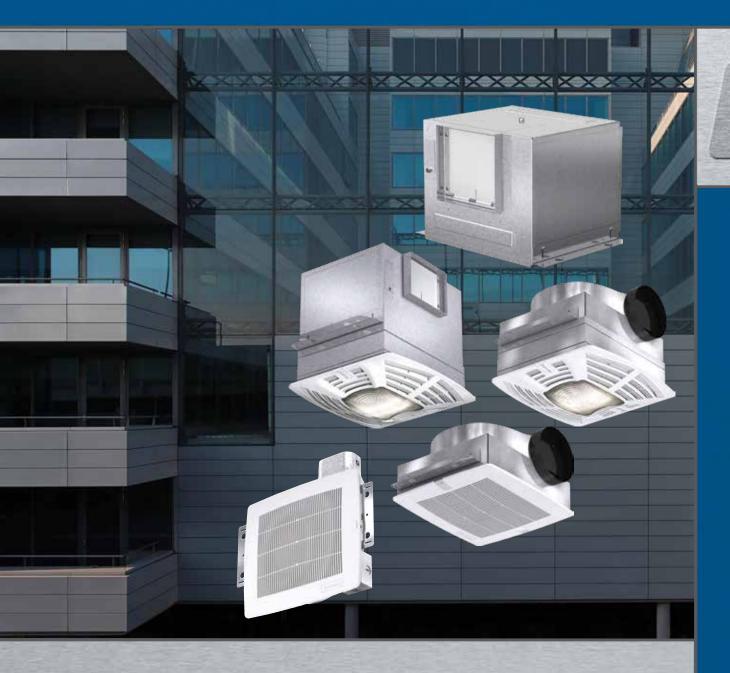
Centrifugal Ceiling Exhaust and Inline Cabinet Fans Models SP and CSP





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Models SP and CSP Ceiling and Cabinet Fans



Great things come in small packages, as do our SP ceiling exhaust fan and CSP inline cabinet fan models. Be assured when you buy any Greenheck product, it is a quality product at a Competitive price. Plus, we guarantee our SP and CSP fans with a three-year warranty. We are your market leader for the most comprehensive ceiling and cabinet fan line in the market.

Typical Installations

- Multifamily housing
- Hotels
- Hospitals
- Schools
- Bathrooms
- Storage rooms

Benefits

- Industry leading sound levels
- Compact size
- Wide range of performance
- Available with EC motors for higher efficiency and more controllability
- Helps maintain acceptable Indoor Air Quality

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Models SP and CSPCeiling and Cabinet Fans



								M	loc	del	C	or	np	ar	is	on									
	Loca	Location Mounting			Airflow		Application				Drive Type		Impeller Type		Performance										
Model	Outdoor	Indoor	Roof Curb	Base/Floor	Hanging	Wall	Ceiling Mounted	Exhaust	Supply	Reversible	Recirculate	General/Clean Air	Contaminated Air	Spark Resistant	Grease (UL 762)	Smoke Control (UL)	High Wind (150 mph)	High Temp (above 200°F)	Belt	Direct	Centrifugal	Propeller/Axial	Mixed Flow	Maximum Volume (cfm)	Maximum Static Pressure (in. wg)
SP		✓			✓	✓	✓	✓				✓								✓	✓			1,600	1
CSP		✓			✓			✓	✓			✓								✓	✓			3,800	1





SP fans are designed for ceiling mounted exhaust applications.

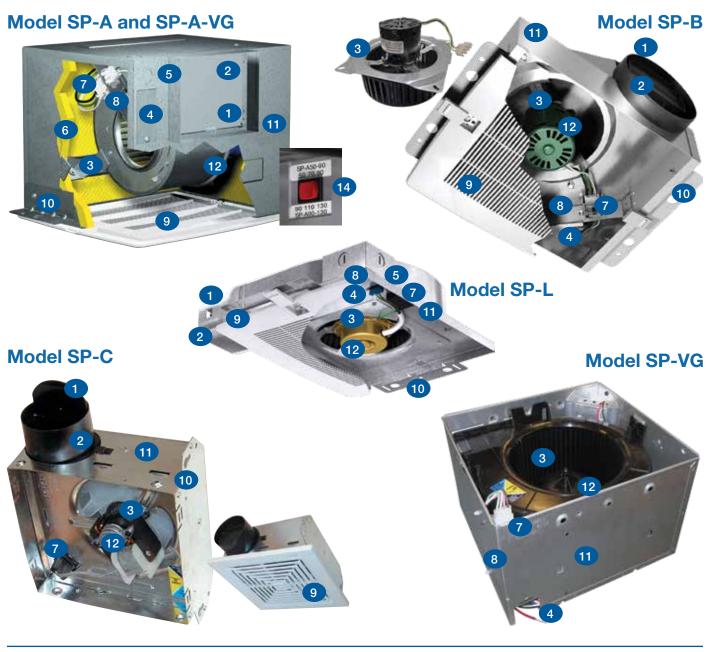


CSP fans are designed for inline supply or exhaust applications.

M	odel	Level of Construction	Description	Profile min. height	Sound min. sones	Air Volume max. cfm	UL Listing
	SP	VG	Premium Plus Fan: Highest performing energy efficient fan	7 inches (178 mm)	<0.3	110 cfm (187 m³/hr)	UL/cUL Listed for above bathtub/ shower with GFCI branch protected circuit (sizes 110 and 80 only)
	SP	A-VG	Premium Constant CFM Ceiling Fan: 3 speed CFM selection	9 inches (229 mm)	<0.3	130 cfm (220 m³/hr)	UL/cUL Listed for above bathtub/ shower with GFCI branch protected circuit
ng Fans	SP	А	Premium Ceiling Fan: Widest selection to meet sound		<0.3	1,600 cfm (2718 m³/ hr)	UL/cUL Listed for above bathtub/ shower with GFCI branch protected circuit (Sizes A390 and smaller)
Ceiling	SP	В	Deluxe Ceiling Fan: Compact to fit most applications with quiet operation	7 inches (178 mm)	0.8	200 cfm (340 m³/hr)	UL/cUL Listed for above bathtub/ shower with GFCI branch protected circuit
	SP	L	Low Profile Ceiling Fan: Designed to fit in 2x4 wall construction	3% inches (86 mm)	1.0	84 cfm	UL/cUL Listed for above bathtub/ shower with GFCI branch protected circuit.
	SP	С	Economy Ceiling Fan: Designed for light commercial applications	3% inches (86 mm)	3.0	50 cfm (85 m³/hr)	UL Listed
e Fans	CSP	А	Premium Inline Fan: Widest selection and industry- leading low sound. Select sizes available with Vari-Green motor.	9 inches (229 mm)	0.8	3,775 cfm (6414 m³/ hr)	UL/cUL Listed
Inline	CSP	В	Deluxe Inline Fan: Compact design to fit in small remote spaces	7 inches (178 mm)	1.5	185 cfm (314 m³/hr)	UL/cUL Listed

Standard Construction Features







Standard Construction Features



	NI.	umber and Description		Specif	ic Featı	ures for	Each M	lodel	
	IN	umber and Description	SP-VG	SP-A	SP-B	SP-C	SP-L	CSP-A	CSP-B
1	Backdraft	Durable plastic to reduce backdrafts		50-90	✓	✓	✓		✓
•	Damper	Aluminum to reduce backdrafts	✓	110-1550				✓	
		Round - For quick and easy connections	✓	50-90 50-90-VG 90-130-VG	✓	✓			✓
2	Outlet	Square - For quick and easy connections		110-1550				✓	
		Oval - Metal construction for increased fire resistance					✓		
		Removes quickly for maintenance/replacement		✓	✓	✓	✓	✓	✓
3	Power Pack	Includes conversion from horizontal to vertical discharge		✓				✓	
	Flootwicel	Vertical electrical access to eliminate drilling holes		✓	✓		Ceiling	✓	✓
4	Electrical Access	Horizontal electrical access					Wall		
		External electrical access to save installation time	✓	✓				✓	
5	Electrical Knockouts	Eliminates drilling holes (horizontal or vertical)	✓	✓	✓	✓	✓	✓	✓
6	Acoustic Insulation	Absorbs sound		✓				✓	
7	Disconnect	Servicing is quick and safe	✓	✓	✓	✓	✓	✓	✓
8	Electrical Junction Box	Large for easy wiring	✓	✓	✓	✓	✓	✓	✓
9	Grille	Concealed attachment screws securely fasten grille to housing for quiet, rattle free operation		✓	✓		✓		
	Mounting	Adjustable for multiple installation conditions	✓	✓	✓	✓		✓	✓
	Brackets	Integral for quick installation				✓	✓		
	Haveine	Embossed galvanized steel for rigidity	✓	✓	✓	✓	✓	✓	✓
	Housing	A low profile for height restricted areas	✓		✓	✓	✓		✓
12	Motors	Motors are compatible for use with speed controls and have thermal overload protection Domestic & International • 50 cycle, 220v or 240v • 60 cycle, 115v, 208v, 220v, 230v, & 277v options (See CAPS or pg. 6 for availability)	60 cycle, 115v only	✓	✓	60 cycle, 115v only	60 cycle, 115v only	✓	✓
13	Access Panel	Gain easy access to internal components once installed	✓	✓	✓	✓	✓	✓	✓
14	CFM Speed Selector	User-controlled internal switch to set fan to operate at one of three speeds for desired airflow		50-90-VG 90-130-VG					
	Control with Vari-Green Motor	Constant CFM motors capable of two speed operation. Run at continuous low speed and switch to high speed on demand. ASHRAE 62.2, California Title 24 and Washington State Energy Code compliant.	80(L) 110(L) only	50 40 30 CF SP-80(L)-V	70 15	100 45 100 100 100 100 100 100 100 100 100 10	70 50 90 30 CFM P-110(L)-VG user-	30 15 5 TIME adjustable contr	bls
	Exclusive Electrical Wiring Feature	Electrical access cover located on the housing ext the power assembly, saving installation time and co		s feature perr	nits exter	nal wiring	without r		
	Double-Wide Fans	Available for applications requiring 700 cfm or great Double-wide fans have two double-width forward-which are housed in separate scrolls, and driven by Available on models SP-A and CSP-A.	curved w					nur	1
	Vertical Discharge	Exhaust outlet duct installed in the optional vertica The power assembly must be rotated to match the Available on SP-A and CSP-A models.			٦.		19		

Power Ratings and Certifications



Models	Avai	Available Motor Voltage and Cycle Ratings										
Models Available (X) 115V/60Hz 50Hz 50Hz 60Hz 277V 60Hz 277V option SP-A50 X			Pow	er Rating V	/Hz							
SP-A70 X <th></th> <th></th> <th></th> <th></th> <th></th> <th>277V</th> <th>Motor</th>						277V	Motor					
SP-A90 X <td>SP-A50</td> <td>х</td> <td>х</td> <td>х</td> <td>х</td> <td></td> <td>х</td>	SP-A50	х	х	х	х		х					
SP-A110 X </td <td>SP-A70</td> <td>х</td> <td>х</td> <td>Х</td> <td>Х</td> <td></td> <td>Х</td>	SP-A70	х	х	Х	Х		Х					
SP-A125 X </td <td>SP-A90</td> <td>х</td> <td>Х</td> <td>х</td> <td>Х</td> <td></td> <td>х</td>	SP-A90	х	Х	х	Х		х					
SP-A130 X </td <td>SP-A110</td> <td>х</td> <td>х</td> <td>х</td> <td>х</td> <td>Х</td> <td>Х</td>	SP-A110	х	х	х	х	Х	Х					
SP-A190 X X X X SP-A200 X X X X SP-A290 X X X X SP-A390 X X X X SP-A390-VG X X X X X SP-A390-VG X X X X X X SP-A510 X <td< td=""><td>SP-A125</td><td>х</td><td></td><td></td><td></td><td>Х</td><td></td></td<>	SP-A125	х				Х						
SP-A200 X SP-A250 X SP-A290 X SP-A390 X SP-A390-VG X X X SP-A390-VG X X X SP-A410 X SP-A510 X X X SP-A510-VG X X X SP-A700 X SP-A700-VG X X X SP-A710-VG X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X <t< td=""><td>SP-A130</td><td>х</td><td>х</td><td>х</td><td>Х</td><td></td><td>х</td></t<>	SP-A130	х	х	х	Х		х					
SP-A250 X </td <td>SP-A190</td> <td>х</td> <td></td> <td>х</td> <td>х</td> <td>Х</td> <td></td>	SP-A190	х		х	х	Х						
SP-A290 X X X X SP-A390-VG X X X X X SP-A390-VG X X X X X X SP-A410 X <t< td=""><td>SP-A200</td><td>х</td><td></td><td></td><td></td><td></td><td></td></t<>	SP-A200	х										
SP-A390 X </td <td>SP-A250</td> <td>х</td> <td></td> <td></td> <td></td> <td></td> <td></td>	SP-A250	х										
SP-A390-VG X	SP-A290	х		Х	Х							
SP-A410 X </td <td>SP-A390</td> <td>х</td> <td>Х</td> <td>х</td> <td>Х</td> <td></td> <td></td>	SP-A390	х	Х	х	Х							
SP-A510 X X X X SP-A510-VG X X X X X SP-A700 X	SP-A390-VG	х	Х	х	Х	х	Х					
SP-A510-VG X	SP-A410	х										
SP-A700 X </td <td>SP-A510</td> <td>х</td> <td></td> <td>х</td> <td>х</td> <td></td> <td>х</td>	SP-A510	х		х	х		х					
SP-A700-VG X	SP-A510-VG	х	х	х	х	Х	х					
SP-A710 X </td <td>SP-A700</td> <td>х</td> <td></td> <td></td> <td></td> <td></td> <td></td>	SP-A700	х										
SP-A710-VG X	SP-A700-VG	х	х	х	х	х	х					
SP-A780 X X X SP-A900 X X X X SP-A1050 X X X X X SP-A1050-VG X X X X X SP-A1410 X X X X X SP-B50 X X X X SP-B50 X X X X SP-B80 X	SP-A710	х					х					
SP-A900 x </td <td>SP-A710-VG</td> <td>х</td> <td>Х</td> <td>х</td> <td>х</td> <td>х</td> <td>х</td>	SP-A710-VG	х	Х	х	х	х	х					
SP-A1050 X SP-B50 X X X X SP-B70 X X X X X X SP-B80 X	SP-A780	х		х	х							
SP-A1050-VG X X X X X X X X X X X X X X X X X X SP-B50 X X X X X SP-B70 X	SP-A900	х										
SP-A1410 X X X X SP-B50 X X X X SP-B70 X X X X SP-B80 X X X X SP-B90 X X X X SP-B110 X X X X SP-B10ES X X X X SP-B200 X X X X SP-L50 X X X X	SP-A1050	х		х	Х							
SP-A1550 X X X SP-B50 X X X SP-B70 X X X SP-B80 X X X SP-B90 X X X SP-B110 X X X SP-B110ES X X X SP-B150 X X X SP-B200 X X X SP-L50 X X X	SP-A1050-VG	х	Х	х	Х	х	х					
SP-B50 x SP-B70 x SP-B80 x SP-B90 x SP-B10 x X x SP-B110ES x SP-B150 x X x SP-B200 x X x X x X x X x X x X x X x X x X x	SP-A1410	х										
SP-B70 X SP-B80 X SP-B90 X X X SP-B110 X X X X SP-B110ES X X X X SP-B150 X X X X SP-B200 X X X X SP-L50 X X X	SP-A1550	х		х	х							
SP-B80 x <td>SP-B50</td> <td>х</td> <td></td> <td></td> <td></td> <td></td> <td></td>	SP-B50	х										
SP-B90 x x x x SP-B110 x x x x SP-B110ES x x x x SP-B150 x x x x SP-B200 x x x x SP-L50 x x x x	SP-B70	х										
SP-B110 x x x x SP-B110ES x SP-B150 x x x x SP-B200 x x x x SP-L50 x	SP-B80	х										
SP-B110ES X	SP-B90	х		х	х							
SP-B150 x x x x SP-B200 x x x x SP-L50 x x x x	SP-B110	х		Х	Х	х						
SP-B150 x x x x SP-B200 x x x x SP-L50 x x x x	SP-B110ES	х										
SP-L50 x				Х	Х	х						
SP-L50 x	SP-B200	х		х	х	х						

