**YUNCA®**

A division of Terry Young Ltd, New Zealand

## INSTALLATION INSTRUCTIONS for

# XANDER BUILT-IN
## WOOD BURNER

• Clean Air Sub 1.0   • Non Clean Air (Rural)

# BUILT-IN "ZC" INSTALLATIONS

**8th AUGUST 2023**

❖ **Tested to AS/NZS 2918:2001 Appendix B.**

❖ **These instructions cover installations of the Yunca Xander Built-In, where the "Zero Clearance Kit" is being used - enabling installation into a suitably constructed enclosure as per AS/NZS 2918: 2001.**

❖ **For Masonry, please refer to the separate instruction book.**

❖ **Two fascia (panel set) options are covered in these instructions, "ORIGINAL" and "ALLURE". The Original fascia set comprises an assembly of separate panels whereas the Allure is a single piece fascia.**

## SAFETY INFORMATION

**General:**

• This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

• For the protection of young children, install an effective fire safety screen around your fire. Always keep children well away from the wood burner when it is alight.

• Supervise young children to ensure they do not play with the appliance.

• During initial burns of the appliance, ventilate the rooms well. It is recommended that babies, small children, pregnant women and pets should not be present in the area during initial burns as this is the firebox paint curing period.

• Do not make any modifications to the unit and use it only in the manner described in the manual. Using it in any manner not recommended by the manufacturer may result in injury or death.

**For units including electrical connections:**

• If the wood burner is permanently connected to an electrical source, an isolating switch (wall switch) must be installed.

• New circuits or modifications, if required, but be made using the services of a certified electrician only.

- Ensure that the outlets you use are grounded properly, polarised and provided with fuse units.

- Ensure that the electrical plug is accessible after installation. The wood burner must not be located immediately below an electrical socket.

- Never operate the appliance with a damaged plug or cord, or if you observe the fan unit is malfunctioning or the heater has been damaged in any way. Call the authorised service person immediately for repairs or making electrical or mechanical adjustments. – Isolate the electrical supply to alleviate any potential risk.

- If the supply cord is damaged, the manufacturer, its service agent or a suitably qualified person must replace it to avoid electrical hazard. Any cord similar to the original can be used.

# IMPORTANT INFORMATION

I. **It is imperative that you familiarise yourself with this entire document, and also ensure you have sufficient knowledge of relevant building regulations prior to proceeding with an installation.**

II. **The term "Zero Clearance", or "ZC" is in common parlance, however it refers to reduced rather than actual nil clearances. Please refer to specifications in this document in conjunction with the relevant building code if unsure of clearances.**

III. **The appliance and flue system shall be installed in compliance with AS/NZS 2918:2001 and the appropriate requirements of the relevant building code or codes.**

IV. **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"**

V. **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**

VI. **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.**

VII. **Cracked and broken components e.g. glass panels or fire bricks, may render the installation unsafe.**

A. Yunca recommends that competent trades persons carry out all installations (e.g. a NZHHA Registered Installer), to obtain maximum performance and safe, efficient heating.

B. A consent is required. We suggest you check with local building inspectors as by-laws do vary from area to area. Also notify your Insurance Company that a solid fuel heater has been installed.

## C. Floor Protector

C1. Built-in (ZC) installations: Floor protector (Promina/Bellis Board or similar non-combustible material) must be installed so that its leading edge is a minimum of 500mm in front of the appliance base [with fascia attached]. **The floor protector must be a <u>minimum</u> of 860mm wide x 1090mm deep x 9mm thick.**

C2. Front floor protector clearances may be reduced if appliance is elevated. (Table 2)

## D. Seismic restraint.

D1. Heater must be restrained from seismic movement (per Fig. 9) as required by AS/NZS 2918:2001

## E. Heat sensitive materials exclusion zone.

E1. Non-combustible front cladding **must be used** to a minimum of 600mm above the top-most panel vent, and a minimum of 30mm either side of the fascia (152mm either side of the outer casing of the firebox (Zero Clearance Kit) for the Original panel set or 162mm for the Allure fascia). (Fig. 5)

**E2.** No heat-sensitive material is permitted to contact the fascia forming or surrounding the front of the installation.

**E3.** No heat-sensitive material is to be placed any closer than 1315mm from the base of the Zero Clearance Box, 20mm from either side, or 20mm from the rear.

**E4.** Where a nogging or lintel is required, a steel angle or other suitable non-combustible alternative should be used if within the aforementioned exclusion zone.

## F. Mantel Clearances.

**F1.** Built-in Zero Clearance installation must have a minimum of 1300mm from the underside of the mantel shelf to the top of the appliance hearth. The mantel shelf must not protrude further than 250mm into the room. Minimum clearance of 1200mm from the underside of the mantel key (first combustible above appliance) to the top of the appliance hearth. The mantel key must not protrude further than 30mm into the room.

**F2.** All installations must have a minimum of 600mm vertically from the top vent to the nearest combustible material.

**F3.** **A 100mm heat deflector** must be installed directly above the fascia for the full width of the appliance if a combustible mantel key or shelf is present. Note: This is <u>not</u> for reducing clearances

**F4.** Mantel uprights must not protrude further than 70mm into the room, with the original fascia, or 85mm with the Allure fascia and be no closer than 30mm to the fascia on the side of the appliance where fans are (internally) hard wired. For units with external wiring using the included cable through the side panel, the side clearance to mantel uprights should be a minimum of 50mm to allow for the cable exiting the side panel.

**F5.** If the clearance to the mantel shelf is less than the minimum specified, a heat shield can be fitted to the underside of the mantel shelf using shielding detail as per AS/NZS 2918:2001.

