

# Farringdon 12

Wood Stove

## **Operating & Installation Manual**





## PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

**VEUILLEZ NOTER** : Pour la version française de ce guide de l'utilisateur, veuillez visiter : www.aradastoves.com/canada

## Tested To : UL 1482-2022 CAN/ULC S627-2022



BK 655 Rev 11

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## Congratulations on your choice of an Arada Stove.

Read all instructions carefully before installing your wood burning stove. If you are in any doubt about the instruction

to install your appliance correctly, we suggest to call a professional master installer. A wrong installation may result with a fire, burns and possible death.

Keep these instructions.

This appliance must be connect to

• A HT type factory-built chimney approved UL103 or ULC 629 with a 6 inches dia. (15.24 cm) • A code-approved masonry chimney with a flue liner with a 6 inches diameter (15.24cm)

N.B: Be warned that local codes and rules can have more specific requirements than those detailed in this manual.

You should consult a master installer, fire officials or local building office about restriction and installation inspection in your area and to determine if you need to obtain a permit Prior to installation.

## Install and operate this stove only in accordance with these instruction Applicable standards: UL 1482-22, CAN/ULC S627-22

This manual describes the installation and operation of the Arada, Farringdon 12 wood heater. This heater meets the 2020 U.S. Environmental Protection Agency's cored wood emission limits for wood heaters sold after May 15, 2020.

This wood heater was tested to EPA Method 28R using Cored fuel with an emissions value of 1.79g/hr.

Under specific test conditions this heater has been shown to deliver heat at rates ranging from 12,600 to 40,400 Btu/hr 3.7 - 11.8kw/hr

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

This wood heater, needs periodic inspection and servicing for to ensure proper operation.



We recommend our wood burning stoves be fitted by an installation engineer certified in the US by The National Fireplace Institute (NFI) And in Canada, by the Wood Energy Technology Transfer (WETT)



<u>PLEASE NOTE</u>— Arada has a policy of continuous product development and therefore we reserve the right to amend the specification without prior notice.

Due to printing cycles, items or options may be described before they are generally available or after they have ceased, so please check with your retailer or dealer.

## CONTENTS

	Page No.		Page No.
INTRODUCTION		OPERATING INSTRUCTION	
Warning Notice	4	Fuel Types	25
Safety Notices	5	Lighting The Stove	25
The Principle Of The Stove	5	Burning Wood	26
Check List	6-7	Smoke/CO Alarms	26
Data Label Plate	8	Over Firing & Chimney Fires	27
Technical Data	9	Ash Removal	27
General Precautions	10		
Handling	10	Air Inlet Control	28
Asbestos	10	Primary Air	28
Hearth	10	Main Fire Door Handle	29
Combustible Materials	10	Parts List	30
Air For Combustion	10	GUARANTEE	31– 32
Fitting The Flue / Spigot	11	USER QUICK REFERENCE GUIDE	33
Flue / Chimneys	11-15	ADDITIONAL INFORMATION FOR CANADA	34—35
Floor Protection	16-17		
Clearances To Combustible Materials	18		
Firebox Liner Panels	19		
Final Check List	20		
Summer Storage / Non Usage	20		
SERVICE & MAINTENANCE			
Annual Maintenance	21		
Cleaning	21		
Chimney Sweeping	21		
Door Glass	21		
Outer Finish	21		
Fire Door Rope Replacement	22		
Fire Door Glass Replacement	22-23		
Service Record	24		

## WARNING NOTICES



Installation of wood burning stoves must be safe and legal. The Farringdon 12 is designed for installation in the main living area of your home only. If it is not installed correctly, it may cause a house fire. To reduce the risk of fire, the installation instructions must be followed carefully. Do not allow makeshift compromises to endanger property and personal safety.

Contact the local building officials about restrictions and installation inspection in your area.

### THIS STOVE MUST NOT BE CONNECTED TO A SHARED FLUE SERVING ANOTHER APPLIANCE.

TO ALL USERS: THIS APPLIANCE IS SUITABLE FOR WOOD BURNING ONLY.

ANY FORM OF COAL SHOULD NEVER BE USED IN YOUR STOVE.

TO USE FUEL OTHER THAN WOOD WILL INVALIDATE THE APPLIANCE GUARANTEE.

THIS APPLIANCE IS NOT SUITABLE FOR USE IN A MOBILE HOME.

THE ROOM HEATER SHALL NOT BE INSTALLED IN A FACTORY-BUILT FIREPLACE.

DO NOT INSTALL IN ANY FIREPLACE.

DO NOT INSTALL IN A TRANSPORTABLE BUILDING.

DO NOT CONNECT OR USE IN CONJUCTION WITH ANY AIR DISTRIBUTION DUCTWORK UNLESS SPECIFICALLY APPROVED FOR SUCH INSTALLATIONS.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.

Under no circumstances make impromptu alterations or modifications to this stove. It is an approved appliance and changes to the product or tampering with the design will render it **'non-compliant'** 

This also applies to 'ad hoc' repairs using non Arada approved components.

FOR FURTHER INFORMATION, REFER TO THE NATIONAL FIRE PROTECTION ASSOCIATION ANSI/NFPA 211 STANDARD FOR CHIMNEYS, FIREPLACES, VENTS AND SOLID FUEL BURNING APPLIANCES.

## SAFETY NOTICES

A fireguard should be used in the presence of children and elderly or infirm people. Please note, This appliance should be used with the fire door closed at all times except when re-fuelling or de-ashing.

#### REMEMBER THE STOVE IS VERY HOT DURING OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

Do not use aerosol sprays or any other flammable materials near the appliance under fire.

Do not fit an extractor fan in the same room as the appliance.

Fire cement is caustic, hand and eye protection should always be worn, prolonged contact with the skin should be avoided.

# Arada Ltd will not be responsible for any consequential or incidental loss or injury however caused.

Before continuing any further, with the installation of this appliance please read the following guide to manual handling.

- Always obtain assistance when lifting the appliance
- When lifting always keep your back straight, bend your legs not your back
- Avoid twisting at the waist. It is better to reposition your feet.
- Avoid upper body/top heavy bending. Do not lean forwards or sideways when handling the fire
- Always grip with the palms of your hands do not use your fingertips for support
- Always keep the stove as close to the body as possible as this will minimise the cantilever action.
- Use gloves to provide additional grip.

## THE PRINCIPLE OF THE STOVE

Your **Arada** stove is built to the highest standard of craftsmanship using the best materials and the most modern equipment available. It is a highly efficient and sophisticated piece of machinery and when properly installed and operated should provide a lifetime of heating satisfaction.

Safety is the most important consideration when installing your fire. If not properly installed and operated a house fire may result. Installation must comply with the Building Regulations and conform to all safety standards.

**Arada** produce a variety of appliances ranging from the traditional to the modern in style and appearance.

The fire door is fitted with a special high temperature ceramic glass panel through which the fire can be viewed.

The stove is lined with firebricks or heat reflective panels which ensure complete combustion and provide a good heat store to even out fluctuations in burning.

An internal throat plate produces turbulence to encourage secondary combustion and direct the flue gas around the whole upper firebox before allowing it to escape up the chimney.

#### **Grate Bars**

The **Farringdon 12** wood stove is fitted with a riddling grate system to support the fuel above the ash pit containing the removable ash pan.

The stove is designed to burn wood only on the grate and the stove MUST NOT be used without the grate fitted. Spare grate bars are available see page 30 for part number details

**Arada** stoves are also fitted with an 'air wash' so called because it provides a curtain of high speed preheated air behind the glass to help keep it clean and provide secondary air/over draught.

