

Important! Read ALL instructions thoroughly before attempting to install the IV-9 Tile Roof Intake Vent.

Congratulations on your purchase of the IV-9 tile roof intake vent. The IV-9 is an intake vent that will help rid your attic of damaging heat and moisture when properly installed and used in conjunction with proper exhaust vents.

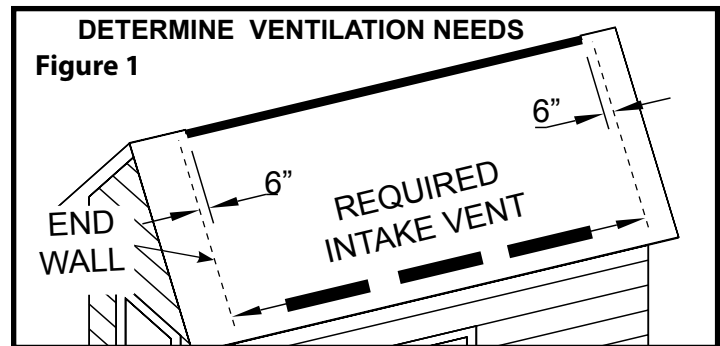
Required Before Installation

- A.** Most codes concerning residential attic ventilation require a balanced system of 50% exhaust vents and 50% intake vents. Exhaust vents should be located near the top of the roof and intake vents should be located near the bottom of the roof. When this balanced system is used, the Lomanco IV-9 meets or exceeds residential attic ventilation codes.
- B.** Examine your roof configuration and determine the correct amount of IV-9 Tile Roof Intake Vent needed for proper ventilation of your attic space. You can use a Lomanco ventilation guide to determine the amount of intake vents required for your chosen exhaust vents. Divide the required intake evenly for your attic space being ventilated. Example: If 50 linear feet of intake vent is required, you would want to install 25 linear feet on each side of the attic space if possible.
- C.** The IV-9 Tile Roof Intake Vent may be installed with or without battens. Determine if battens will or will not be used and follow the installation instructions for that particular construction method.
- D. Materials Required:** Roofing nails and a sealant/adhesive are needed for all installation methods.
- Sealant Methods:** The upper flange of the IV-9 Tile Roof Intake Vent may be sealed using different sealing methods. Listed below are the three approved methods and the required additional materials for each method:
- Method 1. Peel and Seal Tape**
a. At least 4 feet of 3" wide (minimum) peel and seal aluminum-backed tape.
- Method 2. Three-Course Mastic (Mastic/Reinforcement Mesh/Mastic)**
a. At least 4 feet of 3" wide (minimum) reinforcement mesh.
b. Adequate mastic to apply two complete coats.
- Method 3. Roofing Felt-Over-Flange (Underlayment-Over-Flange)**
a. At least 5 feet of roofing felt (tile underlayment).

NOTE: All materials must be approved based on local building codes.

