VENTILATION FAN / LED LIGHT

MODEL SIG80-110ELED
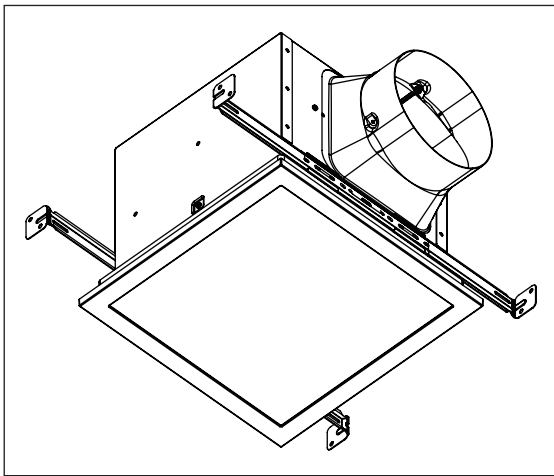

TABLE OF CONTENTS

READ AND SAVE THESE INSTRUCTIONS

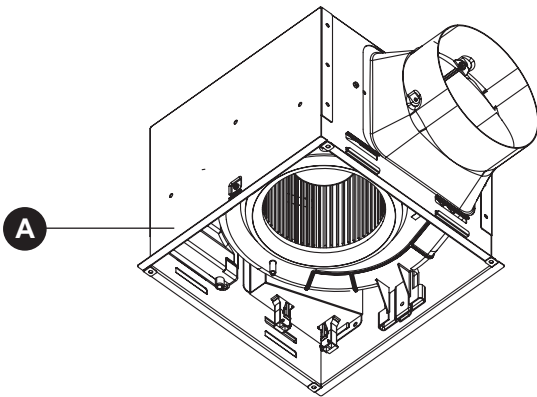Address: 46101 Fremont Boulevard, Fremont, CA 94538
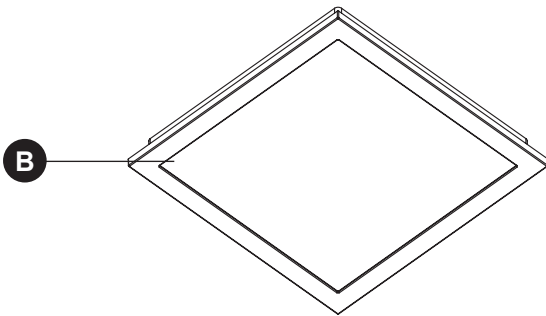US Toll Free Number:
1-888-979-9889 – Technical Support
1-877-685-4384 – Customer Sales Support
www.deltabreez.com

PACKAGE CONTENTS

PART	DESCRIPTION	QTY
A	Fan housing	1
B	LED light panel	1
C	Duct adapter (optional)	1
D	Suspension bracket	4

A

B

C

6 in. to 4 in.

D

HARDWARE CONTENTS
(Images are to scale)

AA × 8

Long Wood Screw (ø 4 x 25mm)

BB × 4
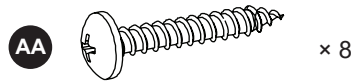
Short Machine Screw (#8-32x1/4")
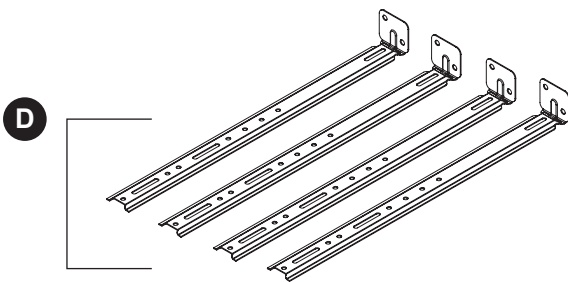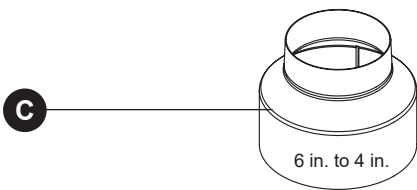
GENERAL SAFETY INFORMATION

READ AND SAVE THESE INSTRUCTIONS
GENERAL SAFETY INFORMATION

1. Make sure that the electric service supply voltage is AC 120V, 60Hz.

2. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSH Act).

3. Always disconnect the power source before working on or near the ventilating fan, motor or junction box.

4. Protect the power cord from sharp edges, oil, grease, hot surfaces, chemicals or other objects.

5. Do not kink the power cord.

6. Do not install the unit where ducts are confugured as shown in Fig.A.

7. Provide suction parts with proper ventilation.

8. This unit is UL Listed for use over a bathtub or shower when installed in a GFCI protected branch circuit.

WARNING

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

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

2. Before servicing or cleaning the unit, switch the power off at the 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.

3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

4. 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 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.

5. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.

6. Ducted ventilating fans must always be vented to the outdoors.

7. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) – protected branch circuit.

8. Do not use this unit with any other solid-state control device. Solid-state controls may cause harmonic distortion, which can cause a motor humming noise.