## G. Xander Wood Burner Dimensions

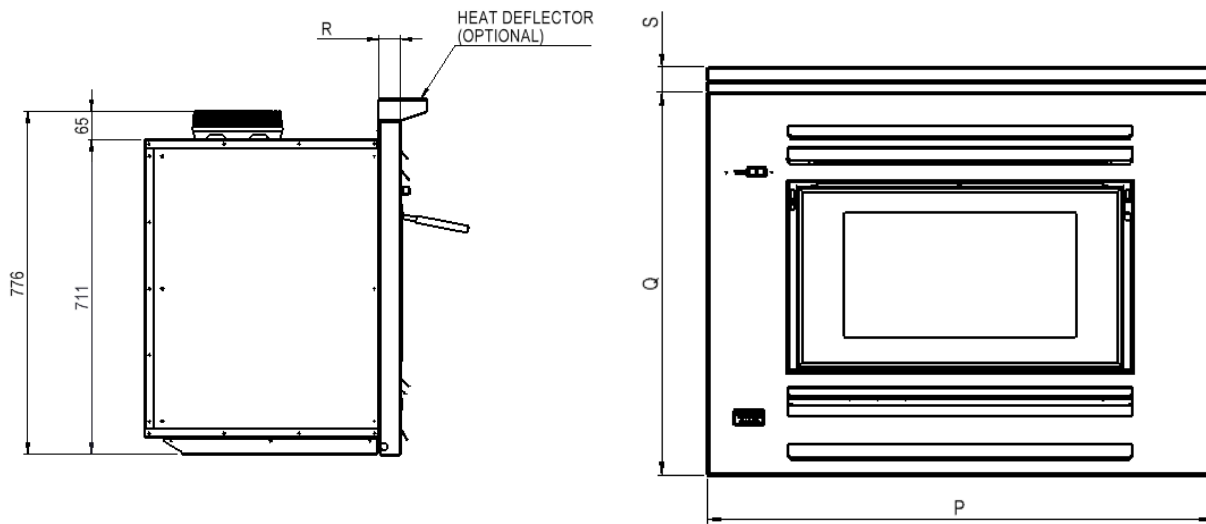| FASCIA DIMENSIONS (mm) | | |
|---|---|---|
| | ORIGINAL | ALLURE |
| **WIDTH (P)** | 980 | 1000 |
| **HEIGHT (Q)** | 753 | 756 |
| **THICKNESS (R)** | 35 | 50 |
| **DEFLECTOR HEIGHT (S)** | 35 | 50 |
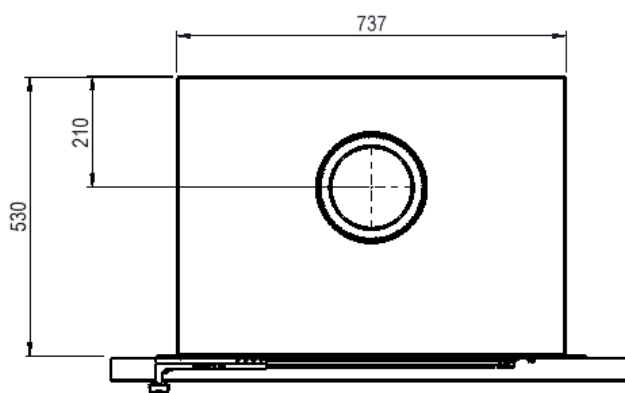
**Fig 1**

- Dimensions given include the Built-in "Zero Clearance" cabinet and also the bottom infill fascia panel, which is required for ZC installations.

- Vented fascia top panel <u>must</u> be used for Built-in (ZC) installations. This does not apply to the Allure fascia set.
  (The blank fascia top panel is for masonry installations only)

## H. Cavity Dimensions

**H1.** Cavity should be prepared based on the given clearances or greater. (Table 1) & (Fig. 2)

- Non-combustible material must be used on front wall between appliance and first nogging/dwang/frame of enclosure.
- Heat-sensitive structures not to contact carcass or appliance fascia.
- Ensure wiring for fan (Fig. 11) is taken into account when preparing the cavity.



(Not to scale)

**Fig. 2**

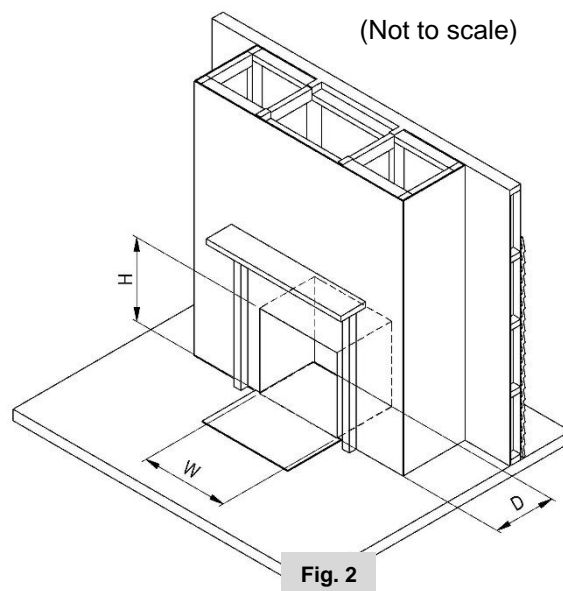| BUILT-IN (ZC) CAVITY <br> <u>MINIMUM</u> DIMENSIONS (mm) | | |
|---|---|---|
| WIDTH (W) | HEIGHT (H) | DEPTH (D) |
| 790 | 731 | 555 |
| Min timber cavity framing height 1315mm | | |

Table 1

**WARNING:**

Cavity Dimensions <u>must</u> be determined in conjunction with requirements as per Section E and Section M, with particular note made to the heat sensitive material exclusion zone.

## I. Cavity Venting

**I1.** A 10,000mm² vent must be installed at least 600mm up from the base of the enclosure. This can be any configuration as long as it equates to at least 10,000mm². [For example: 1 hole at 100 x 100mm, 2 holes at 100 x 50mm, or 4 holes at 50 x 50mm].

**I2.** Additional venting must be installed near the top of the enclosure to prevent heat being trapped in the cavity. This too can be any configuration as long as it equates to at least 10,000mm².

**I3.** Suitable precautions should be taken to prevent rodents, birds and/or debris from entering or obscuring the air vents. If grilles are used; ensure the minimum vent area is maintained through the grille.

**I4.** WARNINGS:

- A minimum of 450mm x 450mm space around the flue, in the enclosure ceiling, through which the flue system passes, should be maintained to provide sufficient ventilation in order to prevent heat build-up within the enclosure.

- The constructed enclosure should **not** be capped off at ceiling level, as there would be a considerable risk of fire from the build-up of heat. Such an installation should be properly vented into the ceiling cavity with sufficient clearances to comply with relevant building codes and practices.

- For standard flue installations (Fig. 3); if any support is required under the chimney cap, it should be constructed of non-combustible materials only.

## J. YUNCA Insert Flue Kit – Zero Clearance (Complies with AS/NZS 2918:2001):

**J1.** Zero Clearance (Built-in) Flue Kit consists of the following:
- 4.8m x 150mm stainless steel flue.
- 4.8m x 200mm galvanised liner.
- 4.8m x 250mm galvanised liner.
- 1 x top cap & cowl (cone).

⇒ **Please Note:** All flue joints must be sealed with flue sealing compound. Use stainless steel screws or rivets to join the flue pipe (three equally spaced places at each joint). The first length of flue must be fixed to the flue spigot with at least one stainless steel screw or rivet. The required minimum flue termination height is 4.6 metres above the floor protector.

