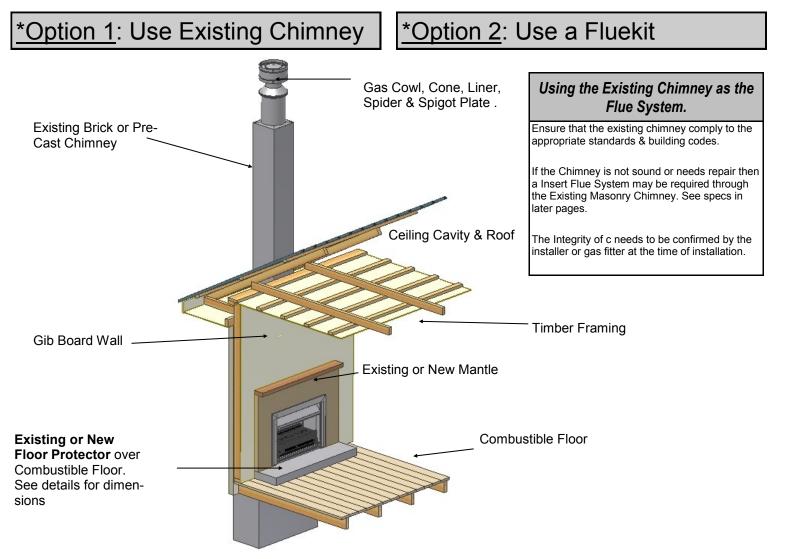


# SG EG 700-780-900-1100

# **Retro Fitted Gas Open Fire** Installation Instructions into Existing Brick / Pre Cast Chimney.



Related documents

Fire and flue system installation, and instructions to comply with NZS 5601.1:2013, 3645.1(Int):2010, 3645.2(Int):2010, 5266:2014, 2918:2001.

The fireplace is constructed and tested to comply with NZS 4558(int):2013 "Decorative gas log and other fuel effect appliances".

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

Installation

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

See www.homeheat.co.nz/members for a certified NZHHA SFAIT Installer in your area.

A licenced certified gas fitter and licenced electrician are required to run power and gas supplies as required to the unit and any commissioning as part of the installation process. The heater must be installed according to these instructions and in compliance with all relevant building, gas fitting, electrical and other statutory regulations.

**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



#### 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 and gusts that hits the flue and cowl system may overcome the cowl and draft back down the flue into the home. This can be a combination of down draft and high pressure.

#### Hearth and Plinth:

The Height of the Hearth off the Floor. The Finishing that is to be used on the Hearth is to be allowed for at the design stage. Note : Ensure Air Intake at Base of Firebox is not blocked or restricted .

Positioning of the Flue System:

There is a maximum distance that an offset flue can be Installed. Reference to relevant standards.

#### Flue And Fire Clearance

To be maintained to the Manufactures Instructions &/or Comply with appropriate Standards & Building Codes .

#### 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, Naturally forming Draft spaces, can all have an effect on the pressure difference from inside the building to the outside. A lower pressure in the building may induce a draft 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, or some mechanical system to ensure that there is always a neutral or positive pressure at the fireplace and a negative pressure at the flue outlet. This will ensure that the draft in the flue system is always to the outside.

"CAITEC AIR" the limits and requirements. See details in these Spec's

#### 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.

#### When using the Existing Chimney as the Flue System:

Ensure that the Existing Chimney Comply to the Appropriate Standards & Building Codes.

If the Chimney is not sound or needs repair then a Flue System may be required through the Existing Masonry Chimney. See specs in later pages.

The Integrity of the Chimney needs to be confirmed by the Installer or Gas Fitter at the time of Installation.

#### INSTALLATION ORDER OF OPERATIONS

Prior to Construction and Installation Important Notes:

Consult a licenced certified gas fitter for correct gas installation.

Install to current standards

All New Installations require an Application for Local Council Permit/Consent No (Repairs on Fires NOT Included.)

For Special Requirements concerning materials (Timber Mantles and Surrounds) within close proximity of Warmington products, please contact your local Warmington Technical Consultant.

