

## LITTLE THURLOW SMOKE CONTROL ECO MULTI FUEL STOVE

## **INSTALLATION AND USER INSTRUCTIONS**

Read these instructions carefully before installation and use. These instructions should be retained by the user for future reference.



The Little Thurlow Smoke Control Eco stove has a nominal heat output of 5kW., and a weight of 61 kg. The flue gas mass flow is 4.3 g/s for wood logs, 3.7 g/s for solid fuel. The mean flue gas temperature directly downstream of the flue spigot at nominal heat output is 281 degrees C (wood) 276 degrees C (solid fuel). The stove is designed as a closed appliance and is capable of intermittent operation. Tested Net efficiency 79.0% (wood), 80.2% (solid fuel).

The stove must be installed to comply with Health and Safety at Work Act 1974, and to all local Building Regulations, including those referring to National and European standards. These need to be complied with when installing the appliance. Ensure that the flue pipe diameter is not less than the 125mm diameter outlet on the appliance.

There must not be an extractor fan fitted in the same room as the Little Thurlow Smoke Control Eco.

If there is a possibility of disturbing asbestos during the installation it is necessary to take the appropriate steps to protect the installer.

Fire cement is caustic and protective gloves should be worn.

The chimney must be swept and examined for soundness and suitability before the stove is installed. Remedial action should be taken if required, seeking expert advice if necessary. Where the chimney is believed to have previously served an open fire installation it is possible that the higher flue gas temperature from a closed appliance may loosen deposits that were previously 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.

CO Alarms:-Building regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions.

<u>Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.</u>

#### The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. In Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014. Similarly, In Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016. In Wales appliances are exempted by regulations made by Welsh Ministers.

Further information on the requirements of the Clean Air Act can be found here: <a href="https://www.gov.uk/smoke-control-area-rules">https://www.gov.uk/smoke-control-area-rules</a>

Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

The Little Thurlow Smoke Control Eco stove has been recommended as suitable for use in smoke control areas when burning dry seasoned wood logs (less than 20% moisture),

## **UNPACK THE STOVE**

Carefully cut the straps and lift the box up over the top of the stove. Remove the packing from round the outside of the stove, it is important to protect the paint finish from any damage, water, dust or fire cement. Using a 17mm spanner, remove the two bolts attaching the stove to the pallet, and then replace the bolts into the stove legs, these are used as levelling bolts if required. Open the stove door and remove the packaging from inside the stove, there is some behind the baffle, and the heavy one inside the stove contains the spigot and blank for the flue outlets. Remove the bag inside the ashpan, this contains the operating tool, instructions, stove handle cover and a pair of stove gloves.

## **CLEARANCES**

The Little Thurlow Smoke Control Eco Smoke Control needs to be sited next to and on a non-combustible surface. A recommended minimum clearance of 150mm at the sides, and at least 300mm above and 50mm from the back of the stove body will allow air circulation and not impede the performance of the stove. If it is necessary to site the stove near a combustible surface a minimum of 350mm at the back, and 450mm at the sides must be maintained. It is a requirement that this appliance is installed on a solid, level, non-combustible hearth conforming to current Building Regulations. This appliance has been tested for hearth temperatures and the maximum temperature was 73 degrees C so is also suitable for a 12mm hearth.

#### **INSTALLATION**

A minimum flue draught of 20 Pa is required for nominal heat output. As referred to in document J of the Building Regulations, no purpose provided ventilation is required for the Little Thurlow Smoke Control Eco stove. It is important that any inlet grilles are so positioned that they are not liable to blockage. The Appliance must be installed on a floor with an adequate load-bearing capacity. If an existing construction doesn't meet the prerequisite, suitable measures (e.g. load distributing plate) shall be taken to achieve it. It is important that any inlet grilles are so positioned that they are not liable to blockage. It is essential that the stove has adequate air supply for combustion and ventilation. Apertures provided for this purpose shall not be restricted.

