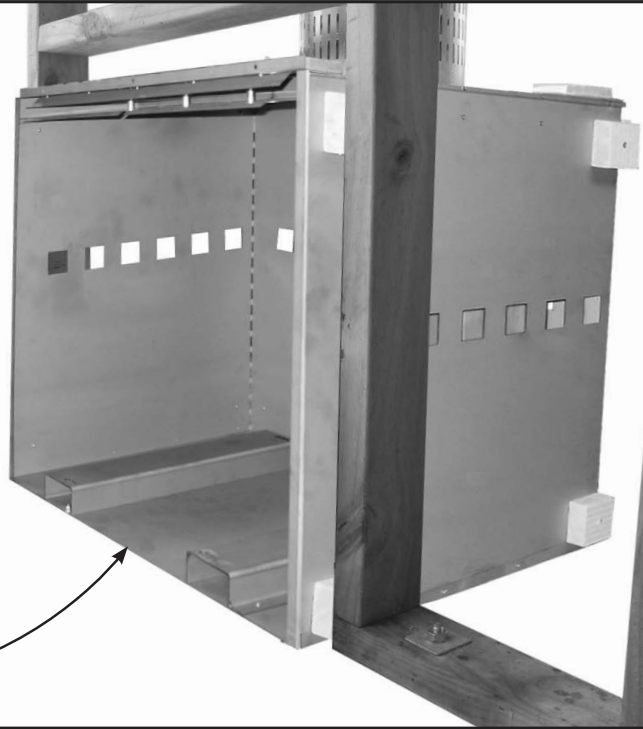


⚠ ATTENTION!

Installation of the ECO Smart Insert into a Vented Zero Clearance Cabinet (VZCC) elevates the appliance and fascia by 45mm.

To complete installation to conceal the VZCC base runners, a Metro Pine Insert insulated floor protector or ECO Smart Fascia Base Rail are options available. (See page 5)



metrofires

ECO Smart Vented Zero Clearance Cabinet (VZCC) Installation Manual

Fits Metro ECO Smart Insert only

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⚠ WARNING! Important Information for the installer

- It is critical to the safe installation of a vented zero clearance cabinet (VZCC) that you are conversant with the installation of wood fires and competent to undertake this installation.
- This vented zero clearance cabinet is for the ECO Smart Insert only.
- You must read the following five points prior to starting the installation.

Stage 1 - Unpacking and familiarisation

The function of the Metro ECO Smart Insert Vented Zero Clearance Cabinet (VZCC) is to enable the Metro ECO Smart Insert wood fire to be installed into a timber framed wall replacing a masonry chimney at a fraction of the cost.

1. Installation must be strictly in accordance with this manual to comply with the test approvals to AS/NZS 2918:2001 held by Pioneer Manufacturing Ltd. The installation of any model wood fire other than the ECO Smart Insert into this VZCC will not comply with the test approvals held by Pioneer Manufacturing Ltd and may create a fire hazard.
2. Certain points within this manual are critical to the safe operation of the VZCC, these points are highlighted by being shaded within a grey panel.
3. Insulating spacer blocks are attached to the rear, sides and top of the VZCC. These blocks must not be removed, they may touch timber framing as their function is to ensure

a minimum airspace of 15mm is maintained on top and 20mm airspace at the rear and both sides between the VZCC and any combustible framing or materials built around it.

4. There is a white insulating blanket pre-fitted to the ECO Smart Insert outer cabinet. It is important that this insulating blanket remains installed and in good condition as detailed in stage 4 of these instructions. Do not remove this blanket under any circumstances.
5. Refer to stage 6 in relation to Floor Protector requirements prior to commencing installation.

The Metro "Vented Zero Clearance Cabinet"

Having read the five critical points above, unpack and familiarise yourself with the various components of the VZCC as detailed and illustrated in Diagrams 1 and 2 below;

Supplied in the VZCC Pack:

- 1 x Assembled cabinet body
- 1 x 200mm dia. inner liner spigot
- 1 x 250mm dia. outer casing spigot
- 1 x Metro Insert replacement top panel
- 1 x Bag of assembly screws, bolts and nuts
- 1 x Installation manual
- 3 x Blanket securing plates

Not Supplied BUT REQUIRED:

- 4 x Restraint fixtures, masonry anchors or wood screws
- 1 x Metro ECO Built-In flue system
- 1 x Metro ECO Smart Insert firebox with fascia

