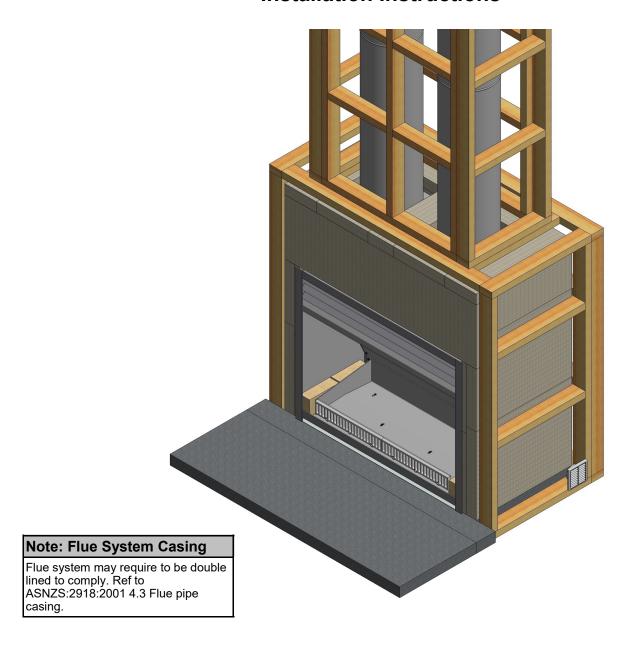


SI 1250 - 1500 - 2000 Double Flue Open Fire

Solid Fuel Burner - Open Wood Fire

Installation Instructions



Visit www.warmington.co.nz for specs, DWGs and PDF uploads of fires

Fire, flue system and instructions to comply with ASNZS 2918:2001 & Building Code C/AS1 7.5 Open Fires

Keep these instructions for further reference. Ensure that you have the correct and current installation details for the Warmington Fire.

Installation

The Warmington unit is to be installed by a certified Warmington installer or an approved NZHHA installation technician.

IMPORTANT

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



COMPONENTS REQUIRED FOR CONSTRUCTION



Check List	
Firebox	
Adaptor (Fastenings)	
Ash pan	
Bricks	
Louvers	
Badge	
Damper Handle	
Packed By	

NOT Supplied (optional extras)	No:
Log Lighter & Control Box	1

NOT Supplied (sold separately)	No:
Warmington Fluekit	1
Autoclaved Aerated Concrete (AAC) Heat cell	1
Flashing System	1/2
Promina Fascia	1
Exhaust Sealant	
Gas fitting (for log lighters)	
Fire / Flue kit / Flashing Installation	
Council Permit	



GENERAL INFORMATION

HEAT OUTPUT

Description	SI 1250 DF	SI 1500 DF	SI 2000 DF
Estimated (kW)	30	35	40
Average (kW)	14	14	14

POINTS TO CONSIDER PRIOR TO INSTALLATION

Location of the fire:

Open fires are better located at one end of a room or area, as they project the heat away from their opening.

The Topography of the Land:

The slope and position of the land in relation to the home has a bearing on how the wind will interact with the fire and flue system. Care needs to be taken to ensure that the flue termination is in the correct position to maximise performance.

The Prevailing Wind

Care needs to be taken to ensure that the flue termination is in the correct position, as wind gusts that hit the flue and cowl system may overcome the cowl and draught back down the flue into the home. This can be a combination of down draught and high pressure.

Pressure Differential, Venting & External Air into the Building:

All fires need air to burn and draw correctly. Kitchen fans, air conditioning units, high wind zones, and naturally forming draught spaces can all have an effect on the pressure differential from inside the building to the outside. A lower pressure in the building may induce a draught down the flue system and back into the building, causing the fire to smoke or spill into the building. Care needs to be taken at the design and installation stage to adequately vent the building to ensure that there is always a neutral or positive pressure at the fireplace and a negative pressure at the flue outlet (a mechanical system can be added to aid this if necessary). This will ensure that the draught in the flue system is always to the outside.

