



# Installation Instructions

## **READ AND SAVE THESE INSTRUCTIONS**

### **SAFETY INFORMATION**

Read the following safety information before installing this Whole House Fan. Failure to follow these instructions could result in personal injury, death or property damage.

### **WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before installing, servicing, or cleaning the unit, main electrical disconnect switch must be in the OFF position and install a lockout tag.

### **CAUTION - FOR GENERAL VENTILATING USE ONLY. NOT DESIGNED TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.**

### **WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- Qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction, must do installation work and electrical wiring.

Contact Us  
**(888) 398-5267**

# WHERE TO LOCATE

Whole House Fans are designed to pull in fresh, cool air from the outside through open windows in your home. Hot air that is in the home is pulled up through the fan and into the attic, and then exhausted through vents in the roof, under eaves, soffits or gables.

## STEP 1: SELECT THE INSTALLATION SITE

1. The unit is designed to be installed on the floor of the attic between the joist that are a minimum of 16" on center. Most modern homes are built with either 16" or 24" on-center (OC) joists.
2. Select the location for your new Whole House Fan. Usually, locating the fan in a central hallway or in the open area at the top of the stairs produces the most uniform airflow.
3. Once you have selected the installation site, check the attic immediately above the site to be sure that there are no ducts, piping or wiring obstructing the installation area.
4. Selected location should have unobstructed space above the floor joist of at least 22.5" W x 26" L x 30" H.
5. The Cold Climate damper box can be mounted in the horizontal or vertical orientation. Our recommended location is on a ceiling in the horizontal position. The Back Draft damper can only be installed in the horizontal position.



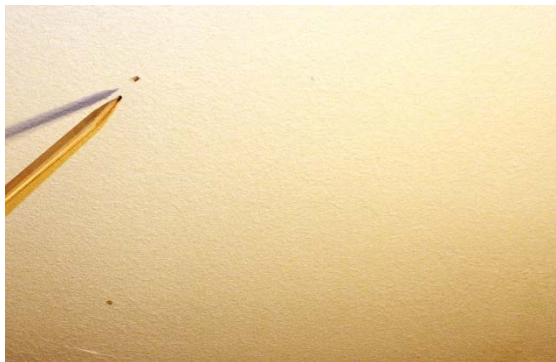
# INSTALLATION

## 1. **\*\*Warning: Cut out drywall to the dimensions of the Grille and not to the dimensions of the metal damper box.**

- From inside the attic at your predetermined location drill two holes at the edge of the joist approximately 12 inches apart.



- From inside the home use the two newly drilled holes as a guide to align the inner edge of the grill and outline with a pencil.



- Using a drywall saw or similar tool, cut out the drywall. **(Note: be sure to secure the drywall with one hand while cutting to prevent the drywall from falling or tearing away.)**

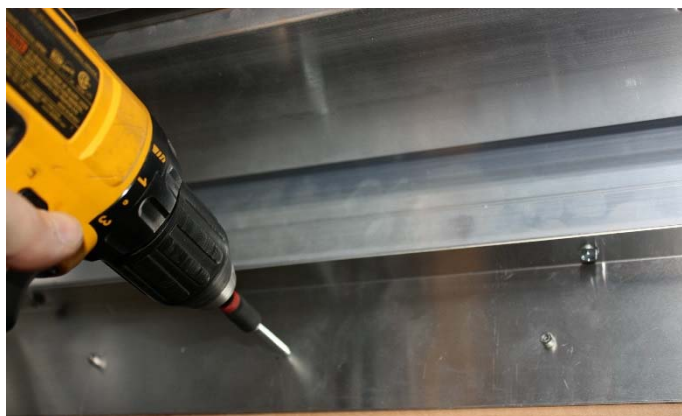


### 3. Installing Damper Box

- ✓ Attach the supplied brackets to the joist as shown in the picture below using the 1 ½" hex screws.



- Place the damper box on top of the brackets as shown in the picture below and screw one side of the damper box to the joist. The brackets will support the weight of the damper box.



#### 4. Attaching the Ducting

**\*\*\*IMPORTANT\*\*\* DO NOT stretch ducting tight from end to end, as this could cause the tape securing the ducting to the metal collar to pull away over time. However, you do want to use the full length of the ducting while leaving a little slack to get the quietest operation.**

Place one end of the duct collar over the fan shroud and secure with at least four of the self-tapping screws evenly spaced around the shroud.



