

INSTALLATION AND USER MANUAL

AUSTRALIA & NEW ZEALAND

THE AETHER & THE HEARTH SUSPENDED FIRES

Wood & Bioethanol



We would like to thank you for your purchase of an Aurora Suspended Fire. The care and craftsmanship we put into each fire will give you trouble free heating for many years to come. 🔥

CONTENTS

1. PLANNING

| | |
|---------------------------|---|
| INTRODUCTION | 6 |
| CLEARANCE TO COMBUSTIBLES | 7 |
| FLUE POSITION | 8 |

2. DIMENSIONS & SPECIFICATIONS

| | |
|---------------------------|----|
| THE AETHER | 12 |
| THE HEARTH | 13 |
| MINIMUM TOTAL FLUE LENGTH | 14 |

3. INSTALLATION

| | |
|------------------------------|----|
| SUSPENSION BRACKET | 16 |
| LOWER FLUE | 19 |
| FLUE ADAPTOR | 21 |
| EXTERNAL FLUE | 22 |
| FIREBOX | 24 |
| FLOOR PROTECTOR REQUIREMENTS | 26 |
| BIOETHANOL FIREPLACE | 28 |
| BIOETHANOL - WOOD HYBRID | 30 |
| FOR INSTALLERS | 31 |
| INSTALLATION CHECKLIST | 32 |

1. PLANNING



Aurora

INTRODUCTION

For your safety, ensure you have read the operation guidelines prior to use. Your fire must be installed by a qualified professional. Refer to our website for assistance finding an installer in your area:

aurorasuspendedfires.com/planning-customer-support/faq/

INSTALLATION PROCESS

1. Choose the position of firebox and flue ensuring that you follow the clearances described within this section.
2. Install the suspension bracket
3. Install the lower flue
4. Install the flue adaptor
5. Install the external flue & anti-down draught cowl
6. Engage the firebox
7. Ensure the floor has adequate protection

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.
- 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.



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, Aurora fires should be consulted in the first instance.

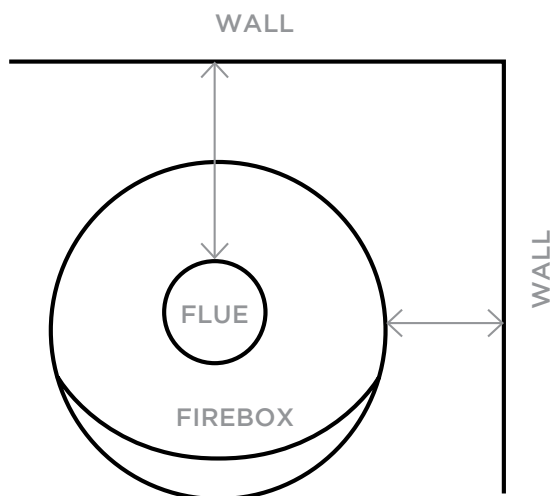
CLEARANCE TO COMBUSTIBLES

A combustible surface is anything that can burn (i.e. plaster, wall paper, wood, fabrics etc.) These surfaces are not limited to those that are visible, but also include materials that are behind non-combustible material. Timber frames behind gyprock are considered combustible.

IMPORTANT

Window frames must also be considered. Timber window frames must be treated as combustible surfaces. Aluminium frames can be treated as non-combustible

| Wall Material | Position Of Firebox | Firebox To Combustible | Ceiling Dropbox To Combustible | Flue To Combustible |
|-----------------|---------------------|------------------------|--------------------------------|---------------------|
| Non-Combustible | Fixed | 100mm | 25mm | 100mm |
| Non-Combustible | Rotating | 100mm | 25mm | 100mm |
| Combustible | Fixed | 700mm | 25mm | 700mm |
| Combustible | Rotating | 1200mm | 25mm | 700mm |



▶ REDUCING CLEARANCE TO COMBUSTIBLES

Please refer to the 'Help' section of our website for further information on reducing clearances safely.

