



charnwood
SLX 45 MKII
MULTI-FUEL

Operating & Installation Instructions

SLX45_{MKII}

MULTI-FUEL CONTENTS

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GENERAL POINTS

Before lighting the fire check with the installer that the work and checks described in the installation instructions have been carried out correctly and that the chimney has been swept, is sound, and free from any obstructions. The stove is not suitable for use in a shared flue system. Do not light the fire before the boiler and heating system have been filled with water as this can damage the boiler.

If the appliance is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the appliance and the open fire.

Do not use an aerosol spray on or near the stove when it is alight. There is a risk of explosion or flash ignition of the spray.

Your SLX45 stove has been designed to work with minimum effort. If any operation - such as riddling the grate or opening and closing the door - begins to require extra force then the cause must be investigated to prevent and correct damage being caused to the stove.

Remember that the stove will be hot and is made from hard material. Ensure that you have good balance before operating the fire.

When using the fire in situations where children or infirm people are present please use a fire guard to prevent accidents. The fire guard should be manufactured in accordance with BS 8423:2010.

FUELS

The following smokeless fuels are suitable for use on this appliance: Ancit (Phurnacite Plus), Anthracite Large Nuts, Phurnacite, or any fuel included on the HETAS list of Approved Smokeless Fuels for Closed Appliances.

(http://guide.hetas.co.uk/guide/fuels_smokeless.html)

The above fuels are all suitable for use in smoke controlled areas. In other areas the following fuels may also be burnt:

Coal

When burning bituminous coal a little extra care is needed. Please take note of the section "Special Points For Burning Coal".

Wood

Only dry well seasoned wood should be burnt on this appliance as burning wet unseasoned wood will give rise to heavy tar deposits.

For the same reason hard wood is better than soft wood. Burning wet unseasoned wood will also result in considerably reduced outputs. The wood should be cut and split and then left to season in a well ventilated dry place for at least one year but preferably two years before use.

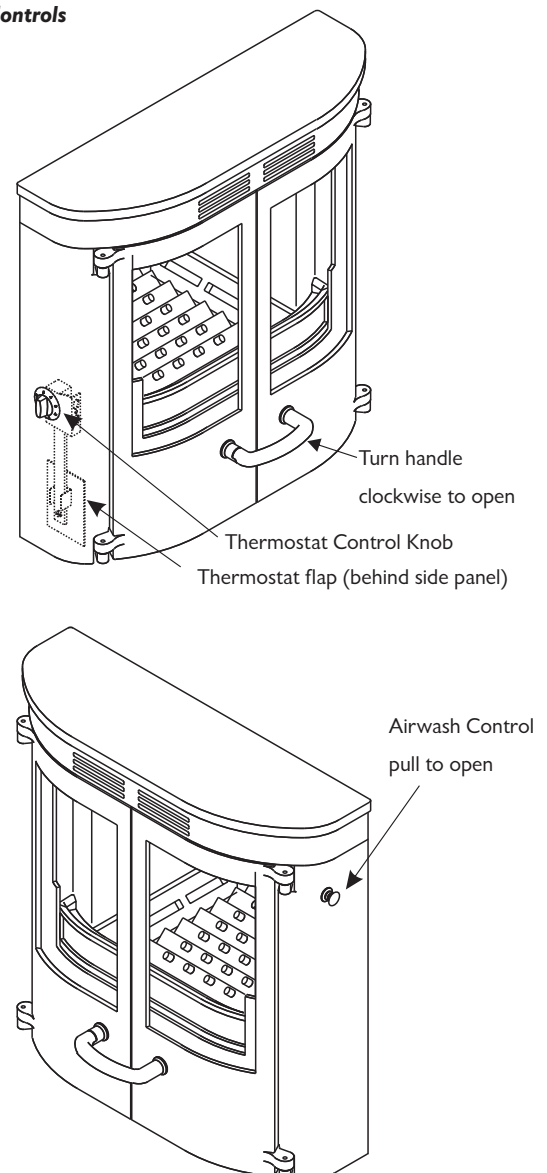
Peat

Ensure that the peat is well dried before use. Burning wet peat will give rise to heavy tar deposits and reduced outputs.

PETROLEUM COKE IS NOT SUITABLE FOR USE ON THIS APPLIANCE, ITS USE WILL INVALIDATE THE GUARANTEE

At first you may find it helpful to try several fuels to find the most suitable. If you are unable to obtain the fuel you want, ask your supplier or an approved fuel distributor to suggest an alternative or

Fig. 1. Controls



ring the Solid Fuel Association Helpline on 0845 601 4406.

NOTE: This appliance has been approved by HETAS as a continuous operating appliance for burning dry seasoned wood logs or smokeless fuel.

HETAS approval does not cover the use of other fuels either alone or mixed with wood logs nor does it cover the instructions for use of other fuels.

DOOR OPERATION

The doors are opened by raising the door handle as shown in Fig. 1. When the fire is alight, avoid touching the doors other than on the handle as the metal will become hot. When closing the doors do not use excessive force.

MULTIFUEL GRATE

Your Charnwood is fitted with a multifuel grate which enables solid fuel, wood and peat to be burned equally effectively.

The grate has two positions. One for solid fuel, the other for wood and peat. When in the solid fuel position ash can fall through the grate and into the ashpan. When in the wood position ash is able to build up on the grate as is necessary for effective wood or peat burning. Movement of the grate from one position to the other is effected using the tool supplied. The grate is put into the wood position by moving the tool up until the tool is vertical. The grate is put into the solid fuel position by moving the tool down until the tool is horizontal.

If a mixture of wood and solid fuel, or peat and solid fuel, is to be burnt then keep the grate in the solid fuel position.

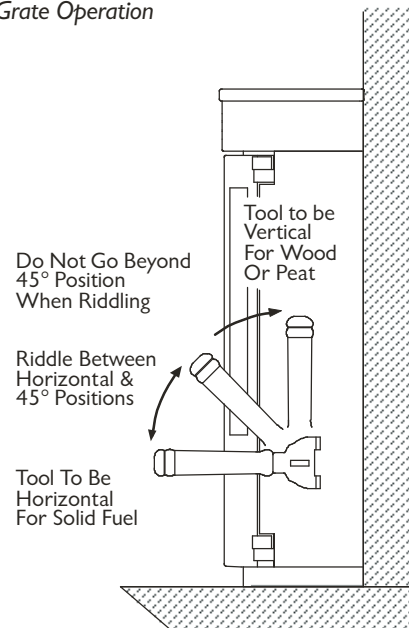
LIGHTING

Place some paper and dry kindling wood or fire lighters on the grate and cover with a small amount of fuel. Turn the thermostat control knob to the maximum setting and light the paper/fire lighters. Close the doors and allow the fire to burn until the fuel is well ignited then load with more fuel and adjust the thermostat to the required level. On initial lighting, the fire may smoke and give off an odour as the silicon paint with which the firebox is painted reacts to the heat. This is normal and will cease after a short time. In the meantime the room should be kept well ventilated. Before relighting the fire, riddle, remove any clinker from the firebed and empty the ashpan.

