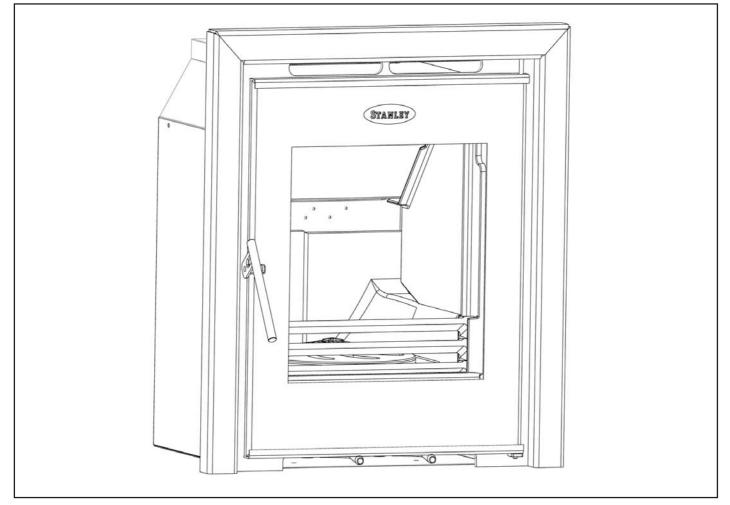
# PLEASE RETAIN



# Cara Glass Non Boiler Insert Stove



# **INSTALLATION AND OPERATING INSTRUCTIONS**

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 8423:2010.

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# STANLEY SOLID FUEL STOVE WARRANTY

# **CONDITIONS OF WARRANTY**

Your Stanley Solid Fuel Stove is guaranteed against any part that fails (under normal operating conditions) as detailed in the following table with timelines specified from the date of installation of the appliance. If the unit is not installed within six months of date of purchase, the warranty will commence six months from the date of purchase.

Warranty Period	Parts Covered (Parts & Labour unless Stated)
Up to 1 Year	Refractory materials (supply only)
	<ul> <li>Rope seals, glass seals and cement seals.</li> </ul>
	Surface Finish on Seno models.
	Grates and fire bars.
	<ul> <li>Ceramic glass is covered for Thermal breakage (supply only).</li> </ul>
	Rust (if reported before installation)
	Aesthetic Damage (provided reported on date of receipt)
Up to 5 Years	<ul> <li>All external castings &amp; enamel finishes (excluding impact damage or damage caused by overfiring). Pictures of damage must be submitted to WS Service Department.</li> </ul>

All warranty claims must be reported to the Waterford Stanley Service Department and must be submitted with the product serial number (located on the bottom RH corner of the front plate), date of purchase, proof of purchase (if requested) and details of the specific nature of the problem.

The warranty is given only to the original consumer/purchaser only and is non- transferable. The appliance must be installed by a suitable qualified person and installed as per the requirements of the manual. Failure to comply with the Installation requirements or Building Regulations will void your warranty. Waterford Stanley reserve the right to replace any part due to manufacturing defect that fails within the warranty period under the terms of the warranty. The unit must be used for normal domestic purposes only and in accordance with manufacturer's operation instructions.

#### LIMITS OF LIABILITY

The warranty does not cover:

- \* Special, incidental or consequential damages, injury to persons or Property, or any other consequential loss.
- \* Any issue caused by negligence, misuse, abuse or circumstances beyond Waterford Stanley's control.
- \* Any issue with wear and tear, modification, alteration, or servicing by anyone other than an authorized service engineer.
- \* Installation and operational related problems such as draught related issues external to the stove, inadequate venting or ventilation, excessive flue offsets, negative air pressure caused by insufficient burning of improper fuel.
- \* Damage caused to the unit while in transit.
- \* Enamel discolouration due to over firing, enamel damage caused by impact, damage to baffles caused by over firing and fading of surface finish on casting.
- \* Stress fractures on bricks.
- \* Rust on cast iron parts unless reported prior to unit being installed.
- \* Aesthetic damage, rust & missing parts on units purchased off display.

**Note:** Adequate clearance must be maintained around the appliance to ensure the ease of part removal in the possible event of their damage/failure. Waterford Stanley are not responsible for any costs incurred in the removal of items installed in the vicinity of the appliance that have to be moved to facilitate a part replacement.

# **INSTALLATION CHECK LIST**

himum Flue Height of 4.6 metres (15 feet). pliance should be connected to a 125mm (5") flue pipe within a metre and then if flue size increased to a minimum of 150mm (6") diameter. e horizontal flue run should not exceed 150mm (6") flue pipework passing through walls must be sleeved & adequately insulated in line h current Building Regulations. pliance should be connected to a chimney of less than 200mm (8") in diameter herwise the chimney must be lined with a 6" flue liner). e chimney/ flue termination must be located in accordance with building regulations e chimney serving this appliance should not serve any other appliance. cess should be provided to the chimney serving the appliance to allow for cleaning. s a requirement by Building Regulations to have a carbon monoxide alarm ed to any room with a solid fuel appliance.	[ part J.[	
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on and a second s		
earance to combustible materials must be adhered to as described in the Clearance Combustible section.	;	
e stove must be installed on a floor protector that covers the area under the stove d extends 14" to the front and 10" to the sides.	[	
earance must be maintained to allow for maintenance and part replacement.	[	
tion & Combustion Air Requirements		
e room in which the appliance is located should have an air vent of adequate support correct combustion (see Ventilation & Combustion Air Requirement of for specific details).	[	
e stove must not be installed in the same room as an extractor fan.	[	
ร า	support correct combustion (see Ventilation & Combustion Air Requirement for specific details).	support correct combustion (see Ventilation & Combustion Air Requirement for specific details).

