

Further installation notes and advice  
for

# ECO Range T<sup>3</sup>



**Log Wood burning**  
**Thornhill Turbo Technology**  
**5 Oven Cooker**



Please retain these instructions for future reference.



All regulations are in Document J, which can be down loaded free @ [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/468872/ADJ\\_LOCKED.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/468872/ADJ_LOCKED.pdf) The following is to help you achieve these rules & regs.

There are 4 areas to check prior to delivery:

- 1: Floor
- 2: Chimney
- 3: Air supply
- 3: Cupboards and work tops
- 4: Electric supply for electric ovens and hob

## **Floors:**

The floor/hearth under the cooker must be constructed on non-flammable material at least 20mm thick.

The floor should be at the same level or higher than the rest of the floor.

If the floor is to be tiled, this should be done first, not after the cooker is in place as it is lower than and impossible to get out/move without damaging tiles.

If the floor is to be wood or other flammable material then the area under the cooker should be tiled or a slab of stone laid, so that it ends up slightly higher than the surrounding floor and should extend 9" (225mm) in front of the cooker.

**A good minimum size for the hearth area is 1,800mm wide by 900 deep.**

## **Chimney/Flue**

The fire box on the 5 oven cooker can be on the Left or Right hand side. Use the the configurator on the website to see what it would look like. You can then see the differences.

Th flue will be 500 from the side you have the firebox, and the fire box side is hot, so needs greater clearance to flammable materials/cupboards, that's the reason for making it either way round.

## **Flueing:**

Any chimney should be lined with a suitable 6"/150mm liner, terminating at a register plate. The liner should than have a 'Register plate adaptor' at the bottom ready to take the virtuous enamel flue pipe.

We recommend Flue Supplies, see [www.fluesupplies.com](http://www.fluesupplies.com) 6" Register plate adaptor.



The top of the chimney should have a Bird guard/rain cap terminal.

If you are in a windy area or surrounded by tree or high building, downdraught might be a problem, so we recommend Vedette cowls, not the spinning ones.

Stone fireplace with brick chimney lined with 6" (150mm) flex. liner finished with a register plate adaptor. The gloss flue pipe slips over the outside of this. When finished it please email the height for the plate to the floor, so we can work out what flue pipe to bring.

If it is a twin wall stainless chimney, then there should be an appliance adaptor at the bottom which will have a similar spigot hanging down.

### **Golden Design Rules:**

- a) No more than 2 metres of single skin flue pipe should be used (it causes the flue gases to over-cool and lose their lift).
- b) No more than 4 x 45-degree elbows should be used, in the flue and the chimney.
- c) Distance to flammable materials (plaster board is cardboard backed and flammable): Chimney 60mm, flue pipe 3 x diameter, so 450mm on the wood cooker.
- d) A soot door/sweeping door must be provided, in the first section of flue pipe or at the first bend.
- e) An adjustable section must be used to enable removal of the flue pipe for maintenance. Twin wall must **NOT** be built up from the appliance, using the appliance as support.

### **Air Supply:**

All hydrocarbon burning appliances require an oxygen/air supply.

Under Building Regs Part J in the UK, an air vent is required for older properties built before about 2005 of a minimum of 30mm diameter. Properties that have been 'improved' with extra insulation and draught proofing of windows and doors do require a vent of 60mm diameter minimum.

If the chimney/cooker is to be fitted on an external wall the air supply can be taken straight from the outside. A 3" (80mm) diameter hole needs to be drilled in the correct place, 138mm above the hearth and the cooker 'manifold/extension air pipe' kit purchased and fitted. A proprietary grille is supplied with the kit, if not used an air brick or non-closing vent should be fitted to ensure the air supply is not blocked in any way.

The manifold method of supplying air is always to be preferred as there will be no draught in the room especially when the cooker is not in use.

If the cooker is not on an outside wall or the direct air supply method cannot be used, an air vent must be supplied in the room in which the cooker is fitted.

