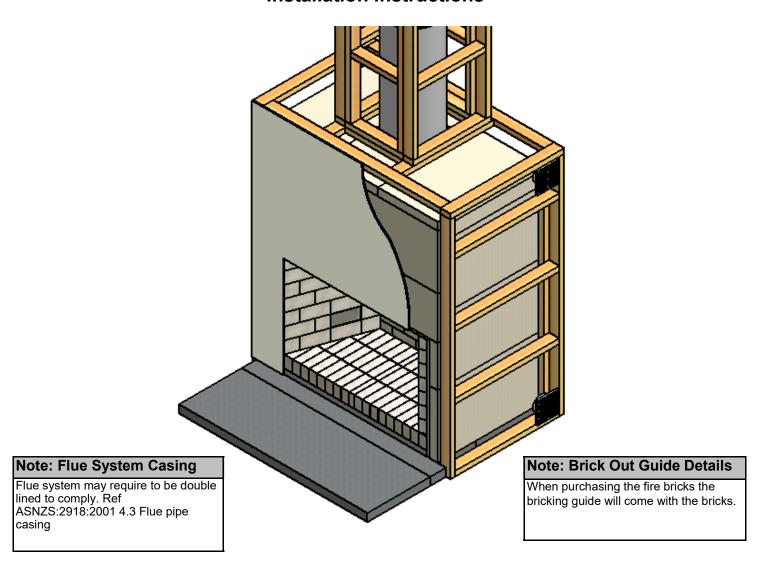


# Traditional 800-1000-1200 Open Fire

Solid Fuel Burner, Traditional Brick Built Open Fire.

### **Installation Instructions**



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

### Fires and flue system have been tested 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

Warmington recommends the fire to be installed by an approved NZHHA Installer or suitable qualified trade person.

### **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**

Supplied as Trad. Fire Box	No:
Traditional Firebox	1
Traditional Firebox Adaptor	1
Caitec Venting System	2
*Caitec Steel Brick	
*Caitec Perf. Extension	

NOT Supplied (Optional extra)	No:
Log Lighter & Control Box	1

NOT Supplied (sold separately)	No:
Warmington Fluekit	1

NOT Supplied (sold separately)	No:
Fire Bricks (H40) 75X115X230mm	Varied
Other Sizes Available	
Fire Brick Refractory Mortar	1
Autoclaved Aerated Concrete (AAC) Heat cell	1
Constructed on site	
Flashing System	1
Traditional Fire Grate	1
Size to Order  After Bricklaying	
Non Combustible Cladding	
(Promat-Superlux-Brick-Stone etc)	
Fill /Crush (vermiculite etc)	
Aluminium Tape . 3M Scotch Brand	
Exhaust Sealant	
Gas & Electrical Work Onsite	
Fire / Flue kit / Flashing Installation	
Installation of Brickwork	
Council Permit	



## GENERAL INFORMATION

Like the traditional brick back fires of yesteryear, the Warmington Traditional Fire is built with the experience and techniques of the past. These make a grand statement in the home. With the introduction of the gas log lighter for ease of lighting, these fires are simple to operate.

### 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.

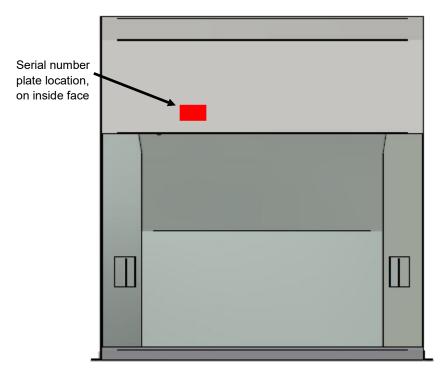
### Pressure Differential, Venting & External Air into the Building:

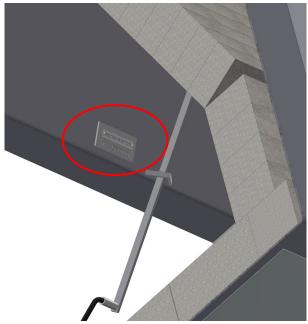
All fires need air to burn and draw correctly. Kitchen fans, air conditioning units, high wind zones, and naturally forming draught spaces can all have an effect on the pressure differential from inside the building to the outside. A lower pressure in the building may induce a draught down the flue system 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.

