

# SPECIFICATIONS



\*034\*



WAGENER

# Sparky



*The cute wee fire with a big heart*



[www.wagenerstoves.co.nz](http://www.wagenerstoves.co.nz)



# Wagener *Sparky*

Meet the new Wagener *Sparky*. We've designed him to fit a gap in the market for a good looking, compact wee fire.

*Sparky* is a little bit of fun. He's a happy, chirpy little guy who would love to go on holiday with you. Fit him in your mobile home, camper or house boat and he will keep you cosy and warm. Let him boil your kettle for a cuppa and even heat your water for a nice hot shower.

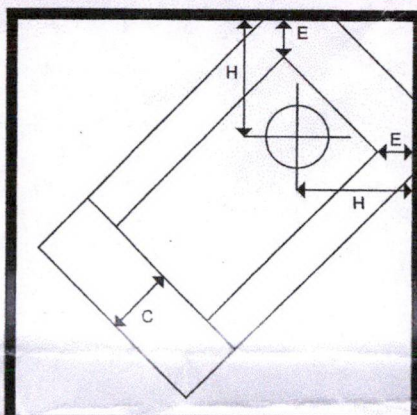
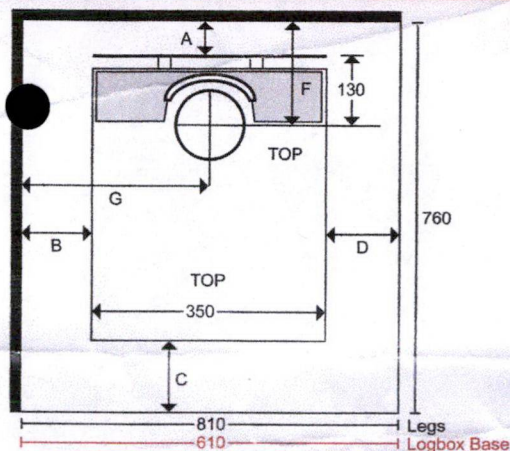
Pop him in your small home or holiday bach or tuck him up in front of your inefficient old open fire. *Sparky* will chuckle away and brighten your day.

## Features include:

- Modern clean burning technology
- Solid 5mm steel construction
- Brick lined firebox
- Removable baffle for easy cleaning
- Optional "Lion" Wetback for hot water
- Top and rear flue outlet
- Cooking surface
- Multi fuel
- Ashpan and grate
- Hi temp paint finish in black
- Optional log box base

## Installation Clearances

## AS/NZ Standard 2918:2011



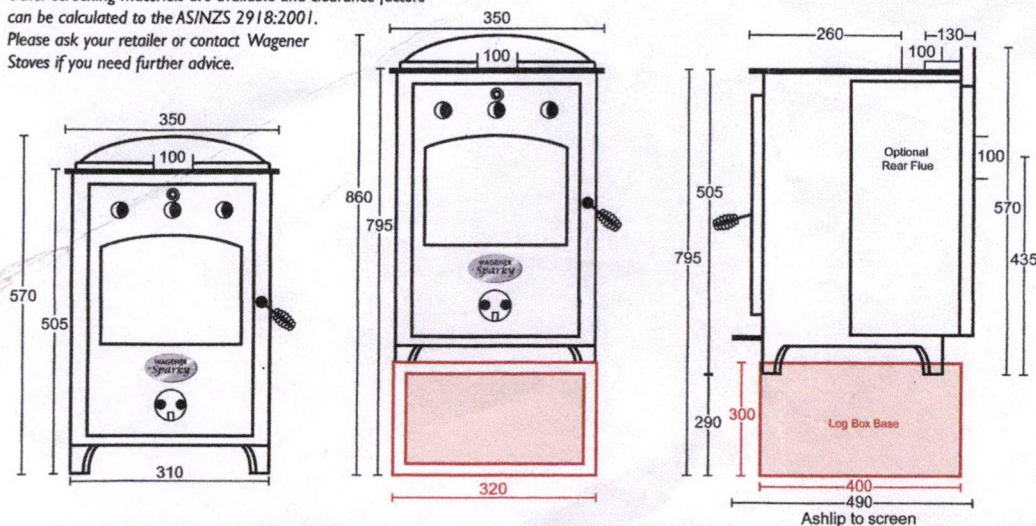
- Optional log box base requires ash hearth floor protector only
- Standard leg model requires insulated hearth floor protector (eg One sheet micore board with tiles glued and grouted to top surface)

### Wetback Pipe Heights

- On legs 205mm & 285mm
- On base 495mm & 575mm

Minimum clearance to Combustible Surfaces	A	B	C	D	E	F	G	H
With stainless steel flue shield to unprotected wall	50	550	300	150* 200*	250	180	725	450
As above 12mm Eterpan LD spaced 25mm off wall	37	160	Floor protection must extend under the stove and forward 300mm. *Leg model 200mm to sides. Log base model 150mm to sides.		73	167	335	273
As above with sheet metal any type 0.5mm or thicker spaced 25mm off the wall.	26	165		75	156	340	275	
Sheet metal as above 2 sheets spaced 12mmx12mm	26	110			50	156	285	250

Other screening materials are available and clearance factors can be calculated to the AS/NZS 2918:2011. Please ask your retailer or contact Wagener Stoves if you need further advice.



*Sparky* generates a cosy 7kw (estimated) heat output.

A "Lion" wet back can be fitted to heat your hot water (1.2kw).

## Enduring Quality & Design

*Sparky* is New Zealand designed and handcrafted by Wagener Stoves using only the best quality materials with a special Hi Temperature paint finish.

## Warranty

*Sparky's* firebox is covered by a 5 year warranty (Please refer to Installation & Operating Instructions for full details).

## Buy with Confidence

Wagener Stoves have over 35 years experience in the heating industry and have been members of the NZ Home Heating Association for over 25 years.

## Other Products Manufactured by Wagener Stoves

Wagener Stoves also design and manufacture "Lion" Wetbacks, the CookTop Wagener Stove, Butler Multi High Performance Hot Water Heaters and Traditional Style Slow Combustion Wagener Fairburn Cookers.



