



# INSTALLATION & MAINTENANCE INSTRUCTIONS

## AXC BATHROOM VENTILATION KITS

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



### APPLICABLE KITS:

- RG Kits
- DX Kits
- AGK Kits
- DXAGK Kit

### BEFORE INSTALLATION

#### IMPORTANT NOTICE!

AXC in-line duct 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. **AXC** fans are not suitable for outdoor use.
3. 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.
4. **CAUTION:** For general ventilation use only. Do not use to exhaust hazardous or explosive materials and vapors.
5. **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 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.
6. **WARNING:** Check voltage at the fan to see that it corresponds to the motor nameplate.

### FAN INSTALLATION

#### STEP 1. FAN LOCATION

For optimum performance, the **AXC** in-line duct fan should be mounted near the termination of the duct, close to an outside vent. Sufficient access to the fan should be allowed in order to perform recommended maintenance.

#### STEP 2. INSTALL FAN

Attach mounting brackets to the fan housing. Secure the fan to a support beam at the selected location. The fan may be mounted in any position; however, vertical orientation is recommended to reduce condensation build-up in the fan. The terminal box should be positioned for easy access. Please note the airflow direction arrow located on the box cover.

#### STEP 3. EXHAUST GRILLE LOCATION

Select a location for the exhaust grille that will facilitate the rapid collection and exhaust of bathroom air.

Note: For larger bathrooms, it is recommended that two exhaust grilles be installed: one near the shower area, and one above the toilet. The use of multiple vents in larger bathrooms will allow humidity to be removed more efficiently, thereby preventing 'fogging' on mirrors and windows, and minimizing condensation damage to wallpaper and fixtures. If two grilles are used, both exhaust ducts should be directed into a PVC or sheet metal Y-fitting, resulting in a single duct run to the fan. (A Y-fitting is included in all DX Kits).

#### STEP 4. INSTALL EXHAUST GRILLE

Place the exhaust grille collar in the selected location and trace around the inside of the collar. Cut a circular hole along the traced outline. Mount the collar flange flush with the ceiling and secure by utilizing the holes provided.

**STEP 4. CONTINUED**

Once the collar is securely mounted, snap the grille into place. When using an adjustable grille, desired airflow may be attained by opening or closing the grille as required. (Adjustable grilles are capable of 100% shut off).

**STEP 5. CONNECT DUCT**

Rigid duct is recommended to optimize fan performance, and should be installed in as straight a line as possible. If using flex duct, it should be stretched as smooth as possible. For duct runs in unheated spaces, insulated duct is recommended to reduce the effects of condensation.

Connect duct to the inlet and outlet ends of the fan housing by means of mounting clamps or duct tape. Duct connections must be properly sealed to prevent air leakage and loss of fan performance. To minimize condensation at the exhaust grille, the duct should run horizontally before connecting to the grille collar.

Secure duct to collar by means of the plastic clamp supplied with the collar. Alternately, metal gear clamps or duct/foil tape may be used.

**STEP 6. WIRING PROCEDURE**

Refer to wiring diagram below.

**RECOMMENDED MAINTENANCE**

Fan bearings are sealed. No additional lubrication is necessary. Fan should be inspected and cleaned periodically.

**BACKDRAFT DAMPER**

A spring operated backdraft damper (optional) is recommended to prevent the entry of cold air through the exhaust duct. It should be installed just above the grille collar, and may be mounted at any angle provided the damper blades are allowed to swing freely in the direction of airflow.

**CONTROLS**

**AXC** in-line duct fans are suitable for use with a standard on/off switch. Continental Fan also offers the following controls:

- Digital time control (10-20-30-60 minute)
- Spring wound time control (0-1 hour)
- Dehumidistat
- Variable speed control
- On/Off Switch with pilot light

Note: It is recommended that the fan run for 15-20 minutes after a shower to clear the room of excess humidity and minimize mold and moisture damage.

**AVAILABLE ACCESSORIES**

- Flexible Insulated Duct
- Backdraft Dampers
- Mounting Clamps (for use with rigid duct)
- Duct Reducers/Increasesers
- Y-Fittings
- Controls (see above)

