Python Single Layer Vent for Roof Ridge – Installation Instruction for Nail Gun or Hand Nail Installation

Roof Decks: Use on minimum 3/8" (10 mm) plywood or OSB decking (see recommended by APA -The Engineered Wood Association. Wood plank decks must be well-seasoned and supported having a maximum 1/8" (3 mm) spacing, using minimum nominal 1" (25.4 mm) thick lumber, a maximum 6" (152 mm) width, with adequate nail-holding capacity

NOTE: Use only one type of exhaust ventilation so that you do not short circuit your exhaust vents by unintentionally converting them into an intake vent. Continuous ridge vents work best. Do not use with gable-end or roof louvers, wind turbines, solar or powered vents or other exhaust vents.

Slope Restrictions: Use only on slopes between 2:12 and 20:12

Step 1 Instructions for Slots

Cut a 2" 951 mm) slot along the ridge, 1" (25.4 mm) on each side. Leave uncut (closed) sheathing area of 6" (152 mm) at each end of the ridge.

Cut through sheathing only, avoiding roof trusses. (In houses with a ridge board, cut 3-1/2" (89 mm) slot, 1-3/4" (44.4 mm) on each side.) (Figure I)

Figure 1

Step 2 Ridge Vent Installation

Uncoil Python Single Layer Vent along the entire length of the ridge, covering uncut 6" (152 mm) sheathing area on both ends (Figure B)

Shorter lengths can be joined by caulking and butting the ends. (Figure 2)


Figure 2

Step 3 Cap Shingle Installation

Install cap shingles directly over Python Single Layer Vent. Use included 1-3/4" (44.4 mm) coil nails. (Figure C)

Python Single Layer Vent has a ¾" (19.1 mm) nominal thickness for optimum ventilation. Be sure not to crush or compress the vent during installation.

NOTE: Nails must be of sufficient length to penetrate through plywood and OSB decks or at least 3/4" (19.1 mm) into wood planks (Figure C)

Figure 3
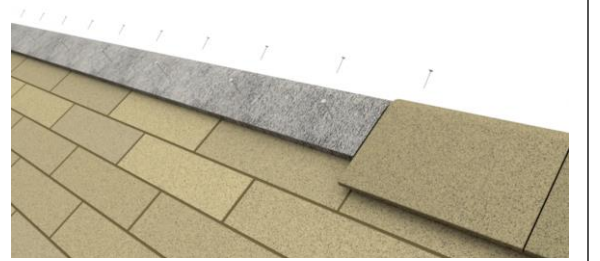
1. When marking off and cutting slot openings, make sure that the ends of the opening stop at least 6" (152 mm) from any end walls and at least 12" (305 mm) from hip and ridge intersections or chimneys
2. Where short ridges (dormers, ridge intersections) are used, mark and cut the slot and make sure that the end of the opening stops at least 12" (305 mm) from the ridge intersection.
3. Not recommended for roof hips.
4. For additional protection in high wind areas, a bead of silicone, roofing cement, or polyurethane roofing sealant can be applied around the perimeter of the underside of the cap shingle before fastening on the Python Single Layer Vent. Do not use excess roofing cement or polyurethane roofing sealant, as it may cause blistering of the shingles.
5. For additional protection on installations with extra-thick shingles, a bead of roofing cement or polyurethane roofing sealant can be applied to the underside of the outer edge of the vent along the entire ridge and at exposed edges so that any large gaps are completely filled. Do not use excess roofing cement or polyurethane roofing sealant, as it may cause blistering of the shingles.

Properly ventilated attics harness the chimney effect; the power of convection pulling in cooler air entering at the underside of the eave or near the eave by pushing warm, moist air up and out of the attic space at the ridge vent. Properly ventilated attics also utilize the wind effect where the wind flows over the ridge as it speeds up creating a natural vacuum above the ridge pulling hot moist air out of the attic. The mechanics of these two air movements require a proper amount of intake and exhaust for the system to work. A balanced system is required where two conditions need to be met:

1.   You need one square foot of vent area for every 150 square foot of attic floor space. The bare minimum according to code is one square foot of vent area for every 300 square foot of attic floor space with a vapor retarder. Please check with your local building official.

2.   Balance your ventilation with 50% for intake and 50% for exhaust.

3.   In no case should the amount of exhaust ventilation exceed the amount of intake ventilation

Python Calculator Math Example:

1. Calculate Square footage of attic floor space: 60 ft width x 40 ft length = 2,400 Square feet.
2. Select Exhaust Rule & Calculate Square Feet of required venting; Net Free Area of 1 Square foot of ventilation for every 150 Square foot of Attic floor space; =2,400 Square Feet /150 = 16 Square Feet of ventilation required
3. Convert to Square inches required; 16 x 144 = 2,304 Required Exhaust/Intake.
   a. Required ridge exhaust = 50% x 2,304 = 1,152 Square inches
   b. Required soffit exhaust = 50% x 2,304 = 1,152 Square inches
4. Lineal ft. of venting required;
   a. Ridge Exhaust Required in lineal ft PY-3475-20N; ¾" x 11.75" x 20' with Net Free Area of 17.5 Square inches per lineal ft = 1,152/17.5 = 66 ft
   b. Intake Venting Required in lineal ft. PY-3000 -50N; 1" x 3" x 50' with Net Free Area of 23.4 Square inches per lineal ft = 1,152/23.4 = 49 ft.