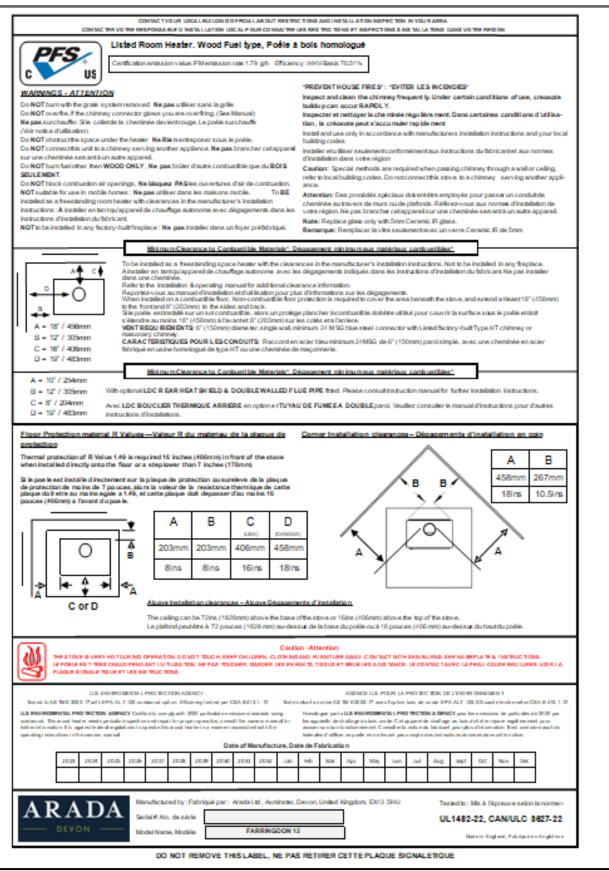
Part Description & Visual Aid (not to scale)	Farringdon 12
1. Fuel Retainer	1
2. Throat Plate	1
3. Ash Pan	1
4. Throat Plate Insulation Blanket	1
5. Instruction Manual	1

## Inside the appliance body you should find the following:

Description & Visual Aid	(not to scale)	Farringdon 12
6. Back Side Liners		4
7. Front Side Liners		
		2
8. Rear Liner		2
9. Grate Bars		12
10. Stove Gauntlets	Y	1 Pair
11. Fire Door and grate riddling		
Handle		1

## Inside the appliance you should find the following :

## DATA LABEL PLATE



## **TECHNICAL DATA**

TECHNICAL DATA	Farringdon 12
Maximum / Nominal Heat Output Kw / BTU	11.8 / 40,400
Efficiency Nett % CE/HHV	78 / 70.5
Smoke Emissions (g/hr)	1.79
Mean Flue Gas Temperature °C	342
Mean CO Emission @ 13% O2 (%)	0.15
Flue Mass Gas Flow (g/s)	5.7
Height mm/inch (Canopy To Base Feet)	666/26.2
Width mm/inch (Across Canopy)	533/21
<b>Depth mm/inch</b> (Rear Heat Shield To Handle Boss—Handle Removed)	354/14
Depth From Back To Centre Of Flue mm/inch	125/5
Flue Diameter mm/inch	152/6
Weight Packed Kg/lbs	127.5 / 281
Weight Nett Kg/lbs	117 / 258
Ideal Log Length mm/inch	350/14
Max Log Length mm/inch	432/17
Firebox size Cu. Inch / foot	1970/1.14
Fuel	Seasoned Cord Wood
Weighted Average CO, grams per min	1.77

## **GENERAL PRECAUTIONS**

Note : All local regulations, including those referring to National standards need to be complied with, when installing the appliance.

# Any Manufacturer's Instructions must not be taken as overriding statutory requirements.

Before any installation work is undertaken consideration must be given to the Health and Safety . Safe working practices should be followed at all times.

During installation ensure that adequate precautions are taken to avoid unnecessary risk to yourself or any householder. In particular the danger from caustic nature of the fire cement should be avoided by using these accepted methods :

- · Wear gloves when handling fire cement
- Wear goggles when chiselling or looking up chimneys.

Make sure that Building Regulations are adhered to during installation along with any local by-laws. In the case of heating systems make sure that the pipe work is correctly bonded to ensure electrical earth continuity.

#### ASBESTOS

All Arada stoves contain no asbestos in their manufacture or construction. If there is a possibility of disturbing any asbestos in the course of installation, then please seek specialist guidance and use appropriate protective equipment.

#### HANDLING

The safe handling guidelines are set out on page 5 of this manual, to make movement easier, internal fittings, fuel retainers, grates, firebox liners, flue outlets, hot plates, throat plates etc, can be removed. Care should be taken to make sure that the hinges are not damaged during installation.

### HEARTH

The stove shall be installed on a floor with adequate load bearing capacity. If the existing construction does not meet this prerequisite, suitable measures (e.g.: load distributing plate) should be taken to achieve it. Ideally, the appliance should stand on a constructional hearth of non-combustible materials not less than 125mm (5") thick conforming to Building Regulations. Dimensions of the hearth should project at least 458mm (18") forward of the front of the appliance and 203mm (8") at the sides. The surface of the hearth should be free of combustible materials. In most buildings with solid concrete or stone floors, the requirement will be met by the floor itself, but mark the hearth to ensure floor coverings are kept well away or use different levels to mark the hearth perimeter.

#### **COMBUSTIBLE MATERIALS**

Please view the technical data (See page 10) and observe the **minimum** distance to combustible materials, which is applicable to your stove model. Ideally, adjacent walls should be of suitable non combustible construction, preferably brickwork. In large fireplaces take care that any supporting beam is protected by a 13mm (0.5") sheet of Fire proof board spaced 13mm (0.5") off the surface with strips of non combustible material. Make sure that there is a gap between an un-insulated flue system and any combustible material. This gap must be at least 3X the outside diameter of the flue pipe, or 1.5X the flue diameter to non combustible surfaces.

#### **AIR FOR COMBUSTION**

There must always be a permanent means of providing air for combustion into the room in which the stove is installed. A permanent vent with a total free area of at least 550mm<sup>2</sup> for every KW rated above 5KW should be connected directly to the outside air or to an adjacent room which itself has a permanent vent of the same size direct to the outside air. The positioning of any air vent must be so that it cannot be liable to blockage or obstruction. **Please note** : The fitting of an extractor fan to either of these rooms is not recommended.

# FITTING THE FLUE OUTLET AND HOT PLATE (Where Provided)

#### Note:

## Not applicable for units supplied with a fixed flue outlet spigot

The flue outlet spigot is found packed inside the appliance . The hot plate (blanking plate) is supplied fitted to the top opening and is removed by turning clockwise (as is the flue outlet).

Smear a very thin layer of fire cement on the mating faces of the flue outlet and the hot plate. Fit the outlet to the appliance in the desired position.

Lock into place by rotating anti-clockwise and tighten by tapping with a block of wood and mallet from inside of the appliance. Similarly, fit the hot plate (blanking plate) to the unused opening. Clean off any surplus fire cement.

Place appliance on the hearth and make sure that it is level and does not rock.

Connect the chimney ensuring all joints are sealed with fire cement.

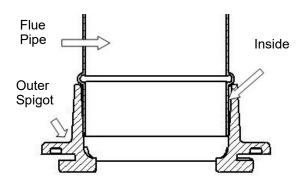


Fig. 1. Flue & Spigot Fitting

#### Important note :

#### For fixed and removable flue spigot types:-

The flue pipe **must** be fitted **inside** the outlet spigot. Failure to do so could result in the spillage of condensation and combustion residues running down the flue onto the stove canopy.