CONTROLLING THE FIRE

The rate of burning and hence the output is controlled by the control

Fig. 2. Grate Operation



knob on the left hand side of the appliance and the airwash control on the right, shown in Fig. 1. The control knob is connected to the water temperature sensing thermostat. Use the control knob on the left to control the heat output from the fire and keep the airwash control slightly open most of the time to keep the glass clean. It will not be possible to keep the glass clean if the ashwash control is fully closed, particularly after refuelling. The number at the top of the control knob is the number at which it is set, the higher the number the faster the burning rate.

For correct firing of the Freestanding model we recommend using a stove pipe thermometer which may be purchased from your supplier or from ourselves.

Liquid fuels are not to be used on this appliance.

SYSTEM CONTROLS

The heating system controls may consist of time switches, room thermostats, outdoor temperature thermostats and thermostatic radiator valves in virtually any combination. These will work in conjunction with the thermostat control on the appliance. The thermostat on the appliance will simply control the temperature of the water coming from the boiler and hence the temperature of the radiators and domestic hot water. The automatic controls (other than thermostatic radiator valves) will switch the pump (and hence the radiators) on and off. Your installer will be able to explain the controls fitted to your system and how to operate them.

ASH CLEARANCE

The ashpan should be emptied regularly before it becomes too full. The most convenient time to remove the ash is just before riddling the fire since the ash will then be at its coolest. Use the ashpan/riddling tool provided to remove the ashpan, the fold up carrying handle should be held with a heat proof glove.

Never allow the ash to accumulate in the ashpan so that it comes in contact with the underside of the grate as this will seriously damage the grate bars. Ensure that the air inlet damper is not prevented from closing by spilled fuel or ash.

Care should be taken to ensure that ash is cool before emptying it into plastic liners or bins.

To make ash removal easier there is a special **Charnwood ash carrier** available. This may be purchased from your supplier or, in case of difficulty, from ourselves.

RIDDLING

The fire should be riddled with the doors shut. Place the tool on the knob and rotate between the horizontal and the 45° position several times as shown in Fig. 2.

Caution: when riddling the grate using solid fuel do not go beyond the 45° position as this can cause the grate to jam.

If jamming does occur then the fire should be allowed to burn for approximately half an hour before riddling the grate again as described above. Riddling twice a day is usually sufficient when burning solid fuel. When burning wood, ash should be allowed to build up and only riddled when the ash begins to cover the slots in the rear fireplate.

Too much riddling can result in emptying unburnt fuel into the ashpan and should therefore be avoided. Clinker should regularly be removed from the firebed.

After riddling, the grate should be put back into the solid fuel or wood position as required (the tool should be horizontal for solid fuel or vertical for wood).

REFUELLING

Keep the firebox well filled (the fuel may be sloped up from the front firebars), but do not allow fuel to spill over the top of the front fire bars. Take care that fuel does not project over the front fire bars or damage to the glass may be caused when the doors are closed.

OVERNIGHT BURNING

For overnight burning the fire doors must be closed.

When burning solid fuel the ashpans should be emptied and the fire riddled. If the fire is very low then it may be necessary to add a little fuel and turn the thermostat control up to maximum for a brief period until the fire is burning brightly before filling with fuel. When the new fuel has ignited, the thermostat control should be turned down to the required setting and the airwash control moved to a low setting. If the central heating pump is off overnight then the thermostat may be left at the same setting for both day and night operation. If the central heating pump is on overnight then set the thermostat control to give the required level of heating.

Some experimentation will be necessary to find the settings most suitable for the particular fuel used and the draw on the chimney. To revive the fire, empty the ashpans, riddle, and open the air controls to maximum. When the fire is burning well load on more fuel as necessary and move the air controls to the desired setting.

When burning wood use large logs rather than small ones. Proceed as above, but do not riddle the fire either when shutting down or reviving.

THROATPLATE AND FLUEWAY CLEANING

It is important that the throat plate and all the appliance flueways are kept clean. When burning smokeless fuels they should be cleaned at least monthly and more frequently if it is found necessary.

The throat plate and flueways may be cleaned with a low fire still burning. Use the scraper tool to scrape any sooty deposits off the front of the plate until they fall into the fire. Also scrape any soot deposits from the sides and top of the firebox. Ensure that soot deposits are not allowed to build up on the sides because if the throat plate becomes tight between the faces this can cause it to fail prematurely.

More soot will be deposited on the throat plate and in the flueways if the appliance is run at low levels for long periods. If this is the case then more frequent cleaning will be necessary.

SPECIAL POINTS WHEN BURNING COAL

When loading the appliance take care not to smother the fire, instead fill the firebox in two stages waiting between each stage for the flames to appear above the fire.

After a period of slumbering always turn the air control up to

maximum and wait until flames appear above the fuel bed before opening the doors.

Burning coal will produce more soot deposits than other fuels, especially if the fire is run at low levels for long periods. It is therefore vital to clean the throat plate regularly, daily cleaning is recommended. Please also note that when burning coal, some blackening of the glass may occur.

MAINTENANCE

Cleaning

The appliance is finished in silicone paint or vitreous enamel. To clean the surfaces simply wipe over with a dry cloth. Abrasive pads and scouring cleaners must not be used as these will damage the finish. Care should be taken not to knock the enamel with hard objects as it will chip.

Cleaning the Glass

The glass in the doors is a special ceramic glass which is able to withstand high temperatures. Before cleaning the glass open the doors and allow them to cool. Clean the glass using a damp cloth and then wiping over with a dry cloth. Any stubborn deposits on the glass may be removed with a proprietary stove glass cleaner or ceramic hob cleaner. Some deposits on the glass may be burnt off simply by running the fire at a fast rate for a few minutes. Do not use abrasive cleaners or pads as these can scratch the surface which will weaken the glass and cause premature failure. Aerosol spray cleaners should not be used near the appliance whilst it is under fire.

