

**LOMANCO**  
VENTS

Solar Powered Attic Ventilation

# OMNI SOLAR VENT™

PATENT PENDING



**Owner's Manual &  
Installation Guide  
for Lomanco's  
Omni Solar Vent™**

MIAMI-DADE COUNTY  
APPROVED



Texas Department of  
Insurance "Windstorm"  
Approved



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Thank you for choosing to purchase the Lomanco® Omni Solar Vent™. We are certain it will give you years of reliable and faithful service. You are also doing your part in reducing your carbon footprint by utilizing the power of our sun.

### Things you should know about attic ventilation.

Ventilation is simply the process of supplying a continuous supply of air through the attic space. “Proper ventilation” consists of 50% intake, under the eaves, and 50% exhaust near or at the roof peak, at least 3 feet higher than the intake system.

We take a great deal of pride in the making of our vents. They are a necessity for the effective ventilation of homes everywhere. Our commitment to providing these quality products combined with our experienced personnel is the reason Lomanco is “The Best On The Roof”.

### Things you should know about Omni Solar Vent™.

The Omni Solar Vent™ is a very economical, efficient way to ventilate your home. You can rest assured that you have purchased the proven best performer for solar attic ventilation.

You have purchased from a reputable company that knows ventilation. Lomanco has been in the ventilation business since 1946. Our main line of products has always been ventilation. We are ventilation experts. When we decided to design our Omni Solar Vent™, we set out to build the best in the market. We have done just that.

Your Omni Solar Vent™ will perform as advertised. Believe us, some do not! Lomanco has had independent third party testing performed, not only on the Omni Solar Vent™, but also on most major solar powered attic vents on the market. The Omni Solar Vent™ has proven to be the best performer.

We are a company that will stand behind our product and help you if you have any problems. Again, Lomanco has been in business since 1946. We stand behind all our ventilation products, because we know they are the best in the business.

If you ever have a question or problem, you can find support and answers quickly by contacting us through any of the methods below:

Lomanco.com  
OmniSolarVent.com  
facebook.com/lomanco  
1.800.643.5596

## Ventilation Calculator

How many Solar Vents do you need?

Your attic floor space to be ventilated in square feet.

1000 1500 2000 2500 3000 3500

### OMNI SOLAR EXHAUST SYSTEM

OSV40 1 2 2 3 3 4

### OMNI SOLAR INTAKE SYSTEM

C416 31 62 62 93 93 123

C616 21 42 42 63 63 84

C816 12 24 24 36 36 48

105/190 11 22 22 32 32 43

140 9 18 18 27 27 35

SV-10 13 25 25 37 37 49

Tools  
For  
Install

Safety Glasses

Drill with 3/8" drill bit

Phillips head screw bit

3/8" wrench

Marker or chalk

Utility knife

Flat pry bar

Tape measure

Reciprocating or jig saw

Hammer and roofing nails

Caulk gun & roofing sealant

## 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. It's speed of operation will vary with the intensity of sunlight the panel is exposed to.



**Figure 1**

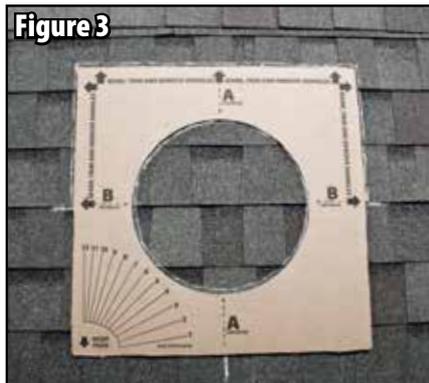
### Vent Installation

1. Determine the location of your Omni Solar Vent™ keeping in mind that a southern exposure will be best when mounting your solar panel. The Omni Solar Vent™ should be installed 24" (36" maximum) below the roof peak or ridge line. Center your Omni Solar Vent™ along the roof ridge. If multiple units are required, space evenly with a minimum of 15 feet between units. See figure 1.



**Figure 2**

2. From inside the attic mark hole location by measuring down 24 to 36 inches from the roof peak centered between two rafters. Drive a nail or drill a screw through the roof at the confirmed location so it can easily be found on the roof outside. See figure 2.



**Figure 3**

3. Use the supplied template to mark the hole location and shingles to be trimmed. Position the template vertical center mark (A) in line with the nail driven from the inside of your attic or air space. Position the template horizontal center mark (B) in line with the nearest bottom of a course of shingles. Mark hole position and shingle trim area. Also, mark the center position at the sides and bottom of template. See figures 3 and 4.

