

SELECT SOLID FUEL MODEL

INSTALLATION INSTRUCTIONS



THE AUTHENTIC ORIGINAL SINCE 1854

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GENERAL

The installation of the cooker: the chimney, hearth and walls adjacent to the cooker must conform with local or national regulations currently in force. In the United Kingdom, the appropriate sections of the Building Regulations must be conformed to.

The cooker is supplied for use with smokeless fuels or wood (**See Operating Instructions** - Notes on woodburning).

Important: For the cooker to function correctly, a steady chimney draught of 0.05" w.g. to 0.10" w.g. is required. The draught should be assessed with a reliable manometer when the cooker is operating with an oven temperature of approximately 400°F. A draught towards the higher limit is preferred.

A chimney draught lower than 0.05" will result in incorrect combustion with soot formation.

Where the draught exceeds 0.10", or is fluctuating, a stabiliser must be fitted.

Downdraught cannot be tolerated and arrangements must be made to overcome this condition where it occurs.

VENTILATION

A supply of fresh air is necessary for correct combustion and ventilation arrangements should be sufficient to supply this air together with air to allow an adequate number of air changes per hour in the room in which the cooker is installed. If the construction of the room is such that adventitious air is not available, then ventilation bricks, grids, etc., should be provided.

It should be noted that the cooker will emit a certain amount of convected heat and ventilation arrangements should allow for this.

Where an extract fan is provided to vent the room of cooking smells, steam, etc., arrangements must be made to avoid any possibility of reversing the flow in the chimney. Arrangements for ventilation must always comply with any local by-laws or Code of Practice relevant to the installation.

(See also under **Chimney and Flues**, Page 6)

CHIMNEY

A conventional chimney should not be less than 6" internal diameter. A continuous flexible metallic liner, suitable for solid fuels may be used to line an existing chimney.

It must be free from horizontal runs which may encourage gathering of solid or liquid combustion products like fly ash or creosote. Where wood is the predominant fuel the chimney must be constructed to cope with the special requirements for wood fuel.

A proprietary, prefabricated chimney should conform to BS.4343, the appropriate Building Regulations and ideally, be approved by the Agreement Board.

In all cases the chimney should conform to relevant Building Regulations.

The following General Points should be noted:-

1. The fabric of the chimney must be sound and the internal surface smooth and free from obstructions. Any air leaks and bad joints must be rectified.
2. The chimney should be capped to prevent ingress of rain.
3. The chimney must serve the cooker alone and not be shared with any other appliance.

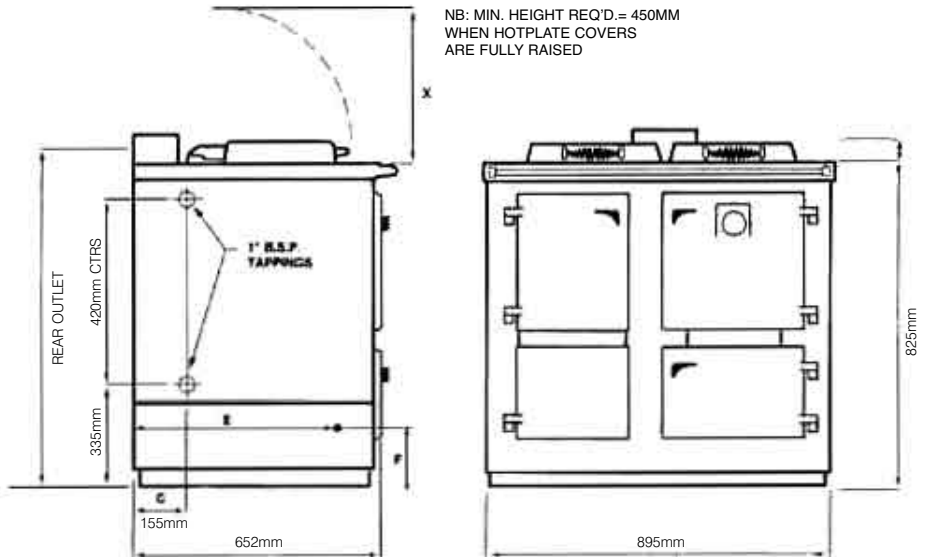
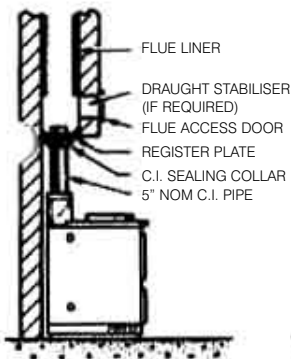
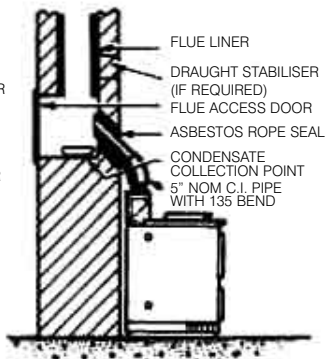


Fig 1.