### **SERIAL NUMBER**





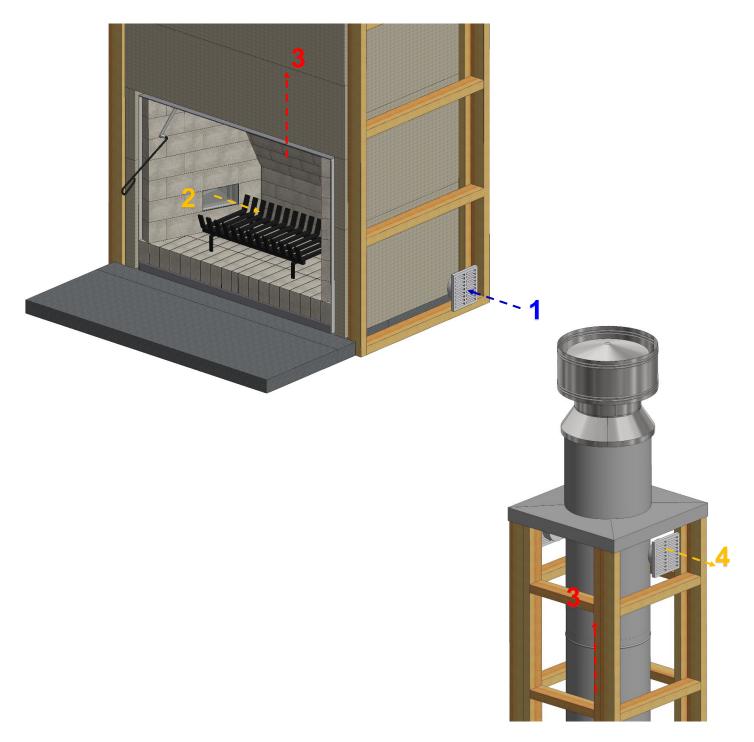


### "CAITEC" ROOM AIR REPLACEMENT TECHNOLOGY

Fitted in every Warmington traditional 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:

- Air enters the cavity (and heat cell if one is used) through external vents 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 and enters the combustion chamber via two perforated air bricks (one on each side).
- 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).





### **Important Notes:**

- 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.
- Install to manufacturer's specifications.
- All new installations require a permit.
- For special requirements concerning materials (timber mantle and surrounds) within close proximity of Warmington products, please contact your local Warmington technical consultant or designated installer.

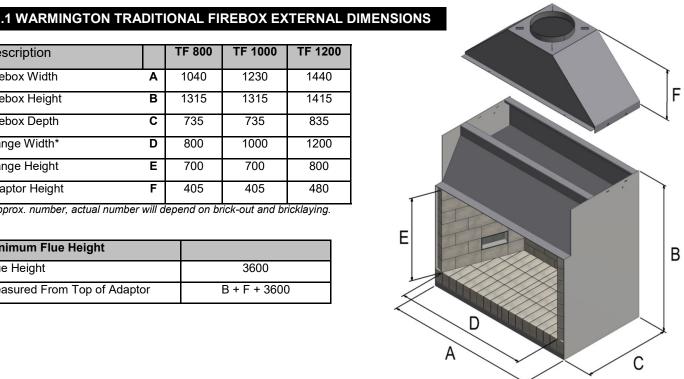
### STAGE 1: FRAME CONSTRUCTION PROCEDURE FOR BUILDER

- Mark out flue centre on floor.
- Mark out heat cell clearance requirements.
- Construct framing or block surround according to relevant minimum dimensions as referenced on pages 4 to 7.
- After framing surround is complete, construct plinth to required height (see page 8 for details).

Description		TF 800	TF 1000	TF 1200
Firebox Width	Α	1040	1230	1440
Firebox Height	В	1315	1315	1415
Firebox Depth	С	735	735	835
Flange Width*	D	800	1000	1200
Flange Height	Е	700	700	800
Adaptor Height	F	405	405	480

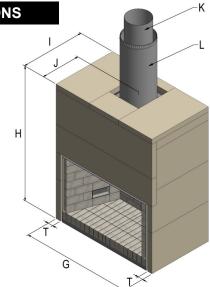
<sup>\*</sup>Approx. number, actual number will depend on brick-out and bricklaying.

