NECTRE
WOOD STOVES

WOOD COMBUSTION HEATING

Installation & Operating Instructions

Baker's Oven
Model: NBO

CE

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Tested to EN12815

Introduction

Thank you for purchasing a Nectre Baker's Oven. The Baker's Oven combines a wood-fuelled heater with an oven and cook top. The oven will cook anything from crispy bread to succulent roasts. The cook top takes four large saucepans and features two removable rings for wok-style cooking.

Best of all, your Baker's Oven will spread warmth throughout your kitchen and living area while it cooks.

Technical Data

Please refer to attached technical drawing for other dimensions not listed here.

Specification	**Baker's Oven**
Nominal heat output	10.6 kW
Total efficiency	77.3%
Mean CO Emission (at 13% O_2)	0.55%
Mean flue gas temperature	274.9°C
Flue mass gas flow	8.483 g/s
Minimum flue pipe diameter	150mm / 6 inches
Minimum flue draft	1.0 – 1.2mm w.g.
Appliance size (W x D x H)	550 x 535 x 825mm
Oven size (W x D x H)	360 x 340 x 280mm (34 Litres)
Firebox size (W x D x H)	360 x 340 x 395mm
Total weight of appliance	120kg

Room Output

In normal operation the Baker's Oven can be controlled using the primary air vent to produce the following heat output range:

Room heat output: **5.5 kW – 10.6kW**

Operating Instructions

The Nectre Baker's Oven has the firebox at the top and the oven below. Heat is directed around the oven by closing the damper located next to the flue outlet on top of the stove. The damper is closed when the lever is in the up position.

Necessary air for combustion is provided via two air controls. Primary air is provided via an adjustable spindle located on the front of the firebox door, while secondary air enters via an inlet at the top of the door seal allowing the air to 'wash' over the glass door keeping it free from sooty deposits.

Before lighting your Baker's Oven ensure that the damper control is open (the control lever is in the down position).

This appliance has been developed to burn wood only. Burn only dry, well-seasoned hardwood such as Ash, Beech or Oak, which should have been cut, split and stacked for at least 12 months, with free air movement allowing it to dry out. Burning wet or unseasoned wood will create tar deposits in the stove and chimney/flue and will not produce a satisfactory heat output.

Lighting the Stove

- To light the stove, first make sure that the damper is open (down position) and the primary air spindle control on the firebox door is fully open.
- Light a fire using finely chopped wood and establish it so that it has plenty of flames. As soon as the fire is going briskly, close the damper. This directs the flames and flue gases down the sides and around the oven.
- Keep the fire burning briskly until the oven is up to temperature. NOTE: the temperature gauge on the oven door is only a guide to the temperature in the oven. We have found that when the gauge is reading around 100°C, the internal oven temperature is more like 180°C. It is a good idea to use a meat thermometer when cooking.
- To add more fuel to the fire, it is advisable to open the damper (down position) before opening the door. When the firebox is loaded and the door shut, then close the damper (up position). This will avoid having smoke come into the room.
- Typically the refuelling period is approximately every 60 to 90 minutes.

Operation when Cooking:-

Always have a brisk fire using small pieces of wood that provide plenty of flames. This type of fire will maintain the oven temperature. The hot plates may be removed using the hot-plate tool provided to enable wok-style cooking directly on the fire.

Operation when Heating:-

1. **Increase Heat Output**

To increase the heat output from the fire, use larger pieces of wood, ensure the damper is in closed (up position), and use the spindle tool to open the primary air inlet until the level of burning is reached.

With the primary air spindle fully open, the fire will burn very hot, and the wood won't last long. More importantly the unit may over heat. In the event of over heating completely close the primary air spindle until the level of burning is reduced to a safe level.

2. **Background heating with longer Burn Time**

For background heating and increased burn time, use larger pieces of wood, ensure the damper is closed, and using the spindle tool reduce the primary air inlet until it's almost closed. In this mode, the wood will burn for extended periods of time, however, the oven temperature will drop.

Important Notes

- First time the fire is lit, the appliance will give off some fumes while the paint cures.
- The surfaces of this appliance get hot when the fire has been lit. Please ensure that children, the elderly, and the infirm are made aware of this.
- Do not use flammable liquids or aerosols to start or rekindle the fire.
- Never burn woods containing paint, glue, or any other chemicals.
- Do not use the fire as an incinerator only burn appropriately seasoned wood.
- Do not overload the appliance with wood.
- Do not operate stove with the firebox door open.
- Do not operate the appliance with a cracked glass.
- Ensure adequate ventilation as described in the installation instructions.
- This appliance should be maintained and operated at all times in accordance with these instructions.
- Occasional local weather conditions may cause downdraught in the flue and cause the appliance to emit fumes. In these circumstances, the appliance should not be used. This can generally be resolved by extending the flue or fitting a specialist cowl.
- In the event of a chimney fire, close the primary air spindle control to suffocate the fire.
- After a prolonged period of no use, the chimney and the appliance should be checked for blockages prior to lighting.