9. NEVER place a switch where it can be reached from a tub or shower.

10. Not to be installed in a ceiling thermally insulated to a value greater than R40. (This is required for installation in Canada only).
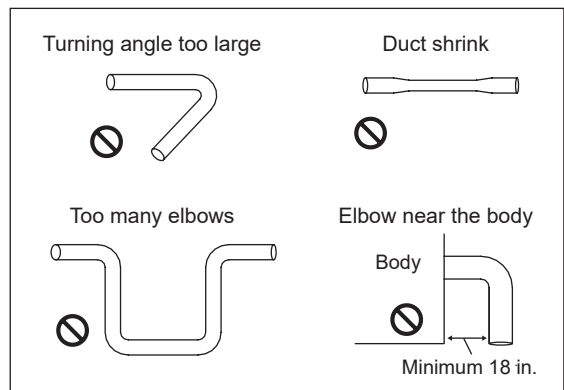

Fig. A

CAUTION

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

2. Not for use in cooking areas. (Fig.B)

3. This product must properly connect to the grounding conductor of the supply circuit.

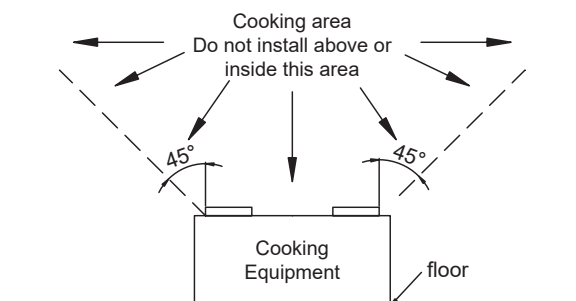4. To reduce the risk of injury to persons, install the fan at least 8.2 feet (2.5m) above the floor.

Fig. B

PREPARATION

Estimated Assembly Time: 60 minutes

Tools Required for Assembly (not included): Hammer, Flathead Screwdriver, Wire Nuts, Nails, Duct Tape, Phillips Head Screwdriver, Utility Knife
Helpful Tools (not included): Electric Drill, Drill Bits

**WARNING: Turn off electricity at breaker box before beginning installation.**

- Carefully remove unit from carton.
- Check area above installation location to be sure that wiring can run to the planned location and that duct work can be run. Make sure the area is sufficient for proper ventilation.
- Inspect duct work and wiring before proceeding with installation.
- Before installation, provide inspection and future maintenance access at a location that will not interfere with installation work.
- You may need the help of a second person to install this fan: one person on the attic side and one on the room side.

Note: Installations may vary depending on how the previous bath fan was installed. Supplies necessary for the installation of your bath fan are not all included. However, most are available at your local home improvement or hardware store.

DIMENSION REQUIREMENTS

Ceiling Opening (L)	Ceiling Opening (W)	Ceiling Opening (H)
10 1/4 in.	10 1/4 in.	7 7/8 in.

Proper insulation around the fan to minimize building heat loss and gain. 6" circular duct is recommended for installation. The ducting from this fan to the outside of building has a strong effect on the air flow, 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 reduceenergy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.
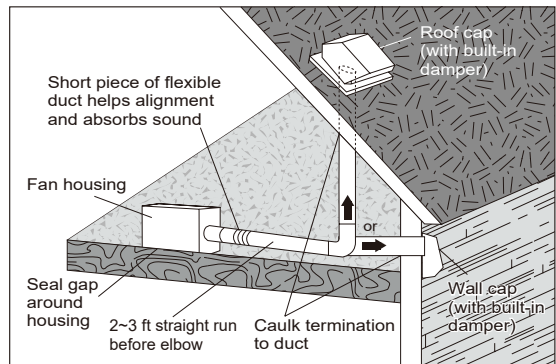
- The fan will operate most efficiently when located where the shortest possible duct run and minimum number of elbows will be needed.
- Use a roof cap or wall cap that has a built-in damper to reduce backdrafts.
- External timer/dimmer switch can be used. Please contact Delta Breez customer service and consult with a licensed electrician for compatibility.
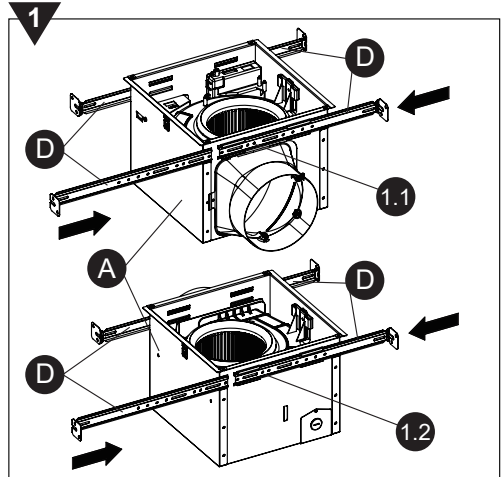
WIRING DIAGRAM
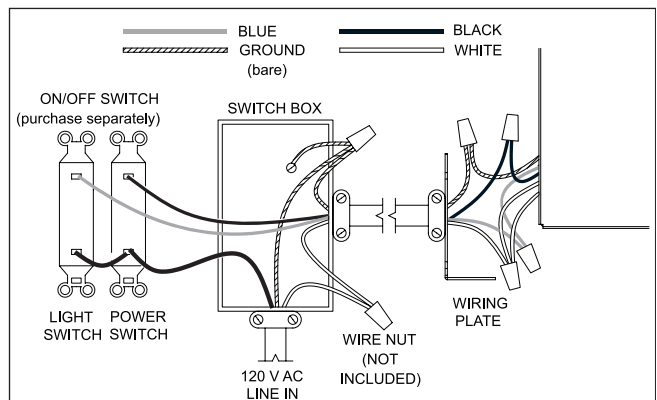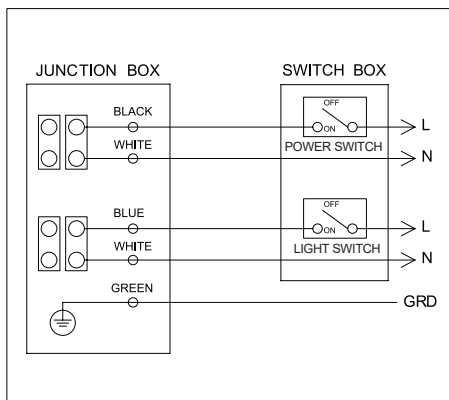
NEW CONSTRUCTION ASSEMBLY INSTRUCTIONS

BEFORE INSTALLATION

Turn off power source. Review all safety precautions.