When not in use

If the fire is going to be out of use for a long period, (for instance in the summer,) then to prevent condensation, and hence corrosion, the thermostat should be left at the maximum setting and the main doors left ajar. It is also advisable to sweep the chimney and clean out the fire. Spraying the inside of the doors and firebox with a light oil, such as WD40, will also help to keep all internal parts working well.

After long periods where the fire has been out of use, the chimney and appliance flueways should be cleaned before lighting.

Door Seals

For the fire to operate correctly it is important that the door seals are in good condition. Check that they do not become worn or frayed and replace them when necessary.

Servicing

It is recommended that the fire is serviced once a year to keep it in first class working order. After cleaning out the firebox thoroughly, check that all internal parts are in good working order, replacing any parts that are beginning to show signs of wear. Check that the door seals are in good condition and that the door seals correctly. A servicing guide is available on request. Repairs or modifications may only be carried out by the Manufacturer or their approved agents. Use only genuine Charnwood replacement parts.

CHIMNEY SWEEPING

Where the chimney previously served an open fire, it is possible that the higher flue gas temperature from a stove may loosen soot deposits 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 chimney should be swept at least twice a year. In most installations it will be possible to sweep the chimney through the appliance.

First remove the front firebars and the throat plate. Then sweep the chimney ensuring that soot is removed from all horizontal surfaces after sweeping.

In situations where it is not possible to sweep through the appliance the installer will have provided alternative means, such as a soot door. After sweeping the chimney the appliance flue outlet and the flue pipe connecting the appliance to the chimney must be cleaned with a flue brush.

After clearing any soot from within the fire, replace the throat plate and the front firebars.

Different types of sweep's brushes are available to suit different flueways. For standard brick chimneys a wire centre sweep's brush fitted with a guide wheel is recommended. For prefabricated insulated chimneys the manufacturers instructions with regard to sweeping should be consulted.

TROUBLE SHOOTING

Fire Will Not Burn

Check that:

- the air inlet is not obstructed in any way,
- chimneys and flueways are clear,
- a suitable fuel is being used,
- there is an adequate air supply into the room,
- an extractor fan is not fitted in the same room as the fire,
- there is sufficient draw in the chimney. Once the chimney is warm a draught reading of at least 2.5 mm (0.10 inches) water gauge (25Pa) should be obtained.

Fire Blazing Out Of Control

Check that:

- the doors are tightly closed,
- the thermostat knob is turned down to the minimum setting,
- the air inlet damper is closed (at the bottom left of the appliance, see Fig. 1.), and that it is not prevented from closing completely by a piece of ash,
- a suitable fuel is being used,
- the door seals are in good condition.

Over-Firing

If the fire is over-fired it will cause premature failure of the internal fire parts. Over-firing is occurring when any internal parts of the fire begin to glow red. To prevent over-firing ensure that:

- the door seals are kept in good condition, and that the doors are sealing correctly,
- the thermostat on the fire is working correctly,
- a suitable fuel is being used,
- the fire is not fitted onto a heating system which is too large.

Fume Emission

Warning Note: Properly installed, operated and maintained this appliance will not emit fumes into the room. Occasional fumes from de-ashing and re-fueling may occur. Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist then take the following immediate actions should be taken:

- Open doors and windows to ventilate the room and then leave the premises.**
- Let the fire out and safely dispose of the fuel from the appliance.**

c) **Check for flue or chimney blockage, and clean if required.**

d) **Do not attempt to relight fire until cause of fume has been identified and corrected, if necessary seek professional advise.**

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

Freezing

Do not light the fire if there is any possibility that any parts of the system may be frozen.

Chimney Fires

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur then turn the control knob to the minimum setting (see Fig. 1), and tightly close the doors of the appliance. This should cause the chimney fire to go out in which case the control should be kept at the minimum setting until the fire in the appliance has gone out. The chimney and flueways should then be cleaned. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately.

After a chimney fire the chimney should be carefully examined for any damage. Expert advice should be sought if necessary.

Lack of Heat To Radiators / Hot Water

Check that:

- the fire is burning properly - if not then carry out the checks under "Fire Will Not Burn".
- the throat plate is fitted correctly, i.e. pushed back against the boiler, and that it is not distorted.
- the door seals are in good condition.
- If the hot water goes cold when the pump is turned on, or if some radiators are hotter than others, then the system may need balancing, the pump may be pumping the water too quickly around the system, or the radiators may need bleeding. Please ask your installer to check these points.

Blackening of Door Glass

Differences in chimney draughts mean that the best setting of the air controls will vary for different installations. A certain amount of experimentation may be required, however the following points should be noted and with a little care should enable the glass to be kept clean in most situations:

- The airwash relies on a supply of heated air to keep the glass clean, therefore, when lighting the stove allow the firebed to become well established before turning the thermostat down. It may

sometimes be beneficial to also keep the doors slightly ajar whilst the fire becomes established. This can also apply when re-fuelling.

b) When re-fuelling keep the fuel back a little from the front firebars, do not try to fit too much fuel into the firebox.

c) Never completely close the airwash control - as a guide it should be at least a quarter open.

d) Wet wood or logs overhanging the front firebars will cause the glass to blacken.

It is always more difficult to keep the glass clean when running the stove very slowly for long periods.

If blackening of the glass still occurs check that all flue connections are well sealed. It is also important that the chimney draw is sufficient and that it is not affected by down-draught. When the chimney is warm a draught reading of at least 2.5mm (0.10 inches) water gauge should be obtained.

CO ALARM

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under “Warning Note” above.

IF YOU NEED FURTHER HELP

If you need further help with your Charnwood then your Installer will be able to provide the answers to most questions. Your Local Charnwood Premier Dealer has a great deal of experience and will also be able to provide helpful advice. Further help is available from the Charnwood Customer Services department who will be pleased to give advice, if necessary.

HEALTH AND SAFETY PRECAUTIONS

WARNING: Please take care when installing the appliance that the requirements of the Health and Safety at Work Act are met.

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash with plenty of water.

If there is a possibility of disturbing any asbestos in the course of installation then please use appropriate equipment.

There must not be an extractor fan in the same room as the appliance as this can cause the appliance to emit fumes into the room.

There must be an adequate air supply to the room in which the appliance is installed totalling at least 52 cm² (8 in²) to provide combustion air. This is particularly necessary if the room is double glazed.

This stove is capable of continuous operation when burning wood logs or smokeless fuel.

This stove is not suitable for use in a shared flue system.

