



Instructions for installation and use.

Stove Chimneys Installation – Use – Maintenance Type: ATRAFIRE

Contents	Page
<u>I – INSTALLATION</u>	2
1.1 BEFORE COMMENCING WORK	2
1.2 PROTECTION OF WALLS OF BACKING AREAS	2
1.3 LOCATION	3
<i>a. Combustion air intake</i>	
<i>b. Outlet of air duct</i>	
1.4 THE CHIMNEY	3
<i>a. Existing chimneys</i>	
<i>b. Interior brick-built chimneys – Stability and fitting</i>	
<i>c. Sizing the chimney</i>	
1.5 CONNECTION TO CHIMNEY	5
<i>a. Flue pipe</i>	
<i>b. Junction of the flue pipe to a brick flue</i>	
<i>c. Instructions for fitting smoke evacuation nozzle</i>	
<u>II – USE – MAINTENANCE</u>	8
2.1 PRINCIPLE OF OPERATION	8
2.2 INSTRUCTIONS FOR USE	8
<i>a. Control components</i>	
<i>b. General details of operation of Atrafire stove</i>	
<i>c. Lighting</i>	
<i>d. Combustion process</i>	
<i>e. Refuelling – Heat Output</i>	
<i>f. Opening the door and reloading</i>	
<i>g. Ash removal</i>	
2.3 MAINTENANCE INSTRUCTIONS	10
<i>a. Chimney maintenance</i>	
<i>b. Cleaning the stove</i>	
2.4 GUARANTEE.	
<u>III – IMPORTANT RECOMMENDATIONS</u>	11
<u>IV – INTEGRATED VENTILATION- VI300</u>	12
<u>V – TECHNICAL DATA SHEET</u>	13-14

1 – INSTALLATION

It is recommended that competent, professional installers carry out the installation. Connection of this equipment to an existing or prefabricated chimney must be carried out in accordance with local regulations, applicable to chimneys fitted with a closed stove or an INSERT using only wood as a fuel unless subject to more stringent requirements in the present instructions.

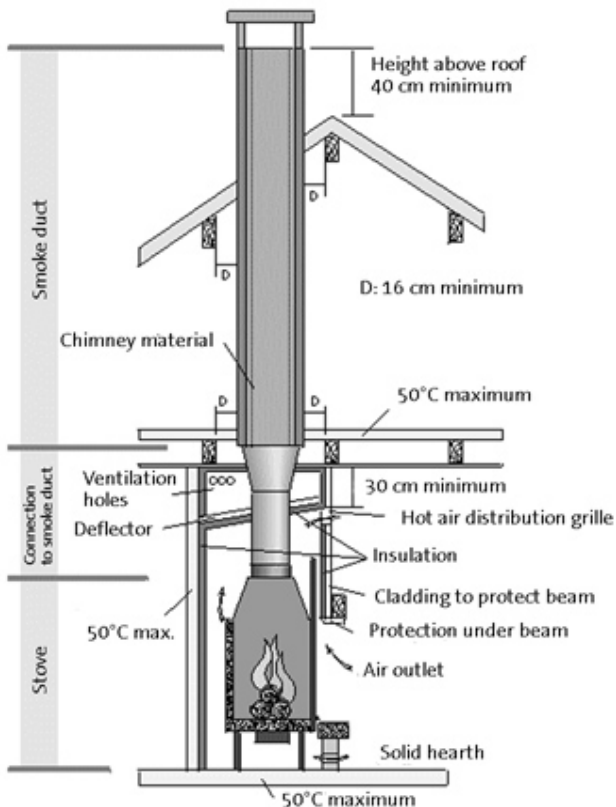
1.1 BEFORE COMMENCING WORK

The conformity and suitability of the chimney to which the stove is to be connected must be ascertained in accordance with the rules in force for the duty it is to perform.

Some points to check:

- Perfect condition of air tightness, clearness and stability.
- The duct must be built using a single type of product.
- Its cross section must be constant and of the same shape for the full height.
- For brick chimneys, the mortar joints must be made with aluminous cement mortar or cement-lime mortar. They must not be located at the same level as the floor cross members.
- There must be no electrical installations located nearby.
- The chimney must be swept.
- The draught must be correct.
- The lower edge of the duct must be clear from any wooden part (floor, frames, etc.) or other combustible items. Please refer to local building control.

Diagram 1



1.2 PROTECTION OF WALLS OF BACKING AREAS

All materials must be removed that are combustible (or that may be damaged by the effects of temperature on the walls) or within them (floors, walls and ceilings) at the location of the chimney, if the latter is in contact with the walls. The surface temperature of these walls must not exceed 50°C at accessible parts.

Comment:

If insulation is required for this, it can be achieved:

- either with non-combustible insulating material of sufficient thickness, for example:
 - special high temperature rock wool
 - Ceramic fibres, accompanied or not by a layer of ventilated air,
- or simply with a layer of ventilated air.

We recommend that a minimum clearance distance of 3cm from the recess is achieved.

