

eFL Series **Front-Loading Kilns**



The Affordable Front-Loading Kiln

- Front-Loading
- Arched Sides and Top (like DaVinci Kilns)
- Built-In Shelves in base
- DynaTrol Dynamic Three Zone Control
- 4 Easy-Fire plus 6 Custom Programs
- Hard Ceramic Element Holders
- Cone 10 • 2350°F • 1290°C
- Full-View Solid Peephole Plug
- Fold Down Panel for Easy Maintenance
- Door Switch to turn off Elements
- Optional Casters for all models except the eFL2635
- Installation Videos (hotkilns/unpack-efl)
- For Potters, Teachers, Institutions, Camps, Hobbyists, and Industry - anyone who needs a carefully engineered kiln that will last longer and save money in maintenance costs.
- c-MET-us Listed to UL499 Standards
- Customize to meet your exact needs. *Every kiln is built to order.*

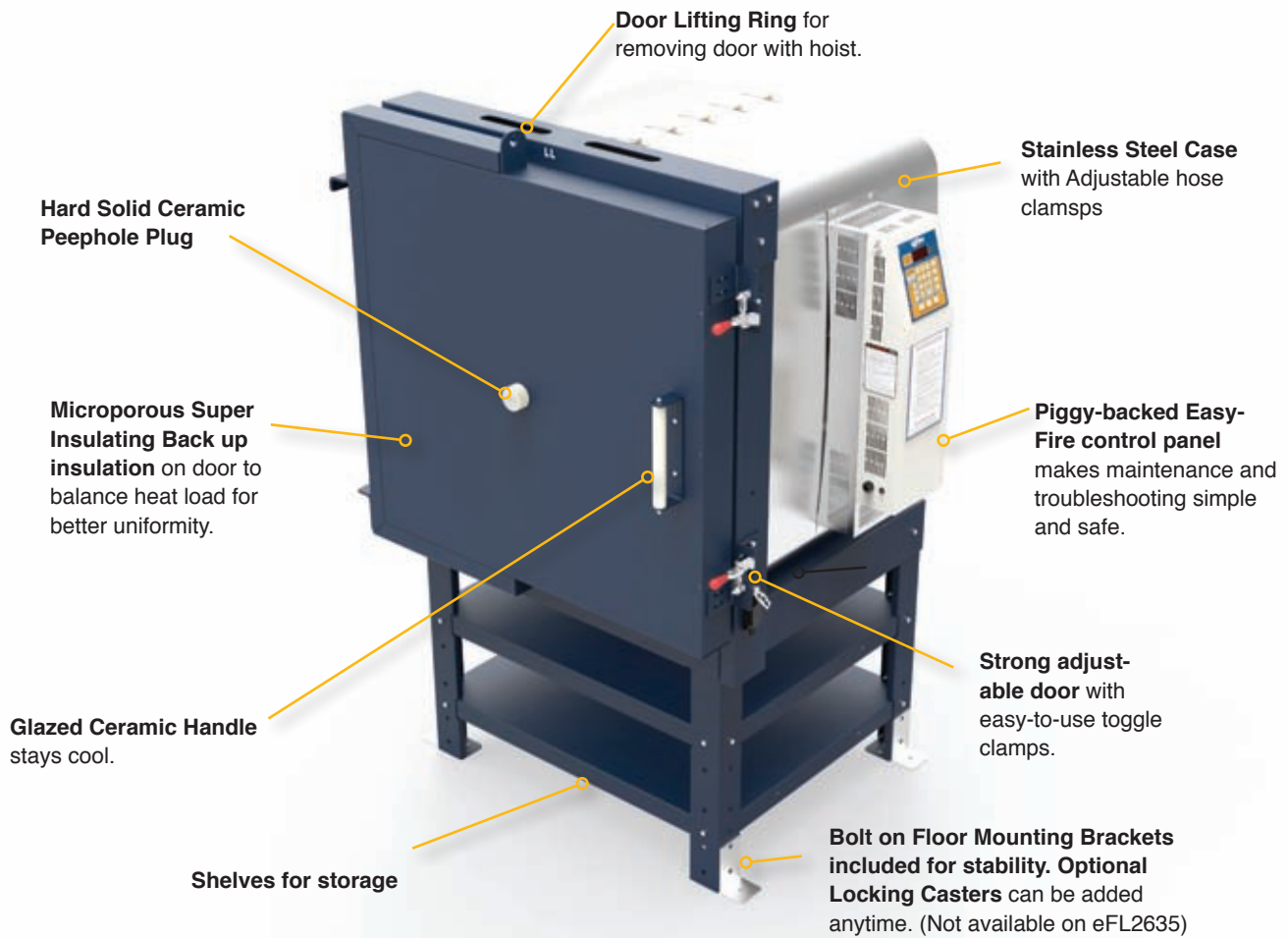


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KILNS BUILT TO LAST

Bulletin No: EFL-0520

Unique L&L Features with Lasting Benefits



CONE 10 TEMPERATURE RATING

Cone 10, 2350°F, 1290°C (Except for some single phase models - see page 9 for details).

PATENTED CERAMIC ELEMENT HOLDERS

Protect brick from loading damage, keep elements from falling out of grooves, make changing elements easy, and optimize heat transfer to load. Kiln lasts longer! No pins. (hotkilns.com/ceramic-holders)



ELEMENT DESIGN

Quad heavy-duty elements on sides and back. Low watt density for long life.

DOOR

Horizontal swing door. 14 gauge metal case with easily changed brick section. Hinge is adjustable in two planes. Includes back up super-insulating microporous insulation, and easy-to-use toggle clamps. The entire door is removable with an integrated lifting ring.

REMOVABLE STAND

