JALANDO PIZZA OVENS

JA80 PRECAST PIZZA OVEN KIT

ASSEMBLY GUIDE

NOVEMBER 2025

TABLE OF CONTENTS

Congratulations on purchasing a Jalando Pizza oven DIY kit. These kits are carefully designed and manufactured using high-grade materials, ensuring durability and longevity.

With these user-friendly instructions and step-by-step guidance, even those with limited DIY experience can easily construct their own professional-grade pizza oven.

Investing in a Jalando Pizza oven DIY kit means investing in a superior product that combines quality, functionality, and the joy of homemade artisanal pizzas.

Good luck with the build!

HEALTH & SAFETY

We recommend that before you commence building your pizza oven that you take a few precautions to avoid any injury. The oven chamber is heavy and you will need assistance when lifting it into position.

It is highly recommended that you wear the following during construction.

- Protective footwear
- Safety glasses
- Breathing mask
- Protective Gloves

When handling materials such as the insulation blanket and mortar powder, always wear appropriate personal protective equipment — including a dust mask, safety glasses, and gloves. These products can cause irritation to the skin, eyes, and respiratory system if handled without protection.

BEFORE YOU START

Make sure you set aside the required time needed for your build.The build will take around 3-5 days to complete, and you will also need to allow an additional 5-7 days for the render to dry prior to curing the oven.

Make sure all oven components have been stored in a dry place prior to commencing your build as moisture trapped beneath the render can affect adhesion and lead to cracking later on.

Before you start building, take the time to carefully read through the entire set of instructions from start to finish. Keep the instructions nearby during the installation, as you may need to refer back to them at various stages. Familiarise yourself with each step in advance and make sure all required tools, materials, and workspace arrangements are ready before you begin. familiarise yourself with the installation steps and have everything ready.

WHAT IS INCLUDED IN THE KIT

- Precast refractory inner dome shell - 3 pieces
  - 65mm thick refractory cement shell
    - Rear - 553mm(L) x 965mm(W) x 559mm(H) - Weight - 108kg
    - Middle - 490mm(L) x 959mm(W) x 559mm(H) - Weight - 84kg
    - Front- 325mm(L) x 846mm(W) x 453mm(H) - Weight - 45kg
- Ceramic insulation fibre blanket
- Super wool floor base
- Oven floor bricks - 9 pieces
  - 38mm thick pre-cut
- Front slab brick - 1 piece
  - 38mm thick pre-cut
- Chicken wire
- Stainless steel slab cover
- Stainless steel flue
  - 150mm(W) x 1000mm(L) with china cap (flue extensions are available - visit our website **www.jalandopizzaovens.com.au** to see the range)
- Black oven door
  - powder coated steel
- Pizza paddle
  - Stainless steel handle and alloy round head - 1000mm long

WHAT IS NOT INCLUDED IN THE KIT

- Kitchen tin-foil and plastic wrap
- Measuring tape
- Sponge
- Tin snips and sharp knife
- Trowel - *We recommend choosing a good quality render trowel (e.g., Hyde or Nela) for the main work. You can also find a dome rendering float at The Firebrick Factory or a rendering float at Bunnings. Consider also getting a finishing trowel or float that matches the dome curvature (if your dome is large or curved significantly).*
- Spirit level
- Hight temperature black paint to paint the arch e.g. Engine Paint/Pot Belly
- High Temp Silicone - used to adhere the slab cover
- Render Mix (see page 5 for recommended recipe and ingredients)
- If you prefer a coloured finish, you can use a Cement Oxide (choice of colour). Alternatively, you could use suitable Acrylic Render Paint after you have completed and cured your oven.
- Black Powder Coated Steel Base is not included but can be purchased separately.

BASE RECOMMENDATIONS

The finished pizza oven measures approximately 1340mm deep x 1125mm wide. We recommend constructing a base at least 1390mm deep x 1150mm wide, capable of supporting an oven weighing up to 750 kg.

Having a work surface around the oven is highly beneficial for placing pizza boards, roasting trays, and other accessories. Before starting oven construction, ensure the concrete slab (top of the base) is dry, level, and clean. Applying a concrete sealant is recommended to prevent the oven from drawing moisture from the base.

A bench height of around 1000 mm is recommended, although this can be adjusted to suit your comfort. The height should allow you to work without bending over, making it easy to slide pizzas in and out of the oven.

