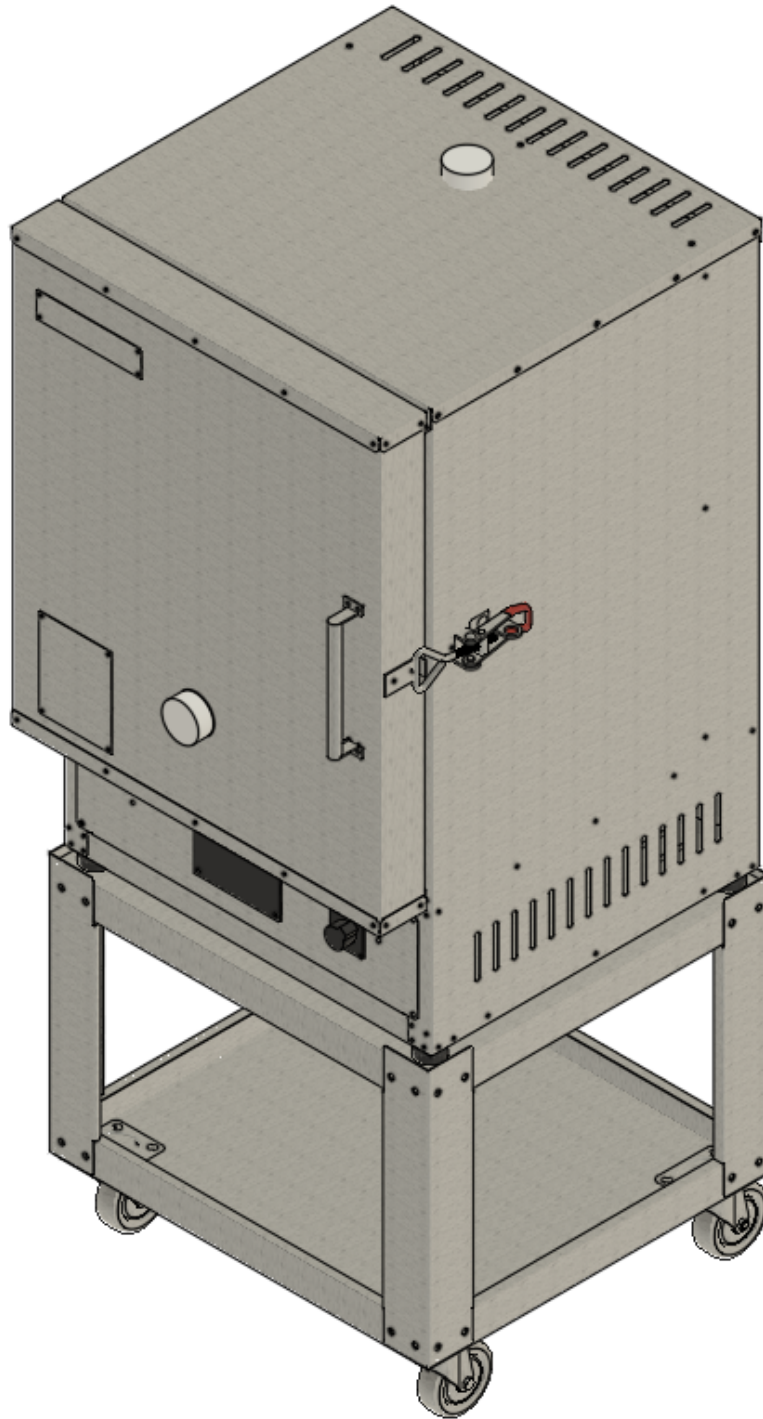




Owner's Manual

EASY KILNS ECO SERIES, ECO30 TO ECO120

Document: EK-OM-V3 **Effective:** 18 May 2026 **Supersedes:** V2 **Applies to:** All ECO Series models (ECO30, ECO50, ECO70, ECO120)



Thank you for choosing an Easy Kiln!!!! We design and build our kilns in Melbourne, and we want you to get many years of enjoyable, safe firing from your Kiln. This manual covers everything from sitting and first firing through to routine care, plus a section of frequently asked questions and a troubleshooting guide at the back. If you get stuck, contact us. We would much rather hear from you early than have you guess. Have fun with it :)

SAFETY WARNINGS

1. This kiln should not be used by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
2. Children should be supervised so that they do not play with the kiln.
3. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
4. Please read the instruction manual carefully before operating the kiln.
5. Please also wear proper PPE / P2 or higher respiratory protection when loading and unloading the kiln, as harmful insulation dust can become airborne and pose a respiratory hazard.
6. Always place a kiln shelf directly on the brick floor of the chamber before loading, no posts beneath. Loading directly onto the bare brick floor will damage the floor and is not covered by warranty.
7. For glaze firings of Cone 4 and above, always use the controller's MEDIUM or MEDIUM-SLOW cone-fire speed, never Fast. Easy Kilns are designed for the slower ramp; using Fast at Cone 4+ causes the kiln to lag, lengthens the firing, and over-fires the ware.

QUICK START, YOUR FIRST DAYS WITH THE KILN

If you are new to kilns, here is the short version. Each step has its own section in this manual. Read the detailed sections before firing, but this is a good start to get an idea.

STEP	WHAT YOU DO	WHERE TO READ MORE
1. Plan the site and check the outlet	Pick a dry, well-ventilated spot. Concrete or tile floor. 300 mm clear on every side, 600 mm above. Make sure there is a suitable outlet on a correctly rated circuit.	Sections 3, 4
2. Lift the kiln onto its stand	The stand ships on top of the kiln packaging. Once unpacked and all accessories removed, lift the stand off, place it in the final position, then lift the kiln onto the stand. Use a safe team lift (two people minimum, four for the ECO120) or a mechanical aid. Empty kiln weight: 60–110 kg depending on model.	Section 3.4
3. Plug it in	All ECO Series kilns ship with the plug fitted. Once the kiln is in position, plug it in. No electrician needed at delivery.	Section 4
4. First firing, empty	Run an empty cone 04 Bisque firing to dry and set the kiln before firing any ware.	Section 7
5. Load your first bisque	Bone-dry greenware only. Bottom shelf directly on the floor. Three posts per shelf above that.	Sections 8–9
6. Fire your first bisque	Use the Bartlett controller's built-in cone-fire profile. Stay within earshot. Don't open the door.	Section 10

STEP	WHAT YOU DO	WHERE TO READ MORE
7. Cool and unload	Door stays closed above 400 °C. Don't unload until the chamber is below 100 °C.	Section 13

TIP, BEFORE YOU FIRE FOR THE FIRST TIME

Read sections 1 to 7 in full first, even if you've fired kilns before. The behaviour of every kiln is slightly different and the first-firing dry-out really matters, it sets up the elements for a long working life and dries out moisture absorbed during shipping and storage.

FROM THE WORKSHOP

Every Easy Kiln is built to order by hand in Coburg, Melbourne. Before yours was packed it was wired, checked and fired at least once, so the kiln in front of you has already proven itself. Treat the first few firings as a conversation: the kiln shows you how it behaves, you learn to read it, and within a handful of loads the two of you settle into a rhythm. Keep this manual near the kiln, write in the margins, and send us a photo any time something looks off. We would much rather hear from you early than have you guess.

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1. ABOUT YOUR EASY KILN

The Easy Kilns ECO Series is our family of four single-phase electric kilns, designed and built in Melbourne for the Australian studio market.

ECO Kiln family:

- ECO30, 30 L chamber, 10 A, 60 kg empty;
- ECO50, 50 L chamber, 15 A, 70 kg empty;
- ECO70, 70 L chamber, 20 A, 90 kg empty;
- ECO120, 120 L chamber, 32 A, 110 kg empty.

