

Sidewall Propeller Fans Models SE1-M and SS1-M

- Direct Drive
- Exhaust
- Supply



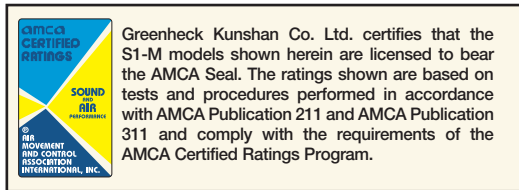
BUILDING VALUE IN AIR.

 **GREENHECK**
Building Value in Air.

February
2009

Greenheck's sidewall propeller fan line is the ideal choice for factory and warehouse applications where high volumes of air and low pressures are required. Performance spans the range between 510 to 11,383 m³/hr (300 to 6,700 cfm) with static pressures to 175 Pa. Fan sizes range from 203 to 610 mm (8 to 24 inches). Regardless of fan size, performance or duty level, all Greenheck sidewall propeller fans are built to perform with the same high standards of reliability and durability.

All models are available in either exhaust or supply arrangements. Propellers are only available with fabricated aluminum blades. Drive frames and panels are constructed to match the level of duty and the motor size.



Sidewall Direct Drive models are listed for electrical (UL/cUL 705) File no. E40001
 *UL is optional and must be specified



Leading Edge Technical Support

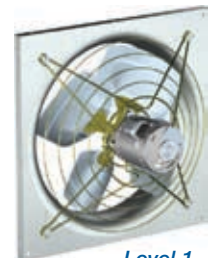
When product and IOM (Installation, Operation and Maintenance Manual) information is needed, our products are supported by the industry's best product literature, electronic media and Computer Aided Product Selection (CAPS) program. You'll also find this information on our website at greenheck.com

Our national and international representative organization provides personal service and expertise. To locate your nearest Greenheck representative, visit our website at greenheck.com or call any of the phone numbers provided on the back of this catalog.

Direct Drive Fan Selection

Models SE1 and SS1 are designed for smaller size applications where lower air volumes and static pressures are found.

	Construction Level	Models	Size Range (diameter)	Performance
Level 1	Fabricated aluminum propeller riveted to the hub	SE1-M SS1-M	203 to 610 mm (8 to 24 in.)	Up to 11,000 cmh and up to 175 Pa



Level 1
 Sizes 8 to 12



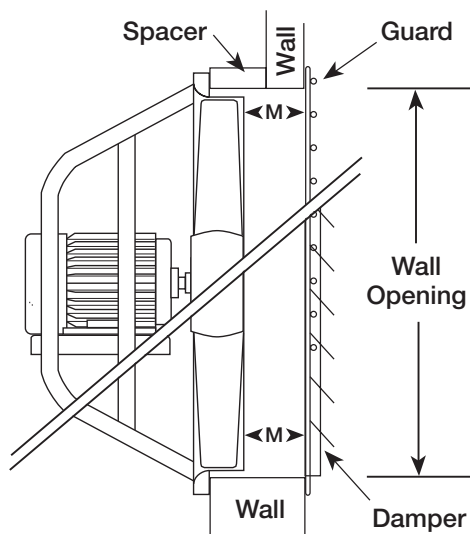
Level 1
 Sizes 12 to 24

Mounting Fan Directly to Wall

The split drawing below 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 to allow the venturi to fit into the wall opening.

Refer to the table for 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.

Fan Size	M	Wall Opening
8	152 (6)	267 (10½)
10	152 (6)	318 (12½)
12	178 (7)	368 (14½)
14	203 (8)	419 (16½)
16	229 (9)	470 (18½)
18	254 (10)	521 (20½)
20	305 (12)	572 (22½)
24	330 (13)	673 (26½)

All dimensions given in millimeters (inches).

Motor Side Guard

Protective guards of welded steel wire completely enclose the motor and drive side of the fan. Guards are coated with Permator™, a thermal setting polyester urethane. Other paint finishes are also available. Sizes 20 and larger only.

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. 90° turn down is available for exhaust and supply fans and 45° turn down is only available for exhaust fans.

Damper Guard

Damper guards meet the OSHA requirements by completely enclosing 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.

Dampers

Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.



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. Direct drive fans can be horizontally mounted and motors can be mounted on top or on bottom with airflow up or down. Specify configuration best suited for access and service.

