

# FW CASETTE STOVE RANGE V2 Installation and Operating Instructions

Please fix label with serial number of stove before putting manual into stove

Please hand these instructions to the stove user when the installation is complete. Leave the stove ready for operation and instruct the user in the correct use of the appliance and operation of controls.

**Important:** – This product must be installed by a suitably qualified installer.

# **Heat Design**

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# PLEASE READ ALL THESE INSTRUCTIONS CAREFULLY!

For safety reasons it is essential that your stove is correctly installed and operated. Heat Design cannot accept responsibility for any fault or consequential problems arising through incorrect installation or operation.

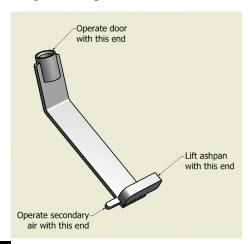
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# 1. List of Components

Description of Parts	Qty
FW Stove Assembly	1
Stove Tool	1
Door Tool	1
Ash Pan	1
Instruction Manual	1
Lower Baffle	1
Stove Operating Glove	1
Touch up paint	1

Fig 1 – Ashpan Tool & Door Tool



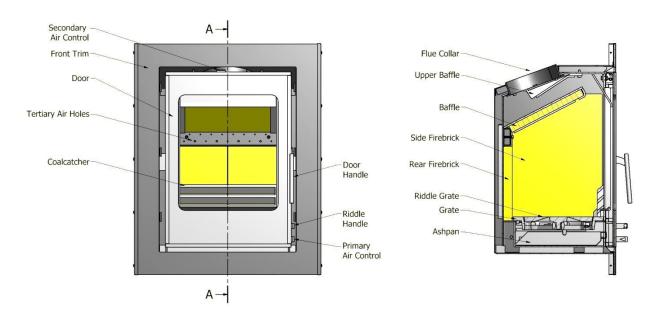


Fig 2 – Stove Assembly and controls

# 2. Component Identification and Assembly

Your Firewarm Cassette Stove is shipped securely packed and strapped. Carefully remove any straps and remove all wood, cardboard and any plastic packaging, open the door and remove all the contents. See List of Components section and check contents carefully.

- 2.1 To remove the baffle plate, carefully lift the front and slide forward until it drops through the pegs, slide the baffle down and remove through the front door. Then remove the two side firebricks and the two rear firebricks. Handle & store very carefully to one side where they will not get broken.
- 2.2 Now lift and remove the riddle grate and grate from the stove.
- 2.3 Now proceed to install the stove according to these instructions and current installation standards or HETAS advice. The internal parts of the stove can be re-assembled as the reverse of the previous removal instructions.

3. Stove Commissioning Checklist
Please complete the form below as it will be of great assistance in the unlikely event that there is a problem with the stove or a warranty claim needs to be made. Please contact the installer or dealer if there is a problem.

Retailer from whom the appliance was purchased
Name:
Address:
Telephone Number:
Complete upon stove installation
Date of Installation:
Model Number: (FW06C or FW09C or FW11C)
Serial Number:
Name: Fitter/Plumber
Address:
Telephone Number:
Commissioning Checklist – Installer to complete and sign-off
Stove correctly flued according to building regulations
Flue swept and integrity of flue verified
Smoke test completed on installed stove
Spillage test completed
Use of appliance and operation of controls explained to end-user
Check that specified clearance to combustibles has been adhered to
Instruction manual handed to end-user
Installer Signature:

# 3 Installation Instructions

# READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

It is very important to understand the requirements of the National Building Regulations (England and Wales – Document J / Scotland - Part F/Document J (Republic of Ireland only) and standards BS 8303, BS 6461, BS 7566, along with any local regulations and working practices that may apply. Should any conflict occur between these instructions and these regulations then the regulations must apply.

# **Health and Safety Precautions**

Works must be carried out with care to meet the requirements of Health and Safety (Health and Safety at Work Act 1974) and comply with the Health and Safety rules contained therein, and any new regulations introduced during the lifetime of these instructions.

# Handling

Adequate facilities must be available for unloading and site handling. Heat Design Cassette Stoves are very heavily built so always ask for assistance when lifting and siting the stoves.

# **Fire Cement**

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

### **Asbestos**

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, proper care should be taken to avoid the possibility of personal injury.

# **Important Chimney Warning**

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

# **Extractor Fan Warning**

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.

### **Cleaning and Chimney Sweeping**

The appliance, flue & chimney must be cleaned and checked internally and externally regularly in use and especially after a period on disuse (e.g. after summer). Lift down the baffle regularly to check for build up of soot or debris on the top from the flue pipe. Remove the baffle and check the flue spigot and connector is fully clear at regular intervals. The chimney and flue connector must be swept at least annually, more often when used with sooty fuels or damp wood. Any loose, broken or leaking joints or flue ways MUST be repaired immediately.

# **Fuels**

Only use recommended fuels. The appliance can be damaged by burning petroleum coke, liquid fuels or general rubbish and this will invalidate your warranty and risk your personal safety. **The appliance must not be used as a rubbish incinerator**.

# **Maintenance**

Annual checking and servicing of the appliance and flue by a competent engineer is recommended.

