

# Installation Manual

## Installation & Appliance Set-Up

**INSTALLER:** Leave this manual with party responsible for use and operation.  
**OWNER:** Retain this manual for future reference.

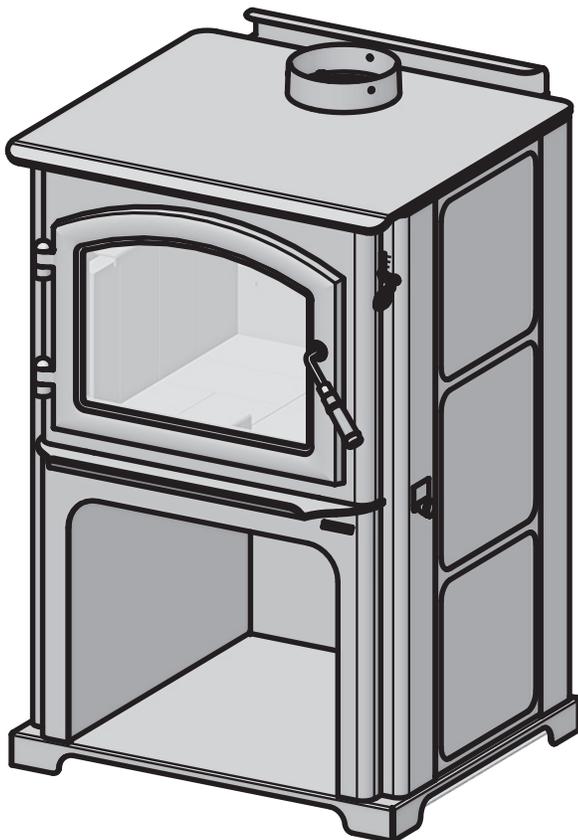
**NOTICE: DO NOT DISCARD THIS MANUAL**

# QUADRA-FIRE

3100 LIMITED EDITION AUSTRALIAN  
WOOD APPLIANCE

Automatic Combustion Control (ACC)

Model:  
**31LE-ACC-AU**



### WARNING



If the information in these instructions is not followed exactly, a fire could result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not over fire - If appliance or chimney connector glows, you are over firing. Over firing will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

### WARNING



#### **HOT SURFACES!**

Glass and other surfaces are hot during operation AND cool down.

Hot glass and appliance will cause burns.

- Do not touch glass until it is cooled
- Use leather gloves when reloading fuel
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures
- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

### WARNING



#### **Fire Risk.**

For use with solid wood fuel only.  
Other fuels may over fire and generate poisonous gases (i.e. carbon monoxide).

**Safety Alert Key:**



- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided may result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the appliance or to property.

**TABLE OF CONTENTS**

|  |          |   |           |
|--|----------|---|-----------|
| <b>1 Important Safety Information.....</b>           | <b>3</b> | <b>4 Chimney Systems.....</b>                   | <b>10</b> |
| A. Appliance Certification.....                      | 3        | A. Locating Your Appliance & Chimney.....       | 10        |
| B. BTU & Efficiency Specifications.....              | 3        | B. Minimum Height of Flue System Exit.....      | 11        |
| C. Glass Specifications.....                         | 3        | C. Chimney Termination Requirements.....        | 12        |
| D. Non-Combustible Materials.....                    | 3        | D. General Flue System Instructions.....        | 13        |
| E. Combustible Materials.....                        | 3        | E. Chimney Height / Rise and Run.....           | 13        |
| <b>2 Getting Started.....</b>                        | <b>4</b> | F. Installing Chimney Components.....           | 13        |
| A. Design and Installation Considerations.....       | 4        | G. Proper Draft.....                            | 13        |
| B. Fire Safety.....                                  | 4        | H. Tested Flue Systems.....                     | 14        |
| C. Negative Pressure.....                            | 4        | I. Un-Tested Flue Systems.....                  | 15        |
| D. Tools And Supplies Needed.....                    | 5        | <b>5 Appliance Set-Up.....</b>                  | <b>16</b> |
| E. Inspection of Appliance and Components.....       | 5        | A. Outside Air Kit Installation.....            | 16        |
| F. Removal of Appliance from Shipping Materials..... | 5        | B. Decorative Panel Removal & Installation..... | 17        |
| G. Install Checklist.....                            | 6        | C. Door Handle Assembly.....                    | 17        |
| <b>3 Dimensions and Clearances.....</b>              | <b>7</b> | <b>6 AS/NZS 2918:2001 General Notes ...</b>     | <b>18</b> |
| A. Appliance Dimensions.....                         | 7        | <b>7 Accessory List.....</b>                    | <b>19</b> |
| B. Hearth Protection Requirements.....               | 8        |   |           |
| C. Firebox Installation.....                         | 8        |   |           |
| D. Clearances to Combustibles.....                   | 9        |   |           |

# 1 Important Safety Information

## A. Appliance Certification

|                    |  |
|--------------------|--|
| <b>Model:</b>      | 3100 Limited Edition AU Wood Appliance |
| <b>Laboratory:</b> | HRL Technology                         |
| <b>Report No:</b>  | HCMG/12/043A                           |
| <b>Type:</b>       | Hardwood only at 25% dry basis         |
| <b>Standard:</b>   | AS/NZS 2918:2001                       |

## B. BTU & Efficiency Specifications

|   |   |
|---|---|
| <b>Overall Average Efficiency Burning Hardwood (AS/NZS 4012)</b>          | 71%   |
| <b>Average Particulate Emission Factor Burning Hardwood (AS/NZS 4013)</b> | 1.4 g/kg  |
| <b>Maximum Average Heat Output Burning Hardwood</b>                       | 7.1kW   |
| <b>Wetback</b>  | Wetbacks are NOT an approved option and must be fitted.         |
| <b>Vent Size:</b>   | 6 inches  |
| <b>Firebox Size:</b>  | 2 cubic feet  |
| <b>Recommended Wood Length:</b>   | 16 inches   |
| <b>Fuel Orientation:</b>  | Front-to-Back   |
| <b>Approved Fuel</b>  | Hardwood only with a Moisture content less than 25% (dry basis) |

## C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified installer, service agency or your dealer.

Hearth & Home Technologies WILL NOT warranty appliances that exhibit evidence of over-firing. Evidence of over-firing includes, but is not limited to:

- Warped air tube
- Deteriorated refractory brick retainers
- Deteriorated baffle and other interior components

## D. Non-Combustible Materials

Material which will not ignite and burn, composed of any combination of the following:

- Steel
- Plaster
- Brick
- Iron
- Concrete
- Tile
- Glass
- Slate

## E. Combustible Materials

Material made of/ or surfaced with any of the following materials:

- Wood
- Compressed Paper
- Plant Fibers
- Plastic
- Plywood/OSB
- Sheet Rock (drywall)

Any material that can ignite and burn: flame proofed or not, plastered or non-plastered.

**NOTE:** Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

The Quadra-Fire 3100 Limited Edition Australian Wood Appliance is Hardwood Certified. Particulate Emissions equaling 1.4 g/kg with a space heating efficiency of 71%.

This wood appliance needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood appliance in a manner inconsistent with operating instructions in this manual.