Wind Noise:

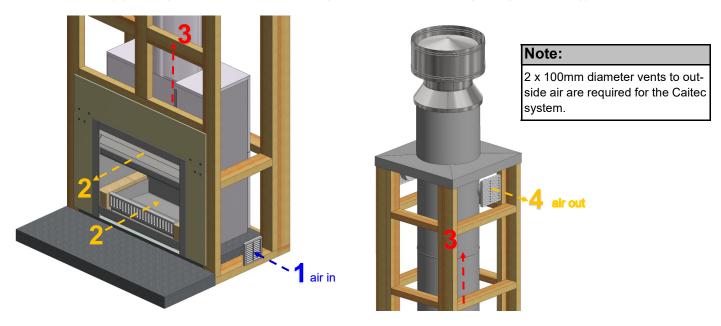
You may encounter wind noise in some installations. It is recommended to use an enclosed chase with a chimney pot to help reduce noise. There will always be some noise from the flue systems of all fireplaces.

"CAITEC" ROOM AIR REPLACEMENT TECHNOLOGY

Fitted in every Warmington open fireplace is Warmington's own "Caitec" technology. The Caitec system draws air from an external air source (outside the room) to ensure that the open fire has a steady supply of pre-heated combustion air. This maximises efficiency while maintaining a pressure equilibrium in the home, reducing the risk of back draughting.

The following references are used in this document for the Caitec system and venting requirements:

- 1. Air enters the cavity through external vents (see Note) in the surrounding structure. Excess air drawn in will cool the cavity structure.
- 2. The external air travels through the Caitec system within the firebox, is pre-heated and is circulated back into the room. The excess supply of air to the room will be ample to feed the fire without inducing negative room air pressure.
- 3. Combusted gases and particulates are exhausted through the flue system.
- 4. The excess air supply that entered the cavity (in 1), that has warmed and risen due to natural convection, exits through the vents at the top of the cavity (or through the liner and out of a venting cone in the case of venting through the flashing).





INSTALLATION INSTRUCTIONS

Important Notes:

Liner diameter

- This is a general installation guide only. Contact a "NZHHA Installer" for installation advice or go to www.homeheat.co.nz, then select Members & follow instructions to find a certified NZHHA SFAIT installer.
- Install to AS/NZS 2918:2001 and to manufacturer's specifications.

STAGE 1: CAVITY CONSTRUCTION PROCEDURE FOR BUILDER

- Mark out flue centre on floor.
- Mark out relevant clearance requirements.
- Construct plinth to required height (see page 5 for details).
- Construct framing or block surround according to relevant minimum dimensions as referenced on pages

1.1 WARMINGTON SI FIREBOX AND HEAT SHIELD DIMENSIONS SI 1250 DF SI 1500 DF SI 2000 DF 1250 1500 2000 Firebox width Α 1000 1000 1000 Firebox height В 600 600 600 Firebox depth С 1300 1550 2050 D Flange width 1025 1025 1025 Flange height Ε 429 477 736 Adaptor height 2097 1345 1595 Heat shield width G Н 1455 1625 1802 Heat shield height Heat shield depth 690 690 690 400 403 405 Centre of flue 250 300 350 Flue diameter K

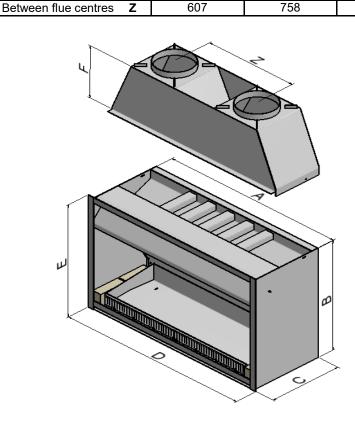
400

450

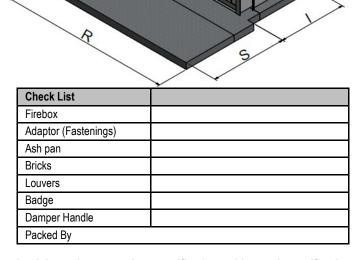
1008

Minimum Flue Height	
Flue Height	3600
Measured From Top of Adaptor	B + F + 3600

I



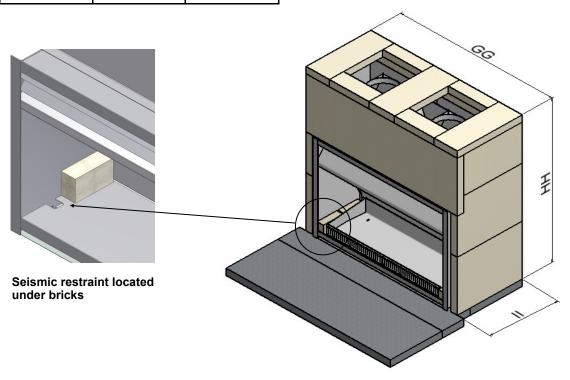
350





1.2 AUTOCLAVED AERATED CONCRETE (AAC) HEAT CELL DIMENSIONS

		SI 1250 DF	SI 1500 DF	SI 2000 DF
Heat cell width	GG	1500	1750	2250
Heat cell height	НН	1535	1700	1900
Heat cell depth	II	750	750	750



