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**PLEASE RETAIN**



# **Solis Inset 500 & 900**



## **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 STOVE WARRANTY

### CONDITIONS OF WARRANTY

Your Stanley 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	<ul style="list-style-type: none"> <li>• Refractory materials (supply only)</li> <li>• Rope seals, glass seals and cement seals.</li> <li>• Surface Finish on Seno models.</li> <li>• Grates and fire bars.</li> <li>• Ceramic glass is covered for Thermal breakage (supply only).</li> <li>• Rust (if reported before installation)</li> <li>• Aesthetic Damage (provided reported on date of receipt)</li> </ul>
Up to 5 Years	<ul style="list-style-type: none"> <li>• All external castings (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 rating plate on the back of the firedoor), 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.
- \* 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

Tick

### *Flue System*

1. Minimum Flue Height of 4.6 metres (15 feet).
2. Appliance should be connected to a 125mm (5") flue pipe within a metre and then the flue size increased to a minimum of 150mm (6") diameter (500 Models).
- 2A. Appliance should be connected to a 1.8m (6 feet) of 150mm (6") flue pipe (900 Models).
3. The horizontal flue run should not exceed 150mm (6")
4. All flue pipework passing through walls must be sleeved & adequately insulated in line with current Building Regulations.
5. Appliance should be connected to a chimney of less than 200mm (8") in diameter (otherwise the chimney must be lined with a 6" flue liner).
6. The chimney/ flue termination must be located in accordance with building regulations part J.
7. The chimney serving this appliance should not serve any other appliance.
8. Access should be provided to the chimney serving the appliance to allow for cleaning. (This can be done through the stove).
9. It is a requirement by Building Regulations to have a carbon monoxide alarm fitted to any room with a solid fuel appliance.

### *Location*

10. Clearance to combustible materials must be adhered to as described in the Clearance to Combustible section.
11. The stove must be installed in a solid non combustible recess with a hearth or suitable non combustible floor protector that extends 225mm to the front of the appliance and 150mm to either side.
12. Clearance must be maintained to allow for maintenance and part replacement.

### *Ventilation & Combustion Air Requirements*

13. 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).
14. The stove must not be installed in the same room as an extractor fan.



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## **IMPORTANT OPERATION / MAINTENANCE NOTES**

Now that your Stanley 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.

<b>FUEL CALORIFIC VALUES - SOLID FUELS</b>		
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.

**LEAVE THE DOOR SLIGHTLY AJAR DURING THE FIRST FIRING TO PREVENT THE ROPE FROM STICKING TO THE PAINT DURING THE CURING PROCESS.**

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.

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## INSTALLATION & OPERATING INSTRUCTIONS

### GENERAL

When installing, operating and maintaining your Solis Inset 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](http://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.

<p>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.</p>
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*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 Solis Inset stove is supplied with the following items:

- Ashpan
- Glove
- OSA Connection

### 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 in order to minimise flue resistance and to make sweeping easier it is recommended to use 2 x 45° bends rather than a 90° 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.

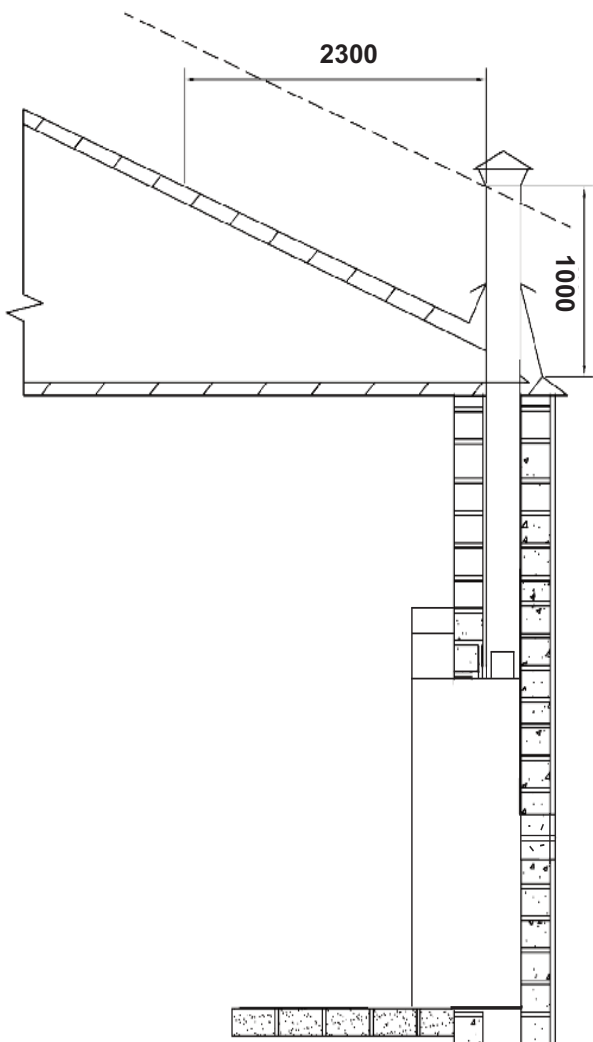
All register plates, restrictor plates, damper etc., which could obstruct the flue at a future date should be removed before connecting this appliance.

If connecting to an existing chimney with a flue diameter of more than 8” 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.

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 least 2300mm when measured horizontally and at least 1000mm when measured vertically, (see Fig.1). In circumstances where there are adjoining buildings/ structures/ roof openings there are additional requirements, please refer to building regulations part J.

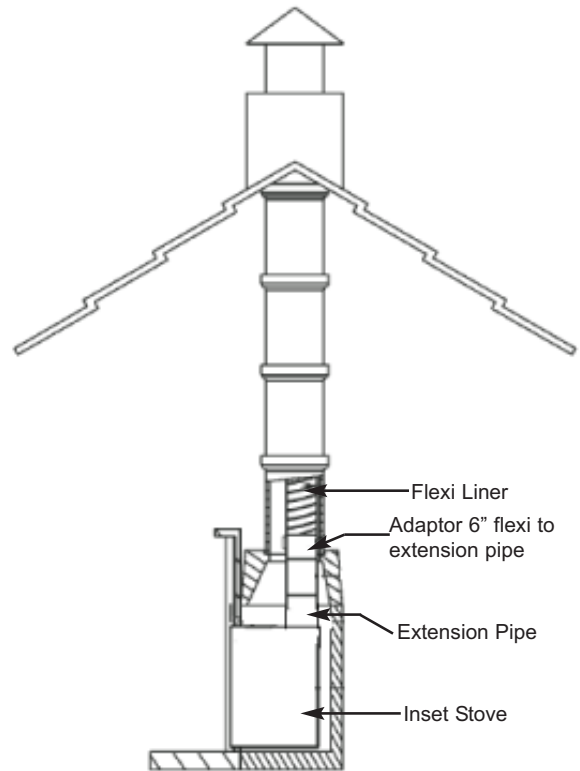
Fig.1



## FITTING INSTRUCTIONS

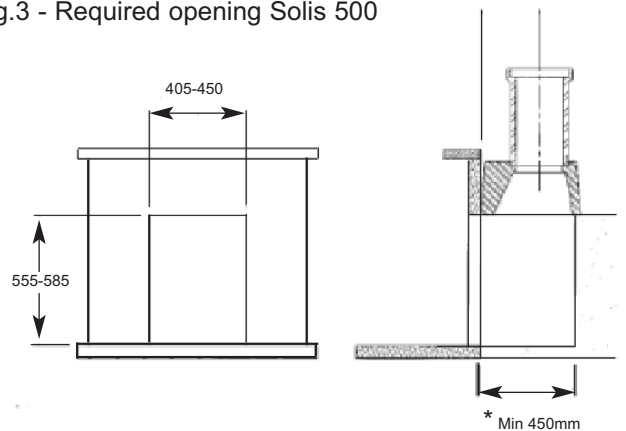
### FLUE LINED CHIMNEY (See fig. 2)

