

# ***Warmington SI Open Wood Fires***

## **Maintenance and Operating Instructions**

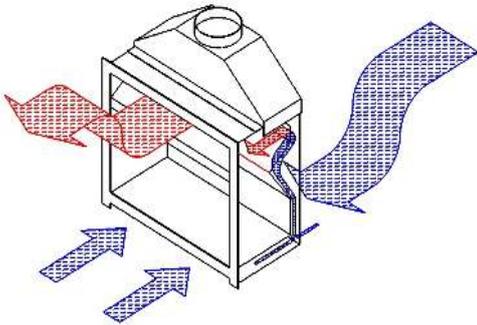


### **How to light and maintain an Open Wood**

Please 'Keep these instructions for future reference'

Manufactured by Warmington Industries, 47 Sir William Ave, East Tamaki, Auckland.  
P O Box, 58 652, Botany 2163.  
Telephone: 09 273 9227 Fax: 09 271 0892 email: [www.warmington.co.nz](http://www.warmington.co.nz)

**"CAITEC" UNIQUE TO WARMINGTON'S DESIGN**



The Warmington fire is designed with our exclusive 'Caitec' technology. Air is drawn from an external source which is then circulated through the firebox sending warm air back into the room. This maximises efficiency whilst maintaining the home at a constant pressure equilibrium, reducing the risk of back draft.

**LIGHTING THE FIRE**

To start and maintain a good fire, you need the following:

- Newspaper (not coloured or coated).
- Box of matches
- Packet of firelighters (optional)
- Quantity of finely split, dry soft wood kindling (such as pine).
- Seasoned dry, split firewood in range of sizes. (do not burn: treated wood, painted wood, plywood, particleboard or MDF).



Matches.



Newspaper



Firelighters may be used



Kindling is finely split and ideal for starting the fire.

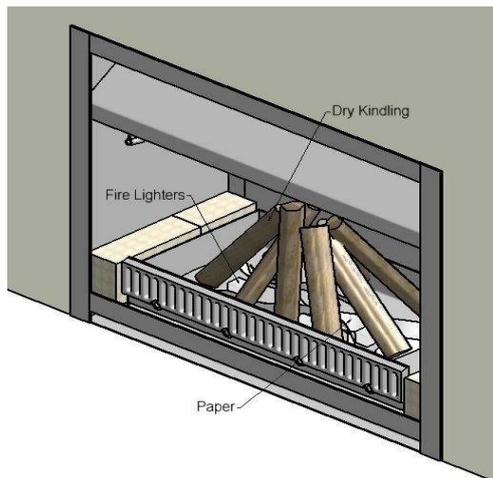


Generally fire wood is cut to 300 to 350mm lengths and split to 150 to 180mm cross section. Note the Season Cracks in the ends.

**FOR CORRECT OPERATION OF YOUR OPEN WOOD FIRE - follow these Guidelines**

**These are guidelines only - each Installation will operate with it's unique aspects:**

Place generous amount of crumpled newspaper in the Firebox. Place 10-15 pieces of finely split, dry kindling on top and behind the paper, say 20cms. Putting firelighters under the newspaper can help to sustain burn time.

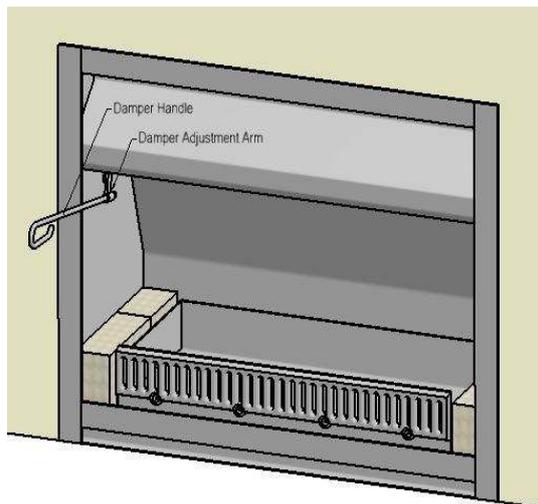


Light the paper and/or firelighters from both ends and the middle. As soon as the kindling has 'caught' and is burning briskly, add smallish pieces of wood to the fire. When the fire is established, put on larger pieces in a criss-cross pattern.