## WAGENER STOVES "LION" LTD

5 Allen Bell Drive, Kaitaia 0410  
New Zealand  
Ph/Fax: 09 408 2469

[www.wagenerstoves.co.nz](http://www.wagenerstoves.co.nz)

At Wagener Stoves we are continually improving our products and therefore specifications and designs may change without prior notice

2015





# Part I: Installation Instructions for WAGENER SPARKY

(Please keep these Instructions for future Reference)

## Important Message to the Owner

Please read fully the Operation & Maintenance Instructions with your Wagener Sparky **BEFORE** lighting your first fire. Your insurance company may require notification of the installation. Please check. **If a Wet Back is fitted it must be connected to the water supply or damage will result.** Such damage is not covered by Warranty. Tempering Valves should be installed to the system for safety. Tempering Valves may be a Permit Requirement. Check with your Building Inspector or Local Council. BIA: As from 22 April 2003 Automatic Smoke Detectors/Alarms are mandatory in all new homes and when solid fuel heating appliances are installed. Permits will not be signed off if alarms are not fitted.

## Important Message to the Installer

**The Wagener Sparky freestanding multi-fuel heater has been tested to and complies with AS/NZS 2918:2001 - Domestic Solid Fuel Burning Appliances.**

The Wagener Sparky must be installed in accordance with these installation instructions to comply with AS/NZS 2918-2001-Domestic Solid Fuel burning appliances.

## **Installer's Responsibilities**

Installation of the Wagener Sparky must be in accordance with these instructions.

Any variation from these installation instructions or any doubts about them must be checked against requirements of the AS/NZS 2918-2001

The installation must be carried out by a suitably qualified installer.

**WARNING: THE APPLIANCE AND FLUE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918: 2001 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.**

**THE APPLIANCE AND FLUE SYSTEM SHOULD NOT BE MODIFIED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE MANUFACTURER.**

**WARNING: DO NOT CONNECT WET BACKS TO AN UNVENTED HOT WATER SYSTEM  
INSTALL IN ACCORDANCE WITH AS 3500.4.1 OR NZS 4603 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES**

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 FIRE BRICKS, MAY RENDER THE INSTALLATION UNSAFE.

## **Flue System**

Must be manufactured in accordance with AS/NZ 2918-2001 and tested to Appendix F. See installation instruction section on page 5.

**PLEASE LEAVE THESE INSTRUCTIONS WITH THE OWNER WHEN THE INSTALLATION IS COMPLETED**



# Preliminary Installation Procedures for WAGENER SPARKY

To get full benefit from your Wagener Sparky it is important that it is installed correctly, both for efficiency and safety sake. The following points should be noted:-

1. The characteristics of the Wagener Sparky will determine its position within the home. As a general rule an interior wall installation suits flue requirements better than against an exterior wall. Sparky may also be positioned in front of an existing open fireplace – see separate specification page.
2. Check for flue obstructions above the ceiling. (e.g. header tanks, electrical mains or load bearing roof supports).
3. The minimum vertical flue height for satisfactory operation is 4.2metres above the top of Sparkys Flue Flange. The performance of Sparky depends more on the flue than on any other single component. It is the draw on the flue that drives the stove.
4. Remember a permit is required from your Local Authority.

## Floor Protector/Hearth Requirements & Positioning

**NB** Note different requirements for leg and log box base models

**Sparky on Legs** requires an **INSULATING floor protector hearth** a minimum size of 810mm wide x 760mm deep. Sparky can sit directly on to a concrete floor which may be overlaid with tiles etc .

On wooden floors a minimum of one sheet of micorel 60 board (16mm thick) with a non combustible and supportive upper surface of tiles, slate, treadle plate or the like is required.

**Sparky on a Log Box Base** requires an **ash hearth floor protector only** of a minimum size of 610mm wide and 760mm deep. (eg Tiles, slate, treadle plate etc) The Ash Hearth floor protector shall have an upper surface, including grouting, of durable, non-combustible material. All joints in the surface must be sealed to protect and prevent ash or spilled embers reaching the floor.

Floor protection must extend under the stove and forward 300mm and 200mm to each side of leg model and 150mm to each side of log box base model.

For concrete floors trim any floor coverings to the same minimum hearth requirement.

NOTE: SPARKY MUST BE AFFIXED TO THE HEARTH AND FLOOR FOR SEISMIC RESTRAINT.

For Seismic Restraint secure through two holes in the rear legs or through the base of the log box and screw through the hearth and into the floor.

## Wet Back Fitting

Sparky can be fitted with a wet back.

We recommend that you use the "Lion" Wet Back which has been designed and tested specifically for the Sparky. In general, wet backs are factory fitted at the time of ordering.

However, a suitably qualified person can fit or change the wet back out in the field if this is required.

Water must always be present in the wet back.

The wet back **MUST** be connected by a Registered Plumber to an open vented system.

Tempering valves are required.

**Please check the PH level of the water supply as wet backs can become fouled with lime which will void the warranty. NB Some coals are very corrosive and may shorten the life of the wet back – please check with the supplier as this is NOT covered by warranty.**

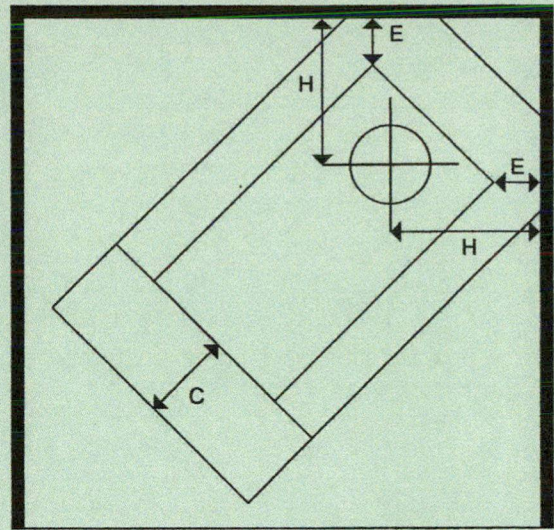
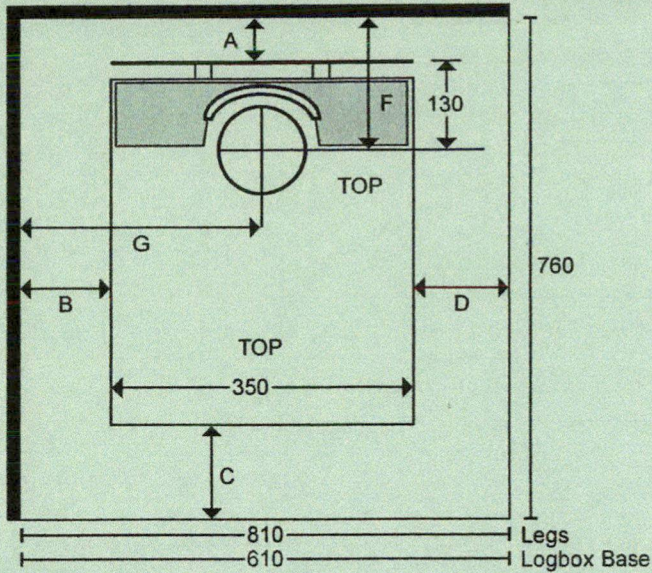
Please advise the householders **NOT** to boil the wet back as this will cause vibrations and will fatigue the wet back, the pipes and the cylinder. This will **NOT** be covered by the warranty.



