Bathroom Ventilation

featuring

Premium *Choice* Series
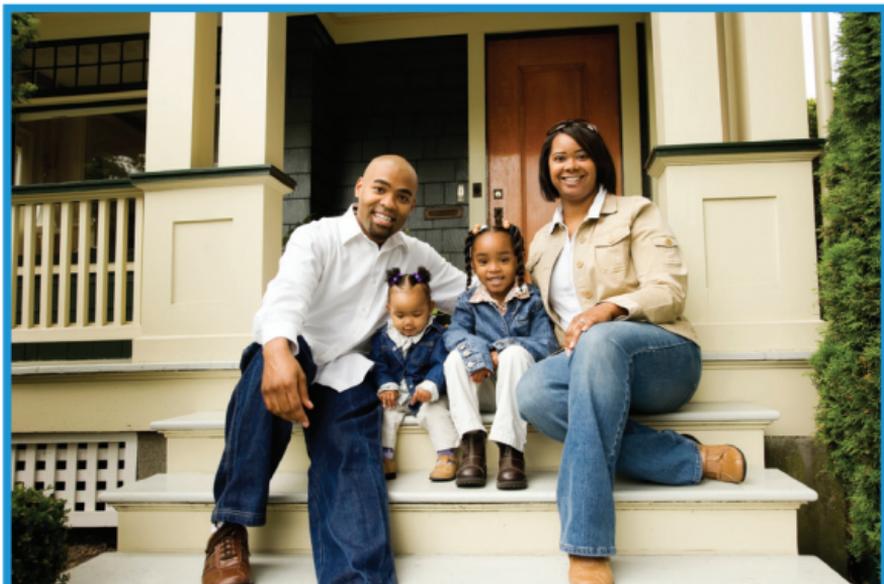### Ventilation Fans

Also with
TD-MIXVENT and PV-POWERVENT
Bathroom Exhaust Kits

April 2014

Soler&Palau
Ventilation Group

Premium *Choice* Series
Ventilation Fans

The Fan of your CHOICE

To protect the two most valuable investments of your life, your home and your family, improving indoor air quality is key. S&P fans remove air quickly, quietly and efficiently, extracting pollutants and moisture before they wreak havoc on your home.

PC50

PC80 • PC110 • PC150

PCD110M (DC Motor)

PC with Lighted Grille Kit

PC with Motion Sensing Grille Kit

Energy Concerns Solved

If saving money & conserving energy are concerns, S&P PC110, 150 & PCD110M fans are ENERGY STAR® qualified. Our fans come standard with high efficiency motors and lighting to reduce energy consumption without sacrificing performance. ENERGY STAR® qualification is especially important when using the PC fans as a whole-house fan that may run all the time. You can learn more about ENERGY STAR® at www.energystar.gov.

Features & Construction

- Extremely quiet operation <0.3 to 1.1 Sones
- Totally enclosed condenser motor for long life
- Motor rated for 30,000 hours continuous on
- Built-in backdraft damper
- Robust steel housing
- Attractive, sturdy grille
- ETL Listed
- PC110 & 150 are ENERGY STAR® qualified
- HVI Certified
- 5-year warranty
- Options: Lighted or Motion Sensing Grilles, Speed Control, Humidity Sensor, Radiation Dampers

Performance and Dimensions

	PC50	PC80	PC110	PC150
CFM @ 0.1/0.25" SP*	50/31	80/60	110/93	150/110
Sones	0.6	0.3	0.6	1.1
Watts	16	32	36	41
Energy Efficiency (CFMs/Watts)	3.1	3.0	3.2	3.8
Amps	.13	.27	.30	.34
ENERGY STAR® Qualified	No	No	Yes	Yes
Duct Connector Diameter (in)	4"	4" or 6"		
Grille Size (in)	10.25" x 10.5"	13" x 14"		
Dimensions (w x d x h) (in)	9" x 9" x 5-3/4"	11-3/8" x 10-1/2" x 7-5/8"		

*Air Performance test performed with 4" duct.

with DC Motor

Most Efficient 2014
ENERGY STAR www.energystar.gov

You CHOOSE Your Airflow!

