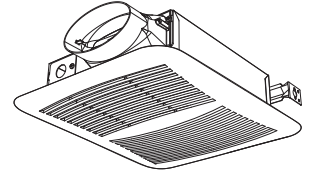


MODEL: AES50 AES80 AES100



WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a). Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b). Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switching on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- c). Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- d). Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- e). When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- f). Ducted fans must always be vented to the outdoors.
- g). Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit (ceiling installation only).
- h). This unit must be grounded.
- i). Not for Use in Kitchens.
- j). To reduce risk of fire and to properly exhaust air, be sure to duct air outside – Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.
- k). The fan must not be installed in a ceiling thermally insulated to a value greater than R40.

CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up.
3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
4. Please read specification label on product for further information and requirements.

CLEANING & MAINTENANCE

For quiet and efficient operation, long life, and attractive appearance - lower or remove grille and vacuum interior of unit with the dust brush attachment.

The motor is permanently lubricated and never needs oiling. If the motor bearings are making excessive or unusual noises, replace the motor with the exact service motor. The impeller should also be replaced.

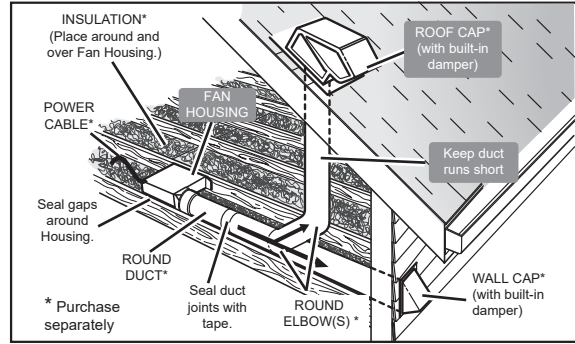
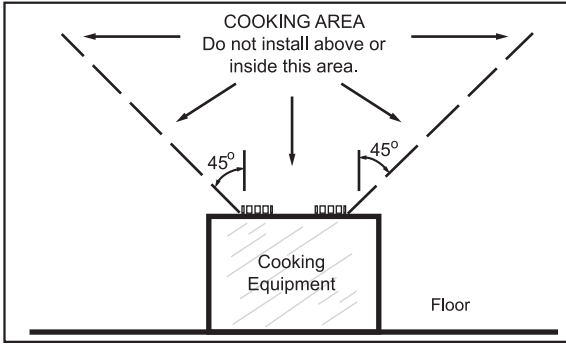
OPERATION

Use an on/off switch to operate this fan. See "CONNECT ELECTRICAL WIRING" for details.

READ AND SAVE THESE INSTRUCTIONS
Installer: Leave this manual with the homeowner.

PLAN THE INSTALLATION

1. Do not use in a cooking area.
2. Two ways to connect ductwork to a factory-shipped unit.

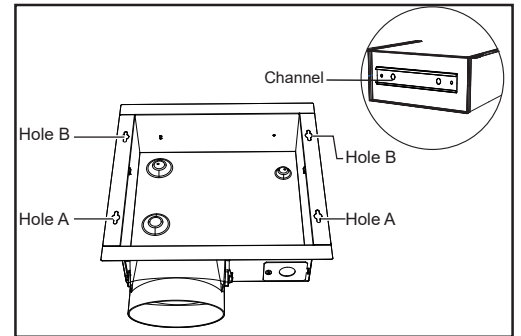


ASSEMBLY INSTRUCTIONS

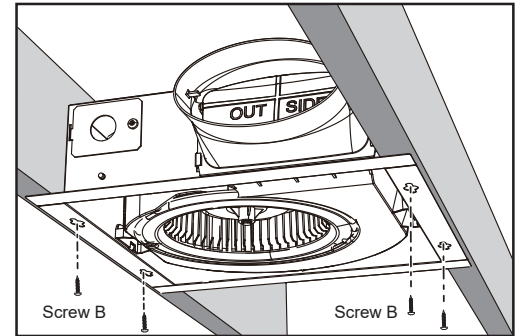
1. Before installation, you need to know:

Screw A		ST4.2*13mm
Screw B		ST4.2*25mm
Hanger bar		13 3/8 in. (340mm)

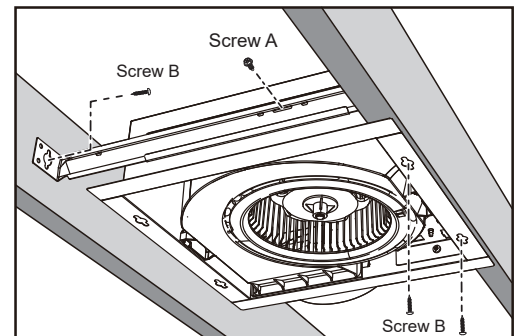
When installing contractor packs, make sure to install any optional modules such as speed controls or humidity sensors with the fan housing to ensure wiring is completed properly. Module and grille plugs come packaged with the optional accessory and must be installed with the fan housing.



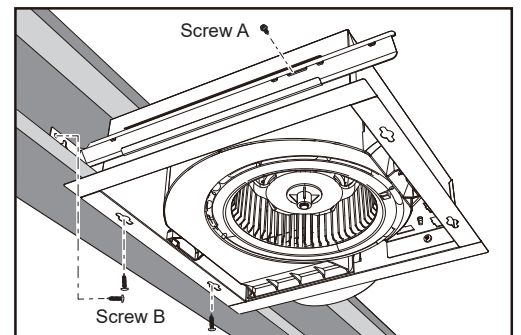
2. Mount with mounting holes
Hold housing in place so that the housing contacts the bottom of the joist, Screw housing to joist through the hole A and hole B.



3. Mount with mounting holes
Slide one hanger bar into the channel on the housing and adjust as needed to fit between framing. Hold housing in place so that the housing contacts the bottom of the joist, Screw housing to joist through the hole A and hole B. Screw the hanger bar onto the other side of joist through its hole. Screw hanger bar to housing with screw A.



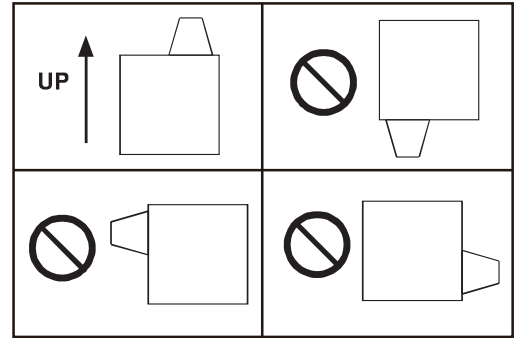
4. Mount to I-joist
Slide hanger bar into the channel on the housing and adjust as needed to fit I-joist. Hold housing in place so that the housing contacts the bottom of joist. Screw housing to joist through the hole A and hole B. Screw the hanger bar onto the joist through its hole. Screw hanger bar to housing with screw A.



ASSEMBLY INSTRUCTIONS

5. Wall installation

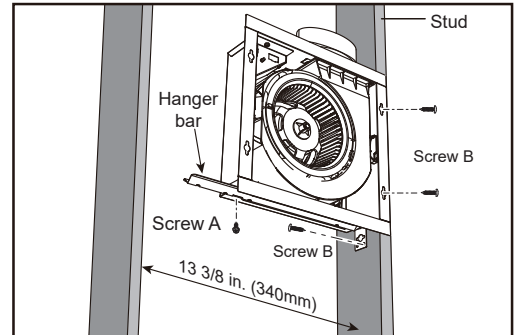
5a. When the product is installed on the wall, the adaptor shall be faced upward.



5b. Slide hanger bar into the channel on the housing. Hold housing in place so that the housing contacts the bottom of stud. Screw housing to stud through the hole A and hole B on the same side. Screw the hanger bar onto the stud through its hole.