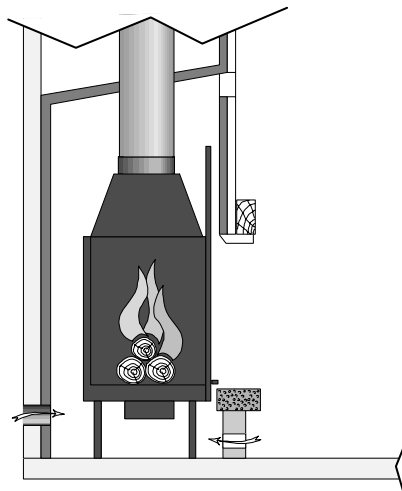
1.3 LOCATION

Check that there is sufficient air for combustion in the room where the equipment is installed. (Building Regulations). In rooms with built-in electrical heating, take into account the air drawn in by the Controlled Mechanical Ventilation (CMV) system. If necessary, install an additional external air intake or stop the CMV system or kitchen extractor. When the air inlet to the room is insufficient, it is necessary to arrange for the chimney to have its own additional air feed. When the room is equipped with a so-called CMV mechanical air extraction system, this air feed is essential. In all cases, the fresh air intake for operation of the stove must have a **MINIMUM area of 177 cm² (Ø 150 mm)**.

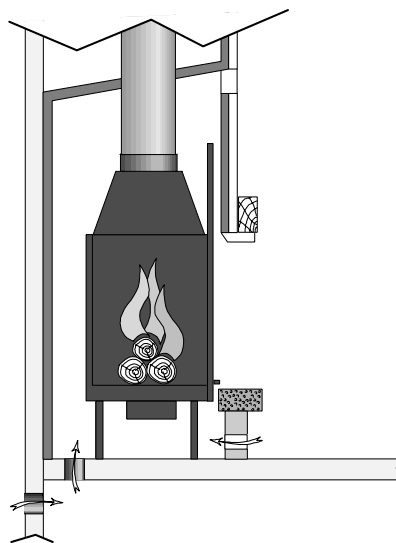
a. Combustion air intake

This must be located either directly to the outside, or to an area ventilated to the outside and discharging at the base of the stove. It must be protected by a closable grille. For the dimensions of the fresh air inlet, refer to the technical data sheet for the stove concerned.

External air intake



Air intake in area ventilated to the outside



b. Outlet of air duct

This must be situated either directly in the chimney or as close as possible to the equipment. The air vent must be closable when it discharges directly into the room.

1.4 CHIMNEY

a. Existing chimneys

Check for correct operation of the chimney.

A smoke test must be carried out to assess the soundness of the chimney.

It is necessary to check:

- That the chimney is airtight and obstruction free.
- The general stability of the chimney.
- The compatibility of the chimney with its use (solid fuel).



In the case of an unsuitable chimney, proceed as follows:

- Either line the chimney with a suitable flue lining material.
- Or use another chimney system technically approved for this purpose and of cross section suitable for the stove.

Only connect one stove unit to one chimney.

- Chimneys must have access for soot removal and sweeping.
- The flue pipe must enter the chimney at least 50mm for the whole of their external cross section in the area where the stove to which they are to be connected is located.
- Chimneys built on the external walls of a building must be constructed of a suitable material and conform to building regulations.
- No vents must pass through a chimney designed for the evacuation of smoke.

Comment: In the case of a chimney that starts at ceiling level, attention is drawn to the need to produce:

- Either a joint between the connecting pipe and the chimney to ensure the air tightness and heat resistance of the work.
- Or suitable flue pipe from the appliance outlet to the chimney stack, observing the fire regulations.

b. Interior brick-built chimneys – Stability and fitting

Brick-built chimneys are either independent or placed besides supporting elements.

1. Independent chimneys

Independent chimneys must be vertical and with free expansion for their full height. They are self-supporting for their full height and rest on a seating at their lower end. Their transverse stability is ensured by sleeves or collars with flexible, fire-proof material (MO classification) interposed to allow free expansion.

Comment: These sleeves or collars are located principally in the floor cross-members. Any covering must be separated in this area. This separation may consist of an air space of at least 30 mm around the relevant surfaces of the duct.

Comment: the purpose of this separation is to permit free expansion.

2. Paired ducts

Paired ducts are joined together for their whole height like a supporting component (wall, post). This pairing, which restricts expansion of the duct, can be achieved by metal collars binding the duct at regular intervals over all its length and embedded in the supporting elements. The ducts must be vertical.

c. Sizing the chimney

1. General

In the case of a closed stove or insert, the chimney must have a minimum cross section, rectangular or square, of 400 cm² or an equivalent cross section with a minimum diameter of 200 mm.

In the case of maintenance requiring lining or jacketing, the size of the duct must be increased

- in the case of jacketing, to 350 cm²
- in the case of lining, to a cross section equivalent to a minimum diameter of 180 mm, where necessary, and, after the installer has checked that there is sufficient draught for the stove concerned to operate correctly.

In all cases, the duct must allow mechanical sweeping.

2. For the Atrafire stove

Dimensions of the duct to which the stove may be connected: the internal evacuation area of the duct to which the stove is connected must be equal to the evacuation area of the outlet of the stove. Refer to the corresponding technical data sheet for the stove concerned (Page 12-13, upper connection).