All models share a common design that includes:

- a lasercut 304 stainless steel body that resists corrosion and stays neat over years of use;
- a layered insulation system of ceramic fibre, anorthite firebrick and nanopore insulation, chosen for thermal efficiency;
- an integrated control box that forms part of the main body, no separate enclosure to mount;
- a Type S (platinum / platinum-rhodium) thermocouple as standard, stable and accurate;
- a programmable Bartlett ramp-soak controller (with cone-fire and other built-in profiles);
- a dual-pole safety interlock that disables the elements whenever the door is opened;
- a fitted plug;
- optional furniture kit (shelves, posts and kiln wash) sized to the kiln's chamber.



The ECO Series range: ECO30, ECO50, ECO70 and ECO120, shown to scale on their stands.

Your kiln's electrical rating, chamber volume and maximum temperature are shown on the serial plate attached to the control box. Record these details here for quick reference:

FIELD	VALUE
Model	
Serial number	
Chamber volume (L)	

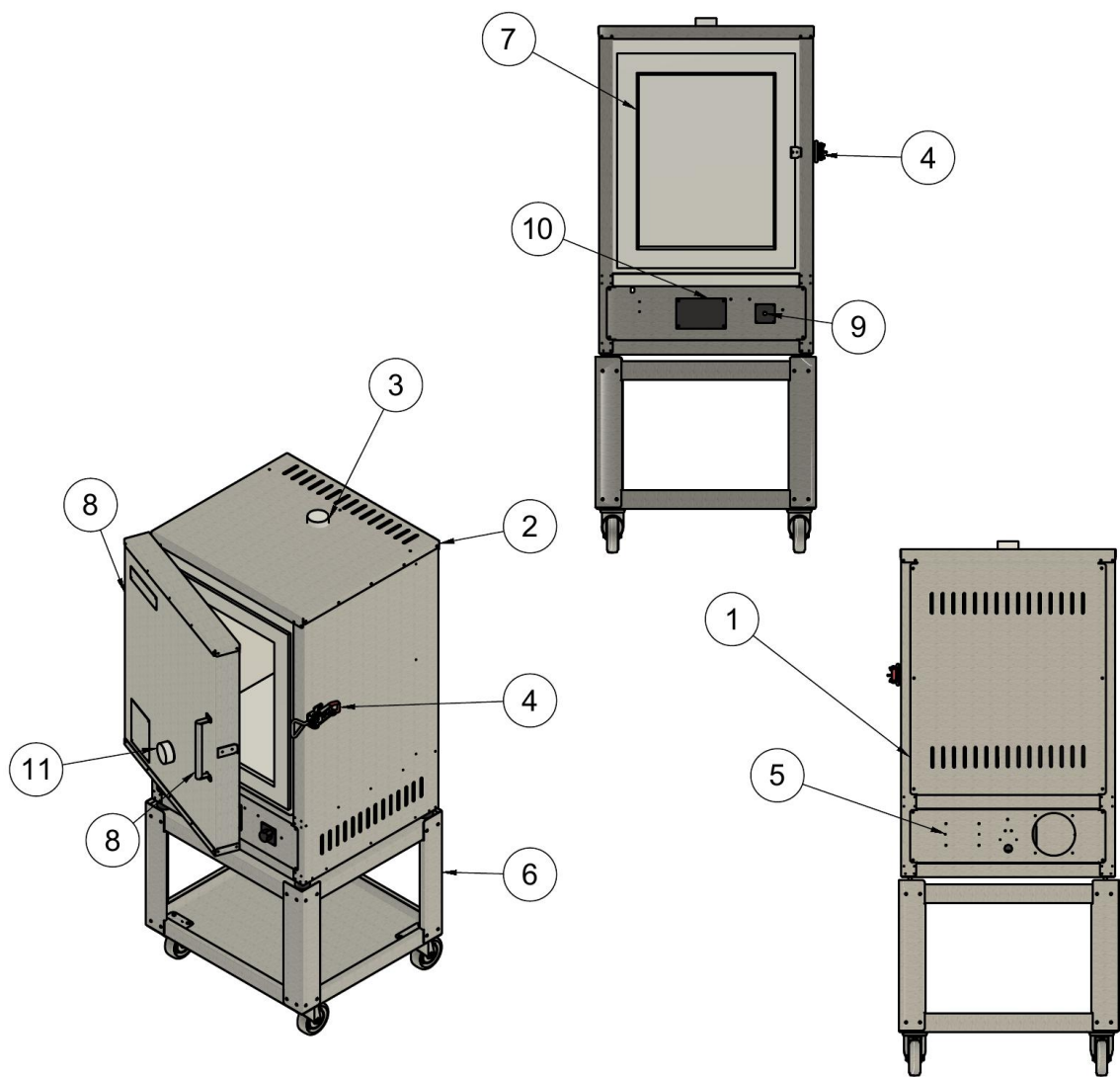
FIELD	VALUE
Rated current (A) / voltage (V)	
Maximum temperature (°C)	1280
Empty weight (kg)	
Date of purchase	

The kiln’s insulation expands and contracts with each firing, producing hairline cracks while the kiln is cold, even in a new kiln. These cracks act as expansion joints and close tightly at temperature; they do not affect performance. A small amount of light may also be visible around the door edge when firing. Provided the door is fully closed and latched, this is normal.

1.1 A Note on Firing Temperatures

Our kilns tend to fire on the hot side of the controller reading, so every Easy Kiln is programmed with a 15 °C temperature offset to compensate (see 10.4.3). Every studio is slightly different, so we still recommend you favour the lower end of any cone or temperature range when starting out. An under-fired piece can be re-fired; an over-fired piece cannot. Use witness cones until you know your kiln, and fine-tune the offset if needed.

2. PARTS OF THE KILN



1 Main rear panel **2** Main body **3** Roof bung **4** Door latch **5** Rear input panel **6** Stand
7 Heating chamber **8** Door **9** On / off switch **10** Controller panel **11** Door bung
The safety interlock, thermocouple, supply cord and serial plate are not visible from these angles;
see the table below for each.

No.	PART	FUNCTION
1	Main rear panel	Removable rear panel covering the element terminals and supply connections. Isolate and unplug before it is ever taken off.
2	Main body	Lasercut 304 stainless steel with ceramic fibre, anorthite firebrick and nanopore insulation. Houses the chamber and the integrated control box.
3	Roof bung	Removable plug in the roof that lets moisture and gases escape during bisque firings and burn-out.
4	Door latch	Holds the door shut and compresses the seal. Can be padlocked to prevent unauthorized access.

No.	PART	FUNCTION
5	Rear input panel	Lower rear panel carrying the supply cord entry and the cooling vents for the control box.
6	Stand	Steel working-height stand supplied with every kiln. Ships over the top of the kiln during transit, then the kiln is lifted onto it (see section 3.4).
7	Heating chamber	The insulated firing chamber. The lowest shelf sits directly on the chamber floor, with no posts underneath.
8	Door	Insulated door that seals heat into the chamber. Opening it trips the interlock and cuts power to the elements.
9	On / off switch	Main isolator switch. Isolates the kiln circuit for safe loading and servicing.
10	Controller panel	Bartlett programmable ramp-soak controller with built-in cone-fire and other profiles. Refer to the supplied Bartlett manual for programming.
11	Door bung	Removable peephole plug in the door for venting and for checking witness cones during a firing.
	Safety interlock pin	Activates the element circuit when the door is closed and disables it when the door is opened. Engagement is a small click, you may not always hear it.
	Thermocouple (Type S)	Platinum / platinum-rhodium temperature probe projecting into the chamber. Stable, accurate, and rated comfortably above the kiln's peak temperature.
	Supply cord	Fitted flexible cord and plug matched to your kiln's rating. If it is damaged, stop using the kiln and have it replaced by a qualified person.
	Serial plate	Riveted plate showing the model, serial number and electrical rating. Quote the serial number when you contact us for service or parts.
	Optional furniture kit	Shelves, posts and kiln wash sized to your model. The lowest shelf sits directly on the chamber floor, no posts required underneath.