Heavy gauge stand with two shelves included. Levelling bolts and anchor holes included. Stand comes assembled in the US and Canada. It is packed on top for safe shipping outside North American. Floor mounting brackets are included.

CASE CONSTRUCTION

Stainless steel wrapped around brick clamped with adjustable screw clamps. Sides and top are arched for super-strength. Bottom is flat.

ASSEMBLY

Door is removable (and comes packed unmounted for safety during shipping. See the installation videos at hotkilns.com/unpack-efl). All models fit through a 31" wide by 75" high door. Stand is removable.

INSULATION

Sides, top, and bottom are 3" K23 firebrick. The back and door insulation are balanced to create front to back uniformity. Back brick is 3" of K25 denser firebrick. Door is 3" of K23 and an extra 1" of microporus backup super insulation.

BRICK COATING FOR DURABILITY

Proprietary reflective brick coating. This helps firebrick stay strong on the surface, helps prevent dusting on your work, and keeps the kiln clean inside. (hotkilns.com/reflective-coating)

DOOR ELEMENT SAFETY SWITCH

Limit switch turns power off to elements when the door is open.

CORROSION RESISTANT CONSTRUCTION

Stainless steel wrapped around brick. All stainless screws on case. Stand and base are powder coated. Vent parts are stainless steel or aluminum. Hinge is stainless steel. Control box is powder coated. (hotkilns.com/case)

ONE SOLID PEEPHOLE PLUG



One solid ceramic plug with heat-locked head. diameter full-view non-tapered. Located door center. (hotkilns.com/peephole-plugs)

EASY MULTI-PROGRAM DYNATROL

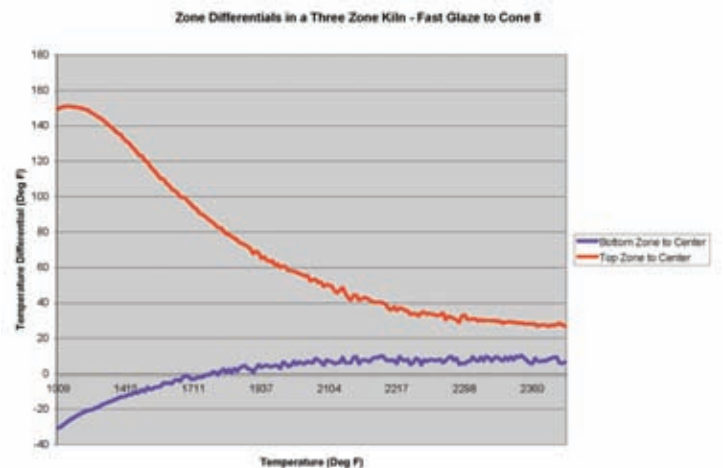


The time-tested DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Control is mounted on an angled panel for easy viewing. *Optional Genesis control* (see

page 8) features touch screen and free Wifi App for monitoring kiln. (hotkilns.com/dynatrol)