Important: If placing the oven on a natural stone bench, install a layer of calcium silicate board or fibre cement sheeting under the oven slab base to protect the surface.

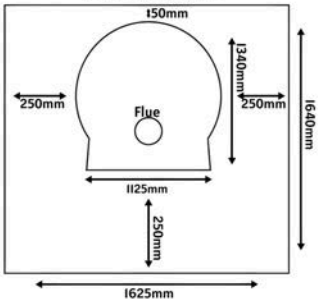
SUGGESTED BASE SIZES (PLAIN BASE)

Length (Minimum)	1390mm
Length (with Front Prep Area)	1640mm
Width (Minimum)	1150mm
Width (with Side Prep Area)	1625mm
Suggested Base Height (Minimum)	900-1000mm
Suggested Slab/Benchtop Thickness	75mm+/-
Suggested Distance from Walls	50mm
Suggested Front Prep Area	200-250mm

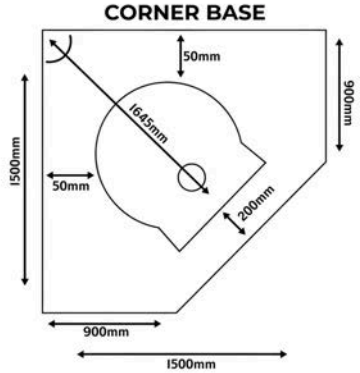
SUGGESTED BASE SIZES (CORNER BASE)

Length from Corner (Minimum)	1645mm
Length from Corner (with Front Prep Area)	1845mm
Side (Minimum)	900mm
Width (Minimum)	900mm

PLAIN BASE



CORNER BASE



RECOMMENDED RENDER RECIPE

We recommend a minimum of 50mm render for our pizza oven kits. Allow 3-5 days for the oven build.

Ingredients and Purpose:

- **Perlite:** Insulates, lightens the mix, helps repel water.
- **White/General Purpose Cement:** This is the main binding agent. White cement keeps colours true and the finish will be lighter and is a better option if you plan to colour the render while GP Cement will result in a grey finish but is a cost-effective option.
- **Washed Sand:** Primary filler for bulk, strength, and body.
- **Hydrated/Builders Lime:** Adds flexibility and bonding, reduces cracking.
- **Bondcrete (Liquid):** Improves water resistance and limits cracking.

Product	1st Base Coat 20mm	2nd Base Coat 20mm	Top Coat 10mm	Total QTY
Perlite	52.5L	52.5L	-	105L
White / GP Cement	18kg	18kg	9kg	45kg
Washed Sand (Dry)	28kg	28kg	14kg	70kg
Hydrated Lime	7.2kg	7.2kg	3.6kg	18kg
Bondcrete	950ml	950ml	500ml	2.4L
Water (estimate only)	19L	19L	9L	47L

Mixing Summary for each rendering coat:
Combine half of the required water with the full amount of Bondcrete. In a wheelbarrow, thoroughly mix the dry ingredients—Perlite, sand, cement, and lime. Gradually add the water/Bondcrete mixture, followed by the remaining water in small amounts, until the render reaches a thick, workable consistency.

HOW TO KNOW YOU'VE GOT THE RIGHT CONSISTENCY

Base Coat (Perlite Render) - Provides a bonding layer and hides the surface imperfections.

Your mix is correct when:

- It is soft like peanut butter and It sticks to the dome without sliding off
- You can press it into shape, but it still feels light and slightly coarse
- It holds on a trowel when turned sideways

If it feels crumbly → add 200 mL water at a time.
If it slumps → add a handful of sand or a small scoop of dry mix.

Top Coat (Bondcrete Render)

Correct when:

- Texture is creamy, not wet, runny or sloppy
- Trowel glides smoothly
- Holds ridges slightly before you steel-float it smooth

If it drags too much → add 100 mL water.
If it goes shiny/wet → sprinkle in a handful of sand.

CONSTRUCTION OF YOUR PIZZA OVEN

1 BASE PREPARATIONS

Cover the entire base area with a layer of tin foil, allowing extra material to extend beyond the edges. This excess can be trimmed away later before the rendering stage.

Once the foil is in place, mark the front edge and the centre point where the pizza oven will be positioned on the base.

