

# StoveMaestro

**MULTI-FUEL CAST IRON STOVE WITH BOILER  
MODEL NUMBER: 016B**

## **INSTALLATION AND OPERATION MANUAL**



**StoveMaestro MODEL 016B**

**Conforms to EN13240  
Independently tested by  
UKTC Approved  
Laboratory No.TC09/0316026Z**



Fuel Types	Wood	and
Coal		
Efficiency	65 – 70%	
Max. Output	21KW	
Mean Flue Temperature	386°C	
Clearance to combustibles	120cms	
Flue Draught	Min. 12Pa	

**All local regulations, including those referring to national and European Standards need to be complied with when installing the appliance.**

## THANK YOU

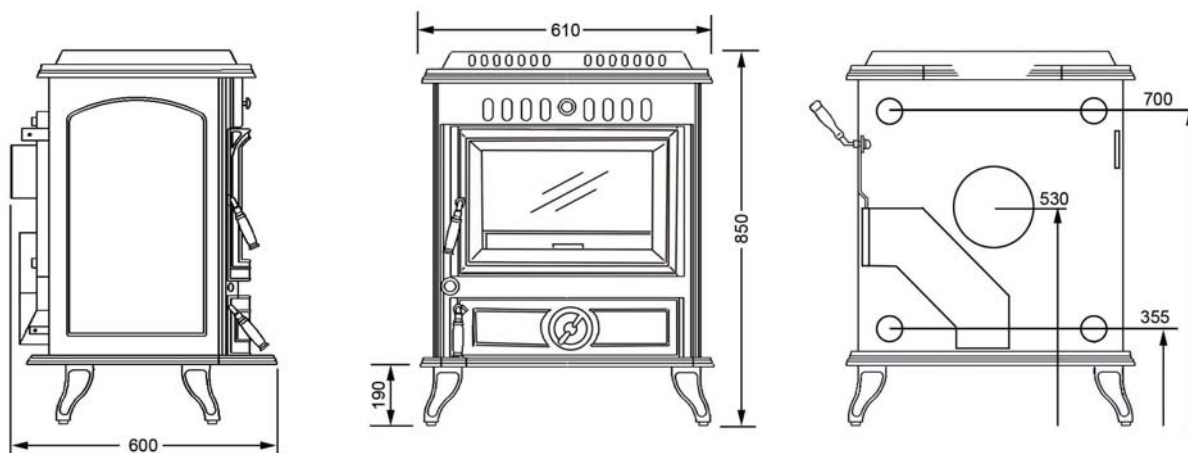
May we take this opportunity to thank you for choosing a StoveMaestro cast iron multi-fuel stove. Please take time to read this manual and follow the guidelines on how to install and operate your new stove, as we feel sure it will enable you to use it to its best advantage for many years.

The term "Multi-fuel" means that the stove is capable of burning a variety of solid fuel e.g. wood, coal, anthracite, phurnicite and various preformed briquettes or a mixture of these. The multi-fuel grate inside the stove allows a flow of air through the base of the fire. This is necessary when burning coal. See the section on "Starting and maintaining the fire" for more details.

## SAFETY PRECAUTIONS

1. The viewing door must be closed and latched during operation.
2. Never block free airflow through the air vents on this appliance.
3. Gasoline or other flammable liquids must never be used to start the fire or "Freshen Up" the fire. Do not store or use gasoline or other flammable liquids in the vicinity of this appliance.
4. Do not touch the appliance while it is hot and educate all children of the danger of a high-temperature appliance. Young children should be supervised when they are in the same room as the appliance.
5. Keep furniture, drapes, curtains, wood, paper, and other combustibles a minimum of 36" away from the front of the appliance.
6. This appliance must be properly installed to prevent the possibility of a house fire. The instructions must be strictly adhered to. Do not use makeshift methods or compromise in the installation.
7. Contact your local building officials to obtain a permit and information on any installation restrictions or inspection requirements in your area. Notify your insurance company of this appliance as well.
8. Over-firing the appliance may cause a house fire. If a unit or chimney connector glows, you are over-firing.
9. Allow the appliance to cool before carrying out any maintenance or cleaning. Inspect the chimney connector and chimney at least twice monthly and clean if necessary. Creosote may build up and cause a house fire. Do not connect this appliance to any chimney serving another appliance.
10. Do not place clothing or other flammable items on or near this appliance.
11. Never try to repair or replace any part of this appliance. All other work must be done by a trained technician.
12. Maintain the door and glass seal and keep them in good condition. Avoid placing wood against the glass when loading. Do not slam the door or strike the glass.
13. Ashes must be disposed of in a metal container with a tight lid and placed on a non-combustible surface well away from the home or structure.
14. Do not throw this manual away. This manual has important operating and maintenance instructions that you will need at a later date.