3. WHERE TO PUT THE KILN

3.1 Environment

- Indoor use only. The kiln has no IP rating and must never be exposed to weather.
- Dry, well-ventilated room with natural ventilation to outside. Use forced ventilation if natural airflow is insufficient (see section 6).
- Do not install in any space exposed to vehicle exhaust, weather, condensation, or combustible storage and dust. A well-ventilated, dedicated studio garage is suitable provided all clearance, ventilation and electrical requirements are met.
- Ambient temperature 5 to 40 °C; relative humidity under 80% non-condensing. Operation above 40 °C ambient risks damaging the controller.
- A solid, lockable door between the kiln room and the rest of the studio / home is recommended to contain dust and fumes when the kiln is in use.

3.2 Clearances

- Minimum 300 mm clearance on all sides from walls, furniture or other structures.
- Minimum 600 mm clearance above the kiln.
- The kiln must sit on a level, non-combustible surface such as concrete, cement sheet, or tile. Do not place on vinyl, rubber, laminate, linoleum, carpet or timber.
- Where fire sprinklers are fitted in the kiln room, the kiln must not be within a 3 m radius directly below a sprinkler head. Confirm the sprinkler activation temperature is rated higher than the room temperature achieved during firing.

3.3 Combustibles

- Remove all combustibles (canvas, timber, paper, chemicals, plastics, fabrics, aerosols) from under, around, above and behind the kiln.
- Never store items on top of the kiln or use the kiln body as a shelf.
- Do not allow the supply cord to contact the kiln body, heat may damage the insulation.
- Keep a fire extinguisher rated for electrical fires (CO₂ or dry chemical, Class E) accessible near the kiln.

3.4 Moving the Kiln and Loading It Onto the Stand

Every ECO Series kiln is supplied with a matching working-height stand. To reduce freight footprint and protect the stand during transit, the stands shipped are placed on top of the kiln packaging. Once the packaging and accessories have been removed, the stand is lifted off, placed in its final position, and the kiln is then lifted onto the stand.



TEAM LIFT, DO NOT LIFT ALONE

Empty kiln weights are: ECO30 ≈60 kg, ECO50 ≈70 kg, ECO70 ≈90 kg, ECO120 ≈110 kg.

All ECO models exceed the safe single-person lift threshold for repetitive workplace handling. Use a safe team lift (two people minimum, four for the ECO120) or a mechanical aid such as a hand truck, trolley, engine crane or forklift.

Safe handling practice

1. Plan the move before delivery. Know where the kiln will end up, and how it will get there. Measure doorways, corridors and any thresholds the kiln will need to clear.
2. Have the destination ready: level, non-combustible flooring as set out in section 3.1, with electrical outlet within reach of the kiln's supply cord.
3. Brief the lift team. Each person should know which corner they will lift from, where they will walk, and where the kiln will be set down. Agree a single "stop" word.
4. Lift the kiln using the body, not the door, control box or supply cord. Bend at the knees, keep the back straight, and lift with the legs.
5. Walk the kiln to the stand and lower it gently onto the stand top. Confirm the kiln is centred, sitting flat, and stable on the stand.

6. The supplied stand is designed for the kiln. Before lifting the kiln onto it, confirm the stand is sitting firmly on level non-combustible flooring with all four feet in contact, and is not wobbling. The stand top should be clear of packaging foam, tools, or other items.

If you cannot team-lift

- Use a mechanical lifting aid: an engine crane with a soft sling under the kiln body, or straps with a forklift or pallet jack rated above the kiln weight. Lift the kiln directly onto the stand top.
- Do not use the door or door hinge as a lift point.
- Do not lift by the supply cord, controller or control box.
- If you have any doubt about safe lifting or moving, contact us before delivery, we can arrange professional installation in most metro areas.

4. GETTING THE KILN CONNECTED

CIRCUIT BASICS

The ECO30 (10 A) can be plugged into a standard 10 A general-purpose outlet on its own circuit. The same circuit should not also run a heater, microwave or other heavy load while the kiln is firing.

The ECO50, ECO70 and ECO120 require their own dedicated circuit. No other appliances should share that circuit.

All ECO Series kilns ship with a fitted plug suitable for the kiln's rating. We do not supply hard-wired models.

Confirm the outlet matches the kiln's plug and is on a correctly rated circuit. If you don't have a suitable outlet, an electrician can fit one.

4.1 Circuit and Outlet Requirements by Model

The circuit breaker should comfortably exceed the kiln's rated draw. The values below are recommended ratings for each ECO model:

MODEL	KILN RATED DRAW	RECOMMENDED CIRCUIT RATING
ECO30	10 A	10 A (standard GPO circuit acceptable)
ECO50	15 A	20 A (dedicated circuit)
ECO70	20 A	25 A (dedicated circuit)
ECO120	32 A	40A (dedicated circuit)

4.2 Checks Before First Use

- Confirm the rating plate matches the installed circuit breaker and outlet.
- Check that the supply cord runs clear of the kiln body and out of high-traffic areas.
- Periodically during a firing (when the plug is cool enough to touch briefly) feel the plug body, it should be slightly warm at most. A hot plug indicates a loose connection or overload; isolate and call an electrician..

5. WORKING SAFELY WITH YOUR KILN

Important: supervise the kiln during firing, isolate at the wall before touching anything inside, and don't bypass the door interlock.

5.1 General

- Always supervise the kiln during firing. Stay within earshot and check on it frequently, especially in the final hours.
- Restrict access to the kiln during firing, the exterior becomes hot. The outer casing is insulated but is not designed to be touched while firing or cooling down; keep children, pets and bystanders clear.
- Always isolate at the main switch before opening the control box, touching elements, or servicing.
- Do not bypass the door safety interlock under any circumstances.
- Do not open the kiln door during firing. Bungs may be removed or replaced briefly using PPE and heat-rated tools.
- Lock the door when the kiln is not in use to prevent unsupervised firing and to keep dust out of the chamber.
- In shared spaces (schools, colleges, community studios), keep bystanders at a safe distance during firing and limit operation to trained users.
- If you need to step out, ask a competent adult to keep an eye on the kiln, particularly in the last couple of hours.

5.2 Personal Protective Equipment (PPE)

PPE recommendations follow the relevant Australian Standards:

- Eye protection: safety glasses or goggles with an infrared filter for brief spy-hole viewing; welder's shade 3–5 (AS/NZS 1338.1:2012) or didymium lenses for extended or high-temperature viewing. Sunglasses are not suitable. Frames per AS/NZS 1337.1:2010.
- Respiratory protection: P2 (minimum) respirator when loading, unloading, vacuuming, mixing kiln wash or handling clay and glaze powders. AS/NZS 1715:2009 (selection and use) and AS/NZS 1716:2012 (devices). For workplace use, fit testing per AS/NZS ISO 16975.3:2023.
- Hand protection: leather or kiln-rated (Kevlar) gloves for loading, unloading and shelf handling, AS/NZS 2161 series.
- Clothing: long sleeves, natural fibres (cotton, wool, leather), closed-toe leather footwear. Synthetic fabrics can melt on contact with heat.

