



WARNING: Read all warning messages and instructions before starting installation of this vent. Failure to follow these safety instructions can result in injury or even death. If you need assistance in understanding these instructions or have questions or comments, please call (800) 247-8368.

WARNING



**LACERATION
HAZARDS**

WARNING: This product has sharp metal edges that can cut your hands. Wear canvas work gloves while handling the vent during installation. Safety glasses are also recommended for the installation of the vent.

WARNING



**OTHER
HAZARDS**

WARNING: Do not install vents near areas of concentrated water runoff (ex: roof valley).

CAUTION: Installation on minimum 3:12 roof pitch or greater. If using this as an Intake Vent, all of the holes need to have a minimum of 6 inches above the attic insulation. For further information regarding use in heavy snow load areas, contact 800-AIR-VENT.

NOTE: For optimum performance an attic ventilation system should be a balanced system of intake and exhaust vents. Air Vent does not recommend mixing different types of exhaust vents. When reroofing DO NOT reuse the old vents. Replace them with new vents.

NOTE: Air intake openings are necessary for proper exhaust operation. Best results will be obtained if these openings are located around the eaves. The ShadowHawk, undereave soffit grills or continuous soffit vents are suggested.

TOOLS NEEDED:

- Work gloves
- Safety glasses
- Reciprocating saw or jigsaw
- Roofing shingles if applicable
- Roofing caulk/sealant
- Hammer
- 21 roofing nails long enough to penetrate roof deck
- Chalk or pencil
- Tape measure

STEP 1: CALCULATE THE PROPER AMOUNT OF VENTILATION NEEDED FOR YOUR ATTIC.

Acquire the minimum NFA (Net Free Area) from your local building code.

Use our online tools!

Online Calculator:

<http://www.airvent.com/ventilation-resources/attic-ventilation-calculator>

Mobile App:

Air Vent App in the Apple App store and from Google Play



STEP 2: DETERMINE APPROXIMATE LOCATION.

- Space the roof vents evenly along the ridge for exhaust and the bottom edge of the roofline for intake.
- Ensure there are no electrical wires or cables where you want to install your vent.
- The distance between the back edge of the intake vent and the roof ridge should be no greater than 49 feet.

FOR NEW CONSTRUCTION: SEE 3A

OR

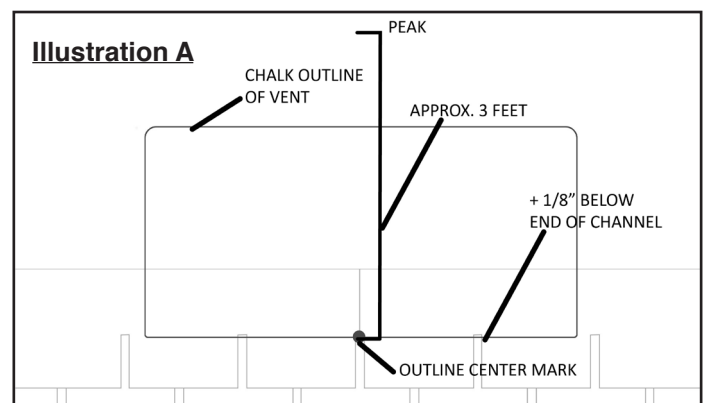
FOR EXISTING CONSTRUCTION: SEE 3B

STEP 3A: NEW CONSTRUCTION APPLICATION

Determine if you are installing the vent as an exhaust vent or an intake vent, measure, and cut.

- **EXHAUST VENT** is installed near roof's ridge: Measure 3 feet DOWN from the ridge and align the FRONT of the vent to the center of the next course of shingles + 1/8". (See Illustration A.)

- Trace the vent with chalk or pencil. Next, mark the center of the front chalk line. Lay vent to the side. Next, skip to measure.
- **INTAKE VENT** is installed near roof's lower edge: Measure 3 feet UP from the lower roof edge and align FRONT of the vent to the closest lower edge of the shingle.
- Trace the vent with chalk or pencil. Next, mark the center of the front line of chalk. (See Illustration A.) Lay vent to the side. Next, measure.

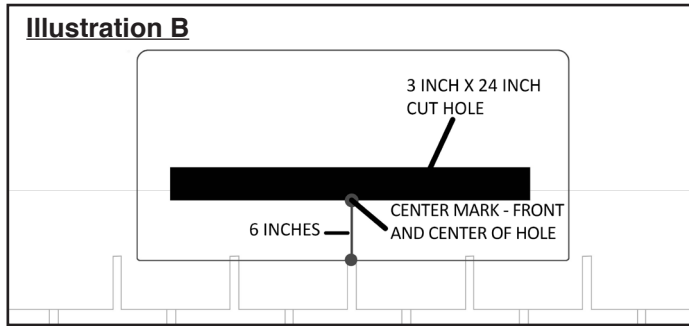


Measure: (See Illustration B on Page 2.)

