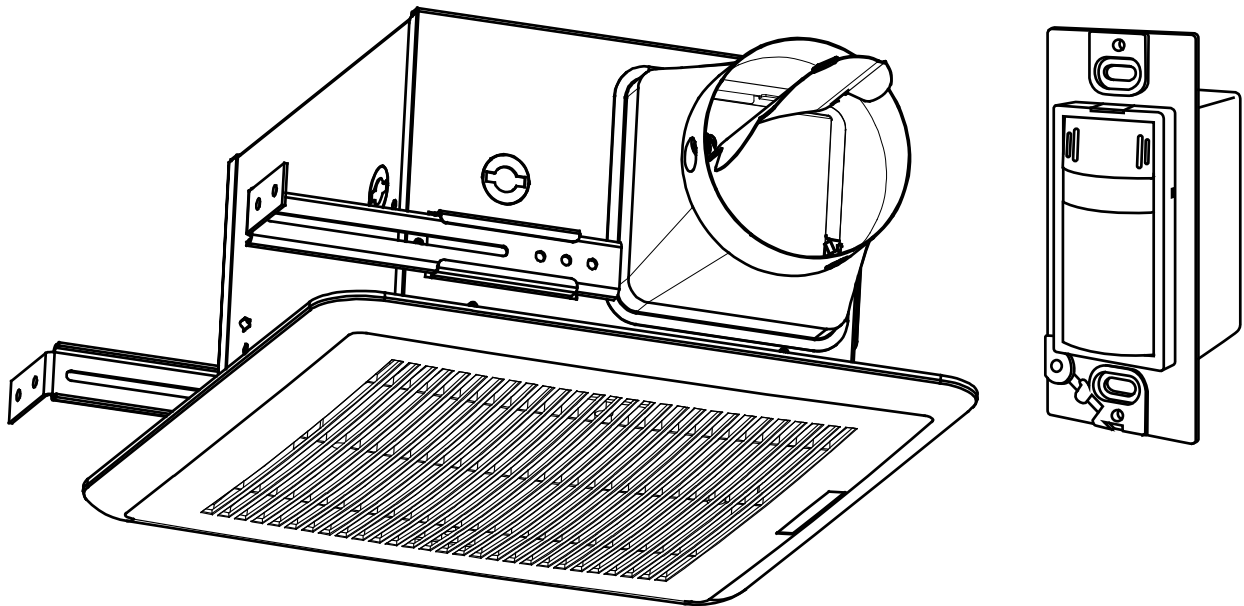


DewStop®
breeze easy™
model # **F100-1W**

Installation Guide

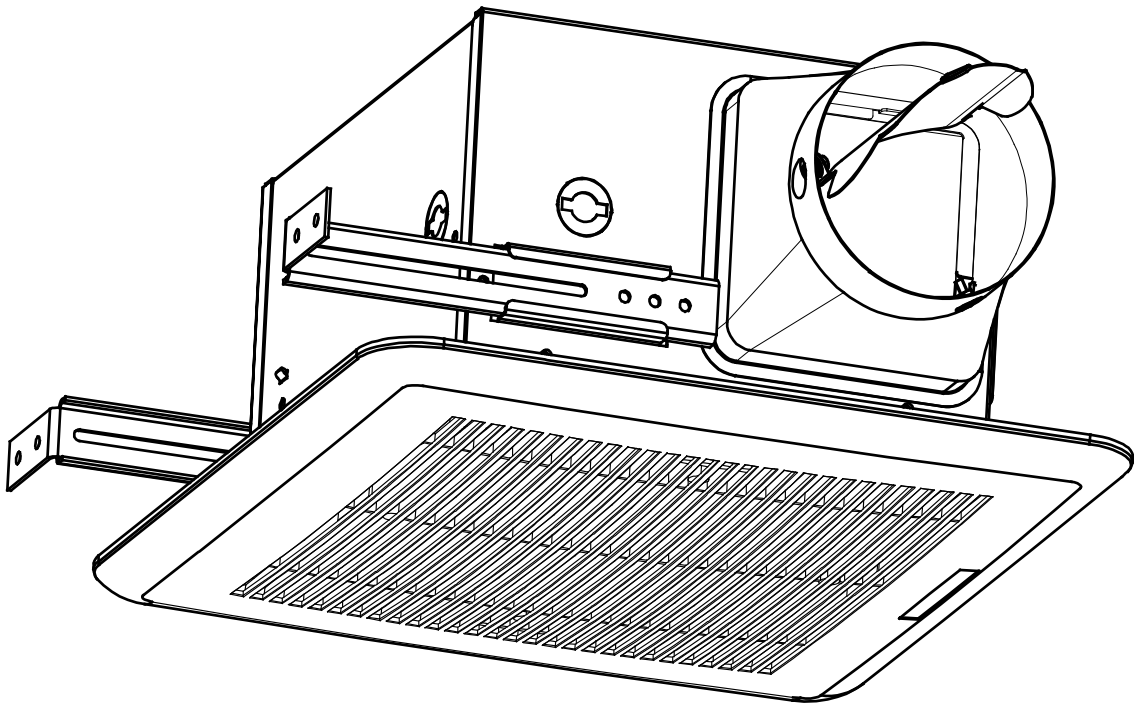
Read and Save These Instructions



Questions, Problems, Missing Parts? Please Call 1-360-876-2974
or E-Mail info@DewStop.com

please retain this manual for reference

SECTION 1



Ventilation Fan

Safety Information

- 1.) WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:
 - a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated 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 the local code authorities.
 - c) When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
 - d) Ducted fans must always be vented to the outdoors.
 - e) 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.
- 2.) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- 3.) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means 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.
- 4.) This ventilation fan is approved for use over a bathtub or shower when installed in a GFCI protected circuit. Do not use unapproved fans over a bathtub or shower that is not approved for that application.
- 5.) Install ductwork in a straight line with minimal bends.
- 6.) Use 120 V, 60 Hz for the electrical supply and properly ground the unit. Follow all local safety and electrical codes.
- 7.) Do not use this fan with any solid-state control device; such as a dimmer switch. Solid-state controls may cause harmonic distortion, which can cause a motor humming noise, as well as increase risk of fire or electric shock.
- 8.) To reduce the risk of fire or electric shock, do not block air entry grille.
- 9.) Mount with the lowest moving parts at least 2.5 m (8.2 feet) above floor or grade level.