# Install procedure to be carried out by a recommended 'Warmington Installer' only, or visit www.homeheat.co.nz, go to 'Members' & follow Instructions to find a Certified NZHHA SFAIT Installer.

#### Stage 1: Removing Existing Fire (Brick Fire, Register Fire or Inbuilt).

Important Note: Before removing the fire, check outside & inside of Chimney Chase for structural cracks etc. These will need to be repaired before installation. Remove old Flue System if required & then remove existing Fire from Chimney Chase.

Sweep Chimney & clean entire chase out thoroughly. If a ash pit exists at base of Fire, this will need to be sealed off or covered over.

A new Plinth & Hearth may need to be Installed if necessary.

The existing mantle opening may need to be cut out or closed down to accommodate the Warmington Firebox.

#### Stage 2: Installing Warmington Retro Firebox.

In most cases there will be a gap around the firebox once in place. Prior to installation, this needs to be filled in with a Non-Combustible material & with a 45 degree chamfer at the top of the firebox. See following pages.

Install Firebox into mantle opening ensuring Firebox flange ends up hard against mantle opening face to create a good seal. Secure fire in place.

#### Stage 3: Installing Chimney Top Flashing System.

Remove any existing cowling or top to leave a flat clean surface.

Cut spigot plate flashing to suit size of chimney top & secure level & in place with 6mm dynabolts or equivalent. Use silicon to seal spigot plate. Note: The diameter of the spigot pipe should be equivalent to the flue size required for fire typ.

Mortar or concrete over Spigot Plat .

Install Liner (cut to length), Spider, Gas Cone, Cowl.

#### NOTE: Clean and touch up paint on the fires and cover if necessary (Installer and Gas-fitter).



# **IMPORTANT NOTES:**

#### GAS SPECIFICATIONS

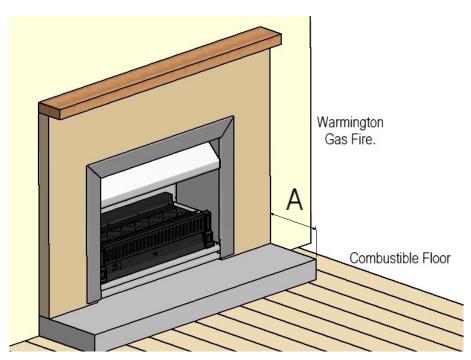
#### Tested to: AS 4558

#### NOTE : All Test Pressures are tested by a Independent Test Lab \* Inlet Pressure not to exceed 4.0KPa

MODLE	SG-EG 700	SG-EG 780	SG-EG 900	SG-EG 1100
LPG				
Nominal Pressure kPa	2.75 kPa	2.75 kPa	2.75 kPa	2.75 kPa
Nominal Injector Size mm	2 X 1.1mm	2 X 1.2mm	2 X 1.3mm	2 X 1.4mm
Burner Pressure High kPa	2.5	2.5	2.5	2.5
Burner Pressure Low kPa	0.75	0.75	0.75	0.75
MJ/h	29	38	42	50
Flame Effect Output Only	Effect	Effect	Effect	Effect
Supply Pipe Size dia—min	3/8"	3/8"	1/2"	1/2"
Natural Gas				
Nominal Pressure kPa	1.5 kPa	1.5 kPa	1.5 kPa	1.5 kPa
Nominal Injector Size mm	2 X 1.8mm	2 X 2mm	2 X 2.2mm	2 X 2.4mm
Burner Pressure High kPa	1	1	1	1
Burner Pressure Low kPa	0.3	0.3	0.3	0.3
MJ/h	35	41	48	60
Flame Effect Output Only	Effect	Effect	Effect	Effect
Supply Pipe Size dia—min	3/8"	1/2"	1/2"	1/2"

Lab. Test No	GL 923	GL 900	GL 834	GL 876
Lab. Test Dates	20/04/2010	26/02/10	26/06/09	24/12/09
ESS Declaration No:	1149420106	1149520106	1149720106	1149820106

### **RAISED HEARTH CLEARANCES**



#### Note: for combustible floors Minimum Hearth of 300mm (A) must be maintained at any given height.



### SELECTION OF THE SIZE OF FIRE TO FIT THE EXISTING CHIMNEY

The size of the Fire and the flue diameter needs to be balanced for the Fire to operate correctly.