The built-in **Toggle Switches** and duct connector options allow you to set the PCD110M to the needed airflow:

Integrated Controls

Low Airflow

Timer Delay

Switch Position

Switch position	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Airflow (CFM)	80	90	110	120	90	110	120	140
Duct diameter (inches)	4"	4"	4"	4"	6"	6"	6"	6"

1 & 2: Airflow • 3: Duct size
Factory setting is 110 CFM with 6" duct

Features & Construction

- Extremely quiet operation 0.5 Sones
- Brushless DC motor for long life
- Motor rated for 60,000 hours continuous on
- Built-in motion sensor
- LED night light
- High/Low speed delay timer
- Built-in backdraft damper
- Robust steel housing
- Attractive, sturdy grille
- ETL Listed
- ENERGY STAR® qualified
- HVI Certified
- 6-year warranty on DC Motor
- 5-year warranty on balance of unit

with DC Motor

Performance and Dimensions

PCD110M					
CFM @ 0.1" SP	4" Duct	80	90	110	120
	6" Duct	90	110	120	140
Sones	4" Duct	0.7	0.7	1.0	1.2
	6" Duct	0.3	0.5	0.8	1.1
Watts	4" Duct	5.5	7	11.5	13
	6" Duct	5.5	10	11.5	14.5
Energy Efficiency (CFM/Watt)	4" Duct	14.5	12.9	9.6	9.2
	6" Duct	16.4	11	10.4	9.7
Amps		.16	.18	.22	.23
ENERGY STAR® Qualified		Yes			
Duct Connector Diameter (in)		4" or 6"			
Grille Size (in)		13" x 14"			
Dimensions (w x d x h) (in)		11-3/8" x 10-1/2" x 7-5/8"			

The Premium *CHOICES*

S&P's Premium CHOICE Series gives you maximum flexibility to create the bath ventilation system that you need. The simplicity of S&P's PC fans is in the options. While other premium bath fans come as lighted fans or humidity sensing fans; with a speed control or humidity sensor built in, our Premium CHOICE bath fans give you the flexibility to choose your grille and control separately. Our fans even allow you to change your mind after you install them!

Our Premium CHOICE bath fans come with standard grilles and you have the option of a lighted grille or motion sensing grille. You pick the fan model, the grille and the controls you need. The CHOICE is yours!

Grille CHOICES
Lighted Grille Kits: PCLK (Plug-&-Play)
Motion Sensing Grille Kits: PCMK (Plug-&-Play)
Metal Grille: PCMG

Control CHOICES
Humidity Sensor: PCHS (Plug-&-Play)
Speed Control: PCSC (Plug-&-Play)
3-Switch Controls: PC3S
ASHRAE 62.2 Controls: FT622 or FT247

