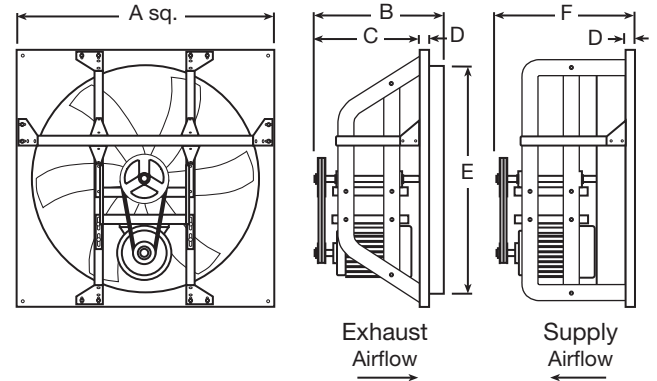
Level 1



Level 2



Level 3



Model SE1 (direct drive) is available with Greenheck's Vari-Green® technology. Greenheck's Vari-Green products are designed for efficiency, controllability, and low maintenance.

Motors

The Greenheck Vari-Green motor is an electronically commutated (EC) motor that operates on single or three phase AC power input and internally converts it to DC power providing better speed control capabilities (up to an 80% turndown) and higher efficiencies than standard motors. The Vari-Green motor blends technology, controllability and energy efficiency in a low maintenance package that has changed the way the industry designs, specifies, and operates air movement equipment. Depending on power rating, Vari-Green motors are available in both single and three phase with either a dial-mounted potentiometer (speed control) or wired to accept a 0-10 VDC control signal from an external source.



Controls

For expanded controllability, Greenheck offers many different solutions to fit any need. Controls are designed specifically for Vari-Green motors. These controls are available for applications requiring manual operation or demand-controlled ventilation (DCV). Applications utilizing DCV controls provide only the desired amount of ventilation, delivering building owners savings on their energy bills.

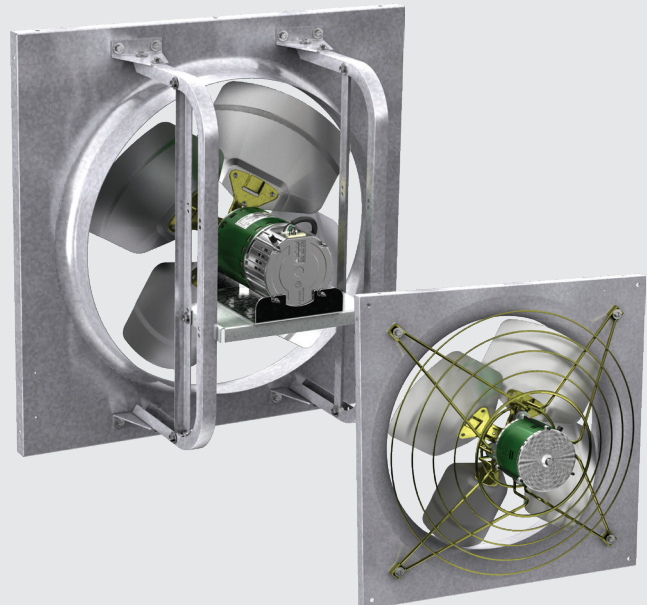


Manual Controls

- Dial-on Motor
- Remote Dial
- Touch Remote

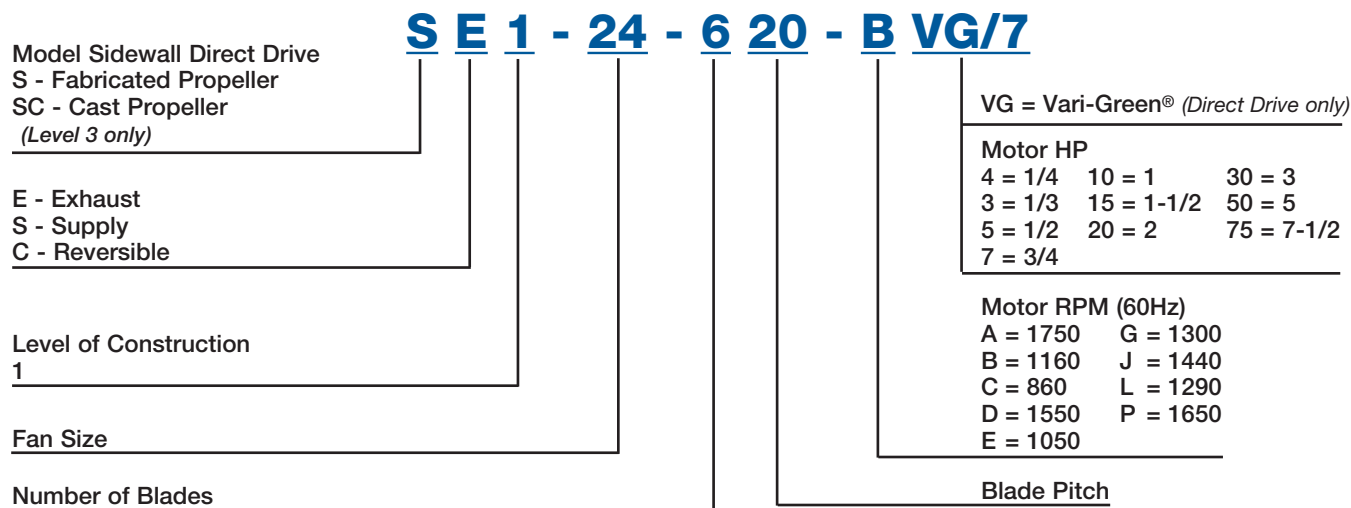
Demand Controlled Ventilation

- Hand/Off/Auto (HOA)
- Constant Airflow
- Constant Pressure
- Air Quality - Volatile Organic Compound (VOC)
- Air Quality - Temperature/Humidity
- 0-10 VDC Signal from Building Management System (BMS)



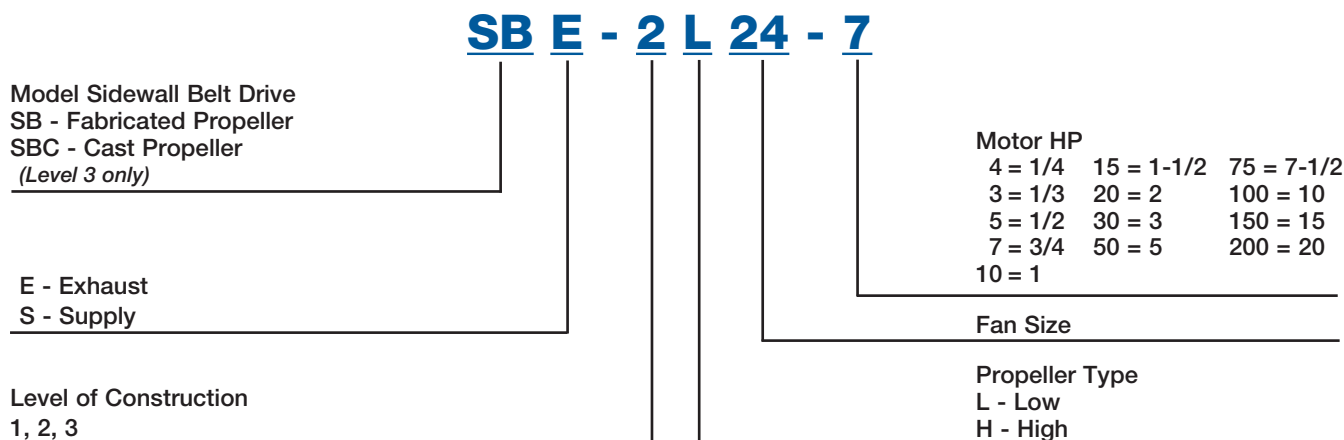
Model Number Code - Direct Drive

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate direct drive with exhaust, supply, or reversible air configuration. The remainder of the model number is determined by the size and performance selected from the following pages.



Model Number Code - Belt Drive

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate belt drive with exhaust, supply, or reversible air configuration. The remainder of the model number is determined by the size and performance selected from the following pages.