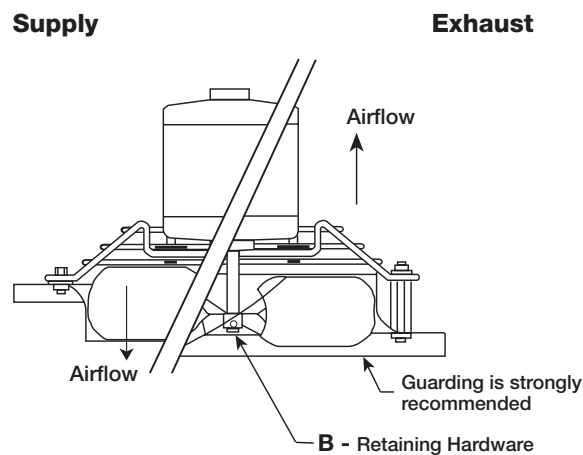
Horizontally mounted fans are put under different stresses than fans mounted in a wall. Construction modifications are required depending on motor location (top or bottom). These modifications may include the following:

- A - Reinforcing angles on fan panel - not shown (fans with motor on bottom)
- B - Propeller retaining hardware (fans with motor on top)

Motor on Top

Level 1 - Sizes 8 through 12

Motor on Top
Air blowing downward

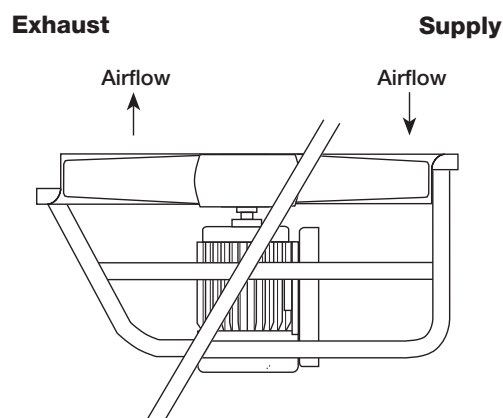


Motor on Top
Air blowing upward

Motor on Bottom

Level 1 - Sizes 12 through 24

Motor on Bottom
Air blowing upward



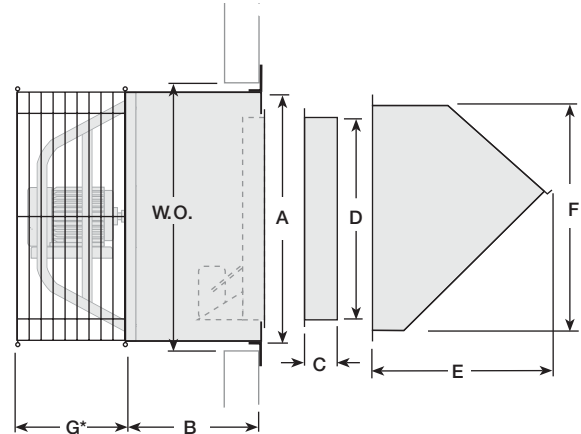
Motor on Bottom
Air blowing downward

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.

Wall Collar Mounting Option



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.



