L&L KILNS

EFL KILNS

QUICK START GUIDE

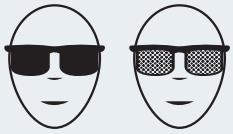
hotkilns.com

REV: 8/28/25

KILN CAUTIONS

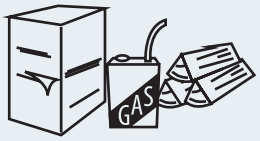
Details & PDF at
hotkilns.com
/support/cautions/
overview

VIEWING INTO KILN



Use dark glasses (shade number 1.7 to 3.0) to view inside the kiln through the peepholes when firing.

KEEP FLAMMABLES AWAY FROM KILN



Do not put sealed containers or combustible materials such as solvents, paper, rags, in or near kiln. An explosion or fire could result.

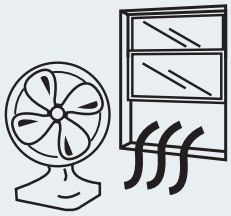
TURN OFF POWER WHILE LOADING

Turn off power to the kiln when loading or servicing.

CHILDREN & PETS

Protect any children, animals, and unqualified adults (anyone who is not able to understand these cautions) that may be near the kiln.

VENTILATION IS ESSENTIAL



Kilns generate harmful fumes when firing ceramics. Fumes include carbon monoxide, sulfur oxides, hydrogen fluoride and metal vapors (all of which can be very toxic).

DO NOT STORE ANYTHING ON LID

Do not use the lid as a storage shelf.
The lid could crack.

DO NOT FIRE TOXIC, FLAMMABLE, OR UNKNOWN MATERIALS

Flammable or unknown materials can decompose under heat causing the release of highly toxic fumes or rapid uncontrollable combustion.

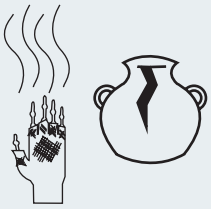
NO EXTENSION CORDS

Locate the outlet close enough to the kiln to plug directly into it with the kiln's supplied power cord.

SURFACE IS HOT AND CAN CAUSE BURNS

Kiln surface can be extremely hot: up to 500°F(260°C). You can be severely burned if you touch the hot surface.

DO NOT UNLOAD KILN WHILE HOT

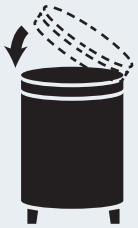


You may burn yourself or you may harm your work.

ATTEND THE FIRING

We recommend attending the kiln while firing. Be especially careful about attending the kiln when it is scheduled to shut off.

KEEP LID CLOSED WHEN KILN IS NOT USED



Keep lid closed when not operating the kiln. Keeping the lid closed will keep out dust and extend the longevity of your kiln.

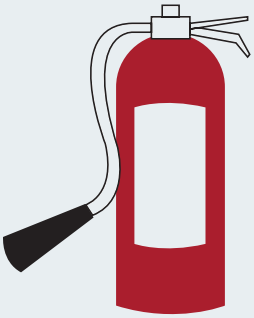
ELECTRICAL SAFETY

Lock out all electrical power before repairing kiln. Have electrical installation performed by a licensed electrician.

SPRINKLER CAUTIONS

If you have a sprinkler system be careful to check the temperature rating and location of the heads so that you do not inadvertently cause them to activate under normal firing conditions.

FIRE EXTINGUISHER



Keep an adequate fire extinguisher near the kiln and check it on a regular basis.

AVOID LOOSE/ FLAMMABLE CLOTHING

When working around a hot kiln be careful of the kinds of clothes you are wearing. Some clothes could potentially catch on fire if they touch the hot surface of a kiln.

DO NOT OPEN DOOR ABOVE 250°F

Do not open the kiln door until the kiln has cooled down to 250°F (120°C).

KEEP KILN DRY

Kiln must be kept dry and protected from moisture. It is best to keep kiln in an enclosed room away from inclement weather and dew formation.

PRE-ASSEMBLY

Preparation & Installation

Before assembling your kiln, make sure your workspace meets all ventilation, power, and clearance requirements.

Follow the link to read our full preparation and installation guide—it covers everything you need to set up your space and operate the kiln safely.