# Install Guide

## 2 Getting Started

### A. Design and Installation Considerations

Consideration must be given to:

- Safety
- Convenience
- Traffic flow
- Chimney and chimney connector required

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. If you are not using an existing chimney, place the appliance where there will be a clear passage for a factory-built listed chimney through the ceiling and roof.

We recommend that a qualified building inspector and your insurance company representative review your plans before and after installation.

If this appliance is in an area where children may be near it is recommended that you purchase a decorative barrier to go in front of the appliance. Remember to always keep children away while it is operating and do not let anyone operate this appliance unless they are familiar with these operating instructions.



#### CAUTION

Check building codes prior to installation.

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.



#### WARNING

##### Asphyxiation Risk.



- Do **NOT** connect this appliance to a chimney flue servicing another appliance.
- Do **NOT** connect to any air distribution duct or system.

May allow flue gases to enter the house.

#### NOTICE

**Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance system caused by:**

- Inadequate draft due to environmental conditions
- Down drafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Over drafting caused by excessive chimney heights
- Ideal performance is with height of chimney between 14-16 feet (4.26-4.88m) measured from the base of the appliance.

### B. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A CO detector should be installed in the room with the appliance.
4. A practiced evacuation plan, consisting of at least two escape routes.
5. A plan to deal with a chimney fire as follows:
6. In the event of a chimney fire:
  - a. Evacuate the house immediately
  - b. Notify fire department.

### C. Negative Pressure



#### WARNING



##### Asphyxiation Risk.

- Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide.
- Appliance needs to draft properly for safety.

Negative pressure results from the imbalance of air available for the appliance to operate properly. It can be strongest in lower levels of the house.

##### Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water appliances and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
  - Recessed lighting
  - Attic hatch
  - Duct leaks

**To minimize the effects of negative air pressure:**

- Install optional outside air kit with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for all combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the appliance
- Avoid installing the appliance near doors, walkways or small isolated spaces
- Recessed lighting should be a "sealed can" design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed
- Basement installations should be avoided

**WARNING****Fire Risk.**

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with appliance).
- Do NOT Over fire - If appliance or chimney connector glows, you are over firing.

**Any such action that may cause a fire hazard.**

**D. Tools And Supplies Needed**

Before beginning the installation be sure the following tools and building supplies are available:

|   |                             |
|---|-----------------------------|
| Reciprocating saw                                 | Framing material            |
| Pliers  | High temp caulking material |
| Hammer  | Gloves                      |
| Phillips screwdriver                              | Framing square              |
| Flat blade screwdriver                            | Electric drill and bits     |
| Plumb line  | Safety glasses              |
| Level   | Tape measure                |
| Misc. screws and nails                            | 7/16 socket or wrench       |
| 1/2-3/4 in. length, #6 or #8 self-drilling screws |                             |

**E. Inspection of Appliance and Components**

- Remove appliance and components from packaging and inspect for damage.
- Report to your dealer any parts damaged in shipment.
- Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

**F. Removal of Appliance from Shipping Materials**

1. Remove box and 51mm x 102mm structural boards being careful not to damage product.
2. Remove Start Up Air Control Knob by turning counterclockwise.
3. Using Phillips screwdriver remove four screws from back of appliance; set aside. Pull side panel off; set aside.
4. Using a 7/16 socket or open end wrench, remove two lag bolts and washers attaching appliance to pallet and discard.
5. Reassemble side panel assembly
6. Reattach Start Up Air Control Knob to appliance.
7. Repeat steps 3 through 5 for other side of appliance.
8. Carefully pull appliance off of pallet and place in desired location following Hearth Pad and Clearance to Combustibles on pages 8 & 9.

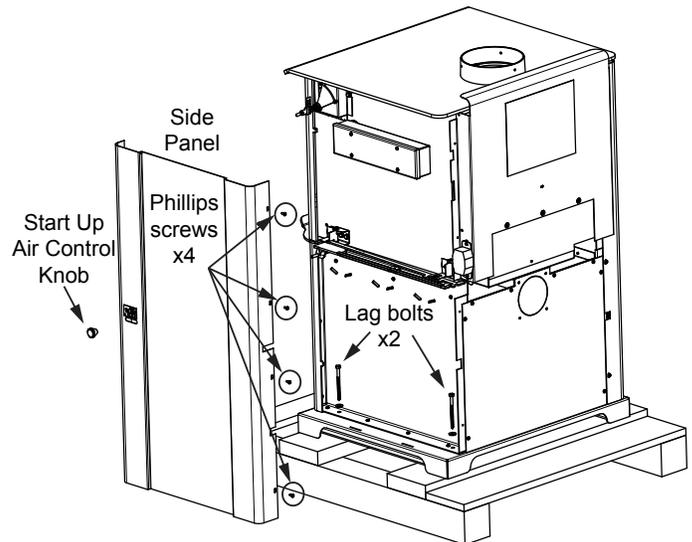


Figure 5.1 Front View

**WARNING****Fire Risk.**

Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report damaged parts to dealer.



**G. Install Checklist**

**ATTENTION INSTALLER:**  
Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: \_\_\_\_\_  
 Date Installed: \_\_\_\_\_  
 Lot / Address: \_\_\_\_\_  
 Location of Appliance: \_\_\_\_\_  
 Installer: \_\_\_\_\_  
 Dealer / Distributor Phone #: \_\_\_\_\_  
 Serial #: \_\_\_\_\_  
 Model: \_\_\_\_\_

**WARNING! Risk of Fire or Explosion!** Failure to install appliance according to these instructions can lead to a fire or explosion.

**Appliance Install**

Verified clearances to combustibles.  
 Appliance is leveled and connector is secured to appliance.  
 Hearth extension size/height decided.  
 Outside air kit installed.  
 Floor protection requirements have been met.  
 If appliance is connected to a masonry chimney, it should be cleaned and inspected by a professional. If installed to a factory built metal chimney, the chimney must be installed according to the manufacturer's instructions and clearances.

| YES                      | IF NO, WHY? |
|--------------------------|-------------|
| <input type="checkbox"/> | _____       |

**Chimney**

Chimney configuration complies with diagrams.  
 Chimney installed, locked and secured in place with proper clearance.  
 Chimney meets recommended height requirements (14-16 feet).  
 Roof flashing installed and sealed.  
 Terminations installed and sealed.

|                          |       |
|--------------------------|-------|
| <input type="checkbox"/> | _____ |

**Clearances**

Combustible materials not installed in non-combustible areas.  
 Verified all clearances meet installation manual requirements.  
 Mantels and wall projections comply with installation manual requirements.  
 Protective hearth strips and hearth extension installed per manual requirements.

|                          |       |
|--------------------------|-------|
| <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | _____ |

**Appliance Setup**

All packaging and protective materials removed.  
 Firebrick, baffle and ceramic blanket installed correctly.  
 All labels have been removed from the door.  
 All packaging materials are removed from inside/under the appliance.  
 Manual bag and all of its contents are removed from inside/under the appliance and given to the party responsible for use and operation.

|                          |       |
|--------------------------|-------|
| <input type="checkbox"/> | _____ |

Hearth & Home Technologies recommends the following:

- Photographing the installation and copying this checklist for your file.
- That this checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/Builder/Other Trades, etc.) and corrective action needed:  
 Comments communicated to party responsible \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_  
 (Builder / Gen. Contractor) (Installer) (Date)