In addition to these instructions the requirements of BS.8303 and BSEN 15287-1:2007 must be fulfilled. Local Authority Bylaws and Building Regulations, including those referring to national and European Standards, regarding the installation of Solid Fuel burning appliances, flues and chimneys must also be observed.

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.

PERFORMANCE

The rated outputs for the Charnwood SLX45 are shown in the Specification table. These outputs are obtained during the standard tests burning fuel with the doors closed over a 4 hourly re-fuelling interval for solid fuel and 1.5 hourly period for wood.

SPECIFICATION

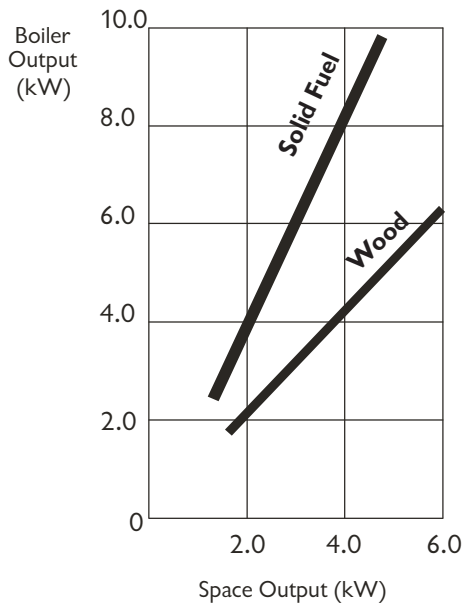
Fuel Type	Wood Logs	Smokeless Fuel
<i>Rated Output</i>	12.3kW (41,970 Btu/h)	14.3kW (48,791 Btu/h)
<i>Space Heating Output</i>	6.0kW (20,472 Btu/h)	4.6kW (15,695 Btu/h)
<i>Water Heating Output</i>	6.3kW (21,496 Btu/h)	9.7kW (33,096 Btu/h)
<i>Flue Gas Temp</i>	343°C	433°C
<i>Flue Gas Mass Flow</i>	7.8g/s	10.8g/s
<i>Max Hearth Temp</i>	62.4°C	181.6°C
<i>Refuelling Cycle</i>	1.5hr	4.0hr
<i>CO @ 13& O₂</i>	0.78%	0.14%
<i>Min Distance to Combustible Materials</i>	INSET	FREESTANDING
<i>Side</i>	50mm	200mm
<i>Above (Inset) /Rear</i>	200mm	300mm
<i>Max Water Pressure</i>	1.5 Bar (50 foot water)	
<i>Boiler Volume</i>	10.14 Litres	
<i>Min Flue Draught</i>	25Pa (0.1 in wg)	
<i>Stove Weight</i>	135kg	

The heat output to the room is directly proportional to the heat output to water as shown in Fig. 4. This means that if the water heating load is less than the rated output then the room heating will be reduced by the same proportion. This must be borne in mind when calculating the heating requirements.

CHIMNEY

In order for the appliance to perform satisfactorily the chimney height must not be less than 4 metres measured vertically from the outlet of the fire to the top of the chimney. The chimney should preferably be 175 mm (7 inches) or 200mm (8 inches) internal diameter or square with sides of 175mm or 200mm internally and **MUST NOT BE LESS THAN 150mm (6 INCHES) INTERNAL DIAMETER OR 150 x 150mm INTERNAL SQUARE.**

Fig. 4. Performance Chart



If an existing chimney is to be used it must be swept and checked, it must be in good condition, free from cracks and blockages, and should not have an excessive cross sectional area (e.g. greater than 250mm x 250mm). If you find that the chimney is in poor condition then expert advice should be sought regarding the necessity of having the chimney lined.

If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire

If it is found necessary to line the chimney then a lining suitable for Solid Fuel must be used. If there is no existing chimney then a prefabricated block chimney or a twin walled insulated stainless steel flue to BSEN 15287-1:2007 can be used either internally or externally. These chimneys must be fitted in accordance with the manufacturers instructions and Building Regulations.

Single wall flue pipe is suitable for connecting the appliance to the chimney but is not suitable for using for the complete chimney.

If it is found that there is excessive draw in the chimney then a draught stabilizer should be fitted.

1. INSTALLATION AS AN INSET STOVE

The SLX 45 is supplied with one of two panel packs that makes it either an Inset stove SLX45i or a Freestanding stove SLX45fs. The following sections apply specifically to the Inset Installation. The Freestanding installation is mentioned later.

HEARTH AND FIRE SURROUND

The appliance must be installed on a fireproof hearth. The positioning of the appliance and the size of the hearth are governed by building regulations for Solid Fuel appliances. These building regulations state that the hearth must extend in front of the appliance by at least 300mm (12 inches) and to the sides by at least 150mm (6 inches). If in doubt as to the positioning of the appliance, expert advice should be sought either from the supplier or the local building inspector.

The fireplace must allow sufficient airflow around the appliance to provide combustion air and to allow the heat to be transferred to the room. The fire surround must be able to withstand the temperatures generated in normal use. If a wooden mantel is used it should be at least 200mm (8 inches) above the appliance. Wooden surrounds must be at least 100mm (4 inches) from the sides of the appliance. In order for the appliance to fit into the fire surround there must be a flat area around the opening, details are shown in Fig. 5.

PREPARATION OF FIREPLACE

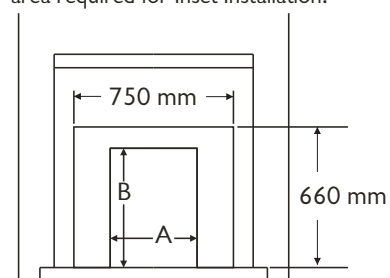
Before fitting the appliance into an existing fireplace remove the fireback and any loose in-fill material.

The surround and opening for the appliance must conform with Fig. 5. The flat area around the opening should be a minimum of 750 mm wide and 660 mm high. Ensure that the hearth and the base in the opening are flat, level, and at right angles to the surround.

Make two holes in the chimney breast, one in the front to give access for infilling and fixing the flue pipe, and one in the side to give access for the pipework.

Fig. 5. Limiting Dimensions Of Surround And Opening

The shaded area on the face of the surround is the minimum flat area required for Inset Installation.



Dim. A:
Max. 470mm (18 1/2")
Min. 405mm (16")

Dim. B:
Max. 575mm (22 2/3")
Min. 555mm (21 3/4")

CENTRAL HEATING SYSTEM

The central heating system must comply with BS:5449 part 1.

