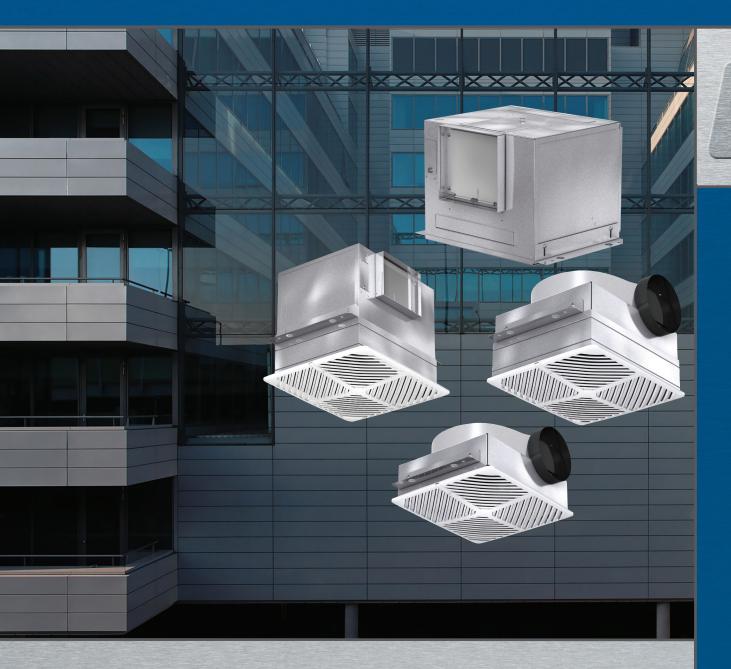
# Centrifugal Ceiling Exhaust and Inline Cabinet Fans Models SP and CSP





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October 2025

### Models SP and CSP Ceiling and Cabinet Fans



Engineered for quiet performance and dependable value, Greenheck's SP and CSP fans set the standard for ceiling and cabinet ventilation. These versatile units deliver low sound levels, cost-effective operation, and are built for long-lasting reliability. With a wide range of sizes and accessories, SP and CSP fans offer the perfect combination of quiet comfort, proven performance, and ease of installation.

#### **SIZES**

- SP-A 21 sizes, 70 - 1550
- SP-B 8 sizes, 50 - 200
- CSP-A 22 sizes, 110 - 3300

#### PERFORMANCE

- Ranges from 50 to 1,600 cfm
  Up to 1.0 in. wg of static pressure
- SP-B Ranges from 50 to 200 cfm Up to 1.0 in. wg of static pressure
- CSP-A
  Ranges from 70 to 3,400 cfm
  Up to 1.0 in. wg of static pressure

#### **CONFIGURATION OPTIONS**

- Integrated motion and humidity sensors
- With or without ceiling radiation dampers
- 2 speed operation

#### **APPLICATIONS**

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

#### FEATURES AND BENEFITS

- All models are licensed to bear the AMCA Seal and are UL/cUL Listed ensuring verified performance, safety, and compliance with industry standards
- Industry-leading quiet performance with sound levels as low as <0.3 sones</li>
- Delivers powerful airflow in a space-saving form perfect for tight ceiling or cabinet installations
- Engineered to meet the demands of commercial buildings and multifamily housing promoting healthier, more comfortable indoor environments
- VG models feature electronically commutated (EC) motors for higher efficiency and more controllability
- Every SP and CSP fan comes backed by our industry-leading three-year warranty providing confidence in every installation







Model	Level of Construction		Profile Min. Height	Sound Min. Sones	Air Volume Max. CFM	UL Listing
SP	А	Premium Ceiling Fan: Widest selection to meet sound requirements. Select sizes available with Vari-Green® motor.	9 inches (229 mm)	<0.3	1,600 cfm (2718 m³/hr)	UL/cUL Listed for above bathtub/shower with GFCI branch protected circuit (Sizes A390 and smaller)
SP	В	Deluxe Ceiling Fan: Compact to fit most applications with quiet operation.	7 inches (178 mm)	0.8	200 cfm (340 m <sup>3</sup> /hr)	UL/cUL Listed for above bathtub/shower with GFCI branch protected circuit
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	3,400 cfm (5777 m³/hr)	UL/cUL Listed

# Power Ratings and Certifications Codes and Standards



SP Model	115V/ 60Hz	115V/ 50Hz	220- 240V/ 50Hz	220- 240V/ 60Hz	277V	EC Motor	Output Power (Watts or HP)	ASHRAE 90.1 Compliant
SP-A70	317723						2.25W	Yes
SP-A90	1043274						3.61W	Yes
SP-A110	1043275						4.57W	Yes
SP-A125	1043276						6.14W	Yes
SP-A200	1039434						18.65W	Yes
SP-A250	1039435						1/30	Yes
SP-A390	1039436						1/12	Yes
SP-A390-VG	329508	329508	329508	329508	329508	Yes	1/10	Yes
SP-A410	301817						1/19	Yes
SP-A510	1039951						1/12	Yes
SP-A510-VG	329557	329557	329557	329557	329557	Yes	17/100	Yes
SP-A700	318873						1/7	No
SP-A700-VG	328174	328174	328174	328174	328174	Yes	29/100	Yes
SP-A710	1039949						1/6	No
SP-A710-VG	329558	329558	329558	329558	329558	Yes	27/100	Yes
SP-A780	309133						1/3	No
SP-A900	318871						1/6	No
SP-A1050	318863						1/4	No
SP-A1050-VG	328173	328173	328173	328173	328173	Yes	1/3	Yes
SP-A1300	329516						1/7	No
SP-A1550	318865						3/4	No
SP-B50	1039442						1W	Yes
SP-B70	1039947						3W	Yes
SP-B80	1039948						5W	Yes
SP-B90	1039440						5W	Yes
SP-B110	1039437						8W	Yes
SP-B110ES	356655						9W	Yes
SP-B150	1039438						18W	Yes
SP-B200	318872						1/30	Yes

\*Note: All motors are rated for continuous use.



