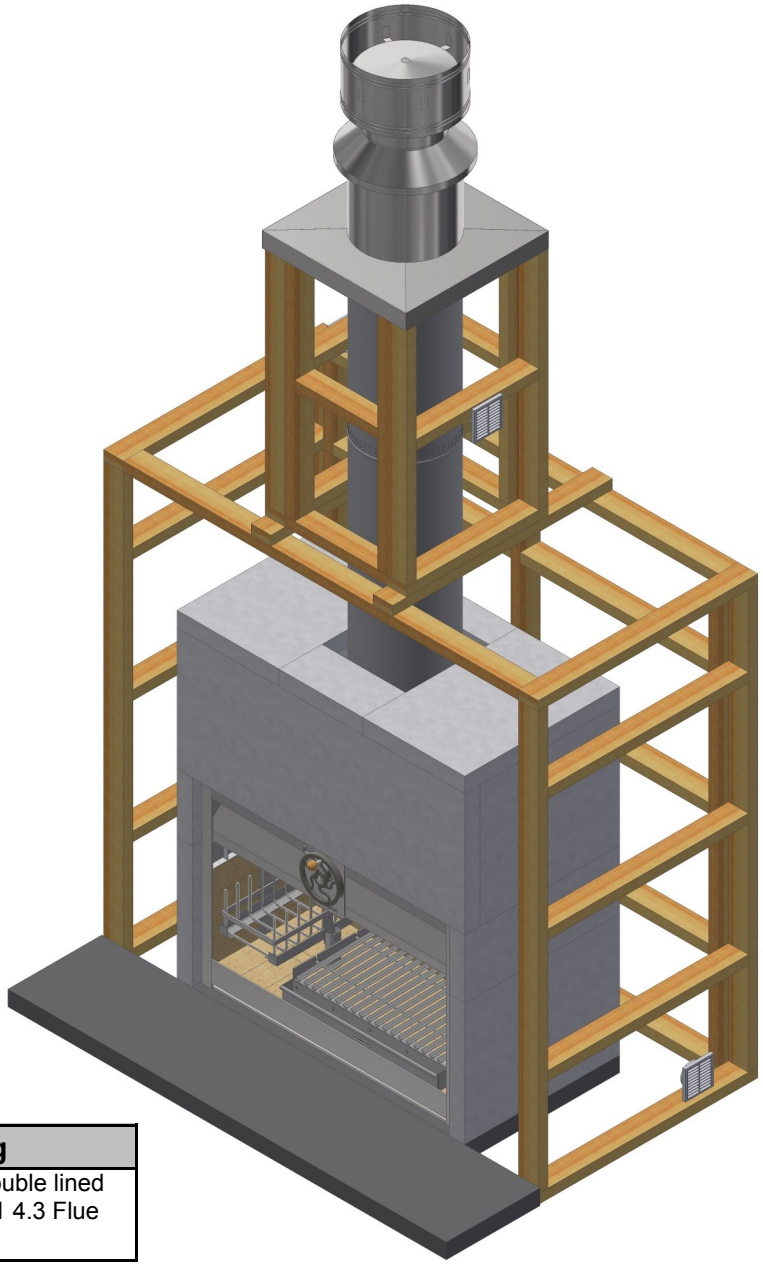
9 October 2018

Kiwi Grill Inbuilt Open Fire

Outdoor South-American Style BBQ Cooking Wood Fire

Installation Instructions



Note: Flue System Casing
Flue system may require to be double lined to comply. Ref ASNZS:2918:2001 4.3 Flue pipe casing.

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

Fire, flue system and instructions 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.

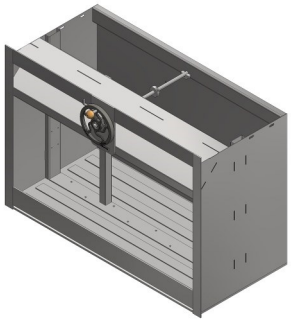
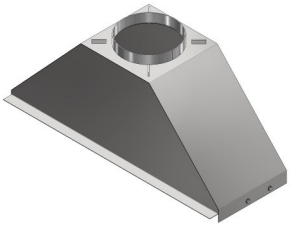
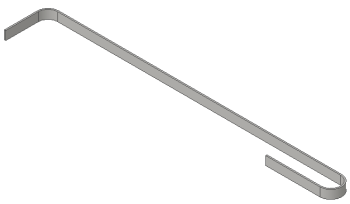
IMPORTANT

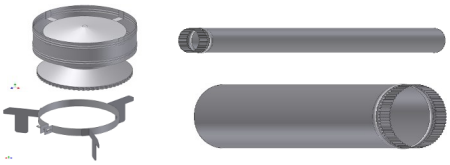
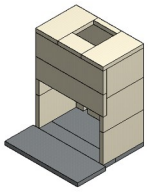
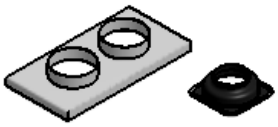
Read all the instructions carefully before commencing the installation. Failure to follow these instructions may result in a fire hazard and void the warranty.

Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.

All dimensions are in mm

COMPONENTS REQUIRED FOR CONSTRUCTION

Supplied	No:
Warmington KG Firebox 	1
Warmington KG Adaptor 	1
25mm Bricks 	80
Warmington KG Weather Shield 	1
Ember rake 	1

NOT Supplied (sold separately)	No:
Warmington Outdoor Flue kit 	1
Autoclaved Aerated Concrete (AAC) Heat cell 	1
Flashing System 	1
Exhaust Sealant	
Council Permit	
Fire, flue kit and flashing installation	

NOT Supplied (optional extras)	No:
Outdoor KG Cabinet 	1

Checklist:	
Firebox incl. grill, wood basket etc	
Bricks	
Adaptor and bolts	
Weather shield	
Badge	
Packed by:	

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GENERAL INFORMATION

The Warmington Kiwi Grill is a wood fired barbeque, using the distinctive South American style of cooking over hot coals and logs. The Inbuilt appliance comes with a stainless steel grill, and wood basket and adjustable height control, which allows for precise temperature control for uniform cooking. To see more details and other models of the Kiwi Grill, visit our website www.warmington.co.nz.

POINTS TO CONSIDER PRIOR TO INSTALLATION

Location of the fire:

Open fires are better located well ventilated, sheltered area.

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.

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.

CAVITY VENTING

According to AS:NZS 2918:2001, the cavity must be vented with a minimum area of 10,000mm^2 top and bottom. Warmington requires two 100mm diameter vents to be installed at the base of the cavity. At the top of the cavity, the warm air can either be vented through the chimney chase structure (with a further two 100mm diameter vents), or through a venting flashing cone (in which case the flashing shall be made to suit). See page 14 of this document for more details.

This document makes the following references to cavity venting:

1. Air enters the cavity (air in).
2. Air exits the cavity (air out).

INSTALLATION

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 and to manufacturer's specifications
- Please establish which components are necessary for specific installation detail, before purchasing relevant products.
- All new installations require a permit. Check with your local council about compliance.
- 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: CAVITY CONSTRUCTION PROCEDURE FOR BUILDER

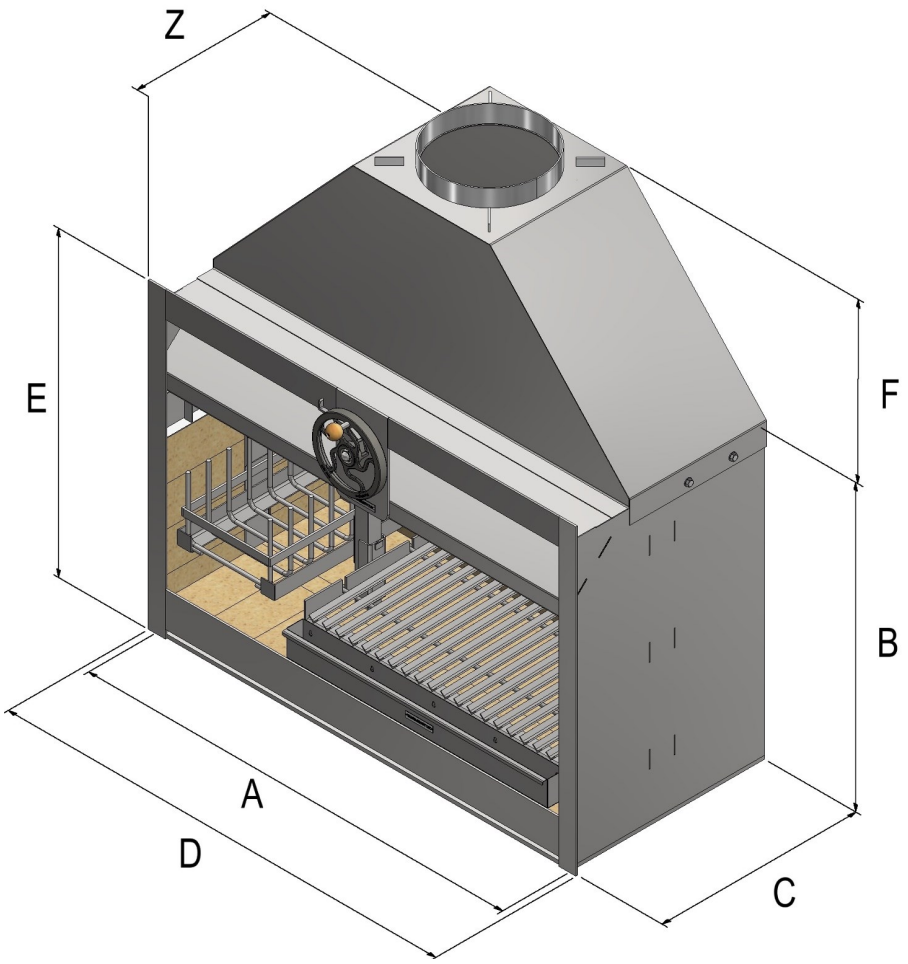
- Mark out flue centre on floor.
- Mark out relevant clearance requirements.
- Construct plinth to required height (see page 5 for details).
- Construct AAC heat cell (if installing into combustible surround). See page 5 for details.
- Start construction of framing or block surround according to relevant minimum dimensions as referenced on pages 4 to 7.

