



Stanley Aoife Solid Fuel NB Stove



This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.

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 8423:2002.

INSTALLATION AND OPERATING INSTRUCTIONS

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AOIFE SOLID FUEL STOVE INSTALLATION & OPERATING INSTRUCTIONS

NOTE: Please note that it is a legal requirement under England & Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

GENERAL

When installing, operating and maintaining your Aoife Stove respect basic standards of fire safety. Read these instructions carefully before commencing the installation. Failure to do so may result in damage to persons or property. Consult your local Municipal office and your insurance representative to determine what regulations are in force. Save these instructions for future reference.

Special care must be taken when installing the stove such that the requirements of the Health & 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 with the skin 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 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.

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.

The complete installation must be done in accordance with current Standards and Local Codes. It should be noted that the requirements and these publications may be superseded during the life of this manual.

PRE-INSTALLATION ASSEMBLY

1. After removing the stove from its pack, open the firedoor and remove all contents from the ashpan.
2. Fit the firedoor handle using the screw provided.
3. Remove the stove from the pallet and position it in the final installation position (See Location & Clearance to Combustibles Section).

FLUES

Flues should be vertical wherever possible and where a bend is necessary, it should not make an angle of more than 45° with the vertical. Horizontal flue runs should be avoided except in the case of a back outlet connection where the length of the horizontal section should not exceed 150mm.

CHIMNEY

The Aoife is a radiant room heater and must be connected to a chimney of the proper size and type. The chimney must have a diameter of at least 150mm. Never connect to a smaller size chimney. Do not connect to a chimney serving another appliance. Minimum chimney height 4.5 meters from floor on which stove is installed. The stove is supplied with a 5" flue spigot, the flue installation will require a 5" to 6" increaser which must be fitted within 1 meter of flue outlet.

A flue that has proved to be unsatisfactory, particularly with regard to down draught should not be used for venting this appliance until it has been examined and any faults corrected. An existing masonry chimney should be inspected and if necessary repaired by a competent mason or relined using an approved lining system. The stove must be connected to a chimney with a minimum continuous draught of 0.06 w.g. Poor draught conditions will result in poor performance.

All register plates, restricter plates, damper etc., which could obstruct the flue at a future date should be removed before connecting this appliance.

If connecting to an existing chimney with a flue diameter of more than 6" it is recommended to line the flue using a suitable stainless steel flue liner.

Where a masonry chimney is not available a proprietary type of 6"/150mm - twin wall, fully insulated pipe may be used. The pipe must terminate at a point not lower than the main ridge of adjacent outside obstructions. With such installation, access to the chimney must be provided for cleaning purposes. (See Fig.1)

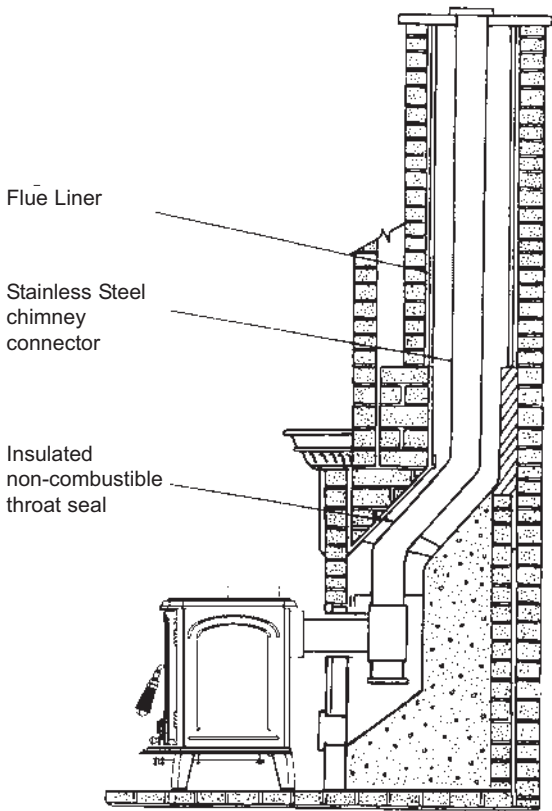
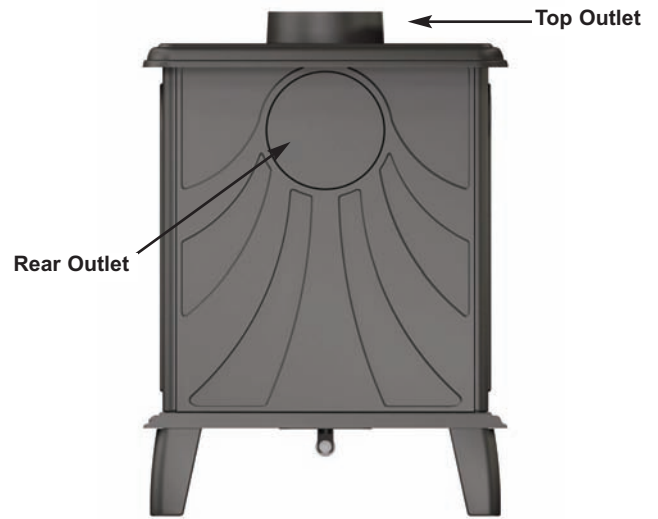


