

OPEN FIREPLACES

INSTALLATION AND OWNERS MANUAL

440 - 1050 UNITS



IMPORTANT: Read all instructions carefully before starting installation. Failure to follow these instructions may result in a fire hazard and will void the warranty.

WARNING



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

INSTALLATIONS TO COMPLY WITH AS/NZS2918:2018 AND WILL REQUIRE A BUILDING CONSENT



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 a house fire.

Introduction and contents

Thank you for purchasing a Jetmaster fireplace. Please read this manual carefully to ensure the correct installation.

There are different methods of installing a Jetmaster fireplace depending on the unit size. Before conducting any works, please go to the relevant section of this installation manual.



Warning! Please read these instructions carefully. Failure to adequately follow the instructions can result in serious injury or death.

Contents

Page	Section	Information
2-3	1. Getting started	
4	2. Components and specifications	Unit and Gather
5	2. Components and specifications	Surround, Cowl, Logpan and Screen
6	3. Timber framing specs	All units
7	4. Clearance requirements	Hearth
8	4. Clearance requirements	Enclosure construction
9	5. Flue & Chimney requirements	General requirements
10	5. Flue & Chimney requirements	Installation
11	6. Existing brick chimney installation	Installation guide
12	6. Existing brick chimney installation	diagrams
12	7. General use	Attaching firescreen, lighting a fire
13	7. General use	Fuels, Cleaning, Maintenance & Safety
14	AS/NZS 2918:2018	General notes

Install Guide

1. 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.



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: JETMASTER 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:

- 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.
- A practiced evacuation plan, consisting of at least two escape routes.
- 5. A plan to deal with a chimney fire as follows: 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:

- 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.

JETMASTER VIC 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 JETMASTER VIC.
- Installation and/or use of any component part not approved by JETMASTER VIC.
- Operating appliance without fully assembling all components.
- Do NOT Over fire If appliance or chimney connector glows, you are over firing.

Any such action that may cause a fire hazard.



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.

D. Tools And Supplies Needed

Touch up paint - Stove bright satin black

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

Reciprocating saw Flat blade screwdriver Electric drill and bits

Hand saw Plumb line Framing material pliers Safety glasses

High temp caulking material Level

Hammer Tape measure

Gloves Misc. screws and nails Phillips screwdriver 10mm socket or wrench

Framing square 1/2-3/4 in.

R3.5 Fibreglass insulation (if required)
75mm Hebel Powerpanel (if required)

E. Inspection of Appliance and Components

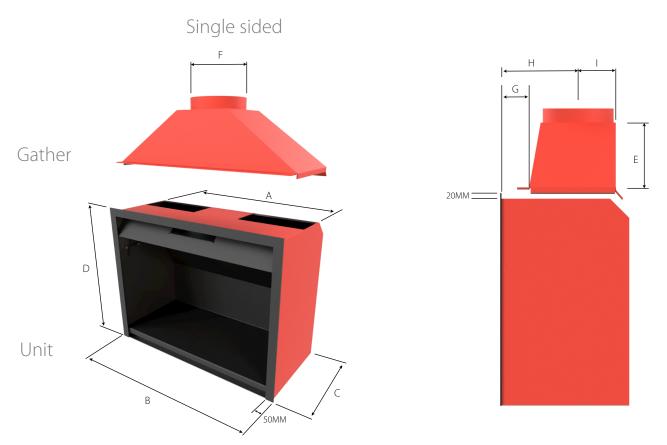
- Remove appliance and components from packaging and inspect for damage.
- · Report to your dealer any parts damaged in shipment.

Due to the nature of thick welded steel, it is normal and expected for some imperfections and slightly out of square components. It is recommended to not begin construction of cavity or flue penetration points until after the unit is in place on site.

Surface scratches can and will occur during installation - it is normal to expect to touch these visible surfaces up with Stove Bright Satin black. Deep scoring may require a light sand and respray. This is normal and not covered by warranty.

• Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

2. Components and specifications - single sided



A Jetmaster firebox may be installed without a gather in an existing brick chimney only where it is in good working order, structurally sound and passes a static smoke test.

Gather must be securely bolted to the unit (if used)

Optional 3 and 4 sided 100mm surrounds are available. Add 100mm to B measurement for coverage

MODEL	Α	В	C	D	Е	F	G	Н	I
440	470	510	330	610	200	200	80	190	140
500	570	600	350	650	200	200	90	230	120
600	670	700	350	650	200	200	90	230	120
600 LOW	670	700	350	600	200	200	90	230	120
700S	770	800	350	650	200	200	90	230	120
700SH LOW	770	800	350	600	200	200	90	230	120
700 D	770	800	400	700	200	225	100	250	150
850	920	950	450	750	220	250	130	300	150
850 LOW	920	950	450	700	220	250	130	300	150
1050	1120	1150	500	800	240	300	150	320	180
1050 LOW	1120	1150	500	750	240	300	150	320	180
1050 LOW LOW	1120	1150	500	700	240	300	150	320	180

Measurements are in mm and provided as a reference only.

[•] Due to the nature of thick welded steel, it is normal and expected for some imperfections and slightly out of square components. It is recommended to not begin construction of cavity or flue penetration points until after the unit is in place on site.

2. Components and specifications

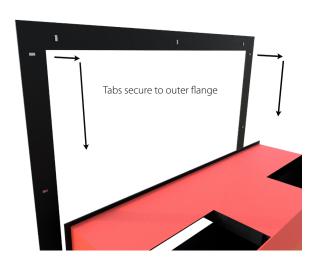
Optional 100mm surround

The surround should be installed before sliding the unit into it's final position.

Lift the surround above the fireplace outer flange and locate the external tabs over the flange and lower into place. Ensure the top folds clip on securely.



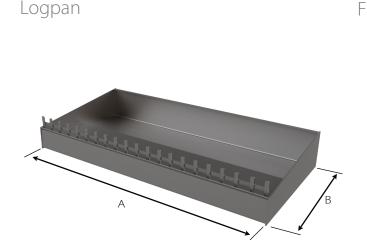


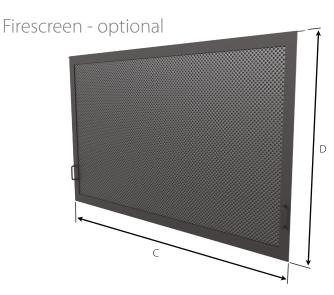


For solid fuel applications only, a rotating bird cowl will assist in preventing the effects of downdraft as it turns with the direction of wind.

Other solid fuel cowls may be desired to achieve a visual design and such cowls can be used but must not restrict airflow from the flue pipe casings.

For gas applications an AGA approved cowl must be used.





MODEL	Α	В	С	D
440	425	230	425	430
500	480	255	495	455
600	575	255	595	455
600 Low	575	255	595	405
700 S	675	250	695	455
700 Sh Low	675	250	695	405
700 D	675	315	695	500
850	820	350	845	545
850 Low	820	350	845	495
1050	1025	400	1045	590
1050 Low	1025	400	1045	540
1050 Low Low	1025	400	1045	490

- Measurements are in mm and provided as a reference only.
- Due to the nature of thick welded steel, it is normal and expected for some imperfections and slightly out of square components. It is recommended to not begin construction of cavity or flue penetration points until after the unit is in place on site.