1.5 CONNECTION TO CHIMNEY

a. Flue pipe

The flue pipe is made from metal ducting suitable for this purpose and complying with standards BS 6461 and BS 6999.

Either using products meeting the following specifications:

- Stainless steel of minimum thickness 1mm grade 316. (BS6461)
- Vitreous enamelled sheet steel complying with BS 6999
- Other products are available. Please refer to Building regulations document J 1.32.
- Aluminium, aluminium coated steel, and galvanised steel are prohibited.
- The use of flexible tubing directly from the appliance is prohibited.

Minimum draught conditions (refer to the technical data sheet for the equipment concerned).

1. Air tightness

In the case of a low pressure hood with mechanical extraction, the air tightness of the connecting duct, including its joints, must be such that gases cannot be drawn into the extractor.

2. Maintenance

In the case of a closed stove or insert, the flue pipe, where applicable, must be accessible for all its length, either directly or by means of a trap door or grille fitted in the hood.

It must be possible to sweep the chimney and remove soot.

If required for sweeping, the flue pipe must be accessible.

Comment: Typical Health Department regulations require sweeping to be carried out mechanically at least once a year when wood fuel is used.

3. Damper

This is recommended where the chimney draught is too great for correct use of the stove.

It must be connected to the flue pipe where the stove is located and must remain visible and accessible even if it is located in the hood.

It must not draw in convection air. Refer to the instructions for the damper supplied by the manufacturer.

b. Junction of the flue pipe to a brick flue

Metal connecting ducts are connected:

- Either by a specially designed adaptor,
- Or by a flange bricked into place.

Connection with a special adaptor.

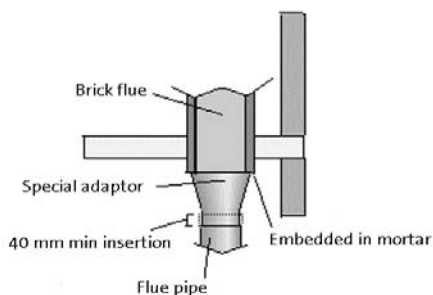
1. Special adaptor

This type of connection is preferable to a brick connection, which should only be used when it is impossible to use an adaptor.

The part must correspond with the dimensions of the mating flue liner and the flue pipe.

Attachment to the mating flue liner is by fixings in the liner. The corresponding face of the adaptor must be designed so that there is perfect sealing between it and the liner.

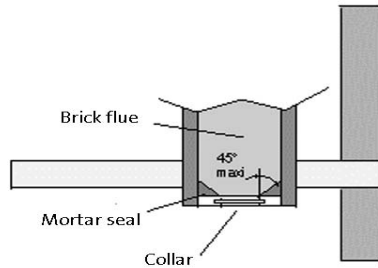
The air tightness of the connection between the adaptor and the flue pipe is by means of a collar or sealing washer, or the adaptor may itself be fitted with a sealing washer. In any event, these two parts are inserted for at least 40 mm. The direction of fitting depends on the manufacturer's requirements for the adaptor.



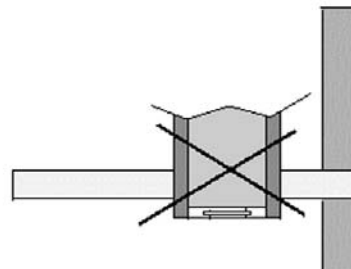
2. Brick collar

It is advisable to fit a collar corresponding to the diameter of the flue pipe, which must be inserted inside it.

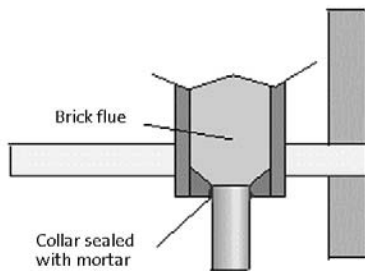
The sealing of the collar must be done using mortar, it being specified that the upper edges of the seal must be flounced in the shape of a funnel to prevent the accumulation of soot.



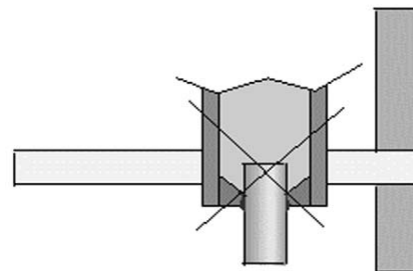
Mounting of a connecting collar
With a slope of less than 45°