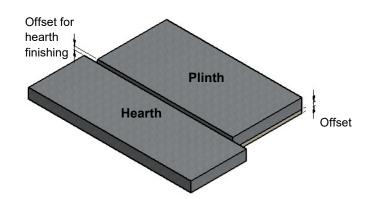
1.3 HEARTH & PLINTH CONSTRUCTION DETAILS

Notes:

For combustible flooring an insulating hearth and plinth of 75mm Autoclaved Aerated Concrete (AAC) is required.

To keep finishing on hearth flush with the plinth, the plinth should be offset from the ground by the thickness of the finishing material.

See page 10 for details on raised hearths.





1.4 TIMBER FRAMING DETAILS - MINIMUM CLEARANCES

		SI 1250 DF	SI 1500 DF	SI 2000 DF
Timber clearance width	0	1550	1800	2300
Timber clearance depth	Р	780	780	780
Timber clearance height	Q	1560	1750	1950
Hearth width	R	1800	1900	2400
Hearth projection	S	750	850	850
Chimney chase clearance	Х	450	500	550
Chimney chase clearance	Υ	1057	1263	1558

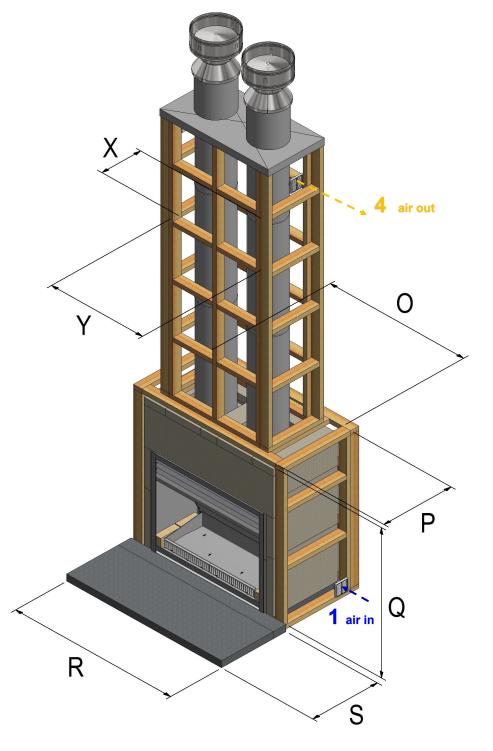
Notes:

Centreline of flue is NOT in centre of alcove.

All framing dimensions are internal only.

The metal heat shield and AAC heat cell must be used to satisfy minimum clearances if installing into combustible framing.

Recommended framing laying on the 45mm side.





1.5 BLOCK ENCLOSURE - MINIMUM CLEARANCES

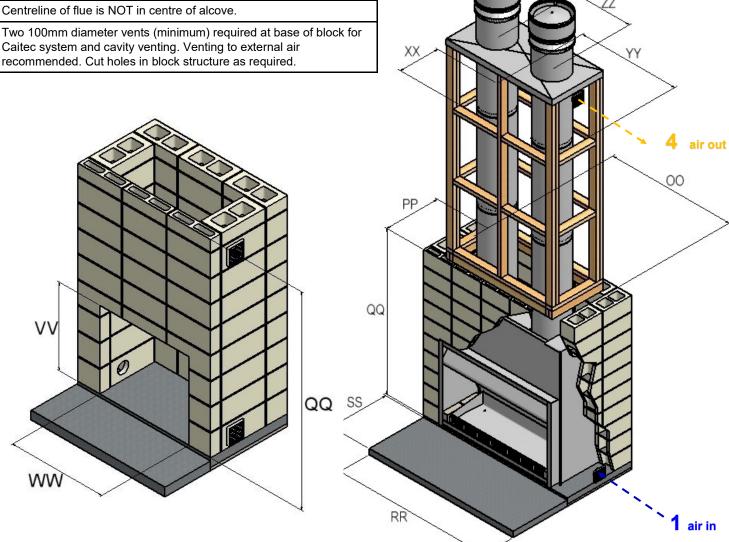
Description		SI 1250 DF	SI 1500 DF	SI 2000 DF
Block clearance width	00	1610	1610	2410
Block clearance depth	PP	700	700	1000
Block clearance height	QQ	2390	2390	2390
Hearth width	RR	1990	1990	2400
Hearth projection	SS	750	850	850
Window height	VV	1010	1010	1010
Window width	ww	1280	1530	2030
Chimney chase clearance	XX	450	515	550
Chimney chase clearance	YY	1057	1278	1558
Distance between flues	ZZ	607	758	1008

