REAL FLAME

LIGNA

OPEN FIREPLACE SYSTEM

INSTALLATION MANUAL

VERSION 10

REAL FLAME LIGNA 700/800/900

Australian Home Heating Association Inc.

Landcare Australia

Glen Dimplex Australia proudly supports the activities of Landcare Australia through its membership of the AHHA.

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1. IMPORTANT INFORMATION

Most building regulatory Authorities in Australia require any wood heater installation to comply with Installation Standard AS/NZS 2918:2018. Different states and councils may have varying regulations. Check local building regulations before installing the appliance.

All Real Flame wood heaters have been tested to ensure that they will meet the appropriate safety Standard requirements if the instructions in this manual are followed. As the safety and emissions performance can be affected by altering the appliance, no modifications are allowed without written permission from the manufacturer.

WE RECOMMEND THAT THE INSTALLATION OF YOUR REAL FLAME WOOD HEATER BE CARRIED OUT BY A QUALIFIED INSTALLER.

WARNING: THE APPLIANCE AND FLUE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918:2018 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 4012 & 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 4012 & 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 4012 & 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.

2. MASONRY INSTALLATION

The Real Flame Ligna open fireplace can be installed in a non-combustible masonry enclosure. Refer to this section for clearance requirements and instructions if the heater is to be in a masonry installation.

2.1. BASE & FLOOR PROTECTOR REQUIREMENTS (FIG 1)

Base and floor protector must be constructed of non-combustible materials i.e. concrete slab, brickwork or Hebel blocks. The base must be a minimum of 75mm thick.

NOTE: On timber floor applications 6mm cement sheeting is also required beneath the base and floor protector in addition to the selected 75mm (min) non-combustible base material.

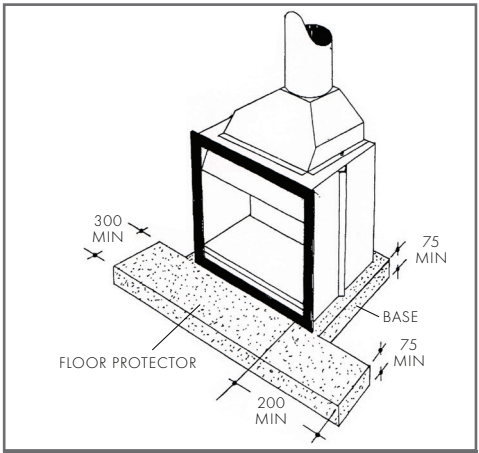


FIGURE 1

The floor protector must project a minimum of 300mm forward of the face of the Ligna unit and extend 200mm on each side of the unit. This must also be constructed of non-combustible materials at least 75mm thick as detailed above.

2.2. ENCLOSURE REQUIREMENTS (FIG 2)

The enclosure must be of non-combustible materials i.e. masonry, 75mm Hebel blocks or equivalent material as otherwise specified by the manufacturer. The enclosure must completely surround the sides, back and breast above the unit, as shown in Fig 2. Place the insulation on top of the units gather and tuck into enclosure.

NOTE: Timber framing can directly abut i.e. Zero Clearance (0mm) the outside faces of the sides and back of the non-combustible enclosure.

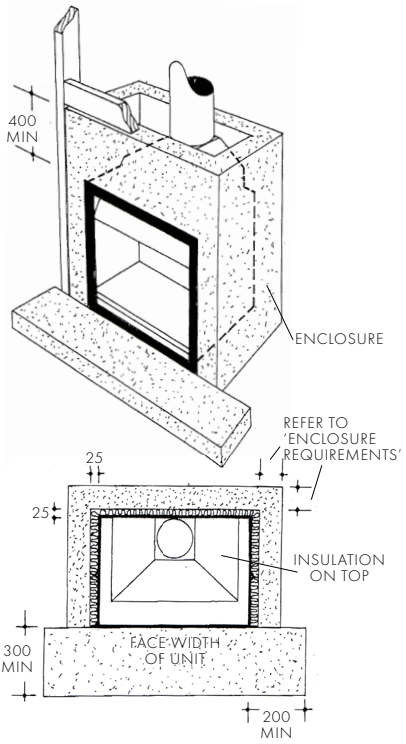
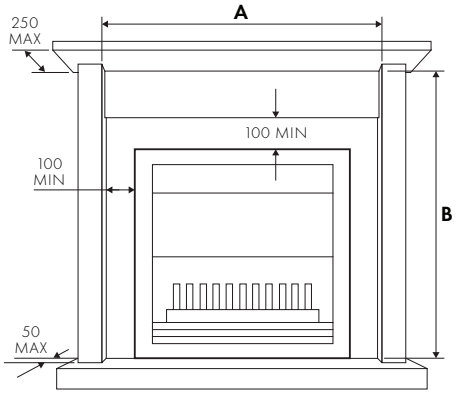


