



*better AIRFLOW by DESIGN™*

## ***Installation & Maintenance***



***TF TRANQUIL BATHROOM FANS  
LOW PROFILE***

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

## SAFETY INSTRUCTIONS

**NOTICE** TF low profile 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. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
2. TF fans are not suitable for use in cooking areas.
3. This unit has rotating parts! Safety precautions must be exercised during installation, operation and maintenance. Turn impeller by hand to make sure it rotates freely.
4. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
5. For general ventilation use only. Do not use to exhaust hazardous or explosive materials and vapors.
6. 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. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. 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.
7. Check voltage at the fan to see that it corresponds to the motor nameplate.
8. TF fans are suitable for installation over a shower or tub when installed in a GFCI (Ground Fault Circuit Interrupter) protected branch circuit (ceiling installation only). This unit must be grounded.
9. The fan must not be installed in a ceiling that is thermally insulated to a value greater than R40.
10. TF fans are designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up.

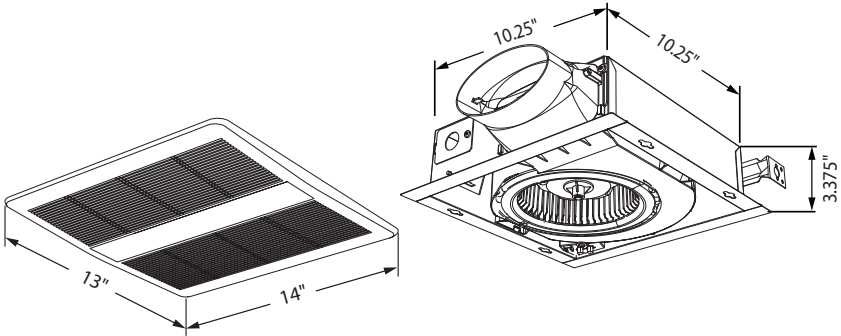
**⚠ WARNING** To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

## TF TRANQUIL BATHROOM FANS - LOW PROFILE

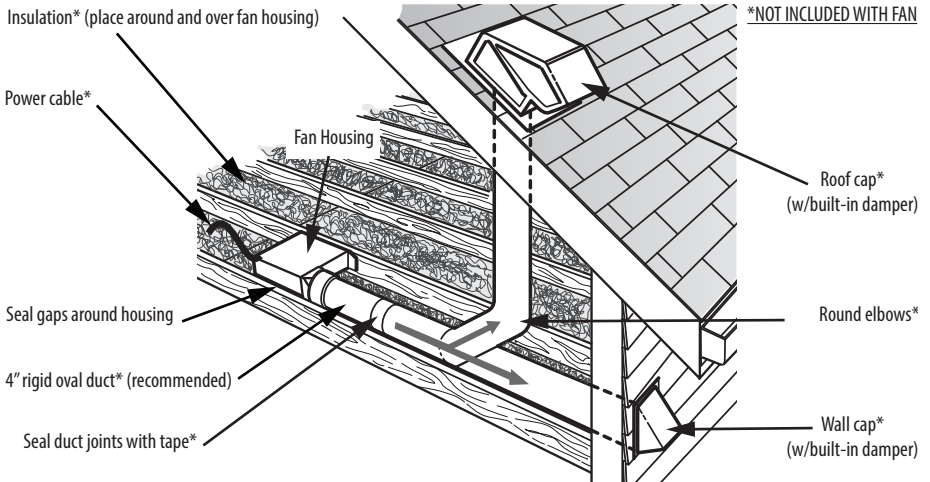
### MODELS: TF80N & TF100N

The delivery set includes:

- Housing
- Duct assembly
- Blower assembly
- Grille
- Mounting hardware



## TWO WAYS TO CONNECT DUCTWORK TO A UNIT



Ducting has a strong effect on the airflow, noise and energy use of the fan. Use the shortest, straightest 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.

# 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.

Before installation, you need to know:

Screw A  (ST4.2\*13mm)

Screw B  (ST4.2\*25mm)

Hanger bar  (13-3/8 in, 340 mm)

## STEP 1. INSTALL HOUSING (A, B, C or D)

### A) Fasten to joist

Position the housing so that the housing contacts the bottom of the joist. Secure housing to joist through holes A and holes B (Figure 1 & 2).

### B) Hanger Bar

Slide hanger bar into the channel on the housing and adjust to fit between framing. Position the housing so that the housing contacts the bottom of the joist. Secure housing to joist through hole A and hole B. Next secure the hanger bar to side of joist through the hole and secure hanger bar to housing with screw A (Figure 3).