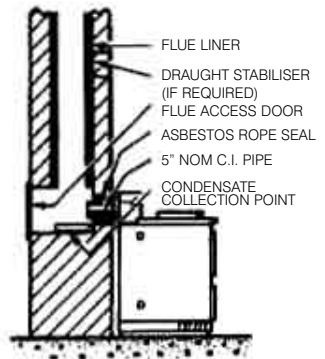
The company policy is one of continual development. Sizes are approximate and variations may occur during manufacture.



**Fig. 3-RECESS WITH
FLUE CAVITY**



**Fig. 4-PLAIN WALL USING
TOP CONNECTION**



**Fig. 5-PLAIN WALL USING
REAR CONNECTION**

4. External flues of asbestos or cast iron pipe must not be used. Excessive exposure will result in heat loss and poor performance.
5. The chimney should include means of sweeping.

FLUE

The flue outlet is set for back connection and is suitable for a 5" cast iron smoke pipe to B.S.41. For top connection simply reverse the top of the flue outlet (undo one screw underneath flue plug and swap to rear).

(See also under **Chimney and Flues**, Page 6)

HEARTH

The cooker weighs 300kg. approx. The hearth must be solid, level, of incombustible material and constructed in accordance with any Building Regulations which apply to the particular site.

HOT WATER SYSTEM

1. Maximum output without regard to maximum oven temperature is 70,000 Btu/h. Output with an oven temperature at 450°F is 55,000 to 65,000 Btu/h.

Minimum output "summer running" is 15,000 Btu/h with oven at 450°F.

The system must be designed to cope with loads between the maximum and minimum figures. When the central heating load is turned off there must be sufficient gravity load to absorb at least 15,000 Btu/h for periods when the oven is being used for cooking; e.g. domestic hot water plus gravity operated radiator.

2. An indirect storage cylinder is essential for domestic hot water supply, irrespective of whether the water

supply is hard or soft.
Minimum capacity - 40 gallons.

3. The boiler tappings are 1" BSP and cookers are supplied for left-hand connection only.
4. The central heating circuit may be gravity circulation, but a pumped system is preferred. To allow heat from the boiler to be absorbed there should be a pump stoppage on an accelerated circuit, the primary domestic supply must be gravity operated.
5. Installation as a central heating system alone; i.e. without a domestic supply; is not recommended as the boiler will produce heat when the cooker is in use, irrespective of central heating demand and primary absorption must be provided.
6. Whichever system is chosen the layout must follow established heating engineering practice. To avoid trapping air in the boiler a 1" BSP connection must be used on the flow tapping, any reduction in pipe size thereafter being made on vertical rising pipe. The cooker must be level when fitted and the flow pipe must rise from the boiler. A drain cock must be fitted on the low point of the return pipe and a vent to atmosphere at the highest point of each circuit.
7. The cylinder and pipework should be lagged to avoid heat losses.
8. The static head must not exceed 60 feet of water.

SPACE REQUIREMENTS

When the rear or side walls are of combustible material, space between wall and cooker should conform to regulations.

Note: Allow at least 150mm clear space between the left hand end of the cooker and any adjacent unit or wall to enable the lower left hand end panel to be removed for maintenance. An extension top, to form a continuous working surface, or a removable infill panel can be fitted provided the space formed is freely ventilated. The air inlets in the lower left hand end must not be obstructed in any way.

BUILDING IN THE COOKER

PROCEDURE FOR ASSEMBLY

Unpack the cooker completely and check for any damage. Lift off the three doors and store carefully to avoid damage.

Remove loose components from ovens, towel rail, etc.

Remove the hotplate with lifting tool provided.

(See Operating Instructions).

CAUTION - The hotplate is heavy and if dropped on the hob will cause damage to the enamel. Cover the hob with paper or cardboard and lower the hotplate covers to their closed position.

Check the flue box is correctly assembled dependent on choice of top or rear outlet. Position the flue box assembly over the flue outlet and seal all round with a fillet of fire cement.

Note: Carefully clean off all excess fire cement. Any restriction to the flue will create serious problems or at least cause the cooker to function inefficiently.

Three schematic diagrams of installation

methods are shown in figures 2,3 and 4, but modifications may be made to suit site requirements. In all cases, however, the important principle that no air must enter the chimney except through the inlets provided on the cooker, must be adhered to.

Move the cooker into position, connect to water. Remove the three firebricks. Check the cooker is level.

Connect the flue pipe with good quality fire cement make sure of an air tight seal between the flue box and flue pipe and flue. Any soot door, register plate etc. must also be sealed to form an air tight joint.

Where a draught stabiliser is fitted then this must be in the same room as the cooker, and set correctly.

Check direct damper slides in and out freely.

(See Operating Instructions).

Replace the hotplate and check it is correctly positioned and level.

Should hotplate rock slightly, this must be corrected by bedding into the soft seal with a wooden mallet.

Remove the plastic covering from the underside of the hotplate covers.

Replace firebricks, L.H. side brick first, then the rear brick and finally the front brick.

(See Operating Instructions).

Check bottom grate is correctly located and the ashpan is in place.

Check thermostat knob rotates freely.

Fit towel rail as follows: Attach one towel rail bracket to the hob using one screw, leaving the bracket just slack; the graphited gasket goes between bracket and hob. Repeat for right-hand bracket. Slip towel rail over round projections and tighten the fixing screws from the back of the hob using a 1/4" BSW spanner.

Replace the three doors, the shelves and roasting tin, and the hotplate lifting tool.

TESTING

After installation, kindle a fire and allow the cooker to heat up gradually.

(See Operating Instructions).

CHIMNEYS AND FLUES DEFINITIONS

Flue: A passage for carrying the products of combustion from an appliance to the external air.

Chimney: Includes any part of the structure of a building forming any part of a flue, other than a flue pipe.

Flue Pipe: A pipe forming a flue, does not include a pipe built as a lining into a chimney.

FUNCTION

The function of a chimney and flue pipe is two-fold:

- a) To carry away the products of combustion.
- b) To assist in the supply of combustion air to the burner.

Draught: Draught is necessary for both these functions. The hot combustion gases in the chimney are less dense and lighter than the colder air outside and draught is created by this colder air pushing the lighter flue gases upwards.

Draught is expressed as a difference in the pressure of the hot flue gases and that of the colder surrounding air. The difference is very small and is measured for practical purposes, as fractions of an inch or mm water gauge.

Ventilation: Providing adequate air for combustion and ventilation of the appliance is very important for safe and efficient operation. If the flow of air for combustion is inadequate then the flue system will fail and hazardous conditions may arise.

When replacement windows and doors have been installed as refurbishment work in a building, ventilation to a room is very much reduced. It is therefore essential to provide the correct amount of free air to appliances.

Other points worth noting are that it is not permitted to fit 'Fly Screens' over vents or airbricks due to the possibility of the screen clogging up and reducing the air flow, nor is it permissible to use a 'Hi and Miss' vent that can be closed down stopping free air supply. If an 'Extractor' fan is fitted in the same room as the appliance extra ventilation may be needed and this also applies to powerful 'Tumble dryers' and Cooker hoods.

ADDITIONAL INFORMATION

In order to make the Select solid fuel cooker operate efficiently three main criteria are required, correct fuel, adequate ventilation air and draught, nothing else other than a watchful eye to achieve best results. There is **no** electrical/electronic wizardry, and **no** automatic gadgets.

Only three things control the burning rate of the appliance, the thermostatic boiler control, the position of the air slide on the inner ashdoor and the draught in the chimney.

The Select solid fuel appliance is simply a fire in a metal box which burns faster or slower depending on how much air is allowed into the firebox and how strong a draught is created in the chimney. If the draught in the chimney is insufficient this simple appliance will fail to work properly.

FINAL CHECKS

1. Boiler Connections (0.28mm flow and return)
2. Primary gravity/pumped secondary system.
3. Sufficient sized tank.
Pipe thermostat (fitted to flow pipe).
5. Ventilation (air brick in wall or floor).
6. Draught measurement.
7. Installation/commissioning card (is it completed properly with all relevant figures quoted?).
8. Flue/chimney connections (correct size and sealed).