Not permitted
Seal encourages
the accumulation of soot



Mounting of a connecting collar with
a slop of less than 45°

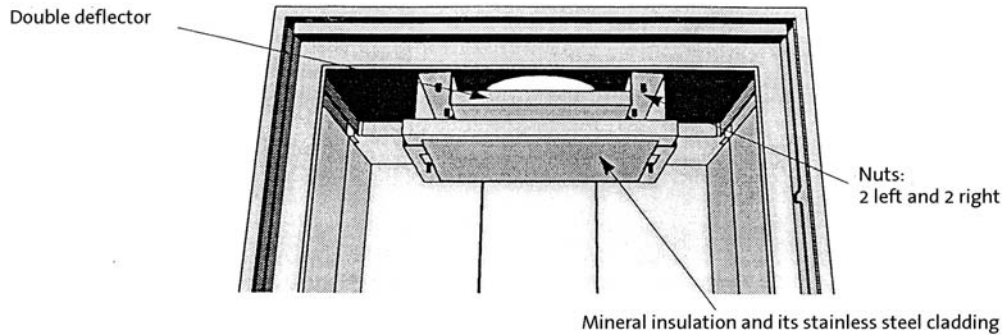


Not permitted
Seal encourages
the accumulation of soot

Connection with collar

c. Instructions for fitting smoke evacuation nozzle

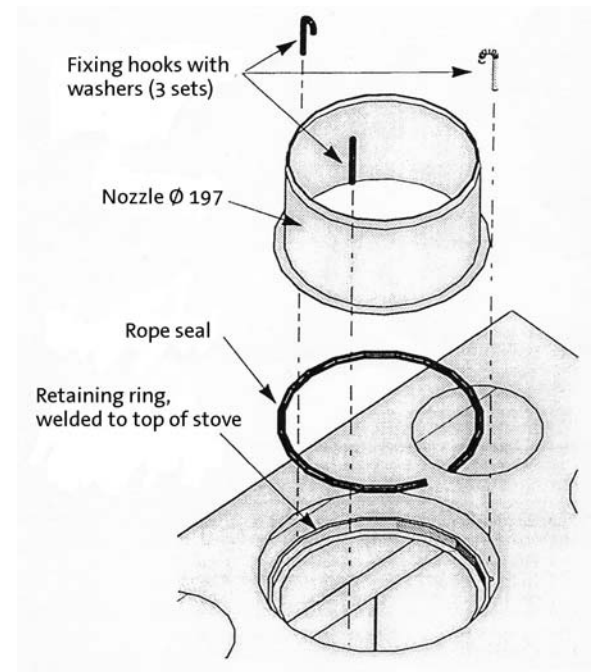
1. Removal of the double deflector and its insulation



- * Remove the mineral insulation from its steel cladding.
- * Remove the 4 nuts holding the stainless steel double deflector.
- * Withdraw the stainless steel double deflector from the 4 welded threaded studs.

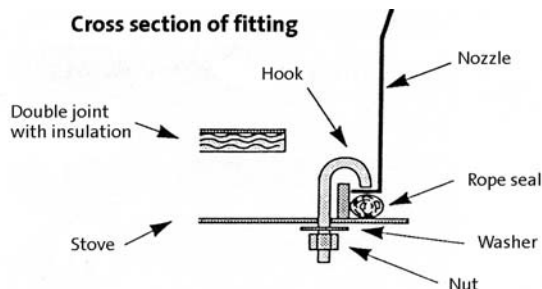
2. Fitting the stainless steel nozzle

- * Insert the hooks into the 3 holes spaced around the holding ring, placing the hooked part outside the ring.
- * Place the rope seal inside the nozzle-retaining ring on the top of the stove. This braid is slightly longer than the circumference. Because of this, the two ends must meet to ensure a good seal.
- * Fit the nozzle to the braid in the direction shown in the diagram.
- * Rotate the hooks so that the bent part touches the flat part of the nozzle.
- * On the inside of the stove, fit the washers and nuts to the hooks and tighten to lock the assembly.



After correctly fitting the nozzle, replace the double deflector and its mineral insulation with its stainless steel strapping by reversing the removal procedure.

Take care to press the mineral insulation down to the bottom of the stove.



We accept no responsibility if the smoke evacuation nozzle is incorrectly fitted

II – USE – MAINTENANCE

2.1 PRINCIPLE OF OPERATION

The body of the stove constitutes the hearth of a chimney to be built. Its operation requires the glass door to be closed. The stove releases a significant quantity of heat by radiation through the glass. Ambient air drawn in through the base of the unit circulates around the stove where it is heated by convection and then returned to the room through diffusion grilles in the hood.