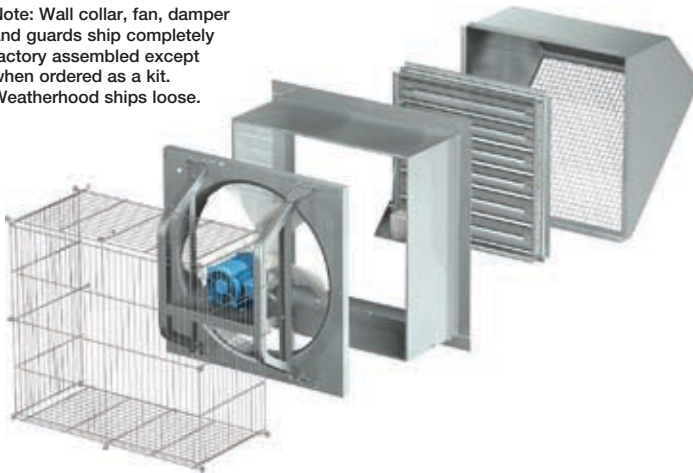
Size	Wall Collar			Damper Guard		Weatherhood			Motor Side Guard	Damper
	A	B*	W.O.	C	D	E	F	Width	G**	
8	327 (12 ⁷ / ₈)	410 (16 ¹ / ₈)	362 (14 ¹ / ₄)	140 (5 ¹ / ₂)	260 (10 ¹ / ₄)	337 (13 ¹ / ₄)	286 (11 ¹ / ₄)	267 (10 ¹ / ₂)	219 (8 ⁵ / ₈)	254 (10)
10	378 (14 ⁷ / ₈)	410 (16 ¹ / ₈)	413 (16 ¹ / ₄)	165 (6 ¹ / ₂)	311 (12 ¹ / ₄)	378 (14 ⁷ / ₈)	340 (13 ³ / ₈)	318 (12 ¹ / ₂)	229 (9)	305 (12)
12	454 (17 ⁷ / ₈)	410 (16 ¹ / ₈)	489 (19 ¹ / ₄)	137 (5 ³ / ₈)	362 (14 ¹ / ₄)	416 (16 ³ / ₈)	397 (15 ⁵ / ₈)	368 (14 ¹ / ₂)	279 (11)	356 (14)
14	505 (19 ⁵ / ₈)	467 (18 ³ / ₈)	540 (21 ¹ / ₄)	162 (6 ³ / ₈)	413 (16 ¹ / ₄)	445 (17 ¹ / ₂)	448 (17 ⁵ / ₈)	419 (16 ¹ / ₂)	279 (11)	406 (16)
16	556 (21 ⁵ / ₈)	467 (18 ³ / ₈)	591 (23 ¹ / ₄)	171 (6 ³ / ₄)	464 (18 ¹ / ₄)	492 (19 ³ / ₈)	498 (19 ⁵ / ₈)	470 (18 ¹ / ₂)	279 (11)	457 (18)
18	606 (23 ⁵ / ₈)	467 (18 ³ / ₈)	641 (25 ¹ / ₄)	152 (6)	514 (20 ¹ / ₄)	559 (22)	549 (21 ⁵ / ₈)	521 (20 ¹ / ₂)	279 (11)	508 (20)
20	657 (25 ⁵ / ₈)	467 (18 ³ / ₈)	692 (27 ¹ / ₄)	165 (6 ¹ / ₂)	565 (22 ¹ / ₄)	629 (24 ³ / ₄)	600 (23 ⁵ / ₈)	572 (22 ¹ / ₂)	406 (16)	559 (22)
24	810 (31 ⁵ / ₈)	467 (18 ³ / ₈)	857 (33 ³ / ₄)	162 (6 ³ / ₈)	667 (26 ¹ / ₄)	683 (26 ⁷ / ₈)	772 (30 ³ / ₈)	740 (29 ¹ / ₈)	457 (18)	660 (26)

All dimensions given in millimeters (*inches*).

*All sizes, except size 20, are 51 mm (2 inches) larger if a VCD damper is used. For complete dimensional information refer to submittal.

**Dimensions are for exhaust fan guard. See CAPS for supply fan and for optional OSHA motor side guard dimensions.

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



Motor Side Guard – Protective guards of welded steel wire completely enclose the motor and drive side of the fan. Guards are coated with Permatector™, a thermal setting polyester urethane. Other paint finishes are also available. Sizes 20 and larger only.

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.

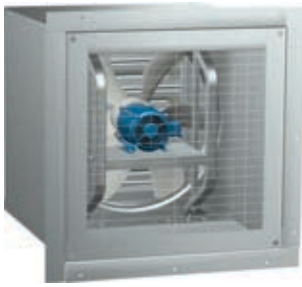


Dampers – Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.

Damper Guard – Damper guards meet the OSHA requirements and 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.

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° turn down is for exhaust and 90° turn down is for exhaust and supply.

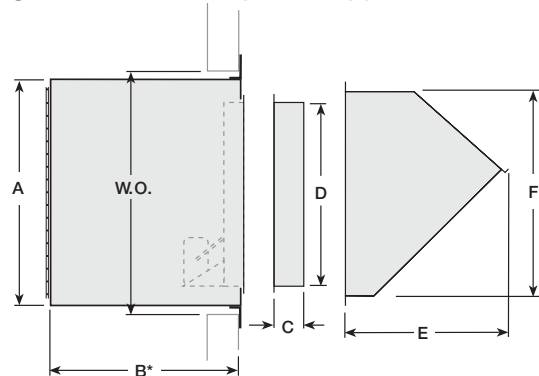
Wall Housing Mounting Option



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 Permator, a thermal setting polyester urethane. Other paint finishes are also available.

Wall housing guards that meet the OSHA requirements are also available.



