



# Industrial Exhaust Fans Installation Instructions

**Model Numbers:**  
IF14, IF18, IF24, IF30 and IF36

**READ ALL WARNINGS AND INSTRUCTIONS BEFORE BEGINNING TO INSTALL THIS UNIT.**

**WARNING: FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.**

1. Before servicing or cleaning this unit, switch power off at the service panel and lock out to prevent power from being switched on accidentally. When service disconnecting means cannot be locked, securely fasten a prominent warning tag to the service panel.
2. Installation work and electrical wiring must be performed by a qualified person in accordance with the applicable codes and standards, including fire-related construction.
3. When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.
4. 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 guideline and safety standards such as those published by the National Fire and Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), and the local code authorities.

## CAUTION

1. This unit has an unguarded impeller. Do not use in locations readily accessible to people or animals.
2. Mount with the lowest moving parts at least 8-feet above floor level.
3. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
4. Carbon monoxide is an odorless, colorless gas that can kill. It may be drawn into the house by operating this fan if your fuel-burning equipment is not properly maintained, or if you lack the adequate attic intake vents.

## SAFETY



This safety alert symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER**

Danger indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



**WARNING**

Warning indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



**CAUTION**

Caution indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

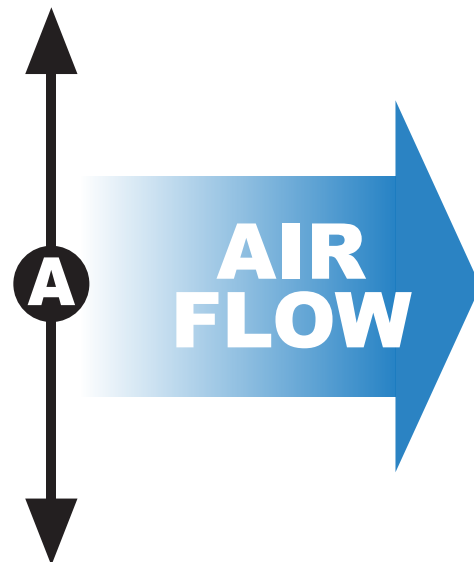
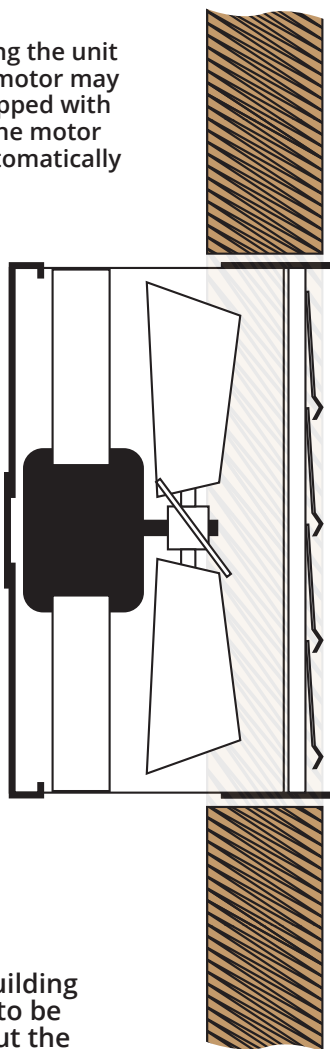
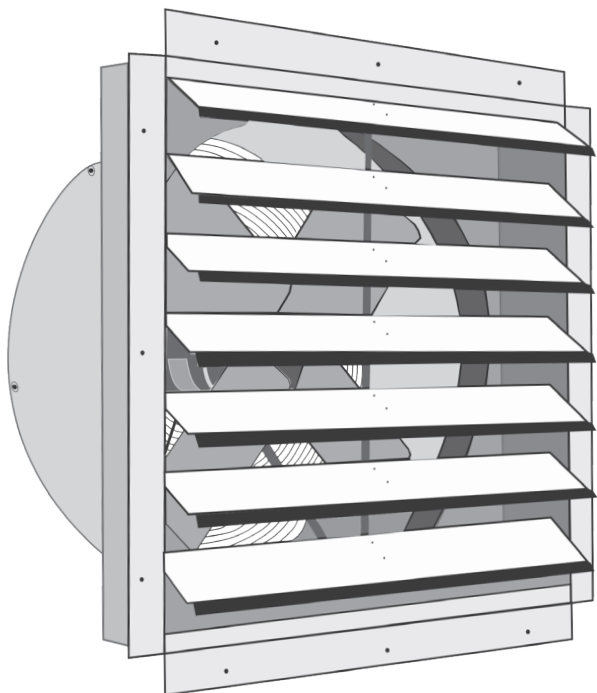