3. Timber framing specification

UNIT	A - HEIGHT	B - WIDTH	C - DEPTH
440	1235	720	455
500	1275	820	475
600	1275	920	475
600 LOW	1225	920	475
700S	1275	1020	475
700SH LOW	1225	1020	475
700 D	1325	1020	525
850	1375	1170	575
850 LOW	1325	1170	575
1050	1425	1370	625
1050 LOW	1375	1370	625
1050 LOW LOW	1325	1370	625



Note:

Timber framing should be constructed using normal framing methods. Image above is an example only. Do not install finishing materials around the cavity until after the fireplace has been installed. Frame height from top of the 100mm hebel hearth base. Refer to the following page for hearth requirements

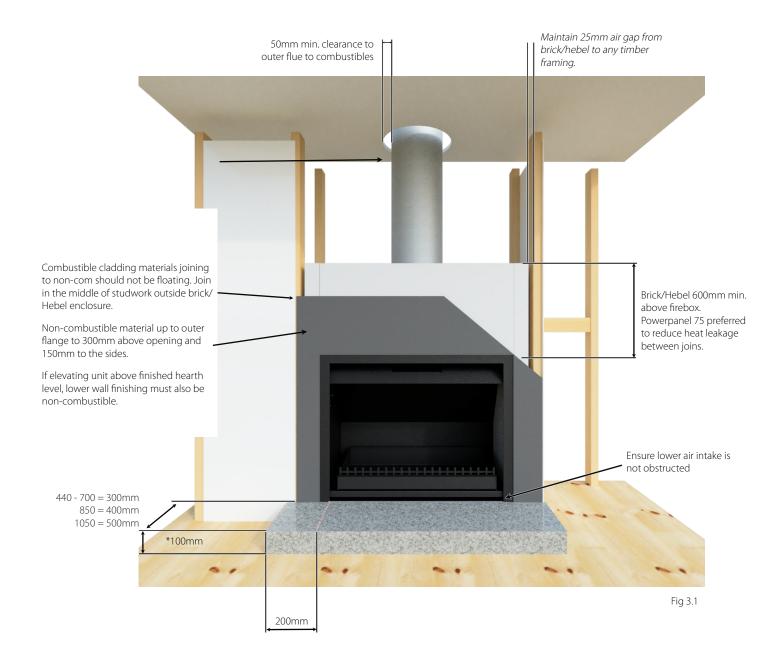
4. Clearance requirements - Hebel installation up to 1050 sizes

A hearth should be used under the appliance with a minimum depth of the 'C' measurement + 100mm to the rear and 'A' + 200mm in width and be centrally located. (refer section 2 components)

- 440 700 Must project forward of aperture by a minimum of 300mm.
 * In the case of a hearth level (in-line) with a combustible floor material, projection to be extended by 100mm to a minimum total of 400mm.
 - * 850 Must project forward by 400mm
 - * 1050 Must project forward by 500mm
- Must project either side of aperture by a minimum of 200mm.
- 100mm minimum thickness

Includes finishing material if using 12mm sheet of fibre cement with a 50mm layer of Hebel Powerpanel 50. The Thermal resistivity of the floor protector is 0.31m².K/W for 50mm thick Hebel Powerpanel.

Clay bricks (75mmx110mmx230mm) if used as a hearth must be laid on the 110mm edge combined with 12mm cement sheet. (See joint AS/NZS 2918:2018 3.3.2). Bricks on the 75mm face is insufficient in terms of thermal resistivity to be compliant.



100mm 3 and 4 sided surrounds are available if greater coverage over cladding materials is required

