

# ESSE Woodfired Cooker

10/09

INSTALLATION & COMMISSIONING INSTRUCTIONS

MODEL: WN



THIS APPLIANCE MUST BE COMMISSIONED BY A HETAS REGISTERED ENGINEER OR A COMPETENT PERSON.  
THE WARRANTY CARD MUST BE RETURNED TO ENSURE GUARANTEE VALIDITY



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## GENERAL SAFETY INFORMATION

In the UK, the installer has a responsibility under the Health and Safety at Work Act 1974 to provide for the safety of persons carrying out the installation. Attention is drawn to the fact that fire cement is caustic and hands must be washed thoroughly after use. The appliance is heavy (max 350kg) and care must be taken during handling. Although the appliance does not contain asbestos products, it is possible that asbestos may be disturbed in existing installations and every precaution must be taken.

These instructions give a guide for the installation of the appliance but in no way absolve the installer from responsibilities to conform to British Standards, in particular **BS8303** and **BS6461**, relating to the installation of solid fuel appliances. All local regulations including those referring to national and European standards need to be complied when installing this appliance.

Outside of the UK, the installer must comply with all local, national & European standards that apply.

Any adjacent combustible material should be far enough away from the appliance so as not to raise 60°C above the room temperature when the appliance is in operation. If necessary, any adjoining walls should be protected from the effects of heat. Clearances from combustible materials are 20mm from the sides and 40mm from the rear.

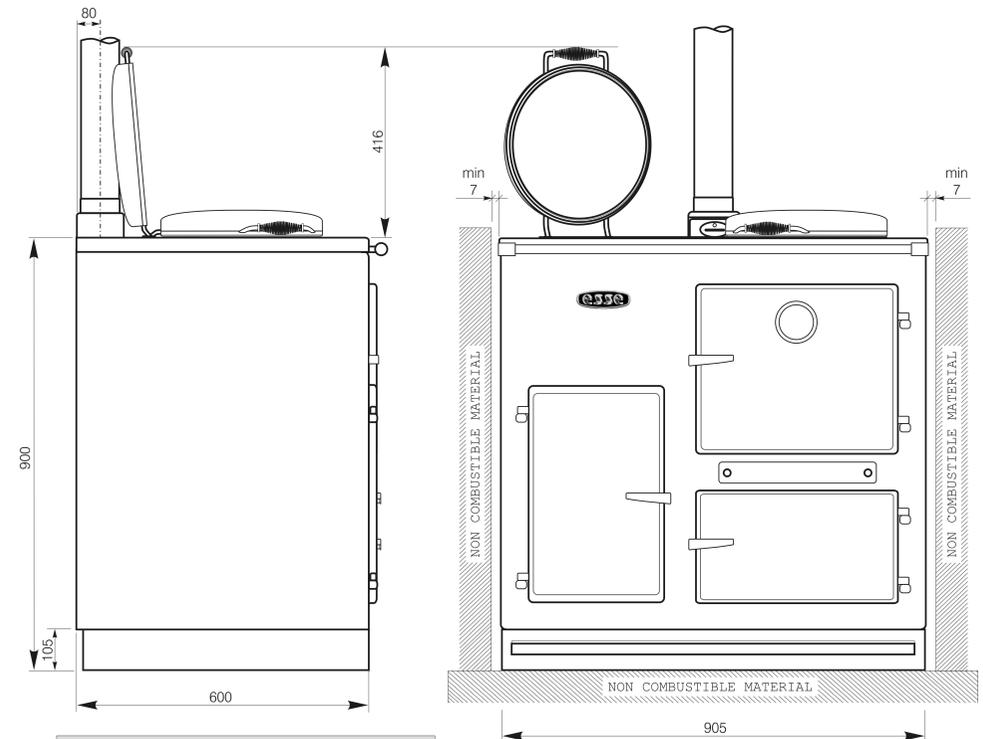
It is also recommended that a smoke alarm and appropriate fire safety equipment such as a fire extinguisher and fire blanket are installed in the kitchen as a safety precaution.

An adequate air supply for combustion and ventilation is required. As this cooker does not exceed 5.0kW nominal heat output (refer to building regulations document J). However, in certain circumstances a purpose provided air vent may be necessary – for example, small or tightly sealed rooms. Air openings provided for this purpose must not be restricted.