# WAGENER SPARKY

## Installation Clearances

AS/NZ Standard 2918:2011



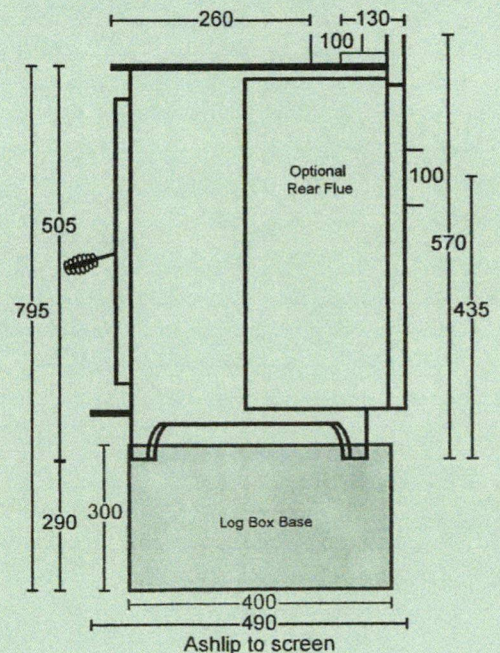
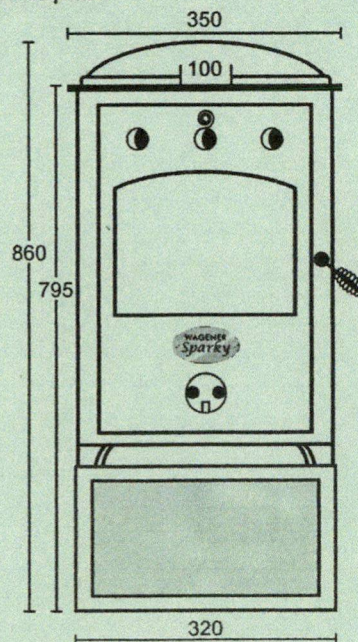
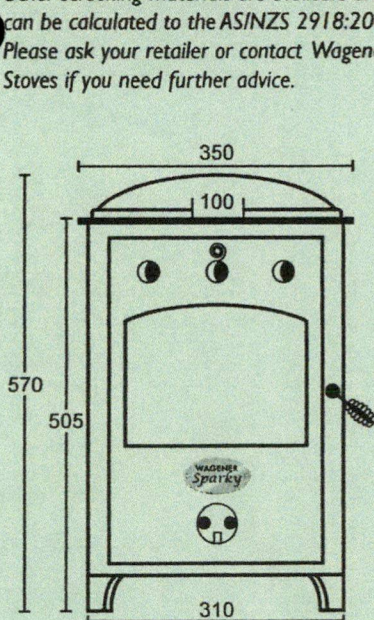
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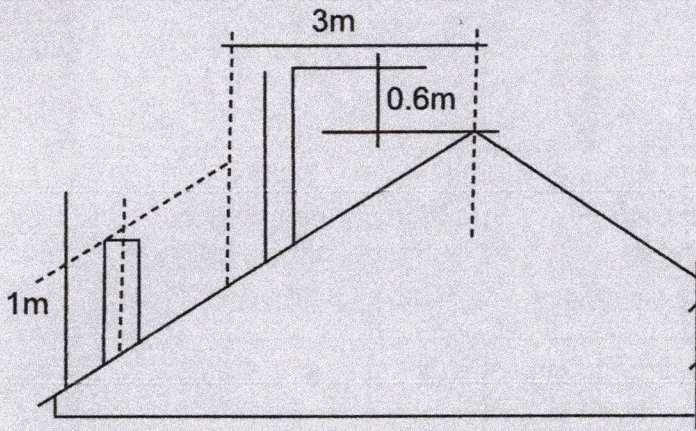
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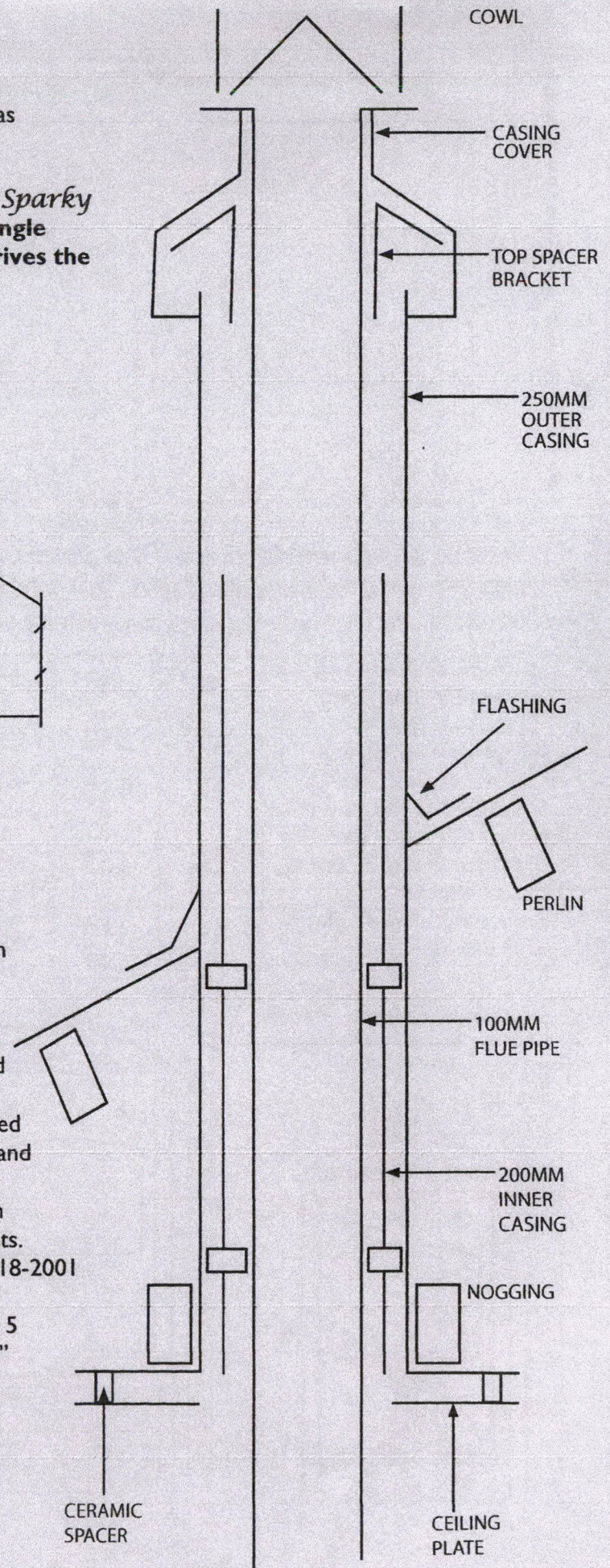