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



### 1.2 AUTOCLAVED AERATED CONCRETE (AAC) HEAT CELL DIMENSIONS

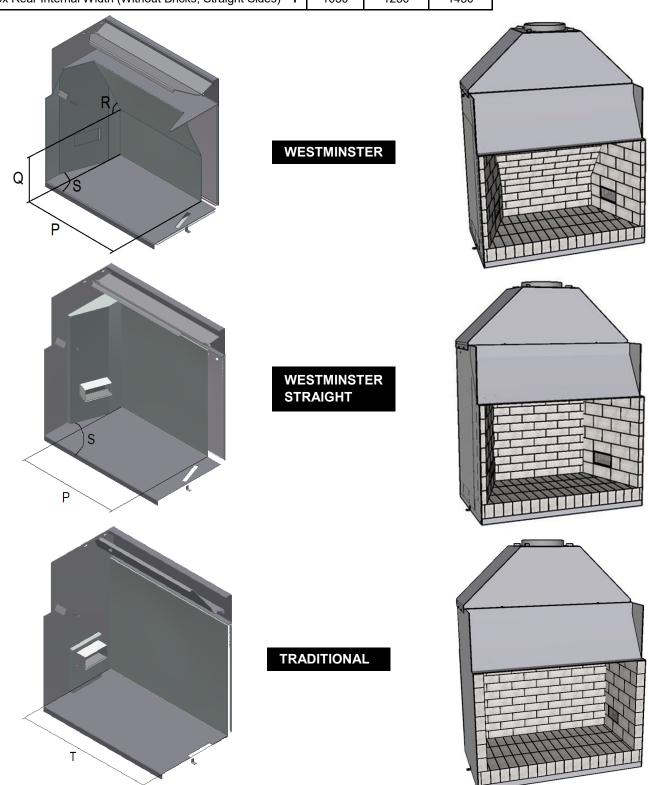
Description		TF 800	TF 1000	TF 1200
Heat Cell Width	G	1240	1440	1640
Heat Cell Height	Н	1820	1820	1995
Heat Cell Depth	I	865	865	965
To Centre of Flue	J	539	538	589
Flue Diameter	K	300	300	350
Liner Diameter	L	400	400	450
Heat Cell Clearance Width	M	1290	1490	1690
Heat Cell Clearance Depth	N	890	890	990
Heat Cell Clearance Height	0	2150	2150	2150
Heat Cell Panel Thickness	T	75	75	75
Chimney Chase Clearance	Χ	500	500	550





### 1.3.1 WARMINGTON TRADITIONAL FIREBOX INTERNAL DIMENSIONS

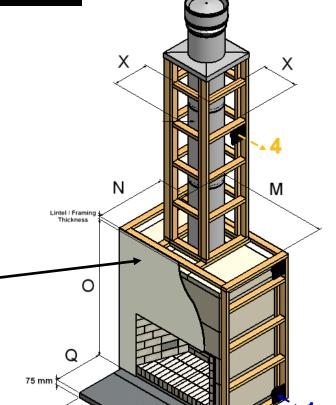
Description		TF 800	TF 1000	TF 1200
Firebox Rear Internal Width (Without Bricks)	Р	738	938	1138
Height to Back Taper	Q	446	446	446
Back Taper Angle	R	66°	66°	66°
Side Wall Taper Angle	S	70°	70°	70°
Firebox Rear Internal Width (Without Bricks, Straight Sides)	Τ	1030	1230	1430





### 1.3 TIMBER FRAMING & TRIM OUT DETAILS - HEAT CELL CLEARANCE

Description		TF 800	TF 1000	TF 1200
To Centre of Flue	J	539	538	589
Flue Diameter	K	300	300	350
Liner Diameter	L	400	400	450
Heat Cell Clearance Width	М	1290	1490	1690
Heat Cell Clearance Depth	N	890	890	990
Heat Cell Clearance Height	0	2150	2150	2150
Hearth Width	Р	1350	1550	1800
Hearth Projection	Q	500	600	750
Chimney Chase Clearance	Х	500	500	550



Р

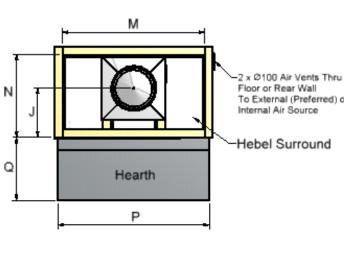
### Note:

Non-combustible cladding eg. 10mm promina board, 10mm Supalux, latex plaster etc. (not supplied).

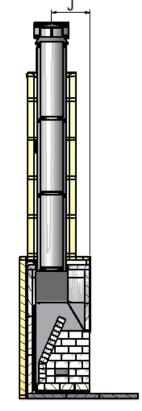
### Note:

Centreline of flue is NOT in centre of alcove

### 1.4 PLAN, FRONT ELEVATION & CROSS SECTION



# Lintel/Framing Thickness



### Note:

50mm clearance from the flue liner to timber framing is required if single lined, see page 19.

75 mm



### 1.5 BLOCK ENCLOSURE 1 (WITH AAC HEAT CELL)

Description		TF 800	TF 1000	TF 1200
Hearth Width	Р	1350	1550	1800
Hearth Projection	Q	500	600	750
Block Clearance Width	R	1610	1610	2010
Block Clearance Depth	S	1000	1000	1200
Block Enclosure Height	U	2390	2390	2390
To Centre of Flue	V	639	638	689
Chimney Chase Clearance	Х	500	500	550

### Note:

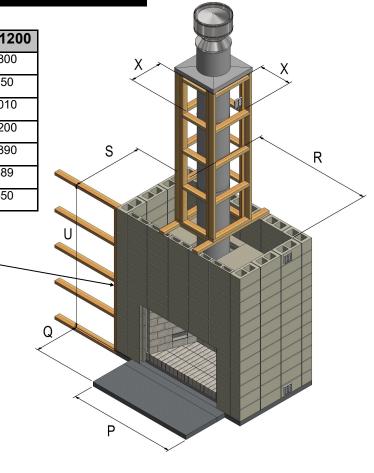
With AAC heat cell, timber framing can be in direct contact with brick alcove