# **IMPORTANT OPERATION / MAINTENANCE 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 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		

- 3. **IMPORTANT:** The first few fires should be relatively small to permit the refractory to set properly and season the stove. During these firings it is recommended to ventilate the room as an unpleasant (not toxic) odour may be emitted as the paint is completing curement.
- 4. Inspect the flue-ways of the stove weekly and ensure that there are no blockages. Check flue ways before lighting especially after a shut down period. Please see chimney cleaning section.
- 5. Before loading fresh fuel into the firebox, riddle fully to remove all ashes. This will allow better and cleaner burning. See Re-Fuelling section.
- 6. Never allow a build up of ashes in the ash pan, as this will cause the grate to burn out prematurely. Empty the ashpan when refuelling.
- 7. Avoid slow burning of damp or unseasoned fuel as this will result in tarring flue ways and chimney i.e. peat or timber.
- 8. Allow adequate air ventilation to ensure plenty of air for combustion.
- 9. Do not burn rubbish/household plastic.
- 10. Clean the chimney at least twice a year.
- 11. Burning soft fuels such as timber and peat will stain the glass. Regular cleaning will prevent permanent staining. Clean with soapy water when cool.
- 12. Keep all combustible materials a safe distance away from unit, please see section for clearances to combustibles.
- 13. Never use aerosol spray near the appliance when it is in operation.
- 14. For safety reasons never leave children or the elderly unaccompanied while stove is in use. Use a fire guard.
- 15. Avoid contact with the appliance when in use as stove reaches very high operating temperatures.
- 16. This appliance should be regularly maintained by a competent service engineer.

#### THE CARA GLASS SOLID FUEL NON BOILER STOVE INSTALLATION & OPERATING INSTRUCTIONS

#### GENERAL

When installing, operating and maintaining your Cara 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 and property. Consult your local Municipal office and your insurance representative to determine what regulations are in force. Save these instructions for future reference.

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.

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 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.

#### "IMPORTANT WARNING"

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

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. Please refer to the current standards, BS EN 15287-1:2007 Design, Installation and Commissioning of chimneys. BS EN 14336:2004: Heating Systems in Buildings. Installation & Commissioning of Water Based Heating Systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of Water Based Heating Systems. BS EN 12831: 2003; Heating Systems in Buildings. method for calculation of the design heat load.

Your Cara Glass stove is supplied with the following items:

- Ashpan
- Operating Tool
- Glove
- Side Bricks
- Clay Adaptor
- Rigid Pipe
- 15° Adaptor

#### **PRE-INSTALLATION ASSEMBLY**

After removing the stove from the packaging, open the fire door and remove the loose packing. Prior to installation all the internal components of the stove are removed to gain access to fixings and to make it lighter for installation.

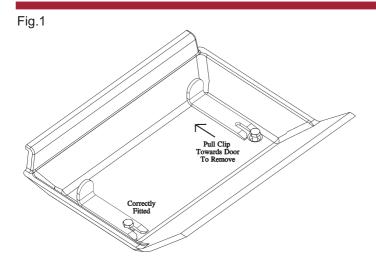
Remove the refractory fire bricks, these bricks are loose and just need to be lifted clear of the grate support plate before they can be removed.

To remove the loose baffle, lift on right side and move this up and to the right to give maximum clearance at the opposite side to allow the baffle be lowered clear of the supporting ledge on the left hand side casting.

Next, remove the grate by pushing it from underneath, the riddling bar is not fixed to the grate.

The cast iron side liners must be removed prior to the fixed baffle, to remove the side liners lift the bottom edge clear of the grate support and slide the bottom edge towards the opposite side of the stove, when the casting is moved to a diagonal position it will be free to be lifted from the stove.

To remove the fixed baffle, loosen the two roof bolts, support the baffle with one hand while removing the L shaped brackets with the other hand, see Fig.1.



Do not overtighten the roof bolts when refitting the baffle. It is adequate to leave them in a position where the L shaped bracket has just enough room to be removed.

Remove the flue spigot and gasket by removing the four bolts.

To remove the insert stove from the external casing, lift out the grate support, this will allow access to two M6 fixings which attach the stove to the outer casing. Remove the 2 fixings, allowing the insert stove to be removed from the external casing.