## K. Typical Built-in (ZC) Flue Installation (Fig. 3)

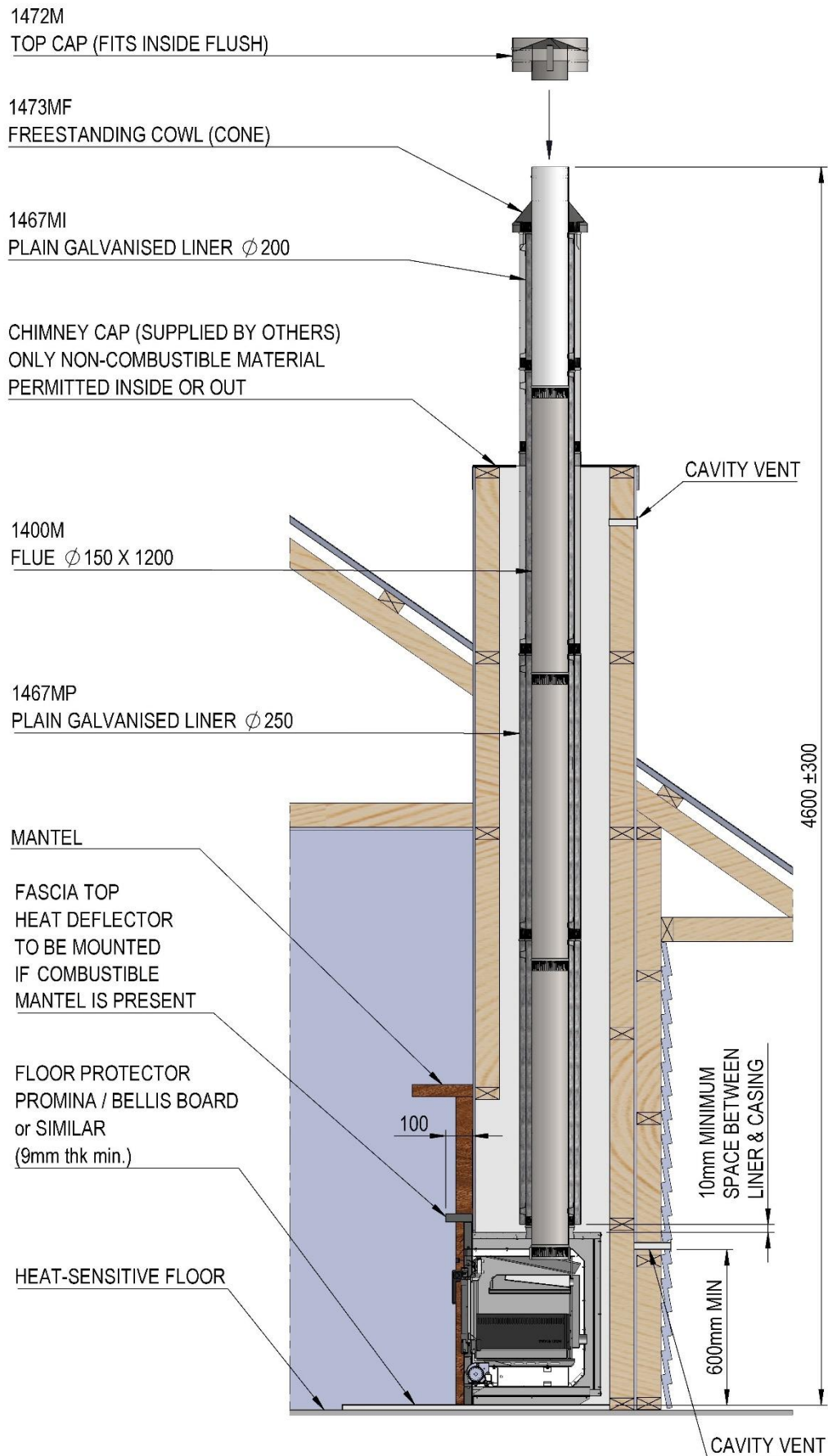Complies (with heater) to AS/NZS 2918:2001

(Not drawn to scale)

1472M
TOP CAP (FITS INSIDE FLUSH)

1473MF
FREESTANDING COWL (CONE)

1467MI
PLAIN GALVANISED LINER ⌀200

CHIMNEY CAP (SUPPLIED BY OTHERS)
ONLY NON-COMBUSTIBLE MATERIAL
PERMITTED INSIDE OR OUT

CAVITY VENT

1400M
FLUE ⌀150 X 1200

1467MP
PLAIN GALVANISED LINER ⌀250

4600 ±300

MANTEL

FASCIA TOP
HEAT DEFLECTOR
TO BE MOUNTED
IF COMBUSTIBLE
MANTEL IS PRESENT

FLOOR PROTECTOR
PROMINA / BELLIS BOARD
or SIMILAR
(9mm thk min.)

100

10mm MINIMUM
SPACE BETWEEN
LINER & CASING

HEAT-SENSITIVE FLOOR

600mm MIN

CAVITY VENT

Fig. 3

# L. Conditions for Flues (Fig. 4)

**L1.** The FLUE shall extend to:
- Not less than 600mm above the highest point on the roof if within 3.0m of that point, or
- Not less than 1000mm above the intersection point with the roof and not lower than any point of the roof within 3.0m.
- In any case the length of the flue shall not be less than 4.6m from the ash floor protector.

**L2.** In some situations, the Local Council may vary the above requirements.

**L3.** The flue system must comply with AS/NZS2918:2001.

**L4.** A minimum of 25mm clearance must be left between the outer casing of the flue and any surrounding combustible materials.

**L5.** For situations where the cavity terminates at ceiling level, suitable measures must be taken to prevent accidental migration of loose-fill or any combustible material by any action of wind or by persons moving in the ceiling space. Such installations are not detailed in these instructions, so please refer to AS/NZS 2918:2001, and your local authorities for requirements.
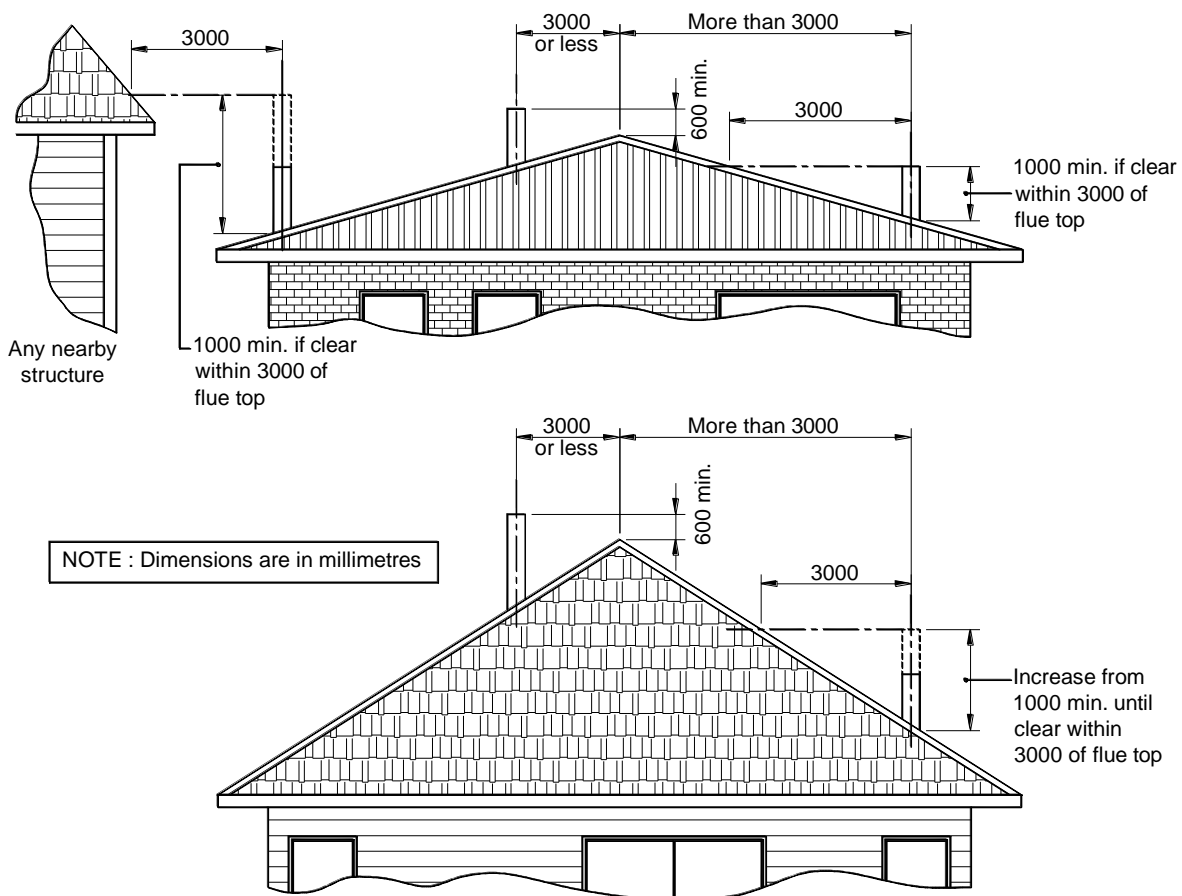