SE1 Vari-Green®

Direct Drive Fabricated Propeller



Model Number	Fan RPM	Max BHP	Max Sones	CFM / Static Pressure (in. wg)											
				0.000	0.050	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750
8-VG - Level 1 Performance															
SE1-8-440	1725 300	0.044	11.3	511 89	476	435	387	349	261	220	191				
10-VG - Level 1 Performance															
SE1-10-440	1725 300	0.098	11.3	1029 179	979	921	889	856	792	707					
12-VG - Level 1 Performance															
SE1-12-426	1725 300	0.078	14.8	1239 215	1187	1122	1084	1043	947	828	711	468			
SE1-12-432	1725 300	0.26	14.8	1613 281	1553	1490	1455	1421	1334	1254	1176	1056	888	679	556
SE1-12-436	1725 300	0.13	16.7	1621 282	1570	1513	1471	1429	1346	1230	1073	639			
14-VG - Level 1 Performance															
SE1-14-432	1725 300	0.27	12.5	2370 412	2317	2264	2237	2209	2152	2096	2007	1864			
SE1-14-436	1725 300	0.38	16.3	2695 469	2635	2575	2544	2511	2445	2378	2292	2129	1728	1183	
SE1-14-440	1725 300	0.47	21	2386 415	2307	2234	2205	2176	2119	2048	1973	1877	1435	1282	1163
16-VG - Level 1 Performance															
SE1-16-421	1725 300	0.36	19	2516 438	2470	2424	2400	2377	2327	2268	2210	2093	1862		
SE1-16-426	1725 300	0.49	31	3136 545	3081	3026	2999	2972	2917	2852	2787	2681	2464		
SE1-16-428	1725 300	0.61	16.1	3325 578	3266	3207	3178	3149	3088	3026	2963	2849	2637	2385	1801
SE1-16-436	1725 300	0.85	21	4019 699	3956	3894	3863	3832	3766	3697	3629	3526	3262	2790	2214
18-VG - Level 1 Performance															
SE1-18-424	1725 300	0.7	17	4164 724	4090	4017	3980	3943	3859	3768	3676	3519	3157	2826	
SE1-18-429	1725 300	0.85	22	4816 838	4737	4658	4618	4578	4489	4382	4274	4113	3817	3342	2860
20-VG - Level 1 Performance															
SE1-20-420	1550	0.61	24	4148	4074	4000	3963	3926	3859	3793	3726	3610	3352		
SE1-20-420	1725 300	0.84	24	4616 803	4550	4483	4450	4417	4352	4292	4232	4143	3953	3718	

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

S1

Direct Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Watts Max BHP	Sones @ Free Air	CFM / Static Pressure (in. wg)											
					0.000	0.050	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750
8 - Level 1 Performance																
S1-8-424-G	1/80	1350*	28W	3.2	300	263	190									
S1-8-426-D	1/80	1550*	39 W	3.7	310	282	232	190	140							
S1-8-428-P	1/40	1650*	53 W	3.9	329	303	266	237	214	149						
S1-8-440-E	1/100	1050*	50 W	1.5	311	224	127	101								
S1-8-440-G	1/40	1350*	55 W	3.5	400	354	257	189	174	138						
S1-8-440-D	1/25	1550*	75 W	4.9	459	420	351	308	256	198	167	115				
10 - Level 1 Performance																
S1-10-424-D	1/50	1550*	45 W	4.6	575	526	462	407								
S1-10-426-P	1/30	1650*	55 W	4.8	590	551	502	468	429							
S1-10-428-P	1/20		78 W	5.2	606	574	537	511	484	407	273	249	214			
S1-10-440-E	1/40	1050*	105 W	3.2	626	533	361									
S1-10-440-G	1/20	1350*	135 W	4.9	805	739	656	616	565							
S1-10-440-D	1/12	1550*	170 W	5.9	924	869	801	763	777	641						
12 - Level 1 Performance																
S1-12-426-D	1/13	1550*	105 W	6.6	1113	1055	976	930	878	749	609	428				
S1-12-436-G	1/13	1350*	120 W	7.5	1269	1203	1101	1048	974	780	359					
S1-12-432-E	1/20	1050*	125 W	4.3	982	878	745	678	623	464	383					
S1-12-432-G	1/12	1350*	170 W	6.0	1262	1185	1098	1038	987	886	798	721	540			
S1-12-432-D	1/8	1550*	190 W	7.5	1449	1383	1309	1271	1225	1129	1042	953	861	615	478	
S1-12-432-C8	1/8	860	0.03	4.0	804	664	512	438	349	249						
S1-12-432-B6	1/6	1160	0.07	4.8	1084	991	872	816	755	660	503	431				
S1-12-432-A4	1/4	1750	0.27	8.7	1636	1577	1515	1481	1447	1365	1282	1207	1085	947	706	585
14 - Level 1 Performance																
S1-14-440-C8	1/8	860	0.07	5.9	1189	1055	919	711	649	551	408					
S1-14-440-B6	1/6	1160	0.15	7.3	1604	1493	1406	1350	1297	1207	908	837	720			
S1-14-432-A4	1/4	1750	0.29	12.9	2404	2351	2299	2273	2245	2189	2134	2052	1912	1636		
S1-14-436-A3	1/3		0.39	14.8	2734	2674	2615	2585	2553	2487	2422	2340	2192	1829	1220	
16 - Level 1 Performance																
S1-16-436-C8	1/8	860	0.12	5.0	2003	1876	1732	1621	1433	1037	849	705				
S1-16-426-B6	1/6	1160	0.15	7.5	2108	2027	1942	1894	1846	1725	1588					
S1-16-428-B6	1/6		0.19	7.6	2235	2148	2058	2012	1964	1840	1710	1534	1126			
S1-16-436-B4	1/4	0.29	9.5	2702	2609	2512	2461	2410	2281	2067	1761	1359	1049			
S1-16-421-A3	1/3	1750	0.38	13.5	2552	2506	2461	2438	2415	2367	2309	2252	2143	1916		
S1-16-428-A5	1/2	0.63	15.3	3372	3315	3257	3228	3199	3140	3078	3016	2908	2700	2468	1861	
S1-16-436-A7	3/4	0.89	16.6	4076	4015	3954	3923	3892	3828	3760	3693	3591	3349	2902	2298	
18 - Level 1 Performance																
S1-18-434-C8	1/8	860	0.15	8.7	2661	2464	2202	2032	1874	1346						
S1-18-436-C6	1/6		0.19	9.2	2778	2595	2319	2102	1963	1385	1108	912				
S1-18-424-B6	1/6	1160	0.20	6.7	2800	2690	2568	2501	2427	2257	2025	1828				
S1-18-429-B4	1/4		0.30	7.2	3238	3120	2987	2908	2828	2668	2434	2145	1510	1183		
S1-18-436-B3	1/3	0.45	12.6	3747	3621	3466	3370	3267	3034	2732	2548	1727	1363			
S1-18-424-A5	1/2	1750	0.67	15.7	4224	4151	4079	4043	4006	3925	3835	3745	3592	3252		
S1-18-429-A7	3/4		0.88	17.4	4885	4807	4729	4690	4651	4565	4460	4354	4196	3926	3460	2984
20 - Level 1 Performance																
S1-20-428-C6	1/6	860	0.19	10.8	3133	3001	2823	2727	2641	2390						
S1-20-436-C4	1/4		0.29	11.7	3888	3717	3523	3420	3285	2918	2237	2091	1873			
S1-20-424-B4	1/4	1160	0.30	13.8	3655	3561	3467	3419	3364	3255	3095	2924	2661			
S1-20-428-B3	1/3		0.45	14.3	4227	4128	4030	3974	3901	3755	3621	3493	3175			
S1-20-436-B5	1/2	0.70	14.4	5245	5118	4991	4926	4849	4697	4525	4321	3863	2920	2650		
S1-20-420-A7	3/4	1750	0.87	24	4682	4617	4552	4519	4486	4421	4362	4303	4215	4036	3810	
S1-20-428-A10	1		1.19	25	6377	6311	6246	6214	6181	6116	6050	5965	5820	5580	5368	5087
S1-20-432-A15	1-1/2		1.73	26	7115	7038	6962	6924	6886	6809	6733	6653	6518	6292	6016	5688
24 - Level 1 Performance																
S1-24-432-C4	1/4	860	0.34	9.1	5000	4767	4540	4409	4233	3789						
S1-24-436-C3	1/3		0.41	10.0	5457	5232	5002									
S1-24-437-C5	1/2	1160	0.58	11.6	6136	5953	5764	5631	5497	5150	4720	4341				
S1-24-428-B5	1/2		0.61	14.1	5908	5794	5680	5623	5566	5382	5175	4898				
S1-24-432-B7	3/4		0.83	14.7	6745	6572	6399	6313	6229	6064	5830	5569	5007			

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). *Speed (RPM) Shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels.