<u>Ventilation</u> No purpose provided ventilation is normally required for stoves rated under 5KW. However for newer build properties or properties that have been modified so that the design air permeability is less than 5m<sup>3</sup>/h.m<sup>2</sup> a permanent ventilator will need to be fitted. Approved document J of the building Regulations gives more detailed information. For each KW above 5KW, 550 sq mm of fixed ventilation is required – i.e. a stove rated at 9KW would require 3 x 550 sq mm = 1650 sq mm of fixed ventilation. If more than one appliance is installed in the same room, the ventilation requirements for each appliance must be added together.

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.

# 4.0 <u>Installation Information</u>

# Chimney

The chimney height and the position of the chimney terminal should conform to Building Regulations. Minimum chimney height is 4.5m. Check that the chimney is in good condition, dry, free from cracks and obstructions. The diameter of the flue should not be less than 150mm and not more than 200mm. If any of these requirements are not met, the chimney should be lined by a suitable method. The chimney must be swept before connection to the stove.

Where the chimney is believed to have previously served an open fire installation, it is possible that the higher flue gas temperature from the stove may loosen deposits that were previously firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

If you have any doubts about the suitability of your chimney, consult your local dealer/stockist or chimney specialist. If there is no existing chimney then either a solid fuel compatible prefabricated block chimney or a twin-walled insulated stainless steel flue to BS 1856-1 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and also please refer to the current issues of British Standards BS EN 15287-1:2007 for design, installation and commissioning of chimneys.

### Flue Draught

A flue draught of minimum 1.2mm to a maximum 2.5mm water gauge (12 to 25 Pascals) is required for satisfactory appliance performance. The flue draught should be checked under fire at high output and, if it exceeds the recommended maximum, a draught stabiliser must be fitted so that the rate of burning can be controlled to prevent over-firing.

# **Connection to the Chimney**

This appliance is <u>not</u> suitable for use in a shared flue. This appliance requires a direct flue connection to the spigot. If practical, an existing fireplace opening can be bricked up or sealed with a register plate and a short length of flue pipe of a minimum 150mm internal diameter may then be used to connect the stove to the register plate in the chimney. This flue pipe should conform to Building Regulations. The stove must be insulated and properly fitted into the fireplace opening by back filling with 6:1 ratio vermiculite & cement mixture using minimal water through the top of the fireplace or flue spigot opening. The surface should be finished using 1:1:8 mix of cement, lime and sand. The connecting pipe is fitted with the spigot pushed up from **inside** the stove and rotated onto its keyhole slots to join to the pipe. Ensure that the pipe end is no closer than 76mm to the side or rear chimney walls.

If necessary a hole must be opened up into the flue way above the fireplace in order to fit the appliance to the flue correctly. Please consult HETAS recommended fitting methods if in doubt. It is **essential** that all connections between the stove and chimney-flue are sealed and made airtight with sealing rope, clamping rings and/or fire cement or heat resisting cement where required.

Both the chimney and flue pipe must be accessible for cleaning and if ANY parts of the chimney cannot be reached through the stove (with baffle removed), a soot door must be fitted in a suitable position to enable this to be done.

In adverse weather conditions, downdrafts may occur causing smoke or fumes to spill into the room. If this occurs the appliance should be shut down as much as possible by closing the air controls and the room should be ventilated to clear the fumes. If the problem persists seek the advice of a chimney sweep.

### **Material Clearances**

# **Safety Distances from Combustible Surfaces:**

Model	Back	Side
FW06C	400mm	300mm
FW09C	500mm	400mm
FW11C	500mm	400mm

This appliance must be installed in a recess which must not contain any combustible materials. Wooden battens and plasterboard should not be used within the clearance to combustibles.

In addition it is strongly recommended that any furniture or other combustible materials are kept at least 1000mm clear from the front of the stove and any mantle is at least 550mm above the stove.

### **Hearths:**

This stove require a 125mm thick non-combustible constructional hearth beneath them to protect the building, this can include any solid non-combustible floor. A non-combustible superimposed hearth forming an apron of at least 225mm at the front of the stove and 150mm on either side must also be provided. The superimposed hearth must not be less than 12mm thick and must have a clearly defined edge (change of level) to discourage placing of any combustible materials on or partially over it.

The appliance must be installed on a floor with adequate load-bearing capacity. If the existing construction does not meet this requirement, suitable measures (e.g. load distributing plate) should be provided to achieve it.

# **4.4 Fitting the stove**

# **Installing the Stove**

Please note that the each installation is unique to the particular household and it is not possible to give recommendations in this manual to cover every situation. The installation must comply with building regulations and be completed using "Best Practice" methods.

Note that most fireplaces have a supporting Lintel. Never remove this without first supporting the remaining structure of the building. The stove of flue system must not be used to support the structure of the building.

The fitting of the cassette stove is different depending on whether the chimney is already lined of not. The fitting in both scenarios is described below. Note that it is best practice to line every chimney.