FLUE POSITION

FLUE HEIGHTS AND TERMINATION

The minimum flue height recommended for optimum performance of our fireplaces is 4.5 m from the top of the firebox to the top of the external flue. It is best to position the flue so that it goes straight up as near to the roof ridge as possible. The diagram over page shows the minimum flue discharge heights and positions for all wood burning and multi fuel applications.

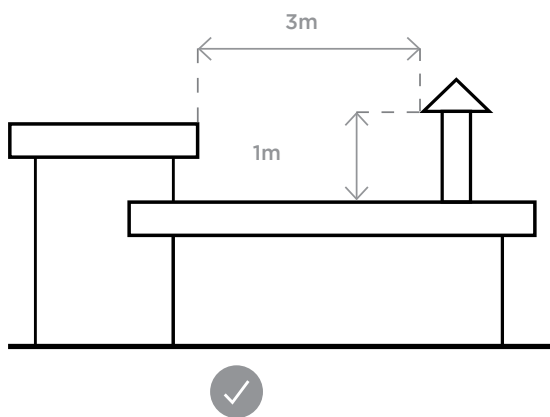
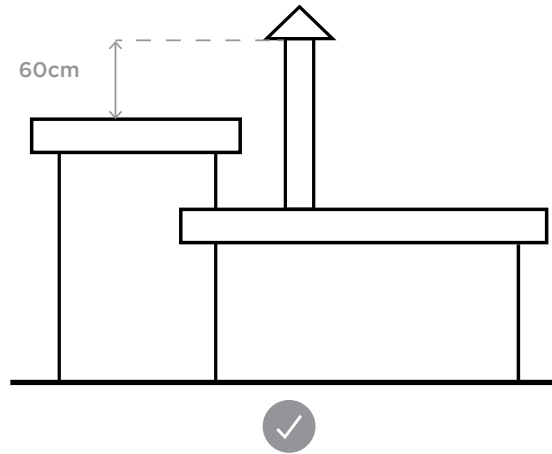
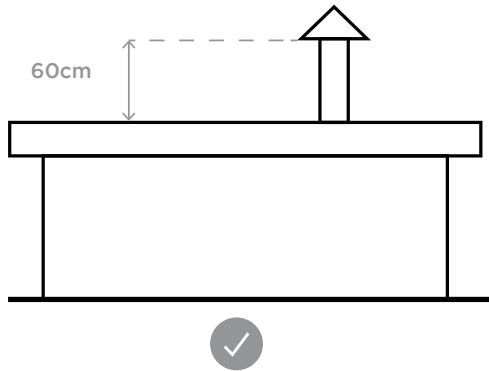
In some cases, particularly when flues are towards the bottom of a sloping roof or at the eaves, it may be necessary to increase the flue height above these minimum mandatory requirements. The reason for this is to clear pressure zones created by wind hitting the roof and nearby structures, like trees, which may interfere with the up draught required by the appliance or fire.

Tall flues may need bracing, always consult your installer for advice.

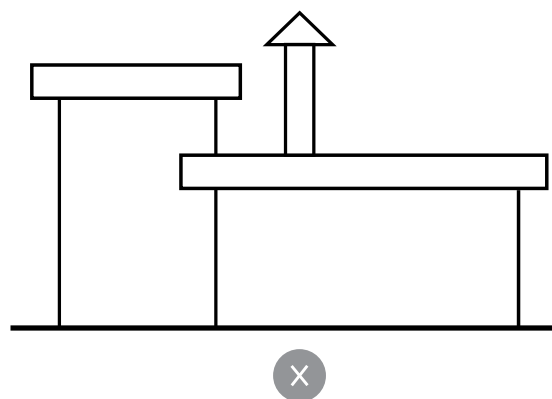
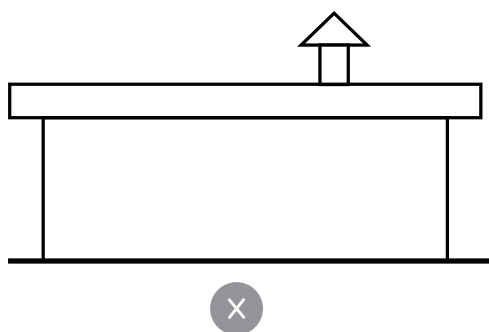
POSITIONING THE EXTERNAL FLUE