SCR3 Reversible

Direct Drive Cast Aluminum



Model Number	Motor HP	Fan RPM	Max BHP	Sones @ Free Air	CFM / Static Pressure (in. wg)												
					0.000	0.050	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	
24 - Level 3 Performance																	
SCR3-24-627-C4	1/4	860	0.29	16.7	4981	4664	4269	4007	3498								
SCR3-24-632-C3	1/3		0.35	16.9	5478	5153	4731	4391	3789								
SCR3-24-416-B4	1/4	1160	0.29	18.1	4521	4241	3949	3784	3619	3015	2232						
SCR3-24-420-B3	1/3		0.37	19.3	5200	4904	4597	4434	4271	3815	2837						
SCR3-24-623-B5	1/2		0.58	22	6093	5869	5627	5499	5371	5029	4529	3791					
SCR3-24-632-B7	3/4		0.86	27	7389	7148	6896	6739	6582	6207	5689						
SCR3-24-410-A5	1/2	1750	0.57	32	5233	5028	4828	4730	4632	4403	4167	3921	3364				
SCR3-24-414-A7	3/4		0.83	34	6297	6114	5930	5834	5738	5546	5331	5108	4625				
SCR3-24-418-A10	1		1.15	35	7332	7141	6949	6853	6752	6552	6348	6112	5758	4623			
SCR3-24-425-A15	1-1/2		1.67	38	8928	8701	8474	8364	8259	8050	7831	7581	7160	6055			
SCR3-24-626-A20	2		2.31	41	9935	9786	9636	9561	9486	9325	9155	8984	8707	8111	6996		
30 - Level 3 Performance																	
SCR3-30-415-C4	1/4		860	0.29	16.6	6262	5732	5131	4718	4013							
SCR3-30-419-C3	1/3	0.38		17.2	7219	6523	5854	5466	4860								
SCR3-30-620-C5	1/2	0.56		18.8	8118	7694	7218	6953	6682	5738							
SCR3-30-629-C7	3/4	0.84		20	9694	9233	8450	7977	7404								
SCR3-30-412-B5	1/2	1160	0.58	24	7490	7051	6640	6429	6211	5688	4914						
SCR3-30-418-B7	3/4		0.88	27	9414	8921	8440	8206	7968	7466	6763	5490					
SCR3-30-423-B10	1		1.14	29	10658	10134	9606	9329	8999	8338	7672	6255					
SCR3-30-624-B15	1-1/2		1.74	33	12167	11796	11425	11239	11041	10647	10032	9244	8158				
SCR3-30-630-B20	2	1750	2.18	35	13226	12911	12595	12375	11987	11233	10437	9304					
SCR3-30-407-A10	1		1.21	47	8583	8290	7998	7882	7765	7533	7258	6770	6243				
SCR3-30-410-A15	1-1/2		1.63	46	10337	10022	9712	9571	9429	9146	8892	8652	8266	7375			
SCR3-30-413-A20	2		2.09	45	11779	11498	11216	11077	10943	10673	10403	10114	9643	8634			
SCR3-30-420-A30	3		3.34	53	15176	14806	14437	14258	14084	13737	13393	13070	12585	11691	10359		
SCR3-30-623-A50	5		5.5	63	17896	17658	17419	17300	17180	16942	16703	16454	16067	15380	14269	13199	
36 - Level 3 Performance																	
SCR3-36-412-C5	1/2	860	0.55	23	9047	8380	7589	7156	6726								
SCR3-36-419-C7	3/4		0.85	23	12243	11532	10734	10259	9750	8734							
SCR3-36-425-C10	1		1.15	27	14110	13544	12541	12029	11535	10271	8338						
SCR3-36-628-C15	1-1/2		1.74	31	16432	15855	15258	14814	14370	13429	12309						
SCR3-36-406-B7	3/4	1160	0.84	38	9490	8991	8415	8053	7676								
SCR3-36-410-B10	1		1.14	38	10863	10436	9964	9700	9412	8797	8226	7493					
SCR3-36-415-B15	1-1/2		1.71	38	14215	13624	13075	12814	12552	11874	11201	10530	9442				
SCR3-36-616-B20	2		2.2	44	15749	15311	14874	14666	14468	14071	13650	13183	12407				
SCR3-36-623-B30	3		3.44	49	19714	19293	18873	18658	18420	17943	17467	16951	16028	14204			
SCR3-36-630-B50	5		4.66	51	23117	22703	22290	22083	21876	21222	20473	19750	18648	16179			
42 - Level 3 Performance																	
SCR3-42-415-C10	1	860	1.15	30	16078	14907	13968	13436	12804	11234							
SCR3-42-422-C15	1-1/2		1.77	35	18875	17758	16552	15875	15182	13699	11683						
SCR3-42-621-C20	2		2.28	36	21190	20336	19478	19048	18614	17612	16541	15213					
SCR3-42-630-C30	3		3.48	43	24181	23243	22221	21682	20821	18963	17704	16613					
SCR3-42-408-B15	1-1/2	1160	1.76	50	15026	14328	13600	13216	12824	11978	10952	9650	7136				
SCR3-42-412-B20	2		2.33	51	18959	18189	17432	17066	16700	15890	15029	14017	11855				
SCR3-42-418-B30	3		3.47	54	23445	22661	21885	21501	21117	20314	19400	18384	16497				
SCR3-42-621-B50	5		5.54	60	28583	27949	27315	26999	26680	26042	25405	24704	23590	21563			
SCR3-42-630-B75	7-1/2		8.55	73	32616	31921	31226	30878	30483	29683	28884	27018	25357	23149			
48 - Level 3 Performance																	
SCR3-48-414-C15	1-1/2		860	1.69	40	22448	21297	19941	19200	18353	16384	14153					
SCR3-48-418-C20	2	2.27		42	25619	24430	23020	22243	21306	19279	16958	14401					
SCR3-48-620-C30	3	3.52		48	30092	29264	28435	27770	27003	25523	24096	22719	19594				
SCR3-48-629-C50	5	5.6		56	35190	33738	32249	31430	30610	28531	26291	24091	20049				
SCR3-48-403-B15	1-1/2	1160	1.6	56	14101	13313	12413	11885	11323	10099	8759						
SCR3-48-407-B20	2		2.31	69	20861	20047	19222	18773	18324	17285	16039	14683	12327				
SCR3-48-412-B30	3		3.57	69	28014	27172	26330	25844	25330	24303	23202	22039	19654	15119			
SCR3-48-418-B50	5		5.57	72	34556	33674	32792	32352	31787	30634	29386	27973	25647	21187			
SCR3-48-417-B75	7-1/2		8.95	69	37004	36466	35928	35659	35390	34852	34216	33475	32363	30250	27397		
SCR3-48-420-B100	10		11.14	75	41055	40543	40032	39776	39520	39008	38383	37504	36185	34026	31482	28124	
54 - Level 3 Performance																	
SCR3-54-409-C20	2	860	2.38	51	26479	25468	24556	24145	23734	22661	21344	19757	16344				
SCR3-54-410-C30	3		3.37	53	28003	26997	26093	25707	25320	24416	23141	21715	18977				
SCR3-54-417-C50	5		5.81	52	37090	35925	34761	34229	33715	32688	31591	30131	27681	21769			
SCR3-54-618-C75	7-1/2		8.46	61	41795	40904	40014	39569	39124	38309	37501	36693	35197	31916	25633		
SCR3-54-625-C100	10		11.7	68	50142	49192	48243	47768	47283	46066	44850	43285	40770	37198	33806		

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

Using The Performance Table

Shown below is a portion of a typical performance table used in this catalog. Performance data shown offers the best selections for each propeller type ("L" or "H") relative to sound, RPM, and static pressure.

