Read and understand this installation and operating manual as well as the controls manual before operating your kiln. If you have any questions please contact Evenheat Kiln at 989-856-2281 or at evenheat-kiln.com.

Kilns are as safe as any other electrical appliance when used under normal and proper operating conditions. To create and maintain this safe environment observe all safety precautions.

Evenheat V8 Vitrigraph Kiln

Evenheat V8 Vitrigraph Kiln with Floor Stand

Evenheat V8 Vitrigraph Kiln with Wall Mounted Stand

V8 Location and Placement

V8 Kiln Location

"Vitrigraph" is the term used to describe the process of heating glass to a molten state and allowing it to exit the floor of the kiln where it is collected and manipulated by the user. To accomplish this, a vitrigraph kiln is elevated to a point where the user has open and easy access to the glass exiting the kiln bottom. Evenheat manufactures floor and wall mounted stands for this purpose.

When selecting a location for either the floor stand or wall mounted stand, choose or create an area that allows for the free physical movement. Avoid confining yourself as free bodily movement is necessary. This means clearing the area of obstacles, combustible materials, power cords and any other potential limits to free bodily movement.

Floor stands shall be placed on a level, non-combustible surface. Shimming of the floor stand base is allowable if needed. Shim only with non-combustible material.

Wall mounted stands shall be secured to a non-combustible wall surface and both floor and ceiling surfaces shall be non-combustible.

V8 Kiln Placement

The V8 is provided with a small metal stand. The purpose of this metal stand is to allow the user to use the V8 as a traditional glass or ceramic/pottery kiln if desired. Before doing so the user must replace the firebrick floor with a firebrick floor that does not have a hole. This solid floor is available for purchase on shopevenheat.com and has a part #00342.202. All non-vitrigraph firing in the V8 shall be done with this solid floor.

To place the V8 in either the floor or wall mounted stands for vitrigraph use.

Remove the kiln floor from the small metal stand supplied with your kiln. You will not use the small metal stand when placing the V8 in stands.

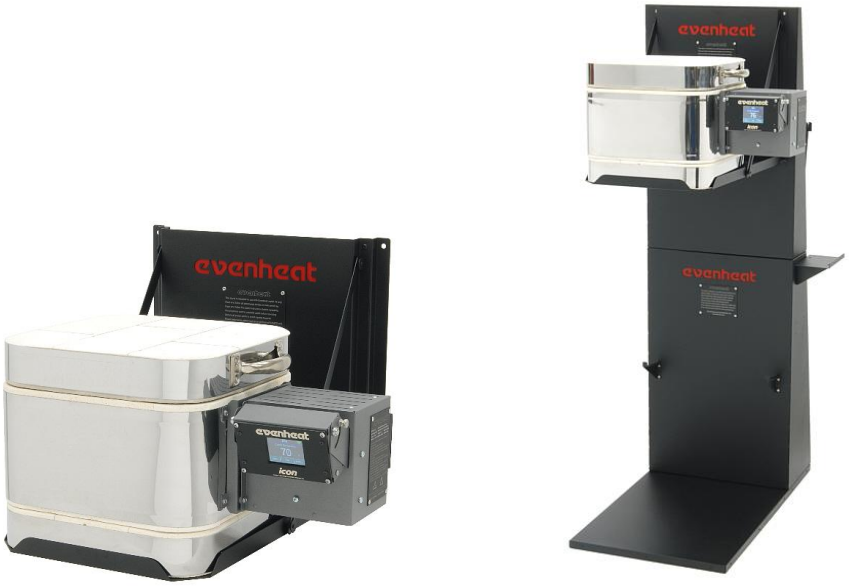
Place the kilns firebrick floor onto the metal stand base with the band clamps facing the back and the front of the floor making contact with the front lip on the metal base.

Verify that the glass exit hole in the firebrick is properly aligned with the glass exit hole in the metal base.

Place the kiln chamber onto the kiln floor with the controls positioned to the right.

Place the power cord into the power cord catch located towards the back of the base. This catch keeps the power cord out of harm's way during use.

Place the kiln lid onto the chamber. We prefer to place the lid handles left and right.



Proper V8 Placement in both wall mounted and floor stands

Kiln Operation

Electrical Service Requirements

The North American V8 kiln operates from a standard 120V receptacle and will consume 14A. It is recommended that V8 be the only electrical appliance operating on the circuit.