*Note: All motors are rated for continuous use except model SP-C50.



Greenheck Fan Corporation certifies that the SP 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. The SP models are not AMCA certified with 50 hertz motors.

Products that earn the ENERGY STAR® prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.



Fans that are ENERGY STAR certified include: SP-A70, SP-A90, SP-A110, SP-A125, SP-A190, SP-A200, SP-A250, SP-B50, SP-B70, SP-B80, SP-B90, SP-B110ES, SP-L50, SP-L80, SP-80-VG, SP-80L-VG, SP-110-VG, SP-A50-90-VG, SP-A90-130-VG, CSP-A110, CSP-A125, CSP-A200, CSP-A390-VG

Available Motor Voltage and Cycle Ratings											
		Pow	er Rating V	/Hz							
Models Available (X)	115V/ 60Hz	115V/ 50Hz	220-240V/ 50Hz	220-240V/ 60Hz	277V	Vari-Green Motor Option					
SP-C50*	х										
SP-80	х					х					
SP-80L	х					х					
SP-110	х					Х					
SP-110L	х					х					
CSP-A110	х		Х	Х	Х						
CSP-A125	х				х						
CSP-A190	х		Х	Х	х						
CSP-A200	х										
CSP-A250	х	Х									
CSP-A290	х		Х	Х							
CSP-A390	х	х	х	х							
CSP-A390-VG	х	х	Х	Х	Х	Х					
CSP-A410	х										
CSP-A510	х		х	х		х					
CSP-A510-VG	х	х	х	х	х	Х					
CSP-A700	х										
CSP-A700-VG	х	х	х	х	Х	Х					
CSP-A710	х					х					
CSP-A710-VG	х	х	х	х	х	х					
CSP-A780	х		х	х							
CSP-A900	х										
CSP-A1050	х		х	х							
CSP-A1050-VG	х	Х	х	х	х	х					
CSP-A1410	х										
CSP-A1550	Х		Х	Х							
CSP-A1750	Х										
CSP-A2150	Х										
CSP-A3600	Х		х	х							
CSP-B110	Х		Х	Х	х						
CSP-B150	х		х	х	х						
CSP-B200	Х		Х	Х	х						

*Note: All motors are rated for continuous use except model SP-C50.



Greenheck Fan Corporation certifies that the CSP 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 comply with the requirements of the AMCA Certified Ratings Program. The CSP models are not AMCA certified with 50 hertz motors.



Models SP and CSP are listed electric fans (UL/cUL 507). Ceiling Exhaust Fans are also UL Listed for above bathtub/ shower with GFCI branch protected circuit. File no. E33599. Note: SP/CSP fans are rated for direct contact with insulation.



Home Ventilating Institute www.hvi.org

Air and Sound Certified at .1, .25 and .375 in. wg

Vari-Green® Motor and Controls







Vari-Green® Motor

EC Motor Technology Information & Advantages -

Greenheck's Vari-Green (VG) Electronically Commutated (EC) motor combines motor technology, controllability and energy-efficiency into one single low maintenance unit and is the industry's first fully controllable motor. The EC motor operates on AC power that is converted to DC – providing more efficient motor operation as compared to an AC operation. The controllability of the Vari-Green motor allows communication compatibility with a variable volume system. This allows speed adjustment of the motor to meet the needs of the system to exhaust air as needed and reduce overexhausting conditioned air.

Available	Vari-Green	Controls an	d Models
		Models	
Controls	SP-80(L)-VG SP-110(L)-VG	SP-A50-90-VG SP-A90-130-VG	SP/CSP-A390-VG SP/CSP-A510-VG SP/CSP-A700-VG SP/CSP-A710-VG SP/CSP-A1050-VG CSP-A3300-VG
VOC			X
Temperature/ Humidity			x
Two-Speed			X
Remote Dial			X
Touch Remote			X
Constant Pressure			X
Transformer			X
Built-in Time Delay	Х		
Built-in Two Speed	Х		
Constant Airflow	Х	Х	Х
0-10V DC			Х
CFM Speed Selector		X	

See Greenheck's Vari-Green Motor and Vari-Green Controls brochures for more information.

Vari-Green® Controls

Transformer - Provides 24V power from the existing line voltage at the fan to the Vari-Green motor and controls. Dual voltage primary (120/240V) transformer provided with the fan.

Remote Dial - Allows for remote, manual airflow adjustments. Wall plate with dial may be mounted in a standard 2x4 inch electrical junction box.

Two Speed Control - Control allows motor rpm to be set at two independent speeds (high or low). Meets minimum airflow requirements with the ability to bump up to high speed in an emergency or meet maximum airflow requirements, or reset down to low speed for energy conservation.

Constant Pressure Control - Control the Vari-Green® motor via static (variable volume) or velocity (constant CFM) pressure on the inlet or outlet side of the fan. Available with duct or room probes for use in:

- Multifamily structures including apartments, condos, hotels; residential kitchens and bathrooms
- Institutional facilities such as schools, prisons, multistory office buildings; bathrooms

Air Quality, Volatile Organic Compounds (VOC) - Control a Vari-Green motor via changes in VOCs. VOCs are gasses that are emitted from humans, building materials, perfumes, foods, and furniture off-gassing. Range is 0-2000 CO₂ PPM equivalent.

- Institutional facilities including school, courthouse, hospital bathrooms, waiting rooms, cafeteria
- Commercial buildings such as office space in conference rooms bathrooms or breakroom

Air Quality for Temperature and Humidity - Control the Vari-Green motor via changes in temperature, humidity, or both. Range is 32° to 120°F and 0% to 100% relative humidity.

- Multifamily structures including apartments, condos, hotels, with placement in bathrooms and utility rooms
- Commercial buildings such as office buildings for placement in general office space, conference rooms, utility rooms, and bathrooms

Sound and Fan Selection

Things to know when sound is critical



Sound Data

The sound data shown in this catalog has been presented to aid the system designer in selecting a fan which will meet the desired sound criteria. Sone levels have been included on the performance pages to provide a means of quickly evaluating the relative loudness of a fan selection.

What is a sone?

Sones are an internationally recognized unit of loudness. In practical terms, the loudness of one sone is equivalent to the sound of a quiet refrigerator measured from five feet away in an acoustically average room. A sone is a single number rating, indicating the inlet noise derived from the eight audible octave bands. Sones are a linear measurement of sound level. For example, a sound level of 10 sones is twice as loud as 5 sones.

Can radiated noise increase sound levels?

Radiated noise from fan housings can cause unacceptable sound levels on any brand of fan. The size of these fans allows them to be placed in areas where this noise will be transmitted to the conditioned space through walls or ceilings. Where possible, cabinet fans should be located in remote parts of the ventilation system.

Where should an SP or CSP fan be used?

Model SP and CSP fans are designed for the lowest possible sound levels. Forward-curved wheels, insulated housings and vibration isolators between the motor and housing contribute to guiet, efficient operation. Applied and installed as recommended, SP and CSP sound levels will fall well within the ranges shown in the Suggested Limits for Room Loudness chart. For applications where sound levels are critical, a remote mounted CSP with ductboard is recommended. Placement of SP and CSP fans should take into account the desired sound level at the location of the listener.

The compact size of the SP and CSP fans provides the system designer greater flexibility in locating these fans for lowest sound levels. In critical sound areas, insulated ductwork, flexible duct connections, or placing the fan in a remote model CSP section of the ductwork (away from the critical isolators and area) offers the best ductwork provides means of meeting the quietest installation.

Why are low sound levels important?

desired sound levels.

The main application of a ceiling exhaust fan under 200 cfm is typically to exhaust odor and humid air from a bathroom. If a bathroom fan is excessively loud, the occupant will seldom use it. Lack of proper ventilation may lead to a variety of concerns including damage to finishes, walls, ceilings and even health issues. Greenheck is proud to offer some of the guietest fans on the market.

Why is Indoor Air Quality (IAQ) important?

According to the United States Environmental Protection Agency (EPA), the concentration of some pollutants are often 2 to 5 times higher indoors than outdoors. The average American spends approximately 90% of their time indoors, so IAQ is extremely important. Poor moisture control may lead to mold and mildew issues that may cause health concerns. Seemingly harmless items such as building materials, personal care items and cleaning agents may contribute to poor IAQ. Greenheck ceiling exhaust fans are guaranteed to effectively exhaust moisture and odors from your bathroom.

	9	Suggested Limits for Room Loudness
Sones	dBA	
1.3-4	32-48	Private homes (rural and suburban)
1.7-5	36-51	Conference rooms
2-6	38-54	Hotel rooms, libraries, movie theatres, executive offices
2.5-8	41-58	Schools and classrooms, hospital wards and operating rooms
3-9	44-60	Court rooms, museums, apartment houses, private homes (urban)
4-2	48-64	Restaurants, lobbies, general open offices, banks
5-15	51-67	Corridors and halls, cocktail lounges, washrooms and toilets
7-21	56-72	Hotel kitchens and laundries, supermarkets

Reprinted from AMCA Publication 302 (Application of Sone Ratings for Non-ducted Air Moving Devices, with room-sone-dBA correlations) with the written permission from AMCA International, Inc., 30 West University Drive, Arlington Heights, IL 60004-1893.

NOTE: Values above are for room loudness and are not sound ratings. Room loudness is the resulting level in a conditioned space after the acoustical qualities of the room have been accounted for.

When room sound levels are critical, such as in executive offices, conference rooms, hospital operating rooms, and school study areas, a CSP fan is the best choice. Shown here is a comparison of SP and CSP fans of the same size, with equal performance in typical installations. The CSP shows lower sone values.

Model	CFM	WG	FRPM	Sones
SP-A410	405	1/8	1000	3.0
CSP-A410	403	1/8	1000	1.5

Sone value on CSP is with insulated inlet duct.

ENERGY STAR® Codes and Standards



ENERGY STAR® is a market-based partnership formed to reduce greenhouse gas emissions through energy efficiency and make it easier for consumers to identify energy-efficient products that offer savings, performance, features, and comfort.

To earn the ENERGY STAR label, products must meet strict energy-efficient standards set by the U.S. Environmental Protection Agency (EPA) for energy consumption, air and sound performance. Fan models that are ENERGY STAR certified are identified in this catalog.

Note: ENERGY STAR is only for products 500 cfm or less.



Products that earn the ENERGY STAR® prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.