EYE PROTECTION

Prolonged viewing of a hot kiln interior exposes your eyes to infrared radiation that can contribute to cataracts over time. Use appropriate eyewear whenever you look through a spy hole or open bung, even briefly.

5.3 Materials

What you can fire

- Standard ceramic clays at the appropriate cone for the body.
- Most commercial glazes formulated for the cone you're firing at.
- Limited paper-clay, adequate ventilation only (see section 6); avoid burning out large quantities of organic material.

What not to fire

- Mothballs, marbles, concrete, rocks, road stones, or unknown found objects.

- Reduction atmospheres, these kilns are designed for oxidation firing only, and reducing gases shorten element life dramatically.
- Raku, salt or soda glazing, these require purpose-built kilns. Salt and soda attack the elements and insulation and permanently contaminate the chamber. Raku and salt-glaze damage is not covered under warranty.
- Cracked shelves.

Preparing ware

- Greenware must be bone dry. Touch the piece to the inside of your wrist, if it feels cool it is still wet and may explode when fired.
- Hollow solid hand-built pieces where possible, trapped air can expand and crack the piece during firing.

5.4 Temperature Limits

- Do not exceed 1280 °C. This is the rated maximum chamber temperature. Over-firing voids the warranty and can damage the kiln.
- For longest element life, limit regular firings to 1240 °C or below. Reducing firings by 100 °C (for example 1180 °C instead of 1280 °C) can extend element life up to five-fold.
- Our kilns tend to fire on the hot side, so every Easy Kiln is programmed with a 15 °C temperature offset (see 10.4.3). Favour the lower end of any cone or temperature range, use witness cones until you know your kiln, and fine-tune the offset if needed.

5.4.1 Proportional Element Life by Firing Temperature

Published FeCrAl alloy data gives the following indication of element life at sustained peak temperatures. Values are proportional, the life at 1120 °C is set to 100% as a reference. Actual life depends on firing frequency, atmosphere, contamination and loading. The table stops at the kiln's rated maximum of 1280 °C.

ELEMENT TEMPERATURE (°C)	APPROX. CHAMBER TEMPERATURE (°C)	PROPORTIONAL LIFE
1150	1120	100%
1200	1170	~45%
1260	1230	~22%
1310 (rated max)	1280	~15%

Element temperature sits approximately 30 °C above the chamber temperature due to the radiant gradient between the element surface and the thermocouple tip.

5.5 Hot Surfaces and Sharp Edges

- Never touch the heating elements with anything, even when cold, while the kiln is plugged in.
- Do not unload until the chamber has cooled below 100 °C. Removing pieces too early risks thermal shock to ware and shelves.
- After glaze firings, check shelves for glaze slivers before running a hand over them.
- Do not add extra insulation around the kiln, this causes the casing and wiring to overheat.
- Do not place hands or tools inside a hot chamber, hot elements can cause severe burns.

6. VENTILATION

Adequate ventilation is essential. Firing any clay or glaze produces gases and particulates, some are merely unpleasant, others (carbon monoxide, sulfur dioxide, fluorine compounds, vaporised lead or cadmium from certain glazes) are toxic. Your installation must remove these safely to outside.

6.1 Minimum, Natural Cross-Ventilation

- An openable window or door directly to outside on one side of the kiln room.
- A second opening (window, vent grille or passive air brick) on the opposite side to create cross-flow.
- Doors to the rest of the studio or house kept closed during firing to prevent fume migration.
- Natural ventilation is the minimum and is adequate only for intermittent hobby use of small kilns with standard pottery clays and lead-free glazes.

6.2 Required for Regular Use — Mechanical Extraction to Outside

- For regular, commercial, school or studio use, install mechanical extraction that ducts directly to outside.
- The extraction system must be sized and installed by a qualified ventilation contractor.
- Proprietary kiln ventilation accessories are available from third-party suppliers in Australia. We do not supply, endorse or warrant any particular system, speak to your HVAC contractor about a solution suited to your room and firing profile.
- Whatever system is chosen, confirm it achieves the room air-change rate recommended by your contractor and that exhaust discharge is well away from any air intake.

CARBON MONOXIDE

Carbon monoxide is colourless, odourless and can be fatal. It is produced during bisque firings as organic binders and carbonaceous material burn off. Never run a kiln in a sealed room. If you fire in an attached garage or laundry, install a battery-backed CO alarm to AS 3786 in the kiln room and in any adjacent occupied space.

6.3 Paper Clay, Organic Supports and Lustres

Paper clay, organic inclusions (sawdust, grog binders) and gold or metallic lustres generate significantly more smoke and volatile compounds during burn-out than plain clay. If you fire these materials regularly:

- Mechanical extraction to outside is required, not optional, for these materials.
- Check the position of smoke and fire alarms, relocate them away from the direct plume or ask your installer about a rate-of-rise detector instead of an ionisation type.
- Open additional bungs during burn-out stages (below 600 °C) then refit them for the remainder of the firing.

6.4 Lead, Cadmium and Other Toxic Glazes

- Lead-bearing and cadmium-bearing glazes vaporise at high temperatures. These fumes are toxic and can contaminate other ware in the load.
- If you fire these glazes, mechanical extraction running continuously throughout the firing is required. Segregate them in dedicated firings and do not fire any food-contact ware in the same load.
- Chlorinated additives and salt-containing bodies release hydrogen chloride, which is severely corrosive to elements, kiln insulation, and ventilation ducts. These materials are not suitable for this kiln.

TIP, GIVE PROBLEM GLAZES THEIR OWN DAY

Chrome, selenium, cadmium and lead are the usual troublemakers. Rather than chase perfect separation inside a mixed load, give these glazes their own firing with the extraction running start to finish. A dedicated firing is easier to ventilate, easier to keep clear of your food-contact ware, and leaves one fewer thing to worry about when you open the kiln. Label the bisque so future you remembers which pots are in the problem batch.

7. THE FIRST FIRING

7.1 Why It Matters

- Moisture removal, even new insulation holds some manufacturing moisture. Firing too quickly without driving this off can crack the firebricks.
- Element oxidation, a properly formed oxide layer on the elements reduces premature burnout and extends element life by years.

7.2 First-Firing Schedule (empty chamber)

- On the Bartlett controller, select cone-fire mode → Medium → Cone 04

7.3 After the First Firing

Once the kiln has cooled, the insulation is dry and the elements are oxidised. You may begin normal bisque or glaze firings. Repeat this schedule if the kiln has been stored in damp conditions for an extended period.

7.4 Your First Ten Firings

A new kiln behaves slightly differently in its first ten or so firings as the insulation finishes drying, the elements form their protective oxide layer, and you get a feel for its particular character. None of the following needs action, knowing what to expect makes early firings less stressful.

First firing

Plenty of vapour and a faint smell from the bungs as residual moisture and binder burn off, this is the main reason the first firing is empty and bungs out.

A short hum from the elements as they first energise. Normal 50 Hz mechanical resonance, fades as the elements warm.

Hairline cracks in the cold insulation. These are expansion joints, they close at temperature and do not affect performance.

Firings two to five

The smell becomes much less noticeable. Any persistent burning odour after the third firing is not normal, isolate and contact us.

You may notice the kiln runs a little slow for the first few firings. Once the insulation is fully dry the kiln settles into its normal pace.

Witness cones give a more reliable read on what the ware actually experienced than the controller temperature. Make a habit of placing a target plus guard cone in every load while you are getting to know the kiln.

Firings six to ten

The kiln has settled into its rhythm. Note your ramp rates and peak temperatures, they form your baseline for the life of the kiln.

Thermocouple readings can sit a few degrees off true temperature, what matters is that the controller is consistent firing to firing, so witness cones reach the same end-point. The controller is calibrated at the factory to fire hot, so favour the lower end of any cone or temperature range.

