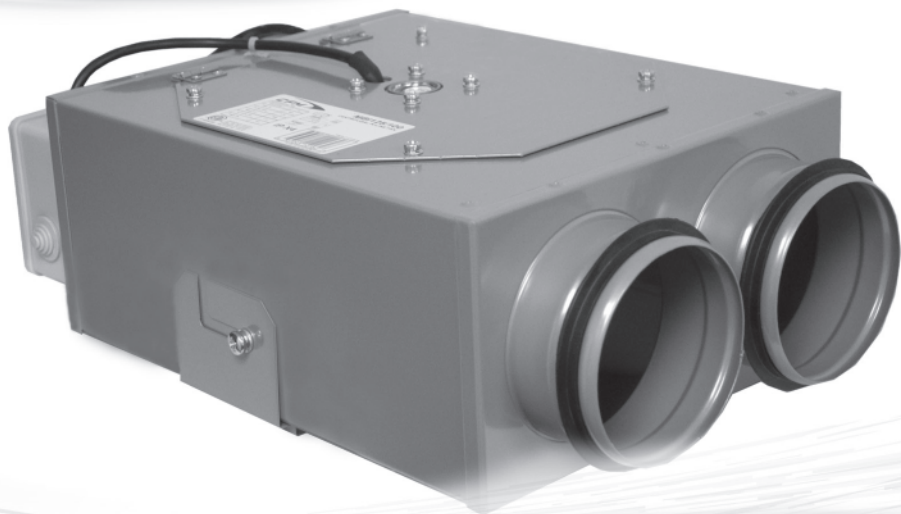




better AIRFLOW by DESIGN™

Installation & Maintenance



MBI
CENTRIFUGAL IN-LINE FANS

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

SAFETY INSTRUCTIONS

NOTICE MBI centrifugal in-line fans are not explosion proof and should not be used when a potentially explosive situation exists. Do not use where temperatures will exceed 140 F/60 C.

WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, INJURY TO PERSONS, PLEASE READ THESE INSTRUCTIONS CAREFULLY

1. Before servicing or cleaning the unit, ensure that the electrical service to the fan is locked in the "OFF" position 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. Do not re-establish power supply until the fan has been completely installed.
2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the factory.
3. A qualified person(s) must perform installation work and electrical wiring in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
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 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 the local code authorities.
5. When cutting or drilling into walls or ceilings, take care not to damage electrical wires and other hidden utilities.
6. When used to exhaust moist / humid air, fans must always be vented to the outdoors.
7. This unit may have sharp edges. Use caution to avoid injury when installing and cleaning.
8. The fan is intended to be hard wired to a properly rated electrical circuit, and must be properly grounded. Do not use an extension cord.

CAUTION

1. For general ventilating use only. For use in non-fire installations only. Do not use to exhaust hazardous or explosive materials and vapors.
2. For interior use only. Mount with the lowest moving parts at least 8 feet (2.5 meters) above the floor or grade level.
3. To avoid motor damage and noisy and/or unbalanced impeller, keep the fan clean from dry-wall spray, construction dust, etc.
4. Before installing the unit, check for any visible damage to the impeller and housing. The housing internals must be free of debris, which can damage the impeller blades.
5. Please read the specification label on product for further information and requirements.
6. Not for installation by any person that is unable to follow these safety guidelines.
7. Connect through switch built into fixed wiring. The gap between the breaker contacts on all poles must be no less than 1/8".
8. To ensure optimal airflow, do not close or block the unit inlet or outlet. Do not sit or put objects on the unit.
9. Store the fan in manufacturer's packaging in a ventilated room at temperatures between 41F and 104F. Relative humidity should not exceed 80%.