# 3 Dimensions and Clearances

## A. Appliance Dimensions

NOTE: Flue Collar size is 6 inch (152mm) diameter (ID)

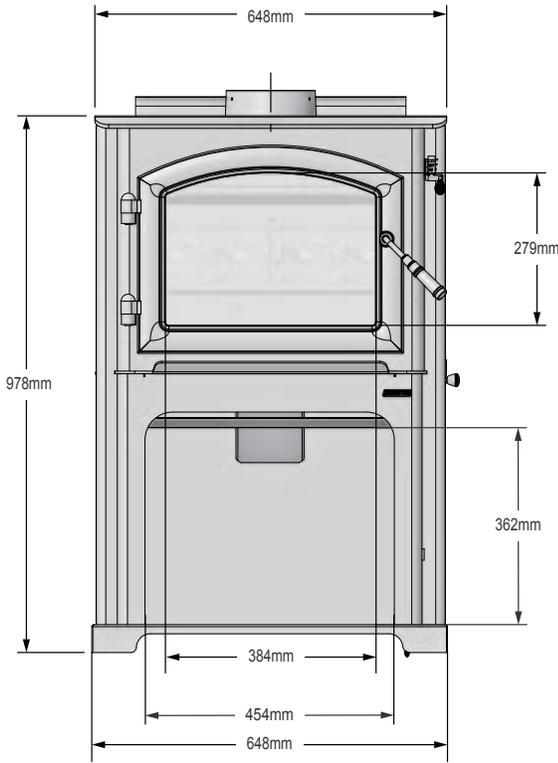


Figure 7.1 Front View

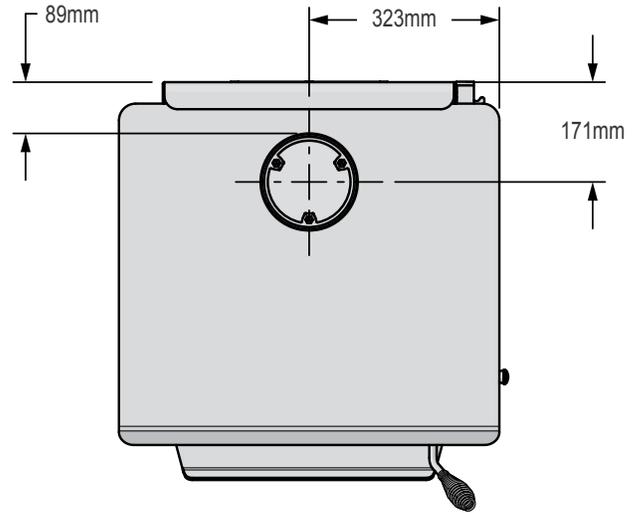


Figure 7.2 Top View

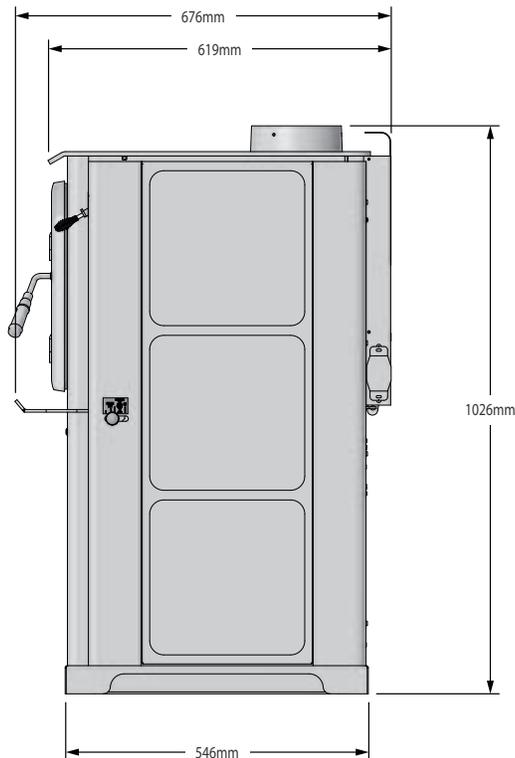


Figure 7.3 Side View

## B. Hearth Protection Requirements

Quadra-fire 3100 Millennium ACC do not require a insulating Floor Protector, as they are tested and comply with the minimum Floor Protector requirements of **AS/NZS 2918:2001**.

### **NOTE**

- The minimum Floor Protector sizes are specified in the clearance chart, see Figures 9.1 and 9.2 on page 9.
- A Floor Protector can include ceramic tiles with grouted joints fixed directly onto a wooden floor or a sheet of toughened glass, panel steel or any other non combustible material laid directly onto a wooden floor.
- If installed directly onto a concrete slab, the concrete slab can be considered as the floor protector, but must maintain the minimum measurement listed.

### **WARNING**



#### **Fire Risk.**

Hearth pads must be installed exactly as specified. High temperatures or hot embers may ignite concealed combustibles.

### **WARNING**



#### **Fire Risk.**

- Comply with all minimum clearances to combustibles as specified.
- Failure to comply may cause house fire.

## C. Firebox Installation

1. If a separate floor protector is being used position now. Place the firebox on the floor protector to suit the minimum installation clearances (**Figures 9.1 and 9.2 on page 9**).
2. Systemically restrain the firebox and the floor protector to the floor.
3. Fit 2mm x 6mm fixings suitable for the floor material. **DO NOT** over tighten.
4. Fit timber trim pedestal edging to front and back of base (optional).

**D. Clearances to Combustibles**

| MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS in Millimeters        |     |     |     |     |    |     |     |      |     |     |      |      |
|---|-----|-----|-----|-----|----|-----|-----|------|-----|-----|------|------|
| Note: A, C, and F Dimensions are to the center of the flue collar |     |     |     |     |    |     |     |      |     |     |      |      |
| 3100 Millennium AU Wood Appliance                                 |     |     |     |     |    |     |     |      |     |     |      |      |
| INSTALLATION  |     |     |     |     |    |     |     |      |     |     |      |      |
|   | A   | B   | C   | D   | E  | F   | G   | H    | I   | J   | K    | L    |
| <b>DOUBLE WALL PIPE</b>   | 345 | 175 | 668 | 360 | 76 | 225 | 800 | 1062 | 300 | 756 | 1197 | 1469 |