**ELECTRICAL SHOCK**

Used to indicate an electrical shock or electrocution hazard.

**WARNING****WARNING:**

Turn off all power to fan before cleaning the unit or performing any maintenance. The motor may start automatically. The motor is equipped with an automatic overload protection. If the motor overheats and stops, it will re-start automatically when it cools.

**LOCATION OF FANS:**

The fan should be located in the side or end of the building away from prevailing winds. If more than one fan is to be installed, the fans should be placed evenly throughout the building so that a balanced flow of air is established.

**CAUTION****AIR INTAKES:**

Adequate air intake (Net Free Area\*) is required for proper operation of this fan. Air intakes should be sufficient to allow as much air to enter the building as the fan exhausts (see NFZ Required for each model on the chart below).

*\*Net Free Area (NFA) is a measurement of the unobstructed area through which air can pass freely. Adequate air intake is essential for the fan to operate properly.*

**SPECIFICATIONS SUMMARY**

MODEL	SIZE	VOLTS	AMPS	CFM	NFA (INTAKE) REQUIRED	ROUGH OPENING
IF14	14"	120	2.65	1400	4.5 sq ft	17 1/4 x 17 1/4
IF18	18"	120	5.34	3000	10 sq ft	20 3/4 x 20 3/4
IF24	24"	120	4.35	4100	13.5 sq ft	28 1/4 x 28 1/4
IF30	30"	120	6.3	5500	18 sq ft	34 1/4 x 34 1/4
IF36	36"	120	5.15	9000	30 sq ft	40 1/4 x 40 1/4

**A**

*Due to our continuing program of product improvement, specifications may change without notice.*

# INSTALLATION INSTRUCTIONS

## LOCATION

1. Locate suitable location along wall away from prevailing winds. If multiple units are to be installed, units should be spaced evenly throughout the building to provide balanced airflow.
2. Remove any insulation or nonstructural material from location.

## CUTTING

3. Using chart on previous page, determine required rough opening (RO) dimension (A) and remove wall studs as needed. (Fig. 1 & 2)
4. After studs are removed, cut appropriate sized RO in outer wall. RO should be centered between remaining studs and positioned so that lowest point of the RO will be at least 8ft above floor level where possible.

## FRAMING

5. Using conventional framing methods in accordance with local building requirements and codes, build a frame around the RO to support the unit and maintain structural integrity of the wall as needed. (Fig. 3)

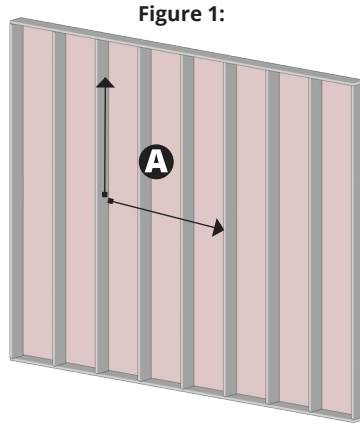


Figure 1:

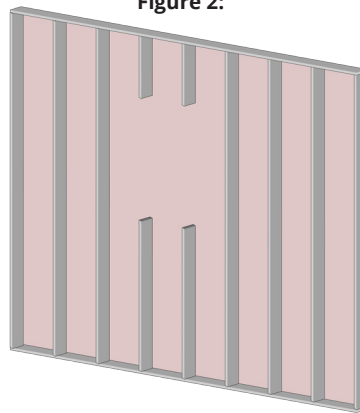


Figure 2:

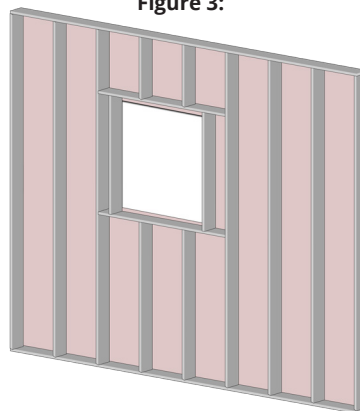


Figure 3:

## SHEATHING (Optional)

6. Cover the inside opening with plywood sheathing cut to the appropriate dimensions as needed.
7. Cut a circular hole in the plywood sheathing to accept the shroud of the unit being installed. (Fig. 4)

Refer to this chart for the minimum dimension (B):

UNIT	Shroud Clearance
IF14	15-9/16"
IF18	19-3/4"
IF24	25-5/8"
IF30	31-3/4"
IF36	37-3/4"

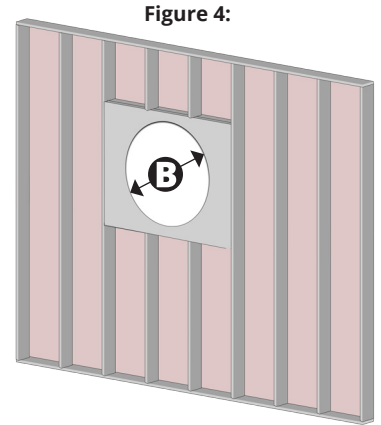


Figure 4:

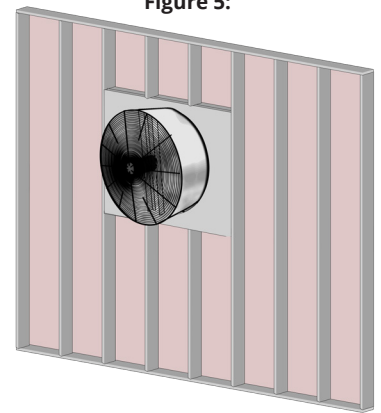


Figure 5:

## POSITIONING

8. Use shims as needed to center unit in cut outs. (Fig. 5)
9. When satisfied with unit position, attach unit to outer wall framing using screws as needed. (Fig. 6)

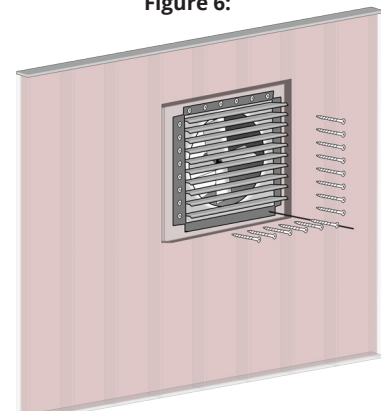


Figure 6:

## SEALING (Optional)

10. Air gaps between the installed unit and inside or outside RO may be covered by additional framing, flashing or weather stripping as desired.

Air gaps will not hinder unit performance.



## WARNING

## WIRING

Refer to wiring diagrams at right to wire in the unit to an appropriate power supply.

Diagram 1 - Without Thermostat

Diagram 2 - With Thermostat

Diagram 1:

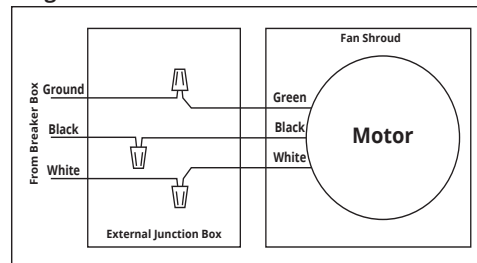


Diagram 2:

