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## IMPORTANT SAFETY INFORMATION READ AND SAVE THESE INSTRUCTIONS



**WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, and INJURY TO PERSONS:** Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards.

**CAUTION:** The installation of a JetVent Fan must be in accordance with the requirements specified in this installation manual and with any additional requirements set forth by the National Electric Code (NEC), ANSI/NFPA 70-1999, and all local codes. If you are unfamiliar with electrical codes use a qualified electrician to perform this work.

**WARNING:** Risk of fire, electric shock, death or injury to persons during cleaning and user maintenance. Disconnect the fan from the power supply before servicing or moving the fan.

**WARNING - DANGER DUE TO RESIDUAL ELECTRIC CURRENT:** When the motor runs due to air flowing through the fan, or if it continues to run down after being turned off, dangerous voltages of over 50 Volts can be present on the motor's internal connections. Even after disconnecting the power, life-threatening charges can appear between the protective ground and the mains connection. **WAITING PERIOD OF 3 MINUTES!** Danger of death exists even after switching off the fan by directly touching the energized parts, or by touching parts that have become energized due to faults. The controller housing may only be removed or opened when the power line has been switched off and a waiting period of three minutes has elapsed since switching it off.

**WARNING:** To reduce the risk of fire, electric shock, or personal injury, mount the fan directly to a structural framing member that has sufficient strength to support at least three times the hanging weight of the fan. If uncertain, a certified engineer or architect should conduct an analysis of the installation prior to purchasing the fans. While ZOO Fans provides guidelines for installation, it is the sole responsibility of the owner to ensure the safety of the installation and that it complies with all relevant codes.

**WARNING:** To reduce the risk of fire, electric shock, and injury to persons, JetVent Fans must be installed only with controllers supplied by ZOO Fans. Other parts cannot be substituted—they may cause injury and will void product warranties.

**WARNING:** Motor is NOT suitable for use with solid-state speed controls.

**CAUTION:** When service or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.

**WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnect to prevent power from being switched on accidentally. When the service disconnect cannot be locked, securely fasten a prominent warning device, such as a large tag, to the service panel and apply tape to secure the service disconnect in the OFF position.

**WARNING:** Do not install this fan in a cooking area.

**WARNING:** Do not operate the fan in spaces with hazardous or Explosive Material and Vapors.

**DANGER:** Rotating equipment. Death, severe injury and property damage may result.

- The safety grills on the fan must remain securely attached.
- Do not wear loose or hanging clothing, jewelry, etc., tie together long hair and cover it—avoid being tangled in the blades!

**WARNING:** Stay alert and use common sense when installing, operating and servicing fans. Do not operate, install, or service fans if tired or under the influence of drugs, alcohol, or medication.

**CAUTION:** Only operate the fan within the ranges specified on the motor's type plate.

**WARNING:** Do not flex or bend the blades or fan brackets when installing, adjusting, or cleaning the fan. Do not insert foreign objects in between rotating fan blades.

**CAUTION - HOT SURFACE.** Avoid being burned. When fan is turned off use caution when touching motor surfaces to be sure they have cooled sufficiently. Temperatures of 185°F (85°C) can occur, especially on the motor housing.

**CAUTION - AUTOMATIC RESTART:** The fan/motor may switch on and off automatically for functional reasons. After power failure or disconnection of main power, an automatic restart of the fan takes place when power is restored. Wait for the fan to come to a complete stop before approaching it and be sure it is disconnected from power to avoid accidental restart.

**CAUTION:** The ZOO Fans product warranty will not cover equipment damage or failure that is caused by improper installation, operation or use.

**ATTENTION - Intended Use:**

- The fans are only intended for the conveyance of air or mixtures similar to air.
- Other uses which do not coincide with, or which exceed those specified will be deemed unauthorized unless contractually agreed in advance. Damages resulting from such unauthorized uses will not be the liability of the manufacturer—the user will assume sole liability.
- The fans must not be used in hazardous areas for the transfer of gas, mist vapors or mixtures, nor may they be used for the transfer of solid components in the transfer medium.