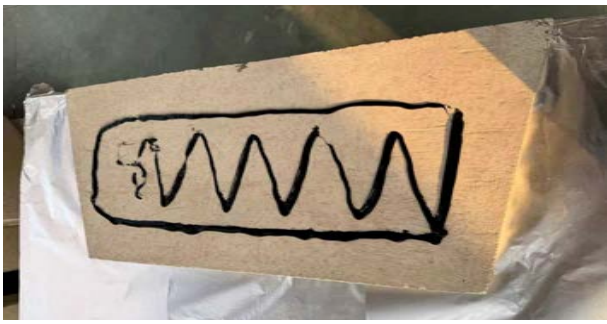
2 INSTALLING THE FRONT SLAB BRICK

Locate the centre line on the front floor slab, then align it with the marked centre line on the oven base before positioning the slab.

3 INSTALLING THE STAINLESS STEEL SLAB COVER

Position the stainless steel slab cover over the front brick, ensuring it sits flush and correctly aligned.

Apply heat-resistant silicone to secure the cover in place, pressing down firmly to bond it to the surface. Seal around the edges with additional silicone if a neater finish or improved weather protection is desired.



4 INSTALLING THE MIDDLE CHAMBER

Install the middle dome chamber, ensuring it fits tightly against the front floor slab.

5 INSTALLING THE FLOOR INSULATION

Install the oven floor insulation blanket by laying it evenly across the entire slab area, ensuring full coverage with no gaps or overlaps.

Press and smooth the blanket firmly into place, working from the centre outward to remove any wrinkles or raised sections. The insulation should sit flat and tight against the slab to provide a stable, level base for the floor bricks.

6 INSTALLING THE FLOOR BRICKS

Begin installing the floor bricks by placing the first tile to the right of the floor slab centre line and the second tile to the left, ensuring both are properly aligned.

Continue by laying the remaining numbered floor bricks in their designated order.

Once all bricks are positioned, trim the insulation so that it sits tightly around the floor but does not extend over or beneath the bricks.

Ensure that when the dome is installed, it rests directly on the floor bricks and not on the insulation.

7 INSTALLING THE REAR AND FRONT CHAMBERS

Position the rear chamber directly behind the middle chamber, making sure the edges sit flush and the two chambers fit tightly together with no gaps.

Position the front chamber in front of the middle chamber, pushing it firmly into place so the adjoining edges sit flush and the two chambers align tightly without any gaps.

8 MIX THE BONDING CEMENT

Mix the bonding cement provided in the green bag according to the instructions, then apply it to all external joints.

Use a scraper to press the cement firmly into the gaps, or a damp sponge to smooth and seal the joints for a clean, even finish.

9 APPLYING THE BONDING CEMENT

Lightly dampen the surfaces to be joined using a sponge to ensure proper adhesion.

Apply an even strip of bonding cement along the edges on both sides of the front floor chamber, making sure the coverage is continuous and consistent.

Retain a small amount of bonding cement for future maintenance or touch-ups.

10 COVER WITH INSULATION

Wrap the remaining insulation blanket around the entire oven chamber, ensuring it is fitted snugly against the surface.

Begin at the front of the oven and work your way toward the back, making sure the blanket overlaps slightly as you go to achieve full and even coverage.

Any excess insulation should be trimmed neatly and can be reused to pack and fill small gaps or irregular areas. Using the full amount of insulation provided is recommended, as this will maximise the oven's heat retention and overall performance.

Once the chamber is fully wrapped, carefully cut a hole in the insulation blanket to accommodate the flue. Ensure the opening is just large enough for a clean fit without leaving unnecessary gaps.

11 COVER WITH TIN FOIL

Wrap the entire oven dome in heavy-duty tin foil, making sure the surface is completely covered with no bare patches.

Overlap each sheet of foil by a few centimetres so there are no weak spots, and press the foil firmly against the dome so it follows the curves closely. Use masking tape to hold the foil in place, especially along the overlaps and edges, ensuring it stays tight and secure.

When you reach the flue, carefully cut a hole in the foil just large enough for the flue pipe to pass through. Fold back the cut edges around the base of the flue so the foil sits snugly without leaving gaps. This will give the flue a neat finish while maintaining full coverage of the dome.

12 COVER WITH CHICKEN WIRE

Wrap the entire dome chamber securely with chicken wire, ensuring it fits tightly around the curves of the oven. The wire acts as a reinforcing mesh, giving the render something to grip onto and preventing it from sliding or cracking as it dries.

