

Vent-Sure

Downdraft Vent System



Vent Assembly

Vent Type

Downdraft, improves firing uniformity up to 1/2 cone.

Voltage / Amperage

120V / 1.37A
240V / .33A

Switch / Cord

On/Off switch on six-foot cord

Blower Mounting

Wall or floor mount, 4" discharge, extendable to 60 feet.

Duct Work

8ft of 3" flexible duct, adaptable with longer or stove pipe. (optional 15ft flexible duct.)

Capacity

Vents up to 130 cfm, fits 20+ cubic foot kilns or dual kilns with optional Vent-Doubler

Vent Bypass

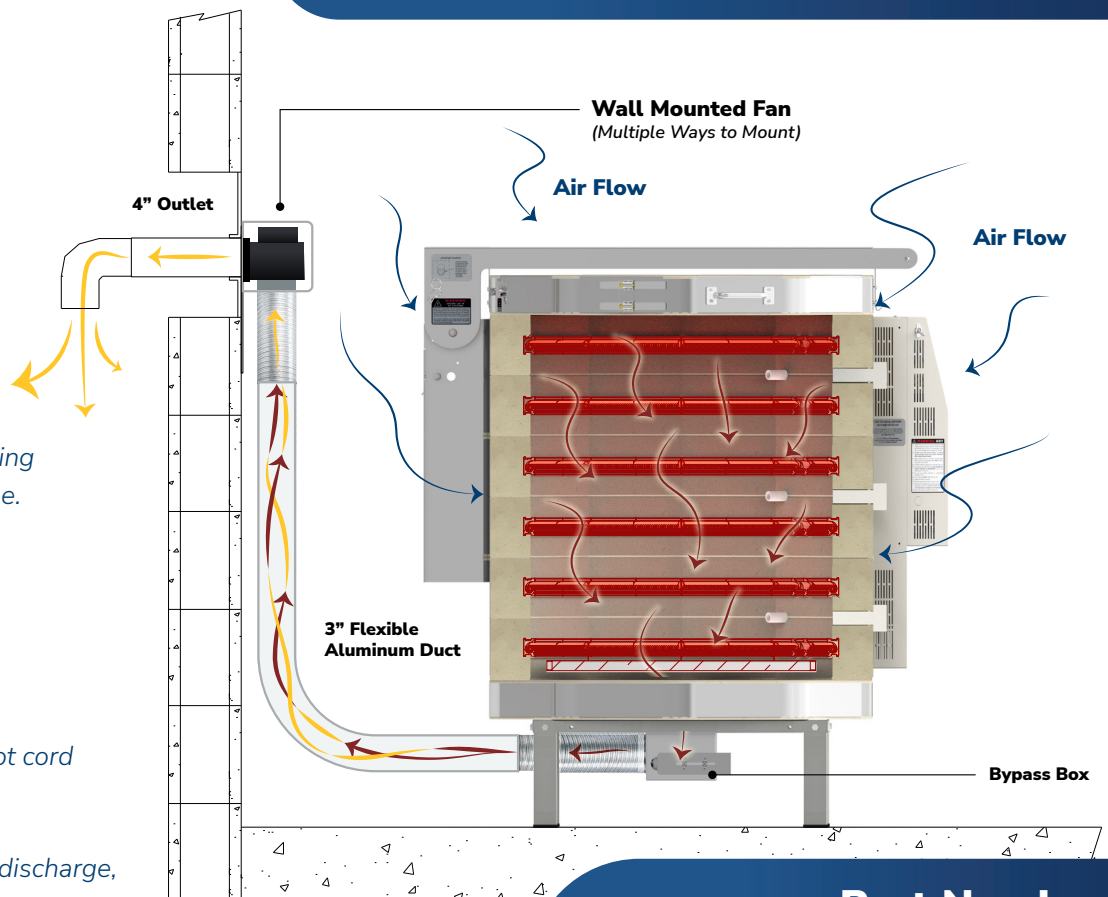
Adjustable vacuum bypass for system venting.

Warranty

3-year limited. (hotkilns.com/warranty)

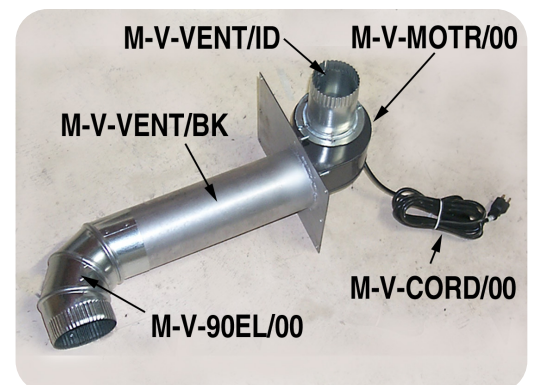
UL Listing

c-MET-us to UL499 for specified kilns.



Part Number

M-V-VENT/00 for standard 120V



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INCLUDED

Multi-Mounting Bracket (M-V-MULT/00)

An adapter to mount the vent motor on the floor or point the outlet vertically for ceiling installations.