Maintenance

No unauthorised modification of this appliance should be carried out.

The Baker’s Oven requires little maintenance, however the flue and oven base should be periodically checked by a competent engineer for soot/creosote build up that may require cleaning. Inside the oven is a removable base plate. This plate should be lifted out and any soot underneath removed. The hot plates can also be removed for cleaning. The glass on the firebox and oven doors can be cleaned with steel wool and water. It is not advisable to use a cleaner that contains caustic chemicals, and abrasive cleaners.

A metal strip at the top of the firebox door can be adjusted in and out with the allen key provided. The strip should be set leaving a gap of 1mm between the edge of the strip and the front of the Baker’s Oven. This gap provides the secondary air supply.

The fire operates best when there is a certain amount of ash left in the bottom of the firebox. When removing excess ash, ensure to leave a minimum 10mm thick bed of ash in the bottom of the firebox.

Replacement components

Recommendation
Only replacement parts authorised by the manufacturer may be used.

Firebricks
In normal use, these can last for many years. It is possible however, to crack them if logs are continually jammed against them or if frequently struck with a poker.
Check periodically for seriously cracked firebricks, which can be replaced with new ones available from your dealer.

Glass Door Panel
The door glass is resistant to extreme temperatures. However, on occasion it can crack if for example closing the door against a protruding log. If the glass has cracked, do not operate the stove until the glass has been replaced with a new one available from your dealer.

Door Rope
The door seal is a braided heat resistant rope. If it detaches from the groove in the door, or needs to be replaced, it can be fixed using silicone.

Firebox side shields
The internal sides of the firebox are protected by 6mm thick steel sheets. Over time these can burn through. In such an event, new ones can be sourced from your dealer, and re-hung inside the firebox.

Key Environmental Considerations

To minimise the impact on the environment the following issues need to be considered when proposing to install the Baker's Oven:

- Local authorities (Councils) must be consulted for any restrictions that may apply to the use of wood burning appliances in certain areas such as smoke free zones.
- The appliance must be correctly sized to suit the space and necessary clearances must be strictly adhered to.
- The appliance and flue system must be correctly installed to the current regulations (local, national and European) in force at the time.
- The appliance must be correctly operated.
- The appliance and flue system must be properly maintained.
- It is also important to ensure that the dwelling to be heated is insulated and is as energy efficient as is practical.
- Only wood must be used when firing the appliance.

The selection, installation, correct use and maintenance of the appliance and flue system are discussed in more detail in the following sections of these instructions.

Installation

IMPORTANT – The installation of the Baker's Oven must comply with current local, national, and/or European regulations applicable to wood burning appliances.

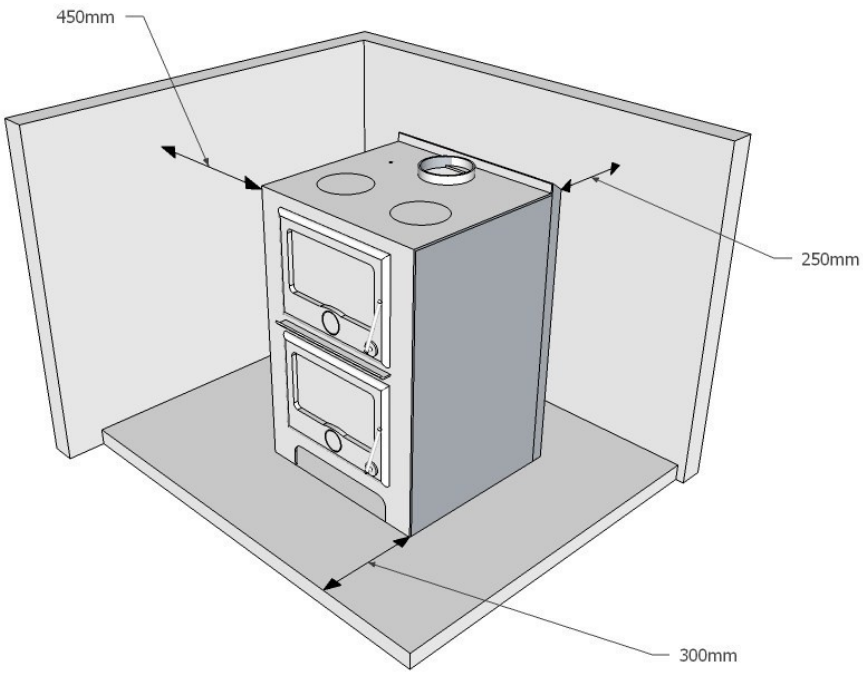
Clearances
The clearances from the appliance to combustible materials must not be less than the following:-

- Rear 250 mm
- Side 450 mm

If the appliance is placed in the corner of a room, the minimum clearance from the corner edge of the appliance to the nearest combustible surface is 250mm.