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 the local code authorities.

Safety Information (continued)



WARNING: Not suitable for use as a range hood.



NOTE: Make sure duct work size is a minimum of the discharge. Do not reduce. Reducing the duct size can increase fan noise.



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



IMPORTANT: You may want to consult with a professional electrician regarding the wiring of your ventilation fan.



CAUTION: Do not install in locations where the temperature will exceed 104°F (40°C).



WARNING: To reduce the risk of electric shock, please disconnect the electrical supply circuit before servicing.

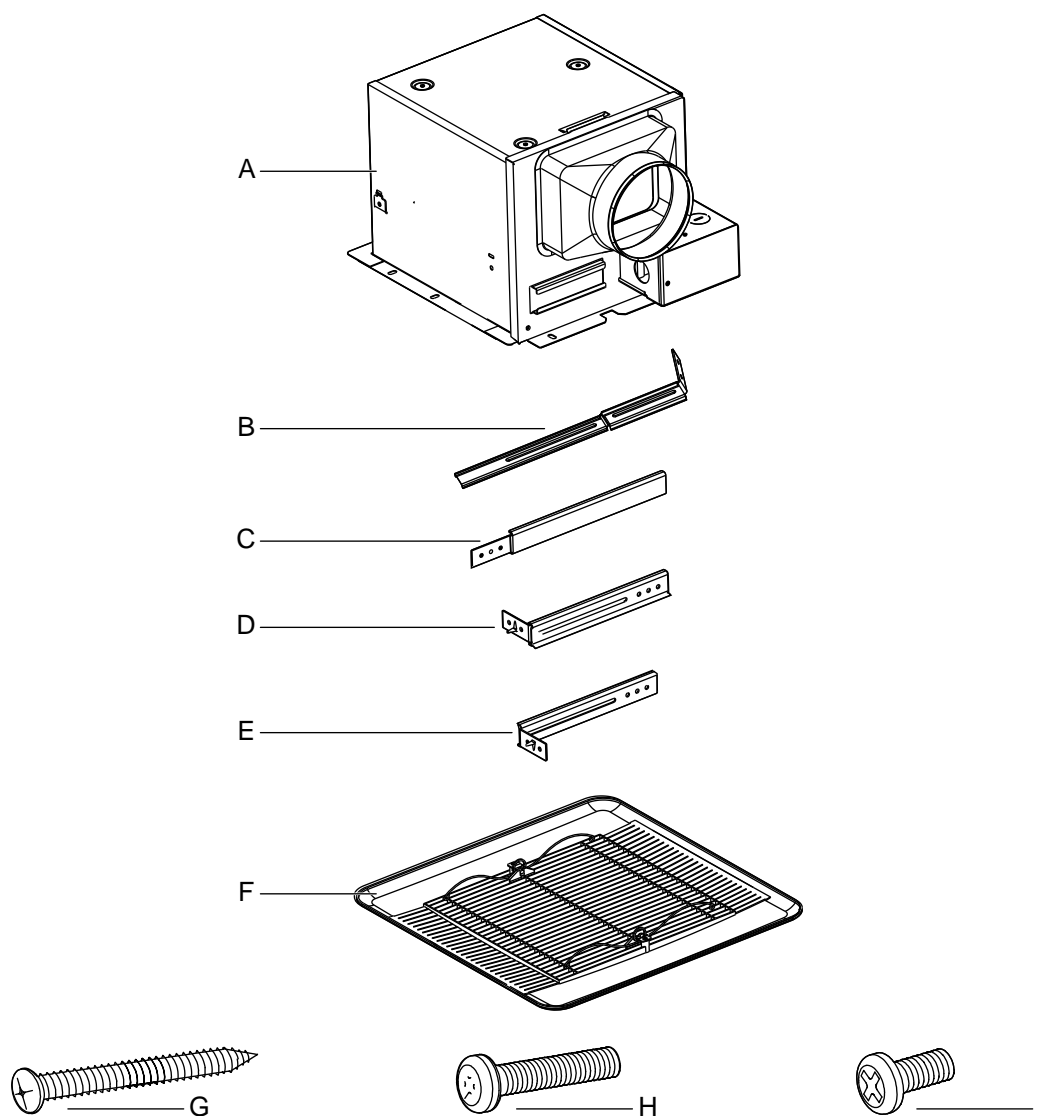


IMPORTANT: Exercise care to not damage existing wiring when cutting or drilling into walls or ceilings.



CAUTION: This product must be properly grounded.