Notes:

All block materials must be non-combustible up to clearance height QQ.

Ensure that the fire and flue system is installed before the alcove access is blocked off. Block modules may vary to the drawing.

Caitec system and cavity venting. Venting to external air

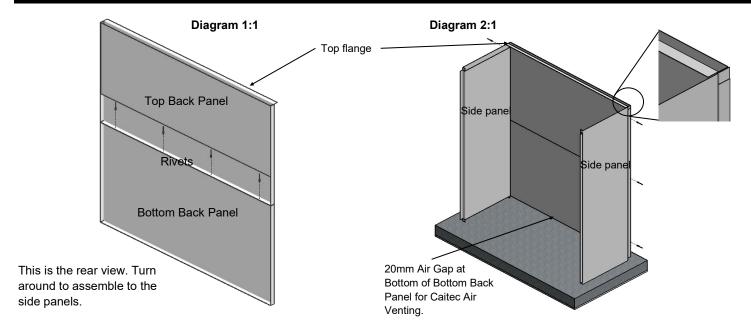




STAGE 2: INSTALL PROCEDURE FOR NZHHA CERTIFIED INSTALLER

- Assemble the back panel and side of the heat shield, and position into the cavity.
- Fit the firebox into the cavity, allow (approximately 10mm) for the fascia to fit behind the flange. Bolt the firebox to the plinth using the internal seismic restraint brackets (which are under the removable bricks on the left and right sides of the firebox).
- Fit the adaptor to the firebox. The adaptor bolts to the firebox with two M8 bolts/ nuts/ washers on each side. Seal the adaptor to the firebox using hi temperature sealant around all joining edges.
- Install flue system (see pages 12 to 15 for details).
- Fit the front of the heat shield and rivet into position. The liner should press against the front panel of the heat shield (towards the front of the fire). This is to ensure the fascia is pressed hard against the back of the firebox flange during operation. The front panel of the heat shield may appear more challenging to install however. The front panel can be taped in place while riveting (remove the tape when finished).
- Fit the lintel cap and top caps to the heat shield.
- Assemble the AAC heat cell around heat shield if installing into combustible framing. A separate assembly guide is supplied with the heat cell kit.

2.1 HEAT SHIELD ASSEMBLY



Step 1:

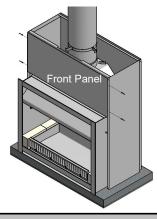
Assemble top & bottom back panels together by riveting as shown in diagram 1:1.

The top back panel has a double shield layer at the top.

Step 2:

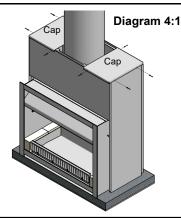
Rivet 2x side panels to pre-assembled back panels as shown in diagram 2:1. Ensure the top flange on the back panel sits on the side panels creating a 20mm air gap at the bottom for the Caitec air venting.





Step 3:

Install firebox etc and assemble front panel to heatshield as shown in diagram 3:1. Rivet front panel to side panels to secure.