#### (See Fig. 1)

# The chimney connector must be in good condition and kept clean.

## **FLUES AND CHIMNEYS**

The flue draw is critical on any installation and should be checked to ensure that it matches what is specified. If it is higher than recommended, provision must be made to correct the over draw. The draw can vary in different weather conditions and the customer should be made aware of this. Failure to correct an over-drawing flue will invalidate the warranty. Please remember that chimney draught is

Please remember that chimney draught is dependent on four main factors :

- Flue gas temperature
- Flue height
- Flue size
- Flue terminal

The stove must be connected to a suitable and efficient flue so that products of combustion (fumes) from the stove are expelled to the outside air. To ensure a good up draught it is important that the flue gases are kept warm and that the flue size suits the stove. The termination of the outlet at the top of the flue also needs to comply with Local Building Codes.

The minimum effective height of the flue should be at least 15 feet from the top of the stove to the top of the flue outlet. When warm the flue draught should be between 0.1 to 0.2 mb. (1-2 " H20) A chimney may comply with regulations but could still be subject to down draught and similar problems. A chimney terminating above the ridge level is generally less likely to suffer such problems.

If a new chimney is being provided it should fully comply with the relevant Building Regulations that specify the requirements for solid fuel burning installations. Suitable types of chimney include the following :

#### Masonry Chimney:

A code-approved masonry chimney with a flue liner with a 6 inches diameter (15.24cm)

#### Factory Made Chimney:

A HT type factory-built chimney approved UL103 or ULC 629 with 6 inches diameter (15.24 cm)

#### **Chimney Connector:**

The Chimney connector must be 6 inches diameter and have a minimum thickness of 24 gauge (0.025 inches 0.64 mm)

This must be secured into the flue spigot with 3 screws through the holes provided.

The flue and chimney installation must be carefully checked by a competent person before fitting the stove to ensure it is suitable and will work safely.

If the chimney is old (ie: built of brick or stone without a liner) or being opened up for reuse additional checks and smoke testing should also be carried out to ensure the flue and chimney are good operating condition.

Check the existing flue is in good condition with suitable access for collection and removal of debris. If the flue size is more than 225mm (9") diameter or 200mm (8") X 200mm (8") square, a suitable lining of 150mm (6") diameter should be fitted, or if the flue length is over 5.5 metres one size larger than the appliance outlet should be fitted. This should be a double skin stainless steel flexible liner that is independently certified for use with solid fuel.

It is also important that suitable flue pipe is used to connect the stove to the flue in the chimney and that suitable access is provided into the flue for regular inspection and sweeping of the flue ways.

The installer should comply with regulation requirements in respect of providing a Notice Plate giving details on the chimney, flue lining, hearth and fireplace installation. Chimneys should be as straight as possible.

Horizontal runs should be avoided except where the rear outlet of the appliance ( if available ) is used, in which case the horizontal section should not exceed 150mm (6") in length.

**WARNING:** When wood is burnt slowly in a closed appliance it produces moisture, tar and Creosote which will create condensation and deposits in the chimney.

This effect can be minimised by burning hard for a short period, about 20 minutes, twice a day.

It is usually convenient to do this morning and night.

*Note: To avoid chimney problems your fire should not be burnt slowly for longer than 12 hours without a period of fast burning.* 

Inspection is advised on a regular basis and accumulations of more than 3mm removed.

If the stove appears to be working hard but produces very little output to the room it is likely that excess draw is present in the chimney, and that heat is being sucked out of the appliance and up the chimney.

#### **Important Note:**

The chimney connector must not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling. Where passage through a wall or partition of combustible constriction is desired the installation shall conform to CAN/CSA-B365, Installation code for Solid Fuel Burning appliances and equipment

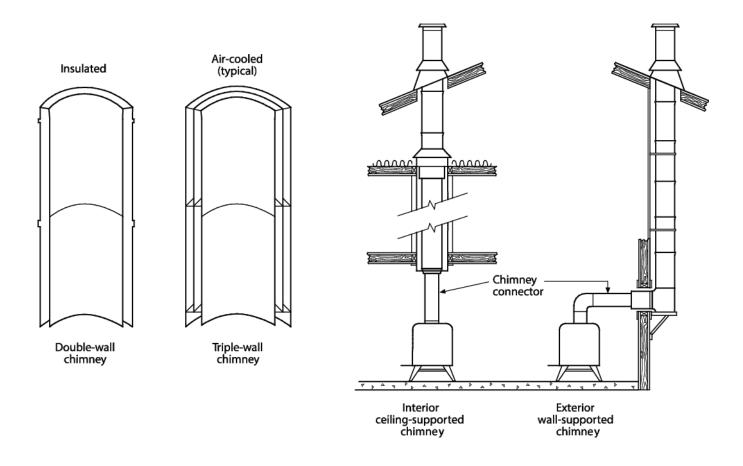
## DO NOT CONNECT THIS STOVE TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE

## FOR ALL APPLIANCES

Access for cleaning the flue should be incorporated in the system other than through the appliance (eg: a soot door or access through register plate). Purpose made soot doors and inspection lengths are available from manufacturers of all systems. Ensure that the whole length of the flue can be reached from the soot door.

Note: if the appliance is fitted with a draught stabiliser or if one is fitted to the flue pipe or chimney in the same room as the appliance, then the permanent air entry opening (or Openings) should be increased by 300 mm<sup>2</sup> for each KW of rated output.

## Typical Factory built chimney installation in a single family residence



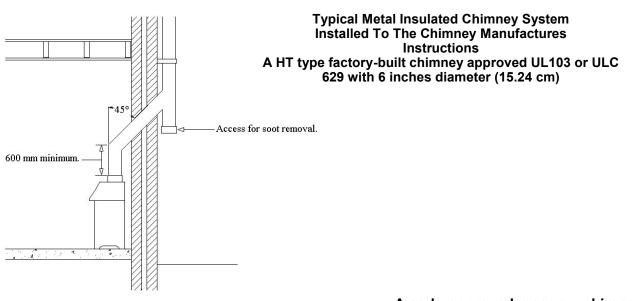
#### General.

Factory built chimneys and chimney units must be installed in accordance with the temperature and pressure conditions detailed in the manufacturers instructions.

#### Temperature and pressure limits.

Flue gas temperature and static pressure within the chimney must not exceed the limits used during listing tests

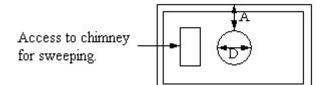
## INSTALLATION



A code-approved masonry chimney with a flue liner with a 6 inches diameter (15.24cm)

#### PLAN VIEW OF REGISTER PLATE AND CLEARANCES FOR NON INSULATED FLUES

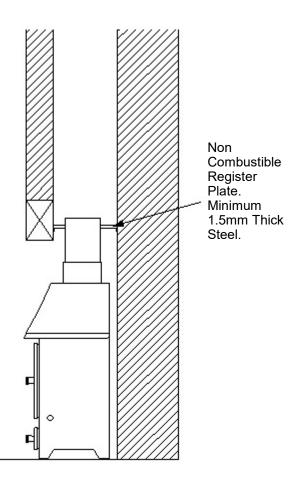
(Plan View Of Steel Register Plate, 1.5mm Thick Minimum )