The size of the Warmington firebox that is to be fitted to an existing masonry fire place, is generally set by the opening of the masonry flue system x and y (see box below).

Remedial work may need to be carried out to physically fit the firebox into the masonry opening, however this may limit the size of the fire that can be fitted.

Firebox		SG/EG 700	SG/EG 780	SG/EG 900	SG/EG 1100
Flue	Κ	200	200	250	250
Flue Liner	L	250	250	300	300

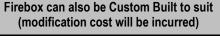
#### **FIREBOX SELECTION**

Remedial work may be necessary to fit the firebox into the masonry cavity, BUT the flue diameter 'K' will determine the size of the firebox.

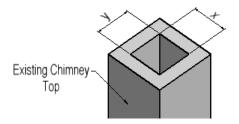
The selected Firebox flue - (diameter "K") MUST be able to pass through the masonry chimney whether the flue pipe is being used, or the existing chimney is being used.

Always consult your Technical Representative for advice.

#### FLUE HEIGHT MINIMUM DETAILS

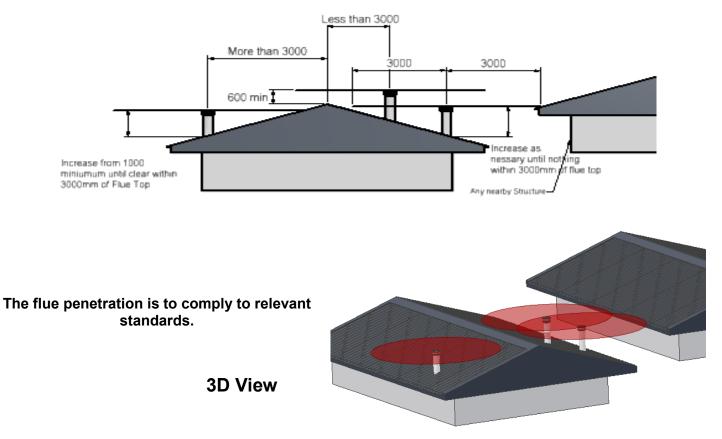


#### See this detail later in the specs.



Existing chimney opening size must be larger than the required flue and liner size (see above table for K and L measurements. The height of the masonry flue may need to be

increased to obtain correction operation of the fire.



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



#### NOTE: IMPORTANT INFORMATION FROM THE STANDARD:

Installation to comply with current standards. When installing a fitted open gas fire with an existing chimney section 6.7.11 in NZS 5601 is particularly relevant, see quote below:

#### 6.7.11 Use of existing flue or chimney

An existing chimney or *flue* shall be used for flueing a gas appliance only after examination and the correction of faults.

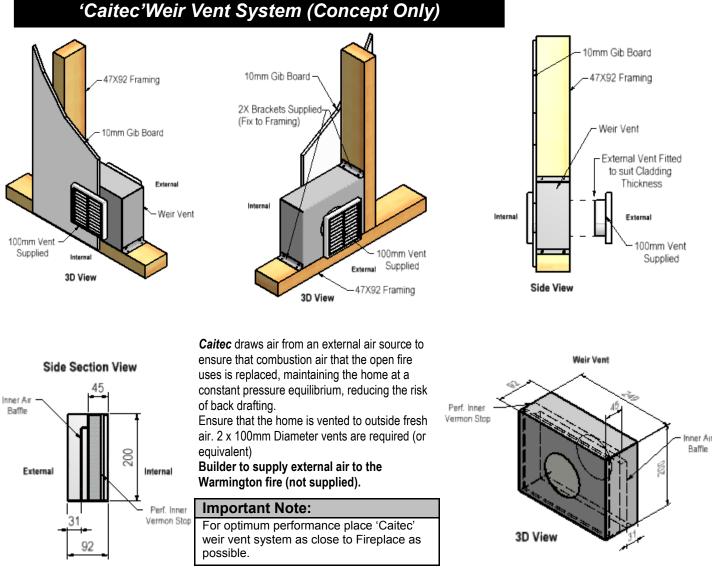
Note: Poor design of existing *flues* and chimneys can cause *combustion products* to enter into the room.