Diagram 2

Replacement Top Panel

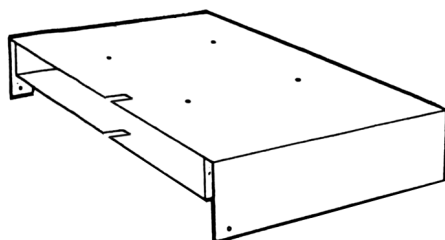
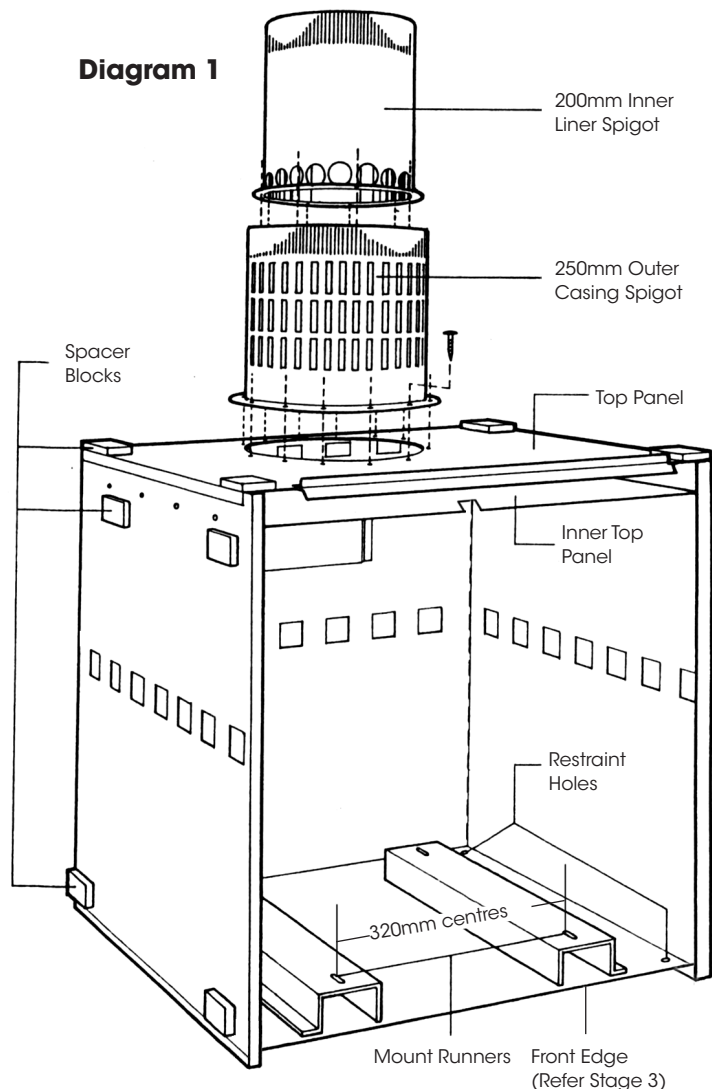


Diagram 1



Stage 2 - Preparing the wall opening/cavity

CAUTION! Important Information

If the enclosure is constructed to the full height of the room and is fully open/vented into the ceiling cavity of the home, then the venting requirements as specified below are not required.

Cavity Venting Requirements

- It is common for the installation cavity to extend the full size of the VZCC vertically through to the roofline. However, if it is necessary to reduce the cavity size which the flue system passes through, it is critical that a minimum cavity dimension of 270mm x 270mm extends a minimum height of 200mm above the VZCC to provide a 10mm airspace required to allow cooling air to enter the slots provided in the outer casing spigot as illustrated in Diagram 1.
- Air vents are required on three faces of the enclosure, both sides and the rear. The top of these vents must be no higher than 185mm above the floor and have a minimum surface area of 16000mm² per face. i.e 400mm x 40mm of vent area on each of the three faces of the VZCC. The VZCC may also be vented through the floor.
- If the enclosure is through an external wall, suitable precautions will be necessary to prevent rodents and debris from entering or restricting the air vents. If grilles are used, ensure the minimum vent area is maintained through the grille itself.

Prepare an opening in the wall as illustrated.