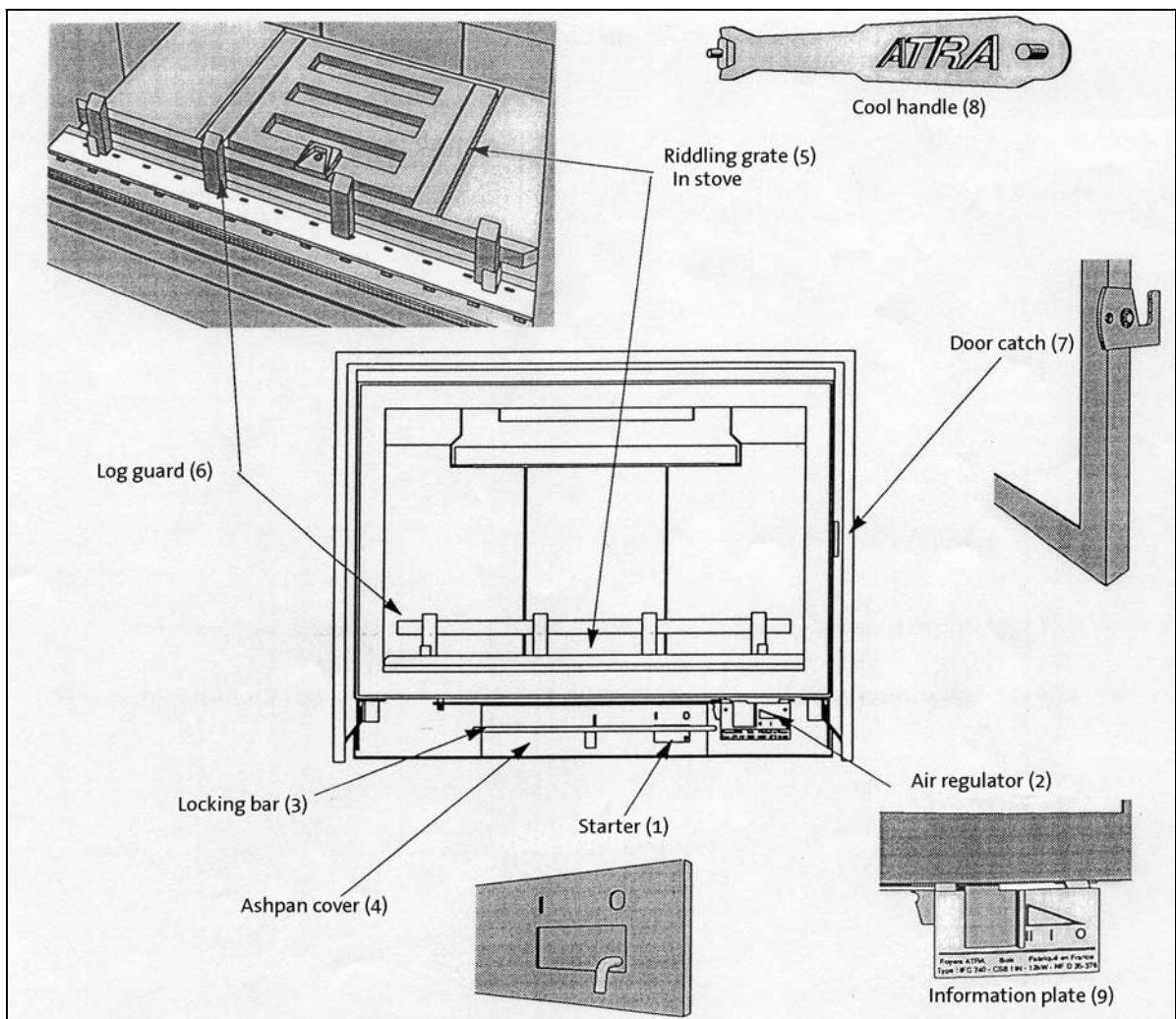
2.2 INSTRUCTIONS FOR USE

Recommended fuel: firewood

Use 50 cm logs that have been cut and seasoned for at least two years and have a maximum relative humidity of 20% (preferably oak or hornbeam, avoid resinous woods). It must be stored under a shelter. If the wood is too wet it will cause soot deposits on the glass, the inner walls of the stove and the chimney.

We do not accept any responsibility for damage caused by the use of fuels other than those recommended in our instructions.

a. Control components





b. General details of operation of Atrafire stove

This equipment achieves its best performance at a chimney draught of 1 to 2 mm CE that should be checked with a draught meter.

After loading or reloading, operate the equipment at a fairly high rate to release condensable vapours when commencing combustion.

Avoid prolonged use at reduced rate (slumbering), particularly when starting or re-fuelling, at the end of the winter and during periods of mild weather when there is a risk of incomplete combustion.

The cleanliness of the refractory bricks (and glass) of the stove is an indicator of complete or incomplete combustion.

Avoid over firing with excessive uncontrolled inlet of air, as well as overloading with wood.

The front of the grate must be locked during operation and the starter must be closed.

c. Lighting

Start the fire with crumpled newspaper, cover with very dry twigs or kindling with a maximum diameter of 3 cm., light the paper, push the door closed. The starter (1) and the damper (2) must be open. Position "I" for the starter and position "II" for the damper.

When the fire has caught properly, continue loading and then close the starter (1) to position "O".

To facilitate lighting, it is advisable to keep a bed of ashes on the grille and the base of the stove while in use. Never light or revive the fire with an inflammable liquid such as petrol, alcohol, etc.

d. Combustion process

Your equipment is fitted with:

- A starter (1) for starting and relighting located on the ash pan cover (4), which works directly on the embers through the riddling grate (5).

This damper must only be used for starting the fire and difficult relighting. It must remain closed during normal operation.

- A combustion air damper (2) with gradations to vary the rate of burning.

The "O" mark corresponds to reduced combustion.

The "II" mark corresponds to normal combustion.

e. Refuelling – Heat Output.

The calorific power of the stove is dependent on the wood used.

For sustained heating, use logs of about 6 to 10 cm in diameter.

For long and slow heating use logs of 12 to 15 cm in diameter on a bed of average size embers.