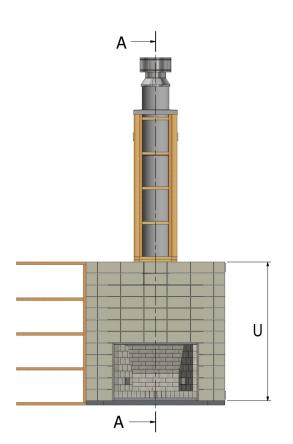
### Note:

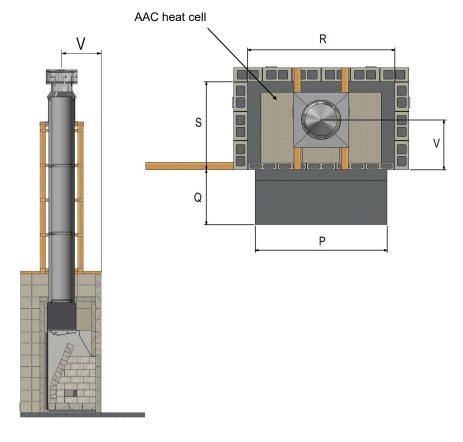
Centreline of flue is NOT in centre of alcove

### Note:

Two 100mm diameter vents (minimum) required at base of block for Caitec system and cavity venting. Venting to external air recommended. Cut holes in block structure as required.

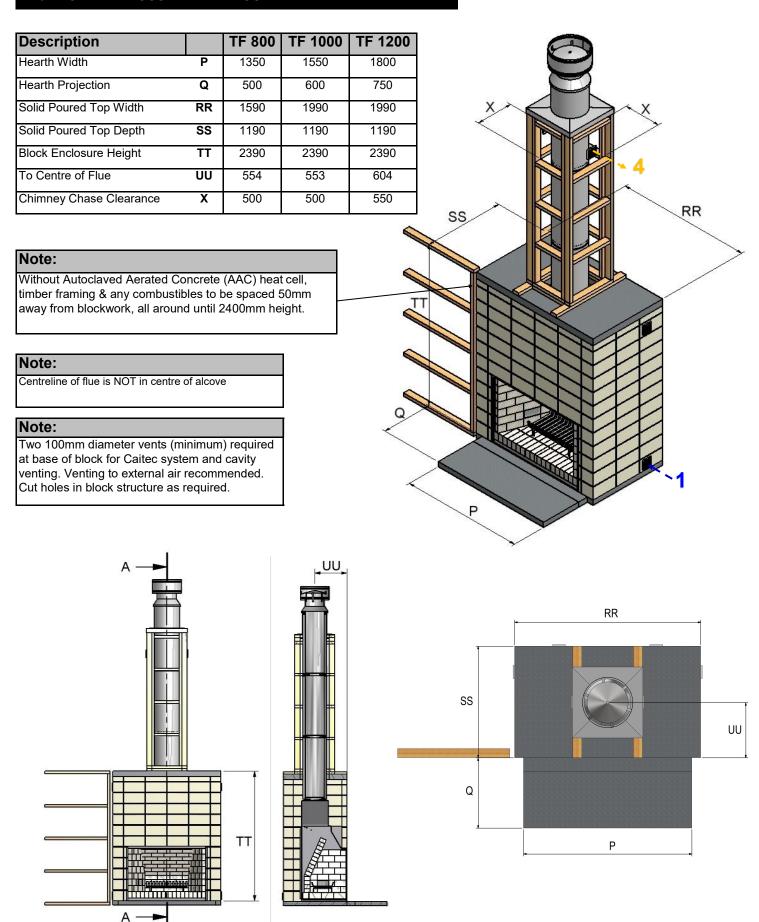








### 1.6 BLOCK ENCLOSURE 2 - WITHOUT AAC HEAT CELL



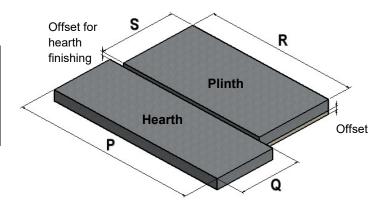


### 1.7 HEARTH & PLINTH CONSTRUCTION DETAILS

### 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.



### STAGE 2: INSTALL PROCEDURE FOR NZHHA CERTIFIED INSTALLER AND BRICKLAYER

Note: Recommended order of operations only. Installation order may vary depending on nature of build and/ or availability of bricklayer.