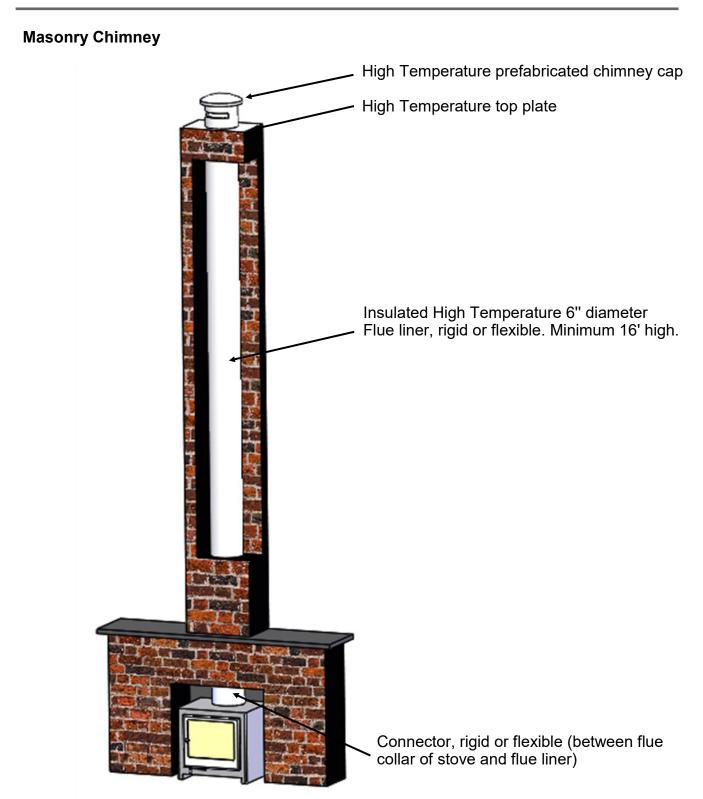


A (Minimum clearance for non-insulated flue) =

 $1.5 \ge D$  to a non-combustible surface/material

or 3 x D to a combustible surface/material





Sample installation into existing chimney. Chimney liner system has to be UL listed to UL 1777 in USA and ULC S635 in Canada.

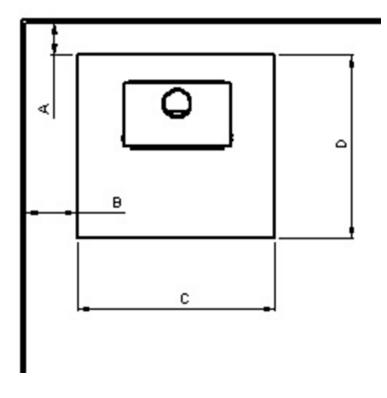
## INSTALLATION

#### **Floor Protection**

The stove must be installed on a non-combustible material plate to protect the floor and possible fire caused by

- Ejection of sparks and hot ashes when the stove door is opened for refuelling etc.
- Radiated heat caused by stove over firing
- Spillage of creosote as a result of a chimney fire

The surface used must be non-combustible and approved to UL 1618 for USA or local codes ( cement, brick, stone, ceramic etc )



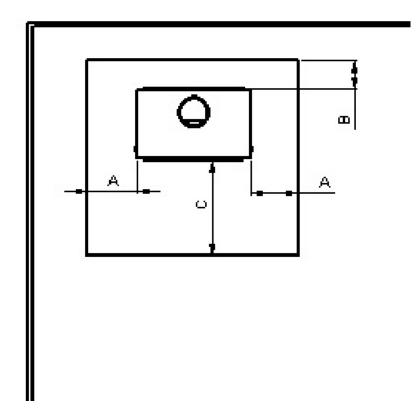
## Floor protection minimum dimensions

Α	В	С	D (USA)	D (Canada)
198mm	275mm	940mm	960mm	1016mm
8ins.	11ins.	37ins.	38ins.	40ins

## Stove clearances on floor protection plate

The floor protection plate must be of Non-Combustible Material

Minimum dimensions listed may be increased



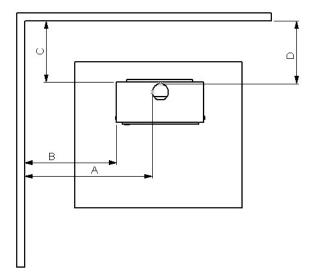
А	В	C (USA)	D (Canada)
203mm	203mm	406mm	458mm
8ins.	8ins.	16ins.	18ins.

## INSTALLATION

#### Stove clearances to combustible material.

Minimum dimensions listed may be increased.

Clearances may only be reduced by means approved by the regulatory authority.



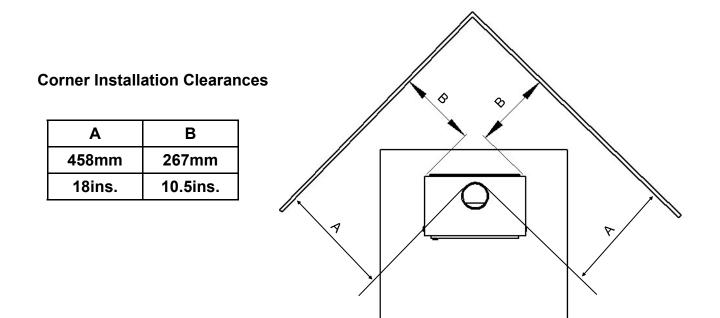
### **Straight Installation Clearances**

Standard Rear Heat Shield and Single Wall Flue Pipe

Α	В	С	D
478mm	305mm	406mm	458mm
19ins.	12ins.	16ins.	18ins.

Deep Rear Heat Shield and Double Wall Flue Pipe

Α	В	С	D
478mm	305mm	204mm	245mm
19ins.	12ins.	8ins.	10ins.



## **For Alcove Installation**

The ceiling can be 72ins (1828mm) above the base of the stove or 16ins (406mm) above the top of the stove.

Do **NOT** connect this unit to a chimney serving another appliance.

## FIREBOX LINER PANELS

The Arada Farringdon stove uses firebox liner panels to the sides and back. The throat plate sits on top of the perforated air tube at the front and into two slots in the rear air bar. These parts should come fitted to your stove, if however they are not, proceed as follows to fit them.

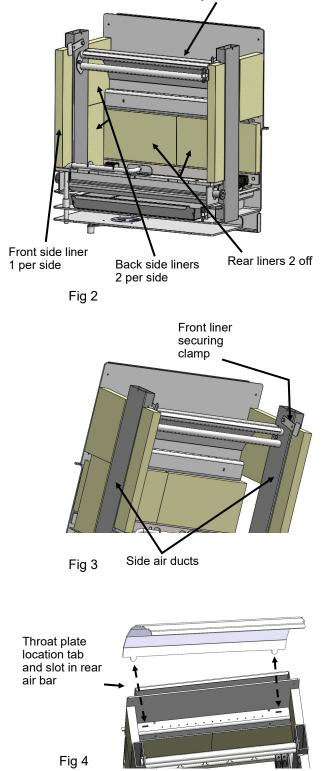
- Open the fire door.
- Remove the fuel retaining bar, by lifting free of the retaining slots.
- Set the rear liner (s) into the back of the firebox.
- Lift the throat plate into position with the front above the perforated air tube. Align the 2 tabs on the throat plate with the location slots in the rear air bar and drop into position (See Fig 4)
- Insert one of the side liner panels in each side at the back sitting on the side landing. Lift up one at a time past the throat pate as far as it will go and slide in the lower liner side liner. Repeat for the other set of rear side liners. (See Fig 2&3)
- Insert one front side liner in each side of the front of the stove. Secure in place with the front liner clamp as shown. (See Fig 2&3)

# Note: Neither the rear firebox liners nor the side firebox liners are 'handed', both faces are suitable for direct contact with the fire bed.

Note : Cracking of the liner panels does not effect efficiency.

#### **Overall View Of Liners & Throat Plate Assembly**

Throat plate sat correctly on air tube and rear air bar. Note: Insulation blanket not shown for clarity



## FINAL CHECK LIST

Before handing over the installation to the customer it is recommended that the appliance is lit and the functioning of the chimney system is checked for satisfactory operation.

- Be sure that the chimney is operating and ALL smoke and fumes are vented to the atmosphere through the chimney terminal.
- Check all joints and seals.
- Clean the outside of the appliance to prevent any stains becoming burnt on.
- Check the flue draught which should read 1.2—2mm, or 0.12—0.2 mbar.
- Explain the controls and operation of the appliance to the customer.