Accessory CHOICES
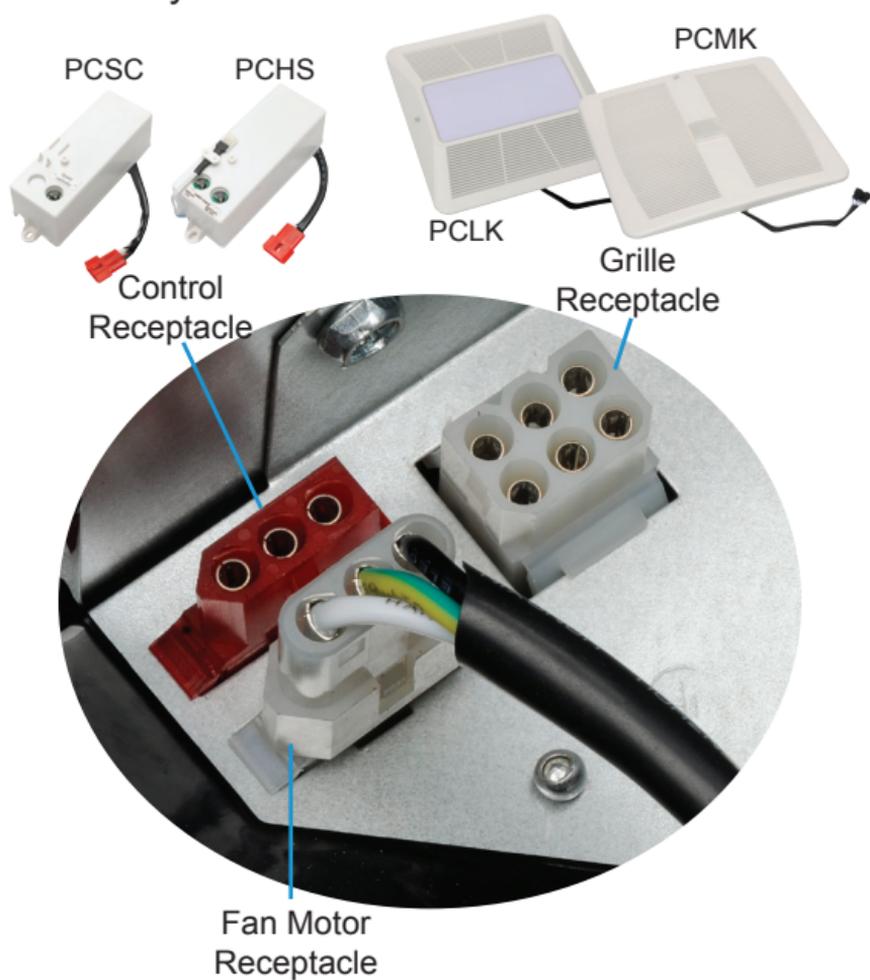Radiation Damper: PCRD
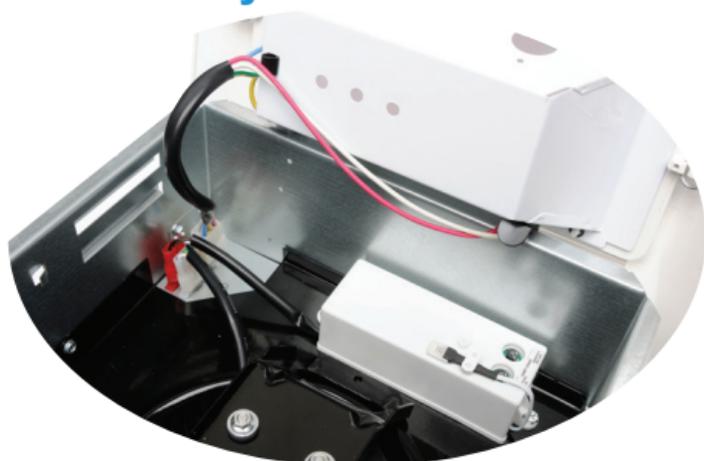4" duct collar: PCDC4
6"duct collar: PCDC6

Plug-&-Play Flexibility

S&P's unique Plug-&-Play option makes your CHOICE easy. There is a receptacle to plug in your control CHOICE. Whether it's a PCSC-Speed Control or a PCHS-Humidity Sensor the control connects to the receptacle and easily mounts into the pre-drilled holes in side the fan housing.

There is also a receptacle for your grille CHOICE. Need a lighted fan? Choose the PCLK-Lighted Grille Kit. Need a motion sensing fan? Choose the PCMK-Motion Sensing Grille Kit. Either grille easily plugs into the grille receptacle to give you the fan of your CHOICE!

PCSC PCHS PCMK

PCLK Grille Receptacle

Control Receptacle

Fan Motor Receptacle

PC with Lighted Grille and Humidity Sensor Installed

Plug-&-Play CHOICE Controls

Humidity Sensor (PCHS)

A PC fan with S&P's humidity sensing control detects rapid increases in moisture at the ceiling level where steam and humidity naturally rise, and automatically turns on the fan. The sensor easily mounts inside the fan housing utilizing 2 pre-drilled holes and a standard receptacle.