#### **FLUES**

Flues should be vertical wherever possible and where a bend is necessary, it should not make an angle of more than  $45^{\circ}$  with the vertical. Horizontal flue runs should be avoided in order to minimise flue resistance and to make sweeping easier it is recommended to use 2 x  $45^{\circ}$  bends rather than a  $90^{\circ}$  bend.

#### CHIMNEY

# Do not connect to a chimney serving another appliance.

The stove is a radiant room heater and must be connected to a chimney of the proper size and type. The chimney must have a cross-sectional area of at least 30 square inches 19350sq. mm or a diameter of at least 6" (150mm). It is best to connect to a chimney of the same size, as connection to a larger size may result in a somewhat less draught.

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.

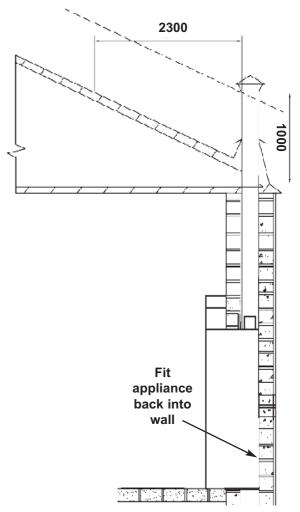
All register plates, restrictor plates, damper etc., which could obstruct the flue at a future date should be removed before connecting this appliance.

If connecting to an existing chimney with a flue diameter of more that 8" it is recommend 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.

A chimney / flue termination must be located to minimise wind effects, a basic guide is that the distance from the termination to the roof should be at be at least 2300mm when measured horizontally and at least 1000mm when measured vertically, (see Fig.2). In circumstances where there are adjoining buildings/ structures/ roof openings there are additional requirements, please refer to building regulations part J.

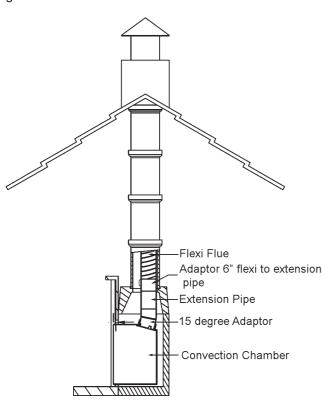
Fig.2



The liner should be approved for use with solid fuel. (See Fig. 3)

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#### Note:

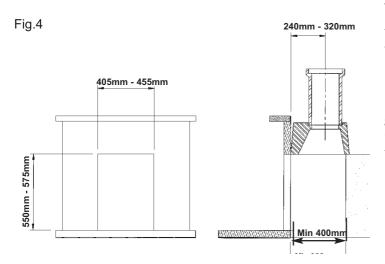
Where the product is to be installed at minimal clearances to non combustible rendered walls, it will be necessary to have the adjacent surfaces rendered using a heat resistant render/ plaster.

#### **FITTING INSTRUCTIONS**

#### **Fully Lined Chimney**

#### <u>Step 1</u>

Prepare the fireplace area with milner brick removal. Ensure the opening is suitable for fitting of the insert stove opening required, i.e. remove fire surround trim if fitted. See Fig.4.



#### <u>Step 2</u>

Ensure the floor area is level with the hearth, this area needs to be level as the insert fire is screw fixed to the floor. Remove all internal parts as per pre-assembly instructions.

#### Step 3

Drop the flexi flue liner down through the chimney and into the fireplace. Fit the adaptor (not supplied available to order) to the end of the flexible flue liner along with the extension pipe which is supplied.

### <u>Step 4</u>

Lay the external casing into the opening and position it so that the front plate is up against the front edge of the opening.

### <u>Step 5</u>

Mark the drill locations and drill the holes using a 5.5mm drill bit. Fix the casing to the floor using the self tapping screws provided.

# <u>Step 6</u>

Lift the stove into the casing approximately 75mm first and then it can be pushed into the final position while taking care to lift the front edge to preserve the hearth.

# <u>Step 7</u>

Lay the sealing gasket on to the flue spigot, then fit the flue spigot to the end of the15 degree adaptor. Fix the 15 degree adaptor to the flue spigot using the grub screws provided. Then pass the 15 degree adaptor through the flue opening and connect it to the extension pipe.

# <u>Step 8</u>

Then using the M6 x 10mm screws secure the stove to the convection chamber. Push the insert stove against the fireplace before fully tightening these bolts.

# <u>Step 9</u>

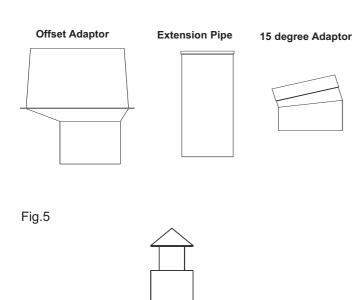
Pull the flue liner back up through the flue outlet until the flue spigot is in position. Fix the flue spigot using the M8 bolts provided. It may be necessary to cut a prop to hold the spigot in place while the fixings are being attached.

# <u>Step 10</u>

Complete the installation of the flexi flue at the top of the chimney in accordance with the manufacturers instructions.