- From the mark you made in the center of the lower chalk line, measure up toward the peak 6 inches. Mark that center spot. This is the center lower edge of the hole. Use the **TEMPLATE** on the bottom of the box or draw a rectangle that is 24 inches wide and 3 inches tall.

- Cut out the rectangle drawn by using a reciprocating saw or jigsaw. The hole should penetrate the shingle, underlayment, and the decking. Do not cut the rafters.

Illustration B



Apply caulk/sealant:

- Apply caulk/sealant under the front row shingles that the vent will rest on top of.
- On the underside of the vent, place a thick bead of caulk/sealant in a continuous line centered on the vent's flange. This will prevent any leaks between the vent and the roof surface.
- Carefully line up and place the vent inside the outline you created in step 3.
- Check if the vent is lined up properly from inside attic and the vent is not blocking the cut hole. Adjust and re-caulk/re-seal if needed.

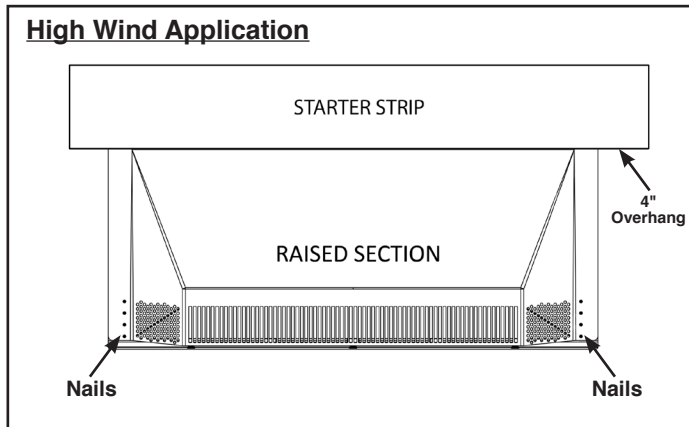
IN HIGH WIND AREAS

- **When installing in high wind areas, use ring-shank nails instead of smooth-shank nails. Also, apply four nails to each of the downhill corners of the product as shown below.**

Secure vent:

- Use a hammer and 21 roofing nails to secure the vent's flange to the roof. First nail should be placed centered on rear flange. Nails need to be spaced 4 inches apart centered on the flange. Roofing nails must penetrate roofing deck. Place a continuous bead of caulk/sealant over top of nails.

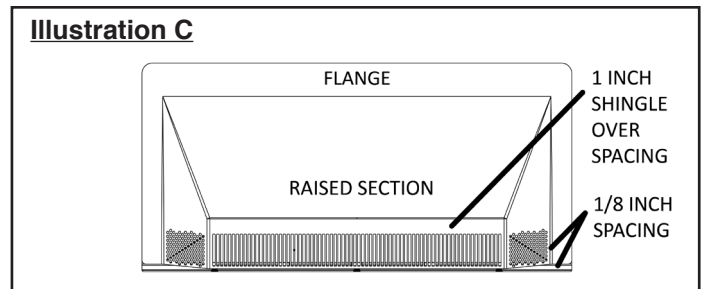
High Wind Application



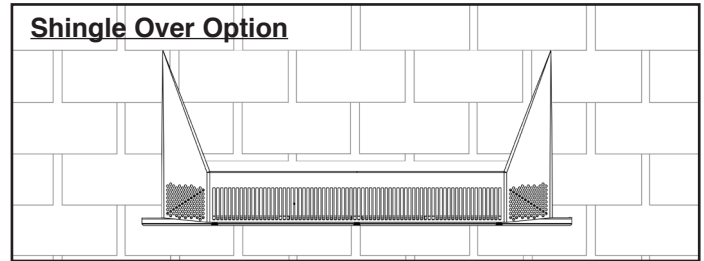
Install shingles:

- Lay a shingle starter strip over rear flange with a 4" inch overhang.
- Do not nail shingles onto flange or raised section of vent. For the shingles placed on the side of the vent, make a small one inch, 45 degree angle cut to the shingle corner that will be placed against the side of the vent.
- Leave a 1/8 inch minimum space between raised section of vent and shingles.
- Leave 1 inch between louvers and shingles if shingling over vent. (See illustration C. and Shingle Over option image)