FIGURE 2

For flue clearances to timber framing above the noncombustible enclosure refer "4. Flue Clearance Requirements" on page 6.

2.3. MANTLEPIECE SHELF & COLUMNS - MASONRY



MODEL	A	B
700	980	1110
800	1100	1120
900	1220	1180

3. ZERO CLEARANCE INSTALLATION

The Real Flame Ligna open fireplace can be installed as a built in appliance within a zero clearance box. Refer to this section for clearance requirements and instructions if the heater is to be in a zero clearance installation. The ZC box complies with AS/NZS2918:2018 Appendix B when installed in accordance with the following specifications;

1. Installed as a built-in appliance in accordance with AS/NZS2918:2018.

2. Minimum clearance from zero clearance box to combustibles within built-in enclosure:

    - Rear – not less than 35mm
    - Side – not less than 10mm
    - Above – not less than 15mm
    - Beneath – zero clearance box must be installed on a minimum 6mm thick compressed fibre cement sheet or equivalent which is no less in dimensions than the footprint of the base of the zero clearance box.

3. The front wall between the open fireplace and the mantelpiece panel above must consist of non-combustible material.

4. Side wall clearance no less than 375mm from the side of the appliance.

5. Combustible mantelpiece infill panel with a maximum allowable thickness of 50mm installed no less than 100mm (Ligna 700/800), 120mm (Ligna 900) above the top edge of the open fireplace appliance.

6. Combustible mantelpiece shelf not less than 300mm (Ligna 700), 250mm (Ligna 800) or 320mm (Ligna 900) above the top edge of the open fireplace appliance. Mantelpiece shelf shall project no more than 250mm out from the wall.

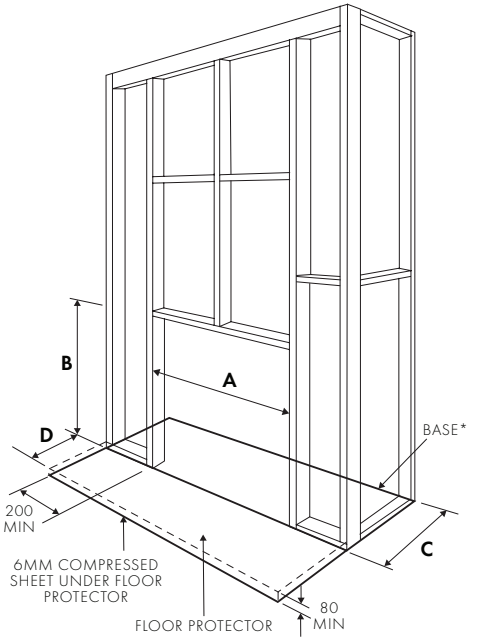
7. Combustible mantelpiece columns:

    - Maximum thickness of 100mm extending out from the wall – not less than 125mm from the sides of the appliance.
    - Maximum thickness of 50mm extending out from the wall – not less than 25mm from the sides of the appliance.

8. Floor protector must be no less than 80mm thick, extending no less than 300mm (Ligna 700/800) or 400mm (Ligna 900) in front of the appliance and no less than 200mm either side of the appliance. It must be constructed from 6mm thick compressed fibre cement sheet with 75mm bricks positioned on top, or an equivalent construction material giving the same thermal conductivity or less.

9. The dimensions and construction of the zero clearance box must be consistent with the engineering drawings supplied (refer to pages 9, 10 & 11).