DYNAMIC ZONE CONTROL

This is a *standard* feature with either a DynaTrol or touch-screen Genesis control. The control separately measures temperatures in the bottom, middle, and top of the kiln and automatically adjusts the heat of three zones (two on eFL1616) during the firing. Kiln temperatures are automatically equalized to within 1/2 cone or better. Zone control automatically compensates for many loading issues and element resistance changes. Additionally, L&L kilns are fundamentally uniform because the element holders radiate the heat more evenly. (hotkilns.com/zone-control)

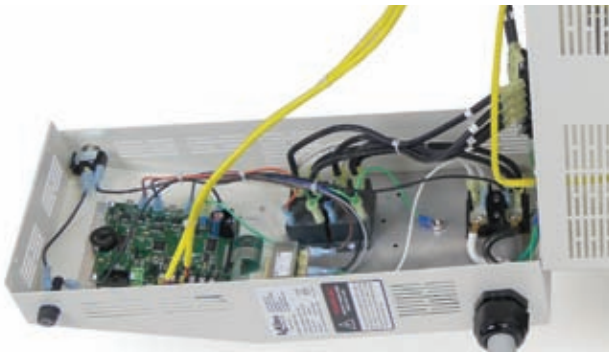


SEPARATED COOL-FIRING CONTROL PANEL

All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. In addition a layer of insulation keeps the controls cool - which is critical for long term health of the electronics.

The control panel and element box are hinged for easy access and maintenance. The control box can be easily removed for servicing. On/off switch and control fuse are included.

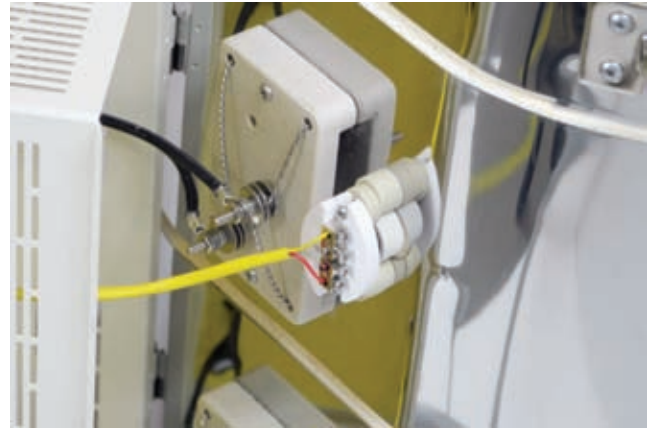
(hotkilns.com/easy-fire-panel)



CERAMIC ELEMENT CONNECTIONS

Proprietary all-ceramic element connection block makes changing elements easy.

(hotkilns.com/ceramic-terminal)



HEAVY-GAUGE TYPE K THERMOCOUPLES PROTECTED WITH CERAMIC TUBES

Type K 8 gauge thermocouples are protected by ceramic protection tubes. (hotkilns.com/protected-thermocouples)



MERCURY FREE RELAYS

Mercury free relays are standard. *See Page 8 for optional electronic SSRs for extra long element life and quiet operation.*

COMPLETE VISUAL INSTRUCTIONS

No one has a better or more complete instruction manual. Our visual instructions address the needs of the artist, the installer, and the repair person. You get a fully illustrated operation and service manual. Many instructional videos are available. (hotkilns.com/videos)



eFL Series Front Loading Kilns

L&L KILNS ARE EASY TO TROUBLESHOOT

Open up any L&L kiln control panel and see how easy it is to check amps, element resistance, and voltage. No other kiln can be serviced as quickly, easily, or inexpensively as an L&L kiln.

THREE-YEAR WARRANTY

See hotkilns.com/warranty. Email, web and phone support.

IN-DEPTH SUPPORT

One customer said: "I am truly impressed with your website, it is more than informative and your products are well designed. The fact that all the information, including repair manuals, are listed, speaks well of your dedication to customer service." Our website has thousands of pages of technical help - all easily searchable - plus we provide expert support with phone and email.

SUSTAINABLE MANUFACTURING

We use solar energy as our primary energy source.