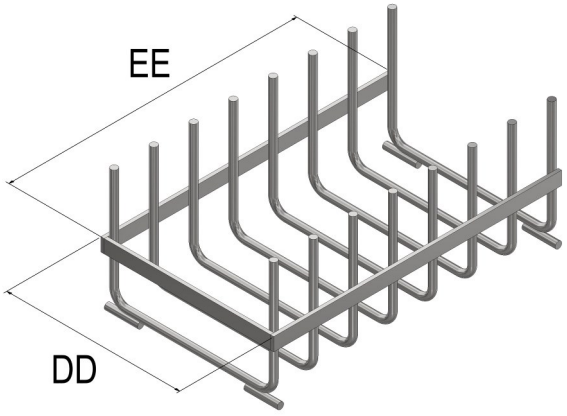
All dimensions are in mm

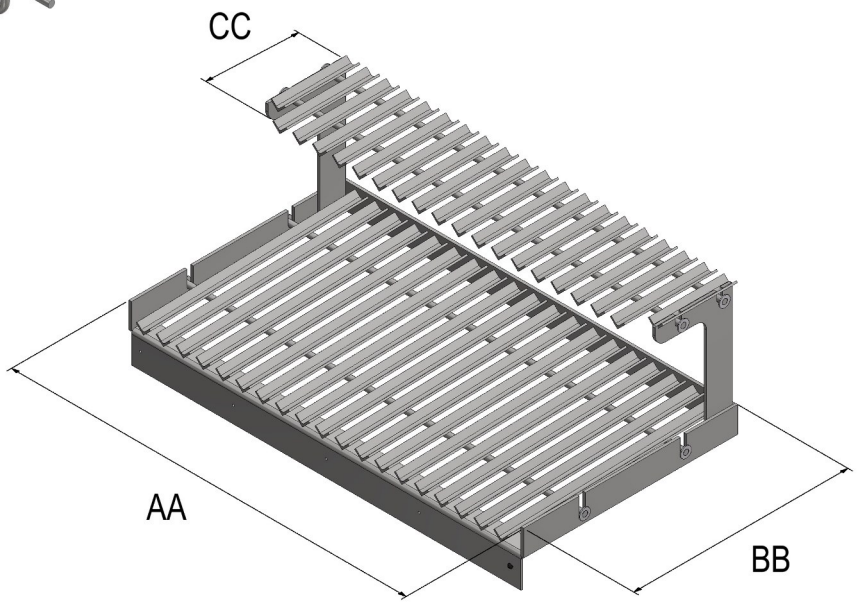
1.1 KIWIGRILL FIREBOX DIMENSIONS

Description		Kiwigrill
Firebox width	**A**	1210
Firebox height	**B**	835
Firebox depth	**C**	580
Flange width	**D**	1250
Flange height	**E**	885
Adaptor height	**F**	465
Front flange to flue centre	**Z**	374
Grill width	**AA**	765
Grill depth	**BB**	415
Warming rack depth	**CC**	180
Wood basket width	**DD**	260
Wood basket depth	**EE**	435

Minimum Flue Height	
Flue height	2400
Measured from top of plinth	B + F + 2400







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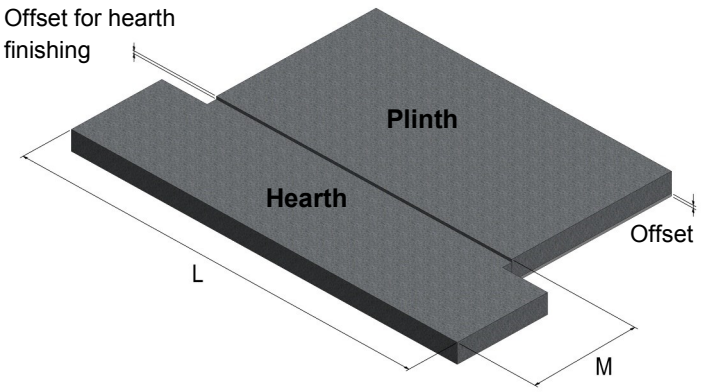
1.3 HEARTH AND PLINTH DETAILS

Description		Kiwigrill
Hearth width	L	2150
Hearth projection	M	460

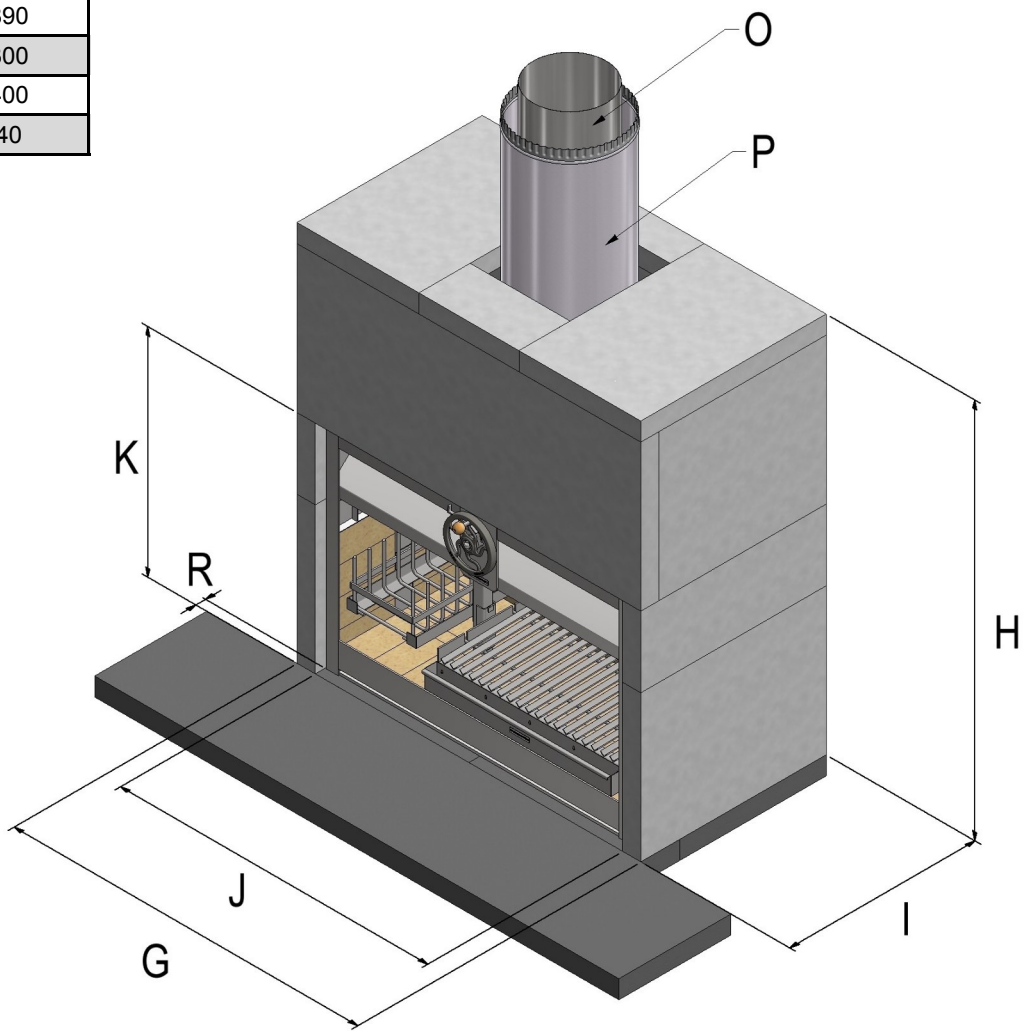


Notes:
For combustible flooring an insulating hearth and plinth of 75mm Autoclaved Aerated Concrete (AAC) is required.
The hearth projection M is 500mm minus the recess R. Therefore if R increases, the hearth projection may be reduced by the same amount.
To keep finishing on hearth flush with the plinth, the plinth should be offset from the ground by the thickness of the finishing material.
See page 9 for details on raised hearths.