3.1. ZERO CLEARANCE BOX IN TIMBER FRAME



3.2. FRAME DIMENSIONS

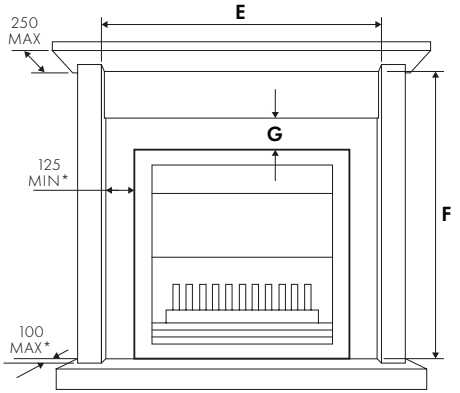
MODEL	A	B	C	D
700	925	1025	605	300
800	1045	1060	635	300
900	1165	1155	655	400

3.3. CLEARANCES FROM COMBUSTIBLES

REAR	SIDE	TOP	BENEATH
35mm	10mm	15mm	6mm*

*The Zero Clearance Box must sit on a minimum 6mm thick compressed fibre cement sheet base or equivalent which is no less than the dimensions of the footprint of the base of the Zero Clearance Box.

3.4. MANTELPIECE SHELF & COLUMNS - ZC



MODEL	E	F	G
700	1030*	1010	100
800	1150*	970	100
900	1270*	1100	120

* Dimension E (width between columns) can be reduced if columns extend out from the wall no more than 50mm. In this scenario, this dimension can be 830mm (Ligna 700) / 950mm (Ligna 800) / 1070mm (Ligna 900).

4. FLUE CLEARANCE REQUIREMENTS

4.1. TIMBER FRAMED FLUE ENCLOSURES (FIG 3A)

Use the triple skin ventilated flue system, (stainless steel inner flue and galvanised dual-layer outer flue casing) if the flue is to be enclosed with combustible materials like timber framing and plaster board or left exposed. A minimum clearance of 25mm must be maintained between the galvanised outer flue casing and any combustible materials.

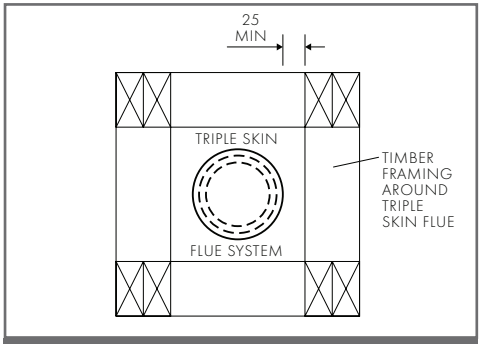


FIGURE 3A

4.2. MASONRY FLUE ENCLOSURES (FIG 3B)

Use the single skin stainless steel flue system. If the flue is to be completely enclosed with noncombustible materials (i.e. 110mm Brickwork, 75mm Hebel blocks). This can abut (Zero Clearance) to masonry.

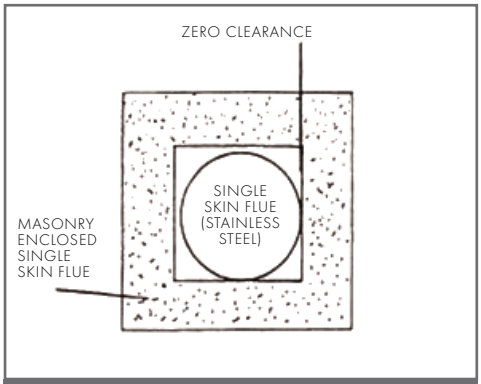


FIGURE 3B

4.3. FLUE INSTALLATION

The flue system used when installing the heater MUST comply with the current installation standard AS/NZS 2918.

Full instructions on the installation of the flue will be supplied with the flue kit. These MUST be followed closely, including the minimum exit height from the top of the floor protector being not less than 4.6m, and the minimum exit height above the roof line of roof ridge as detailed in the instructions.

5. INSTALLATION PROCEDURE

1. Position unit on finished hearth base. Do not restrict air intake at base of unit (refer "2.1. Base & Floor Protector Requirements (Fig 1)" on page 2).

2. Ensure gather is bolted tightly onto unit.

3. The Real Flame Ligna features a flue damper system (Fig 4). Damper is positioned to rest on a support during transportation. **This must be removed** via a pin and reset so the damper drops down in a natural position before proceeding. Once reset, the damper can be operated with the chain.