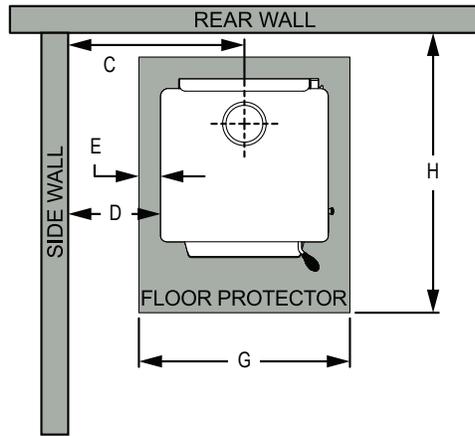


Figure 9.1

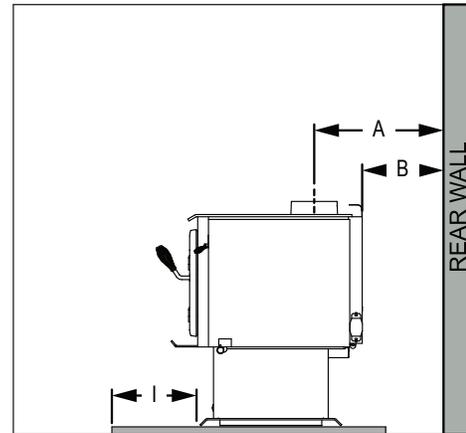


Figure 9.2

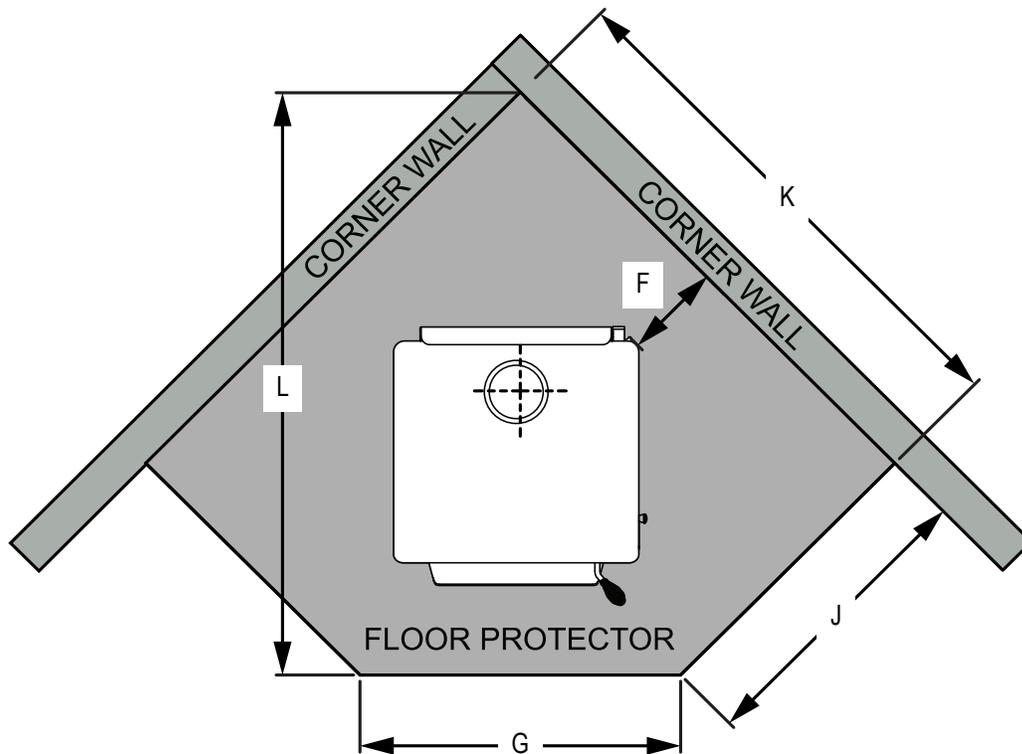


Figure 9.3

**NOTE: Service Space**

In order to replace the tube channel assembly a clearance of 483mm is required on the right side of appliance in order to remove the tubes with the appliance in place.

If space is not available, the appliance will have to be disconnected from the chimney to proceed with the tube replacement.

# 4 Chimney Systems

## A. Locating Your Appliance & Chimney

Location of the appliance and chimney will affect performance. As shown in **Figure 10.1** the chimney should:

- Install through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die down of the fire.
- Penetrate the highest part of the roof. This minimizes the affects of wind turbulence and down drafts.
- Consider the appliance location in order to avoid floor

and ceiling attic joists and rafters.

- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.

Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.