Fans that are ENERGY STAR certified include: SP-A70, SP-A90, SP-A110, SP-A125, SP-A190, SP-A200, SP-A250, SP-B50, SP-B70, SP-B80, SP-B90, SP-B110ES, SP-L50, SP-L80, SP-80-VG, SP-80L-VG, SP-110-VG, SP-A50-90-VG, SP-A90-130-VG, CSP-A110, CSP-A125, CSP-A200, CSP-A390-VG

Codes and Standards

ASHRAE 62.2 sets the minimum Indoor Air Quality (IAQ) standards and minimum ventilation rates in commercial and residential buildings. This standard is used as the basis for state and local building codes such as the Washington State Energy Code. Select Greenheck fans are able to provide low speed continuous ventilation and cycle to high speed upon activation of a switch or a sensor.

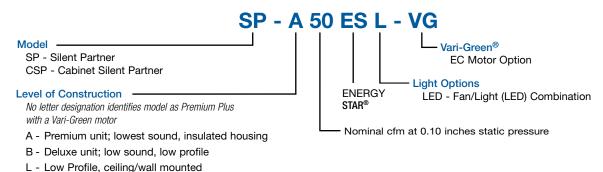
California Title 24 states that each bathroom shall be mechanically ventilated and shall comply with the following: Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control. Humidity controls shall be capable of adjustment between a relative humidity range of less than or equal to 50 percent to a maximum of 80 percent.

Multiple Greenheck ceiling exhaust fans can be used to comply with these latest codes and standards.

Model Number Code

C - Economy unit; inexpensive

The model number code system is designed to completely identify the fan. The remainder of the model code is determined by the size and performance of the fan.



Model SP-VG Premium Ceiling Exhaust Fan



Model SP-VG

Model SP	Model SP-VG Dimensions												
Model	Α	В	С	D	Е	Designer Grille	Unit Weight						
80, 80(L)	11¾ <i>(</i> 289)	10½ (267)	75/ ₈ (194)	_	4 (102)	14 x 13 (356 x 330)	12 (5)						
110	11¾ <i>(</i> 289)	10½ (267)	7% (194)	6 (152)	_	14 x 13 (356 x 330)	12 (5)						

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Outlet connection width is 1 in. (25 mm). Mounting bracket width is $1\frac{1}{2}$ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.







*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model SP-VG Performance																						
Model	ENERGY HVI RPM	RPM	Amps*	Max. Input Watts*		CFM / Static Pressure in Inches wg																
Wiodei	STAR®	1101 111 171 7	7 tilipo			0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0							
SP-80-VG	SP-80-VG ☆ + !	935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	6.1	CFM	80	80	80	80	78	66	38			
3F-00-VG	M	•	300		0.1	Sones	< 0.3	< 0.3	< 0.3	0.6	1.4	2.2	3.0									
SP-80L-VG	☆	_	935	0.1	6.1	CFM	80	80	80	79	79	70	37									
SF-00L-VG	M	•	935 0.	0.1	0.1	Sones	< 0.3	<0.3	< 0.3	0.6	1.3	2.1	2.6									
SP-110-VG	☆	+	940	0.2	8.4	CFM	110	110	110	109	100	62	28									
01 -110-VG	M		340	0.2		Sones	< 0.3	<0.3	<0.3	1.4	2.3	3.0	3.6									

Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.



Model SP-A-VG

Premium Constant CFM Ceiling Exhaust Fan



Model SP-A-VG

Model SP-	Model SP-A-VG Dimensions													
Model	del A B C D E Designer Grille Decorative We													
SP-A50-90-VG	131/4	10%	9	6	3	14% x 13¼	151/4 (387)	12						
SP-A90-130-VG	(337)	(270)	(229)	(152)		(378 x 337)	square	(5)						

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Outlet connection width is 1 in. (25 mm). Mounting bracket width is 1½ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.









*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model	SP-A	-VG P	erfo	rmar	ice										
Madal	ENERGY	CFM	RPM	Max	Max					CFM/Static	Pressure in	Inches wg			
Model	STAR®	Selection	KPIVI	Amps*	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875
						CFM	50	50	50	50	50	50	50	50	50
		50	808	0.29	22.1	Sones	< 0.3	<0.3	0.6	0.7	1.5	2.0	2.0	2.5	2.5
		50	000	0.29	22.1	CFM/Watt*	56.5	20.7	17.3	9.9	6.5	5.4	4.0	3.4	2.9
						Watts*	1.2	3.2	3.7	5.5	8.3	10.9	14.3	17.9	21.7
						CFM	70	70	70	70	70	70	70	70	66
SP-	☆	70	838	0.30	23.3	Sones	< 0.3	<0.3	0.4	0.9	1.4	2.0	2.0	3.0	2.5
A50-90-VG	M	70	030	0.30	23.3	CFM/Watt*	56.2	19.7	17.4	10.4	7.2	5.4	4.2	3.5	3.0
						Watts*	1.6	4.3	4.8	7.6	10.8	14.3	17.7	22.1	22.1
		00				CFM	90	90	90	90	90	90	90	82	71
		90	887	0.31	24.1	Sones	< 0.3	0.5	0.6	1.0	1.5	2.0	2.0	2.5	2.5
		30	007	0.51	24.1	CFM/Watt*	28.7	18.1	15.4	10.4	7.0	5.4	4.5	3.6	3.2
						Watts*	3.8	5.6	6.5	9.3	13.4	17.8	21.6	22.5	22.3
						CFM	90	90	90	90	90	90	90	82	71
		90	887	0.31	24.1	Sones	< 0.3	0.5	0.6	1.0	1.5	2.0	2.0	2.5	2.5
		50	007	0.01	2-7.1	CFM/Watt*	28.7	18.1	15.4	10.4	7.0	5.4	4.5	3.6	3.2
						Watts*	3.8	5.6	6.5	9.3	13.4	17.8	21.6	22.5	22.3
						CFM	110	110	110	110	110	110	102.5	82	67
SP-	☆	110	960	0.31	24.2	Sones	0.4	0.9	0.8	1.3	1.5	2.5	2.5	2.5	2.5
A90-130-VG	~	110	000	0.01		CFM/Watt*	22.7	14.7	13.3	9.4	6.9	5.3	4.4	3.5	3.1
						Watts*	5.6	8.4	9.1	12.7	17.0	22.1	23.4	23.4	22.2
						CFM	130	130	130	130	130	122.7	99.1	80.8	63.7
		130	1041	0.32	24.2	Sones	1.2	1.4	1.5	2.0	2.5	3.0	2.5	2.5	2.5
		130	.541	0.02		CFM/Watt*	16.2	12.0	11.1	8.5	6.2	5.1	4.2	3.4	3.0
						Watts*	9.1	11.7	12.7	16.4	22.4	23.9	23.5	23.5	22.4

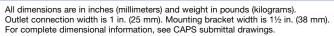
Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.

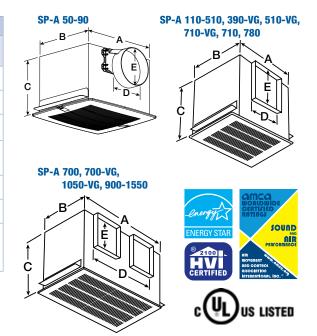
Model SP-A

Premium Ceiling Exhaust Fan



Model SP	-A Di	imen	sions	3				
Model	Α	В	С	D	Е	Designer Grille	Decorative Grille	Unit Weight
50, 70, 90	13¼ <i>(</i> 337)	10% <i>(270)</i>	9 <i>(</i> 229)		5 52)			12 (5)
110, 125, 190	13¼ <i>(</i> 337)	10 ⁵ / ₈ (270)	9 <i>(</i> 229)	8 (203)	6 (152)	14 ⁷ / ₈ x 13 ¹ / ₄ (378 x 337)	15¼ <i>(387)</i> square	17 (8)
200, 250, 290, 390, 390-VG	14 <i>(</i> 356)	11½ (302)	11½ (286)	8 (203)	8 (203)			24 (11)
410, 510, 510-VG, 710-VG	18 <i>(457)</i>	14% (365)	14½ (368)	8 (203)	8 (203)	19% x 16% (492 x 416)		31 <i>(14)</i>
700, 700-VG	23 ⁵ / ₈ (600)	11% (295)	11% <i>(</i> 295 <i>)</i>	19½ (495)	8 (203)	251/8 x 131/2 (638 x 343)		34 (15)
710, 780	18 <i>(457)</i>	14¾ <i>(</i> 365)	14½ (368)	10 (254)	8 (203)	19% x 16% (492 x 416)	_	34 (15)
900, 1050, 1050-VG, 1300, 1410, 1550	23¾ (603)	14% (365)	14½ (368)	17 ⁷ / ₁₆ (443)	8 (203)	25 x 16% (635 x 416)		56 (25)





◆Continuous Ventilation Compatible: Low speed continuous operation is adjustable from 30 cfm to full rated fan speed

*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model	ENERGY	HVI	Continuous Ventilation	Control	RPM	Amps*	Max. Input				CFM	/ Stat	ic Pres	sure ir	n Inche	s wg			
Model	STAR®	ПИІ	Compatible	Voltage	NEIVI	Allips	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0	1.25
SP-A50		+			790	0.33	25.9	CFM	89	66	61	31							
01 -700		•			730	0.00	20.0	Sones	0.4	0.6	0.6	0.9							
								CFM	88	74	71	54							
SP-A70	₹				790	0.14	15.6	Sones	< 0.3	<0.3	<0.3	<0.3							
01 7110	A				700	0.14	10.0	CFM/Watt*	5.64	4.97	4.83	4.12							
								Watts*	15.6	14.9	14.7	13.1							
								CFM	114	101	98	80							
SP-A90	☆	1	•		870	0.14	16.9	Sones	< 0.3	<0.3	<0.3	0.4							
OI -ASO	~	+	_		070	0.14	10.5	CFM/Watt*	6.75	6.20	6.95	5.33							
								Watts*	16.9	16.3	14.1	15							
								CFM	130	119	115	98							
SP-A110	☆				950	0.16	19.4	Sones	< 0.3	<0.3	<0.3	0.5							
SF-ATTU	×		_		930	0.10	13.4	CFM/Watt*	6.70	6.33	6.15	5.54							
								Watts*	19.4	18.8	18.7	17.7							
								CFM	144	130	127	109							
SP-A125	☆				1010	0.19	23	Sones	0.4	0.4	0.4	0.6							
3F-A123	×				1010	0.19	23	CFM/Watt*	6.26	5.73	5.62	5.00							
								Watts*	23.0	22.7	22.6	21.8							
								CFM	229	214	210	186	156						
SP-A190	Α				1400	0.45	54.2	Sones	2.5	2.0	2.0	2.0	1.5						
5P-A190	☆				1400	0.45	54.2	CFM/Watt*	4.23	4.08	4.05	3.78	3.36						
								Watts*	54.2	52.5	51.9	49.2	46.4						
								CFM	267	246	242	224	199	162	109	68			
CD 4000					000	0.47	EC 1	Sones	2.0	2.0	2.0	2.5	3.0	3.5	4.0	4.5			
SP-A200	☆				900	0.47	56.1	CFM/Watt*	4.76	4.42	4.34	4.10	3.75	3.19	2.29	1.49			
								Watts*	56.1	55.7	55.7	54.7	53.1	50.8	47.6	45.7			
								CFM	294	274	271	250	230	201	147	92			
CD 4050					1000	0.50	67	Sones	2.5	2.5	2.5	3.0	3.5	4.0	5.0	5.0			
SP-A250	☆				1000	0.56	0.56 67	CFM/Watt*	4.39	4.18	4.12	3.89	3.67	3.36	2.65	1.80			
								Watts*	67.0	65.6	65.8	64.2	62.6	59.8	55.4	51.2			
00.4000					1050	0.70	00.7	CFM	315	293	287	257	231	207	175	124			
SP-A290					1050	0.72	80.7	Sones	2.5	2.5	2.5	3.0	3.0	3.5	3.5	4.5			