FIGURE 4

4. Fit flues as follows:

   a. Triple Skin Flue System

      Where flues are to be left exposed or surrounded with combustible materials, the triple skin ventilated flue system is required (refer "4.1. Timber Framed Flue Enclosures (Fig 3A)" on page 6).

      Position stainless steel inner active flue (crimped end down) into collar of spigot. Rivet to collar at 4 points and thereafter 4 at each flue joint.

      Position outer flue casings (crimped end up) over inner flue and space with 25mm self tapping screws, 4 at bottom then 4 at each flue casing joint. Ensure flues are structurally secure.

      Maintain at least 25 mm clearance between outer casing and any combustible materials.

   b. Single Skin Flue System

      Where flue is to be fully enclosed in masonry or other non-combustible material, only the single skin stainless steel active flue is required (refer "4.2. Masonry Flue Enclosures (Fig 3B)" on page 6).

      Position stainless steel inner active flue (crimped end down) into collar of spigot. Rivet to collar at 3 points and thereafter 3 at each flue joint.

      Clearance between masonry and flue is not necessary.

   c. N.B. Flue Offsets

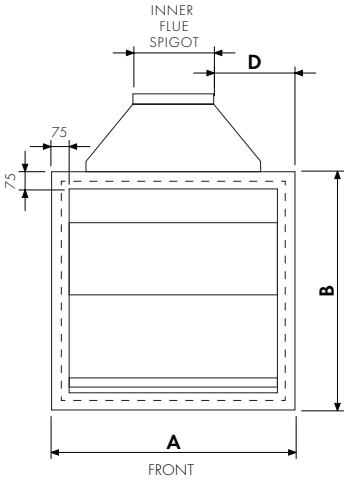
      45 degree flue bends can be positioned directly onto the gather collar of the unit. Use at least 2 x 900mm lengths of flue following last bend upright. Use a minimum 3.6m length of flue from the top of the unit.

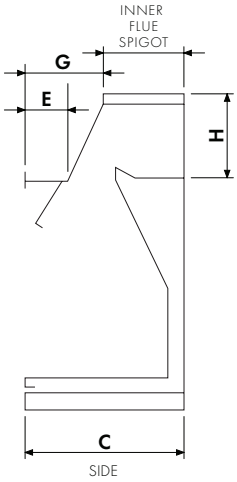
5. If installing with Zero Clearance Box, skip to Step 6. If installing into masonry, construct enclosure as required and place the insulation provided on top of unit, gather and below optional brickwork lintel. (Refer "2.2. Enclosure Requirements (Fig 2)" on page 3)

6. Fit cowl into inner stainless steel flue and secure. Seal and flash flues appropriately.

7. Place log grate and ashpan in position.

6. APPLIANCE DIMENSIONS

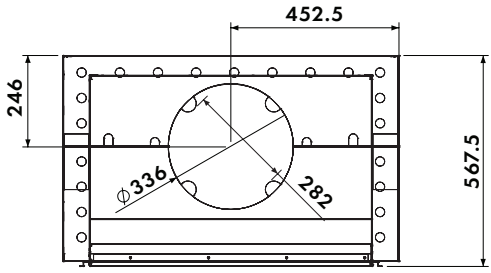




MODEL	DIMENSIONS							FLUES	
	A	B	C	D	E	G	H	Inner	Outer
700	780	706	450	272	139	205	141	229 (9″)	280 (11″)
800	900	717	470	321	137	205	170	254 (10″)	305 (12″)
900	1020	780	500	367	138	204	180	280 (11″)	330 (13″)

7. ZERO CLEARANCE BOX DIMENSIONS

7.1. LIGNA 700 ZC



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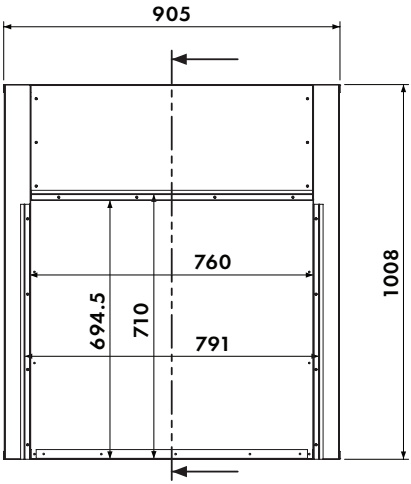