Overlap the edges of the wire by a few centimetres where sheets join, and tie them together with wire or clips so there are no gaps. Make sure the wire is pulled snug against the dome, following its shape closely—this will provide a strong base for an even coat of render and help the finish last longer.

13 RENDERING

The oven is now ready for rendering. The Jalando PreCast Dome included in your DIY kit is made from high-quality refractory materials, specifically engineered to retain heat and maintain consistent cooking temperatures. By applying the recommended render coats using the recipe provided, you increase the dome's thermal mass and improve its heat retention ability, making the oven even more efficient and effective.

Cover the flue with plastic wrap and insert the flue into the front chamber hole with the seam of the flue facing the back of the oven before beginning the rendering process. Use a spirit level to ensure the flue remains straight. For best results, use a float to apply the render mix.

Render mix quantities required for each oven varies and is dependent upon the ultimate shape and desired finish. As a guide however, the render recipe supplied on page 5 should provide good coverage if applying the recommended 50mm thickness.

Cement colour oxides can be added to the render mix for colour. A completed oven can be painted any colour (e.g. terracotta, or sandstone) after it has been cured. The front arch may also be painted wth a heat resistant paint, we recommend Stove Bright - Metallic Black.

Once the oven is assembled and rendered, allow at least 5 full days for the cement to cure and dry completely. After this initial drying period, proceed with the curing process, which should take an additional 5 days. This gradual process is essential for strengthening the oven structure and ensuring long-term durability and performance.

13 RENDERING CONT...

PIZZA OVEN RENDERING – DAY-BY-DAY SCHEDULE

Day	Layer & Thickness	Instructions	Moisture/Drying
Day 1	1st Base Coat 20mm	Apply the first layer evenly, pressing it firmly into the dome. Create a crosshatch or rough texture using a scratcher or comb tool to make shallow grooves in the surface, this will help the next coat adhere more effectively.	Lightly mist the surface after 30–60 minutes, then repeat 2–3 times throughout the day. Keep the area shaded if exposed to direct sunlight.
Day 2 12-18 hours later	2nd Base Coat 20mm	Before applying lightly wet the surface so that the new layer will bond. Apply once base coat is firm but slightly damp. Work quickly and avoid slumping.	Lightly mist after application to prevent surface cracks.
Day 3 12-18 hours later	Top Coat 10-15mm	Apply smooth top coat; you can include more perlite to your render mix if you want better insulation.	Lightly mist after application and 1–2 times next day. This help to prevent the dome from drying out too fast.
Day 3-7	--	Let render dry slowly. Avoid heavy wind, sun, or rain. Do not fire up the oven yet.	Tip: *Keep slightly damp if conditions are dry.* Oven can be gently preheated after 5–7 days.

Rendering Tips

- Apply the render in 20 mm layers, starting with the first coat pushed firmly into the chicken wire by hand. Cover and let it cure for 12 hours to reduce cracking. Keep the surface slightly damp and a light misting of water will help.
- Before each new coat, thoroughly wet the previous layer so the mix bonds properly—use soaked towels if needed.
- Trowel the next layer on shaping the dome with a curved float and maintaining even thickness.
- Repeat the above steps for the second coat, then leave the oven to dry for 12 hours before applying the final 10mm top coat.

Environment

- Avoid direct sun, strong wind, and heavy rain.
- If rain occurs after a coat, cover with a tarp and pause until weather settles.

14 PAINTING THE INNER ARCH

Apply a coat of black high-temperature paint, or your chosen heat-resistant colour, to the inner arch.

Use a brush or spray application to ensure full, even coverage, working carefully into all curves and edges.

Allow the paint to dry completely before proceeding to the next step.

15

CURING YOUR OVEN

See our 'Curing Guide' for more details)

WHY CURE?

Curing your oven Is an Important process as newly built ovens contain moisture from the concrete, refractory materials, and construction process. Curing slowly releases this moisture, which strengthens the oven and helps prevent cracking. Proper curing ensures your oven remains durable and long-lasting. Small hairline cracks are normal and expected; we typically only consider cracks of 2mm or more to be significant.

HOW TO CURE YOUR PIZZA OVEN

Curing involves building a series of gradually larger fires over 5-7 days, starting at a low temperature. At the end of every cure make sure you place the door on the oven to seal the dome. The key is to go low and slow—this prevents thermal shock, which can cause excess cracking. Gradually increasing the heat allows your oven to dry evenly and strengthens the structure for long-term use.

