town & country fires

LANGDALE 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 Langdale Smoke Control ECO stove has a nominal heat output of 7.7kW (wood), 7.8kW (solid fuel) and a weight of 92 kg. The flue gas mass flow is 5.5g/s for wood logs and 5.9 g/s for mineral fuel. The mean flue gas temperature directly downstream of the flue spigot at nominal heat output is 319 degrees C (wood), 324degrees C (solid fuel). The Langdale Smoke Control ECO has been tested as a closed appliance and is capable of intermittent operation.

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.

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.

WARNING

The stove must be installed to comply with Health and Safety at Work Act 1974 to British Standard BS 8303 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 Langdale 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.

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.

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorize smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with the Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been “authorised” in Regulations and that appliances used to burn solid fuel in those areas (other than “authorised” fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

The Langdale Smoke Control ECO have been recommended as suitable for use in smoke control areas when burning dry seasoned wood logs and approved smokeless fuels.

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

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.

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, leaving the plastic cover on if building work is still in progress 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 baffles, Remove the bag inside the ashpan, this contains the operating tool, instructions and a pair of stove gloves.

CLEARANCES

The Langdale needs to be sited next to and on a non-combustible surface. A recommended minimum clearance of 150mm at the sides 300mm above and 75mm 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 with the Langdale Smoke Control ECO a minimum of 200mm at the back. 400mm at the sides and 400mm above must be maintained from combustible surfaces.

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 81 degrees C so is also suitable for a 12mm hearth.

INSTALLATION

A minimum flue draught of 24 Pa is required for nominal heat output. 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. As referred to in document J in the Building Regulations, the Langdale Smoke Control ECO requires a minimum of 1700 sq mm of fixed ventilation.

Please note where either the external air kit or remote control kit are fitted an air vent is still required in the same room as the stove to the above specification.

It is important that any inlet grilles are positioned so that they are not liable to block. It is essential that the stove has adequate air supply for combustion and ventilation. Apertures provided for this purpose shall not be restricted.

If necessary to remove the flue collar a flat-bladed screw driver and 8mm spanner will be required.

The Langdale 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 manufacturers' 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 manufacturers' instructions and to relevant Building Regulations.

The length of the chimney or flue must be at least 4.5metres 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 - 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. The flue is fitted from the top of the stove and the baffle can be removed to sweep up through the stove.

To connect the flue pipe to an existing chimney, a register plate is required, preferably made of metal. A collar is welded to the underside of the register plate so that the flue pipe can be placed into the spigot on top of the stove and round the outside of the collar on the register plate, so forming a 'funnel' effect. In this way, any moisture running down the chimney will be directed back into the stove instead of seeping out onto the top of 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.

TO INSTALL EXTERNAL AIR SUPPLY WITH REMOTE CONTROL

WARNING – DO NOT FIT ANY OF THE BATTERIES UNTIL INSTALLATION IS COMPLETE

Put one of the jubilee clips provided over the flexi vent pipe. Push the vent pipe onto the rear air outlet on the stove and tighten the jubilee clip. Drill a 100mm hole through the wall with a core drill and push the vent pipe through the wall. Take the cover off the stainless steel air intake box by undoing the two rear screws at either side. Feed the 1.5m braided lead through the wall into the stove position. Connect the flexi air intake pipe to the back of the stove using the clip provided.

Feed the flexi pipe through the wall, gently pushing the stove into place and connect the outside air vent onto the metal tube connected to the back plate. Wrap the 13mm ceramic rope provided round the pipe and place silicone sealer round the outside of the back plate. Screw the back plate to the wall and replace the cover. Connect the receiver box to the cable near the stove, insert 4 x AA batteries. Place the 9v battery into the handset.

To open the air vent press the smallest button on the handset at the same time as the button next to the arrow pointing upwards. To close the air vent, just press the button next to the arrow pointing downwards.