MINIMUM HEIGHT OF FLUE SYSTEM EXIT

**Fig. 4**

## M. Xander Built-in (ZC) Installation Thermal Clearances
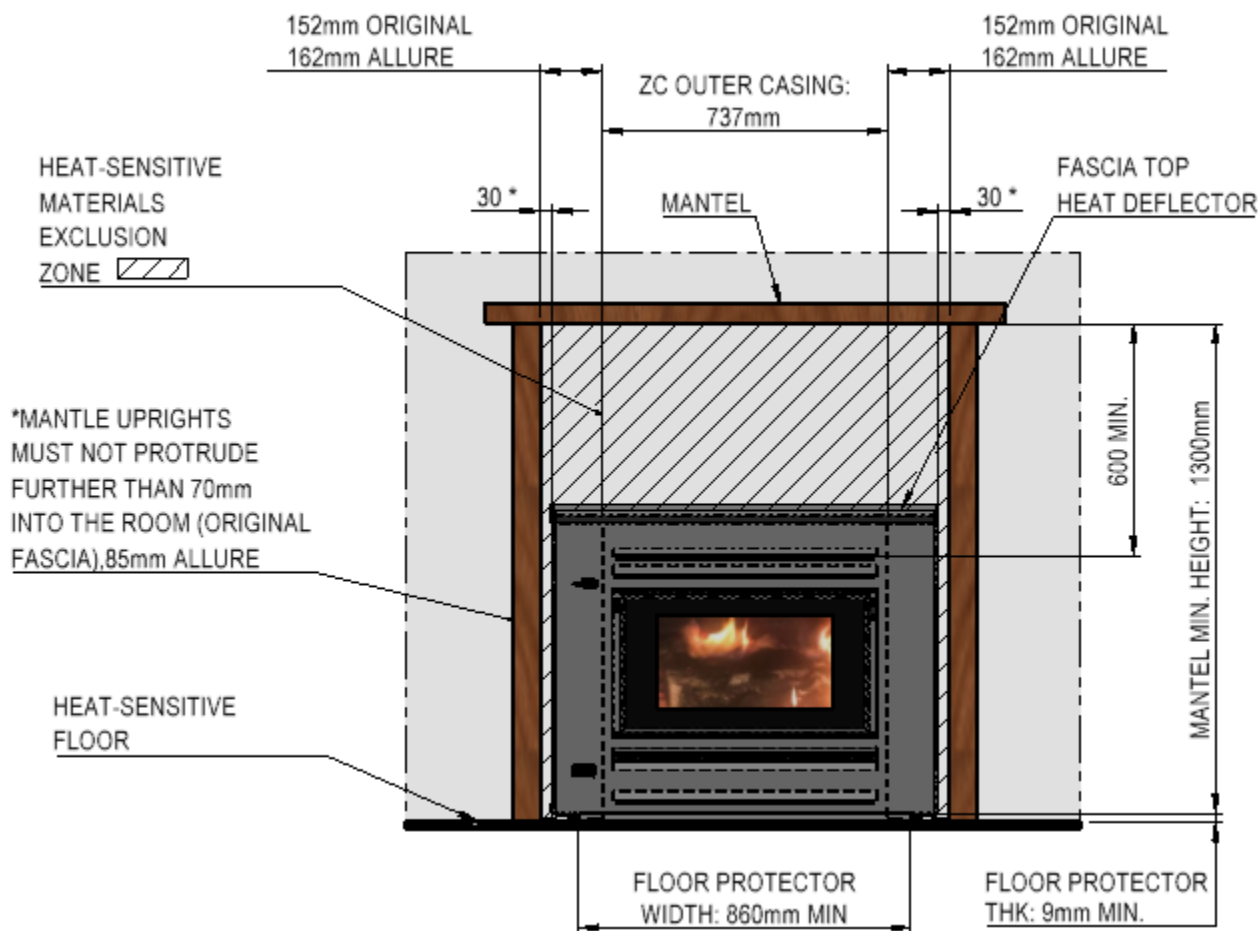
➢ **THERMAL CLEARANCES FRONT VIEW**



*Fig 5*

Notes:   If a combustible mantel shelf is present, a 100mm heat deflector must be installed directly above the appliance fascia for the full width of the appliance.

\* Mantel uprights must be no closer than 30mm to the fascia on the side of the appliance, and not protrude further than 70mm into the room, with the original fascia, or 85mm with the Allure fascia for units where fans are (internally) hard wired.

 For units with external wiring using the included cutout on the side panel, the side clearances should be extended to a minimum of 50mm to allow for the cord.

> ➢ **THERMAL CLEARANCES CROSS SECTION**
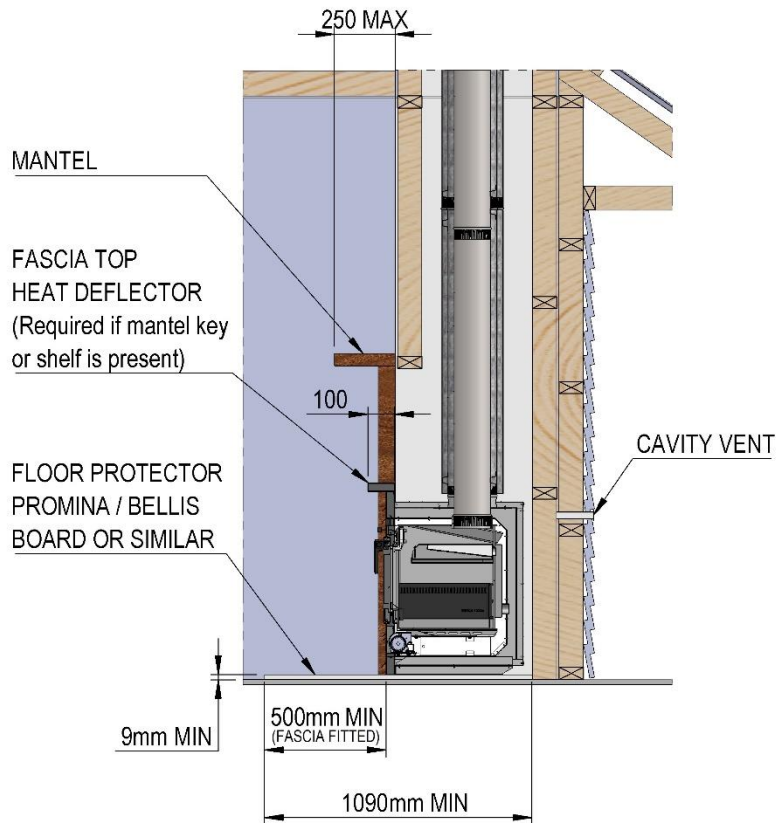


**Fig. 6**

# N. Floor Protector Reductions

**N1.** The floor protector extension from the front of the unit can be reduced if the unit is elevated. (Table 2) * Measurements taken from the front of the (35mm thick) fascia.

| Elevation Increase (mm) | 0 | 50 | 100 | 150 | 200 |
|---|---|---|---|---|---|
| * Protector Extension (mm) | 500 | 464 | 421 | 366 | 300 |

Table 2. Floor Protector Reductions for Built-In Installations

## o. Fitting the Airflow Baffle

The airflow baffle must be fitted to the firebox for all Allure zero clearance fascia's, prior to fitting the fascia assembly.