If the system is to be a combined heating and domestic hot water system then a double feed indirect hot water storage cylinder to BS:1566 part 1 should be used. In order to prevent the build up of scale and corrosion a suitable inhibitor should be used. The system must be correctly vented as shown in Figs. 6 and 7. The height differential between the header tank and the appliance must not exceed 15.2 metres (50 feet).

If all four boiler tappings are used then, if possible, diagonal pairs should be connected for domestic hot water and central heating. Where a common return is used an injector tee must be incorporated into the system as shown in Fig. 8. This will ensure that a good domestic hot water supply is maintained when the central heating pump is operating.

The system must incorporate a gravity circuit which will normally heat the domestic hot water and an unvalved radiator with an output of at least 1 kW. When the appliance is not connected to a domestic hot water system the unvalved radiator(s) on the gravity circuit must have an output of at least 1.25 kW. This is to prevent boiling in case of pump failure. All pipework in the primary circuit must be 28 mm diameter and the gravity flow pipe must rise continuously from the boiler to the open vent. Two typical systems are shown in Figures 6. and 7.

If the appliance is used to heat a small central heating system then the heat output to the room from the fire will be reduced. Fig. 4. shows the ratio of space heating to water heating which can be expected.

Fitting a radiator in the same room as the fire is recommended as it will allow greater flexibility in the way that the system is operated as well as ensuring that there is sufficient heat.

SYSTEM CONTROLS

The circulating pump may be controlled by means of time switches, room thermostats or outdoor thermostats. Radiators may be either manually or thermostatically controlled. These controls will all work in conjunction with the thermostat on the appliance and the minimum return thermostat.

We recommend fitting a pipe thermostat onto the gravity return pipe and wiring it into the mains supply to the pump so that if the gravity return temperature drops below 45° C then the pump will cut out. This will help to prevent condensation forming on the boiler

faces and will thereby increase the life of the boiler. It will also ensure that priority is given to the domestic hot water. These thermostats are available from ourselves if you are unable to obtain them locally.

Fig. 6. Typical Central Heating & Hot Water System Using 4 Boiler Tappings

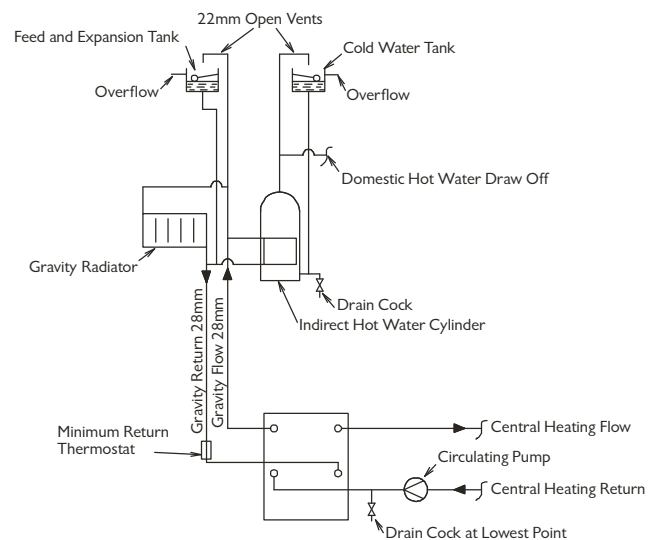


Fig. 7. Typical Central Heating & Hot Water System Using 3 Tappings

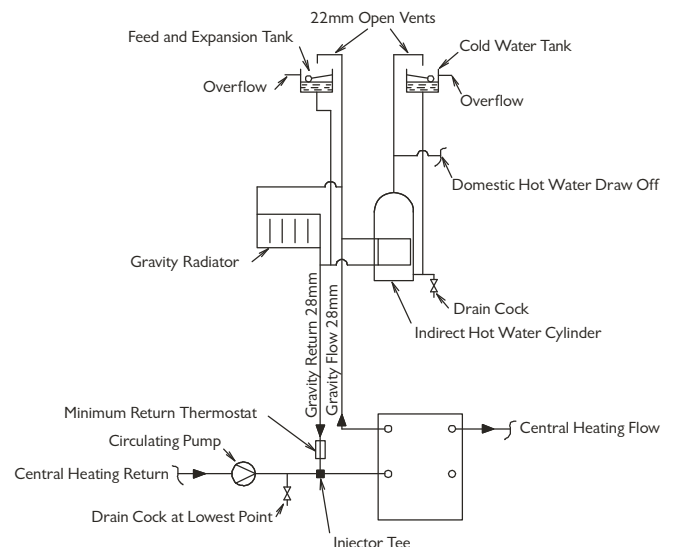
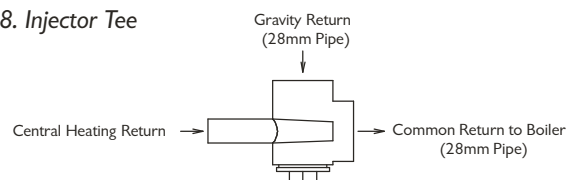


Fig. 8. Injector Tee



FITTING THE FIRE

In some cases it may be necessary to place the connecting flue pipe in the chimney before fitting the fire into the fireplace.

Apply fire cement to the rear face of the sealing flange on the appliance. Fit the appliance into the opening ensuring that it is central and that a good seal is made between the sealing flange and the face of the surround.

Remove any excess fire cement from around the sealing flange. The fire should be screwed to the hearth through the holes at the base of the sealing flange.

Connect the heating system to the boiler ensuring that the primary flow pipe rises from the appliance. Fill the system with water and check for leaks.

FLUE CONNECTION AND INFILLING

Make the flue connection with a short length of 150mm (6") internal diameter flue pipe (cast iron to BS41:1973, 1.0 mm thick stainless steel, or 5.0mm thick mild steel).

The end of the flue pipe must line up with the centre-line of the chimney, and must also extend to the point where the chimney narrows to its final size. Any large voids must be filled and flaunching to the flue pipe to ensure that all soot deposits can be cleared when the chimney is swept. If necessary a flue offset is available. The offset may be used directly with stainless steel flue pipe or may be used with cast iron flue pipe in conjunction with a cast iron adaptor. If the flue pipe has to be set at an angle then cut the ends so that it sits correctly.

Ensure that the flue pipe is not obstructed or restricted in any way and that all joints are well sealed.