An existing chimney or *flue* that has been used for fuel other than gas shall be -

- a) Swept clear of soot and other loose materials;
- b) Checked for soundness of construction and freedom from leakage; and
- c) Checked for adequate size.

Any damper plate shall be removed or permanently fixed fully open, except where a damper is necessary and in accordance with the *manufacturer's relevant instructions*.

Firebox		SG 700	SG 780	SG 900	SG 1100
Flue Diameter Min	J	200	200	250	250
Flue CSA mm	Κ	31 416	31 416	49 087	49 087



# Warm<mark>ington </mark>

25 July 2017

### WARMINGTON FIREBOX DIMENSION

Firebox		SG / EG 700	SG / EG 780	SG / EG 900	SG / EG 1100
Firebox Width	Α	710	790	910	1110
Firebox Height	В	600	600	600	600
Firebox Depth	С	440	440	440	440
Flange Width	D	800	880	1000	1200
Flange Height	Е	650	650	650	650
Chimney Flue Size	J	200	200	250	250
Flue Liner	K	250	250	300	300
Fascia Width	L	860	940	1060	1260
Fascia Height	М	680	680	680	680
Fascia Section	Ν	80	80	80	80
Heat Output	kW				
Range*		6-7	7-8	8-9	9

Check List	Tick Box
Firebox	
Burner	
Grate	
Control Valve	
Badge	
Packed By	

\*Estimated unless stated otherwise.

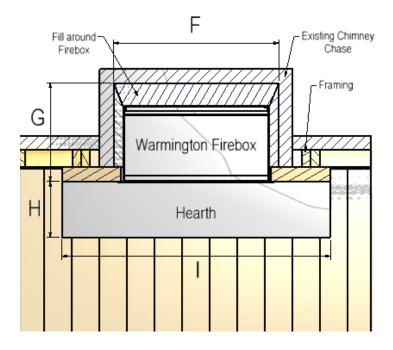
#### Note: Timber framing

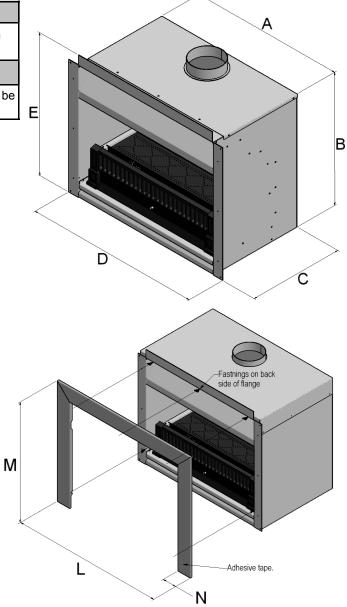
All combustible materials to be 50mm away from chimney structure (in accordance with appropriate Building Code.

#### Seismic Restraints:

Secure firebox in place with 2 x seismic restraints (not supplied). Can be drilled through Base of fire, using 2 x dynabolts to secure.

Minimum Flue Height	
Top of Hearth to Top of Cowl	4600





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



#### FIREBOX INSTALLATION

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).

#### When using the existing Chimney as the Flue System:

Ensure that the existing chimney complies to the Appropriate Standards & Building Codes. If the Chimney is not sound or needs repair then a Flue System may be required through the existing masonry chimney. The integrity of the chimney needs to be confirmed by the Installer or Gas Fitter at the time of Installation.

- 1. All the dimensions are millimetres.
- 2. Ensure that an Insulating Plinth is installed as per the Specifications. **Ensure that the plinth is elevated** to allow for finishing on the Hearth. (See hearth and plinth details).
- 3. Install Rockwool (Fire Resistant Insulation) or 75mm Hebel into cavity around firebox
- 4. Fit the firebox into the cavity, the flange should have a tight seal around opening of existing cavity. Bolt the Firebox to the plinth or through the floor. This may require drilling through Fire Base under the ashpan & bolting in place. (Seismic Restraints).
- 5. Install the Retro Flue/Cowl System. (see page 7).