If the walls adjacent to the appliance are a non-combustible material and minimum 75mm thick, then the minimum clearance is 25mm.

Never store any flammable materials near the stove.



Hearth Requirements
The hearth on which the Baker's Oven is to be placed should be constructed of non-combustible material in accordance with Building Regulations Approved Document J (Section 2 – Hearths).

The hearth should extend a minimum 300mm in front of the Baker's Oven.

Flue / Chimney Requirements

IMPORTANT - The stove must not be installed into a chimney that serves any other heating appliance, i.e. must not be fitted as part of a shared flue.

The flue must meet the following conditions:-

- This appliance must be installed into a ‘Class 1 Chimney’. If there is no existing chimney, then an approved solid fuel, factory built, prefabricated block type or a twin walled, stainless steel flue can be used. Get advice from a qualified chimney installer e.g. a HETAS registered engineer.
- The flue diameter to fit the appliance must be 150mm / 6 inches.
- To perform satisfactorily, the chimney/flue height must not be less than 4.6 metres from the base of the appliance.
- The top of the flue pipe must be a minimum of 600mm above the ridge of the roof if the flue penetrates the roof within 3 metres of the ridge. Or if more than 3 metres horizontally from the roof line, have a minimum height of 1 metre.
- If the upward draft is insufficient or periodic down drafting occurs and the appliance smokes or only burns slowly, it can be resolved by extending the flue or fitting a specialist cowl.
- All flue pipe has to be suitable for solid fuel and fitted in accordance with building regulations, whilst complying with local and current legislation and manufacturer’s instructions.
- Both the chimney and flue must be accessible for periodic cleaning.
- If the appliance is fitted into an existing chimney, ensure that it is sealed at the base of the chimney with a register plate and fit the flue pipe up through the plate and continue the flue until it terminates outside the chimney in accordance with Building Regulations Approved Document J.

Ventilation

The burning of wood involves oxygen consumption. It is important that the room in which the appliance is installed should be sufficiently ventilated.

Insufficient ventilation may disrupt the combustion process and cause the smoke flow through the chimney to be interrupted, which may lead to smoke emissions into the room.

The Baker's Oven requires ventilation in accordance with Building Regulations Approved Document J. If necessary, you can install a ventilation grill to provide a constant flow of fresh air in the room. This precaution is particularly necessary in well-insulated rooms with mechanical ventilation. Be sure that the ventilation grill is not liable to any form of blockage.

Ensure not to use other air-consuming appliances, such as heaters, cooking hoods, bathroom ventilators, in the same room or in the house while the stove is burning, or make sure to have an extra ventilation grill installed for these appliances.

Lighting the Baker's Oven

Prior to lighting the Baker's Oven, check the metal strip at the top of the firebox door. The strip should be set leaving a gap of 1mm between the edge of the strip and the front of the Baker’s Oven. This gap provides the secondary air supply and can be adjusted in and out with the allen key provided. If this gap is set too wide, the burn rate of the stove will be difficult to control. If the gap is set too close, the air-wash over the glass will not function correctly.

Warranty

Pecan Engineering Pty. Ltd. warrants this stove to be able to operate under normal use and service and within 5 years from the date of the original purchase on the terms herein shall repair or replace without cost to the original customer any part thereof which shall be returned to our factory, transportation charges prepaid and which our inspection shows would prevent operation. This warranty does not apply to firebricks, firebox shields, door seal, glass, nor discolouration of the surface or tarnishing of gold/silver fittings all of which require normal service to maintain them.

Under the terms of this warranty, Pecan Engineering Pty. Ltd. assumes no responsibility for the labour costs involved in removing or replacing the stove. Nor shall Pecan Engineering Pty. Ltd. be liable for any injury, loss, or damage (direct, indirect or consequential) arising out of the use or inability to use the product, or its removal and replacement. All other stove warranties, expressed or implied are excluded to the extent possible to law. Any claims against Pecan Engineering Pty. Ltd. must be brought within Australian Jurisdiction.

The Retailer does not have the authority to alter this warranty.

For further information, contact:

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