Model SP-APremium Ceiling Exhaust Fan



◆Continuous Ventilation Compatible: Low speed continuous operation is adjustable from 30 cfm to full rated fan speed *Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model	ENERGY	HVI	Continuous Ventilation	Control	RPM	Amps*	Max. Input				CFM	/ Stat	ic Pres	sure ir	n Inche	s wg			
Wiodei	STAR®	1111	Compatible	Voltage	1 11 111	7 tiripo	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0	1.25
SP-A390			,		1350	1.34	135	CFM	410	395	391	368	345	325	307	279			
3F-A390					1330	1.34	133	Sones	4.5	4.5	4.5	4.5	5.0	5.0	5.5	5.5			
				6	935	0.70	47	CFM	276	251	248	233	215	196	173	146	120	93	
SP-A390-VG				0	933	0.70	47	Sones	2.0	2.0	2.0	2.5	3.0	3.5	4.0	5.0	6.0	6.0	
3F-A330-VG				10	1340	1.46	100	CFM	410	395	390	370	361	349	338	325	307	294	
				10	1040	1.40	100	Sones	5.0	5.0	5.0	5.0	5.0	6.0	6.5	7.0	7.0	7.0	
SP-A410					1000	1.74	121	CFM	443	413	405	351	306						
0. 71110					1000			Sones	3.5	3.0	3.0	3.0	3.5						
SP-A510					1070	3.30	224	CFM	557	512	501	439	392	325					
								Sones	5.0	4.5	4.5	4.5	4.5	4.0					
					850	0.75	49.1	CFM	399	354	341	255							
SP-A510-VG								Sones	4.5	4.0	4.0	3.5	405	440	077				
					1275	2.40	155	CFM	604 8.0	583 8.0	576 8.0	540 7.5	495 7.0	443 7.0	377 6.5				
								Sones CFM	790	762	753	7.5	7.0	659	621	547	474	382	
SP-A700					1015	2.98	351	Sones	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	
								CFM	568	527	517	466	419	372	329	275	223	170	100
				6	1275	1.82	111	Sones	3.5	3.5	3.5	3.5	4.0	4.5	5.0	6.0	7.0	7.0	9.0
SP-A700-VG								CFM	801	774	766	729	699	666	634	597	569	530	418
				10	1450	3.52	218	Sones	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.5	8.0	9.0
OD 4740					1000	4 40	005	CFM	752	714	701	653	588	486	320				
SP-A710					1080	4.40	285	Sones	6.0	6.0	6.0	6.0	6.0	5.5	5.5				
					005	0.06	60.4	CFM	441	410	397	327							
SP-A710-VG					925	0.96	60.4	Sones	4.5	4.5	4.0	4.0							
3F-A/10-VG					1450	3.39	230	CFM	709	685	677	656	621	580	534	483	399		
					1430	0.00	200	Sones	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.0	8.0		
SP-A780					1600	3.30	348	CFM	812	782	775	741	704	665	625	581			
01 71700					1000	0.00	0-10	Sones	8.5	8.5	8.5	8.0	8.0	8.0	8.0	8.0			
SP-A900					1055	2.78	301	CFM	971	925	915	866	814	754	694	621	433	327	
								Sones	6.0	5.5	5.0	5.0	5.0	5.0	5.5	5.5	6.0	6.5	
SP-A1050					1250	4.05	438	CFM	1144	1098	1084	1032	987	935	875	809	734	561	
								Sones CFM	7.0 838	7.0 789	7.0 779	7.0 735	6.5 685	6.5 632	6.5 579	6.5	7.0	7.0	
				6	1050	1.94	120	Sones	4.0	4.0	4.0	4.0	4.0	4.5	5.0				
SP-A1050-VG								CFM		1106		1023	944	831	668				
				10	1225	3.75	240	Sones	7.5	7.0	7.0	7.0	6.5	6.0	5.0				
OD 44000					4505	5.00	007	CFM			1348	1304	1260	1216	1168	1111	1045	971	701
SP-A1300					1535	5.33	607	Sones	10.0	10.0	10.0	9.5	9.5	9.5	9.0	9.0	9.0	8.5	8.5
CD 41410					1.450	7.40	700	CFM			1404		1307		1218				
SP-A1410					1450	7.40	786	Sones	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0			
SP-A1550					1695	6.07	695	CFM	1559	1518	1503	1456	1402	1346	1300	1239	1172	1095	876
3P-A1000					1095	0.07	บชบ	Sones	11.5	11.0	11.0	11.0	10.5	10.0	10.0	9.5	9.5	9.0	8.5

Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.

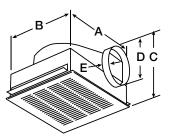
Model SP-B and SP-C

Deluxe and Standard Ceiling Exhaust Fan



Model SP-B

Model SP-	B Di	men	sions	}											
Model	Grille Grille Weight														
50, 70, 80	13 ⁷ / ₈ (352)	11½ (292)	7 (179)	6 (152)	1½ (32)	14 ⁷ / ₈ x 13 ¹ / ₄	151/4 (387)	9 (4)							
90, 110, 110ES, 150, 200	13 ⁷ / ₈ (352)	11½ (292)	7 (179)	6 (152)	1½ (32)	(378 x 337)	square	10 <i>(</i> 5)							







SOUND

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Mounting bracket width is 1% in. (38 mm). For complete dimensional information, see CAPS submittal drawings.

◆Continuous Ventilation Compatible: Low speed continuous operation is adjustable from 30 cfm to full rated fan speed *Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model S	SP-B	Pe	rformai	nce													
Model	ENERGY	HVI	Continuous Ventilation		Amps*	Max. Input				CF	M / Sta	tic Pres	sure in	Inches v	wg		
Wiodoi	STAR®		Compatible		, anpo	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0
							CFM	79	63	60	45	28					
SP-B50	☆	+	•	580	0.13	15.9	Sones	<0.3	0.4	0.5	1.1	2.5					
O. DO0	A	•	Y	000	0.10	10.0	CFM/Watt*	4.97	4.04	3.87	2.99	1.92					
							Watt*	15.89	15.59	15.50	15.06	14.57					
							CFM	89	75	71	54	35					
SP-B70	☆	+		675	0.16	17.1	Sones	0.8	0.8	0.9	1.4	2.0					
0. 2.0	~	•		0.0	00		CFM/Watt*	5.20	4.46	4.25	3.27	2.27					
							Watts*	17.10	16.80	16.70	16.50	15.41					
							CFM	94	81	77	62	46					
SP-B80	☆	+	•	900	0.16	18.6	Sones	0.8	0.9	0.9	1.3	2.0					
0. 200	_	•	Ť				CFM/Watt*	5.05	4.40	4.21	3.44	2.71					
							Watts*	18.60	18.40	18.30	18.00	16.95					
							CFM	104	92	89	72	57					
SP-B90	☆	+		700	0.18	21.1	Sones	1.0	1.0	1.0	1.5	2.0					
c. 200		٠					CFM/Watt*	4.93	4.40	4.24	3.48	2.88					
							Watts*	21.10	20.90	21.00	20.70	19.77					
SP-B110		+	•	950	1.14	80.2	CFM	133	114	110	97	95	94	91	85	72	50
		<u>'</u>	Ť		1111		Sones	1.5	1.5	1.5	2.0	2.0	2.0	3.0	3.5	4.0	4.5
							CFM	130	118	115	100	86	73	58	37		
SP-B110ES	☆	+		650	0.25	29.7	Sones	1.5	1.5	1.5	2.0	2.5	3.0	3.5	4.0		
SF-BITUES	,	•					CFM/Watt*	4.38	4.03	3.95	3.50	3.08	2.70	2.24	1.48		
							Watt*	29.65	29.27	29.15	28.57	27.89	27.08	25.95	24.97	400	00
SP-B150				1050	1.70	128	CFM	160	156	155	154	152	149	147	138	123	92
							Sones	2.5	2.5	2.5	3.0	3.5	3.5	4.0	4.5	4.5	5.0
SP-B200				980	2.41	185	CFM	208	211	212	216	216	210	197	176	157	130
							Sones	5.0	5.5	5.5	6.0	6.5	6.5	6.5	6.5	6.0	6.0

Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.

Model SP-C

Mode	I SP	-C D	ime	nsio	ns			
Model	Α	В	С	D	E	F	Decorative Grille	Unit Weight
50	7½ (191)	7½ (191)	35/8 (92)	3 (76)	1% (41)	1/2 (13)	9½ x 9 (235 x 229)	5 (2)

All dimensions are in inches (millimeters) and weight in pounds (kilograms). For complete dimensional information, see CAPS submittal drawings.

B A D D F





*Note: Amp draw is approximate and may vary based on motor manufacturer.

Model S	P-C	Perf	orman	се								
Madal	ши	DDM	Amno*	Motto			CFM	/ Static I	Pressure	in Inche	es wg	
Model HVI RPM Amps* Watts 0 0.1 0.125 0.25 0.375 0.										0.5	0.625	
SP-C50	_	1680	0.80	46	CFM	52	49	49	47	44	38	29
35-030	7	1000	0.00	40	Sones	3.0	3.0	3.0	3.0	3.5	4.0	4.0

Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.

Model SP-L and CSP-B

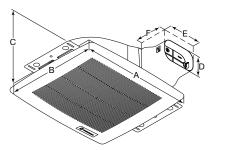
Deluxe Inline Cabinet Fan



Model SP-L

Mode	I SP	-L D	imeı	nsio	ns			
Model	Α	В	С	D	E	F	Designer Grille	Unit Weight
50, 80	13 ⁷ / ₈ (352)	11½ (292)	35/8 (92)	25/8 (67)	4 ⁷ / ₁₆ (113)	3¾ (86)	14 ⁷ / ₈ x 13 ¹ / ₄ (378 x 337)	9.5 <i>(4)</i>

All dimensions are in inches (millimeters) and weight in pounds (kilograms). For complete dimensional information, see CAPS submittal drawings.







*Note: Amp and watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

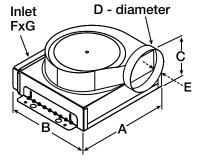
Mode	I SP-L	Pe	rform	ance									
Model	ENERGY	HVI	RPM	Amps*	Max. Input				CFM / Station	c Pressure i	n Inches wg		
Model	STAR®	IIVI	NEW	Allips	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625
						CFM	62	53	51	41	31	19	
SP-L50	☆	+	800	0.17	17.8	Sones	1.0	1.2	1.3	2.0	3.0	3.5	
3F-L30	×	T	800	0.17	17.0	CFM/Watts	3.48	2.99	2.91	2.38	1.85	1.15	
						Watts	17.8	17.7	17.5	17.2	16.8	16.5	
						CFM	86	78	76	67	57	46	33
SP-L80	☆	†	850	0.00	06.0	Sones	1.5	2.0	2.0	2.0	2.5	3.5	4.0
SP-LOU	×		650	0.23	26.8	CFM/Watts	3.21	2.92	2.85	2.54	2.19	1.78	1.30
						Watts	26.8	26.7	26.7	26.4	26.0	25.8	25.4

Performance certified is for model SP exhaust for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type B: free inlet spherical fan sone levels.

Model CSP-B

Model CS	SP-B	D in	nens	sions	3			
Model	Α	В	С	D	E	F	G	Unit Weight
110, 150, 200	13 ⁷ / ₈ (352)	11½ (292)	7 (178)	6 (152)	1½ (32)	13½ (260)	3½ (83)	10½ (5)

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Inlet connection width is 1 inch (25 mm). Mounting bracket width is $1\frac{1}{2}$ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.







*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model	CSP	-B Pe	rform	ance										
Model	DDM	A	Max.				CFM / S	tatic Pres	sure in Ind	ches wg				
Model	RPM	Amps*	Input Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1
				CFM	103	100	100	98	97	96	94	86		
CSP-B110	950	1.14	80	Sones	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5		
				Watts*	92.3	92.2	92.2	92.1	92.0	92.0	91.9	91.4		
				CFM	151	150	149	148	144	146	142	135		
CSP-B150	1050	1.70	129	Sones	2.0	2.0	2.0	2.0	2.5	2.5	3.0	3.0		
				Watts*	145.0	145.0	145.0	145.0	144.9	144.9	144.9	144.7		
				CFM	194	194	195	198	195	187	177	163	145	123
CSP-B200	1040	2.40	179	Sones	0.4	0.5	0.5	0.7	1	1.5	2.0	2.5	2.5	3.0
				Watts*	179.2	175.9	173.8	167.3	160.8	154.4	147.7	140.5	134.1	126.4

Performance certified is for model CSP inline for installation type D: Ducted inlet, Ducted outlet. Performance ratings include the effects of a backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type D: ducted inlet spherical fan sone levels. Ratings do not include the effect of duct end correction. Ratings are based on 10 ft of insulated duct.

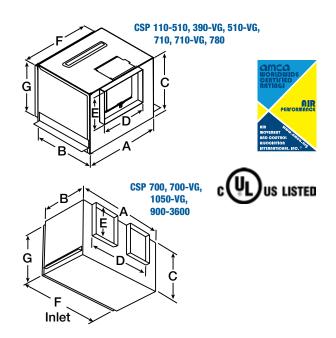
Model CSP-A

Premium Inline Cabinet Fan



Model CSP	Model CSP-A Dimensions										
Model	Α	В	С	D	E	F	G	Unit Weight			
110, 125, 190	13½	10%	9	8	6	12	9½	16			
	(337)	(270)	(229)	(203)	(152)	<i>(</i> 305)	(235)	<i>(7)</i>			
200, 250, 290,	14	11 ⁷ / ₈	11½	8	8	12 ⁷ / ₈	10	23			
390. 390-VG	(356)	(302)	(286)	(203)	(203)	(327)	<i>(</i> 25 <i>4</i>)	(10)			
410, 510,	18	14%	14½	8	8	16 ⁷ / ₈ (429)	13¼	36			
510-VG, 710-VG	<i>(457)</i>	(365)	(368)	(203)	(203)		<i>(</i> 337)	(16)			
700, 700-VG	23 ⁵ / ₈ (600)	11% (295)	11% (295)	19½ (495)	8 (203)	22 ⁵ / ₈ (575)	10½ (267)	34 (15)			
710, 780	18	14¾	14½	10	8	16 ⁷ / ₈	13½	36			
	<i>(457)</i>	<i>(</i> 365)	(368)	<i>(</i> 254)	(203)	(429)	(337)	(16)			
900, 1050, 1050-VG, 1300 1410, 1550	23¾ (603)	14% (365)	14½ (368)	17 ⁷ / ₁₆ (443)	8 (203)	22 ⁵ / ₈ (575)	13½ (337)	59 (27)			
1750, 2150	35	14¾	14¾	28	6	32¾	13	68			
	(889)	(375)	(375)	(711)	(152)	(832)	<i>(</i> 330)	(31)			
3300-VG, 3600	45½	16½	16½	40	11	43½	14%	122			
	(1156)	(419)	(419)	(1016)	<i>(</i> 279)	(1099)	(371)	(55)			

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Inlet and outlet connection widths are 1 in. (25 mm). Mounting bracket width is $1\frac{1}{2}$ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.