# Flue Installation

The Wagener *Sparky* uses a 100mm diameter flue. It is imperative that the connection between the flue and the flue spigot is sealed using a recommended flue sealant. If an offset bend is required it should be as steep as possible to enable ease of cleaning. Extra flue height may be required to compensate for lack of draw. **The performance of the Wagener *Sparky* depends more on the flue than on any other single component as it is the draw on the flue that drives the *Sparky*. We recommend 4.2 metres of flue.**



The top of the flue system should be at least 1000mm above the roof or at least 600mm higher than any obstacle or ridge within 3 metres of the flue. A total minimum vertical flue height ABOVE the Wagener *Sparky* of 4.2 metres is normally required for adequate draft. Joints between sections of the flue pipes are push fitted so that the upper section enters the bottom section and must be SEALED using a flue sealant. Each section should be secured to prevent separation using 3 stainless steel self tapping screws or pop rivets. Only flue systems which comply with the AS/NZS 2918-2001 should be used. Please follow flue manufacturers instructions on page 5 '100mm Free Standing Woodfire Flue Kit Installation' Instructions'. **NB. Bird netting is available**







Sheetmetal Fabricated Products Ltd.

100,108,115,125 MM

## FREE STANDING WOODFIRE FLUE KIT INSTALLATION INSTRUCTIONS

**WARNING: THIS FLUE KIT HAS BEEN MANUFACTURED IN ACCORDANCE WITH AS/NZS 2918:2001 AND TESTED TO APPENDIX F. TO ENSURE SAFETY THIS FLUE KIT MUST BE INSTALLED AS OUTLINED IN THESE INSTRUCTIONS AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES. WOOD FIRE AND FLUE CLEARANCES FROM COMBUSTIBLE WALLS MUST BE IN ACCORDANCE WITH WOOD FIRE MANUFACTURER'S SPECIFICATIONS AND AS/NZS 2918:2001. THESE INSTALLATION INSTRUCTIONS ARE FOR TESTED APPLIANCES ONLY.**

**CAUTION: MIXING 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: IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE INSTALLATION OF THIS FLUE KIT COMPLIES WITH AS/NZS 2918:2001, THE APPLIANCE MANUFACTURERS SPECIFICATIONS FOR FLUE PIPE SHIELD AND CEILING PLATE AND THAT THE RELEVANT BUILDING CODES ARE ADHERED TO.**

BENDS AND EXTENSIONS TO THE LENGTH OF A FLUE SYSTEM ARE PERMITTED (AS/NZS 2918 2001 4.1)

- 1) Locate Wood Fire in its proposed position and mark a point on the ceiling that is directly above the centre of the Wood Fire's Flue Spigot. Check that the Wood Fire's location allows the OUTER CASING to clear all structural roof timbers.
- 2) Cut a 250mm square hole in ceiling. Directly above cut a hole in roof to accommodate OUTER CASING.
- 3) Fit timber nogs around ceiling. i.e. Nogs form a 250mm square aperture that allows air to circulate freely over the OUTER CASING surface.
- 4) Position the OUTER CASING so that it is flush with the underneath of the ceiling and protrudes through the roof the required height. Note that AS/NZS 2918:2001 4.9.1(a) states, "the FLUE PIPE shall extend not less than 4.6m above the top of the floor protector". Refer to diagram B.
  - a) If the FLUE PIPE is within 3 metres of the ridge, the FLUE PIPE must protrude at least 600mm above the ridge of the roof.
  - b) If the distance from the ridge is more than 3 metres, the FLUE PIPE must protrude at least 1000mm above roof penetration.
  - c) The FLUE PIPE must be more than 3 metres from any nearby structure. (Refer diagram C).

Additional FLUE PIPE, OUTER CASING and/or INNER CASING may have to be added to ensure the following:

- 1) The correct minimum roof penetration height.
- 1) Sufficient overall height to encase the FLUE PIPE which must extend a minimum of 4.6 metres from the floor protector. Refer diagram B.

Note that the INNER CASING should extend 200mm above roof penetration.

NB: Do not secure the OUTER CASING SLIP EXTENSION onto the OUTER CASING, as final adjustment will be required when fitting cowl assembly. See Paragraph 11.

- 5) Fix an appropriate flashing around the OUTER CASING to seal onto the roofing material. Refer to the manufacturer's recommendations for correct fitting. NB: On iron roofs, fixings such as metal angle brackets (approximately 25mm x 25mm) can be fitted under the flashing to securely fix the roof to OUTER CASING.
- 6) Drill holes in ceiling plate for the fixing screws. Place CEILING PLATE over Wood Fire's Flue Spigot, ensuring the folded edges are facing the ceiling.
- 7) Position bottom length of FLUE PIPE (crimped end downwards) into Wood Fire Flue Spigot.  
  
Refer to the supplier of the Wood Fire and use flue pipe sealant if recommended.
- 8) Assemble FLUE PIPES together ensuring seams are straight, offsetting the seams will ensure a neat fit. FLUE PIPES **must** be assembled with crimped ends down (towards Wood Fire). Secure each joint with a minimum of three Monel Steel rivets equally spaced around the joint. If using HI-THERM FLUE PIPE the protective wrapping should be left on the FLUE PIPE during installation.
- 9) From the roof lower FLUE PIPE through OUTER CASING into the bottom FLUE PIPE securing with three monel rivets.
- 10) Check that the FLUE PIPE SPACING BRACKETS inside the INNER CASING are correctly positioned and then from the roof slide the INNER CASING into the OUTER CASING until the brackets rest on to the internal swage ring of the OUTER CASING, this will ensure the INNER CASING is the correct 12mm above ceiling level.