- Fit firebox to plinth in correct position using seismic restraint flanges on sides of firebox.
- Bricklayer to install bricks. Refer to section 2.2 to install 'Caitec' system during brick out. If installing fire with optional log-lighter, follow additional instructions 2.3 and 2.4.
- Fill cavity at back of firebox (behind installed brickwork) with vermiculite fill/ crush
- Fit adaptor to firebox using supplied M8 bolts, nuts and washers. Ensure that exhaust sealant is used between fire and adaptor.
- Construct autoclaved aerated concrete (AAC) enclosure around traditional firebox.
- Insert grate. Grate dimensions are to be specified after brick out is complete.
- Fit flue system. See page 16 for details.
- Fit cowl and flashing system

	TF 800	TF 1000	TF 1200
Bags of vermiculite fill required	1	1	1

### 2.1 BRICKS & BRICK OUT DETAIL

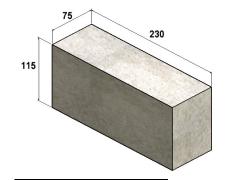
The fire bricks are sold separately from the firebox. Purchase from a Warmington retailer. The bricking guide will come with the purchase of the bricks.

### **Brick size and refractory:**

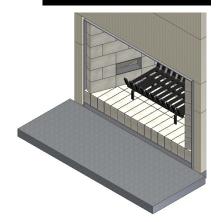
The standard brick out is the stretcher bond style. However, other styles can be bricked according to your liking. Some bricklayers prefer to use their own refractory. Please check with the bricklayer.

Bricks come in a standard size of 230 x 115 x 75mm. 25 mm and 40 mm thick bricks are available, at a higher cost however due to more bricks being necessary for the brick out.

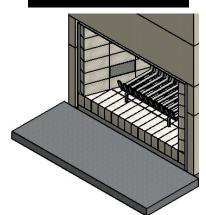
The figures below show different pattern styles that are bricked with the standard brick size of  $230 \times 115 \times 75$ mm.



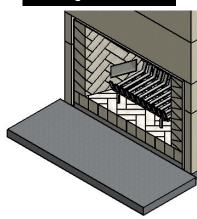
### **Stretcher Bond Pattern**



### Stack Bond Pattern



### **Herring Bone Pattern**





### 2.2 CAITEC SYSTEM INSTALLATION

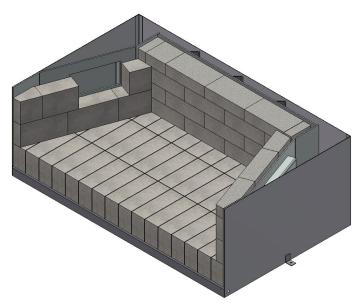
The Caitec system ensures that pre-heated external air is available for combustion, improving efficiency while reducing the risk of back draughting.

Warmington requires that 2x 100mm diameter (or equivalent cross sectional area or larger) vents are used to extract outside air into the cavity (and into the firebox).

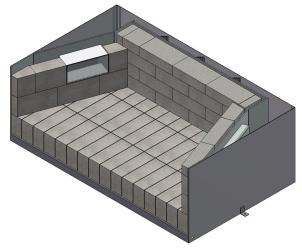
Such vents should be accounted for at the design stage, and should be placed below the elevation of where combustion occurs within the firebox. Locating the vents flush with the profile of the base of the firebox (or close to) is sufficient.

### To install:

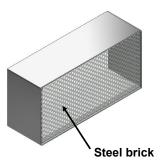
- For bricklayer: Lay up the base layer of bricks, first two layers of the wings and first few layers of the fireback, leaving a one brick gap in the side of the second layer of each wing, about 100 150mm forward of the front face of the fireback (or where the grate is expected to be placed).
- Complete brick out
- Slide 'steel bricks' into place to complete Caitec installation (front face of steel bricks should sit flush with bricks).



Lay up base layer of bricks, as well as first two layers of wings and fireback

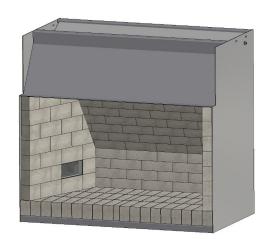


Mark up outline of air brick in situ



### Note:

Caitec system to be installed on both left and right sides of firebox as standard



Completed brick out with Caitec installed

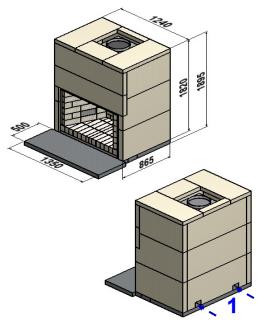


### 2.3 AAC HEAT CELL ASSEMBLY

The heat cell is constructed around the firebox, using 75mm Hebel aerated autoclaved concrete (AAC) panels. (2400x600x75) Power Panels are required for basic heat cell construction as shown in detail "Firebox with Hebel Surround".

\*Visit www.warmington.co.nz site for AAC instructions (PDF download).

### **TF800 HEAT CELL ASSEMBLED**



### Note: Heat cell assembly details

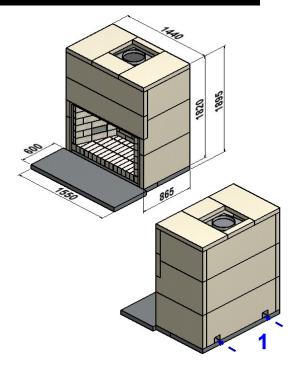
When purchasing the AAC heat cell kit, the assembly guide will come with the kit.