Whether you are a home builder or owner, the best return on investment for protecting the longevity of your house is the proper installation of a balanced ventilation system with the proven performance and quality of Lomanco Vents.

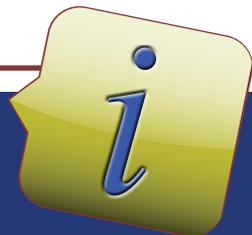


Figure 4



Figure 5



Figure 6



4. Drill a pilot hole inside the marked hole position. Insert the saw blade in the pilot hole, follow the hole pattern and cut out the 16" vent opening. See figures 5 and 6.

Figure 7



Figure 8



5. Trim and remove shingles inside the marked trim line. **DO NOT CUT FELT PAPER.** Carefully remove roofing nails from the surrounding area so the flashing of the unit will slide under shingles. See figures 7 and 8.

Figure 9



6. Apply roofing cement around the edge of the vent opening. See figure 9.

Figure 10



7. With the side marked UP aimed toward the ridge, carefully slide the unit into place allowing the motor wiring to hang down into the vent opening. Align the center marks on the flashing to the center marks made from the template, this will ensure that the throat of the unit is centered over the vent opening. See figure 10.

Figure 11



8. Fasten the base to roof decking with roofing nails, keeping heads of nails under shingles where possible. See figure 11.

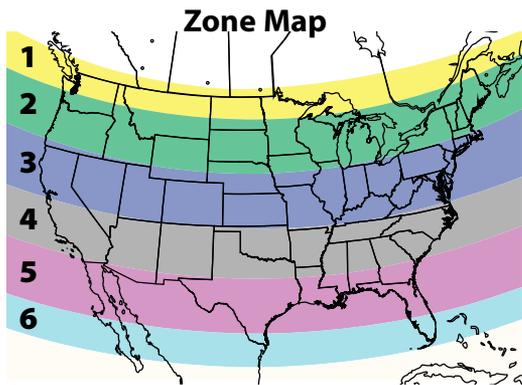
9. Finish installation by sealing any exposed nail heads or loose shingles with roofing cement.



Do not cut through any roof rafter or framing members. Before cutting the hole make certain there are no wires or pipes within the area you will be cutting. Prevent any material you remove from falling into the attic space.

# Solar Panel Mounting Guide

Determine your roof pitch by placing the supplied gauge/template on the peak of roof as shown. Position a straight edge as shown and read the roof's pitch from the printed gauge parallel to bottom of straight edge. **See figure 12.** Determine your zone by finding your location on the zone map below. Use the corresponding number and color to identify the zone you are in. Once your zone and roof pitch are known, use the solar panel hole guide shown below to find what position to install the short bracket arm.

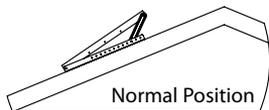
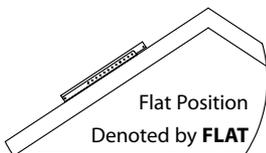
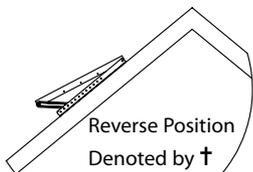
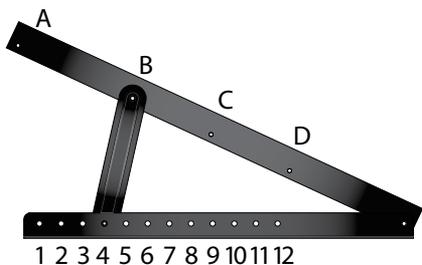


Solar Panel Hole Guide		YOUR ROOF PITCH											
		1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
ZONE	1	D10	D9	C8	C6	B4	B4	B7	A1	A1	A2	A3	A3
	2	D9	C8	C6	B4	B7	B7	A1	A2	A2	A3	FLAT	FLAT
	3	C8	C6	B4	B7	A1	A1	A2	A3	A3	FLAT	A3†	A3†
	4	C6	B4	B7	A1	A2	A2	A3	FLAT	FLAT	A3†	A2†	A2†
	5	B4	B7	A1	A2	A3	A3	FLAT	A3†	A3†	A2†	A1†	A1†
	6	B7	A1	A2	A3	FLAT	FLAT	A3†	A2†	A2†	A1†	B7†	B7†

**FLAT**— The panel should be mounted flat against the roof deck. Hole B on the solar panel and Hole 3 on the long bracket arm are aligned to allow flat installation, the short bracket arm is not required.