The Global 230V V8 kiln will consume 9.5A.

Plugging In the Kiln

Throw the kiln control panel power switch down to the OFF position (located on the back of the control panel). Plug the V8's power plug into your outlet. As the V8 requires 14A/120V to operate it should be the only devise plugged into the circuit. It is permissible to use an extension cord to connect to electrical power but only with the following conditions: extension cord wire size must be at least #12AWG, extension cord length shall not exceed 12' (4m) and be of a 3 wire, grounded style.

We have placed a power cord catch on the stands directly behind the control panel. Place the power cord into this catch. This moves the power cord to the back and out of the way of the user and also away from the kiln itself. Place the power cord and any extension cords in such a way as to avoid tripping or entanglement hazards.

Test Fire

Evenheat suggests that you perform a test fire with your new kiln before putting it into service.

A test fire gives you an opportunity to become familiar with the features and functions of the kiln before committing to actual use. It also allows your heating element to form a protective oxide barrier. A light lubricant was used in the production of your heating element. The test fire will burn this off, almost immediately! You may notice a light smoke as this occurs. It's normal.

The V8 is available with a variety of controls. A separate control manual is available on our website evenheat-kiln.com. Simply go the V8 Vitrigraph page to locate it. Refer to these manual(s) for controls programming instructions.

Program the control to reach 1200°F as fast as possible and hold for 15 minutes (see the controls programming manual for instructions). Allow it to climb to temperature and then hold, after which point the firing program will end.

We would encourage you to repeat this test fire procedure if you've never fired a kiln of this design before. You won't hurt anything. Kilns are wonderful machines and they're even more wonderful when you know what to expect and how to work them.

Your Firing Surface

If you plan to use the V8 in more traditional glass or ceramic/pottery firings you will always want to fire your ware on a kiln shelf prepared with a kiln wash or glass separator. You may also choose to fire on many of the fiber papers available. You DO NOT want to fire your ware directly on the floor of the kiln. Doing so will most likely allow your ware to stick to the floor and damage it, and that's no fun. If you have not prepared your shelf do so now. If you're using Evenheat supplied shelves and wash there are separate instructions included with these items.

As noted previously, a solid floor must be used when using the V8 in traditional firing roles. This solid floor replaces the floor with the vitrigraph hole in it. This solid floor is available for purchase on shopevenheat.com and has a part #00342.202. All non-vitrigraph firing in the V8 shall be done with this solid floor.

Loading the Kiln

Throw the kiln control panel power switch to the OFF position and remove the lid.

Load your vitrigraph pot or ware while being mindful to avoid allowing them to make contact with the thermocouple. The thermocouple needs some space around it in order to operate properly.

We tend to like placing the vitrigraph pot into the firing chamber already loaded with glass. Loading glass into a vitrigraph pot as it sits in the chamber opens up the chance of missing the pot and dropping glass directly into the chamber which gets messy and destructive.

Verify that the hole in the bottom of your vitrigraph pot is aligned with the hole in the kiln floor. You want it as centered as possible for best possible tool use and to avoid any unexpected contact with the firebrick floor. It should be noted that any glass that does get stuck to the firebrick floor can be removed fairly easily once cooled. Just take care to remove as little firebrick as possible when doing so.

Once the vitrigraph pot or ware are loaded place the lid back on. When placing the lid back on be sure that your pot or ware does not make contact with the lid.

Firing the V8

Once the V8 has been properly loaded and closed you may now fire the kiln.

Throw the power switch up to the ON position. The temperature control will illuminate and programming of the control is now possible. Your firing controls are positioned in a swiveling enclosure we call the Swing View. This swing view enclosure has been modified on the V8 kiln to allow the control to face downward as well as upward. The downward positioning comes in very handy especially on the wall mounted stand where the controls may be above eye level.

Refer to the controls programming manual previously mentioned for all programming and operation details.

The glass in your vitrigraph pot does not immediately begin to flow once temperature has been reached. Have patience at this point and don't leave the kiln unattended. Once it does begin to flow, it flows.

As mentioned in the safety portion of this manual vitrigraph work exposes you to molten glass exiting the bottom of the kiln which is very hot and can cause severe burns or fires. Please play this safe and give yourself plenty of room to move, wear protective clothing and eyewear and be ready to respond to any mishaps.