Fig.2



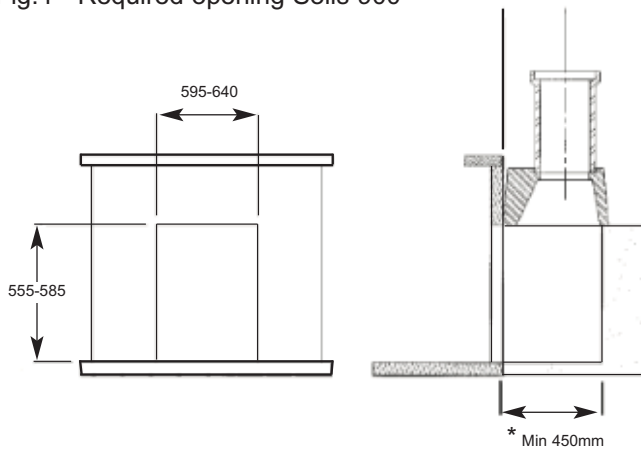
1. Ensure that the opening is suitable for fitting of the inset stove (Fig 3 shows 500 Model & Fig 4 shows 900 Model).
2. Ensure that the floor area is level.
3. Remove the top baffle from the firebox by pulling it forward and lifting it up on the RHS to allow the LHS of the baffle to drop into the firebox so that it can be removed through the fire door opening.

Fig.3 - Required opening Solis 500



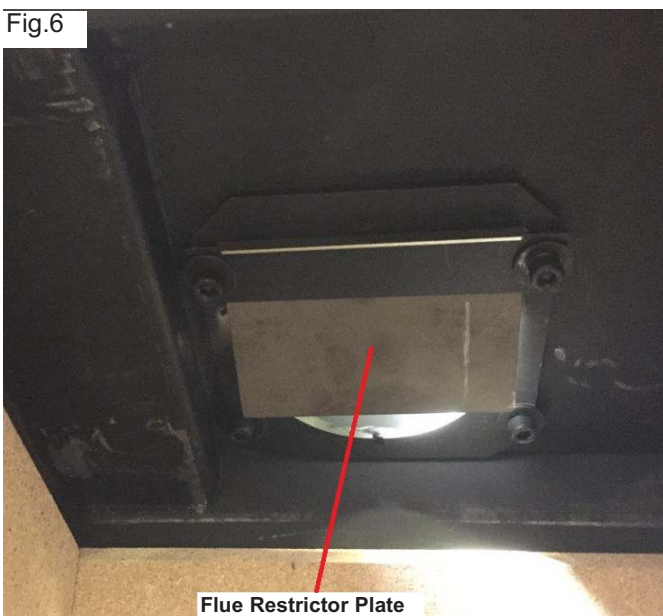
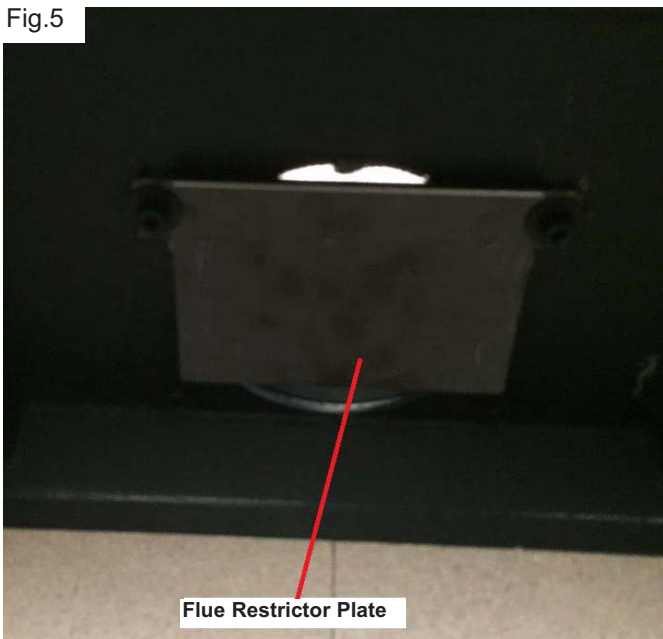
\* Can be reduced to 375mm if OSA connection is not fitted.

Fig.4 - Required opening Solis 900



\* Can be reduced to 375mm if OSA connection is not fitted.

4. For the 500 model, remove the Flue Restrictor Plate by pulling it towards the fire door (see Figure 5) and for the 900 model, loosen the two front spigot fixing bolts (see Figure 6).



5. Remove the Flue Spigot by removing the four M8 Allen Screws and washers.
6. Remove the Firebox Shell from the outer casing by loosening the two M6 Allen Head Screws and washers as shown in Figure 7 and pull the shell out from the casing.
7. Drop the flue liner down the chimney into the fireplace and fit the flexi flue adaptor and length of rigid pipe as required by flexible flue manufactured to the end of the flue liner.



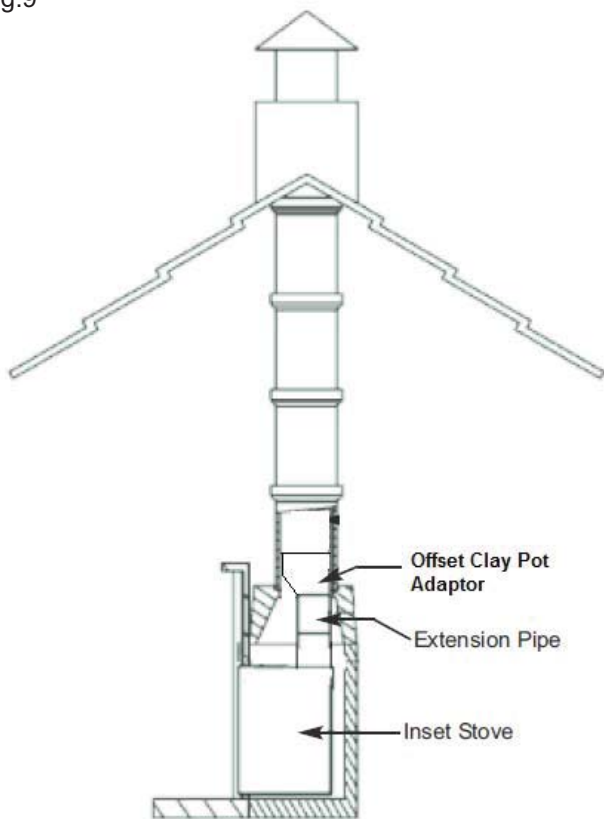
8. Place the outer casing temporarily into its final position to determine what length of extension pipe is required between the adaptor & flue spigot. Cut the extension pipe to the required length.
9. Connect the extension pipe to the adaptor and seal the joint using the appropriate fire cement.
10. Fit the flue spigot to the extension pipe and seal the joint using the appropriate fire cement.
11. Position the outer casing into the fireplace opening so that the front lip on the casing sits against the front of the opening.
12. Mark the fixing hole locations in the base of the outer casing and fix in place using a suitable concrete screw anchor.
13. Lift the firebox shell approximately 75mm into the outer casing so that it can then be pushed into the final position while taking care to lift the front edge so that it doesn't damage the hearth.
14. Secure the flue spigot to the firebox shell and secure the firebox shell to the outer casing.
15. Refit the Flue Restrictor Plate and refit the top baffle.
16. Fit the frame by inserting the bottom lip on the frame under the air control levers and engaging the cut-outs on the back of the frame into the fixing points on the shell using the M6 screws (see Fig. 8)