The nominal power of this equipment during controlled tests was obtained with a loading of 12kgs of wood for about 3 hours operation with the damper in position "II" and 1 mm CE of chimney draught.

The slow burning rate of about 10 hours was carried out with a load of 14kgs of wood, in logs of about 12-cm diameter. Damper in position "O" and chimney draught of 0.5 mm CE.

Normal operation is dependent on the ember bed. It is therefore necessary to preserve this and prevent it from disappearing.

It must be maintained at about 3 cm in depth.

In the case of difficult relighting, use small pieces of wood and use the starter which must be closed as soon as the fire has started.

NOTE: A log 50 cm long, depending on the type of wood and its dampness may weigh, depending on its diameter:

About 6 cm	1 kg
About 10 cm	3 kg
About 12 cm	5.5 kg
About 15 cm	7 kg

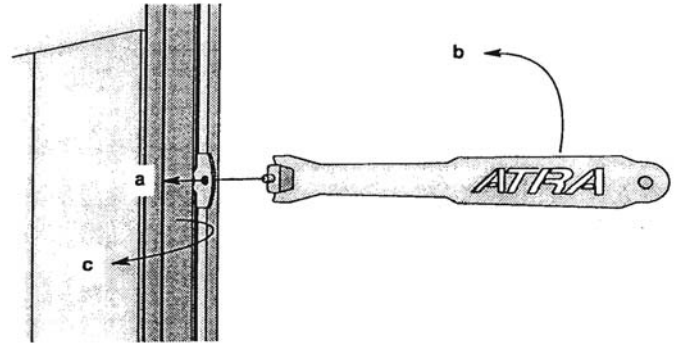


f. Opening the door and reloading

Only reload the equipment onto a bed of embers (with no flames) with a quantity of wood corresponding to the desired power level.

To open the door:

- a. Engage the cool handle in the door catch as shown in the diagram.
- b. Rotate upwards to release the catch.
- c. Half open the door, stop for a moment, then open the door slowly and gradually



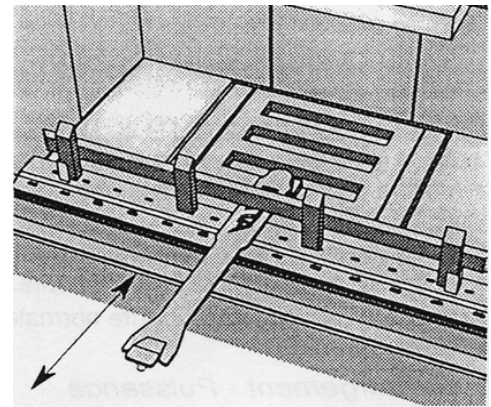
This method will prevent smoke being drawn into the room.

g. Ash removal

To remove ash from the stove, shake the embers by sliding the cast iron grate with the cool handle. It is possible to remove the log guard (5) to facilitate this operation.

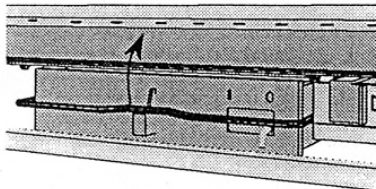
To empty the ashes when the stove is cold:

- * Open the hinged cover and raise the locking wire (3).
- * Remove the front cover of the grate (4).
- * Remove the ash pan containing the ash and repeat this operation if necessary.

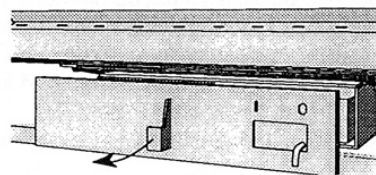


Be careful when handling hot ashes.

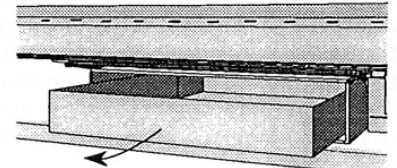
Opening the locking bar



Opening the front of the grate



Removing the ash pan



2.3 MAINTENANCE INSTRUCTIONS

a. Chimney maintenance

VERY IMPORTANT: To avoid any accidents (chimney fire, etc.), maintenance work must be undertaken regularly, in accordance with health regulations.

b. Cleaning the stove

- The equipment must be cleaned regularly.
- Remove deposits from the combustion chamber and clean the stove grate.
- Cleaning the ceramic glass window must be done with an approved product. This operation must be done when the equipment is cold. After cleaning, rinse with fresh water. Do not use abrasive cleaners.
- The ceramic glass window is resistant to a temperature of 750 °C. If the glass is broken, it is inadvisable to replace the broken window with any material other than that supplied by the manufacturer.



2.4 GUARANTEE

Flame path or consumable equipment such as baffles, grates, firebricks, glass, ash pans etc., painted finishes and sealing materials such as ceramic rope are not covered by the guarantee.

Incorrect installation and operation will also revoke the guarantee.

III – IMPORTANT RECOMMENDATIONS

ATTENTION

The window and the front of the stove can reach high temperatures, exceeding 100°C. Uninitiated persons and especially babies and young children must be kept away and informed of the danger of burns from touching these parts.