Size	Wall Housing			Damper Guard		Weatherhood			Damper	Material Gauge Thickness
	A	B*	W.O.	C	D	E	F	Width		
8	337 (13 ¹ / ₄)	483 (19)	362 (14 ¹ / ₄)	140 (5 ¹ / ₂)	260 (10 ¹ / ₄)	337 (13 ¹ / ₄)	286 (11 ¹ / ₄)	267 (10 ¹ / ₂)	254 (10)	1.2 (20)
10	387 (15 ¹ / ₄)	483 (19)	413 (16 ¹ / ₄)	165 (6 ¹ / ₂)	311 (12 ¹ / ₄)	378 (14 ⁷ / ₈)	340 (13 ³ / ₈)	318 (12 ¹ / ₂)	305 (12)	1.2 (20)
12	464 (18 ³ / ₄)	584 (23)	489 (19 ¹ / ₄)	137 (5 ³ / ₈)	362 (14 ¹ / ₄)	416 (16 ³ / ₈)	397 (15 ⁵ / ₈)	368 (14 ¹ / ₂)	356 (14)	1.2 (20)
14	514 (20 ¹ / ₄)	660 (26)	540 (21 ¹ / ₄)	162 (6 ³ / ₈)	413 (16 ¹ / ₄)	445 (17 ¹ / ₂)	448 (17 ⁵ / ₈)	419 (16 ¹ / ₂)	406 (16)	1.2 (20)
16	565 (22 ¹ / ₄)	686 (27)	591 (23 ¹ / ₄)	171 (6 ³ / ₄)	464 (18 ¹ / ₄)	492 (19 ³ / ₈)	498 (19 ⁵ / ₈)	470 (18 ¹ / ₂)	457 (18)	1.2 (20)
18	616 (24 ¹ / ₄)	711 (28)	641 (25 ¹ / ₄)	152 (6)	514 (20 ¹ / ₄)	559 (22)	549 (21 ⁵ / ₈)	521 (20 ¹ / ₂)	508 (20)	1.2 (20)
20	667 (26 ¹ / ₄)	813 (32)	692 (27 ¹ / ₄)	165 (6 ¹ / ₂)	565 (22 ¹ / ₄)	629 (24 ³ / ₄)	600 (23 ³ / ₈)	572 (22 ¹ / ₂)	559 (22)	1.5 (18)
24	819 (32 ¹ / ₄)	940 (37)	857 (33 ³ / ₄)	162 (6 ³ / ₈)	667 (26 ¹ / ₄)	683 (26 ⁷ / ₈)	772 (30 ³ / ₈)	740 (29 ¹ / ₂)	660 (26)	1.5 (18)

All dimensions given in millimeters (*inches*).

*B dimension will increase by 152 millimeters (*6 inches*) when a heavy duty motorized backdraft damper is specified. For complete dimensional information, refer to submittal.

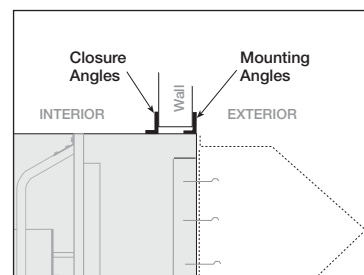
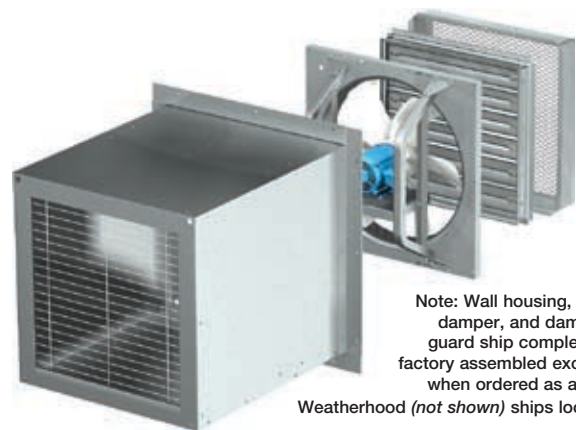
Dampers – Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.

Damper Guard – Damper guards meet the OSHA requirements and 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.

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° turn down is for exhaust and 90° turn down is for exhaust and supply.

Closure Angles

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



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.

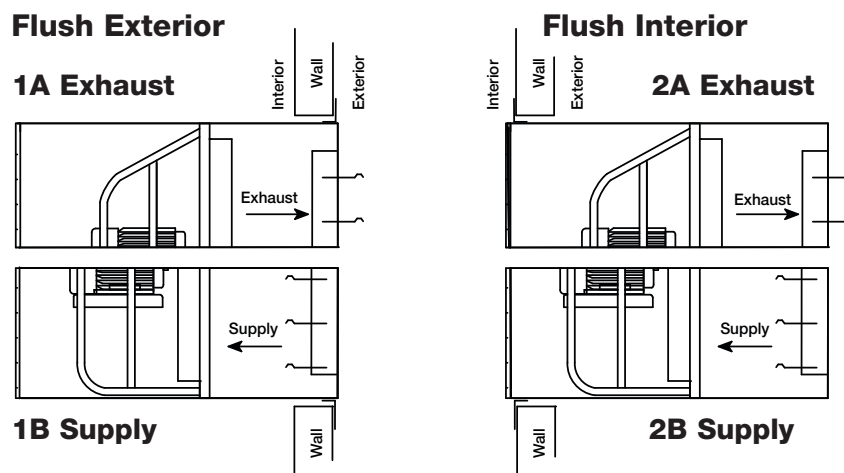
The following information will help determine the correct arrangement required. When ordering specify arrangement by the drawing number 1A, 2A, 1B or 2B as shown in the diagrams below.