Fig.8



Fig.9



**NON FLUE LINED CHIMNEY** (See Fig. 9)

1. Ensure that the opening is suitable for fitting of the inset stove (Fig 3 shows 500 Model & Fig 4 shows 900 Model).
2. Ensure that the floor area is level.
3. Remove the top baffle from the firebox by pulling it forward and lifting it up on the RHS to allow the LHS of the baffle to drop into the firebox so that it can be removed through the fire door opening.
4. For the 500 model, remove the Flue Restrictor Plate by pulling it towards the fire door (see Figure 5) and for the 900 model, loosen the two front spigot fixing bolts (see Figure 6).
5. Remove the Flue Spigot by removing the four M8 Allen Screws and washers.

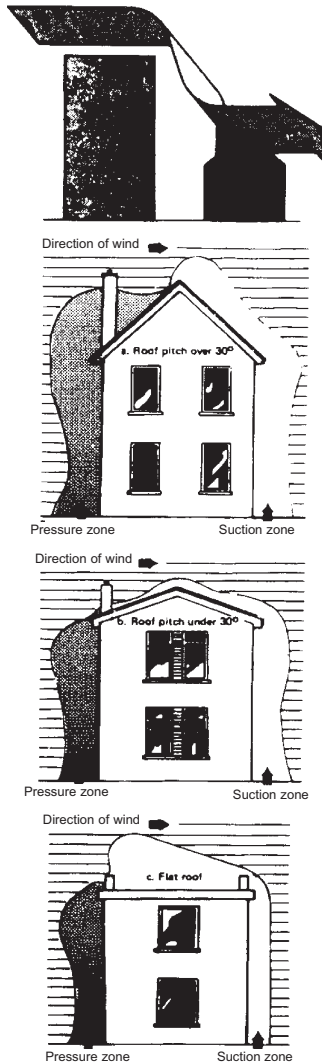
6. Remove the Firebox Shell from the outer casing by loosening the two M6 Allen Head Screws and washers as shown in Figure 7 and pull the shell out from the casing.
7. Fit a clay pot adaptor to the clay liner ensuring that it is sealed using the appropriate fire cement. Before sealing the adaptor in position it may be best to fit the outer casing into position so as to ensure that the clay pot adaptor and flue spigot are all in line and to determine what length of extension pipe is required between the adaptor & flue spigot.
8. Connect the extension pipe to the adaptor and seal the joint using the appropriate fire cement.
9. Fit the flue spigot to the extension pipe and seal the joint using the appropriate fire cement.
10. Position the outer casing into the fireplace opening so that the front lip on the casing sits against the front of the opening.
11. Mark the fixing hole locations in the base of the outer casing and fix in place using a suitable concrete screw anchor.
12. Lift the firebox shell approximately 75mm into the outer casing so that it can then be pushed into the final position while taking care to lift the front edge so that it doesn't damage the hearth.
13. Secure the flue spigot to the firebox shell and secure the firebox shell to the outer casing.
14. Refit the Flue Restrictor Plate and refit the top baffle.
15. Fit the frame by inserting the bottom lip on the frame under the air control levers and engaging the cut-outs on the back of the frame into the fixing points on the shell.
16. Secure the frame to the shell using the M6 screws (see Fig. 8).

**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.10).

Fig.10



## VENTILATION & COMBUSTION AIR REQUIREMENTS

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 500 model is 5cm<sup>2</sup> and for the 900 model is 22cm<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 5kw 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.

### 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<sup>3</sup> / (h.m<sup>2</sup>) (normally newer properties built from 2006), then a permanent ventilation must be fitted to provide 550mm<sup>2</sup> of ventilation for each kW of rated output. If a draught stabiliser is also fitted then the requirement is 850mm<sup>2</sup> per kW of rated output.

## EXTERNAL DUCTED AIR

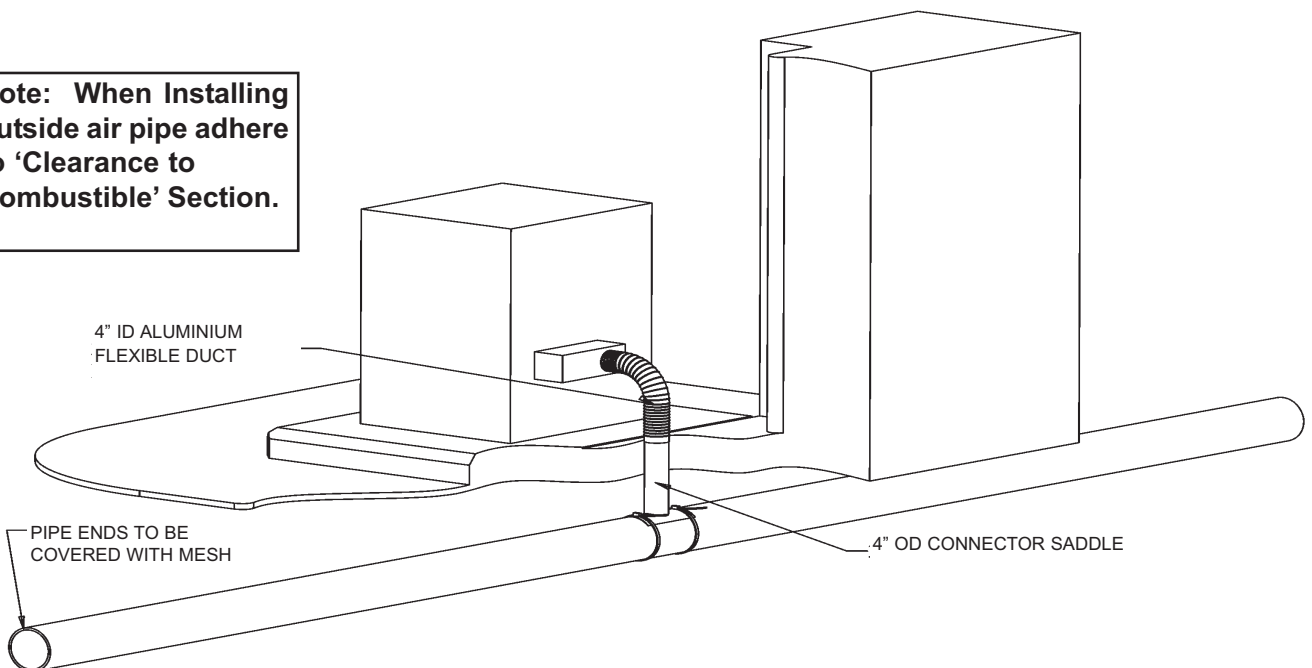
Where required the primary air supply can be ducted from outside.

It is recommended to bring the air supply for the stove into the house using a 4" plastic pipe. Where the pipe meets the outside wall make sure a vent cover is fitted properly to ensure no rodents can enter via the vent pipe.