When your vitrigraph session is complete be aware that molten glass may still exit the kiln bottom, even with the controller no longer operating. It takes time for glass to cool and it's possible you may still have glass exiting when you believe you are done. Keep this in mind and monitor the vitrigraph well into the cooling portion.

Unloading the V8

Throw the kiln control power switch to the OFF position.

Unload the V8 only once the kiln temperature has reached ambient room temperature.

Remove the lid and unload your ware.

Once all ware has been unloaded place the lid back on the kiln.

You are free to leave your V8 placed into the stands when not in use. If you do remove them it's possible to lower the metal kiln base of the stand to a vertical position to get it out of the way. Just remove the kiln, unhook the support arms and allow the metal base to rotate down.

SAFETY

Warning Symbol Descriptions

Warning symbols are used throughout this manual. These symbols alert the operator to certain hazards and important information. Pictured below are symbols used along with a description of each.

The Exclamation Point alerts you to particular cautions, hazards and information.

The Lightning Bolt alerts you to specific information regarding the risk of electric shock. Electric shock may result in injury or death.

The Heat Waves alert you to specific information regarding the risk of burn injury.

Emergency Shut Off Provision

The kilns power supply connection (plug/receptacle, breaker or disconnect) acts as the emergency electrical power shut off. Access to these devises should be unobstructed and safe at all times.

Electrical Safety

A licensed electrician should be used for all electrical installation and service. All applicable local, state and federal electrical codes must be followed.

Use correct voltage, wire size and fuse or breakers. Kiln electrical requirements are located on the kiln nameplate. Make sure all electrical connections are tight. Avoid using aluminum wire.

Always use the proper electrical receptacle. Never alter the kiln cordset or cordset plug. Alterations can be dangerous. Alterations will void any warranties along with nullifying any Listing Agency markings.

Evenheat recommends that a voltage check be performed before placing the kiln into service, ideally before actual purchase. Operating voltage varies. The kilns operating voltage (printed on the kilns nameplate) must match the applied voltage (actual electrical service voltage). If it does not, do not install or operate the kiln as potential electrical and fire hazards exist. Contact Evenheat for guidance in such cases.

The kiln must be properly grounded.

Unplug or disconnect the kiln from the electrical service before accessing the chamber for servicing or vacuuming. Do not attempt to touch or replace the heating elements while the kiln is plugged in or connected to the electrical service. Electric shock may result in serious injury or death.

You may use an extension cord to power the V8 Vitrigraph within the following conditions: Wire size must be a minimum of #12AWG, extension cord shall be no longer than 12' (4m) and extension cord must be a 3 wire, grounded style.

Your kiln is designed with a feature that allows for relay replacement without having to remove the entire kiln control enclosure: Relay Access Port. A plate is used to cover this port. Except for servicing, this plate must be secured to the control enclosure at all times. Do not operate the kiln without this Relay Access Port Plate in place and secured to the control enclosure. Failure to do so may result in electric shock resulting in serious injury or death.

Kiln Location Safety

The best location for the V8 kiln for vitrigraph work is on an Evenheat manufactured floor or wall stand. The best location for the V8 when using it as a traditional kiln for glass or ceramic/pottery is a non-combustible work surface.

Evenheat recommends that floor, wall and ceiling surfaces are constructed of non-combustible materials.

Do not place or use kiln on combustible surface.

Place only on the metal stand, metal floor stand or wall mounted stand provided by Evenheat Kiln, Inc.

For those using the kiln for vitrigraph work while not using an Evenheat manufactured stand, it is required that the metal kiln base be physically attached to the vitrigraph enabling structure to prevent potential safety hazards. It is also required that the vitrigraph enabling structure be of such a design as to be stable and physically secure. This means that if you provide your own stand or kiln elevation device make sure it's stable and suitable for the work at hand.

Do not use the Evenheat vitrigraph firebrick base for any types of firing other than vitrigraph work.

The surface on which the kiln is placed shall be capable of safely supporting the combined weight of the kiln and kiln load.

Observe all building, fire and safety codes when installing the kiln.

Do not install the kiln closer than 12" (31cm) from combustible wall surface.

Install in a covered, well ventilated area.