» FLAT ROOF INSTALLATION Less than 5%

1. The top of the flue must be 60cm above the roofline. Alternatively, there must be a minimum distance of 3 meters from any higher section of roof.
2. Ensure the triple skin flue is installed as per Australian standards

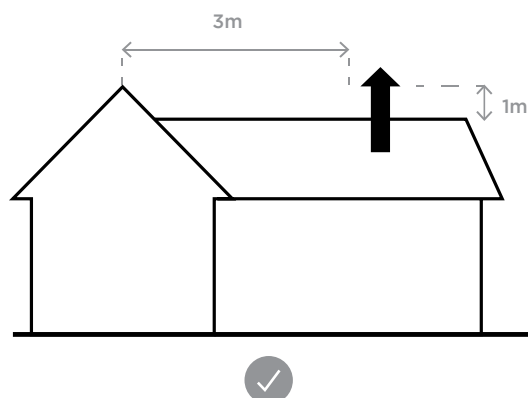
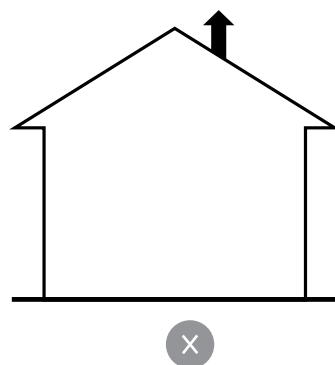
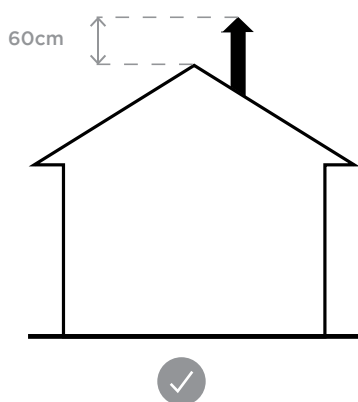


- ▶ The minimum height of the flue system further than 3 meters from the highest point of the roof shall be 1 meter above roof penetration.



» PITCHED ROOF INSTALLATION

1. The top of the flue must be 60cm above the roofline. Alternatively, there must be a minimum distance of 3 meters from any higher section of roof.
2. Ensure the triple skin flue is installed as per Australian standards (see diagrams below).



- ▶ The minimum height of the flue system further than 3 meters from the highest point of the roof shall be 1 meter above roof penetration.

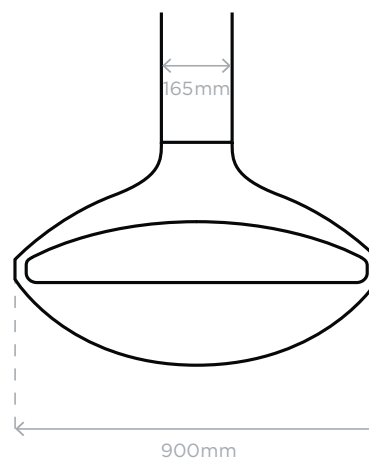
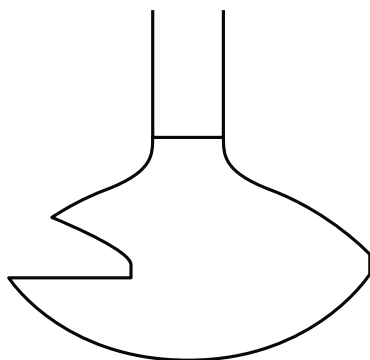
2.