The vent pipe should be located to prevent the ingress of moisture and in a location where it will not get blocked with leaves or any other debris. As wind effects can create suction and pressure zones of opposite sides of the dwelling it is recommended to run the air vent from opposite poles (North, South, East & West) of the dwelling and tee off for the air supply to the stove. This should negate the effect of suction and pressure zones. See Fig. 11

Fig.11

**Note: When Installing outside air pipe adhere to 'Clearance to Combustible' Section.**



## HEAT RECOVERY VENTILATION

Where a stove is to be installed in a dwelling with *Heat Recovery Ventilation* (HRV) a number of precautionary measures must be undertaken:

Where the product is to be installed with a Mechanical ventilation, the stove must be connected to an external air supply, The ductwork for the external air supply must be no longer than 6 metres and the air inlet terminal to the ductwork must have a cross sectional area of at least 80cm<sup>2</sup>.

## LOCATION

There are several conditions to be considered in selecting a location for your Solis Inset.

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

		500 Model	900 Model
Top	A	550mm	550mm
Sides	B	100mm	100mm
Front	C	950mm	1200mm
Combustible Flooring - Front	D	225mm	225mm
Combustible Flooring - Side	-	150mm	150mm
Back	-	100mm	100mm

Fig.12

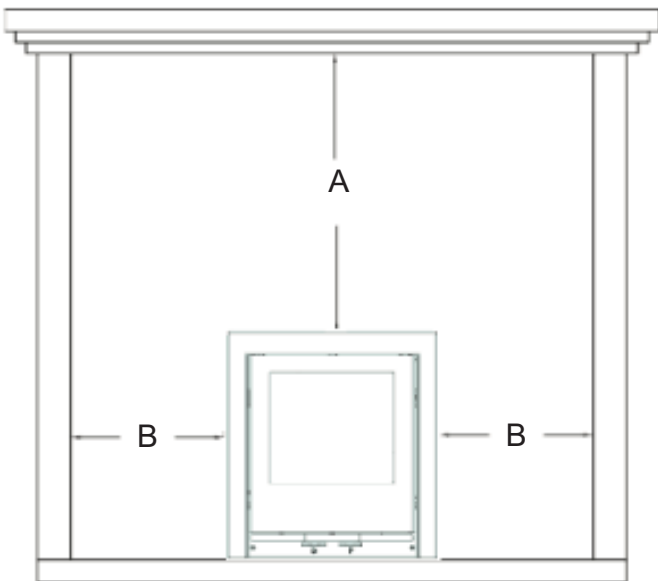
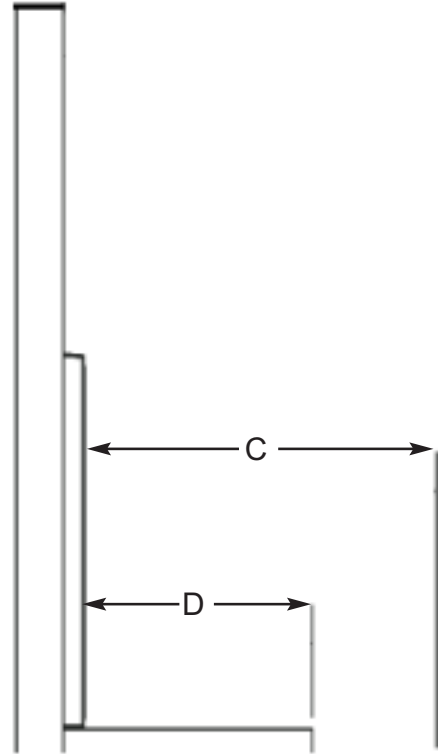


Fig.13



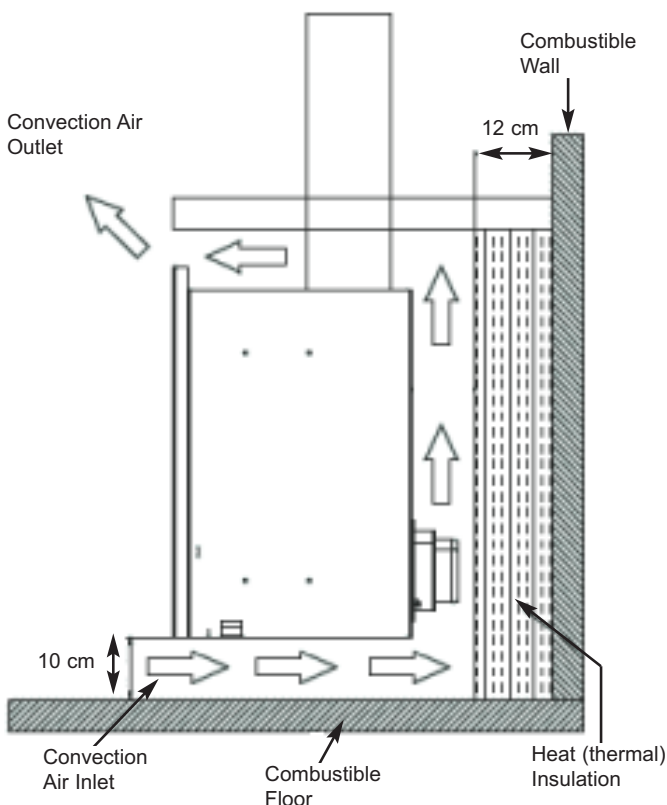
If the appliance recess is close to any combustible material, it must be adequately protected using a suitable insulation material (See table 1) and configured as showing in Fig. 14.

## TECHNICAL DATA

MATERIAL DESCRIPTION		SILCA 250KM
Approval in Germany		National technical approval no Z-43.14-117 valid for fireplace and tiled stove construction
Approval in Switzerland		Fire Prevention Approval no. 15202
Fire resistance	DIN EN 13501-2	EI 120 (80 mm)
CE-Certificate		0432-CPD-420002242/2-6
Construction material class	DIN 4102	Non-combustible A1
Bulk density ( $\pm 10\%$ )	DIN EN 1094-4	250 kg/m <sup>3</sup>
Porosity	DIN EN 1094-4	Approx. 90 %
Compressive strength	DIN EN 1094-5	> 1.4 MPa
Thermal conductivity at 200 °C	DIN EN 993-14	<0.1 W/mK
Thermal expansion at 500 °C	DIN EN 993-8	< 0.2 %
Standard dimensions in mm		3,000 x 1,250, 1,250 x 1,000; 1,250 x 500; 1,000 x 625; 625 x 500
Standard thicknesses in mm		30-100

The insulation material must be at least 120mm in thickness and must be situated at least 100mm away from the rear and sides of the appliance.