WARNING

The placing of any inflammable materials, such as paper, linen, furniture, solvents, liquids that are inflammable or sensitive to fire and heat close to the stove is forbidden.

Obviously, all these products must not be stored, even for an instant, in the wood stores or niches below or to the side of the chimney or in the hood.

It is essential that the front covers and rough forged brass plated doors are maintained with a suitable commercial product and never with abrasive or oxidising products (wire wool, domestic scourer, etc.). Cracks or faults in the forging are not covered by the guarantee.

CAUTION

Any modifications to the equipment or its installation by the reseller, installer or user may upset the operation and safety of the equipment.

The fitting of accessories or additional equipment not supplied by ourselves may have the same consequences.

The consequences will be the same if certain parts essential for operation and safety of the equipment are removed or omitted.

In all these cases, the manufacturer will not accept responsibility or honour the guarantee.

ATRA is only a designer manufacturer of equipment and the following activities are not within his remit:

- * The design of heating installations.
- * Heat loss studies.
- * The building of heat distribution ducting systems, these being the responsibility of professional installers with the required qualifications.

Comply with the regulations in force.



IV - INTEGRATED VENTILATION - VI300

Directions for use

Electrical settings:

The fan has to be installed on earth protected electrical equipment. The feeding cable will not go on or against the heating system.

Access:

The control box is concealed behind the flap fascia panel.

Turning on:

Turn the variator switch clockwise all the way.

Fine-tuning:

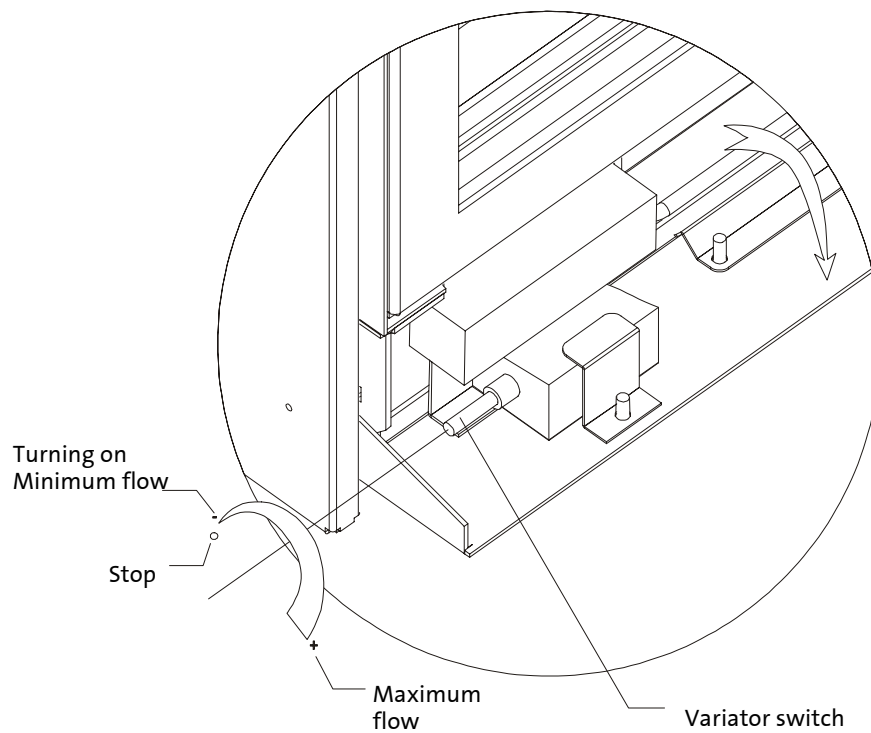
Shortly after the start of the fans, adjust the flow (if necessary) by turning the variator switch.

Turning off:

Turn the variator switch all the way back anticlockwise.

Important:

The electric fans are controlled by a thermal sensor, which will detect a temperature high enough to allow the cleaning of the glass through pyrolysis. It is recommended to burn a normal fire until the fans turn on. It is then possible to reduce the combustion.