NOTE: Weatherhoods are strongly recommended for all configurations to help prevent moisture infiltration. Mounting flange, damper and guard ship factory mounted on all arrangements as shown except when ordered as a kit.

Mounting Arrangements for Interior Service Applications

The arrangements shown below are the most commonly used and should be considered first for most applications. The choice of flush interior or exterior mounting are based on appearance or space considerations.

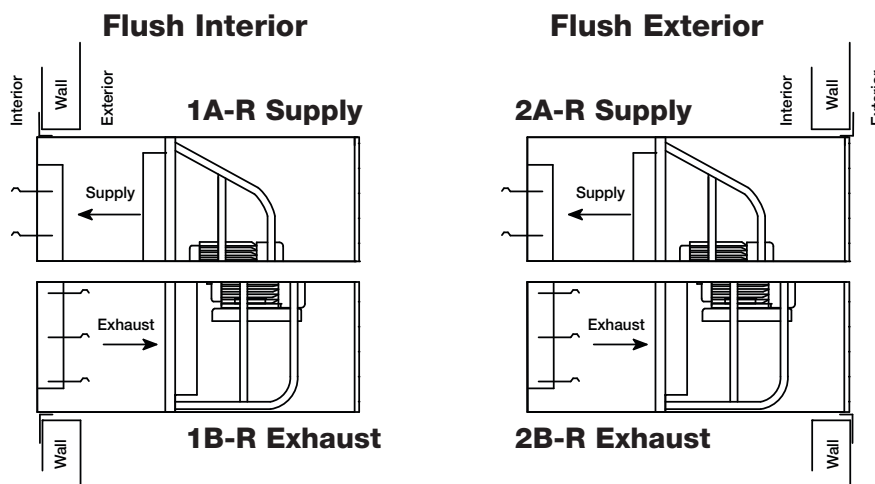
Belts, pulleys and motors are serviced from inside the building with these arrangements. For applications requiring service from outside the building, see reverse mounting arrangements below.



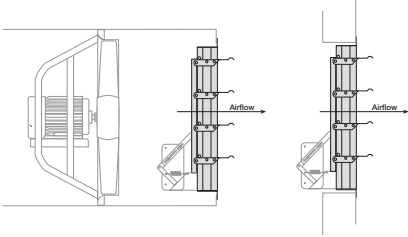
Mounting Arrangements for Exterior Service Applications (Optional)

Reverse mounting a wall housing simply involves installing the wall housing through the wall opening in the opposite direction of the above configurations. This results in an opposite effect on fan function. An exhaust fan in a wall housing will function as a supply fan when the housing is reverse mounted.

Example: When the exhaust arrangement shown as 1A is reversed (shown as 1A-R) the same unit now becomes a supply arrangement. The construction, fan position and mounting angle location in both configurations remain identical.



Used alone or in conjunction with the wall housing or wall collar, backdraft dampers are available for exhaust or supply configurations. Backdraft dampers are constructed with galvanized frames, aluminum blades and vinyl blade seals.

Damper Type	Description	Flush Exterior	Flush Interior
<p>Exhaust - Gravity or Motorized</p>  <p>Wall Housing Installation Wall Installation</p>	<p>WD-320 and WD-300 exhaust dampers are available as either gravity operated or motorized</p>	<p>Exhaust backdraft dampers are Model WD-320, which has the prepunched mounting flange located on the outlet end of the damper for a flush exterior appearance.</p>	<p>For applications where the mounting flange is required on the inlet end of the damper (so that the damper projects to the exterior), the Model WD-300 is available.</p>
<p>Model WD-320 shown</p>			