The following details <u>must</u> be checked and completed in full by the installer at the time of installation. Please answer all questions as fully as possible. **Arada stoves** cannot be held responsible for the chimney or installation.

## SUMMER STORAGE / NON USAGE

Please ensure that your stove is left clean and moving components are well lubricated for the summer months (during periods of prolonged non use). If possible store the throat plate outside of the stove, check all moveable components, at regular intervals, to ensure they are moving freely.

Allow air movement through the stove, by opening the air wash and primary air inlet control to about half way open or leave the door ajar. This will allow a free flow of air through the appliance thus preventing moisture and condensation forming inside the stove and chimney. This preventative maintenance will ensure your stove stays in the best condition for the coming winter months.

## ANNUAL MAINTENANCE

It is important that your appliance is regularly serviced in accordance with these instructions.

Note: Only use original Arada components for service replacements, NEVER substitute parts for similar items

Service / repairs should be carried out at least annually by a qualified person and should consist of the following as a minimum:

## CLEANING

**Important;** Under some circumstances soot can quickly build up on the throat plate and adjacent areas. The throat plate should be removed and checked monthly, and any debris stripped off. Similarly, clean the upper surface of the firebox.

Remove the firebrick linings and throat plate, inspect all rope gaskets on doors, glass etc, and re -order any items that may need replacing from your **Arada** dealer.

With a wire brush clean inside the appliance paying particular attention to the small inlet holes of the air wash on the inside, above the fire door.

Sweep the chimney and confirm that it is sound. Examine all joints in the flue pipe etc, and re-seal if necessary. Re-assemble and leave with the air inlet and air wash control about half way open. This will allow a free flow of air through the appliance thus preventing moisture and condensation from building up inside the stove and chimney.

## **CHIMNEY SWEEPING**

Sweeping should be carried out with an appropriate sized bristle brush and rods to suit chimney size and type. As with all appliances regular sweeping of the flue is essential to avoid danger of blockage and the escape of poisonous fumes. Access for cleaning should also be incorporated in the chimney (e.g. Soot door or access through the register plate).

Any existing chimney should be swept prior to installation of the appliance, and swept again a second time **within one month** of regular use after installation to establish frequency of sweeping required. This should be done by a competent person such as a chimney engineer who will provide a Certificate Of Chimney Sweeping. The whole flue way including the outlet must be swept at least twice per burning season. It is important that the flue ways, flue pipe and chimney be cleaned prior to lighting the fire after a prolonged shut down period.

## DOOR GLASS

The door glass should remain clear during normal burning. However, under certain conditions, such as burning at a low rate or damp wood, or overnight burning, the glass may become somewhat blackened. To remedy this, operate the appliance at a fast rate. Alternatively:-

### WHEN THE STOVE IS COLD

open the door and clean the inside face of the glass with a damp cloth or with glass cleaner (available from fire stockists). A piece of cloth moistened with vinegar and dipped in wood ash will provide a good soft scourer to remove the soot without scratching the glass.

#### **Do Not Use Abrasive Cleaners**

## **OUTER FINISH**

The outer finish of the appliance is a durable high temperature paint. It is best cleaned, by brushing down, with a clean shoe brush. Do not allow moisture to remain on the appliance whilst cold or surface rust may form.

The high temperature paint should not require attention for some time, depending on use. The hotter the fire burns the sooner repainting will be necessary. Aerosol tins of paint are available for complete refurbishing.

Before repainting make sure that the fire is out and the stove is cold.

- Remove the door glass
- Lightly wire brush, or rub with wire wool, the body of the appliance to remove any loose paint or rust.
- Mask or remove items such as brass work.
- Any adjacent brickwork, mantelpiece, hearth etc, should be carefully masked for quite a distance around the appliance. This precaution is to prevent discolouration of the surrounding brickwork or wall paper etc.

Re-spray in a well ventilated area, avoid breathing the vapour. Refer to safety instructions on paint cans.

- When the paint is dry refit the door glass & any other parts previously removed.
- Leave the appliance for eight hours before lighting a fire.
- Burn slowly for the first four hours, then build up heat slowly to gradually cure the paint.

## **SERVICE & MAINTENANCE**

## FIRE DOOR ROPE REPLACEMENT

Periodically, visually check over the fire door rope seal for any damage, cuts or tears and any detached sections. It is important to maintain these seals in good condition at all times

The rope gasket can be replaced, using the universal rope kit (Available from Arada), please follow the instructions below :

- Ensure the appliance is cold.
- Lift the door off the appliance and lay onto a flat surface with the rear face upwards.
- Carefully remove the old rope gasket and old adhesive. Take note of the layout of the old rope seal. Ensure no traces of the old adhesive or rust / flaky paint is present, as this will result in a unsound joint.
- Apply the rope adhesive following the instructions on the bottle.
- Press the rope gasket into the channel on the rear of the door casting, following the same layout as the old rope seal. See Fig. 5.
- Just before the final end, cut the rope seal to length and glue into position.
- Allow 30 minutes, before refitting the door to the appliance.



Fig. 5. Rope Replacement

Note: Images fig 5 & 6 for reference only

## **Important Note**

This Wood heater needs periodic inspection and repair for proper operation. It is against Federal Regulation to operate this wood heater in a manner inconstant with the operating instructions in this manual.

## FIRE DOOR GLASS REPLACEMENT

In the event of the door glass being broken it can easily be replaced. Please follow :

- The door should be lifted off the hinges so that the operation can be carried out on a work bench or similar level surface.
- Unscrew the four screw fixings, securing the glass clips and remove, both clips and fixings.
- Carefully remove any pieces of broken glass, and sealing gasket, wearing suitable gloves as protection. Take note of the position and joint of the rope gasket.
- Replace the glass rope gasket; start at the bottom of the window, centrally, push the adhesive side of the rope into the groove on the rear of the casting. Gradually work your way around until the end of the rope meets. See Fig. 6.
- Re-seat the new glass, ensuring the glass sits flat against the gasket. See Fig. 7.
- Replace the four retaining clips, ensuring that the silicone rubber U section is in place on the end of the clips. Only hand tighten the fixing screws. Do not over tighten the fixings and or replace the clips without the silicone U seal in situ, as damage may occur to the glass See Fig.8.
- Refit the door assembly back onto the stove; carefully lift the door over the hinge and slot into place.

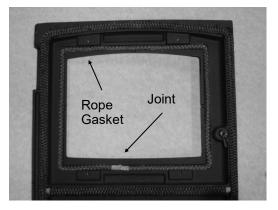


Fig. 6. Lining Up Gasket Rope

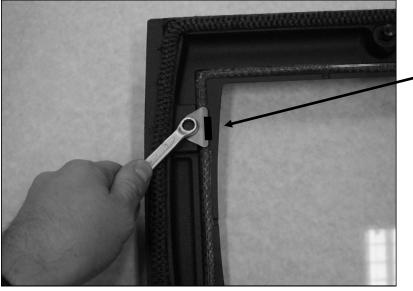
## **SERVICE & MAINTENANCE**

Please Note:

This should be carried out when the stove is cold and unlit.



Fig. 7. Positioning The Glass



RUBBER U SECTION IS IN PLACE ON ALL THE CLIPS, BEFORE HAND TIGHTENING.

NOTE: ENSURE SILICONE

Fig. 8. Tightening The Glass Clip

The images used on pages 22 and 23 illustrating the door rope and glass replacement are generic images and may differ from the stove you have, but the procedure is identical.

Use only genuine Arada 5mm Neocrem Ceramic glass as detailed in the parts list shown on page 30. Do not substitute with any other material type or size.