Fig.14



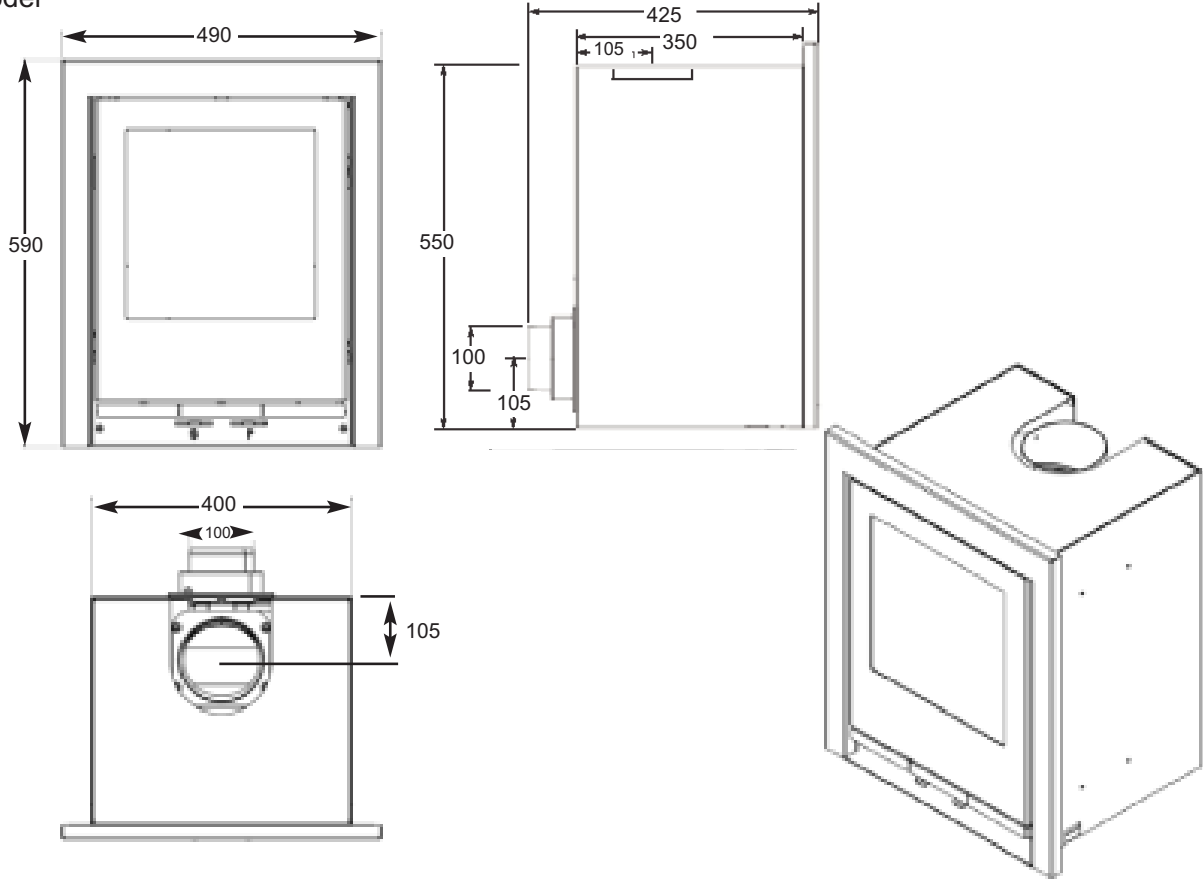
## FLOOR PROTECTION

It is recommended that the appliance is installed on a solid, level, concrete base of non combustible hearth conforming to the current Building Regulations which must extend 225mm in front of the unit and 150mm from the sides of the front edge. This will provide protection from sparks and embers which may fall out when stoking or refuelling.

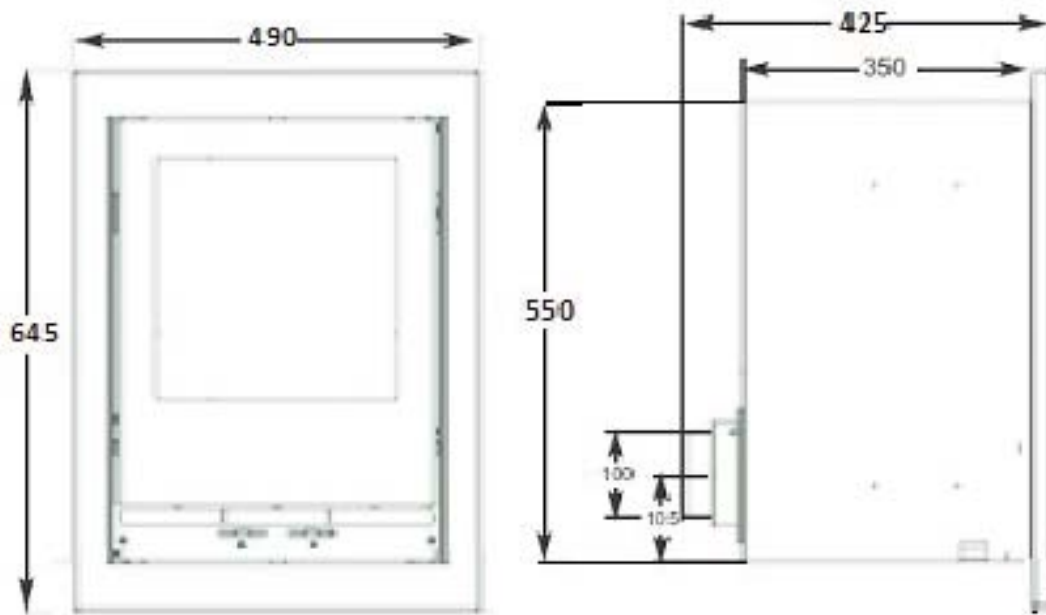
**STOVE DIMENSIONS**  
**THREE SIDED FRAME**