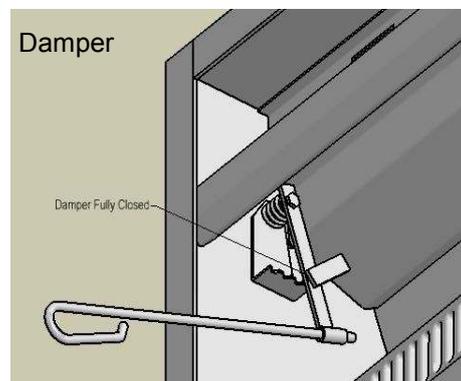
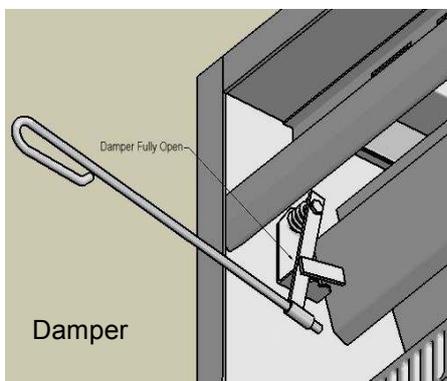
You may notice a faint smell on the first light of the fire. This is the paint coat curing and this smell will soon disappear. (see note on Paint).

The most productive way to control the burn rate is by the amount of fuel that you load in the fire. Load the fire to gain the desired heat output but ensure that the fire is not over firing. See fuel load in these instructions.

**The Damper Adjustment Arm is always on the top left of the fire opening, as indicated. The handle fits inside the Adjustment Arm & has 4x settings from fully open to closed.**



**Fully open the Damper when first lighting the fire, by using the Damper Handle tool as indicated.**

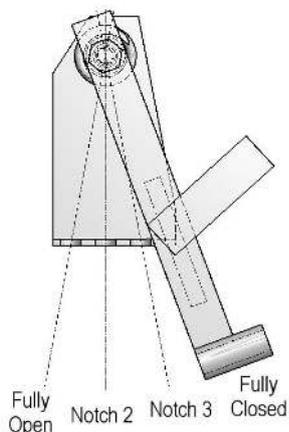


**Note:** The Damper is fully open when the handle is in the out position, and closed when in the in position. When fully closed the smoke should still be able to draw up the Chimney.

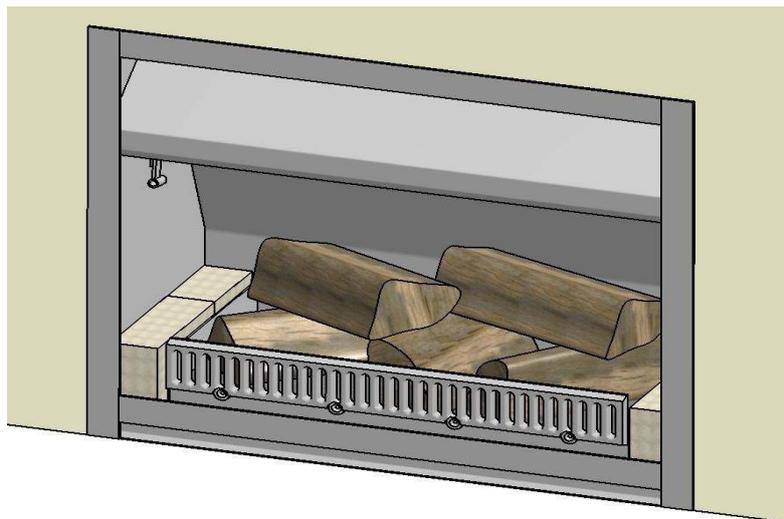
**FOR CORRECT OPERATION OF YOUR OPEN WOOD FIRE cont..**

Altering the Damper Blade once the fire is well established and burning well with good base embers can have some effect on the draw of the fire and the heat output. For best results, only alter the Damper one notch at a time and allow 15 to 20 min to allow the fire to find it's own equilibrium. If you close the Damper too far, the fire will smoke into the room and will need to be opened up.