Fig.1

TOP FLUE EXIT

For the top outlet configuration, remove the blanking plate from the hob, remove the flue spigot from the back plate and fix it to the hob. Fix the outlet blanking plate to back plate (see Fig. 2). Push the flue outlet connector pipe (not supplied) into the flue spigot and cement into place using approved fire cement ensuring that no cement blocks the flue passageway.

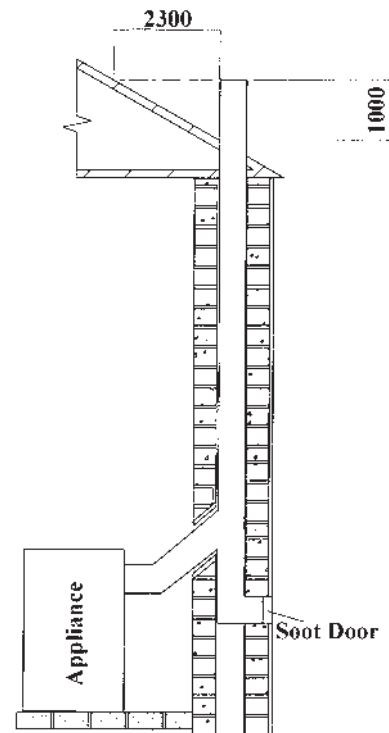
Fig.2



REAR FLUE EXIT

Push the flue connector pipe (not supplied) into the flue spigot and cement into place using approved fire cement ensuring that no cement blocks the flue passageway (see Fig.2).

Fig.3



To minimise the wind effects, the flue termination point should be located a minimum of 1000mm from the roof measured vertically and 2300mm measured horizontally. Where this termination point does not suffice it may be necessary to extend the flue pipe so that the termination point is above the apex. (See Fig.3)

DOWN DRAUGHTS

However well designed constructed and positioned, the satisfactory performance of the flue can be adversely affected by down draught caused by nearby hills, adjacent tall buildings or trees. These can deflect wind to blow directly down the flue or create a zone of low pressure over the terminal.

A suitable terminal or cowl will usually effectively combat direct down blow but no cowl is likely to prevent down draught due to a low pressure zone. (See Fig.4)

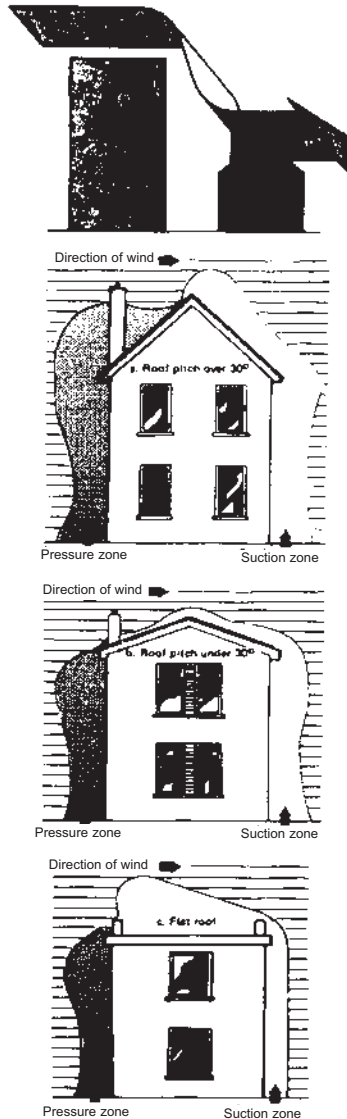


Fig.4

All materials used in the manufacture of air vents should be such that the vent is dimensionally stable, corrosion resistant, and no provision for closure.

The effective free area of any vent should be ascertained before installation. The effect of any grills should be allowed for when determining the effective free area of any vent.

Air vents direct to the outside of the building should be located so that any air current produced will not pass through normally occupied areas of the room.

An air vent outside the building should not be located less than the dimensions specified within the Building Regulations and B.S. 8303: Part 1 from any part of any flue terminal. These air vents must also be satisfactorily fire proofed as per Building Regulations and B.S. 8303: Part 1.

Air vents in internal walls should not communicate with bedrooms, bedsits, toilets, bathrooms or rooms containing a shower.