Fan Components



Part	Description	Quantity
A	Fan body	1
B	Installation bracket IV	1
C	Installation bracket II	1
D	Installation bracket I	1
E	Installation bracket III	1
F	Grille	1
G	Long wood screws	8
H	Short screw (4X12)	2
I	Short screw (4X6)	2

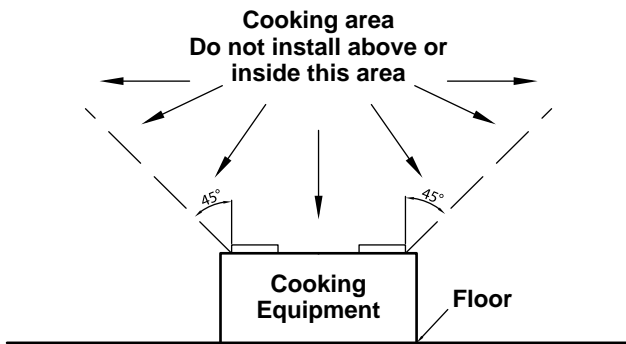
Pre-Installation

PLANNING FOR SUCCESSFUL INSTALLATION

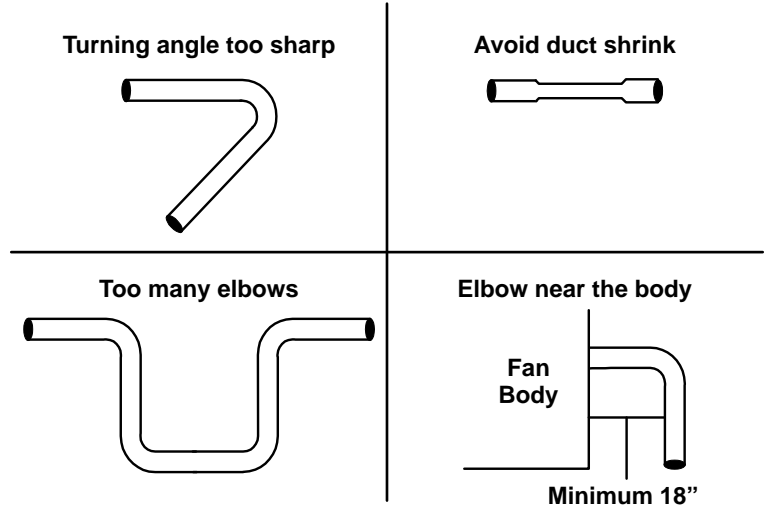
When installing the ventilation fan in a new construction site, install the main body of the fan and duct work during the rough-in construction of the building. The grille should be installed after the finished ceiling is in place.

When installing in existing construction, use the dimensions on page to determine the required hole size for the ceiling. Grille edge should overlap finished ceiling.

Not for use in cooking area - see installation instructions.



Do not install ventilation fan in areas where the duct work will require configuration as shown.

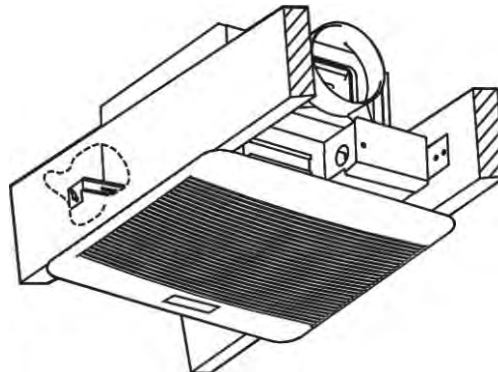


NOTE: If installing in existing construction, you must have access to space above and below the installation location.

INSTALLATION OPTIONS

We recommend installing the ventilation fan by securing the main body of the fan against one ceiling joist and using the header bars as necessary for support of the adjoining joist.

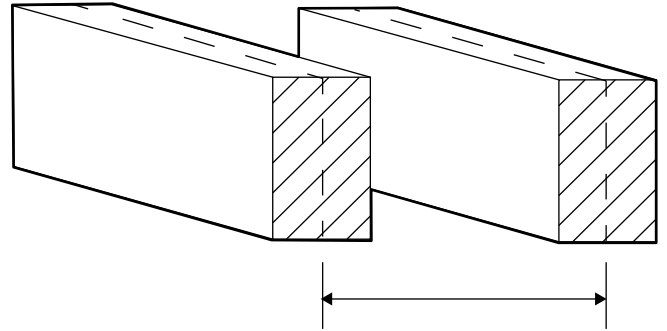
There are multiple installation configurations possible for this ventilation fan. Not all configurations are shown. If your installation requires a variation other than those shown, consult with a licensed contractor to determine the best installation for your project. If you are replacing an existing fan, ensure that the new grille will adequately cover the existing opening.



Installation

1 Determine joist width

- Measure the distance from the centre of the two ceiling joists where you will be installing the ventilation fan.
- Use the table to determine the header bar installation.
 - For configuration 1, proceed to step 2.
 - For configuration 2, proceed to step 3.
 - For configuration 3, proceed to step 4.

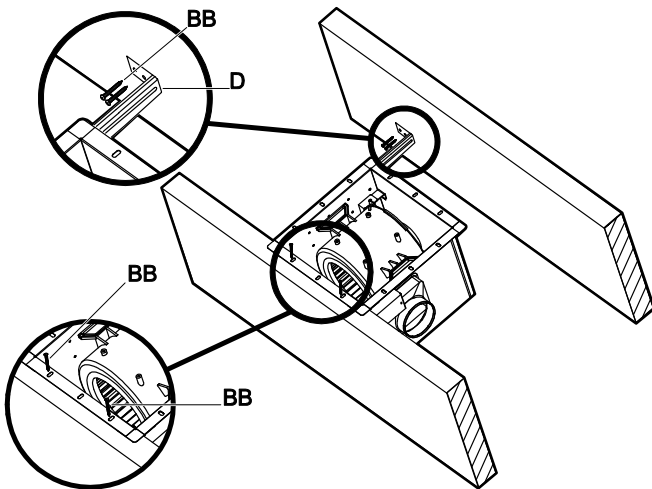


Use the following to determine the proper installation configuration:

Width between the Joists	Brackets Used	Configuration
30.5 cm	I	1
40.6 cm	I, IV	2
48.8 cm	I, II	3

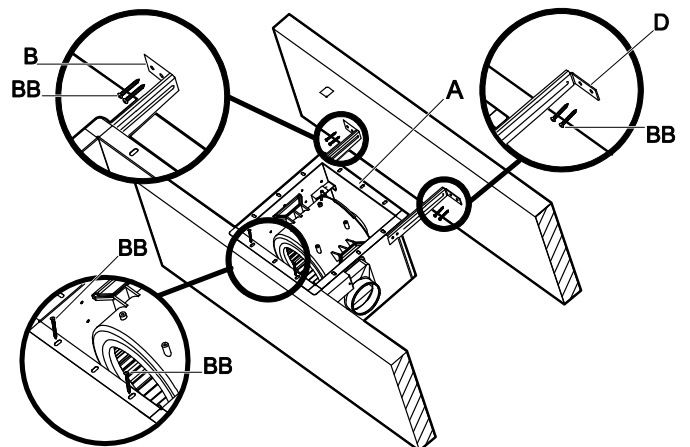
2 Configuration 1, initial install

- Use long wood screws (BB) to loosely attach the main body of fan (A) to ceiling joist in the four locations shown.
- Fit bracket I (D) against the main body of fan, ensuring the bracket is snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I to the opposite ceiling joist as shown.
- Proceed to step 6.



3 Configuration 2, initial install

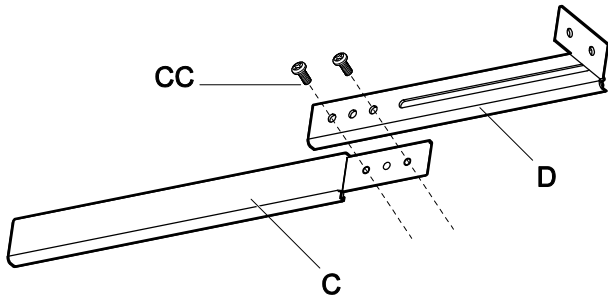
- Use long wood screws (BB) to loosely attach the main body of fan (A) to the ceiling joist in the four locations shown.
- Fit bracket IV (B) against the main body of fan, ensuring bracket I is snug against the opposite ceiling joist.
- Fit bracket I (D) against the main body of fan, ensuring bracket IV is snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I to the opposite ceiling joist as shown.
- Proceed to step 6.



Installation (continued)

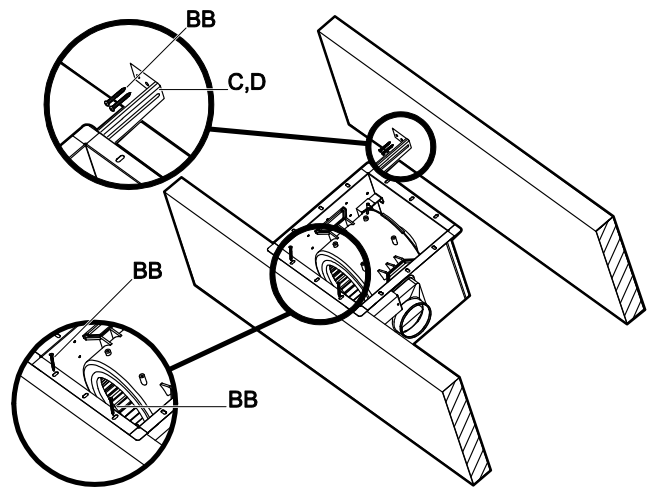
4 Configuration 3, preparation

- Connect bracket I (D) to bracket II (C) using two M4x6 screws (CC).



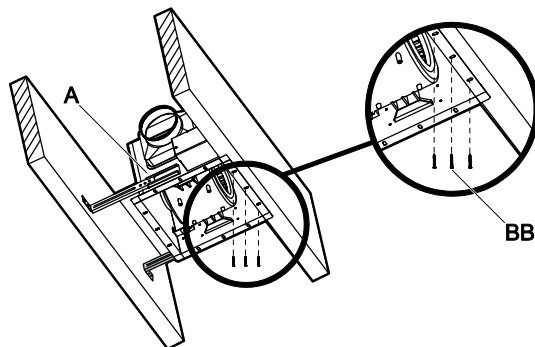
5 Configuration 3, initial install

- Use long wood screws (BB) to loosely attach the main body of fan (A) to the ceiling joist in the four locations shown.
- Fit connected brackets (C, D) against the main body of fan, ensuring they are snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I and II (C, D) to the opposite ceiling joist as shown.
- Proceed to step 6.