Illustration C



Shingle Over Option



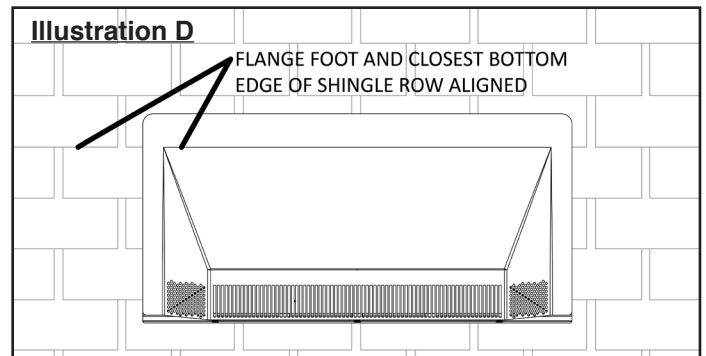
- Install the shingles into the vent flange with roofing caulk/sealant.
- Firmly press the side and top of shingles to help seat them.

STEP 3B: EXISTING CONSTRUCTION APPLICATION

Determine if you are installing the vent as an exhaust vent or an intake vent, measure, and cut.

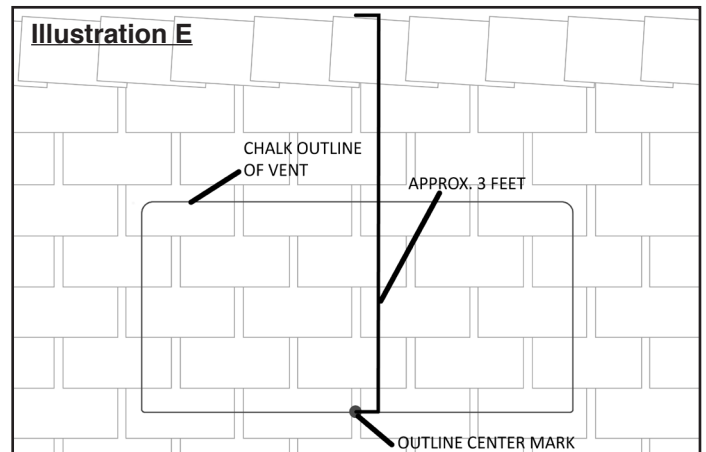
- **EXHAUST VENT** is installed near roof's ridge: Measure 3 feet DOWN from the ridge and align the FRONT of the vent to that measurement.
- Next, move the vent up to align the rear foot of the flange to the bottom of the closest shingle row. (See Illustration D.)
- Trace the vent with chalk or pencil. Next, mark the center of the front chalk line. Lay vent to the side. (See illustration E.) Next, skip to Measure.
- **INTAKE VENT** is installed near roof's lower edge: Measure 3 feet UP from the lower roof edge and align FRONT of the vent to that measurement.
- Next, move the vent up to align the foot of the rear flange to the bottom of the closest shingle row. (Illustration D.)

Illustration D



- Trace the vent with chalk or pencil. Next, mark the

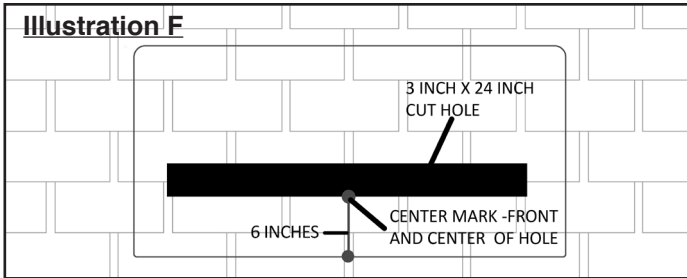
Illustration E



center of the front line of chalk. (Illustration E.) Lay vent to the side. Next, measure.

Measure: (See Illustration F.)

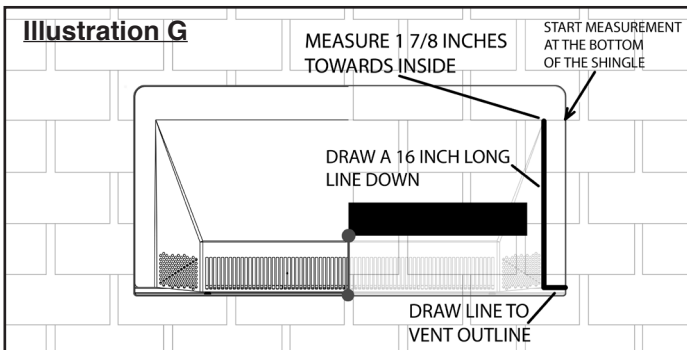
- From the mark you made in the center of the lower chalk line, measure up toward the peak 4½ inches. Mark that center spot. This is the center lower edge of the hole. Use the **TEMPLATE** on the box or draw a rectangle that is 24 inches wide and 3 inches tall.
- Cut out the rectangle drawn by using a reciprocating saw or jigsaw.