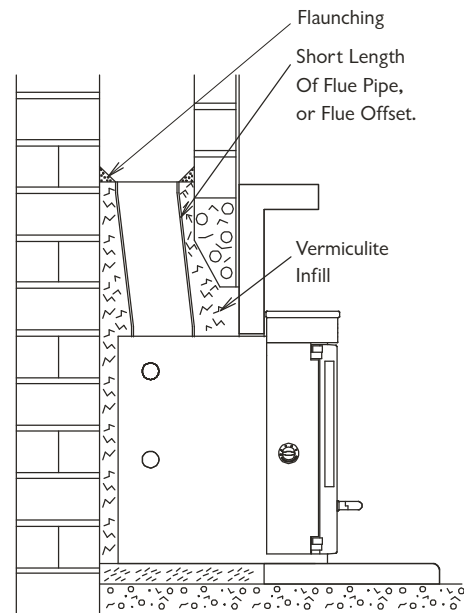
Before infilling cover the front of the appliance to protect it. Ensure that the flue pipe is central and then fill the space between the body of the appliance and the structural brickwork with vermiculite (e.g. Micafil or similar) concrete. Ensure that there are no air pockets. The recommended mix is six volumes of vermiculite granules to one volume of Portland cement thoroughly mixed together. Enough water should be added so that no more than one or two drops of water are released when a handful of the mixture is squeezed.

After filling with vermiculite flaunch the top of the flue connector pipe to the chimney with lime mortar. Make good the holes in the front and side of the chimney breast making sure that they are completely airtight. A typical installation is shown in Fig. 9.

In most installations it will be possible to sweep the chimney through the appliance. If this is not possible then some alternative means (such as a soot door) must be provided.

The free inset method of installation may be used instead of infilling. Details are available on request.

Fig. 9. Typical Installation into standard chimney



2. INSTALLATION AS A FREESTANDING STOVE

The SLX45 may be installed as a Freestanding Stove when supplied with the Freestanding Panel Pack 020/KV52. Typical installations are shown in Figs. 10 & 11 and may be either on a freestanding hearth or in an 'Inglenook' type fireplace. In these configurations the minimum distances to combustible materials must be 200mm from the sides of the stove and 300mm from the back. Stud wall is counted as combustible, and if this distance is required to be reduced, then additional shielding must be provided.

The Hearth requirements are the same as the Inset Installation.

If the stove is to be installed on a freestanding hearth, as shown in Fig.10, then the fireplace may be bricked up and filled with non-combustible material, and the chimney breast broken into higher up the wall, and a sleeve inserted to take the Fluepipe. The angle between the vertical and the sleeve/fluepipe must be not less than 135°. It is advisable for the vertical section of the Fluepipe to be at least 600mm long. A soot door for debris clearance/ chimney sweeping must be provided and this may be in the side or front of the chimney breast, or outside.

INSTALLATION INSTRUCTIONS

If the stove is to be installed in an 'Inglenook' type fireplace, then there must be sufficient space around and above it for air to circulate, and for access for servicing. This requires a minimum of 150mm each side and 300mm above. There must not be any combustible materials within these distances.

A steel 'Register' plate will be fixed into the chimney, preferably at a height where the chimney narrows down so as to avoid having a large air void above the register plate. The fluepipe from the stove will protrude a small amount through the hole in the register plate, and will be sealed in position. This is shown in Fig. 11.

Fig. 10. Freestanding Installation with Chimney Connection above the Fireplace

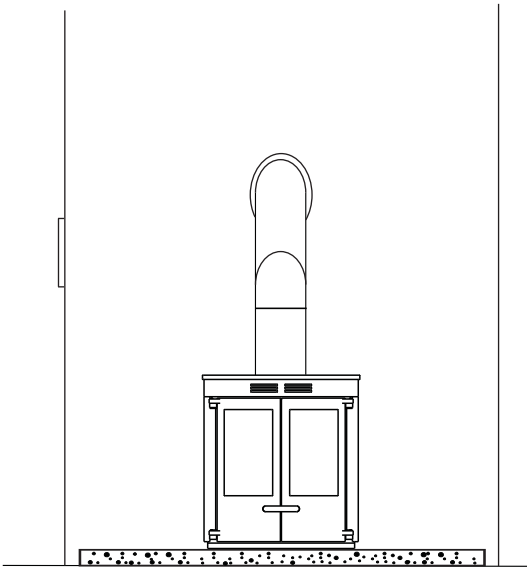
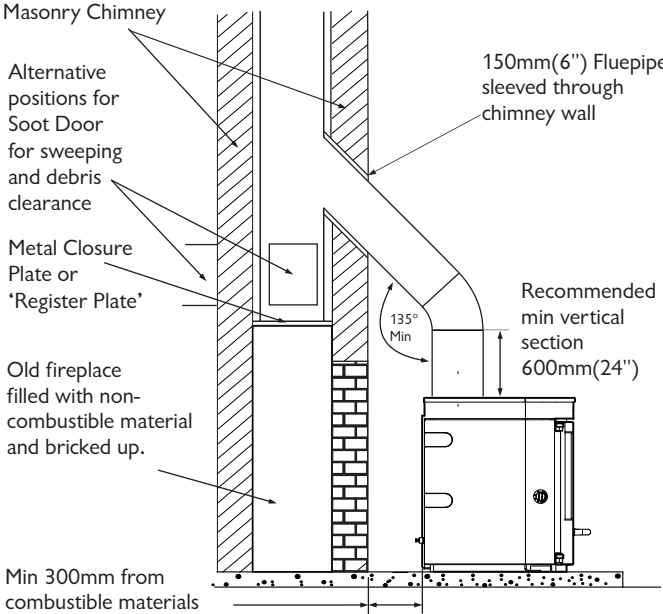
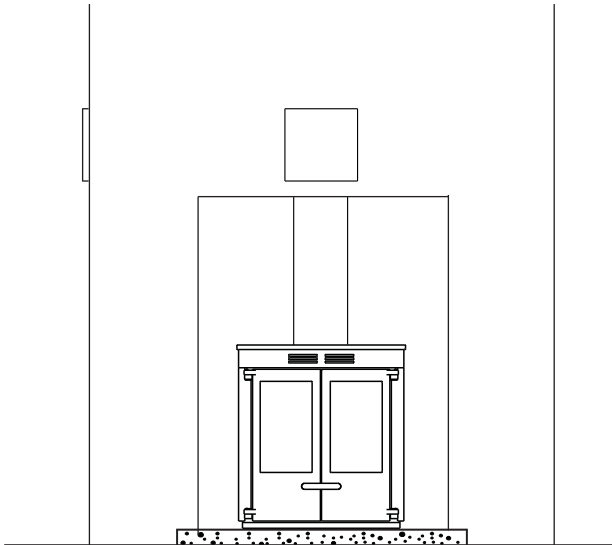
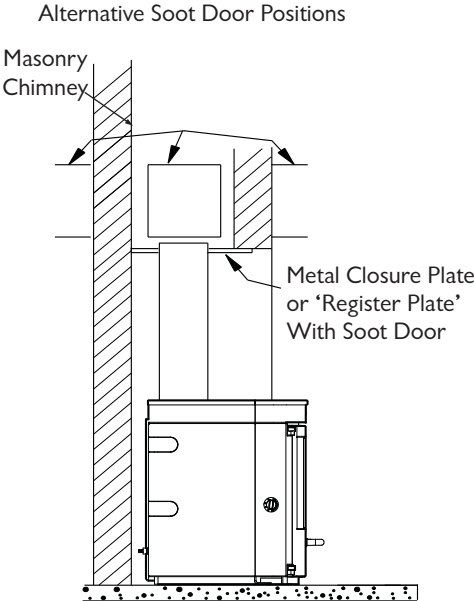