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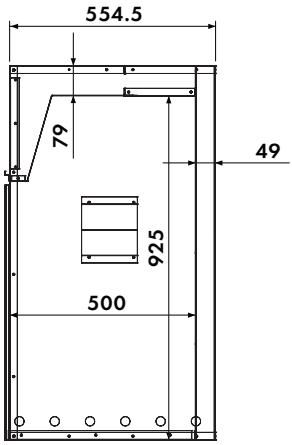

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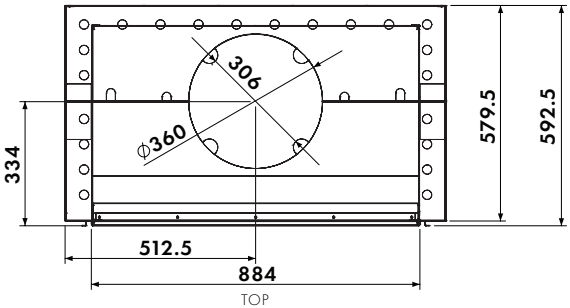
7.2. LIGNA 800 ZC



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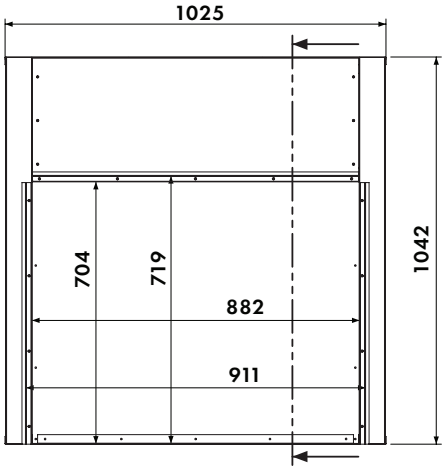

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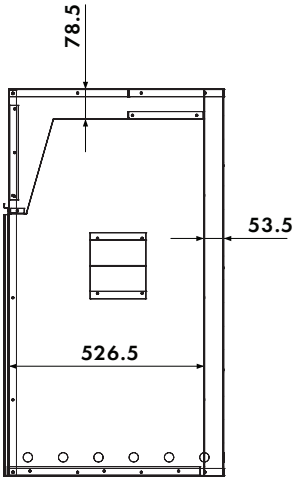

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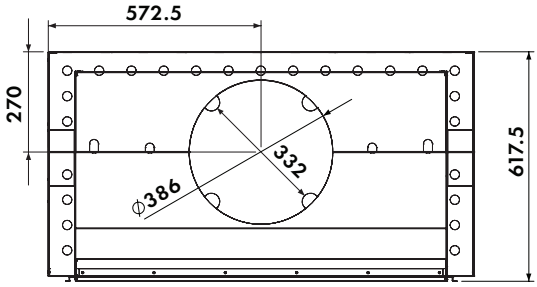
7.3. LIGNA 900 ZC



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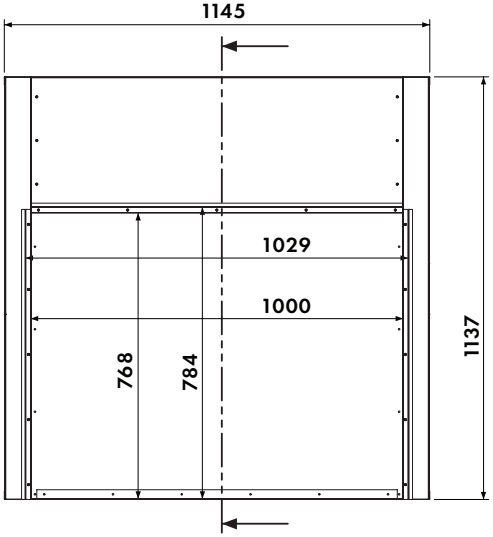

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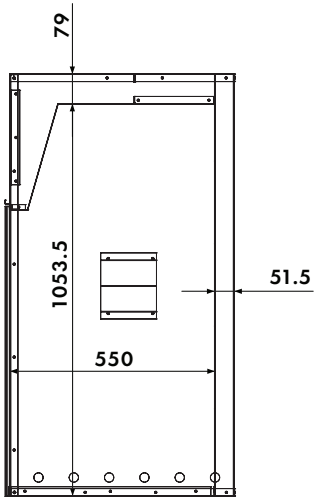

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