1. ATTACHING TO THE JOIST

For joist spacing 16 in. - 24 in., insert two suspension brackets (D) into the bracket covers on each side of the fan housing (A) as shown (1.1 and 1.2).
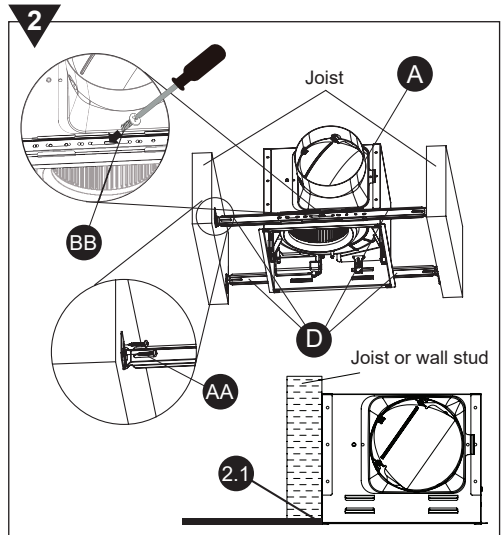

2. Secure the suspension brackets (D) to the joists with long wood screws (AA), and secure the suspension brackets (D) to the fan housing (A) using the short machine screws (BB).

**Note:** The bottom of the fan housing (A) should be flush with the bottom of the ceiling board (2.1).

Hardware Used

| AA	Long wood screw		× 8
BB	Short machine screw		× 4

3. Remove the fan junction box cover (3.1). Using wire nuts (not supplied), connect the house wires (3.2) to the fan wires (3.3) as shown in the wiring diagram on page 4. 14 AWG is the smallest conductor that can be used for branch-circuit wiring. Reattach fan junction box cover (3.1).
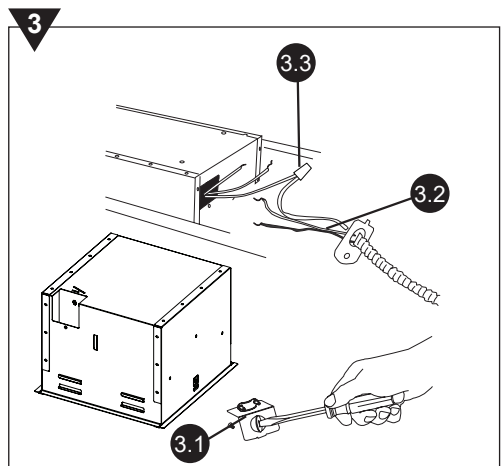
NEW CONSTRUCTION ASSEMBLY INSTRUCTIONS

4. Connect a 6 in. circular duct (4.1) (not supplied) and vent to the outside. Secure it with duct tap (not included) or clamp (not included) to make the connection secure and air tight.

   Note: If available ducting is 4 inches in diameter, the optional duct adapter (C) can be used to reduce the 6 in. duct connector (4.2) on the fan housing (A) to the 4 in. ducting. Use duct tape (not included) or clamp (not included) to secure the ducting to the adapter to create an air tight seal.
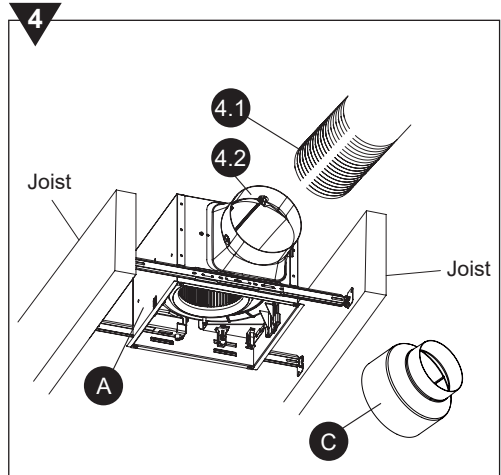

5. Insert the LED connector (5.1) on the LED light panel (B) into the fan housing (A).
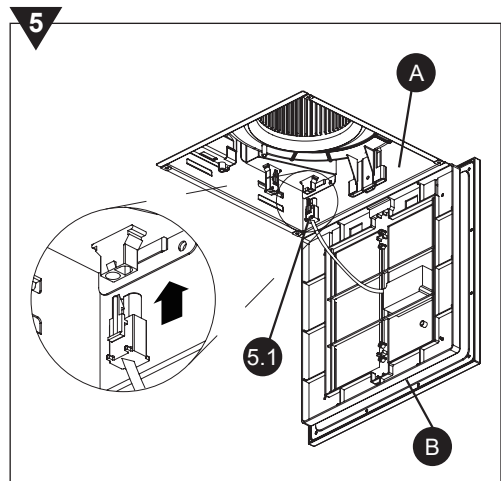
6. Attach LED light panel (B) by pinching the mounting springs (6.1) and inserting them into the narrow rectangular slots (6.2) on both sides of the fan housing (A).