TO INSTALL EXTERNAL AIR SUPPLY

Put one jubilee clip over the flexi vent pipe. Push the vent pipe onto the rear air outlet on the stove and tighten the jubilee clip. Drill a 100mm hole through the wall with a core drill and push the vent pipe through the wall, cutting to correct length. Put the second jubilee clip round the vent pipe then fasten to louvre grill. Back fill round the outside of the vent pipe with insulating material to prevent draught getting into the house. Then fasten the louvre grill onto the wall.

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.

TURBO BURNER

There is a Turbo Burner which brings air in 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 turbo burner is built in and needs no adjustment.

LIGHTING THE STOVE

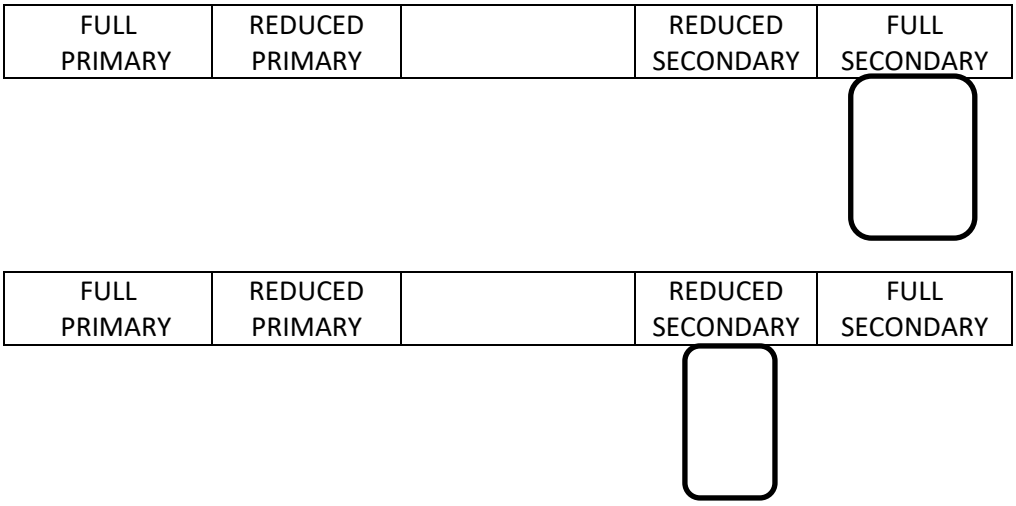
When ready to light the stove for the first time, make sure that everything is removed from the ashpan, and then open the lever under the door fully to the left for solid fuel or fully to the right for wood, this is operated by hand with a glove or by foot. Then pull out the air inlet on the right hand side of the stove towards the front to let air in under the grate, this is meant for cold start or to be used when refueling.

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 this does not work, call in your installer. If the stove has not been lit for a while, the chimney should be checked for blockages before lighting.

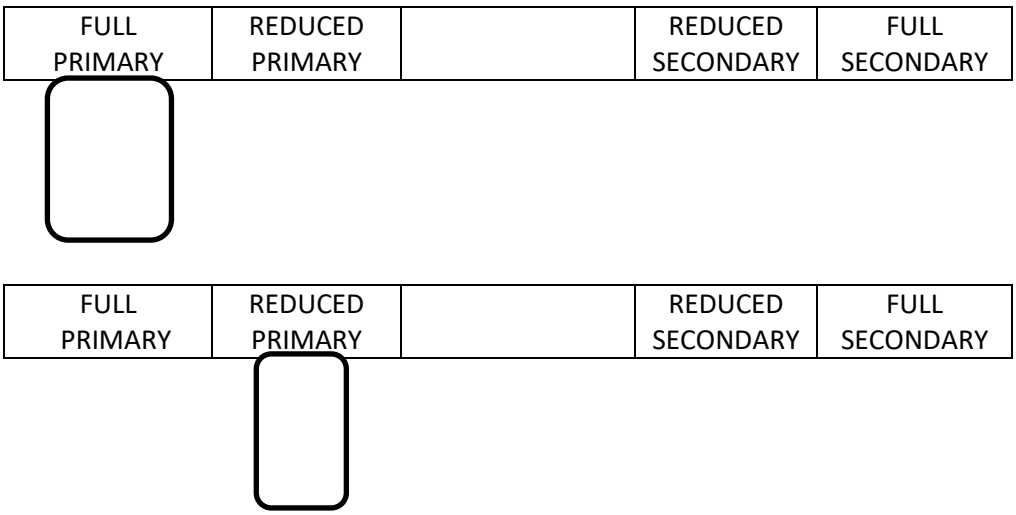
When ready to light the stove, put a small piece of fire lighter, about 25mm square is big enough, and then add small sticks, taking care not to smother the flames. When the sticks are well alight add small logs, gradually increasing the size. After 3 minutes close the primary lever by pushing the lever back to the body of the stove. When burning solid fuel, it may be necessary to leave the bottom air vent slightly open.