1.4 AAC HEAT CELL DETAILS

Description		Kiwigrill
Heat cell surround width	G	1410
Heat cell surround height	H	1565
Heat cell surround depth	I	760
Heat cell window width	J	1260
Heat cell window height	K	890
Flue diameter	O	300
Liner diameter	P	400
Minimum recess	R	40

Notes:
Firebox is recessed a minimum of distance R (40mm in most cases) into heat cell structure (from the front).
Dimension Z is from flue centre to firebox front flange, not including the recess from the heat cell.
Hearth projection (dimension M) is taken from the front of the firebox flange to the edge of the hearth.
The heat cell structure is NOT designed to be load bearing.
The heat cell is purchased separately from the firebox. An installation guide for the heat cell is supplied with the AAC panels.



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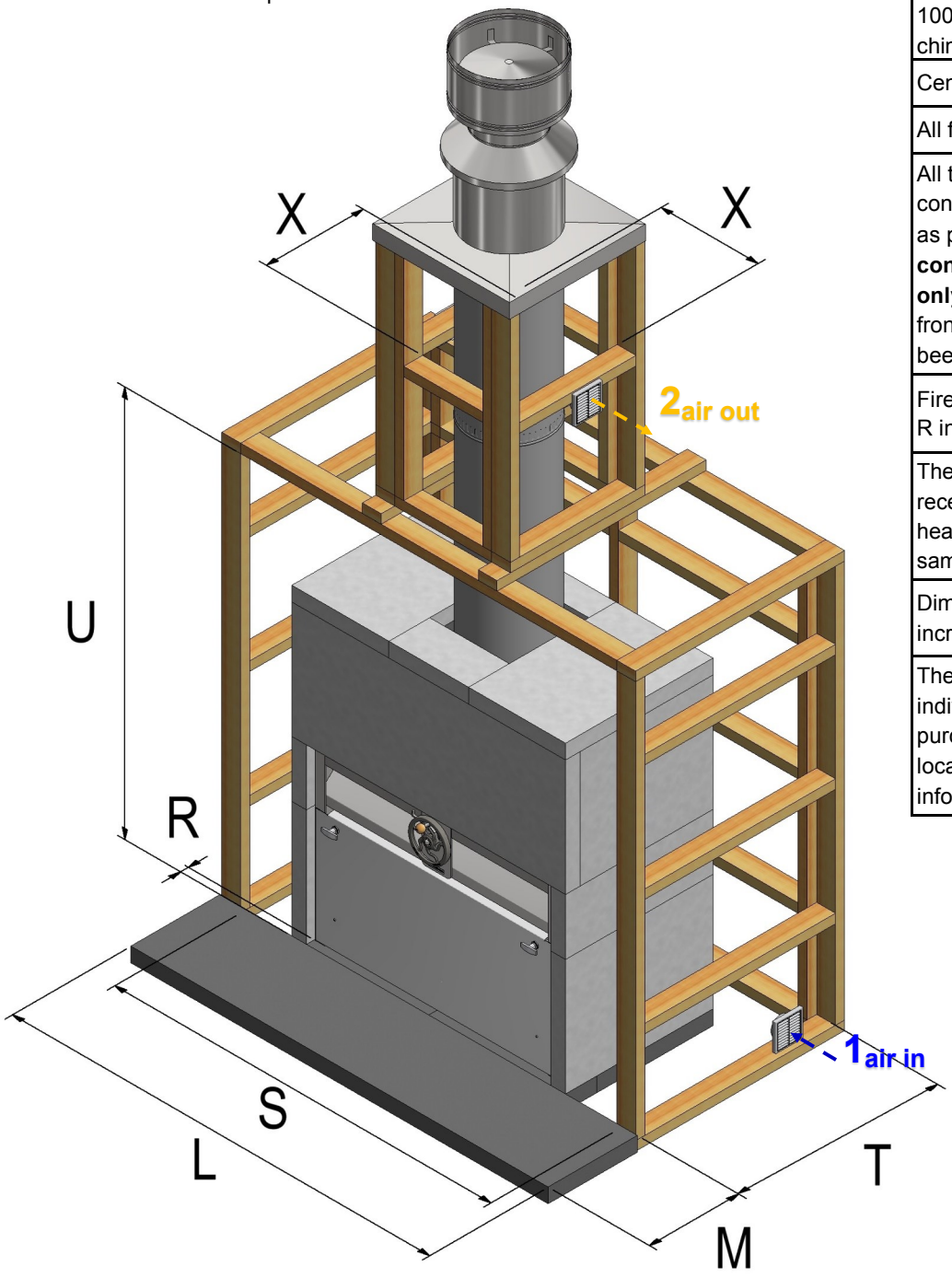
All dimensions are in mm

1.5 TIMBER FRAMING DETAILS - MINIMUM CLEARANCES

Description		Kiwigrill
Hearth width	**L**	2150
Hearth projection	**M**	460
Minimum recess	**R**	40
Timber clearance width	**S**	1938
Timber clearance depth	**T**	1030
Timber clearance height	**U**	2020
Chimney chase clearance	**X**	500

*U is measured from the top of the hearth

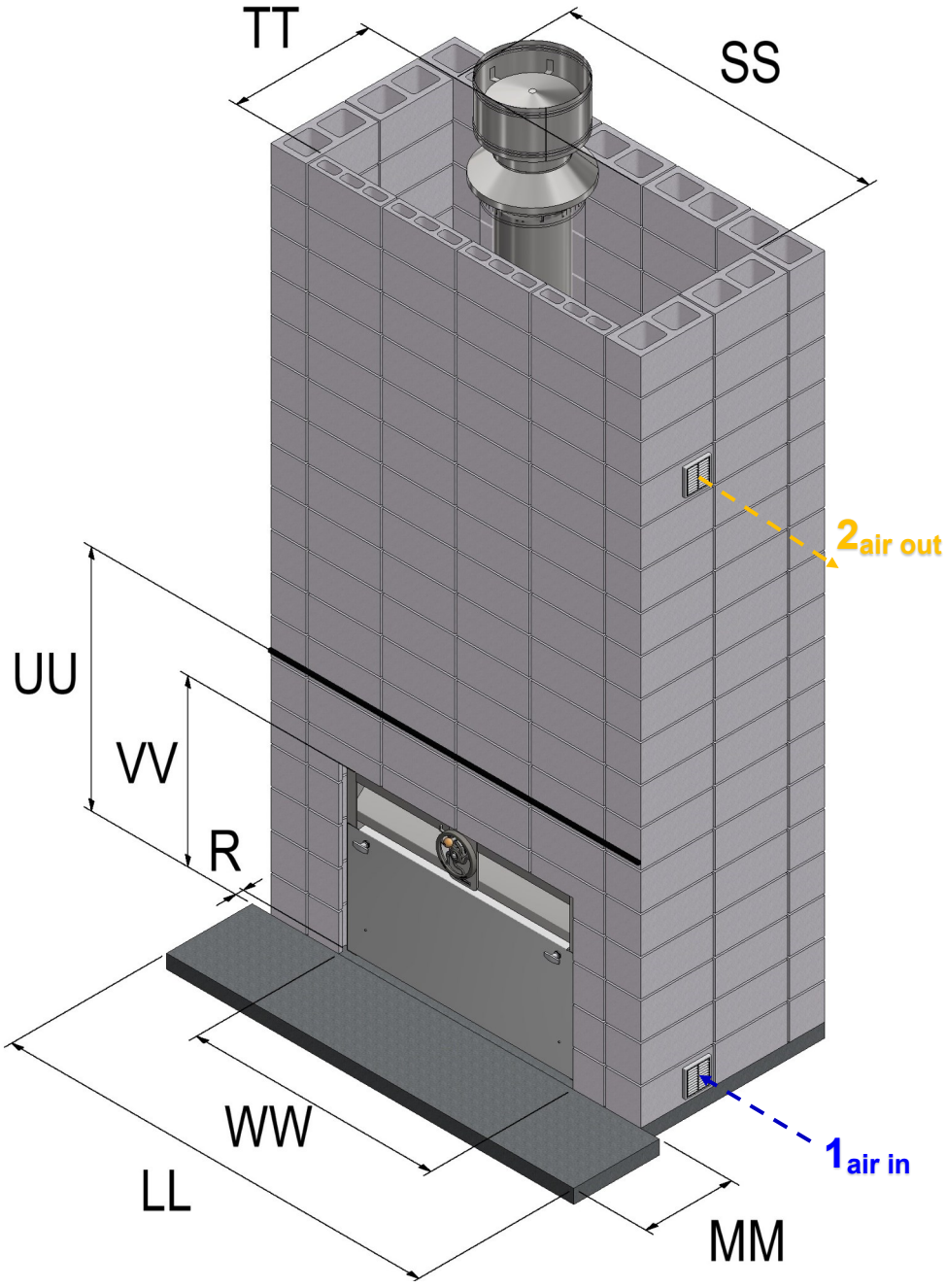


Notes:
The AAC heat cell **must** be constructed if installing into a combustible surround/ cavity for the installation to be regarded as tested (AS/NZS 2918:2001) and for these minimum clearances to be valid.
The cavity must be vented with 2x 100mm diameter vents (LH and RH sides of the cavity, close to base of fire). A further 2x 100mm diameter vents are required at top of chimney chase (or via venting cone).
Centreline of flue is NOT in centre of alcove.
All framing dimensions are internal only.
All timber framing and cladding to be constructed to suit an outdoor environment as per NZ Building Code. **Timber construction shown here is an example only.** It is recommended to construct the front framing sections after the firebox has been installed.
Firebox is recessed a minimum of distance R into the heat cell structure (from the front).
The hearth projection M is 500mm minus the recess R. Therefore if R increases, the hearth projection may be reduced by the same amount.
Dimension T includes the recess R and will increase if R increases.
The flue centre can be offset to suit individual installation scenarios, by purchasing an offset adaptor. Consult your local Warmington dealer for more information.