   Using the switch on the back of grille, choose the color temperature you want for your LED.
   You can choose from 2700K warm white, 4000K cool white, and 5000K daylight white.
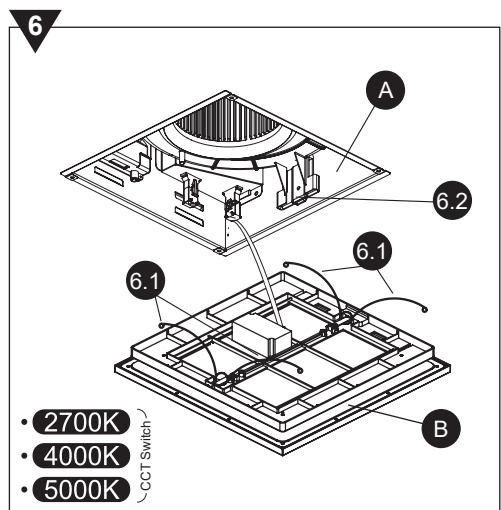
EXISTING CONSTRUCTION ASSEMBLY INSTRUCTIONS

**INSTALLATION FROM BELOW - NO NEED FOR SUSPENSION BRACKETS (NO ATTIC ACCESS)**

BEFORE INSTALLATION

Turn off power source. Review all safety precautions.

1. Measure the opening to ensure it is large enough to accommodate the new fan housing (A) (10 1/4 in. x 10 1/4 in.).

   If this fan is not replacing an old fan, be sure to cut a 10 1/4 in. x 10 1/4 in. opening for the fan housing (A).

   NOTE: One edge of the 10 1/4 in. x 10 1/4 in. cut out must be a long the joist for proper installation. If not possible, then attic access and brackets will need to be used (see step 2 on page 10).
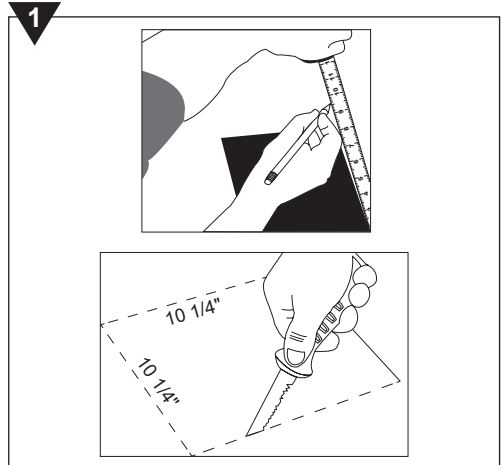
2. Remove fan motor (2.1) from fan housing (A) by removing the screws where shown (2.2). Gently pull the motor out from the fan housing.
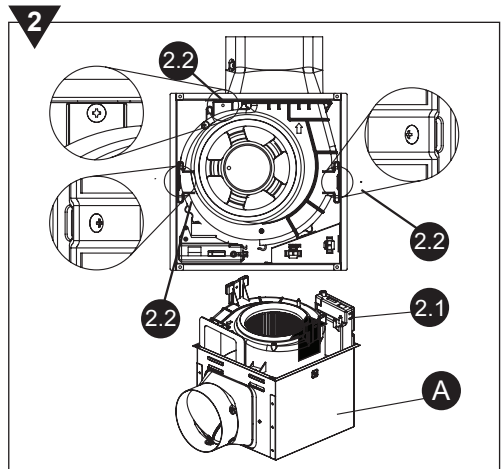

3. Remove duct connector (3.1) by removing the duct connector screw (3.2) on the fan housing (A).
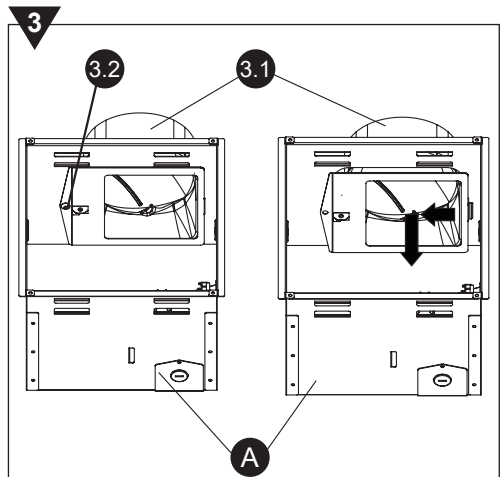
EXISTING CONSTRUCTION ASSEMBLY INSTRUCTIONS

4. Remove the fan junction box cover (4.1). Using wire nuts (not supplied), connect the house wires to the fan wires (4.2) as shown in the wiring diagram on page 4. 14 AWG is the smallest conductor that should be used for branch-circuit wiring.
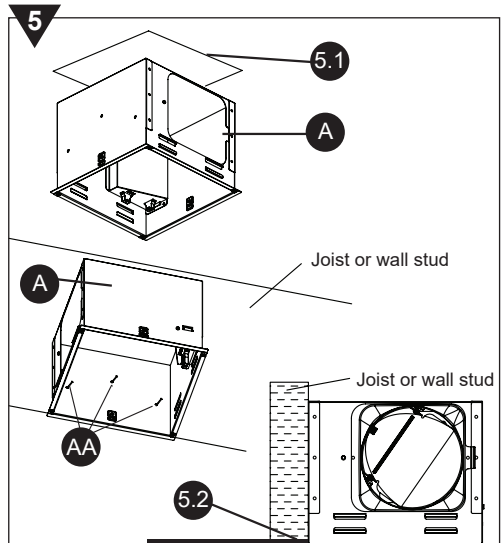
   Reattach fan junction box cover (4.3).
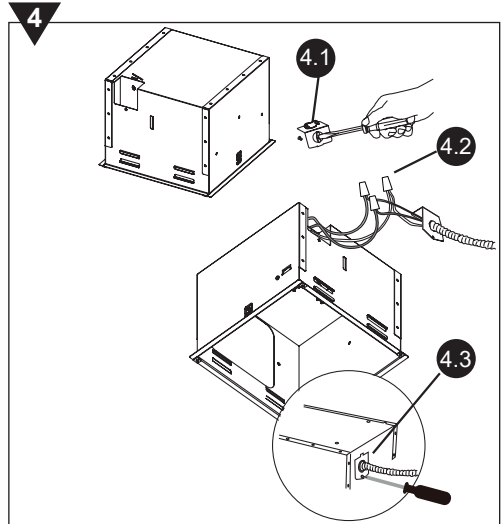
5. Insert the fan housing (A) into the hole in the ceiling board (5.1). Mount the fan housing (A) to the joist or stud using long wood screws (AA) where indicated by the arrows inside the fan housing (A).