Never place the kiln in a small, enclosed area such as a closet, cabinet or very small room. The room in which the kiln is placed into service shall be capable of safely dissipating all heat produced by the kiln.

Do not place the kiln in any structure resembling a carport or screened in porch. Avoid areas that are subject to outdoors weather.

Never install a kiln outside. Avoid moisture.

It is the user's responsibility to be knowledgeable regarding any and all contaminants, produced by the ware during firing, and take steps to properly and legally contain and dispose of these contaminants.

It is the user's responsibility to provide ventilation capable of removing all gases, fumes and other airborne contaminants produced by the ware during firing safely from work the area and building structure.

Do not store flammable or combustible products near or in the same room the kiln such as gasoline, paint, aerosol cans, paper, curtains, plastics, etc. Better yet, store these items in another separate structure designed for this purpose.

Position the power supply cable in such a way as not to create a tripping hazard around the kiln. Our vitrigraph stands include a power cord catch specifically for this purpose. Additional care should be taken with an extension power cords as well.

The area around the kiln should be free of obstructions that interfere with the proper and safe operation of the kiln.

Never place anything under or above the kiln for storage. Absolutely nothing should be propped against the kiln.

Kiln Use Safety


The surface of the kiln is hot and burn injuries are possible. Keep all children and unsupervised personnel away. Always wear protective clothing, gloves and eyewear when operating and handling a hot kiln.


Use extreme care when accessing a functioning and/or hot kiln. Under no circumstances should you touch the heating elements with your body or any other devises like tools. Electrical shock may result in serious injury or death.


Use care when accessing or looking into a hot kiln, this includes looking through a cracked lid or peepholes. High heat escapes quickly and burn injury may result. When accessing or looking into a hot kiln, approach slowly and wear protective clothing and gloves designed to withstand high heat and eyewear capable of filtering Infrared and Ultraviolet light.


The vitrigraph process exposes the user to molten glass which is of very high temperature (1800°F and more) and severe burns can result. If you are using the kiln for the vitrigraph process you are advised to wear personal protective gear capable of withstanding these extreme temperatures.


If you are using the kiln for the vitrigraph process please note that molten glass will conduct electricity and personal protective gear must chosen and used that is capable of insulating the user from potential electric shock.


Please note that the vitrigraph process exposes the user to potentially harmful Ultraviolet (UV) and Infrared (IR) light. Select eye protection that is capable of filtering both UV and IR light.

Protective clothing should be worn when operating the kiln and includes, but is not limited to, cotton clothing, heat resistant gloves and eyewear capable of filtering Infrared and Ultraviolet light.

Do not operate the kiln over the maximum temperature rating printed on the nameplate.

Never fire a kiln unattended beyond its anticipated firing time.

Never allow the power cord to touch the kiln. If the cord, plug or receptacle become damaged discontinue use and replace immediately.

It is recommended that a fire extinguisher, capable of dousing an electrical fire, be accessible in the event of fire. Smoke detectors within the kiln room are also recommended.

Keep the kiln lid and chamber closed when not in use.


It is the user's responsibility to have knowledge of the material intended to be fired. If you are unsure as to the safety of firing a particular material contact your materials supplier for guidance. If you remain unsure as to the safety of firing a particular material do not do it. Firing hazards include materials that explode or produce toxic gases. Finished ware hazards include materials containing lead. Materials containing lead should not be used for articles intended for food use.

Fire all ware according to the material manufacturer's instructions. Improper firing may result in damage to the kiln or ware.

Do not use the kiln to prepare food, heat a living space, dry clothes or ice laden articles or use as a storage devise. The kiln is designed for one purpose and one purpose only: the firing of glass materials.

All kiln models not equipped with an automatic shutoff devise (electronic control or kiln sitter) must not be allowed to exceed the rated operating temperature indicated on the kiln nametag. To prevent kiln from exceeding this maximum temperature disconnect it from the electrical power supply.

A kiln will remain very hot long after the firing is complete. All safety recommendations should be followed, even with the kiln unpowered, to avoid any burn injuries. Keep children and other unauthorized personnel away.

When firing is complete, and during periods of non-use, remove power from the kiln by unplugging or by throwing the disconnect or breakers to the OFF position.