Check the INNER CASING when correctly positioned extends a minimum of 200mm above the roof penetration.

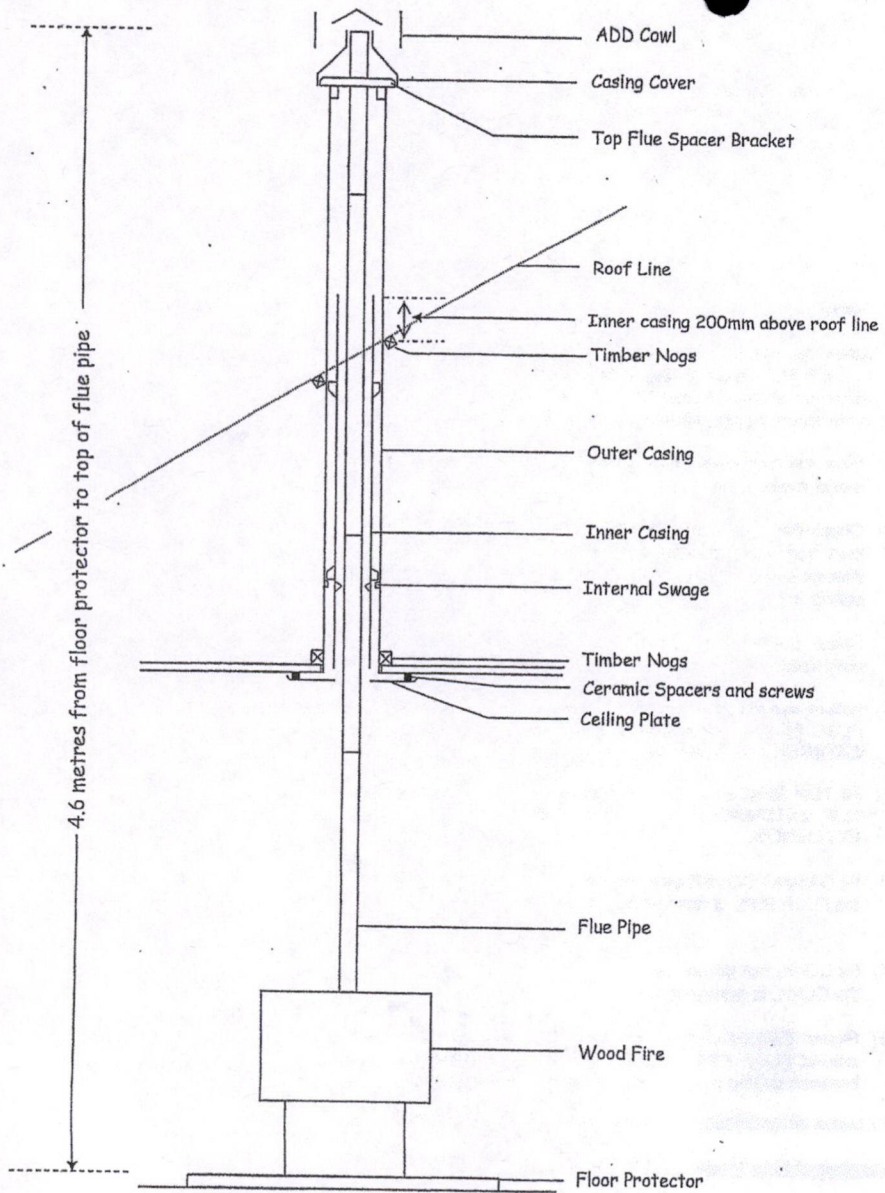
- 11) Before securing the OUTER CASING SLIP EXTENSION to the OUTER CASING with 3 rivets, ensure the FLUE PIPE extends above the top of the OUTER CASING SLIP EXTENSION 145mm. Adjust SLIP EXTENSION to obtain this measurement.
- 12) Fit TOP SPACER BRACKET to the FLUE PIPE making sure the lugs fit snugly inside OUTER CASING SLIP EXTENSION. Make sure TOP SPACER BRACKET fits hard down onto OUTER CASING SLIP EXTENSION.
- 13) Fit CASING COVER over the FLUE PIPE and push down firmly onto TOP SPACER BRACKET. Check that the FLUE PIPE is flush with or slightly below the top edge of the CASING COVER.
- 14) Fit COWL but do not secure, as removal for flue cleaning will be necessary. Deform or ovalise the stub of the COWL to ensure it is a tight friction fit.
- 15) Fasten CEILING PLATE to ceiling using screws and ceramic spacers provided. Ensure an even air gap around FLUE PIPE when fixing. Remove protective plastic from CEILING PLATE. N.B. 12mm air gap between ceiling plate and ceiling must be maintained.
- 16) Leave all installation and operating instructions with the owner.

### Cleaning of Flue Pipes before lighting the fire.

Stainless Steel pipe should be wiped clean using a soft cloth and methylated spirits to remove finger marks and oils used to manufacture the flue pipe.