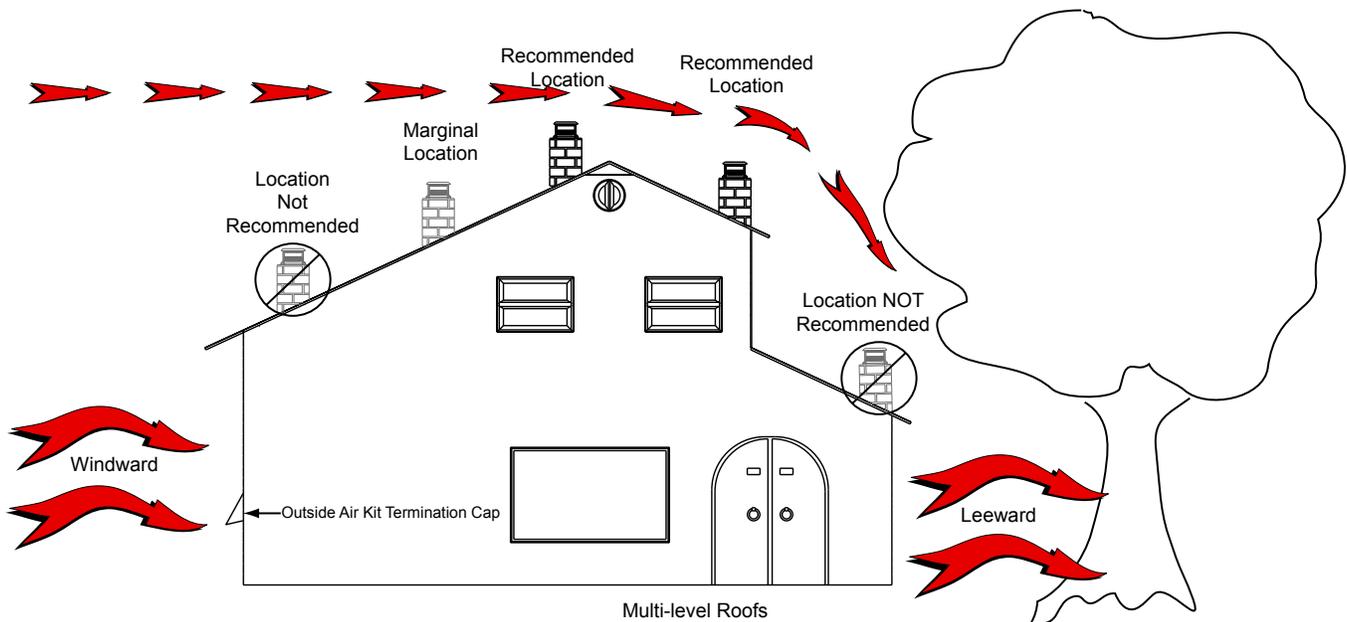


Figure 10.1

## B. Minimum Height of Flue System Exit

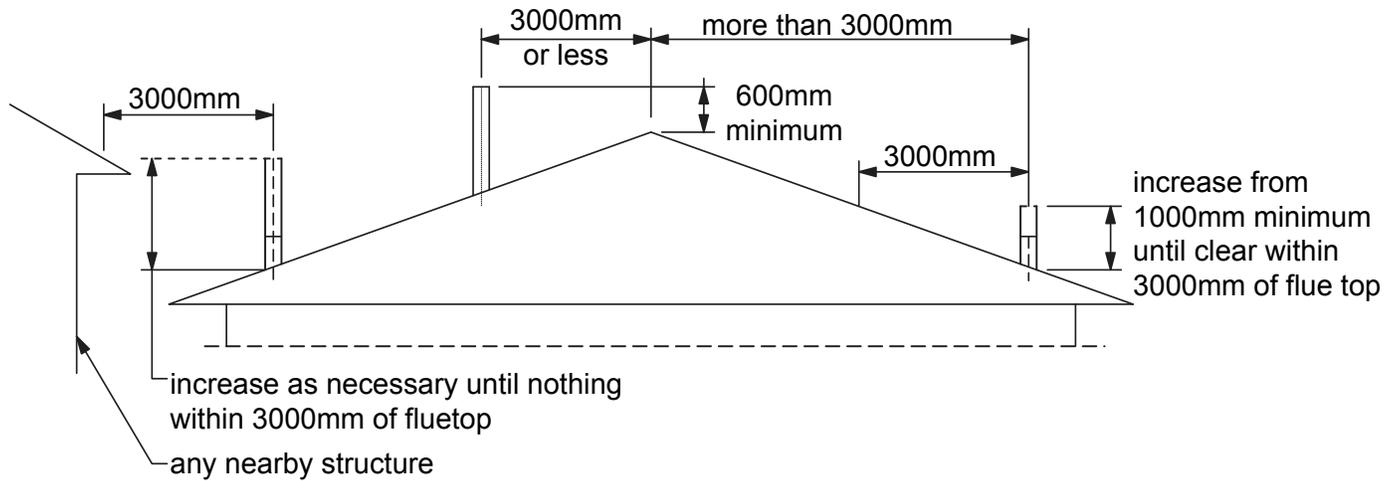


Figure 11.1

### NOTICE:

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

### NOTICE:

**Locating the appliance in a basement or in a location of considerable air movement can cause intermittent smoke spillage from appliance. Do not locate appliance near**

- Frequently open doors
- Central heat outlets or returns

### C. Chimney Termination Requirements

- Flue pipe installed crimp/narrow end down
- Outer casings installed crimped/narrow end up. (Critical when exposed above the roof)
- Inner casings:
  - direction not critical
- Flue pipes:
  - seal all joints including firebox spigot.
  - fix with a minimum of 3 stainless steel rivets
- Flue pipe spacers:
  - affix to flue pipe
- Flue system termination point:
  - Refer to **AS/NZS 2918:2001 4.9.1**, see **Figure 15.2** on **page 15**.
- Flue pipe shall extend not less than 4.6m above top of the floor protector as per **AS/NZS 2918:2001 4.9.1(a)**
- Facade or chase systems:
  - same rule applies as above.
- Roof penetration and flashing method refer to **NZ Building Code E2.(From 01/07/05)**

**NOTE:** These instructions apply to 150mm diameter flue pipe systems as tested to **AS/NZS 2918:2001**

1. Either locate the appliance in position or by measuring at the ceiling mark the flue pipe center position. Check that the outer casing is unobstructed through the attic space or roof area.
2. Spike the center with a nail. Transfer this position to the next surface above. Plumb bob/laser.
3. Cut out the ceiling penetration hole – square or rectangle – short axis equals outer casing diameter plus 50mm, long axis as required. See Tested Flue System on page 14 and Un-Tested Flue System on page 15. Perform the same at the roof penetration.
4. Frame out the hole with minimum 75mm x 50mm timber or as required for roofing material. Minimum requirement at roof penetration see **NZ Building Code E2 Acceptable Solution (from 01/07/05)**.
5. Install the outer casing so that:
  - i. lower end is flush with the underside of the ceiling material and
  - ii. with the addition of metal “L” brackets, affix to the outer casing at 90 degrees secure the outer casing centrally to the ceiling and roof nogs. Alternatively substitute the “L” brackets for 25mm thick non heat sensitive packers. Secure the outer casing through the packers with horizontal fixings to the nogs. Refer to the **General Flue System Instructions** on **page 13** for termination height. The option of outer casing slips to be taken into account.
6. Flash the outer casing to the roof material with the appropriate approved flashing.
7. If using an outer/inner casing combination, now install the inner casing ensuring it extends a minimum 200mm above the high side of the roof penetration. If not using a combination see ‘11’ below.

8. Refer to steps 1 and 2 under **Firebox Installation** on **page 8**.
9. Prepare the ceiling plate and place upside down over the flue spigot.
10. Install the flue pipes by preferred method – either up or down the outer casing. Affix each length per the notes in General Instructions (above). Extend the flue pipe above the outer casing to suit the casing cover/cowl assembly.
11. If the inner casing has not been installed, install now. Refer to step 7 on **page 12** for minimum height.
12. Install the cowl assembly, i.e. Top spacer, casing cover and cowl.
13. Position and secure the ceiling plate with the screws and spacers.
14. Wipe the flue pipe to remove finger marks.
15. Refer to step 3 under **Firebox Installation** on **page 8**.
16. If flue offset is required, refer to **AS/NZS 2918:2001 4.1**



#### WARNING

##### Asphyxiation Risk.

- DO NOT CONNECT THIS Appliance TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
  - DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.
- May allow flue gases to enter the house.



#### WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or your dealer.



#### WARNING

##### Fire Risk.

Follow Chimney Connector Manufacturer's Instructions for Proper Installation.

ONLY use connector:

- Within the room, between appliance and ceiling or wall.
- Connector shall NOT pass through:
  - Attic or roof space
  - Closet or similar concealed space
  - Floor or ceiling

Maintain minimum clearances to combustibles



## D. General Flue System Instructions

1. Unpack the Flue Mounted Shield, detach the three brackets and familiarize yourself with the illustrations.
2. Using a sharp knife or razor blade, carefully cut through the plastic film on the "inside face" where it meets the outer shield (refer sketch). Cut along the full length of the Flue Mounted Shield on both side, then peel off and fully remove the plastic film from the stainless steel inner shield.
3. Peel back and fully remove the plastic film from the outer shield.
4. Fit the top bracket to the Flue Mounted Shield as illustrated ensuring the rear mid section of the bracket fits "outside" while the two outer sections of the bracket fit "inside".
5. Fit the appropriate lower bracket to your wood fire.

Lower Bracket "5B suitable for all other wood fires without an inner rear heat shield. On certain model wood fires without a raised flue spigot it will be necessary to cut off both the lower outer legs from the bracket "5B" leaving the entral tongue to locate inside the flue outlet only.

Two tabs are provided and if folded back at 90 degrees the bracket and Flue Mounted Shield will mount lower onto the appliance.

The Flue Mounted Shield then locates into the two notches provided n bracket "5B" as illustrated.

6. Once the Flue Mounted Shield is fitted in position onto either of the two lower mounting brackets, check to ensure a large gap is not present between the top of the wood fire and the base of the Flue Mounted Shield, as this may result in a hot spot on the rear wall directly behind the flue outlet. If your wood fire has a lift off top grill the Flue Mounted Shield should be raised sufficiently to enable the top grill to be removed.
7. Using the pre-punched holes in the two tabs provided on the top bracket as guides, drill into the flue pipe and secure the top bracket to the flue pipe with two stainless steel rivets (not supplied).

## E. Chimney Height / Rise and Run

This product was designed for and tested on a 152mm chimney, 427-488cm high, (includes appliance height) measured from the base of the appliance. The further your stack height or diameter varies from this configuration, the greater the likelihood it may affect performance.