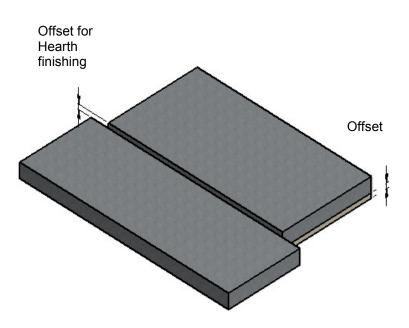
#### HEARTH & PLINTH CONSTRUCTION DETAILS

## **IMPORTANT NOTE:**

#### Hearth and Plinth Construction.

For combustible flooring an insulating hearth and plinth of 75mm is required.

Plinth to be offset above Hearth for the Hearth finishing (eg: tiles/granite/plaster/etc).



\*Note: If Solid Plastering the Heat Cell Enclosure, it is recommended to use a Fibreglass Mesh with a Latex or Silicon Based Plaster to minimise the chance of the plaster cracking. (See your Solid Plasterer for correct materials and applications).

Visit the Warmington Web Site for 'Hebel' instruction (PDF Download). www.warmington.co.nz



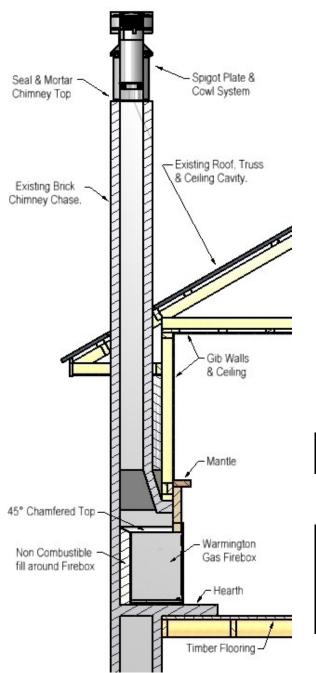
# **OPTION 1: Using Existing Chimney as Flue**

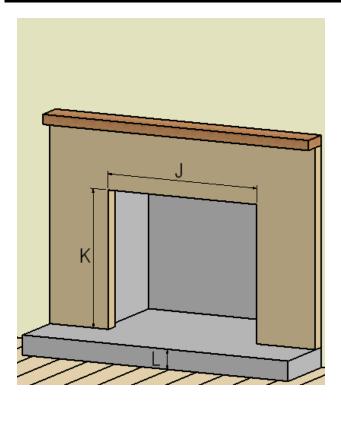
#### EXISTING FIREPLACE OPENING CLEARANCES

Firebox		SG/EG 700	SG/EG 780	SG/EG 900	SG/EG 1100
Window Width	L	720	800	920	1120
Window Height	Κ	610	610	760	810
Hearth Height	L	75	75	75	75

#### FIREBOX & CHIMNEY CHASE SECTION VIEW

### EXISTING FIREPLACE OPENING CLEARANCES





Note: Timber framing (to be confirmed by the Installer on site) All combustible materials to be 50mm away from Chimney structure.

## 'CAITEC' AIR (Installer to check)

For fitment into Existing chimneys the 'CAITEC' is blanked off. This is due to the 'CAITEC' and the flue being in the same flue system.

Additional "CAITEC" Air can be provided by venting the home as close to the fireplace as possible. See concept of external air supply (not supplied).



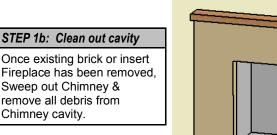
#### STEP 1: REMOVE EXISTING FIREPLACE

### STEP 2: MEASURE ALCOVE & HEARTH

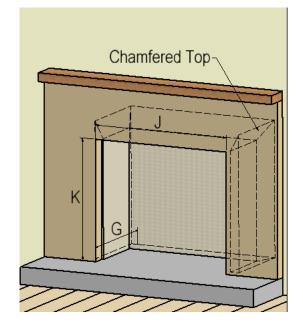


#### STEP 1a: Remove Fireplace

Once the main Chimney structure has been assessed & complies to C1 outbreak of fire, remove existing fireplace eg. brick or insert firebox.