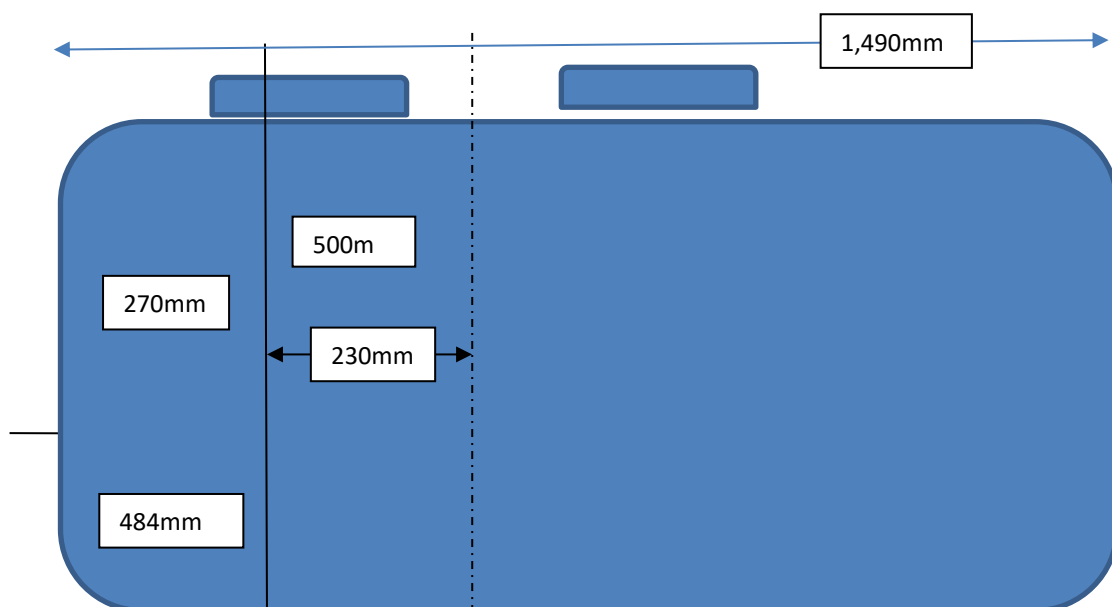
Only permanently open vents can be used and consideration should be given to draught when the cooker is not in use. Site these vents carefully. The vent covers should comply with Building Regs Part J and should be sited where they cannot be blocked.

Extractor Fans:

These suck air out of the room and cause a negative pressure in the room so they must have their own air vent to counter this. Even when the air is taken directly from the outside using the manifold system a vent will be required for any extractor fan fitted in the same room or adjacent rooms. Great care must be taken with restaurant/café kitchens which have professional levels of extraction.

Air vent requirement:	
Pre 2005 house	550mmsq vent required. (30mm diameter)
Post 2005 houses	An air vent is required (3,300mm sq.) or direct connection to outside.
Extractor fan	Air vent required to match fan.
Manifold Kit	100mm diameter

**Left hand fire box.**



This diagram shows the position of the air inlet on the wood 5 oven cooker.

This diagram is **looking from the front and is for the firebox on the Left hand side electric ovens to the right**; the air inlet is behind the fire box on the left hand side of the cooker.