500 Model

Fig.15

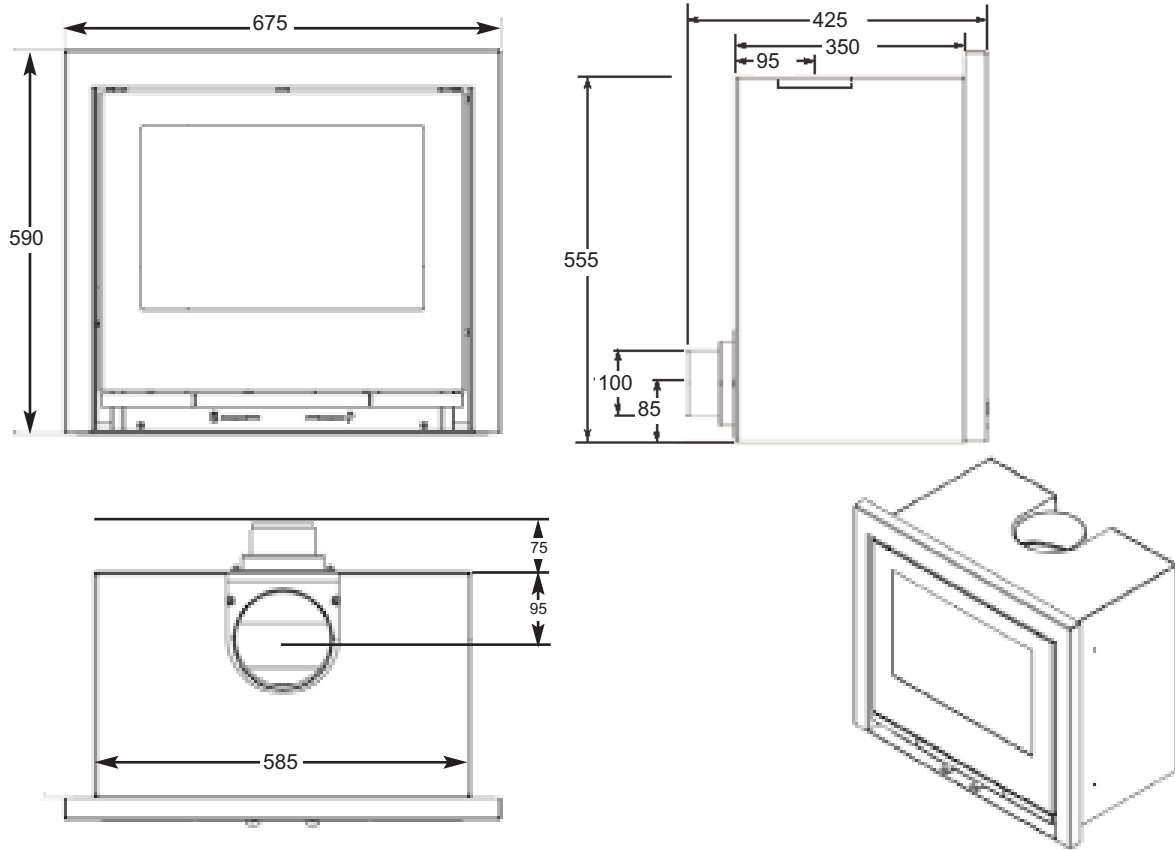


**FOUR SIDED FRAME**

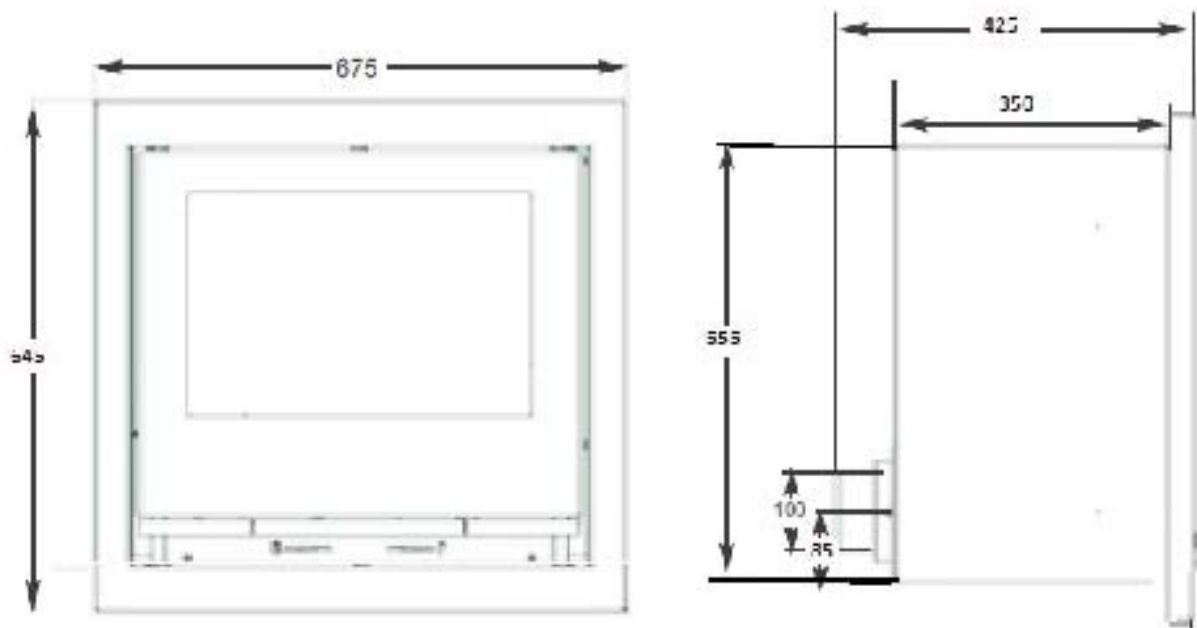


## THREE SIDED FRAME

### 900 Model



## FOUR SIDED FRAME



**WARNING: DO NOT OBSTRUCT PRIMARY AIR SUPPLY TO THE STOVE**

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

## 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

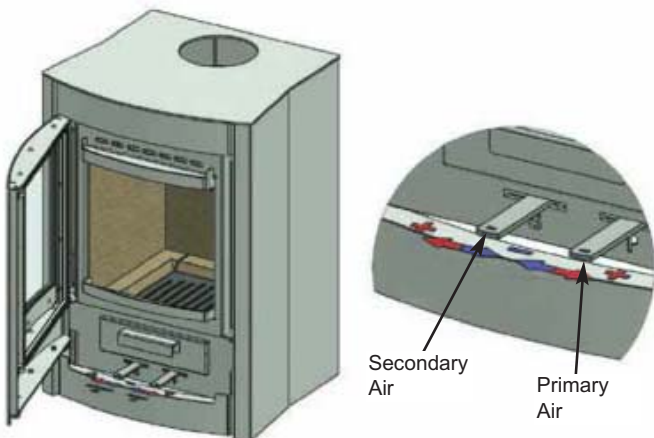
Check that all dampers and catches are operating correctly and ensure that all flue connections are thoroughly sealed.

## AIR CONTROLS

The Solis Inset has two independent air controls (See fig. 16)

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

Fig.16



## 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.

If opting to burn solid fuel, a solid fuel kit must be installed. (See Installing Solid Fuel Kit section)

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 seasoned wood logs 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

	SOLIS INSET 500		SOLIS INSET 900	
	MANUFACTURED SMOKELESS FUEL	WOOD	MANUFACTURED SMOKELESS FUEL	WOOD
Nominal Output: (kW)	Room 5kW	Room 5kW	Room 9kW	Room 9kW
Typical refuelling intervals to obtain nominal outputs:	MSF 1 hour	Wood .75 hours	MSF 1 hour	Wood .75 hours
Mean Flue Gas Temperature °C	205	253	328	296
Flue Gas Mass Flue	4.3	4.3	7	7
Flue Outlet:	127 mm		152 mm	
Efficiency	81%	82%	75%	80%
Flue Draught:	12 PA			
Log Size	N/A	260 mm	N/A	440 mm

Model	Energy Efficiency Class	Heat Output to Room	Heat Output to Water	Energy Efficiency Index	Preferred Fuel	Nominal Heat Output	Net Efficiency
Solis Inset 500	A <sup>+</sup>	5	N/A	110	Wood	5	82
Solis Inset 900	A <sup>+</sup>	9	N/A	107	Wood	9	80

### 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.

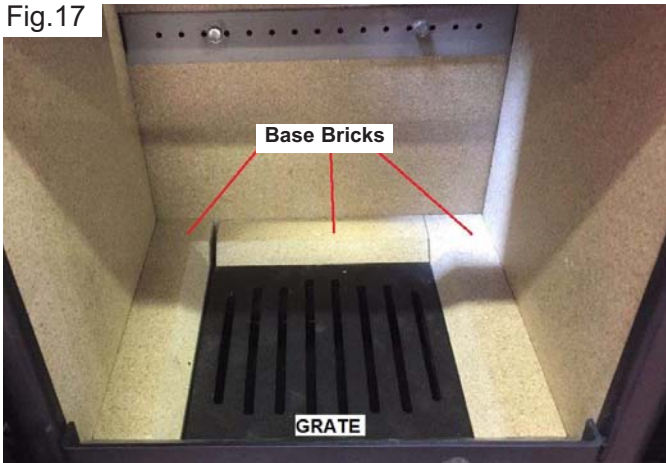
LEAVE THE DOOR SLIGHTLY AJAR DURING THE FIRST FIRING TO PREVENT THE ROPE FROM STICKING TO THE PAINT DURING THE CURING PROCESS.

## INSTALLING SOLID FUEL KIT - 500 MODEL

IF OPTING TO BURN SOLID FUEL, A SOLID FUEL KIT MUST BE INSTALLED.

1. Open the fire door and remove the ashpan.
2. Lift out the grate by pushing it upwards through the ash compartment.
3. Remove the base bricks (see Fig. 17).

Fig.17



4. Refit the grate.
5. Fit the two refractory bricks as shown in fig. 19.

Fig.19



## INSTALLING SOLID FUEL KIT - 900 MODEL

IF OPTING TO BURN SOLID FUEL, A SOLID FUEL KIT MUST BE INSTALLED.