0006453 AIRFLOW BAFFLE

RIVET - TRUSS HEAD BLIND 73SS-0403
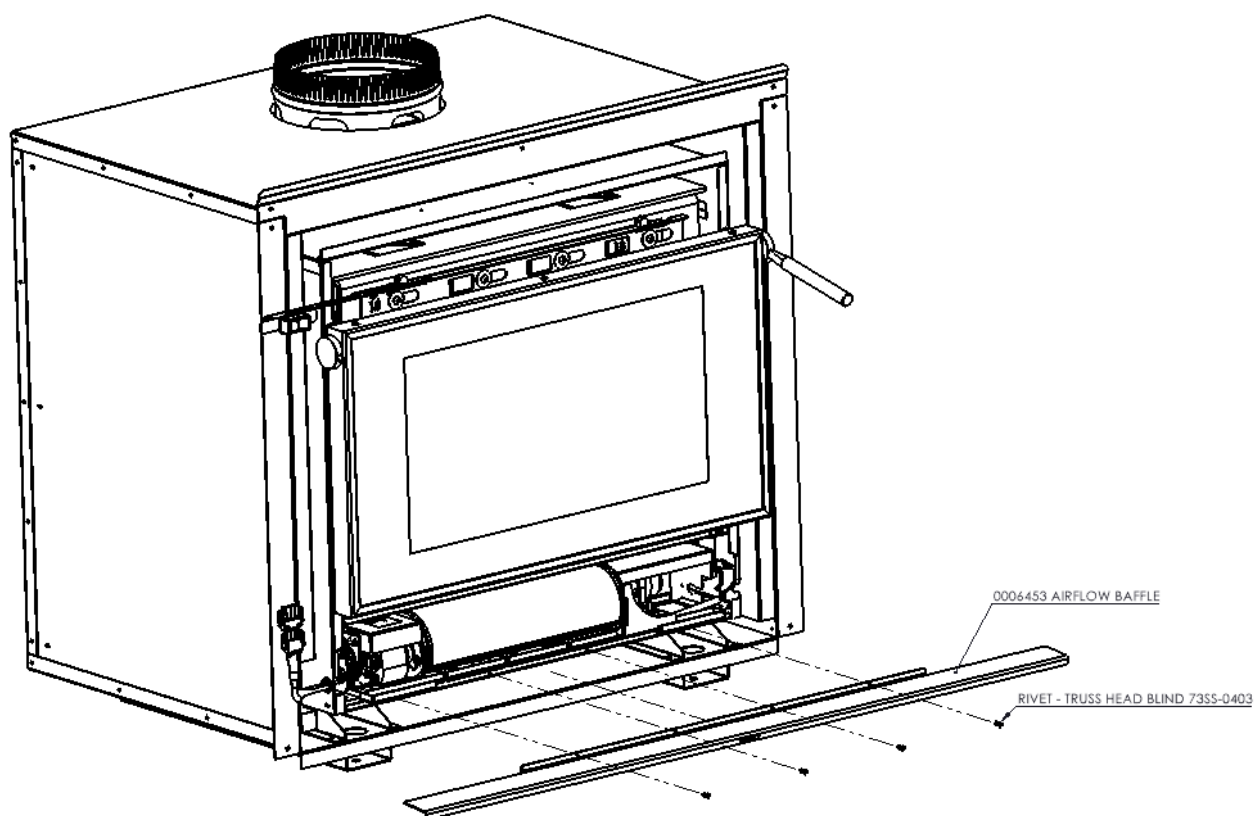
## P. Xander ZERO CLEARANCE KIT Assembly

- Note: The Xander "Zero Clearance Kit" (for built-in installations) is supplied as a flat pack and will require assembly before installation:
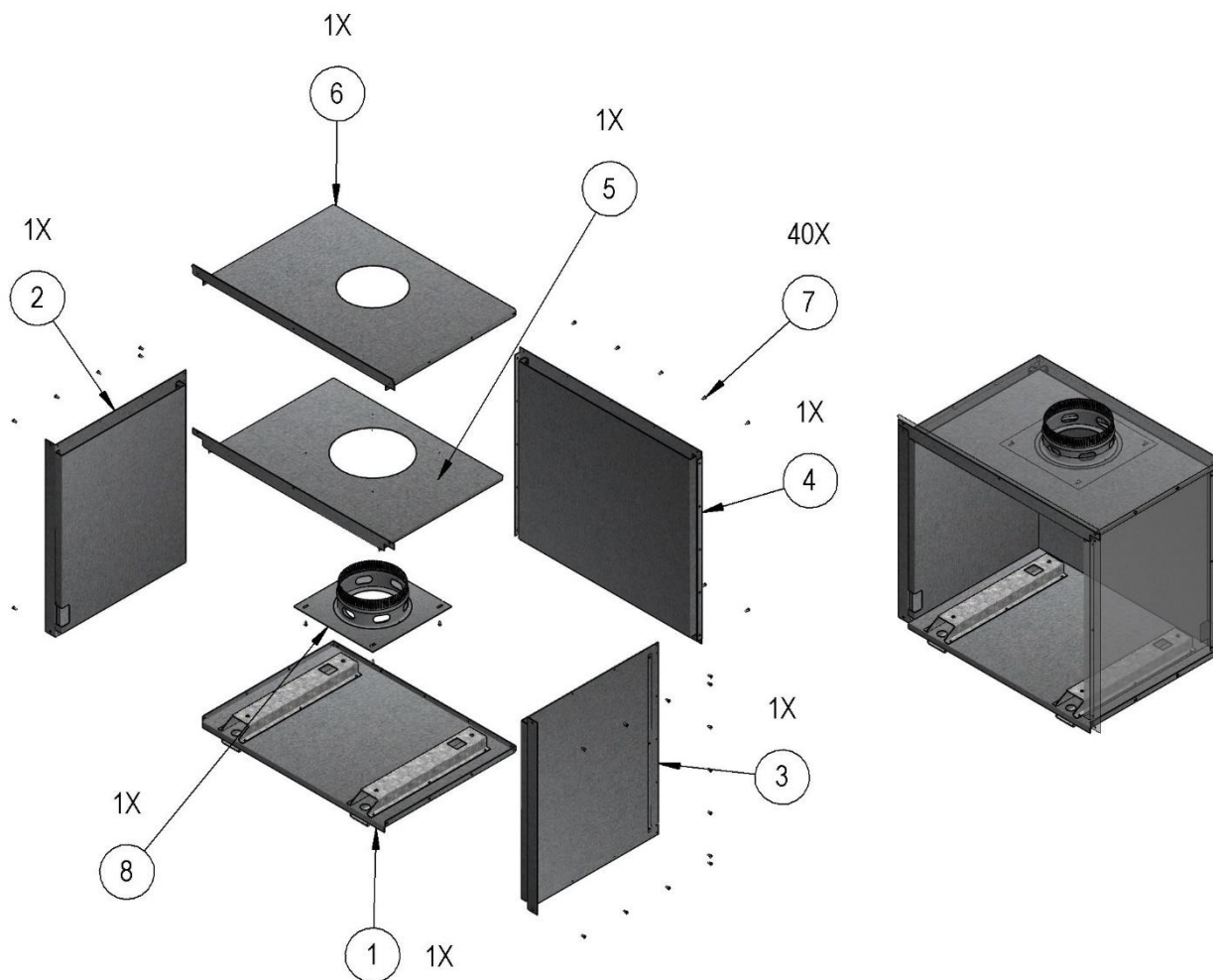