DIMENSIONS & SPECIFICATIONS



Aurora

THE AETHER



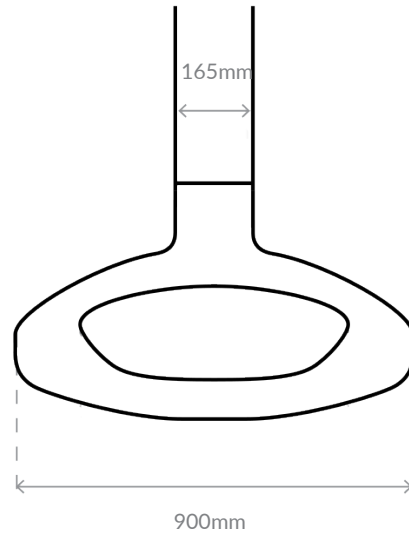
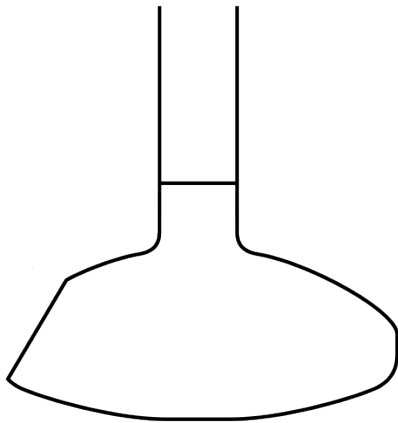
FEATURES

- Stainless steel ball bearing 360 degree rotation system
- Custom flue length with damper
- Material: 4mm Steel or Stainless Steel
- Finish: high temperature coating system
- Heat Output: 8.2kW
- Colour: matte black
(A range of other colours are available on request. For more information visit our website.)

WEIGHT & DIMENSIONS

| | |
|-------------------------|----------------------------|
| Firebox diameter | 900mm |
| Firebox weight | 55kg |
| Flue diameter | 165mm |
| Flue weight | 12kg/meter |
| Standard bracket weight | 23kg |
| External flue kit | Triple skin 6/8/10 inch |
| Grate | 22kg |

THE HEARTH



FEATURES

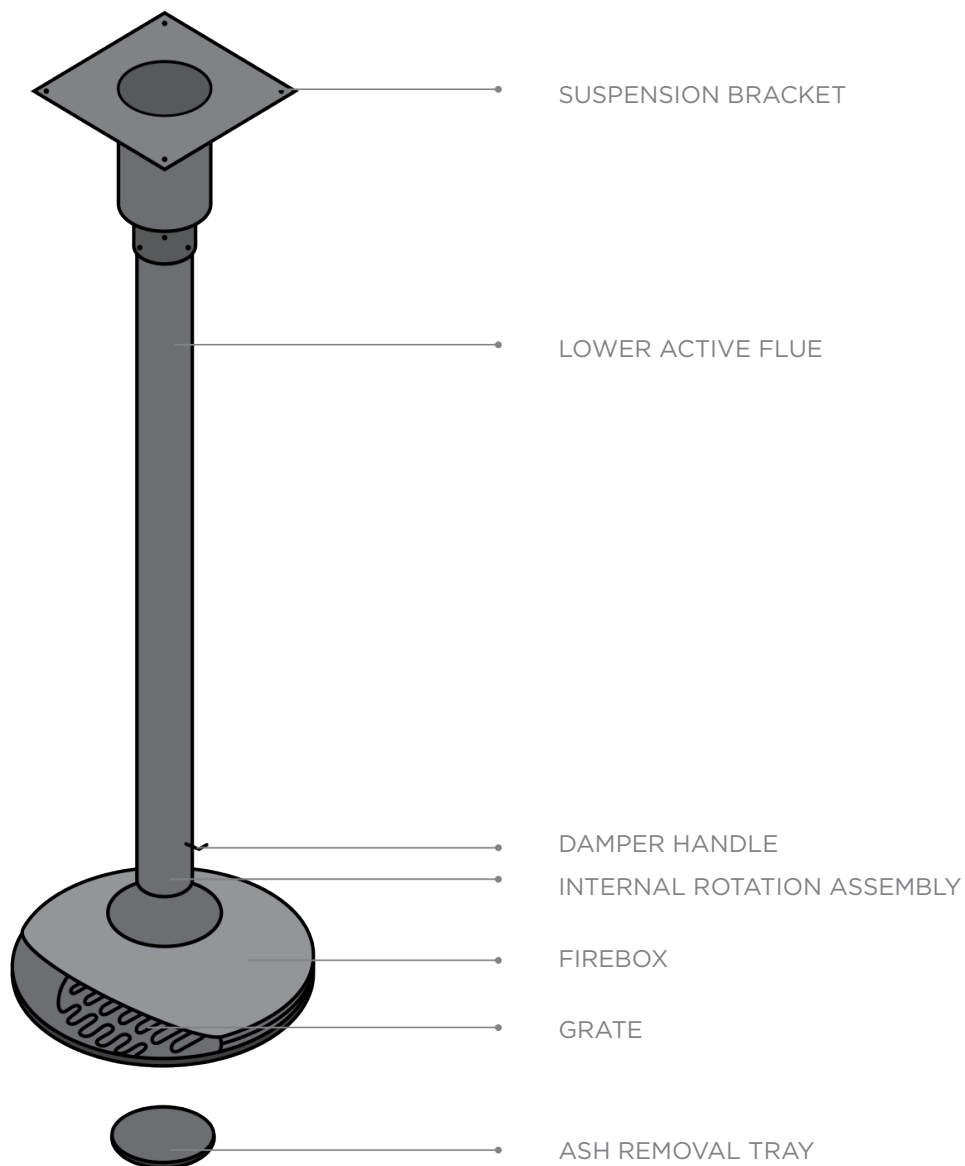
- Stainless steel ball bearing 360 degree rotation system
- Flue custom length with damper
- Material: 4mm Steel or Stainless Steel
- Finish: high temperature coating system
- Heat Output: 7.2kW
- Colour: matte black
(A range of other colours are available on request. For more information visit our website.)