6 Final installation

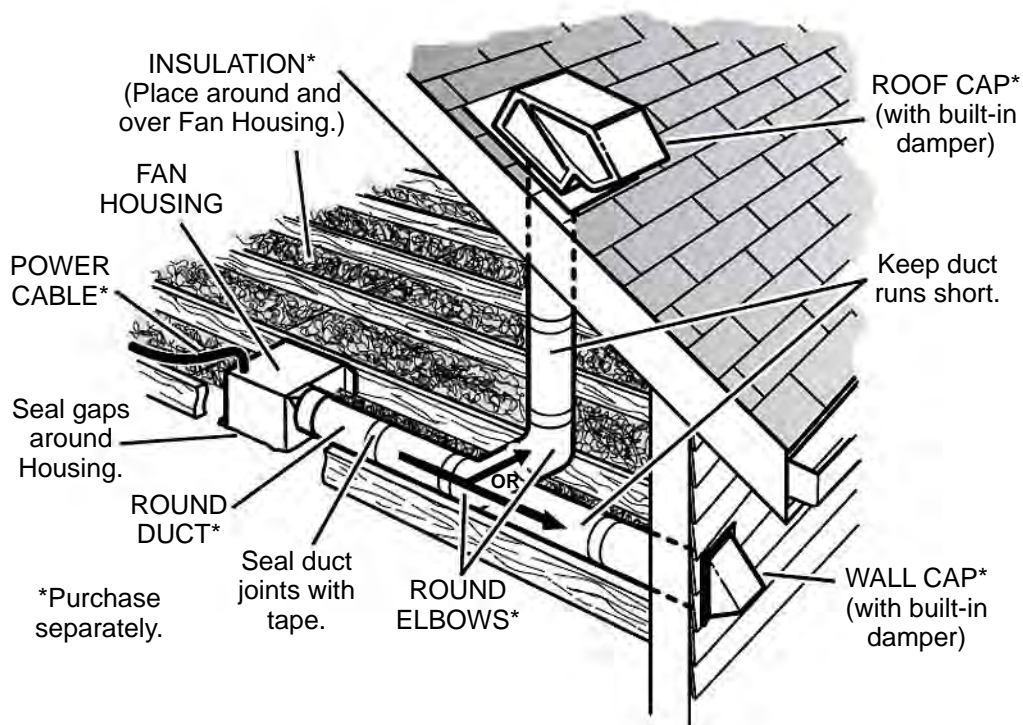
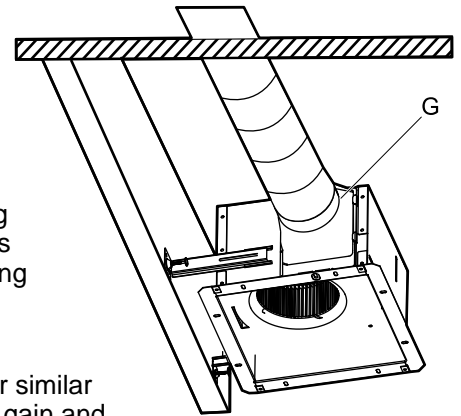
- Ensure the main body (A) is level.
- Ensure the flange on the main body is flush with the ceiling joist.
- Firmly secure all screws on the main body and any installed brackets.
- Use long wood screws (BB) to secure the main body flange to bottom of ceiling joist as shown.



Installation (continued)

7 Connect duct

- Install a circular duct to outlet and secure it with duct tape or clamps.
- Install the duct (G) to the outlet with a gradient 1° ~ 2° to the outside as shown.
- The ducting from this fan to the outside of the 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 reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.
- 4" round is recommended for best performance.
- Ensure duct joints and exterior penetrations are sealed with caulk or other similar material to create an air-tight path and to minimize building heat loss and gain and reduce the potential for condensation.
- Place/wrap insulation around duct and/or fan to in order to minimize possible condensation buildup within the duct, building heat loss and gain.



Installation (continued)

8 Connect wiring



WARNING: Wiring must comply with all applicable electrical codes. Turn OFF power before removing or installing connectors.



WARNING: COPPER TO COPPER ONLY. Do not use aluminum wire.



WARNING: Follow all local electrical and safety codes.

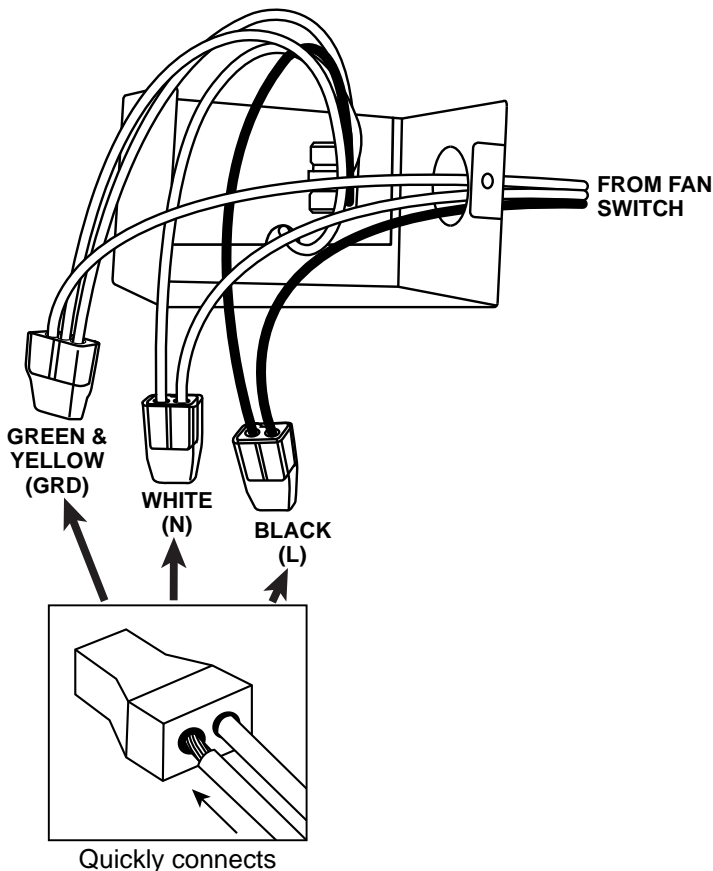


CAUTION: Never place a switch where it can be reached from a tub or shower.