### C) Fasten to I-joist

Slide hanger bar into the channel on the housing and adjust to fit I-joist. Position the housing so that the housing contacts the bottom of the joist. Secure housing to joist through hole A and hole B. Next secure the hanger bar to the joist through the hole and secure hanger bar to housing with screw A (Figure 4).

### D) Installed on the wall

Slide hanger bar into the channel on the housing. Hold housing in place so that the housing contacts the bottom of stud. Secure housing to stud through hole A and hole B on the same side. Next secure the hanger bar to the stud through its hole. Secure hanger bar to housing with screw A (Figure 5). The minimum installation distance between studs is 13-3/8 in. (340mm).

Note: When the fan is installed on the wall, the duct assembly shall be faced upward (Figure 6).

## STEP 2. CONNECT DUCT

Using the recommended duct size, connect duct to the damper/duct connector (Figure 7), and run duct to an exterior roof or wall cap using the shortest, straightest duct routing possible. Ensure all duct connections are airtight.

## STEP 3. CONNECT WIRING

Refer to wiring diagrams on page 6. Install all electrical box covers before applying power.

## STEP 4. INSTALL GRILLE

Pinch the springs on the sides of grille and insert them into the slots in the housing. Firmly push the grille against the ceiling to secure (Figure 8).

# FAN INSTALLATION

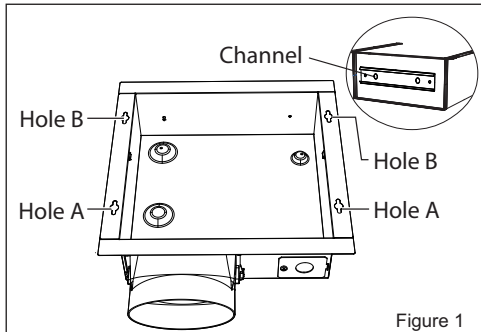


Figure 1

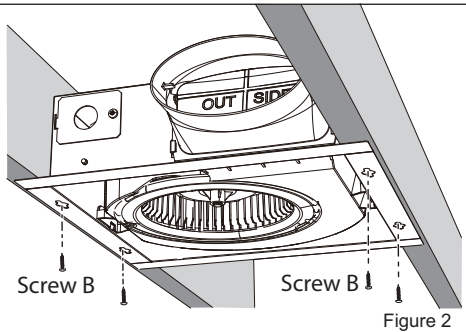


Figure 2

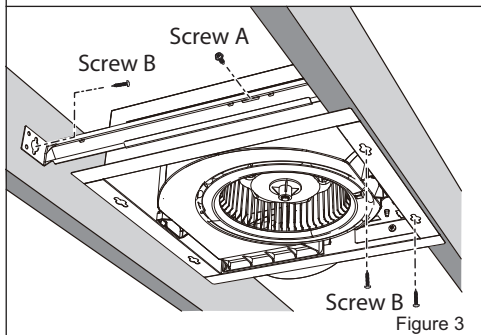


Figure 3

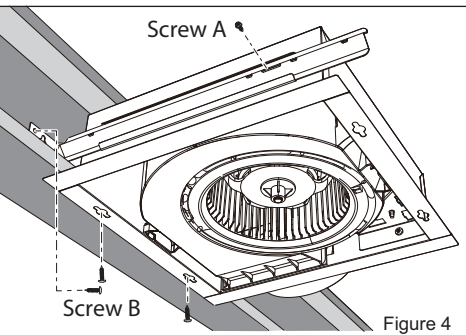


Figure 4

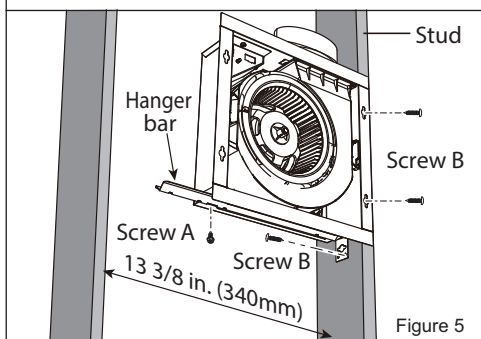


Figure 5

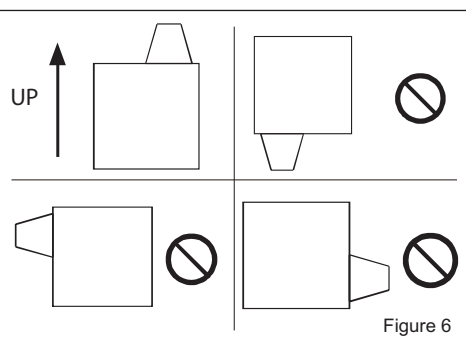


Figure 6

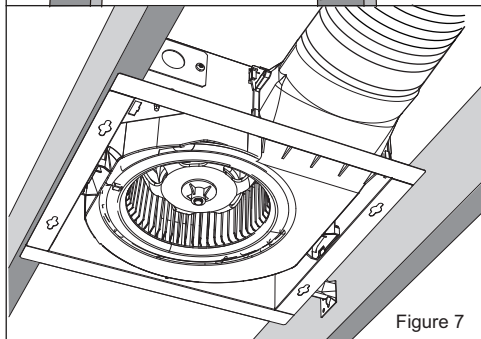


Figure 7

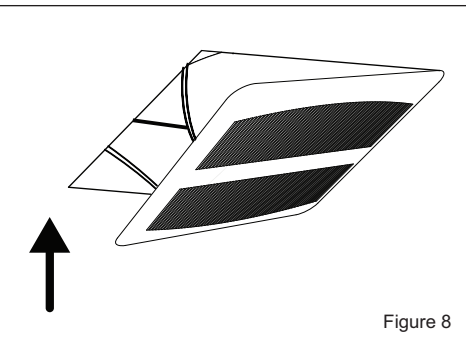


Figure 8