*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Madal	ENERGY	Control	DDM	A *	Max.				CF	M / Sta	tic Pres	sure in	Inches	wg				
Model	STAR®	Voltage	RPM	Amps*	Input Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0		
						CFM	131	111	107	85	38							
CSP-A110	☆		950	0.16	19.7	Sones	0.8	0.8	0.8	0.9	0.9							
CSP-ATTU	×		950	0.16	19.7	CFM/Watt*	6.65	5.78	5.61	4.70	2.39							
						Watts*	19.7	19.2	19.1	18.1	15.9							
						CFM	149	129	125	103	52							
CSP-A125	☆		980	0.19	22.4	Sones	1.1	1.1	1.1	1.0	1.2							
00F-A125	M		300	0.13	22.4	CFM/Watt*	6.64	5.82	5.65	4.79	2.61							
						Watts*	22.4	22.2	22.1	21.5	19.9							
						CFM	215	202	198	180	159	121						
CSP-A190			1400	1.10	55	Sones	2.0	1.5	2.0	2.0	2.5	2.5						
						Watts*	55.1	54.1	53.7	51.9	49.8	46.0						
						CFM	264	240	235	214	191	154	98	62				
CSP-A200	☆		825	0.48	56.8	Sones	0.6	0.4	0.5	0.9	1.0	1.3	1.5	1.5				
GSP-A200	×		020	0.46	50.6	CFM/Watt*	4.65	4.28	4.20	3.89	3.58	3.04	2.10	1.38				
						Watts*	56.8	56.1	55.9	55.0	53.4	50.7	46.7	45.1				
						CFM	266	246	241	221	205	187	165	132				
CSP-A250			1000	0.79	67	Sones	0.9	1.0	1.0	2.0	2.5	3.0	2.5	2.5				
						Watts*	66.5	65.6	65.4	64.0	62.7	61.2	59.4	56.6				
						CFM	318	299	292	265	248	229	201	144				
CSP-A290			1050	0.71	102	Sones	1.1	1.2	1.3	2.0	2.5	3.5	3.0	3.0				
						Watts*	102.2	100.9	100.4	98.3	96.9	95.0	90.5	81.3				
						CFM	412	400	397	382	363	339	324	309				
CSP-A390			1350	1.33	161	Sones	2.0	2.0	2.0	2.5	3.0	4.0	4.5	4.5				
						Watts*	160.8	158.5	157.9	152.4	147.9	141.8	135.4	130.0				
						CFM	270	244	239	212	191	164	137	104	78	57		
		6	870	0.66	42	Sones	0.3	< 0.3	0.3	0.6	0.7	1.1	1.4	2.0	2.0	2.5		
CSP-A390-VG	☆					Watts*	22.8	25.0	25.2	27.0	29.8	33.4	36.3	39.6	40.6	42.2		
001 -A030-VG	M					CFM	417	400	395	369	350	335	322	307	290	271		
		10 126	10	10	1260	1.45	98	Sones	1.2	1.3	2.0	1.3	0.9	1.4	2.0	2.5	3.0	3.0
						Watts*	77.1	79.3	80.3	82.9	83.5	86.8	89.6	93.1	94.9	97.7		

Model CSP-A Premium Inline Cabinet Fan



*Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 115V.

Model	ENERGY	Control	DDM	Amps*	Max.					CFM / St	atic Pres	sure in I	nches w)				
Model		Voltage		Allips	Input Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0	1.25	1.5
						CFM	447	441	403	364	317	217						
CSP-A410			1000	1.87	132	Sones Wetter	1.5	1.5	1.5 128.7	2.0 125.6	2.0	2.0						
						Watts*	132.2 545	131.7 514	506	464	405	112.4 324						
CSP-A510			1070	3.11	218	Sones	2.5	2.0	2.0	2.0	2.0	2.5						
						Watts*	218.2	214.3	213.3	207.0								
			050	0.00		CFM	428	358	338	238								
			850	0.86	55	Sones Watts*	0.8 54.8	0.6 48.9	0.5 47.0	0.3 35.8								
CSP-A510-VG						CFM	621	590	583	540	479	414	328					
			1275	2.40	160	Sones	1.5	1.4	1.4	1.3	1.2	1.5	2.0					
						Watts*	154.4			156.1	140.7	123.1	99.9					
00D 4700			4005	0.40	000	CFM	866	827	817	758	720	694	648	594	419	330		
CSP-A700			1035	3.16	368	Sones Watts*	1.1 367.9	1.1 351.0	1.1	1.1 330.0	1.2	1.5 312.0	2.0 298.3	2.0 284.1	2.5 249.6	3.0 231.4		
						CFM	625	570	558	504	450	402	348	261	213	167	67	
		6	1275	1.83	110	Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.8	1.1	1.5	2.0	2.5	3.0	
CSP-A700-VG						Watts*	55.6	58.7	60.0	63.5	69.4	76.5	83.8	89.5	95.3	101.0		
551 -A700-VG		10	4 450	0.50	04.0	CFM	895	857	848	803	760	725	688	647	604	556	479	
		10	1450	3.53	216	Sones Watts*	1.0 157.1	1.0 160.6	1.0 161.3	1.0 168.5	1.0 169.4	1.2 173.1	1.5 179.9	1.5	2.0	2.5 201.4	3.0	
						CFM	737	698	688	635	567	475	334	10/.1	193.0	∠∪1.4	∠15.3	
CSP-A710			1080	4.40	333	Sones	2.5	2.5	2.5	2.5	2.0	2.0	2.0					
						Watts*	332.5	324.1	322.0		295.8							
						CFM	470	415	405	322								
			925	1.08	68	Sones	0.6	0.4	0.4	0.4								
CSP-A710-VG						Watts*	67.8 730	61.2 699	60.6 690	49.0 654	622	574	514	446	349			
			1450	3.51	236	Sones	2.0	2.0	2.0	2.0	2.0	2.0	2.5	3.0	3.0			
				0.0.		Watts*	236.0			223.1		200.8						
						CFM	813	784	777	742	707	672	638	603	567	527		
CSP-A780			1600	3.77	496	Sones	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.5		
						Watts*	496.4 930	493.0 875	492.2 865	488.0 811	467.5 755	453.1 686	441.8 558	423.1 411	407.2 290			
CSP-A900			895	2.91	318	Sones	0.4	0.3	0.3	0.3	0.4	0.9	1.4	2.0	2.5			
7.000			000	2.01	0.0	Watts*	318.3	308.1		297.7		278.0	260.9	245.7	225.5			
						CFM	1108	1059	1050	1001	958	912	857	793	723	498		
CSP-A1050			1070	4.29	467	Sones	1.1	1.0	1.0	1.0	1.1	1.3	1.5	2.0	2.0	3.0		
						Watts*	466.8 805	451.2 754	450.1 741	440.1 689	430.8 642	419.3 597	404.3 547	389.1	372.7	329.6		
		6	1050	1.90	115	Sones	< 0.3	<0.3	<0.3	0.4	0.5	1.0	1.5					
00D 440E0 VO						Watts*	79.8	85.2	85.0	91.4	97.4	105.5						
CSP-A1050-VG						CFM	1131	1105	1092	1047	998	900	758					
		10	1225	3.85	241	Sones	1.0	0.9	0.9	1.0	1.2	1.3	1.4					
						Watts*	220.7 1313	231.5 1283	231.5 1277	239.7 1245	1213	216.7 1181	173.9 1144	1098	1046	978	791	
CSP-A1300			1300	6.82	761	Sones	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5	3.0	3.5	3.5	
23. 7000			. 555	0.02		Watts*							608.3					
						CFM	1584	1543	1533	1483	1439	1395	1345	1293	1238	1181		
CSP-A1410			1450	7.80	871	Sones	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	4.0		
						Watts*	870.8 1735	1689	1680	788.2 1627	751.0 1570	728.3 1511	696.3 1453	1387	628.8 1322	595.9 1257	1085	
CSP-A1550			1625	8.18	934	Sones	5.0	5.0	5.0	4.5	4.0	4.5	4.5	4.5	4.5	4.5	5.0	
							934.3	902.7	899.6	865.1		803.2	774.9	736.0	698.4			
						CFM		1954			1805	1738	1669	1593	1508	1416	1152	705
CSP-A1750			1325	10.30	1153	Sones	3.0	3.0	3.0	3.0	3.0	3.5	3.5	4.0	4.5	4.5	5.0	5.0
						Watts*		1105.0 2110			1963	1915	909.7 1853	1783	1702	781.5 1614	673.3 1400	520.0 887
CSP-A2150			790	11.55	1285	Sones	3.0	3.0	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5	5.0	5.0
22. 7.2.00			. 50		00								1010.9					
						CFM	2445	2367	2344	2264	2195	2149	2072	1965	1851	1664		
		6	820	6.18	507.3	Sones	2.5	2.5	2.0	2.0	2.5	3.0	3.0	3.5	4.0	4.0		
CSP-A3300-VG						Watts*							433.6					
		10	1000	12.34	1048 ዓ	CFM Sones	3401 5.0	5.0	3312 4.5	4.5	3154 4.0	4.5	2956 4.5	2879 4.5	2766 5.0	2439 4.5		
		'0	1000	12.04	. 0 70.3	Watts*							1000.7			803.9		
						CFM	3778	3653	3622	3460	3280	3091	2844	2551	2232	1750		
CSP-A3600			1100	7.10	1314	Sones	5.0	5.0	5.0	5.0	4.5	4.0	4.0	4.0	3.5	3.5		
						Watts*	1313.7	1253.3	1238.3	1160.0	1084.0	1041.5	971.1	871.9	766.5	649.5		

Performance certified is for model CSP inline for installation type D: Ducted inlet, Ducted outlet. Performance ratings include the effects of a backdraft damper. Speed (rpm) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in spherical fan sones at 5 ft (1.5m) in a spherical free field calculated per Annex B of AMCA 311. Values shown are for installation type D: ducted inlet spherical fan sone levels. Ratings do not include the effect of duct end correction. Ratings are based on 10 ft of insulated duct.

Model SP50 Cycle Performance



For uses in countries with 50 cycle (50 Hz) power, Greenheck offers the same reliability and performance for ceiling mounted exhaust fans model SP.

• Same dimensions and outlet options • Performance shown in 50 cycle RPMs

• Full-line of grille and discharge accessories available

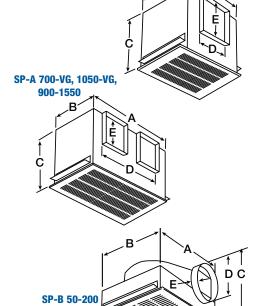
Model SP Dimensions											
SP-A	Α	В	С	D	Е	Designer Grille	Decorative Grille	Unit Weight			
110, 125, 190	13½ (337)	10 ⁵ / ₈ (270)	9 (229)	8 (203)	6 (152)	14% x 131/4	15¼ (387)	17 (8)			
200, 250, 290, 390, 390-VG	14 <i>(</i> 356)	11 ⁷ / ₈ (302)	11½ (286)	8 (203)	8 (203)	(378 x 337)	square	24 (11)			
410, 510, 510-VG, 710-VG	18 <i>(457)</i>	14% (365)	14½ (368)	8 (203)	8 (203)	19% x 16% (492 x 416)		31 <i>(14)</i>			
700-VG	23 ⁵ / ₈ (600)	11% (295)	11 ⁵ / ₈ (295)	19½ (495)	8 (203)	251/8 x 131/2 (638 x 343)		34 (15)			
710, 780	18 <i>(457)</i>	14% (365)	14½ (368)	10 (254)	8 (203)	19% x 16% (492 x 416)	_	34 (15)			
900, 1050, 1050-VG, 1410, 1550	23 ³ / ₄ (603)	14% (365)	14½ (368)	18¾ (476)	8 (203)	25 x 16% (635 x 416)		56 (25)			

Outlet connection width is 1 in. (25 mm). Mounting bracket width is $1\frac{1}{2}$ in. (38 mm).

SP-B	Α	В	С	D	Е	Designer Grille	Decorative Grille	Unit Weight
50, 70, 80	13 ⁷ / ₈ (352)	11½ (292)	7 (178)	6 (152)	1¼ (32)	14 ⁷ / ₈ x 13 ¹ / ₄ (378 x 337)	15¼ (387)	9 <i>(4)</i>
90, 110, 150, 200	13 ⁷ / ₈ (352)	11½ (292)	7 (152)	6 (152)	1¼ (32)	14 ⁷ / ₈ x 13 ¹ / ₄ (378 x 337)	square	10 <i>(</i> 5)

All dimensions are in inches (millimeters) and weight in pounds (kilograms). Mounting bracket width is 1½ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.

SP-A 110-510, 390-VG, 510-VG, 710, 710-VG, 780



*Note: Amp and Watt draw is approximate and may vary based on motor manufacturer. Below performance is for 220-240V.