The Little Thurlow Smoke Control Eco requires a Class 1 chimney of its own, a shared chimney will not be suitable. The chimney must be sound, free from leaks and swept before installation. If the chimney requires lining, a lining must be used which is suitable for wood and solid fuel, with a minimum of 125mm internal diameter. A metre of flue pipe should be used from the stove before the chimney lining, and the lining must be installed to manufacturer's instructions. Alternatively, if there is no chimney, then an insulated stainless steel flue may be used to BS EN 15287-1:2007+A1:2010 with a minimum of 125mm internal diameter, and must be installed to manufacturer's instructions and to relevant Building Regulations. The length of the chimney or flue must be at least 4.5 metres from the top of the stove, and must finish in a down draught free area. A stove must not be installed into a room where there is an extractor fan, or fumes could be pulled down the chimney.

It is essential to provide a facility for sweeping the chimney, and this may be done by installing a soot door in the brickwork, or providing an access plate in the register plate or flue pipe. With the flue fitted from the top of the stove, the baffles can be removed to sweep up through the stove.

Connect the stove to the chimney using vitreous enameled flue pipe from the top of the stove. Make sure that all joints and connections are well sealed.

When installation is complete, allow a suitable time for fire cement and mortar to dry, light a fire and make sure all joints are sealed. The stove is painted with a high temperature paint finish. The paint will be cured when most surfaces have reached about 246 degrees C. During this burn off period you will notice an unpleasant smell; you should not touch or wipe the paint during this period as it will be soft and may mark. The room should be well ventilated, children and pets should be kept away. Do not use water to clean the stove, either before or after it is cured.

## **LIGHTING THE STOVE**

When ready to light the stove for the first time, make sure that everything is removed from the ashpan, and open the spin wheels at the bottom and top of the stove. First burn some newspaper in the stove, with the door closed, to warm the flue, as there may be down draught initially. The temperature in the flue has to be increased to change the down draught to up draught. If down draught persists, try burning a blow torch in the stove, facing the flue for a minute or two. If there is a soot door fitted, try warming the flue through the soot door. If the stove has not been lit for a while, the chimney should be checked for blockages before lighting.

When ready to light the stove, put a small piece of fire lighter, about 25mm square is big enough, then light with a match, then add small sticks.

Taking care not to smother the flames. When the sticks are well alight add small logs, gradually increasing the size.

Once the fire is well established and hot the bottom spin wheels can be closed.

And the fire can be controlled from the top air controls, without having to bend down. The spin wheels do become hot, so use a glove or the tool provided to open or close the air vents, they only need moving slightly to open or close the air gap. A stove handle cover is included with the stove – place the black cover over the handle when opening and closing the door, then remove and leave near the stove.

The appliance will give more heat output with increased air supply, so the controls can be adjusted to increase or decrease the burning rate of the fuel, as desired.

This appliance is hot whilst in operation.

Keep children and furniture a safe distance away.

In the presence of children, elderly or infirm people a fireguard should be used. The fireguard should be manufactured in accordance with BS 8423:2002 – Fireguards for use with solid fuel appliances.

User warning - parts become very hot while the stove is running so should not be touched with bare hands. The special operating tool, stove handle cover and a pair of gloves are provided for operation of the hot stove.

To close the stove down, close the bottom spin wheels and the top spin wheels (to their stop). Depending on the fuel and the amount of draught in the chimney, it may be necessary to leave the top vents open slightly to allow the glass to burn clean.

DO NOT OPEN THE BOTTOM SPIN WHEELS WITH THE TOP ONES CLOSED, THIS WILL DAMAGE THE GLASS.

To burn the glass clean, make a good fire to get the stove hot, close the bottom vents and leave the top spin wheels open.

The appliance is designed to operate efficiently with the fire door closed. The door should be kept closed at all times, except when refueling or removing ashes.

#### TURBO BURNER

There is a turbo burner which brings in air (not pre-heated), allowing plenty of oxygen into the rear and top of the stove, thus burning off gases which normally do not ignite. This gives the stove more efficiency and better combustion, less pollution. The vent for the Turbo Burner is positioned on the left hand side of the stove, near the back.

## **TO RE-FUEL THE STOVE**

Do not over fill the firebox, maximum filling height 100mm. The maximum amount of fuel specified should not be exceeded, overloading can cause excessive smoke.