Consider "L" type propellers first for most applications.

Many sidewall applications can be met with the "L" type propeller. When using the performance tables, look first at the "L" selections, because they offer the lowest speed and sound levels.

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)											
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000
Level 1 Performance		Max RPM	L - 1085	H - 1221	Max Motor Frame Size - 56						TS = RPM x 5.235					
SB-1L20-4	1/4	705	0.17	11.6	3606	2836	2451									
		810	0.25	13.3	4143	3510	3325	3084								
		861	0.30	14.3	4404	3795	3672	3455								
SB-1H20-4	1/4	773	0.17	11.1	2904	2453	2293	2112	1596	924	676	304				
		892	0.27	14.1	3351	2987	2873	2744	2436	2011	1409	886	348			
		953	0.30	16.2	3581	3247	3148	3034	2769	2469	2002	1160	657			
SB-1L20-3	1/3	889	0.33	14.9	4547	3950	3830	3655	3067							
		947	0.40	16.1	4844	4271	4156	4044	3648							
SB-1H20-3	1/3	998	0.37	16.7	3750	3436	3342	3244	3006	2727	2398	1588	873	393		
		1039	0.40	17.2	3904	3608	3517	3427	3212	2954	2676	2037	1064	603		
SB-1L20-5	1/2	1021	0.50	17.0	5222	4675	4566	4461	4181	3747						
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712					
SB-1H20-5	1/2	1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502	
		1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064	

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

“L” type low pressure propeller

“H” type high pressure propeller

Shows level of construction based on fan RPM and motor frame size. See Performance Charts.

Note that each max. BHP is cataloged at a 1.0 and 1.2 service factor.

Optimum selection range for the “L” type propeller.

Optimum selection range for the “H” type propeller.

SB-20

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)											
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000
Level 1 Performance		Max RPM	L - 1085	H - 1221	Max Motor Frame Size - 56								TS = RPM x 5.235			
SB-1L20-4	1/4	705	0.17	11.6	3606	2836	2451						CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.			
		810	0.25	13.3	4143	3510	3325	3084								
		861	0.30	14.3	4404	3795	3672	3455								
SB-1H20-4	1/4	773	0.17	11.1	2904	2453	2293	2112	1596	924	676	304				
		892	0.27	14.1	3351	2987	2873	2744	2436	2011	1409	886	348			
		953	0.30	16.2	3581	3247	3148	3034	2769	2469	2002	1160	657			
SB-1L20-3	1/3	889	0.33	14.9	4547	3950	3830	3655	3067							
		947	0.40	16.1	4844	4271	4156	4044	3648							
SB-1H20-3	1/3	998	0.37	16.7	3750	3436	3342	3244	3006	2727	2398	1588	873	393		
		1039	0.40	17.2	3904	3608	3517	3427	3212	2954	2676	2037	1064	603		
SB-1L20-5	1/2	1021	0.50	17.0	5222	4675	4566	4461	4181	3747						
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712					
SB-1H20-5	1/2	1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502	
		1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064	
Level 2 Performance		Max RPM	L - 1241	H - 1391	Max Motor Frame Size - 143T								TS = RPM x 5.235			
SB-2L20-5	1/2	1021	0.50	17.0	5222	4675	4566	4461	4181	3747						
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712					
SB-2H20-5	1/2	1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502	
		1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064	
SB-2L20-7	3/4	1168	0.75	20	5974	5466	5371	5275	5090	4861	4527					
		1241	0.90	22	6348	5853	5764	5674	5496	5325	5053	4479				
SB-2H20-7	3/4	1262	0.75	21	4742	4501	4441	4375	4226	4065	3883	3562	2849	1635	1255	495
		1391	0.90	25	5226	5008	4954	4899	4774	4639	4493	4244	3741	3005	1886	1138

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-24

Belt Drive Fabricated Propeller



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)											
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000
Level 1 Performance		Max RPM	L - 809	H - 1010	Max Motor Frame Size - 56						TS = RPM x 6.283					
SB-1L24-4	1/4	513	0.19	10.3	4818	3784										
		558	0.25	11.0	5241	4402	3971									
		593	0.30	11.8	5569	4803	4551	4050								
SB-1H24-4	1/4	674	0.17	10.2	3524	2894	2680	2416	1616	1155	821					
		785	0.30	13.3	4105	3618	3445	3267	2848	2105	1655	1133	444			
SB-1L24-3	1/3	614	0.33	12.4	5766	5040	4807	4396								
		653	0.40	12.8	6133	5466	5256	5037								
SB-1H24-3	1/3	829	0.33	14.8	4335	3877	3734	3568	3220	2595	2006	1445	769			
		877	0.36	16.1	4586	4157	4041	3887	3564	3179	2472	1845	1108	491		
SB-1L24-5	1/2	704	0.50	13.8	6612	6000	5831	5628	4992							
		748	0.60	14.8	7025	6455	6300	6128	5723	4939						
SB-1H24-5	1/2	961	0.55	18.5	5025	4641	4535	4428	4145	3846	3485	2574	1701	1103	540	
		1010	0.60	19.9	5281	4920	4819	4717	4471	4193	3902	3093	2108	1439	904	
SB-1L24-7	3/4	775	0.67	15.5	7279	6732	6582	6430	6061	5383						
		809	0.76	17.4	7598	7079	6935	6792	6454	5948	5237					
Level 2 Performance		Max RPM	L - 986	H - 1148	Max Motor Frame Size - 145T						TS = RPM x 6.283					
SB-2L24-5	1/2	688	0.47	13.5	6461	5833	5652	5444	4730							
		704	0.50	13.8	6612	6000	5831	5628	4992							
		748	0.60	14.8	7025	6455	6300	6128	5723	4939						
SB-2H24-5	1/2	961	0.55	18.5	5025	4641	4535	4428	4145	3846	3485	2574	1701	1103	540	
		1010	0.60	19.9	5281	4920	4819	4717	4471	4193	3902	3093	2108	1439	904	
SB-2L24-7	3/4	805	0.75	17.1	7560	7038	6894	6750	6408	5882	5170					
		856	0.90	21	8039	7555	7419	7284	6989	6654	6011					
SB-2H24-7	3/4	1110	0.85	23	5804	5476	5392	5299	5115	4872	4619	4200	2975	2199	1601	626
		1148	0.90	25	6003	5685	5606	5518	5340	5122	4882	4502	3343	2510	1853	910
SB-2L24-10	1	886	1.00	23	8321	7856	7726	7595	7326	7003	6512					
		942	1.20	28	8847	8409	8294	8171	7925	7643	7340	6476				
SB-2L24-15	1-1/2	960	1.27	30	9016	8587	8476	8355	8114	7847	7549	6769				
		986	1.37	33	9260	8842	8738	8620	8385	8139	7849	7205				

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS[®], the Computer Aided Product Selection program.