**Fig. 7 – Zero Clearance Kit parts breakdown**

| ITEM | DESCRIPTION | QTY |
|------|-------------|-----|
| 1 | CASING PANEL ASSEMBLY – BASE | 1 |
| 2 | CASING PANEL ASSEMBLY - LEFT SIDE (SIDE-HOLE OPEN WITH RUBBER GROMMETS) | 1 |
| 3 | CASING PANEL ASSEMBLY – RIGHT SIDE (SIDE HOLE COVERED) | 1 |
| 4 | CASING PANEL ASSEMBLY – BACK | 1 |
| 5 | CASING PANEL – TOP INNER | 1 |
| 6 | CASING PANEL – TOP OUTER | 1 |
| 7 | 8G x 1/2 PAN POZI SELF TAPPER ZP (0013) | 40 |
| 8 | CASING SPIGOT ADAPTOR | 1 |

**1**

**2**

**3**

**4**

**5**

**6**

Note: Spigot must be installed after the ZC cowl is positioned into the cavity.
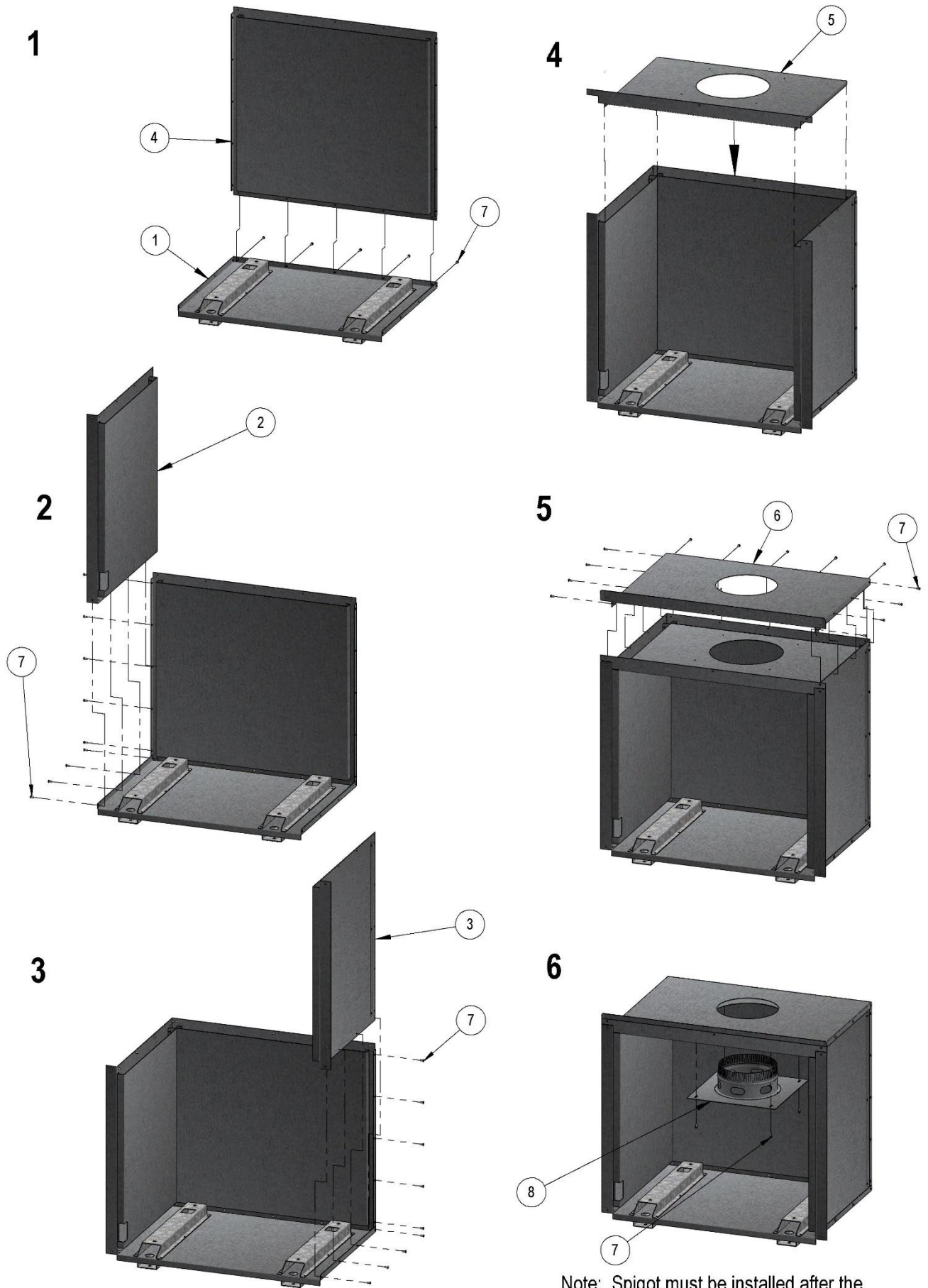
**Fig. 8 - Zero Clearance Kit ASSEMBLY PROCEDURE**

## Q. Xander Insert Seismic Fixings

**Q1.** Prior to installation, ensure the cavity floor is level both ways, smooth and bump free. Also ensure the mantel face is perpendicular in relationship to the cavity floor.

**Q2.** Ensure the unit is securely fixed using sleeve anchors or similar at the locations shown in the images on this page. (Fig. 9)



ZERO CLEARANCE OUTER CASING ASSEMBLY

SEISMIC ANCHORING LOCATIONS
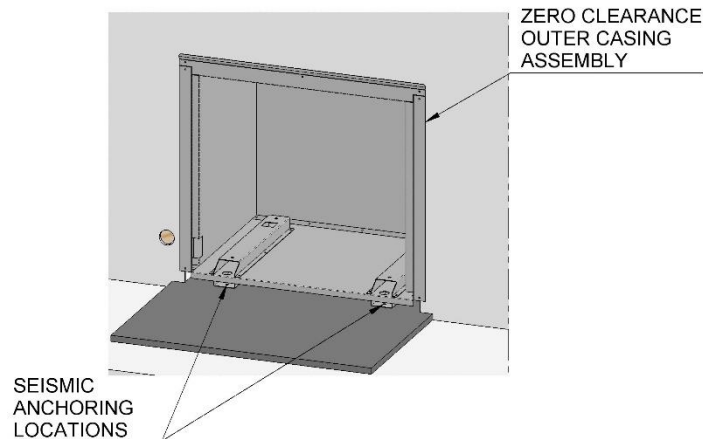
**Fig. 9**

## R. Xander Fan - Electrical Supply

**R1.** Remove the front fascia from its separate box and packaging and set it aside in a safe position. You can use the box as a work surface to raise it up if you wish.