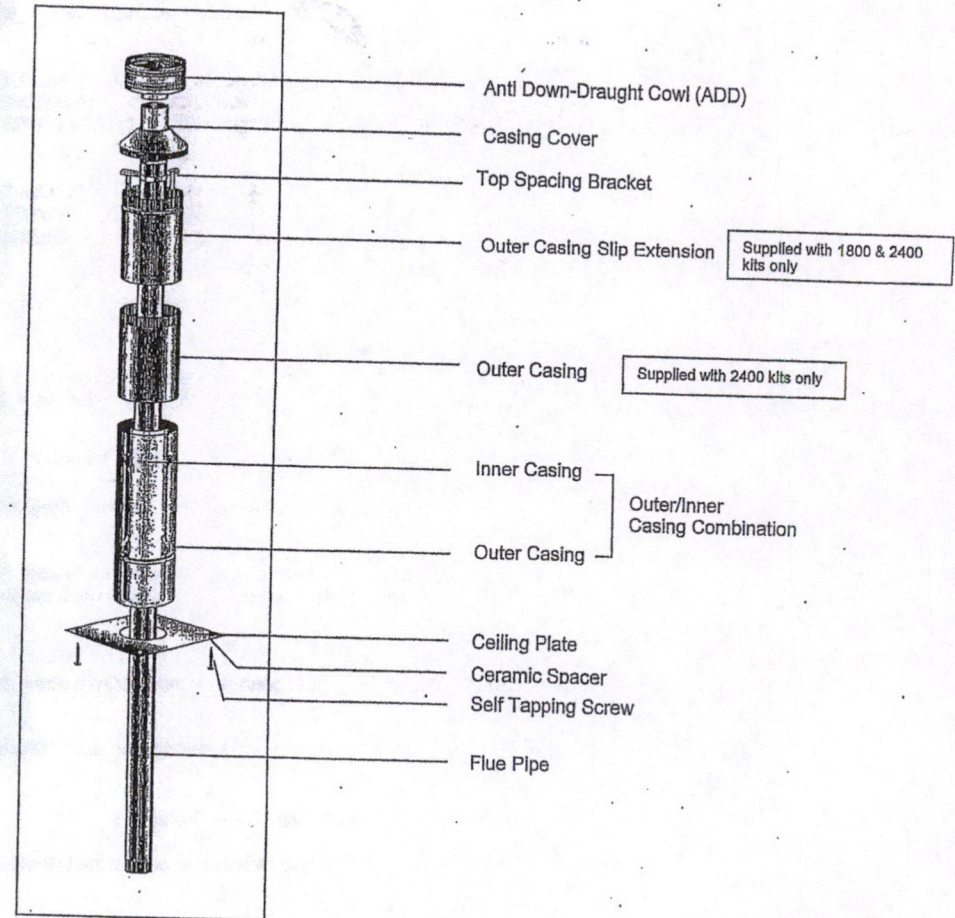
Hi-Therm flue pipe can be touched up using only STOVE BRIGHT aerosol paint.





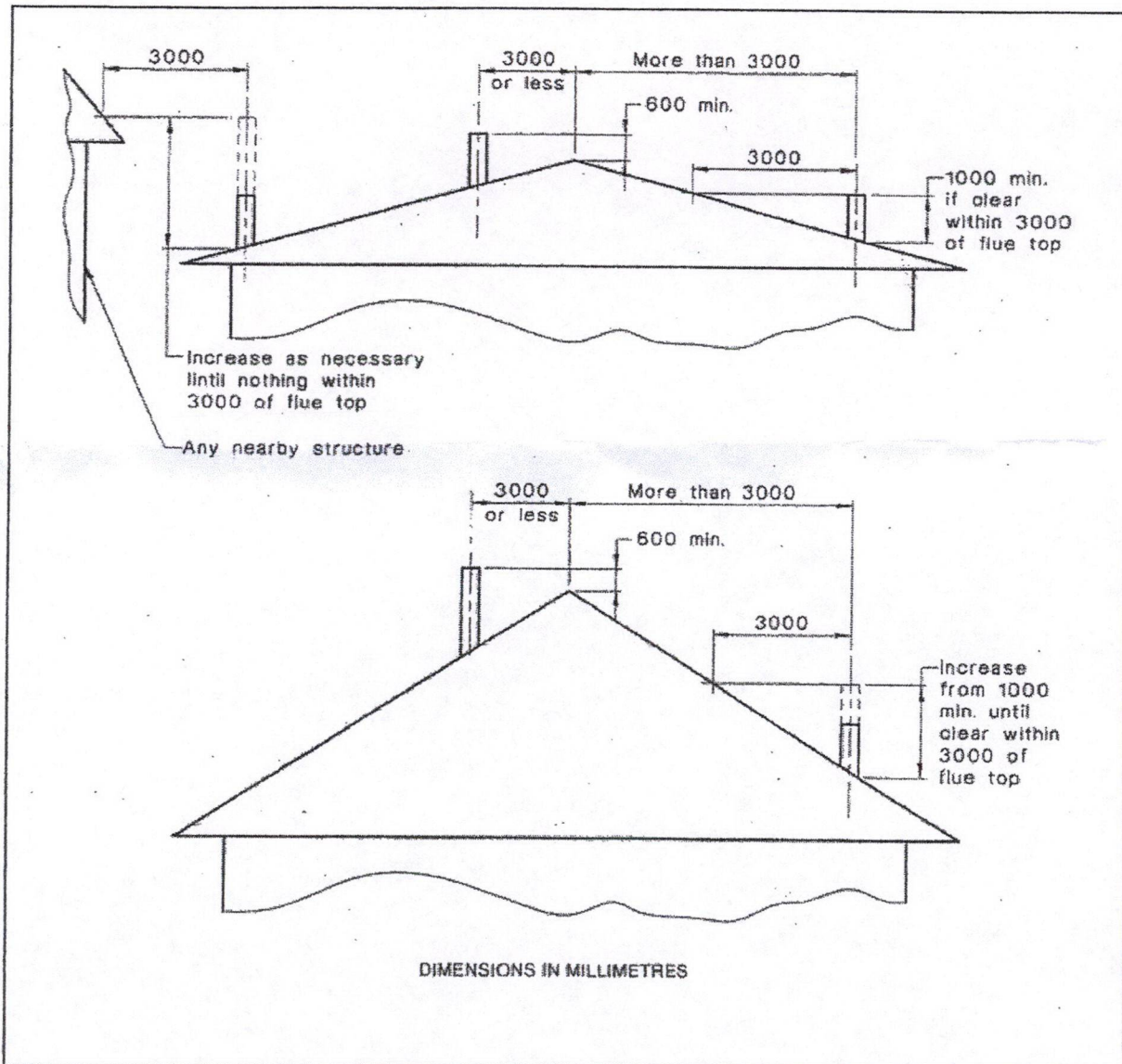
Sheetmetal Fabricated Products Ltd.

**100,108,115,125mm  
Free Standing Wood Fire Flue Kit  
Installation Instructions  
Complies with AS/NZS 2918:2001**





**Diagram C AS/NZS 2918:2001 pg 37**





# Dektite Premium

The versatile solution

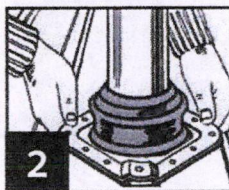
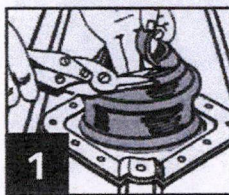
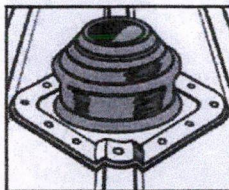
- ✓ Most extensive range of Dektites for flashing penetrations 0 - 510mm, available in black and grey EPDM and silicone red for high temperatures.
- ✓ Designed to enable practically any pipe flashing operation to be carried out within minutes, simple to install and very effective.
- ✓ The low profile cone not only looks good but provides a generous internal clearance, so even the steepest roofs are handled with ease.
- ✓ Suitable for flashing pipes that penetrate wall claddings.
- ✓ Can also be used to flash square penetrations. Just add 30% to the pipe diameter and trim the cone to suit.