# NOT FULLY LINED CHIMNEY (Using Closure Plate & Pipe Extension)

Fig.5 Chimney Connectors



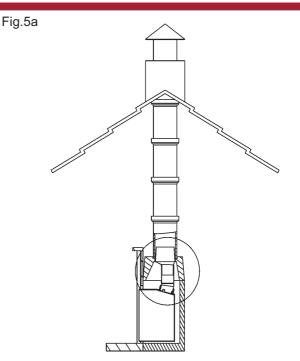
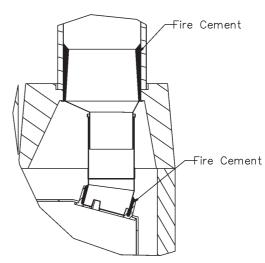


Fig.5b



# <u>Step 1</u>

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Prepare the fireplace area with milner brick removal. Ensure the opening is suitable for fitting of the insert stove opening required, i.e. remove fire surround trim if fitted. See Fig.4.

Clay Liner 8"Or Less

Convection Chamber

-5" To 8" Adaptor Closure Plate

#### <u>Step 2</u>

Ensure the floor area is level with the hearth, this area needs to be level as the insert fire is screw fixed to the floor. Remove all internal parts as per pre-assembly instructions prior to lifting it.

#### Step 3

Measure the distance to the flue outlet of the stove and compare to the chimney, decide on best orientation of the offset adaptor.

#### Step 4

Push the offset adaptor into position and make a seal using approved fire cement between the adaptor and the clay liner. The seal should be tapered to allow any condensation that may occur in the chimney flow back into the flue. See Fig.5.

#### Step 5

Mark the drill locations and drill the holes using a 5.5mm drill bit. Fix the casing to the floor using the self tapping screws provided.

#### Step 6

Lift the stove into the external casing. The stove can be lifted into the casing approximately 75mm first and then it can be pushed into the final position while taking care to lift the front edge to preserve the hearth.

### Step 7

Then using the M6 x 10mm screws secure the stove to the convection chamber. Push the insert stove against the fireplace before fully tightening these bolts.

### Step 8

Temporarily fit the flue spigot and the 15 degree adaptor. Measure the required length for the extension pipe.

#### Step 9

Measure and cut the extension pipe at the straight end to the required dimension using the guide collar provided.

### Step 10

Lay the flue gasket onto the flue spigot and then fit 15 degree adaptor and extension pipe to the spigot using the grub screws to fix the 15 degree adaptor provided and seal using fire cement.

#### **Step 11**

Fit the spigot adaptor and extension pipe so that it completes the flue installation between the stove and adaptor (closure plate).

#### Step 12

Bolt the spigot to the stove and re-apply fire cement to the seals where it may have been disturbed during the installation.

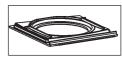
Fit the individual components in the following order:

- 1. Grate Support
- 2. Fixed Baffle
- 3. Cast Iron Side Liners
- 4. Loose Baffle
- 5. Grate
- 6. Back Bricks
- 7. Side Bricks
- 8. Fire Fence



1. Grate Support

#### 2. Fixed Baffle





3. Cast Iron Side Liners 4. Loose Baffle



5. Grate

6. Back Bricks 7. Side Bricks 8. Fire Fence



### 1. Grate Support

Tilt the grate support up on one side and pass it carefully through the door opening, it should then rest on three supports approx 100mm from the floor of the stove.

### 2. Fixed Baffle

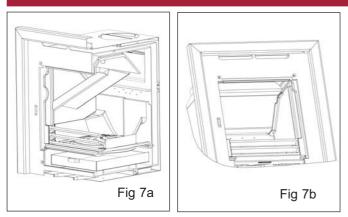
The baffle fits to the roof of the stove using the two M6 bolts and L shaped stainless steel clips. The bolts should be still in place following removal of the baffle, simply lift the baffle into place with the hex head bolts passing through the holes in the baffle, then fit the L shaped clip over the head of the bolt to hold the baffle in place. It is best to leave the bolts half a turn loose to allow for ease of removal.

#### 3. Cast Iron Side Liners

To insert the side liner, place the casting diagonally into the stove with the top edge to the side it is intended, then push the bottom edge across while making sure the top edge passes inside the fixed baffle. The casting should fall into its final location at the side where the bottom edge is located by the grate support.

#### 4. Loose Baffle

To fit the bottom baffle, place it into the stove as shown in fig. 7a with the bend in the baffle aligned with the bottom edge of the top baffle. Slide the baffle up to one side as far as possible until it can be lifted past the support ledge on the opposite side panel, then lower the baffle into its correct position centrally in the stove with the rear edge in contact with the rear of the stove and resting on the support ledges of the side panels and with the chamfer located in the top corner as per fig. 7b.



#### 5. Grate

The grate simply lays into the grate support but care needs to be taken that the riddling bar will rest in the middle of the fork.

