NuTone

INSTALLATION INSTRUCTIONS **READ & SAVE THESE INSTRUCTIONS!**

In-Line Fans MODELS: ILF120, ILF130, ILF250

IMPORTANT SAFETY INSTRUCTIONS

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 vou have questions, contact the manufacturer.
- B. Before servicing or cleaning unit, switch power off at service panel and lock 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.

• Suitable for use with solid state speed controls.

CAUTION: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

INSTALLATION INSTRUCTIONS

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

- A. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- B. 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 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.
- C. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- D. Ducted fans must always be vented to the outdoors.
- E. **NEVER** place a switch where it can be reached from a tub or shower.

FOR BEST RESULTS

To ensure quiet operation of ENERGY STAR qualified inline fans. each fan shall be installed using sound attenuation techniques appropriate for the installation. For bathroom and general ventilation applications, at least 8 feet of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan.

When installing the Ventilator in a new construction site, install fan and ducting during the rough-in construction of the building. Inlet grille(s) should be installed after the finished ceiling is in place.

To install a ventilator in an existing building requires access to the attic area above the space to be ventilated.

INSTALLATION IN A NEW CONSTRUCTION SITE

MOUNTING

1. Select a mounting site; Identify a mounting location that offers accessibility with minimal duct run. Mount ventilator as far from the inlet grille as practical to minimize noise.



FIGURE 1

- 2. Attach fan mounting bracket to the support joist using the wood screws provided (Refer to Figure 1). For best performance vertical mounting is recommended, however any orientation is acceptable.
- 3. Attach fan to the mounting bracket using the self threading screws provided (Refer to Figure 1). To ease attachment 1/16" pilot holes may be used for the mounting screws.

WIRING

- 1. Run 120v AC house power wiring through switch box to junction box in ventilator housing.
- 2. Remove ventilator junction box cover.
- 3. Refer to Figure 2. Connect the house power wire (black) to the terminal marked L. Connect the house neutral wire (white) to the terminal marked N (see wiring diagram). The fan housing is fully insulated and therefore no grounding is required.
- 4. Replace outlet box cover.
- 5. Connect house power wire to the wall switch.
- NOTE: ALL WIRING MUST COMPLY WITH LOCAL ELECTRICAL CODES.

DUCTING INSTALLATION

- 1. Refer to Figure 3. Attach duct to ventilator inlet and outlet using clamps, fasteners and/or duct tape. Observe the following recommendations for best results:
 - A. Always minimize duct lengths and turns.
 - B. When flexible ducting is used be sure that the duct is fully stretched and free of kinks or sharp bends.
 - C. Use insulated ducting when passing through unconditioned spaces.

D. When insulated ducting is used clamp or tape the inner vinyl core to the inlet and outlet of the fan and tape the vapor barrier surrounding the duct insulation to the fan housing.

E. Always install a damper at the inlet grilles.





The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straighest 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 airflow.

INSTALLATION IN EXISTING CONSTRUCTION

Installing in an existing building requires access to the attic or space above the planned installation.

Carefully examine the installation area to be sure that;

- 1. Ducting can be installed.
- 2. Wiring can be run to the planned location.
- **3.** No wiring or other obstructions might interfere with installation. Install fan and ducting following the instructions in "Installation in a New Construction Site".

CARE AND MAINTENANCE

1. No regular maintenance is required.