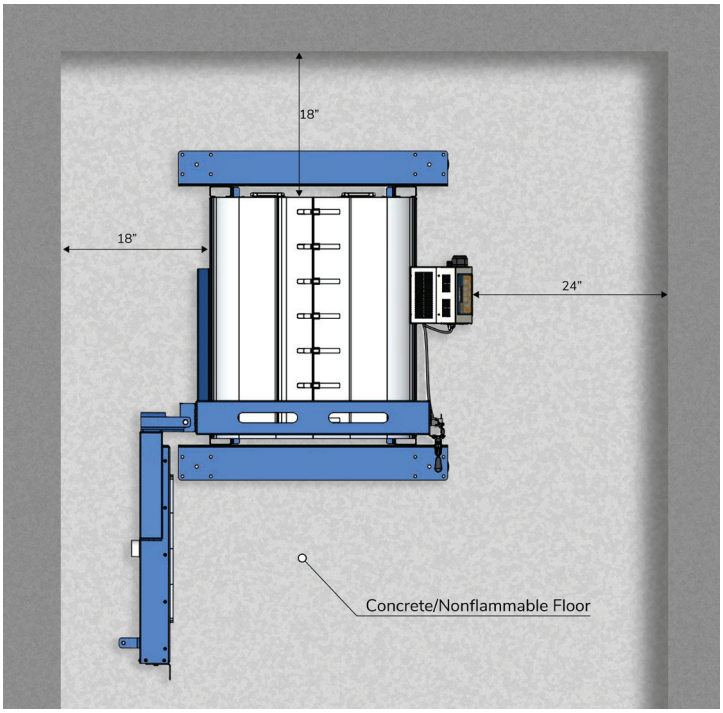
Details at
hotkilns.com
/support/installation/
overview

WHAT'S INSIDE

PLACEMENT

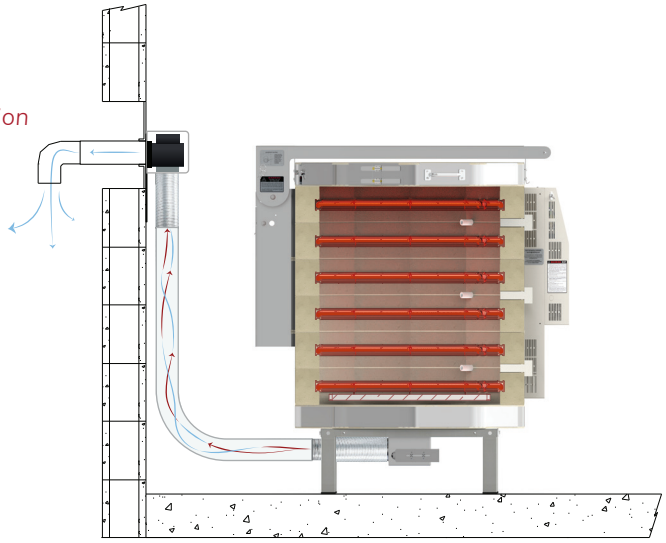
Details at
hotkilns.com
/support/installation/
overview

- **Floor Surface:** Use non-combustible surfaces (cement, ceramic, stone, slate, cinder blocks, brick).
- **Avoid:** Wood, vinyl, carpet; protect linoleum with a non-combustible covering.
- **Clearance:** Maintain 18” (46cm) clearance from non-combustible walls, 12” (30cm) minimum; 36” (91cm) (from combustible surfaces. Maintain a 24” clearance from the control panel for access.



VENTILATION

Details at
hotkilns.com
/support/ventilation



- **Vent-Sure Downdraft Vent System Recommended:** Removes harmful fumes, prevents corrosion, improves firing uniformity, enhances kiln atmosphere, and extends element life.
- If using without a dedicated vent system, fire in a well-ventilated area with the top peephole unplugged. **Always use a CO-Monitor.** Pro-Rated Element & Thermocouple Limited Warranty may be effected.

VIDEO INSTRUCTIONS

Details at
hotkilns.com
/support/kiln-assembly/efl-kilns

The following guide gives a general overview of the assembly process. See the link above for more detailed instructions and a video demonstration of the assembly.

REQUIRED TOOLS

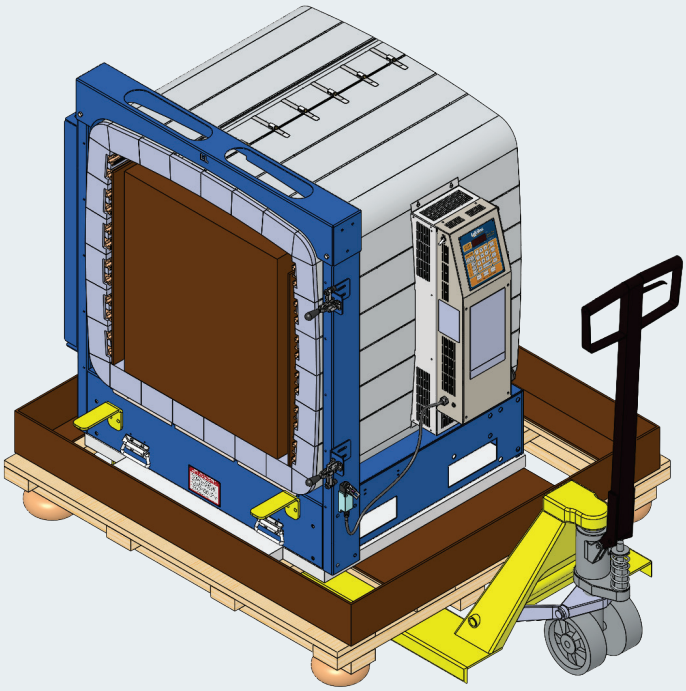
1. Two 1/2” wrenches
2. 7/16” nut driver
3. 9/16” socket wrench
4. 9/16” adjustable or box-end wrench
5. Powered Phillips-head screwdriver
6. Safety glasses and gloves
7. Utility knife or scissors
8. Pallet jack
9. For eFL2626 and eFL2635 kilns: Four people reccomended for positioning the door, use an Engine Hoist if needed