**ATTENTION - Improper Use:**

- Conveyance of aggressive and explosive gaseous media
- Use in an explosive atmosphere
- Operation with iced-up, obstructed, or improperly operating fan impellers
- Conveyance of abrasive or adhesive media
- Conveyance of liquid media
- Use of the fan and add-on parts as a resting surface or climbing aid
- Blocking or braking of the fan by inserting objects
- Loosening of fan blade, impeller and balancing weight
- All applications not listed in the intended use

## PRE-INSTALLATION

The safe installation and operation of equipment supplied by ZOO Fans is the responsibility of the system designer, installer, maintainer, and operator (collectively, the “User”). The need for protective safety accessories to meet company standards, applicable codes, and the requirements of the Occupational Safety and Health Act (“OSHA”) must be determined by the User since safety requirements may vary depending on the location and application of the equipment.

The elements of a successful installation consist of:

1. Efficiently designed and well coordinated layout of fans, wiring, and controls
2. Hanging the fans where they’ll be most effective and convenient to control
3. Completing the electrical hook-up
4. Start-up and commissioning
5. Conducting all work in a safe manner consistent with all relevant codes and regulations

## PARTS ENCLOSED

If you ordered multiple fans, be sure to keep the components of each fan together.

- JetVent Fan
- Installation Guide (this manual)
- Variable speed controller (optional, as ordered)
- Gas detection sensors, Modbus repeaters, expansion boards, power supplies, time delay relays, EC Digital Connectors, and end-of-line resistors (optional, as ordered)

## JETVENT FANS SPECIFICATIONS

Model	Height	Weight	Max Amp Draw	Voltage Range	Max RPM	Flow Rate
JVEC-SLP	7.8 in	53 lbs	2.6	208V-240V 1 Ph	2550	1142 CFM
	199 mm	24 kg				539 L/S

## LAYOUT

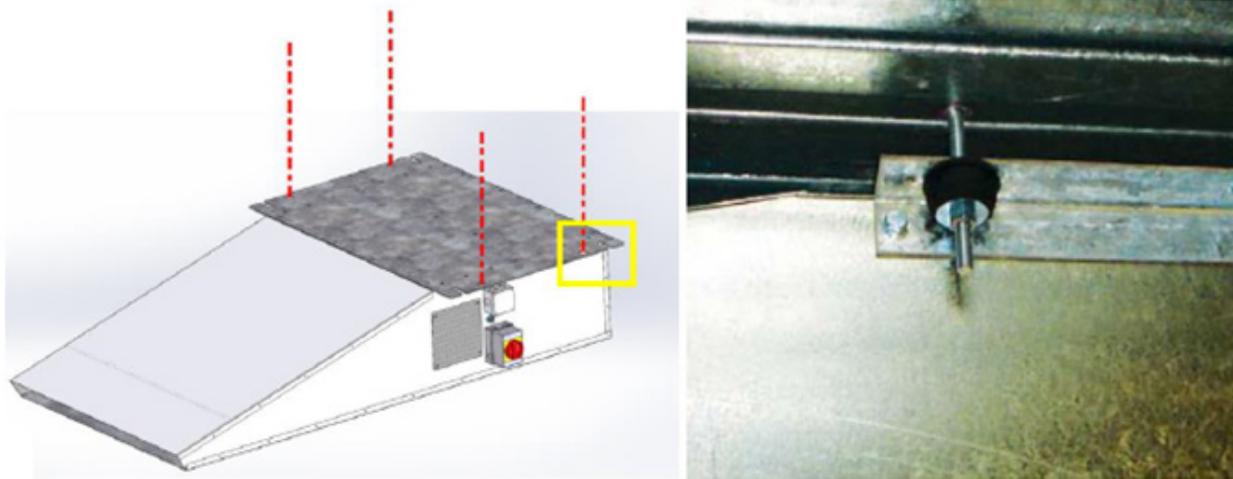
This phase should have been completed prior to placing your order. If you do not have a plan or would like to consider modifications, please consult with your professional engineer, designer and/or installer. You may also contact your ZOO Fans' representative or ZOO Fans directly (see the bottom of page 8) if you require assistance.

