

## SAFETY

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.

### 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 devices should be unobstructed and safe at all times.

All electrical installations for direct wired models (those without a plug/receptacle connection) must include a power disconnect near the kiln and that is easily accessible and safe for emergency power shutoff.

### 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.

Never, ever use an extension cord to operate a kiln.

### Kiln Location Safety

The best location for the kiln is a concrete floor. If not available, the kiln must be placed on a minimum of 2" of masonry extending at least 12" beyond the outside perimeter of the kiln.



Do not place or use kiln on combustible surface.

Place only on the metal stand provided by Evenheat Kiln, Inc.

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

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

Do not install the kiln closer than 12" (31cm) from combustible wall surface or object or 36" from any ceiling surface in all opened and closed positions.

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 cables, power supply conduit, controller cables, pyrometer thermocouple leads and other materials in such a way as not to create a tripping hazard around the kiln.

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 devices 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.

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.

Do not open the chamber with the lid in the open position.

Do not open the lid with the chamber in the open position.

Be sure that kilns Chamber Security Bar is secured within the wireform catch before releasing the chamber. The hardware used for this safety bar should be inspected periodically for damage and wear. If this device is not operating properly discontinue kiln use until repair or adjustment is made.

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 device. 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 device (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.

#### **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.



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.

## Studio Pro 15 Features

### Dual Access Design

The Studio Pro 15 features a Dual Access Design. The Dual Access Design simply means you have the choice of entering the chamber through the Top or through the Front.

Top entry offers many unique advantages. Top entry allows for the use of forming tools that require a vertical approach. It also offers easy placement of large ware such as slumping molds and forms. The hinged lid, with its built-in venting allows for excellent ventilation opportunities.

Front entry offers its own unique advantages. Front entry grants wide open access to the kiln floor. This wide open access is excellent for ware placement, particularly for ware that cannot be moved once positioned. The gentle, hinged action brings the chamber back down with precision and confidence. Front entry also makes possible the use of forming tools that require a horizontal approach.

### Fiber Lid with Suspended Heating Elements

The lid of the Studio Pro 15 is constructed of a special fiber material that provides excellent thermal properties along with light weight. This design also allows the heating elements to be positioned on the surface for maximum heat transfer and firing efficiency.

### Wide and Sturdy Handles

We've fitted the Studio Pro 15 with two wonderfully wide and sturdy bar handles. These corner mounted handles are placed well away from the kiln for easy, gloved hand operation. You'll enjoy using them.

### Set-Pro & Rampmaster Controls

Your Studio Pro 15 was shipped with separate operating and programming instructions for the Set-Pro and Rampmaster controls. Each control style includes our Express Mode programming for quick and easy use along with the ability to define your own, custom programs.

### Bench Top or Floor Placement

The Studio Pro 15 is designed to be used either on a counter/bench top or placed within the included stand. The choice is yours. Regardless of your choice of use, the supporting surface (what the kiln is sitting on, on your counter/bench or on your floor) must be made only of a non-combustible material.

### Automatic Power Interrupt Switch

The Studio Pro 15 is equipped with an automatic, power interrupt switch. This power interrupt switch disconnects electrical power from all of the heating elements when either the lid or chamber is opened. This feature is designed to allow for safe access into the kiln.



While the Power Interrupt Switch is designed as a guard against electric shock it remains advisable to avoid touching the heating elements with anything when the kiln is plugged into (connected to) the electrical supply.

## Kiln Setup and Placement

### Kiln Location

Place your Studio Pro 15 in a location that offers a level, non combustibile surface. The Studio Pro 15 should be placed no closer than 12" from any wall or 48" from any ceiling surface in all opened and closed positions. All flammable and combustibile materials should be removed from the kiln area. Enjoy your kiln safely.

The Studio Pro 15 is designed to be placed either on a counter/bench top or within the included stand. If you choose to place the kiln directly on a counter or bench top, the counter or bench top must be strong enough to support the weight of the kiln along with any shelving and ware to be fired. Please note again that the surface on which the kiln is placed should be made of a non-combustibile material.

If you choose to place the Studio Pro within the provided stand the location must be strong enough to support the weight of the kiln along with any shelving and ware to be fired. Please note again that the surface on which the kiln stand is placed should be made of a non-combustibile material.

### Stand Assembly

If you have chosen to place the Studio Pro 15 on the stand you will first need to assemble the stand.