Chimney height may need to be increased by 2 - 3% per each 305 meters above sea level. It is not recommended to use offsets or elbows at altitudes above 1219 meters above sea level or when there are other factors that affect flue draft.



## WARNING



### Fire Risk.

Do NOT pack insulation or other combustibles between spacers.

- ALWAYS maintain specified clearances around venting and spacers.
- install spacers as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.

## F. Installing Chimney Components Chimney Connector

### Single wall connector or appliance pipe:

This must be at least 24 gauge mild steel or 26 gauge blue steel. The sections must be attached to the appliance and to each other with the crimped (male) end pointing toward the appliance. All joints, including the connection at the flue collar, should be secured with 3 sheet metal screws. Make sure to follow the minimum clearances to combustibles.

### Factory-built listed chimney connector (vented):

The listed connectors must conform to each other to ensure a proper fit and seal.

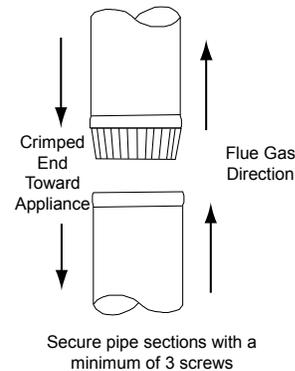


Figure 13.1 - Chimney Connector (Appliance Pipe)

## G. Proper Draft

To be sure that your Quadra-Fire insert burns properly, the chimney draft (static pressure) should be approximately -2.54mm water column (W.C.) during a high burn and -1.016mm W.C. during a low burn, measured 152mm above the top of the insert after one hour of operation at each burn setting.

H. Tested Flue Systems, as per AS/NZS 2918:2001

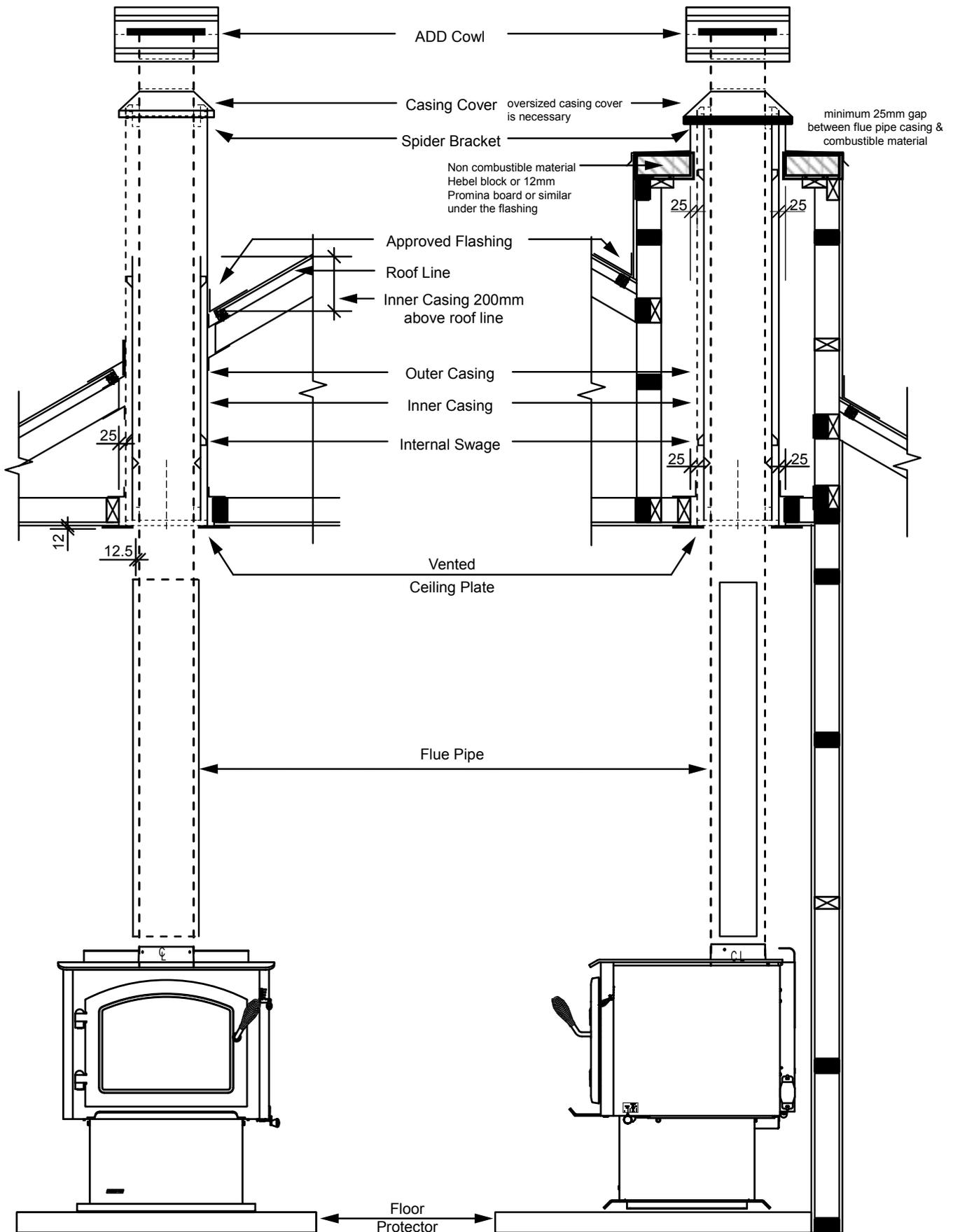


Figure 14.1

I. Un-Tested Flue Systems , as per AS/NZS 2918:2001, 4.6.3(b)

AS/NZS2918:2001

Un-tested flue with sloped ceiling penetration greater than 30° from horizontal

A = 25mm

4.6.3(b)

Fig 4.6 = downward distance of casing and 3 x Ø flue distance of the ceiling plate

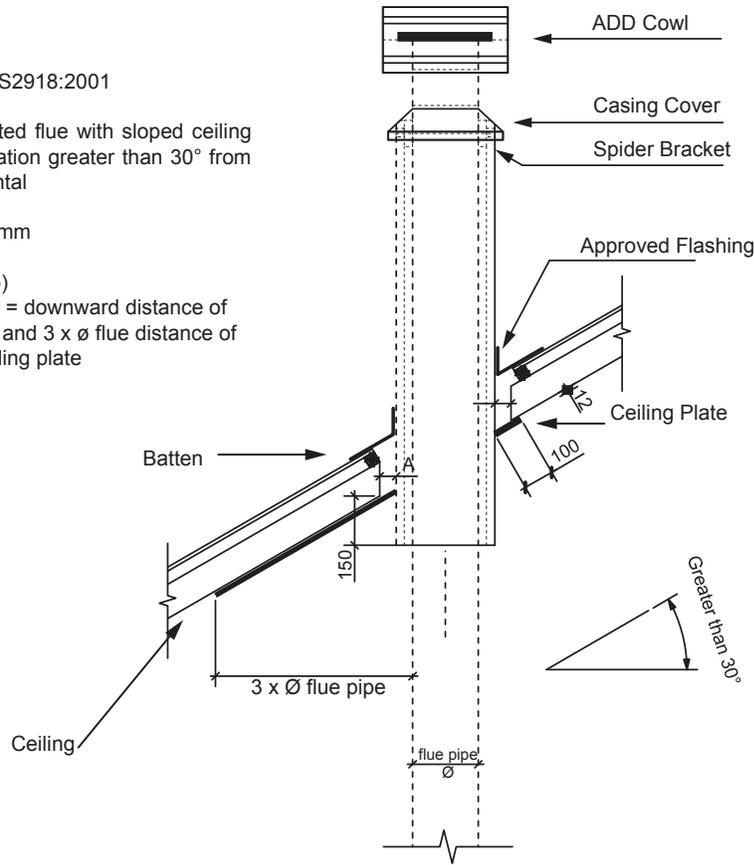


Figure 15.1

AS/NZS2918:2001

Un-tested flue with sloped ceiling penetration greater than 30° from horizontal

A = 25mm

4.6.3(b)