UNCRATING

Deconstruct and remove the top and sides of the wooden crate

MOVING

With the kiln still wrapped in plastic and strapped to the pallet, use a pallet jack or forklift to move the kiln to its installation location.



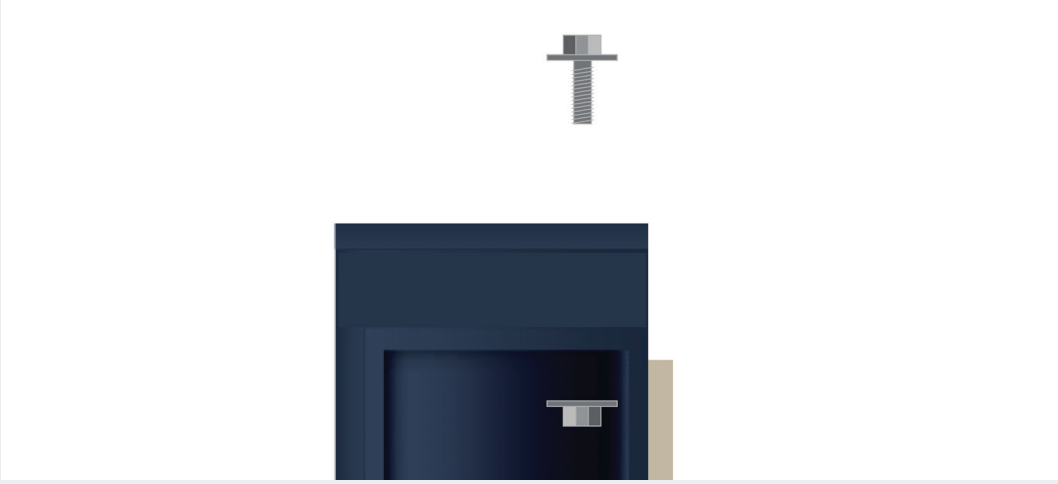
UNPACKING

1. Cut and remove the plastic wrap from the kiln.
Important: Support the door during this step.

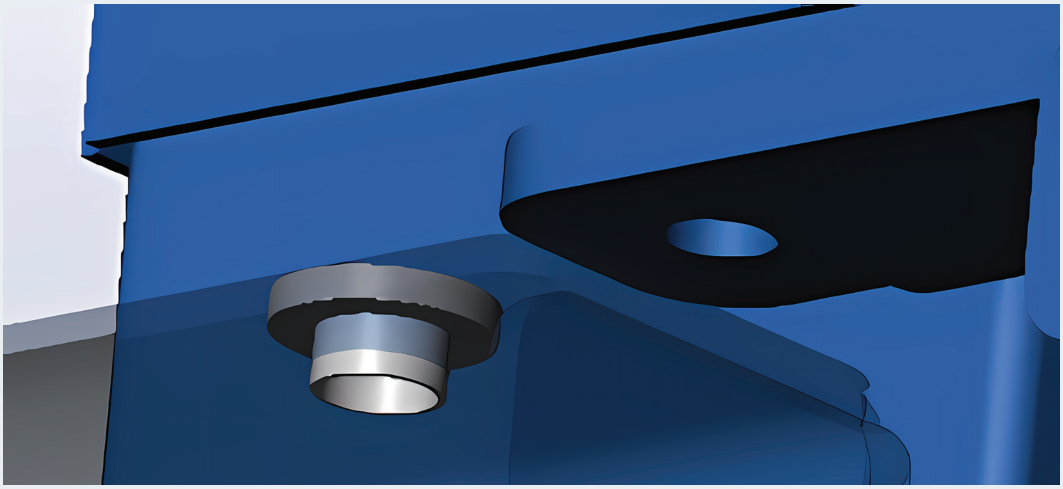
2. Remove any accessory boxes and internal packaging from the kiln chamber.