   Note: The bottom of the fan housing (A) should be flush with the bottom of the ceiling board (5.2).

   Hardware Used

   **AA** Long wood screw ⟿⟿⟿⟿ × 3

6. To attach the duct connector (6.1), pull the existing ducting (6.2) into the fan housing (A). Connect the duct connector to the ducting using duct tape (not included) or clamp (not included) to create an air tight seal. Push ducting (6.2) back through the fan housing (A) and secure the duct connector (6.1) by sliding it into the slots in the fan housing (A) and securing it with the screw that was removed in step 3.

   Note: If the available ducting is 4 inches in diameter, the optional duct adapter (C) can be used to reduce the 6 in. duct connector (6.1) on the fan housing (A) to the existing 4 in. ducting. Use duct tape (not included) or clamp (not included) to secure the ducting to the adapter to create an air tight seal.
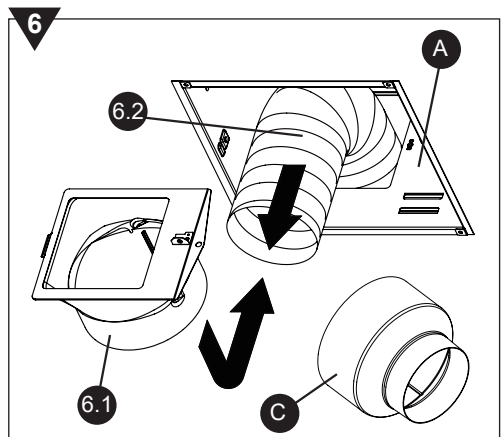
7. Reinsert fan motor (7.1) into the fan housing (A).
   Secure with the screws that were removed in step 2.
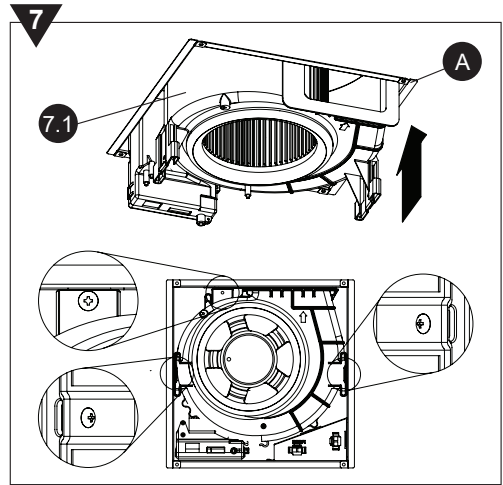
8. Insert the LED connector (8.1) on the LED light panel
   (B) into the fan housing (A).
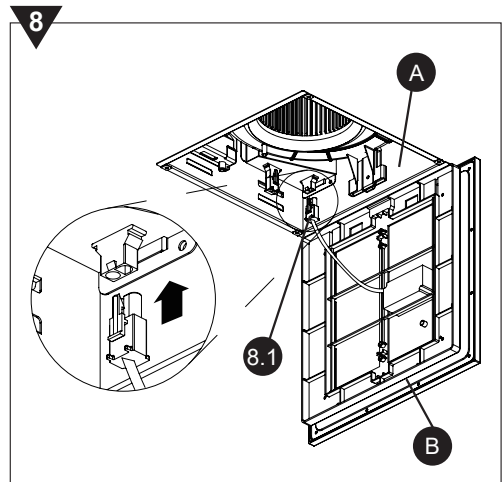
9. Attach LED light panel (B) by pinching the mounting
   springs (9.1) and inserting them into the narrow
   rectangular slots (9.2) on both sides of the fan housing
   (A).
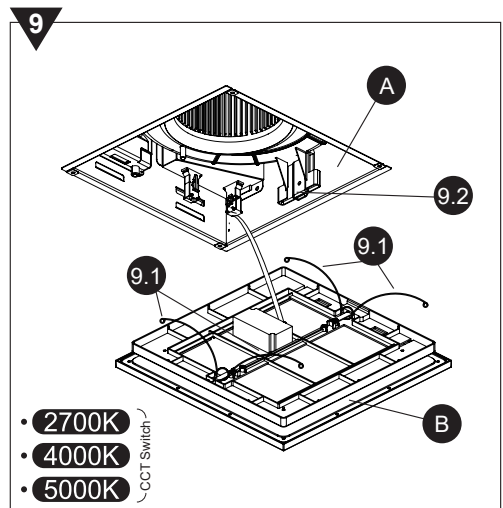
   Using the switch on the back of grille, choose the color
   temperature you want for your LED.
   You can choose from 2700K warm white, 4000K cool
   white, and 5000K daylight white.