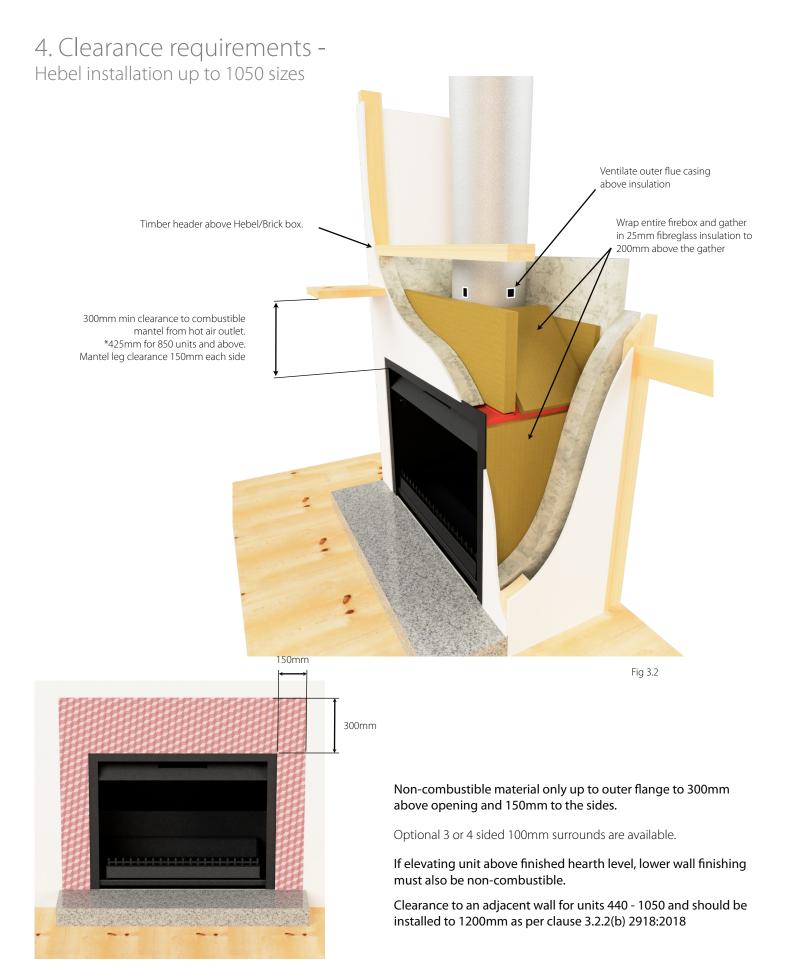


Fig 3.3

5. Flue & chimney requirements

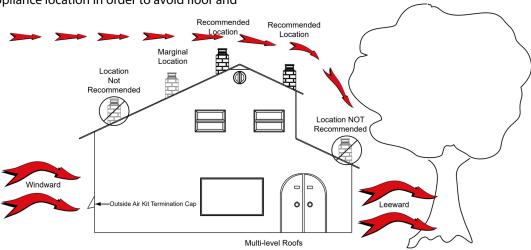
Location of the appliance and chimney will affect performance. As shown in Figure xx the chimney should:

- 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

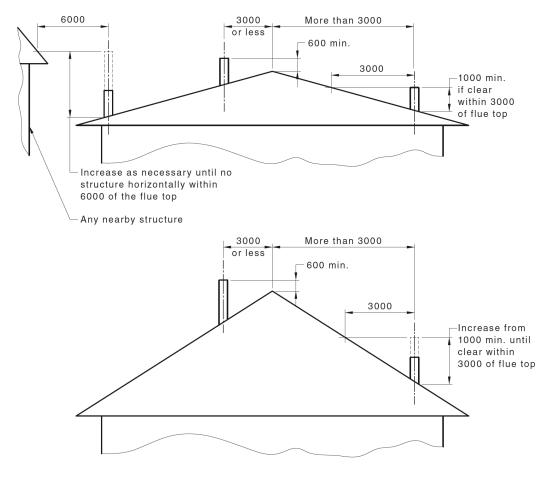
ceiling attic joists and rafters.

• 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.



Minimum height of flue system exit Solid fuel AS/NZS 2918:2018



DIMENSIONS IN MILLIMETRES

NOTICE:

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

of considerable air movement can cause intermittent smoke spillage from appliance.

NOTICE: Locating the appliance in a basement or in a location

Do not locate appliance near

- Frequently open doors
- Central heat outlets or returns

5. Flue & chimney requirements cont...

Existing chimneys should be inspected and cleaned by a qualified professional prior to installation. The chimney must not have cracks, loose mortar or other signs of deterioration and blockage. Jetmaster recommends a certified professional or a technician, under the direction of a certified professional.

Single skin flue (stainless steel) must be completely enclosed with single skin brickwork, concrete, or autoclaved aerated concrete block. A chimney plate will be used to weather seal the chimney.