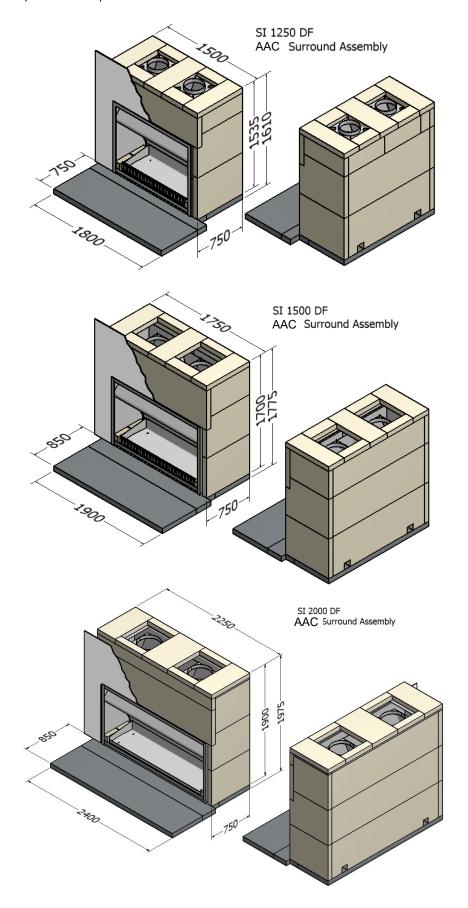
Step 4:

Assemble top caps to heatshield and rivet in place as shown in diagram 4:1



2.2 AAC HEAT CELL ASSEMBLY

- The heat cell is constructed around the firebox, using 75mm autoclaved aerated concrete (AAC) panels.
- (2400x600x75) power panels are required for basic heat cell construction.





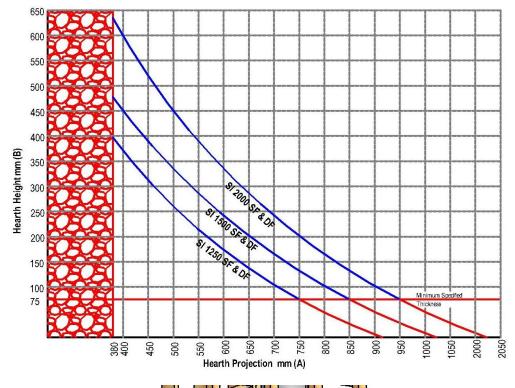
STAGE 3: FINISHING PROCEDURE FOR BUILDER

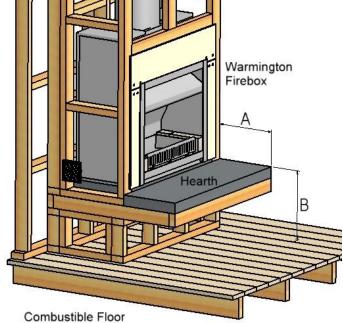
- Construct hearth to requirements (see hearth clearance details on this page).
- Construct framing or block surround according to relevant minimum dimensions as referenced on pages 6 to 7. Remember to
 install required 2 x 100mm diameter vents for Caitec system.
- Complete finishing around surround structure as required. Refer to page 11 for finishing requirements. If plastering the heat cell structure, it is recommended to use a fibreglass mesh with a latex plaster to minimise the chance of the plaster cracking.
- Construct mantle if required.

3.1 HEARTH CLEARANCES

Important Note:

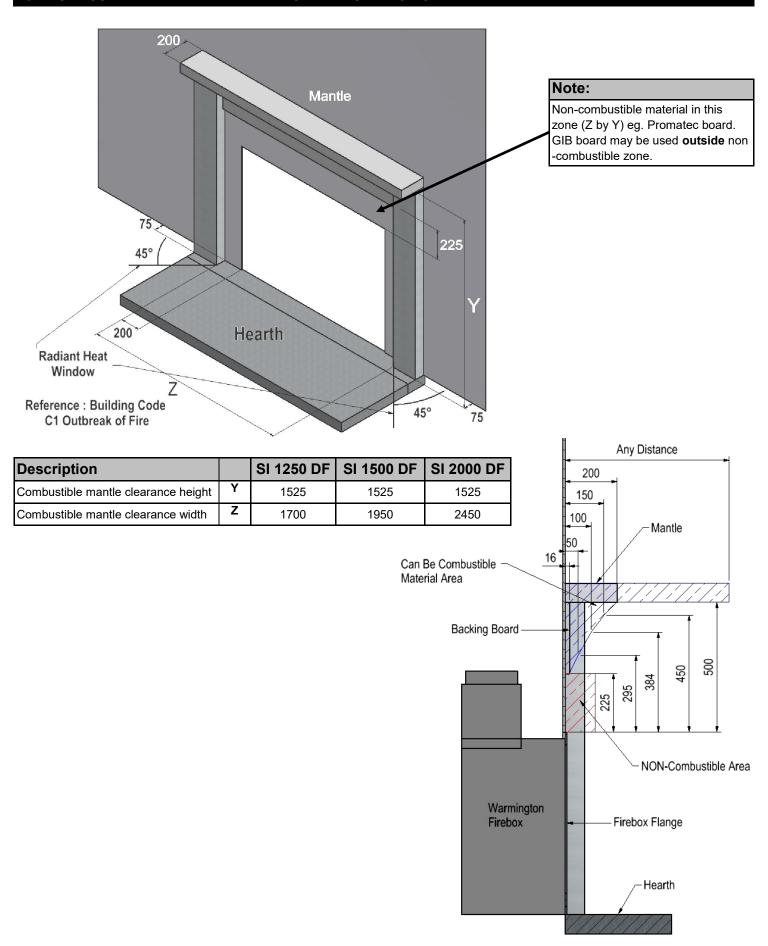
A hearth extension ABOVE the curved minimum requirement line on the graph for a selected model of traditional fire is an acceptable hearth extension. A hearth extension BELOW the curved minimum requirement line is NOT acceptable.