Fig 4.6 = 3 x Ø flue from active flue to heat sensitive surface

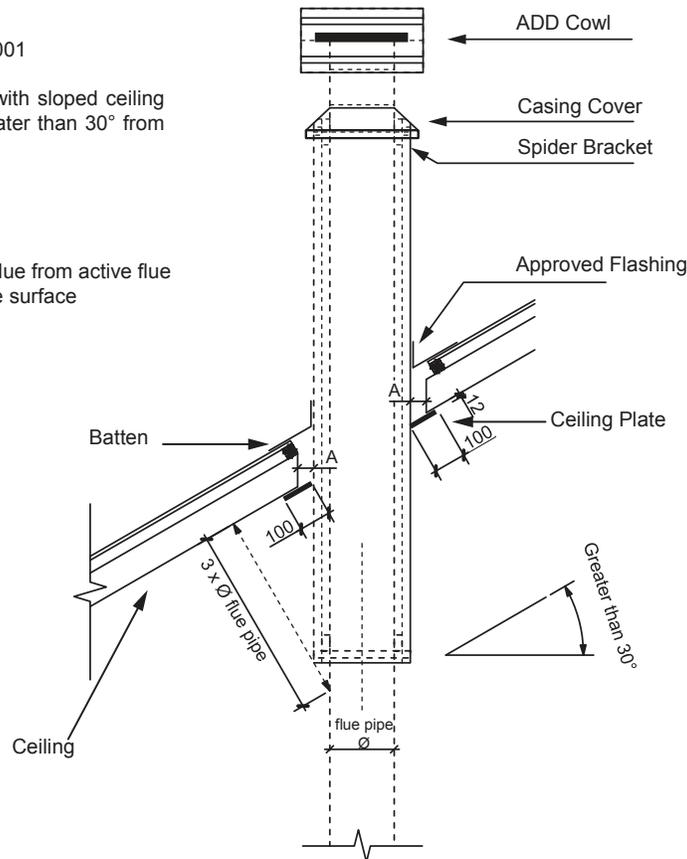


Figure 15.2

# 5 Appliance Set-Up

## A. Outside Air Kit Installation

A source of air (oxygen) is necessary in order for combustion to take place. Whatever combustion air is consumed by the fire must be replaced. Air is replaced via air leakage around windows and under doors. In homes that have tightly sealed doors and windows, an outside air source is needed. An optional Outside Air Kit is available.

### Optional OAK-ACC includes:

Termination cap, (2) wire ties, flex adapter, and fasteners

Items Needed for Installation (not supplied)

- 4 inch flex aluminum pipe, or if using alternate material, then it shall be made from durable, non-combustible, heat resistant material up to 350°F. Cut the pipe to the required length for your installation.
- Phillips head screw driver
- Silicone sealant
- Drills and saws necessary for cutting holes through the wall or flooring in your home.

### Installation Instructions

1. Remove all materials from packing box.
2. **Floor & Rear Installation:** Cut a 102mm hole in outside wall or floor to accommodate outside air piping. Use 102mm aluminum metal flex or rigid piping to directly connect outside air to appliance intake. Use the supplied termination cap with a rodent screen. Seal between the wall (or floor) and the pipe with silicone to prevent moisture penetration.

|   |  |
|---|--|
| <b>! WARNING</b>  |  |
|    | <b>Fire Risk.</b><br><b>Asphyxiation Risk.</b><br>Do not draw outside combustion air from: <ul style="list-style-type: none"> <li>• Wall, floor or ceiling cavity</li> <li>• Enclosed space such as an attic or garage</li> <li>• Close proximity to exhaust vents or chimneys</li> </ul> Fumes or odor may result |
|    |  |
| <b>! WARNING</b>  |  |
|    | <b>Asphyxiation Risk.</b><br>Outside air inlet must be located to prevent blockage from: <ul style="list-style-type: none"> <li>• Leaves</li> <li>• Snow or ice</li> <li>• Other debris</li> </ul> Block may cause combustion air starvation. Smoke spillage may set off alarms or irritate sensitive individuals. |
| <b>! WARNING</b>  |  |
|  | <b>Asphyxiation Risk.</b><br>Length of outside air supply duct shall NOT exceed the length of the vertical height of the exhaust flue. <ul style="list-style-type: none"> <li>• Fire will not burn properly</li> <li>• Smoke spillage occurs when door is opened due to air starvation</li> </ul>                  |

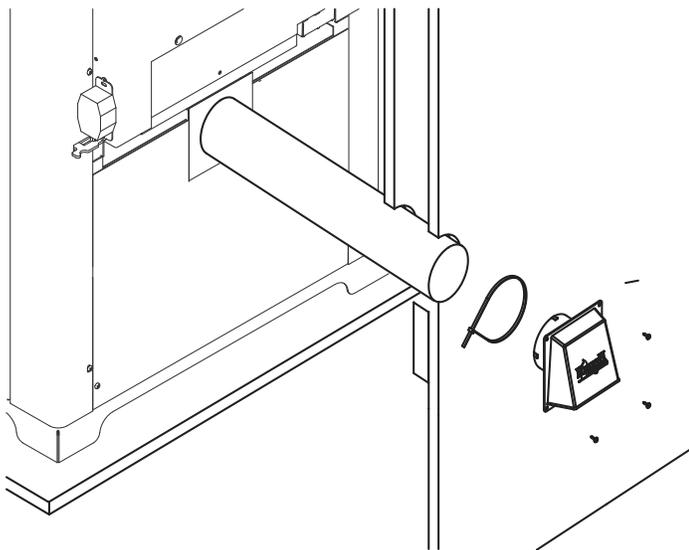


Figure 16.1 - Rear Installation

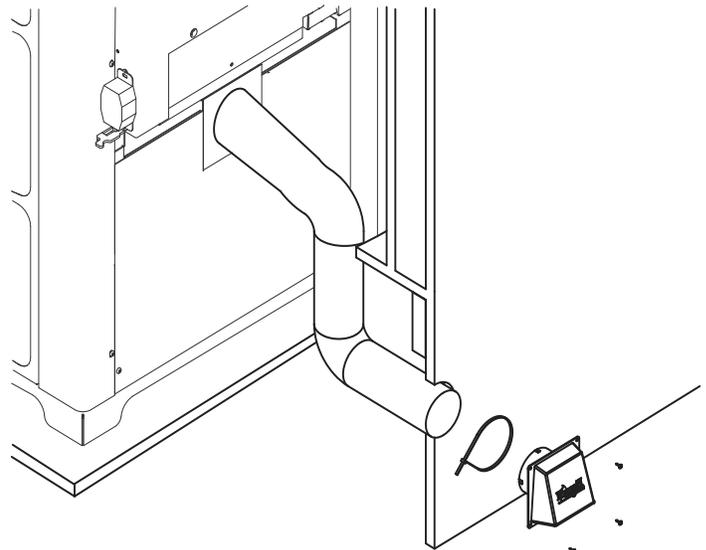


Figure 16.2 - Floor Installation

## B. Decorative Panel Removal & Installation

Your appliance ships with two different side options, one is a solid side panel (**Figure 17.1**) and tile side panel (**Figure 17.2**). There are two of each and no left or right side, these can be changed at anytime.