ENGINEERED PACKAGING

See videos for information on how eFL kilns are packed and assembled. The door is prefitted but shipped unmounted (to protect the door and the face of the kiln from damage). The door needs to be lifted in place. Mounting brackets are included to make it easy. The skids are designed to be disassembled so you can lower the kiln to the floor with only a standard pallet jack. (hotkilns.com/unpack-efl)

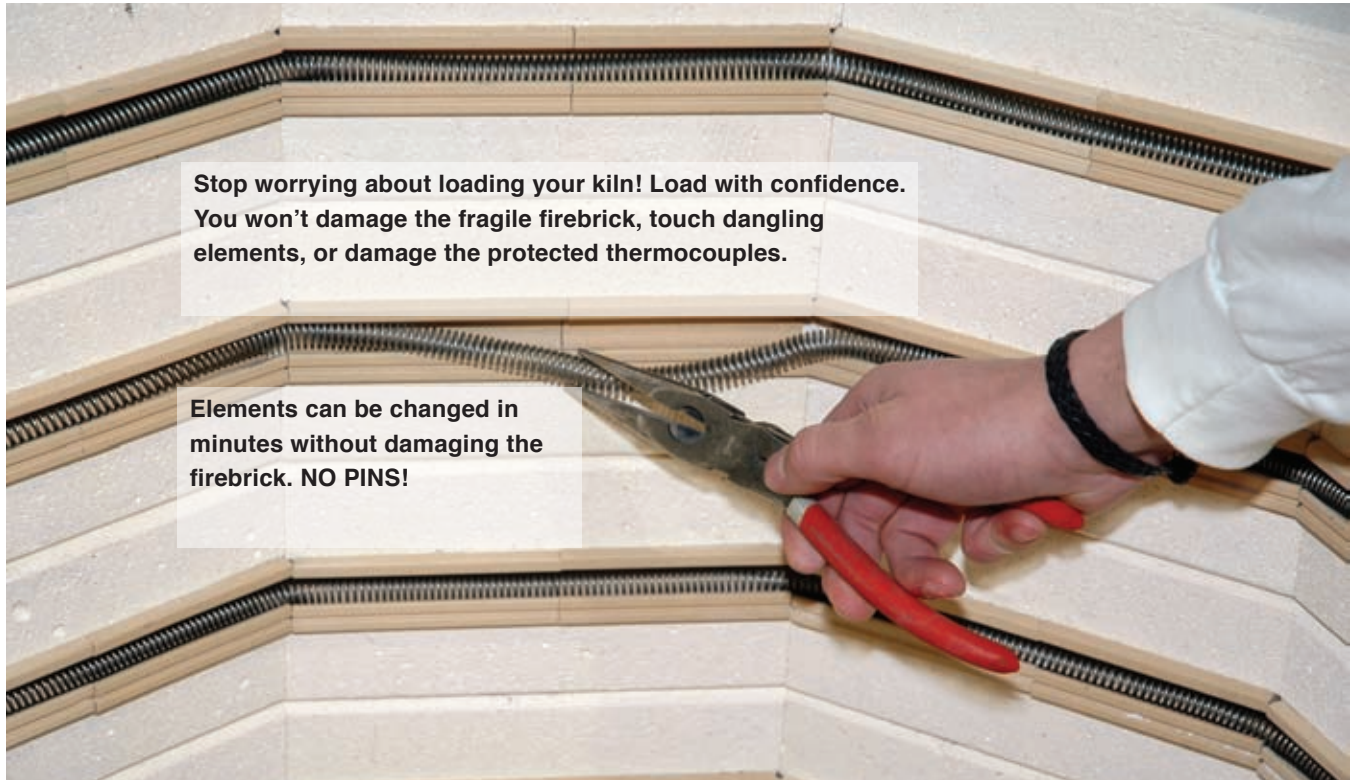
CHECKLIST

See this link for the eFL Checklist for buying an eFL kiln. Because of their size and weight eFL kilns cannot be shipped or installed in all locations and situations. You may need professional assistance. (hotkilns.com/efl-checklist)

MET UL499 LISTING



c-MET-us listed to UL499 standards assures highest safety standards. (hotkilns.com/met)



Stop worrying about loading your kiln! Load with confidence. You won't damage the fragile firebrick, touch dangling elements, or damage the protected thermocouples.

Elements can be changed in minutes without damaging the firebrick. NO PINS!

Options & Accessories

CONE 11 FURNITURE KITS

Shelves are cone 11 high alumina shelves. Each post kit includes six each 1/2", 1", 2", 4", 6" and 8" high 1-1/2" square cordierite posts
(hotkilns.com/kiln-furniture)



APM ELEMENTS

Special sintered alloy provides the ultimate in element life. The special sintered alloy inhibits grain growth and resistance change in the elements.
(hotkilns.com/apm)

ROLLING CASTER SYSTEM

Locking Swivel Casters on bolt-on brackets. Designed to provide excellent stability with an extra wide base and heavy-duty bracket that bolts onto kiln stand. Chest handles included for easy pulling. Can be added later. (Available on all models except the eFL2635.)