9

EXISTING CONSTRUCTION ASSEMBLY INSTRUCTIONS

INSTALL FROM ABOVE WITH SUSPENSION BRACKETS (ATTIC ACCESSIBLE)

ONLY IF UNABLE TO ATTACH DIRECTLY TO JOIST(S)

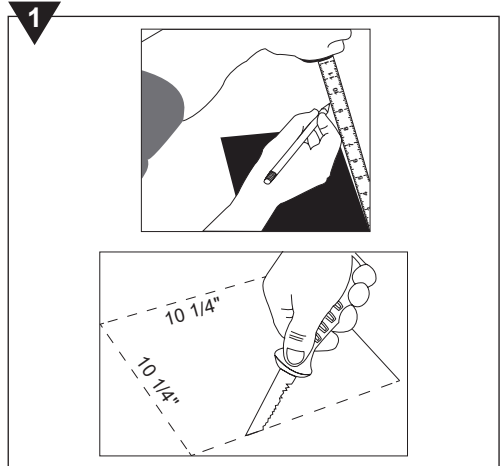Turn off power source. Review all safety precautions. Remove old fan.

1. Measure the opening to ensure it is large enough to accommodate the new fan housing (A) (10 1/4 in. x 10 1/4 in.).

   If this fan is not replacing an old fan, be sure to cut a 10 1/4 in. x 10 1/4 in. opening for the fan housing (A).

2. ATTACHING TO THE JOIST

   For joist spacing 16 in. - 24 in., insert two suspension brackets (D) into the bracket covers on each side of the fan housing (A) as shown (2.1 and 2.2).
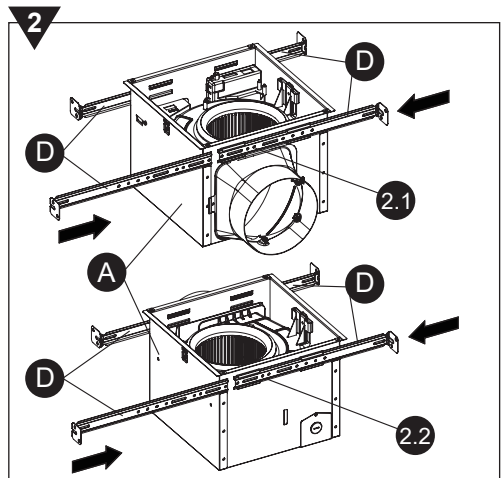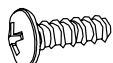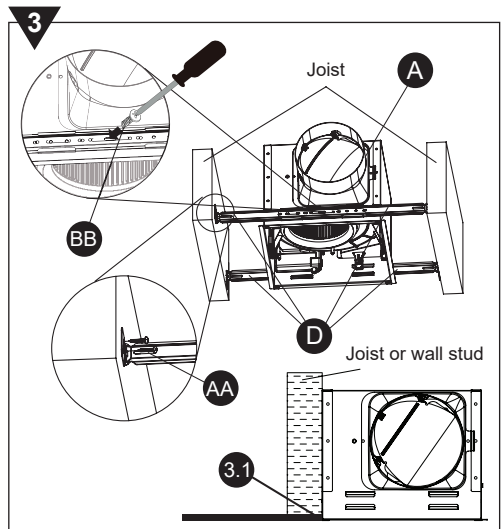
3. Secure the suspension brackets (D) to the joists with long wood screws (AA), and secure the suspension brackets (D) to the fan housing (A) using the short machine screws (BB).

   Note: The bottom of the fan housing (A) should be flush with the bottom of the ceiling board (3.1).
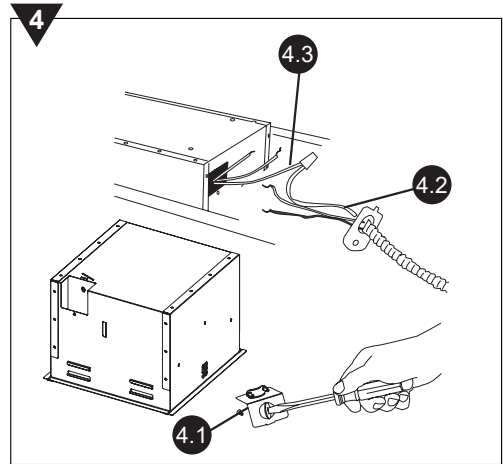
   Hardware Used

   AA Long wood screw   × 8

   BB Short machine screw   × 4

4. Remove the fan junction box cover (4.1). Using wire nuts (not supplied), connect the house wires (4.2) to the fan wires (4.3) as shown in the wiring diagram on page 4. 14 AWG is the smallest conductor that can be used for branch-circuit wiring. Reattach fan junction box cover (4.1)

5. Connect a 6 in. circular duct (5.1) (not supplied) and vent to the outside. Secure it with duct tap (not included) or clamp (not included) to make the connection secure and air tight.

   Note: If available ducting is 4 inches in diameter, the optional duct adapter (C) can be used to reduce the 6 in. duct connector (5.2) on the fan housing (A) to the 4 in. ducting. Use duct tape (not included) or clamp (not included) to secure the ducting to the adapter to create an air tight seal.
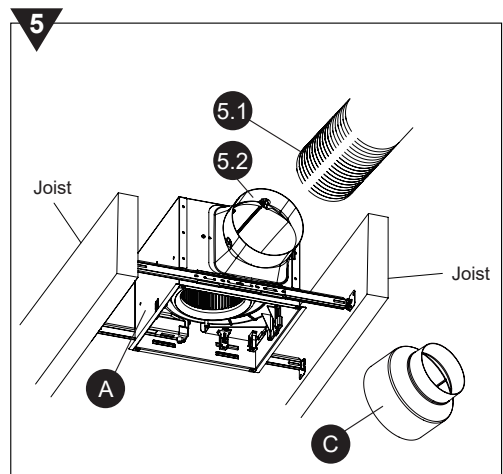
6. Insert the LED connector (6.1) on the LED light panel (B) into the fan housing (A).