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-A200, SP-A250, SP-B50, SP-B70, SP-B80, SP-B90, SP-B110ES, CSP-A110, CSP-A125, CSP-A200, CSP-A390-VG

ENERGY STAR<sup>®</sup> 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.

CSP Model	115V/ 60Hz	115V/ 50Hz	220- 240V/ 50Hz	220- 240V/ 60Hz	277V	EC Motor	Output Power (Watts or HP)	ASHRAE 90.1 Compliant
CSP-A110	1043275						4.57W	Yes
CSP-A125	1043276						6.14W	Yes
CSP-A200	1039434						18.65W	Yes
CSP-A250	1039435						1/30	Yes
CSP-A390	1039436						1/12	Yes
CSP-A390-VG	329508	329508	329508	329508	329508	Yes	1/10	Yes
CSP-A410	301817						1/19	Yes
CSP-A510	1039951						1/12	Yes
CSP-A510-VG	329557	329557	329557	329557	329557	Yes	17/100	Yes
CSP-A700	318873						1/7	No
CSP-A700-VG	328174	328174	328174	328174	328174	Yes	29/100	Yes
CSP-A710	1039949						1/6	No
CSP-A710-VG	329558	329558	329558	329558	329558	Yes	1/4	Yes
CSP-A780	309133						1/3	No
CSP-A900	318871						1/6	No
CSP-A1050	318863						1/4	No
CSP-A1050-VG	328173	328173	328173	328173	328173	Yes	1/3	Yes
CSP-A1300	329516						3/7	No
CSP-A1550	318865						3/4	No
CSP-A1750	318864						3/4	No
CSP-A2150	318864						3/4	No
CSP-A3300-VG	356599	356599	356599	356599	356599	Yes	1	Yes

\*Note: All motors are rated for continuous use.



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.

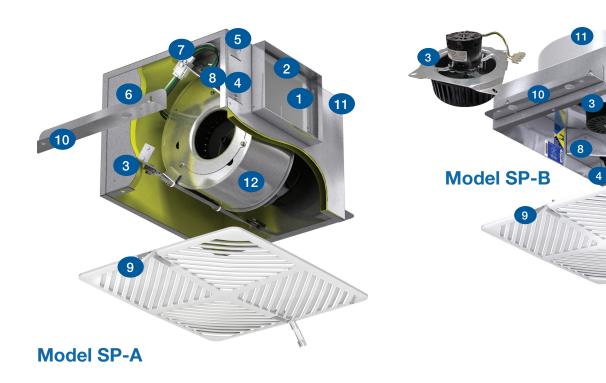
#### **Codes and Standards**

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.

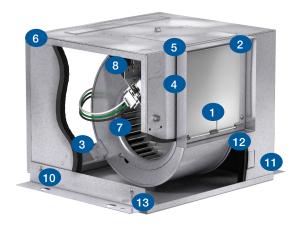
California Title 24 states that each bathroom shall be mechanically ventilated and shall comply with the following: Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a 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.

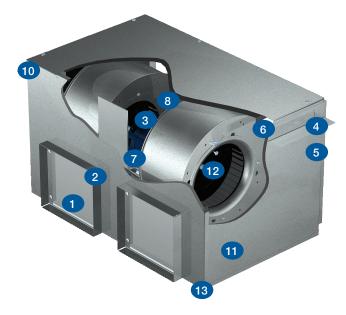
Multiple Greenheck ceiling exhaust fans can be used to comply with these latest codes and standards.











# **Standard Construction Features**



			Specific	Features for E	ach Model					
		Number and Description	SP-A	SP-B	CSP-A					
1	Backdraft	Durable plastic to reduce backdrafts	70-90	✓						
1	Damper	Aluminum to reduce backdrafts	110-1550		✓					
_	O. Hat	Round	70-90	✓						
2	Outlet	Square	110-1550		✓					
		Removes quickly for maintenance/replacement	✓	✓	✓					
3	Power Pack	Includes conversion from horizontal to vertical discharge	✓		✓					
4	Electrical	Vertical electrical access to eliminate drilling holes	✓	✓	✓					
	Access	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	✓	$\checkmark$	✓					
8	Electrical Junction Box	Large for easy wiring	✓	✓	✓					
9	Grille	Concealed attachment screws securely fasten grille to housing for quiet, rattle-free operation	✓	✓						
0	Mounting Brackets	Adjustable for multiple installation conditions	✓	✓	✓					
1	Housing	Embossed galvanized steel for rigidity	✓	✓	✓					
	Housing	A low profile for height-restricted areas		✓						
		Motors are compatible for use with speed controls and have thermal overload protection								
12	Motors	Domestic & International 60 cycle, 115V, 208V, 220V, 230V, & 277V options (See CAPS® or pg. 6 for availability)	<b>√</b>	✓	✓					
3	Access Panel	Gain easy access to internal components once installed			✓					
	Exclusive Electrical Wiring Feature	Electrical access cover located on the housing exterior. the power assembly, saving installation time and cost. A								
	Double-Wide Fans	Available for applications requiring 700 cfm or greater. Double-wide fans have two double-width forward-curve which are housed in separate scrolls, and driven by a si Available on models SP-A and CSP-A.								
	Vertical Discharge	Exhaust outlet duct installed in the optional vertical position.  The power assembly must be rotated to match the duct adapter position.  Available on models SP-A and CSP-A.								