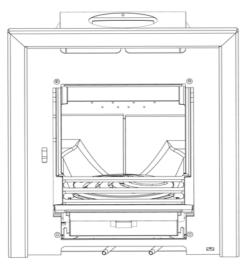
### 6 & 7. Side & Back Bricks

Lay the side and back bricks in as shown in Fig.8.

#### 8. Fire Fence

Lay the fire fence into the slots provided ensuring that they slope from front to back so that no embers can fall out through the fire fence.





#### Three Sided Frame

Fit the three sided frame by placing the top section of the frame over the top hinge point for the door and engaging the cut-outs on the back of the frame into the fixing points on the shell (See fig. 8a).

#### Four Sided Frame

Fit the four sided frame by inserting the frame over the firedoor and air controls and engaging the cutouts on the back of the frame into the fixing points on the shell. Secure in position using the two fixing screws as shown in figure 8b.

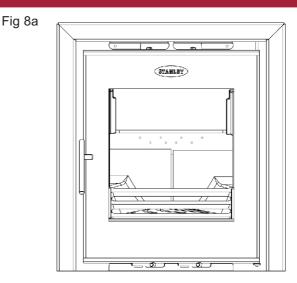
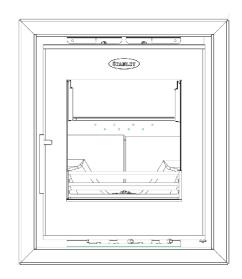


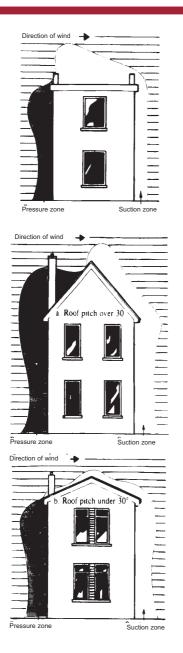
Fig 8b



#### **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.9).



#### VENTILATION & COMBUSTION AIR REQUIRE-MENTS

It is imperative that there is sufficient air supply to the stove in order to support correct combustion. The air supply to this appliance must comply with current Building Regulations Part J, Heat Providing Appliances. If another appliance is fitted in an adjacent room it will be necessary to calculate an additional air supply.

The minimum effective air requirement for this appliance is 8.25cm<sup>2</sup>. When calculating combustion air requirements for this appliance use the following equation: 550mm<sup>2</sup> 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 300mm<sup>2</sup> 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.

#### Note:

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.

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 should be positioned so that they are not liable to blockage.

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.

#### Especially Airtight Properties:-

If the stove is being fitted in a property where the design air permeability is less than  $5m^3$  / (h.m<sup>2</sup>) (normally newer properties built from 2006), then a permanent ventilation must be fitted to provide  $550mm^2$  of ventilation for each kW of rated output. If a draught stabiliser is also fitted then the requirement is  $850mm^2$  per kW of rated output.

'HETAS product approval covers this appliance when installed in accordance with the manufacturer's instructions and relevant standards. As there is currently no standard for Ducted Combustion Air Supply this does not fall within the remit for HETAS product approval. Responsibility for the specification of this and for appropriate manufacturer's instructions is carried by the appliance manufacturer, as allowed for under the Building Regulations.'

### LOCATION

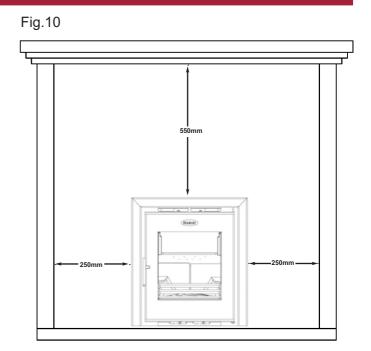
There are several conditions to be considered in selecting a location for your Stanley Glass Stove.

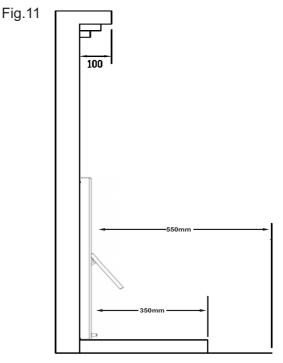
- a. Position in the area to be heated, central locations are usually best.
- b. Allowances for proper clearances to combustibles.
- c. Allowances for proper clearances for maintenance work.

#### **Clearances to Combustibles**

This appliance must be installed in a recess, the recess should not contain any combustible material. Wood battens and plaster board should not be used within the clearance to combustibles. The minimum clearance to combustibles required is as follows:

To the Top	550mm (22")
To the Front	550mm (22")
From the Sides	250mm (10")
To Combustible Flooring	350mm (14")

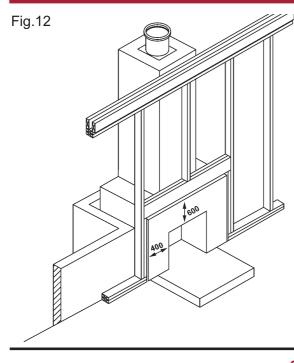




If the mantlepiece protrudes further than 100mm from the fireplace, then it will be necessary to have further clearance to the top of the stove. The distance the mantle protrudes past the 100mm should be added to the clearance.