### Note:

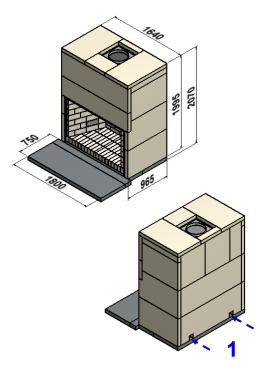
If solid plastering the heat cell structure, it is recommended to use a fibreglass mesh with a latex plaster to minimise the chance of the plaster cracking. (see your plasterer for correct materials and applications).

Note: Two 100 x 100mm holes in the bottom back Hebel panels provide venting for Caitec air system.

### **TF1000 HEAT CELL ASSEMBLED**



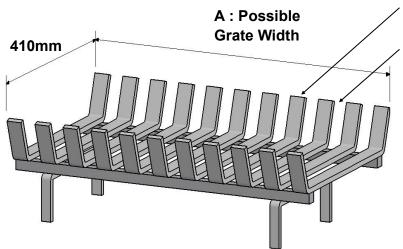
### **TF1200 HEAT CELL ASSEMBLED**



\*Note: 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. (See your plasterer for correct materials and applications).



### 2.4 BRICK FIRE GRATE FITMENT



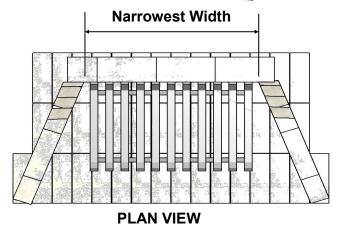
30 mm fingers

30 mm gaps

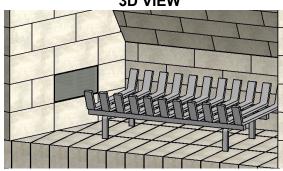
### Measuring for the Grate

First measure the narrowest width of the brick fire as shown in diagram.

Each finger of the grate is 30mm & each gap in between is 30mm, the width of the grate needs to be within the narrowest brick out measurement on the base as indicated in the plan view below, with a bar needing to be at each end of the grate to complete the makeup of the grate.



**3D VIEW** 



	A : Possible grate widths	Amount of 30mm fingers	Amount of 30mm gaps
	330 mm (min)	6	5
	390 mm	7	6
* TF 800 Grate	450 mm	8	7
	510 mm	9	8
	570 mm	10	9
	630 mm	11	10
* TF 1000 Grate	690 mm	12	11
	750 mm	13	12
* TF 1200 Grate	810 mm	14	13
	870 mm	15	14
	930 mm	16	15
	990 mm	17	16
	1050 mm	18	17
* TF 1500 Grate	1110 mm (max)	19	18

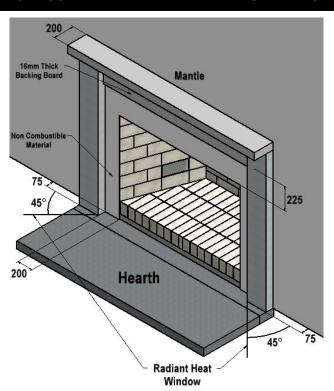
**Measurements for Wood Grate Sizes** 

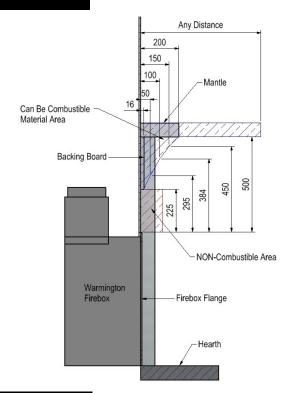


### **STAGE 3: FINISHING PROCEDURE FOR BUILDER**

- Construct hearth to required thickness
- Close in AAC enclosure and chimney chase (if in timber alcove)
- Finish autoclaved aerated concrete (AAC) enclosure and hearth to customer's requirements (e.g. paint/ tiles etc). Due to the expansion and contraction of metal fireplaces, a 3mm gap between the flange and the finished surround should be maintained.
- Remember to install required 2 x 100mm diameter vents for Caitec system
- Construct mantle if required

### 3.1 COMBUSTIBLE MANTLE CLEARANCES: REF BUILDING CODE





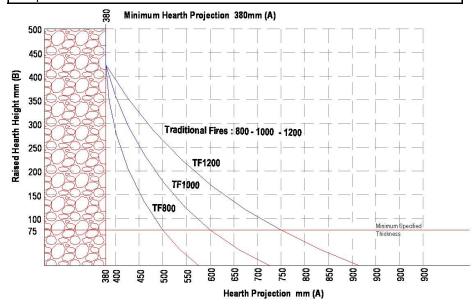
### **3.2 HEARTH CLEARANCES**

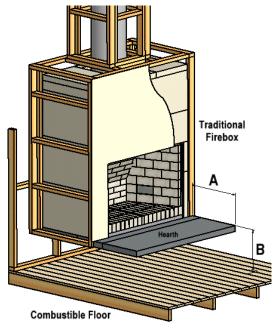
### Important Note:

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.