All dimensions are in mm

1.6 BLOCK ENCLOSURE DETAILS- INSTALLATION GUIDE

Description		Kiwigrill
Hearth width	LL	2150
Hearth projection	MM	460
Minimum recess	R	40
Block structure internal width	SS	1610
Block structure internal depth	TT	710
Combustible mantel clearance	UU	1230
Block window height	VV	890
Block window width	WW	1260



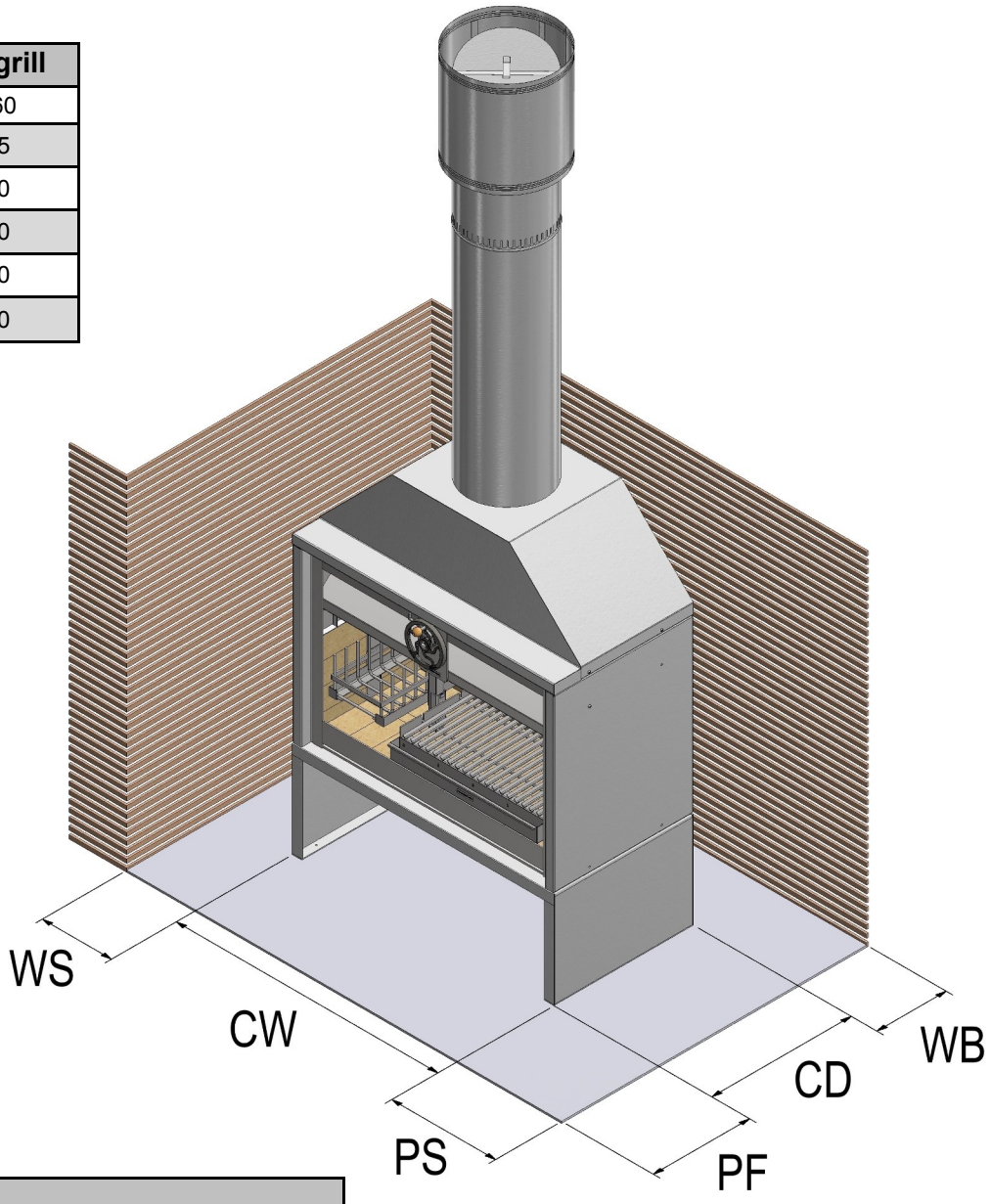
Notes:
Block structure must be constructed of non-combustible material (excluding mantel).
Example blockwork shown here is 20 series blocks at back and sides, 10 series blocks at the front.
Firebox is recessed by minimum dimension R into structure for waterproofing firebox.
The hearth projection MM is 500mm minus the recess R. Therefore if R increases, the hearth projection may be reduced by the same amount.
The cavity must be vented with 2x 100mm diameter vents (LH and RH sides near base of fire). Air must exit cavity either with an additional 2x 100mm diameter vents (near top of cavity), or through a venting cone.
If installing a combustible mantel with block structure, mantel clearance UU applies. This clearance can be reduced with the addition of an appropriate mantelshelf heatshield as per AS/NZS 2918:2001 requirements.
Centreline of flue is NOT in centre of alcove.
Image is shown without flashing (to show block-out dimensions). See page 12 for details on flashings.
Height of block structure is shown here is to match height of the 2.4m flue system. If framing out the flue with timber, follow AS/NZS 2918 section 3.2.2 for chase clearance height.
Ensure that the fire and flue system is installed before the alcove access is blocked off.
All load bearing structures are to be engineered to carry load.
The flue centre can be offset to suit individual installation scenarios, by purchasing an offset adaptor. Consult your local Warmington dealer for more information.

All dimensions are in mm

1.7 FREESTANDING CABINET SURROUND DETAILS– MINIMUM CLEARANCES

Outdoor cabinets can be used to reduce building costs as no heat cell or timber/ block surround is required. The Kiwigrill cabinets can either be purchased with a base (the appliance will therefore be freestanding), or installed onto a raised plinth (see page 9 for details on raised hearths). TA separate installation manual will be supplied on purchase of the cabinet.

Description		Kiwigrill
Cabinet width	**CW**	1360
Cabinet depth	**CD**	725
Wall clearance side	**WS**	360
Wall clearance back	**WB**	360
Plinth projection side	**PS**	500
Plinth projection front	**PF**	500



Notes:
Installation scenario shown is an example only.
Cabinet installation is an untested situation with reduced clearances (according to AS/NZS 2918).
Clearances WS and WB may be reduced to 240mm if additional heat shields are placed on the walls according to AS/NZS 2918 requirements (12mm spacing).
Plinth must be non-combustible.
The cabinet is supplied separately to the firebox. A separate installation manual will be supplied with the cabinet purchase.