Each fire will have it's own unique setting and in time you will find the optimum position. When you reload the fire, ensure you open the damper fully to allow all the smoke to pass up the flue, then once the fire is fully alight, you can begin to close the Damper one notch at a time repeating the process as above.



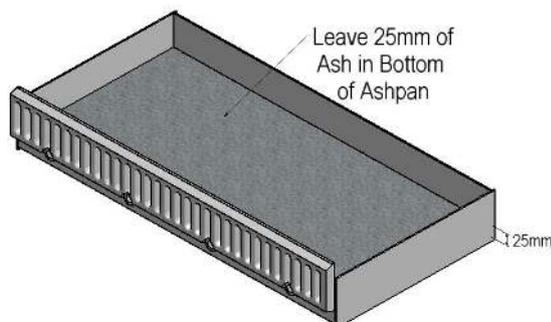
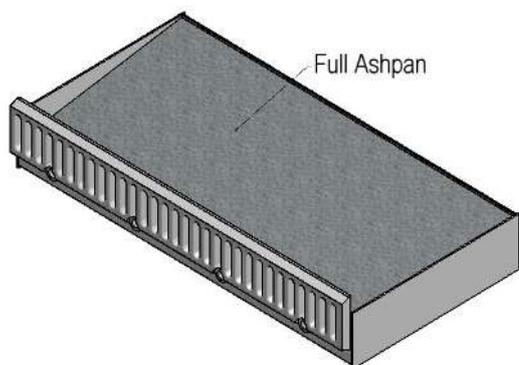
The 4 Positions of the Damper Arm



Fuel load in a criss-cross pattern.

Remove and clean out the ash pan before it is full to the top. It is recommended that a bed of ash be left in the bottom of the tray (say 25mm) after cleaning as this aids with stable burning. The excess should be placed in a non-combustible container and moved outdoors immediately to a location clear of combustible materials. In order for the fire to burn properly, you will need a fast fire for the first ten to fifteen minutes. This is to get the chimney to pull combustion air through the heat exchangers on the firebox.

Maintain a fire as big as you need without overloading the ash pan, being careful that wood does not fall out of the fireplace and onto the hearth. As the area being heated warms up and air circulation increases, you will be able to run a smaller and slower fire. It is now time to put on the larger, split timber logs.



Keep the area under the ash pan and at the rear of the ash pan clear of ash. This space allow air to the rear of the Fire increasing the air for the Fire to burn.

Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.

## FUEL LOADS

The size of the logs and the number of pieces that can be loaded per fueling will vary with the size of the fire.

As a rule, firewood is cut to 300 to 350mm lengths and split to 150 to 180mm cross section, depending on the wood merchant that you purchase it from, or if you are cutting it yourself.

Generally the fuel load would be 2 to 6 pieces (depending on the size of the fire) of fuel every 25 to 40 minutes placed in the ash pan. The fuel load will directly impact the heat output and will vary to your requirements.

### GUIDE ONLY:

The amount of wood and the frequency of the wood load can be gauged by the level of embers in the ash pan along with the height of the wood that is burning.

The ember level will build up as the fire is being used, and should not exceed the level of the ash pan. Once it has filled the ash pan and the fire is cold, remove the excess ash as described in the instructions.

The burning wood is to be contained in the ash pan to prevent the fuel from falling out onto the hearth. If the load of fuel is too large, or the physical size of the wood is too big, it may not fit into the ash pan, therefore the number of pieces of wood will need to be reduced and the size will need to be cut to a smaller size.

When the ash pan is full, remove the ash, leaving 25mm in the bottom of the pan as described in the Instructions.

## SAFETY AND FIRE SENSE

- Most firewood will spit sparks from time to time. It is strongly recommended you use a sparkguard. **NEVER** leave a lit fire unattended. **Warmington** have a range of sparkguards, either fitted or freestanding for safety and peace of mind.
- **DO NOT** overload the fire with large logs which could fall out of the fireplace and cause a fire hazard in the home. Ensure the logs are placed at the back of the firebox and that a limit of no more than six logs be used during high fire operation. This will vary depending on the size of the fire.
- **In the event of a soot or creosote fire:**
  - Alert all the people in the house. Have them leave or be ready to leave the house.
  - Call the Fire Department.
  - Suppress the fire the best you can being careful of your own safety.
  - Make sure you have a way out of the house should the fire get out of hand.
  - Extinguish the fire using a dry chemical household fire extinguisher, or smother it with loose soil or sand. Putting water on the fire will turn to steam and will aid in putting out the fire - but be careful as this can spit hot water.