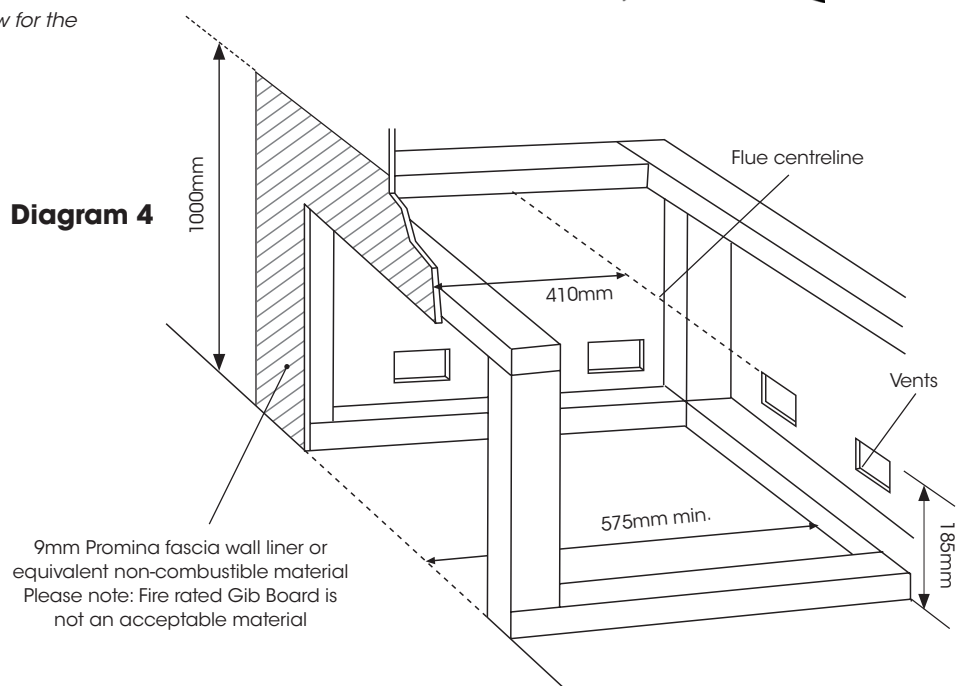
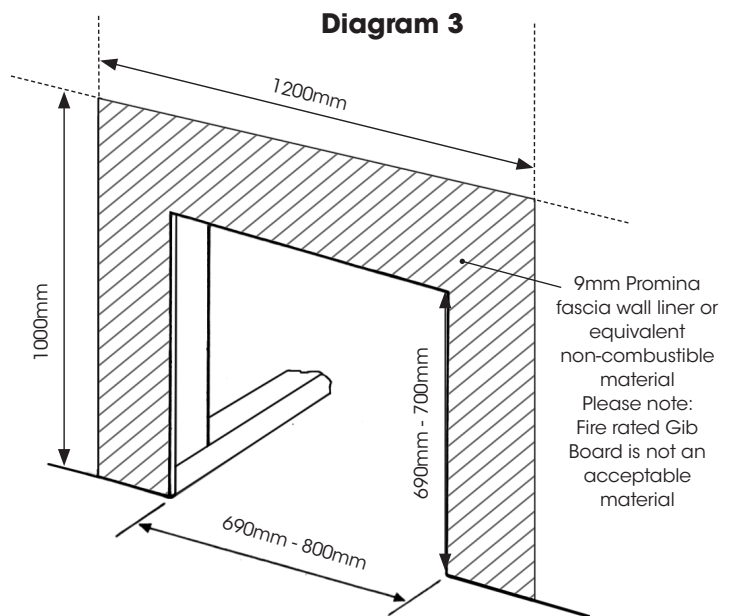
Note: Recommended wall lining is 9mm Promina board or equivalent non-combustible material. Note: Fire rated gib board is not an acceptable material.

Width of opening - **700mm suggested**
 - 800mm maximum
 - 690mm minimum

Height of opening - **695mm suggested**
 - 700mm maximum
 - 690mm minimum

- If the VZCC is built into an enclosure, the enclosure must be vented as illustrated in Diagram 4 and specified in the grey panel above.
- Insulation is not required under the VZCC, it may sit directly onto a timber or particle board floor.
- The distance from the front edge of the enclosure (directly behind the fascia) to the centre of the flue is 410mm as shown in Diagram 4.

Note: If a brick front is to be built you need to allow for the thickness of the bricks.



Stage 3 - Installing the Vented Zero Clearance Cabinet

CAUTION! Important Information

- Position the VZCC into the wall opening you have created (Diagram 3), slide the cabinet into the cavity until the front edge of the VZCC's base panel is flush with the front face of the wall lining (Refer Diagram 1).

