



# INSTALLATION INSTRUCTIONS

## Models BFQ90, BFQ110, BFQ140 & BFQ175 Bathroom Fan

If you discover any missing components or damage call 1-800-465-7300 between 8:00 am and 3:30 pm eastern time Monday to Friday. Read and save these instructions.

### IMPORTANT SAFEGUARDS

- **WARNING:** Disconnect the power before beginning this installation.
- **WARNING:** To reduce the risk of fire or electric shock or injury to persons observe the following:
  - Do not use this fan with any solid-state speed control device.
  - Use this unit only in the manner intended by the manufacturer.
  - Before servicing or cleaning the unit, switch power off at the service panel. To prevent power from being switched on accidentally when the service disconnecting means cannot be locked securely, fasten a prominent warning device, such as a tag to the service panel.
  - Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
  - When cutting or drilling into wall or ceiling, do not damage electrical wiring or other hidden utilities.
  - Ducted fans must always be vented to the outdoors.
  - Do not install this fan in a ceiling thermally insulated to a value greater than R-40.
- **WARNING:** Do not use in kitchens.
- **WARNING:** Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guidelines and safety standards such as those published by National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and local code authorities.
- **CAUTION:** For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
  - Acceptable for use over tub or shower when installed in a GFCI protected branch circuit.
  - Never place a switch where it can be reached from the tub or shower.

BFQ series bathroom fans come complete with a metal 'snap-in' mounting bracket. On the side of this bracket is a drywall gauge (fig. 1) to allow for fan height adjustment through different ceiling drywall thickness.

### Mounting the Housing: New Construction

Select the desired location to mount the fan.

1. Line up the bracket on the joist so that the bottom of the fan will be flush with the finished ceiling. Nail or screw the snap-in bracket in place securely as shown in fig. 1.
2. On the fan body remove the wire compartment cover and select the desired electrical knockout and remove it. Install an approved 1 1/2" electrical connector in the knockout.
3. Snap the fan body into the snap-in bracket as shown in fig. 2. The fan can be ducted either left or right – whichever is most convenient.



### Mounting the Housing: Existing Construction

Select the desired location to mount the fan.

1. Drill a small hole through the ceiling at the chosen location. Stick the end of a coat hanger through the hole into the attic to help locate the spot in the attic.

2. Check the chosen area from above to make sure that the wiring and ducting can be installed and that the installation will not interfere with any existing wiring. Remove the electrical compartment cover and remove the desired electrical knockout. Install an approved 1 1/2" electrical connector in the knockout.



Fig. 2

3. From above, position the housing next to the joist and use the housing as a template to mark the required cut out in the ceiling.
4. After making the cut out for the fan, you will have to install the snap-in bracket from below. Line the bracket up so that the fan will be flush with the finished ceiling. Nail or screw the bracket to the joist securely as shown in fig. 1.
5. Snap the fan body into the snap-in bracket as shown in fig. 2. The fan can be ducted either left or right – whichever is most convenient.

### Ducting

When installing the ducting always try to ensure that there is a downward slope away from the fan to ensure that there is no condensation run back. It is recommended that you use insulated ducting.

**NOTE:** All ducting must comply with local building codes.

1. Connect the correct ducting to the fan as shown in fig. 3. (BFQ model fans come complete from the factory with a 4" duct collar.) Secure in place using duct tape or a screw clamp. Always duct these fans to the outside through the wall or roof cap. To ensure maximum delivery keep the length of duct and number of elbows to a minimum.

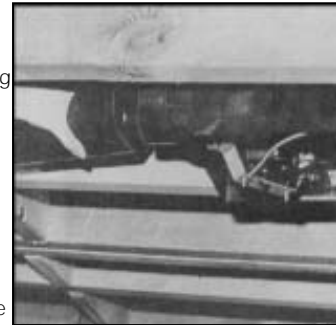


Fig. 3

### Electrical Wiring

**CAUTION:** Make sure the power is switched off before making this installation.

**NOTE:** All wiring must comply with local and national codes. You must ground this unit.

1. Run wiring from a wall switch (not provided) to the housing electrical compartment, 1 neutral (white), 1 ground (green or bare copper wire), and 1 hot (black lead connected to the switch). Secure the electrical wire to the housing with an approved electrical connector (make sure you leave enough wiring in the box to make the connection to the fan's receptacle).
2. Make the connection to the fan's green ground screw first (use approved electrical conductors).
3. Connect the white wire from the house to the white wire of the fan's receptacle. Connect the one black wire from the fan switch to the black wire of the fan's receptacle (use approved electrical conductors). Replace the fan's wire compartment cover.

### Completing the Installation

1. After you have installed the housing in the ceiling, run ducting from the unit to the outside and have made all the necessary electrical connections you can install the fan's motor plug into the fan's receptacle. Rotate the blower wheel by hand to ensure it revolves freely.
2. To install the grill, squeeze the two ends of each spring fastener together and insert each into the slots on the venturi. Push the grill up to the ceiling.