## TROUBLESHOOTING

**⚠ WARNING** Only qualified personnel should work on electrical equipment. Working on or near energized equipment could result in death or serious injury.

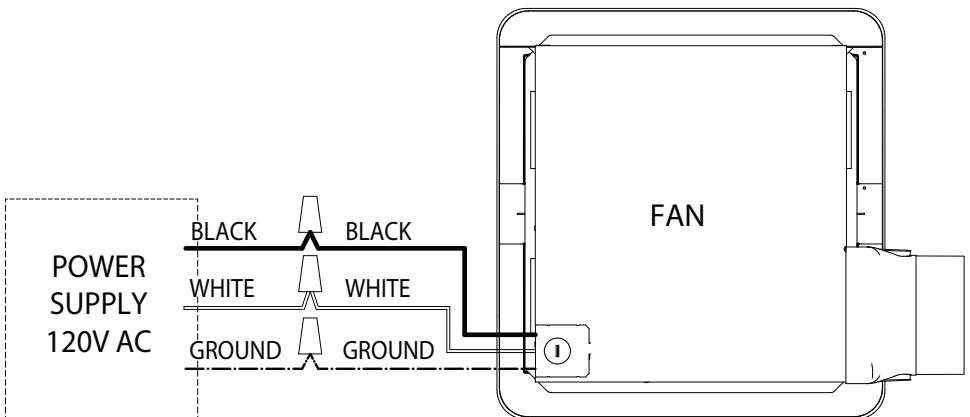
1. If the fan fails to start, consult wiring diagram to ensure proper connection.
2. Check the incoming supply for proper voltage.
3. Ensure that the electrical service to the fan is locked in the "OFF" position.
4. Use a meter to test for continuity across the fan motor leads.
5. If the motor leads show continuity, rewire the fan.
6. Turn on the electrical supply and restart.
7. If the fan fails to start, please contact factory.

## RECOMMENDED MAINTENANCE

**⚠ WARNING** Disconnect and lock out power supply before performing any maintenance. Working on or near energized equipment could result in death or serious injury.

1. The motor is permanently lubricated. No additional lubrication is necessary.
2. Periodic inspection, based upon usage, should be performed to ensure that the fan impeller is not obstructed. The fan should be inspected a minimum of every six (6) months.
3. Excessive fan noise or vibration may indicate an obstructed impeller.
4. To inspect and clean impeller:
  - a) Remove the grille from the fan and remove any obstruction from the impeller.
  - b) Vacuum the interior of the unit.
  - c) Reconnect the grille to the fan.
  - d) Turn power supply on.

## WIRING DIAGRAM





## ACCEPTANCE CERTIFICATE

The TF low profile fan has been duly certified as serviceable.

TF80N

TF100N

Manufactured on (date):

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Date of sale

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Sold by

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(name of trading enterprise, stamp of store)

## CONNECTION CERTIFICATE

Company name

---

Electrician name

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Date

---

Signature

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

TF-N-I&M-2108



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