Tools Needed: Phillips Screwdriver, 7/16" wrench

Stand Contents: 2 19-3/8" frame angles, 2 25" frame angles, 4 16" legs, 4 stand feet, 16 bolts, 16 nuts

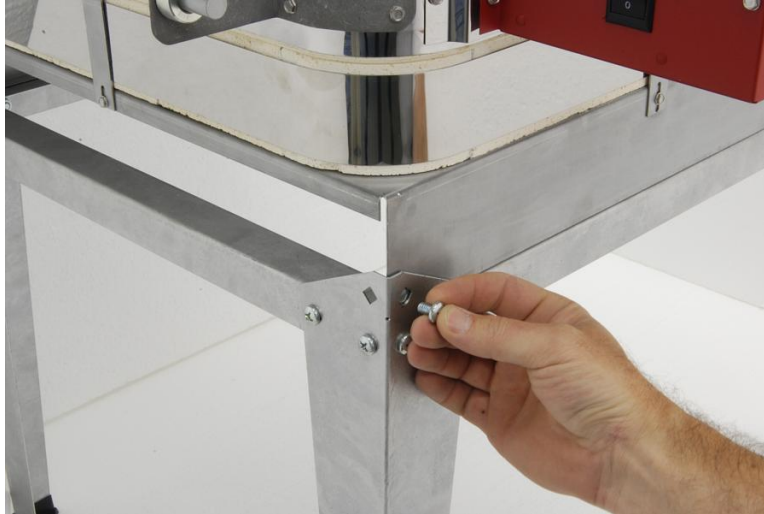


Place frame angles to form a rectangle. Attach each leg to corners as shown using nuts and bolts, tighten securely.



Place the plastic stand feet on the stand legs. The stand is now complete.

Place the Studio Pro 15 on the stand as shown and secure the kiln base to the stand. Your Studio Pro 15 base came with 4 nuts and bolts for this purpose. The kiln **MUST** be secured to the stand as shown. Failure to secure the kiln to the stand will result in instability which may cause property damage or personal injury.



Insert a bolt through each front leg and kiln base and secure with nut.



Insert a bolt through each side of rear base and stand frame angle and secure with nut.



Your Studio Pro 15 is now properly secured to the stand.



## Kiln Operation

### Electrical Service Requirements

120V Studio Pro 15 models: The 120V Studio Pro 15 requires a dedicated 120V electrical service using a NEMA 5-15R single outlet receptacle. Wiring should be at least 12AWG and the circuit breaker should be "Fully Rated" at 20A.

240V Studio Pro 15 Models: The 240V Studio Pro 15 requires a 240V electrical service using a 6-20R receptacle. Wiring should be at least 12AWG and the circuit breaker should be rated at 20A.

### Plugging In the Kiln

Throw the kiln control panel power switch down to the OFF position. Plug the Studio Pro 15's power plug into your standard household outlet. As the Studio Pro 15 requires 15A/120V to operate it should be the only device plugged into the circuit. We have designed the Studio Pro's power cable to run straight out the back of the control panel: mainly to keep it out of your way but also to help keep it away from the kiln itself. Once you plug it in make sure the power cable is not touching the kiln.

### Pre Fire

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

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

A separate control manual is included on the manuals disc included with your kiln. Refer to these manual(s) for controls programming instructions.



*Scan this QR code to view instructional programming videos for both the Evenheat Set-Pro and Rampmaster controls.*

*You will also find these instructional videos and manuals on our web site [www.evenheat-kiln.com](http://www.evenheat-kiln.com)*

Vent the lid of the kiln using a 1" shelf post (this allows the light smoke to escape) and program the control to reach 1200°F as fast as possible and hold for 15 minutes (see the included controls programming manual for instruction). When the kiln reaches 300°F close the lid entirely and allow it to continue climbing to 1200°F. Once the kiln reaches 1200°F it will begin to hold 15 minutes. As it's holding you will notice audible clicks. These clicks are made by the control relay turning the heating element on and off and it's a normal and welcome sound.

We would encourage you to repeat this pre 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

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.

## Loading the Kiln

As mentioned in the Features Section of this manual the Studio Pro 15 gives you a choice between loading via the Top or Front.

To load via the top, throw the kiln control panel power switch to the OFF position and simply lift on the lid handle and take the lid back. A built-in stop will hold the lid at the open position. Avoid positioning the shelf or ware directly at the thermocouple. The thermocouple needs some space around it in order to operate properly. When lowering the lid be sure that your ware does not make contact with the lid. This is possible when using tall forming molds and large pieces.

To load via the front, throw the kiln control panel power switch to the OFF position and simply lift on the front chamber handle and take the chamber back. A built-in stop will hold the chamber at the open position. Place your shelf squarely onto the floor of the Studio Pro 15. At this point we think it's a great idea to gently lower the chamber to check that the shelf clears the chamber. Reposition if necessary. Position your ware on the shelf as desired and close the kiln. Open the lid and check for clearance, particularly with the thermocouple. Remember we want to give the thermocouple some space.

Note: Do not open the chamber with the lid in the open position.

## Firing the Studio Pro

Once the Studio Pro 15 has been properly loaded and closed you may now fire the kiln.

Throw the power switch, located on the kiln control panel, to the ON position. The temperature control will illuminate and programming of the control is now possible.

A separate instructional manual for the Set-Pro and Rampmaster controls was included with your new Studio Pro 15. Please refer to these manuals for all programming and operation details.