A faint brown stain around the door seal is normal fume condensation at the seal's coolest point, not a leak. Start keeping a firing log (Appendix B).

PHOTOGRAPH EVERY LOAD

Take a phone photo of each load before you fire. Six months in, when you want to repeat a successful firing, the photo plus your log entry will rebuild the conditions much better than memory.

8. SHELVES, POSTS AND KILN WASH

BOTTOM SHELF DIRECTLY ON THE BRICK FLOOR

The bottom shelf of every load must sit **DIRECTLY** on the brick floor of the kiln, no posts beneath. The shelf shields the floor brick from glaze drips and from the heat-cycling stress of supporting a load on points. Loading without a bottom shelf, or putting posts under the bottom shelf, will damage the floor and is not covered by warranty.



8.1 Shelves

- **Place the bottom shelf directly on the kiln floor, no posts are required underneath.** The bottom shelf protects the floor insulation and catches any glaze drips, and prevents heat damage to the brick floor.
- Rotate and flip shelves between firings to balance thermal stress and prevent warping.
- Inspect each shelf before every firing. Replace cracked shelves, a cracked shelf can fail mid-firing and take down the ware above it.
- Store shelves on edge when not in use, never flat-stacked. Flat-stacked shelves are more likely to crack under their own weight, especially if damp.
- Keep shelves dry. Moisture absorbed during storage can flash to steam during firing and shatter the shelf.

8.2 Posts

- Posts are made from the same refractory material as shelves and support multi-layer loads above the bottom shelf.
- Use three posts per shelf, evenly spaced in a triangle. Four posts are less stable because the shelf rocks unless all four posts and the surface below are perfectly level.
- Shorter posts are more stable than tall ones, a single post of the correct height is preferred over a stack of shorter posts.
- Align posts vertically between shelf layers so the load runs straight down through the posts.

TRIANGLE PROPS

A common mistake is using four posts under a shelf because it “feels” more secure. Three is more stable on any real floor, four wobbles unless every post and the surface below are dead level. Trust the triangle.



8.3 High-Fire Kiln Wash

Kiln wash is a protective mineral coating for shelves and the kiln floor. It prevents glaze and glass drips from permanently bonding to the refractory surface. See section 12 for application instructions.

WHERE NOT TO APPLY KILN WASH

Do not apply kiln wash to the kiln walls, roof floor, elements, or the underside of shelves. Wash in contact with elements will damage them, and flakes from an unused underside can land on glazed ware below.

9. LOADING YOUR KILN

Most under-firings are caused by poor loading or thermocouple spacing, not a fault with the kiln. Good loading is even, balanced, and gives gases a path to escape.9.1 Pre-Firing Visual Inspection Failures.

ITEM	WHAT YOU'RE LOOKING FOR	ACTION IF NOT OK
Chamber interior	Clean, free of dust, debris and glaze drips	HEPA-vacuum, scrape and re-wash as needed
Elements	No breaks, bulges, glaze contamination, or flattened spots	Do not fire; refer to Maintenance Manual
Element grooves	No crumbling or cracks between coils	Do not fire; call service
Thermocouple	Projecting 20–30 mm into chamber, tip intact, not bent	Do not fire; call service
Door seal	Fully seats when door is closed	Check for obstruction or worn seal
Supply cord and plug	No heat damage or discolouration, cord not touching the kiln body	Do not fire; call an electrician
Shelves	No cracks; kiln wash intact on top surface	Replace cracked shelves; re-wash as needed
Area around kiln	Clear of combustibles; 300 mm clearance maintained	Move combustibles before firing

9.2 Before Loading

- Put on PPE: P2 respirator, leather gloves, long sleeves, safety glasses.
- Always switch off the kiln at the main isolator and unplug it at the wall before loading or unloading.
- Vacuum the chamber with a HEPA vacuum and wipe the floor with a damp cloth if needed.
- Confirm all ware is bone dry and free from visible cracks.
- Hollow hand-built pieces where possible, trapped air can explode during firing.

9.3 Loading Technique

Shelves and posts

- Place the bottom shelf directly on the kiln floor (no posts beneath). Subsequent layers sit on three evenly spaced posts forming a triangle.
- For multi-layer loads, align posts vertically between shelf layers for stability.

Spacing the load

- Distribute weight evenly front-to-back and side-to-side. Group items by height to make efficient use of space.
- Keep **2–3 cm clearance around the thermocouple**. Contact with ware or a shelf causes incorrect temperature readings and can cause over-firing.
- Keep ware at least 30 mm from chamber walls and elements to allow heat circulation and avoid glaze drips hitting the elements.
- Leave at least 20 mm between pieces so heat can circulate and pieces do not bond together if any glaze runs.

Flat pieces

- Align flat pieces (tiles, plates) so their edges sit between element grooves rather than directly in front of an element, this avoids uneven heating at the rim.

9.4 Loading Bisque Ware

- Greenware can touch other greenware and can be stacked inside larger pieces, provided total weight is supported.
- Large flat pieces (plates, tiles) should be fired on their flat side, supported fully, to prevent warping.
- Thin cups may be fired upside down or rim-to-rim if the rims are strong enough.
- Fire lidded pieces with lids in place to ensure lid and body shrink together for a good fit.
- Do not load greenware with glazed ware in the same firing, different temperatures and different ventilation needs.

9.5 Loading Glaze Firings

- Glazed pieces must not touch each other or the shelf. Keep at least 15 mm between glazed pieces, bubbles and fumes can contaminate adjacent pieces.
- Foot all glazed ware, wipe at least 5 mm of glaze from the base to prevent sticking to the shelf.
- For earthenware glaze firings, stilts may be used. Test stilts for wobble before firing.
- Stoneware and porcelain glaze firings: do not use stilts, the ware slumps too much at temperature and can tear away from the stilt.
- Red, green and yellow glazes (especially those containing chrome, selenium or cadmium) can fume across the kiln and tint other ware. Fire them in their own load, or keep at least 50 mm between red-glazed pieces and other colours.
- Do not fire glazed lidded pieces with lids in place, the lid will permanently fuse to the body.

PHOTOGRAPH EVERY LOAD

Take a phone photo of each load before you close the door. Six months in you'll have a visual library of what fits where in your kiln, what worked, and what didn't. It's the fastest way to learn your particular kiln's heat patterns and you can make a cool library of before and after!

10. FIRING YOUR KILN

Stay within earshot during a firing, especially in the last couple of hours, and trust the cones over the controller display when you're comparing results.

Your kiln is supplied with a Bartlett programmable controller. Refer to the Bartlett controller manual included with your kiln for programming and to start a firing. The guidance below applies to all firings.

IMPORTANT

1. Kiln controllers are not safety devices.
2. Supervise the kiln at all times, especially when approaching maximum temperature.
3. If the maximum temperature is exceeded, switch off and unplug the kiln immediately and contact us.

10.1 Before Starting a Firing

- Confirm the door is fully closed and latched. The safety interlock engages with a small click, you may not always hear it.
- Confirm bungs are in the correct position for the firing type (section 11).
- Confirm the area around the kiln is clear of combustibles.

10.2 During the Firing

- Stay within earshot. Return to the kiln frequently in the last couple of hours.
- A brief hum from the elements when first energised is normal, it is a 50 Hz mechanical resonance and disappears once the elements are warm.
- Our kilns use solid-state relays (SSRs) for switching the elements, you will not hear any clicking from a mechanical contactor during firing.
- Watch for any smoke, unusual smells, or discolouration of the supply cord.
- Do not open the kiln door during firing. Bungs may be removed or replaced briefly using PPE and heat-rated tools.