### 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 a single low maintenance unit and is the industry's first fully controllable motor. The EC motor operates on AC power converted to DC, providing more efficient motor operation than an AC operation. The controllability of the Vari-Green motor allows communication compatibility with a variable volume system. This controllability allows motor speed adjustment to exhaust air as needed and reduces over-exhausting conditioned air.

Available Vari-Green Controls and Models											
Controls	SP/CSP-A390-VG, SP/CSP-A510-VG SP/CSP-A700-VG SP/CSP-A710-VG SP/CSP-A1050-VG CSP-A3300-VG										
voc	385822, 387186, 384589										
Temperature/Humidity	385822, 387186, 387127										
Two-Speed	867010										
Remote Dial	385822, 387186, 385803										
Touch Remote	385822, 387186, 385396										
Constant Pressure	385822, 387186, 872982										
Potentiometer	385806										
Transformer	385253										
Constant Airflow	385822, 387186, 872985										
0-10 VDC	385822										
HOA Control	387186										

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 a 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.

**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. The range is 0-2000 CO<sub>2</sub> PPM equivalent.

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

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

# 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 that 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.

	Su	ggested 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

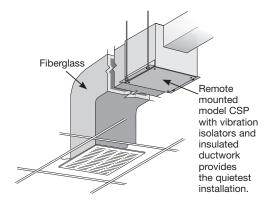
#### Why are low sound levels important?

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 quietest fans on the market.

#### 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 quiet, 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 duct board 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 SP and CSP fans provides more flexibility to place these fans and achieve the lowest sound levels. Critical sound areas such as insulated ductwork, flexible duct connections, or placement of the fan in a remote section of the ductwork (away from the critical area) offer the best means of meeting the desired sound levels.



#### 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.

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.

# Model SP-A Premium Ceiling Exhaust Fan

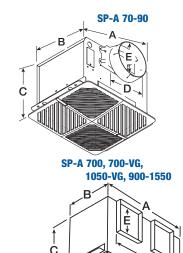


<b>Model SP</b>	Model SP-A Dimensions													
Model	Α	В	С	D	Е	Grille	Unit Weight							
70, 90	13½ (337)	10 <sup>5</sup> / <sub>8</sub> (270)	9 <i>(</i> 229)		5 52)		12 <i>(</i> 5 <i>)</i>							
110, 125	13½ (337)	10 <sup>5</sup> / <sub>8</sub> (270)	9 <i>(</i> 229)	8 (203)	6 (152)	14 <sup>7</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub> (378 x 337)	17 (8)							
200, 250, 390, 390-VG	14 <i>(</i> 356)	11 <sup>7</sup> / <sub>8</sub> (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 (14)							
700, 700-VG	23 <sup>5</sup> / <sub>8</sub> (600)	11% (295)	11% (295)	19½ (495)	8 (203)	251/8 x 131/2 (638 x 343)	34 (15)							
710, 780	18 <i>(457)</i>	14¾ (365)	14½ (368)	10 (254)	8 (203)	19% x 16% (492 x 416)	34 (15)							
900, 1050, 1050-VG, 1300, 1550	23 <sup>3</sup> / <sub>4</sub> (603)	14¾ (365)	14½ (368)	17 <sup>7</sup> / <sub>16</sub> (443)	8 (203)	25 x 163/8 (635 x 416)	56 (25)							

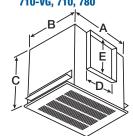
All dimensions are in inches (millimeters) and weight in pounds (kilograms).

Outlet connection width is 1 in. (25 mm). Mounting bracket width is 1½ in. (38 mm).

For complete dimensional information, see CAPS® submittal drawings.



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









												~					
Model	ENERGY		RPM	Amps*	Max. Input					CFM / S	tatic Pres	sure in Ir	nches wg				
modor	STAR®	Voltage		runpo	Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0	1.25
						CFM	88	74	71	54							
SP-A70	☆		790	0.14	15.6	Sones	< 0.3	<0.3	<0.3	<0.3							
01 7170	~		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	*		870	0.14	16.9	Sones	< 0.3	<0.3	<0.3	0.4							
						CFM/Watt*	6.75 16.9	6.20 16.3	6.95	5.33							-
						Watts*	130	119	115	15 98							
						Sones	<0.3	<0.3	<0.3	0.5							
SP-A110	☆		950	0.16	19.4	CFM/Watt*	6.70	6.33	6.15	5.54							
						Watts*	19.4	18.8	18.7	17.7							
						CFM	144	130	127	109							
						Sones	0.4	0.4	0.4	0.6							
SP-A125	☆		1010	0.19	23	CFM/Watt*	6.26	5.73	5.62	5.00							
						Watts*	23.0	22.7	22.6	21.8							
						CFM	267	246	242	224	199	162	109	68			
OD 4000	Α		4000	0.50	07	Sones	2.0	2.0	2.0	2.5	3.0	3.5	4.0	4.5			
SP-A200	☆		1000	0.56	67	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 AGEO	^ _~		000	0.47	56.1	Sones	2.5	2.5	2.5	3.0	3.5	4.0	5.0	5.0			
SP-A250	☆	900	900	0.47	56.1	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			
SP-A390			1350	1.34	135	CFM	410	395	391	368	345	325	307	279			
3F-A390			1330	1.54	133	Sones	4.5	4.5	4.5	4.5	5.0	5.0	5.5	5.5			
		_	005	0.70	47	CFM	276	251	248	233	215	196	173	146	120	93	
SP-A390-VG		6	935	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-A390-VG		40	10.10		400	CFM	410	395	390	370	361	349	338	325	307	294	
		10	1340	1.46	100	Sones	5.0	5.0	5.0	5.0	5.0	6.0	6.5	7.0	7.0	7.0	
CD 4440			1000	171	101	CFM	443	413	405	351	306						
SP-A410			1000	1.74	121	Sones	3.5	3.0	3.0	3.0	3.5						
SP-A510			1070	3.30	224	CFM	557	512	501	439	392	325					
OF-ADIU			1070	3.30	224	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			000	0.73	49.1	Sones	4.5	4.0	4.0	3.5							
31-A310-VG			1275	2.40	155	CFM	604	583	576	540	495	443	377				
			1273	2.40	155	Sones	8.0	8.0	8.0	7.5	7.0	7.0	6.5				
SP-A700			1015	2.98	351	CFM	790	762	753	728	701	659	621	547	474	382	
3F 7A7 00			1013	2.50	331	Sones	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	
		6	1275	1.82	111	CFM	568	527	517	466	419	372	329	275	223	170	100
SP-A700-VG			1273	1.02	111	Sones	3.5	3.5	3.5	3.5	4.0	4.5	5.0	6.0	7.0	7.0	9.0
J. 71700-VG		10	1450	3.52	218	CFM	801	774	766	729	699	666	634	597	569	530	418
		10	1-100	0.02	210	Sones	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.5	8.0	9.0
SP-A710			1080	4.40	285	CFM	752	714	701	653	588	486	320				
			. 500		_50	Sones	6.0	6.0	6.0	6.0	6.0	5.5	5.5				
			925	0.96	60.4	CFM	441	410	397	327							
SP-A710-VG			020	0.00	00.1	Sones	4.5	4.5	4.0	4.0	001	500	F0.4	400	000		
			1450	3.39	230	CFM	709	685	677	656	621	580	534	483	399		
						Sones	9.5	9.5	9.0	9.0	9.0	8.5	8.5	8.0	8.0		