Fig. 11. Freestanding Installation with Chimney Connection in 'Inglenook' type Fireplace

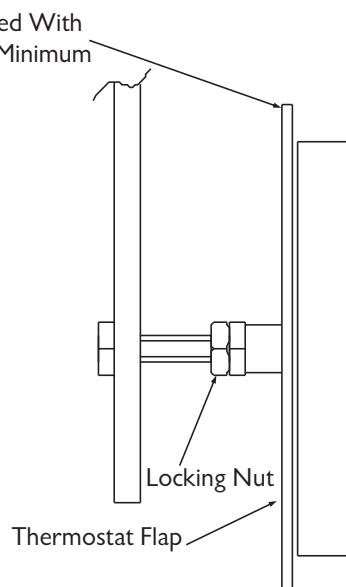


THERMOSTAT

Before lighting the fire check the cold setting distance of the thermostat.

With the control knob at the minimum setting the flap should be just closed as shown in Fig. 12. To adjust the distance slacken the locking nut and adjust as necessary. When set correctly re-tighten the locking nut. Ensure that the flap opens and closes freely as the knob is turned.

Fig. 12. Thermostat Setting



ASSEMBLY

Fit the side panels and hood onto the appliance. Instructions for this are enclosed with the panel pack. Replace any internal parts previously removed.

PRE LIGHTING CHECK

Before initial lighting check the following points:

1. The bottom grate bars must all be fitted and should move freely and easily when the riddling mechanism is operated.
2. The plates round the sides and back of the grate must be in position and sitting correctly.
3. The throat plate must be fitted in the roof of the appliance and should be pushed back so that it touches the knee of the boiler.

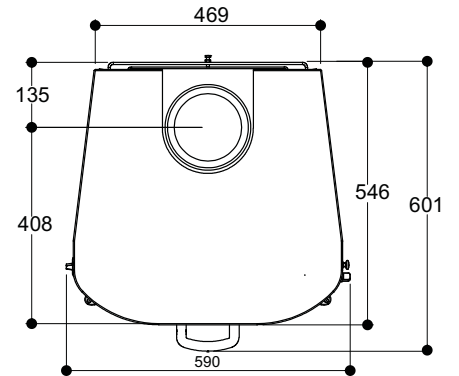
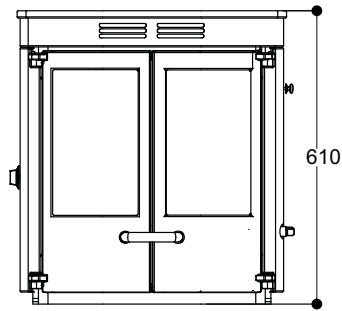
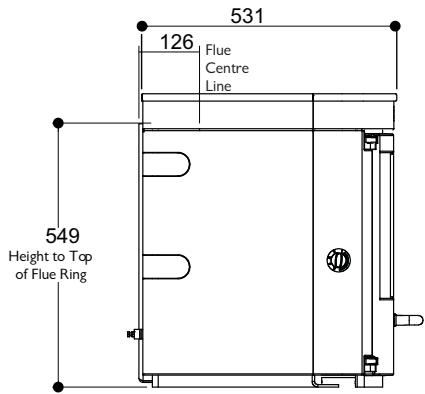
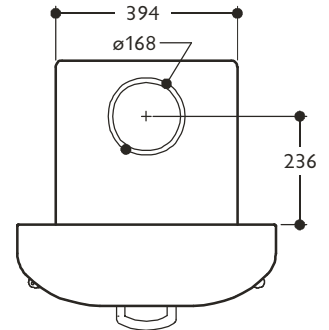
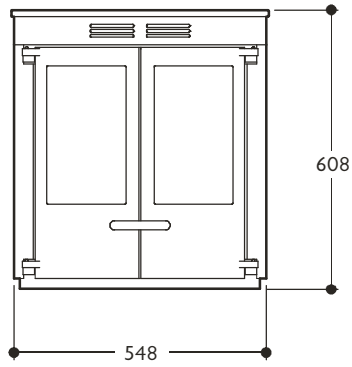
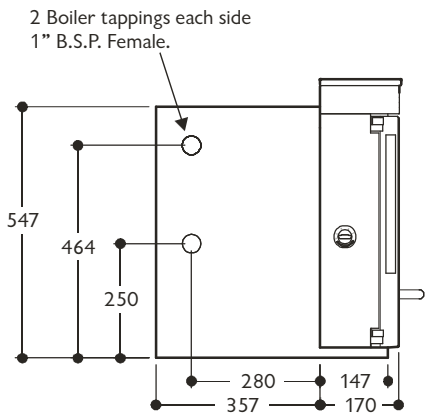
COMMISSIONING

On completion of the installation and after allowing a suitable period of time for the fire cement and mortar to dry out, the fire should be lit and checked to ensure that smoke and fumes are taken from the appliance up the chimney and emitted safely. Also check all joints and seals.

The central heating pump should be adjusted to give the correct water flow against the circuit resistance and the system should be correctly balanced.