DOWNDRAFT VENT SYSTEM

Vent-Sure downdraft vent vents fumes from kiln out of room and away from kiln. (hotkilns.com/vent)

VENT-SURE FEATURES

- Downdraft venting pulls air down to bottom of kiln
- Improves temperature uniformity inside the kiln
- Powerful 130 CFM fan motor, typically mounted on wall, allows fumes to be under vacuum in your studio
- The strong fan motor helps overcome static pressure in long exhaust lines. The duct may be up to 60 feet in length, and include up to four 90° bends
- 120 volts with on/off switch on cord (240 volts available)
- 15 foot long flexible aluminum duct
- Bypass collection box mounted on kiln allows adjustment of venting.
- Fan motor, mounted away from the kiln, stays cool and no vibration is transmitted to the kiln
- The included Multi-Mounting Bracket allows you to mount the vent on the floor or, alternately, to mount the vent on a wall so that the output of the vent is pointing up.
- Three-year Limited Warranty
- c-MET-us Listed to UL499 standards for use on c-MET-us L&L Kilns



VENT CONTROL

Allows vent to be controlled with an event switch in the DynaTrol or Genesis. (For use with one kiln.)
(hotkilns.com/vent-control)



Genesis Touch Screen Control with App

GENESIS TOUCH SCREEN CONTROL

The Genesis control includes a touch screen interface and WIFI connectivity added to the proven software of the DynaTrol. More programming options and memory. Free App available to monitor kiln via WiFi. (hotkilns.com/genesis)



GENESIS FEATURES

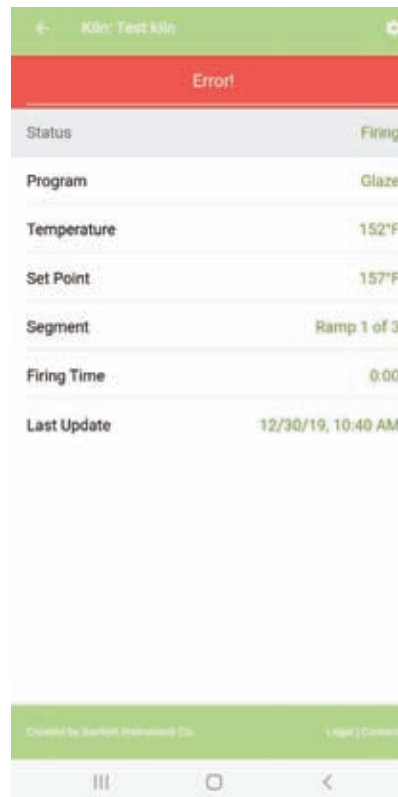
- Touch-screen intuitive technology for easy user interface.
- Easy-to-follow screen descriptions.
- Different user-interface levels, which can be set to match the user's firing knowledge.
- Graphical display of the firing process right at the controller. This means you can graph the firing in real time and compare the program with actual results.
- Glass programs included.
- Store up to 30 custom user programs.
- Up to 32 segments per program.
- Ability to make adjustments during a firing such as add segments, add temperature, and skip segments.
- Built in diagnostics testing
- Alarm
- Error Codes
- WiFi enabled for easy software updating.
- Included Phone App allows you to monitor kiln operation remotely (with no subscription fee).



The Genesis control fits right into the control box to replace the DynaTrol. That means you can upgrade anytime!



See a graph of your firing before you fire, while you fire and after you fire.



This shows the view you get on your phone with the Kiln Aid Phone app. Simply download the Kiln Aid phone app from your Google Play Store or Apple App Store, add your kiln, and begin monitoring as your kiln progresses through a firing. See temperatures, where you are in a program cycle, what program you are firing and error notifications.

More Control & Power Options

TYPE S THERMOCOUPLES

The best thermocouple for constant high fire applications. No thermocouple drift. Priced per thermocouple. Note that kilns with four or more sections still only have a three zone control.

(hotkilns.com/type-s)

PYROCIL SHEATHED THERMOCOUPLES

For greater sensitivity to temperature change. Use below 2200°F for sensitivity (glass is a good example). Priced per thermocouple. These are useful for sensitive industrial applications.