SB-30

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)											
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.00
Level 1 Performance		Max RPM	L - 696	H - 882	Max Motor Frame Size - 56								TS = RPM x 7.854			
SB-1L30-4	1/4	390	0.16	9.5	6453										CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.	
		448	0.25	10.9	7413	5790										
		475	0.30	11.6	7860	6394	5880									
SB-1H30-4	1/4	503	0.17	9.4	5747	4619	4164									
		577	0.25	11.8	6593	5682	5389	5018								
		610	0.30	12.6	6970	6129	5860	5559	4743							
SB-1L30-3	1/3	491	0.33	12.1	8125	6742	6249									
		523	0.40	13.0	8654	7427	6970	6503								
SB-1H30-3	1/3	631	0.33	13.1	7210	6396	6156	5888	5163							
		675	0.41	14.1	7713	6950	6763	6515	5939	5160						
SB-1L30-5	1/2	564	0.50	14.3	9333	8261	7862	7436								
		598	0.60	15.5	9895	8898	8583	8185	7366							
SB-1H30-5	1/2	725	0.50	15.5	8284	7571	7398	7213	6746	6145						
		769	0.60	16.9	8787	8112	7949	7785	7376	6876	6248					
SB-1L30-7	3/4	645	0.75	17.2	10673	9766	9508	9190	8446	7562						
		685	0.9	18.7	11335	10496	10253	10009	9332	8622						
SB-1H30-7	3/4	827	0.75	19.1	9450	8819	8667	8515	8188	7779	7279	6326				
		882	0.90	22	10078	9484	9342	9199	8914	8560	8174	7424				
SB-1L30-10	1	696	0.94	19.2	11517	10696	10456	10217	9570	8874						
Level 2 Performance		Max RPM	L - 950	H - 1221	Max Motor Frame Size - 184T								TS = RPM x 7.854			
SB-2L30-7	3/4	645	0.75	17.2	10673	9766	9508	9190	8446	7562						
		685	0.90	18.7	11335	10496	10253	10009	9332	8622						
SB-2H30-7	3/4	827	0.75	19.1	9450	8819	8667	8515	8188	7779	7279	6326				
		882	0.90	22	10078	9484	9342	9199	8914	8560	8174	7424				
SB-2L30-10	1	710	1.00	19.7	11748	10949	10714	10479	9872	9192	8383					
		754	1.20	21	12477	11736	11519	11298	10806	10175	9528					
SB-2H30-10	1	917	1.00	23	10478	9906	9768	9631	9357	9049	8680	8012				
		968	1.20	26	11061	10519	10385	10255	9996	9736	9403	8847	7570			
SB-2L30-15	1-1/2	812	1.50	24	13436	12749	12570	12364	11954	11426	10838	9893				
		864	1.81	27	14297	13650	13489	13309	12923	12522	11971	11132				
SB-2H30-15	1-1/2	1048	1.50	29	11975	11474	11349	11227	10987	10747	10507	10029	9071			
		1110	1.80	31	12683	12211	12092	11974	11747	11521	11294	10901	10090	9019		
SB-2L30-20	2	895	2.00	29	14810	14186	14030	13868	13496	13123	12633	11830				
		950	2.41	32	15720	15132	14985	14838	14503	14152	13790	13039	11760			
SB-2H30-20	2	1152	2.00	33	13163	12708	12594	12480	12259	12041	11823	11483	10749	9811		
		1221	2.40	36	13951	13522	13414	13307	13095	12889	12683	12374	11734	10955	9980	

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-36

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)										
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75
Level 1 Performance		Max RPM	L - 551	H - 694	Max Motor Frame Size - 56						TS = RPM x 7.854				
SB-1L36-3	1/3	329	0.25	12.3	9491	6448								CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.	
		361	0.34	11.8	10415	7958	6849								
		384	0.41	11.8	11078	8915	8018	6662							
SB-1H36-3	1/3	410	0.25	10.0	9011	6831	6112								
		450	0.33	11.1	9890	7967	7391	6725							
		481	0.41	12.1	10572	8812	8290	7743							
SB-1L36-5	1/2	412	0.50	12.7	11886	9913	9250	8354							
		438	0.61	13.6	12636	10809	10290	9572							
SB-1H36-5	1/2	521	0.52	13.5	11451	9845	9398	8912	7811						
		556	0.63	14.9	12220	10729	10328	9891	8958						
SB-1L36-7	3/4	471	0.76	14.5	13588	11925	11442	10947	9408						
		500	0.90	15.3	14425	12890	12435	11981	10808	8915					
SB-1H36-7	3/4	591	0.75	16.4	12989	11605	11223	10844	9985	9016					
		628	0.91	18.2	13802	12520	12156	11800	11035	10205	9228				
SB-1L36-10	1	518	1.01	16.1	14944	13482	13044	12605	11569	10084					
		551	1.21	17.7	15896	14558	14146	13733	12908	11731	10007				
SB-1H36-10	1	651	1.01	18.8	14308	13083	12731	12386	11668	10880	9995				
		694	1.23	20	15253	14135	13798	13468	12824	12111	11358	9875			
Level 2 Performance		Max RPM	L - 693	H - 870	Max Motor Frame Size - 184T						TS = RPM x 7.854				
SB-2L36-10	1	518	1.01	16.1	14944	13482	13044	12605	11569	10084					
		550	1.21	17.6	15867	14525	14113	13699	12873	11682	9934				
SB-2H36-10	1	651	1.01	18.8	14308	13083	12731	12386	11668	10880	9995				
		694	1.23	20	15253	14135	13798	13468	12824	12111	11358	9875			
SB-2L36-15	1-1/2	593	1.51	20	17108	15909	15527	15144	14377	13512	12329				
		631	1.81	22	18204	17113	16759	16400	15680	14959	14025	12176			
SB-2H36-15	1-1/2	744	1.50	23	16352	15358	15021	14714	14106	13486	12810	11706			
		792	1.80	27	17407	16519	16198	15894	15316	14753	14145	13170			
SB-2L36-20	2	653	2.01	24	18839	17784	17467	17120	16424	15728	14942	13287			
		693	2.41	27	19993	18999	18744	18416	17762	17106	16450	15154			
SB-2H36-20	2	821	2.02	30	18044	17217	16907	16601	16043	15496	14935	14011	12258		
		870	2.40	34	19121	18388	18096	17803	17259	16736	16223	15389	13871		

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-42

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)											
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000
Level 1 Performance		Max RPM	L - 424	H - 533	Max Motor Frame Size - 145T								TS = RPM x 10.995			
SB-1L42-3	1/3	250	0.24	9.4	11651											
		275	0.33	10.3	12816	8583										
		294	0.40	11.1	13701	10026										
SB-1H42-3	1/3	314	0.25	9.4	10844	7332										
		345	0.33	11.1	11915	9126	7744									
		369	0.40	12.6	12744	10191	9283									
SB-1L42-5	1/2	316	0.50	12.0	14726	11363	10252									
		335	0.60	13.0	15612	12415	11671	10248								
SB-1H42-5	1/2	400	0.51	14.7	13814	11527	10841	9931								
		426	0.61	16.3	14712	12605	11980	11333								
SB-1L42-7	3/4	362	0.75	14.5	16870	13939	13189	12422								
		385	0.92	15.8	17942	15273	14451	13804	11298							
SB-1H42-7	3/4	460	0.78	18.5	15887	13987	13420	12834	11361							
		482	0.90	20	16646	14868	14327	13784	12592	10507						
SB-1L42-10	1	398	1.00	16.8	18548	16016	15189	14528	12837							
		424	1.21	18.8	19759	17478	16705	15953	14777							
SB-1H42-10	1	500	1.00	20	17268	15573	15060	14539	13448	11853						
		533	1.22	21	18408	16849	16388	15899	14900	13752	11887					
Level 2 Performance		Max RPM	L - 723	H - 907	Max Motor Frame Size - 184T								TS = RPM x 10.995			
SB-2L42-10	1	398	1.00	16.8	18548	16016	15189	14528	12837							
		424	1.21	18.8	19759	17478	16705	15953	14777							
SB-2H42-10	1	500	1.00	21	17268	15573	15060	14539	13448	11853						
		533	1.22	22	18408	16849	16388	15899	14900	13752	11887					
SB-2L42-15	1-1/2	456	1.50	21	21251	19152	18532	17809	16577	15188						
		484	1.80	23	22555	20599	20064	19420	18117	17086	15458					
SB-2H42-15	1-1/2	577	1.53	24	19927	18529	18109	17678	16773	15831	14681					
		608	1.81	26	20998	19701	19302	18903	18053	17182	16275	14193				
SB-2L42-20	2	502	2.01	24	23394	21521	21006	20440	19128	18098	16824					
		532	2.40	27	24792	23046	22560	22074	20881	19757	18819	16579				
SB-2H42-20	2	630	2.00	28	21758	20527	20142	19757	18951	18122	17251	15564				
		673	2.41	31	23243	22131	21771	21411	20682	19906	19122	17893				
SB-2L42-30	3	575	3.01	32	26796	25212	24762	24312	23339	22193	21216	19836				
		611	3.65	31	28474	26984	26586	26162	25316	24279	23201	21952	18527			
SB-2H42-30	3	721	3.00	36	24900	23864	23572	23236	22564	21861	21137	20017	17604			
		766	3.61	40	26455	25479	25235	24931	24298	23664	22982	21961	20125	16908		
SB-2L42-50	5	681	5.08	36	31736	30400	30066	29712	28952	28192	27265	25814	23967	20093		
		723	6.00	39	33693	32435	32120	31805	31102	30386	29642	28275	26322	24165		
SB-2H42-50	5	853	4.99	48	29459	28583	28364	28145	27603	27035	26466	25556	24003	22312	19563	
		907	5.95	56	31324	30500	30294	30088	29630	29095	28561	27738	26299	24797	22915	