**Warning:** This appliance is not suitable for installation in a shared flue system

TECHNICAL INFORMATION	
Nominal heat output	5.0kW
Combustion air requirements	29m <sup>3</sup> /h
Weight of appliance	370kg
Minimum chimney draught	12Pa
Mean flue gas temperature	170°C
Flue gas mass flow	9.68g/s

Fig.1 – Cooker Dimensions



## CHIMNEY AND FLUE INFORMATION

The successful operation of the cooking appliance relies on the adequate performance of the chimney to which it is connected. The following chimney guidelines must be followed:

- It should have an internal cross section of no less than 320cm<sup>2</sup> (200mm dia.) (If a flue liner is used, it should be 150mm (6'') diameter and be made of suitable material for burning wood). The flue diameter is 150mm (6'').
- Voids in the chimney should be avoided, as these will prevent a steady flue draught. The appliance flue pipe should pass beyond the narrowing of the chimney.
- Be terminated at least 1m above roof level so that the chimney does not terminate in a pressure zone.
- If the appliance is installed as a freestanding appliance, it should not support any part of the chimney.
- Be free from cracks, severe bends, voids, and obstructions.
- Be connected to this one appliance only.
- New chimneys must be in accordance with local regulations.
- The chimney must be capped to prevent ingress of rain.
- A flue/chimney access point may also be required so that the state of the chimney can be checked and any fallen soot removed.
- External flues must be insulated to prevent heat loss.
- Do not fit an extractor fan in the same room as the appliance.
- Be a minimum 4.6m high from top of the flue box to the hob chimney pot.

**Note:** The chimney/flue to which this appliance is being connected must be swept and examined for soundness prior to installation. Remedial action should be taken if required, seeking expert advice if necessary. Where the chimney is believed to have served an open fire installation it is possible that a higher flue gas temperature from a closed appliance may loosen deposits that were firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

## FLUE DRAUGHT

The chimney can be checked, before the appliance is installed, with a smoke match. If the chimney doesn't pull the smoke it may suggest the chimney needs attention.

**Note:** This test is only a guide as an apparently poor flue may improve once the appliance is installed, lit and the flue is warmed. If, once the appliance is installed there is any doubt that the chimney is providing an adequate draught, a flue draught reading should be taken.

### Flue Draught Readings

Two flue draught readings should be taken, one with the appliance at minimum firing rate and one at maximum firing rate. The flue draught test hole must be drilled in the flue pipe as close to the appliance as possible and before any flue draught stabiliser.

**Minimum reading:** The appliance should be lit and allowed to warm the flue thoroughly. Close the air slider control, thermostat control and the flue box door and ensure firebox door is fully closed. Allow the burning rate to become steady. The flue draught reading should now be taken; the minimum required is 12 Pascals [Pa] (0.05" w.g.).

**Maximum reading:** The air slider control can now be opened to allow the appliance to burn at maximum rate, and the firebox door open on the first catch. Keep the flue box door closed. Take a flue draught reading.

Ideally, the flue draught readings should range between 12Pa, 0.12mm (0.05" w.g.) and 24Pa, 2.5mm (0.1" w.g.). Any readings significantly outside this range may indicate the need for remedial action. Low flue draught symptoms: difficult to light and smoke coming into the room. High flue draught and fuel burns away very quickly.

### Flue Stabiliser

A flue stabiliser can be fitted to reduce the draught through the appliance if the draught is too high. The flue stabiliser should be fitted in the same room as the appliance and be the same size as the flue pipe.

### Positioning

The appliance should be sited on non-combustible material.

## INSTALLING THE APPLIANCE

### Flue Connection

The flue pipe used to connect the appliance to the chimney is 6" (150mm) in diameter. A 5-6" adaptor is supplied to connect to the flue box of the range.

The flue connection is on the top of the appliance, in the centre at the back.

### Important Installation Notes

1. The installation must allow access for adequate chimney sweeping and flue cleaning.
2. Avoid using bends greater than 45° to the vertical. All flue pipe sections should be as close to the vertical as possible.
3. All joints in the flue system must be effectively sealed.
4. All flue sockets must face upwards. On completing the installation of the appliance, the chimney, hearth and walls adjacent to the cooker must conform to local or national regulations currently in force. In the United Kingdom, the appropriate sections of the Building Regulations must be conformed to.
5. Air inlet grilles should be positioned so that they are not liable to blockage.
6. An air extraction device shall not be used in the same room as the appliance unless adequate additional ventilation is provided.

7. A flue cleaning door should be fitted to provide access for cleaning the flue and chimney.
8. Check the appliance for soundness of seals between casting and main components and that all supplied parts and fittings are correctly fitted.
9. Ensure the appliance is left operational and hand over the operating instructions and operating tools supplied.
10. Before leaving the installation demonstrate the operation of the appliance to the user. Explain all controls and flue way access for cleaning.

## CHIMNEY AND FLUE

Fig.3 – Chimney and Flue Performance