<sup>\*</sup>Amp and Watt draw is approximate and may vary based on motor manufacturer. Performance above is for 115V.

# Model SP-A Premium Ceiling Exhaust Fan



Model	ENERGY	Control	RPM	Amno*	Max.					CFM / St	tatic Pres	sure in In	ches wg				
Model	STAR®	Voltage	NEIVI	Amps*	Input Watts*		0	0.1	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1.0	1.25
SP-A780			1600	3.30	348	CFM	812	782	775	741	704	665	625	581			
3F-A/00			1000	3.30	340	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	
3F-A300			1033	2.70	301	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	
3F-A1000			1230	4.05	430	Sones	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	7.0	7.0	
		6	1050	1.94	120	CFM	838	789	779	735	685	632	579				
SP-A1050-VG		0	5 1050	1.94	120	Sones	4.0	4.0	4.0	4.0	4.0	4.5	5.0				
5P-A1050-VG		10	1225	3.75	240	CFM	1162	1106	1092	1023	944	831	668				
		10	1225	3.75	240	Sones	7.5	7.0	7.0	7.0	6.5	6.0	5.0				
SP-A1300			1535	5.33	607	CFM	1396	1360	1348	1304	1260	1216	1168	1111	1045	971	701
SF-A1300			1535	5.33	007	Sones	10.0	10.0	10.0	9.5	9.5	9.5	9.0	9.0	9.0	8.5	8.5
CD 41550			1695	0.07	27 005	CFM	1559	1518	1503	1456	1402	1346	1300	1239	1172	1095	876
SP-A1550			1095	6.07	695	Sones	11.5	11.0	11.0	11.0	10.5	10.0	10.0	9.5	9.5	9.0	8.5

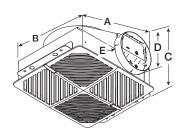
<sup>\*</sup>Amp and Watt draw is approximate and may vary based on motor manufacturer. Above performance is for 115V.

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 (1.5 m) 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 Deluxe and Standard Ceiling Exhaust Fan

Model SP-B Dimensions													
Model	Α	В	С	D	E	Grille	Unit Weight						
50, 70, 80	13 <sup>7</sup> / <sub>8</sub> (352)	11½ (292)	7 (179)	6 (152)	1½ (32)	141/8 x 131/4	9 (4)						
90, 110, 110ES, 150, 200	13 <sup>7</sup> / <sub>8</sub> (352)	11½ (292)	7 (179)	6 (152)	1½ (32)	(378 x 337)	10 (5)						

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









Model	ENERGY	Continuous	DDM	Amno*	Max.				C	CFM / St	atic Pres	sure in I	nches w	g		
Model	STAR®	Ventilation Compatible	nrivi	Amps*	Input 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					
0. 500			000	01.0		CFM/Watt*	4.97	4.04	3.87	2.99	1.92					
						Watt* CFM	15.89 89	15.59 75	15.50 71	15.06 54	14.57 35					
						Sones	0.8	0.8	0.9	1.4	2.0					
SP-B70	☆		675	0.16	17.1	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					
3F-D00	M	•	900	0.10	10.0	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 CEMANIOH*	1.0 4.93	1.0	1.0 4.24	1.5	2.0 2.88					
	, ·					CFM/Watt* Watts*	21.10	4.40 20.90	21.00	3.48 20.70	19.77					
						CFM	133	114	110	97	95	94	91	85	72	50
SP-B110			950	1.14	80.2	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-DITUES	M	_	030	0.25	29.1	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		
SP-B150			1050	1.70	128	CFM	160	156	155	154	152	149	147	138	123	92
5. 5100						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 Sones	208 5.0	211 5.5	212 5.5	216 6.0	216 6.5	210 6.5	197 6.5	176 6.5	157 6.0	130 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 (1.5 m) 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.

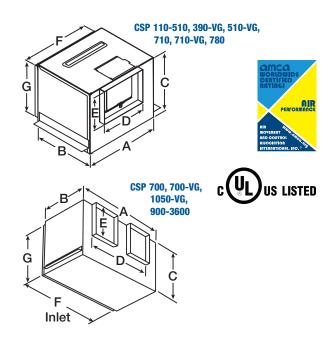
<sup>\*</sup>Amp and Watt draw is approximate and may vary based on motor manufacturer. Above performance is for 115V.