For example, if the mantle protrudes 200mm, the clearance to the mantle should be 650mm. (See Figs 10 & 11).

If there is a studded wall surrounding the fireplace as in Fig.16, ensure the clearances in this Fig are adhered to.

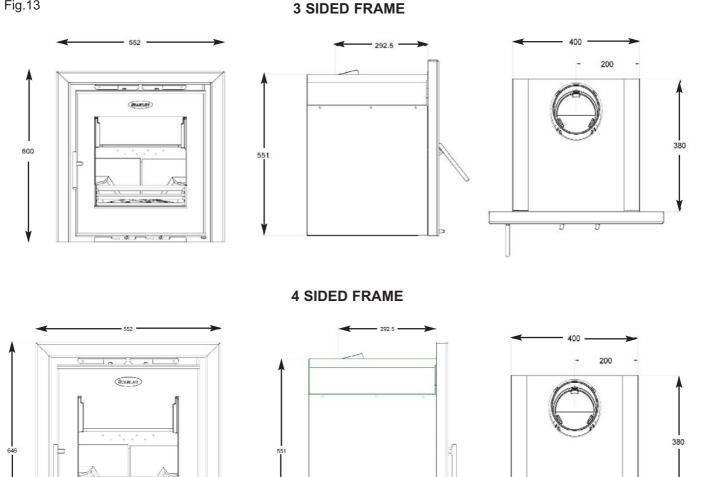


#### **FLOOR PROTECTION**

It is recommended that the appliance is installed on a solid, level, concrete base of non combustible hearth conforming to the current Building Regulations must extend 350mm in front of the unit and 250mm from the sides of the front edge. This will provide protection from sparks and embers which may fall out when stoking on refuelling.

Fig.13

# **STOVE DIMENSIONS**



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

WARNING: DO NOT OBSTRUCT PRIMARY AIR SUPPLY TO THE STOVE

# **COMMISSIONING AND 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.** 

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 fireguard to BS 8423: 2010 in the presence of children, aged and/or infirm persons.

#### **OPERATION**

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

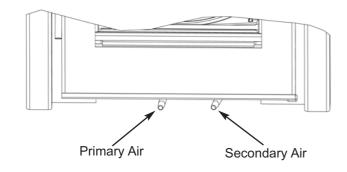
#### **AIR CONTROLS**

The Stanley Cara Glass Insert has two independent air controls.

- 1. The primary air control lever is the left hand lever under the fire door. Slide left to close and right to open.
- 2. The secondary air control lever is the right hand lever under the fire door. Slide left to close and right to open.

Note: When the stove is hot, use the glove provided to operate the air controls.

Fig.14



#### **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 340mm 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 for burning natural and manufactured smokeless fuels only 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.

TECHNICAL DATA				
	MANUFACTURED SMOKELESS FUEL	WOOD		
Max Output: (kW)	Room 6.5 kW	Room 5.0 kW		
Nominal Output: (kW)	5.0 kW	5.0 kW		
Typical refuelling intervals to obtain nom- inal outputs:	MSF 1 hour	WOOD 0.8 hour		
Mean Flue Gas Temperature <sup>o</sup> C	288	316		
Flue Gas Mass Flue	3.6	4.0		
Gross Weight:	100 kgs			
Flue Outlet:	125 mm			
Efficiency	80.0%	78.1%		
Flue Draught:	12 Pa	12 Pa		
Log Size:	-	310		

Model	Energy Efficiency Class	Heat Output to Room	Heat Output to Water	Energy Efficiency Index	Preferred Fuel	Nominal Heat Output	Net Efficiency
Cara Glass NB SF Stove	А	5	N/A	104.25	Wood	5	78.1

#### LIGHTING

Before lighting the stove check with the installer that the installation work and commissioning checks described previously 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 THE STOVE

- 1. Open the firebox door and remove all debris from the grate and ashpan.
- 2. Open the primary air control fully.
- Set the secondary air controls to the required position depending on the fuel being burned i.e. open when burning wood and closed when burning coal/ anthracite.

- 4. Place pieces of paper and kindling on top of the grate and add a small quantity of fuel. Light the fire and close the firebox door.
- 5. When a good fire is established, open the fire door and load the fuel as required.
- Adjust the primary and secondary air controls as required depending on the fuel type being used and the heat output required (see table below). Both controls should be adjusted in conjunction with each other to get the appropriate burn rate with exact settings on each control depending on the draught conditions of the chimney to which the unit is connected.

FUEL	PRIMARY AIR	SECONDARY AIR
Anthracite	Adjust for Desired Heat Output	Fully Closed
Coal	Adjust for Desired Heat Output	Fully Closed
Turf/ Wood	Maximum Opening of 50%	Adjust for Desired Heat Output

# WARNING: DO NOT LEAVE BOTH AIR CONTROLS FULLY OPEN AS THIS CAN CAUSE THE STOVE TO OVERHEAT, DAMAGING THE INTERNAL COMPONENTS.