## DIMENSIONS



## ASSEMBLY

1. Remove your stove from the outer packaging and place on floor, (if the package is honey-comb package, just take off the upper cover with the surrounding support), please inspect the stove and check that it is not damaged in any way. Never attempt to use a stove that has been damaged.
2. If you are installing the stove yourself, proceed as follows. However, if you are unsure about any aspect of stove installation, please contact your dealer and they will discuss installation with you or put you in touch with an experienced stove installer.
3. Open the door, take out and check the following contents:
  - Four (4) legs
  - Ash pan
  - Ash Front
  - Hardware kits (bolts, nuts, washers etc.)
  - Flue Adapter
  - Three (3) Wooden Handles

**In the unlikely event that something is missing, please contact your dealer immediately and we will rectify the situation.**

4. **Please note:** this stove is very heavy; we strongly suggest at least two or more persons assemble this stove. Gently lay the stove on its back. Fit one of the legs onto each corner of the stove. Tighten hexhead bolts, washers to ensure legs are secure to base of stove, and fully stand the stove right side up.
5. Fix the ash front into the stove.
6. If using rear flue outlet, please go to step 8. If using top flue outlet, remove hob and lay it upside down on soft surface, remove hob blanking plate from the hob by taking out two screws, remove flue blanking plate from top outlet and fit the flue adapter, making sure it is properly sealed with ceramic rope or approved fire cement.
7. Move the stove into position. Do not drag the stove as this may damage the legs, screws or base.
8. Remove the rear blanking plate by taking out two screws, and keep it for future use. Connect flue pipe to the collar and seal all joints with ceramic rope and/or approved fire cement. Follow manufacturer's instruction for flue pipes.
9. Fix the wooden handles onto the catches and open the ash pan door and put the ash pan into the ash pan compartment.

## INSTALLATION

The detailed provisions in this document are intended to provide guidance for the more common situations. Alternative ways may be appropriate in other circumstances. Building regulations must be followed.

1. We recommend that you seek the services of an installer who is conversant with stove installations and building regulations.
2. It is most important that there is no obstruction in the flue or chimney. Please ensure that the flue is checked and swept before any installation. A flue draught of minimum 1.5mm to a maximum 2.5mm water gauge is required for satisfactory appliance performance. The flue draught should be checked under fire at high output and if it exceeds the recommend maximum, a draught stabilizer must be fitted so that the rate of burning can be controlled, and to prevent over firing. If you have any doubts about the suitability of your chimney, consult your local specialist.
3. Ventilation is essential for the combustion process. It may be necessary to install a wall vent to

provide combustion air and prevent the depletion of oxygen in the room. This need is more prevalent in modern houses where drafts have been almost eliminated by double-glazing etc. Our gas models have an oxygen depletion sensor, this switches off the gas supply to the stove if the oxygen content in the room falls below the desired level. This is not possible with a multi-fuel stove.

4. Your stove must be installed on a non-combustible hearth and with a gap of at least 600mm from any combustible material. In front of the stove, to carpets or wooden floors there must be 300mm of hearth. It is possible that on opening the door of the stove for a log or coal to fall out. A fender must be fitted if the heart is flush with the carpet.
5. A properly built masonry or factory installed chimney, preferably with a height of 15 feet or more, should ensure a consistent draught (draw) under a variety of weather conditions. This stove requires a chimney (not the flue pipe) with a minimum diameter of 150mm (6"). If the chimney and cavity are larger, this may result in less than optimum performance to an extent where it may require a liner to improve the draught (draw) and performance of the stove, certain cowls improve the draught (draw) of a chimney. If the draught (draw) on the chimney is excessive, then a flue damper will help to slow this down. An excessive draught (draw) may cause over firing and thus the internal components of the stove to wear out quicker.
6. The flue spigot (pre fibre roped) provided with the stove can be fitted to the rear or the top of the stove and must be tightly fitted to the opening. This is so that air is not drawn in at this point which will affect the stove's performance.
7. To get the best transfer of heat from the stove into the room there are two factors to consider.  
**Firstly**, the flue pipe from the stove must pass through a "register plate". A register plate is the term used for a flat plate which is installed up inside the chimney (usually out of sight) to prevent heat from the stove being drawn up the chimney to waste. The register plate must be made of a non-combustible material such as steel, asbestolux, or masterboard. It is advisable to seal this register plate to the walls of the chimney and also around the flue pipe. Provision of a trap door in the closure plate or a soot door in the flue for access to clean the chimney from time to time is recommended.  
**Secondly**, the more forward the stove can be sited on the hearth, the more heat will be radiated into the room. To achieve this the back flue outlet is favored but remember the 600mm gap from combustible materials.

## OPERATION

### CURING THE STOVE

Your stove is made of a number of cast iron components and we recommended that the first burn should be a small fire for about 30 minutes. This enables the stresses and strains at the joints to be taken up and settle gradually. The second burn can be a larger fire for one hour. During the curing process, the stove will give off a pungent smell and some fumes. This is the paint curing and is quite normal. Provide ventilation whilst this is happening since the fumes can be quite strong and may set off smoke alarms in the room. The paint will become slightly lighter in colour when the stove is cured, particularly in the hottest spots. Fire grate polish can be used to keep the stove in good condition, or stove spray paint can be used to re-touch the stove. Obtain the correct stove spray from a stove stockist.