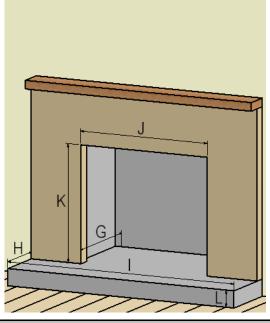


### STEP 3 : FILL VOIDS AROUND FIREBOX



#### STEP 3: Fill Voids Around Firebox

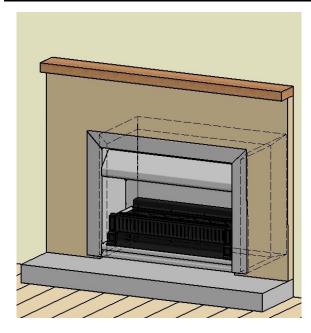
Mark out firebox size on plinth & fill void around firebox with non combustible material eg: rockwool insulation or Hebel panels is recommended. Chamfer top of fill.



#### STEP 2: Check Cavity size

Check cavity sizes as above to suit firebox. In most cases reducing or enlarging these dimensions may be required to suit Firebox.

#### STEP 4 : INSTALL FIREPLACE & SEAL



#### STEP 4: Install Firebox in Place

Slide firebox into place ensuring a tight seal is created on inside of firebox flange against mantle face. Heat resistant sealant may need to be used. Secure firebox in place. This can be done by drilling & b\bolting through base under gas burner. Drill to suit.



### SUGGESTED CHIMNEY CHASE FLASHING DETAILS (using existing chimney as the flue)

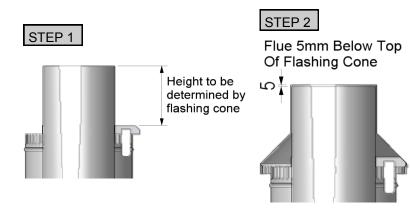
#### Using the Existing Chimney as the flue system.

Retro Fit Chimney

Ensure that the existing chimney complies to the Appropriate Standards & Building Codes.

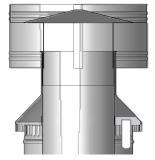
#### Flashing Detail NOTE : Chimney top flashing must be installed in a weather proof manner. No water should be able to get down chimney chase at any time. ADD Cowl Flashing Cone SUGGESTED FLASHING & COWL SYSTEM INSTALLATION Suggested Installation Details: Top Spider 1. Remove existing cowl system & clean/remove any debris at top of chimney chase. Galv Flue Liner 2. Cut the spigot plate 20mm+ smaller than chimney top if 600mm Length necessary, & dynabolt or fix in place, centred on chimney top. Seal around spigot with sealant. Mortar plaster over the spigot plate & create runoff for water. S/S Flue 600mm Length 3. Rivet flue to spigot plate in place & install spacer near bottom of flue. 4. Cut liner down to suit cowl & cone system using the steps 50mm Spacer outlined below. S/S Spigot Plate 5. Bird protection by Installer if necessary. Note : Spigot Plate Fixed to Chimney Top, Sealed & Mortared Over Chimney Chase

### SETTING A.D.D COWL & FLASHING CONE HEIGHT





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



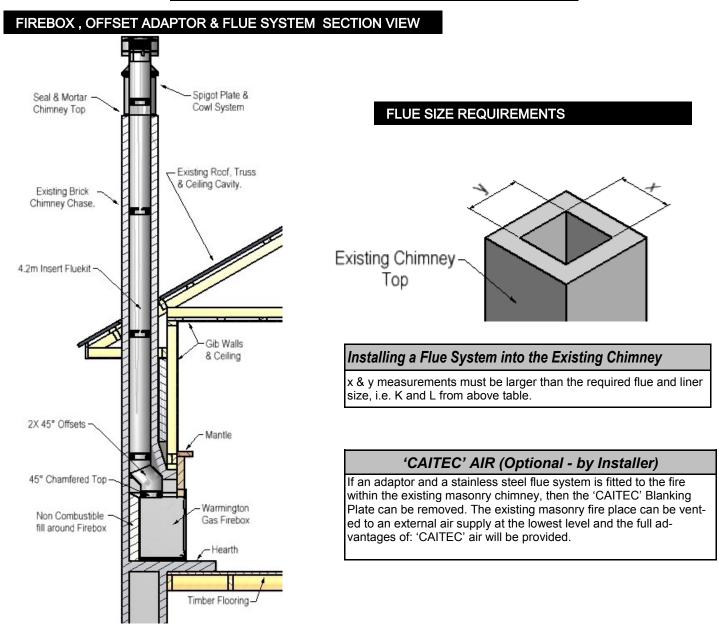
Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.