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-48

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)										
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750
Level 1 Performance		Max RPM	L - 355	H - 355	Max Motor Frame Size - 145T							TS = RPM x 12.566			
SB-1L48-5	1/2	231	0.31	8.6	14885										
		266	0.50	9.7	17140	12381									
		282	0.60	10.5	18171	14077	11902								
SB-1H48-5	1/2	278	0.33	9.6	14144	9240									
		320	0.50	11.3	16281	12822	11273	8844							
		341	0.61	12.3	17349	14214	13047	11371							
SB-1L48-7	3/4	305	0.76	11.8	19653	16196	14706	12401							
		324	0.91	13.0	20877	17700	16601	14948							
SB-1H48-7	3/4	368	0.76	13.6	18723	15953	15022	13860							
		393	0.93	15.5	19995	17450	16655	15783	13052						
SB-1L48-10	1	335	1.00	13.7	21586	18559	17626	16200							
		355	1.20	15.4	22875	20096	19220	18193	14778						
SB-1H48-10	1	408	1.04	16.4	20758	18314	17617	16777	14587						
		429	1.21	1.3	21827	19513	18907	18147	16322	13506					
Level 2 Performance		Max RPM	L - 608	H - 734	Max Motor Frame Size - 184T							TS = RPM x 12.566			
SB-2L48-10	1	335	1.00	13.7	21586	18559	17626	16200							
		355	1.20	15.4	22875	20096	19220	18193	14778						
SB-2H48-10	1	408	1.04	16.4	20758	18314	17617	16777	14587						
		429	1.21	19.3	21827	19513	18907	18147	16322	13506					
SB-2L48-15	1-1/2	384	1.51	17.9	24744	22197	21482	20668	18419						
		407	1.80	18.9	26226	23841	23203	22474	20720	17923					
SB-2H48-15	1-1/2	462	1.51	21	23506	21374	20811	20248	18770	16860	13759				
		491	1.81	22	24981	22990	22460	21930	20671	19129	16981				
SB-2L48-20	2	422	2.00	19.6	27192	24904	24289	23637	22154	19746					
		448	2.40	21	28868	26733	26154	25575	24229	22469	19898				
SB-2H48-20	2	509	2.02	23	25897	23985	23474	22963	21831	20485	18700	14388			
		540	2.41	24	27474	25681	25206	24724	23761	22529	21119	18065			
SB-2L48-30	3	483	3.03	23	31123	29170	28633	28096	26963	25668	23839	19730			
		513	3.60	28	33056	31241	30735	30230	29218	28043	26799	23721			
SB-2H48-30	3	582	3.01	27	29611	27947	27527	27081	26187	25232	24055	21925			
		618	3.61	29	31442	29875	29484	29078	28236	27395	26391	24703	20285		
SB-2L48-50	5	572	5.02	33	36858	35237	34822	34368	33461	32554	31504	29811	24906		
		608	5.99	36	39177	37652	37271	36864	36010	35157	34288	32745	29209		
SB-2H48-50	5	688	4.99	34	35004	33596	33244	32893	32158	31402	30646	29317	26560	22373	
		734	6.05	39	37344	36025	35695	35365	34700	33991	33283	32220	29911	26937	22215

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-54

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)														
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000			
Level 2 Performance		Max RPM	L - 508	H - 562	Max Motor Frame Size - 184T							TS = RPM x 13.135							
SB-2L54-15	1-1/2	325	1.56	16.5	28548	25088	24008	22726	18692	CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.									
		343	1.81	17.3	30129	26851	26014	24825	21850										
SB-2H54-15	1-1/2	355	1.52	17.4	27149	24310	23414	22509	20237										
		377	1.82	19.0	28832	26243	25408	24557	22802								19924		
SB-2L54-20	2	356	2.00	18.0	31271	28113	27322	26297	23790										
		380	2.46	19.6	33379	30420	29680	28940	26821								23826		
SB-2H54-20	2	390	2.01	20	29826	27374	26567	25750	24103	21767									
		414	2.41	22	31662	29444	28684	27924	26374	24628								21971	
SB-2L54-30	3	408	3.07	22	35839	33083	32394	31704	30019	27876	24657								
		433	3.61	26	38035	35439	34789	34139	32810	30926	28749								
SB-2H54-30	3	446	3.01	26	34109	32145	31468	30762	29338	27897	26104								
		474	3.61	30	36250	34402	33873	33209	31882	30526	29170						26145		
SB-2L54-50	5	478	4.87	35	41988	39636	39048	38459	37283	36006	34299	31347							
		508	5.97	44	44623	42410	41857	41303	40196	39088	37699	35194					28363		
SB-2H54-50	5	528	4.99	35	40380	38721	38307	37854	36662	35469	34252	32427	27435						
		562	6.03	40	42980	41422	41032	40643	39618	38498	37370	35655	32079						
Level 3 Performance		Max RPM	L - 619	H - 779	Max Motor Frame Size - 254T							TS = RPM x 13.135							
SB-3L54-30	3	339	1.97	20	29862	26277	25025	23452	19663										
		390	3.01	25	34354	31312	30531	29462	26898									24533	21251
		415	3.61	27	36557	33708	32974	32162	30005									27535	24061
SB-3H54-30	3	430	2.03	27	27612	25569	25157	24640	23580	22036	20032								
		491	3.00	33	31529	29634	29274	28913	28053	27125	25868						23501		
		526	3.62	38	33776	31946	31609	31272	30565	29698	28831						26933		
SB-3L54-50	5	463	5.01	40	40785	38252	37593	36935	35395	33426	31153	26792							
		492	6.02	44	43339	40968	40348	39728	38489	36778	34740	31783					26116		
SB-3H54-50	5	584	5.01	48	37501	35765	35447	35144	34537	33881	33101	31897	28836						
		618	6.02	52	39684	38044	37683	37396	36823	36250	35558	34451	32025			28547			
SB-3L54-75	7-1/2	530	7.51	46	46687	44501	43926	43351	42200	40903	39302	36323	30423						
		563	9.03	49	49594	47550	47008	46467	45384	44301	42910	40440	36084				30683		
SB-3H54-75	7-1/2	666	7.38	57	42766	41244	40864	40558	40026	39494	38962	37956	36129	33526					
		710	9.02	63	45591	44164	43807	43450	42943	42444	41945	41121	39515	37449			34796		
SB-3L54-100	10	584	10.04	51	51443	49482	48960	48438	47394	46350	45173	42994	38597	33058					
		619	12.00	56	54526	52685	52198	51706	50721	49736	48751	46840	42826	39077			33870		
SB-3H54-100	10	738	10.01	68	47389	46016	45673	45329	44791	44311	43831	43111	41571	39835	37550				
		779	12.00	75	50022	48721	48396	48070	47487	47032	46578	45895	44548	43085	41129			35732	