Remember, the model and number of JetVent Fans required for the job, as well as where they are hung, will depend on a number of variables, some of which are:

- Ceiling height, as well as the overall volume of air the fans need to move in order to achieve the targeted rate for turnover of air in the facility
- The availability of a sturdy and secure anchor point for attaching the fan
- Present and future obstructions
- The location of existing HVAC supply and returns

Ask the electrician who will do the wiring for the fan(s) to review the following section to be sure your layout meets your objectives and electrical code requirements. Ask the installing contractor to review your layout for ease and safety of installation, as well as compatibility with existing mechanical systems and all applicable codes. If the installer(s) have any questions about where to locate your fan(s) or how to install them, please contact either your ZOO Fans' representative or ZOO Fans (see the bottom of page 8).

# INSTALLATION

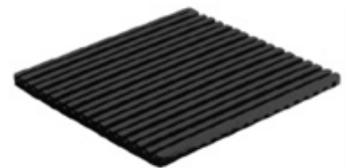


## STEP 1: HANGING THE FAN

Mounting Points are illustrated in Red. Two sets of holes are provided on the unit, one is a 0.5 in (13mm) hole to be used for mounting directly via hanger rods or bolts, and the other is a 1 in (25mm) hole to support the fan with anti-vibration mounts (close up of yellow box Illustrated on the right).

### STANDARD INSTALLATION METHOD

For standard installation, use waffle pad (supplied by others) and 8mm Lag bolts (supplied by others) directly to the mounting points.



### SOUND SENSITIVE INSTALLATION

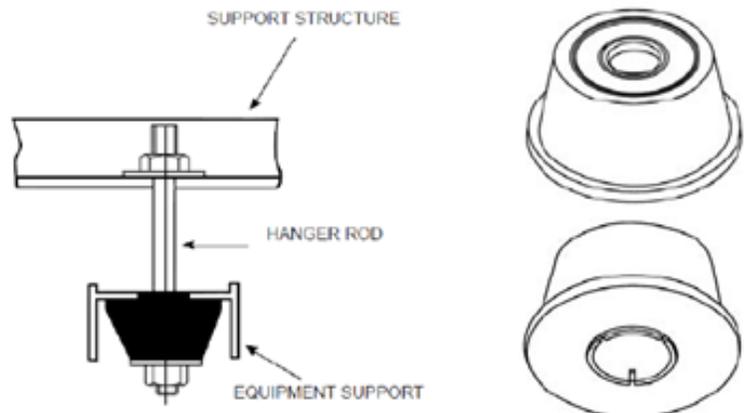
For sound sensitive installations, such as the first level under a residential complex, additional anti-vibration mounts are available.

For anti-vibration mounts, the following parts are required:

Front Mounting Points: 2 X Embelton RHE1-Blue (optional, as ordered)

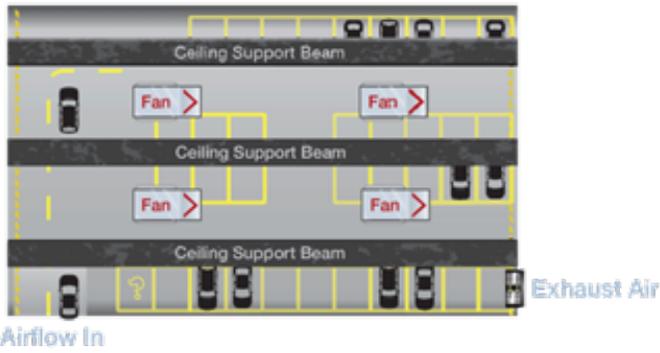
Rear Mounting Points: 2 X Embelton RHE1-Blue