MBI CENTRIFUGAL IN-LINE FANS

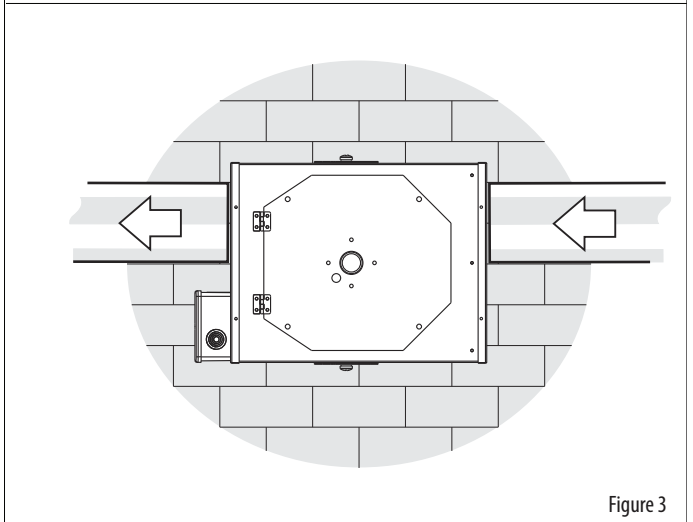
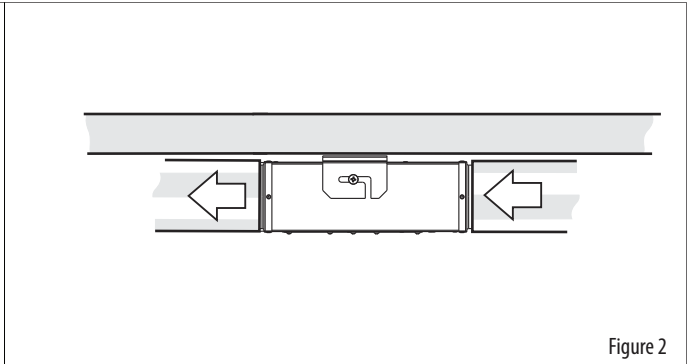
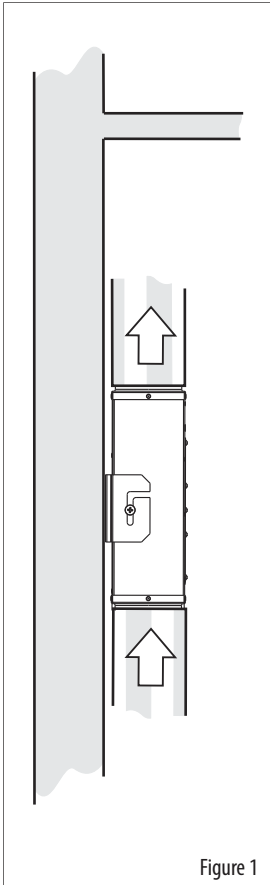
MBI in-line centrifugal fans are enclosed in a metal case designed for mounting in round ventilation ducts. The delivery set includes:

- Fan -1
- Screws with dowels – 4

Depending on model, fan is compatible with 4" (100 mm), 5" (125 mm), or 6" (150 mm) diameter duct.

TYPICAL FAN INSTALLATION

Fans may be wall or ceiling mounted (Figure 1-3) and are designed for intake or exhaust ventilation in residential, public or industrial premises. Fans are also applicable for multistory buildings where they can be connected to variable air volume (air change, ventilation) systems.



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.

Fan mounting with the use of a bracket, four screws, and dowels is shown in Figures 4-8.