## GENERAL MAINTENANCE

- We strongly recommend that you have the flue swept and cleaned at least once a year to reduce the risk of a chimney fire and ensure proper operation of the fire.
- Ensure the damper is fully open when cleaning the chimney. Remove the cowl from the top of the chimney and sweep from the top down the flue. Remove all soot and ash and ensure cowl and bird protection is cleaned and replaced.
- To keep your fire clean, polish all over with a soft cloth when the unit is cool. Cleaning the Firebox interior at the end of winter and spraying with high temperature *Stovebright* paint will extend the life of the firebox. (see General Information paint later in this document). Ensure all surfaces are cleaned with a wire brush or scotchbrite before applying paint.
- The quality of the firewood used can have a dramatic effect on the efficiency and operation of the fire. The main factors are moisture content, tree species and piece size. We recommend that dry timber which has been stored from the previous year, and that a mix of soft and hard woods be used. A dense, hard wood will give a longer-lasting coal bed, while a less dense wood will bring a fire to optimum temperature more quickly.

## TROUBLE SHOOTING

**Smoke Spillage:** The smell of wood smoke inside your home is a sign that the fireplace is not drawing properly. There are many causes and many solutions for this occurrence. Incorrect cleaning of the flue, or close proximity to large trees, tall buildings or high landmass may contribute. Other contributing factors can simply be the different climates or atmospheric conditions of certain areas.

The solutions are varied, some guides below:

- **Checking the fuel Load:** Too much fuel (wood) in one load will cause the fire to overcharge, not allowing the flue and cowl system to cope with the excess smoke, causing the smoke to bellow into the room. See standard fuel loads in this instruction.
- **To little fuel load:** This will have the effect that there is not enough draft in the flue allowing the smoke to waft into the room. The fire will be performing poorly as the fire will not heat up and circulate the convection air.
- **Cowls:** A different style of cowl may make a difference in some situations, but seek the advice of a Warmington Agent as some cowls are not suitable for some applications.
- **Chimney:** Ensure that the chimney is swept as the buildup of soot inside the chimney can happen very quickly in cold climates, especially if the fuel is green. This can happen as quickly as 5 to 10 fire operations.
- **Negative Pressure in the home:** All fires need air to burn and draw correctly, kitchen fans, air conditioning units, high wind zones, naturally forming draft spaces; can all have an effect on the pressure difference from inside the building to the outside. A lower pressure in the building may induce a draft down the flue system and back into the building, causing the fire to smoke or spill into the building. **Care needs to be taken at the design and installation stage to adequately vent the building, or some mechanical system to ensure that there is always a neutral or positive pressure at the fireplace and a negative pressure at the flue outlet.** This will ensure that the draft in the flue system is always to the outside.
- **The Prevailing Wind:** Care needs to be taken to ensure that the flue termination is in the correct position, as wind and gusts that hit the flue and cowl system may overcome the cowl and draft back down the flue into the home. This can be a combination of down draft and high pressure.
- **The Topography of the land:** The slope and position of the land in relation to the home has a bearing on how the wind will interact with the fire and flue system. Care needs to be taken to ensure that the flue termination is in the correct position to maximise performance.

### NOTE:

Please check the chimney has been cleaned recently and that it is not blocked before calling your **Warmington** Dealer or Agent.

**Low Heat Output:** The moisture content of the fuel has the greatest effect on the heat output of the fire. The wood needs to be seasoned and dry to approx. 20% moisture content.

**Type of wood:** The type of wood will also have an effect on the heat output and the burn rate. Hard woods will generally burn longer while soft wood will burn faster and more intense. A good blend of two soft wood (Pine) to one hard wood (Manuka) will maintain a good fire bed and flames into the top heat exchanger of the fire.

**The load of wood:** The amount and frequency of the load is the best way to control the heat from the fire. The wood load is covered in this instruction.