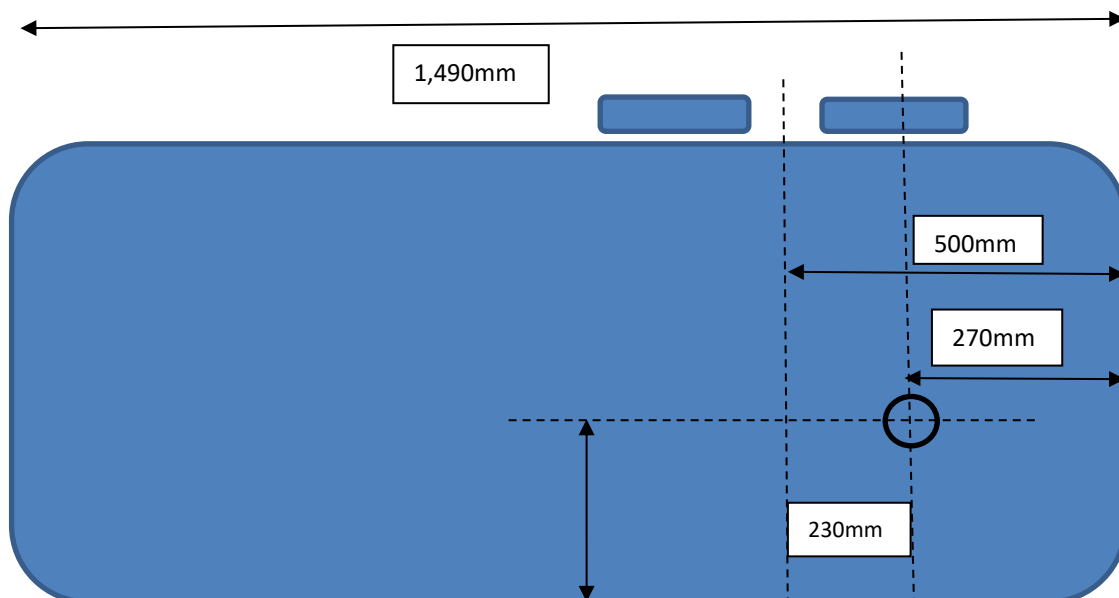
If your house is old, then you only need a 30mm diameter vent, unless you are going to install an extractor fan.

If your house is new, or you have fitted a lot of insulation and double glazing then you require a 60mm minimum vent.

If the fire is on an outside wall you can fit the vent directly behind the fire and reduce drafts in the home.

The hole should be core drilled, and sleeved with a tube. Leave the tube sticking out into the room 80mm-100mm.

### **Right hand Fire box**



This diagram shows the position of the air inlet on the wood 5 oven cooker.

This diagram is **looking from the front and is for the firebox on the RIGHT hand side electric ovens to the Left**; the air inlet is behind the fire box on the left hand side of the cooker.

If your house is old, then you only need a 30mm diameter vent unless you are going to install an extractor fan.

If your house is new, or you have fitted a lot of insulation and double glazing then you require a 60mm minimum vent.

If the fire is on an outside wall you can fit the vent directly behind the fire and reduce drafts in the home.

The hole should be core drilled, and sleeved with a tube. Leave the tube sticking out into the room 80/100mm

## **ELECTRIC SUPPLY**

A 40-amp cooker supply is required for the electric ovens, grill and induction hobs. A cooker switch should be located in a convenient position, but not so you have to lean over a hot cooker to turn it off.



A 6mm Twin & Earth cable should lead to the right side of the cooker (left hand firebox). The cable should lead to the left side if you have a right hand fire box.

The cooker will come with a short length of 6mm cabling, so if you can arrange a cooker outlet on the wall nearby (usually about 3" off the floor) the cooker can be connected to this.



## **Cupboards and work tops.**

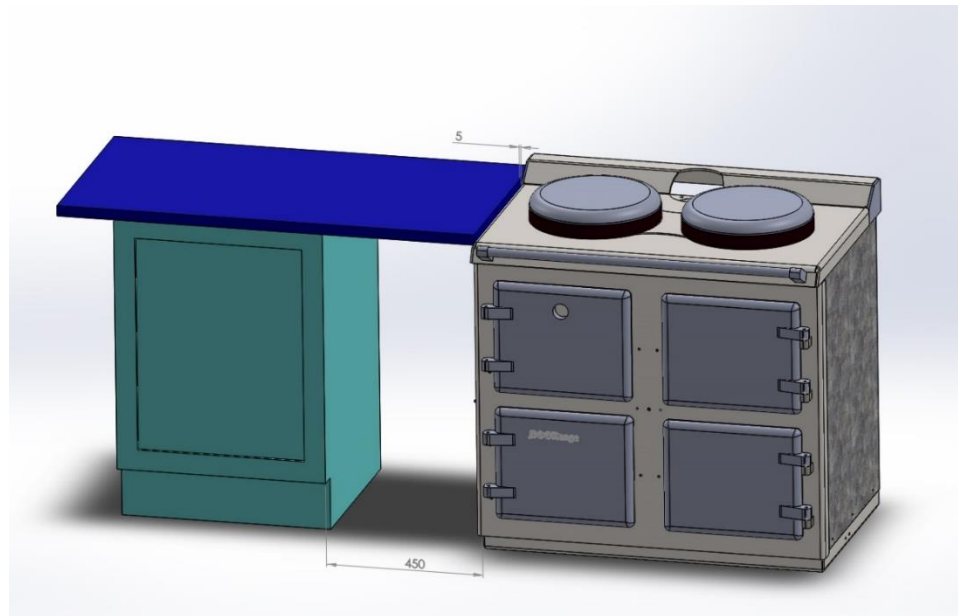
The 5 oven wood fired range is a wood burning stove with oven designed to be very hot, with the oven 200C and the hot plate around 250C. So there is a fire risk and the cooker must be installed the same as a wood stove.