Air vents traversing cavity walls should include a continuous duct across the cavity. The duct should be installed in such a manner as not to impair the weather resistance of the cavity.

Joints between air vents and outside walls should be sealed to prevent the ingress of moisture. Existing air vents should be of the correct size and unobstructed for the appliance in use. If there is an extraction fan fitted in adjacent rooms where this appliance is fitted, additional air vents may be required to alleviate the possibility of spillage of products of combustion from the appliance/flue while the fan is in operation. Refer to B.S. 8303 Part 1.

Where such an installation exists, a test for spillage should be made with the fan or fans and other appliances using air in operation at full rate, (i.e. extraction fans, tumble dryers) with all external doors and windows closed.

If spillage occurs following the above operation, an additional air vent of sufficient size to prevent this occurrence should be installed.

VENTILATION AND COMBUSTION AIR REQUIREMENTS

The minimum effective air requirement for this appliance is 13cm². When calculating combustion air requirements for this appliance use the following equation: 550mm² per each kW of rated output above 5 kW should be provided, where a flue draught stabiliser is used the total free area shall be increased by 300mm² for each kW of rated output.

If there is another appliance using air fitted in the same or adjacent room, it will be necessary to provide an additional air supply.

PERMANENT AIR VENT

The stove requires an adequate air supply in order for it to operate safely and efficiently. The installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion and/or ventilation air. This air vent should not under any circumstances be shut off or sealed.

Extractor Fan

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

COMMISSIONING & HANDOVER

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, when a small fire may be lit and checked to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to 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 warn 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 fire guard to BS 8423:2002 in the presence of children, aged and/or infirm persons.

LOCATION

There are several conditions to be considered in selecting a location for your Aoife Stove.

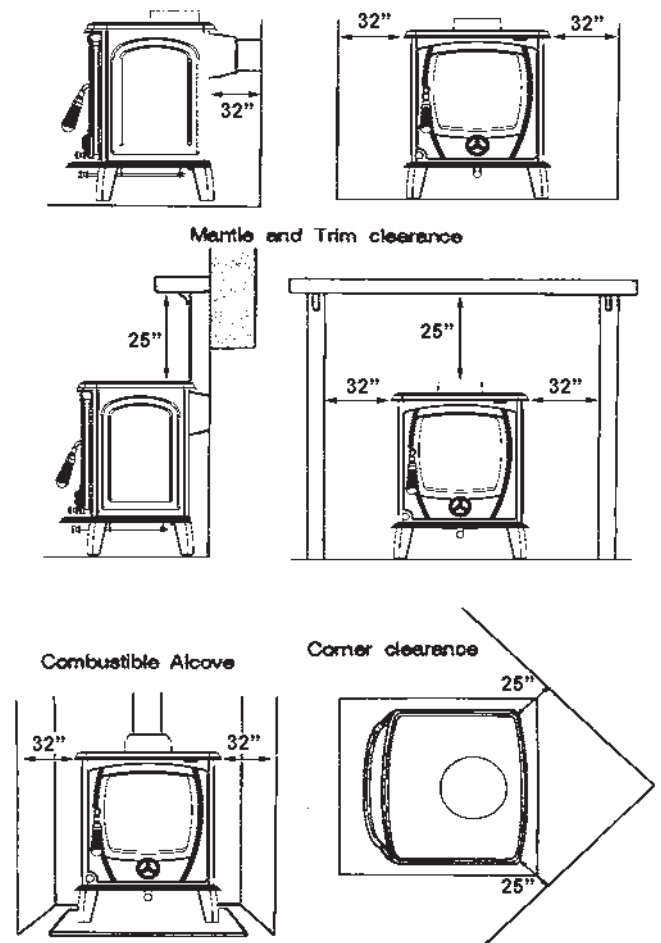
- Position in the area to be heated - central locations are usually best.
- Allowances for proper clearances to combustibles.

CLEARANCE TO COMBUSTIBLES

Side wall to stove	32" 800mm
Back wall to stove	32" 800mm
Corner	25" 635mm
Mantle clearance	25" 635mm

It is recommended that this appliance is sited next to and on a non-combustible surface. A minimum all round clearance of 150mm will allow air circulation and not impede the performance of the stove. See Fig.5.