3.2 COMBUSTIBLE MANTLE CLEARANCES: REF BUILDING CODE





FLUE DETAILS DIMENSIONS

Minimum Flue Height	
Flue Height	3600
Measured From Top of Adaptor	B + F + 3600

	No:	SI 1250 DF	SI 1500 DF	SI 2000 DF
Cowl	2	250	300	350
Cone	2	250	300	350
Top Spider	2	250	300	350
Flue Diameter	6	250	300	350
Liner Diameter	6	350	400	450
Spacer	6	250/350	300/400	350/450

Note: FLUE SYSTEMS Casing....

Flue system may require to be Doubled lined to comply. Ref ASNZS:2918:2001 4.3 Flue pipe casing

NOTE: Ensure that a Standard Tested Warmington Flue system is used on Warmington fires.

FLUE SYSTEM INSTALLATION GUIDE

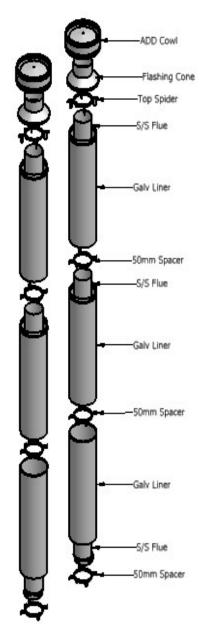
This is a general installation guide only - Contact a "NZHHA Installer" for Installation Advice.

See: www.homeheat.co.nz, choose "members" & pick your Area & Fire type (wood / Gas etc) this will provide you with a NZHHA Certified Installer (use the SFAIT Installers Only.)

- Install the first length of flue pipe with the crimped end down, inside the Adaptor collar, ensure that the flue pipe is sealed into the collar with exhaust sealant. Rivet the flue in 3 places around the Adaptor collar. Place a spacer around the flue pipe approximitaly150mm above the adaptor collar. Secure in position by tightening the screw and nut.
- 2. Install the second length of flue pipe with the crimped end down and fit by riveting in at least 3 places around the flue pipe joint. Ensure that the flue is sealed into position with sealant.
- 3. Install the first section of flue pipe liner with the Crimped end up, over the flue pipe and over the spacer that is fixed to the flue pipe. This spacer will keep the liner concentric about the flue pipe.
- 4. Position flue spacer at the flue pipe joint for every length of "Flue pipe" and "Liner".

Repeat the Steps from 1 – 4 to the installed required height of the flue system. The flue system is to comply with ASNZS 2918:2001 4.9.1