Model	Control	DDM	A *	Max.		CFM / Static Pressure in Inches of wg									
(50 Hertz Motor)	Voltage	KPIVI	Amps*	Input Watts*		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.75	0.875	1
SP-A110		950	0.29	49	CFM	119	110	106	88						
SF-ATTO		330	0.23	40	Sones	1.3	1.2	1.2	1.6						
SP-A190		1400	0.65	113	CFM	216	197	192	167	133					
0. 700			0.00		Sones	3.2	2.8	2.9	3.1	3.4	404				
SP-A290		1050	0.36	81	CFM	329 3.2	302 3.3	296 3.3	262	222	164				
					Sones CFM	3.2 410	395	392	3.7 368	4.0 345	4.9 325				
SP-A390		1350	0.67	135	Sones	5.4	5.4	5.4	5.7	6.0	6.3				
	_				CFM	276	251	248	233	215	196				
	6	935	0.70	47	Sones	2.0	2.0	2.0	2.5	3.0	3.5				
SP-A390-VG		1010		400	CFM	410	395	390	370	361	349				
	10	1340	1.46	100	Sones	5.0	5.0	5.0	5.0	5.0	6.0				
		OEC	0.75	49	CFM	399	354	341	255						
SP-A510-VG		850	0.75	49	Sones	4.5	4.0	3.9	3.4						
SP-ASTU-VG		1275	2.40	155	CFM	604	583	576	540	495	443				
		12/5	2.40	155	Sones	7.9	7.7	7.7	7.3	7.0	6.8				
	6	1275	1.82	111	CFM	568	527	517	466	419	372				
SP-A700-VG		1275	1.02	111	Sones	3.5	3.5	3.5	3.5	4.0	4.5				
3F-A700-VG	10	1450	3.52	218	CFM	801	774	766	729	699	666				
	10	1400	0.02	210	Sones	7.0	7.0	7.0	7.0	7.0	7.0				
		925	0.96	60	CFM	441	410	397	327						
SP-A710-VG		020	0.00	00	Sones	4.5	4.3	4.2	4.0						
01 717 10 10		1450	3.39	230	CFM	709	685	677	656	621	580				
		1 100	0.00	200	Sones	9.6	9.4	9.2	9.0	8.7	8.6				
SP-A780		1334	1.65	348	CFM	677	642	633	591	544	493				
					Sones	8.8	8.8	8.7	8.2	8.1	8.1				
SP-A1050		950	3.15	420	CFM	990	905	886	769 6.6	531 6.5					
					Sones CFM	7.2 838	6.8 789	6.8 779	735	685	632				
	6	1050	1.94	120	Sones	4.0	4.0	4.0	4.0	4.0	4.5				
SP-A1050-VG					CFM	1162	1106	1092	1023	944	831				
	10	1225	3.75	240	Sones	7.5	7.0	7.0	7.0	6.5	6.0				
00 44550		10.10		0.10	CFM	1337	1290	1279	1211	1161	1112				
SP-A1550		1340	4.3	818	Sones	11.1	10.6	10.6	10.5	11.6	13.5				
0D D00		700	0.005		CFM	102	92	88	75	59	45				
SP-B90		700	0.325	50	Sones	1.9	2.6	2.7	3.0	3.6	4.1				
SP-B110		950	0.57	80	CFM	133	114	110	97	95	94				
SF-DIIU		950	0.57	00	Sones	2.0	2.1	2.2	2.4	2.7	2.8				
SP-B150		1050	0.85	129	CFM	160	156	155	154	152	149				
טוים יוט		1000	0.00	123	Sones	3.0	3.3	3.3	3.7	4.3	4.5				
SP-B200		1100	1.1	173	CFM	197	195	194	191	187	184				
O. DEVO		1.00		1,0	Sones	4.4	4.6	4.7	5.1	5.6	5.8				
SP-B200		1100	1.1	173	CFM	197	195	194	191	187	184				
					Sones	4.4	4.6	4.7	5.1	5.6	5.8				

Model CSP 50 Cycle Performance



For uses in countries with 50 cycle (50 Hz) power, Greenheck offers the same reliability and performance for inline cabinet fans model CSP.

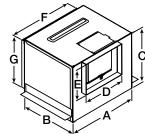
• Same dimensions and outlet options • Performance shown in 50 cycle RPMs

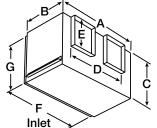
• Full line of discharge accessories available

Model CSP Di	Model CSP Dimensions										
CSP-A	Α	В	С	D	Е	F	G	Unit Weight			
110, 125, 190	13½ (337)	10 ⁵ / ₈ (270)	9 (229)	8 (203)	6 (152)	12 <i>(</i> 305)	9 (235)	16 <i>(7)</i>			
200, 250, 290, 390, 390-VG	14 <i>(</i> 356)	11 ⁷ / ₈ (302)	11½ (286)	8 (203)	8 (203)	12 ⁷ / ₈ (327)	10 <i>(</i> 254)	23 (10)			
410, 510, 510-VG, 710-VG	18 <i>(457)</i>	14% (365)	14½ (368)	8 (203)	8 <i>(</i> 203)	16 ⁷ / ₈ (429)	13¼ <i>(</i> 337)	36 (16)			
700-VG	23 ⁵ / ₈ (600)	11% (295)	115/8 (295)	19½ (495)	8 (203)	22 ⁵ / ₈ (575)	10½ (267)	34 (15)			
710, 780	18 <i>(457)</i>	14% (365)	14½ (368)	10 (254)	8 (203)	16 ⁷ / ₈ (429)	13¼ (337)	36 (16)			
900, 1050, 1050-VG, 1410, 1550	23¾ (603)	14% (365)	14½ (368)	18¾ (476)	8 (203)	225/8 (575)	13¼ (337)	59 <i>(</i> 27)			
1750, 2150	35 (889)	14¾ (375)	14¾ (375)	28 (711)	6 (152)	32 ³ / ₄ (832)	13 (330)	68 <i>(</i> 31)			
3300-VG, 3600	45½ (1156)	16½ (419)	16½ (419)	40 (1016)	11 <i>(</i> 279)	43½ (1099)	14% (371)	122 (55)			
CSP-B	Α	В	С	D	Е	F	G	Unit Weight			
110, 150, 200	13½ (352)	11½ (292)	7 (178)	6 (152)	1½ (32)	10½ (260)	3½ (83)	10½ (5)			

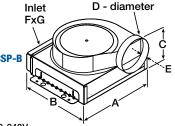
All dimensions are in inches (millimeters) and weight in pounds (kilograms). Inlet and outlet connection widths are 1 in. (25 mm). Mounting bracket width is 1½ in. (38 mm). For complete dimensional information, see CAPS submittal drawings.

CSP-A 110-510, 390-VG, 510-VG, 710, 710-VG, 780





CSP-A 700-VG, 1050-VG 900-3600



Model	Control			Max	-		CFM /	Static P	ressure i	n Inches	of wg				
(50 Hertz Motor)	Voltage	RPM	Amps*	Input Watts*		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.75	0.875	1
CSP-A110		950	0.16	19.7	CFM	131	111	107	85	38					
71110		000	0.10	10.7	Sones	0.8	0.8	0.8	0.9	0.9					
CSP-A190		1400	0.55	100	CFM	215	198	180	121						
					Sones	2.3	2.2	2.7	3.0	004	000				
CSP-A390		1350	0.67	144	CFM	412 2.8	397	382 3.2	339	324 5.5	309 6.5				
					Sones CFM	2.8	2.8 244	239	4.7 212	191	164				
	6	870	0.66	42	Sones	0.3	<0.3	0.3	0.6	0.7	1.1				
CSP-A390-VG					CFM	417	400	395	369	350	335				
	10	1260	1.45	98	Sones	1.2	1.3	2.0	1.3	0.9	1.4				
					CFM	428	358	338	238	0.0	1.4				
		850	0.86	55	Sones	0.8	0.6	0.5	0.3						
CSP-A510-VG					CFM	621	590	583	540	479	414	328			
		1275	2.40	160	Sones	1.5	1.4	1.4	1.3	1.2	1.5	1.7			
					CFM	625	570	558	504	450	402	1.7			
	6	1275	1.83	110	Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.8				
CSP-A700-VG					CFM	895	857	848	803	760	725				
	10	1450	3.53	216	Sones	1.0	1.0	1.0	1.0	1.0	1.2				
					CFM	470	415	405	322	1.0	1.2				
		925	1.08	68	Sones	0.6	0.4	0.4	0.4						
CSP-A710-VG					CFM	730	699	690	654	622	574	514			
		1450	3.51	236	Sones	2.2	2.1	2.1	2.0	1.9	2.1	2.4			
					CFM	685	648	609	520	481	2.1	۷.٦			
CSP-A780		1334	1.89	405	Sones	5.0	4.8	4.7	4.7	4.9					
					CFM	1079	982	957	841	655					
CSP-A1050		950	3.33	455	Sones	6.3	6.0	5.9	6.0	5.5					
	_	1050	4.00		CFM	805	754	741	689	642	597				
000 44050 1/0	6	1050	1.90	115	Sones	<0.3	<0.3	< 0.3	0.4	0.5	1.0				
CSP-A1050-VG	40	4005	0.05	0.44	CFM	1131	1105	1092	1047	998	900				
	10	1225	3.85	241	Sones	1.0	0.9	0.9	1.0	1.2	1.3				
CSP-A1550		1340	4.16	830	CFM	1391	1311	1240	1098	1019	929				
CSP-A1550		1340	4.10	630	Sones	7.5	7.4	7.3	7.3	7.3	7.2				
	6	820	6.18	507.3	CFM	2445	2367	2344	2264	2195	2149	2072	1965	1851	1664
CSP-A3300-VG	U	020	0.10	307.3	Sones	2.5	2.5	2.0	2.0	2.5	3.0	3.0	3.5	4.0	4.0
031-43300-VG	10	1090	12.34	3/ 10/8 0	CFM	3401	3342	3312	3271	3154	3083	2956	2879	2766	2439
	10	1090	12.04	1040.9	Sones	5.0	5.0	4.5	4.5	4.0	4.5	4.5	4.5	5.0	4.5
CSP-B110		950	0.57	80	CFM	103	100	99	98	97	96	93			
001-0110		330	0.57	00	Sones	2.0	2.0	2.1	2.3	2.6	2.7	3.1			
CSP-B150		1050	0.85	129	CFM	151	149	149	148	148	145	142			
OOI -D100		1000	0.00	120	Sones	2.5	2.7	2.7	2.9	3.1	3.4	3.6			
CSP-B200		1100	1.1	173	CFM	186	184	183	182	180	178	175			
00. D200		1.00		1,0	Sones	3.4	3.6	3.7	4.0	4.1	4.1	4.3			



Wheel Options

Greenheck's ceiling and cabinet fans (models SP and CSP) deliver high performance from a forward-curved wheel. The forward-curved wheel design offers both high-efficiency and low sound. Fan wheels are constructed of polypropylene or steel as standard, and most models offer an aluminum wheel option.

- Level A models utilize steel or polypropylene (standard) wheel construction depending on size.
- Level B and L models are standard with a polypropylene wheel.

Polypropylene



Steel



Aluminum



SP-B Replacement Power Packs

Save installation and down time by replacing the entire power pack instead of individual components. Available



Contractor 4 Packs

Save installation time and labor by installing the housing first, then installing the internal components after the sheetrocking, plastering and finishing is done. Housings are packaged in one box, power assemblies and grilles are packaged in another box. Components are shipped to coincide with the phase of your project. (Model SP-B and SP-L series).





Grille Options

Designer (Standard)

Available in white polystyrene finish, with optional motion humidity or combination sensors. All optional sensors have



time delay functionality as standard. Available on A50-A390 and B50-B200. *No grille mounted sensors available on the SP-L50 and SP-L80.*

Aluminum

White enamel finish standard for models A410-A1550. Optional for models A50-A390 and B50-B200.



Stainless Steel

Polished stainless steel finish optional for models A50-A390 and B50-B200.



Decorative

White plastic finish, with or without light, motion detector with time delay. Optional for models A50-A390 and B50-B200.



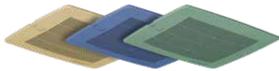
Architectural Grilles

Aluminum, powder coated paint. Available on A50-A390 and B50-200.



Custom

Molded polystyrene available in an array of colors. Includes all the same accessory options as the standard grilles. For more information on the many ways this grille option can be used, please contact your Greenheck representative.



Customized Grille Lens

Lenses can be customized with formed shapes or logos. Contact your Greenheck representative for details.



Lighted Grille Options

Greenheck's fan and light combinations include either a prismatic or a frosted lens with LED lamp. Our unique light box is manufactured with a reflective material to increase the light given off by the LED lamp. *UL Listed for above bathtub and showers with GFCI branch protected circuit.*

Model SP-A, sizes 50 - 390 Model SP-B, sizes 50 - 200

Note: When selecting a lighted grille it will add height to the fan assembly. See CAPS drawings for exact values.

Prismatic Lens

The prismatic lens design provides approximately 25% more light than a traditional frosted lens. The lens may be easily removed to replace light bulbs.



Frosted Lens

The frosted lens option is a traditional design which lets approximately 80% of light through the lens. The lens may be easily removed to replace light bulbs.



Note: Our LED light bulbs are ENERGY STAR® certified. Not all fan/lighted grille options are ENERGY STAR® certified. See CAPS for availability.

LED

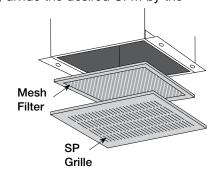
- GU24 Base
- 25,000 hour life
- Reflective light box
- 85% more efficient than incandescent



Filters

Fans used in most applications will collect airborne dirt on wheels and motors over time, even where air is not excessively dirty. Accumulations of dirt on the fan wheel will sharply reduce performance and cause imbalance. Dirt buildup on the motor can cause it to overheat. All of these conditions will shorten the life of the fan. To help reduce this accumulation, washable aluminum mesh filters are available to trap dirt before it enters the fan. These filters should be regularly cleaned to maintain performance. The Filter Loss Chart below shows the effect the filter will have on performance. To determine the added resistance, divide the desired CFM by the

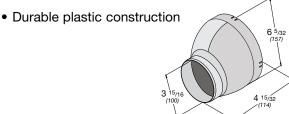
filter area (ft²). This will give ft/min. Use this with the filter loss chart to get the added resistance. Filters reduce sound levels, in addition to reducing dirt accumulations on the motor and wheel.