#### Refueling on to a low fire bed

When wood is added to the stove, open the stove door gently, using the stove gloves. Put more logs on the stove and close the door. The primary air vents (i.e. the bottom vents)

#### MUST BE OPENED 4 TURNS FOR NO LONGER THAN 2 MINUTES.

Do not over fill the firebox. After the maximum two minutes, close the bottom spin wheels and then close the top spin wheels as much as required. If the fire has burnt low you will need to use sticks to re-establish the flame before re-fueling with logs, to ensure no smoke is produced by stalling the fire with large logs. The bottom air vents should be opened to maintain flames until the fire is well established and then closed.

## **Fuel Overloading**

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excessive smoke

## Operation with door left open

Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in the instructions.

## Dampers left open

Operation with the air controls or appliance dampers open can cause excess smoke.

The appliance must not be operated with air controls, appliance dampers or door left open except as directed in the instructions.

## **FUELS**

This appliance has been tested using seasoned wood logs in a smoke control area. The logs need to be dry, seasoned logs, i.e. No more than 20% moisture content, maximum log length up to 350mm. The Little Thurlow Smoke Control Eco Smoke Control wood burning stove is only exempt for use in a smoke control area if it is burning clean, dry (no more than 20% moisture) and seasoned logs of maximum length 300mm. No fuel that contains halogenated organic compounds or heavy metals as result of treatment with wood-preservatives or coatings must be burnt in the appliance. Do not burn household coal. Small pieces of kiln dried timber can burn very hot, take care that the fire does not get out of control. The stove is designed to burn wood and HETAS approved smokeless fuels for closed stoves.

WARNING – USING A NON APPROVED FUEL MAY CAUSE DAMAGE TO THE STOVE AND WILL NOT BE COVERED BY OUR GUARANTEE. WOOD NEEDS TO BE DRY AND SEASONED (MAXIMUM 20% MOISTURE CONTENT) DO NOT BURN ANY LIQUID FUEL. DO NOT BURN WOOD PELLETS.DO NOT BURN WOOD CHIPS. DO NOT BURN ANY RUBBISH ON THE STOVE. DO NOT USE HOUSEHOLD COAL, HIGH PETROLEUM BASED FUELS, PETROCOKE, COSY COKE, EXCEL, PUREHEAT, NEWHEAT, BURNWELL OR ANTHRACITE. (A COMPREHENSIVE LIST OF APPROVED FUELS FOR CLOSED APPLIANCES IS AVAILABLE ON THE HETAS WEBSITE)

Suitable manufactured smokeless fuels approved by Hetas for use in closed stoves include Homefire Ovals, Phurnacite, Taybrite, Multiheat, Ancit, Briteheat and Ecoal 50.

## **CLEANING THE STOVE AND FLUE**

The riddling knob to shake the ashes through is on the front of the stove, left hand side near the bottom corner of the door. Using the tool, or a stove glove, pull the lever in and out to rotate the grate and shake the ashes into the ashpan. It is important to remove the ashes regularly, if the ash builds up through the grate, the grate could overheat and distort.

Open the fire door with the stove glove provided, and, using the tool, gently pull out the ashpan a little way. Then remove the tool and slot it in from the top of the slot in the middle of the ashpan. The tool will then have a firm grip on the ashpan. Carefully carry the ashes out to dispose of them, or use a 'Tippy' or similar ash carrier.

When the stove is being used regularly, it will be necessary to remove the baffle once a year to clean any debris that may have collected there. The chimney/flue should be swept and checked every year. The glass on the stove door can be cleaned (better when

the glass is cool), using a damp cloth, or sponge pan scrubber for any stubborn marks. Stove glass cleaner may be used if required.

The body of the stove can be brushed with a soft brush, do not use water on the paint work. If, in time, the body of the stove needs touching up, a touch-up aerosol of paint, the same as originally used in the factory, can be obtained from you supplier.

#### Warning – do not use an aerosol spray near the stove when the stove is alight.

This appliance should be regularly maintained by a competent service engineer. There must be no unauthorised modification of the appliance. Any replacement parts must be recommended by the Manufacturer

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

It is important that the flue connection, any appliance baffles or throat plates and the chimney are swept prior to lighting up after a prolonged shutdown period.