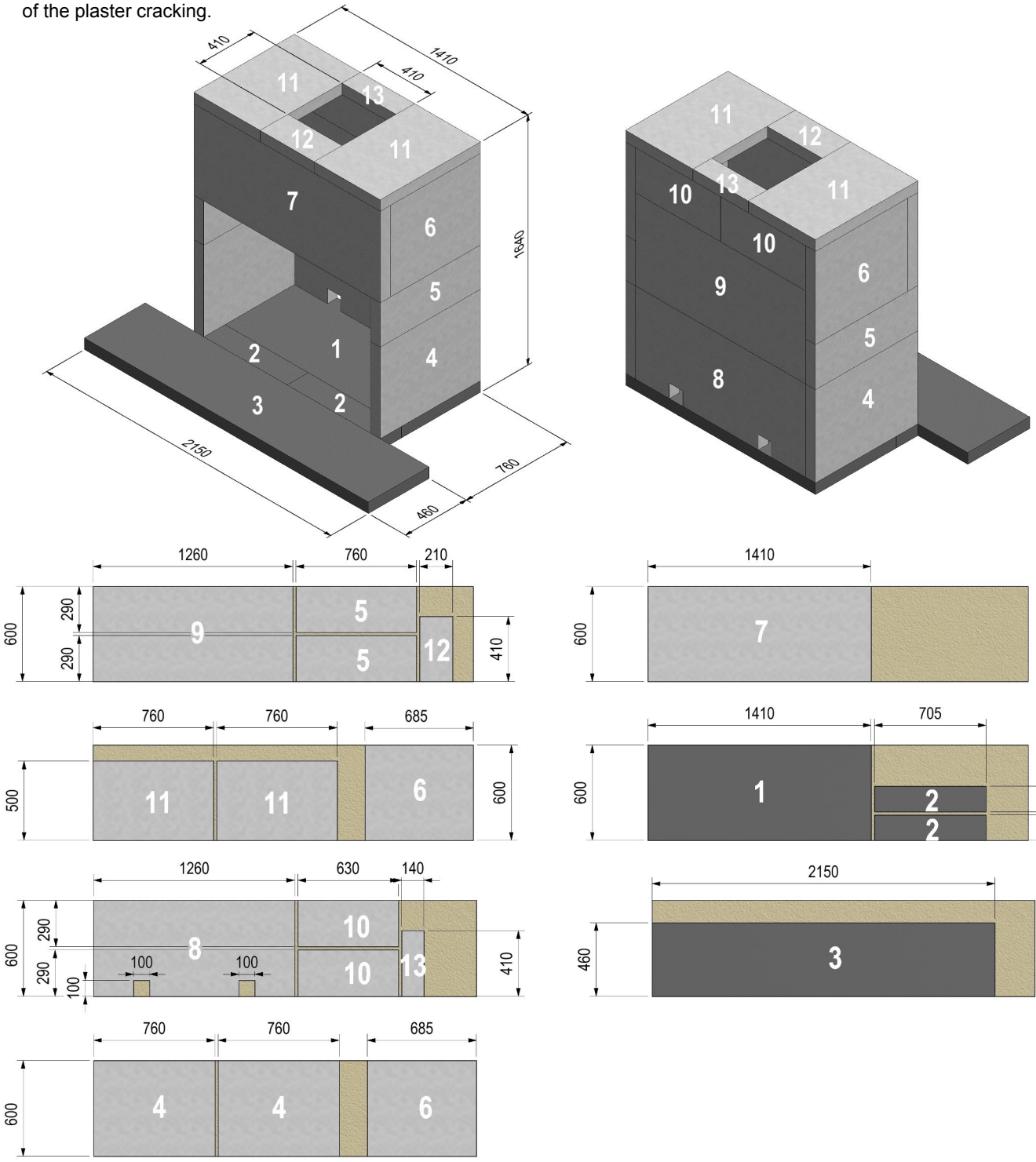
All dimensions are in mm

STAGE 2: INSTALL PROCEDURE FOR NZHHA CERTIFIED INSTALLER

- Fit the firebox into the cavity, onto the plinth. Bolt the firebox to the plinth using the seismic restraint brackets (which are located under square removable covers on the internal left and right hand 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.
- If installing into combustible framing, construct the AAC heat cell around the fire. An instruction manual for construction of the heat cell is supplied separately.

2.1 AAC HEAT CELL ASSEMBLY

- The heat cell is constructed using 75mm AAC panels. Seven sheets are required (standard sheet size is 600 x 2400mm).
- The heat cell structure is not designed to be load bearing
- If solid plastering the structure, it is recommended to use a fibreglass mesh with a latex based solid plaster to minimise the chance of the plaster cracking.



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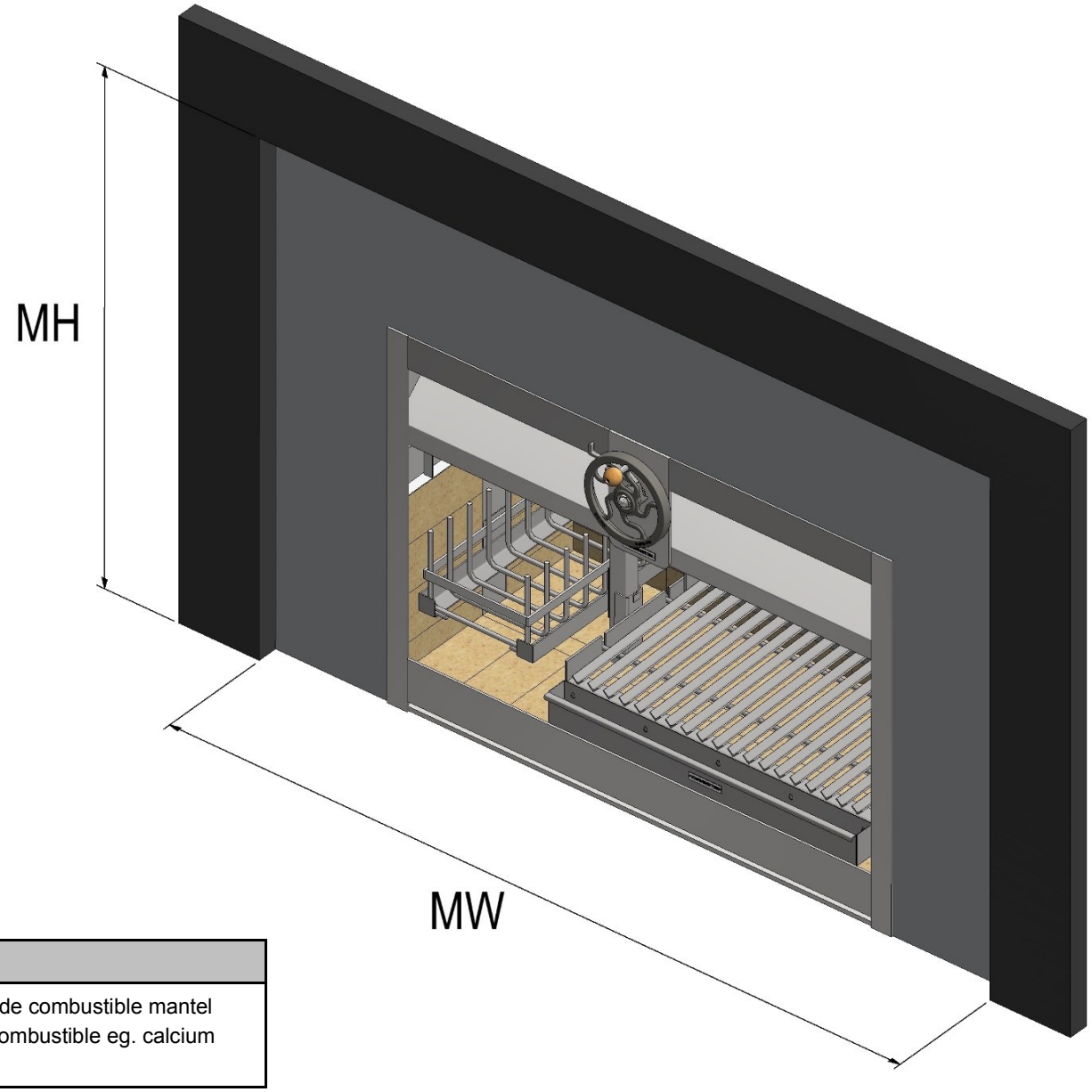
STAGE 3: FINISHING PROCEDURE FOR BUILDER

- Construct hearth to required thickness.
- Remember to install required 2 x 100mm diameter vents at the base of the cavity. If venting through the chimney chase, a further two vents are requited at the top of the chase structure.
- Complete finishing. Finishing material must be non-combustible, eg. Promina board. 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 COMBUSTIBLE MANTEL CLEARANCES

Description		Kiwigrill
Combustible mantel - clearance height	MH	1230
Combustible mantel - clearance width	MW	1810

