

**CFM**<sup>™</sup>  
CONTINENTAL FAN

*better AIRFLOW by DESIGN*<sup>™</sup>

# *Installation & Maintenance*



**CF**  
**BATHROOM EXHAUST FANS**

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

## SAFETY INSTRUCTIONS

**NOTICE** CF bathroom exhaust fans are not explosion proof and should not be used when a potentially explosive situation exists.

1. Ensure that the electrical service to the fan is locked in the “OFF” position. Do not re-establish power supply until fan and activation device are completely installed.
2. **CF** bathroom exhaust fans are not suitable for use in cooking areas.
3. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up.
4. This unit has rotating parts! Safety precautions must be exercised during installation, operation and maintenance. Turn centrifugal impeller by hand to make sure it rotates freely.
5. For general ventilation use only. Do not use to exhaust hazardous or explosive materials and vapors.
6. 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 factory.
  - b. A qualified person(s) must perform installation work and electrical wiring in accordance with all applicable codes and standards, including fire-rated construction.
  - c. The combustion airflow needed for safe operation of fuel burning equipment may be affected by this unit’s operation. Follow the heating equipment manufacturer’s guidelines and safety standards as published by the National Fire Protection Association (NFPA), the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), and local code authorities.
  - d. When cutting or drilling into walls or ceilings, take care not to damage electrical wires or other hidden utilities.
  - e. Ducted fans must always be vented to the outdoors when used to exhaust moist/humid air.
7. Check voltage at the fan to see that it corresponds to the motor nameplate.
8. CF Fans are suitable for installation over a shower or tub when installed in a GFCI (Ground Fault Circuit Interrupter) protected branch circuit. This unit must be grounded.

## CF BATHROOM EXHAUST FANS

The delivery set includes:

Box 1 (Housing)

- Housing -1
- Duct connector - 1

Box 2 (Motor/Blower & Grille)

- Motor/blower assembly - 1
- Grille - 1



CF50 & CF70 Bathroom Exhaust Fans

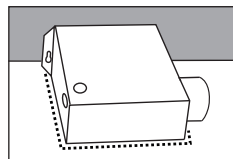
## FAN INSTALLATION

**⚠ WARNING** Disconnect and lock out power supply before performing any installation work. Working on or near energized equipment could result in death or serious injury.

### STEP 1. FAN LOCATION

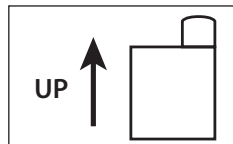
Position the housing assembly against the joist. With a pencil, trace an outline of the housing assembly onto the ceiling. Set the housing aside and cut the opening for the fan.

CF50 can be installed on a wall. If installing on a wall, the outlet end must face up.



### STEP 2. INSTALL HOUSING ASSEMBLY

Place the housing assembly in the opening so the bottom edge is flush with the finished ceiling. Attach the housing assembly to the joist with wood screws (not provided). Please note the housing's bottom edge must be flush with the finished ceiling to ensure the grille fits properly.



### STEP 3. CONNECT DUCT

Rigid duct is recommended to optimize fan performance. If using flex duct, it should be stretched as smooth as possible. Connect duct to the outlet end of the fan housing by means of mounting/gear clamps or duct tape and seal to prevent air leakage and loss of fan performance.

**NOTE:** For duct runs in unheated spaces, insulated duct is recommended to reduce the effects of condensation.

### STEP 4. INSTALL MOTOR/BLOWER ASSEMBLY

With the fan blade pointing away from you, align the electrical connection of the motor assembly with the terminal on the housing. Insert the edge with the two tabs into the two openings on the housing. Once the two tabs are in place, pivot the motor assembly so the single tab inserts into the opening on the opposite side. Use the screw provided to secure the motor plate to the housing by using the hole adjacent to the single tab. If the holes do not align between the motor plate and housing, adjustment may be required.

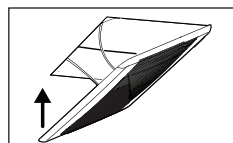
Lastly, insert the wired connector into the terminal on the housing. The connector and terminal are keyed to one another, which insures the proper fit.

### STEP 5. CONNECT WIRING

Refer to wiring diagram. Reattach all electrical box covers before applying power.

### STEP 6. INSTALL GRILLE

Press the springs on the grille together and insert the springs into the motor plate inside the housing assembly. Firmly push the grille up against the ceiling.



## TROUBLESHOOTING

**⚠ WARNING** Only qualified personnel should work on electrical equipment. Working on or near energized equipment could result in death or serious injury.

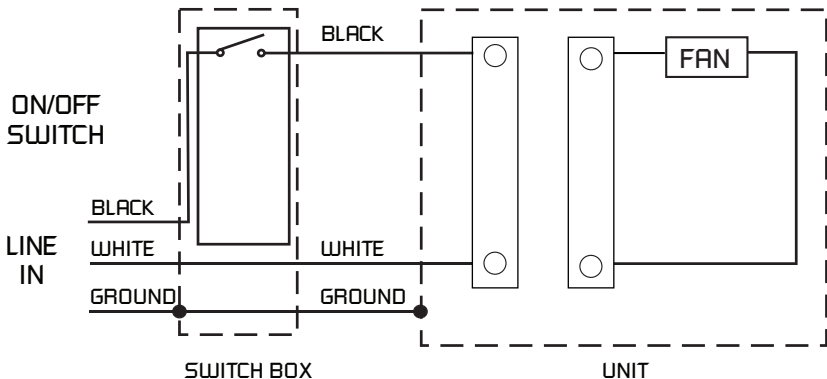
1. If the fan fails to start, consult wiring diagram to ensure proper connection.
2. Check the incoming supply for proper voltage.
3. Ensure that the electrical service to the fan is locked in the "OFF" position.
4. Use a meter to test for continuity across the fan motor leads.
5. If the motor leads show continuity, rewire the fan.
6. Turn on the electrical supply and restart.
7. If the fan fails to start, please contact factory.

## RECOMMENDED MAINTENANCE

**⚠ WARNING** Disconnect and lock out power supply before performing any maintenance. Working on or near energized equipment could result in death or serious injury.

1. Fan bearings are sealed. No additional lubrication is necessary.
2. Periodic inspection, based upon usage, should be performed to ensure that the fan impeller is not obstructed. The fan should be inspected a minimum of every six (6) months.
3. Excessive fan noise or vibration may indicate an obstructed impeller.
4. To inspect and clean impeller:
  - a) Remove the grille from the fan and remove any obstruction from the impeller.
  - b) Vacuum the interior of the unit.
  - c) Reconnect the grille to the fan.
  - d) Turn power supply on.

## WIRING DIAGRAM



CF FANS-I&M-1612