WHAT IS NORMAL DURING A FIRING

Faint vapour from the bungs in early bisque firings as moisture and organic burn-off escape.

External surfaces become hot, particularly around the door and top. The shell can reach over 100 °C in a high-fire firing.

Light visible around the door edge when firing. The insulation has expansion joints, the door does not need to be light-tight to seal heat.

Hairline cracks in the cold insulation. These close at temperature.

A faint brown or black stain around the door seal after many firings, fume condensation at the seal's coolest point, cosmetic only.

10.3 End of Firing

- When the controller reports completion, manually switch off at the main isolator and at the wall.
- Leave bungs in for a slow controlled cooling unless your firing profile requires otherwise.
- To accelerate cooling once the chamber has dropped below 200 °C, you can crack the door open in stages, a few millimetres at first, then progressively wider as the chamber cools further. Do not open the door at higher temperatures, and do not unload until the chamber is below 100 °C.

USE WITNESS CONES

Drop a witness cone or two onto a kiln-washed shelf with every firing for the first few months. After unloading, the bent cone tells you exactly what heatwork the kiln actually delivered, which is a more useful diagnostic than the controller's peak-temperature reading.

10.4 Heatwork, Cones and Ramp Rate

ALWAYS, MEDIUM OR MEDIUM-SLOW FOR CONE 4 AND ABOVE

Glaze firings of Cone 4 and above must run on MEDIUM or MEDIUM-SLOW speed on every Easy Kiln. Never use Fast for Cone 4+ glaze firings. Easy Kilns have a high volume-to-power ratio, at Fast speed the kiln lags behind the programmed ramp near peak, the firing takes longer, extra heatwork accumulates, and the ware will over-fire even though the set cone has not changed. Medium or Medium-Slow keeps the kiln tracking the set-point accurately and delivers the intended heatwork. See 10.4.2 for the detail.

Firing is a combination of temperature and time. Pyrometric cones measure heatwork (the combined effect of temperature and time), not temperature alone, which is why the clay and glaze supplier cone guidance is more reliable than a single top-temperature number.

- Aim for a ramp of no more than 60 °C/hour in the final 100 °C of a firing. Faster ramps above 1200 °C dramatically shorten element life.
- A soak at top temperature adds heatwork even though the temperature does not rise. As a rough guide: 20 min soak $\approx$ +10 °C, 60 min $\approx$ +20 °C, 120 min $\approx$ +30 °C of additional heatwork.
- Always follow the clay or glaze manufacturer's firing recommendations in preference to generic cone charts.
- Every kiln has a slightly different "heat signature". Judge results from the ware first and adjust your profile from there.
- For glaze firings using the Bartlett controller's cone-fire mode, select **Medium or Medium-Slow** speed, not Fast. All Easy Kilns are built with a high volume-to-power ratio (generous chamber volume relative to installed element wattage), which gives even, consistent heat distribution but means the kiln cannot follow the Fast cone-fire ramp without the controller running flat-out near peak and over-shooting target heatwork. Medium gives the elements headroom to track the set-point accurately through the final 100 °C, where heatwork is most sensitive. See 10.4.2.

10.4.1 Reaching Higher Cones Within the 1280 °C Rating

This kiln is rated to 1280 °C maximum chamber temperature. At first glance that appears to cap the kiln at cone 9. In practice, because cones measure heatwork, cones 10 and even 11 are achievable within this ceiling by slowing the final ramp rate, trading a few extra hours of firing time for additional heatwork at a lower peak temperature.

CONC	PEAK AT 150 °C/HR	PEAK AT 60 °C/HR	PEAK AT 15 °C/HR
9	1280 °C	1260 °C	1224 °C
10	1305 °C (over rating)	1285 °C (over rating)	1251 °C (within rating)
11	1315 °C (over rating)	1294 °C (over rating)	1272 °C (within rating)

10.4.3 Temperature Offsets

Every Easy Kiln is programmed with a temperature offset of 15 °C as standard. We find this results in more accurate cone firing across the ECO range. The offset is applied at our pre-shipment test firing and deliberately makes the kiln call completion slightly early, so it errs on the cooler side. This is intentional: it is best to aim slightly cool, because an under-fired piece can be re-fired, whereas an over-fired piece cannot be recovered. The controller display already reflects this offset, and the cone-fire programs and the sample schedules in 10.5 are written against it, so no change is needed for normal use.

You may still need to fine-tune the offset for your own studio. The thermocouple sees the position it is in, not the average of the chamber, and a heavily loaded kiln, a different shelf arrangement, or a different ambient temperature can shift the relationship between the reading and the heatwork delivered to the ware. Use witness cones for the first six to ten firings and adjust as follows:

- If the target cone consistently bends past its end-point (ware looks over-fired, glazes run), the kiln is running hot, increase the offset above the standard 15 °C so the controller calls completion a little sooner.
- If the target cone is barely leaning (ware looks under-fired, glazes matt or under-melted), the kiln is running cool, reduce the offset below 15 °C so the controller drives the chamber a little further.
- Adjust in 5 °C steps and re-test with witness cones before making further changes. The factory value is 15 °C; note any change you make so you can return to the factory setting if needed.

Refer to the Bartlett controller manual for the menu sequence used to view and edit the offset on your controller model. Offsets are stored against the thermocouple input, so if a thermocouple is replaced the offset must be reviewed and re-set.

11. BUNGS AND VENTS

11.1 Bisque Firing

- Initial stage: keep bungs OUT until the chamber reaches 600 °C or a faint orange glow is visible, this lets moisture and organic burn-off escape.
- Replace bungs once moisture and organic burn-off are complete.
- Optionally remove bungs again after peak temperature to speed cooling (only if your ware can tolerate it).

11.2 Glaze Firing

- Bungs can remain in place throughout the firing.
- Remove bungs if there are volatile materials (e.g. gold lustres) that require venting, always wear full PPE.

11.3 Handling Bungs Safely

- Remove bungs slowly with tongs, hot gases and radiated heat can burn hands and eyes.
- Wear infrared-filter safety glasses (or welder's shade 3–5) when looking into the chamber through an open bung hole.
- Place hot bungs on a non-combustible surface. Never on carpet, timber or plastic.
- **If a bung seizes, do not force it.** A bung that has been pushed in too hard can seize in its hole, particularly while the kiln is hot and the materials have expanded. Do not lever or hammer it out, you risk cracking the bung or the surrounding brickwork. Allow the kiln to cool fully. As it cools the bung and the hole contract and the bung will release, after which it can be removed gently by hand or with light tong pressure. Next time, seat the bung gently in place.

12. KILN WASH

RESPIRATORY HAZARD

Kiln wash contains respirable crystalline silica and alumina. Always wear a P2 or higher respirator and work outdoors or in a well-ventilated area. Never sand dry kiln wash indoors.

12.1 Mixing

Pour a small amount of water into a disposable container and gradually add powdered kiln wash until the consistency resembles thin coffee cream. Stir thoroughly to eliminate lumps.

12.2 Applying

- Brush on two or three thin coats, letting each coat dry a few minutes before the next.
- Rotate brush strokes by 90° between coats for even coverage.
- Swirl the brush in the container each time, the solids settle quickly.
- Work from the centre outwards to prevent build-up on edges.
- Leave a 10 mm unwashed margin at the edge of the shelf to prevent flakes falling off.

12.3 Drying

- Allow shelves to dry in the open air, then dry them fully in the kiln at about 90 °C for an hour before glaze firing.
- Shelves still feel cool when damp, if they are cool to touch they are still wet.