The hole should penetrate the shingle, underlayment, and the decking. Do not cut the rafters.

Prepare to slide vent under shingles

- Apply caulk/sealant under the front row shingles that the vent will rest on top of.
- (See Illustration G.) From the shingle line that will cover the rear



flange, measure towards inside 1 7/8 inches. Mark roof. From that mark, draw a straight line 16 inches down. Make another line to the vent outline. Repeat on other side.

- Before cutting shingles, verify the chalk lines are placed correctly. (See Illustration G.)

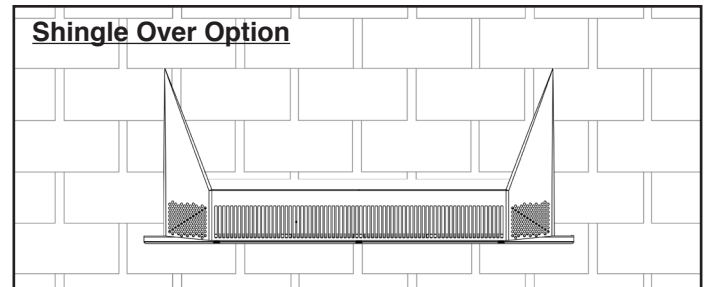
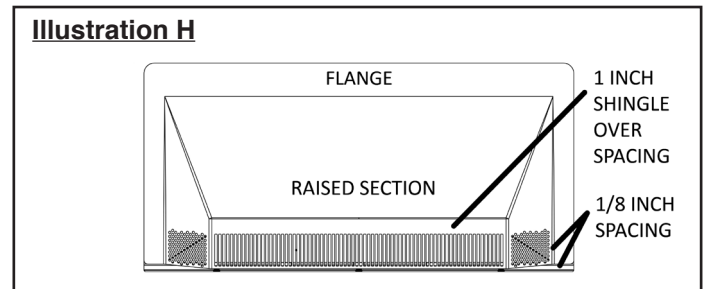
- Cut through the top shingles along the lines.
- Gently slide vent under the shingles until the flanges no longer show.

Secure vent:

- Lift front of vent just enough to place a continuous bead of sealant underneath and out of sight. Sealant cannot block the drainage holes.
- Gently lift shingles and nail vent's flange to the roof. Use a hammer and 21 roofing nails to secure the vent's flange. The first nail should be placed centered on the rear flange. Nails need to be spaced 4 inches apart centered on the flange. Roofing nails must penetrate roofing deck. Place a continuous bead of caulk/sealant over top of nails.

Install shingles:

- Do not nail shingles onto flange or raised section of vent. For the shingles placed on the side of the vent, make a small one inch, 45 degree angle cut to the shingle corner that will be placed against the side of the vent.
- Leave a 1/8 inch minimum space between raised section of vent and shingles.
- Leave 1 inch between louvers and shingles if shingling over vent. (See illustration H. and Shingle Over option image)



- Install the shingles into the vent flange with roofing caulk/sealant.
- Firmly press the side and top of shingles to help seat them.

LIMITED LIFETIME WARRANTY

The ShadowHawk vent has a limited lifetime warranty from date of purchase against defects in workmanship and materials. If you believe any part is defective, call (800) 247-8368 for Customer Service. If it's determined that parts need to be returned, they must be shipped freight prepaid to Air Vent, 4117 Pinnacle Point Drive, Suite 400, Dallas, TX 75211. If found to be defective following examination by Air Vent, any defective part will be replaced free of charge and returned freight prepaid. This warranty does not cover any labor costs, including those required for field repair, replacement or removal of any allegedly defective part. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

REPLACEMENT PLUS PROTECTION

The Air Vent product to which this warranty applies is covered by Replacement Plus protection for a period of five (5) years, provided that the product has been installed in strict accordance with Air Vent's written installation instructions and in accordance with all local codes and standards, including those pertaining to fire-rated construction. Under this warranty feature, Air Vent, at no charge, will replace any part covered by this warranty and found to be defective during the Replacement Plus period (the Replacement Plus period begins when the vent installation is completed.) Air Vent's maximum liability under Replacement Plus will be equal to the reasonable cost of the replacement part, including labor to remove the defective part and install the replacement part.