It is critical for the safe and efficient operation of the ECO Smart Insert fitted into a VZCC, that this front edge of the VZCC base panel **MUST BE FLUSH** with the front edge of the wall lining. Frequently at time of installation the wall

lining may not be complete, so if 9mm promina board is being used to cover the framing, the installer will need to have the front edge of the base panel 9mm forward of the framing. Similarly if a brick facade is being constructed, the installer must move the VZCC forward so the front edge of the base panel ends up flush with the front face of the bricks once constructed.

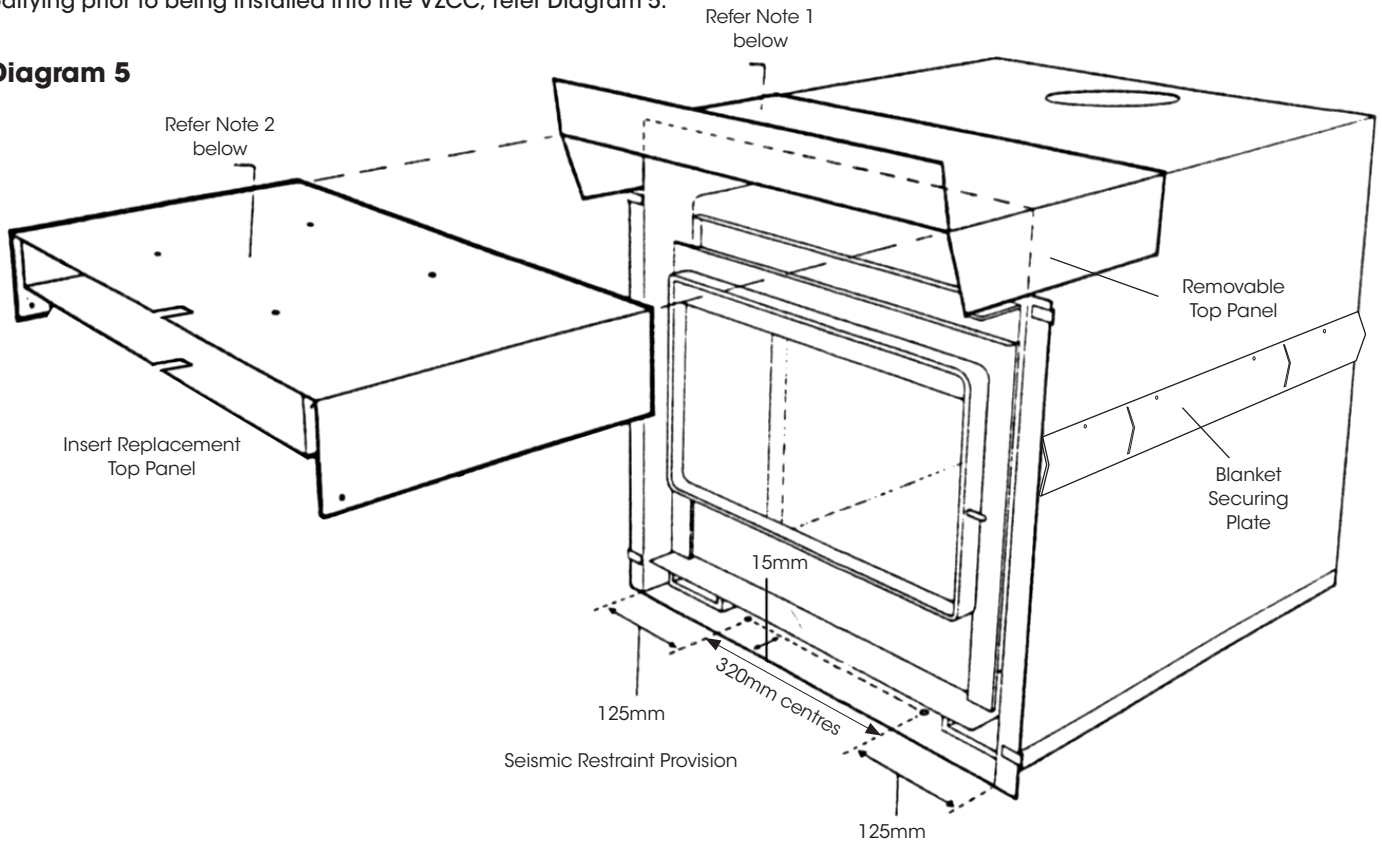
- Check the VZCC is central by ensuring the clearance between each side of the cabinet and the sides of the opening are equal.
- Secure the VZCC to the floor through the four restraint holes provided in each corner as illustrated in Diagram 1. Masonry anchors are required for a concrete floor and wood screws for a timber or particleboard floor.
- Position the 200mm diameter "Inner liner spigot" through the 245mm diameter hole at the rear/top panel of the VZCC, it will rest on the inner top panel of the VZCC. (refer Diagram 1). Secure the "Inner liner spigot" into position using 12 of the self tapping screws supplied.
- Position the 250mm diameter "Outer casing spigot" centrally over the 200mm diameter spigot. Using the remaining 12 self tapping screws supplied, secure this spigot into position.