PCHS

Features

- Detects rapid rise in humidity
- Simple plug into receptacle in fan housing
- Auto-shut off timer
- Accessible sensitivity adjustment
- Humidity is sensed at the ceiling
- Can be installed with new fan or as an add-on later if needed
- Meets CALGreen Bathroom Fan Requirement

Speed Control (PCSC)

Using a PC fan with S&P's speed control is simple solution for intermittent and continuous ventilation. The control easily mounts inside the fan housing utilizing 2 pre-drilled holes and a standard receptacle.

Features

- Simple plug into receptacle in fan housing
- Accessible speed adjustment
- Allows for adjustable continuous speed to meet ASHRAE 62.2
- High speed override
- Can be installed with new fan or as an add-on later if needed
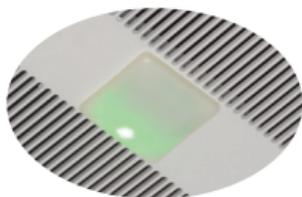
Plug-&-Play
CHOICE Grilles

Motion Sensing Grille Kits (PCMK)

S&P offers Premium CHOICE Series Motion Sensing Grille Kits so you can have worry free bathroom ventilation. This kit fits the PC80, 110 & 150. The grille kit includes a motion sensor, a speed control and a LED night light.
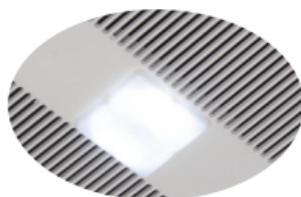
PC with PCMK Installed

PCMK Motion Sensor Activated

PCMK LED Night Light On

Grille Light Kits (PCLK)

S&P offers Premium CHOICE Series Light Kits so you can choose a fan with lights now or later. This kit fits the PC80, 110 & 150. The lighted grilles come standard with a 13 watt GU24 fluorescent bulb and a 4 watt night light.

PC with PCLK Installed

Additional PC Options

3-Switch Controls (PC3S)

The PC3S allows you to control three (3) features of a PC fan with one switch. Designed for PC fans with Plug-&-Play grille and control options installed.

Radiation Damper (PCRD)

- 3-hour rating ceiling radiation dampers
- UL Listed Link (165ºF Standard)
- UL Approved flexible fire blanket
- Ceramic fiber with fiberglass cover
- Roll-formed frame 22 g. galvanized steel

Metal Grille (PCMG)

- Ideal for commercial applications

Duct Collar CHOICES

4" duct collar: PCDC4
6"duct collar: PCDC6

PC CHOICE Compatibility

Option	PC Model				
	PC50	PC80	PC110	PC150	PCD110M
PCLK		✓	✓	✓	
PCMK		✓	✓	✓	
PCHS	✓	✓	✓	✓	
PCSC	✓	✓	✓	✓	
PC3S	✓	✓	✓	✓	✓
PCRD		✓	✓	✓	
PCMG		✓	✓	✓	

**PCLK
Lighted Grille Kit**

**PCMK
Motion Sensing
Grille Kit**

**PCSC
Speed Control**

**PCHS
Humidity
Sensor**

**PC3S
Three Switch
Control**

**PCRD
Radiation Damper**

**PCMG
Metal Grille**

Premium *CHOICE* Contractor Packs

For simple installation, the PC80 and PC110 are available as 4 packs with the fan housings ready for installation first, then after the drywall and painting are complete the motor and grilles are available to finish the job. The housing kit includes the housing and hanger bars. The motor and grille kit includes the motor plate, motor, wheel and grille.

Contractor packs can be ordered with the PCLK Lighted Kits to make a lighted fan pack or PCMK Motion Sensing Kits to make a motion sensing fan pack (order 4 grille packs with the Motor & Grille pack).