The appliances are being shipped with a solid side panel securing clip on both sides. Please remove and discard pins prior to use (**Figures 17.3**).

### Solid Side Panel Removal

- Remove solid panel from side by lifting up and pulling away from appliance (use a flat tool to pry from bottom if needed) (**Figure 17.4**).

**Note:** 300°F high temp paint can be use to repaint the solid side panel only! DO NOT use on the rest of appliance this requires 1200°F high temp paint.

### Tile Panel Installation

- Remove tile frame from side by lifting up and pulling away from appliance (**Figure 17.4 reference solid side panel removal**).
- Stack non-combustible material tiles in tile frame as shown in **Figure 17.2**.
- Reattach tile frame **Figure 17.5**.

### Tile Dimensional Requirements:

- Max Thickness: 8mm
- Max Length/Width: 30cm<sup>2</sup>
- Min Length/Width: 29.7cm<sup>2</sup>

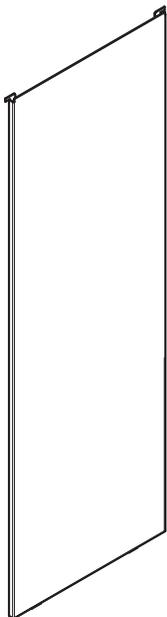


Figure 17.1

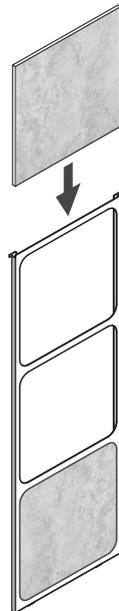


Figure 17.2

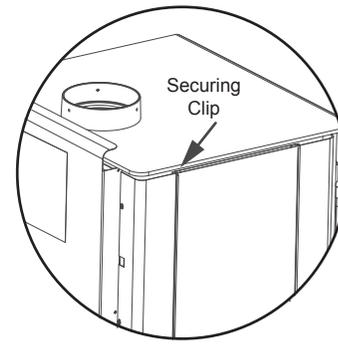


Figure 17.3

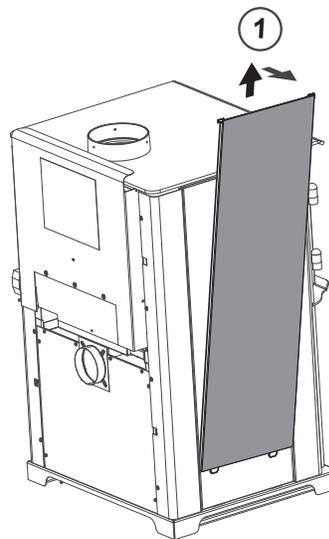


Figure 17.4

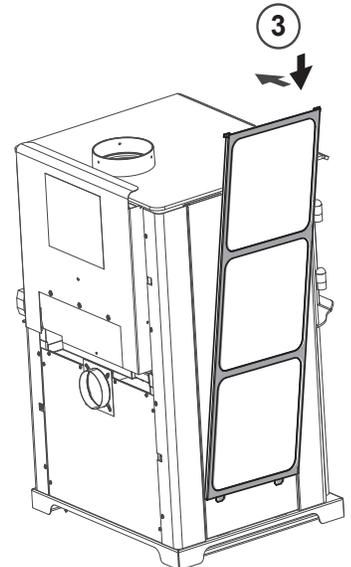


Figure 17.5

## C. Door Handle Assembly

Install fiber handle to door handle rod (**Figure 17.6**).

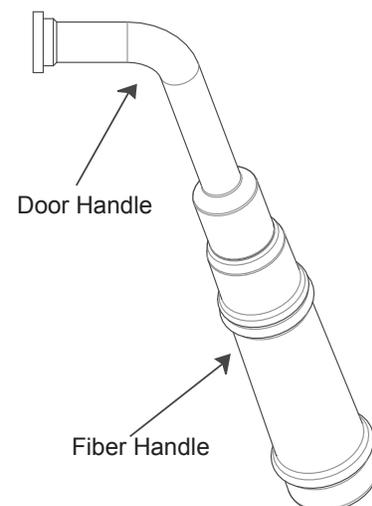


Figure 17.6

### WARNING!

Use only noncombustible materials as a decorative tile.

# 6 AS/NZS 2918:2001 General Notes

---

## WARNINGS

**WARNING:** THE APPLIANCE AND FLUE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH **AS/NZS 2918** AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.

**WARNING:** APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF **AS/NZS 4013** WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING 'TESTED TO **AS/NZS 4013**'.

ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTED FOR COMPLIANCE WITH **AS/NZS 4013**.

**CAUTION:** MIXING OF APPLIANCE OR FLUE SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.

**CAUTION:** CRACKED AND BROKEN COMPONENTS, e.g. GLASS PANELS OR CERAMIC TILES, MAY RENDER THE INSTALLATION UNSAFE.

**WARNING:** ANY MODIFICATION 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 ITS OPERATING.

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

**WARNING:** FOR OPTIMUM PERFORMANCE FUEL MUST BE LOADED SO THE LOGS LAY "FRONT TO REAR" IN PREFERENCE TO LAYING ACROSS THE WIDTH OF THE FIREBOX. SPACES SHOULD BE LEFT BETWEEN THE LOGS TO ENABLE OXYGEN TO GET TO AS MUCH OF THE SURFACE OF THE FUEL AS POSSIBLE.

**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.





**CONTACT INFORMATION**

Hearth & Home Technologies  
352 Mountain House Road  
Halifax, PA 17032  
Division of HNI INDUSTRIES

**Please contact your Quadra-Fire dealer with any questions or concerns.  
For the number of your nearest Quadra-Fire dealer  
log onto [www.quadrafire.com](http://www.quadrafire.com)**

**CAUTION**

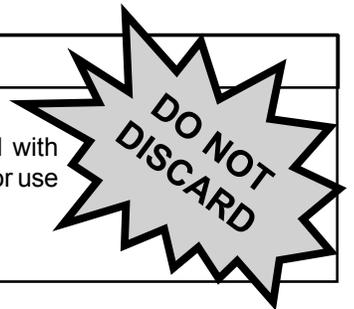


**DO NOT DISCARD THIS MANUAL**

Important operating and maintenance instructions included.

• Read, understand and follow these instructions for safe installation and operation.

• Leave this manual with party responsible for use and operation.



**We recommend that you record the following pertinent information for your heating appliance.**

Date purchased/installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer phone: \_1(\_\_\_\_)\_\_\_\_ - \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.