### TROUBLE SHOOTING

1. The stove is not burning well.

The stove may need more fuel loading - load more fuel, see 'lighting the stove' The wood may be un-seasoned or damp - avoid using unsuitable wood.

The chimney may need sweeping, or there may be a build up of debris above the baffle - see 'Cleaning the Stove and Flue'

There may not be the required flue draught in the chimney/flue. In this case a longer chimney pot may help, or there may be a blockage in the flue.

2. Smoke is coming into the room.

There may be down draught conditions, see paragraph 1 of 'Lighting the Stove'. If it is not possible to stop the down draught by warming the flue as described, it is advisable to leave the stove unlit and test conditions later.

3. The stove is burning too hot.

Make sure the stove door is closed properly, and check that all spin wheels and turbo burner are closed

Check the rope seal on the door. If this needs replacing, ceramic rope and heatproof adhesive can be obtained from your supplier.

#### **WARNING NOTE**

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fueling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:-

- (a) Open doors and windows to ventilate the room and then leave the premises.
- (b)Let the fire go out.
- (c)Check for flue or chimney blockage and clean if required.
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

#### <u>IN CASE OF A CHIMNEY FIRE –</u>

CLOSE ALL AIR VENTS IF POSSIBLE.

MAKE SURE THERE IS NOTHING COMBUSTIBLE NEAR THE STOVE.

MOVE PEOPLE AWAY FROM THE ROOM.

**CLOSE THE ROOM DOOR** 

PHONE THE FIRE BRIGADE.

#### **COMMISSIONING AND HANDOVER INSTRUCTIONS**

Ensure all parts are fitted in accordance with the instructions.

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, before lighting the stove.

Once the stove is under fire check all seals for soundness and check that the flue is functioning correctly and that all products of combustion are vented safely to atmosphere via the chimney terminal.

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer.

Ensure to advise the customer on the correct use of the appliance and operating tools and warn them to use only the recommended fuel for the stoves.

Advise the user what to do should smoke of fumes be emitted from the stove.

The customer should be warned to use a fireguard to BS8423:2002 in the presence of children, elderly and / or infirm persons.

Issue No. 01 08/03/2019

Product Fiche						
Commission Delegated Regulation (EU) 2015/1187						
Energy Labelling of Local Space Heaters						
Supplier`s Name or Trademark:	Town & Country Fires					
Suppliers Model Identifier:	Little Thurlow Smoke Control Eco					
Energy Efficiency Class of Model:	Α					
Nominal Heat Output to Room (kW):	5.0					
Nominal Heat Output to Water (kW):	n/a					
Net Efficiency (%):	79.0					
Energy Efficiency Index (%):	105					



# Supplementary Information for the verification of Ecodesign Compliance under the HETAS Product Approval Scheme



**Appliance Manufacturer:** Town & Country

1 Enterprise Way, Thornton Road Industrial Estate

Pickering, North Yorkshire, YO18 7NA

Model Name(s):	Little Thurlow Smoke Control Eco Multifuel Stove
Direct Heat Output:	5 kW
Indirect Heating Functionality:	No
Type of Heat Output Room Temperature Control:	Two or more manual stages, no temperature control
Other control options:	N/A

Space Heating Performance at Nominal Output									
Fuel(s)	Primary Fuel	Seasonal Efficiency (%)	(mg/m³)						
			PM	OGC	СО	NOx			
Wood Logs	Yes	69	12	58	875	93			
Smokeless Fuel	No	70.2	32	41	1375	114			

Performance when Operated on Primary Fuel							
Rated Heat Output (kW)	5	Nominal Net Efficiency (%)	79				
Electrical Consumption Nominal (kW)	N/A	Electrical Consumption Minir	N/A				
Electrical Consumption Standby (kW)	N/A	Energy Efficiency Index	105 EEI		Rating	A	

**Specific Precautions during Assembling, Installing & Maintenance:** *See installation instructions for more information* 

**Product End-of-Life/Recycling:** To dispose of the stove after the product life has expired, please observe the following information

- ✓ Dispose of the items correctly i.e. separate the parts to be disposed of in material groups
- ✓ Always dispose of items in a way that is as sustainable as possible and that is in line with the current environmental protection, reprocessing/recycling and disposal technology

HETAS confirms the above information is accurate and the stove complies with the Ecodesign regulation at nominal heat output.