# A – Installing a stove into a chimney that needs to be fully lined (see fig. 3)

(i) Ensure the fireplace is suitable for the stove. The opening should measure 410-480mm wide x 550-580mm high and a minimum of 350mm deep for the FW06C, the opening should measure 535-605mm wide x 550-580mm high and a minimum of 350mm deep for the FW09C and the opening should measure 660-730mm wide x 550-580mm high and a minimum of 350mm deep

- for the FW11C. The fireplace must be suitable for solid fuel. The hearth must be level. The fireback needs to be removed and there needs to be a solid base under the fireback, level with the hearth as the stove will need to be secured to this.
- (ii) Drop the flexi liner down the chimney using fig. 3 as guide. Ensure a flexi stop or plate is used at the bottom of the clay lined/unlined chimney to stop the loose vermiculite from falling down. Note the height of the flue collar of the stove and cut the flexi flue to length accordingly and fit a flexi-adaptor to the flexi liner and seal on the inside between the flexi liner and flexi adaptor with fire cement. It is important this joint is airtight for proper operation of the stove. Leave the flexi liner and adaptor hang down and the opening is now ready for the stove to be fitted.
- (iii) Remove the lower baffle from the stove by lifting the front of the baffle and pull it forward a little which will allow it to drop down and be easily removed from the stove and put to one side. Carefully remove the firebricks and place to one side. Note the fire bricks can be brittle (especially after use) so handle with care. Remove the ash pan. Remove the screw form the bottom of the riddle grate and remove the riddle grate from the stove. Lift the grate to expose the four fixing holes. Also loosen the two screws securing the top baffle and pull the baffle forward until it drops down and remove it. The front door can also be easily removed before lifting into position if desired.
- (iv) Lift the stove into position taking care not to scratch the hearth and push into the opening until the front trim is up against the front of the opening. Drill through the four holes in the base of the appliance into the concrete base under the appliance using a 5.5mm concrete bit. Use the four screws and washers provided to fix the appliance securely.
- (v) Fill any void at the back or sides of the box with 6:1 vermiculite / cement mix or any other good quality non-combustible insulation material. It is important that the back and sides of the box are well insulated.
- (vi) Always use a minimum of 600mm of single wall connecting flue between the stove and the flue where possible if using flexi flue ensure it is T600 rated and any adaptors are 1mm stainless steel. (Ref Irish building regualtions doc J) Connect the flexi flue adaptor to the collar of the stove and seal between the collar and the inside using fire cement. It is important this joint is airtight for proper operation of the stove.
- (vii) Replace the door, baffles, liner and grates by completing step (iii) in reverse.

# B – Installing a stove into a chimney that is already lined (see Fig. 4 or Fig. 5)

- (i) The integrity of the chimney must be thoroughly inspected and verified by a suitably qualified professional.
- (ii) Ensure the fireplace is suitable for the stove. The opening should measure 410-480mm wide x 550-580mm high and a minimum of 350mm deep for the FW06C, the opening should measure 535-605mm wide x 550-580mm high and a minimum of 350mm deep for the FW09C and the opening should measure 660-730mm wide x 550-580mm high and a minimum of 350mm deep for the FW11C. The fireplace must be suitable for solid fuel. The hearth must be level. The fireback needs to be removed and there needs to be a solid base under the fireback, level with the hearth as the stove will need to be secured to this.
- (iii) Push a 6" to 8" adaptor (or offset adaptor if needed) up into the clay flue liner and seal using fire cement. Push the required length of single wall or flexi liner onto the adaptor. If single wall is being used push a 20° single wall angle onto the end of the straight length and support this in preparation for the stove. If flexi flue is being used fit a flexi-adaptor to the flexi liner and seal on the inside between the flexi liner and flexi adaptor with fire cement. It is important this joint is airtight for proper operation of the stove. Leave the flexi liner and adaptor hang down and the opening is now ready for the stove to be fitted.
- (iv) Remove the lower baffle from the stove by lifting the front of the baffle and pull it forward a little which will allow it to drop down and be easily removed from the stove and put to one side. Carefully remove the firebricks and place to one side. Note the fire bricks can be brittle (especially after use) so handle with care. Remove the ash pan. Remove the screw form the bottom of the riddle grate and remove the riddle grate from the stove. Lift the grate to expose the

four fixing holes. Also loosen the two screws securing the top baffle and pull the baffle forward until it drops down and remove it. The front door can also be easily removed before lifting into position if desired.

- (v) Lift the stove into position taking care not to scratch the hearth and push into the opening until the front trim is up against the front of the opening. Drill through the four holes in the base of the appliance into the concrete base under the appliance using a 5.5mm concrete bit. Use the four screws and washers provided to fix the appliance securely.
- (vi) Fill any void at the back or sides of the box with 6:1 vermiculite / cement mix or any other good quality non-combustible insulation material. It is important that the back and sides of the box are well insulated.
- (vii) Always use a minimum of 600mm of single wall connecting flue between the stove and the flue where possible, if using flexi flue ensure it is T600 rated and any adaptors are 1mm stainless steel. (Ref Irish building regualtions doc J) Connect the single wall or flexi flue adaptor to the collar of the stove and seal between the collar and the inside using fire cement. It is important this joint is airtight for proper operation of the stove.
- (viii) Replace the door, baffles, liner and grates by completing step (iii) in reverse.

# **Commissioning and Handover**

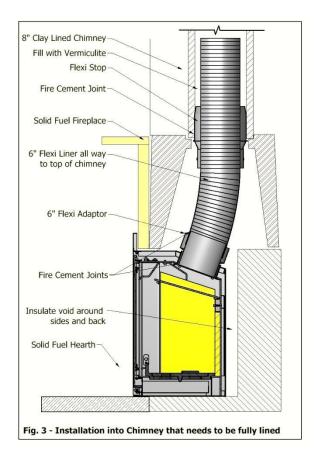
Upon completion of the installation, allow a suitable period of time for any fire cement and mortar to dry out. A small fire may then be lit and checked to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to atmosphere.