## WARRANTY

**Warranty - for full details and conditions on product Warranties, contact your Authorised Retailer.**

Provided the **Warmington** firebox is installed to the Manufacturer's Specifications, and operated in accordance with these instructions, from the 'Date of Purchase' we give:

1. **5 year Warranty (for SI440 to SI1100 models)**
2. **2 year Warranty for the SI1250, SI1500 and larger fires**

Please note - some parts are not covered by the Warranty - see below:

The painted black surface, whilst extremely durable and long lasting, may need touching up with an approved high temperature paint i.e. Stovebright, to retain its colour and appearance. (See General Maintenance).

### **Not included in the Warranty for all Warmington SI Open Fires:**

1. Internal damper system (consumable)
2. Ash pan
3. Bricks
4. Poker
5. Flue System
6. Paint (Stovebright)
7. Accessories (Sparkguards etc.)
8. Damage incurred by over firing
9. Hebel Enclosure (if used)

For replacement parts, please contact your **Warmington** Dealer or [sales@warmington.co.nz](mailto:sales@warmington.co.nz)

**Note: Damage to the fire as a result of over-firing is not covered in the Warranty.**

## WARNINGS

**WARNING:** ANY MODIFICATIONS OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED AS BREACHING AS/NZS 4013.

**WARNING:** DO NOT USE FLAMMABLE LIQUIDS OR AEROSOLS TO START OR REKINDLE THE FIRE.

**WARNING:** DO NOT USE FLAMMABLE LIQUIDS OR AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHEN IT IS OPERATING.

**WARNING:** DO NOT STORE FUEL WITHIN HEATER INSTALLATION CLEARANCES.

**WARNING:** WHEN OPERATING THIS APPLIANCE AS AN OPEN FIRE, USE A FIRE SCREEN.

**CAUTION:** THIS APPLIANCE SHOULD NOT BE OPERATED WITH CRACKED GLASS.

**CAUTION:** THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.

**CAUTION:** THE USE OF SOME TYPES OF PRESERVATIVE-TREATED WOOD AS A FUEL CAN BE HAZARDOUS.



## IMPORTANT NOTES

### **Construction**

The fires are constructed from 4-5mm and 3.2mm steel plate.

### **Finish**

High temperature steel parts are finished with a matt black high temperature paint designed to withstand the rigors of normal combustion (see above).

### **Flue System**

The installation and construction of the flue system must comply with ASNZS:2918.

The **Warmington** open fires require a **Warmington** tested and approved flue system as tested to ASNZS:2918. The tested flue system should not be modified in any way without written approval of the manufacturer. Any additional flue components must comply with ASNZS:2918.

### **Floor Protection**

Floor protectors are normally designed to suit each individual 'setting'. The installation and construction of the floor protector must comply with ASNZS:2918. The **Warmington** fire requires an 'insulating hearth' and an 'insulating plinth' (floor protector), as outlined in the specifications.

### **Wetbacks**

On special order a wetback connection can be fitted. The wetback sits along the back of the firebox. The inlet and outlet are to the side of the fireplace and require standard 25mm pipe connections to the threaded brass pipe of the wetback. Inlet and outlet pipes are at different heights, permitting flow of water in one direction and need to be correctly connected by the Plumber. (see our Wetback Specifications).

### **Installation**

The **Warmington** unit is to be installed by an approved NZHHA Installation Technician.

## GENERAL INFORMATION REGARDING PAINT

Stove Bright temperature paint has been air dried creating a quality coating. To optimize the performance of the coating, and to maximize its durability, it needs to go through a heating process. Once this initial firing process is successfully completed, the coating will bond to the metal with a colourfast finish that will last for years. For general information from the paint manufacturer regarding paint curing, please visit: <http://forrestpaint.com/index.php?page=stove-bright-User-guide>

### **Follow these instructions from Stovebright BEFORE using the fire for the first time:**

- **Ventilate:** Open windows and doors in the room. To speed dissipation of odour from the initial firing process, you can place a fan in the room to move the air.
- **Vacate:** The fumes from the initial heating process are non-toxic, but may be uncomfortable for babies, small children, pregnant women, elderly, pets, or anyone with breathing difficulties.
- Don't touch the surface. The paint will be soft during the first light.
- Set the paint slowly with successive burns.
- For detailed information regarding burn temperatures please refer to the above web address for forrestpaint.