(hotkilns.com/pyrocil-tc)

KISS SOFTWARE

Kiss (kiln interface software system) connects up to 50 DynaTrol controllers to a personal computer running Windows. Monitor and control kiln remotely. For the DynaTrol only. (hotkilns.com/kiss)

SOLID STATE RELAYS

Industrial Grade Solid State Relays are quiet and result in longer element life because the switching time is so fast the elements don't expand and



contract as much. The whole system includes extra large heat sinks, special fast acting fuses, cooling fan and extra safety relays.

(hotkilns.com/ssr)

Kiln shown with the special control panel that houses the SSRs and/or High Limit Control

HIGH LIMIT BACK

UP CONTROL

Bartlett High Limit Control with latching relay acts as a back up to the main control. If the main control fails for any reason then this acts as a "back stop" and shuts the kiln down.

(hotkilns.com/high-limit)

BACK UP CONTACTORS

Actuated by the High Limit Back Up Digital Control, back up contactors are completely redundant power contactors so that if one or more contactors fail in a closed position, then the kiln still cannot climb above the High Limit set point. (hotkilns.com/high-limit)

120 VOLT POWER SUPPLY

If there are problems with short power outages, voltage spikes, voltage drops, or excessive environmental line noise, this can cause unpredictable behaviour in the electronic control. With this option the control is powered by a separate 120 volt line (with a standard 6 foot long cord) and that voltage is filtered through an EMI (Electrical Magnetic Interference) noise filter. (hotkilns.com/noise)

Electrical Specifications

Model Numbers	Part Number	Volt/Phase	Cone Rating	Watts	Amps	Wire Size	Fuse Size	Power Connection
eFL1616-240	K-H-1616/31	240/1P	10	9,000	37.5	6 ga	50 Amps	6-50 Cordset
eFL1616-240-3P	K-H-1616/32	240/3P	10	9,000	32.5	6 ga	50 Amps	15-50 Cordset
eFL1616-208	K-H-1616/21	208/1P	10	9,000	43.3	6 ga	60 Amps	6-50 Cordset
eFL1616-208-3P	K-H-1616/22	208/3P	10	9,000	37.5	6 ga	50 Amps	15-50 Cordset
eFL1626-240	K-H-1626/31	240/1P	10	11,520	48.0	6 ga	60 Amps	6-50 Cordset
eFL1626-240-3P	K-H-1626/32	240/3P	10	12,500	30.1	8 ga	40 Amps	15-50 Cordset
eFL1626-208	K-H-1626/21	208/1P	5	9,984	48.0	6 ga	60 Amps	6-50 Cordset
eFL1626-208-X	K-H-162X/21	208/1P	10	11,649	56.0	4 ga	70 Amps	Direct Wired
eFL1626-208-3P	K-H-1626/22	208/3P	10	12,500	34.7	6 ga	50 Amps	15-50 Cordset
eFL2026-240	K-H-2026/31	240/1P	10	13,305	55.4	4 ga	70 Amps	Direct Wired
eFL2026-240-3P	K-H-2026/32	240/3P	10	13,305	32.0	8 ga	40 Amps	15-50 Cordset
eFL2026-208	K-H-2026/21	208/1P	10	13,305	64.0	3 ga	80 Amps	Direct Wired
eFL2026-208-3P	K-H-2026/22	208/3P	10	13,305	36.9	6 ga	50 Amps	15-50 Cordset
eFL2626-240	K-H-2626/31	240/1P	10	15,360	64.0	3 ga	80 Amps	Direct Wired
eFL2626-240-3P	K-H-2626/32	240/3P	10	15,360	37.0	6 ga	50 Amps	15-50 Cordset
eFL2626-208	K-H-2626/21	208/1P	10	15,360	73.8	1 ga	100 Amps	Direct Wired
eFL2626-208-3P	K-H-2626/22	208/3P	10	15,360	42.6	6 ga	60 Amps	15-50 Cordset
eFL2635-240	K-H-2635/31	240/1P	10	19,200	80.0	1 ga	100 Amps	Direct Wired
eFL2635-240-3P	K-H-2635/32	240/3P	10	19,200	52.9	4 ga	70 Amps	Direct Wired
eFL2635-208	K-H-2635/21	208/1P	10	19,200	92.3	1/0 ga	125 Amps	Direct Wired
eFL2635-208-3P	K-H-2635/22	208/3P	10	19,200	61.1	3 ga	80 Amps	Direct Wired
WORLD VOLTAGES								
eFL1616-220	K-H-1616/41	220/1P	10	9,000	40.9	6 ga	60 Amps	Direct Wired
eFL1616-380-3PY	K-H-1616/52	380/3PY	10	9,000	20.5	10 ga	30 Amps	Direct Wired
eFL1626-220	K-H-1626/41	220/1P	10	12,500	56.8	3 ga	80 Amps	Direct Wired
eFL1626-380-3PY	K-H-1626/52	380/3PY	10	12,500	18.9	12 ga	25 Amps	Direct Wired
eFL2026-220	K-H-2026/41	220/1P	10	13,305	60.5	3 ga	80 Amps	Direct Wired
eFL2026-380-3PY	K-H-2026/52	380/3PY	10	13,305	20.2	10 ga	30 Amps	Direct Wired
eFL2626-220	K-H-2626/41	220/1P	10	15,360	69.8	2 ga	90 Amps	Direct Wired
eFL2626-380-3PY	K-H-2626/52	380/3PY	10	15,360	23.3	10 ga	30 Amps	Direct Wired
eFL2635-220	K-H-2635/41	220/1P	10	19,200	87.3	1 ga	110 Amps	Direct Wired
eFL2635-380-3PY	K-H-2635/52	380/3PY	10	19,200	43.6	6 ga	60 Amps	Direct Wired