12.4 Rules

- Apply kiln wash ONLY to the tops of shelves and the kiln floor.
- Never apply to walls, roof, elements, or undersides of shelves (unless you flip shelves regularly and coat both sides accordingly).
- Scrape and re-coat any area where glaze has dripped before the next firing. Build-up must be removed periodically.

3. UNLOADING

- Wait until the chamber is below 100 °C before unloading. Items will be hotter than the chamber air, still hot enough to burn.
- Switch off at the main isolator and unplug the kiln before unloading.
- Wear P2 respirator, leather gloves, closed-toe shoes and safety glasses.
- Remove ware from the top down to avoid reaching over hot shelves.
- Place items on a heat-resistant surface. Do not place hot ware on rubber, vinyl or timber.
- Vacuum the chamber with a HEPA vacuum between firings.
- Run a finger lightly around shelf edges to check for glaze slivers before picking up.

14. KEEPING YOUR STUDIO CLEAN

Most kiln-related health risk is from dust and fume exposure, not single incidents. Good daily routines lower your exposure to a safe level.

14.1 Dust Control

- Never dry-sweep the studio. Use a HEPA-filtered vacuum and wet-mop damp surfaces instead.
- Wipe down surfaces with a damp cloth before the clay has dried.
- Keep a solid door between the kiln room and living areas, closed during firing and for at least an hour after completion.
- Do not carry dusty clothing, rags or unfired pots into kitchens, bedrooms or living areas.

14.2 Personal Hygiene

- Do not eat, drink or smoke in the kiln room or studio. Materials that are safe to handle become harmful if ingested.
- Wash hands and forearms with soap and water after every studio session, and before eating or drinking.
- Remove and wash studio clothing separately from household laundry. Shake off dust outdoors.
- Keep a dedicated pair of shoes for the studio and leave them at the door.

14.3 Storing Chemicals and Materials

- Store glaze chemicals in labelled, sealed containers. Never store in food or drink containers.
- Keep lead-, cadmium- or cobalt-bearing materials separate from general glazes and clearly labelled.
- Safety Data Sheets (SDS) for all supplied materials should be kept in the studio and reviewed when handling new products.

15. LOOKING AFTER YOUR KILN

Detailed maintenance procedures, including element replacement, thermocouple replacement, and interlock alignment, are in the separate Easy Kilns Maintenance Manual (EK-MM-V3). The tasks below are the routine care that the owner can perform.

The following table summarises what to do and when. Details for each task are in the subsections that follow.

INTERVAL	ACTION	WHERE
Every firing	Inspect shelves for drips and slivers; check the door seals	Section 15.1
Every 10–20 firings	HEPA-vacuum the chamber, inspect elements and thermocouple, check supply cord	Section 15.2
Annually (or 100 firings)	Book a service inspection; replace thermocouple if drift suspected	Section 15.3
As needed	Re-seat any element that has lifted from its groove (cold technique only)	Section 15.4
As needed	Pin elements that have worked loose at a corner	Section 15.5

15.1 After Every Firing

- Inspect shelves for glaze drips and slivers. Scrape and re-wash as needed.
- Visually inspect elements for breaks, bulges or contamination.
- Check the door seals close.

15.2 Every 10–20 Firings

- HEPA-vacuum the chamber, element grooves and floor. Wear a P2 respirator.
- Visually inspect the thermocouple. The Type S thermocouple fitted to your kiln does not flake, the platinum / platinum-rhodium alloy is stable at firing temperature, but check that it is straight, projecting clear of any ware, and not damaged at the tip.
- Check the supply cord and plug for heat damage or loose connections.

15.3 Annually (or after 100 firings)

- Book a service inspection with a qualified kiln technician.
- Inspect element resistance against factory specifications, see Maintenance Manual.

15.4 Cosmetic Re-Seating of Elements

Shipping can occasionally dislodge an element slightly from its groove. Before the first firing, and any time you suspect an element has shifted:

ISOLATE FIRST

Unplug the kiln at the wall before touching anything inside the chamber. Only touch cold elements with a non-metallic tool, metal can short across coils.

- Use a plastic comb or a flat timber stick to press the element gently into the groove.
- If the element does not sit perfectly flat at the bottom of the groove, it is fine, provided it is back in the channel and does not bulge outward into the chamber.
- If an element is clearly out of its groove and cannot be seated cold, do not force it. Contact a qualified kiln technician, see Maintenance Manual section B3.

15.5 Element Pins

These kilns are configured with side elements only. The element pins are FeCrAl staples pushed across the element into the brick, blocking outward movement and keeping each element seated in its groove during normal thermal cycling.

- Use only genuine Easy Kilns pins. They are FeCrAl staples made from the same alloy as the elements. Pins made from household wire or stainless steel will fail at firing temperature and can damage the kiln.
- Pinning a new (unfired) element is straightforward, see Maintenance Manual section B3.4 for the procedure. Pinning a fired element requires the element to be heated red-hot with a gas torch and is a job for a qualified kiln technician.



- If an element has worked loose, isolate the kiln and arrange service rather than attempting a cold repair.

16. FREQUENTLY ASKED QUESTIONS

These are the questions we hear most often from new owners. If yours isn't here, please get in touch, we'd rather hear from you than have you guess.

Can I leave the kiln firing while I sleep?

No. Always supervise the kiln during firing, particularly in the last couple of hours when the kiln is approaching peak temperature. If you need to be elsewhere near the end of a firing, ask a competent adult to keep an eye on it for you. Multiple things can go wrong (a stuck SSR, a thermocouple drifting, ware dislodging) and your presence is the most reliable safeguard.

Why does my finished piece look different to my friend's, even though we used the same glaze and clay?

Glaze results depend on heatwork, the combined effect of temperature AND time, not just peak temperature. Different ramp rates, soak times, kiln position, and even how densely you load the kiln all change the heatwork the glaze experiences. Use witness cones to compare actual heatwork between firings. See section 10.4.

I can hear faint cracking sounds when the kiln cools, is something wrong?

No. The insulation expands and contracts with each firing, and the brick joints relax audibly as the kiln cools. It's the same sound a wood stove makes after the fire dies down. As long as the door still seals when the kiln is cold and the chamber looks healthy from a quick visual check, all is well.

There's a small brown stain around the door seal, should I worry?

No. That's condensation of fumes at the coolest point of the seal during firing.

How often will I need to replace the elements?

It depends almost entirely on the temperatures you fire at. As a rough guide: a kiln fired regularly to cone 6 (about 1230 °C) will get many years out of a set of elements; one fired regularly to cone 10 (about 1280 °C) will get a fraction of that. Section 5.4.1 has a proportional life table that gives you the trade-off in numbers. The single biggest thing you can do to extend element life is favour the lower end of any cone or temperature range.

Why does my controller read a slightly different temperature than my pyrometer or witness cones?

Three reasons. First, our kilns tend to fire on the hot side and ship with a temperature offset already configured, the controller display reflects the corrected reading. Second, witness cones measure heatwork (temperature × time), not temperature, so they tell you about the firing the ware actually experienced rather than the kiln's peak. Third, every thermocouple is a few degrees off true temperature, the controller is consistent within itself, which is what matters for repeatability.

Do I need an electrician to set up the kiln?

Not for the kiln itself. All ECO Series kilns plug in. You just plug into a suitable outlet and the kiln is ready to fire. If you don't already have a suitable outlet on a correctly rated circuit, an electrician will need to install one. The Owner's Manual section 4 has the breaker rating for each model and the Maintenance Manual includes a dedicated Part B with the technical details a licensed electrician needs for any later service work.

Can I fire glass, or do glass fusing, in this kiln?