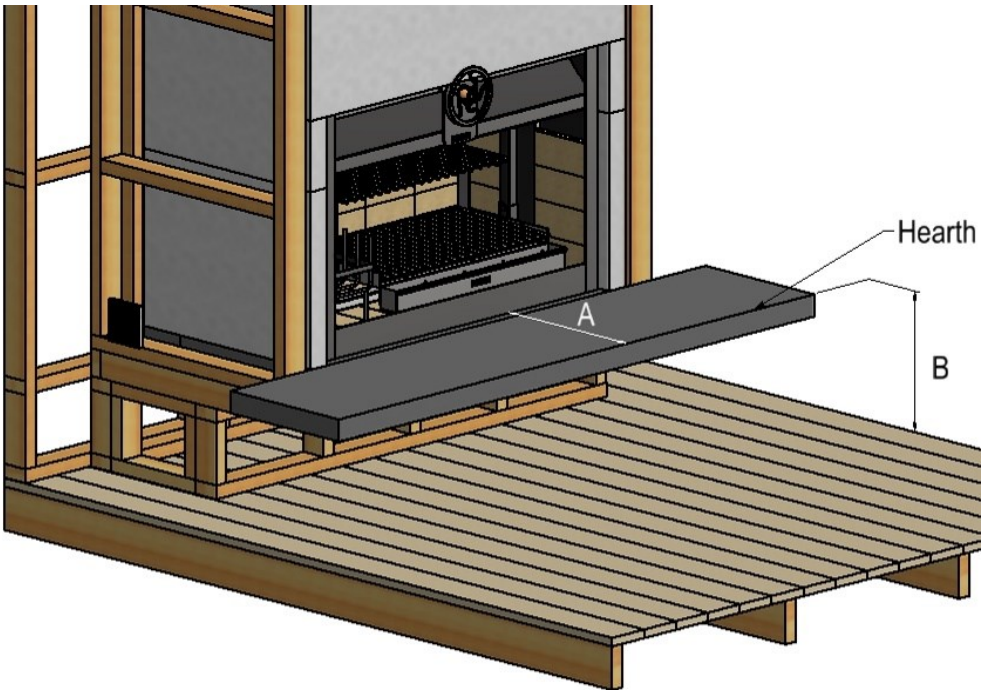


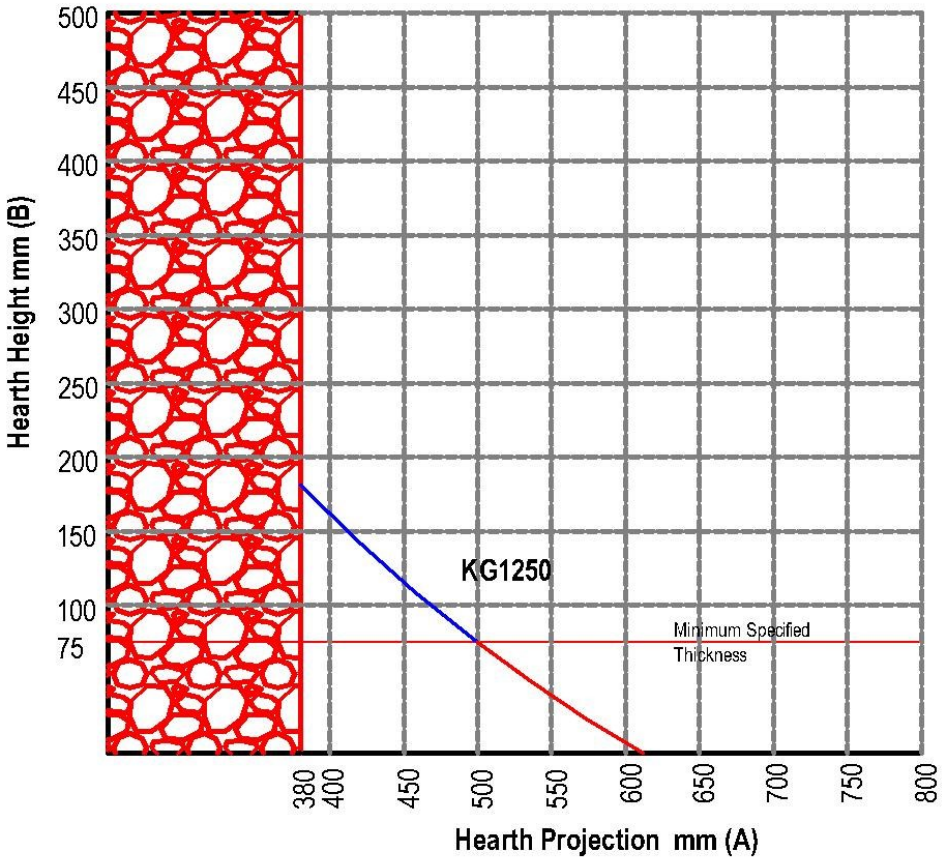
Note:
For backing board inside combustible mantel clearances, use non-combustible eg. calcium silicate board.

All dimensions are in mm

3.2 RAISED HEARTH PROJECTIONS

Notes:
A hearth extension ABOVE the curved minimum requirement line on the graph for a selected model of Nouveau fire is an acceptable hearth extension. A hearth extension BELOW the curved minimum requirement line is NOT acceptable.
The minimum raised hearth projection is 380mm (Building Code C1 Outbreak of Fire).





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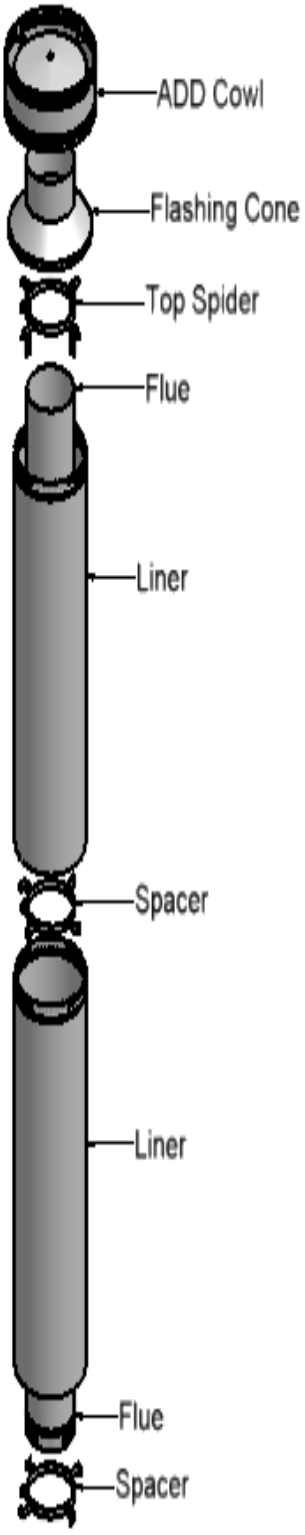
FLUE SYSTEM INSTALLATION

FLUE DETAILS DIMENSIONS

Minimum Flue Height	
Flue height	2400
Measured from top of plinth	B + F + 2400

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

	No:	Kiwigrill
Cowl	1	300
Cone	1	300
Top Spider	1	300
Flue Diameter	3	300
Liner Diameter	3	400
Spacer	3	300/400



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 Members & follow Instructions , to find a Certified NZHHA SFAIT Installer.

1. Install the first length of Flue Pipe with the crimped end down inside the adaptor collar, ensure that the Flue Pipe is tight into the collar . Rivet the Flue in 3 places around the Adaptor collar. Place a spacer around the Flue Pipe approximately 150mm 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 into the first length and secure by Riveting in at least 3 places around the Flue Pipe joint .
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 around the Flue Pipe.
4. Position Flue Spacers near 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

- The 'flue pipe' shall extend no less than the minimum flue height specified.
- The 'minimum ' height of the flue system within 3m from the highest point of the roof, shall be 600mm above that point.
- The 'minimum' height of the flue system further than 3m from the highestpoint of the roof shall be 1000mm above the roof penetration.
- No part of any building lies in or above a circular area described by a horizontal radius of 3m 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 Top of the "Flashing Cone" and the "Flue Pipe" are **flush,** or that the "Flue Pipe" is **5mm lower** than the "Flashing cone".

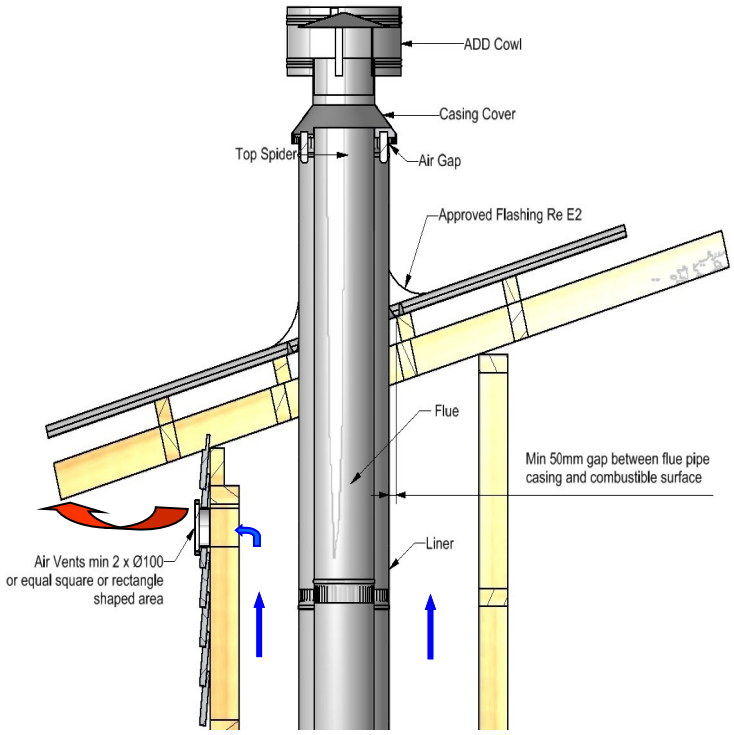
5. Fit the "Top Spider" into position, ensure that the legs of the Spider are fitted inside the Liner and that the spider is positioned hard down onto the Liner and Tighten with the Screw and Nut.
6. Place the "Flashing Cone" over the "Flue Pipe" and press hard down onto the "Top Spider". (Note that 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" over the Top & Inside of the Flue Pipe . The "Cowl" , "Flashing Cone", and the "Flue pipe" can be secured to each other with the use of a Stainless Steel Self Tapping Screw. This will secure the "Cowl System" in high wind areas.