MET UL499 Listing: All models are c-MET-us listed to UL499 standard.

Wiring Diagrams: See the **Electrical Tab** for each kiln model to get the wiring diagram for each voltage.

Other voltages for any country in the world are available. Examples are 200V/3 Phase Delta, 220V/3 Phase Delta, 415V/3 Phase Wye and 400V/3 Phase Wye. CE Listing available in some countries. See 380 Volt diagrams for electrical specifications for 400V/3 Phase Wye and 415V/3 Phase Wye.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Furniture Kit	Furn Kit Part No.	Outside Dimensions	Shipping Dimensions (w Kit and Vent)	Ship Weight Kiln Only	Ship Wght Kiln/Kit/Vent
eFL1616	17" W x 26"D x 16"H	4	(2) 14" x 24"	H-J-1616/KT	36" W x 54" H x 39" D	40" W x 78" H x 48" D	545 LBS	610 LBS
eFL1626	17" W x 26"D x 26"H	6.6	(3) 14" x 24"	H-J-1626/KT	36" W x 63" H x 39" D	40" W x 78" H x 48" D	645 LBS	725 LBS
eFL2026	22" W x 26"D x 26"H	8.6	(6) 10" x 24"	H-J-2026/KT	41" W x 63" H x 39" D	40" W x 78" H x 48" D	700 LBS	800 LBS
eFL2626	26" W x 26"D x 26"H	10.2	(6) 12" x 24"	H-J-2626/KT	45" W x 63" H x 39" D	45" W x 90" H x 58" D	770 LBS	890 LBS
eFL2635	26" W x 26"D x 35"H	13.7	(8) 12" x 24"	H-J-2635/KT	45" W x 72" H x 39" D	45" W x 90" H x 58" D	895 LBS	1040 LBS
METRIC DIMENSIONS (CM, LITERS & KG)								
eFL1616	43.2 W x 66 D x 40.6 H	114	(2) 35.6 cm x 60.9 cm	H-J-1616/KT	91 W x 137 H x 99 D	102 W x 199 H x 122 D	248 KG	277 KG
eFL1626	43.2 W x 66 D x 66 H	187	(3) 35.6 cm x 60.9 cm	H-J-1626/KT	91 W x 160 H x 99 D	102 W x 199 H x 122 D	293 KG	329 KG
eFL2026	55.9 W x 66 D x 66 H	244	(6) 25.4 cm x 60.9 cm	H-J-2026/KT	104 W x 160 H x 99 D	102 W x 199 H x 122 D	318 KG	363 KG
eFL2626	66 W x 66 D x 66 H	289	(6) 30.5 cm x 60.9 cm	H-J-2626/KT	114 W x 160 H x 99 D	115 W x 229 H x 148 D	350 KG	404 KG
eFL2635	66 W x 66 D x 88.9 H	388	(8) 30.5 cm x 60.9 cm	H-J-2635/KT	114 W x 183 H x 99 D	115 W x 229 H x 148 D	406 KG	472 KG

MORE: See each model page on hotkilns.com/unpack-efl to download PDF General Dimension Drawings for more outside and inside dimensions, minimum space requirements, BTU ventilation requirements, and kiln weight. See the Shipping Tab on the model page for complete shipping dimension and shipping weight information.