These kilns are designed for ceramic firing. Limited glass fusing in dedicated glass-firing moulds is acceptable provided the temperatures stay below 900 °C and the floor is well protected with kiln

wash. Lampwork annealing and stained-glass slumping should be done in a kiln designed for that purpose, the heat distribution and ramp characteristics differ from a top-loading ceramic kiln.

My kiln has been sitting unused for months, do I need to do anything before firing it again?

Yes. Run the first-firing dry-out schedule from section 7 to drive off any moisture the insulation has absorbed. Skipping this can cause RCD trips, a burning smell, or in extreme cases cracked firebricks. A dry-out firing also re-oxidises the elements after a long idle period.

My ware came out under-fired, what should I check?

Most under-firings come from one of three things: the bungs were left open during the last segment, the thermocouple was too close to ware (which makes the controller think the kiln is hotter than it really is), or the load was too tightly packed for heat to circulate. Run the troubleshooting table in section 17 row by row. If you can't identify the cause, save a few witness cones from the firing and contact us, the cones tell us a lot.

Why does the kiln seem to take forever to cool down?

That's the insulation doing exactly what it's designed to do, a kiln that cools too quickly is also one that loses heat too quickly during firing. Below 400 °C you can crack the door open in stages to accelerate cooling without damaging ware (see section 10.3). Above 400 °C, cool naturally.

Where do I get replacement elements / thermocouples / shelves?

From us directly, contact details are on the cover and in section 18. We supply genuine parts that match the kiln's specifications. Aftermarket elements and thermocouples may not match the controller calibration and will void the warranty (see Warranty clauses 4 and 7).

17. TROUBLESHOOTING

When something looks wrong, isolate the kiln first and diagnose second.

SYMPTOM	LIKELY CAUSE	WHAT TO TRY
Kiln does not heat at all	Door interlock not engaged; main switch off; tripped circuit breaker or safety switch; broken element	Confirm door is fully closed and latched. Reset the circuit breaker or safety switch at the switchboard. If it trips again, isolate and contact an electrician. If the circuit is healthy, inspect the elements for a visible break and book service.
Kiln heats slowly or does not reach temperature	Bungs left out after the initial stage; ware placed too close to the thermocouple; damaged or drifted thermocouple; poor loading or uneven packing; worn elements	Confirm bungs are replaced once the bisque burn-off is complete. Check the thermocouple has 2–3 cm clearance (tennis-ball zone) and is not bent or touching ware. Re-distribute the load. Inspect elements. Book service if the thermocouple is damaged.
Slight smell or light haze during the first firing(s)	Normal, residual binder and manufacturing moisture in new insulation and on new elements burning off	No action required. Ensure good ventilation and run the dry-out firing in section 7. The smell will disappear after the first one or two firings. Persistent burning smells after several firings are not normal, isolate and contact us.
Controller shows a fault code	Thermocouple failure, interlock open, over-temperature	Refer to Bartlett controller manual. Isolate and contact us if unclear.
Light visible around door edge	Normal, insulation expansion joints	No action required provided the door is latched.
Small hairline cracks in cold insulation	Normal thermal cycling	No action. Cracks close at temperature.
Plug or cord warm to hot	Loose connection, undersized circuit, damaged cord	Stop firing, isolate, contact a licensed electrician.
Safety switch trips during firing	Moisture in insulation (common in new or stored kilns); element earth fault; wiring fault	Isolate. If the kiln has been stored or is new, run the dry-out firing (section 7). If it trips again, contact a qualified kiln technician.
Uneven firing top vs bottom	Loading density, element wear, thermocouple placement	Re-distribute load. Inspect elements and thermocouple.
Hum from kiln when first switched on	Normal, 50 Hz mechanical resonance in elements until they soften and warm	No action. The hum disappears as elements reach operating temperature.

SYMPTOM	LIKELY CAUSE	WHAT TO TRY
Element bulging outward into the chamber	Thermal cycling has relaxed the element; pin missing or failed	Isolate. Do not cold-repair fired elements, they are brittle and will break. Contact a qualified kiln technician for hot-reseating or replacement.
Ware came out underfired (matt glaze, soft body)	Slow ramp, low peak, thermocouple drift, ware blocking thermocouple, controller cone profile too cool	Confirm the witness cone reflects the same heatwork as the controller target. If the cone bent less than expected, fire one cone higher or add a longer hold next time. Inspect thermocouple clearance (see section 9.3).
Ware came out overfired (slumped, glaze ran, sharp ware)	Fast ramp, ware too close to thermocouple, controller drifted hot, cone target too high	Stop firing if in progress, isolate. Place witness cones in the next test firing. Drop one cone or 20 °C and re-test. Contact us if the witness cone consistently disagrees with the controller.
Glaze pinholes, crawling, or pinning across the surface	Ramp too fast through the 700–1000 °C range, dirty bisque ware, insufficient soak at peak, glaze applied too thick, ware not bisqued hot enough	Add a 10–20 minute soak at peak. Slow the final 100 °C of the firing. Bisque ware should be clean and free of grease before glazing. Not a kiln fault, this is a firing-profile or glaze-application issue.
Ware stuck to the shelf after a glaze firing	Glaze ran onto the shelf; shelf needs kiln wash; ware not footed (glaze too close to the base); stilts not used on earthenware	Chip carefully with a sharp chisel and re-wash the shelf. Foot all glazed ware by wiping 5 mm of glaze from the base. Use stilts for earthenware glaze firings only, never for stoneware or porcelain.
Kiln does not finish a firing (cuts out before reaching peak)	Thermocouple drift past the controller's acceptable range, interlock not fully engaged, supply circuit tripped, controller error code	Note any error code on the controller before cycling power. Inspect the thermocouple (see 9.1). Check the door is fully closed and latched. Reset the supply circuit. If the issue repeats, isolate and book service.

18. GETTING HELP

We want your Easy Kiln to give you years of reliable service. If you have a question or concern, please get in touch, even small issues are best resolved early. There are no silly questions.

How to reach us

Phone, email and address details are on the back page of this manual ("Get in Touch"). The fastest route for a non-urgent question is email; for anything urgent, please call.

What helps us help you

- Your kiln model and serial number (from the serial plate on the control box).
- Date of purchase and supplying retailer.
- A clear description of what's happening, ideally with a photograph.
- Any controller fault codes or unusual readings.
- Your firing log entries for the affected firings, if any (see Appendix B).

Related documents

- Easy Kilns Warranty (EK-WR-V3), coverage, claims, remedies.
- Easy Kilns Terms & Conditions (EK-TC-V3), sales, delivery, installation.
- Easy Kilns Maintenance Manual (EK-MM-V3), user and technician maintenance procedures.
- Bartlett controller manual (supplied with your kiln).

19. MADE IN MELBOURNE

Easy Kilns are designed, built and tested at our workshop in Coburg North, Melbourne. Every ECO Series kiln is hand-assembled by a small team, wired by qualified technicians, and put through a full test firing before it leaves the factory. We use the same kilns ourselves, which is how we end up tuning each model to the standard that we'd want to fire on. If something on your kiln ever doesn't feel right, you're talking to the people who built it, see section 18 for how to reach us.



GET IN TOUCH

We'd much rather hear from you early than have you guess. There are no silly questions, if something is bothering you about your kiln, please reach out.

Easy Kilns Pty Ltd	ABN 12 675 848 932
Address	Unit 3, 212–214 Newlands Road, Coburg North VIC 3058
Phone	(03) 4061 6248
Email	support@easykilns.com.au
Web	www.easykilns.com.au

If you ever sell your kiln, please pass this manual on to the new owner. Warranty **does not** transfer automatically. If you sell the kiln, ask Easy Kilns before sale if the remaining warranty can be considered for transfer under Warranty clause 13.

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