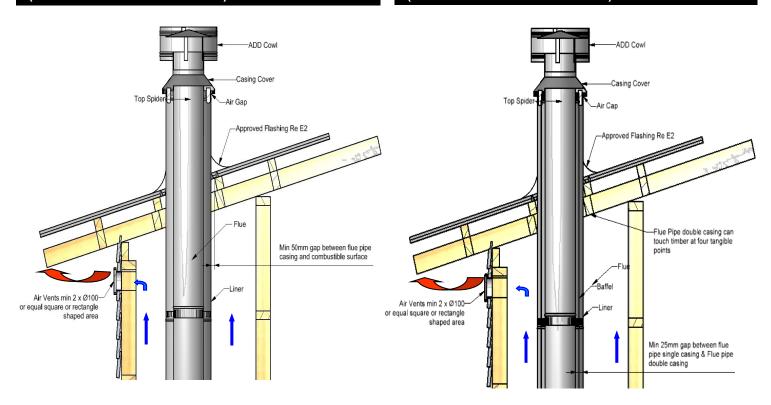
- a "the flue pipe shall extend not less than 4.6m above the top of the floor protector."
- b " the minimum height of the flue system within 3 m distance from the highest point of the roof shall be 600mm above that point."
- c "the minimum height of the flue system further than 3 m from the highest point of the roof shall be 1000mm above the roof penetration."
- d "no part of any building lies in or above a circular area described by a horizontal radius of 3 m about the flue system exit."
- NOTE: The last length of flue pipe needs to extend past the liner so that when the "top spider" and the "Flashing cone" are fitted, that the "flashing cone" and the "flue pipe" are flush, or that the "flue pipe" is 5mm lower that the "Flashing cone".
- Fit the "Top Spider" into position, ensure that the legs of the spider are fitted inside the liner and that the spider is positioned hard down onto the liner and tighten with the screw and nut.
- 3. Place the "Flashing cone" over the "flue pipe" and press hard down onto the "Top Spider". (Note that the "Flue pipe" and the "Flashing Cone" are either flush or the "Flue pipe" is 5mm Lower than the "Flashing cone".) Ensure that the "Flashing cone" is clear for the venting from the "Liner" and the "flue pipe".
- 4. Fit the "Cowl" to the top of the flue pipe. The "Cowl", "Flashing cone", and the "Flue pipe" can be secured



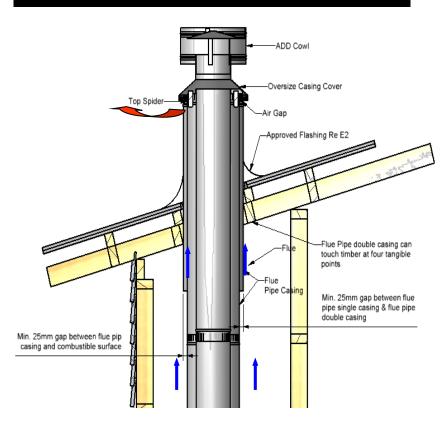


FLUE PENETRATION VENTED THROUGH ALCOVE (SINGLE LINED FLUE SYSTEM)

FLUE PENETRATION VENTED THROUGH ALCOVE (DOUBLE LINED FLUE SYSTEM)



FLUE PENETRATION VENTED THROUGH TOP FLASHING



Note: Flue system casing....

Flue system may require to be Doubled lined to comply. Ref ASNZS:2918:2001 4.3 Flue pipe casing

Notes:

External requirements: refer to AS/NZS2918:2001 4.9.1 All flashing to comply with E2.

Install Flue system to AS/NZS2918:2001

When using a rubber or bitumen flashing (Butynol, Dectite) an additional flue pipe baffle is required.

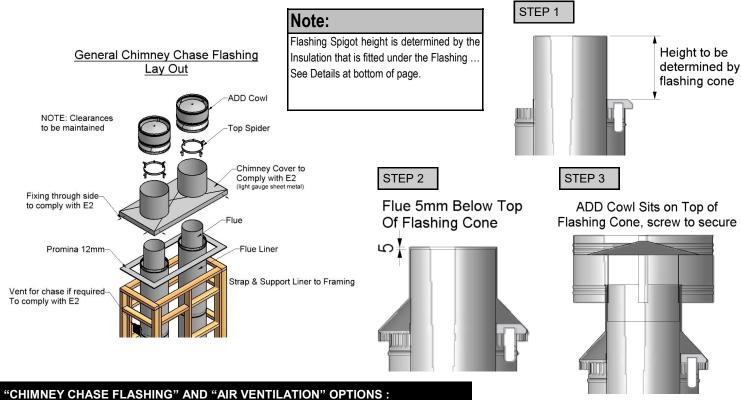
All external air vents & ceiling penetrations must be bird proofed with permanently fixed screens. Additionally, all external air vents and ceiling penetrations are to be vermin and rodent proof.