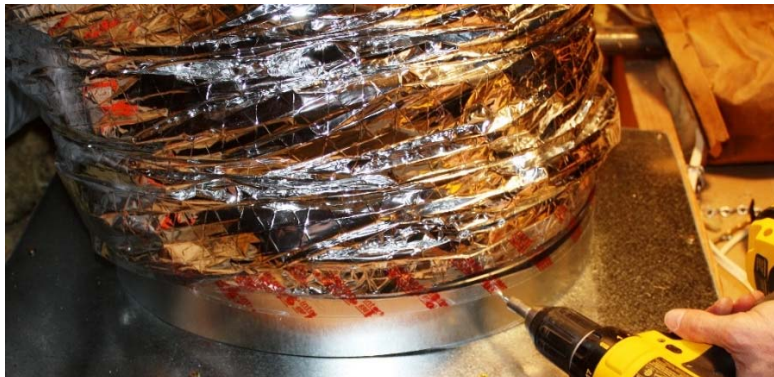
**NOTE: Attaching the ducting to the fan housing is best done with a second person firmly holding the fan housing in place while the other person installs the screws.**



- Using the black nylon strap hang the ducting from the rafters with 1 ½” hex screws and flat washers. **Note: For quietest operation it is best to get a 90 degree bend in the ducting.**



- Place the other end of the duct collar over the damper box and secure with the supplied self-taping screws.



## 5. Installing Grille

- Install the grille over the opening and secure with the four grille screws provided.



## 6. Remote Control Operation

- Plug the electrical cord from the fan housing into the remote control outlet **Note: if you do not have an electrical outlet in your attic you will need to install one. Be sure to have a licensed electrician install all electrical wiring. Failure to have a professional install electrical wiring could result in injury or death.**



## 7. Wall Switch Operation

- See the one page wall switch instructions that is in that bag with the wall switch components. **Note: Be sure to have a licensed electrician install all electrical wiring. Failure to have a professional install electrical wiring could result in injury or death.**

## REQUIRED VENTING AREA

For proper operation of your Comfort Cool whole house fan, it is CRITICAL that your attic has sufficient venting area; otherwise the hot air cannot easily escape and creates back-pressure that can substantially reduce the performance of your new whole house fan.

The “**net-free**” area of a vent is the total vent opening minus the loss caused by the interference of the screen, louver or grille covering the vent.

- The **Centric Air 1.5** requires a **MINIMUM of 1.5 sq. ft. of "net free" venting** area in your attic to allow for proper exhaust. This means that it requires the equivalent of a 2 ft. by 2 ft. unobstructed hole.
- The **Centric Air 2.0** requires a **MINIMUM of 2.5 sq. ft. of "net free" venting** area in your attic to allow for proper exhaust. This means that it requires the equivalent of a 2 ft. by 2 ft. unobstructed hole.
- The **Centric Air 2.7** requires a **MINIMUM of 3.25 sq. ft. of "net free" venting** area in your attic to allow for proper exhaust. This means that it requires the equivalent of a 2 ft. by 2½ ft. unobstructed hole.
- The **Centric Air 3.1** requires a **MINIMUM of 4 sq. ft. of "net free" venting** area in your attic to allow for proper exhaust. This means that it requires the equivalent of a 2 ft. by 3 ft. unobstructed hole.
- The **Centric Air 4.0** requires a **MINIMUM of 5.25 sq. ft. of "net free" venting** area in your attic to allow for proper exhaust. This means that it requires the equivalent of a 2 ft. by 3 ft. unobstructed hole.

Since most attics have multiple vents, often of different types, and since most vents are partially obstructed by grilles and/or bug/animal screens, you’ll need to do some calculations to make sure your venting is sufficient. While it is our experience that most properly constructed houses have the required venting, not all do. And because this is so critical to the proper operation of your unit, it is important that you verify it. Different types of vent designs have different ratios of obstruction caused by grilles and screening and manufacturers typically publish these numbers. If this information is not available to you, a ratio of 50% is a good rule of thumb. For example a typical 24" x 24" louver, with a gross area of 4 sq. ft. would have a net free area of 2 sq. ft.

Vent Type	Length	Width	Net Free Area (NFA%)	Calculation L x W x NFA / 144
<b>Louver</b>	16"	16"	50 %	= 16 x 16 x 0.5 / 144 = 0.89 sq. ft.
<b>Ridge Vent</b>	48"	not used	13 %	= 48 x 0.13 / 12 = 0.52 sq. ft.
<b>Eave Vent</b>	12"	4"	50 %	= 12 x 4 x 0.5 / 144 = 0.16 sq. ft.

- In practice, less net-free area than is recommended will decrease the airflow performance of the unit.
- If you are unsure as to how much net-free venting you have, please consult a roofing professional.

Net-free venting area can be acquired by any combination of gable, eyebrow, soffit, or ridge vents, or any other means that provide ventilation to the attic space.