- ✓ EPDM withstands temperatures from -50°C to 115°C and up to 150°C intermittently.
- ✓ Silicone withstands temperatures from -60°C to 200°C and up to 250°C intermittently.



FAR NORTH DISTRICT COUNCIL  
Approved Documents

## Installation Instructions:

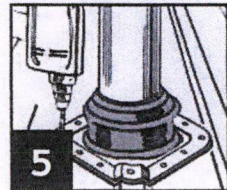
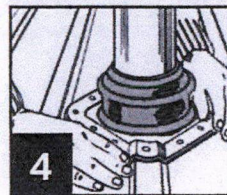
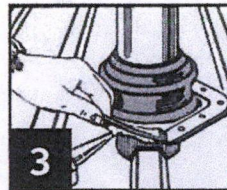


### NOTE:

For more effective drainage, always fit the Dektite on the diamond or bias.  
Dektites are suitable for flashing pipes that penetrate wall claddings.

Cut a neat hole in roofing sheet with minimum clearance for pipe and insert pipe through hole. Trim the cone to suit pipe size using sharp tin snips. Where required, support cut sections of sheet with additional framing.

Slide Dektite flashing down over pipe. Lubricating the pipe with water allows the pipe to slide snugly into position.



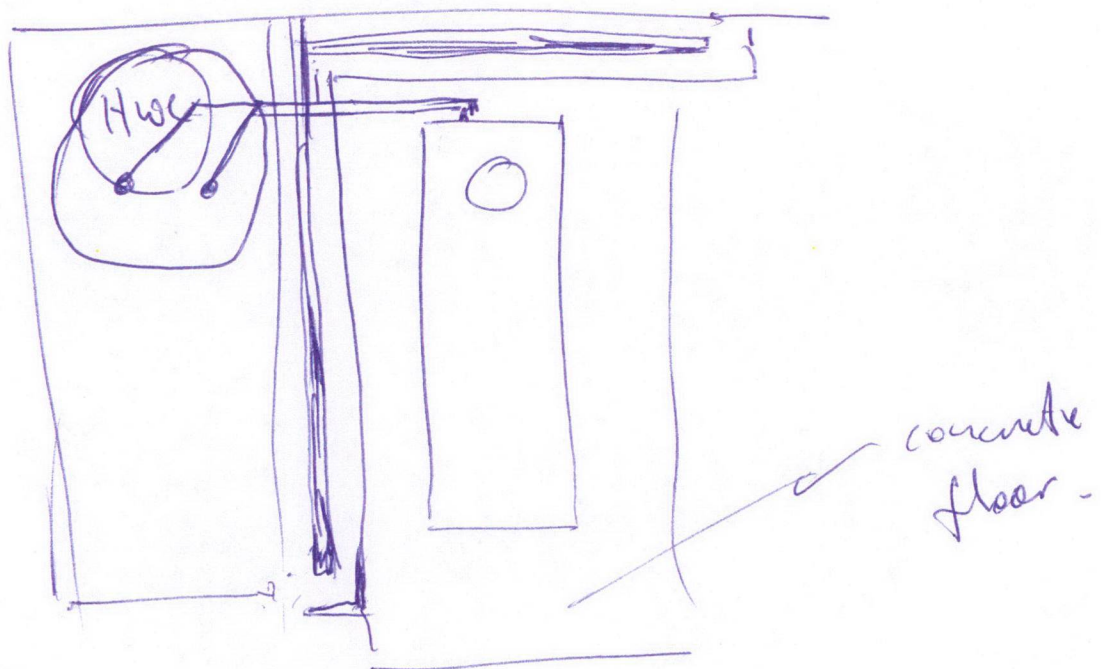
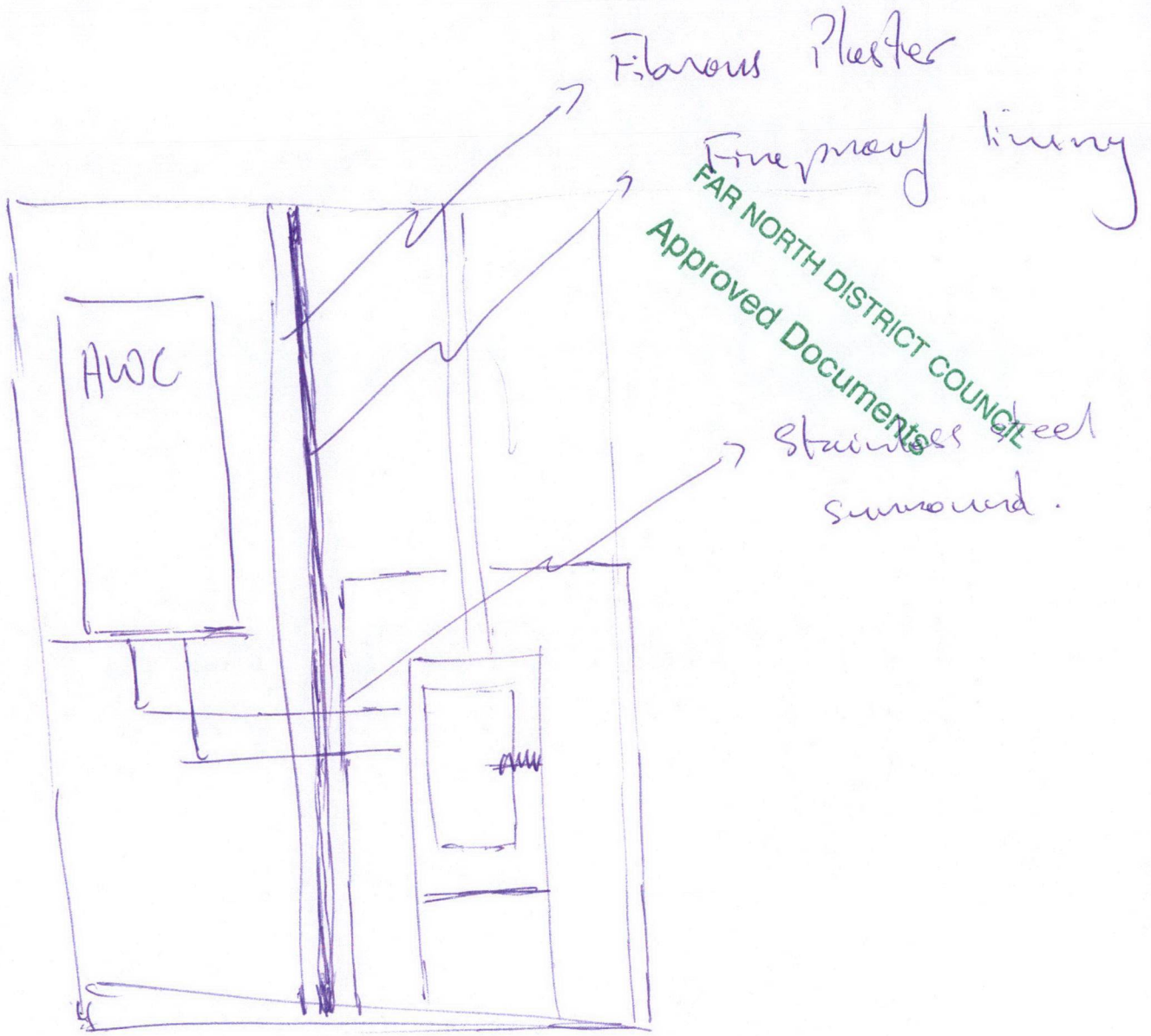
Apply a neutral-cure silicone sealant by turning back the flexible flange. The following silicones have been trialled and provided a suitable bond:

- OCI Roof & Gutter N-192
- Selleys roof & Gutter
- Bostik Findley Roof & Gutter
- Dow Corning 791
- Sikasil AP Multi Purpose

Press base to the roof profile by hand, smooth out any awkward creases. Don't fully extend to allow for vibration.

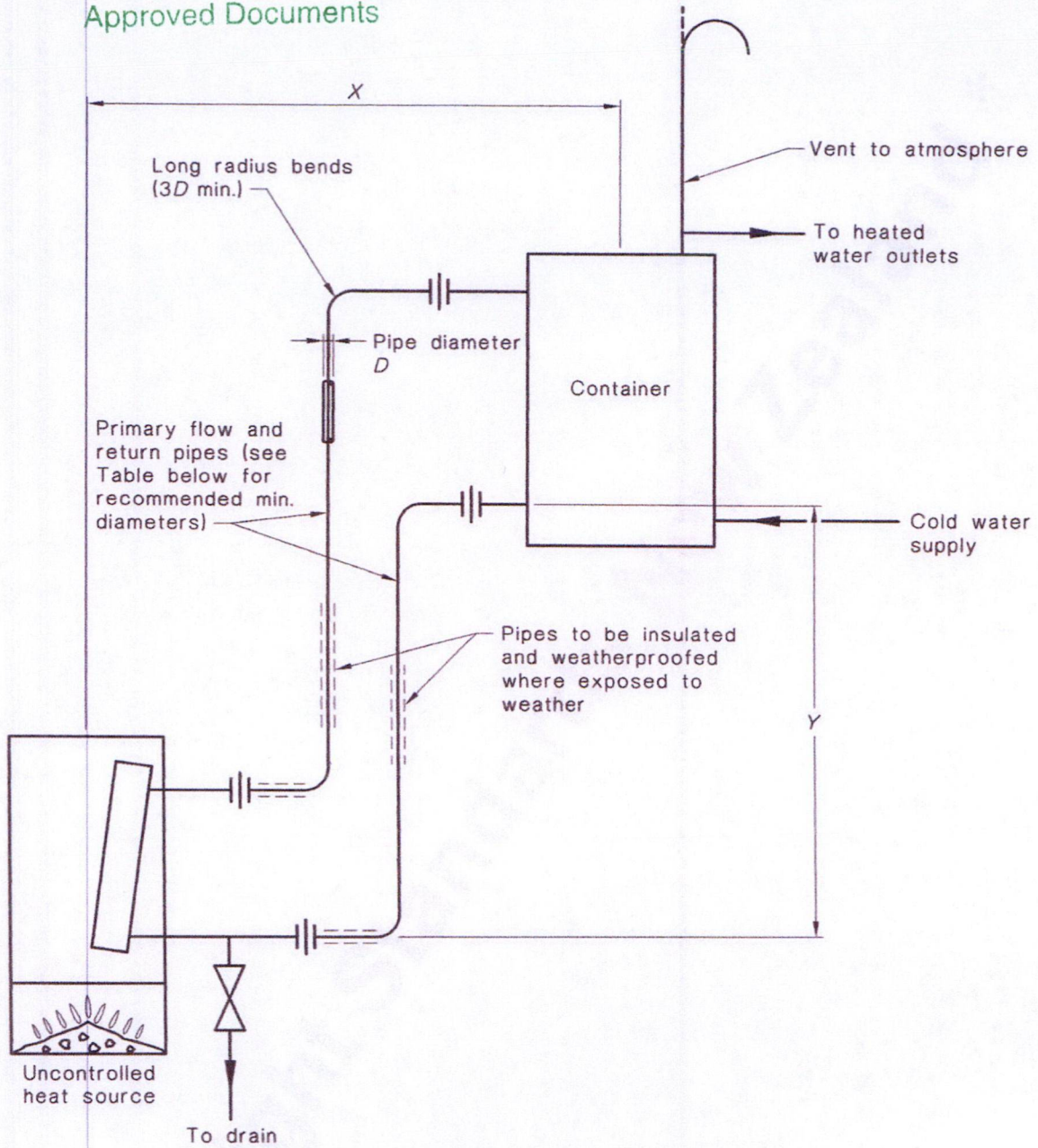
Fasten using self drilling washered screws or sealed rivets. Fit fasteners progressively outward in opposing pairs to avoid gaps.







Approved Documents



Y	Minimum nominal diameter, DN				
	X, m				
	2	4	6	8	10
1	20	20	25	32	32
2	20	20	25	32	32
3	20	20	20	25	32
4	18	20	20	25	25
5	18	20	20	20	25
6	18	18	20	20	25

NOTE: Dimensions X and Y are true horizontal and vertical distances, respectively.

FIGURE 7.1 PIPE COORDINATES: THERMOSIPHON SYSTEMS

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