Other Options and Accessories

UL/cUL 705

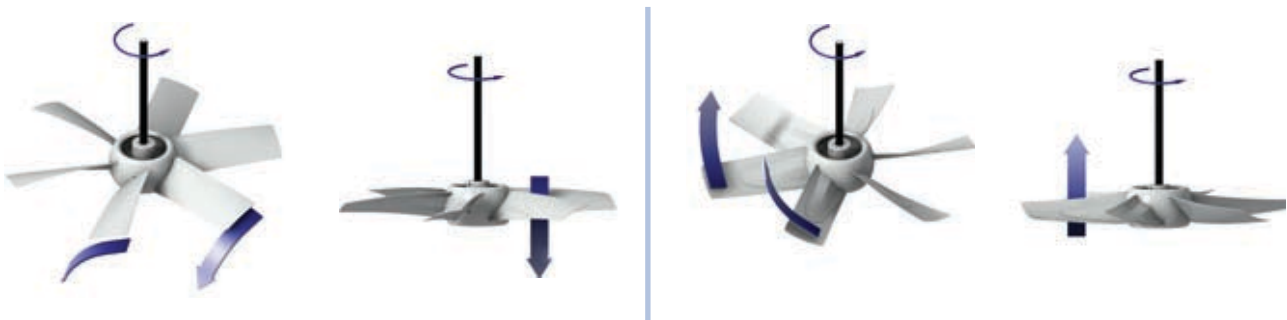
All belt and selected direct drive fans with TE standard efficiency, single speed motors are available with the UL705 listing for electrical.

Extended Wiring Pigtail

Available only in conjunction with factory mounted disconnect switches, liquid tight wiring pigtails allow direct hook-up to the power supply which eliminates field wiring at the fan. Internal or external power supply can be specified.

Propeller Fan Rotation Guide

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



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, with their higher speeds, have more stable performance curves, lower initial costs, higher sound levels, and higher operating costs.

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 speed producing lower sound levels and are recommended for sound sensitive applications.

How Accessories Affect Static Pressure

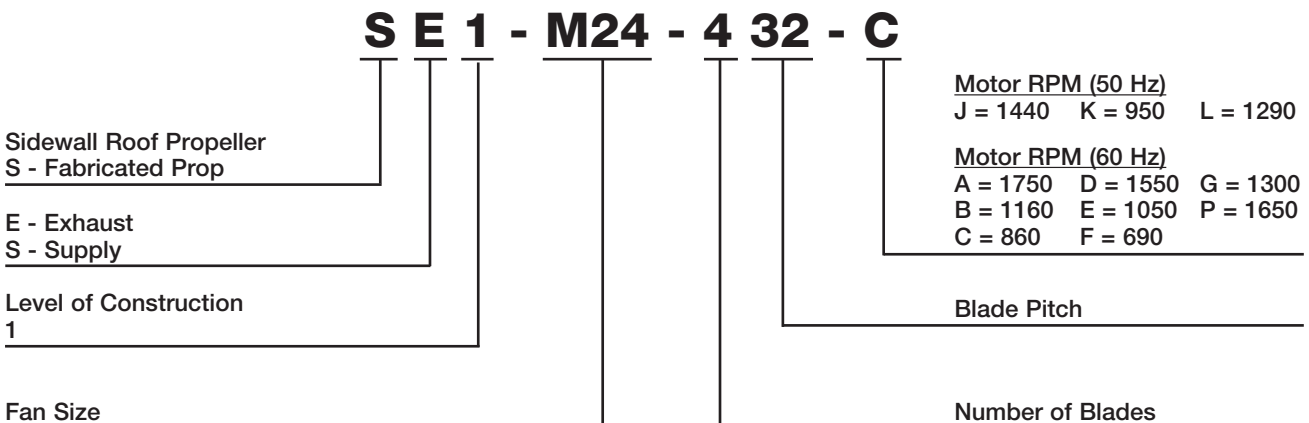
All accessory losses must be accounted for when calculating a fan's static pressure load. In most cases dampers, guards and weatherhoods actually add very little to the total system pressure. This means that propeller fans used in conjunction with common accessories can typically be specified with low pressure capabilities (below 3/8 in. wg). However, in cases where airflow velocities exceed 1500 fpm through the damper or where filters are used, static pressure loss may be significant.

Motor Service Factor

Motors for sidewall propeller fans 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's nameplate horsepower) without damage due to overheating. Lesser overloads are recommended for applications using totally enclosed or explosion resistant motors.

Direct Drive Model Number Code

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate direct drive with exhaust or supply air configuration. The remainder of the model number is determined by the size and performance selected from page 11.



Dimensional Data

Models SE1-M / Model SS1-M

All direct drive models are available in either exhaust (Model SE1-M) or supply (Model SS1-M) arrangements.

Panel/Drive Frame - Galvanized steel with one-piece drawn venturi.