#### REFUELLING

Before opening the door, open the primary air control fully 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 the air controls to the required setting.

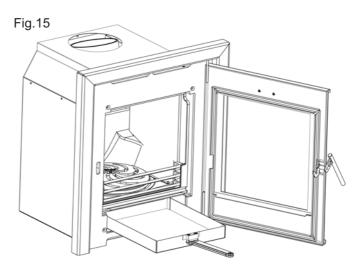
#### **SLOW BURNING**

To achieve slow burning when burning wood close the secondary air control and open a few millimetres. Slow burning will cause the window glass to blacken and should not be used for a long period as it will leave sooty deposits in the flueways. Opening the secondary air control will increase the heat output and will clear the glass.

To obtain slow burning when burning coal, close the secondary air control fully and partially open the primary air control a few millimetres.

#### **DE-ASHING**

Never allow the ashpan to over fill as it will cause damage to the grate. Empty the ashpan before lighting. Always ensure that ashes have thoroughly cooled before removing the ashpan. Open the fire door and remove ashpan using the ashpan tool. Close the fire door. When the ash is disposed of, replace the empty ashpan. Do not leave the fire unattended with the fire door open, even for a minute.



#### **DISPOSAL OF ASHES**

Your stove is provided with a stainless steel ashpan. This ashpan should be emptied every day.

If ashes are allowed to build to grate level you could damage the firebars by overheating. We recommend that you remove ashes after you have riddled the fire when the stove is thoroughly cooled.

Ashes should be placed in a metal or other noncombustible container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible material, pending final disposal. If ashes are buried in soil, or otherwise dumped they should be retained in the closed container until they are thoroughly cooled.

Open the firedoor and remove the ashpan using the tool provided, see Fig 15. Close the door. When the ash is disposed of replace the ashpan.

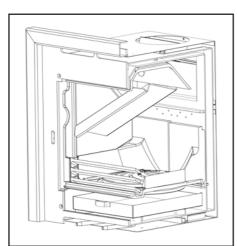
#### **MONTHLY MAINTENANCE**

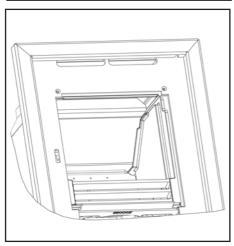
#### Cleaning Stove Flue Pathways

It is recommended that the flue pathways in the stove are cleaned on a monthly basis (or less depending on the soot build-up created by the fuel being used) and the chimney cleaned annually. To access the chimney pathways, use the following procedure:

- 1. Remove the firebars and firebricks.
- 2. Remove the bottom baffle by lifting up the front of the baffle and pulling the back edge forward, allowing it to drop into the firebox area. Turn the baffle at an angle to remove it through the door opening (see Fig. 16).

Fig.16





#### **GRATE REMOVAL & CLEANING**

Over time fuel deposits, clinker & ash can lodge between the grate and grate support which can cause difficulties when moving the grate during deashing. To help reduce this occurrence, it is recommended that the grate is cleaned on a monthly basis when undertaking the general cleaning of the flue pathways using the following procedure:

1. The grate is removed by removing the ashpan and then lifting the grate out of the grate insert from underneath the grate (See fig. 17)



#### PERIODIC MAINTENANCE

#### **CHIMNEY CLEANING**

The chimney should be cleaned twice annually or if the stove is not used for a prolonged period during the summer period, it should be cleaned prior to commencement of usage. The chimney can be cleaned through the stove depending on the flue configuration and the flue liner should be cleaned in accordance with manufacturer's instructions. Always use a brush with plastic bristles that is the correct size to reach all areas of the flue.

#### **GLASS CLEANING**

The stove glass will self-clean when there is sufficient heat generated by the burning fuel i.e. when the unit is operated at the maximum air settings. If a build-up of creosote occurs on the glass it may be due to low draft conditions, poor quality fuel or operating the stove at the minimum air settings for long periods of time. The glass should be cleaned when cool and cleaned with a non-abrasive cloth using warm soapy water. For stubborn deposits, a grade 0 steel wool can be used whilst taking care not to scratch the glass with any coal/ash deposits.

#### **CLEANING THE OUTER CASING**

Cleaning should be done when the stove is cold by removing any dust or dirt using a dry cloth. Do not use any water on the matt

black/senotherm finish as this will cause it to rust.

### PROLONGED PERIODS OF NON USE

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

It is important that the flue connection, any appliance baffles or throat plates and the chimney are swept prior to lighting up after a prolonged shutdown period.

#### WARNING NOTE:

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from the 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:

- (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 flueway 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.