Housing Pack

Motor & Grille Pack

Pack Part #	Description (4 Packs)
PCH	PC80 & PC110 Contractor Pack Housings
PC80F	PC80 Contractor Pack Motor and Grille
PC110F	PC110 Contractor Pack Motor and Grille

Local Exhaust Requirement

A local mechanical exhaust system shall be installed in each kitchen and bathroom:

- Kitchens: 100 CFM intermittent or 5 ACH continuous (based on kitchen volume)
- Bathrooms: 50 CFM intermittent or 20 CFM continuous

Use a PC Premium Choice Bath Fan in each bathroom to meet the ASHRAE 62.2 Local Exhaust Requirement. Please note each bathroom fan counts towards meeting the ASHRAE 62.2 Whole Building Requirement.

Whole Building Requirement

Required ventilation is based on the size of the house and number of expected occupants. Use the chart below to determine the best PC fan to meet the Whole Building Requirement.

Floor Area (sq. ft.)	Number of Bedrooms				
	0-1	2-3	4-5	6-7	>7
	CFM Requirements/Recommended PC*				
<1500	30	45	60	75	90
	PC50	PC50	PC80	PC80	PC110
	PCD110M				
1501-3000	45	60	75	90	105
	PC50	PC80	PC80	PC110	PC110
	PCD110M				
3001-4500	60	75	90	105	120
	PC80	PC80	PC110	PC110	PC150
	PCD110M				
4501-6000	75	90	105	120	135
	PC80	PC110	PC110	PC150	PC150
	PCD110M				
6001-7500	90	105	120	135	150
	PC110	PC110	PC150	PC150	PC150
	PCD110M				
>7500	105	120	135	150	165
	PC110	PC150	PC150	PC150	PC150
	PCD110M				

*PC recommended based on performance at .1 in. WG.

ASHRAE 62.2
Control *CHOICES*

FT622 - ASHRAE 62.2 Bath Fan Ventilation Control

The FT622 is designed to replace bathroom fan and light switches and provide both functions with one easy operation. By using a microprocessor to monitor and control operation, the FT622 delivers a precise amount of ventilation, and is a simple solution to meet ASHRAE 62.2 in conjunction with a S&P fan.

There are only two settings on the FT622: VENTILATION and DELAY. The VENTILATION setting allows the user to set the number of minutes per hour the fan should run. The DELAY setting allows the user to set the number of minutes the fan should run after the bathroom light has been turned off. The DELAY setting provides additional run time for the fan to complete the remaining necessary ventilation after use.

Features
- Programmable DELAY and VENTILATION settings
- Excess manual and/or delay operation is subtracted from the next hour's programmed ventilation time
- Works with ALL incandescent, CFL, fluorescent and LED lights up to 450 watts
- Earn LEED and ENERGY STAR points for enhanced exhaust ventilation

FT247 - Programmable Fan Timer

S&P offers the FT247 with easy programming for your bathroom fan ventilation needs. Simply set what time you want the fan to turn on and off and what day or days you want the fan to run.

Features

- Provides 7 ON and 7 OFF events per day LCD display
- Rechargeable battery back-up
- Push button activation
- **Note:** Do not use with fluorescent lamp ballasts

TD-MIXVENT
Bathroom Exhaust Kits

If the strongest, quietest, bathroom exhaust system is what you seek… look no further. S&P offers the perfect solution with the most options. The TD-MIXVENT fan kits provide all the hardware needed to complete a simple in-line ducted ventilation installation. The kit includes a powerful TD in-line fan and exterior and interior grilles (with or without lights). Available in both Standard Exhaust Kits, for venting a single location, and Deluxe Exhaust Kits, for venting multiple locations with one fan.

The TD-MIXVENT fan kit is the ideal solution for any simple in-line ducted fan installation.

All TD kits have standard 7-year warranty.