Twin skin flues (stainless steel inner, and galvanised outer) can either be left exposed or enclosed with stud walls and sheet plaster or timber. A minimum of 50mm clearance must be maintained between the outer flue and <u>any</u> combustibles within the chase or ceiling cavity. **(Fig 5.1)**

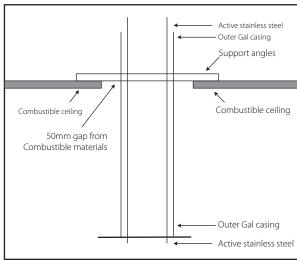


Fig 5.1 Ceiling penetration clearances

Rivet an inner active starter flue with two female ends to gather to allow second length to have crimp facing down. (Fig 5.2)

The outer flue is then installed outside active flue with crimp facing up to ensure water penetration on flue above roof runs out.

Rivet active flues together at crimped joins.

Fix outer non-active flues to active inner flues use 3×25 mm self-tapping screws through outer flue at bottom at each join and on top at each join. As an alternative, rivet 4×25 mm conduit saddles at each join top and bottom.

Ventilate the flues, cut 4 x 25mm notches at bottom of first length of outer flue and top of outer flue in either the ceiling cavity or just below the ceiling. When using a cover cone drill a series of holes into the outer flue below the Cover cone, to ensure adequate ventilation. It's important to ensure airflow between the outer and active flues. (Fig 5.3)

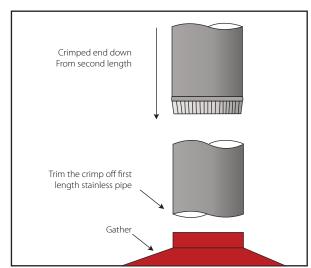


Fig 5.2

Cowl

For solid fuel applications only, a rotating bird cowl will assist in preventing the effects of downdraft as it turns with the direction of wind. (Fig 5.3)

Other solid fuel cowls may be desired to achieve a visual design and such cowls can be used but must not restrict airflow from the flue pipe casings.

For gas applications an AGA approved cowl must be used.



Fig 5.3

6. Existing brick chimney installation

Please read these instructions before beginning Step by step checklist

1. Check the chimney for cracks, cavities and blockages and repair these. The size of the Jetmaster Firebox is determined by the minimum dimensions of the chimney flue. Minimum flues areas are:

Model 500, 600, 700sh-400 cm2

Model 700D, 850-450 cm2

Ensure that this area is maintained throughout the entire chimney. Flues that are 10% smaller than this will work depending on the height of the chimney. Chimney pots that are too small should be removed. Conduct a smoke test prior to a Jetmaster install to ensure the chimney properly draws.

If the chimney does not draw, do not proceed with the installation. Further repairs may be required.

2. Measure the width, depth height of the recess. The following table lists the minimum dimensions of the recess

for each unit.

UNIT SIZE	WIDTH	DEPTH	HEIGHT
500	570	350	640
600	670	350	640
600 LOW	670	350	590
700SH	770	350	640
700 LOW	770	350	590
700D	770	400	690
850	920	450	740
850 LOW	920	450	690
1050	1100	500	790
1050 LOW	1100	500	690

- Allow 25mm on each side of the firebox for insulation
- **A.** If recess is too large:

The recess can be reduced by inserting bricks or Hebel at the sides and/or back, and where necessary between the top of the unit and the underside of the lintel. The existing hearth can also be built up either with bricks or by forming a plinth.

Use Jetmaster fascias and trims to seals gaps less than 75mm between sides and top of the unit and masonry.

B. If recess is too small:

The recess can be made deeper by removing the rollback and smoke shelf. If the height is too low, remove the lintel and replace at the required height.

If the sides have to be removed it is suggested an experienced builder to do the work as the sides support inner flues of the chimney.

NOTE: Allow 1-5mm expansion gap for all materials.

3. Repair any cracks or cavities in the recess especially if it has been chopped out to accommodate a specified unit size, and the cavity between a double brick wall has been exposed.

Note: No metal gather or flue is required if the chimney passes a smoke test.

4. Tape the insulation to back and sides of the Jetmaster and slide into position, taking care not to snag the fibreglass insulation against the sides.

Note:

A. Do not recess the unit by more than 110mm.

B. The two smoke outlets on the firebox marry up with the existing chimney. (There must be a 200mm minimum to any overhang above smoke outlets).

C. Do not obstruct air intake at the bottom of the unit.

5. Use foil tape and cardboard to temporarily seal outer edges of the unit to the chimney face then have a test fire using a mixture of dry and damp paper to create a smokey fire

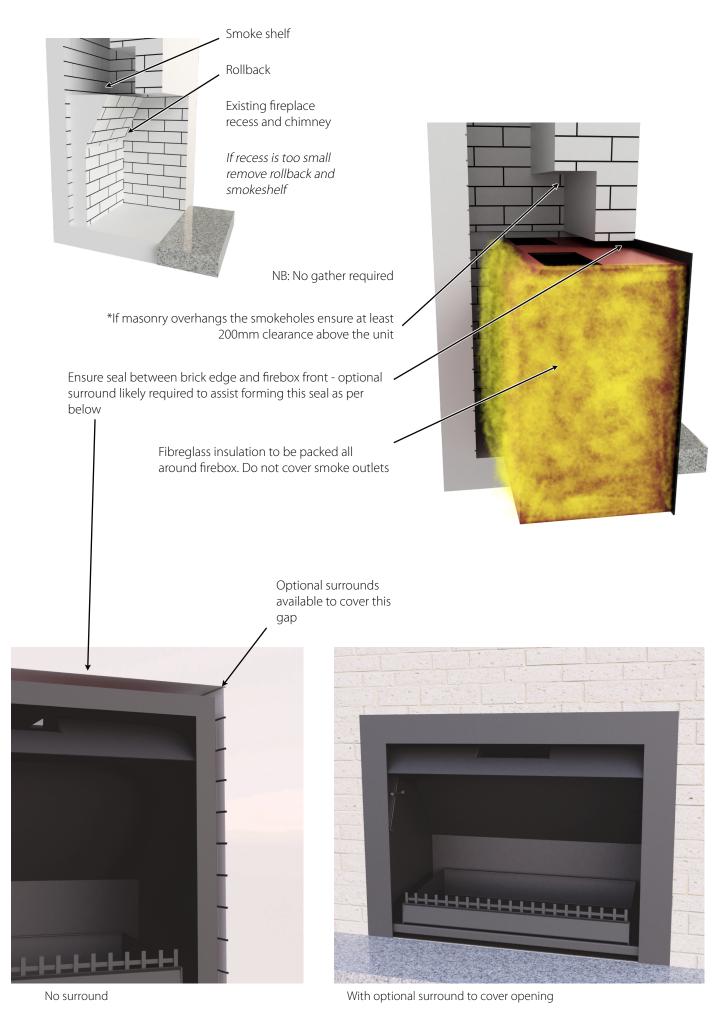
If continuous smoke spillage occurs, check the size of the chimney pots and the chimney for blockages.

"Downdraught" (wind blowing down the chimney) is recognised by occasional puffs of smoke. In this case use a Jetmaster rotating cowl or a high wind cowl.

6. Seal unit into position with the masonry, fascias or trims, ensuring any air leak around frame is limited. Allow masonry work to cure for a minimum of three days.

See next page for diagrams.

6. Existing brick chimney installation



Jetmaster

Page 12

7. General use

Attaching optional fire screen

To attach the firescreen, **1.** place either the left or right side hook in between the outer flange and the lowest part of the upper deflector where it meets the flange. **2.** Raise the opposite side to the top corner of the upper corner to locate the alternate hook inside the flange. **3.** Lower into place. For removal, follow the opposite of this instruction.



General usage info

How to use the wood fireplace

Your Jetmaster fireplace is designed not to spill smoke and by following a few instructions you will achieve optimum heat output, convenience and fuel economy. Please note that during the first fire the paint goes through a bonding process called curing which may emit odours. This is normal and it is recommended to open windows to outside to allow the fumes to disappate.