Fig.5

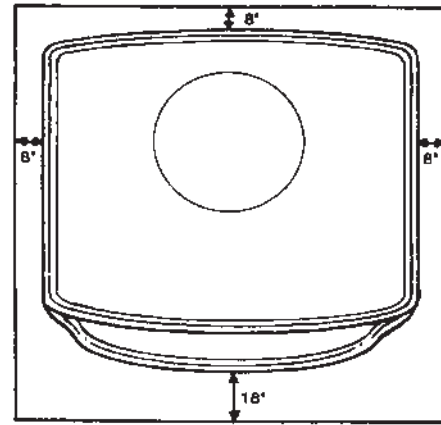


The connector may pass through walls or partitions constructed of combustible materials provided the connector is either listed for wall pass-through or is routed through a device listed for a wall pass-through and is installed in accordance with the conditions of the listing. Any unexposed metal that is used as part of a wall pass-through system is exposed to flue gases shall be constructed of suitable stainless steel or other equivalent material that will resist corrosion, softening, or cracking from flue gas at temperatures up to 982°C.

FLOOR PROTECTION

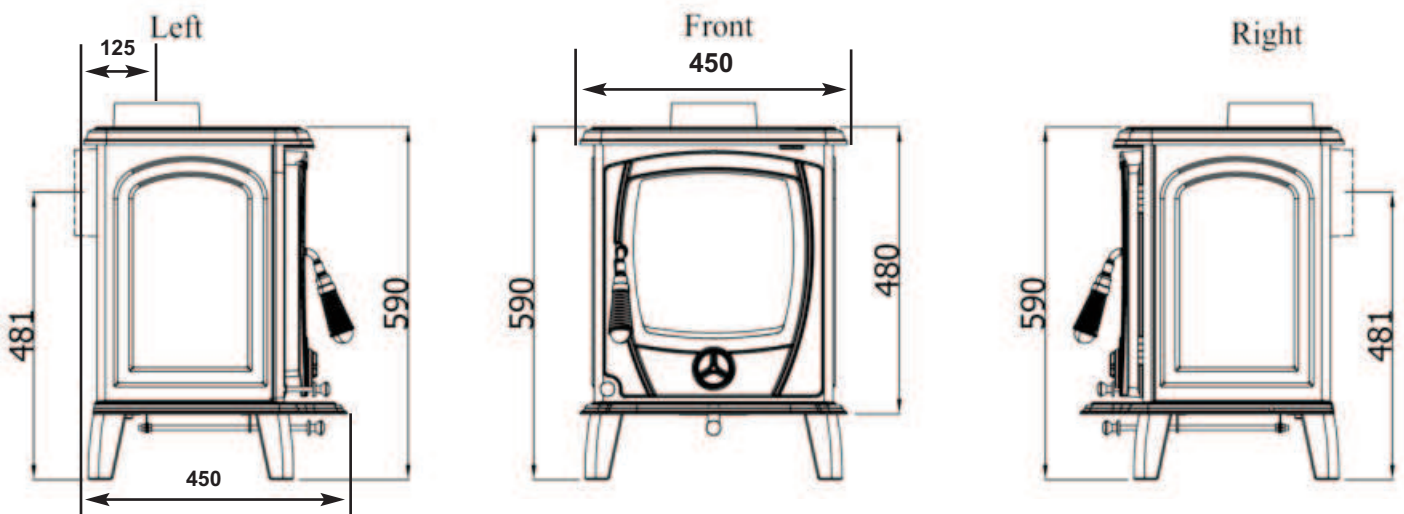
When installing this heater on a combustible floor, a floor protector, consisting of a layer of non-combustible material at least 3/8" thick covered with 1/8" sheet metal is required to cover the area under the heater and extend to at least 18" at the front and 8" to the sides and rear. This will provide protection from sparks and embers which may fall out from the door when stoking or fuelling. (See Fig.6)

Fig.6



STOVE DIMENSIONS

Fig.7



Note: Dimensions stated are in millimetres and may be subject to a slight +/- variation.

LIGHTING

Check that all dampers and catches are operating correctly and ensure that all flue connections are thoroughly sealed.

AIR SETTINGS

The stove has three independent air controls.

1. The primary air control or spin valve. Rotate the spin valve clockwise to close and anticlockwise to open. See Fig.8
2. The secondary air control, this is located under the base. See Fig.9

Fig.8

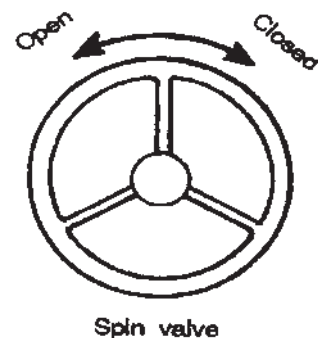
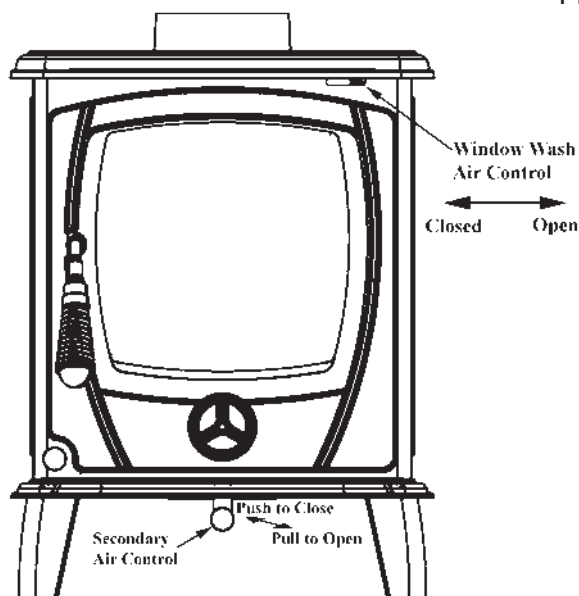