†— The panel should be mounted in a reverse position on the roof deck.

The example hole guide is shown at position B4.



Solar panel location is a prime factor in the efficiency of your Omni Solar Vent™. During the years you may need to trim back trees or remove objects that will throw shadows onto your solar panel.

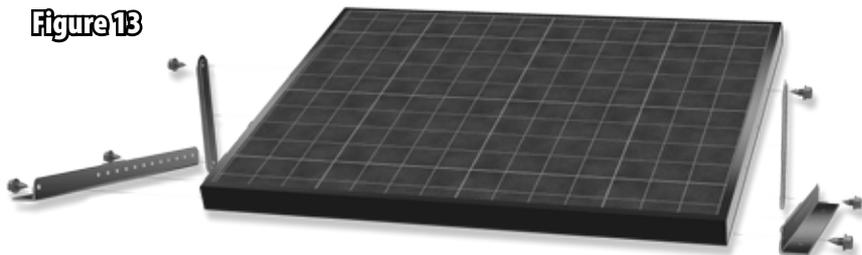


# LOMANCO Solar Panel Installation

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Figure 13



1. While on the ground, assemble the solar panel and mounting brackets. **See figure 13.**
  - A. Remove the protective film from the aluminum frame around the solar panel.
  - B. Attach the long bracket arms to the sides of the solar panel. The wiring cover should be positioned at the top of the panel.
  - C. Adjust the panel to the optimal angle and secure with the short bracket arms.
2. On the roof, select an area within 15 feet of the Omni Solar Vent™ unit that will provide the most direct sunlight unobscured by trees or other objects.
  - A. For optimal performance, the solar panel should face the southern exposure.
3. Once panel placement is determined, mark edges of mounting brackets to locate position. **See figure 14.**
4. Mark a shingle tab under the solar panel where the wire will pass through, and set the solar panel assembly to the side. **See figure 15.** Tap roof to check rafter locations and adjust position if needed. Lift the marked shingle tab

and drill a  $\frac{3}{8}$ " hole. **See figure 16.** DO NOT DRILL THROUGH RAFTER. Feed the wire through the hole into the attic leaving a little excess on the roof. **See figure 17.**

5. Seal the hole and secure the loose shingle tab using roofing cement. **See figure 18.** Also, apply roofing cement along the marked bracket positions.

Figure 15



Figure 16



Figure 17



Figure 18



Figure 14



6. Set the solar panel assembly back into place over the roofing cement. **See figure 19.** Secure

Figure 19



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Cleaning a solar panel is not cosmetic. A panel needs to be clean for it to operate at its rated capacity. Combine it with some other periodic maintenance like checking the batteries in your smoke alarms. The solar panels should be clean to operate at full capacity.



**Figure 20**

using the supplied decking screws. See figure 20.

7. Inside the attic, secure the solar panel wire with a wiring staple. Connect the red solar panel wire to the red motor wire, then connect the black solar panel wire to the black motor wire. **WARNING:** The unit will begin operation once the connection is made. See figure 21.



**Figure 21**

### 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.

**Parts and accessories for the Omni Solar Vent™ and other Lomanco® products are available online at [www.lomanco.com](http://www.lomanco.com)**

Item	Part Name	Model
1	Dome	SDOME
2	DC Motor	SPVMTR
3	Motor Clamp	SCLAMP
4	Screen	NA
5	Shroud	NA
6	Fan Blade	SBLADE
7	Base Flange	NA
8	Solar Panel	SPANEL
9	15' Extension Wire (optional)	EXTWIRE



You can find more ventilation information, tips, parts, videos and support on our website [www.lomanco.com](http://www.lomanco.com). Lomanco® has manufactured quality ventilation products since 1946. We know ventilation and how important it is to the comfort and longevity of your home.