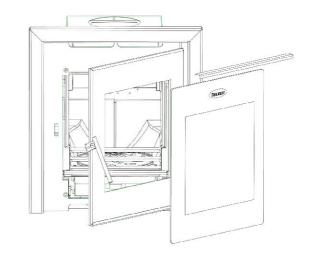
- 1. Do not over fire the stove.
- 2. Over-firing will also damage painted or enamel finish.
- 3. Install a smoke detector in the room.
- 4. A conveniently located class A fire extinguisher to contend with small fires resulting from burning embers.
- 5. A practical evacuation plan.
- 6. A plan to deal 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 overheated flue pipe or from embers or sparks from the chimney.

#### **GLASS REPLACEMENT**

- (a) Open the firedoor fully.
- (b) Remove the top glass retaining bracket by removing the three fixing screws (See fig. 18)
- (c) Lift the glass free for the bottom retaining bracket.
- (d) Before fitting the new glass, check the glass sealing on the door frame and replace if necessary.
- (e) Replace the sealing rope in the door if necessary

#### Fig.18



# CO ALARM

The fitting of CO Alarms in the same room as the appliance is a compulsory requirement under current Building Regulations. For ROI an additional CO Alarm must be fitted either inside each bedroom or within 5 metres of the bedroom door, refer to Building Regulations Part J. Further guidance on the installation of a carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturers instructions.

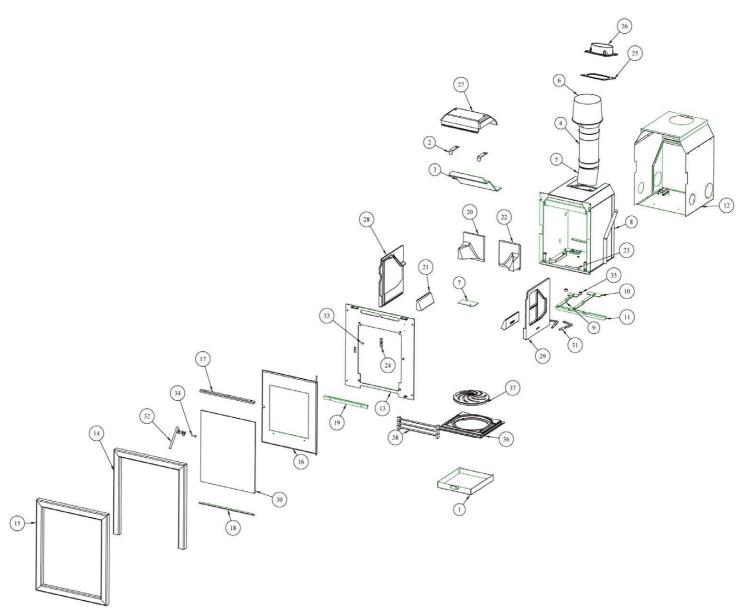
Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

# WARNING:-

If the CO Alarm sounds unexpectedly:-

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

#### CARA GLASS INSERT STOVE EXPLODED VIEW



- 1. ASHPAN F00997AXX
- 2. BAFFLE SUPPORT F01084AXX
- 3. BAFFLE **F01198AXX**
- 4. 5" X 250MM STRAIGHT PIPE F01199AXX
- 5. 5" 15 DEGREE BEND **F01200AXX**
- 6. 5" TO 8" OFFSET CLAY ADAPTOR F01201AXX
- 7. AIR COVER F01302AXX
- 8. COMBUSTION CHAMBER F01330AXX
- 9. LH DAMPER PLATE F01331AXX
- 10. RH DAMPER PLATE F01332AXX
- 11. SEALING BRACKET F01333AXX
- 12. CONVECTION CHAMBER F01334AXX
- 13. MOUNTING PLATE F01335AXX
- 14. DOOR FRAME 3 SIDED F01336AXX
- 15. DOOR FRAME 4 SIDED F01337AXX
- 16. STEEL DOOR F01338AXX
- 17. GLASS RETAINER TOP F01339AXX
- 18. GLASS RETAINER BOTTOM F01340AXX
- 19. DEFLECTOR PLATE F01344AXX

- 20. LH BACK BRICK H00203AXX
- 21. SIDE BRICK H00207AXX
- 22. RH BACK BRICK H00208AXX
- 23. DATA PLAQUE N00546AXX
- 24. SERIAL NUMBER PLATE F00234AXX
- 25. FLUE GASKET P00102AXX
- 26. 5" FLUE Q00752AXX
- 27. TOP BAFFLE **Q00761AXX**
- 28. LH SIDE PLATE Q00790AXX
- 29. RH SIDE PLATE Q00791AXX
- 30. GLASS T00107AXX
- 31. OPERATING LEVER V01075AXX
- 32. DOOR HANDLE V01076AXX
- 33. DOOR CATCH ROLLER V01078AXX
- 34. DOOR HANDLE SPACER V01079AXX
- 35. BUSH V01080AXX
- 36. GRATE SUPPORT Z00035AXX
- 37. GRATE **Z00036AXX**
- 38. FIRE FENCE Z00037AXX

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Manufactured by Waterford Stanley Ltd., Unit 401-403, IDA Industrial Estate, Cork Road, Waterford, Ireland. Tel: (051) 302300 Fax (051) 302315