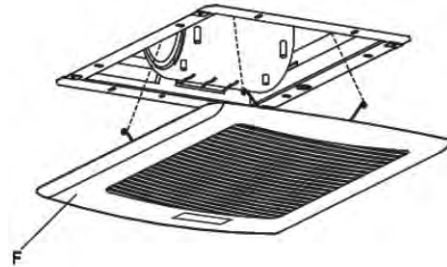
CAUTION: If your house wires do not match these colours, determine what each house wire represents before connecting. You may need to consult a licensed electrician to determine this safely.

- Match colours as shown.



9 Attach grille

- Insert the mounting springs into the slots in the grille (F).
- Squeeze springs together and insert into the main body.



Troubleshooting



CAUTION: Do not install in locations where the temperature will exceed 40°C.

Problem	Possible Cause	Corrective Action
Fan will not turn on	<input type="checkbox"/> Power off	<input type="checkbox"/> Make sure the power supply is on
	<input type="checkbox"/> Faulty switch	<input type="checkbox"/> Test or replace the switch
	<input type="checkbox"/> Faulty wire connection	<input type="checkbox"/> Check wire in the switch box

Care and Cleaning



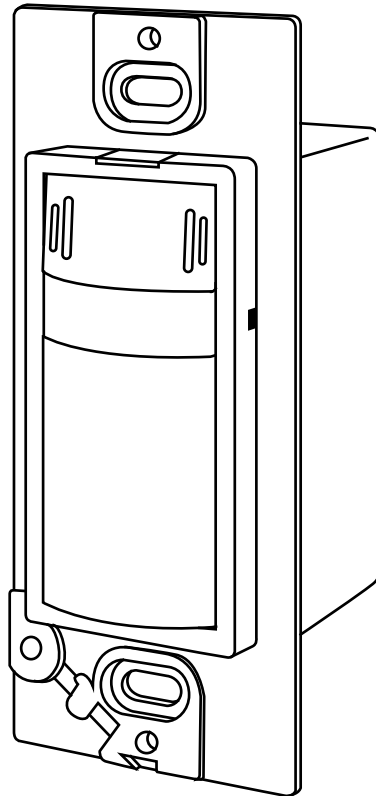
WARNING: Unplug or disconnect the appliance from the power supply before servicing.

- To reduce the risk of fire, electric shock, or injury to persons before servicing or cleaning the unit, disconnect and lock the power supply at the panel to prevent the power from being turned on.
- Before servicing or cleaning the unit, disconnect and lock the power supply at the panel to prevent the power from being turned on.
- Remove the grille by squeezing the springs and pulling down.
- Wash and clean the grille in a sink and dry with a cloth.
- Remove dust and dirt from the fan housing with a vacuum cleaner.
- Dampen cloth with dish detergent, wipe the fan housing and dry with a cloth.
- Replace the grille.

Specifications

- Model: F100-W1
- Exhaust Diameter: 10.2 cm
- Voltage (V): 120 volts AC
- Rate (Hz): 60 hertz
- Power (W): 22 watts
- Rotate Speed (RPM): 1050 rotations per minute
- Air Flow At 0.1x: 2.83 cubic meter per minute
- Weight: 4.5 kg
- Noise (Sones): 1.3 sone
- Housing Dimensions
 - Length: 23.2 cm
 - Width: 23.2 cm
 - Depth: 19.7 cm
- Grille Dimensions
 - Length: 32.4 cm
 - Width: 32.4 cm

SECTION 2



Fan Control

Safety Information



CAUTION:

1. Use only a 120V AC 60Hz power supply connection.
2. For indoor use only.
3. Do not exceed the control's maximum electrical load ratings, as indicated on the product label.
4. Must be installed and used in accordance with your local electrical codes.
5. If a bare copper or green ground connection is not available in the wall box, contact a licensed electrician for installation.
6. For use with permanently installed 120V AC powered fans only.
7. Use only #14 or #12 copper wire connections.



WARNING:

Turn OFF circuit breaker or remove fuse(s) and test that power is OFF before wiring. Wiring the control live can cause serious risk of electrical shock and/or damage the control, voiding the warranty. FOR SAFETY, THIS PRODUCT MUST BE INSTALLED IN A GROUNDED WALL ENCLOSURE. If you are unfamiliar with methods of installing electrical wiring, secure the services of a qualified licensed electrician. USE ONLY COPPER WIRE, DO NOT use aluminum wire with this device.