TD-MIXVENT
Bathroom Exhaust Kits

Standard Exhaust Kits

KIT-TD100
- 1 TD100 exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD100x
- 1 TD100x exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD150
- 1 TD150 exhaust fan
- 1 plastic round grille (PG-150)
- 1 exterior louvered grille (PER-150W)
- Integral mounting bracket

Deluxe Exhaust Kits

KIT-TD150-DV
- 1 TD150 exhaust fan
- 2 plastic round grilles (PG-150)
- 1 exterior louvered grille (PER-150W)
- 1 Y-fitting (SY-6)
- Integral mounting bracket

TD-MIXVENT Bathroom Exhaust Kits

Lighted Standard Exhaust Kits

KIT-TD100XL
- 1 TD100x exhaust fan
- 1 Vent Light with LED Bulb (VLED-100)
- Integral mounting bracket

KIT-TD100XH
- 1 TD100x exhaust fan
- 1 Vent Light with Halogen Bulb (VLH-100)
- Integral mounting bracket

KIT-TD100XF
- 1 TD100x exhaust fan
- 1 Vent Light with Fluorescent Bulb (VLF-100)
- Integral mounting bracket

Lighted Deluxe Exhaust Kits

KIT-TD150L
- 1 TD150 exhaust fan
- 2 Vent Lights with LED Bulb (VLED-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150H
- 1 TD150 exhaust fan
- 2 Vent Lights with Halogen Bulb (VLH-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150F
- 1 TD150 exhaust fan
- 2 Vent Lights with Fluorescent Bulb (VLF-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

PV-POWERVENT
Bathroom Exhaust Kits

S&P PV-POWERVENT Series fans are also available as easy-to-install kits. This ultra powerful bathroom fan offers a choice of single or dual vent exhaust. These kits are used for installations that require long or complicated duct runs.

All PV kits have standard 8-year warranty.

Standard Exhaust Kits

*PV 150x and larger are ENERGY STAR® qualified.

KIT-PV100
- 1 PV100 exhaust fan
- 1 plastic round grille (PG-100)
- Mounting bracket

KIT-PV100x
- 1 PV100x exhaust fan
- 1 plastic round grille (PG-100)
- Mounting bracket

KIT-PV150
- 1 PV150 exhaust fan
- 1 plastic round grille (PG-150)
- Mounting Bracket

PV-POWERVENT
Bathroom Exhaust Kits

PV Deluxe Exhaust Kits

*PV 150x and larger are ENERGY STAR® qualified.

KIT-PV100x-DV
- 1 PV100x exhaust fan
- 2 plastic round grilles (PG-100)
- 1 Y-fitting (SY-4)
- Mounting Bracket

KIT-PV150-DV
- 1 PV150 exhaust fan
- 2 plastic round grilles (PG-150)
- 1 Y-fitting (SY-6)
- Mounting Bracket

KIT-PV200-DV
- 1 PV200 exhaust fan
- 2 plastic round grilles (BOR-200)
- 1 Y-fitting (SY-8)
- Mounting Bracket

Also Available from S&P

TD-SILENT Fans

As the name suggests these fans are extremely quiet, low profile "Mixed-flow" fans. Manufactured in plastic material with an external connection box, the body is easily dismantled with a two speed controllable 115V 60Hz motor. Sound waves are directed through the perforated inner skin and absorbed by a layer of sound-absorbent insulation. Plus the TD-SILENT is fitted with rubber gaskets on the inlet and outlet to absorb vibrations.

PV-100XPS - Clothes Dryer Boosting

If you have a dryer with long or complicated duct runs, S&P offers the perfect solution to increase dryer efficiency: the PV100x Dryer Booster Fan. The PV-100x offers a fully enclosed motor with *Class F insulation* which ensures a long, trouble free life; thus making it the right choice for enhancing the performance of your clothes dryer.

S&P's PV-100XPS utilizes a compact pressure sensor and run timer enclosed within the junction box and mounted to the fan housing. The pressure sensor is also available as an accessory.