REST YOUR OVEN

Let the pizza oven sit for at least 7 days after building to allow the refractory materials to set properly.
Light rain during this time is not a problem—moisture can help strengthen the refractory naturally. After one week, you can begin curing your oven.

PREPARE FOR CURING

5 curing sessions are required but not necessarily over consecutive days but should be completed with 10 days.

PERFORM THE CURES

Cure 1	Cure 2	Cure 3	Cure 4	Cure 5
< 100°C	< 100°C	< 150°C	< 250°C	< 350°C
🔥	🔥	🔥	🔥	🔥
4 - 5 Hours	4 - 5 Hours	4 - 5 Hours	4 - 5 Hours	4 - 5 Hours

MONITOR THE DOME

How to Know When Your Oven Is Fully Cured and Ready to Cook

During curing, the internal chamber (dome) will turn completely black from soot. This soot will gradually clear over successive cures. On the final cure, the dome should be completely clear with no visible black soot.

At this stage:
Move the fire to one side of the oven. Keep a large fire burning so the flames reach the centre of the oven.

The dome temperature should reach between 350–450℃, indicating your oven is fully cured and ready for cooking.

16

PAINTING YOUR PIZZA OVEN - OPTIONAL

if desired after the curing process has been completed, you can now paint the external shell of your oven the desired colour.

TIPS & RECOMMENDATIONS

WATER / MOISTURE

Water or moisture can seriously damage your oven and reduce its efficiency—for example, it may take much longer to reach full operating temperature when lit. To prevent this, keep the oven dry until it has been fully rendered and sealed. The front arch should also be protected from water until it is painted.

Exposure to water over time can cause structural and functional problems in your oven.

If the oven becomes very wet, you will need to repeat the curing process, gradually drying it with low, slow fires over several days. Avoid building a large fire in a wet oven, as this can cause thermal shock, leading to large cracks and compromising the oven's integrity.

CRACKS

It is completely normal to see some hairline cracking in your oven, in fact we can guarantee it, so don't let the cracks cause concern. This cracking is normal and there's nothing that you can do to prevent it. What's important to know is that they won't affect the performance of your pizza oven, as they are just there as thermal stress relief.

If you get a large crack in your mortar (over 2mm width) then you can repair your oven with additional mortar mix to fill the cracks. This is however rare and is usually due to the oven being over-heated early in the curing stages.

If you do choose to use a roll on acrylic render after your oven is cured, this will cover any external hairline cracking in render and it will expand and contract with your oven as it heats up and cools down.

COVER YOUR OVEN

if your oven is exposed to the elements, always cover it when not in use to keep it dry. This will maintain the intergrity and longivity of your pizza oven. You can find our range of oven covers on our website.

During warmer months, a small amount of moisture in the oven is generally not a problem, provided it doesn't get thoroughly wet. Any absorbed moisture will evaporate during your next firing. In fact, one of the best ways to maintain your oven—after keeping it covered—is to use it regularly!

TIPS & RECOMMENDATIONS CONT.....

WATERPROOFING YOUR PIZZA OVEN

Waterproofing your pizza oven is simple and can be done at home—but always follow safety precautions when working with any sealant or paint.
Important: Never apply any sealers until your oven has been fully cured and thoroughly dried. We recommend cooking in the oven a few times first, which allows any small settling cracks to appear - even if you follow one of these options, we still recommend you purchase a cover to protect your oven from the elements.

Option 1: Water-Based Acrylic Roll-On Render
This is a thick, textured paint that, once applied in two coats, prevents water from penetrating the dome. It is water-resistant, flexible, and available in a variety of colors and textures. The material expands and contracts as your oven heats and cools, helping to minimize cracks. It also fills and covers small cracks that may appear after curing.

Option 2: Concrete Water Sealers
If you prefer not to use acrylic render, you can use a concrete water sealer. There are several products available, but we recommend Bondcrete, which can be found at Bunnings and other hardware stores. Apply this only after your oven has been cured and used a few times. For best results, we suggest reapplying annually. Ensure the oven is completely dry before applying.

Application Instructions:
- Mix 1 part Bondcrete with 4 parts water.
- Paint the mixture onto the oven surface, making sure to fill all cracks and joins.
- For larger hairline cracks, use undiluted Bondcrete to fill them.
- The mixture will appear milky at first but will dry clear.

Following these steps will help protect your oven from water damage and keep it performing at its best for years to come.

JALANDO PIZZA OVENS

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