**R2.** ## 3-Pin Plug

If the fan is to be plugged into an electrical outlet in the room, take the RS321-174 mains power cable (plastic bag in box) and plug it into the IEC C14 socket on the underside of the circuit box on the rear of the fascia. Pass the cable through the slot in the fascia, crimp the cable grip bush (in the plastic bag with the power cable) over the cable outside the fascia and pull the bush and cable back into the hole in the fascia.

**R3.** ## Hardwired (Optional)

Should you wish to "hardwire" the fan unit, you can substitute the IEC C14 socket and wiring by using a TPS cable.

⇒ **You MUST be a Registered, Certified Electrical tradesperson to hardwire this appliance.**

**a.** Remove the screw-fixed panel on the rear of the circuit box.

**b.** Completely remove the internal wiring and IEC C14 socket and substitute your TPS in place of the socket.

**c.** Plug the slotted hole in the side of the fascia with the 16mm black, rubber grommet supplied in the plastic bag.
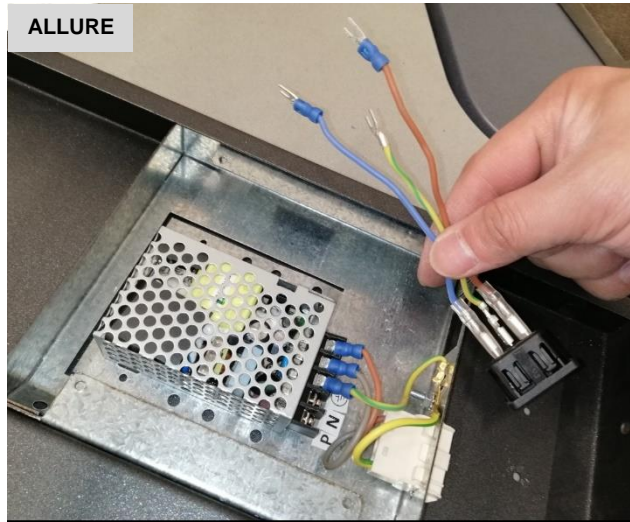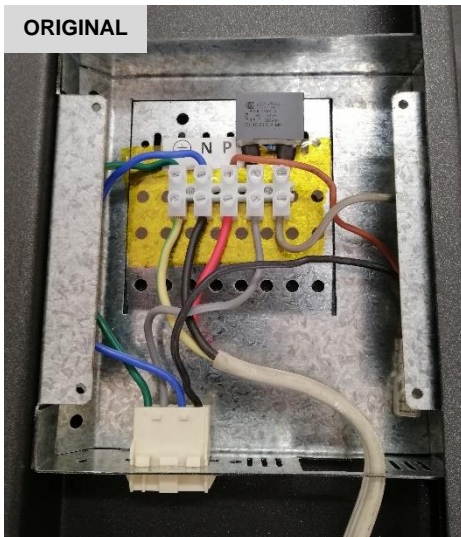
*Fig 10 - Original*



*Fig 11- Allure*









Although the fan is controlled automatically by a thermostat, an isolator switch must be installed in conjunction with the fire.

## S. Xander Install Firebox and Fascia

**S1.** Position firebox in front of fireplace and remove any remaining packaging and desiccants from the flue and front of the air slide.



**S2.** Unlatch door, open it slightly, lift door off from firebox and set it aside in a safe position where it cannot fall down.



**S3.** Undo the two fastening screws from the air slide, handle flip it 180 degrees, reinstall and tighten the screws again. Note, the Allure fascia has its own air slide lever. If retrofitting a fireplace with the Allure Fascia set, the existing air slide lever must be replaced with the one supplied with the Allure fascia set.

**S4.** Slide the Air slide cover over the Airslide lever with the black side facing into the room.

(Photo to come).

**S5.** Remove fan by removing M8 button head socket screws, 2 positions. Withdraw fan, on its mounting plate, from under the fire box. Set the fan aside in a safe position.
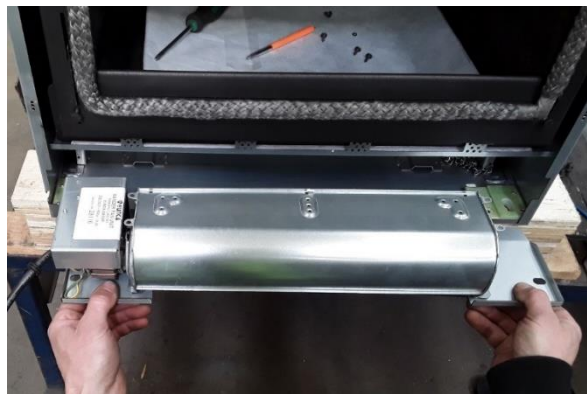


**S6.** Remove the two self tapping screws at the top outer corners of the firebox cowl and remove the Primary Outer Casing Top Panel and set it aside. (The panel is a slip fit under the panel at the rear of the flue spigot.)

**S7.** Manoeuvre the firebox carefully into the previously prepared "zero clearance" box and use the M6 seismic retaining bolts (2 positions) to attach firebox to the box at the bottom front, at each side.



**S8.** Reinstall fan unit on its mounting plate, back under the firebox. The two padded tabs on the mounting plate insert into brackets and the plate is retained by the two M8 button head socket screws you removed earlier. Reinstall the screws complete with split washers and tighten securely but do not over tighten.

**S9.** Insert the fan power cable grommet into the notch in the side cowl of the firebox and hang the cable outside the firebox ready to plug into the circuit box on the rear of the fascia.



**S10.** Apply fire cement sealant as required to the flue spigot and lower the Flue into the spigot on top of the firebox and ensure it is fully seated.

**S11.** Rivet or screw fasten the Flue Spigot, reinsert the Primary Outer Casing Top Panel, slipping the rear edge under the rear top panel and fasten with the two screws at the outer corners as below:
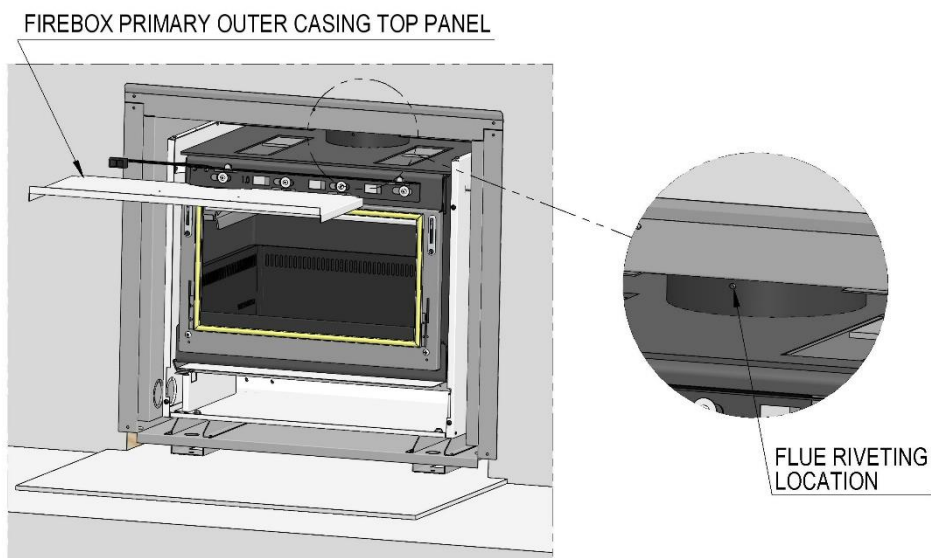


FIREBOX PRIMARY OUTER CASING TOP PANEL

FLUE RIVETING LOCATION

**Fig. 26**

➢ **Note**: Primary Outer Casing Top Panel must be installed after the flue is fixed in place.