DOOR ASSEMBLY

1. Remove the bolts from the top and bottom hinge plates on the kiln.



2. Insert hinge bushings if not already in place.

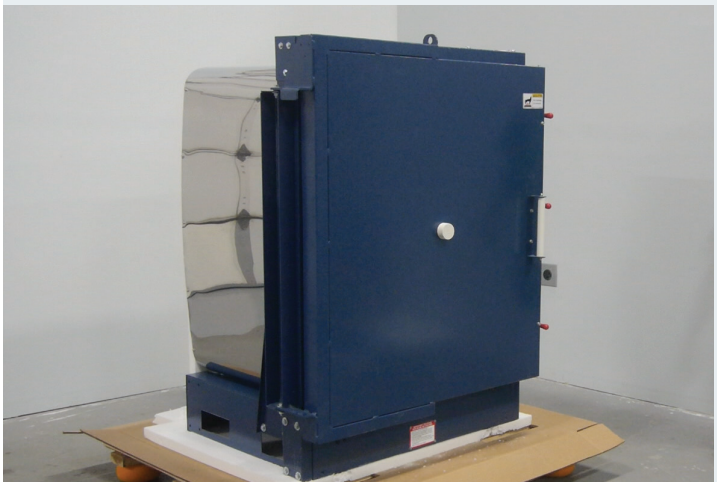


3. With a second person, lift and place the door onto the support brackets on the front of the kiln.

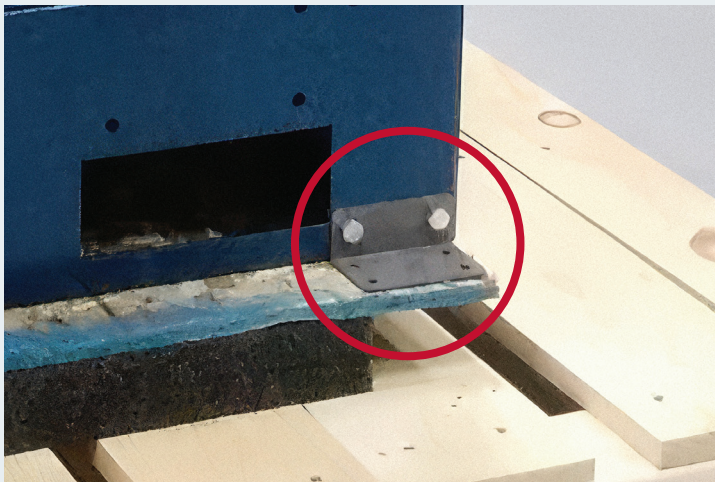
4. Adjust the door position until the hinge holes align. Insert and tighten the top and bottom hinge bolts.

5. Once secured, open the door and remove the support brackets. Keep them for future service work.

6. Close the door and secure it with the quick-release clamps.



7. With the door now attached, remove the brackets mounting the kiln to the packaging.



LEG ASSEMBLY

1. Lift the kiln and pallet using a high-lift pallet jack or forklift to a height slightly taller than the legs.

2. Attach the four legs to the corners of the kiln using the supplied hardware.

3. The pallet includes cutouts to access mounting points. You may need to cut away some packing material to access all of them.

4. Gently lower the kiln so it rests on the legs.

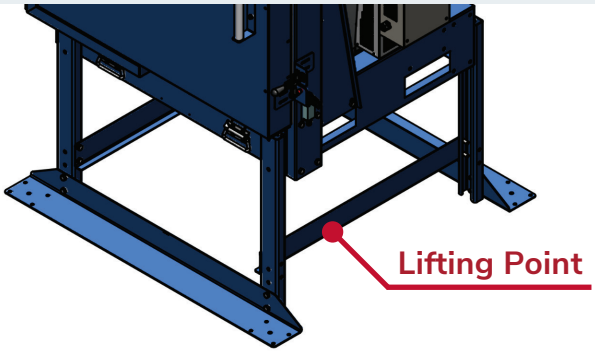
5. Disassemble and remove the pallet.

