

# WF SERIES **ONE & TWO**INSTALLATION MANUAL AND OPERATING INSTRUCTIONS

## **WESTFIRE**

THE ART OF DANISH ENGINEERING





Westfire WF SERIES ONE

Westfire WF SERIES TWO

## WF SERIES ONE & TWO

This manual refers to the stove type listed above, which has been tested in accordance with EN13240.

## **WESTFIRE**

### UK: INSTALLATION MANUAL AND OPERATING INSTRUCTIONS WESTFIRE WF SERIES ONE & TWO

Congratulations on your purchase of a new wood burning stove from Westfire ApS. Please read this manual carefully in order to ensure that you get maximum enjoyment from your new stove and to prevent any problems. Please note that "all local regulations, including those referring to national and European Standards, need to be complied with when installing this appliance".

For further information on installing and using fireplaces and wood burning stoves, please see the relevant building regulations that apply to the country in which WESTFIRE SERIES ONE & TWO has been approved, as well as the relevant brochure on the correct use of wood burning stoves available from your local stove supplier or your Chimney sweep.

These instructions cover the basic principles to ensure the satisfactory installation of the WESTFIRE SERIES ONE & TWO wood stoves, although detail may need slight modification to suit particular local site conditions. In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove.

It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS 6461 and BS 7566 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.

#### HEALTH AND SAFFTY PRECAUTIONS

Special care must be taken when installing the stove such that the requirements of the Health and Safety at Work Act are met.

### Handling

Adequate facilities must be available for loading, unloading and site handling.

#### Fire Cement

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

#### Ashestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

#### Metal Parts

When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

#### **WESTFIRE SERIES ONE AND TWO WOODSTOVES**

WESTFIRE SERIES ONE AND TWO is available in several models

	WF SERIES ONE	WF SERIES ONE PEDESTAL	WF SERIES TWO	WF SERIES TWO PEDESTAL
Height	570 mm	1112 mm	570 mm	1112 mm
Width	410 mm	410 mm	560 mm	560 mm
Depth	410 mm	410 mm	410 mm	410 mm
Closed combustion fitted as standard	Yes	Yes	Yes	Yes

#### STOVE PERFORMANCE & TESTING

Westfire SERIES models have been approved in accordance with EN 13240.

Stove model	l Weight	Nominal heat output	
		Wood	Smokeless fuels
WF SERIES ONE	80 kg	4.9 KW	N/A
WF SERIES ONE PEDESTAL	110 kg	4.9 KW	N/A
WF SERIES TWO	100 kg	7.1 KW	N/A
WF SERIES TWO PEDESTAL	135 kg	7.1 KW	N/A

### PREPARATORY WORK AND SAFETY CHECKS IMPORTANT WARNING

This stove must not be installed into a chimney that serves any other heating appliance.

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

#### **Chimney - Chimney Connection**

#### Flue Diameter 150mm (160cm2)

In order for the stove to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught so as to clear the products of combustion and prevent smoke problems into the room.

Minimum draft: WESTFIRE SERIES ONE stove has been tested with a draft of 12 Pa. Maximum draft 25 Pa. Flue gas flow 3.8 q/sec.

Flue gas temperature 270°C. approximately 12 Pa

WESTFIRE SERIES TWO stove has been tested with a draft of 12 Pa. Maximum draft 25 Pa.

Flue gas flow 4.6 g/sec.

Flue gas temperature 282°C. approximately 12 Pa

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS 5854:1980 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 160 mm x 160 mm. Remedial action should be taken, if required, seeking expert advice. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document I.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. 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 there is no existing chimney then either a prefabricated block chimney in accordance with Building Regulations Approved Document J or a twin walled insulated stainless steel flue to BS 4543 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and Building Regulations.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 150 mm and its dimension should be not less than the size of the outlet socket of the stove. Any bend in the chimney or connecting fluepipe should not exceed 45°. 90° bends should not be used.

If it is found that there is excessive draught in the chimney then either an adjustable flue damper or alternatively a draught stabiliser should be fitted. The adjustable flue damper should not close off the flue entirely but should in its closed position leave a minimum continuous opening free area of at least 20 % of the total cross sectional area of the flue or fluepipe.

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting flue pipe

#### Distance to Combustible materials

Combustible materials should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

WESTFIRE	WF SERIES ONE	WF SERIES TWO
Distance to combustible materials rear	450 mm	450 mm
Distance to combustible materials side	650 mm	600 mm

The minimum distances to flammable materials are specified on the EN 13240 plate on the back of the stove.

#### Hearth

The hearth should be able to accommodate the weight of the stove and its chimney if the chimney is not independently supported.

The WESTFIRE SERIES ONE & TWO wood stoves have been tested and are suitable to be installed on a 12mm non combustible plate such as Westfire 12mm glass plates or 20mm slate plates. Installation of all hearths should comply in size and construction so that it is in accordance with the provisions of the current Building Regulations Approved Document I.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in Building Regulations Approved Document Land also in these stove instructions.

If the stove is to be installed on a wooden floor, it must be covered with a non-combustible material at least 12mm thick, in accordance with Building Regulations Approved Document J, to a distance of 30 cm in front of the stove and 15 cm to each side measuring from the door of the combustion chamber.

#### Combustion air supply

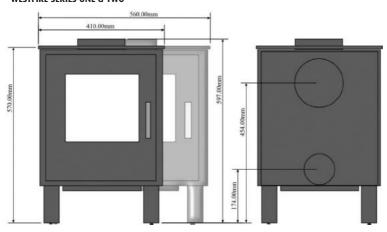
In order for the stove to perform efficiently and safely there should be an adequate air supply into the room in which the stove is installed to provide combustion air. This is particularly necessary if the room is double-glazed or a flue draught stabiliser is operating in the same room as the appliance. The provision of air supply to the stove must be in accordance with current Building Regulations Approved Document J. An opening window is not appropriate for this purpose. Air inlets must be positioned in such a way that they cannot be blocked. An air inlet may be a vent (the vent must be open and the capacity of the vent sufficient when the stove is lit) or a fresh air system linked to the stove.

The WESTFIRE SERIES ONE & TWO are fitted as standard with a closed air supply collar, this enables the stove to take all combustion air (primary, secondary and tertiary) directly from outside with 100mm pipe from the stove.

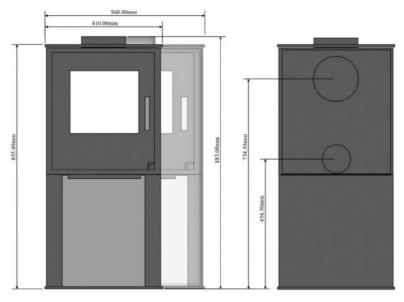
There are no European rules regarding the minimum distance to non-flammable walls, Westfire recommend leaving a gap of at least 10 cm behind and to sides of stove.

FLUE AND AIR INTAKE POSITIONS		
	WF SERIES ONE & TWO	WF SERIES ONE & TWO Pedestal
Distance from rear to centre of top flue exit	120 mm	120 mm
Distance from floor to centre of rear flue exit	454 mm	734.5 mm
Distance from floor to centre of external air intake	174 mm	454.5 mm

### **WESTFIRE SERIES ONE & TWO**



#### **WESTFIRE SERIES ONE & TWO PEDESTAL**



#### **Westfire Insulated chambers**

The WESTFIRE SERIES ONE & TWO stoves are lined with heat deflection panels and baffles, these panels are designed to ensure the maximum efficiency and are an integral part of the clean burn process of the stove. These baffles should not be removed other than for cleaning the stove. Any defective panels should be replaced.

#### Connection to chimney

The WESTFIRE SERIES ONE & TWO stoves are factory set up with a top flue outlet, this can be altered to a rear connection by unbolting top collar and rear cover plate and exchanging collar and plate. Care should be taken to ensure an airtight fit when refitting collar and plate. A decorative cover plate is included with every stove to cover the hole in the convection top plate.

This collar allows connection to either a masonry chimney or a prefabricated factory made insulated metal chimney.

#### Commissioning and handover

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, a small fire may be lit to check that smoke and fumes are taken from the stove up the chimney and emitted safely into the atmosphere. Do not run at full output for at least 24 hours.

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer. Ensure to advise the customer on the correct use of the appliance with the fuels likely to be used on the stove and notify them to use only the recommended fuels for the stove.

Advise the user what to do should smoke or fumes be emitted from the stove. The customer should be warned to use a fireguard to BS 6539 in the presence of children, aged and/or infirm persons.

#### Operating your stove- WESTFIRE SERIES ONE & TWO

#### The first lighting of your stove.

The heat-resistant paint on your stove will cure and harden the first time you light your appliance. The curing process produces a good deal of smoke and odour, it is therefore important that the first time you light your stove the room should be well ventilated. During the process it is important to open and close the stove door periodically (every 30mins) during the first couple of firings therefore preventing the door seal cord around the door from sticking and coming away from the door. Once the heat-resistant paint has hardened the smell will disappear. This stove is NOT designed to be used with the door open, the stove door must be kept closed except when lighting the stove, adding firewood or removing ash in order to prevent flue gases from escaping.

#### Lighting your appliance

Quality Firelighters should be used when lighting the stove. (Never use mentholated spirit, petrol or other flammable liquids). Lighting your stove with firelighters will be more reliable and easier than using paper.

#### To light your stove

- Place a few smaller pieces of dry wood (kindling) in the stove on top of the non toxic firelighters, place one or two small dry split (¼ split) logs on top.
- Fully slide open (to the right) the secondary air slider above the stove door on right hand side. Pull out fully primary air slider at base left of stove. Pull out riddling arm fully at base right of stove. The stoves air supplies are now fully open.
- Light the firelighters and push door to closed position but do not close latch, this will allow a small gap of 1cm for more air to be supplied to stove.
- 4. After approximately 10 minutes when the fire is burning brightly shut latch on the door.
- 5. Once fire is hot push in fully the primary air slider at base left of stove. Push in riddling arm fully at base right of stove. This will close off the primary air control to the stove. If the stove begins to die when the primary is closed, open slider again and leave open for another ten minutes.
- 5. After approximately another 10 minutes close the secondary air slider by 50%, for the stove to burn cleanly plenty of secondary air is needed, do not be tempted to shut the fire down too early as this may cause smoke. At nominal heat output, expect to refuel your stove approximately once an hour.

The WESTFIRE SERIES ONE & TWO stoves are all equipped with a control valve for secondary air designed to ensure a plentiful supply of oxygen during firing. When lit, the stove will get very hot and due care must therefore be exercised. Please use a glove and operating tool supplied when operating levers and dampers.

#### **RE-FUELING**

To re-fuel your stove in the cleanest way.

Only refuel your stove when flames have died down and you have glowing embers.

Before refuelling, open secondary air slider fully, also open primary air slider fully and leave for 5 minutes. Open door gently, add two pieces of wood measuring approx 20cm with a combined weight of approx 1.4kg and closes the door. Leave the air sliders open for 10 minutes to allow the fire to reach a good temperature. Close (push in) primary air slider at base left of stove and slide secondary air slider to 50% open.

**In the event of a chimney fire:** Close the air damper and the stove door, and call 999 or your local fire department.

If your stove is overheating all air sliders and the door must be closed, and left until the stove has returned to nominal temperature.

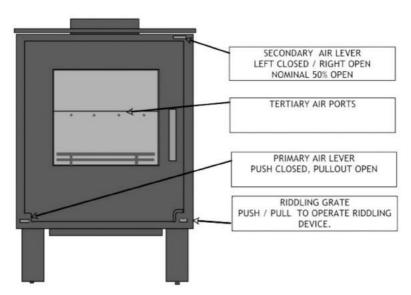
#### Basic Positions of air controls during operation

You will need to become familiar with your stove in order to be able to regulate the secondary air intake correctly, as factors such as the quality and height of your chimney, the quality of your fuel and the external conditions play a large role in your stove performance. It is easy to see whether the stove is functioning correctly; however incomplete combustion may lead to a build-up of hard, shiny soot on the inside of your stove and glass.

To prevent sooting of the chamber and glass introduce secondary air, also check that your wood is dry.

It is important to check the draft conditions before lighting your stove. This may be done, for instance, by crumpling a piece of newspaper, placing it in the combustion chamber and lighting it. The draft conditions are good if the smoke is drawn away through the chimney.

### CONTROLS ON THE WESTFIRE SERIES ONE & TWO



#### Door operation

When opening the door of your Westfire stove always wear the glove that is provided to protect your hand from possible heat. The handle twists right away from the fire. When shutting the door push the door closed and twist left until the handle firmly closes.

#### WOOD FUFI

#### IMPORTANT: Never use toxic wood such as chipboard, impregnated or painted wood.

Good quality is the most important factor in your stove working efficiently and cleanly. Always use dry firewood. The dryness of the firewood plays an important role since the use of wet wood results in poor fuel economy and may cause a tarry sooty film on the internals of the stove.

Newly cut wood contains 60–70% water, making it totally unsuitable for use as firewood. Newly cut wood should be stacked and air dried under cover for two years before being used as firewood.

**SOLID SMOKELESS FUELS-** The WESTFIRE WF SERIES ONE & TWO stoves are suitable for use with good quality smoke less fuels. The stove will burn best when burning wood. HOUSE COAL AND PETROLEUM COKE ARE NOT SUITABLE FOR USE ON THIS STOVE; ITS USE WILL INVALIDATE THE GUARANTEE.

#### Overnight burning

Westfire SERIES ONE & TWO, are designed to burn wood and can burn quality smokeless fuels.

Wood burns more efficiently and cleanly if is burnt hotter. Westfire do not recommend that their stoves are burnt overnight for this reason.

As a night time regime we recommend that the fire is loaded when hot and burnt for five minutes with the secondary air slider fully open until the new wood has taken and is burning, then close the secondary air valve to its operational position.

On returning to the stove in the morning the fire will have burn out, reload with some paper or firelighter and some kindling and open all the slider fully to relight quickly. Beware as the ash bed will have hot embers.

#### Use of operating tools

Always use the operating tools provided when handling parts likely to be hot when the stove is in use.

#### Maintenance

WESTFIRE SERIES ONE & TWO stove needs to have the ash removed from the stove at regular intervals. Make sure the stove is completely cold before cleaning out ash (embers can remain hot for over 24 hours). To operate riddling grate push and pull riddling arm on base right of stove using tool provided with the stove. To clean the outside of the stove use a dry cloth.

#### Annual service

The inside of the stove should be serviced /cleaned once a year. To clean the inside, remove all ash, soot and tar residue from the combustion chamber. Remove insulated chamber panels and baffle, dirt and soot will collect behind it and this must be cleaned out. Check the quality of all insulated panels and replace any which are damaged or cracked, replace stove door rope cord in the door. Check glass is correctly positioned.

The stove, the flue pipe connection and the chimney should be checked regularly by a qualified engineer. The chimney should also be checked for blockages before relighting the stove if it has not been used for an extended period of time.

The paint/ lacquer can wear thin in exposed places due to overheating. This, and other lacquer damage, may be repaired using a Westfire Senotherm paint/lacquer spray available from your Westfire dealer.

Ash must be stored in a non-combustible container and must not be mixed with other combustible waste.

#### Trouble shooting

#### 1. Fire Will Not Burn - check

- a) the air inlet is not obstructed in any way.
- b) that chimneys and flueways are clear,
- c) that a suitable fuel is being used,
- d) that there is an adequate air supply into the room,
- e) that an extractor fan is not fitted in the same room as the fire.

#### 2. Fire Blazing Out Of Control - check

- a) the doors are tightly closed,
- b) the air control is turned down to the minimum setting,
- c) the air inlet damper is closed and that it is not prevented from closing completely by a piece of ash,
- d) a suitable fuel is being used,
- e) the door seals are in good condition.
- f) the chimney draft may be too strong
- g) check ash pan seal and
- h) check for ash below ash pan causing pan to not seat correctly and clean out.

#### 3. Soot forms on the window

- The firewood may be too wet
- b) the intake of secondary air may be insufficient
- c) fire not hot enough

#### 4. The stove fails to heat fully

- a) The firewood may be too wet
- b) the intake of secondary air may be insufficient

#### 5. Smoke or odour

- a) Weak chimney draft
- b) check for blockages in the flue pipe/chimney
- c) check the height of the chimney in relation to the surroundings

#### 6. Soot in the chimney

- a) The firewood may be too wet
- b) intake of secondary air may be insufficient

#### **Chimney Fires**

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur turn the air control setting to the minimum, and tightly close the doors of the stove. 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 stove has gone out. The chimney and flue ways 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

#### Permanent air vent

The stove requires a permanent air vent to the room or a direct connection to the closed air port at the rear of the stove. This is to provide adequate air supply in order for the stove to operate safely and efficiently.

In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

#### **WARNING NOTE**

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de ashing and re fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:

- (a) Open doors and windows to ventilate room
- (b) Let the fire go out or eject and safely dispose of fuel from the appliance
- (c) Check for flue or chimney blockage and clean if required
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

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

#### IMPORTANT NOTES

#### General

Before lighting the stove check with the installer that the installation work and commissioning checks described in the installation instructions have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the stoves' commissioning and handover the installer should have shown you how to operate the stove correctly.

#### Use of fireguard

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 6539.

#### Chimney cleaning

The chimney should be swept at least once a year for smokeless fuels and a minimum of twice a year for wood and other fuels. It is important that the flue connection and chimney are swept prior to lighting up after a prolonged shutdown period.

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.

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

#### **HETAS Ltd Approval**

This appliance has obtained HETAS Ltd approval on a safe and fit for purpose level (single tick approval) for burning wood logs only as detailed in list of recommended fuels above. Approval does not cover the use of other fuels either alone or mixed the recommended fuels listed, nor does it cover instructions for the use of other fuels.

#### Guarantee

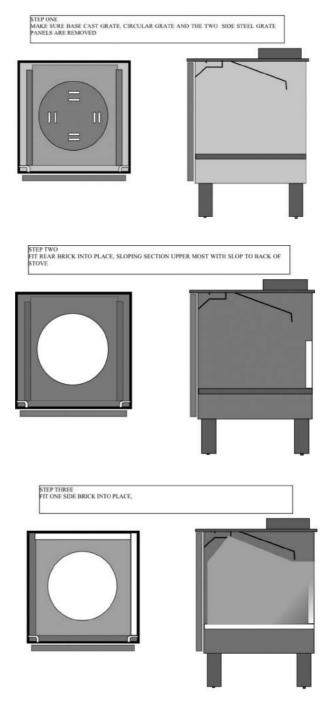
Your new stove is covered by a five year guarantee against manufacturing defects. Your receipt documents is the date of purchase. The guarantee does not cover damage caused by faulty operation such as overheating or the stove being incorrectly connected, or damage which occurs as a result of external physical force.

The guarantee does not cover damage to replaceable parts, transport costs associated with repairs under warranty or the installation/dismantling of the stove in connection with repairs under warranty.

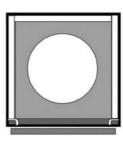
Warning! Any unauthorised modification of the appliance is forbidden.

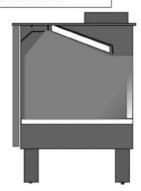
Only replacement parts recommended by Westfire ApS should be used for repairs.

### **RE-INSTALLING BRICK SETS**

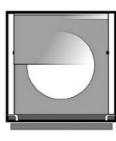


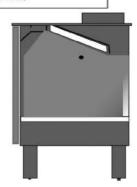
STEP FOUR FIT TOP BAFFLE IN PLACE AGAINST STEEL GUIDES , FIT SECOND SIDE BAFFLE. WITH THE TWO SIDE BAFFLES IN PLACE TOP BAFFLE WILL STAY IN PLACE



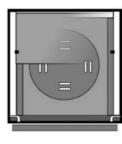


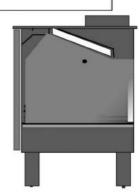
STEP FIVE FIT LOWER BAFFLE, REST ON TOP OF REAR FIRE BRICK AND LEFT INTO PLACE PUSH IN SECURING PINS ON EACH SIDE BAFFLE (2 IN TOTAL)





STEP SIX FIT BASE CAST GRATE, FIT CENTRAL CIRCULAR RIDDLING GRATE. FIT TWO SIDE STEEL GRATE SPACERS FIT FRONT LOG RETAINER BARS





#### WESTFIRE STOVES IN SMOKE CONTROL AREAS

#### The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

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

The Westfire Uniq 15, 16, 17,18, 19, 20, 21, 23, 23 side glass, 23 inset, 26, 27, 28, 32 and 32 freestanding, Series ONE and Series TWO has been recommended as suitable for use in smoke control areas when burning wood logs.

Further information on the requirements of the Clean Air Act can be found here: http://smokecontrol.defra.gov. uk/ Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements

#### Using your stove in a smoke control zone.

You must purchase a smoke control version of the Westfire stove which is altered slightly to comply with regulations. This stove can not be altered, if it is it will not comply with regulations. Westfire smoke control stoves should not be burnt with the door left open.

#### Operating your stove in a smokeless zone

Firelighters should ideally be used when lighting the stove. (Never use mentholated spirit, petrol or other flammable liquids)

To light the stove

- 1. Place a few smaller pieces of dry wood (kindling) in the stove on top of the non toxic firelighters or paper.
- Fully pull open the air slider (secondary air) and the air slider on ash pan (it maybe necessary pull the ash pan drawer open 1cm as well)
- Light the firelighters close the door.
- 4. Once the fire has caught, add two pieces of wood measuring approx (See chart 2) and close the door.
- 5. After approximately 10 minutes when the fire is burning brightly close the primary air control..
- 6. After approximately another 10 minutes close the secondary air slider (See chart 1) for the stove to burn cleanly plenty of secondary air is needed, do not be tempted to shut the fire down too early as this may cause smoke. At nominal heat output, expect to refuel your stove approximately once an hour.

WF Uniq 15, 16, 17,18, 19, 20, 21, 23, 23 side glass, 23 inset, 26, 27, 28, 32 and 32 freestanding, Series ONE and Series TWO are all equipped with a control valve for secondary air designed to ensure a plentiful supply of oxygen during firing. When lit, the stove will get very hot and due care must therefore be exercised. Please use a glove when operating air controls.

#### **RE-FUELING**

To re-fuel in a the cleanest way

Before refuelling open secondary air control fully, also open primary controller (See chart 1) and leave for 5 minutes. Open door gently, adds two pieces of wood measuring (See chart 2) and close the door. Leave the air controls open for 10 minutes to allow the fire to reach a good temperature. Then close primary air control and slide secondary air control to level in table 1. Once the fire is hot the primary can be closed fully.

Table 1

Stove	Operating position Secondary air. Normal Operation	Log length & weight	When refuelling prima- ry air should be open fully for 5 minutes.
WF Uniq 17,18,19	75% open	20 cm , 1.4 KG	Yes
WF Uniq 15,16,20	75% open	20 cm , 1.4 KG	Yes
WF Uniq 23	60% open	33 cm, 1.5 KG	Yes
WF Uniq 21	80% open	20 cm,1.6 KG	Unlatch door
WF Uniq 26,27,28	75% open	20 cm,1.4 KG	Yes
WF Uniq 32	75% open	40 cm 1.6 KG	Yes
WF Series ONE	75% open	30 cm,1.4 KG	Yes
WF Series TWO	75% open	40 cm, 1.6 KG	Yes

#### FUEL

Westfire WF Uniq 15, 16, 17, 18, 19, 20, 23, 23 inset, 23 side glass 26,27,28, 32 inset and 32 freestanding, Series ONE and Series TWO are only suitable for burning wood.

For best performance, and always for low smoke emission:

- · Split logs lengthways for drying
- Use logs no bigger than about ( see table below) .

Table 2

Stove	Log length & weight
WF Uniq 17,18,19	10cm x20cm , 1.4KG
WF Uniq 15,16,20	10cm x 20cm , 1.4KG
WF Uniq 23	10cm x 33cm, 1.5KG
WF Uniq 21	10cm x 20cm, 1.4KG
WF Uniq 26,27,28	10cm x 20cm, 1.4KG
WF Uniq 32	10cm x 40cm, 1.6KG
WF Series ONE	10cm x 30cm, 1.4KG
WF Series TWO	10cm x 40cm, 1.6KG

<sup>•</sup> Ensure logs are absolutely dry (less than 15% moisture)

Never use toxic wood such as chipboard, impregnated, waste wood such as pallets or painted wood. Always use dry firewood. The dryness of the wood plays an important role since the use of wet wood results in poor fuel economy and may cause a tarry soot to form. This will also cause excessive smoke. Recently cut wood contains 60-70 water, making it totally unsuitable for use as firewood. Newly cut wood should be stacked and air dried under cover for two years before being used as firewood.