This mean there must be no flammable material near the cooker sides or back unless they are insulated with fireproof insulation.

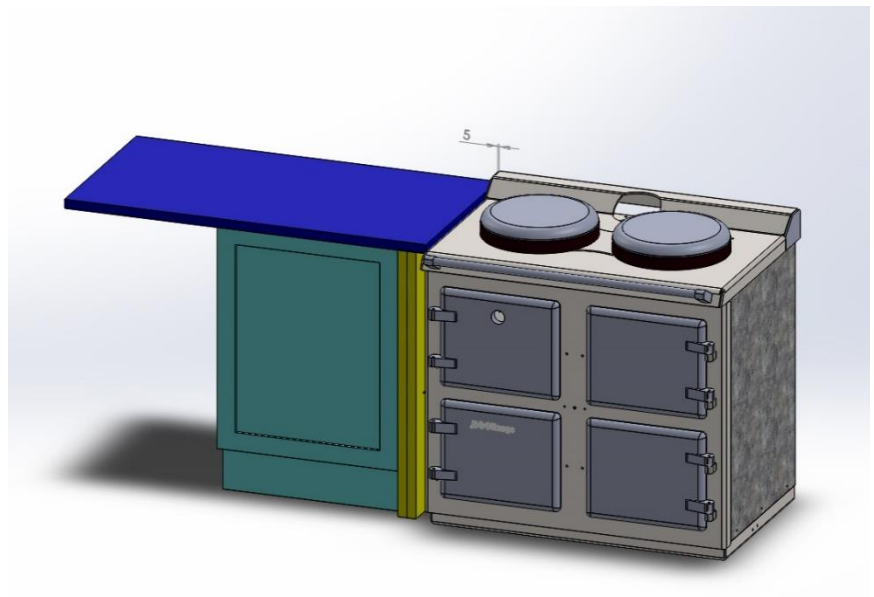
The testing for CE certification measures the distance off the back and LHS to flammable materials and so the nearest a cupboard should be to the left is 4" (100mm) and from the back wall 2" (50mm). The right-hand side is not a problem as the ovens are there already giving you 50mm. (Left hand side if you have the fire box the other side)

The gap of the firebox side can be reduced to 80mm if 40mm of insulation is used.

If the worktop is Granite or similar it can be taken right up to the cooker, but leaving at least a 5mm gap for expansion.



The work top can be taken up to the cooker still, but leave a minimum 5mm gap for expansion. If the work top is Formica, wood or other flammable material, you should leave the 450mm gap.



Note: It is because of this air gap that the 5 oven wood cooker is made with a left or a right hand firebox.

#### Left Hand Fire Box.

With the fire box on the Left Hand Side, the chimney 500mm from the Left Hand Side and the electric ovens on the Right Hand side

#### Right Hand Fire Box

With the fire box on the right hand side, the chimney is then 500mm from the Right Hand Side, the electrics are then on the left hand side.

‘Thornhill Turbo Technology’ is the patented clean burning ‘engine’, used under licence in these cookers.

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