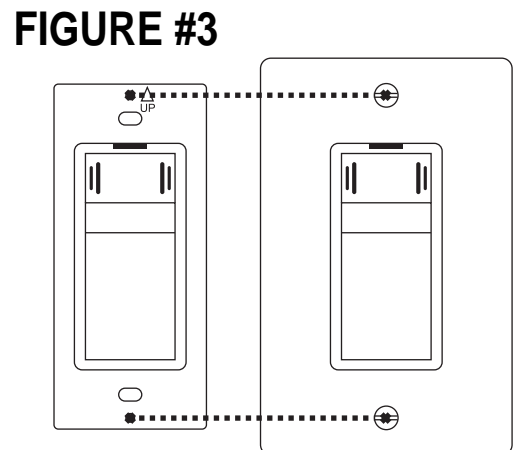
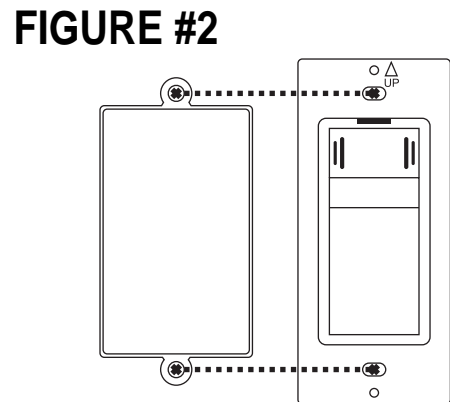
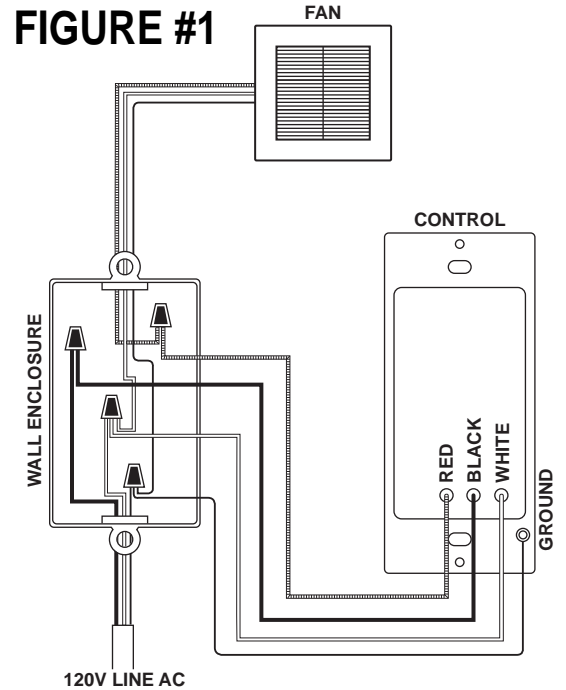


IMPORTANT:

Read each step carefully and perform in sequence. The control will not work or will become damaged if wires are connected incorrectly. To prevent damage, connect the control exactly as shown in the installation diagrams, otherwise warranty will be voided. Prior to wiring, straighten or clip ends of wire such that ends of each wire are straight (if using the control to replace an existing switch). Strip wire insulation at the end of each wire to expose 16 mm of copper. Where instructed to make a connection, twist ends of stripped wires together and twist a proper connector clockwise until secure.

Installation

1. **WARNING** To avoid fire or risk of electrical shock, turn OFF power at circuit breaker or disconnect fuse. Test the power is OFF before you begin wiring.
2. **BEFORE YOU MOUNT THE CONTROL** (new installation) Install the control in a 8.9 cm deep single-gang or multi-gang electrical wall enclosure. OR (replacement of existing switch) remove existing wall plate and switch device being replaced.
3. **ATTACH POWER WIRE AND FAN WIRE** Attach 120V AC 60Hz 3-wire power (Hot / Neutral / Ground) inside the wall enclosure with a minimum of 15.2 cm leads. Attach fan three wire leads inside the wall enclosure also with minimum 15.2 cm leads. If an existing power connection is used in an existing wall enclosure you must confirm proper AC 120V Hot / Neutral / Ground are available.
4. **CONNECT WIRING** Attach wires (as shown in FIGURE #1). Make sure the wall enclosure, fan, and the control are properly grounded. Make sure ground wire is securely fastened. Tighten all ground screws or wire nuts securely. Use the proper sized wire nut for #14 or #12 wire. Make sure to strip back the copper wire 1.6 cm and twist wire and nut clockwise.
5. **FASTEN IN WALL ENCLOSURE** Tuck wires into wall enclosure and fasten the control to the wall enclosure with the two screws provided (See FIGURE #2).
6. **FASTEN WALL PLATE** Attach the wall plate (See FIGURE #3).



Using The Control

Control Functions (see FIGURE #4)

- **Blue LED Light:** Lets you know when your fan is on (especially useful for fans with low sound levels).
- **Condensation Sensor:** Senses moisture in the room and turns your fan ON and OFF automatically.
- **Timer and Sensor Settings:** Countdown timer (left) and moisture sensitivity (right) settings (hidden behind a removable cover – see pages 7-8 for details)
- **Fan ON/OFF:** Turns countdown timer ON and OFF (can be used to temporarily override condensation sensor).

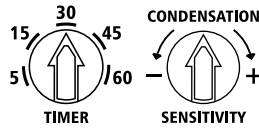
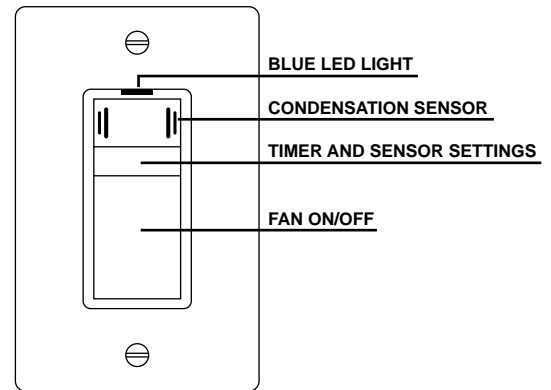


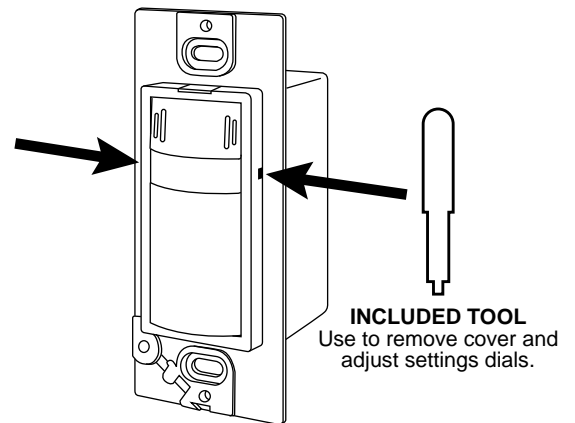
FIGURE #4



Changing The Settings

By default, the control comes with the moisture sensitivity set to average levels, and the countdown timer set to 30 minutes. To change the settings, remove the "Timer and Sensor Settings" cover by taking off the face plate and then inserting the end of the included tool (or a non-metal tool of your own) into the two holes on either side of the control (see FIGURE #5). Use the included tool to turn the settings dials. The countdown timer can be set between 5–60 minutes. Moisture sensitivity can be set at low, average, or high sensitivity. Once you change a setting, the changes will take effect after the next ON/OFF cycle, so it's recommended that you turn your fan ON then OFF after you make a change to the settings.