<sup>◆</sup>Continuous Ventilation Compatible: Low speed continuous operation is adjustable from 30 cfm to full rated fan speed.



<b>Model CSP</b>	-A D	imen	sion	S				
Model	A	В	С	D	Е	F	G	Unit Weight
110, 125	13½ (337)	105/8 (270)	9 (229)	8 (203)	6 (152)	11¾ (298)	7³/ <sub>4</sub> (197)	16 <i>(7)</i>
200, 250, 390, 390-VG	14 (356)	11 <sup>7</sup> / <sub>8</sub> (302)	11½ (286)	8 (203)	8 (203)	12 <sup>7</sup> / <sub>8</sub> (327)	10 (254)	23 (10)
410, 510, 510-VG, 710-VG	18 <i>(457)</i>	14% (365)	14½ (368)	8 (203)	8 (203)	16 <sup>7</sup> / <sub>8</sub> (429)	13½ (337)	36 (16)
700, 700-VG	23 <sup>5</sup> / <sub>8</sub> (600)	11% (295)	11% (295)	19½ (495)	8 (203)	22 <sup>5</sup> / <sub>8</sub> (575)	10½ (267)	34 (15)
710, 780	18 <i>(457)</i>	14% (365)	14½ (368)	10 (254)	8 (203)	16 <sup>7</sup> / <sub>8</sub> (429)	13½ (337)	36 (16)
900, 1050, 1050-VG, 1300, 1550	23¾ (603)	14 <sup>3</sup> / <sub>8</sub> (365)	14½ (368)	18 <sup>7</sup> / <sub>8</sub> (479)	8 (203)	22 <sup>5</sup> / <sub>8</sub> (575)	13½ (337)	59 (27)
1750, 2150	35 (889)	14¾ (375)	14¾ (375)	28 (711)	6 (152)	32 <sup>3</sup> / <sub>4</sub> (832)	13 (330)	68 (31)
3300-VG	45½ (1156)	16½ (419)	16½ (419)	40 (1016)	11 (279)	43½ (1099)	14 <sup>5</sup> / <sub>8</sub> (371)	122 (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.



Madal	ENERGY	Control	RPM	A *	Max.				CF	M / Sta	tic Pres	sure in	Inches	wg		
Model	STAR®	Voltage	KPIVI	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	0.16 19.7	Sones	0.8	0.8	0.8	0.9	0.9					
CSF-ATTO	M		930	0.10	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	19 22.4	Sones	1.1	1.1	1.1	1.0	1.2					
USF-A125	A125 X 960	900	0.19	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	264	240	235	214	191	154	98	62		
CSP-A200	☆		825	5 0.48	56.8	Sones	0.6	0.4	0.5	0.9	1.0	1.3	1.5	1.5		
C3P-A200	×		023			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	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 ☆	_1_					Watts*	22.8	25.0	25.2	27.0	29.8	33.4	36.3	39.6	40.6	42.2
					CFM	417	400	395	369	350	335	322	307	290	271	
	10 12	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

<sup>\*</sup>Amp and Watt draw is approximate and may vary based on motor manufacturer. Above performance is for 115V.