Note: This must be secured rigidly to meet the seismic restraint requirements of AS/NZS 2918:2001

Stage 4 - Preparing the Metro ECO Smart Insert Firebox

The Metro ECO Smart Insert firebox cabinet assembly requires modifying prior to being installed into the VZCC, refer Diagram 5.

Diagram 5



CAUTION! Important Information

1. Remove and discard the "removable top panel" fitted to the top face of the inserts cabinet.
2. Replace the discarded top panel with the "insert replacement top panel" illustrated in the above diagram. Ensure the rear/top edge of the replacement top panel fits into the groove provided in the Insert's cabinet (as illustrated in the inset Diagram B on Page A of the ECO Smart Insert Installation and Operation Manual). Secure the replacement top panel in position by fitting the two self tapping screws supplied into the "lower" mounting holes provided in the cabinet.

Note: This replacement top panel must be mounted level when installed into the VZCC.

3. The ECO Smart Insert firebox's outer cabinet is supplied with a white insulating blanket fitted to its top face. This blanket also covers the upper sections of both sides

and the rear panel of the cabinet. It is critical that this insulating blanket remains fitted and the extra securing blanket plates provided are installed.

Take care not to rip/damage the insulating blanket.

4. Before fitting the Smart insert firebox into the VZCC it is vital that the three blanket securing plates (shown in Diagram 5) are fitted to ensure the blanket does not block air flow through the cabinet, one on each side and one across the back of the fire.

Hold one of the plates along the side of the Smart insert firebox so that it overlaps the bottom edge of the blanket by about 15mm. Then using a 3mm drill bit, drill through the plate holes provided and into the firebox cabinet. Then fix with the self tapping screws provided. Repeat for the remaining plates. The rear plates are formed by breaking a plate into three pieces.

Complete the assembly of the ECO Smart Insert as detailed in the manual supplied with the Metro ECO Smart Insert.

Stage 5 - Installing the Metro Smart Insert Firebox

With the Metro ECO Smart Insert now modified and assembled, you are now ready to install it into the VZCC;

- Position the Insert assembly with its rear facing the front opening of the VZCC. Taking care not to damage the white fibre insulating blanket on the top and upper sides of the insert cabinet, raise the rear of the unit and slide it back into the VZCC. The base of the Metro ECO Smart Insert will be sitting on the mount runners of the VZCC (refer Diagram 1).
- The front side panels of the VZCC have return folds facing inwards, the front side panels of the insert assembly have return folds facing outwards. Move the insert firebox forward or backwards so that the insert assembly return folds are approximately 2mm back from the VZCC return

folds. Ensure the gap between the returns on each side are equal.

- Look down from the top of the cabinet to make sure the firebox flue spigot is central with the cabinet spigots, some fine adjustment may be necessary.
- The ECO Smart Insert firebox assembly must be securely bolted to the VZCC to meet the seismic restraint requirements of AS/NZS 2918:2001.
- Using the two x 6mm bolts, nuts & washers supplied, bolt through the seismic restraint holes as detailed in Stage 4 (refer Diagram 5). These holes will align with the slots provided at the front of the mount runners (refer Diagram 1).