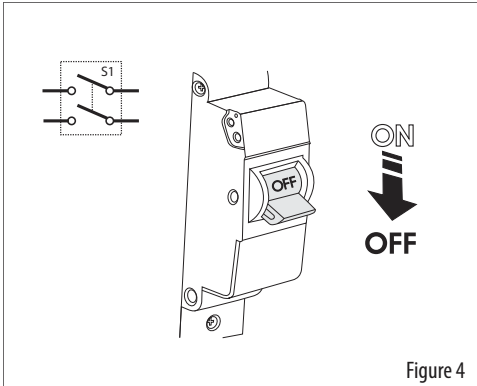


Figure 4

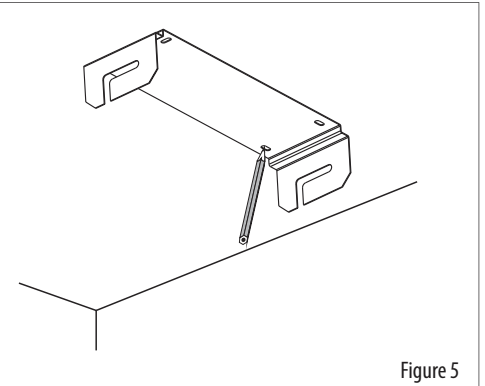


Figure 5

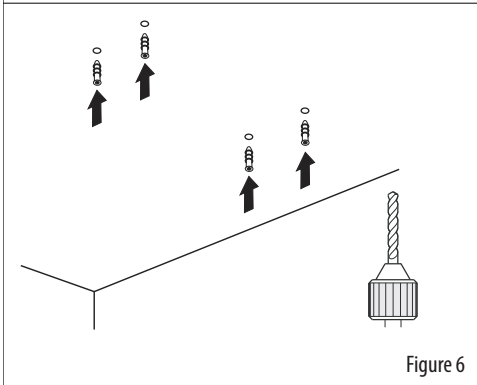


Figure 6

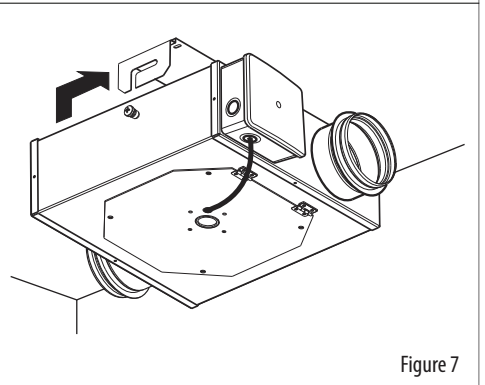


Figure 7

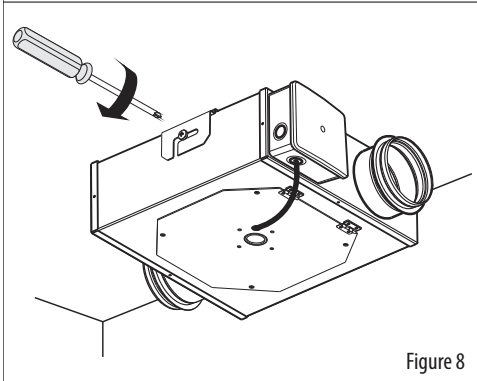


Figure 8

FAN INSTALLATION

Duct attachment is shown in Figures 9-12. The airflow direction should match that indicated on the fan housing.