# Model CSP-A Premium Inline Cabinet Fan



	ENERGY	Control	DDM		Max.					CFM / Sta	atic Pres	sure in I	nches w	g				
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	1.25	1.5
					walls	CFM	447	441	403	364	317	217	0.020	00	0.0.0	- 1.0		
CSP-A410			1000	1.87	132	Sones	1.5	1.5	1.5	2.0	2.0	2.0						
						Watts*	132.2	131.7	128.7	125.6	120.5	112.4						
						CFM	545	514	506	464	405	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	196.4	182.8						
			850	0.86	55	CFM Sones	428 0.8	358 0.6	338 0.5	238 0.3								
			030	0.00	55	Watts*	54.8	48.9	47.0	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	159.6	160.1	156.1	140.7	123.1	99.9					
						CFM	866	827	817	758	720	694	648	594	419	330		
CSP-A700			1035	3.16	368	Sones	1.1	1.1	1.1	1.1	1.2	1.5	2.0	2.0	2.5	3.0		
						Watts*	367.9	351.0		330.0	321.8			284.1	249.6	231.4	0.7	
		_	1075	1 00	110	CFM	625	570	558	504	450	402	348	261	213	167	67	
		6	1275	1.83	110	Sones Watts*	<0.3 55.6	<0.3 58.7	<0.3	<0.3 63.5	<0.3	0.8 76.5	1.1 83.8	1.5 89.5	2.0 95.3	2.5	3.0 108.2	
CSP-A700-VG						CFM	895	857	848	803	760	725	688	647	604	556	479	
	10 1450	3.53	216	Sones	1.0	1.0	1.0	1.0	1.0	1.2	1.5	1.5	2.0	2.5	3.0			
			55	0.00	0	Watts*	157.1	160.6	161.3	168.5	169.4		179.9	187.1	193.6	201.4		
						CFM	737	698	688	635	567	475	334					
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		310.8	295.8	277.4	255.2					
						CFM	470	415	405	322								
			925	1.08	68	Sones	0.6	0.4	0.4	0.4								
CSP-A710-VG						Watts*	67.8	61.2	60.6	49.0	000	F74	F 4 4	440	0.40			
			1450	3.51	236	CFM Sones	730 2.0	699	690 2.0	654 2.0	622 2.0	574 2.0	514 2.5	446 3.0	349			
			1450	3.31	230	Watts*	236.0	234.2	231.4	223.1	218.9		180.0	156.8				
						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	493.0	492.2	488.0	467.5	453.1	441.8	423.1	407.2			
						CFM	930	875	865	811	755	686	558	411	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			
						Watts*	318.3	308.1	305.5	297.7	289.8		260.9	245.7	225.5	400		
CCD 41050			1070	4.00	467	CFM	1108	1059	1050	1001	958	912	857 1.5	793	723	498 3.0		
CSP-A1050			1070	4.29	467	Sones Watts*		1.0 451.2	1.0 450.1	1.0	1.1	1.3 419.3		389.1	372.7	329.6		
						CFM	805	754	741	689	642	597	547	309.1	312.1	329.0		
		6	1050	1.90	115	Sones	<0.3	<0.3	<0.3	0.4	0.5	1.0	1.5					
CCD 44050 VO		-				Watts*	79.8	85.2	85.0	91.4	97.4	105.5	114.9					
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	231.5	231.5	239.7	239.9		173.9	4000	40.10	070	701	
CCD 41200			1200	6.00	761	CFM	1313	1283	1277	1245	1213	1181	1144	1098	1046	978	791	
CSP-A1300			1300	6.82	761	Sones Watts*	2.0 761.3	2.0 728.3	2.0 720.9	2.0 694.0	2.0 667.0	2.0 640.5	2.5 608.3	2.5 578.6	3.0 542.9	3.5 509.9	3.5 416.3	
						CFM	1735	1689	1680	1627	1570		1453	1387	1322	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	
			. 525	0.10		Watts*		902.7		865.1		803.2			698.4			
						CFM	2012	1954	1943	1871	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
													909.7					
000 46450			700		1005	CFM	2167		2082	2014	1963		1853	1783	1702	1614	1400	887
CSP-A2150			790	11.55	1285	Sones Wetter	3.0	3.0	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5	5.0	5.0
													1010.9				764.6	556.8
		6	820	6.18	507.3	CFM Sones	2445	2367	2344	2264	2195 2.5	3.0	3.0	1965 3.5	1851 4.0	1664 4.0		
		J	020	0.10	307.3	Watts*							433.6					
CSP-A3300-VG						CFM	3401	3342	3312	3271	3154	3083	2956	2879	2766	2439		
		10	1090	12.34	1048.9		5.0	5.0	4.5	4.5	4.0	4.5	4.5	4.5	5.0	4.5		
													1000.7					

<sup>\*</sup>Amp and Watt draw is approximate and may vary based on motor manufacturer. Above performance is for 115V.

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 (1.5 m) 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.



#### **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.

- SP/CSP-A models utilize aluminum or polypropylene (standard) wheel construction. Select SP/CSP-A models offer galvanized wheel construction.
- SP-B models are standard with a polypropylene wheel.

# SP-B Replacement Power Packs Save installation and downtime

Save installation and downtime by replacing the entire power pack instead of individual components. Available as a replacement part on all current and previous SP-B models.



#### Polypropylene



**Aluminum** 



**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).







#### **Grille Options**

#### **Standard**

Available in white polystyrene finish, with optional motion, humidity or combination sensors. All optional sensors have time delay functionality as standard. Available on A70-A390 and B50-B200.

#### **Aluminum**

White enamel finish standard for models A410-A1550. Optional for models A70-A390 and B50-B200.







#### **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.

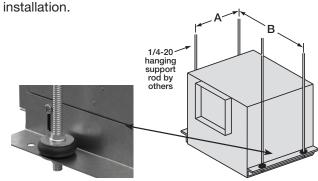


Filter Los	Filter Loss Chart										
SP Model	*Metal Grille	Filter Area (ft²)									
SP-A70 - A110	F-210	0.739									
SP-B50 - B200, A200 - A390, A390-VG	F-220	0.911									
SP-A410 - A510, A510-VG, A710 - A780, A710-VG	F-250	1.518									
SP-A900 - A1550, A1050-VG	F-260	2.078									

<sup>\*</sup>Aluminum grille only.

#### **Hanging Vibration Isolators**

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

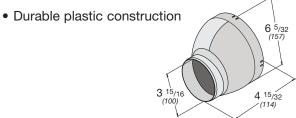


Unit Size	Α	В
B50-B200	4½ (114)	15% (397)
A70-A125	5½ (140)	15 (381)
A200-A390, A390-VG	6¾ (171)	15¾ (400)
A410, A510, A510-VG, A710, A710-VG, A780	91/4 (235)	19¾ (502)
A700, A700-VG	5½ (140)	25% (645)
A900, A1050, A1050-VG, A1550	91/4 (235)	25½ (648)
A1300, A1750, A2150	91/4 (235)	36¾ (933)
A3300-VG	91/4 (235)	471/4 (1200)

All dimensions shown in inches (millimeters).



#### **Transition Duct Reducer**

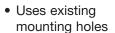


Model	For use with sizes:						
473324*	B50-B200						
	A70-A90						
6x4 Reducer	A110-A125						

All dimensions shown in inches (millimeters).

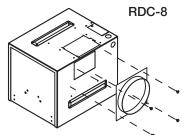
#### **Model RDC - Round Duct Connector**

 Replaces the standard square discharge duct connector and damper



 RDC-6 includes a damper (polypropylene construction)

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

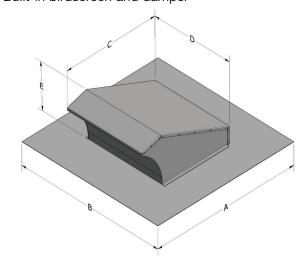


Model	Use with sizes:	Diameter
RDC-6	A110, A125	6 (152)
RDC-8	A200-A510, A390-VG, A510-VG, A710-VG	8 (203)

All dimensions shown in inches (millimeters).

#### 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	B50-B80	13.5 <i>(</i> 343 <i>)</i>	13.5 <i>(343)</i>	5.50 (140)	4 (102)	3.875 <i>(</i> 98 <i>)</i>	4 (102) diameter
RJ-6x9	B90-B200, A70-A390, A390-VG	13.5 <i>(343)</i>	13.5 <i>(343)</i>	8.50 (216)	7 (178)	5.125 (130)	6 x 9 (152 x 229)
RJ-10x10	A410-A1050 A510-VG, A700-VG, A710-VG, A1050-VG	20 (508)	20 (508)	11 (279)	10 (254)	5.25 (133)	10 x 10 (254 x 254)

All dimensions shown in inches (millimeters).

<sup>\*</sup>Used in conjunction with RDC-6 for SP model sizes A110 and A125



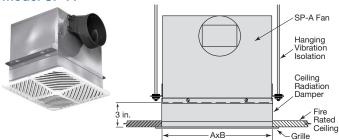
#### **Ceiling Radiation Damper**

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.

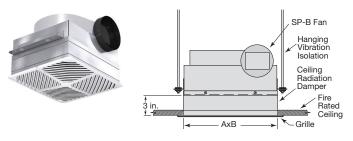
Greenheck offers UL/cUL Classified ceiling radiation dampers that are rated for three hours of fire resistance in a steel/concrete installation, and classified ceiling radiation dampers that are rated for one hour fire resistance in a wood truss (WT) installation.

ETL classified ceiling radiation dampers (formerly Warnock Hersey Listed) are also available and rated for one hour combustible (wood) installation.

#### Model SP-A



#### Model SP-B



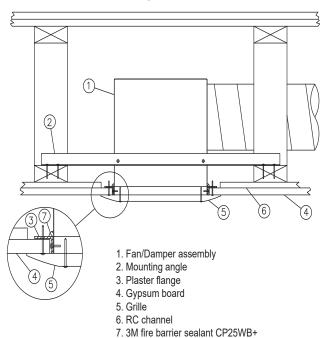
SP Model	CRD	Length (A)	Width (B)	Height	UL	ETL	WT	
A70-A110	310	13½ (343)	11½ (283)	3 (76)		310		
B50 - B200 A200 - A390 A390-VG	320	14¾ (365)	12½ (311)	3 (76)	320			
A410 - A510 A510-VG, A710 - A780 A710-VG	350	18 <sup>7</sup> / <sub>16</sub> (468)	14 <sup>15</sup> / <sub>16</sub> (379)	3 (76)	350		NA	
A700, A700- VG	700	24 <sup>3</sup> ⁄ <sub>16</sub> (614)	12½ (311)	3 (76)	700 NA		NA	
A900 - A1550, A1050-VG	360	24 <sup>3</sup> ⁄ <sub>16</sub> (614)	14 <sup>15</sup> / <sub>16</sub> (379)	3 (76)	360		NA	

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).





#### Wood Truss Install Diagram



(Required with CRD-320WT, optional for

all other CRD models)



#### **Dehumidistat** (Part 385364)

Dehumidistats are available as a wall mount switch or integrated to the fan. Each sensor automatically detects excess humidity to help control condensation. Includes adjustable sensitivity, time delay (10-45 minutes) and humidity percentage settings.

#### Wall switch:

- Rated for 120V, 3 Amps, 1/6 hp
- UL Listed

Integrated switch to fan:

- Available on 115V
  - SP-A200 thru SP-A390
  - SP-B50 thru SP-B200



#### Speed Controls (Part 385031)

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 using 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 applications up to 15 amps. Speed controls can operate more than one fan if the combined total amperage of the fans does not exceed the control rating.





Internal Mounting

#### **Thermostat**

#### Reverse Acting (Part 380044)

Adjustable for temperature ranges between 35°F to 110°F (2°C to 43°C),

• 120V, 16 Amps

UL Listed

#### Cooling (Part 386367)

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 signals the fan to turn on and exhaust air from the space.

- 120V, 16 Amps
- UL Listed
- CSA Certified

# Minimum Ventilation Controls

(Part 3874214 or 385215)

The SmartExhaust is a bath fan switch that also serves as a ventilation controller and fan delay timer. This product provides whole house exhaust ventilation when combined with any SP-A/SP-B models. Earn LEED and ENERGY STAR® points for enhanced exhaust ventilation. Makes standard bath fans ASHRAE 62.2 compliant.



UL Listed







#### **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** (Part 872243)

Single pole rocker switch assembly

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

#### 1 Function with Pilot Light (Part 872242)

Single pole light combination switch assembly

- Rated for 120V, 15 Amps
- UL Listed

#### **2 Function** (Part 872244)

Two single pole combination switch assembly

- Rated for 120V, 15 Amps
- UL Listed







### **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 turn on the fan automatically when motion is sensed. It has a viewing area of 180 degrees provided it is placed in the line of sight.

#### Grille-Mounted

Available on models A200 to A390 and B50 to B200.

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



#### Wall-Mounted (Part 386339)

For use on fan or lights. Available shipped loose.

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



#### Time Delay Switch (Part 874214)

Time delay switches save energy by automatically turning off equipment. The switches are for use with SP and CSP fans, or combinations of fan and light for an extended operating time of fan. Time delay switches act similarly to a standard switch. However, there is a delay of 10 to 60 minutes after turning off the fan.



### Transformers (Part 383668)

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.