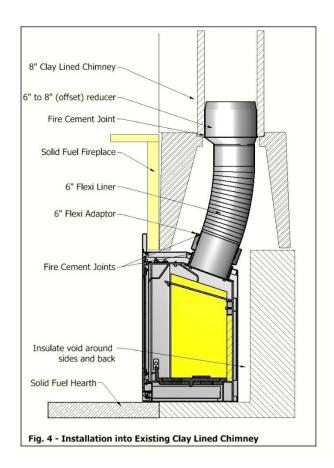
Notice plate should be filled out with indelible ink and located either (A) next to the electricity consumer unit, (B) next to a gas consumer unit or (C) next to the chimney or hearth.

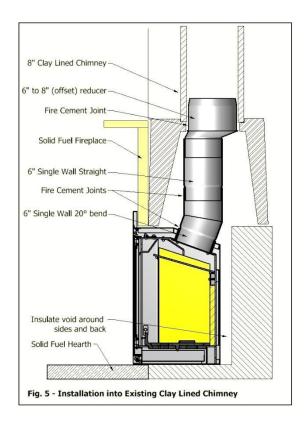
Advise the customer not to run the stove at full output for at 3-4 days. Explain that the stoves can provide much more or less than their rated heat outputs depending upon how they are burnt and fuels and fuel loads used.

On completion of the installation and commissioning, ensure that the operating instructions and operating tools (including glove) for the stove are left with the customer. You must be sure to advise the customer on the correct use of the appliance with the fuels likely to be used on the stove and warn them to use only the recommended fuels for the stove.

Advise the user on what to do should smoke or fumes be emitted into the room from the stove – see **Safety Notes** section. The user should be warned that they MUST use a suitable fireguard in the presence of children, aged and/or infirm persons.







# **5. Technical Data**

Technical Specifications								
			FV	V06C	FW	709C	FW11C	
Fuel		Wood	Wood Solid Fuel		Solid Fuel	Wood	Solid Fuel	
Nominal Heat O	utput (kW)		5.7	6.5	8.4	9.1	10.7	10.5
Efficiency (%)			78.2	83.8	81.2	80.6	78.1	76.4
CO@13% O2			0.06	0.04	0.08	0.04	0.08	0.05
*Flue Temp: (°C	<u>;</u> )		295	245	311	320	332	303
Flue gas mass flo	ow: (g/s)		4.5	4.2	6.4	6.8	8.2	9.3
Flue Outlet Size	(Inch)		6	6	6	6	6	6
Fuel Consumption	on (kg/hr)		1.6	0.9	2.34	1.2	3.16	1.5
Max Log Length:			300mm	300mm	425mm	425mm	550mm	550mm
			Weight 66.5kg		Weight 75kg		Weight 84kg	
Recommended	Wood	Seasone	Seasoned wood with moisture content less than 20%					
fuel	Solid Fuel	Manufactured Smokeless Coal suitable for closed appliances						

<sup>\*</sup>Average reading at nominal output

# **6** Operating Instructions

This appliance is not designed for open operation and therefore should **not** be operated with the doors open.

This stove is designed to burn cleanly with high efficiency. When used correctly this stove will burn very efficiently and cleanly with the very useful feature of clean glass. However, for this product to work properly it must be used correctly.

It is **essential** that the stove has an adequate air supply for combustion and ventilation. The primary, secondary and tertiary air inlets must be kept clear from obstruction.

**Warning!** This appliance will be very **hot** when in operation and due care should be taken when operating the controls. A leather glove is provided to assist safe operation.

Do not use an aerosol spray on or near the stove when it is alight.

# **6.1 Air Controls**

# **Primary Air**

Primary air is controlled via the sliding air control at the bottom right hand side of the stove. This provides a conventional air under draught to the bed of the fire. The primary air is used when lighting the stove or when the fuel bed goes very low. Once the stove is properly lit the primary air should be fully closed when burning wood. Sliding the control forward increases the primary air while sliding the control back decreases the primary air.

# Secondary Air (Airwash)

The Cassette stove has a sophisticated "air wash" system designed to keep the glass clean. This secondary air supply to the stove is controlled via a sliding air control located on the top centre of the stove, just above the door. If you want clean glass, always leave this control open some way whilst burning unless the stove is being shut right down for a long period. Moving the sliding control towards the wide side of the arrow (to the right) increases the burn rate whilst moving it towards the narrow side (to the left) reduces it.

# **Tertiary Air**

This appliance is also fitted with a preheated tertiary air system which burns otherwise uncombusted gases in the products of combustion thereby improving efficiency, increasing heat output and decreasing unwanted atmospheric emissions. At certain stages of burning you will notice "jets" of flame emerging near the air holes to the rear of the firebox.

# **Multifuel Grate**

This stove is fitted with a versatile multifuel riddle grate with suitable air slots to burn most fuels. When burning coal type fuels it is important to riddle the fire well where required to de-ash regularly, to ensure that the primary airflow is not impeded, as a build-up of ash *when burning coal* can damage the cast iron grate. The fire is riddled by moving the primary air control quickly backward and forwards by inserting the hook end of the tool provided into the "R" on the riddle handle. A build up of ash when burning wood will not usually harm the grate and indeed wood burns better on a bed of wood ash building up. Excessive wood ash build up is not to be recommended however as this would decrease the size of the firebox and consequently decrease the amount of fuel that can be put in the stove.