Stage 6 - Building/Installing the insulated Floor Protector

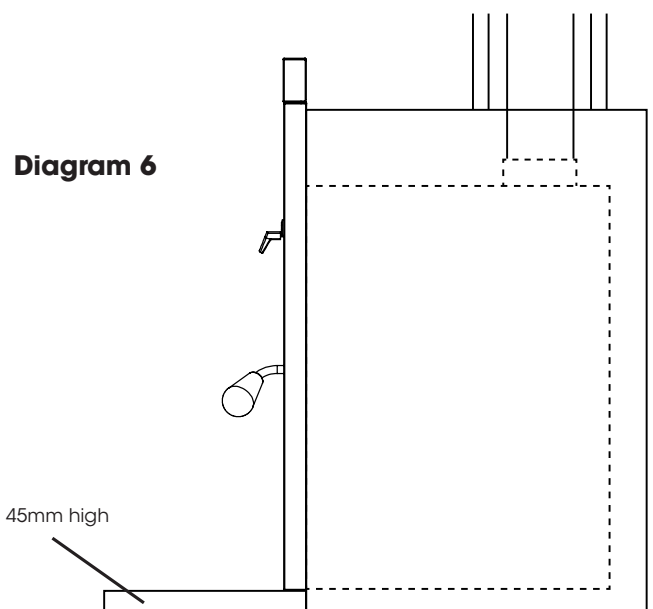
CAUTION! Important Information

- All installations of the Metro ECO Smart Insert in combination with a VZCC onto a combustible floor require an insulated floor protector that complies with AS/NZS 2918:2001 and this installation manual.
- Installation of the ECO Smart Insert into a VZCC elevates the appliance and fascia by 45mm. To conceal the space between the surface of the floor and the underside of the fascia, a 45mm floor protector OR an ECO Smart Fascia Base Rail is required. If thicker than 45mm the fascia will not fit centrally over the door, and the door will foul. If the floor protector is less than 45mm, a gap will be visible under the fascia which may look unsightly.
- Metro offer both a Pine Insert insulated floor protector or ECO Smart Fascia Base Rail to suit either application.

Combustible Floor

If the Metro ECO Smart Insert wood fire in combination with a VZCC is installed on a combustible floor then an insulating floor protector is required to be fitted and must comply with AS/NZS 2918:2001. This Floor Protector must be a minimum width of 890mm and a minimum overall depth of 312mm.

Minimum overall depth is the distance from the front of the wall lining (behind the fascia) to the front point of the Floor Protectors non-combustible surface. The Floor Protector must have an insulating rating which is equal to or greater than 26mm thick Eterpan LD.



Non-combustible/Concrete Floor

If the Metro ECO Smart Insert wood fire in combination with a VZCC is installed on a concrete or non combustible floor, then a floor protector of 45mm thickness OR an ECO Smart Fascia Base Rail will be required in order to conceal the 45mm space between the base of the fascia and the floor. However, in this situation the floor protector does not need to have any insulating properties but it must be constructed from non combustible materials.

Stage 7 - Fitting the Metro ECO Smart Fascia

Fit the fascia as instructed in the Metro ECO Smart Insert Installation and Operation manual.

If a timber or combustible mantleshelf exists above the fireplace insert opening, it should be a minimum distance of 475mm above the top of the fascia.

If less than the above minimum specified, a deflector or heat shield will be required to be fitted under the mantle in accordance with AS/NZS 2918:2001.

Stage 8 - Fitting the Flue System

The Metro ECO Built-In Flue System incorporates Metro's unique vertical discharge cowl which improves flue draft and performance of the Metro wood fire.

The Metro ECO Built-In Flue System comes standard with the necessary 200mm and 250mm liners that are needed for this installation.

CAUTION! Important Information

- As detailed within AS/NZS 2918:2001, it is not allowed to mix flue systems or components from different suppliers or manufacturers. The inner and outer flue spigots supplied with the Metro ECO Smart VZCC are Metro flue system components designed to mate up with the Metro ECO Built-in Flue System. Therefore only the Metro ECO Built-In Flue System can be used for installation with the Metro ECO Smart wood fire installed into a VZCC.

The top of the flue must terminate a minimum of 4.6 metres above the top of the floor protector, the "active" 150mm diameter stainless steel flue pipe must be

fully encased with both 200mm and 250mm diameter galvanised flue liners/casings over its entire length, and the flue system and its installation must comply with AS/NZS 2918:2001. Additional flue system installation criteria which need consideration is detailed below.

- If the flue system is to be enclosed in a structure replicating a conventional masonry chimney, the base of the weather cowl must be a minimum of 500mm above the top of the false chimney.

Flue System Minimum Heights

In compliance with AS/NZS 2918:2001.