## **SERVICE & MAINTENANCE**

## Service Record

Date of Visit	Company	Work Carried Out	Signature

Should you have any questions about your Arada Farringdon stove that have not been covered in this manual please contact your Arada dealer.

Please keep all repair receipts safely.

Please ensure you have this manual available when an engineer visits so they can complete the service record chart.

## FUEL :

#### SAFETY NOTICE

The most efficient use of this appliance is with the fire door closed at all times, apart from re-fuelling (when alight) or cleaning (when cold).

NEVER leave the appliance unattended for an extended length of time with the door open.

**WOOD**— Any type of wood is suitable provided it is well seasoned and has a moisture content below 20%. This usually implies that the timber has been suitably stored to allow moisture to evaporate for at least nine months in the case of soft woods, and at least eighteen months in the case of hard wood.

We recommend that for general burning, wood should be split into logs of no more than 100mm (4") diameter and no more than 14" long. The recommended maximum fuel load is 8lbs (3.5kg)

#### WARNING :

NEVER BURN PLASTICS OR HOUSEHOLD WASTE IN YOUR STOVE.

NEVER BURN LIQUID FUELS OR SOLVENTS IN YOUR STOVE.

NEVER BURN TREATED WOODS LAMINATES COLOURED PAPER, CARDBOARD OR TRASH AND GARBAGE IN YOUR STOVE.

**WARNING**: wet or unseasoned wood must not be used as this will greatly contribute to the creation of tar and creosote which may, in extreme cases, run down the chimney in liquid form. This will seriously

damage both the chimney and the appliance, and increase the risk of a chimney fire.

## Do not exceed the maximum log length detailed in the technical data table on page 9

Please Note : If you have sticky tar inside the appliance or chimney your wood is 'Green' or too wet.

*Please Note : The burn classification for all appliances in these instructions are classed as intermittent use.* 

## LIGHTING THE STOVE

## Prior to lighting the stove for the first time, check with the installer that :

- Installation and all building work is complete.
- The chimney is sound and has been swept and is free from obstruction.
- Adequate provision for combustion air has been made, i.e. a permanent vent of at least 550mm sq per KW of rated output above 5KW, is fitted in the room in which the appliance is installed. That Local Building Codes have been followed during installation. See installation section of this manual.
- All firebox liner panels, throat plate and insulation blanket are in place.
- That the chimney draw has been checked and is within specification. With the chimney warm, the draught should be between 1.2-2 mm water gauge or 0.12 to 0.2 mbar.

#### Refuelling

Re-fuel when the fire has burnt down to a hot ember bed, place in the desired load (do not exceed the recommended maximum) close the fire door and adjust the air control to fully open until the fire is re-established with a good burn rate, normally within 10 minutes,

Re-adjust the air control to achieve the desired heat output burn rate.

**WARNING :** An over drawing chimney can cause over firing, resulting in damage to the appliance.

# ENSURE THAT YOU HAVE READ & UNDERSTOOD THESE INSTRUCTIONS BEFORE LIGHTING THE FIRE.

## ALWAYS WEAR SUITABLE PROTECTIVE FIRE GLOVES WHEN REFUELLING YOUR STOVE.

DO NOT OPERATE THE STOVE WITH CRACKED OR BROCKEN DOOR GLASS.

## The Farringdon is NOT designed to burn any type of coal

## **BURNING WOOD**

- Set the fire by using rolled up newspaper and place a layer of dry kindling wood on top of this.
- Use 2 or 3 fire lighters to light the kindling.
- Set the primary air control to the fully open position. See page 28.
- After the kindling has caught light, you may leave the fire door ajar by about 20mm. If required to aid flue draw (Initial lighting on a very cold day for example)
- The flue draw should be established after 5 minutes, and the kindling well burnt down to form an ember bed.
- Carefully load the stove with a little more kindling and well seasoned wood.
  Avoid building up fuel close to the door glass.
  Keep fuel behind the fuel retainer well inside the firebox, and then close the fire door
- After 5 minutes, regulate the Primary air control, typically reduce to approximately half way.
- Refuel as necessary

The exact position of the air control will vary according to installation factors and some experimentation will be required to acquire the optimum position for burning

The primary air control (Left) should be used to vary the burn rate. 3/4 open will produce approximately 12 kwh for a 3.8kg load (1 hour burn time to refuelling) dependant on fuel quality and moisture content

Please Note : The high temperature paint acquires durability by being "cured" during the initial firings of the appliance. It will give off fumes which are non toxic, but certain persons may find they have an unpleasant or irritant effect. Ensure that the surrounding area is well ventilated during this time.

Please Note : To avoid chimney problems your appliance should not be burnt at a reduced burn rate without a period of fast burning.

## SMOKE / CO ALARMS

# It is always advisable to have a smoke detector & CO alarm fitted in the room where the wood stove is installed

Smoke detectors may be affected if small amounts of smoke are released into the room during re-fueling. To avoid this always open the air supply control to maximum for a few moments prior to opening the fire door to refuel. This will allow time for sufficient heat to build up within the firebox to clear and smoke still present in the lower portion of the flue/connector pipe. Always follow the smoke / CO alarm manufactures instructions on placement and operation.

### Note:

# Do not operate this stove with the fire door open other than for re-fuelling or de-ashing

## Take care to avoid damaging the door glass by excessive slamming of the door, or striking with hard objects.

**WARNING :** Properly installed, with a suitable flue or chimney, operated and maintained correctly, this appliance will not emit fumes into the dwelling. Occasional fumes when de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must be investigated by a registered expert installer.

Stop using the appliance if you smell fumes or see smoke escaping.

If fume emission does persist, the following immediate actions should be taken :

- Open doors and windows to ventilate room.
- Let the fire die or extinguish and safely dispose of fuel from the appliance.
- Check for flue or chimney blockage, and clean if required.

## Seek expert advice!

## **OVER FIRING & CHIMNEY FIRES**

**DO NOT** over fire your appliance. Using flammable liquids or too much wood or firing the stove at maximum for prolonged periods may result in overfiring. If the chimney connector or casing glows red the appliance is being over-fired this may result in a chimney fire. If this occurs :

- Call the Fire Service
- Immediately close all of the air inlets to the appliance, to reduce the air supply to the stove.
- Move items of furniture and combustibles away from the stove, to reduce a risk of fire and to allow access for the fire service.
- Ensure access to the loft space is available.
- Evacuate the property.

The chimney fire may cause structural damage to the chimney. Do not use the appliance until the chimney and connector have been inspected and any damaged parts have been repaired or replaced. This should be done by a registered engineer.

## ASH REMOVAL

The appliance will require ash to be removed periodically but an ash bed of approximately 20mm (3/4") should be maintained. Ash may be removed with a small shovel whilst the fire is still lit by raking the embers of a low fire to one side of the firebox and carefully removing the ash, then repeating the procedure for the other side. Care must be taken not to risk burning of hands or household objects from falling embers.

The ash pan should be emptied at least twice a day or when the level of ash reaches the top of the ash pan. On no account should the ash be allowed to build up to touch the underside of the grate bars, as this will greatly reduce the life span of the grate. When burning wood it is acceptable to maintain an ash bed on top of the grate of approximately 20mm (3/4") without any un-due effect upon the grate bars.

**WARNING :** The ash can be very hot. Empty only into a metal container. Even if the ash appears cold, red-hot pieces of ash may be concealed and could easily start a fire or cause an injury

#### TO EMPTY THE ASH PAN

The Farringdon stove is supplied with a unique ash pan. To empty or remove the ash pan, open the fire door, wearing a safety gloves, draw out the ash pan and unfold the lifting handle of the ash pan and remove from the ash pit chamber. Empty the ash into a suitable steel container with a tight fitting lid.