Lighting a fire

There are many different ways to successfully light and run a fire all of which require an even balance of the 3 elements of combustion. Fuel, Heat (ignition source) and Oxygen - if your fire is not operating cleanly it will be due to one of these elements being compromised. Jetmaster recommends the Home Heating Association website www.homeheat.com.au as a terrific resource for further information on tips and FAQ's on solid fuel troubleshooting.

- 1. Ensure the damper is in the full open position. Pull the handle on the left side towards you with the steel handle provided.
- 2. In firebox lay your fire lighters 10 to 15 centimetres apart, depending on the size of your firebox. Do not use newspaper as a fire lighter. On units that are installed with a dual spigot gather, it is recommended to light 2 fires directly underneath the two separate flues.
- 3. Add soft wood kindling in a criss cross pattern above the firelighters. Softwood kindling allows for fire to light quicker and burn hotter.
- 4. Light fire with match or gas lighter. Leave for 5-10 minutes maximum and do not leave unattended.
- 5. Load pieces of hardwood that are no wider than a drink can in a criss cross pattern.
- 6. After 30 minutes add the large pieces of hardwood. These pieces should be no bigger than a loaf of bread. You may attach your screen now if desired.
- 7. After 45 minutes you can adjust the damper to slightly slow the fire down. The amount you can close it will depend on the type of wood used and general weather conditions.

If the fire begins to spill smoke, adjust the damper to a more open position. Do not close the damper more than 50% when the fire is in operation. Once the fire is extinguished, closing the damper will reduce cold drafts and heat loss associated with the open flue.

Always leave a bed of ashes up to the centre crest of the logpan for ease of lighting and to prolong the life of and protect the logpan. Excess ashes should be removed when necessary, placed in a non-combustible container with a tightly fitting lid and moved outdoors immediately to a location clear of combustible materials.

Fuels

The quality of firewood is extremely important. How long a tree has been felled or dead for does not indicate how dry the wood is.

The best way to dry wood is to split it and expose the inner core allowing the sun to dry the wood naturally.

Good wood merchants will split the wood for you, but may not season it for you.

The amount of you pay for your wood does not justify how dry the wood is. The only way to know how dry your wood is, is to use a moisture meter measuring from the inner core of the wood.

Only burn wood under 20% moisture. Anything over 20% and your wood heater will not work efficiently. The energy from the fire will be used to reduce moisture in your wood and not produce heat for your house.

Store your wood for at least 12 months after your have purchased it. Your wood should be at a perfect moisture level, of around 15 to 20%. Never burn treated wood or painted wood.

Cleaning

The Jetmaster Log Pan is designed to give greater heat and fuel efficiency. For the duration of the cold season the Log Pan should never be emptied. The resulting bed of ash and coals from previous fires will soon become a heat bank generating more heat than the burning logs. This ash bed also insulates and greatly extends the life of the Log Pan. This is why an ash bed must be maintained at all times

When the level of the ash bed becomes too high, the top layer can be removed. Depending on frequency of use and quality of wood, this skimming procedure should not be required more than once or twice a Season!

To prevent chimney fires as well as enabling the chimney to draw properly, the chimney/flue should be swept at least once a season, subject to the quality of timber used in the fire.

General Maintenance

The visible parts of your Jetmaster can be cleaned with a damp cloth or soft brush. Should you wish you could repaint the unit with a heat resistant paint?

Safety

The Jetmaster is a safety-tested unit, however, you must never leave an open fire unguarded. Jetmaster has a screen that is designed to prevent sparks leaving the fireplace and very resistant to being accidentally knocked over by young children.

AS/NZS 2918 General notes

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: THIS APPLIANCE SHOULD NOT BE OPERATED WITH 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: OPEN AIR CONTROLS AND DAMPER WHEN FITTED BEFORE OPENING FIRING DOOR.

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.