6. Attach the floor brackets and cross-support bars between the legs.

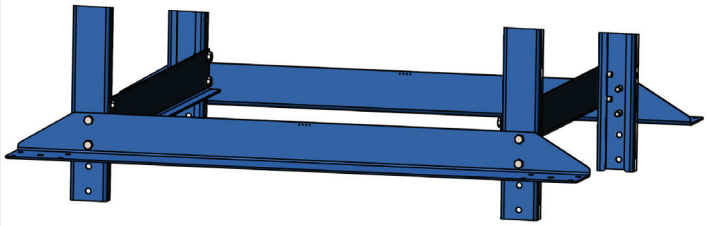
CASTER OPTION

NOTE: NOT FOR EFL2633 DUE TO TIPPING HAZARD

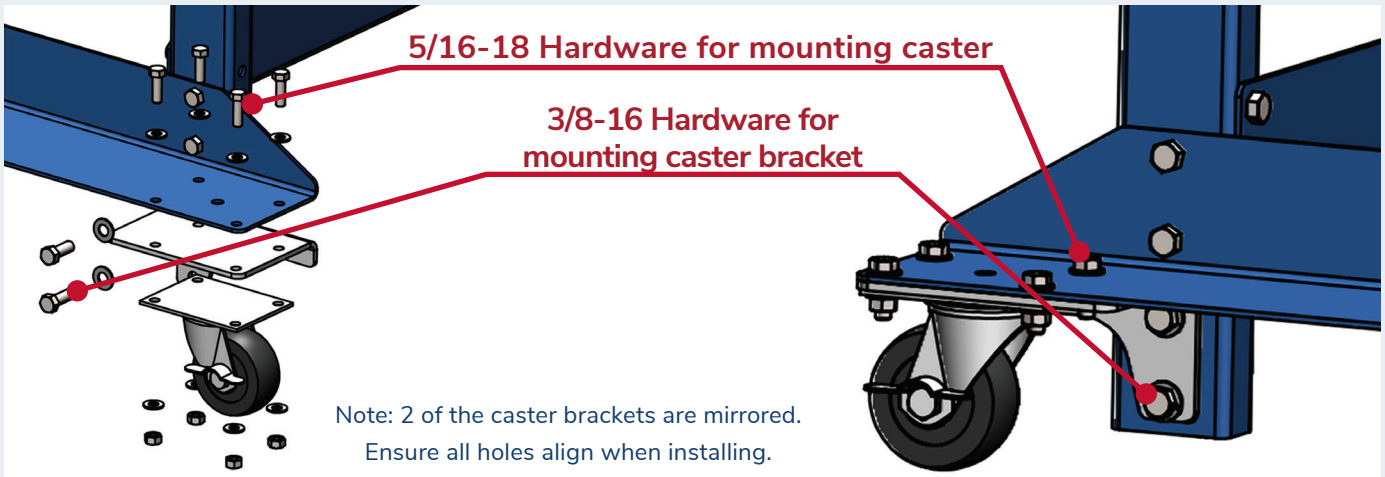
1. Use a pallet jack or forklift to elevate the kiln ~1”



2. Raise the floor bracket to the top set of holes



3. Install all four casters



Note: 2 of the caster brackets are mirrored. Ensure all holes align when installing.