Replace the ash pan into the stove and close the fire door.

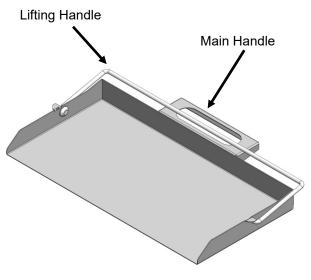


Fig. 9. Farringdon Ash Pan

## **AIR INLET CONTROL**

The Arada Farringdon 12kw stove air inlet control.

The primary air inlet provides the main air supply to the fuel and the *air wash* system through the control slider located under fire door on the *Left* side. Placed fully to the *LEFT* is Low air, and to the *RIGHT* is High air. The air wash system, so called because its pre-heated high speed air, washes across the inner face of the door glass, keeping it clear. This also provides an over draught to the fuel bed, for combustion of the wood fuel.

## **PRIMARY AIR**

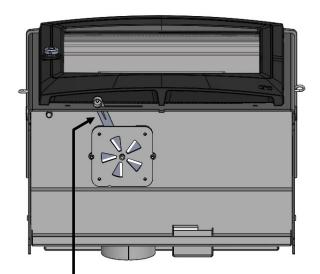
Air enters the appliance through the control at the bottom of the fire door. The Arada Farringdon has a single control slider sliding left to right.

See Fig. 10. & 11. below

Note: The air supply does not fully close intentionally The exact position of the air control will vary according to installation factors and some experimentation will be required to acquire the optimum position for burning

The primary air control (Left) should be used to vary the burn rate. 3/4 open will produce approximately 12 kwh for a 3.8kg load (1 hour burn time to refuelling) dependant on fuel quality and moisture content.

Operation at continuously low burn rates will increase the production of tar and other residues building up in the flue and chimney and should be avoided.



Minimum Closed Position (Lever In LH Position)

Fig. 10.



Fully Open Position (Lever In RH Position)

Fig. 11.

## **OPERATING INSTRUCTIONS**

## MAIN FIRE DOOR HANDLE

A stove mitten is supplied with your Arada Farringdon stove, this is provided for the operation of the fire door handle whilst the stove is in use. Care must be taken when opening and closing the fire door as any surrounding areas of the stove will be very hot.

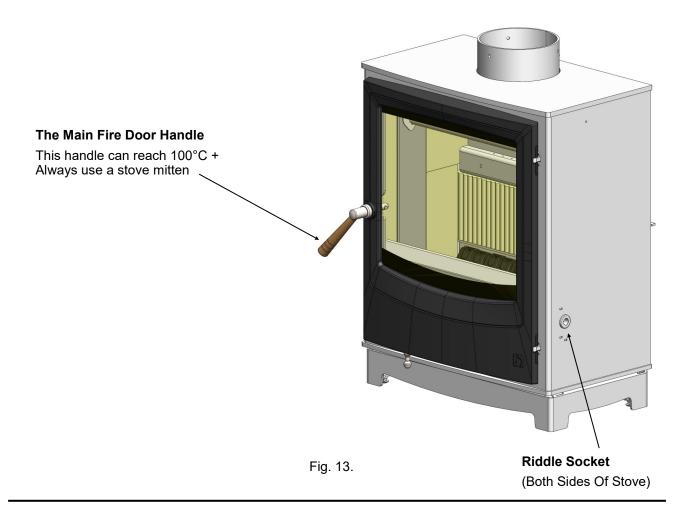
**WARNING**: Never attempt to open the fire door whilst the appliance is in use WITHOUT the use of the stove mitten or suitable gloves, serious injuries may occur. Caution must be given when re-fuelling the appliance, always keep the stove mitten away from naked flames and sparks.

The fire door handle can also be used to operate the riddle mechanism, sockets located on either side of the stove body. This is to aid ash removal by agitating the ash bed and allowing it to drop into the ash pan below.

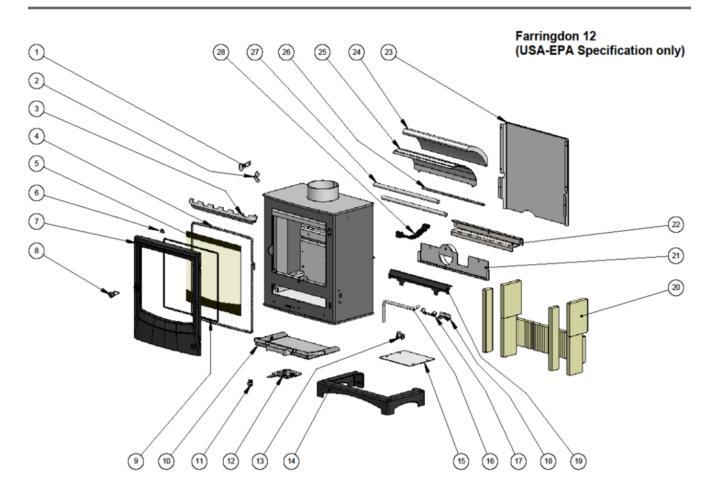


#### .....

#### Fire Door Handle (Oak cladding)



## PARTS LIST



Issue 01 10/11/15

No	Description	Part Number	No	Deceription	Part Number
No.	Description	Part Number	No.	Description	Part Number
1	Liner Fastener	AFS3650	17	Pilot Tube Clamp	AFS3720
2	Airwash Tube Clamp	AFS3655	18	Pilot Tube End Bracket	AFS3725
3	Comb and Extension	AFS3660	19	Fuel Retainer	AFS3730
4	Rope Kit	ARA019	20a	Fluted Rear Liner	AFS3735
5	Glass Kit	AFS3665	20b	Side Liner (Front)	AFS3740
6	Glass Clips	AFS1010	20c	Side Liner (Top Rear)	AFS3745
7	Complete Fire Door	AFS3670	20d	Side Liner (Bottom Rear)	AFS3750
8	Handle Assembly	AFS4015	21	Direct Air Adaptor	AFS3755
9	Gasket and Glass Clips	AFS1361	22	Grate Bar Support	AFS3760
10	Ash Pan	AFS3685	23	Rear Heat Shield	AFS3765
11	Hinge	AFS3690	24	Throat Plate Insulation	AFS3770
12	Air Slider	AFS3405	25	Throat Plate	AFS3775
13	Comb actuator & clevis lock	AFS3795	26	Tertiary Air Bar	AFS3780
14	Farringdon Feet	AFS3700	27	Air Wash Tube	AFS3785
15	Base Air Cover	AFS3710	28	Grate Bars	AFS2375
16	Pilot Tube	AFS3715			

### Arada Stoves – MANUFACTURER'S LIMITED WARRANTY

The warranty policy applies to wood-burning products identified by the Arada and Aarrow trade names only.

Arada Stoves warrants that each stove body will be free of material defect for a period of 10-years from the date of original purchase. If a product is proved to contain a defective component, Arada Stoves will, at its sole discretion authorise repair or replace the defective part at Arada Stoves expense. Arada Stoves will not be responsible for any associated costs incurred by the owner as a result of loss of use.

The stove must have been purchased from an authorised Arada Distributor or Dealer. All products or component parts for which a warranty claim is being made must be returned (at the owners cost) to an authorised Arada distributor or dealer for inspection. If upon inspection, the damage is found to be the fault of the manufacturer, Arada Stoves will either repair the defective part or replace the defective part free of charge and send it to the authorised distributor or dealer.

This 10-year limited warranty is non-transferable and is extended only to, and is solely for the benefit of the original purchaser of the stove. Please retain your dated sales receipt as proof of purchase.

