

## Krysolad Solar Powered Roof Vent Fan

# Krysolad Solar Roof Fan for Shipping Containers

Model: Solar Powered Roof Vent Fan

## 1. INTRODUCTION

The Krysolad Solar Roof Fan is an advanced ventilation system designed for shipping containers, container homes, cabins, and similar structures. This unit utilizes solar energy to power its four high-speed fans, effectively reducing internal temperatures and preventing condensation. Its robust construction ensures durability in various outdoor conditions.



Image 1.1: Krysolad Solar Roof Fan installed on a shipping container, showcasing its design and placement.

## 2. SAFETY INFORMATION

Please read all safety instructions before installation and operation. Failure to follow these guidelines may result in injury or damage to the product.

- Always wear appropriate personal protective equipment (PPE), including gloves and eye protection, during installation.
- Ensure the installation surface is stable and can support the weight of the unit.
- Exercise caution when working on elevated surfaces, such as container roofs.
- Do not attempt to modify the product in any way, as this may void the warranty and create safety hazards.
- Keep children and pets away from the installation area.
- Ensure all electrical connections are secure and protected from environmental elements.

### 3. PACKAGE CONTENTS

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Verify that all components are present and undamaged before beginning installation.

- Solar Powered Roof Vent Fan Unit (with 4 integrated fans)
- Two (2) 15W Foldable Solar Panels
- Adjustable Mounting Brackets for Solar Panels
- Integrated Vents with Screens
- Mounting Hardware (screws, bolts)
- Instruction Manual



Image 3.1: Dual Solar Panels



Image 3.2: Four Powerful Fans



Image 3.3: Ventilation Ports with Filters



Image 3.4: Waterproof Plugs

## 4. SETUP AND INSTALLATION

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The Krysolad Solar Roof Fan is designed for DIY installation on 20/40-foot shipping containers, container houses, and similar structures with 3.5-inch ribbed roofs. Ensure the chosen location allows for maximum sun exposure for the solar panels.

1. **Select Location:** Choose a flat, unobstructed area on the container roof that receives direct sunlight throughout the day.
2. **Prepare Opening:** Carefully mark and cut an opening in the container roof according to the dimensions provided in the product packaging. Ensure the opening is clean and free of burrs.
3. **Mount Vent Unit:** Place the main vent unit over the prepared opening. Secure it to the container roof using the provided mounting hardware. Ensure a tight, waterproof seal around the base of the unit to prevent leaks.
4. **Attach Solar Panels:** Mount the two solar panels onto the main vent unit using the adjustable brackets and screws.
5. **Connect Wiring:** Connect the solar panel wiring to the main vent unit. Ensure connections are secure and waterproof.
6. **Adjust Solar Panels:** Position the solar panels to face the sun directly for optimal energy capture. The panels are vertically adjustable by 90 degrees and horizontally adjustable by 360 degrees.

## Adjustable Solar Panels

Make sure facing the sun

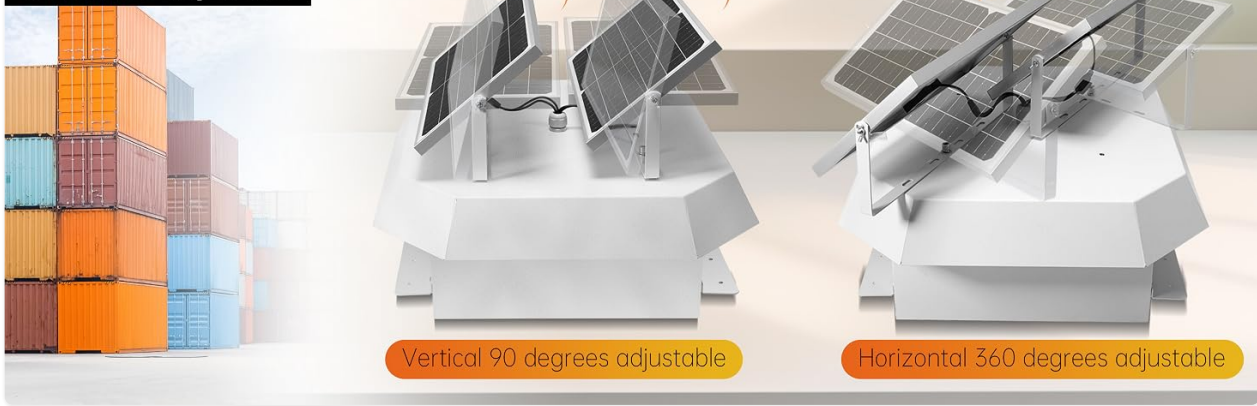


Image 4.1: Adjustable solar panels for optimal sun exposure.