Filter Loss Chart									
	Filter	Model	Filter						
SP Model	Designer Grille	*Metal Grille	Area (ft²)						
SP-A50 - A190	F-200	F-210	0.739						
SP-B50 - B200, A200 - A390, A390-VG	F-200	F-220	0.911						
SP-A410 - A510, A510-VG, A710 - A780, A710-VG	NA	F-250	1.518						
SP-A900 - A1550, A1050-VG	NA	F-260	2.078						

^{*}Aluminum or Stainless Steel Grille.

Transition Duct Reducer

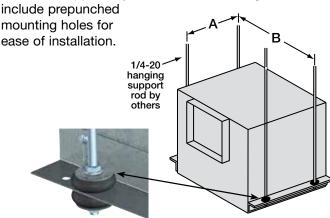


Model	For use with sizes:				
473324*	B50-B200				
	A50-A90				
6x4 Reducer	A110-A190				
481734	150 100				
4x3 Reducer	L50, L80				

All dimensions shown in inches (millimeters).

Hanging Vibration Isolators

Vibration isolator kits are available for suspended installations. Kits include all hardware necessary to mount one unit, with the exception of 1/4-20 threaded rod to be supplied by others. Fan mounting brackets

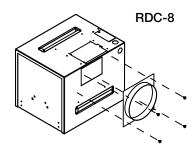


Unit Size	Α	В
B50-B200	4½ (114)	15% (397)
A50-A190	5½ (140)	15 (381)
A200-A390, A390-VG	6¾ (171)	15¾ (400)
A410, A510, A510-VG, A710, A710-VG, A780	91/4 (235)	19¾ (502)
A700, A700-VG	5½ (140)	25% (645)
A900, A1050, A1050-VG, A1410, A1550	91/4 (235)	25½ (648)
A1750, A2150	91/4 (235)	36¾ (933)
A3300-VG, A3600	91/4 (235)	47¼ (1200)

All dimensions shown in inches (millimeters).

Model RDC - Round Duct Connector

- Replaces the standard square discharge duct connector and damper
- Uses existing mounting holes
- RDC-6 includes a damper (polypropylene construction)



 RDC-8 does not include a damper (galvanized construction)

Model	Use with sizes:	Diameter
RDC-6	A110-A190	6 (152)
RDC-8	A200-A510, A390-VG, A510-VG, A710-VG	8 (203)

All dimensions shown in inches (millimeters).

^{*}Used in conjunction with RDC-6 for SP model sizes A110 thru A190

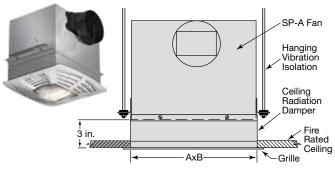


Ceiling Radiation Damper

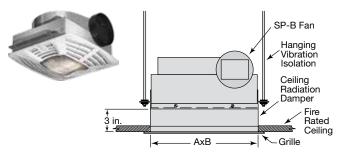
The National Fire Protection Association (NFPA) Standard 90A requires openings in fire rated ceiling assemblies to be protected by appropriately rated ceiling radiation dampers. As a result, many local codes require fans installed in fire rated ceilings to be protected by dampers which are insulated against both heat and flame.

Greenheck's ceiling radiation dampers are also Warnock Hersey Listed to go into a one hour combustible (wood) installation. Greenheck's UL/cUL Classified ceiling radiation dampers are rated for three hours of fire resistance in a steel/concrete installation.

Model SP-A



Model SP-B

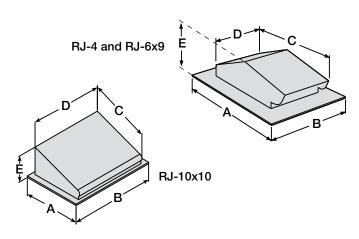


SP Model	CRD	Length (A)	Width (B)	Height	UL	W.H.
A50 - A190	310	13½ (343)	11½ (283)	3 (76)	310 310L	310
B50 - B200 A200 - A390 A390-VG	320	14¾ (365)	12½ (311)	3 (76)	320 320L	320
A410 - A510 A510-VG, A710 - A780 A710-VG	350	18 ⁷ / ₁₆ (468)	14 ¹⁵ ⁄16 (379)	3 (76)	350	350
A700, A700-VG	700	24¾ ₁₆ (614)	12¼ (311)	3 (76)	700	NA
A900 - A1550, A1050-VG	360	24¾ ₆ (614)	14 ¹⁵ ⁄ ₁₆ (379)	3 (76)	360	360

All dimensions shown in inches *(millimeters)*. Add an "L" to all CRD models if fan & light combo is used. *CRD is approximately 1/4 inch (6 mm) larger than housing dimension. (See Installation, Operation and Maintenance Manual).





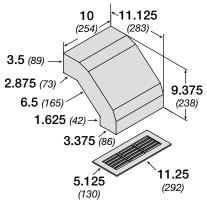


Model RJ - Pitched Roof Cap

- Steel construction with black enamel finish
- Integral flashing flange
- Built-in birdscreen and damper

Model	Use for sizes:	Α	В	С	D	Е	Throat
RJ-4	80, 80L, C50, B50-B80, L50, L80	11 (279)	9½ (235)	8½ (210)	5½ (135)	4½ (114)	4 (102) diameter
RJ-6x9	110, 100L, B90-B200, A50-A390, A390-VG	18¾ (476)	14½ (362)	14½ (368)	10% <i>(264)</i>	6½ (165)	6 x 9 (152 x 229)
RJ- 10x10	A410-A1050 A510-VG, A700-VG, A710-VG, A1050-VG	18½ (470)	27½ (699)	15¾ (400)	23 ⁵ / ₈ (600)	9½ (241)	10 x 10 (254 x 254)

All dimensions shown in inches (millimeters).



All dimensions shown in inches (millimeters).

Model EL-10x3 - Elbow Discharge with Grille

- Designed for installation under roof eaves
- Black epoxy finish (elbow and grille)
- Built-in damper
- SP and CSP sizes 50-290

Electrical Accessories



Dehumidistat

Dehumidistats are available as a wall mount switch or integrated to the fan. Each sensor automatically detects excess humidity to help control condensation.

Wall switch:

- Rated for 120V, 3A, 1/6 HP
- UL Listed

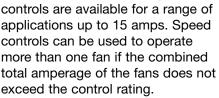
Integrated switch to fan:

- Available on 115V
 - SP-A50 thru SP-A390
 - SP-B50 thru SP-B200



Speed Controls

Speed controls may be used on model SP and CSP fans for manual adjustment of the fan's performance (for final system balancing) or to control the fan's output in confined spaces, such as conference or meeting rooms. The fan can be adjusted to 60% of design airflow with a speed control. This reduction in airflow and fan speed is also accompanied by a reduction in noise level. Solid state speed controls are available for a range of





Internal Mounting

	SPEED CONTROL INTERNAL AND/OR EXTERNAL MOUNTING OPTIONS																							
Model Voltage Rating		FAN SIZES																						
Amp Rating	50	70	80	90	110	125	150	190	200	250	290	390	410	510	700	710	780	900	1050	1410	1550	1750	2150	3600
6WSSC 115 - 127V 6 Amp	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	I/E	NA	NA	NA	NA	NA	NA
10WSSC 115 - 127V 10 Amp	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	NA
15WSSC 115 - 127V 15 Amp	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	NA
5W240 220 - 240V 5 Amp	NA	NA	NA	*I/E	I/E	NA	I/E	I/E	*I/E	NA	I/E	I/E	NA	I/E	NA	NA	I/E	NA	I/E	NA	I/E	NA	NA	NA
8WSSC 220 - 240V 8 Amp	NA	NA	NA	*E	Е	NA	E	Е	*E	NA	E	Е	NA	E	NA	NA	Е	NA	Е	NA	E	NA	NA	NA
5W277 227V 5 Amp	NA	NA	NA	NA	I/E	I/E	I/E	I/E	*I/E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
KEY:	E =	Exteri	nal m	ounte	d only	/								I/E = Available Internal and External Mounted										
KEI.	* On	ly ava	ailable	on th	ne B-s	series	(A-se	eries is	s not	availa	ble)			NA =	= Not	availa	able							

NOTES: Speed controllers are not available for 208V applications.

SP-C50 speed controller is shipped loose only.

All speed controller options listed in table are UL Listed.

Handy box sizes are 2x4 for all options above except 10WSSC and 15WSSC, which are 4x4.

Speed controller is not compatible with SP-A50-90-VG and SP-A90-130-VG

Thermostat

Reverse Acting

Adjustable for temperature ranges between 30°F to 110°F (-1°C to 43°C), 120V, 16 amp.

Cooling

When the temperature in the space rises above the set point of 50°F to 90°F (10°C to 32°C) the contacts close and the thermostat will signal the fan to come on in order to exhaust air from the space.



- UL Approved
- CSA Certified
- 120V, 22 Amps

Electrical Accessories



Switches

Switches may be used on model SP and CSP fans to enable manual control of your fan or fan and light combination.

1 Function

Single pole rocker switch assembly

- Rated for 120-277V, 15A
- UL Listed

1 Function with Pilot Light

Single pole light combination switch assembly

- Rated for 120V, 15A
- UL Listed

2 Function

Two single pole combination switch assembly

- Rated for 120V, 15A
- UL Listed



Time delay switches save energy by automatically turning off equipment. They may be used with SP and CSP fans or fan and light combinations for extended operating time of fan. Time delay switches act in the same manner as a standard switch, however, there is a delay of 10 to 60 minutes after the fan has been turned off.

Minimum Ventilation Control

This control contains a microprocessor that monitors the operation of the fan to make sure that the space is receiving the correct amount of ventilation per ASHRAE 62.2.

- 120V. 2.5A
- UL Listed



Note: All switch covers are standard white. Other colors available upon request.

Motion Detectors

Motion detectors may be used with SP and CSP fans or fan and light combinations. Motion detectors use a passive infrared motion detector to automatically turn the fan on when a change in motion is sensed. They have a viewing area of 180 degrees, however they must be placed in the line-of-sight.



Grille Mounted

Available on models up through size SP-A390 and SP-B200.

- Rated for 115V
- UL Listed

Wall Mounted

For use on fan or lights. Available shipped loose.

- Rated for 115V
- UL Listed
- Requires 2x4 handy box
- Time delay can be set for 30 seconds to 30 minutes in 5 minute increments



Firestat

- 120V, 8 Amp to 120V, 4 Amp capacities
- Max element temperature of 350°F (177°C)
- Type II 5 inch insertion
- Type III 111/2 inch insertion



Transformers

Transformers are available for applications requiring voltage reduction. Selection is based on motor amperage. All transformers are shipped loose. See performance pages for motor amp ratings.



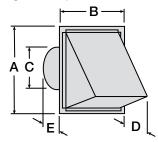
Models	Voltage Ratings	Amp Ratings
T-2.0	230/277V to 115	2.0 Amps
T-4.3	230/277V to 115	4.3 Amps
T-6.5	230/277V to 115	6.5 Amps
T-8.6	230/277V to 115	8.6 Amps

Discharge Accessories



Model WC - Hooded Wall Cap (Round Connection)

- Aluminum construction aluminum finish
- For outside wall applications
- Built-in birdscreen (not available on WC-4) and damper
- Powder coating color options selectable

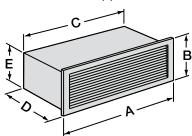


Model	Recommended Sizes	Α	В	С	D	Е
WC-4	C50, L50, L80	6½ (165)	6 (152)	4 (101)	4 (101)	5 (127)
WC-6	B50-B200, 80, 80L A50-A190, 110, 100L	8 (203)	8 (203)	6 (152)	4½ (105)	5 (127)
WC-8	A200-A510	11 <i>(</i> 279)	11 <i>(</i> 279)	8 (203)	5½ (130)	3½ (89)

All dimensions shown in inches (millimeters).

Model WL - Wall Louvered Discharge

- Anodized aluminum grille
- Built-in damper
- Not recommended for exterior applications exposed to severe weather conditions. An external wall louver is recommended for such applications.



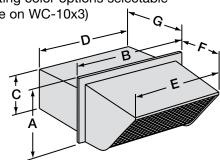
Model	Recommended Sizes	Α	В	С	D	E
WL-10x3	50-290	12 <i>(</i> 305)	5½ (133)	10 (254)	7¾ (197)	3½ (89)
WL-18x6	390-1550	19¾ (502)	8 (203)	18 <i>(457)</i>	9 (229)	6 (152)

All dimensions shown in inches (millimeters).

Model WC - Hooded Wall Cap (Square or Rectangular Connections)

- Steel construction with black enamel finish
- For outside wall applications
- Built-in birdscreen and damper

 Powder coating color options selectable (not available on WC-10x3)

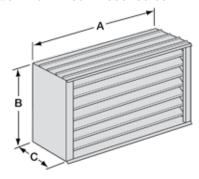


Model	Recommended Sizes	Α	В	С	D	E	F	G
WC-10x3	50-290	5½ (140)	12¾ (324)	3½ (89)	10½ (260)	11½ (283)	4½ (108)	5 (127)
WC-8x8	200-510	10¼ (260)	10½ (260)	8½ (210)	8½ (210)	8½ (210)	6¾ (171)	5 (127)
WC-18x8	700-1550	10½ (260)	20½ (514)	8½ (210)	18½ (464)	18½ (464)	6¾ (171)	5 (127)

All dimensions shown in inches (millimeters).