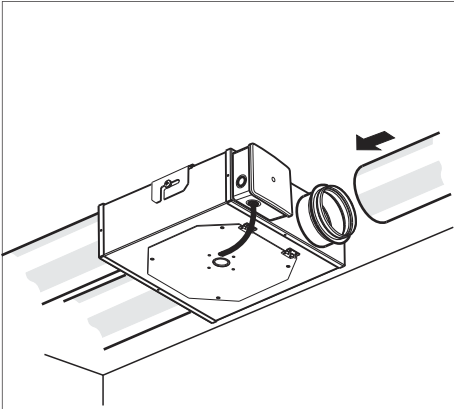


Figure 9

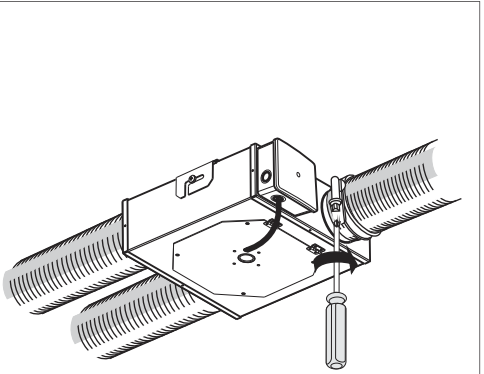


Figure 10

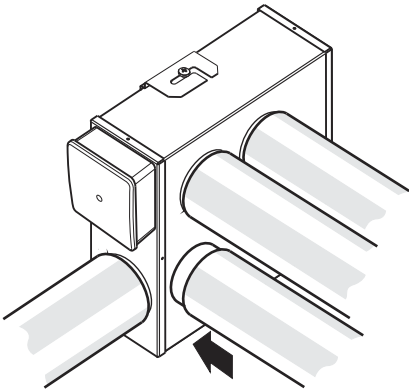


Figure 11

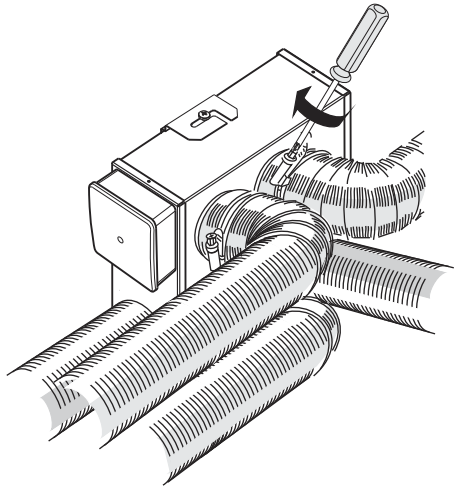


Figure 12

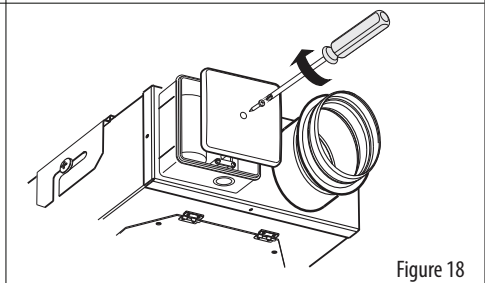
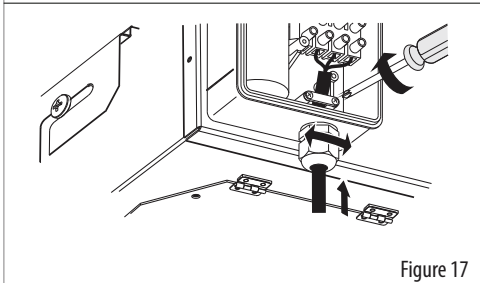
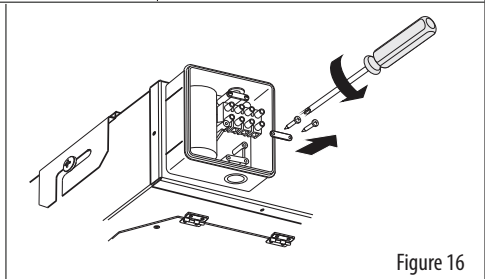
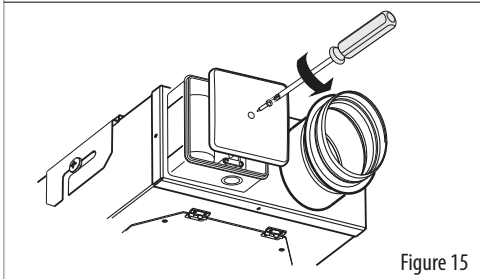
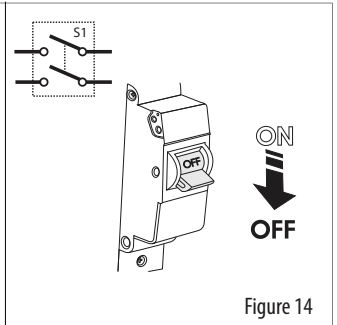
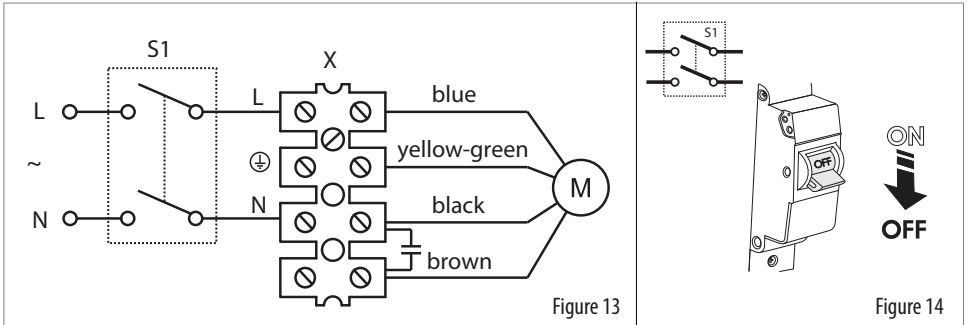
WIRING DIAGRAMS

The wiring diagram for MBI models is show in Figure 13.