### RECOMMENDED FUELS

We have our own recommended fuels which can be found on our website at [www.stovemaestro.co.uk](http://www.stovemaestro.co.uk) and which can be ordered directly from there with delivery direct to your door.

The recommended fuels are wood (dry seasoned for a minimum of one year), house coal, anthracite, smokeless fuels such as "home fire" and various types of preformed briquettes. Ask your local fuel merchant for more details on these fuels. Under no circumstances burn "petrol coke", this is a product for boilers and furnaces only. It will burn out the internal grate and baffle plate in a very short period of time and may damage the stove beyond repair. Do not use gasoline, lighter fluid, kerosene or other flammable liquids to start or rekindle the fire for obvious safety reasons.

### STARTING AND MAINTAINING THE FIRE

Build a fire directly on the grate with crumpled newspaper, kindling wood and "fire lighters". Ensure all air controls (primary and secondary) are fully open to begin with. When the kindling is burning well, add

larger pieces of wood or coal to gradually increase the size of the fire. There are IMPORTANT differences in the method of operation for burning coal or wood in your stove.

### **BURNING COAL**

Coal needs a flow of air for combustion through the bottom of the grate. Wood does not require this and will readily burn on a bed of ash with a flow of air over the top.

### **BURNING WOOD**

If you are only burning wood, you may allow a bed of ash to build up on top of the grate to a level of about 20mm forming a flat surface on which the wood may burn. You will then use the "air-wash" vent slide to provide the combustible air and control the burn rate of the fire.

If you are burning coal or a mixture of coal and wood, DO NOT allow a bed of ash to build up above the level of the sides of the ash can. Coals need combustible air to flow through it from underneath. At the same time, when burning coal, this air is needed to keep the grate from overheating. Failure to allow a sufficient flow of air through the grate will result in the grate burning out in a very short period of time. You will get some spillage of ash to the back and sides of the ashcan itself and you must ensure that this is also cleaned out regularly cleaned out from behind the internal baffle plate. If you do not do this, you will buckle the baffle plate or in the extreme, burn it out.

## **TROUBLE SHOOTING**

### **1. Smoke comes out of the stove when the loading door is opened.**

- The chimney cavity into which the 125mm flue pipe has been installed may be less than the minimum 150mm requirement.
- Deposits (soot) may have built up in the chimney and be restricting the flow of waste products. This flow rate is known as the "draw".

### **2. The stove does not produce the expected heat into the room.**

- A register plate may not have been installed.
- Has the register plate been sealed to prevent heat being drawn out the chimney to waste?
- Green or wet wood is being burnt.
- The chimney has excessive draw (this is unusual). Seek installer advice with regard to installing a Flue Draught Stabilizer.
- The stove has been recessed into the existing fireplace and a lot of heat is absorbed in the surrounding fireplace walls rather than being radiated into the room. Pull the stove forward.
- For the maximum efficiency of heat transference into the room the stove should be sited on the hearth off the fireplace rather than recessed.

### **3. The stove burns too fast.**

- Use whole logs rather than split ones.
- The wood being used may be generally too small.
- The "air-tight" seal between the fibre rope on the doors and the casting may have been lost, adjust door handle lock nuts to reinstate this seal.
- The chimney has excessive draw (seek installers advice on this point).
- The fibre rope seal between the door and the glass may be leaking.
- The glass is not sealed; gently tighten glass retaining clips. Do not over tighten.
- The fibre rope on doors and glass has worn out. Replace.

## **THE AIR-WASH SYSTEM**

This is a system where secondary air is drawn into the stove (by combustion) through the top vent slide and deflected down the back face of the glass, thus preventing the smoke coming into contact with the glass. It does not mean that you will never have to clean the glass, but substantially lengthens the periods between having to do so. The air-wash system works best when burning dry wood. Wet and pitchy wood will produce more deposits in the glass. Also deposits will form on the back of the glass

when the stove is operated on low heat for extended periods. To clean the glass, either use an oven cleaning fluid or dip a wet cloth in the wood ash (not coal ash – this may scratch the glass) and gently rub clean. Only do this when the stove is cold.

## **AIR CONTROL**

### **AIRWASH**

The “airwash” is controlled via the top of the stove, it is this “airwash” that keeps a clean and uninterrupted view of the fire, also aiding in good secondary combustion of the fuel and reducing emissions into the chimney and environment.

### **THE GRATE**

The grate allows ash to drop through into the ashpan, therefore allowing the build up of ash to be removed and allow proper circulation of air throughout the stove. When burning solid fuels riddling twice a day is usually sufficient. When burning wood, the grate can be removed.