Screw hanger bar to housing with screw A.

The minimum installation distance between studs is 13 3/8 in. (340mm)

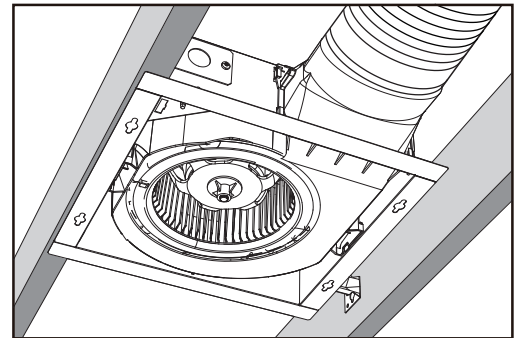


6. INSTALL ROUND DUCTWORK

Connect the round ductwork (not included) to the damper/duct connector, and run the ductwork to a roof or wall cap (not included).

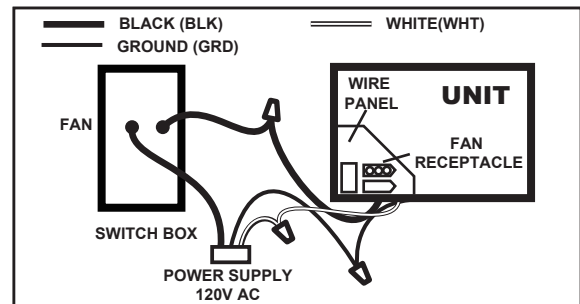
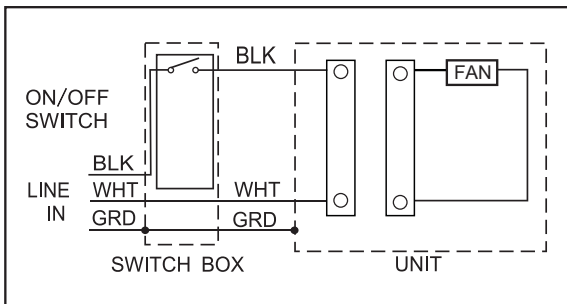
Using tape (not included), secure all the ductwork connections so that they are air tight.

The ducting from this fan to the outside of building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.



CONNECT ELECTRICAL WIRING

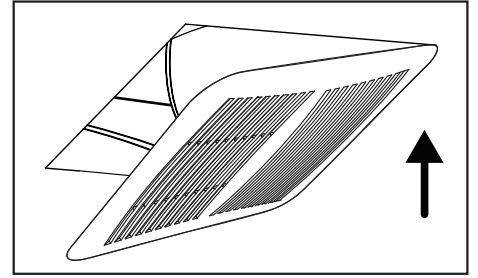
Run 120V AC house wiring to the location of the fan. Use only UL-approved connectors (not included) to attach the house wiring to the wiring plate. Refer to the wiring diagram, and connect the wires as shown.



INSTALL GRILLE

Install ceiling material to complete the ceiling construction. Then, cut around the fan housing.

To attach the grille assembly to the fan housing, pinch the grille springs on the sides of the grille assembly, and position the grille into the housing with the grille springs in the appropriate slots. Push the grille assembly towards the ceiling to secure.



SERVICE PARTS

PART	PART NAME	Qty.
1	Grille Assembly (includes part 2)	1
2	Grille Spring	2
3	Blower	1
4	Blower Wheel	1
5	Motor	1
6	Motor plate	1
7	Wire Panel / Harness Assembly	1
8	Housing	1
9	Wiring plate	1
10	Damper / Duct Connector	1
11	Hanger Bar	1
a	Screw	3
b	Screw	3
c	Screw	3
d	Screw	1
e	Screw	1
f	Screw	1

* Blower Assembly includes part 3, 4, 5, 6, a, b, c.

WARNING: Before replacing, be sure to turn off power at power source.