Flue Systems may require Bird Protection due to the Installation and locations, discuss this with your Installer for the best advice as this may not be supplied .

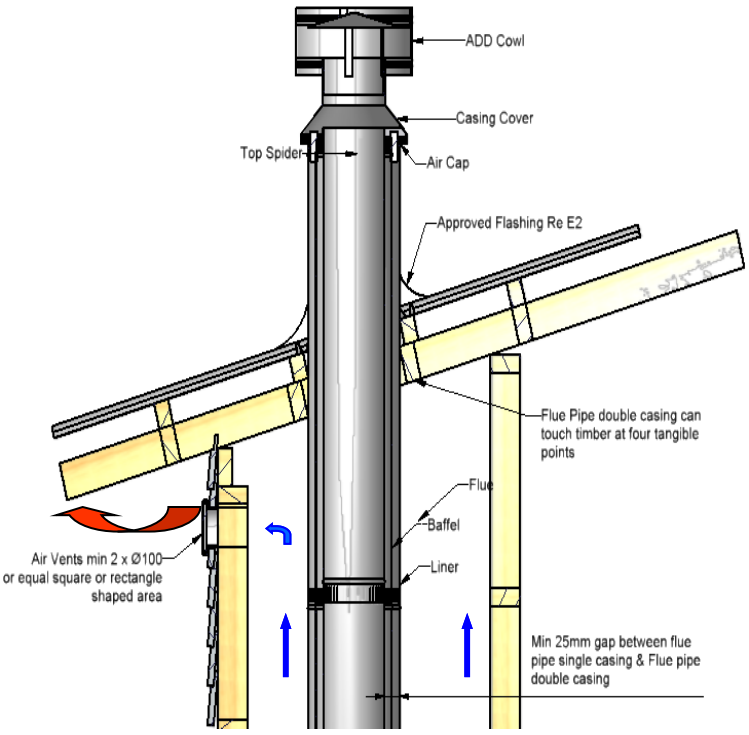
If the Flue System is Installed into a "Chimney Chase", allow for Air Venting as close to the top of the Chase as possible , or allow Venting through the "Chimney Chase Flashing". A "Venting Flashing Cone" and a 25mm gap around the Liner with a "Venting Flashing Cone-Spider" can be used. Ref to Page 11-12 in this Specification.

All dimensions are in mm

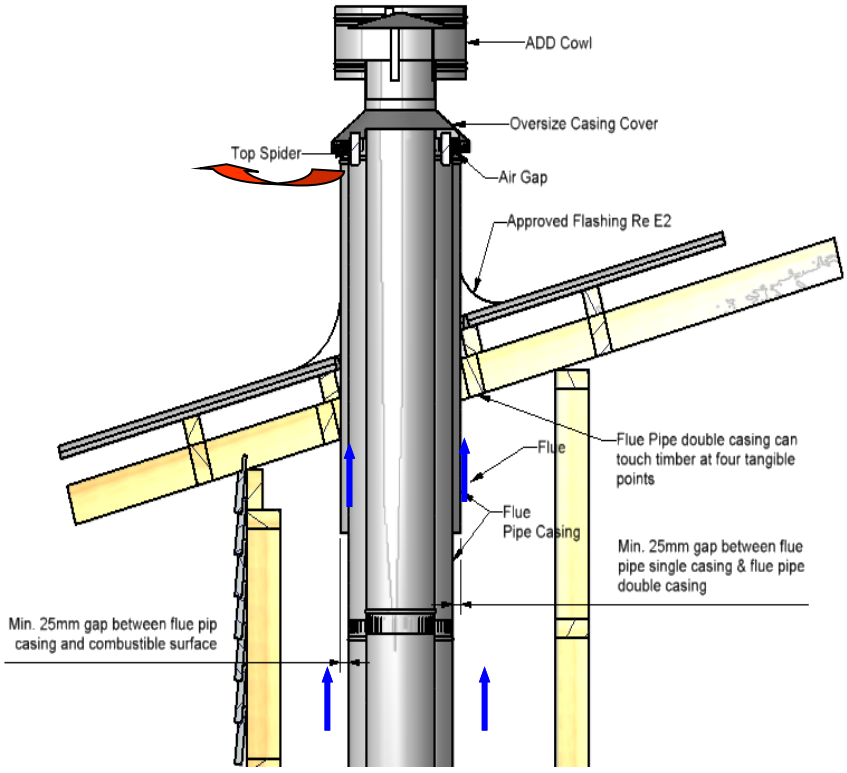
FLUE PENETRATION VENTED THROUGH ALCOVE (SINGLE LINED FLUE SYSTEM)



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.

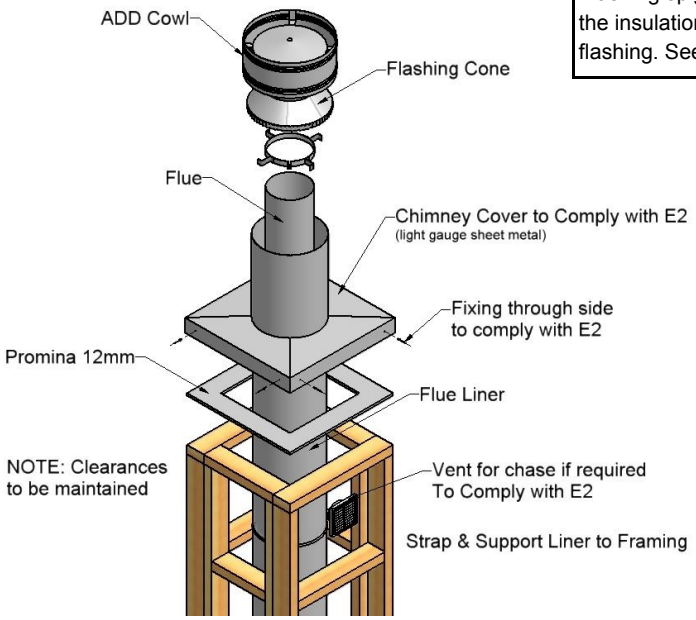
All external air vents & ceiling penetrations must be bird proofed with permanently fixed screens. Additionally, all external air vents and ceiling penetrations are to be vermin and rodent proof.

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

All dimensions are in mm

CHIMNEY CHASE FLASHING DETAILS

General Chimney Chase Flashing Lay Out

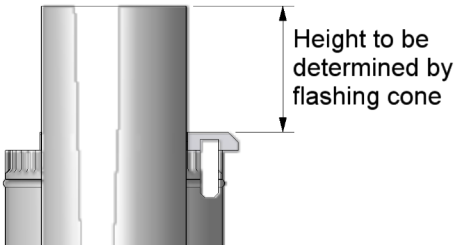


Note:

Flashing spigot height is determined by the insulation that is fitted under the flashing. See details at bottom of page.

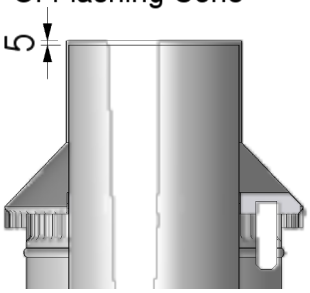
SETTING ADD COWL AND FLASHING CONE HEIGHT

STEP 1



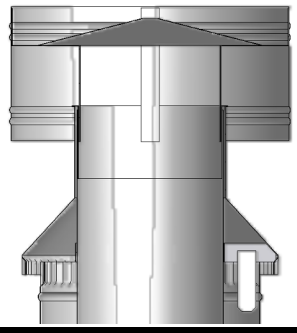
STEP 2

Flue 5mm Below Top Of Flashing Cone



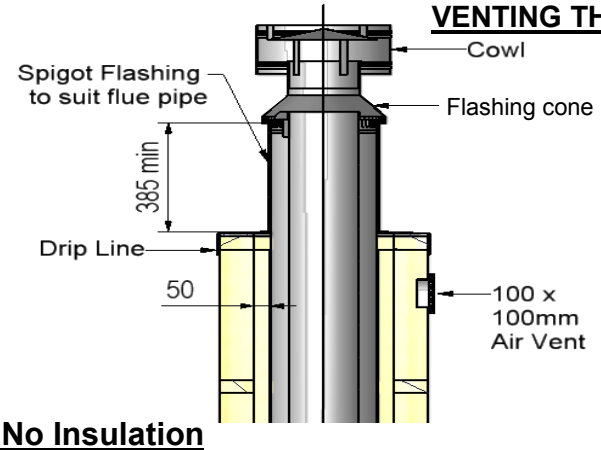
STEP 3

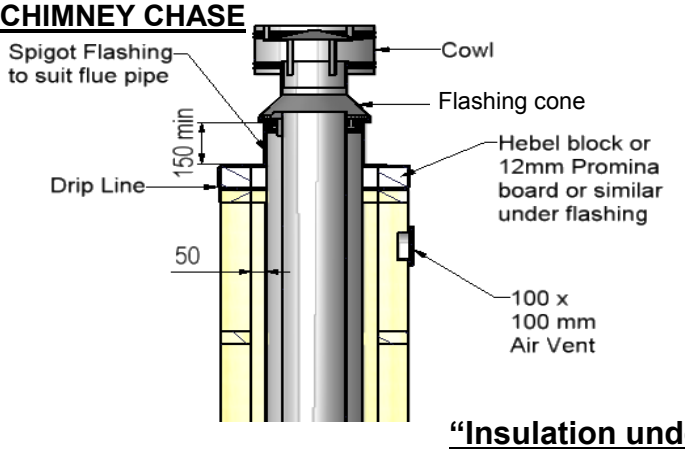
ADD Cowl Sits on Top of Flashing Cone, screw to secure