## **OPTION 2 : Using Offset Adaptor & Insert Fluekit**

### SUGGESTED CHIMNEY CHASE FLASHING DETAILS

Firebox		SG/EG 700	SG/EG 780	SG/EG 900	SG/EG 1100
Flue	K	200	200	250	250
Flue Liner	L	250	250	300	300



#### Installing a Flue System into the Existing Chimney

Ensure that the existing chimney complies to the Appropriate Standards & Building Codes.

The integrity of the chimney need to be confirmed by the Installer at the time of Installation.

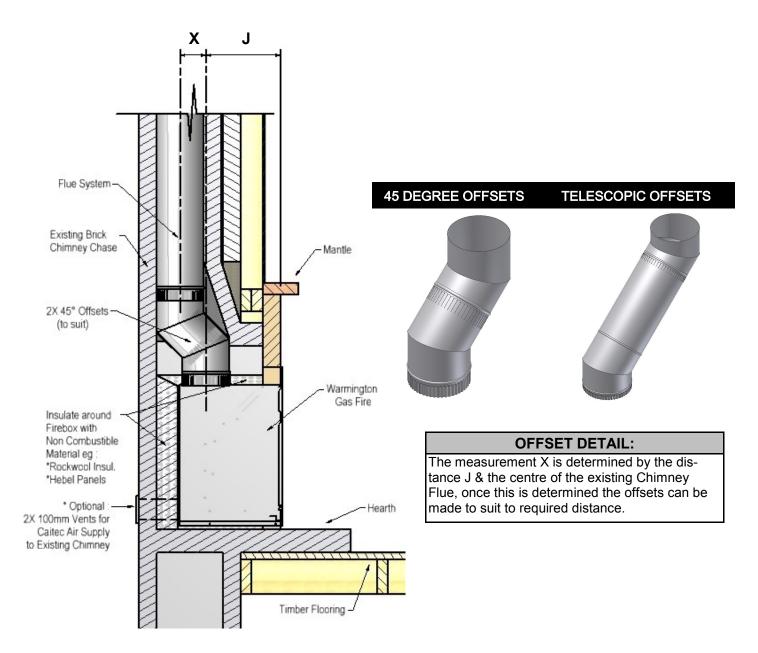
If the chimney is not sound or needs repair, a flue system may be required through the existing masonry chimney. Repair the chimney so that it is structurally sound and prepare the chimney for a flue system.



### **MEASURING FOR 45 DEGREE OFFSET**

Firebox		SG/EG 700	SG/EG 780	SG/EG 900	SG/EG 1100
Centre of Flue	J	315	315	285	285
Flue	K	200	200	250	250
Flue Liner	L	250	250	300	300

### **45 DEGREE OFFSETS**

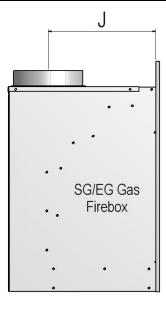


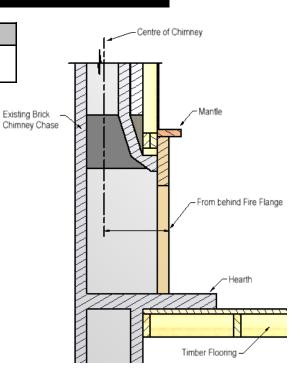


### MEASURING FOR OFFSET ADAPTOR

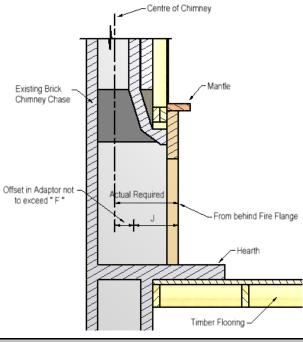
#### **Standard Flue Centre**

Measurements for Standard Flue Centre "J" in the table below from Firebox (inside) Flange to Flue Spigot Centre.