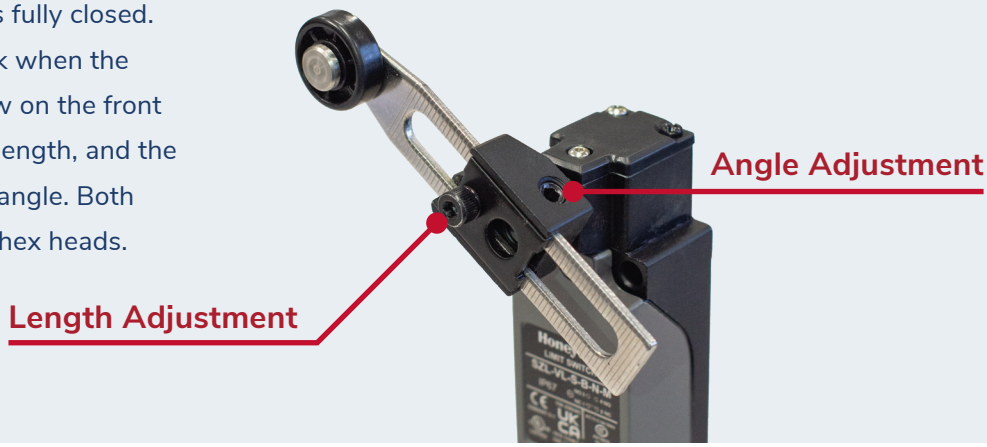
VENTILATION

1. Attach the bypass collection box to the underside of the kiln. Ensure the exhaust pipe faces the rear cutout.

2. Connect the flexible duct from the exhaust pipe to your ventilation fan and tighten the hose clamps.

AUTO SHUT-OFF DOOR SWITCH ADJUSTMENT

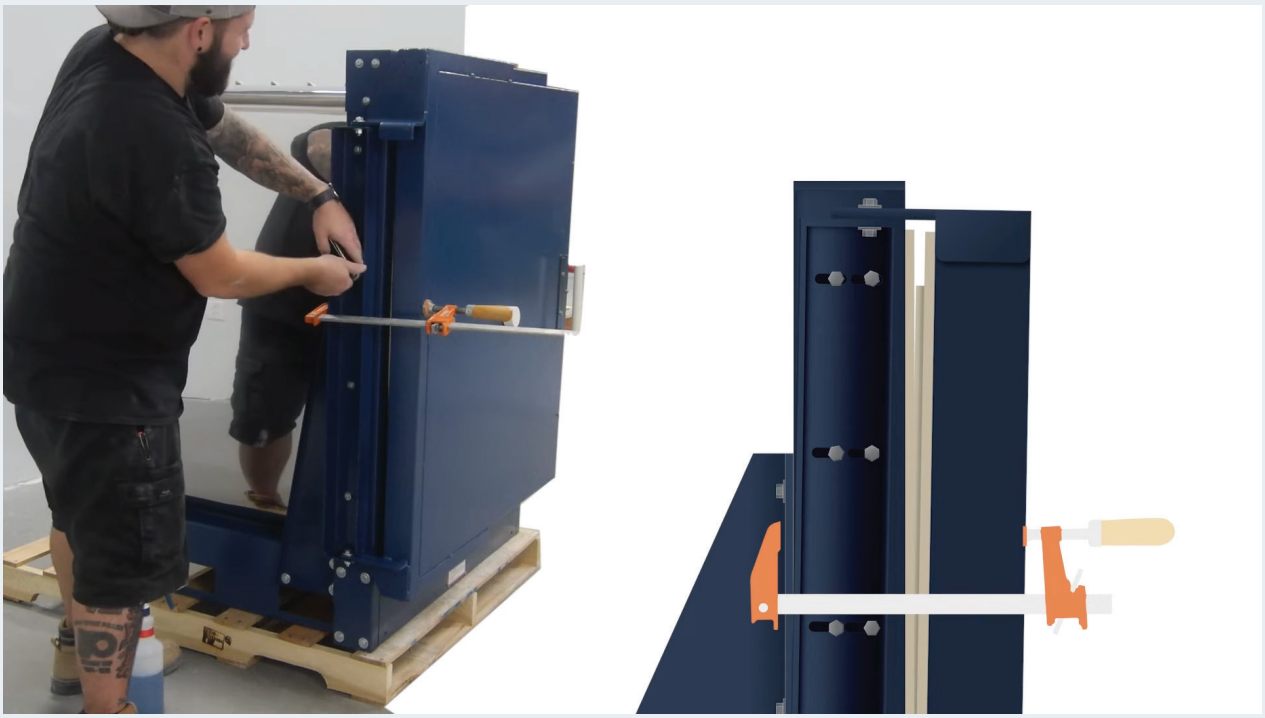
If necessary, adjust the Auto Shut-Off switch so it activates when the door is fully closed. (You should hear a distinct click when the switch engages.) Use the screw on the front of the switch arm to adjust its length, and the screw on the side to adjust its angle. Both adjustment screws have 3mm hex heads.



DOOR ADJUSTMENT

Details at
hotkilns.com
/support/pottery-kiln-videos-links/adjusting-door-efl-series-kiln

If the door on your eFL kiln needs adjustment, scan the QR code to access a detailed instructional video that guides you through the adjustment process.



INSTALLATION CHECKLIST

Details at
hotkilns.com
/support/installation/
checklist

Safety Approvals & Codes

(If required - usually for commercial or institutional spaces)

- ☐ Review the relevant safety approvals and codes
- ☐ Determine if my kiln is listed to UL499 or Canadian Standards
- ☐ Consult the local safety authorities

Clearances & Surfaces

- ☐ Review the kiln's General Dimension Drawing (available on each kiln page)
- ☐ Ensure a 12" clearance (18" recommended) from non-combustible surfaces and 36" from combustible surfaces.
- ☐ Install the kiln on a non-combustible floor, 2" thick, extending 12" beyond the kiln
- ☐ Install the kiln on the factory-supplied kiln stand.

Kiln Room Environment

- ☐ Install the kiln in a dry, weather-proof area
- ☐ Ensure the kiln is inaccessible to children and pets
- ☐ Post clear warning signs (if the kiln is operated in public areas)
- ☐ Have a regularly inspected fire extinguisher nearby
- ☐ (if applicable) Consult local fire codes regarding sprinkler systems

Ventilation

- ☐ Have an exhaust fan OR HVAC system and a thermometer to monitor excess heat
- ☐ Install a downdraft kiln vent OR plan to vent the kiln to manage fumes manually (If manually venting, ensure there is adequate room ventilation)

Electrical Installation

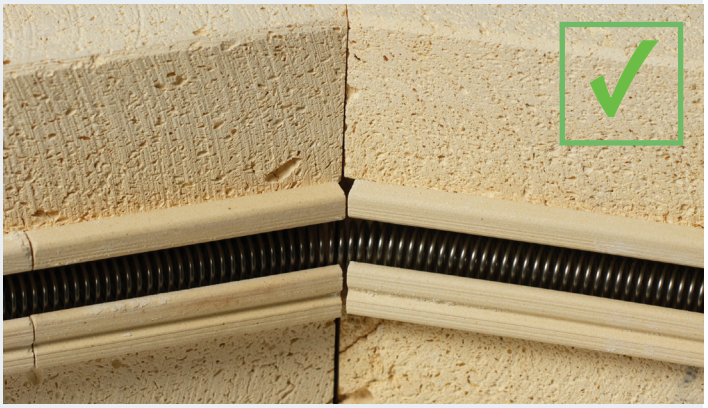
- ☐ Hire a licensed electrician for the installation
- ☐ (If required) Obtain approval from the facility owner
- ☐ Ensure my kiln's voltage, amperage, and phase requirements match the building's supply
- ☐ Ensure the kiln will be located within 50' of the breaker
- ☐ Use copper wire (NOT aluminum) of the appropriate gauge to wire the kiln
- ☐ Have an electrician determine the appropriate wire gauge based on the kiln's amperage load and room conditions. Model-specific electrical specs are available on our website
- ☐ Install a dedicated ground conductor (suggested - but check with your electrician)
- ☐ (if required) Install a fused disconnect switch for lockout/tagout procedures
- ☐ Ensure no wires, cords, or plugs are making contact with the kiln's exterior