# **Ashpan**

It is essential that you empty the ash pan every day. Use the thick end of tool to hook onto and lift the ash pan out of the stove. Replace the empty ashpan in the stove making sure to push it fully into place so that all the ash falls into it. **DO NOT allow ash to build up underneath the bed as this may cause damage to the grate. Never operate the stove without the ashpan in place.** 

# 6.2 Cleaning

Glass: Despite the advanced air wash system provided, the glass will still need cleaning from time to time depending on the fuel quality and burning rates used. Never clean glass when the stove is hot. Always use stove glass cleaner or ceramic hob cleaner, which is available from your stove retailer. As an alternative, use a wet cloth with some of the wood ash if burning wood but be very careful to use very clean ash so as not to scratch the glass.

**Outer body:** The outer body simply needs to be dusted from time to time. DO NOT use any kind of furniture polish or cleaning agent other than your stove suppliers recommended paint.

Inner firebox: Brush the inside of the firebox clean from time to time to check the integrity of the plates and liners etc. It is not normally necessary to re-paint inside the firebox due to the high temperatures that mean that the paint does not have much effect before being burnt off. Steel and vermiculite board liners are resilient firebox materials and will give reliable service without major cleaning or work on the firebox. The liner boards may require replacement fairly regularly depending upon fuels and the type of usage experienced. Lining boards are not covered by warranty, as they are a wearing consumable part.

Baffle: It is essential to check the top of the baffle for build up of soot and ash regularly when in use and after a long period of no use. From time to time remove the baffle if necessary to ensure that the flue way entrance is clear.

### 6.3 Fuels

# Wood

Burn only seasoned timber products with a moisture content of less than 20%. To obtain this moisture content allow cut wood to dry for at least 12-18 months. **Do not burn construction timber, treated of painted wood, manufactured board or pallets.** 

### **Solid Fuel**

Burn only manufactured smokeless fuels listed as suitable for use in a closed appliance. **Do not burn anthracite**, "petro-coke" or other petroleum based fuels as this will invalidate the warranty.

# 6.4 Notes on Wood burning

With a full load of wood, the stove will need to be refuelled approximately every 0.75 hours depending on burn rate. Wood can be stacked in the stove but care must be taken that logs do not touch the baffle. Do not stack fuel above the level of the tertiary air inlets at the back of the stove.

Always make sure that flames are visible above the wood after re-fuelling for cleanest burning. Open the air wash full for 1 to 2 minutes to achieve full flames above the fuel. Carefully adjusting the secondary air controls and fuel load will then control the burn rate of the stove. Wood burns most efficiently with the primary air controls closed and the secondary (air wash) controls open about 25%, this setting will give the stoves nominal output.

See also: section entitled 'Lighting the Stove'.

Wood burns best on a bed of ash and it is therefore only necessary to remove surplus ash from the stove occasionally. If the grate is completely clear, place a few handfuls of ash into the slots in the grate to help the firebed build up.

Burn only dry, well-seasoned wood, which should have been cut, split and stacked - under protection from rain - for at least 12-24 months with free air movement around the sides of the stack to enable it to dry out. Burning wet or unseasoned wood will create tar deposits in the stove and chimney and will not produce a satisfactory heat output. Wood that is not properly dry ('dry' is considered to be less than 20% internal moisture content) uses up energy from the burn process to evaporate the water inside the wood thus creating very poor conditions for combustion. The main cause of burning problems with wood stoves is due to excessively damp wood. Wood can appear perfectly dry on the outside but still contain 40-50% water on the inside. A moisture meter can be purchased from some stove and equipment suppliers if you wish to check your wood source is correct.

# 6.5 Notes on Burning Solid Fuel

# NEVER burn solid fuel in the stove without first fitting a solid fuel kit.

See section 6.6 on lighting the stove. After the fire has become established close the airwash until it is approximately 25% open and use the primary air control to set the burn rate. De-ash the stove by riddling a few times before adding new fuel. Open the primary air 100% for a few minutes before refuelling to establish a good hot bed. Leave the primary air fully open for 4-5 minutes after adding the new fuel and then adjust until approximately 25% open to achieve nominal output. With experience you will learn to adjust the controls to establish personal settings. It is better to refuel little and often, this burns the fuel more efficiently and prolongs the life of the stove.

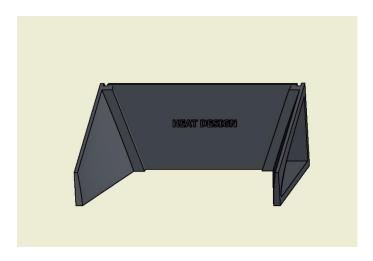


Fig 5. – Three piece Multifuel Kit

# **6.6 Lighting the Stove**

We recommend that you have two or three small fires before you operate your stove to its maximum heat output. This is to allow the paint to cure in steadily and to give a long service life of the paint finish. During this curing in process you may notice an unpleasant smell whilst the finishes finally cure. It is non-toxic, but for your comfort we would suggest that during this period you leave all doors and windows open.

First, open the primary and secondary air wash control fully. Load the firebox with plenty of starting fuel, i.e. paper, dry sticks and/or firelighters. Light the fire at the base leaving the primary and secondary air control fully open. Leave the door slightly ajar for 10 minutes to enhance initial starting and reduce smoke emission – DO NOT leave the stove unattended if the door is left ajar. Allow the fuel to reach a steady glow and build the fire up gradually by adding a few small sticks or well split logs at a time. Once you have a good fire bed established across the grate, further fuel can be added step by step as required. Don't be tempted to overload the fire bed with fuel all at once or close down the air controls too much until the fire is really well established for some time. Once the ignition period is well under way close the primary air and gradually reduce the secondary air wash control opening to establish the burning intensity you require (usually open 25% approx.).