Fig.9



3. Window wash air control, slide to the right to open and to the left to close. See Fig.9.

When burning coal open window wash and primary air controls, keep the secondary air control closed. Regulate the burn rate using the spin valve.

When burning wood open the secondary air and window wash, regulate the burn rate using the secondary air control. If necessary open the spin valve a little, approximately a half turn.

When burning anthracite open the primary air control only, both secondary air control and window wash must remain closed when burning this fuel.

RECOMMENDED FUELS

All fuels should be stored under cover and kept as dry as possible prior to use.

This appliance has been tested using seasoned wood logs and manufactured briquetted smokeless fuel (Ancit) for closed appliances, sized between 20g and 140g. Other fuels are commercially available and may give similar results. Wood logs up to 300mm long are suitable. All fuels should be stored under cover and kept as dry as possible prior to use.

Do not use fuels with a Petro-coke ingredient as this may cause the grate to overheat, causing damage. Reduced outputs will result when fuels of lower calorific values are used. Never use gasoline or gasoline type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this heater. Keep all such liquid well away from the heater at all times. Operate the stove only with the fuelling door closed except for re-fuelling.

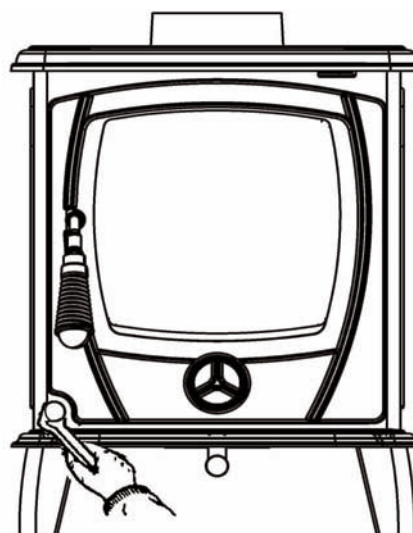
This stove has obtained HETAS Ltd approval as an 'intermittent' operating appliance for burning Natural wood logs and manufactured smokeless fuels as detailed in recommended fuels below.. HETAS Approval does not cover the use of other fuels either alone or mixed with the recommended fuels listed, nor does it cover instructions for the use of other fuels.

AOIFE - TECHNICAL DATA		NON BOILER	
	Fuel	Coal	Wood
Parameter			
Max Heat Output	(kW)	7.3	6.6
Nominal Heat Output	(kW)	7.3	6.6
Output to Room	(kW)	7.3	6.6
Typical Refuel Interval To Achieve Nominal Outputs	(h)	1.00	.75
Mean Flue Gas Temp.	(°C)	311	343
Gross Weight	(kg)	105	
Flue Outlet Diameter	(mm)	125	
Wood Log Size	(mm)	N/A	300

RE-FUELLING

Riddle the fire by connecting the grate operating tool onto the rocker connection located at the bottom front of the stove, then gently pull and push the rocker arm until all dead ash has fallen through into the ashpan. Before opening the door, open the spin valve by turning it anti-clockwise, as this will help to eliminate any smoke or fly ash resident in the combustion chamber. Add fuel to fire, close fire door and re-set spin valve to required setting. (See Fig.10)

Fig.10



IMPORTANT NOTES

Now that your Stanley solid fuel Stove is installed and no doubt you are looking forward to many comforts it will provide, we would like to give you some tips on how to get the best results from your stove.

1. We would like if you could take some time to read the operating instructions/hints, which we are confident, will be of great benefit to you.
2. Do not burn fuel with a high moisture content, such as a damp peat or unseasoned timber. This will only result in poor performance, a build up of tar in the stove and in the chimney.

