IMPORTANT: READ AND SAVE THESE INSTRUCTIONS

DIRECT DRIVE LOW PRESSURE SHUTTER FAN

SAFETY INSTRUCTIONS

Warning: Do not use any solid state control devices with these fans.

Warning: To reduce the risk of fire, electrical shock, or injury to persons observe the following:

- a) Use this unit only in the manner intended by the manufacturer. If you have any questions contact the manufacturer at **1-517-764-2300**.
- b) Before servicing or cleaning the unit, switch off the power at service panel and lock the service disconnecting means to prevent the 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.

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

Caution: This unit has an unguarded impeller. Do not use in locations readily accessible to people or animals. Install fan at least 2.1m (7ft.) Above the floor.

INSTALLATION INSTRUCTIONS

Warning: To reduce the risk of fire, electrical shock, or injury to persons observe the following:

- a) Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-related 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 local code authorities.
- c) When cutting or drilling into a wall, do not damage electrical and other hidden utilities.

Mount fan to wall using holes provided in shutter, being sure it is secured on all four sides with proper screws for attaching to wall surface. Use chart below for proper hole size to fit fan in wall opening.

| Fan Size | Opening Size |
|----------|---------------------|
| 7" | 8 ¾" Sq. |
| 10" | 10 ¾" Sq. |
| 12" | 12 ¾" Sq. |
| 16" | 16 ¾" Sq. |
| 18" | 18 ¾" Sq. |
| 20" | 20 ¾" Sq. |
| 24" | 24 ¾" Sq. |
| 30" | 30 ¾" Sq. |

NOTE: Fan to be mounted with conduit box down and shutter pivot pins up. Allowing shutter to close by gravity.

Fan to be permanently connected to 115 volt supply. Using 3/8" Greenfield cable and Greenfield connector.

The fan shall have an approved disconnect per NEC 430-106 and shall comply with NEC 430-109 and 430-110. It is recommended that an on-off switch be located at the unit to comply with the above requirements.

Further, the unit shall be grounded per NEC 250-42. Refer to motor nameplate for proper wiring connectors.

MAINTENANCE

Motors are permanently lubricated and require no re-oiling.

The fan unit may require periodic cleaning due to dust and foreign matter buildup. The fan should be checked on a yearly basis and cleaned if necessary.

NOTE: Before any cleaning, be sure power is off to unit per safety instructions section of the manual.