1. Open the fire door and remove the ashpan.
2. Lift out the grate by pushing it upwards through the ash compartment.
3. Remove the two floor bricks.

Fig.18



4. Lay the two refractory bricks into the firebox as shown in fig. 20.
5. Refit the grate.

Fig.20



## LIGHTING THE STOVE

1. Open the fire door and open the primary air inlet by pushing the primary air control lever to the right.
2. Open the secondary air inlet by pushing the secondary air control lever to the left.
3. Cover the grate with crumpled pieces of paper and lay 10-12 pieces of kindling on top of the paper towards the back of the firebox.
4. Ignite and close the fire door.
5. When the kindling is well alight open the fire door and add more kindling of a larger size to sustain the fire. Close the fire door.
6. When a hot fire bed is established add the normal fuel.
7. When well lighted, adjust the air controls as required depending on the fuel type being used & the heat output required (see Table). 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.

## AIR CONTROLS

	Ignition		Controlled Burn	
Fuel	Primary Air	Secondary Air	Primary Air	Secondary Air
Anthracite/ Smokeless Coal	Fully Open	Fully Closed	0-80% Open	Fully Closed
Wood/ Turf	Fully Closed	Fully Open	Fully Closed	0-80% Open

### 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

Slow burning will cause the window glass to blacken and should not be used for a long period. It should only be done after the fire has been established and been running at nominal output for a period of time. For a prolonged slow burn, fill the firebox of fuel up to a maximum height just below the top of the fire fence at the front of the door opening. Close the primary air control and the secondary air control.

### DISPOSAL OF ASHES

Your stove is provided with an ashpan which should be emptied every day.

If ashes are allowed to build to grate level you could damage the grate 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 non-combustible 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 glove provided. Close the firedoor. When the ash is disposed of, replace the ashpan.

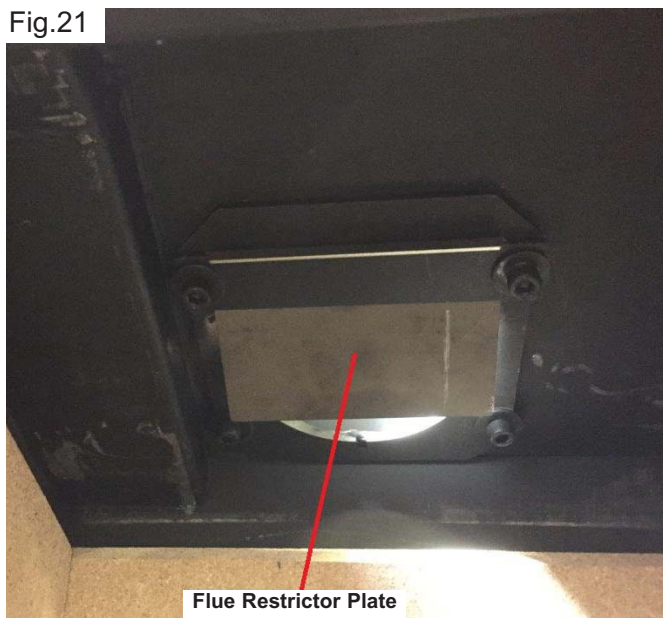
### MONTHLY MAINTENANCE

#### *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 top baffle from the firebox by pulling it forward and lifting it up on the RHS to allow the LHS of the baffle to drop into the firebox so that it can be removed through the firedoor opening.
2. Remove the Flue Restriction Plate by pulling it towards the firedoor (see Fig. 21).

Fig.21



## 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 A MATT BLACK/SENOTHERM STOVE

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 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 your 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 fire door fully.
- (b) Remove the top glass retaining bracket by removing the two fixing screws (see Fig. 22).
- (c) Lift the glass free off the bottom retaining bracket.
- (d) Before fitting the new glass, check the glass sealing on the door frame and replace if necessary.

Fig.22



## 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.

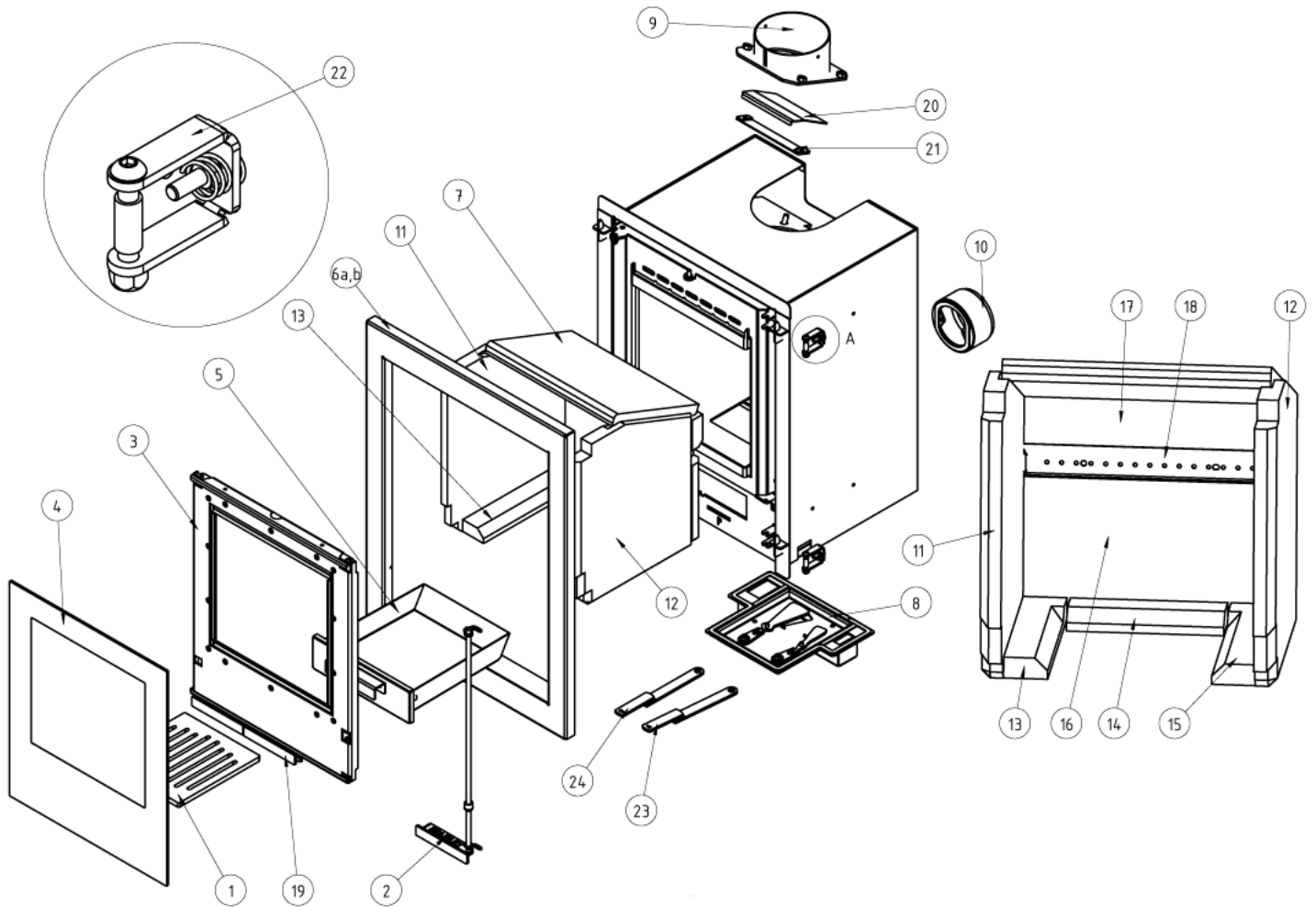
**Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.**