Figure 1

Wood Settings;



Solid Fuel Settings;



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 and a pair of gloves are provided for operation of the hot stove.

The appliance is designed to operate efficiently with the fire door closed door. The door should be kept closed at all times, except when refueling or removing ashes. Operation with the stove door open can cause excessive smoke. The appliance must not be operated with the stove door left open.

TO RE-FUEL THE STOVE

Do not over fill the firebox the maximum filling height is 100mm. Before opening the door to re-fuel, open the primary air at the bottom right hand side. Slide the left hand lever to the right to close the external air. This stops air coming from outside and pushing smoke into the room. Add the fuel and close the door. Then open the left hand lever, leaving the right hand lever open for 2 to 3 minutes. Then close the right hand lever and use the left hand lever to adjust to suit required heat.

Refueling on to a low fire bed
If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refueling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent 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.

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

FUELS

This appliance has been tested using seasoned wood logs and manufactured briquetted smokeless fuel (Ancit) for closed appliances, sized between 20g and 140g. Other fuels are commercially available and may give similar results. Do not use household coal. It is a good idea to try small quantities of different fuels until you find one that suits your chimney. Petrocoke or any high petroleum based fuel such as Cozycoke, Excell & Burnwell must **NOT** be used, they burn excessively hot and will destroy parts of the stove in a very short time.

If using logs, the logs need to be dry, seasoned logs, ie. No more than 20% moisture content, maximum log length up to 400 mm x 100 mm diameter. 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 or an approved solid fuel.

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, WOOD PELLETS, WOOD CHIPS OR 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: Phurnacite, Taybrite, Multiheat,Ancit, Briteheat and Ecoal 50.

TO OPERATE THE REMOTE CONTROL OPTION – IF FITTED

If the Remote Control option is installed on your stove – the remote controls the secondary air intake on the Langdale Smoke Control ECO and is operated by 4 x AA batteries in the control box and a 9V battery in the handset (batteries included). No mains electrity supply is required. To operate the remote control, the air lever at the front of the stove must be in the open position (slide the lever to the left).

Press and hold down the small button on the left of the hand set together with the button next to the up arrow – this will open the air intake at the rear of the stove. To close the air intake, press the bottom button next to the down arrow.

CLEANING THE STOVE AND FLUE

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 that is the same paint 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 and can be purchased from the approved dealer the stove was originally purchased from.

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 - see 'lighting the stove'
- The wood may be un-seasoned or damp - avoid using unsuitable wood, burn smokeless fuel until the wood is dry and seasoned.
- The chimney may need sweeping, or there may be a build up of debris above the baffle - see 'Cleaning the Stove and Flue'
- The fuel may be too hard, e.g. some anthracites and cokes require a lot of draught to maintain a high burning temperature, so try a solid fuel that burns at a lower temperature.
- 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 air vents are closed. Check the rope seal on the door. If this needs replacing, ceramic rope and heatproof adhesive can be obtained from your supplier.