![Delta logo] ![breez Ventilation System logo]
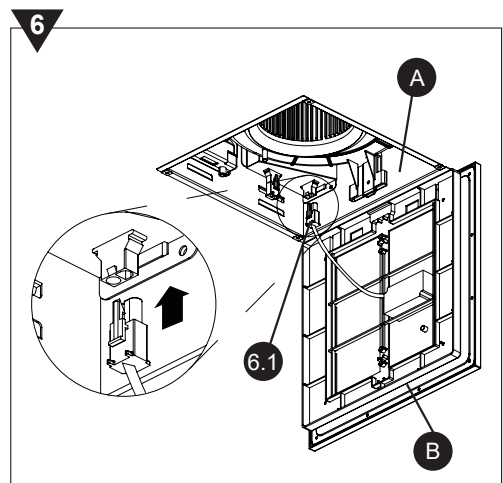
EXISTING CONSTRUCTION ASSEMBLY INSTRUCTIONS

7. Attach LED light panel (B) by pinching the mounting springs (7.1) and inserting them into the narrow rectangular slots (7.2) on both sides of the fan housing (A).

Using the switch on the back of grille, choose the color temperature you want for your LED.
You can choose from 2700K warm white, 4000K cool white, and 5000K daylight white.

- 2700K
- 4000K
- 5000K

CCT Switch

CARE AND MAINTENANCE

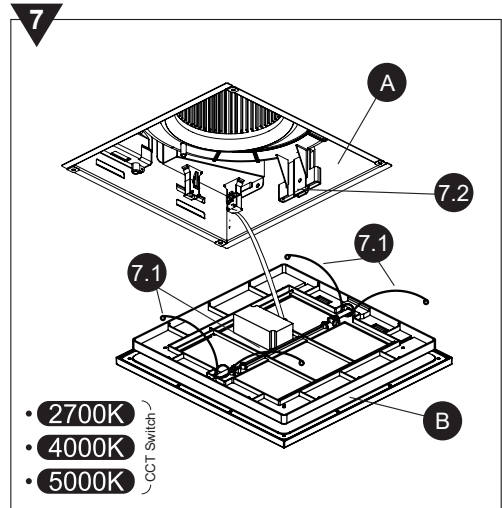WARNING: Disconnect power supply before servicing. See SAFETY INFORMATION before proceeding. Routine maintenance should be done at least once a year.

- Wipe down LED light panel with a damp cloth.
- Remove excess dirt and dust from the fan housing with a vacuum cleaner.
- Do not use solvents, thinner or harsh chemicals for cleaning the fan.
- Do not allow water to enter the motor.
- Do not immerse LED light panel into water.

OPERATION

Single speed control mode: Turn the POWER switch on to operate at user-adjustable full speed airflow, 80 or 110 CFM.

Factory setting: 110CFM.

Full speed air volume preset control
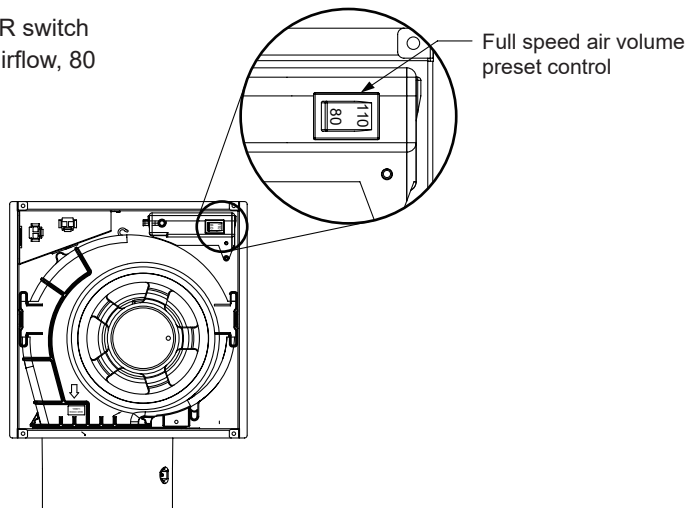
TROUBLESHOOTING

| PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
The fan is not turning on	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.
The fan seems louder than it should	1. CFM too great 2. Damper not working properly or damaged 3. Bend in duct too close to fan discharge 4. Fan discharge reduced to fit smaller duct 5. Fan body not securely attached	1. Be sure the CFM rating on the fan matches the size of your room. 2. Check damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service. 3. Be sure you do not have any sharp bends in duct closer than 18 in. to the fan discharge. 4. Use recommended size ducting to reduce fan noise. 5. Be sure the fan is securely attached to your ceiling joists.
The fan is not clearing the room	1. Insufficient intake airfow within room 2. Insufficient CFM	1. Be sure a door or window is slightly ajar or opened to allow airflow. The fan is not able to draw air out of the room without enough airflow to draw in from. 2. Be sure the CFM rating on the fan matches the requirements for your room size.
The light is not turning ON	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.