For those who may be interested in using vermiculite products for vitrigraph work: vermiculite is a fairly soft material that tends to fracture easily. The use of an easily fractured or fractured product is therefore not recommended by Evenheat as kiln stability is of great importance for safe operation. Evenheat does not use vermiculite in its products.


Vermiculite is a mineral that is mined. Evenheat Kiln is under the impression that vermiculite is most often found in the ground with asbestos. Evenheat Kiln is also under the impression that a single vermiculite mine exists that is certified asbestos free. You are well advised to inquire as to the asbestos content of any vermiculite product you may wish to purchase.

Kiln Maintenance Safety

Disconnect electrical power from the kiln before performing any kiln maintenance. Failure to disconnect the electrical power supply may result in electrical shock which can cause serious injury or death.

Replace any worn, damaged or defective parts immediately with Evenheat Kiln replacement parts only. Discontinue use until parts are replaced.

Your kiln is designed with a feature that allows for relay replacement without having to remove the entire kiln control enclosure: Relay Access Port. A plate is used to cover this port. Except for servicing, this plate must be secured to the control enclosure at all times. Do not operate the kiln without this Relay Access Port Plate in place and secured to the control enclosure. Failure to do so may result in electric shock resulting in serious injury or death.

When vacuuming the kiln use only HEPA filters on the vacuum. Prolonged expose to brick dust and other refractory materials can cause lung injury.

Inspect all electrical service connections periodically for wear. Periodically check chamber jacket clamps for tightness. Tighten as necessary.

EVENHEAT KILN, INC.
LIMITED KILN WARRANTY

Evenheat Kiln, Inc. guarantees to the original purchaser that for a period of two full years (1 year for Superwool lids) from the date of purchase the kiln will be free of defects in workmanship and materials when used under normal and proper operating conditions. Evenheat will replace or repair any defective part as specified..

FOR THE WARRANTY TO BE EFFECTIVE THE PURCHASE MUST:

(1) Provide written proof of date of purchase. (Warranty card sent in at time of purchase.)
(2) Notify the Evenheat Distributor/Dealer from whom the kiln was purchased, within 10 days after defect has been discovered.
(3) Make kiln immediately available for inspection.

FOR WARRANTY REPAIRS:

(1) Warranty repairs should be handled through the Distributor/Dealer from whom the kiln was purchased, who will arrange for any repairs or replacement of parts under the terms of this warranty upon receipt of the kiln (or defective part). Otherwise the defective part may be returned (postage prepaid) to Evenheat Kiln, Inc. P.O. Box 399, 6949 Legion Drive Caseville, MI 48725. If, after factory examination, the original part is found to be defective, a new or repaired part will be shipped prepaid by Evenheat Kiln, Inc.
(2) If the entire kiln is to be returned to the factory, all transportation costs will be borne but he purchaser. The purchaser should notify Evenheat Kiln, Inc. (989) 856-2281 prior to shipping. Evenheat will help advise the best shipping method and if it is necessary to return the entire kiln or only certain parts. Warranty work will be performed within 30 days after defective part is returned to the factory.
(3) Evenheat Kiln, Inc. reserves the right, at its option, to replace the entire kiln or any part of it in order to fulfill its obligation under this warranty.

THIS WARRANTY DOES NOT COVER:

(1) Freight damage, kilns altered in any way, abuse or neglect, moisture, improper storage or installation.
(2) Kiln overfired (reaching temperature higher than melting point of ware inside kiln) regardless of cause.
(3) Dawson Kiln Sitter or Limit Timer.
(4) Kilns operated on incorrect voltage.
(5) Improper electrical installation.
(6) Kiln furniture or ware.
(7) Kilns used for reduction or salt firing.
(8) Kilns used for purposes other than the firing of glass materials.
(9) Kilns operated in excess of the cone or temperature on the rating plate.
(10) Damage to Property or personal injury that may occur from kilns that are fired on or near wood floors or combustibles.
(11) Damage to property or personal injury that may occur from improper ventilation of the work area and building structure.

This warranty is in lieu of all other warranties, expressed, or implied.

Evenheat Kiln, Inc. neither assumes nor authorizes any Distributor/Dealer, Retailer or employee to assume for it any other obligations or liabilities in connection with Evenheat Kilns.

This warranty is limited as specified above and excludes incidental or consequential damages. Some states or providences do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.