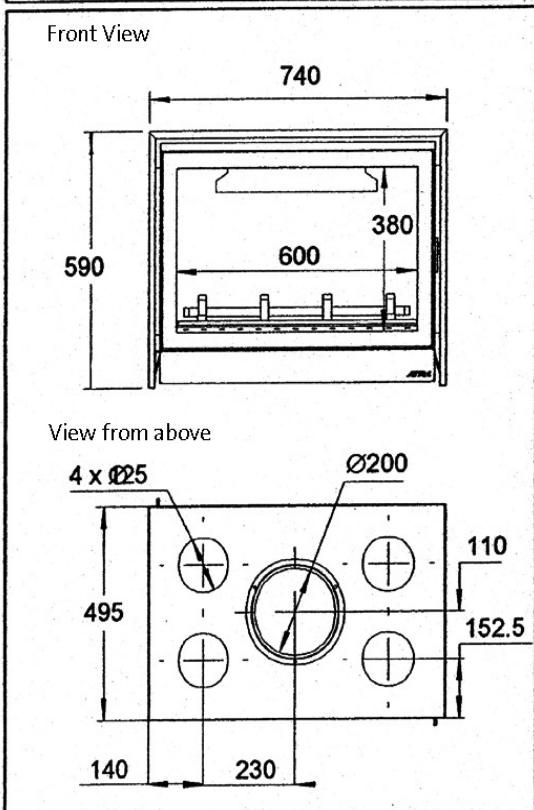
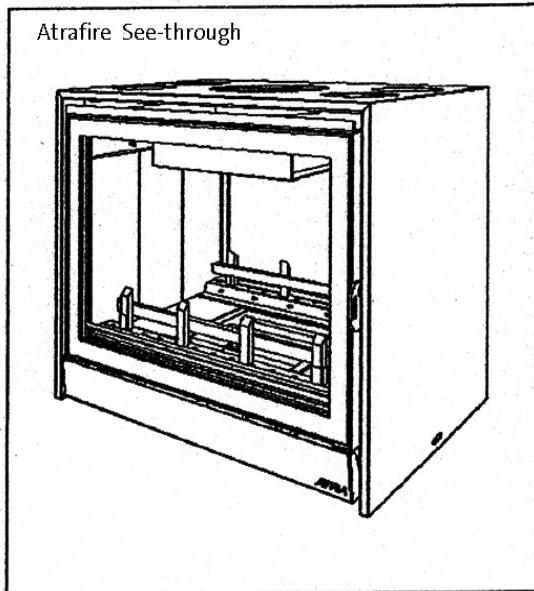


Every maintenance or repair operation has to be done by a specialist.
The warranty will be cancelled in case of non-respect of these instructions.



TECHNICAL DATA SHEET

ATRAFIRE SEE-THROUGH



CHARACTERISTICS

Nominal heat output (closed) :	9 kw
Relative humidity of test wood 15%	
Authorised fuel :	Wood
Minimum draught conditions :	1 mm CE
Consumption at normal rate :	4 kg/h
Maximum load :	11 kg
Total weight :	130 kg

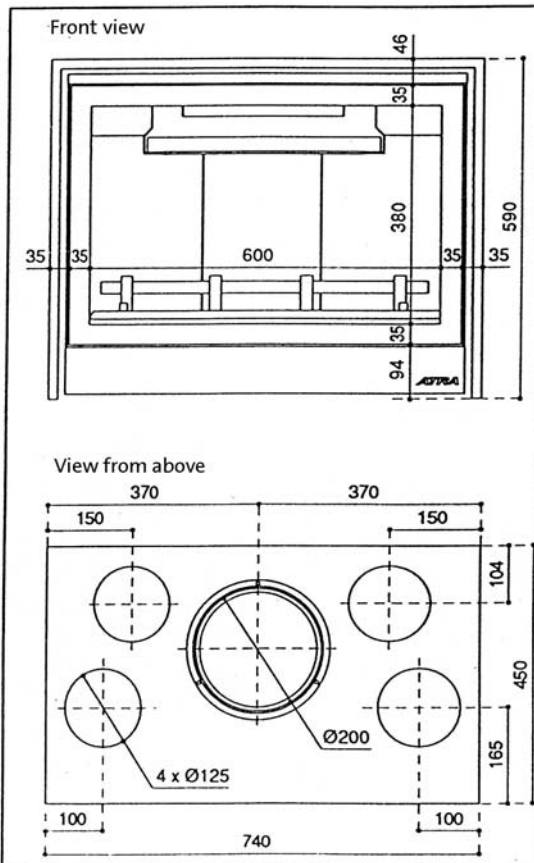
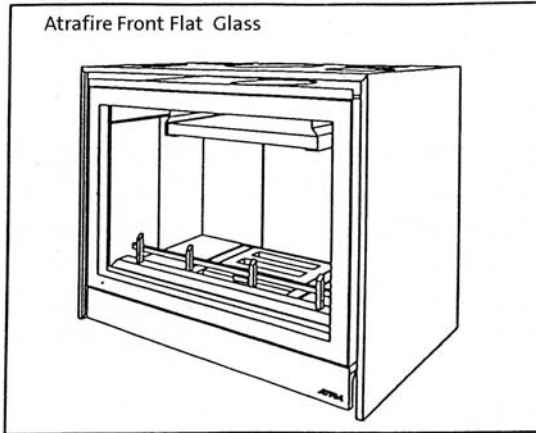
IMPORTANT

- External fresh air inlet essential.
177 cm² minimum reserved for operation of the stove.
- Internal convection air inlet.
Minimum cross section area 600 cm².
- Convection air outlet .
Minimum cross section area 647 cm².



TECHNICAL DATA SHEET

ATRAFIRE FRONT GLASS



CHARACTERISTICS

Nominal heat output (closed) : 12 kw
Relative humidity of test wood 15%

Authorised fuel : Wood

Minimum draught conditions : 1 mm CE

Consumption at normal rate : 4 kg/h

Maximum load : 14 kg

Total weight : 130 kg

IMPORTANT

- External fresh air inlet essential.
177 cm² minimum reserved for operation of the stove.
- Internal convection air inlet.
Minimum cross section area 400 cm².
- Convection air outlet (with decompression) Minimum cross section area 647 cm².