### **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.

## STANLEY SOLIS INSET 500 EXPLODED VIEW

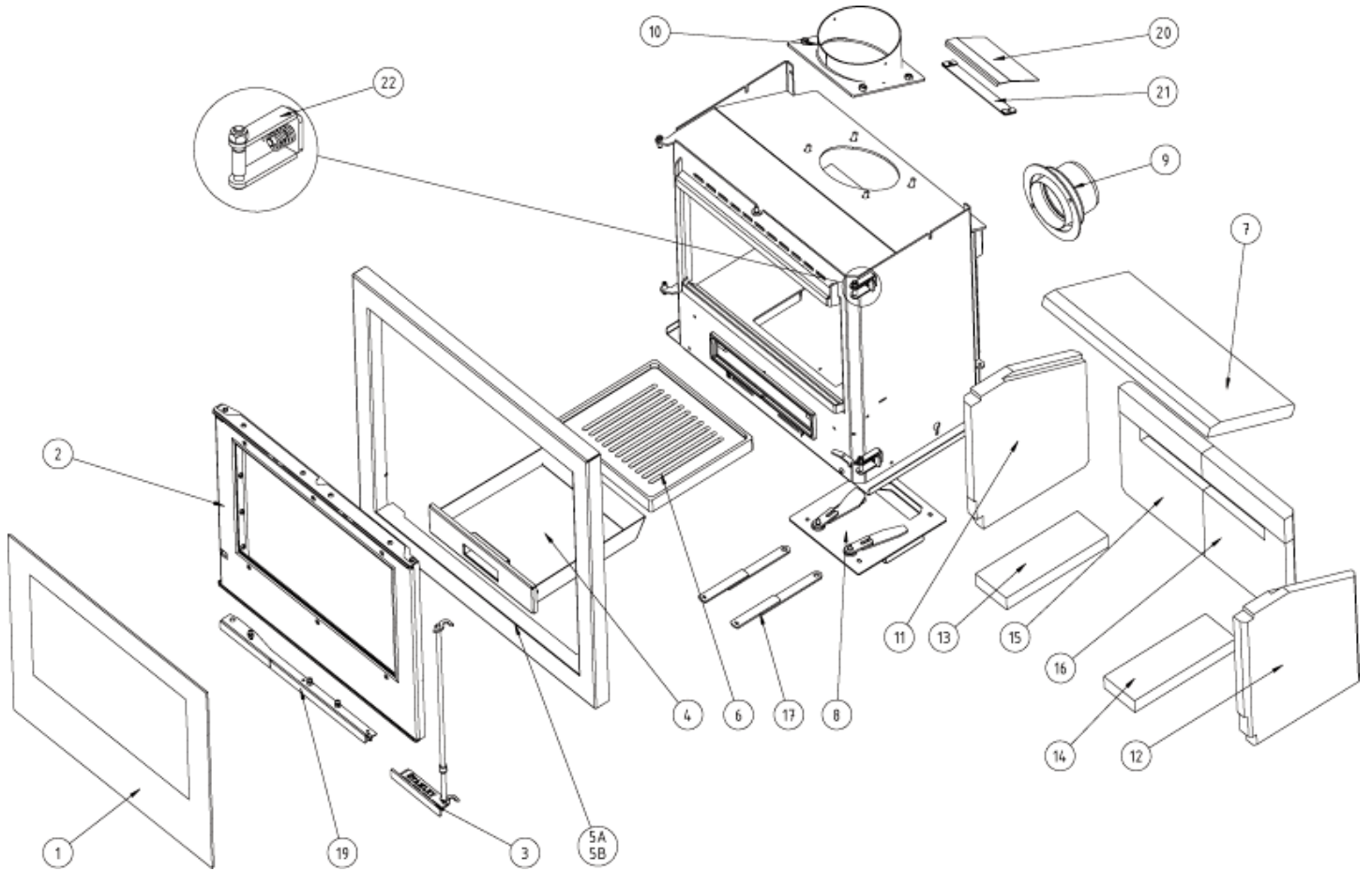


1. GRATE - **9825001**
2. DOOR LOCKING SYSTEM - **093-01-060**
3. DOOR SUBASSEMBLY - **093-01-010**
4. DOOR GLASS - **093-01-070**
5. ASH PAN - **093-06-000**
- 6A. THREE SIDE FRAME - **093-07-000**
- 6B. FOUR SIDED FRAME - **093-07-000A**
7. TOP BAFFLE - **093-30-006**
8. AIR CONTROL CHAMBER - **093-09-000**
9. FLUE SPIGOT - **093-05-040**
10. OSA CONNECTION - **093-05-010**
11. LH SIDE BRICK - **093-30-008**
12. RH SIDE BRICK - **093-30-007**

13. LH BASE BRICK - **093-30-003**
14. REAR BASE BRICK - **093-30-003**
15. RH BASE BRICK - **093-30-002**
16. BOTTOM BACK BRICK - **093-30-004**
17. TOP BACK BRICK - **093-30-005**
18. BOTTOM BACK BRICK FIXING BRACKET - **093-30-009**
19. CHROME DOOR TRIM - **093-01-040**
20. FLUE RESTRICTOR PLATE - **093-00-005**
21. FLUE RESTRICTOR PLATE FIXING BRACKET - **093-08-000**
22. SPRING LOADED LOCKING MECHANISM - SET - **093-02-070**
23. PRIMARY AIR CONTROL LEVER - **093-09-030**
24. SECONDARY AIR CONTROL LEVER - **093-09-020**

DOOR GLASS GASKET (3X25 MM) - **10001619**  
 DOOR GASKET (Ø12 MM) - **30000248**

## STANLEY SOLIS INSET 900 EXPLODED VIEW



1. DOOR GLASS I-G9I - **098-00-012**
2. DOOR SUBASSEMBLY I-G9I - **098-01-000**
3. DOOR LOCKING SYSTEM - **099-03-015**
4. ASH PAN - **099-00-005**
- 5A. THREE SIDE FRAME - **F01326AXX**
- 5B. FOUR SIDED FRAME - **093-07-000**
6. GRATE - **30000328**
7. TOP BAFFLE - **099-09-003**
8. AIR CONTROL CHAMBER - **099-05-000**
9. OSA CONNECTION - **099-06-000**
10. FLUE SPIGOT - **099-06-005**
11. LH SIDE BRICK - **099-09-001**

12. RH SIDE BRICK - **099-09-002**
13. LH BASE BRICK - **099-09-004**
14. RH BASE BRICK - **099-09-004**
15. LH BACK BRICK - **099-09-005**
16. RH BACK BRICK - **099-09-006**
17. AIR CONTROL LEVER PRIM / SET - **099-05-023**
19. STAINLESS DOOR TRIM - **099-03-019**
20. FLUE RESTRICTOR PLATE - **099-10-004**
21. FLUE RESTRICTOR PLATE FIXING BRACKET - **099-10-002**
22. SPRING LOADED LOCKING MECHANISM - SET - **099-13-000**

DOOR GLASS GASKET (Ø6 MM) - **10000972**  
 DOOR GASKET (Ø12 MM) - **30000248**

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