## **HEATSHIELD FITTING INSTRUCTIONS**

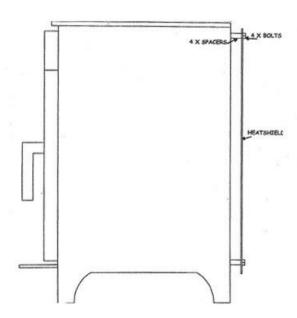
Contents: 4 - M6 x 30 bolts (in back of stove)

1 - Heat shield (packed in front of stove door)

4 - Spacers (in bag in ash pan)

Before installing heat shield, ensure that the flue collar and blanking plate are fitted on the stove correctly.

Remove the 4 bolts from the back of the stove and attach the heat shield using the 4 spacers as diagram.

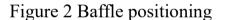


#### THE BRICKS / BAFFLES POSITIONING

The Little Thurlow Smoke Control Eco has a pair of outer side bricks, a pair of inner side bricks, a pair of lower rear bricks and a top rear brick that is located above the tertiary air tube. There are 3 metal baffles (Top, Middle and Lower) please refer to the figures below re removing / replacing the bricks and baffles.



Figure 1 Brick positioning





- There are two sets of side bricks in a Little Thurlow Eco. To remove the inner bricks simply lift the lower steel baffle at one side and remove the brick whilst holding the baffle. Then remove the baffle by tilting and remove the other side brick.
- 2. The tool with a loop is needed to remove the next set of bricks. Put the tool into the top front edge, in front of the middle baffle and lever the brick out from the top, holding on to the middle baffle. Then remove the baffle, taking care to note which way round it goes back in. Next remove the second side brick, it fits down the side of the grate.
- 3. Remove the top small baffle, making sure it goes back in the way it came out, the narrowest part to the back, the writing on the top side and resting on the two lugs under the flue.
- 4. To remove the top rear brick which is on top of the steel turbo charger, take the tool with the loop handle and put into one of the holes in one of the back bricks and pull forward to remove. Repeat with the second rear brick, noting that these two bricks are right and left handed, and need to be the correct way up.

#### The Town and Country Fires Guarantee

Town and Country Fires Ltd guarantee the quality of workmanship of their multi fuel stoves for twelve months from the date of purchase.

Stoves must be installed to current Building Regulations, National and European Standards and per our Installation / User instructions supplied with the stove. Installation must be carried out by a competent installer.

Using a non approved fuel may cause damage to the stove and will not be covered by our guarantee. Wood needs to be dry and seasoned (maximum 20% moisture content). Do not use household coal, petroleum based fuels, Petrocoke, Cozycoke, Excell, Burnwell and Anthracite. (A comprehensive list of approved fuels for closed appliances is available on the HETAS website)

Usage of our multi fuel stoves should be as per our Installation / User Instructions provided with the stove.

Any warranty claim requires Proof of defective workmanship and delivery of the defective product to our factory within twelve months of the date of purchase.

Parts which are classed as consumables and are excluded from our Guarantee include;

Grates, Fire Bricks, Baffles, Fuel Guards, Ash Pan, Glass, Door / Glass Seals and Paint.

Claims under this guarantee should be made through the Approved Town and Country Dealer the appliance was originally purchased from.

Please complete the enclosed form in full to validate your guarantee, and extend the guarantee from one year to ten years. Please note the extended guarantee is only valid when your stove was purchased from a Local Approved Town and Country Dealer and not a third party reseller.

Alternatively this form can be filled out online at - www.townandcountryfires.co.uk/guarantee-form

Town and Country Fires are not liable for any incidental loss, damage or injury, however caused.

This Guarantee is only applicable in the UK.

This Guarantee does not affect your statutory rights.

Please keep this page for your future reference.

Issue No. 01 01/03/2010