FUEL CALORIFIC VALUES - SOLID FUELS		
Anthracite 25-50mm	C.V.: 8.2kW/Kg	14,000 BTUs/lb
House Coal 25-75mm	C.V.: 7.2kW/Kg	12,000 BTUs/lb
Timber - Firebox size	C.V.: 5.0kW/Kg	8,600 BTUs/lb
Peat Briquettes	C.V.: 4.8kW/Kg	8,300 BTUs/lb
Bog Peat	C.V.: 3.4kW/Kg	6,000 BTUs/lb

3. **CLEAN THE FLUE-WAYS OF THE STOVE EVERY WEEK AND ENSURE THAT THERE ARE NO BLOCKAGES. PLEASE REFER TO MANUAL FOR INSTRUCTIONS.**
4. Before loading fresh fuel into the firebox, riddle fully to remove all ashes this will allow better and cleaner burning. See Re-Fuelling Section.
5. Never allow a build up of ashes in the ash pan, as this will cause the grate to burn out prematurely.
6. Avoid slow burning of damp or unseasoned fuel as this will result in tarring flue ways and chimney i.e. peat or timber.
7. Allow adequate air ventilation to ensure plenty of air for combustion.
8. Do not burn rubbish/household plastic.
9. Clean the chimney at least twice a year.
10. Burning soft fuels such as timber and peat will stain the glass. Regular cleaning will prevent permanent staining.
11. Keep all combustible materials a safe distance away from unit, please see section for clearances to combustibles.
12. For safety reasons never leave children unaccompanied while stove is in use.
13. Avoid contact with unit when in use as stove reaches very high operating temperatures.

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 demonstrate how to operate the stove correctly.

LIGHTING

IMPORTANT: The first few fires should be relatively small to permit the refractory to set properly and to season the stove.

1. Before lighting the stove, ensure that any build-up in the firebox has been removed and that the ashpan has been emptied.
2. Open the spin valve by turning it anti-clockwise.
3. Lay a few crumpled sheets of paper on the hearth and then a few small sticks, kindling or an approved firelighter.
4. Ignite and close the door.
5. **Never use inflammable liquid i.e. gasoline, petrol paraffin etc. to start or “freshen up” a fire in this heater.**
6. When the fire is well established add fuel to the firebox and adjust the spin valve to the required setting.

DE-ASHING

Never allow ashpan to over fill as it will cause damage to firebars.

Open the fire door and remove ashpan using the operating tool. Close the fire door. When the ash is disposed of, replace the empty ashpan. See Fig.11.

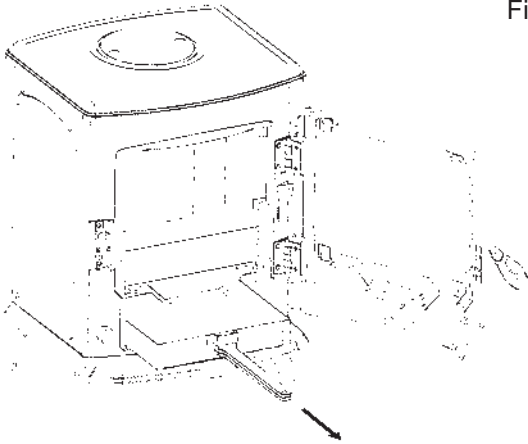


Fig.11

DISPOSAL OF ASH

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be on a non-combustible floor or on the ground well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or other wise locally dispersed they should be retained in the closed container until all cinders have thoroughly cooled.

MAINTENANCE

CREOSOTE: Formation and Need for Removal

When some fuels are burned slowly, they produce tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited creosote makes an extremely hot fire.

CHIMNEY CLEANING

Chimney and connector should be cleaned at least twice a year. Once before heating season and once after.

The chimney connector and chimney should be inspected at least monthly during the heating season to determine if a creosote build-up has occurred.

Remove the cast iron baffle plate located at the top end of the firebricks before chimney cleaning.

When inspecting a masonry chimney, start at the cleanout door, normally found at the base of the chimney, or on the outside. If your chimney does not have a clean-out door one should be provided.

REMEMBER COAL GASES ARE TOXIC.

WARNING NOTE:

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from the 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 out or eject and safely dispose of fuel from the stove.
- (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 flue-way or chimney blockage. For you own safety these must be kept clean at all times.

FIRE SAFETY

To provide reasonable fire safety the following should be given serious consideration:

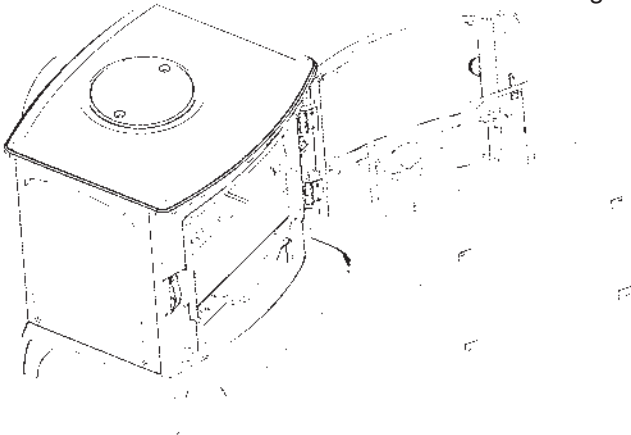
1. The installation of smoke detectors.
2. A conveniently located class 'A' fire extinguisher to contend with small fires resulting from burning embers.
3. A practical evacuation plan.
4. A plan to deal with a chimney fire as follows:
 - a. Notify the fire department.
 - b. Prepare occupants for immediate evacuation
 - c. Close all openings into the stove.
 - d. While awaiting the fire department watch for ignition to adjacent combustibles from overhead stove pipe or from embers or sparks from the chimney.

GLASS

1. How to clean:

The glass will clean itself when there is sufficient heat generated by burning fuel. If a build-up of creosote occurs on the glass it may be due to draft conditions, poor quality fuel or very low burning for a long time. Only clean glass when stove is thoroughly cooled.

Fig.12



2. Glass Replacement: (See Fig.12)

- Open the door fully.
- Remove the four corner screws and clips and carefully remove the broken glass.
- Clean the glass recess in the door.
- Attach adhesive thermal tape to the perimeter of the replacement glass.
- Place the thermal tape side of the glass into the door recess and replace the four corner clips.
- Tighten screws.
- Replace glass only with ceramic glass 5mm thick.

CO ALARM

Waterford Stanley strongly recommend the fitting of a CO Alarm in the same room as the appliance, this is a compulsory requirement under UK Building Regulations. Further guidance on the installation of a carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturers 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.

WARNING:-

If the CO Alarm sounds unexpectedly:-

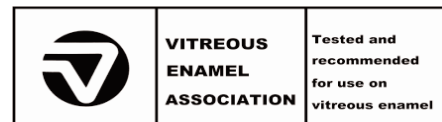
- Open Doors and windows to ventilate the room and then leave the premises.
- Let the fire go out.

ENAMEL CLEANING

General cleaning must be carried out when the stove is cool.

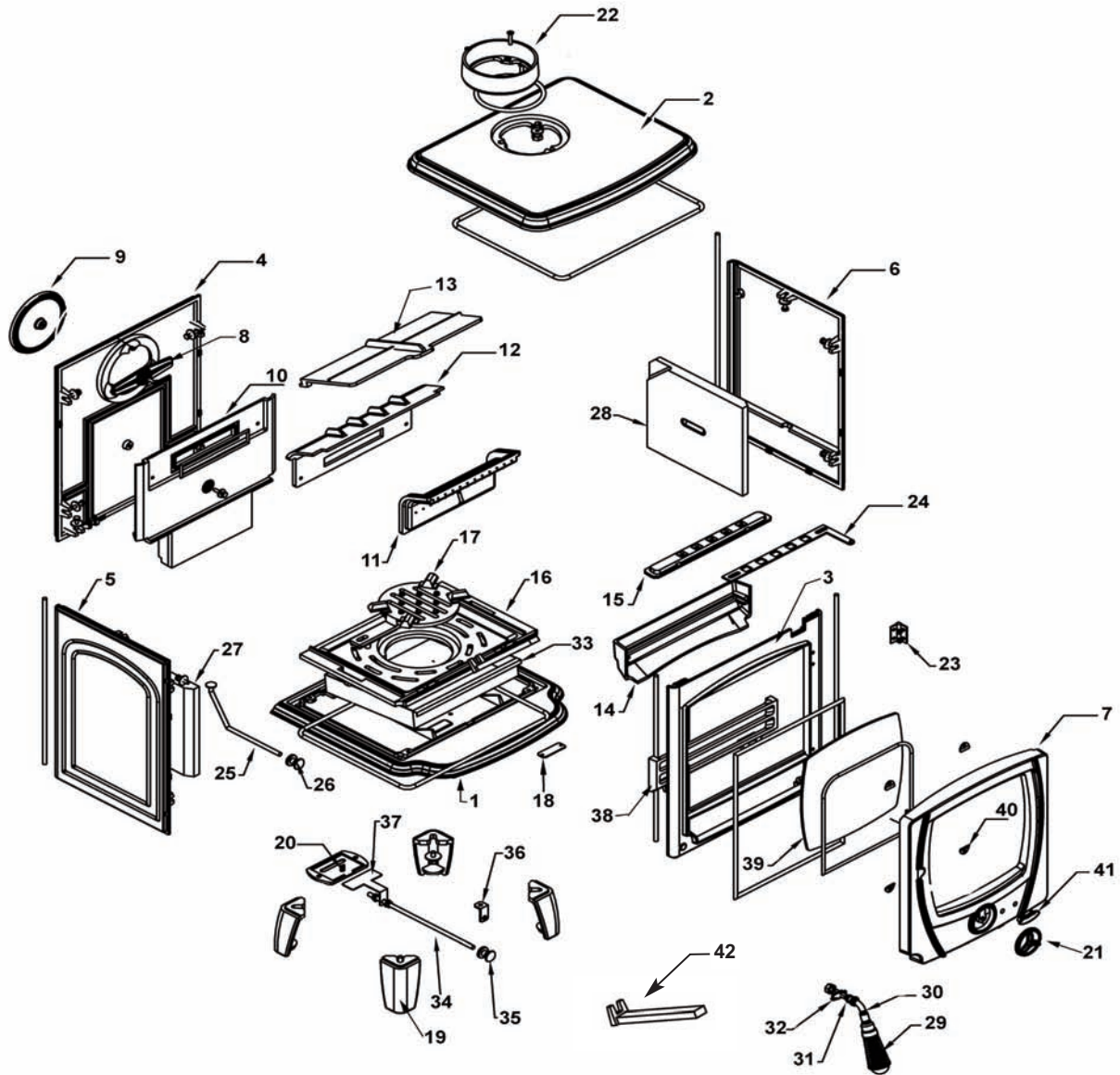
If this stove is finished in a high gloss vitreous enamel, to keep the enamel in the best condition observe the following tips:

- Wipe over daily with a soapy damp cloth, followed by a polish with a clean dry duster.
- For stubborn deposits a soap impregnated pad can be carefully used on the vitreous enamel.
- Use only products recommended by the Vitreous Enamel Association, these products carry the vitramel label.



- DO NOT USE ABRASIVE PADS OR OVEN CLEANSERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES. ENSURE THAT THE CLEANSER MANUFACTURERS INSTRUCTIONS ARE ADHERED TO.**

AOIFE SOLID FUEL STOVE EXPLODED VIEW



1. BASE - AF0501
2. HOB - 0502
3. FRONT - 0503
4. BACK - 0504
5. LH SIDE - AF0505
6. RH SIDE - AF0506
7. DOOR - 0507B
8. BLANKING PLATE LOCKING BAR - C125Y
9. FLUE COVER BLANKING PLATE - C125
10. BACK BRICK - 0511
11. LOWER BAFFLE - 0517
12. MIDDLE BAFFLE - 0516
13. TOP BAFFLE - 0518-CR
14. AIR WASH BASE - AF0509
15. AIR WASH COVER - 0556
16. GRATE FRAME - 0514-CR
17. GRATE - AF0515-CR
18. DATA PLAQUE - CAL0101-ZJ
19. LEG - 0523
20. BACK AIR DAMPER - CA0903
21. SPIN VALVE - CAF0765

22. SPIGOT - I125
23. DOOR HINGE - CA1602
24. AIR WASH SHUTTER - CA1113-05
25. RIDDLING ROD - CA1401-SM05
26. PULL ROD KNOB - CA010402
27. LH SIDE BRICK - FR0512R
28. RH SIDE BRICK - FR0512L
29. FIRE DOOR HANDLE - CA0108-6
30. FIRE DOOR HANDLE AXLE - CA0101-ZH
31. SPRING WASHER - CA0502
32. DOOR CATCH - CA1505
33. ASHPAN - CA1205
34. DAMPER ROD - CA130106
35. DAMPER ROD KNOB - CA010402
36. DAMPER ROD BRACKET - CA01103
37. BACK AIR PLATE - CA0901
38. FIRE FENCE - AF0520-CR
39. DOOR GLASS - CA1005B
40. DOOR GLASS CLIPS - CA1112
41. DOOR BADGE - CAL0101
42. OPERATING TOOL - CA0105

INSTALLATION CHECK LIST

Flue System

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1. Minimum Flue Height of 4.6 metres (15 feet).
2. Appliance should be connected to a minimum of 1.0 metres (3 feet) of 125mm (5") flue pipe with a horizontal run not exceeding 150mm (6").
3. Appliance should be connected to a chimney of less than 200mm (8") in diameter (otherwise the chimney must be lined with a 5 / 6" flue liner).
4. The chimney venting position must be above the main ridge of the roof or adjacent outside obstructions.
5. The chimney serving this appliance should not serve any other appliance.
6. Access should be provided to the chimney serving the appliance to allow for cleaning.

Location

7. Clearance to combustible materials must be adhered to as described in the Clearance to Combustible section.
8. The stove must be installed on a floor protector that covers the area under the stove and extends 18" to the front & 8" to the sides and back.

Ventilation & Combustion Air Requirements

11. The room in which the appliance is located should have an air vent of adequate size to support correct combustion (see Ventilation & Combustion Air Requirement Section for specific details).



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