STEP 1. — CUTTING THE VENTILATION SLOT IN THE ROOF DECKING

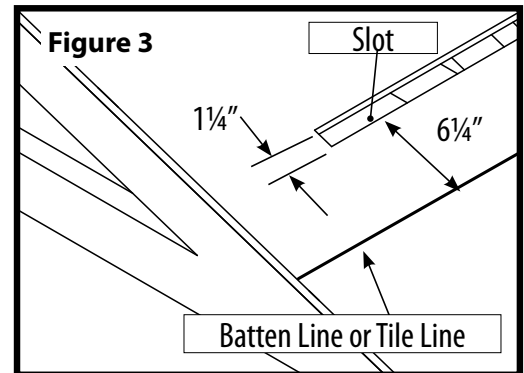
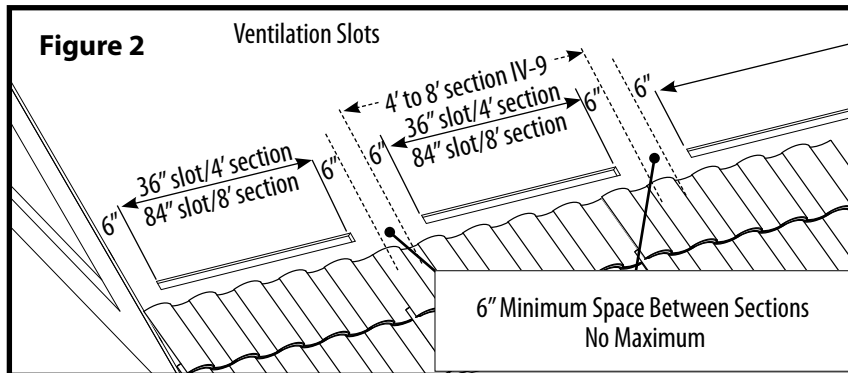
1. Install all tile roof components such as roofing underlayment, battens (if used), bird stops (if used) and field tiles up to the row just below the location for the IV-9 vents. All components should be installed per the TRI (Tile Roof Institute) installation manual pertaining to your specific climate region. (Note: A vented bird stop is not required but it will provide additional intake air if used in conjunction with the IV-9 vents.)
2. The ventilation slot for the IV-9 should end at least 6" from EACH interior end wall and allow the IV-9 to extend a minimum of 6" past the end of the slot. The IV-9 should be installed as low as possible on the roof deck to allow airflow that is unrestricted by attic insulation. (See Figure 1)
3. The IV-9 Tile Roof Intake Vent may be installed in 4' or 8' sections that are evenly spaced along the roof of the attic space to be ventilated. One section (4') will require a 36" ventilation slot. Two sections (8') will require an 84" ventilation slot. A minimum spacing of 6" is recommended between vent sections. (Please check with your local building codes to insure compliance with this spacing requirement.)



DO'S AND DON'TS FOR ATTIC VENTILATION.

- DO** install all Exhaust Ventilation at the SAME HEIGHT within a common attic area. Installation of exhaust vents at more than one level on a roof allows the upper exhaust vent to wrongly pull air in from lower exhaust vent rather than from the soffit Intake Vents.
- DON'T** install exhaust vents at different heights.
- DON'T** install Ridge Vents down the hip.
- DO** install ONLY ONE TYPE of Exhaust Ventilation within a common attic area. Exhaust Vents pull air from the easiest Intake source. The use of two or more types of exhaust vents such as Power Vents with Roof Vents or Gable Vents with Ridge Vents or Roof Vents could make one of these vents act as intake instead of pulling air from the soffit vents.
- DON'T** mix different types of exhaust vents.
- DO** install a BALANCED SYSTEM of Intake and Exhaust Ventilation. 50% Intake and 50% Exhaust is a balanced system. Improper intake may lead to snow or rain infiltration into the exhaust vents.

4. The IV-9 Tile Roof Vent may be installed with or without battens. Use the appropriate method below based on your construction to determine the ventilation slot location.



4a. Installation WITH Battens:

- Using a tape measure, mark the location of the lower edge of the ventilation slot at $6\frac{1}{4}$ " from the top edge of the batten as shown (**Batten Line**). Mark the upper edge of the slot for a $1\frac{1}{4}$ " ventilation slot opening. Using a chalk line, mark the roof deck showing the cut lines for the slot. (See **Figure 2** and **Figure 3**) Cut the slot and remove the cut decking. Do not over cut the slot in length or width.

4b. Installation WITHOUT Battens:

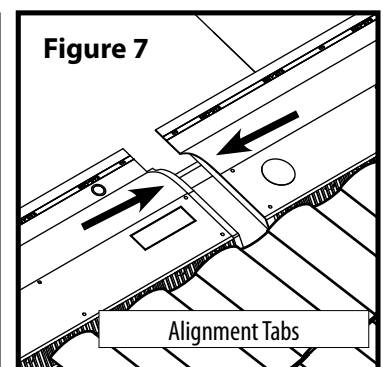
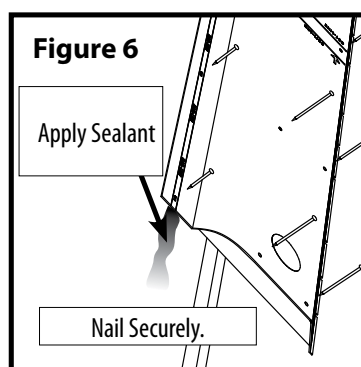
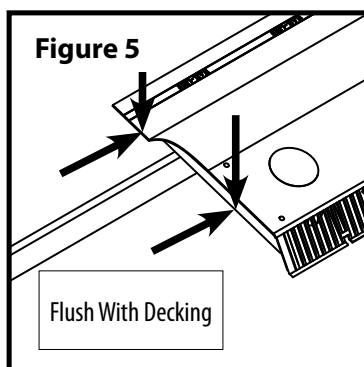
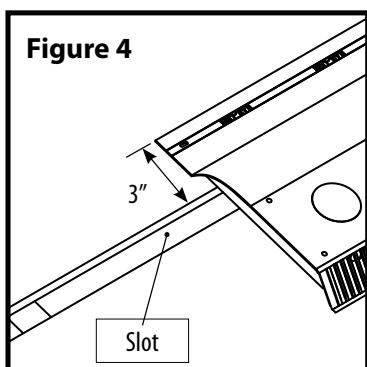
- Using a tape measure, mark the location of the lower edge of the ventilation slot at $6\frac{1}{4}$ " from the top edge of the tile as shown (**Tile Line**). Mark the upper edge of the slot for a $1\frac{1}{4}$ " ventilation slot opening. Using a chalk line, mark the roof deck showing the cut lines for the slot. (See **Figure 2** and **Figure 3**) Cut the slot and remove the cut decking. Do not over cut the slot in length or width.

STEP 2. — INSTALLATION OF THE IV-9 TILE ROOF INTAKE VENT

- Position the IV-9 Tile Roof Intake Vent 3" from the top edge of the flange to the top edge of the ventilation slot as shown. (See **Figure 4**) Measure and chalk line to ensure correct positioning of vent.
- The IV-9 must be installed on top of the tile underlayment and the vent must lay flat on the roof decking to allow proper air flow and sealing. (See **Figure 5**) Before nailing the IV-9 to the deck, apply sealant to the bottom of the flange to seal between the flange and the tile underlayment. Nail hole locations are molded into the IV-9. Use at least $\frac{3}{4}$ " roofing nails, or

adequate length, to penetrate the decking when nailing the upper flange. Use at least 2" nails, or adequate length, to penetrate the decking when nailing the IV-9 body. (See **Figure 6**)

- After securing the IV-9 with nails, apply sealant to each end of the IV-9 and at the butt joint if two vents are installed.
- If two sections are being installed, the IV-9 is designed with an alignment feature on each end (one male and one female). (See **Figure 7**) Place the male end into the female end ensuring that the entire length of IV-9 is as straight as possible.
- Due to the unique, pre-molded ends there are no additional connection plugs or straps.



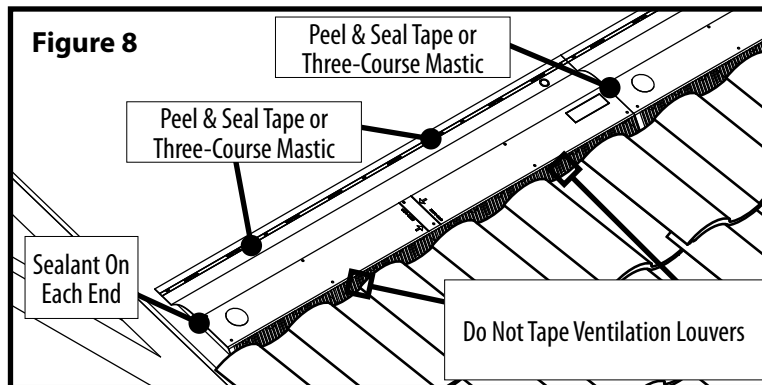
STEP 3. —SEALING METHODS FOR THE IV-9 TILE ROOF INTAKE VENT

Method 1. Seal Using Peel and Seal Tape:

- a. Apply locally approved aluminum backed peel and seal tape along the length of the top flange edge and at the butt joint if two vents are used. (See Figure 8)

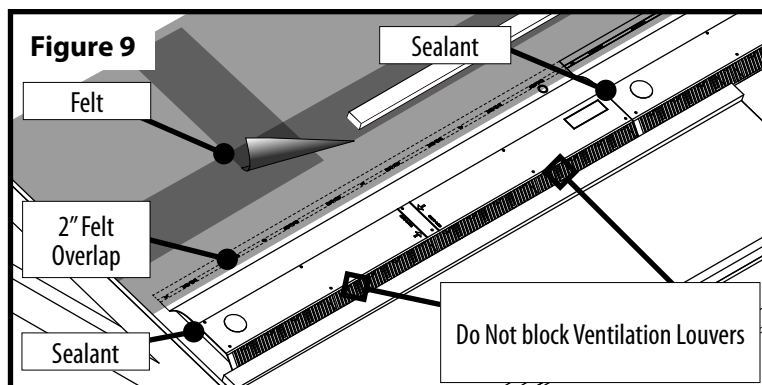
Method 2. Seal Using a Three-Course Mastic (Mastic/Reinforcement Tape/Mastic):

- a. Apply two coats of mastic with a 3" minimum wide strip of reinforcement tape along the length of the top flange edge and at the butt joint if two vents are used. (See Figure 8)



Method 3. Seal Using Felt-Over-Flange (Tile Underlayment -Over-Flange):

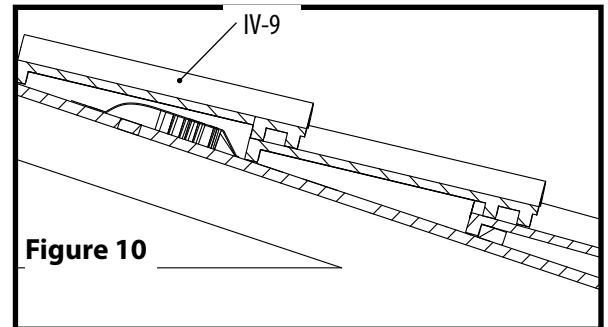
- a. **IMPORTANT:** In addition to sealant beneath the upper flange, sealant should also be placed at each end of the vent where the side walls meet the felt underlayment and at the butt joint if two sections are used. Ensure a proper seal using the sealant on both sides and the top flange.
- b. Install roofing felt (tile underlayment) over the upper flange so there is at least a 2" overlap of the material on the flange. The roofing felt should over hang each end by at least 6". Ensure that the upper edge of the roofing felt covering the flange is overlapped by the next row of roofing felt as required by local code. (NOTE: If battens are already installed, they must be removed so the felt is beneath the battens.) Secure the felt using approved roofing nails. (See Figure 9)



STEP 4. —INSTALLATION OF ROOF FIELD TILE

1. Install the roof field tiles as you normally would per TRI installation instructions for your area. (See Figure 10)

INSTALLED SECTION VIEW



EXISTING ROOF INSTALLATION:

1. Remove the field tiles and battens (if used) around the area of installation. (3 complete tile rows)
2. Proceed with install using new installation instructions.

WARRANTY

Lomanco, Inc. Warrants the IV-9, to the original or subsequent consumer, for a period of 30 years, against defects due to workmanship, parts or mechanical failure, in accordance to the limitations set forth in this warranty. The IV-9, hereby, meets or exceeds all residential attic ventilation code requirements in effect as of January 1, 1999. Should any manufacturing defect occur during the 30 (thirty) year period following date of purchase, Lomanco, Inc., at its sole discretion, will either (a) provide replacement part(s) for that portion of the product deemed to be defective (not to include labor costs incurred in removing the defective part(s) or installing the replacement part(s), or (b) if Lomanco, Inc. is unable to provide replacement part(s) within a reasonable time, or at the consumer's discretion, refund the consumer for the defective part(s) in an amount equal to the sum of the actual purchase price of the defective part(s).

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