Kiln Assembly

- ☐ Follow the assembly directions for my specific kiln

PRE-FIRING

1. Ensure all the elements are seated properly in the holders.



2. Remove the red plastic element clips.

3. Remove any remaining tape or packaging.

4. Plug in the power cord.

5. Power on the kiln to ensure it works.

FIRST FIRING

Details at
hotkilns.com
/support/first-firing

PURPOSE OF FIRST FIRING

- **Removes any moisture from firebrick and sets brick coating**
- **Forms a protective oxide layer on elements.**
- **Identifies electrical issues (e.g., wrong voltage or wiring).**
- **Helps elements settle into holders.**

BEFORE YOU START

Check elements

- Ensure all elements are fully seated in holders—no coils hanging out.
- Stretch coils slightly if needed; vibration during transit may cause shrinkage.

Fire without ware

- Fire without any ware to prevent fumes from damaging the element coils.

Fire with kiln furniture

- Fire with evenly spaced shelves to help with heat circulation and prevent rapid, uneven cooling.
- Apply kiln wash to shelves during this firing if desired.

Fire with cones

- Place cones near thermocouples, at least 2” away from tips.
- We include 04 cones and a recommended firing schedule, but you’re welcome to use your own.

Venting

- **With Vent-Sure:** Leave vent on; keep lid closed and peephole plugs in.
- **Without Vent-Sure:** Remove top peephole plug during first firing for airflow.

RECCOMENDED FIRING SCHEDULE

Ceramic Glaze Cone 04 Medium (Firing Time: ~8 hours)

Segment	Firing Rate	Setpoint Temp (F)	Hold Time
1	150	180	0:00
2	150	250	0:00
3	400	1695	0:00
4	120	1945	0:00

GENESIS PROGRAMMING STEPS

1. Press LOAD
2. Press GLAZE
3. Current setting will display—press OK
4. Press EDIT
5. Set CONE# to CONE 04
6. Set SPEED to MEDIUM
7. Hold should remain at 0.00
8. Press BACK, returning to the Main Menu
9. Press START
10. Choose to start now, later, or remote

Follow the link or QR code for a more detailed first firing guide and Dynatrol programming steps.

KILN CALIBRATION

Get To Know Your Kiln

Details at
hotkilns.com
/support/operation/calibration

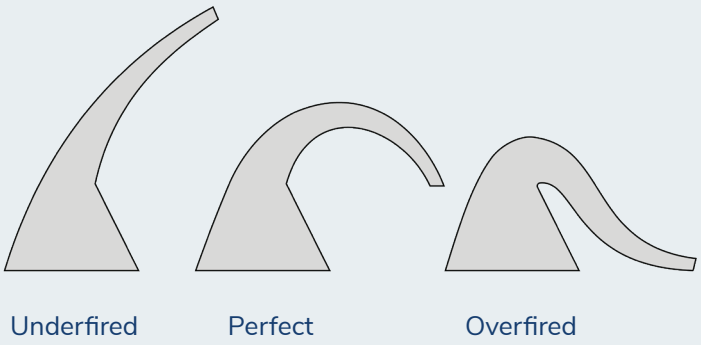
OVERVIEW

New kilns sometimes overfire and may need to be calibrated. Calibration can also become necessary as elements and thermocouples age. Always use witness cones to verify accuracy and adjust as needed. For detailed instructions, see our guides on kiln calibration and using pyrometric cones.

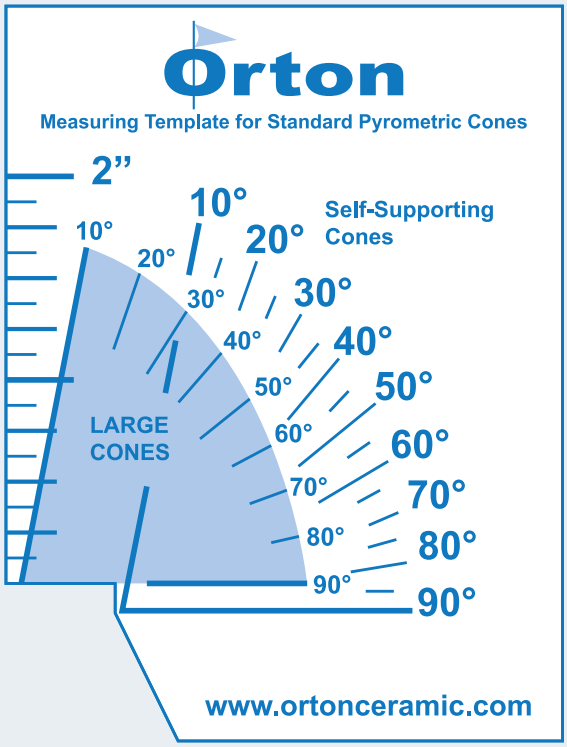
BASIC PROCESS:

1. Fire to your target cone using a full cone pack(guide, target, guard) in each kiln section.
2. After firing, inspect the cones and adjust as needed:
   - If the entire kiln is off, apply a **Cone Offset** for that specific cone number.
   - If one section is off in a multizone kiln, apply a **Thermocouple Offset** to even out that zone.
3. Use our Offset Calculator to help estimate the right adjustment:

Details at
hotkilns.com
/support/cone-offset-calculator



Underfired Perfect Overfired



GENESIS FIRMWARE UPDATES

Details at
hotkilns.com
/support/operation/genesis-control

If using the Genesis Control, periodically check for firmware updates. See the Genesis Control Manual for more details.

ONLINE SUPPORT INDEX

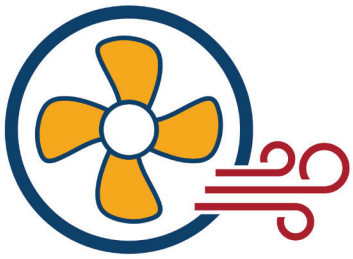
Details at
hotkilns.com/support

INSTALLATION

Space and wiring guidelines, site-preparation checklist — everything you need for kiln installation support.

Pages:

- Overview
- Checklist



VENTILATION

Best-practice for downdraft and hood vents, airflow calculators, and health-and-safety guidelines for kiln ventilation.

Pages:

- Overview
- Vent-Sure Instructions
- Vent Control

OPERATION

Controller programming videos (Genesis®, One-Touch™, Dyna-Trol), calibration guides, and firing-profile templates for precise kiln operation support.

Pages:

- Genesis
- Dynatrol
- One Touch Control
- Manual Control
- First Firing
- The Ceramic Process
- Calibration
- Pyrometric Cones
- Orton Firing Tips

MAINTENANCE

Element replacement, thermocouple testing, brick repair, and preventive-maintenance focused on long-term reliability.

Pages:

- Routine Maintenance
- Changing Elements
- Changing Thermocouples
- Changing Relays
- Changing Transformers
- Changing Controls
- Changing Fuses & Fuse Holders
- Brick Repair

ONLINE SUPPORT INDEX

DIAGNOSTICS

Troubleshooting flowcharts, complete error-code tables, and electrical-supply tips so you can quickly resolve kiln troubleshooting issues.

Pages:

- General Diagnostics
- Electrical Diagnostics
- Error Codes
- Paper Test
- Element Diagnostics
- Firing Log
- Genesis Log

SERVICE

How to get service, how to prepare for a service call or visit, how to hire an electrician, warranty help, and for urgent kiln repair help.

Pages:

- Get Service
- Warranties

RESOURCES

Knowledge-base articles, PDF libraries, wiring diagrams, legacy manuals, external links, and our video library — a deep archive of ceramic-kiln resources at your fingertips.

Pages:

- Video Library
- PDF Library
- Knowledge-Base
- External Links
- Discontinued Kilns
- Receiving
- Wiring Diagrams
- Dimension Drawings

CAUTIONS

Critical safety notices, high-temperature handling advice, and best practices to protect people, property, and your kiln investment.

Pages:

- Cautions Overview
- Cautions Poster
- Safety Data Sheets

Control Operation Manuals

GENESIS

hotkilns.com
/support/operation/genesis-control

DYNATROL

hotkilns.com
/support/operation/dynatrol

Moving Your Kiln After Firing

- If your eFL kiln does not have casters, you will need a pallet jack to move it.
- If the kiln has been fired, tighten the steel case with the bolts above the roof arch before moving (heat cycles can loosen it).

Helpful Links

SERVICE

hotkilns.com
/support/service/get-service

PARTS

hotkilns.com
/parts

RESOURCES

hotkilns.com
/support/resources

Wiring Diagrams

Download wiring diagrams:
hotkilns.com
/support/resources/wiring-diagrams

Electrical Installation: Have all electrical installations performed by a licensed electrician or qualified technician to ensure safety and compliance with electrical codes. Do not use aluminum wire for the final connection to the kiln. Route the power cord (or electrical connection wires) away from the kiln so that it cannot touch the hot case of the kiln or run under the stand. Never use an extension cord with your kiln. Follow the amperage rating on the diagram or the kiln specifications on the website to ensure proper fusing and wire gauge selection. Note that the recommended wire gauge for kiln hookup is based on 75 °C wire. Adjust the wire accordingly for the length of the run to the kiln and any local conditions, such as excessive heat.