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### Limited Warranty

Provided that the Omni Solar Vent™ powered ventilator product has been installed in strict accordance with the Lomanco, Inc. written installation instructions and in accordance with all local codes and standards, including those pertaining to fire-rated construction, Lomanco, Inc. warrants to the original purchaser of the Omni Solar Vent™ powered ventilator product that all parts are free from manufacturing defects for a period of 5 years for the motor and solar panel and 10 years on the vent. Lomanco, Inc. will provide replacement parts or product in accordance with this warranty should any failure occur during the warranty periods shown below as a result of manufacturing defect. This warranty does not extend to labor costs incurred in removing the part or installing replacement parts or product. The warranty period starts at the completion of installation of your Omni Solar Vent™ powered ventilator product and terminates if either your Omni Solar Vent™ powered ventilator products are replaced or if the building is sold or transferred. In the event of replacement according to the terms of this warranty, the replacement part or product will be warranted only for the original warranty period.

**Limitations**  
Even if the Omni Solar Vent™ powered ventilator product was not properly installed according to Lomanco, Inc.'s installation instructions, this limited warranty remains in effect if the Omni Solar Vent™ powered ventilator product fails as a result of manufacturing defects.

Lomanco, Inc. shall not be liable for, and this warranty does not apply to:

1. Damage to roof or building resulting from anything other than a manufacturing defect in your Omni Solar Vent™ powered ventilator product, including, but not limited to:
  - a. Improper installation of your Omni Solar Vent™ powered ventilator product.
  - b. Applications not in strict accordance with Lomanco, Inc.'s written installation instructions.
2. Damage to your Omni Solar Vent™ powered ventilator product or leaking into building resulting from factors beyond Lomanco, Inc.'s control, including, but not limited to:
  - a. Acts of nature – hail, storms, or wind
  - b. Improper storage or handling of your Omni Solar Vent™ powered ventilator product.
  - c. Damage resulting from the application of overlying or adjacent roofing materials.

### Transferability

This limited warranty may not be transferred or assigned, directly or indirectly.

### Sole and Exclusive Warranty

THIS WARRANTY IS EXCLUSIVE AND REPLACES ALL OTHER WARRANTIES, CONDITION, REPRESENTATIONS, AND GUARANTEES, WHETHER EXPRESS OR IMPLIED, WHETHER BY STATUTE, AT LAW OR IN EQUITY, INCLUDING THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. This written warranty is your exclusive warranty from Lomanco, Inc. and represents the SOLE REMEDY available to any owner of Lomanco, Inc.'s Omni Solar Vent™ powered ventilator product. Lomanco, Inc. makes NO OTHER REPRESENTATIONS, CONDITION, GUARANTEE, OR WARRANTY of any kind other than that stated herein. LOMANCO, INC. WILL NOT BE LIABLE IN ANY EVENT FOR CONSEQUENTIAL, PUNITIVE, SPECIAL, INCIDENTAL, OR SIMILAR DAMAGES OF ANY KIND, INCLUDING DAMAGE TO THE INTERIOR OR EXTERIOR OF ANY BUILDING, WHETHER FOR BREACH OF THIS WARRANTY, NEGLIGENCE, STRICT LIABILITY IN TORT, OR FOR ANY OTHER CAUSE. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages so the above exclusions or limitations may not apply to you.

### Modification

This limited warranty may not be changed or modified except in writing signed by an officer of Lomanco, Inc. No one, including any representative or employee of Lomanco, Inc. has authority to assume any additional liability or responsibility for Lomanco, Inc. in connection with a Omni Solar Vent™ powered ventilator product except as described in this warranty. This warranty gives you specific legal rights, and you may have other rights, which vary from jurisdiction to jurisdiction.

### Effective Date

This limited warranty is effective for Omni Solar Vent™ powered ventilator products installed within the continental United States, Hawaii, and Canada after June 1, 2011

### What The Customer Must Do

If you believe any part is defective, call 1-800-643-5596 for Customer Service.

### Federal Tax Credit For Solar Powered Attic Fans



The federal tax credit for solar attic fans is available through 2016. The Omni Solar Vent™ is eligible for a 30% (up to \$1,500) credit on the purchase price of the fan, installation and sales tax.

To assist with claiming a tax credit, Lomanco has provided a Statement of Certification for homeowners. This form and more information on obtaining a tax credit is available online at [omnisolarvent.com](http://omnisolarvent.com)



Scan this QR code with your smartphone to register online.



### ONLINE WARRANTY REGISTRATION

Please fill out the online form at [omnisolarvent.com](http://omnisolarvent.com) to complete your warranty registration. If for any reason you are unable to register your product online please call 800-643-5596 and we will assist you. Purchase and install date information will be required.