⚠ WARNING Make sure to disconnect the fan from the power mains prior to installation. (Figure 14) The input voltage is 120V AC 60Hz. When connecting the fan to power, it is necessary to:

1. Remove the cover from the terminal box. (Figure 15)
2. Remove the clamping bar. (Figure 16)
3. Lay out the cables through the terminal box lug, remove the insulation from the cables ends for 1/4 of an inch (6-7mm) length, connect them to proper terminals and fix with screws. (Figure 17)
4. Replace the clamping bar, tighten the lug and install the cover on the terminal box. (Figure 18)

Fans are designed for continuous operation. Protection rating from access to dangerous parts and water penetration is IPX4. Fans can be operated at ambient temperatures between -13F and 140F.



RECOMMENDED MAINTENANCE

⚠ WARNING Make sure to disconnect the fan from the power mains prior to any cleaning. Proper maintenance (Figures 19-22) includes periodic cleaning of the fan surfaces from dirt and dust. Do not allow liquids to come in contact with the electric motor. Wipe surfaces dry after cleaning.

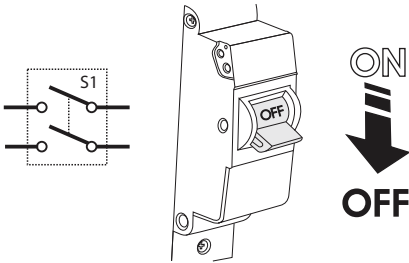


Figure 19

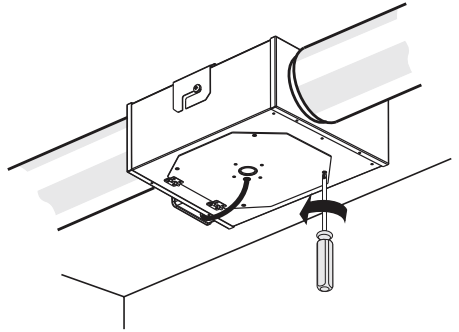


Figure 20

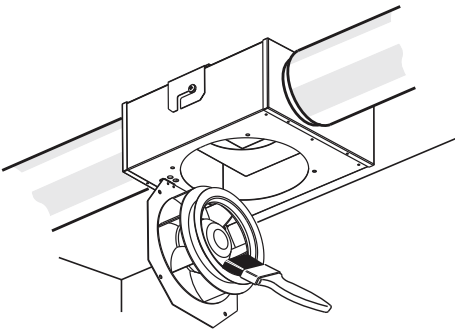


Figure 21

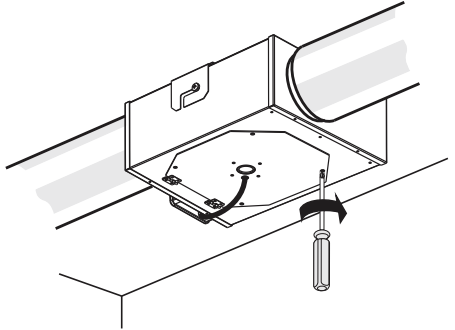


Figure 22

ACCEPTANCE CERTIFICATE

The MBI fan has been duly certified as serviceable.

MBI100

MBI125

MBI150

MBI125/100

MBI150/125

Manufactured on (date): _____

Date of sale: _____

Sold by: _____

(name of trading enterprise, stamp of store)

CONNECTION CERTIFICATE

Company name: _____

Electrician name: _____

Date: _____ Signature: _____

Due to constant product improvements, some models may differ slightly from those portrayed in this manual.

MBI-H&M-1705



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