Firebox		SG/EG 700	SG/EG 780	SG/EG 900	SG/EG 1100
Centre of Flue	J	315	315	285	285
Flue	Κ	200	200	250	250
Flue Liner	L	250	250	300	300



#### **Chimney Chase Flue Centre**

Measure flue centre from face of Mantle opening (inside of firebox flange) to the chimney chase flue centre.

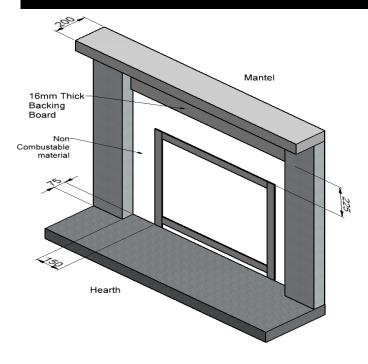
NOTE: If the Warmington fire is not finishing up to the Mantel face, then the chimney flue centre is to be taken from behind the Warmington fires flange.

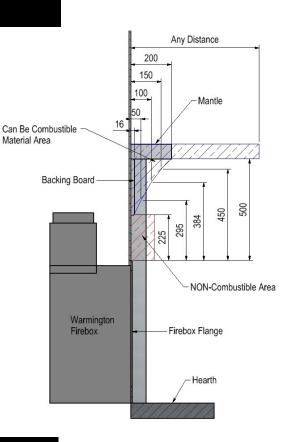
#### Offset Measurement Required

The distance required to make an offset is the difference between 'J' & the 'actual required' overall measurement.

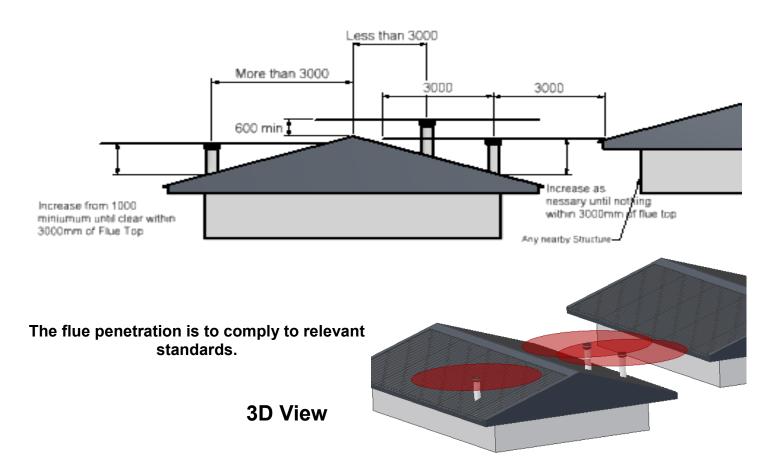


#### COMBUSTIBLE MANTLE CLEARANCES





# FLUE HEIGHT MINIMUM DETAILS





#### GENERAL NOTES

#### NOTES:

- These installation and operating instructions should be kept in a safe place. Should you require another copy, download 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 the **Warmington** Warranty.
- The appliance and flue system must be installed in accordance with relevant standards and the appropriate building codes.
- This appliance must be serviced annually and any service operation must be carried out by a qualified service person.

#### WARNINGS:

- WARNING: ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED A BREACH OF NZ STANDARDS.
- WARNING: DO NOT USE OR STORE FLAMMABLE LIQUIDS OR AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILST IN OPERATION.
- WARNING: DO NOT PLACE FLAMMABLE MATERIALS ON OR AGAINST THIS APPLIANCE.
- **CAUTION**: THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.
- **CAUTION:** ALL SERVICING MUST BE CARRIED OUT BY AN AUTHORISED SERVICE TECHNICIAN.
- CAUTION: MAKE SURE THE USE OF CORRECT FUEL TYPE WITH THIS APPLIANCE.

NOTE: Keep a copy of these instructions for operating and maintenance guidelines.



Industries 1994 LTD PO Box 58652, Botany 2163, Auckland www.warmington.co.nz