CHIMNEY CHASE FLASHING AND AIR VENTILATION OPTIONS

VENTING THROUGH CHIMNEY CHASE

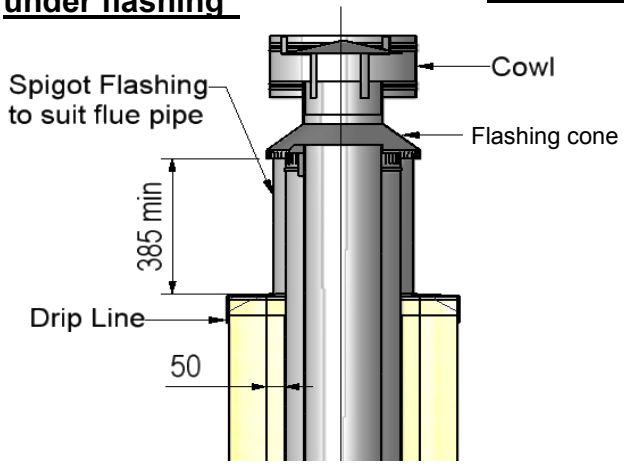


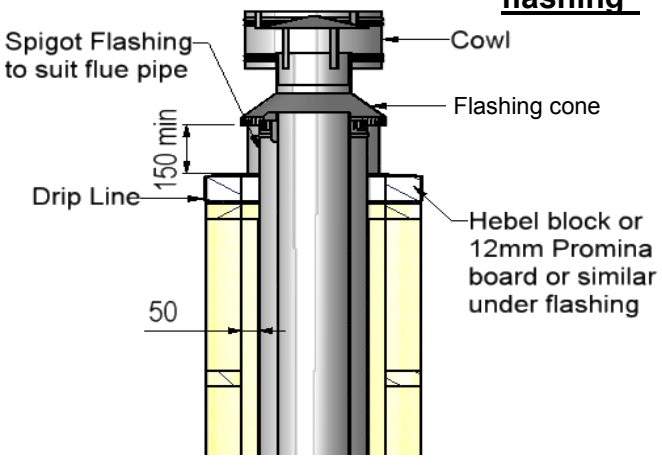


"No Insulation under flashing"

VENTING THROUGH FLASHING

"Insulation under flashing"



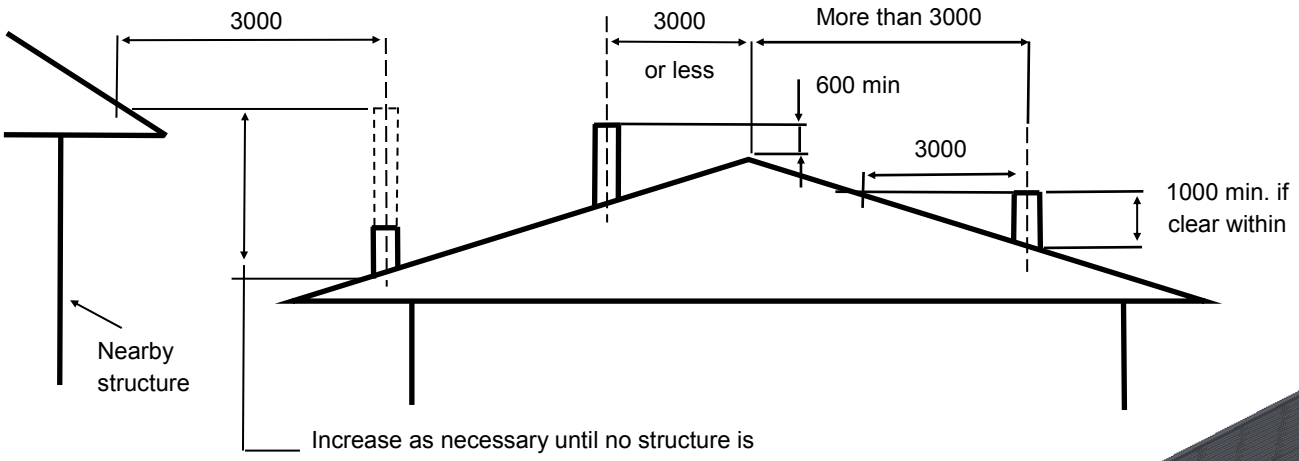


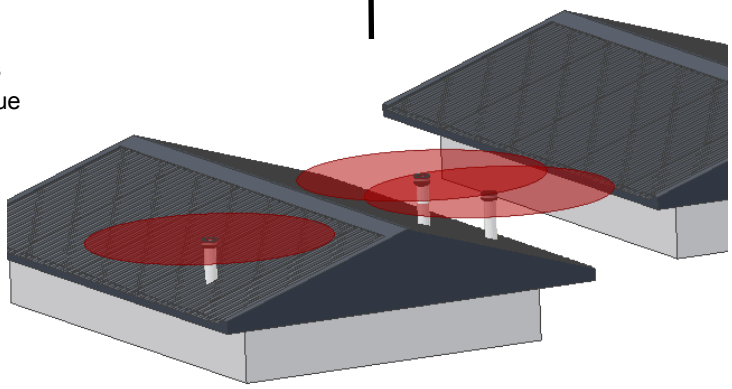
Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.

All dimensions are in mm

FLUE HEIGHT MINIMUM DETAILS

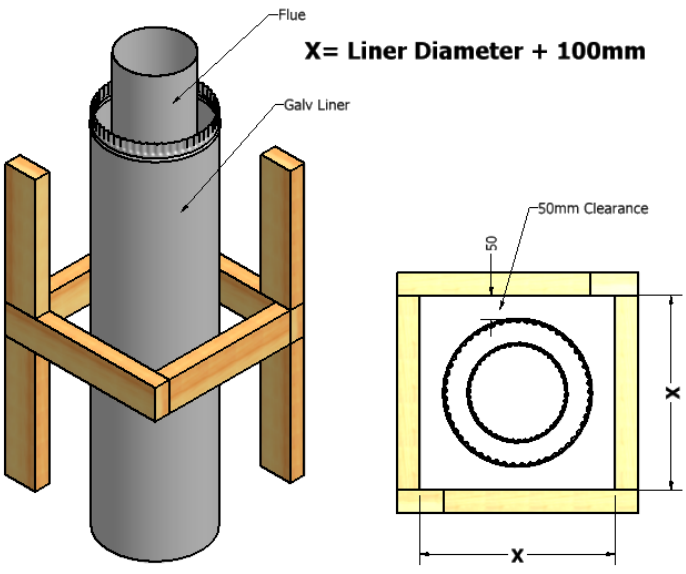
- The minimum height of the flue system within 3m distance from the highest point of the roof shall be minimum 600mm above that point.
- The minimum height of the flue system further than 3m from the highest point of the roof penetration.
- The flue exit must be clear of any surrounding buildings by a horizontal radius of at least 3m.



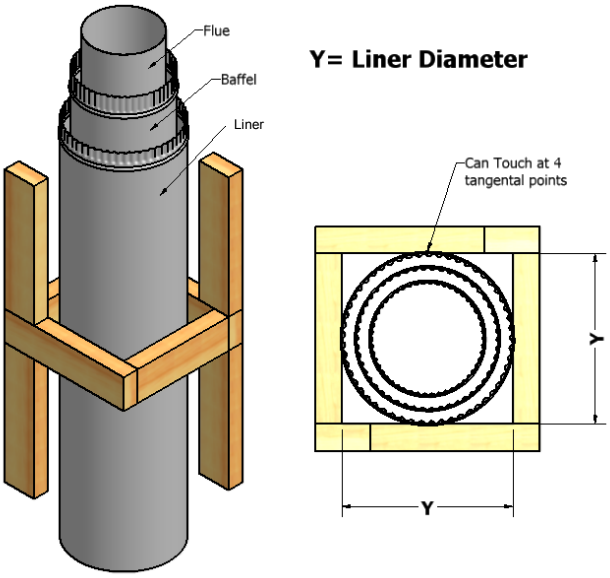


FRAME OUT AND TRIM OUT DETAILS FOR CHIMNEY CHASE

Option X – Singled Lined Flue System



Option Y – Double Lined Flue System



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All dimensions are in mm

GENERAL NOTES:

- Fire operation and maintenance instructions can be downloaded from the Warmington website **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.

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

Industries 1994 LTD

PO Box 58652, Botany 2163, Auckland

All dimensions are in mm