**WARNING:** JetVent does not determine the hanging system needed for seismic applications.

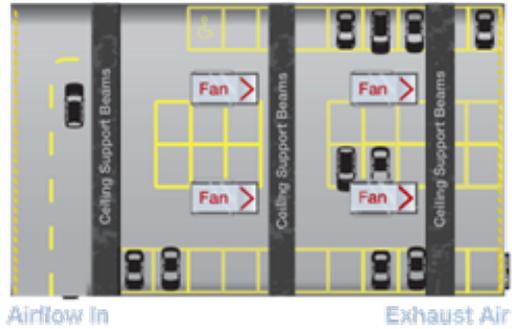


### JETVENT FANS DO'S AND DON'TS:

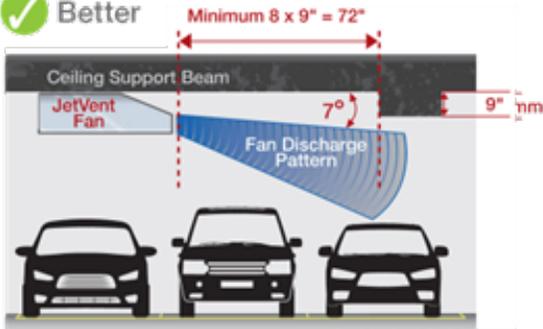
✓ Best



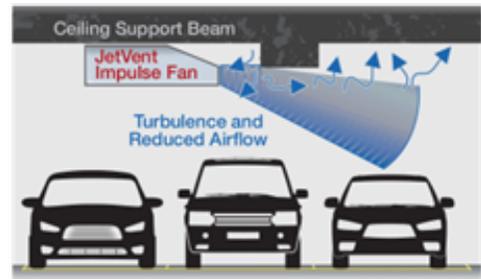
✗ Wrong



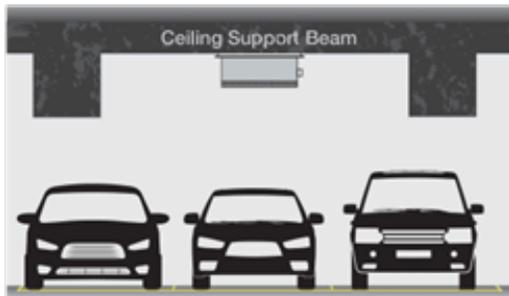
✓ Better



✗ Wrong



✓ Right



✗ Wrong



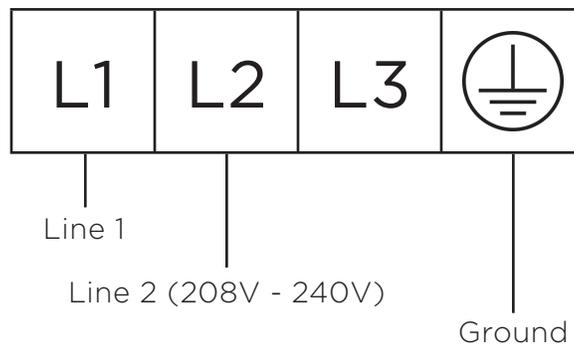
## STEP 2: WIRING FAN MAINS

The JetVent JVEC-SLP fans are equipped with EC motors that will accept a range of voltages. See below:

- 208 - 240 Volts
- 1-Phase
- 50/60 Hertz

- Electrical connection should be made according to Illustration 8, the wiring diagram below:

**Illustration 8: Wiring Fan Mains Diagram**



## STEP 3: WIRING FAN SPEED CONTROL SIGNAL

The JetVent JVEC-SLP includes one speed control input using the following:

- 0 - 10 Volt DC analog signal

**WARNING:** Never apply line voltage to the control input

Contact ZOO Fans for other speed control options.

**Wiring 0-10 Volt DC Analog Signal**

White	Red	Yellow	Black
TACH	10VDC OUT	0-10VDC IN	GND

	DuctSox Corporation 4343 Chavenelle Road Dubuque, IA 52002	zoofans.com Phone: 303-557-1852 Toll Free: 855-966-3267	
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