

THE LITTLE WENLOCK 2

Installation Instructions for Freestanding Little Wenlock 2 Stove Boiler and Non-Boiler Model

Consumer Protection Act 1987

As manufacturers and suppliers of cooking and heating products in compliance with Section 10 of the Consumer Protection Act 1987 we take every care to ensure, as far as is reasonably practicable, that these products are so designed and constructed as to meet the general safety requirements when properly used and installed. To this end, our products are thoroughly tested and examined before despatch.

IMPORTANT: Any alteration that is not approved by Coalbrookdale could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights.

Control of Substances – Health & Safety

IMPORTANT: This appliance contains some of the materials that are indicated below. It is the Users/ installers responsibility, to ensure that the necessary personal protective clothing is worn when handling, where applicable, the pertinent parts that contain any of

the listed materials that could be interpreted as being injurious to health and safety, see below for information.

FIREBRICKS, FUELBEDS, ARTIFICIAL FUEL:

When handling use disposable gloves.

FIRE CEMENT: When handling use disposable gloves.

GLUES AND SEALANTS: Exercise caution – if these are still in liquid form use face mask and disposable gloves.

GLASS YARN, MINERAL WOOL, INSULATION PADS, CERAMIC FIBRE, KEROSENE OIL:

May be harmful if inhaled, may be irritating to skin, eyes, nose and throat.

When handling avoid inhaling and contact with skin or eyes.

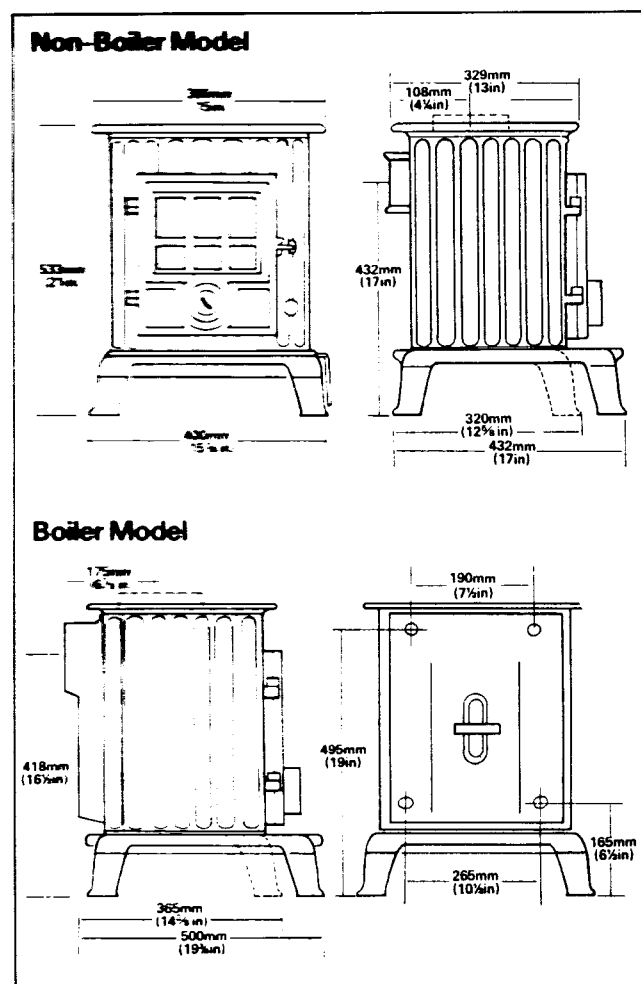
Use disposable gloves, face masks and eye protection.

After handling wash hands and other exposed parts.

When disposing of the product reduce dust with water spray, ensure that parts are securely wrapped.

Boiler Model: There are two sets of back outlet flow and return connections on the L.H. or R.H. side of the boiler.

Both Models: The stove can be installed as a top or back outlet flue appliance.



PERFORMANCE

The Little Wenlock Stove with boiler is intended to provide space heating and the heating of domestic hot water and radiators whilst the non-boiler model provides space heating only.

The appliance and burning rate are controlled by the manual adjustment setting of the spinwheel on the firedoor only.

RATING

Models		Non-boiler	Boiler
Direct Space Heating	kW	6.44	2.95
	Btu/h	22,000	10,000
Water Heating	kW	–	4.35
	Btu/h	–	14,850

The maximum room size (of normal construction) and radiator surface that can be heated are:

Direct Space Heating	m ³ ft ³	113.2 4000	43.9 1550
Pipe and Radiator Surface (no domestic hot water)	m ² ft ²	– –	8.6 93
Radiator Surface (with domestic hot water)	m ² ft ²	– –	6.3 68

The recommended heating surface area is based on an average heat emission of 0.5 kW/m² (160 Btu/h/ft²).

These figures are maxima and must not be exceeded.

A margin (about 10% or 1.4m² – 15ft²) is recommended.

HOT WATER SYSTEM (Boiler Model only)

1. A 140 litre (30 gallon) capacity indirect hot water storage cylinder of the double feed type, complying with BS 1566 Part 1: DF Type 8 should be lagged and fixed vertically as near as possible to the stove.

The 28mm diameter primary flow and return pipes must not exceed 10m (30ft) in length and pipes longer than 5m (15ft) must be lagged.

Ensure that the flow pipe rises continuously from the stove boiler to the cylinder to ensure good gravity circulation. In combined systems, the water draw-off pipes to the taps must be dead leg connection from the vent/expansion pipe.

2. One boiler flow connection (preferably that to the cylinder), must have an open vent. The connection to the boiler must be such that air cannot be trapped in the boiler. Any pipe size reduction must be made on the vertical pipe of the vented flow pipe.

The heating flow and return pipes may be 22mm and should preferably be connected to opposite tappings to each other on each side of the boiler.

3. All installations must be fitted with a drain tap at the lowest point of the system.

THE CHIMNEY

For correct operation of the appliance, the height of the chimney from its base should not be less than 4.5m (15ft) and terminate above the roof in accordance with current Building Regulations and requirements as outlined in BS 6461:1984 Parts 1 and 2 should be observed.

The structural flue through the chimney should not be less than 175mm (7in) diameter. Pargeted lined flues, 230mm x 230mm (9in x 9in) must be in sound condition, and any internal offsets should not be less than 45° to the horizontal and preferably 60°. Check that the flue exit is not obstructed or reduced in size.

IMPORTANT: FAILURE TO OBSERVE THE RECOMMENDED MINIMUM SIZES OR METHODS OF FLUE CONNECTION MAY LEAD TO FUME EMISSION INTO THE ROOM AND REDUCED BURNING RATES.

Existing Chimney

The internal and external condition of the chimney should be checked **before** the appliance is installed and rectification made where necessary to prevent air leakage or porosity.

The flue through the chimney should be formed with 175mm (7in) diameter minimum moisture and acid resistant liners to BS 1181:1971 (1977) or precast linings as specified in the Building Regulations 1985 and requirements in BS 6461:1984 Parts 1 and 2 should be observed.

When repairing existing chimneys, it is recommended that the Building Inspector be consulted before the commencement of work with particular attention to the chimney height and its termination.

NOTE: THE CHIMNEY SHOULD BE SWEEPED BEFORE INSTALLATION.

New Chimney

The flue should not be less than 175mm (7in) diameter and its soundness confirmed by smoke testing or consulting the district Solid Fuel Advisory Service who will give advice on the test method.

Ensure the chimney liners are free of any internal projections such as building jointing composition before the appliance is installed.

Factory-Made Insulated Chimney

It is recommended that the internal face of the chimney be refractory lined and otherwise comply with BS 4543 Parts 1 and 2.

The recommended minimum diameter is 150mm (6in) and chimney manufacturers should be consulted for further advice.

Chimney Terminations

All chimneys should terminate above the roof level in accordance with current Building Regulations and as outlined in BS 6461:1984 Parts 1 and 2.

However well designed, constructed and positioned, the satisfactory performance of a flue can be adversely affected by the downdraughts caused by adjacent tall buildings and trees or even nearby hills. These deflect the wind creating a zone of high pressure over the terminal causing it to blow directly down the chimney flue.

A suitable anti-downdraught terminal such as the **Marcone** will usually effectively combat low pressure down-blow but no known cowl is likely to prevent downdraught due to a high pressure zone.

NOTE: ADVISE THE USER TO ENSURE THE CHIMNEY FLUES ARE THOROUGHLY SWEEPED AT A MINIMUM OF 12 MONTHLY INTERVALS AFTER THE APPLIANCE IS COMMISSIONED.

Preparation of Builders' Recess Opening

The appliance and recess, hearth and chimney flue installation should be in accordance with the relevant recommendations of the British Codes of Practice CP 403:1974 and BS 6461:1984 Parts 1 and 2, with the boiler and heating installation complying with BS 5499 Part 1:1977.

The boiler section must also be installed in accordance with the bye laws of the Local Water Undertaking, Regulations for the Electrical Equipment of Buildings – published by the Institute of Electrical Engineers, and any relevant requirements of the Local Authority.

The appliance can be installed in a recess in which the hearth must be level and together with the adjacent walls, conform to the current Building Regulations.

The size of the recess is dependant on the type of materials used i.e. combustible or non-combustible materials, and this is shown in Fig. 5.

Holes will be required in one or both sides for the pipework – boiler version only.

The clearance between the appliance and any combustible material must be maintained as indicated in Figs. 2a, 2b, 3a, 3b and 4.

AIR SUPPLY

A permanent unobstructed air vent is required having a minimum effective area of 58cm² (9in²) and communicating directly to outside air or an adjacent room which itself has a permanent air vent direct to outside air.

Effect of Extractor Fan

Avoid if possible, the installation of an extractor fan in the same room as the appliance or the room where the permanent vent is located. Compensating extra air inlets must be introduced equivalent to the capacity of the fan when fitted.

Fig.2a

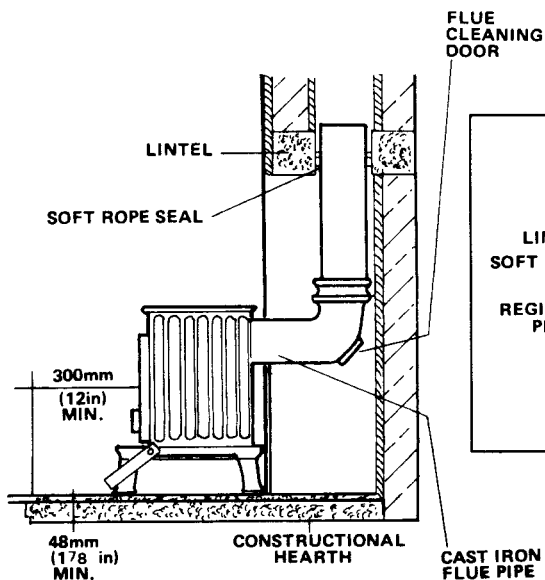


Fig.2b

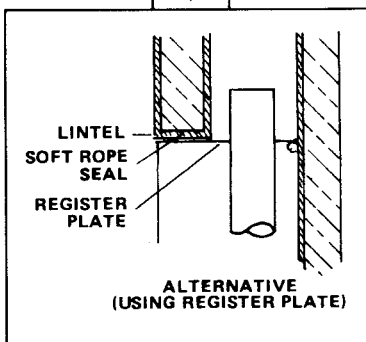
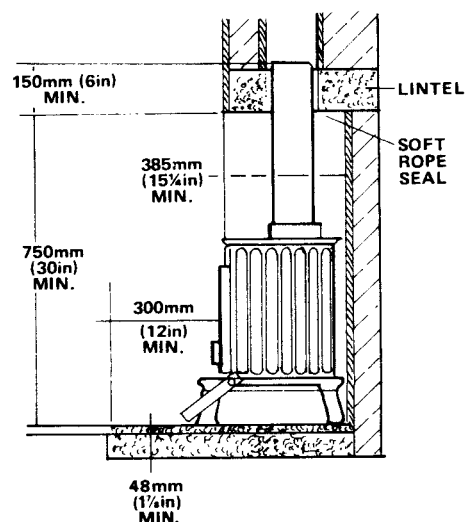


Fig.3a

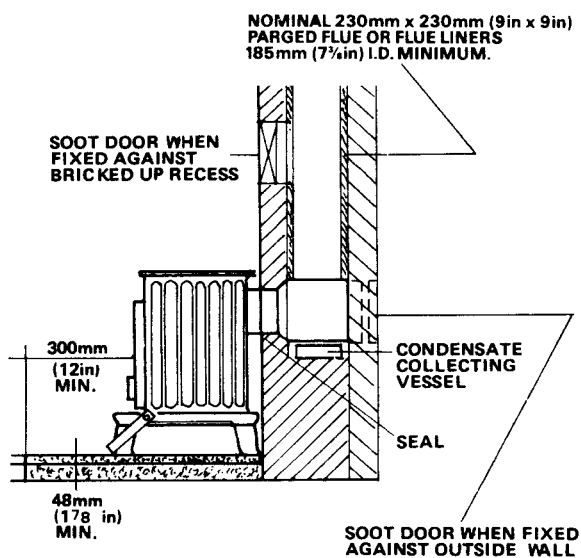


Fig.3b

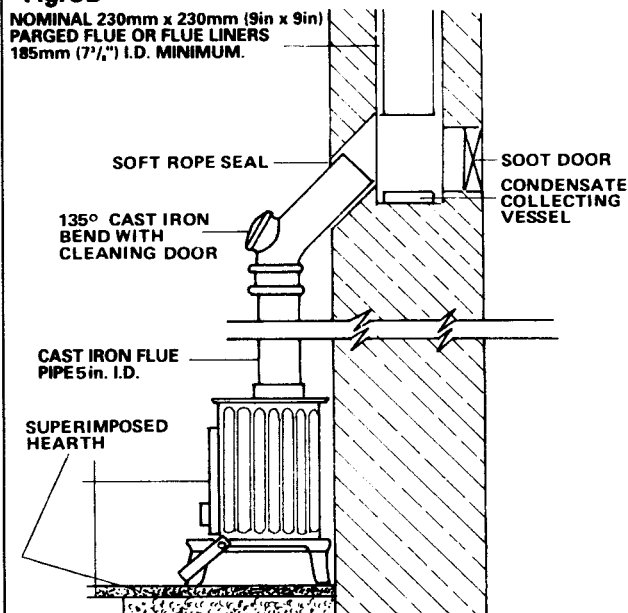
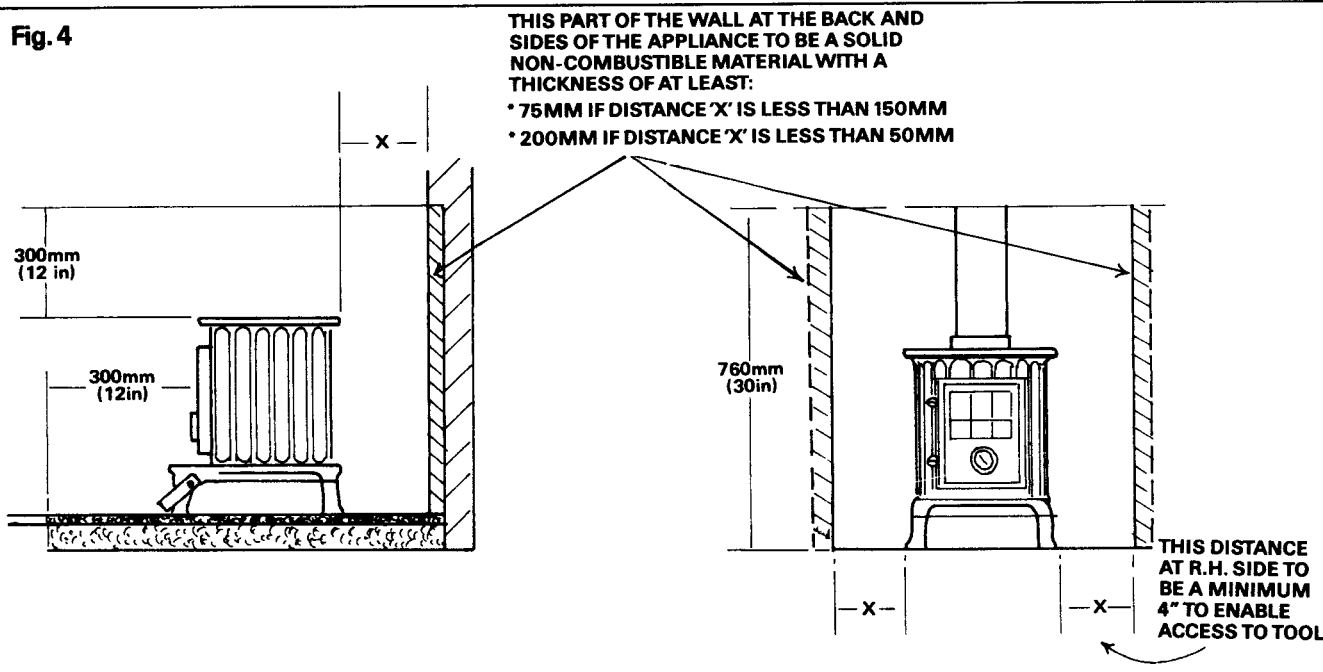


Fig.4



FLUE LAYOUT

In Figs. 2a and 2b, the stove is installed in an existing recess directly below the chimney flue. The exit end of the flue pipe must extend a minimum of 150mm (6in) into the overhanging brickwork. Any cavities or pockets above the register plate should as far as possible be filled with the flue pipe exit extended into the throat of the chimney. If the flue liner or insulated chimney is used, the diameter should not be less than 175mm (7in) in both cases.

In Fig. 4 the stove is connected to an existing brick flue with a length of flue pipe. Square bends and horizontal runs must not be used and a cleaning door included at every bend.

Fig. 3a shows a back flue outlet into a chimney brickwork.

EXTENDED LENGTHS OF HORIZONTAL PIPEWORK MUST BE AVOIDED AND ARE NOT RECOMMENDED.

NOTE: WHATEVER METHOD OF INSTALLATION IS UTILISED, AIR MUST NOT BE ALLOWED TO ENTER THE CHIMNEY EXCEPT THROUGH THE STOVE AND ALL JOINTS MUST BE AIRTIGHT. IF THE CHIMNEY IS UNLINED AND THERE IS ANY DOUBT ABOUT ITS CONDITION, IT SHOULD BE LINED IN ACCORDANCE WITH BUILDING REGULATIONS 1985. PROVISION MUST ALWAYS BE MADE FOR SWEEPING THE CHIMNEY.

IMPORTANT: CEMENT PIPES AND FITTINGS MUST NOT BE USED WITHIN 2m (6ft) OF THE STOVE OUTLET. CHIMNEYS OF PLAIN PIPE ARE NOT RECOMMENDED BUT CERTAIN PROPRIETARY MAKES OF INSULATED CHIMNEY ARE SUITABLE.

NOTE: DUE REGARD SHOULD BE TAKEN OF THE REQUIREMENTS OF THE HEALTH AND SAFETY AT WORK ACT 1974 AND CARE MUST BE TAKEN IN HANDLING THE APPLIANCE TO THE SITE INSTALLATION WITH AIDS USED WHEREVER POSSIBLE.

THE CAUSTIC NATURE OF THE FIRE CEMENT CAN AFFECT THE SKIN WHEN BEING APPLIED AND EFFORTS SHOULD BE MADE TO REMOVE CEMENT FROM HANDS IMMEDIATELY AFTER USE BY WASHING, OR PREFERABLY USE OF BARRIER GLOVES. HANDLE THE FIREDOOR WITH CARE TO ENSURE THE GLASS PANEL REMAINS INTACT. THE STOVE IS DELIVERED FULLY ASSEMBLED WITH THE EXCEPTION OF THE SUPPORT LEGS, BUT ALL FIRE CEMENT JOINTS SHOULD BE EXAMINED FOR SOUNDNESS AND IF NECESSARY, RE-SEALED BEFORE INSTALLATION.

STOVE ASSEMBLY

Before assembling the stove ensure all packaged parts have been removed from inside the stove, and inspect the stove to ensure no damage has occurred during delivery. If there is a problem please contact your local stockist.

1. Lie the stove on its back and assemble 4 support legs to base in position chosen, using 4 hexagon set screws and washers supplied (Fig. 6).

Return stove to its upright position.

2. Non-Boiler Flue Outlet

(a) Back Flue

Apply fire cement supplied to recess of back plate for joint seal before fixing flue collar to back plate using 2 threaded studs, washers and nuts supplied.

Apply fire cement to recess of top plate for joint seal before fixing blanking plate using 2 threaded studs, washers and nuts supplied.

(b) Top Flue

Apply fire cement to recess of top plate for joint seal before fixing flue collar to top plate using 2 set screws and washers supplied.

Remove surplus fire cement.

Apply fire cement to recess of back plate for joint seal before fixing blanking plate to back plate using 2 threaded studs, washers and nuts supplied.

Remove surplus fire cement.

3. Boiler Model Flue Outlet

(a) Back Flue

The flue collar is cast integral with the boiler and requires no fitting.

Apply fire cement to recess of top plate for joint seal before fixing blanking plate to top plate using 2 threaded studs, washers and nuts supplied.

(b) Top Flue

Apply fire cement to recess of top plate for joint seal before fixing flue collar to top plate using 2 set screws and washers supplied.

Remove surplus fire cement.

Apply fire cement to recess of boiler for joint seal before fixing blanking plate to boiler (Fig. 5).

Remove surplus fire cement.

Fig. 5

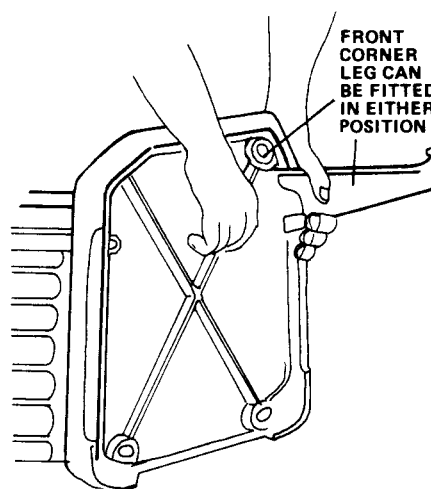
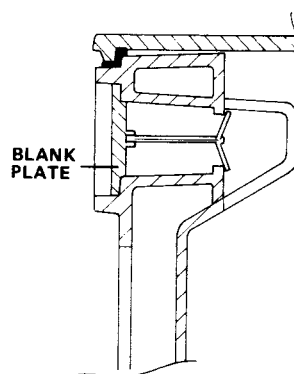


Fig. 6

Flue Pipe

Pipes and bends of 125 mm (5in) diameter black painted C.I. are available through your local stockist. Replacement parts if required can be ordered from your local stockist.

INSTALLATION

1. Position the stove in required position relative to chimney flue and on non-combustible hearth.
2. Cut length of 125mm (5in) diameter pipe to suit chosen method of flue connection. Insert flue pipe spigot in stove outlet socket and caulk joint with soft rope and cement.
3. Connect flue pipe to chimney with selected method.
4. Check that the bottomgrate rotates correctly and that the throat plate is correctly located/sealed.
5. **Boiler Model Only**
Plug any of the 1in BSP boiler connections not required and fit half unions as required.
6. Make connections to the boiler with provision for draining at the lowest point, fill with water and test.
Make good any brickwork around pipes.

COMMISSIONING

Check that the system is full of water and free from airlocks – Boiler Model only.

- (i) When lighting, open firedoor and place paper and sticks with a small quantity of fuel onto the circular bottomgrate. Ignite paper and lock firedoor, setting the firedoor spinwheel to its maximum opening.
When established, balance the water system – Boiler Model only.
- (ii) With the appliance under fire, check for soundness of seals/joints and that the flue functions correctly in permitting all smoke and fumes to be vented through the chimney.

TESTING AND COMMISSIONING

After completing the installation, the Heating Contractor should demonstrate to the user, the operation of the fire, e.g. firedoor spinwheel adjustment, the method of riddling and the removal of the throat plate for cleaning purposes as well as the routine flue cleaning method.

Ensure the Operating Instructions are left in the possession of the user.

Models	Non-boiler	Boiler
Weight of complete stove	84Kg (185lb)	100Kg (220lb)