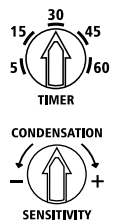
FIGURE #5



Manual ON/OFF: Press the "Fan ON/OFF" button once to manually turn fan ON, and again to turn fan OFF.

Countdown Timer: When the fan is turned ON manually, the countdown timer will run your fan for your selected period of time, then turn your fan OFF.

Moisture Sensitivity: The minus sign is low moisture sensitivity and the plus sign is high sensitivity; the dial can be set anywhere in between. In a very moist environment, lower sensitivity may be needed to avoid excessive fan run-time. In a very dry environment, higher sensitivity may be needed for the sensor to detect moisture. When the control senses condensation, the blue LED will pulse slowly.



Setting Sensitivity: The factory setting of the moisture sensitivity dial is set to the noon position. If you feel the factory setting is too slow in turning on your fan, turn the dial to the right an hour at a time. Or, if you feel the factory setting turns your fan on too quickly, turn the dial to the left an hour at a time until the desired sensitivity level is reached.

Testing The Control

1. After you have completely installed the control, selected your timer and sensor settings, and attached the wall plate on the control, you can turn on the breaker to apply power. **WARNING:** If the breaker trips or the fuse blows, STOP and call a qualified electrician to investigate the problem. Turn the breaker OFF until the problem has been corrected.
2. Press the Fan ON/OFF button to see the fan turn ON, press the button again to see the fan turn OFF.
3. With the fan OFF, you can test the sensor by blowing into the sensor as if you were blowing on a mirror to steam it. Use three puffs of breath and the fan will come ON automatically. The blue LED will pulse slowly; this shows you the control is sensing condensation.
4. Sensor Shut-Off: To turn off the sensor and make the control just a manually activated adjustable timer, hold down the fan ON/OFF button for 15 seconds. To turn the sensor back on, do so again.



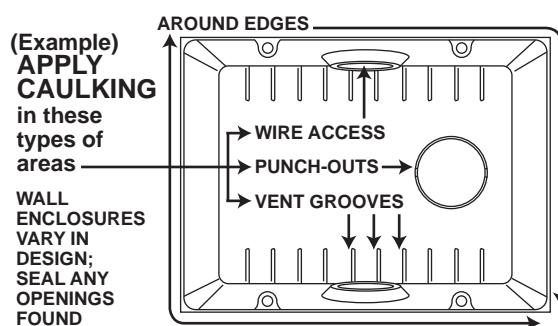
ELECTRICAL SHOCK WARNING: This control is an automatic ON device. At no time should a person work on the fan/light or any appliance connected to this control without the electrical circuit breaker or fuse switched OFF. This control could turn ON the attached device by the unintended presence of condensation while the work is being performed. Always disconnect the AC power before any work is done to any part of the circuit this control is connected to. If you do not understand this warning, seek the services of a qualified licensed electrician.

Air Drafts In Wall Enclosure

Older homes may experience air flowing (drafts) from the inside wall cavity into or out of the wall enclosure depending on the draft situation. If this control is experiencing problems sensing condensation, sealing any enclosure openings is needed. The wall enclosure is easy to seal with standard painter's caulking and a caulking gun. To begin you must DISCONNECT all electrical power to the control before sealing the openings. Unscrew all box switches and pull them forward to allow access to the back of the enclosure. Apply caulking into all openings in the enclosure, even the very small ones. Seal every opening and around electrical wires at their entering point. Also seal the perimeter around the enclosure between the wall board and the enclosure. This will stop heat loss and allow this control to sense the room and not the drafts in the walls.

(See FIGURE #6)

FIGURE #6



SECTION 3

WARRANTY

Three-Year Limited Warranty

Go To Research Technologies, Inc. (GTR) warrants to the original consumer purchaser of its products that such products will be free from defects in materials and workmanship for a period of three years from the date of original purchase.

There are no other warranties, express or implied, including but not limited to, implied warranties of merchantability or fitness for a particular purpose.

During this three-year period, GTR will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service. This warranty does not extend to fluorescent lamp starters and tubes.

This warranty does not cover

- (a) normal maintenance and service or
- (b) any maintenance or repair, faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the three-year period as specified for the express warranty. Some areas do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

GTR's obligation to repair or replace, at GTR's option, shall be the purchaser's sole and exclusive remedy under this warranty. GTR shall not be liable for incidental, consequential, or special damages arising out of or in connection with product use or performance. Some areas do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from area to area.

This warranty supersedes all prior warranties.

To qualify for warranty service, you must

- (a) notify GTR via our website at www.DewStop.com,
- (b) give the model number and part number identification, and
- (c) describe the nature or any defect in the product or part.

At the time of requesting warranty service, you must present evidence of the original purchase date.

Go To Research Technologies, Inc.

www.DewStop.com