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SB-60

Belt Drive Fabricated Propeller

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)												
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	
Level 2 Performance		Max RPM	L - 399	H - 521	Max Motor Frame Size - 215T								TS = RPM x 15.691				
SB-2L60-15	1-1/2	219	0.99	11.8	29223												
		252	1.52	14.9	33627	26297											
		267	1.80	16.7	35628	28888	26731										
SB-2H60-15	1-1/2	285	0.98	19.3	25029	21665	20507	19031									
		328	1.50	23	28805	25931	25163	24307	21827								
		348	1.81	25	30561	27858	27152	26428	24458	21479							
SB-2L60-20	2	277	2.01	17.9	36963	30532	28569										
		294	2.41	20	39231	33280	31524	29592									
SB-2H60-20	2	361	2.01	26	31703	29065	28432	27734	25998	23625							
		383	2.41	28	33635	31095	30577	29920	28558	26588	23870						
SB-2L60-30	3	317	3.02	23	42300	36880	35324	33661									
		337	3.63	25	44969	39902	38533	37026	33664								
SB-2H60-30	3	415	3.01	31	36445	34024	33548	33054	31839	30400	28519						
		438	3.60	34	38465	36115	35664	35214	34128	32978	31354	28368					
SB-2L60-50	5	375	5.00	28	50040	45536	44345	43137	40410	37274							
		399	6.02	31	53242	49009	47929	46800	44361	41676	38401						
SB-2H60-50	5	489	5.00	42	42944	40718	40314	39911	39104	38087	37057	34972	29773				
		521	6.01	47	45754	43590	43208	42830	42072	41233	40266	38708	34835				
Level 3 Performance		Max RPM	L - 503	H - 659	Max Motor Frame Size - 256T								TS = RPM x 15.691				
SB-3L60-50	5	317	3.02	23	42300	36880	35324	33661									
		375	5.00	28	50040	45536	44345	43137	40410	37274							
		399	6.02	31	53242	49009	47929	46800	44361	41676	38401						
SB-3H60-50	5	415	3.01	31	36445	34024	33548	33054	31839	30400	28519						
		489	5.00	42	42944	40718	40314	39911	39104	38087	37057	34972	29773				
		521	6.01	47	45754	43590	43208	42830	42072	41233	40266	38708	34835				
SB-3L60-75	7-1/2	430	7.54	41	57379	53451	52469	51451	49333	46970	44412						
		457	9.05	56	60982	57286	56362	55438	53476	51359	49101	45184					
SB-3H60-75	7-1/2	559	7.51	51	49091	47075	46626	46274	45568	44862	44021	42669	39714	35627			
		595	9.00	56	52253	50358	49884	49518	48855	48192	47529	46261	43933	40629	35715		
SB-3L60-100	10	473	10.04	67	63117	59546	58653	57760	55891	53922	51775	48286					
		503	12.10	72	67120	63762	62923	62083	60374	58582	56644	53530					
SB-3H60-100	10	615	10.00	60	54009	52176	51718	51314	50673	50031	49389	48236	46188	43214	39510		
		659	12.00	70	57873	56163	55735	55307	54653	54054	53455	52537	50625	48395	45470		

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

SB-72

Belt Drive Fabricated Propeller

Level 3 Performance		Max RPM	L - 492	H - 559	Max Motor Frame Size - 256T								TS = RPM x 18.802			
SB-3L72-30	3	236	2.00	17.5	41661	36581	34402	32305								
		271	3.02	20	47840	43440	42315	40635	36937							
		288	3.61	22	50841	46713	45654	44576	40999							
SB-3H72-30	3	266	2.00	24	40185	35934	34790	33352	29513							
		306	3.01	28	46228	42491	41629	40634	38280	35026						
		324	3.61	30	48947	45342	44616	43707	41829	39122	35680					
SB-3L72-50	5	321	5.05	26	56667	52986	52036	51086	48805	45604	42580					
		341	6.01	29	60197	56743	55852	54958	53170	50373	47427					
SB-3H72-50	5	362	5.04	35	54688	51305	50655	50006	48405	46723	44302	39813				
		387	6.03	39	58465	55195	54588	53980	52646	51074	49325	45737				
SB-3L72-75	7-1/2	367	7.52	33	64787	61577	60768	59938	58276	56442	53627	49588				
		391	9.03	38	69024	66011	65258	64489	62930	61371	59275	55346				
SB-3H72-75	7-1/2	414	7.52	43	62543	59374	58806	58238	57102	55698	54228	51410	44663			
		442	9.01	50	66773	63726	63155	62623	61559	60428	59051	56986	51688			
SB-3L72-100	10	405	10.01	41	71495	68587	67859	67128	65622	64117	62514	58687				
		430	12.10	45	75909	73169	72484	71799	70395	68977	67559	64603	58769			
SB-3H72-100	10	456	10.02	51	68888	65934	65321	64806	63775	62743	61437	59435	54874	47671		
		486	12.00	57	73421	70649	69956	69464	68496	67529	66500	64622	60962	55889		
SB-3L72-150	15	463	15.10	52	81734	79190	78554	77918	76637	75320	74003	72027	66649	61379		
		492	18.00	57	86854	84459	83861	83262	82065	80838	79599	77740	73537	68410		
SB-3H72-150	15	522	15.00	64	78859	76279	75633	75025	74124	73223	72322	70752	67837	63842	58785	
		559	18.10	75	84449	82039	81436	80834	79872	79030	78189	76927	74244	71276	67313	

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SBC-54

Belt Drive Cast Aluminum

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)													
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000		
Level 3 Performance		Max RPM	L - 727	H - 856	Max Motor Frame Size - 254T								TS = RPM x 14.135					
SBC-3L54-20	2	364	1.51	18.0	25482	21713	20664	19377					CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.					
		400	2.01	20	28002	24618	23706	22752	19950									
		425	2.41	22	29752	26685	25741	24882	22822									
SBC-3H54-20	2	429	1.51	21	25150	22604	21870	21035	19310	17043	13521							
		471	2.00	23	27612	25349	24701	24032	22511	20907	18781							
		501	2.41	26	29370	27282	26674	26066	24696	23254	21708	18049						
SBC-3L54-30	3	458	3.01	25	32062	29480	28382	27585	25914	23719								
		487	3.62	28	34092	31897	30843	29919	28420	26637	24050							
SBC-3H54-30	3	539	3.00	29	31598	29657	29143	28577	27407	26078	24712	22298						
		573	3.61	31	33591	31765	31309	30796	29731	28536	27286	25299	20153					
SBC-3L54-50	5	543	5.02	33	38013	36203	35539	34594	32996	31652	30072	26691						
		577	6.02	38	40393	38690	38264	37449	35716	34451	33186	30778						
SBC-3H54-50	5	639	5.00	37	37461	35823	35414	35004	34086	33131	32068	30386	27398	22327				
		680	6.02	41	39864	38325	37941	37556	36748	35851	34954	33382	30664	27125	21725			
SBC-3L54-75	7-1/2	621	7.51	44	43473	41891	41495	41090	39437	38008	36833	34916	30021					
		660	9.01	49	46203	44715	44342	43970	42720	41165	40006	38347	34940					
SBC-3H54-75	7-1/2	732	7.52	47	42913	41483	41126	40768	40054	39254	38421	37100	34654	32044	28344			
		778	9.03	53	45609	44264	43928	43592	42919	42229	41445	40269	38025	35671	33163	23604		
SBC-3L54-100	10	684	10.03	53	47883	46447	46088	45729	44718	43217	41935	40334	37224	30947				
		727	12.00	61	50894	49542	49204	48866	48191	46850	45438	43846	41235	37872				
SBC-3H54-100	10	805	10.02	55	47192	45892	45567	45242	44592	43942	43205	42068	39973	37748	35353	27829		
		856	12.03	61	50182	48959	48654	48348	47737	47126	46501	45432	43599	41507	39367	33873		