### Important Note:

For raising trad. fires on combustible floors, at (dimension B) height of 420mm & above the hearth extension (dimension A) of 380mm must be maintained. This is for all traditional fire models.



### **FLUE SYSTEM INSTALLATION**

### **FLUE DETAILS DIMENSIONS**

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

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

Flue Details	No:	TF 800	TF 1000	TF 1200
Cowl	1	300	300	350
Top Spider	1	300	300	350
Cone	1	300	300	350
Flue Diameter	3	300	300	350
Liner Diameter	3	400	400	450
Spacer	3	300/400	300/400	350/450

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

### **FLUE SYSTEM INSTALLATION GUIDE**

This is a general installation guide only – Contact a "NZHHA Installer" for Installation Advice or go to www.homeheat.co.nz then select <u>Members</u> & follow Instructions, to find a Certified NZHHA SFAIT Installer.

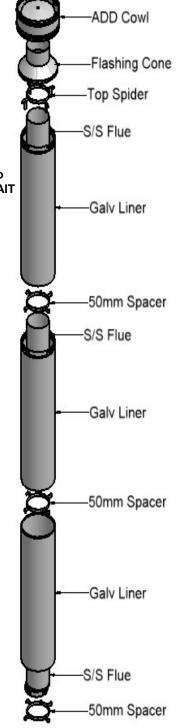
- Install the first length of flue pipe with the crimped end down, inside the Adaptor collar, ensure
  that the flue pipe is sealed into the collar with exhaust sealant. Rivet the flue in 3 places around
  the Adaptor collar. Place a spacer around the flue pipe approximitaly150mm above the adaptor
  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".
- 5. 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".

- 5. 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.
- 6. 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".
- 7. Fit the "Cowl" to the top of the flue pipe. The "Cowl", "Flashing cone", and the "Flue pipe" can be secured to each other with the uses of a stainless steel self tapping screw. This will allow the "Cowl" to be removed for cleaning.

Flue system may require Bird Proofing due to the installation and locations, discuss this with your installer for the best advice.

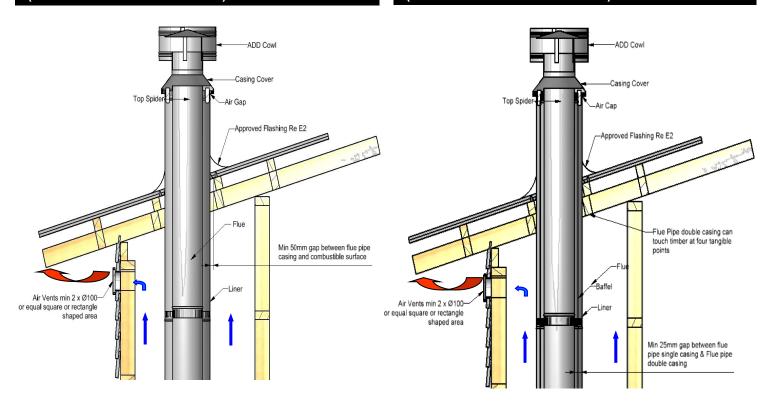
If the Flue system is installed into a "Chimney Chase", allow for air vent as close to the top of the chase as practical, or allow venting through the "Chimney Chase Flashing". A "Venting Flashing cone" and a 25mm gap around the Liner with a "Venting Flashing Cone-Spider" can be used.