(hotkilns.com/multi-mounting)

OPTIONS

220-240 Volt Option (M-V-VENT/EU)

Motor is 208-240 volt. Plug to be specified. (USA, UK or CE)

Vent Control (M-V-CNTL/00)

The Vent Control will allow you to program the vent motor to turn on and off during the firing cycle with your DynaTrol or Genesis control. (hotkilns.com/vent-control)

Vent Doubler (M-V-VENT/DB)

The Vent-Doubler allows you to connect two kilns to a Vent-Sure vent system. This can be added to an existing vent system or ordered with a new vent. In some cases you may be able to fire two kilns at once. The Vent-Sure has enough force to vent at least 20 cubic feet of kiln. The "T" duct fitting attaches to the inlet of the fan motor. There are two dampers on it to allow you to both control the flow and to shut off one or the other kiln. Flexible aluminum duct connects this "T" duct and the two fittings that attach to the kiln stands. (Note: The Multi-Mount Bracket M-V-MULT/00 is shown but not included with the Vent-Doubler. Order separately.)

(hotkilns.com/vent-doubler)

Vent-Sure Options & Accessories



This shows several small kilns hooked up with one Vent-Sure using two Vent-Doublers. (Up to 20 cubic feet can be ventilated with one vent).

OPTIONS Accessories for Vent-Sure

220 ⚡ 240

220-240V Version
M-V-VENT/EU



Vent Control
M-V-CNTL/00



Multi-Mount Bracket
M-V-MULT/00



Vent Doubler
M-V-VENT/DB

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Frequently Asked Questions

How do I know if the system is working?

The easiest way to test the operation of the vent system is to turn the unit on and to place a lit match directly over and level with one of the holes in the bottom of the kiln. The flame from the match should be gently pulled into the kiln as a result of the draft.

How hot does the duct get during the firing?

Due to the introduction of fresh air through the plenum of the vent system mixing with the hot gases being drawn from the kiln, the temperature of the duct is below 150°F. This will prevent burns from occurring in the event of the duct being touched.

How long can the duct be and with many bends?

Up to 60 feet of ducting containing four 90 degree bends may be safely used with no drop in static air flow at the duct exhaust point or a reduction in draw at the kiln. The ducting can be run either horizontally or vertically.

Do I need double wall duct when going through the roof?

You do not normally need double wall ducting when going through the roof since the pipe or duct does not reach high temperature. It is always advisable to check your local building codes for their requirements.

What type of duct do I use if I need more than 15 feet?

You can use more of the flexible aluminum dryer ducting or you can use galvanized furnace ducting. We recommend using 4" diameter galvanized duct.

Will the fumes coming through the vent damage my plants, the neighborhood pets or disturb the local environment?

No. The fumes and the gases coming from the kiln have been diluted with enough fresh air to make them safe for the environment. Do not, however, place the outlet of the vent below an open window.

Will using the vent cause my firing to take longer?

The vent system pulls only a very small amount of air out of the kiln, so very little heat is removed and firing times will change very little. For some kilns, a high firing may take a little longer. The insulation value and the number of air leaks in the kiln also determine the length of the firing. We have seen vents overpower smaller kilns - so it is important to adjust the amount of venting in some cases.

What does it cost to operate the vent system?

The vent system typically costs less than 1 cent/hour to operate (electricity costs). Vent systems save on heating and cooling costs when compared to hoods. Hoods remove massive amounts of air from the kiln room - air that may have been heated or cooled, depending on the time of year. Downdraft type vents remove 80% less air in the kiln room than a hood. (It does cost more to run the vent because it does take heat out of the kiln. For instance an e23T in the example above took 70 KW hours with a vent on and 62 KW hours without a vent. At 8 cents per KW hour that would be a cost of \$0.64. The vent was on the whole time).

Will the cold air entering the kiln damage the product?

The amount of air that is entering the kiln is so small that it does not cause problems with the ware. The top holes are placed toward the outside of the chamber area so that no air comes down directly onto ware that is placed near the top of the kiln. (L&L NOTE: This is fine but we do not normally recommend holes in the lid - a kiln is porous enough).

Will faster cooling crack the ware if I leave the vent on during the cooling cycle?

No. Some kilns can cool an average of 4-1/2 hours faster with the use of the vent system. The cooling is faster but it is taking place at an even rate throughout the kiln avoiding uneven stresses being placed on the ware. Most ceramic ware can be cooled more quickly if the cooling takes place at an even rate. The rate of cooling increase will depend on the kiln size and the density of the load. The vent will remove more molecules of air and hence heat as the kiln cools. This is because the density of the air increases the lower in temperature you go. This is one reason why kiln vents are so efficient - they don't remove too much heat when you don't want them too at the higher temperatures).

What should I do if I still smell fumes?

You should check your duct work to make sure it is properly connected and that the joints are sealed. You can also check for extra air leaks around your kiln and repair these if necessary.

Note: These Frequently Asked Questions are provided courtesy of The Edward Orton Jr. Ceramic Foundation with some modification based on our Vent-Sure vent system and experience.



Vent Control
[hotkilns.com/kiln-accessories/
vent-control-programmed](http://hotkilns.com/kiln-accessories/vent-control-programmed)

Vent Control

Program ON/OFF During Firing Cycle



Vent Control (M-V-CNTL/00)

The Vent Control will allow you to program the vent motor to turn on and off during the firing cycle with your DynaTrol or Genesis control. (hotkilns.com/vent-control)

Vent Control Installation



- The Vent Control consists of a relay controlled from output #4 on the Genesis (or DynaTrol) or from the Safety contact on the Genesis-Mini.
- There is a female 120-volt receptacle to plug the vent into and a cord to plug into a 120-volt wall outlet. (Note: This is not available for 220-240 volts).
- There is a 6-foot wire that connects the control box to the kiln control panel. A grommet is included for non-factory installation.

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