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

SBC-60

Belt Drive Cast Aluminum



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure (in. wg)										
					0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750
Level 3 Performance		Max RPM	L - 620	H - 775	Max Motor Frame Size - 254T						TS = RPM x 15.691				
SBC-3L60-20	2	310	1.51	16.6	30908	25347	22293	19082							
		341	2.01	19.4	33999	29312	27467	24664							
		363	2.42	22	36192	31785	30693	28420	23150						
SBC-3H60-20	2	389	1.52	21	29943	25920	24798	23553	20680	15870					
		427	2.01	24	32868	29286	28268	27248	24967	22058	17552				
		453	2.40	27	34870	31476	30591	29632	27574	25189	22147				
SBC-3L60-30	3	390	3.00	25	38884	34776	33760	32638	27839						
		415	3.62	28	41377	37510	36555	35601	32117	27497					
SBC-3H60-30	3	488	3.00	30	37564	34371	33650	32779	30979	28994	26657	21643			
		519	3.61	32	39950	36909	36232	35520	33845	32059	30140	26478			
SBC-3L60-50	5	463	5.02	32	46162	42688	41830	40975	39264	35742	31582				
		492	6.02	36	49054	45784	44971	44165	42555	40364	36566	30638			
SBC-3H60-50	5	579	5.01	38	44569	41770	41163	40556	39227	37725	36138	33558	27786		
		615	6.01	42	47340	44661	44089	43517	42374	40977	39563	37234	32691	25081	
SBC-3L60-75	7-1/2	530	7.53	41	52842	49807	49049	48296	46801	45306	42821	37434			
		563	9.03	46	56133	53276	52561	51847	50438	49031	47623	43088	34085		
SBC-3H60-75	7-1/2	663	7.53	48	51034	48490	47960	47430	46369	45239	43927	41918	38131	33224	
		704	9.01	54	54190	51775	51244	50745	49746	48747	47588	45736	42385	38434	33206
SBC-3L60-100	10	583	10.02	50	58127	55368	54678	53988	52623	51264	49905	46376	38202		
		620	12.10	56	61816	59221	58573	57924	56632	55354	54076	52119	44587		
SBC-3H60-100	10	729	10.01	57	56115	53782	53238	52756	51791	50827	49796	48006	44851	41263	36767
		775	12.02	63	59656	57462	56913	56439	55532	54624	53717	52131	49309	46183	42537

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

SBC-72

Belt Drive Cast Aluminum

Level 3 Performance		Max RPM		L - 578	H - 795		Max Motor Frame Size - 256T					TS = RPM x 18.802				
SBC-3L72-30	3	278	2.00	19.3	41857	28605	23878	19635								
		319	3.03	24	48030	37936	33936	29771								
		338	3.60	27	50891	41519	38276	34437	26696							
SBC-3H72-30	3	381	1.99	28	40824	35815	34566	33074	29443	24659						
		438	3.02	34	46931	42584	41485	40398	37929	34824	31069	23783				
		465	3.61	37	49824	45755	44693	43669	41527	39012	35800	29847				
SBC-3L72-50	5	378	5.04	33	56913	48882	46438	43660	36768	29874						
		401	6.01	37	60376	53221	50620	48457	42331	35746	29279					
SBC-3H72-50	5	519	5.02	46	55610	52015	51052	50092	48258	46311	44091	39883	30522			
		551	6.00	52	59039	55683	54777	53870	52112	50384	48405	44927	37456			
SBC-3L72-75	7-1/2	432	7.52	41	65043	58947	56432	54138	49416	43402	37327					
		459	9.02	45	69109	63324	61492	59114	55204	49816	44056	35555				
SBC-3H72-75	7-1/2	594	7.56	58	63646	60574	59733	58892	57219	55616	54013	51160	45205	37157		
		631	9.01	65	67611	64754	63963	63171	61587	60049	58540	56106	51062	44626	36346	
SBC-3L72-100	10	476	10.06	48	71668	66060	64634	62341	58348	53680	48216	39954				
		505	12.01	54	76035	70697	69477	67767	63628	60117	55073	47224				
SBC-3H72-100	10	653	10.00	69	69968	67229	66464	65699	64169	62660	61202	59001	54465	48597	41207	
		694	12.00	77	74361	71806	71103	70384	68944	67504	66111	64053	60168	55291	49391	
SBC-3L72-150	15	544	15.01	63	81907	76884	75751	74618	70920	67400	63833	56750	44689			
		578	18.00	72	87026	82239	81173	80107	77299	73547	70545	64621	53266	42050		
SBC-3H72-150	15	748	15.01	90	80147	77777	77176	76508	75172	73836	72500	70580	67340	63488	58637	46264
		795	18.04	104	85183	82953	82395	81804	80547	79290	78033	76179	73186	69826	65974	55871

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to CAPS®, the Computer Aided Product Selection program.

The first consideration in any fan selection is the amount of air to be moved and the resistance to this air movement. With specific performance and application criteria in mind, propeller fan selections typically require decisions based on the following criteria.

Belt Drive vs. Direct Drive

Belt drive fans offer the ability to adjust fan speed for system balancing if necessary. They also offer more flexibility in speeds and motor selections. In a cost comparison, belt drive fans are typically less costly than comparable size direct drive fans with low speed motors.

Direct drive fans are often preferred for jobs where maintenance access is difficult. Maintenance costs are generally lower with direct drive fans since there are no belts or bearings to replace and no pulleys to adjust.

Larger Fans vs. Smaller Fans

In most applications, several fans may meet the specified airflow and pressure requirements. Just as larger fans tend to turn slower and generate less sound, they also tend to have higher initial costs but lower operating costs. Smaller fans have more stable performance curves, lower initial costs, higher sound levels and higher operating costs because of their higher speeds.

Low Sound vs. High Static Pressure

Fans selected for high static pressures run at higher speeds and produce higher tip speeds resulting in higher sound levels. Conversely, in low pressure applications, fans generally run at lower speeds, produce lower sound levels and are recommended for sound sensitive applications.

How Accessories Affect Static Pressure

All accessory losses must be accounted for when calculating the static pressure load for a fan. This means upblast propeller roof fans can be specified with low pressure capabilities, below 0.375 in. wg, when used in conjunction with properly applied accessories (as within our installation recommendations).

When fans are over-specified to compensate for losses that do not actually exist, both cost and sound levels can be higher than necessary. This most commonly results from larger motors and higher tip speeds.

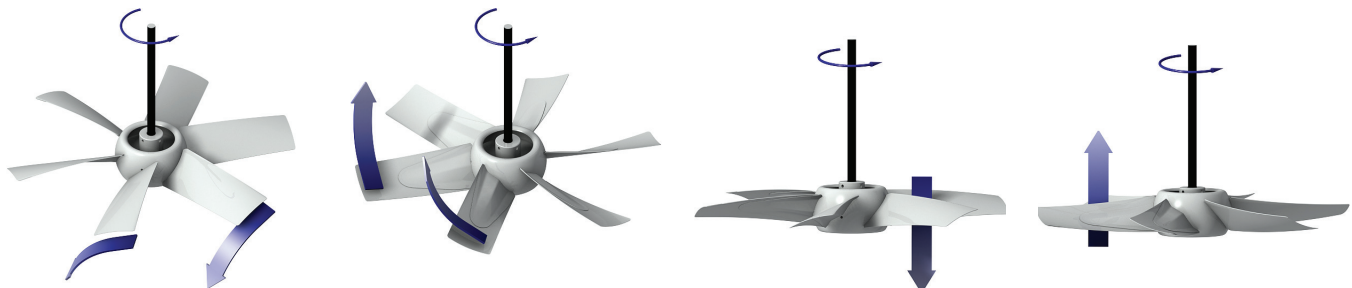
Motor Service Factor

Upblast roof fan motors (except for the model RBUMO) are cooled by the airstream. With an uninterrupted flow of cooling air, motors may be operated in their service factor range (up to 20% above the motor nameplate horsepower) without damage due to overheating. Lesser overloads are recommended for applications using totally enclosed or explosion-resistant motors.

Belt drive performance tables in this catalog show RPM selections for each propeller type (L or H) at a given motor horsepower. The first selection is a 1.0 motor service factor. The second speed selection is at 1.2 motor service factor. Direct drive performance tables show BHP levels with motor service factors ranging up to 1.2. When a selection using the motor service factor is not desirable for the application, specify the next higher motor horsepower.

Propeller Fan Rotation Guide

The propeller blade should cup and throw the air when rotating in the correct rotation as shown below.



Extraordinary Service

Quick Delivery and Quick Build

Greenheck's Quick Delivery (QD) and Quick Build (QB) programs have the industry's most comprehensive offering of commonly requested ventilation equipment.

The QD program has more than 1000 of the most in-demand products in stock, ready to ship. Some products require specific customization to meet the demands of a project. The QB program offers an even larger assortment of configure-to-order products built just for you, in the time frame you need!

Greenheck's Quick Build (QB) program ensures these products can be manufactured as needed in 1, 3, 5, 10, 15, and 25-day manufacturing cycles.



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



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

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