

## Tile Roof Installation Instructions

### READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

This unit is only intended to function as an attic exhaust vent; other applications are not supported. If you have any questions, contact customer service toll free at 1-800-643-5596.

### IMPORTANT!

- ▶ Installation work should be done by a qualified person.
- ▶ Installation should comply with all local codes and standards.
- ▶ Adequate intake ventilation must be provided for proper operation. A minimum of 768 square inches of inlet area must be provided for each solar powered ventilator.

### CAUTION!

- ▶ For general ventilating use only. DO NOT use to exhaust hazardous or explosive materials and/or vapors.
- ▶ This unit has an unguarded fan blade. DO NOT use in locations readily accessible to people or animals. This fan is intended for use facing an unoccupied space.
- ▶ When cutting or drilling into walls of ceiling, do not damage electrical wiring or other utilities.
- ▶ Sharp edges are exposed during installation. Use gloves and other appropriate safety equipment to avoid injury.

### OPERATION

- ▶ Your Omni Solar Vent™ unit will operate automatically when the solar panel is illuminated by sunlight. Its speed of operation will vary with the intensity of sunlight the panel is exposed to.

Special Note: This instruction sheet is to be used in conjunction with the *Owner's Manual and Instruction Guide for Lomanco's Omni Solar Vent™*

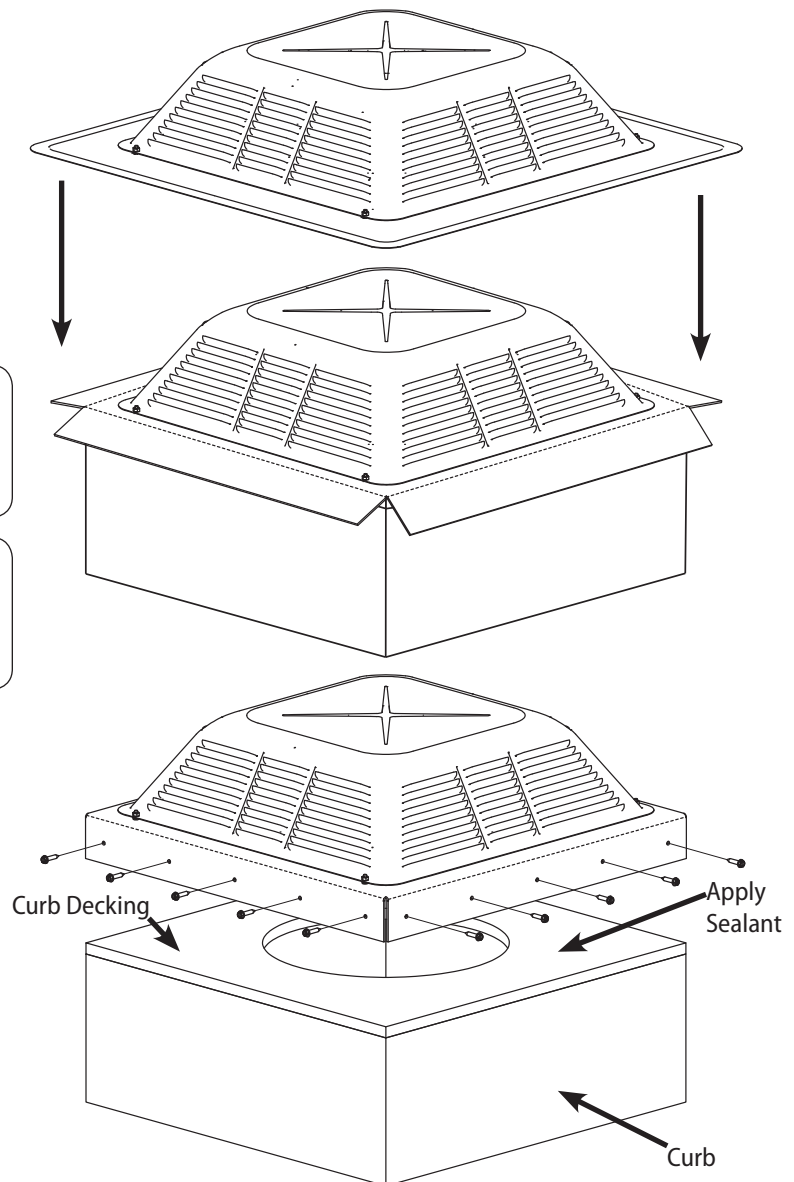
### VENT INSTALLATION

1. To install the Omni Solar Vent™ on a tile roof, the vent must be installed on a raised curb. Curb size can be anywhere from 27" square (minimum) to 31½" square (maximum). The construction, sealing, and flashing of the raised curb must be built to local building codes or the Tile Roofing Institute's (TRI) Installation Manual.
2. The finished outer dimensions of the curb should be based on the amount of flashing that is desired to be turned down the outer sides of the curb.

**NOTE:** The turned down flashing length will be created by removing a square section from each corner of the base flange and bending the flashing down the side of the curb.