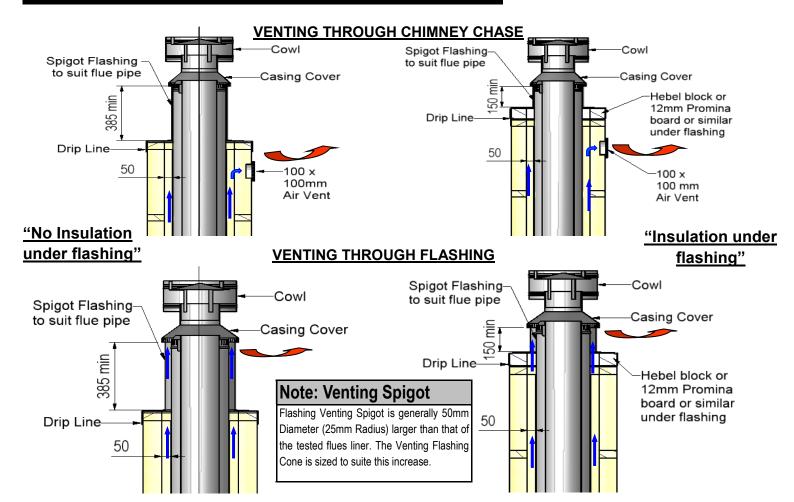
Test Report Number	Date of Report
04/1039	20 th July 2004
04/1040	20 th July 2004
04/1041	20 th July 2004



CHIMNEY CHASE FLASHING DETAILS

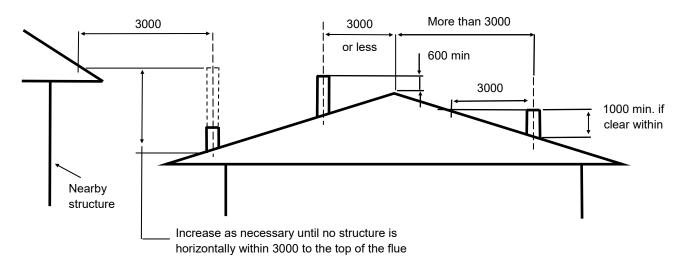
SETTING ADD COWL AND FLASHING CONE HEIGHT





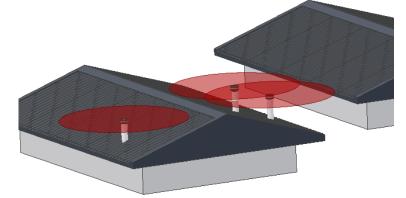


FLUE HEIGHT MINIMUM DETAILS



The flue exits are to comply to ASNZS 2918: 2001

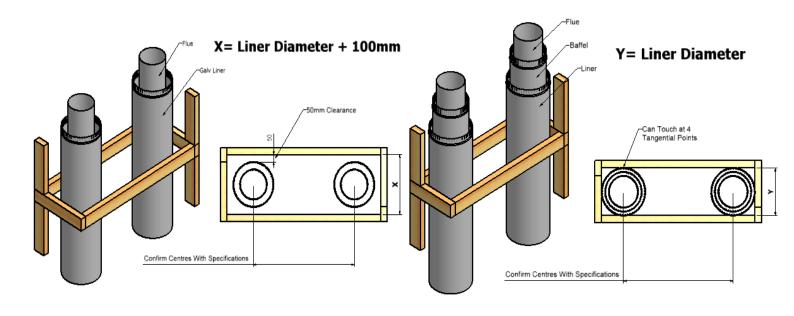




FRAME OUT AND TRIM OUT DETAILS FOR CHIMNEY CHASE

Option X - Singled Lined Flue System

Option Y - Double Lined Flue System





GENERAL NOTES:

- Fire operational and maintenance instructions can be downloaded from www.warmington.co.nz
- Warranty for full details on product warranties, contact your local authorised Warmington retailer.
- Correct installation, operation and maintenance must be maintained to comply with Warmington warranty.
- The appliance and flue system must be installed in accordance with ASNZS2918:2001 and the appropriate building codes.
- The flue system and fireplace is to be swept annually or more frequently if required.

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 MAY RENDER THE INSTALLATION UNSAFE.

FOR SI FIRES INSALLED WITH WETBACKS:

 WARNING: DO NOT CONNECT 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

> NOTE: For operating instructions download from the website www.warmington.co.nz



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