4. Smoke is being emitted from the chimney

Check that the fuel being used is as described and that the operation of this manual is being followed. If smoke is being emitted whilst refueling onto a low firebed then kindling should be used.

IN CASE OF A CHIMNEY FIRE –

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.

WARNING NOTE

Properly installed, operated and maintained, this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling 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 flue way or chimney blockage. For your own safety these must be kept clean at all times.

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.

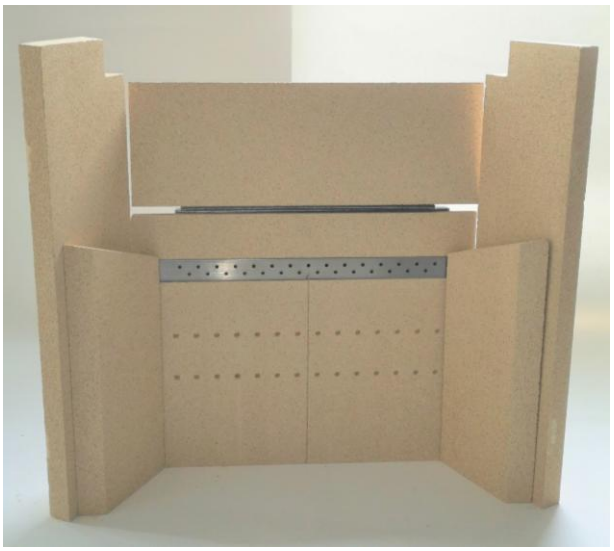
Advise the user what to do should smoke of fumes be emitted from the stove.

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

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:	**Langdale Eco Stove**
Energy Efficiency Class of Model:	**A**
Nominal Heat Output to Room (kW):	**7.7**
Nominal Heat Output to Water (kW):	**n/a**
Net Efficiency (%):	**79.4**
Energy Efficiency Index (%):	**105.1**

The Langdale eco has 8 bricks:
2 x outer side bricks
2 x inner side bricks
2 x lower back bricks
1 x middle back brick
1 x upper back brick

The Langdale eco has 3 baffles:
1 x top baffle
1 x middle baffle
1 x lower baffle



Langdale Eco Brickset & Airtube



Lower Baffle (Stainless Steel)



Top Baffle

Removing the bricks & baffles

- Remove the fuel guard from the front of the stove
- Remove the lower baffle and the two inner side bricks
- Remove the 2 small ledges near the top of the door that help support the middle baffle with an 8mm spanner. The middle baffle should now come out followed by the outer side bricks.
- Remove the upper back brick, the middle back brick, the airtube then the two lower back bricks.
- The top baffle is held in place by a small plate and a bolt that will require a 10mm spanner



Middle Baffle

Please note that the top baffle should sit with the lip at the front, curving upwards. The middle baffle should have the side with gray squares facing upwards, and the edge with a longer lip at the front of the stove, curving upwards. The lower baffle should have the longer edge at the front of the stove, with the two small protrusions on the bottom sitting against the inner side bricks.



The Langdale eco with the optional solid fuel brick & side inserts

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.

Congratulations on your purchase of a Town and Country Fires Multi Fuel Stove.

Please complete the following to validate your guarantee from one to ten years and either complete via our website or return in the pre paid envelope to;
Town and Country Fires Ltd, Unit 1 Enterprise Way, Thornton Road Ind Estate,
PICKERING , North Yorkshire YO18 7NA

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

Model :…….....Serial No...LANGSCECO.....……*

Date of Purchase:…….....…….....

Title:…….. Surname:……..…….....

Address:…….....

…….....

Date of Installation:…….....

Installers Name:…….....HETAS Reg. No.....

Address:…….....

…….....

Tel. No……..…….....

Supplier Details;

Name:…….....

Address:…….....

…….....

Tel. No…….....

Thank you for your co-operation, if you do not wish to be contacted by Town and Country Fires in the future please tick this box ☐

* Serial number is located on the metal data plate on inside of fire door.