For a visual guide on the product's function and potential installation, please refer to the video below:

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Video 4.1: An animated demonstration of the solar roof fan's operation and air circulation within a shipping container.

## 5. OPERATING INSTRUCTIONS

The Krysolad Solar Roof Fan operates automatically when sufficient sunlight is available to power the solar panels. There are no manual controls for fan speed or on/off functions, as its operation is entirely dependent on solar energy.

- **Automatic Operation:** The fans will begin to operate as soon as the solar panels receive adequate sunlight. The fan speed will vary based on the intensity of the sunlight.
- **Panel Adjustment:** Periodically check and adjust the angle of the solar panels to ensure they are directly facing the sun throughout the day for maximum efficiency. This is especially important during different seasons.
- **Ventilation Effect:** The four high-speed fans provide 2000 CFM airflow, maximizing air circulation and reducing temperature differences inside the container. This helps prevent condensation in winter and overheating in summer.

### Enhance ventilation

Accelerate the air flow in the container and reduce the temperature difference between the indoor and outdoor areas



Image 5.1: Visual representation of enhanced ventilation within a container space.

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Video 5.2: A demonstration of the solar powered roof vent fan, highlighting its components and function.

## 6. MAINTENANCE

The Krysolad Solar Roof Fan is designed for low maintenance due to its durable materials and construction. Regular checks will ensure optimal performance.

- **Clean Solar Panels:** Periodically clean the surface of the solar panels with a soft, damp cloth to remove dust, dirt, or debris that may reduce efficiency. Do not use abrasive cleaners.
- **Inspect Fan Grilles:** Check the fan grilles for any obstructions such as leaves, insects, or other debris that could impede fan operation. Carefully remove any blockages.
- **Check Seals:** Annually inspect the seals around the base of the vent unit and any wiring entry points to ensure they remain watertight. Reapply sealant if necessary.
- **Material Durability:** The unit features a sturdy waterproof material and a high UV-resistant coating, providing excellent corrosion resistance and protection against rain, hail, and sun erosion.

### High Quality Materials, Durable



Image 6.1: The fan's durable construction withstands various weather conditions.

## 7. TROUBLESHOOTING

If you encounter issues with your solar roof fan, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Fans are not running.	Insufficient sunlight.	Ensure solar panels are in direct sunlight. Adjust panel angle if necessary.
Fans are not running.	Obstruction on solar panels or in fans.	Clean solar panels. Remove any debris from fan grilles.
Poor ventilation performance.	Suboptimal solar panel angle.	Adjust solar panels to face the sun directly.
Poor ventilation performance.	Blocked airflow.	Check for internal or external obstructions blocking the vent or fan airflow.

Problem	Possible Cause	Solution
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Unusual noise from fans.	Debris in fan blades or loose components.	Carefully inspect fans for debris and remove. Ensure all mounting screws are tight.
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## 8. SPECIFICATIONS

Feature	Detail
Brand	Krysolad
Model Name	Solar Powered Roof Vent Fan
Color	White
Electric Fan Design	Exhaust Fan
Power Source	Solar Powered
Style	Industrial
Special Features	Solar Powered, Durable Desert Design
Mounting Type	Vent Mount
Material	Metal
Air Flow Capacity	2000 Cubic Feet Per Minute (CFM)
Speed	2688 RPM
Indoor/Outdoor Usage	Outdoor
Cordless	No (refers to main power cord, operates via solar)
Motor Type	DC
Smart Home Compatibility	Not Smart Home Compatible
Installation Type	DIY
Compatible Container Rib Size	3.5 inches

## 9. WARRANTY INFORMATION

For detailed warranty terms and conditions, please refer to the product packaging or visit the official Krysolad website. Keep your purchase receipt as proof of purchase for any warranty claims.

## 10. CUSTOMER SUPPORT

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If you have any questions, require technical assistance, or need support regarding your Krysolad Solar Roof Fan, please contact Krysolad customer service. Contact information can typically be found on the manufacturer's official website or through the retailer where you purchased the product.

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