# 6.7 Re-fuelling

When burning wood, the fire will die down as the fuel is consumed. When the flames disappear and the remainder is breaking down into glowing embers it is an appropriate time to consider re-fuelling. NOTE: If the flames disappear and there are still lumps of solid wood left this indicates excessive moisture in the wood or insufficient air supply/flue draught.

**Note:** To eliminate unwanted smoke emission, after loading new logs on to the fire, open the air wash control up fully for 1-2 minutes to boost the fire and get flames issuing from the top of the fuel as soon as possible. When flames are well established, reduce the air wash to the running setting required. Burning without flames above the fuel will create unnecessary smoke. Do not load fuel above the tertiary air inlet holes at the back of the firebox.

Loading 1 to 2 medium sized logs will produce a good output with reasonable burn time, generally small logs will burn up quicker producing a high output for a short time and a large log will take longer to burn

and produce less output over a given time. These appliances are approved for intermittent operation on wood (0.75 to 1.5 hour burn cycles) although much longer burn times can be achieved by fully loading the firebox, getting the fuel burning well and then shutting the air controls down. The fire will then often need reviving by first de-ashing and then using small pieces of wood and plenty of air to get flames issuing from the wood again.

# 6.8 Shutting Down

The stove will normally shut down by itself as the fuel is consumed. In order to shut down the stove for other reasons, close the primary air controls (if open), then close the secondary air control. If the controls are left in this position, the fire will eventually burn out. If you want to revive the fire open the secondary air controls fully.

**Warning!** - The stove will remain **very hot** for a considerable time after the fire has died down or been extinguished.

Warning!- Petroleum coke fuels or household waste must not be burnt on this appliance.

# 6.9 Maintenance

Inspect the inside of the firebox and above the baffle plate every week during use. See chimney cleaning section in section 3 Warnings and Important Information. Only use manufacturers recommended replacement parts on the appliance

# 6.10 Seasonal Use

Remove the baffle and inspect the inside of the stove and the flue ways and ensure they are 100% clear after a period of disuse, for example if the stove is not used during the warmer periods of the year. Also set the air controls half open to keep the appliance ventilated and stop the build-up of any moisture inside.

# 7.0 Safety Notes for your guidance

FIRES CAN BE DANGEROUS – Always use a fireguard in the presence of children, the elderly or the infirm.

**DO NOT OVERFIRE** – it is possible to fire the stove beyond its design capacity, this could damage the stove, so watch for signs of overfiring – if any part of the stove starts to glow red, the fire is in an overfire situation and the controls should be adjusted accordingly. Never leave the stove unattended for long periods without first adjusting the controls to a safe setting – careful air supply control should be exercised at all times.

Any unauthorised modifications of this appliance will render the guarantee null and void and could be potentially dangerous. Replacement parts should only be sourced from San Remo approved dealers

# **CO ALARMS**

Building Regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions.

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

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

# **WARNING NOTE – FUME EMISSION**

Properly installed, operated and maintained this appliance will not emit fumes into the dwelling. Occasional fumes from de-ashing and refuelling 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: -

- 1. Open doors and windows to ventilate room and then leave the premises
- 2. Let the fire out
- 3. Check for flue or chimney blockage and clean if required
- 4. Do not attempt to re-light 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.

### IN THE EVENT OF A CHIMNEY FIRE

- Raise the alarm to let others in the house know.
- Call the Fire Brigade
- Reduce the appliance-burning rate by closing all air controls.
- Move furniture and rugs away from the fireplace and remove any nearby ornaments.
- Place a fireguard or spark guard in front of the stove.
- Feel the chimneybreast for sign of excessive heat.

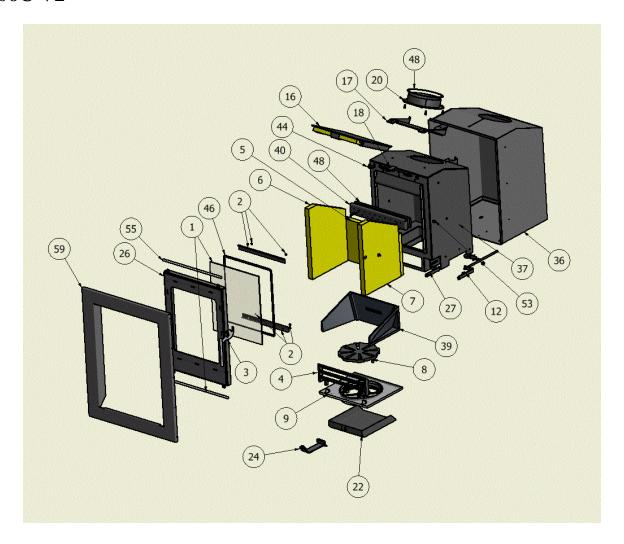
If the wall is becoming hot, move the furniture away. Ensure that the Fire Brigade can gain access to your roof space in order to check this area for signs of fire spread.