Model BVE - Brick Vent

- · Designed for installation in masonry walls
- Anodized aluminum construction
- Built-in aluminum mesh insect screen



Model	Recommended Sizes	Α	В	С
BVE808	50-290	81/ ₈ (206)	7¾ (197)	4 (102)
BVE128	390-510	12 (305)	7¾ (197)	4 (102)
BVE157	700-1050	15% (397)	7¾ (197)	4 (102)

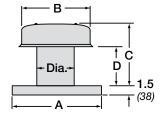
All dimensions shown in inches (millimeters).

Discharge Accessories



Model RCC-7 - Curb Cap

- Weathertight aluminum construction
- Integral birdscreen
- Built-in curb cap
- Requires roof curb

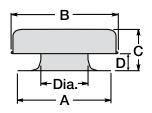


Mod	lel	For all sizes:	Α	В	С	D	Throat Dia.
RCC-	7	50-390	15 (381)	12 (305)	10 (254)	63% (162)	7 (178)

All dimensions shown in inches (millimeters).

Model GRSF - Flashing Flange

- All aluminum exterior construction
- Galvanized steel internal supports
- Integral birdscreen
- Built-in flashing flange

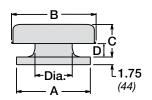


Model	For all sizes:	Α	В	С	D	Throat Dia.
GRSF-10	410-710	23 (584)	20½ (521)	7¾ (197)	2 (51)	101/4 (260)
GRSF-12	780-1050	26 (660)	29 (737)	10 (254)	3½ (89)	121/4 (311)
GRSF-16	1410-2150	30 (762)	29 (737)	11 (279)	4¼ (108)	165/16 <i>(414)</i>
GRSF-20	3600	34 (864)	35½ (902)	1111/4 (286)	3¾ (95)	20 ⁵ / ₁₆ (516)

All dimensions shown in inches (millimeters).

Model GRS - Curb Cap

- All aluminum exterior construction
- Galvanized steel internal supports
- Integral birdscreen
- Built-in curb cap
- · Requires roof curb

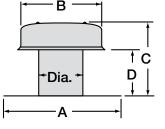


Model	For all sizes:	Α	В	С	D	Throat Dia.
GRS-10	410-710	19 (483)	20½ (521)	7¾ (197)	2 (51)	101/4 (260)
GRS-12	780-1050	22 (559)	29 (737)	10 (254)	3½ (89)	121/4 (311)
GRS-16	1410-2150	26 (660)	29 (737)	11 (279)	41/4 (108)	16 ⁵ /16 <i>(414)</i>
GRS-20	3600	30 (762)	35½ (902)	11½ (286)	3¾ (95)	205/16 (516)

All dimensions shown in inches (millimeters).

Model RFC-7 - Flashing Flange

- Weathertight aluminum construction
- Integral birdscreen
- Built-in flashing flange

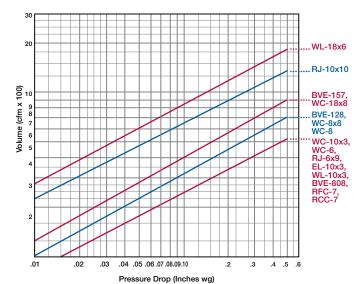


Model	For all sizes:	Α	В	С	D	Throat Dia.
RFC-7	50-390	18 (457)	12 (305)	10 (254)	6% (162)	7 (178)

All dimensions shown in inches (millimeters).

Accessory Pressure Drops

The chart to the right can be used with all of the discharge accessories shown on pages 23, 26 and 27. Specific pressure drop values for these accessories must be included in total system calculations for proper fan selection.



Above accessories tested with 4 feet of inlet duct

Vari-Green® Model Specifications





Vari-Green® Motor

Motor to be an electronic commutation (EC) motor specifically designed for fan applications. AC induction type motors are not acceptable. Examples of unacceptable motors are: Shaded Pole, Permanent Split Capacitor (PSC), Split Phase, Capacitor Start and 3 phase induction type motors. Motors shall be permanently lubricated with heavy-duty ball bearings to match the fan load and prewired to the specific voltage and phase. Internal motor circuitry shall convert AC power supplied to the fan to DC power to operate the motor. Motor shall be speed controllable down to 20% of full speed (80% turndown). Speed shall be controlled by either a potentiometer dial mounted on the motor or by a 0-10 VDC signal. Motor shall be a minimum of 85% efficient at all speeds.

Vari-Green Control - Remote Dial

Remote Dial shall be a Vari-Green Control specifically designed to provide 0-10 volt DC signal to Greenheck's Vari-Green Motor.

Vari-Green Control - Two Speed

Two speed control shall be a Vari-Green Control specifically designed to allow the Vari-Green Motor to operate at two discrete speeds. Two speed control shall include two dials that may be set at any point between 0 and 10 volts DC and an integral transformer capable of reducing 115/208-240 volt AC power to 24 volt AC power.

Vari-Green Control – Indoor Air Quality – Temperature / Humidity

Control to be a packaged indoor air quality control designed to regulate fan speed based on level of temperature and/or relative humidity in a space. Control shall include a Proportional Integral Derivative (PID) feedback loop and shall have labeled terminal strips for easy wiring. Fan shall be direct drive including an electronic commutation (EC) Vari-Green Motor. Control package shall be Vari-Green Indoor Air Quality – Temperature / Humidity Control.

Vari-Green Control – Indoor Air Quality – VOC (Volatile Organic Compound)

Control to be a packaged indoor air quality control designed to regulate fan speed based on level of VOC concentration in a space. Control shall include a Proportional Integral Derivative (PID) feedback loop and shall have labeled terminal strips for easy wiring. Fan shall be direct drive including an electronic commutation (EC) Vari-Green Motor. Control package shall be Vari-Green Indoor Air Quality – VOC Control.

Vari-Green Control - Constant Pressure

Control to be a packaged constant pressure control designed to regulate fan speed based on demand. Control shall include a Proportional Integral Derivative (PID) feedback loop and shall have all components prewired to labeled terminal strips for easy wiring. System shall include the appropriate pressure tap and preset pressure transducer. Fan shall be direct drive including an electronic commutation (EC) Vari-Green Motor. Control package shall be Vari-Green Constant Pressure Control.

Indoor installations shall include pressure tap (duct or room) and control box with integral pressure transducer.

Outdoor installations shall include duct pressure tap, pressure transducer, and control box. Control box shall be prewired and in a NEMA-3R weather tight enclosure for mounting outdoors near the fan location.

Vari-Green® Model Specifications





Models SP-A50-90-VG and SP-A90-130-VG

Ceiling mounted exhaust fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of heavy-gauge galvanized steel. The housing interior shall be lined with 0.5 inch acoustical insulation. The outlet duct collar shall include a plastic backdraft damper. Outlet shall be adaptable for horizontal or vertical discharge. The designer grille for sizes SP-A50 through SP-A390 shall be constructed of high-impact polystyrene.

The access for wiring shall be external. The motor disconnect shall be internal and of the plug-in type. The motor shall be mounted on vibration isolators. The fan wheel shall be of the forward-curved centrifugal type and dynamically balanced. The fan shall have a rocker switch with 3 cfm settings located internally. For the SP-A50-90-VG the settings are 50, 70, and 90 cfm. For the SP-A90-130-VG the settings are 90, 110, and 130 cfm. The fan will come preset at 70 cfm for the SP-A50-90-VG and 110 cfm for the SP-A90-130-VG. Upon installation, the switch shall be selected to the desired CFM. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance seal and shall be UL/cUL Listed. Ceiling or wall mount fans shall be model SP as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.

Complete specifications, in Construction Specifications Institute (CSI) format, are available on greenheck.com.

Model Specifications





Models SP-A50 thru A1550

Ceiling mounted exhaust fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of heavy-gauge galvanized steel. The housing interior shall be lined with 0.5 inch (13 mm) acoustical insulation. The outlet duct collar shall include a polypropylene backdraft damper on SP-A50 - SP-A90 and a spring loaded aluminum backdraft damper on SP-A110 and larger. Outlet shall be adaptable for horizontal or vertical discharge. The designer grille for sizes SP-A50 through SP-A390 shall be constructed of high-impact polystyrene and for sizes SP-A410 through SP-A1550, the grille shall be constructed of aluminum. Grilles shall be non-yellowing.

The access for wiring shall be external. The motor disconnect shall be internal and of the plug-in type. The motor shall be mounted on vibration isolators. The fan wheel shall be of the forward-curved centrifugal type and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance seal and shall be UL/cUL Listed. Ceiling fans shall be model SP as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.

Model SP-A fans with 50 hertz motors are not AMCA certified.

Model SP-80(L)-VG, SP-110(L)-VG

Ceiling mounted exhaust fans shall be of the centrifugal direct drive type with an EC motor and overload protection. The fan housing shall be constructed of galvanized steel and have a low profile housing. The outlet duct collar shall have an aluminum backdraft damper. The fan shall be capable of built-in two-speed operation with a time delay.

The access for wiring shall be external. The motor disconnect shall be internal and of the plug-in type. The fan wheel shall be of the forward-curved centrifugal type and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance Seal and shall be UL/cUL Listed.

Models SP-B50, B70, B80, B90, B110, B150, and B200

Ceiling mounted exhaust fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of galvanized steel. The polypropylene duct collar shall be 6 inches (152 mm) in diameter and shall include a backdraft damper. The designer grille shall be constructed of non-yellowing high-impact polystyrene and attached to the housing with hidden attachment screws. The access for wiring shall be internal. The motor disconnect shall be internal and of the plug-in type.

The motor shall be mounted on vibration isolators. The fan wheel shall be of the forward-curved centrifugal type, constructed of calcium carbonate filled polypropylene and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance Seal and shall be UL/cUL Listed. Ceiling fans shall be model SP-B50, B70, B80, B90, B110, B150 or B200 as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.

Model SP-B fans with 50 hertz motors are not AMCA certified.

Model Specifications



Model SP-C50

Ceiling mounted exhaust fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of galvanized steel. The polypropylene duct collar shall be a sleeve for ease of connection to 3-inch (76 mm) and 4-inch (102 mm) round ductwork and shall include a backdraft damper. The grille shall be constructed of non-yellowing high-impact polystyrene and attached to the housing with torsion springs.

The wheels shall be constructed of high-strength polymer. The access for wiring shall be easily accessible internally. The motor disconnect shall be internal and of the plug-in type. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance seal. Model SP-C50 shall be UL Listed. Fans shall be model SP-C50 as supplied by Greenheck Fan Corporation, Schofield, Wisconsin.

Model SP-C fans with 50 hertz motors are not AMCA certified.



Model SP-L50 and SP-L80

Wall or ceiling mounted exhaust fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of galvanized steel. The galvanized duct collar shall be sized to fit a 4-inch diameter duct and shall include a backdraft damper. The grille shall be constructed of non-yellowing high-impact polystyrene and attached to the housing with hidden attachment screws. The access for wiring shall be internal. The motor disconnect shall be internal and of the plug-in type.

The fan wheel shall be of the forward-curved centrifugal type, constructed of calcium carbonate filled polypropylene and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Sound and Air Performance Seal, shall be UL/cUL Listed and shall be Energy Star 4.0 qualified. Wall or ceiling mount fans shall be model SP-L50 or L80 as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.



Models CSP-A110 thru A3600

Duct mounted exhaust, supply or return air fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of heavy-gauge galvanized steel. The housing interior shall be lined with 0.5 inch (13 mm) acoustical insulation. The outlet duct collar shall include an aluminum backdraft damper and shall be adaptable for horizontal or vertical discharge. The access for wiring shall be external. The motor disconnect shall be internal and of the plug-in type.

The motor shall be mounted on vibration isolators. The fan wheel shall be of the forward-curved centrifugal type and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Air Performance Seal and shall be UL/cUL Listed. Ceiling fans shall be model CSP as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.

Model CSP-A fans with 50 hertz motors are not AMCA certified.

Models CSP-B110, B150 and B200

Duct mounted exhaust, supply or return air fans shall be of the centrifugal direct drive type. The fan housing shall be constructed of galvanized steel. The polypropylene duct collar shall be 6 inch (152 mm) in diameter to accept 6-inch (152 mm) round ductwork and shall include a backdraft damper. The access for wiring shall be internal. The motor disconnect shall be internal and of the plug-in type.

The motor shall be mounted on vibration isolators. The fan wheel shall be of the forward-curved centrifugal type, constructed of calcium carbonate filled polypropylene and dynamically balanced. All fans shall bear the AMCA Certified Ratings program AMCA Air Performance Seal and shall be UL/cUL Listed. Ceiling fans shall be model CSP-B110, B150 or B200 as manufactured by Greenheck Fan Corporation, Schofield, Wisconsin.

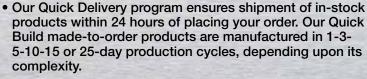
Model CSP-B fans with 50 hertz motors are not AMCA certified.

Design and Selection Support

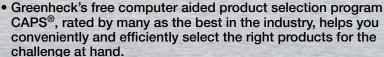
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Greenheck delivers value to mechanical engineers by helping them solve virtually any air quality challenges their clients face with a comprehensive selection of top quality, innovative airrelated equipment. We offer extra value to contractors by providing easy-to-install, competitively priced, reliable products that arrive on time. And building owners and occupants value the energy efficiency, low maintenance and quiet dependable operation they experience long after the construction project ends.

Our Commitment

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

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