Shipping Weight Additions: Add 35 lbs for caster option.



Moving and installation: See hotkilns.com/unpack-efl to understand how to unpack and install these kilns. You must watch the videos before you order to confirm that you can receive and install these kilns in your location. See eFL Checklist for ordering at: hotkilns.com/efl-checklist.

eFL1616

Temperature Rating: Cone 10

Volume: 4 Cubic Feet

Inside Dimensions:

17" Wide x 16" High x 26" Deep

Outside Dimensions:

36" Wide x 54" High x 39" Deep

Shipping Dim with Vent & Furn Kit:

40" W x 78" H x 48" D

Ship Weight (Kiln): 545 LBS

Ship Wgt (Kiln, Vent & Furn Kit): 610 LBS



FURNITURE KIT FOR eFL1616

Part Number: H-J-1616/KT

Includes: Two 14" X 24" Rectangular Shelves (3/4" thick), Six Each 1/2", 1", 2", 4", 6", and 8" Square Posts, Heat Resistant Gloves.



eFL1626

Temperature Rating: Cone 10

Volume: 6.6 Cubic Feet

Inside Dimensions:

17" Wide x 26" High x 26" Deep

Outside Dimensions:

36" Wide x 63" High x 39" Deep

Shipping Dim with Vent & Furn Kit:

40" Wide x 78" High x 48" Deep

Ship Weight (Kiln): 645 LBS

Ship Wgt (Kiln, Vent & Furn Kit): 725 LBS



FURNITURE KIT FOR eFL1626

Part Number: H-J-1626/KT

Includes: Three 14" X 24" Rectangular Shelves (3/4" thick), Six Each 1/2", 1", 2", 4", 6", and 8" Square Posts, Heat Resistant Gloves.



eFL2026

Temperature Rating: Cone 10

Volume: 8.6 Cubic Feet

Inside Dimensions:

22" Wide x 26" High x 26" Deep

Outside Dimensions:

41" Wide x 63" High x 39" Deep

Shipping Dim with Vent & Furn Kit:

40" Wide x 78" High x 48" Deep

Ship Weight (Kiln): 700 LBS

Ship Wgt (Kiln, Vent & Furn Kit): 800 LBS



FURNITURE KIT FOR eFL2026

Part Number: H-J-2026/KT

Includes: Six 10" X 24" Rectangular Shelves (3/4" thick), Six Each 1/2", 1", 2", 4", 6", and 8" Square Posts, Heat Resistant Gloves.



eFL2626

Temperature Rating: Cone 10

Volume: 10.2 Cubic Feet

Inside Dimensions:

26" Wide x 26" High x 26" Deep

Outside Dimensions:

45" Wide x 63" High x 39" Deep

Shipping Dim with Vent & Furn Kit:

40" Wide x 90" High x 48" Deep

Ship Weight (Kiln): 770 LBS

Ship Wgt (Kiln, Vent & Furn Kit):

890 LBS



FURNITURE KIT FOR eFL2626

Part Number: H-J-2626/KT

Includes: One Six 12" X 24" Rectangular Shelves (3/4" thick), Twelve Each 1/2", 1", 2", 4", 6", and 8" Square Posts, Heat Resistant Gloves.



eFL2635



Temperature Rating: Cone 10

Volume: 13.7 Cubic Feet

Inside Dimensions:
26" Wide x 35" High x 26" Deep

Outside Dimensions:
45" Wide x 72" High x 39" Deep

Shipping Dim with Vent & Furn Kit:
40" Wide x 90" High x 48" Deep

Ship Weight (Kiln): 895 LBS

Ship Wgt (Kiln, Vent & Furn Kit):
1040 LBS

FURNITURE KIT FOR eFL2635

Part Number: H-J-2635/KT

Includes: Eight 12" X 24" Rectangular Shelves (3/4" thick), Six Each 1/2", 1", 2", 4", 6", and 8" Square Posts, Heat Resistant Gloves.



What Makes eFL Kilns Built to Last?



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KILNS BUILT TO LAST

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