This limited 10-year limited warranty covers repair or replacement of defective body parts ONLY; it does not cover any associated labour or transport costs.

#### **EXCLUSIONS AND LIMITATIONS**

#### This 10-year limited warranty does not cover the following:

1. No warranty is extended to internal consumable parts, such as (but not limited to) baffle plates, baffle assemblies, grate-bars, fuel retainers, grate assemblies, firebricks/vermiculite liners, glass panels, ash pans, and sealing materials such as sealing rope. It is expected that such parts will be exposed to normal wear and tear and will require replacement from time to time.

2. Damage as a result of poor installation and usage other than as described in Arada's installation and operation instructions or if the installation does not conform to local building and fire and safety codes.

3. Handle components or assemblies.

4. Damage caused by over-firing or over-heating (as described in the operation manual). Warping and a red-oxide colouring will demonstrate the over- heating of internal parts; body paint which has turned dusty white is also indicative of such use.

5. Defects or faults caused by local conditions such as draft problems and chimney defects.

6. Damage caused by the use of the wrong fuel type.

7. Arada stoves modified by the user or any companies other than Arada are not covered under this guaranteed.

8. Costs relating to the removal, repair or re-installation.

9. Parts supplied by any manufacturer other than Arada.

Cont:- on page 32

## **GUARANTEE**

#### Arada Stoves – MANUFACTURER'S LIMITED WARRANTY Cont:

10. Damage caused by modifications, inappropriate use or repair.

11. Damage incurred while the stove is in transit; this should be claimed against the shipper or freight carrier. Contact the authorised dealer from whom you have purchased your stove. (Do not operate the appliance as this may negate the ability to process the claim with the carrier).

12. Any Damage caused by not following the servicing and maintenance schedule as set out in the operation manual.

#### Limited 1-year warranty:

- The stove must be installed in precise accordance with the official Arada instruction and operating manual and local building codes and fire and safety regulations.
- Repaired or replaced products are covered only for the remainder of the original warranty period.
- Glass is warranted against damage resulting from thermal shock <u>ONLY</u>, for a 12 month period from date of purchase.

In no event shall Arada Stoves be liable for incidental or consequential damages, injury to persons, property, or any other consequential loss.

Some States do not allow the disclaimer or limitation of damages so you should consult the laws of your State to determine if this limitation applies to you.

#### **DISCLAIMER OF IMPLIED WARRANTIES**

The foregoing limited warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller. Arada Stoves hereby disclaims all warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose.

Some States do not allow implied warranties to be disclaimed. In that event, the implied warranties that cannot be disclaimed are hereby limited to the shortest duration allowed by the applicable state law. This warranty gives you specific legal rights, and you may also have other rights by state law, which vary from State to State.

If you believe your Arada Stove is defective you should return the defective part/stove at your expense together with the original proof of purchase and stove serial number to the place of purchase. If upon inspection the product is deemed to have a manufacturing defect, an official warranty claim will be processed on your behalf.



#### FUEL:

The Farringdon 12 is suitable for **WOOD** burning only.

Use any untreated well seasoned wood with a moisture content below 20%

#### Never burn:-

Any type of coal, charcoal, liquid fuels, garbage plastic of any other household waste.

#### WARNING :

BURN UNTREATED WOOD ONLY. OTHER MATERIALS SUCH AS WOOD WITH PRESERVATIVES OR PAINT COATINGS, METAL FOILS, ANY TYPE OF COAL, PLASTIC, GARBAGE, SULPHUR OR OIL MAY DAMAGE THE STOVE AND FLUE SYSTEM OR CHIMNEY.

#### COMBUSTION AIR CONTROL :

Optimum setting are as follows.. The primary air control (on the left below the door) should be used to vary the burn rate. 3/4 open will produce approximately 12 kwh for a 4.5kg load (1 hour burn time to refuelling) dependant on fuel quality and moisture content.

This is available from your local Arada agent/stove supplier, information and address details can be found on our web site as follows: www.aradastovesandspares.com

### ADDITIONAL INFORMATION FOR CANADA

#### Canada Specific:

Following the revision update to standard : CAN/ULC-S627:2022

## WARNINGS NOTICES:

**DO NOT** obstruct the space beneath the heater.

ENSURE all combustion air openings are not to be obstructed.

**REPLACEMENT** glass panels are to be ceramic material.

**NOTE** : Users should be aware that the authority having jurisdiction may also require the mark of the certifying agency to be included on the product.

**DO NOT** Install in a transportable building or a structure constructed on skids or running gear.

**NOTE :** The Farringdon 12 stove is equipped and has provision for combustion air inlet components, where a space heater is intended for installation in a structure where direct combustion air is required.

**NOTE :** The Farringdon 12 stove has been accessed to meet the requirements of CAN/ULC-S627 and is suitable for installation on a combustible floor, with suitable radiant floor protection in place.

**WARNING :** <u>ALWAYS</u> use specified components and spare parts, during the installation of the appliance. Never use or employ make shift compromises when installing this appliance, risk of serious fires, injury or death may occur.

**NOTE :** In Canada, to comply with CSA B365; *Installation Code For Solid Fuel Burning Appliances & Equipment,* any combustible covering beneath the appliance and/or within the area extending horizontally at least 450mm (18 inch) beyond the appliance on any side equipped with a door and at least 200mm (8 inch) beyond the appliance on other sides, shall be protected by a continuous, durable, non-combustible pad that will provide ember protection. The 450mm (18 inch) ember protection required on any side with a door shall extend for the full width of the appliance plus 200mm (8 inch) required on each side of the appliance without a door.

Where an appliance is installed less than 200mm (8 inch) from a wall, the ember pad need only extend to the base of the wall. An ember pad shall not be placed on top of a carpet unless the pad is structurally supported to prevent displacement and distortion.

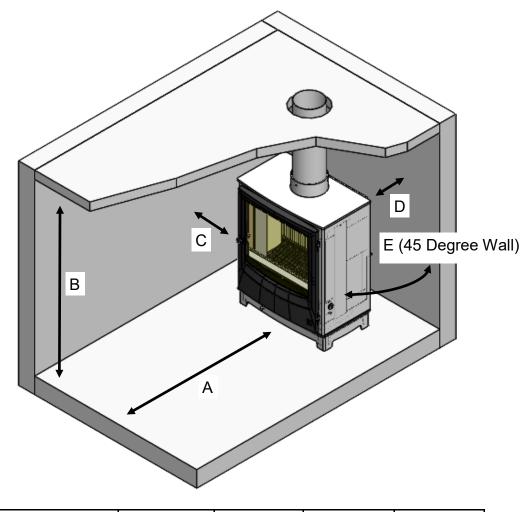
**DO NOT** Install the chimney directly at the outlet of the appliance. A chimney connector (flue pipe) is required to be used.

**NOTE :** A method of maintaining continuity of the airtightness at the location where the chimney or other components penetrates the air barrier system.

#### ADDITIONAL INFORMATION FOR CANADA

## Canada Specific Information: CONTINUED:

**NOTE :** Limitations with respect to installation and minimum installation clearances to combustibles including:



Straight Installations	A Front	B Height Alcove	C Side	D Rear
Minimum Combustible Dimension	458mm (18 inch)	1072mm (43 inch)	305mm (12 inch)	406mm (16 inch)
Corner Installations	A	В	Е	D
	Front	Height Alcove	Side 45 Deg	Rear

**NOTE :** The specification of the chimney as a CAN/ULC-S627 listed or code compliant masonry chimney, must be adhered to during installation of the appliance.





Date of Purchase.....

Name and Address of Supplier.....

.....

Arada Ltd The Fire Works Weycroft Avenue Axminster Devon EX13 5HU United Kingdom Tel: +44(0)1297 632050 www.aradastoves.com