# **8 Frequently Asked Questions**

- 1 Do stoves require a chimney? All of our multi fuel and wood burning stoves require a suitable chimney or professionally installed flue system.
- **2** How do I clean the chimney? You will require a chimney sweep to clean the chimney. It is essential to provide a dedicated chimney cleaning access door when installing the flue of the stove in some situations. In other situations the chimney can be swept through the firebox.
- 3 Who should install my stove? Firewarm Stoves want you to enjoy the maximum performance from your appliance. To ensure this, it is essential that they are installed correctly. We strongly recommend that your stove is installed by a suitably qualified installer e.g HETAS.
- 4 How do I regulate the heat output? Each stove has various air controls, which will allow you to easily regulate the heat output and refuelling rate.
- 5 What warranty do I get? Firewarm Stoves will replace, free of charge, any working part that fails (under normal operating conditions) within 12 months of purchase. Consumables such as glass, firebox lining boards or stove rope and adhesives are not guaranteed. A call out charge will apply if our engineer attends any stove problem that is not related to product failure.
- 6 Where can I get spare parts? Your local Firewarm Stove retailer will be pleased to supply spare parts and to provide any other information you require.
- 7 Can the doors be left open while burning? For safety and heat efficiency the doors should remain closed.
- 8 Why is the stove smoking when lit? A flue with back draught problems is almost certainly the cause of a smoking stove. Also check adequate ventilation is present. A qualified fitter should complete both a smoke pressure and flow test prior to fitting the stove to ascertain the integrity of the flue.
- 9 Why should I "Run in" my stove? To begin, light a series of small fires over a period of a few days to allow the paint finish to cure. The stove is finished with a highly heat resistant paint. The finish can be renovated with stove paint available from your local stove retailer. If the stove is not "run in" correctly, this may cause the paint to discolour and flake.
- 10 What is Over Firing? Your stove should never be used in a manner to cause over firing. Over firing can be caused by over loading the stove with fuel, and with primary controls open. If any part of stove glows "red" your stove is over firing and your draught control should be adjusted to restrict airflow to stove. Over firing can cause permanent damage to the appliance, which is not covered by warranty.

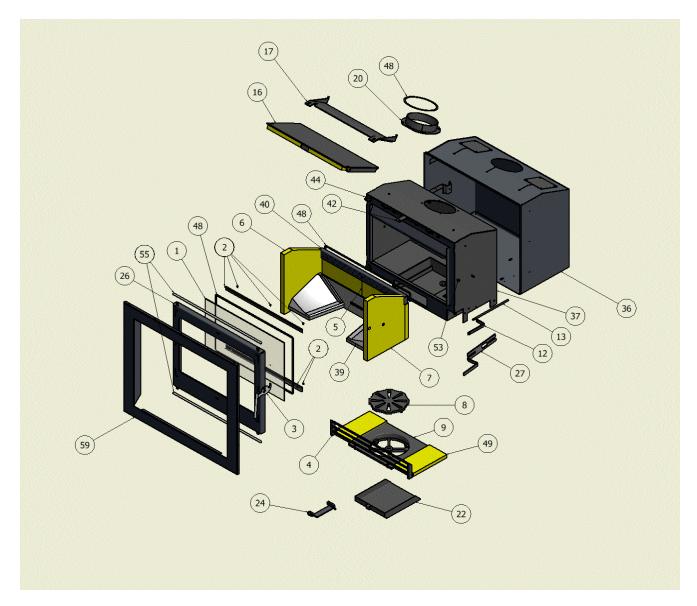
# 9. SPARE PARTS LISTS & CODES

# **FW06C V2**



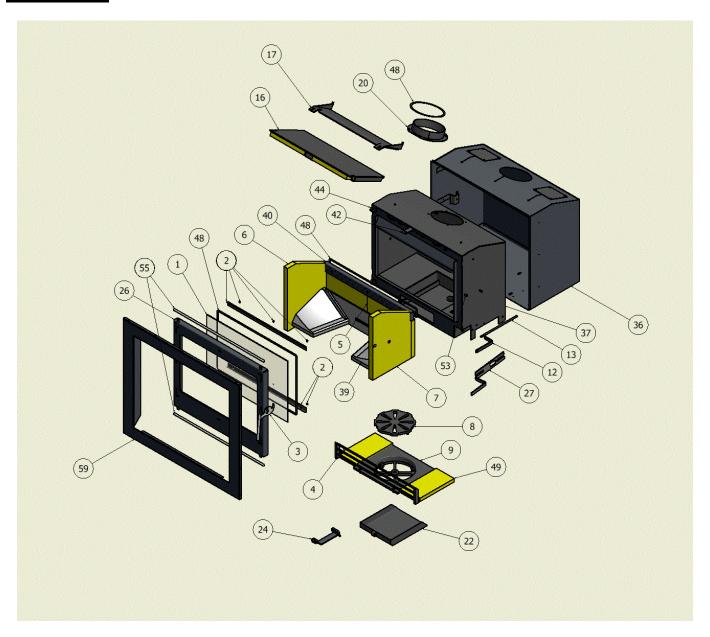
	Component	FW06C V2		Component	FW06C V2
01	Door Glass	Y1FWC06D01A	26	Door	Y1FWC11D32B
02	Glass Brackets and Screws	Y1FWC06D02A	27	Primary Air Control including handle	Y1HDCD33B
03	Door Handle assembly	Y1HDCD03A	36	Outer skin for Insert/Cassette	Y1HDC11D43A
04	Coalcatcher	Y1HDC06D04A	37	Inner Skin for Insert/Cassette	Y1HDC11D44B
05	Back Plate/fireboard	Y1HDC06D05B	39	Multifuel Kit	Y1HDC11D46A
06	Side Plate Left/fireboard	Y1HDCD06B	40	Tertiary Air box	Y1HDC11D47A
07	Side Plate Right/fireboard	Y1HDCD07B	41	Three sided Front Trim for Cassette	Y1FWC11D48B
08	Riddle Grate	Y1HDD09E	42	Airwash Handle	Y1FWC11D42B
09	Grate for Riddle Grate	Y1HDC06D12A	44	Door Hinge/Pin	Y1HDCD51C
12	Riddle Handle	Y1HDC06D15B	46	Rope Ø14mm (cut to size)	Y1HDC11D54A
13	Riddle Bar	Y1HDC06D15B	48	Rope Flat 2mm x 8mm (full roll)	Y1HD55A
16	Baffle Plate	Y1HDC06D19B	51	Plates/Board (Set)	Y1HDC06D59A
17	Baffle Plate Upper	Y1HDC06D20B	53	Door Latch roller	Y1HDCD61A
20	Collar	Y1HDC26E	55	Decorative Beading	Y1FWC11D63A
22	Ashpan	Y1HDCD28B	59	Four Sided front trim for Cassette	Y1FWC11D67B
23	Glove	Y1HDC29A			
24	Stove Tool	Y1VTCD24B			