The Metro ECO Built-In Flue System complies with AS/NZS 2918:2001 and its 4.6 metre height requirement (4.6 metre minimum from the top of the floor protector to the top of the flue pipe). However as external structures and the proximity of

other buildings will differ for every installation, some situations will require additional flue height to comply with the standard. Refer Diagrams 7 and 8 below. (All measurements in mm)

Note: AS/NZS 2918:2001 Section 4, details flue system installation requirements in full.

Diagram 7

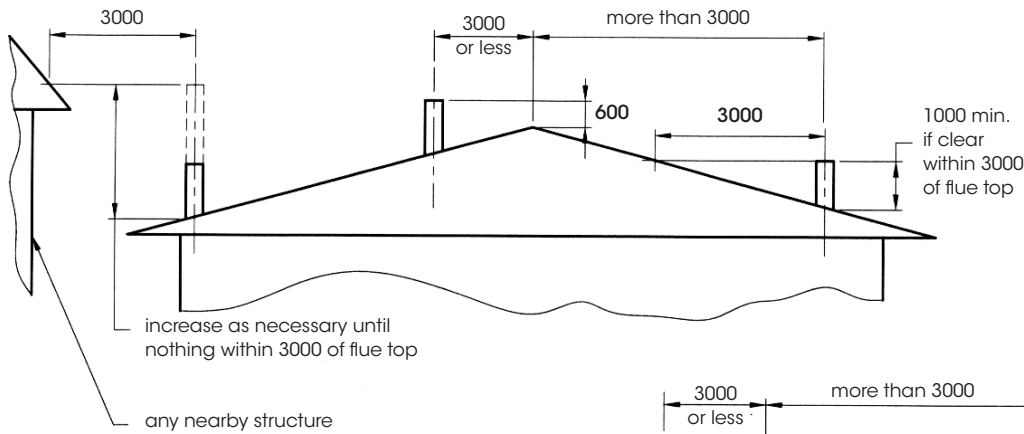
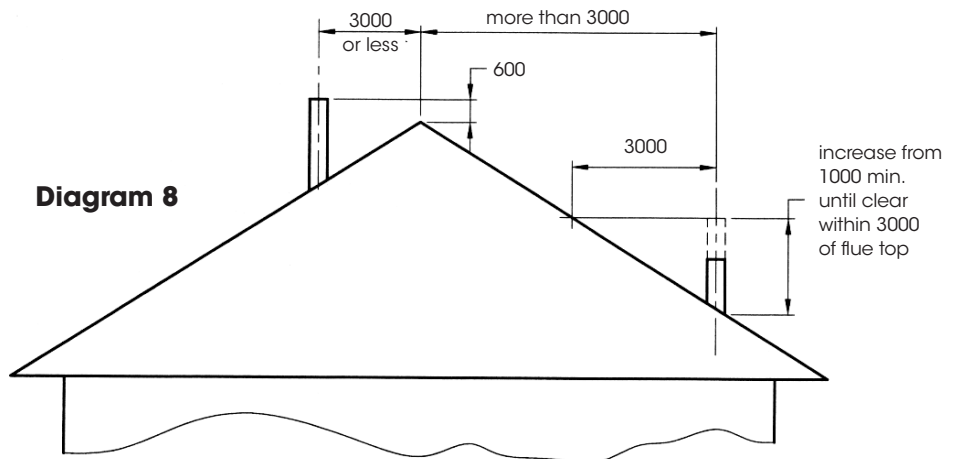


Diagram 8



Summary of Clearances

Side Clearance

If the fascia is close to a combustible wall which projects forward of the installation (a side wall), the minimum distance between the side of the fascia and the wall is 175mm.

Mantle

If a timber or combustible mantleshelf exists above the fireplace insert opening, it should be a minimum distance above the top of the Metro's fascia of 475mm.

If less than the above minimum specified distance, a deflector or heat shield will be required to be fitted under the mantle in accordance with AS/NZS 2918:2001.

Insulated Floor Protector

The Floor Protector must be 45mm thick and a minimum of 890mm wide and 312mm deep for the ECO Smart Insert when installed in combination with the Metro ECO Smart VZCC. The Floor Protector must have an insulating rating which is equal to or greater than 26mm thick Eterpan LD. Pioneer manufactures an insulated floor protector specifically for this application.

If you are in any doubt of any aspects of these instructions or the installation itself, refer to the Metro retailer who supplied the VZCC, a qualified installer or the manufacturer.