DIMENSIONS

11 13/16
(300)

11 13/16
(300)

6
(150)

1 7/16
(36.2)

7 7/8
(200)

9 21/32
(245.4)

3 3/4
(94.4)
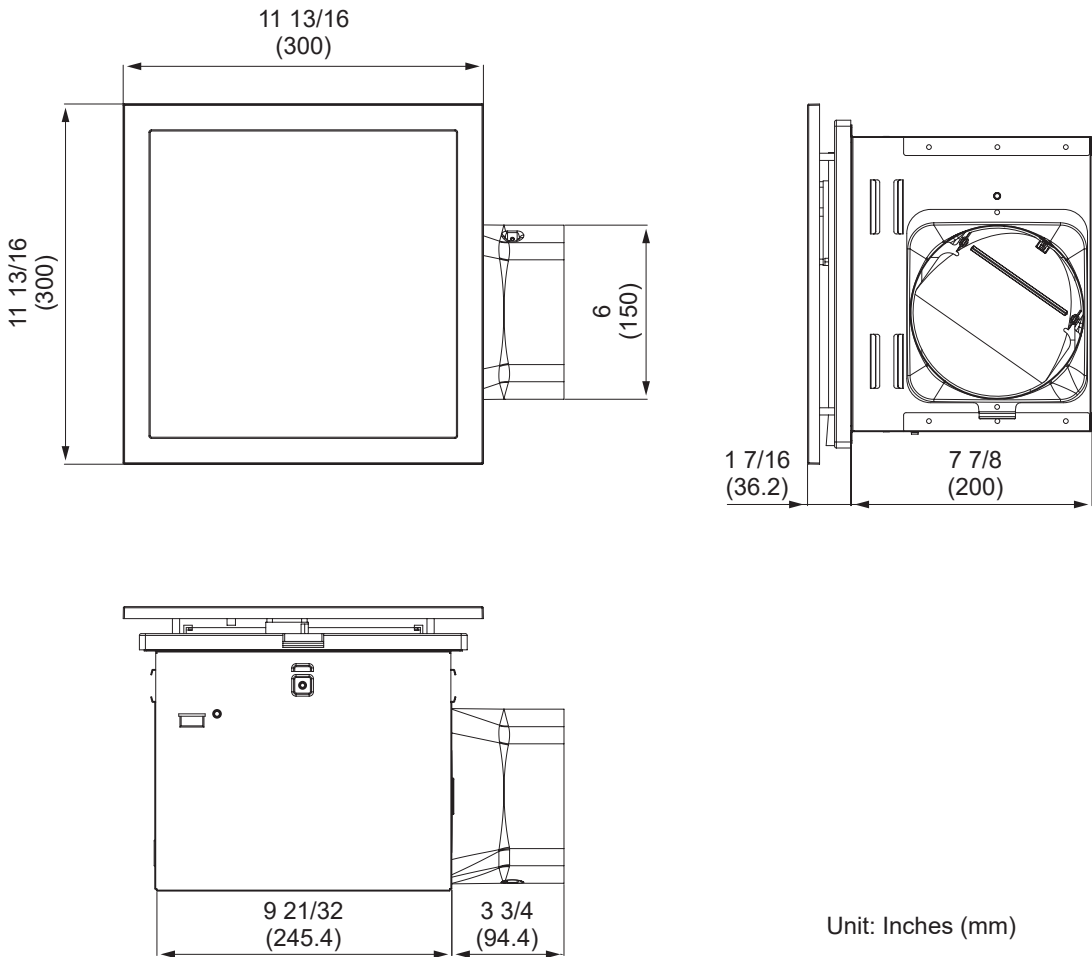
Unit: Inches (mm)

PRODUCT SPECIFICATIONS

Model No.	Voltage (V)	Frequency (Hz)	Air Flow @ 0.1"SP (CFM)	Power @ 0.1"SP (W)	Max Current (Amps)	Weight (lb.)	Light Spec
SIG80-110ELED	120	60	110	36	0.48	10.1	13W LED, 1000 Lumens, 2700K 4000K 5000K

Note: Design and specifications subject to change without notice.

WARRANTY

DELTA ELECTRONICS THREE YEAR LIMITED WARRANTY

Delta Electronics Inc. ("Delta Electronics") warrants to the original consumer purchaser in the USA that the Breez ventilation fan products will be free from defects in material or workmanship. This warranty is limited to three (3) years from the original date of purchase.

Limitations and Exclusions

1. During the warranty period, a replacement for any defective product will be supplied free of charge for installation by the consumer. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, and installation service.

2. All returns of defective parts or products must include the product model number, and must be made through an authorized Delta Electronics distributor. Authorized returns must be shipped prepaid. Repaired or replacement products will be shipped by Delta Electronics F.O.B. shipping point.

3. Delta Electronics shall not be liable for any indirect, incidental, consequential, punitive, or special damages arising out of or in connection with products use or performance, regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise.

4. This warranty does not extend to fluorescent lamp starters and tubes.

5. The warranty does not cover if user does not comply with manufacturer's installation manual.

6. To qualify for warranty service, you must notify Delta Electronics at the address or telephone number below.

7. Delta Electronics shall have no liability to the original owner-user with respect to any defect caused by abuse, misuse, neglect, improper transportation or storage, improper testing, improper installation, improper operation, improper use, improper maintenance, improper repair, improper alteration, improper modification, tampering or accident of products or parts thereof, or unusual deterioration or degradation of products or parts thereof due to a physical environment beyond the requirement of products' specifications.

Address: 46101 Fremont Boulevard, Fremont, CA 94538

US Toll Free Number:

1-888-979-9889 – Technical Support

1-877-685-4384 – Customer Sales Support

www.deltabreez.com

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