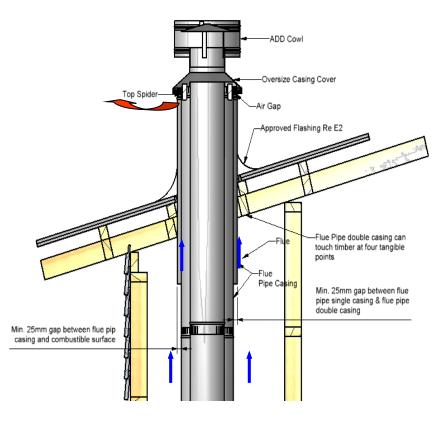


# FLUE PENETRATION VENTED THROUGH ALCOVE (SINGLE LINED FLUE SYSTEM)

# 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.

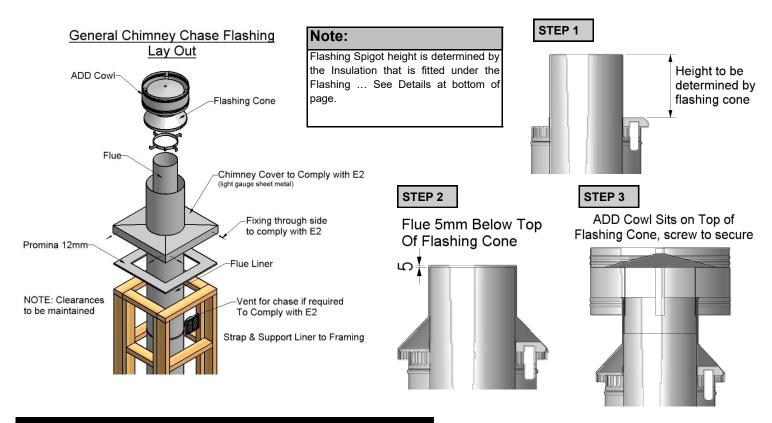
All external air vents & ceiling penetrations must be bird proofed with permanently fixed screens. Additionally, all external air vents and ceiling penetrations are to be vermin and rodent proof.

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

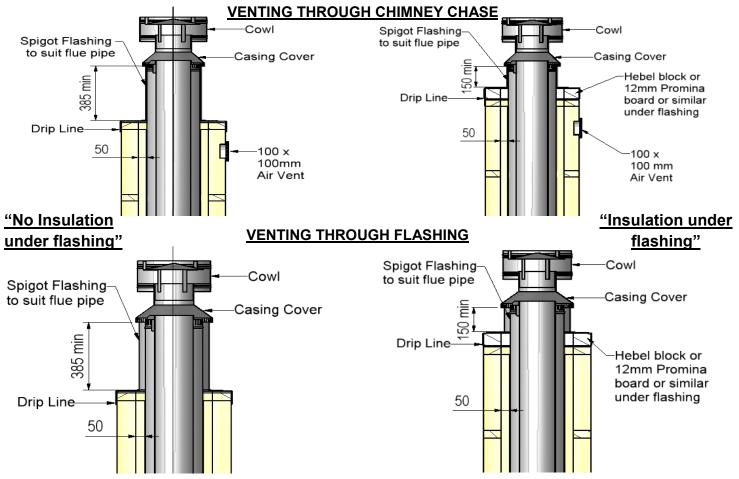


### **CHIMNEY CHASE FLASHING DETAILS**

### SETTING ADD COWL AND FLASHING CONE HEIGHT

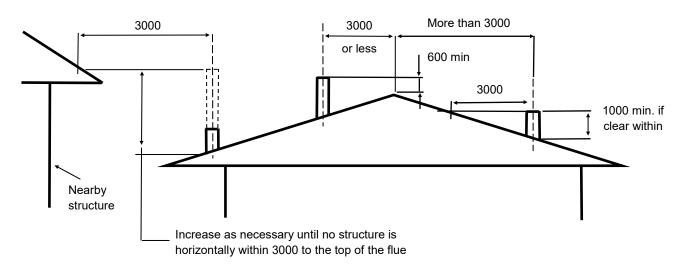


### CHIMNEY CHASE FLASHING AND AIR VENTILATION OPTIONS



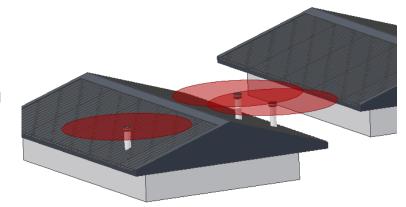


### FLUE HEIGHT MINIMUM DETAILS



The flue exits are to comply to ASNZS 2918: 2001

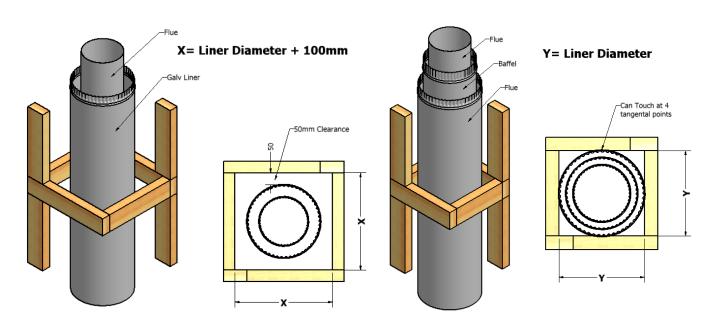




### FRAME OUT AND TRIM OUT DETAILS FOR CHIMNEY CHASE

Option X - Singled Lined Flue System

Option Y - Double Lined Flue System





### GENERAL NOTES: ASNZS 2918: 2001

### **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.

### **IMPORTANT NOTE ABOUT TRADITIONAL FIRES**

Like the traditional brick back fire of yesteryear, the Warmington traditional fire is built with the experience and techniques of the past. These make a grand statement in the home and with the introduction of the gas log lighter for ease of lighting are simple to operate.

### **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.

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



Industries 1994 LTD
PO Box 58652, Botany 2163, Auckland