Sizes 8-12; D, G, & E motor speeds - zinc plated heavy welded wire guard/support structure (paint optional).

Sizes 12-24; A, B, & C motor speeds - bolted structural steel channels and motor plate. (paint optional).

Propeller - Aluminum blades riveted to a galvanized steel hub.

Motors - Heavy duty, permanently lubricated, sleeve bearing type on sizes 8-12 and ball bearing type on sizes 14-24.

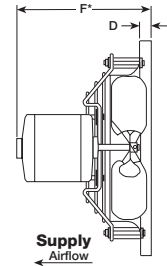
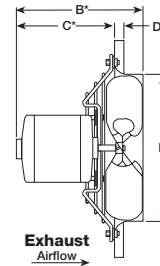
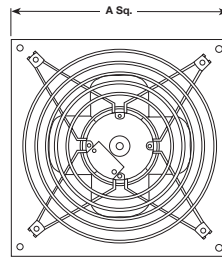
Material Gauges (mm)			Max. Motor Frame Size	Approx. Weight kg. (lbs.)
Fan Size	Fan Panel	Drive Frame		
8	1.2	-		6.8 (15)
10	1.2	-		7.3 (16)
12	1.2	2	71	9.0 (20)
14	1.2	2	80	12.2 (27)
16	1.2	2	80	13.6 (30)
18	1.2	2	80	15.9 (35)
20	1.2	2	90	17.7 (39)
24	1.2	2	90	20.4 (45)

Approximate weight. Does not include accessories.

Model SE1-M exhaust shown



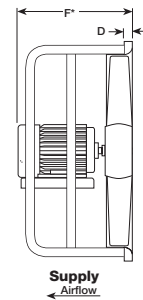
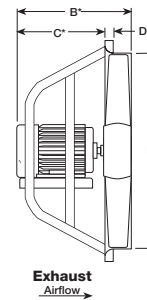
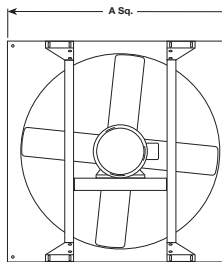
Sizes 8-12
D, G, & E Motor Speeds



Model SS1-M supply shown



Sizes 12-24
A, B, & C Motor Speeds



Fan Size	A Panel*	B**	C**	D	E	F**	Damper Size*
8	330 (13)	178 (7)	127 (5)	25 (1)	213 (8 ³ / ₈)	203 (8)	254 (10)
10	381 (15)	222 (8 ³ / ₄)	127 (5)	25 (1)	264 (10 ³ / ₈)	203 (8)	305 (12)
12	457 (18)	273 (10 ³ / ₄)	210 (8 ¹ / ₄)	25 (1)	314 (12 ³ / ₈)	333 (13 ³ / ₈)	356 (14)
14	508 (20)	286 (11 ¹ / ₄)	216 (8 ¹ / ₂)	25 (1)	365 (14 ³ / ₈)	362 (14 ¹ / ₄)	406 (16)
16	559 (22)	298 (11 ³ / ₄)	225 (8 ³ / ₈)	25 (1)	416 (16 ³ / ₈)	356 (14)	457 (18)
18	610 (24)	356 (14)	276 (10 ³ / ₈)	25 (1)	467 (18 ³ / ₈)	362 (14 ¹ / ₄)	508 (20)
20	660 (26)	438 (17 ¹ / ₄)	279 (11)	25 (1)	521 (20 ¹ / ₂)	457 (18)	559 (22)
24	813 (32)	508 (20)	321 (12 ³ / ₈)	32 (1 ¹ / ₄)	619 (24 ³ / ₈)	533 (21)	660 (26)

All dimensions given in millimeters (inches).

*Square dimension.