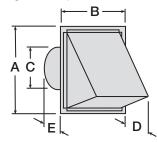


Models	Voltage Ratings	Amp Ratings
T-2.0	230/277V to 115	2.0 Amps
T-4.3	230/277V to 115	4.3 Amps
T-6.5	230/277V to 115	6.5 Amps
T-8.6	230/277V to 115	8.6 Amps



# 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

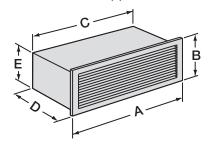


Model	Recommended Sizes	Α	В	С	D	Е
WC-6	B50-B200, A70-A110	8 (203)	8 (203)	6 (152)	4½ (105)	5 (127)
WC-8	A200-A510	11 (279)	11 (279)	8 (203)	5½ (130)	3½ (89)

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.

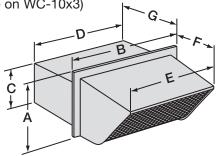


Model	Recommended Sizes	Α	В	С	D	E
WL-10x3	70-250	12 (305)	5½ (133)	10 (254)	7³/ <sub>4</sub> (197)	3½ (89)
WL-18x6	390-1550	19¾ (502)	8 (203)	18 <i>(457)</i>	9 (229)	6 (152)

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)

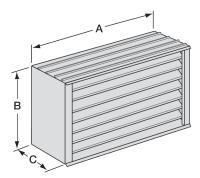


Model	Recommended Sizes	Α	В	С	D	Е	F	G
WC-10x3	70-250	5¾ (146)	12¾ (324)	3½ (83)	10 (254)	11 (283)	4½ (108)	5 (127)
WC-8x8	VC-8x8 200-510	10½ (260)	10 <sup>1</sup> / <sub>4</sub> (260)	8½ (210)	8½ (210)	8½ (210)	6 <sup>3</sup> / <sub>4</sub> (171)	5 (127)
WC-18x8	700-1550	10½ (260)	20½ (514)	8½ (210)	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	70-250	8½ (206)	7³/ <sub>4</sub> (197)	4 (102)
BVE128	390-510	12 (305)	7 <sup>3</sup> / <sub>4</sub> (197)	4 (102)
BVE157	700-1050	15 <sup>5</sup> / <sub>(397)</sub>	7¾ (197)	4 (102)

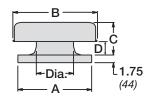
All dimensions shown in inches (millimeters).

# Discharge Accessories Pressure Drop



#### Model GRS - Curb Cap

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

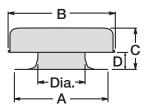


Model	For all sizes:	Α	В	С	D	Throat Dia.
GRS-10	410-710	19 (483)	20½ (521)	7¾ (197)	2 (51)	101/4 (260)
GRS-12	780-1050	22 (559)	29 (737)	10 (254)	3½ (89)	121/4 (311)
GRS-16	1300-2150	26 (660)	29 (737)	11 (279)	41/4 (108)	16 <sup>5</sup> / <sub>16</sub> (414)
GRS-20	3300-VG	30 (762)	35½ (902)	1111/4 (286)	3¾ (95)	205/16 (516)

All dimensions shown in inches (millimeters).

#### **Model GRSF - Flashing Flange**

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

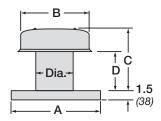


Model	For all sizes:	Α	В	С	D	Throat Dia.
GRSF-10	410-710	23 (584)	20½ (521)	7¾ (197)	2 (51)	101/4 (260)
GRSF-12	780-1050	26 (660)	29 (737)	10 (254)	3½ (89)	121/4 (311)
GRSF-16	1300-2150	30 (762)	29 (737)	11 (279)	41/4 (108)	165/16 (414)
GRSF-20	3300-VG	34 (864)	35½ (902)	111/4 (286)	3¾ (95)	205/16 (516)

All dimensions shown in inches (millimeters).

#### Model RCC-7 - Curb Cap

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

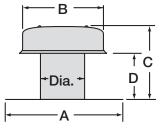


Model	For all sizes:	Α	В	С	D	Throat Dia.
RCC-7	70-390	15 (381)	12 (305)	10 (254)	6% (162)	7 (178)

All dimensions shown in inches (millimeters).

#### Model RFC-7 - Flashing Flange

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

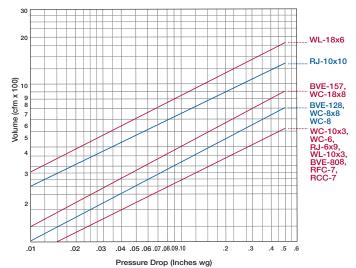


Model	For all sizes:	Α	В	С	D	Throat Dia.
RFC-7	70-390	18 (457)	12 (305)	10 (254)	6% (162)	7 (178)

All dimensions shown in inches (millimeters).

#### **Accessory Pressure Drops**

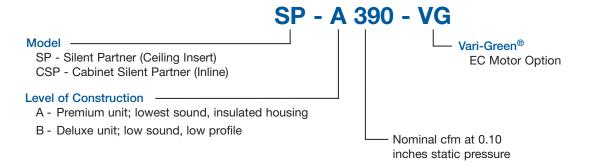
The chart to the right can be used with all of the discharge accessories. Specific pressure drop values for these accessories must be included in total system calculations for proper fan selection.



Above accessories tested with 4 feet of inlet duct

### **Model Nomenclature**

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.



### **Computer Aided Product Selection**

All Greenheck products are supported by the industry's best product literature, electronic media and two product selection tools – CAPS<sup>®</sup>, our Computer Aided Product Selection software program and eCAPS<sup>®</sup>, our online selection tool. These programs will guide you from initial design through detailed submittals.

And, of course, you can always count on the personal service and expertise of our national and international representative organization. To locate your nearest Greenheck representative call 715-359-6171 or visit our website at www.greenheck.com

## **Our Commitment**

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

Specific Greenheck product warranties are located on greenheck.com within the product area tabs and in the Library under Warranties.