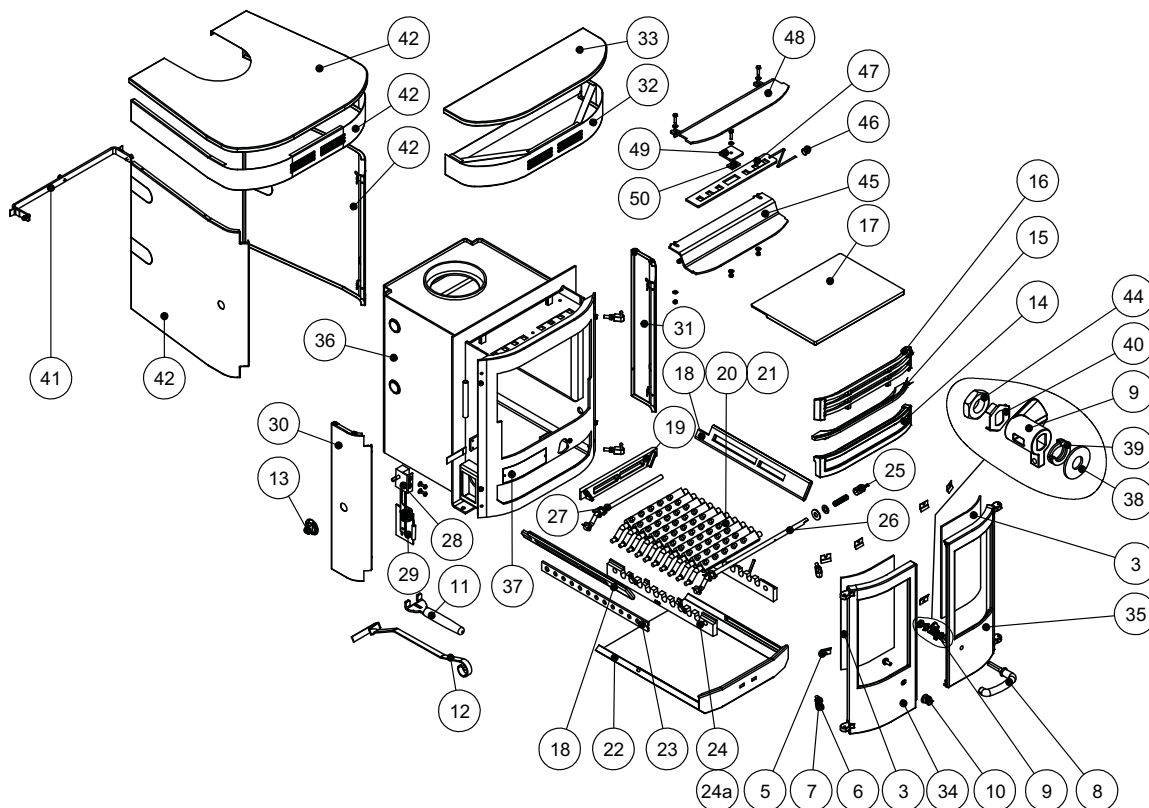
On completion of the installation and commissioning please leave the operating instructions with the customer and advise on the use of the appliance and any controls on the system.

SLX45 DIMENSIONS (MM)



SLX45 MKII PARTS LIST

Issue C



Item	Part No.	Description	Item	Part No.	Description
1*	008/KV35S	Door Seal Set Inc. Adhesive	26	012/KV19	Riddler Rod
2*	008/FW29	Door Seal Adhesive	27	012/CG05	Idler Rod
3	006/KV18	Glass (Inc Seal)	28	008/FW48	Thermostat
4*	008/KV55	Glass Seal Kit	29	008/FV49	Thermostat Flap
5	004/KV23	Glass Retainer	30#	005/KV04	L.H. Side Panel
6	008/TV27	Hinge Post	31#	005/KV05	R.H. Side Panel
7	008/BW39/S	Hinge Pin Set	32#	005/KV06	Lower Hood Panel
8	008/KV16	R.H. Door Handle	33#	005/KV09	Top Hood Panel
9	002/KV14	Door Catch Cam	34#	003/TV01/A	L.H. Door Assembly
10	008/KV13	L.H. Door Knob	35#	003/TV02/A	R.H. Door Assembly
11	010/RW21	Ashpan/Riddling Tool	36	009/SLX45/A	Replacement Firebox/Boiler Assy.
12	012/FW34	Scraper Tool	37	012/KV12	Serial No. Label
13	008/BW50	Thermostat Knob	38	008/FFW010	Washer
14	002/KV07	Front Firebar	39	008/FFW015	M12 Double Coil Spring Washer
15	002/KV11	Front Firebar Back Plate	40	004/ST008	Tabbed Locking Washer
16	002/KV08	Deepening Bar	41**	010/KV29	Freestanding Panel Fixing Bracket
17	002/AV31	Throat Plate	42**#	020/KV52	Freestanding Panel Pack
18	002/FW15	Side Fire Plate	43*	010/FW51	Ash Carrier (Optional Extra)
19	002/FW16	Back Fire Plate	44	008/FFN001	12mm Halfnut
20	002/CG01	Bottom Grate Bar	45	010/XV05	Airwash Manifold
21	002/CG01S10	Set of Grate Bars (10)	46	002/TW13	Air Slide Knob
22	004/KV17	Ashpan	47	012/XV09	Airwash Slide
23	012/KV33	Mover Bar	48	010/KV34	Air Inlet Manifold
24	002/KV30	Carrier Bar	49	012/XV09/03	Airwash Slide Retainer
24a	008/BW40	Carrier Bar Roll Pin (Pair)	50	012/XV09/02	Airwash Slide Guide
25	002/CG06	Riddler Knob			

*These items are not shown on the drawing.

** These items are included in the Freestanding Panel Pack.

Please specify colour when ordering.

This drawing is for identification purposes only.

To obtain spare parts please contact your local stockist giving Model, Part No. and Description. In case of difficulty contact the manufacturer at the address shown.

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BSEN 13229:2001 EN13240:2001

SLX45_{MKII} **MULTI-FUEL**

ROOMHEATER & BOILER FIRED BY SOLID FUEL

EC Certificate of conformity no:	KV080-CPD-2011	
Maximum operating pressure:	1.5 bar	
Fuel types:	WOOD LOGS	ANTHRACITE
Emission of CO in combustion products:	0.78%	0.14%
Mean flue gas temperature:	343°C	433°C
Thermal output:	12.3kW	14.3kW
Space heating output:	6.0kW	4.6kW
Water heating output:	6.3kW	9.7kW
Energy efficiency	75.5%	70.6%
Minimum distance to combustible materials Side: Above (inset) / rear:	INSET 50mm 200mm	FREESTANDING 200mm 300mm

your premier dealer

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