**Varies with motor selection.

Performance Data

Model SE1-M / Model SS1-M

Model Number	Motor Power	Fan RPM	Max Power (W)	Sones @ FA	CMH/Static Pressure in Pa								
					0	25	50	75	100	125	150	175	
SE1/SS1-M8-426-L	1/25 hp	1290	7.5	3	438	214							
SE1/SS1-M8-440-L	1/25 hp	1290	14.9	3	649	375	178						
SE1/SS1-M10-424-L	1/25 hp	1290	7.5	2.5	812								
SE1/SS1-M10-440-L	1/25 hp	1290	29.8	4.5	1307	1038							
SE1/SS1-M12-426-L	1/8 hp	1290	22.4	4.2	1573	1259	642						
SE1/SS1-M12-432-J	0.18 kW	1425	104	6.5	2263	2000	1662	1380	1002	802			
SE1/SS1-M12-432-K	0.18 kW	950	29.8	4.1	1509	1053	600						
SE1/SS1-M14-432-J	0.18 kW	1425	119	8.3	3325	3106	2831	2419					
SE1/SS1-M14-436-J	0.25 kW	1425	157	9.6	3782	3531	3230	2712	1719				
SE1/SS1-M14-440-K	0.18 kW	950	67	6.3	2232	1806	1166	783					
SE1/SS1-M16-421-J	0.25 kW	1425	149	8.6	3531	3340	3111	2769	0				
SE1/SS1-M16-428-J	0.37 kW	1425	254	10.3	4665	4424	4168	3843	3481	2562			
SE1/SS1-M16-436-J	0.55 kW	1425	395	12.3	5639	5384	5102	4764	4125	3160	2657	2345	
SE1/SS1-M16-426-K	0.18 kW	950	52.2	4.7	2932	2571							
SE1/SS1-M16-428-K	0.18 kW	950	74.6	4.8	3111	2735	2136						
SE1/SS1-M16-436-K	0.18 kW	950	112	6.1	3760	3356	2453	1612					
SE1/SS1-M18-424-J	0.37 kW	1425	268	11.9	5843	5540	5173	4716					
SE1/SS1-M18-429-J	0.55 kW	1425	403	12.9	6759	6432	6014	5573	4895	4098	3021	2659	
SE1/SS1-M18-424-K	0.18 kW	950	74.6	4.9	3896	3381							
SE1/SS1-M18-429-K	0.18 kW	950	119	5.2	4506	3938	2987	1832					
SE1/SS1-M18-436-K	0.25 kW	950	172	9.7	5213	4550	3548	2103					
SE1/SS1-M20-420-J	0.55 kW	1425	350	16	6478	6205	5948	5697	5326				
SE1/SS1-M20-428-J	0.75 kW	1425	597	18.1	8821	8549	8244	7841	7474	7015	6404	5772	
SE1/SS1-M20-424-K	0.18 kW	950	112	8.9	5087	4684							
SE1/SS1-M20-428-K	0.25 kW	950	179	11.7	5880	5432	4861	3952					
SE1/SS1-M20-436-K	0.37 kW	950	283	12.2	7297	6752	6013	4217	3768				
SE1/SS1-M24-428-K	0.37 kW	950	246	9.1	8221	7747	6818						
SE1/SS1-M24-432-K	0.37 kW	950	321	10.5	9385	8672	7751						

Performance certified is for Models SE1-M/SS1-M 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.

Direct Drive Specifications

Direct Drive

Direct drive, axial type sidewall fans shall be provided as follows:

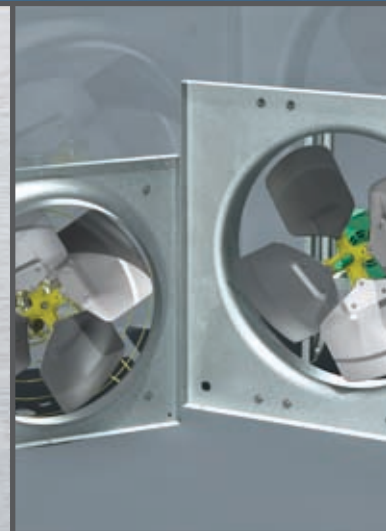
Propellers shall be constructed with fabricated aluminum blades and fabricated galvanized steel hubs. A standard square key and set screw or tapered bushing shall lock the propeller to the motor shaft. All propellers shall be statically and dynamically balanced to AMCA standard 204-05.

Motors shall be permanently lubricated, heavy duty type, carefully matched to the fan load and furnished at the specified RPM, voltage, phase, and enclosure.

Motor drive frame assemblies and fan panels shall be galvanized steel or painted steel. Drive frame assemblies shall be welded wire or formed channels and fan panels shall have prepunched mounting holes, formed flanges, and a deep formed inlet venturi. Drive frames and panels shall be bolted construction or welded construction (level 2 & 3 fans only).

The axial exhaust or supply fans shall bear the AMCA Certified Ratings Seals for both sound and air performance.

Fans shall be Model SE1-M and SS1-M as manufactured by Greenheck Kunshan Co. Ltd., Kunshan, China.



Building Value in Air

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

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

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

Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of 18 months from the shipment date or one year from the date of installation, whichever occurs first. Any units or parts which prove defective during the warranty period will be repaired or replaced at our option when returned to our factory, transportation prepaid. Should motors furnished by Greenheck prove defective during this period, Greenheck should be informed and the motors should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

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



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