**WARNING: DO NOT REMOVE THE SQUARE SECTIONS IN THE CORNERS AT THIS TIME. THIS WILL BE DONE ONCE THE VENT HAS BEEN INSTALLED ON TOP OF THE CURB.**

3. The top of the curb must be solid decking to support beneath the base flange. Using the supplied template, cut a 16" hole centered on top of the curb. Ensure that an opening of at least 155 in<sup>2</sup> is cut into the roof decking providing ventilation to the attic space below.
4. Apply approved flashing cement or roofing sealant on top of the curb to ensure sealing from weather penetration. Center the Omni Solar Vent™ over the 16" hole and secure with adequate fasteners around the perimeter.
5. Remove a square section in each corner of the base flange so each side can be bent down to create the turn down flashing. Bend the base flange sides down the vertical walls of the curb and secure with nails or screws. Apply approved roofing sealant on all fasteners to ensure sealing from weather penetration.



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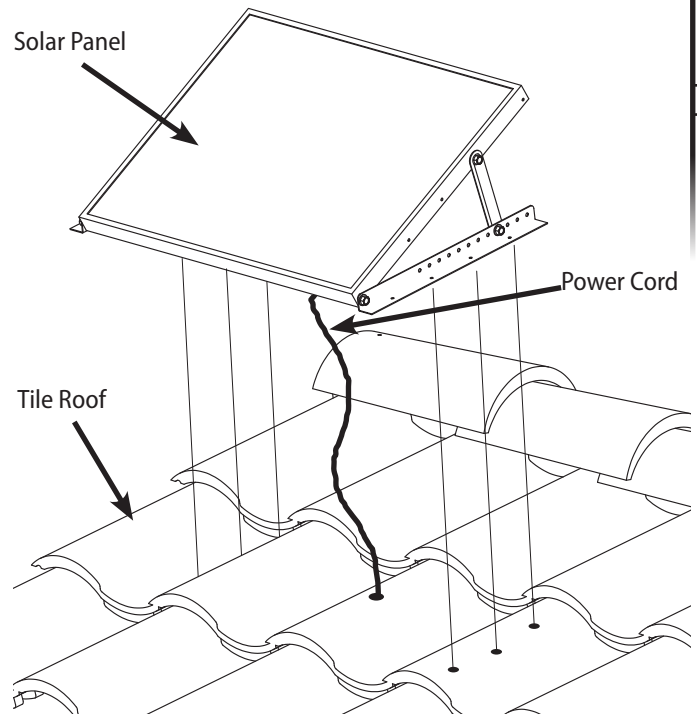
### SOLAR PANEL INSTALLATION

**NOTE:** The solar panel may be installed using materials and methods that are commonly used and accepted based on local installation practices. The solar panel installation described below is one suggested method.

1. Assemble the brackets to the solar panel as described in the Owner's Manual.
2. Determine the location where the solar panel will be installed ensuring that there is adequate wire length to reach the installed Omni Solar Vent™.
3. Place the solar panel assembly on the tile using the following guidelines:
  - A. For profiled tile, the brackets should be located on the highest possible point of the tiles.
  - B. The brackets should be level (horizontal) with each other so the panel does not lean to one side.
  - C. The brackets should be located as high as possible on a single course of tiles to maximize the number of anchor points through the pre-drilled brackets.
4. Mark the anchor locations for the bracket and mark the location for the solar panel wire to penetrate the tile.

**NOTE:** On profiled tile, it is recommended that the wire penetrates at the highest point on the tile so the wire penetration is not located in the tile valley.

5. Use a 3/8" masonry bit to drill a hole in the tile for the solar panel wire. Remove the tile and drill a 3/8" hole into the decking below.
6. Insert the end of the wire through the drilled holes in the tile and decking. Push the remaining wire into the attic and seal the holes in the decking and tile before replacing the tile.
7. Use masonry anchors in the previously marked locations to attach the solar panel to the tiles. Follow the installation instructions provided with the masonry anchors to ensure a proper installation. The type of masonry anchor used should not penetrate into the decking below the tile. It is recommended to use 3/16" x 1-1/4" hex head screws.



### WIRING CONNECTION

1. From inside the attic, locate the wire end from the solar panel and route the wire to the Omni Solar Vent™.

**WARNING:** Stay clear of the fan blade as it may start turning if the solar panel is exposed to sunlight when the wire connections are made.

2. Locate the red wire ends from the panel and vent. Insert the male terminal into the female terminal ensuring that the terminals are completely seated. Locate the black wire ends from the panel and vent. Insert the male terminal into the female terminal ensuring that the terminals are completely seated.

### CHECK FOR PROPER OPERATION

1. Ensure that the vent is exhausting air from the attic and not blowing into the attic. If the vent is blowing into the attic, then the wire ends are mis-plugged and need to be swapped.

#### Tools and Materials Needed:

- Sheet Metal Shears
- Locally Approved Flashing Cement or Roofing Sealant
- 3/8" Masonry Drill Bit
- Masonry Anchors
- (Recommended 3/16" x 1-1/4" hex head screws)
- Masonry Drill Bit for Masonry Anchors