WEIGHT & DIMENSIONS

| | |
|-------------------------|----------------------------|
| Firebox diameter | 900mm |
| Firebox weight | 55kg |
| Flue diameter | 165mm |
| Flue weight | 12kg/meter |
| Standard bracket weight | 23kg |
| External flue kit | Triple skin 6/8/10 inch |
| Grate | 12kg |

MINIMUM TOTAL FLUE LENGTH

The minimum total flue length (lower & external triple skin flue combined) is 4.5 metres measured from the point the firebox joins the flue to the top of the triple skin flue.



3. INSTALLATION



Aurora

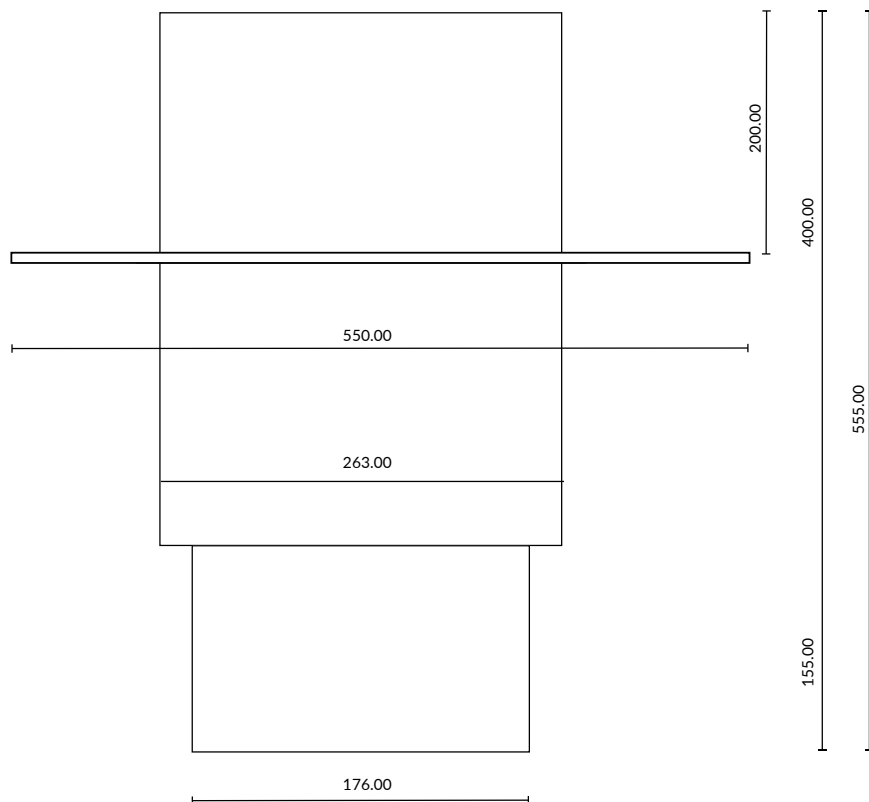
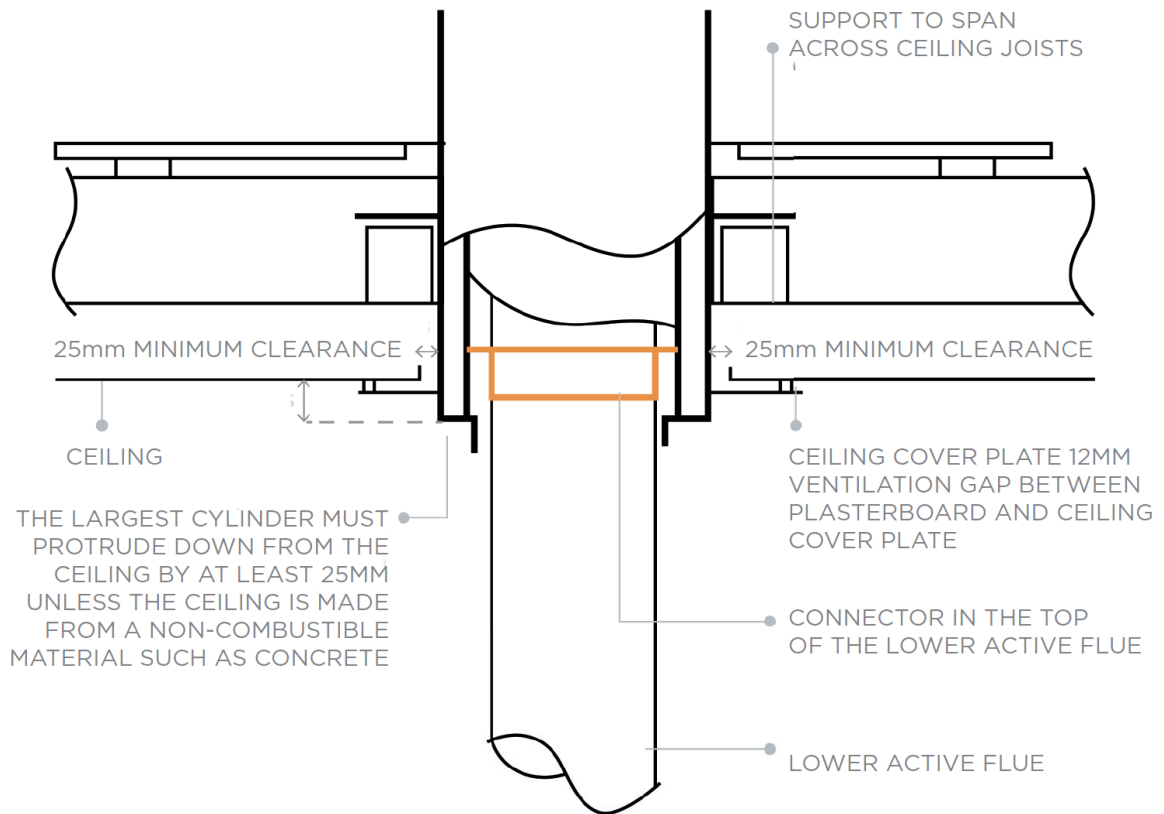
SUSPENSION BRACKET

» FLAT ROOF INSTALLATION

- The bracket must be structurally secured within the roof as shown in the diagram
- The largest cylinder must protrude down from the ceiling by at least 25mm unless the ceiling is made from a noncombustible material such as concrete.
- You must leave a 25mm clearance gap between the bracket and the ceiling. This gap will be covered by the ceiling cover plate.
- 12mm ventilation gap between the plasterboard and the ceiling cover plate.
- 25mm minimum clearance from the triple skin flue to any combustible material within the roof space.