# **FW09C V2**



	Component	FW09C V2		Component	FW09C V2
01	Door Glass	Y1FWC09D01A	26	Door	Y1FWC09D32B
02	Glass Brackets and Screws	Y1FWC09D02A	27	Primary Air Control including handle	Y1HDCD33B
03	Door Handle assembly	Y1HDCD03A	36	Outer skin for Insert/Cassette	Y1HDC09D43A
04	Coalcatcher	Y1HDC09D04A	37	Inner Skin for Insert/Cassette	Y1HDC09D44B
05	Back Plate/fireboard	Y1HDC09D05B	39	Multifuel Kit	Y1HDC09D46A
06	Side Plate Left/fireboard	Y1HDCD06B	40	Tertiary Air box	Y1HDC09D47A
07	Side Plate Right/fireboard	Y1HDCD07B	41	Three sided Front Trim for Cassette	Y1FWC09D48B
08	Riddle Grate	Y1HDD09E	42	Airwash Handle	Y1FWC09D42B
09	Grate for Riddle Grate	Y1HDC06D12A	44	Door Hinge/Pin	Y1HDCD51C
12	Riddle Handle	Y1HDC06D15B	46	Rope Ø14mm (cut to size)	Y1HDC11D54A
13	Riddle Bar	Y1HDC09D15B	48	Rope Flat 2mm x 8mm (full roll)	Y1HD55A
16	Baffle Plate	Y1HDC09D19B	49	Bottom Plate/Fireboard	Y1HDC09D57A
17	Baffle Plate Upper	Y1HDC09D20B	51	Plates/Board (Set)	Y1HDC09D59A
20	Collar	Y1HDC26E	53	Door Latch roller	Y1HDCD61A
22	Ashpan	Y1HDCD28B	55	Decorative Beading	Y1FWC11D63A
23	Glove	Y1HDC29A	59	Four Sided front trim for Cassette	Y1FWC11D67B
24	Stove Tool	Y1VTCD24B			

# **FW11C V2**



	Component	FW11C V2		Component	FW11C V2
01	Door Glass	Y1FWC11D01A	26	Door	Y1FWC11D32B
02	Glass Brackets and Screws	Y1FWC11D02A	27	Primary Air Control including handle	Y1HDCD33B
03	Door Handle assembly	Y1HDCD03A	36	Outer skin for Insert/Cassette	Y1HDC11D43A
04	Coalcatcher	Y1HDC11D04A	37	Inner Skin for Insert/Cassette	Y1HDC11D44B
05	Back Plate/fireboard	Y1HDC11D05B	39	Multifuel Kit	Y1HDC11D46A
06	Side Plate Left/fireboard	Y1HDCD06B	40	Tertiary Air box	Y1HDC11D47A
07	Side Plate Right/fireboard	Y1HDCD07B	41	Three sided Front Trim for Cassette	Y1FWC11D48B
08	Riddle Grate	Y1HDD09E	42	Airwash Handle	Y1FWC11D42B
09	Grate for Riddle Grate	Y1HDC06D12A	44	Door Hinge/Pin	Y1HDCD51C
12	Riddle Handle	Y1HDC06D15B	46	Rope Ø14mm (cut to size)	Y1HDC11D54A
13	Riddle Bar	Y1HDC11D15B	48	Rope Flat 2mm x 8mm (full roll)	Y1HD55A
16	Baffle Plate	Y1HDC11D19B	49	Bottom Plate/Fireboard	Y1HD56A
17	Baffle Plate Upper	Y1HDC11D20B	51	Plates/Board (Set)	Y1HDC11D57A
20	Collar	Y1HDC26E	53	Door Latch roller	Y1HDCD61A
22	Ashpan	Y1HDCD28B	55	Decorative Beading	Y1FWC11D63A
23	Glove	Y1HDC29A	59	Four Sided front trim for Cassette	Y1FWC11D67B
24	Stove Tool	Y1VTCD24B			

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