**S12.** Remove the four loosely fitted, black, mushroom washer, self tapping screws from the front edges of the firebox cowls and set them aside where you can reach them.

**S13.** Set the Front Fascia temporarily in front of the fire, ready to be lifted into position.

**S14.** Reach over the top, or round the side and insert the fan power cable into the socket on the underside of the circuit box mounted on the rear of the fascia panel. (The plug is shaped so it will fit only one way round.)

**S15.** Reach over the top, or round the side and insert the fan power cable into the socket on the underside of the circuit box mounted on the rear of the fascia panel. (The plug is shaped so it will fit only one way round.)
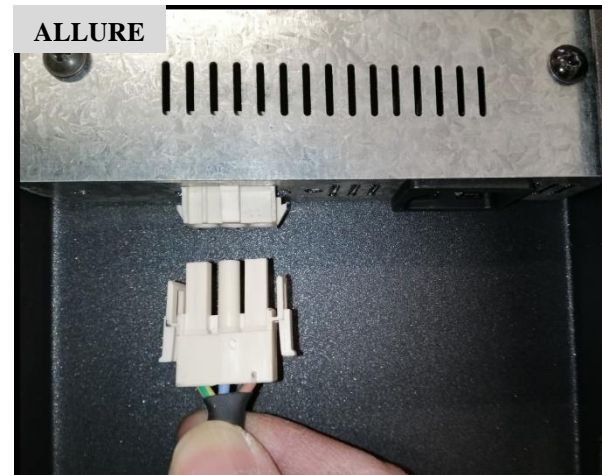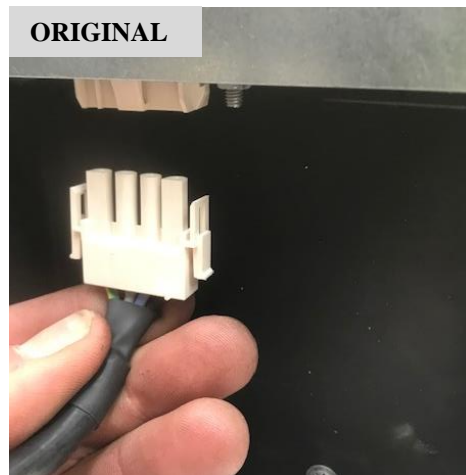


**S16.** Lift the fascia panel, slide it over the air slide handle and sit it over the 2 pins which project out from the side cowls. (The pins take the weight of the fascia while the fastening screws are reinstalled and enable the fascia to easily be aligned during installation.)



**S17.** Lift the fascia panel, slide it over the air slide handle and sit it over the 2 pins which project out from the side cowls. (The pins take the weight of the fascia while the fastening screws are reinstalled and enable the fascia to easily be aligned during installation.)

**S18.** Reinstall the 4 screws, leveling the front fascia to align with the firebox (which you have previously leveled) and centralising it about the firebox, so there is an equal gap at the sides for the door to fit neatly into. Tighten the screws when you have everything aligned correctly.
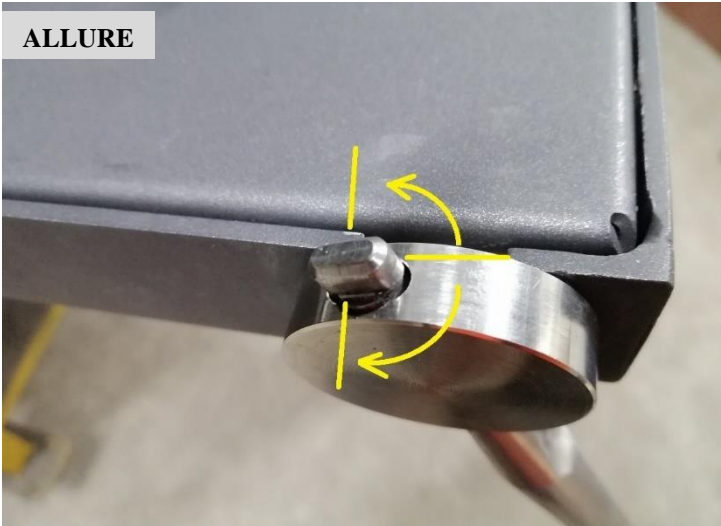
| STANDAD | ALLURE |
| --- | --- |



**S19.** Take the door, pry up the hook latches and insert the shaft of a screwdriver under the arms to make the hooks project.

**S20.** Reinstall the door (remove screwdrivers) and confirm the fascia is positioned to provide equal spaces either side of the door and that the door is "square" with the fascia panel when closed and latched.





**ALLURE:**
Insert and rotate the handle key 90 degrees clockwise (or counterclockwise) to engage it into the disc.

**Handle key should be removed during normal operation.**

Unlock / Open Door — ORIGINAL

Lock / Close Door — ALLURE
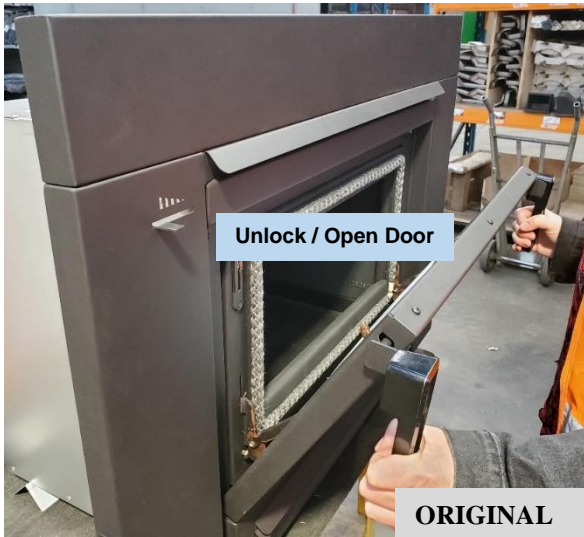
**S21.** Install the air slide handle Knob. (From the plastic bag.)



**S22.** When you are complete and confident everything is electrically safe, plug the power cable in or if hard-wired, turn on the isolation switch to liven the unit prior to lighting a fire and conducting initial burns.

**WARNING:**

It is important that the fire should NOT be operated without the fan powered up to be operational.

The fan has been factory tested to confirm that it starts when the temperature of the thermostat reaches 40 degrees Celsius.

Confirm that the fan starts and runs during your initial burns. The fan may take up to 1 hour to switch on.

< END >