Aurora Suspended Fireplaces are suitable for almost any installation, below are examples of what is possible.

- Outdoor fireplace on a covered deck
- 2 story through both levels installation
- 2 storey through lower level and out up the side of the house with an offset
- Pitched roof with open beams
- Cathedral ceilings
- Single story



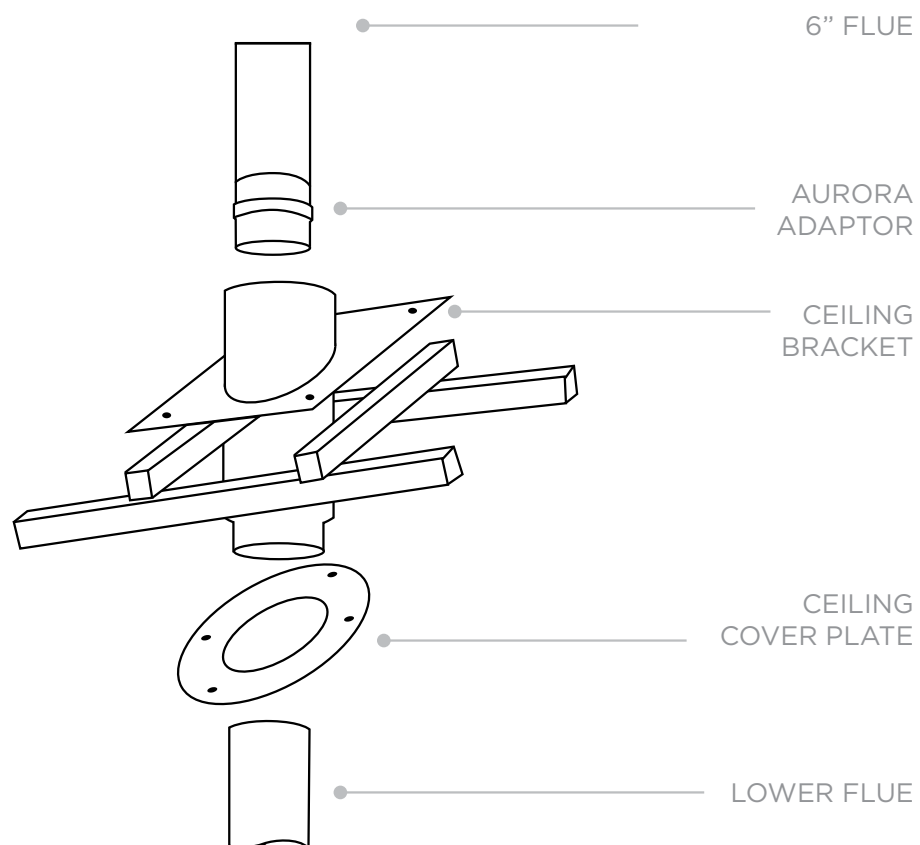
» PITCHED ROOF INSTALLATION Custom Made

For pitched ceilings we have 5 bracket sizes which your installer will adjust to achieve the exact angle for your installation.

- Up to a 5 degree pitch = Flat bracket
- 5 to 15 degree pitch = 10 degree bracket
- 15 to 25 degree pitch = 20 degree bracket
- 25 to 35 degree pitch = 30 degree bracket
- 35 to 45 degree pitch = 40 degree bracket

A custom bracket is available for anything larger than a 45 degree pitch. When installing the bracket, it is very important that the bracket is sitting plumb.

The installer may need to chock up one side of the bracket, with non combustible material i.e. cement sheet.



LOWER FLUE

LOWER FLUE LENGTHS

We supply the lower flue in the standard sizes listed below. The extra length will be pushed up into the ceiling bracket, enabling you to set the correct distance of the firebox to the floor.

FLUE LENGTHS

| | | |
|-------|--------|--|
| 1.6m | 2.75m | ