

## WARNING

The installer has a responsibility under the **Health and Safety at Work Act 1974** to provide for the safety of persons carrying out the installation. Attention is drawn to the fact that fire cement is caustic and hands must be washed thoroughly after use. The appliance is heavy and care must be taken during handling. Although the appliance does not contain asbestos products, it is possible that asbestos may be disturbed in existing installations and every precaution must be taken.

These instructions give a guide for the installation of the appliance but in no way absolves the installer from responsibilities to conform to **British Standards**, in particular **BS833** (Code of Practice for the Installation of Domestic Heating and Cooking Appliances Burning Solid Mineral Fuel). The installation should also comply with local Building Regulations and Local Authority Bye-Laws.

# SOLID FUEL STOVES

## OPERATION INSTRUCTIONS

(To be left with customer)

MONTROSE MKIII

TURNBERRY MKII

VISTA

DRAGON MKIII



**THE AUTHENTIC ORIGINAL**

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**OPERATION INSTRUCTIONS**

For your general safety in operating your ESSE stove we include the following important information:

**SAFETY NOTES:**

1. Properly installed, operated and maintained, this appliance will not emit fumes into the dwelling. However occasional fumes from de-ashing and re-fuelling may occur. Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, open doors and windows to ventilate the room immediately. Let the fire go out or remove and safely dispose of the fuel from the appliance. Once the fire is cold, check the flue or chimney for blockages and clean if required. Do not attempt to re-light the fire until the cause of the fume emission has been identified and corrected. Seek expert advice if necessary.
2. Do not fit an extractor fan in the same room as the appliance.
3. An adequate air supply for combustion and ventilation is essential. Air openings provided for this purpose must not be restricted.
4. It is important that flue ways are cleaned frequently and the chimney swept regularly. The stove must be maintained in good mechanical order. The chimney should be swept at least once per year for smokeless fuel and a minimum of twice per year for other fuels.
5. If the chimney was previously used for an open fire, it is possible that the higher flue gas temperatures generated by the stove may loosen deposits that were firmly adhering to the inner surface of the chimney and cause a blockage in the fluepipe. It is recommend that in such a situation a second sweeping of the chimney should be carried out within one month of regular use of the stove.

6. If your stove is fitted with a boiler, never attempt to light the fire if any part of the water system is frozen. Seek professional advice.

7. Should it be likely that children, aged or infirm people approach the fire, then a fireguard must be fitted. This fireguard must comply with **British Standard BS6539 - 'Fireguards for use with solid fuel appliances'**. Your local stove stockist will be able to advise you.

8. Avoid the use of aerosol sprays in the vicinity of the stove when it is in operation.

**SUITABLE FUELS**

If you live in a smoke control area you must burn a smokeless fuel. Trade names for briquette fuel vary but your coal merchant will be able to tell you what is available. Outside smoke control areas, coal, wood and peat may be burned. Fuels which are petroleum coke based ('PET-COKE') must be burned with the primary and secondary air controls in the closed position, otherwise damage will occur to the stove which will not be covered by the warranty. Pure pet-coke (or industrial pet-coke) must not be burned. If in doubt about any fuel, consult you fuel supplier for advice.

**TYPES OF WOOD FOR FUEL**

For best results use well seasoned hardwood such as Oak, Ash, Elm or Beech. Allow wood to dry out under cover in well-ventilated conditions for at least twelve months. Wood is ready for burning when radial cracks appear in the ends of the logs. Burning green wood produces a low heat output and a serious build up of tar deposit within the flue ways and chimney, resulting in a fire hazard. Resinous softwood burns well and give a high output for short periods but do not last very long and tend to be less efficient because of the amount of flame they produce.

**PEAT**

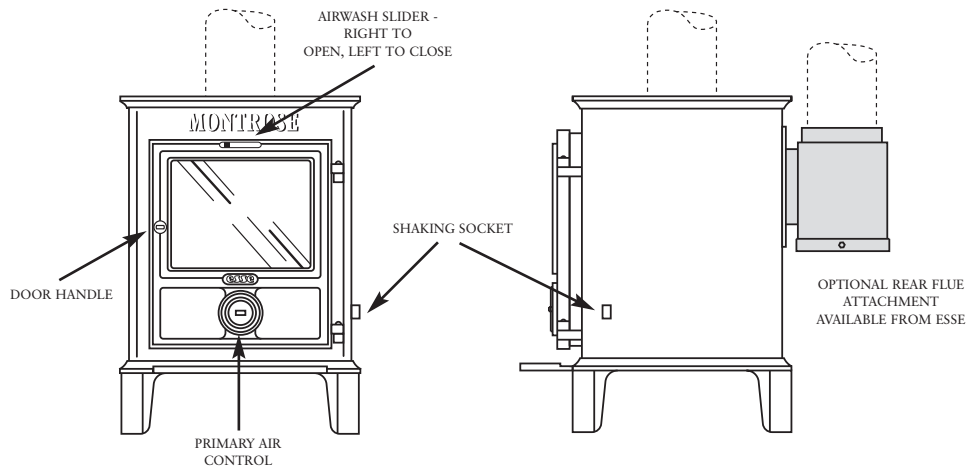
Peat is a fuel conveniently available in some areas and should be treated generally as for wood. Particular attention must be made to the drying process. Compressed peat blocks are also available in some areas and have been reduced in moisture content during the manufacturing process. Peat blocks should be stored in dry airy conditions until required for use.

**REMEMBER** - It is tempting to burn household waste but certain plastics for instance, can give off toxic fumes. Old batteries and aerosol containers can explode violently. Such items must be disposed of by other means.

**LIGHTING AND OPERATION**

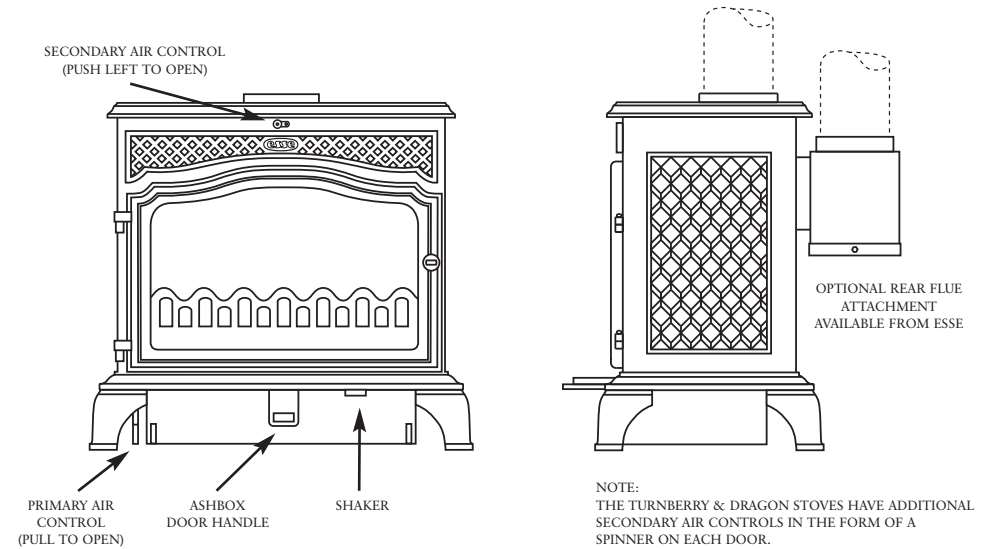
**MONTROSE MKIII**

Fig 1



**MODEL SHOWN IS A VISTA. DESCRIPTION ALSO APPLIES TO DRAGON & TURNBERRY**

Fig 2



**LIGHTING THE FIRE**

Open the fire door(s) fully (see Fig 4), check that the baffle is in position (see Fig 6 & Fig 7), that the grate is clear of ash and that the ash pan/box has been emptied. Prepare the fire using firewood and paper or proprietary fire lighters. Light the fire, close the doors and open the primary and secondary air inlets fully. When the kindling wood is well alight, add fuel and allow the fire to burn up. Build up the fire to the level of the top of the front fire bar then adjust the primary and secondary air inlets as required. The primary air inlet should be used to control the burning rate of the stove. Reducing the primary air inlet openings reduces the amount of air drawn up through the grate and correspondingly reduces the burning rate of the fire. The secondary air inlets allow air to enter the stove above the grate to aid full combustion of the available fuel and help to keep

the glass clean, therefore, the secondary air inlets should be left open except when the burning rate is to be kept to a minimum. Use the operating tool when the stove is alight (see Fig. 3). Take care as all the external surfaces become hot very quickly.

When burning wood take note of the following points:

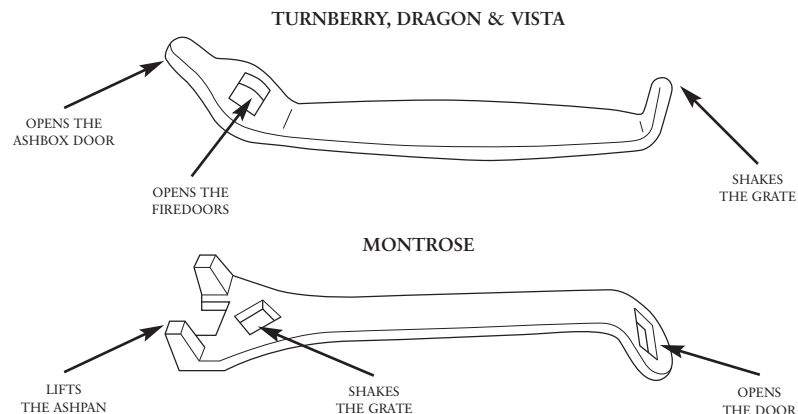
- a) When refuelling, open the air controls until the logs/wood start to burn and then close as required.
- b) Allow a bed of ash to form on the grate and leave this in place when lighting.
- c) Wood is a clean burning fuel if the stove is operated correctly.
- d) It is not good practice to run your stove at low rates continually, since tarry condensation may form. Burning the fire at high rate for 30 minutes twice a day can minimise these deposits.

**OPERATING TOOLS**

Each stove is supplied with a tool for operating the stove when it is lit.

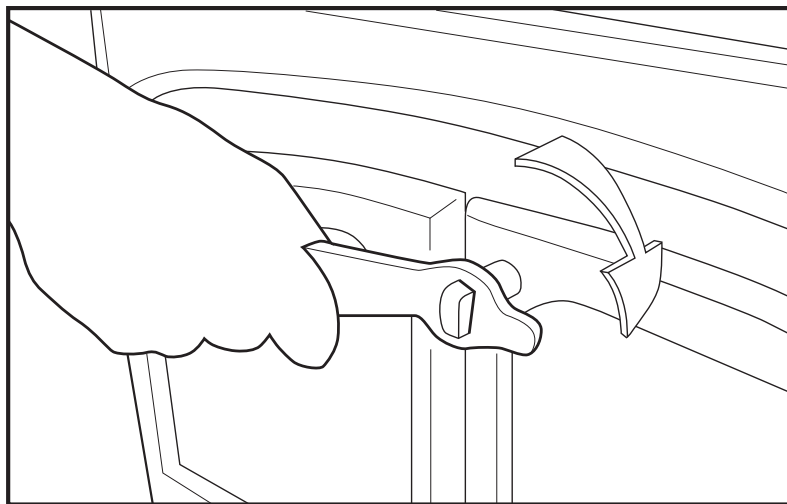
**OPERATING TOOL**

Fig 3



**OPENING THE DOORS**

Fig 4



**SHAKING THE BOTTOMGRATE**

Shake the bottom grate when the fire is fairly low and before refuelling. A full firebox may be difficult to shake due to the weight of the fuel. Shaking should always be carried out with the fire door(s) closed to avoid dust and fumes entering the room.

**ASH REMOVAL**

**Montrose** - Ash falls into the ashpan underneath the grate. The ashpan can be removed and emptied using the tool supplied.

**Vista, Turnberry & Dragon** - Ash falls into the ashbox underneath the grate where it can be removed using the supplied shovel. See Fig 5.

Always empty the ash pan/box before it becomes filled to capacity. The ash level must not be allowed to reach the underside of the grate or the grate may become distorted or burn out.

**IMPORTANT:** A layer of ash should always be left in the base of the ash box up to the level of the ribs. This layer of ash protects the base of the ash box from the heat of the fire.

**OVERNIGHT BURNING**

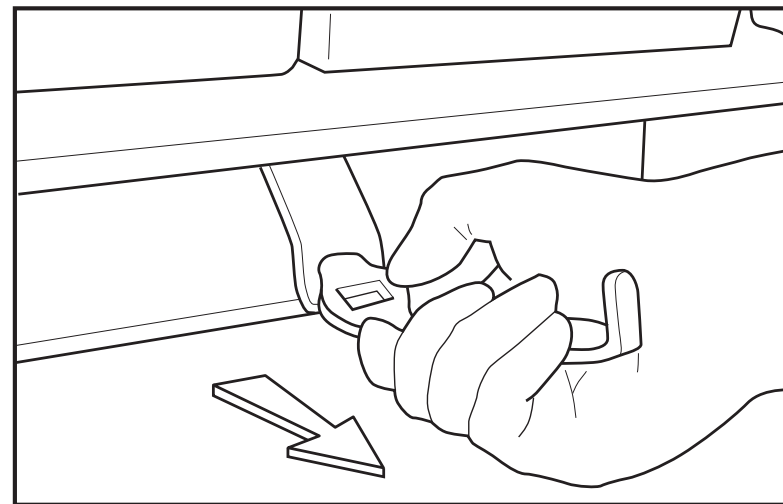
Allow the fire to burn fairly low then de-ash the firebox, add fuel to the level of the top fire bar at the front and slope the fuel upwards towards the back. Close the fire doors and allow the stove to burn for a short period with the air inlets fully open, and then close the air inlets as required. The precise setting will depend on the chimney draught and the type of fuel and can only be determined by experience.

**SHUTTING DOWN THE STOVE FOR LONG PERIODS**

The following procedure should be followed if the stove is not to be used for a long period - summertime for instance. Remove all the ashes from the grate and ash pan/box. Remove the baffle and brush the flue ways. Close the fire doors and open the air inlets fully.

**OPENING THE ASHBOX DOORS**

Fig 5



This will allow air circulation through the flue ways and help to avoid corrosion and condensation. Remember, after a prolonged period of shutdown, it is important to clean all the flue ways and the chimney before putting the stove into operation.

**CLEANING THE STOVE**

The stove should only be cleaned when it is cold. The exterior can be dusted down with a soft brush. If necessary, matt black stoves can be retouched with high temperature stove paints in aerosol form. These are available from DIY stores and stove shops. Do not use this form of paint until the stove is cold and always read the instructions on the container before starting to paint. The glass door panels are of a special heat resisting ceramic and may be cleaned when cold with proprietary glass cleaning liquids and a dry cloth.

**CLEANING THE CHIMNEY**

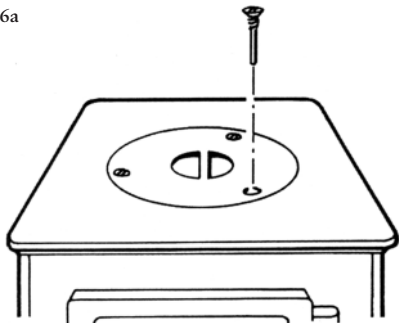
Blocked chimneys cause dangerous fumes to escape. Remove and clean the stove baffle at least monthly. Keep the chimney and fire ways clear. It is possible to access the flue or chimney from inside the stove. This is achieved by removing the stove baffle as follows:

**REMOVING / FITTING THE BAFFLE**

**Montrose**

**Removing** - unscrew and remove the front right-hand screw securing the top cover plate / flue collar.

Fig 6a



Lift up the rear edge of the front baffle and slide the baffle a few inches towards the stove. Drop the front edge down and lower the baffle. Turn the baffle through 90° and remove through the fire door. Next, slide the rear baffle forwards until the slot on the left-hand side clears the hook bolt. Drop the left-hand side down so that the baffle is at 45° and lift clear of the right-hand side hook bolt. Turn the baffle through 90° and remove through the fire door.

**Fitting** - repeat the above procedure in reverse.

Fig 6b

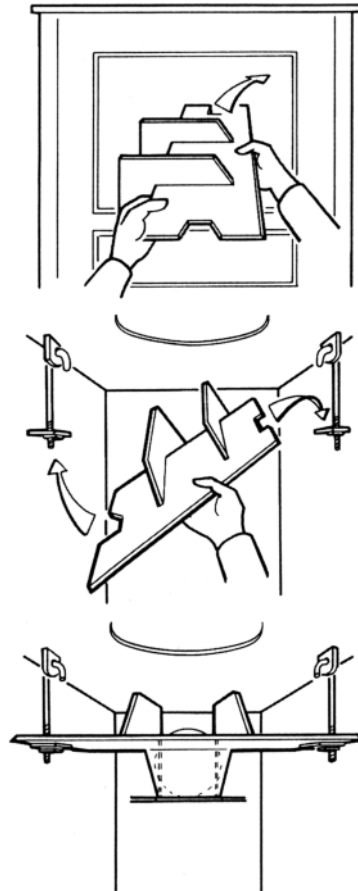
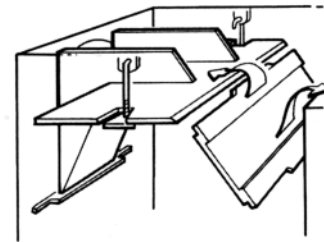


Fig 6c

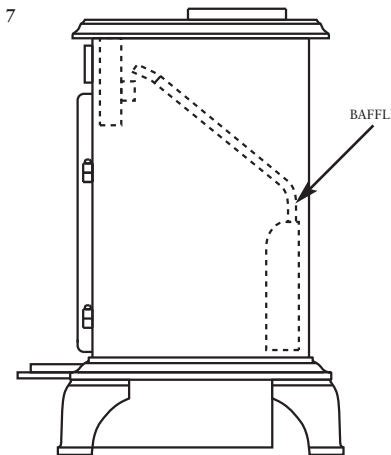


**Vista, Turnberry & Dragon.**

**Removing** - push the baffle upwards inside the stove until the back of the baffle can be rotated downwards and forwards and brought out through the front of the stove.

**Fitting** - repeat the above procedure in reverse.

Fig 7



**BOILER FITTED STOVES**

The Turnberry, Vista and Dragon stoves can be supplied fitted with a domestic hot water boiler. Alternatively, the Turnberry and Vista stoves can be supplied fitted with a central heating boiler. The amount of hot water produced by either type of boiler will depend on the rate of burning and the type of fuel used. For example, the highest output will be obtained when burning smokeless fuel at full rate. Wood burning will produce a lower output.

## SECTION 2: INSTALLATION INSTRUCTIONS

### ESSENTIAL INFORMATION THE CHIMNEY

An existing chimney must be checked to see that it is: Terminated by a ceramic pot, at least 1m above roof level and at least 4.6m from hearth level to pot.

Has an internal cross section not less than 320cm<sup>2</sup> (200mm diameter) and not greater than 1440cm<sup>2</sup> (375x375mm).

Is free from cracks, free from severe bends and free from obstructions after sweeping by a qualified chimney sweep.

Is connected to this one appliance only.

Older chimneys may have developed cracks or have been poorly built. Seek expert advice if uncertain. Where a chimney has previously been used for an open fire, the USER should be advised to have the chimney swept by a qualified chimney sweep one month after the installation of the stove. Higher flue gas temperatures can dry out a chimney and free deposits of soot within the chimney.

### A NEW CHIMNEY

A new chimney must, if made of masonry, conform to local Building Regulations and have a ceramic liner of at least 200mm diameter. If made from a 'kit', it must conform to BS4543 and be installed in accordance with the chimney manufacturers instructions. The installer is referred to BS6461, 'Installation of Chimneys and Flues for Domestic Appliances Burning Solid Fuel and Including Wood and Peat'. The chimney must be free from downdraught under all circumstances and be capable of producing a steady up draught of at least 0.05" (1.25mm) w.g. when the appliance is operating. Where draughts are consistently above 0.10" (2.5mm) w.g. consideration may have to be given to fitting a draught stabiliser to the chimney in the same room as the appliance.

(Optional extra part No. FS1). Where wood is to be used predominantly, then the chimney must be constructed to cope with the special requirements for wood fuel.

### CHIMNEY CONNECTION FOR FREESTANDING APPLIANCES

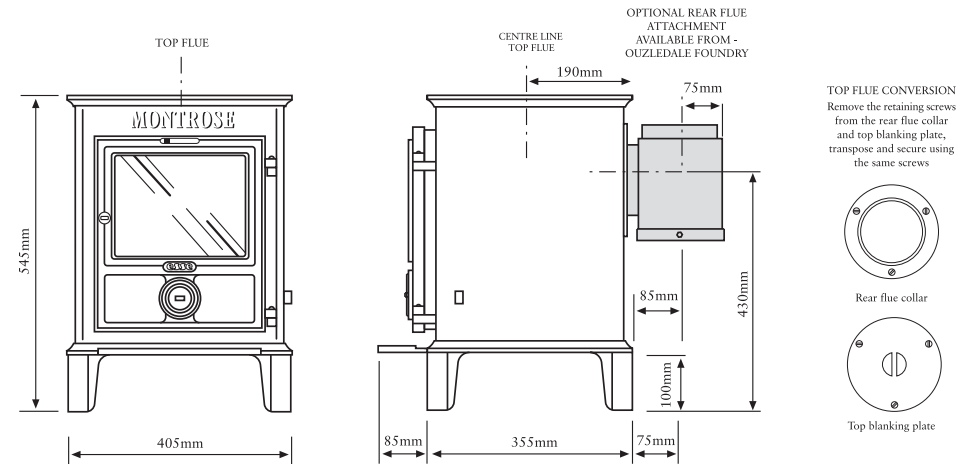
Where a freestanding appliance is to be installed without the use of a fireplace recess, the appliance should support no part of the chimney. This is necessary so that if an appliance needs to be removed for any reason, it can be achieved without major disturbance to the chimney. Masonry chimneys can be built up from ground level, a fireplace or part of the wall structure of the building -see BS8303 for details.

General notes on the performance of chimneys are given in the section of these instructions headed CHIMNEYS & FLUES GENERAL NOTES.

## SECTION 2: INSTALLATION INSTRUCTIONS Cont.

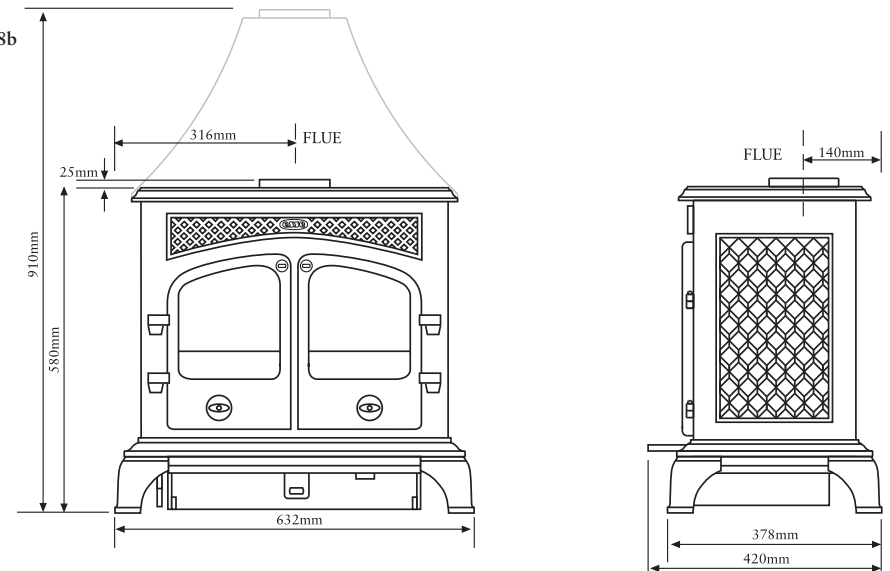
### MONTROSE MKIII DIMENSIONS

Fig 8a



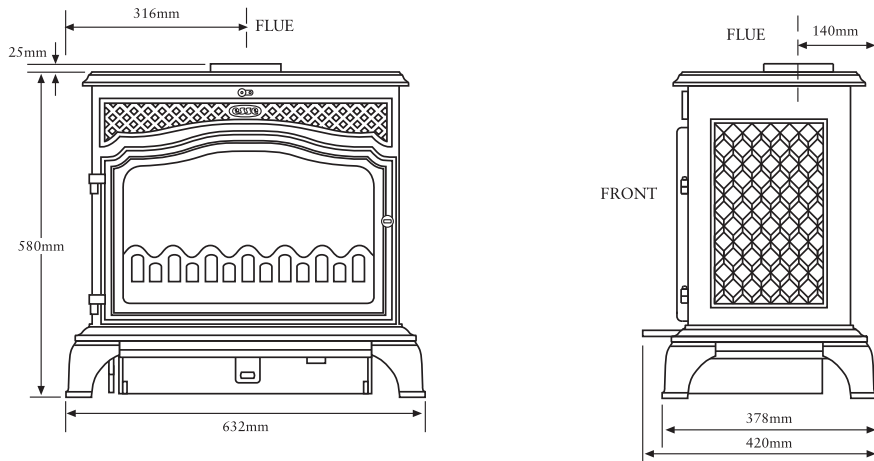
### TURNBERRY MKIII DIMENSIONS

Fig 8b



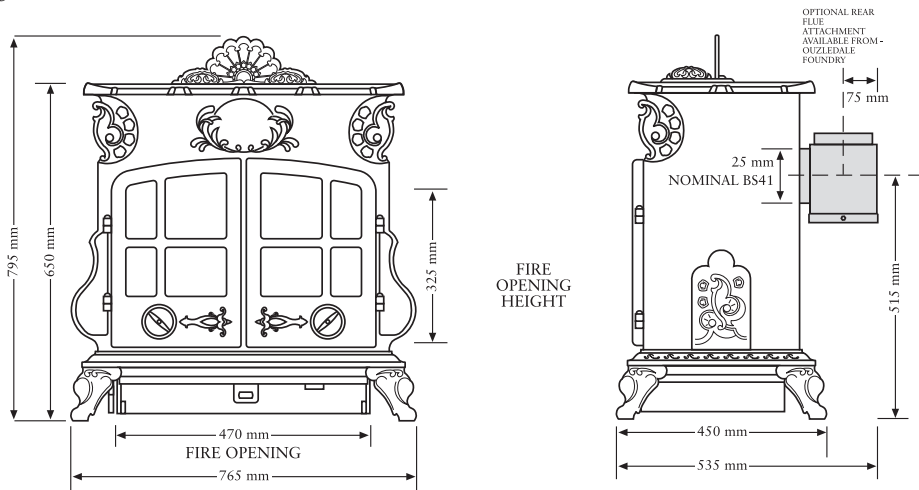
## VISTA DIMENSIONS

Fig 8c



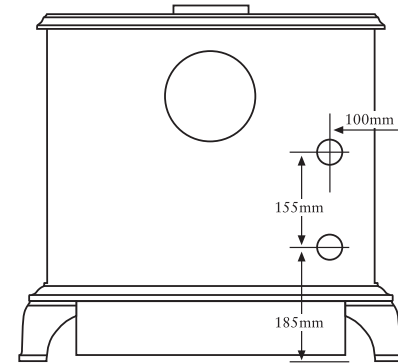
## DRAGON MKIII DIMENSIONS

Fig 8d



## TURNBERRY &amp; VISTA BOILER TAPPINGS

Fig 9



## INSTALLATION FLUE CONNECTION

The flue outlet is suitable for a 5" cast iron smoke pipe. A smaller diameter connection must not be used. Two methods of connection are shown in Fig 12. (Note: the Dragon stove is only suitable for rear connection). If an existing recess is to be used, there must be at least 150mm clearance between the top edge of the fluepipe and any overhanging brick work. Preferably, the fluepipe should project through the register plate by 150mm. If required, a rear flue attachment is available from ESSE as an optional extra. This flue attachment is useful for stoves connected to the flue at the rear where there is little room behind the stove (see Fig 8).

All the stoves will be supplied ready for rear flue connection. To change the stove to top flue connection proceed as follows: -

**Vista, Turnberry & Dragon**

Remove the flue cover plate and gasket from

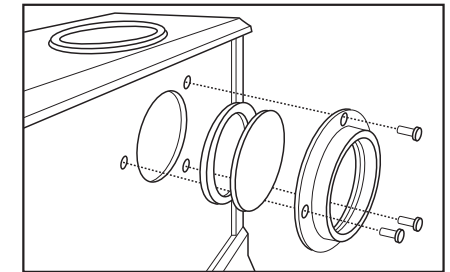
the top of the stove by undoing the wing nut from inside the stove.

Remove the flue collar from the back of the stove by unscrewing the three screws.

Clamp the flue cover plate over the rear flue outlet using the flue collar as shown in Fig 10.

## REMOVING THE FLUE COLLAR

Fig 10

**Montrose**

Remove the flue cover plate from the top of the stove by undoing three screws.

Remove the flue collar from the back of the stove by undoing the three screws.

Refit the flue collar on the top of the stove and the flue cover plate on the back of the stove using the same screws.

**IMPORTANT NOTES:**

1. In all installations there must be adequate chimney sweeping arrangements.
2. Do not use asbestos pipes or fittings.
3. Avoid 90° bends. Use an obtuse bend and limit to one only wherever possible. All bends should have a cleaning door.
4. All joints in the flue system must be effectively sealed to prevent air ingress.
5. All sockets must face upwards.

**HEARTH**

The hearth must be firm, non combustible and capable of supporting the weight of the stove. Construction must conform to the Building Regulations currently in force.

**VENTILATION**

There must be a permanent air supply to the room in which the stove is installed equivalent to 20cm<sup>2</sup>. Slight gaps around doors and windows may be sufficient, but if none exist, fit a suitable airbrick.

**EXTRACTOR FANS**

There must be no extractor fan fitted in the same area as the stove.

**WATER, GAS AND ELECTRIC SERVICES**

The installer is reminded that a competent and authorised person must install any such service.

**ASSEMBLY**

Unpack the stove and check that all parts are present. Move the stove into position and finalise the installation. On completion, check that the flue baffle is correctly located and there is no debris lying at the base of the flue. Check that all of the bottom grate parts are correctly located, the front firebar is in place and that the operating tool shakes the grate correctly. Close and latch the firedoor(s).

**DOOR FIT**

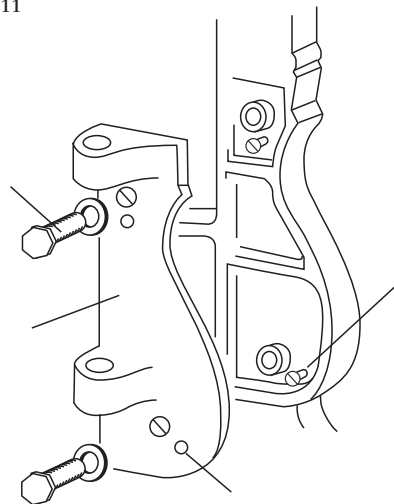
**Dragon**

A soft rope seal is fitted and the hinges are adjustable, see Fig 11. The hinge block (2) bears on flat-headed screws (1) and therefore turning these screws independently as required can make adjustment. Access to the screws (1) is gained through holes (3) in the hinge block. Hexagon screws (4) are the locking screws. To adjust a door, slacken the hexagon screws (4) and move the hinge blocks inwards or outwards by use of a screwdriver

through holes (3). Sideways or up and down movement can be obtained by moving the hinge blocks within the confines of the holes for screws (4). Lock the hexagon screws after adjustment.

**TURNBERRY & VISTA BOILER TAPPINGS**

Fig 11

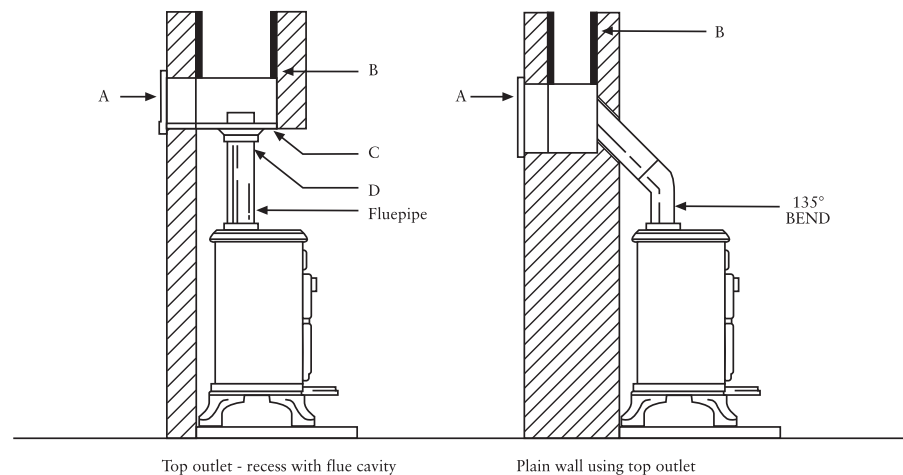


**Vista, Turnberry & Montrose**

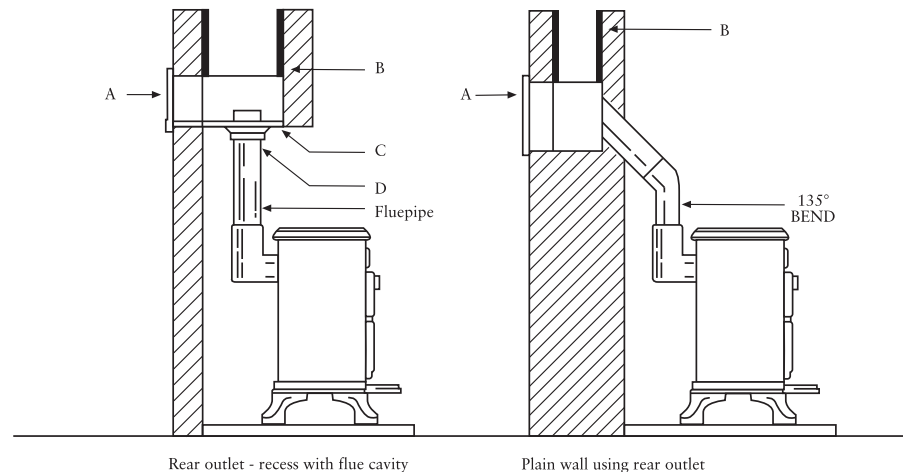
Lift the stove door(s) off its hinges. Screw the hinge blocks further into the stove front to tighten the door fit or screw them further out to loosen the door fit. Replace the stove door to check the fit. Repeat as necessary.

**CONNECTION**

Fig 12



- A Flue clearing door
- B Flue liner
- C Register plate sealed to brickwork
- D Flue pipe colar with rope seal



**INSTALLERS DUTIES**

On completion of the installation, it is the installer's duty to carry out the following tasks:

1. Check that all parts are correctly fitted and the operating tool and accessories are as specified.
2. Light the fire and check that the flue functions correctly and that all products of combustion are vented to atmosphere through the chimney terminal.
3. Demonstrate the method of operation to the user.
4. Draw the attention of the user to the importance of following the Operation Instructions.
5. Remind the user of the necessity for regular chimney sweeping.
6. Hand over the instruction booklet to the user.

**CHIMNEYS & FLUES GENERAL NOTES**

Important: The following notes are for general information only. The details given previously in this instruction are definitive and override any conflicting information which may be read into this section.

**FUNCTION**

The function of a chimney and fluepipe is two fold:

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

Draught is necessary for both of these functions. The hot combustion gases in the chimney are lighter than cold air outside and thus create a chimney draught. Draught is measured as the difference in pressure created by the hot gases and is expressed as mm or inches water gauge.

Ventilation provides air for combustion and is very important for safe and efficient operation. If the flow of fresh air is inadequate then the flue system will fail and hazard may arise. Replacing old windows and doors with sealed types can reduce the 'adventitious air' formerly existing and reduce

the amount of air available for safe operation. 'Fly screens' fitted over vents or airbricks must be avoided since the screen can clog up in time, seriously impairing the airflow. Likewise 'hit or miss' ventilators that can be closed are not permitted.

**FACTORS AFFECTING CHIMNEY AND FLUE PERFORMANCE**

Temperature differential: The hotter the flue gases the greater the pressure differential and draught.

Height: The higher the chimney, the greater the potential draught, provided that the chimney does not dissipate heat in its higher regions. Any interference with the exit of the flue gases at the chimney top will affect the draught. If the chimney is terminated at eaves level or less than 1m above a roof surface, it is probable that wind will affect flue gas exit. Houses may be in positions where wind can produce excessive draughts and cause over firing. A serious pressure difference between windward and leeward sides of a house can increase or reverse gas flow in the chimney, i.e. cause over firing or smoking due to downdraught. The outlet point should not be less than 1m above the highest point of contact between the outlet and the roof, except where the roof has a pitch at both sides of the ridge of less than 10° with the horizontal and the chimney passes through the roof at the ridge or within 0.6m of it. The chimney outlet should not be less than 0.6m above the ridge. The top of the chimney or flue should not be less than 1m above the top of any openable window or skylight in the roof or external wall and which are not more than 2.3m, measured horizontally, from the top of the chimney. The illustrations show these points, which were in accordance with the Building Regulations at the time of preparing these instructions.

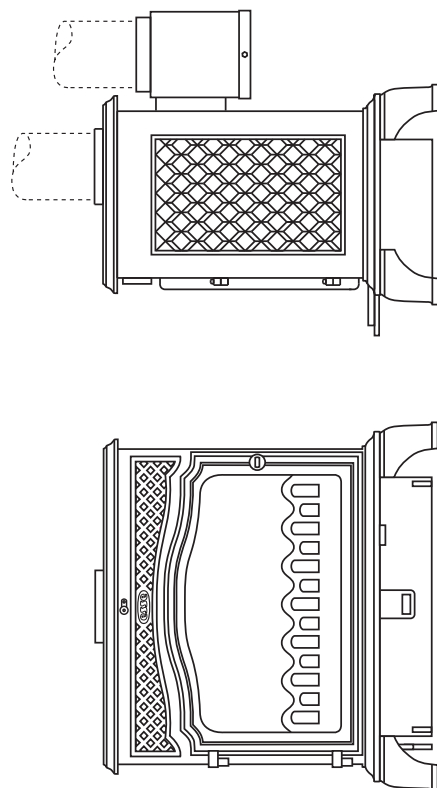
A check should be made in case of any subsequent amendments. Adjacent buildings or high trees can deflect winds and create pressure zones which have an adverse effect on the exit of the flue gases. In bad cases, this is almost impossible to correct, although some form of cowl may prevent downdraught, fumes may still be carried down to ground level. To provide a suitable draught value, a chimney height of a least 4.8m may be required. A draught stabiliser that consists of a hinged and weighted flap covering an opening in the flue can control excessive draught. The stabiliser should be fitted close to the appliance and always in the same room.

Size and shape: The internal size of the flue and chimney must conform to the requirements laid down in the Installation Instructions. The ideal chimney is straight, vertical with no bends and circular in cross section to minimise resistance to the flow of flue gases.

Construction: A chimney enclosed in the fabric of the building or having only one or two walls exposed, usually has tolerable heat losses and these at some extent help to warm the building. Heat can be lost by conduction if the chimney or flue pipe material possess low insulation properties and an unlined brick chimney with three or four walls exposed will lose heat rapidly and reduce the draught potential. Where the use of an external chimney or flue is unavoidable, it will be necessary to install a lining to conserve heat in the flue gases.

## CHIMNEY AND FLUE PERFORMANCE

Fig 13



## BOILER FITTED STOVES

**DOMESTIC BOILER (Dragon, Turnberry, Vista)**

Maximum output to hot water = 2.63kW  
(9,000 Btu/h).

Maximum space heating output = 5.5kW:

A glass-lined boiler is fitted and can, if essential, be installed on a direct water system providing that the water is not prone to lime scale. There is no de-scaling facility on the boiler. An indirect system is recommended wherever possible. The cylinder capacity should not be less than 130 litres.

**CENTRAL HEATING BOILER (Turnberry & Vista Only)**

Maximum output to hot water = 11kW  
(36,500 Btu/h).

Maximum space heating output = 4kw:

This boiler is only suitable for an indirect system.

**BOTH DOMESTIC & CENTRAL HEATING BOILERS**

There are two boiler tapings at the left hand rear of the stove; the thread size is 1" BSP. Fig 9 shows the position of the boiler tapings in the rear of the stove. The flow tapping must be taken from the stove in 28mm pipe to prevent air being trapped in the top of the boiler; any subsequent reduction must be on a rising section of the pipe. The water circuit must be for gravity circulation. The water circuit must follow established plumbing practice. The stove must be level when fitted and the flow pipe must rise from the boiler. A drain cock must be fitted at the lowest point of the circuit and a permanent vent to atmosphere provided at the highest point. The storage cylinder and as much of the pipe work as possible should be insulated to prevent heat losses. The static head must not exceed 18m of water.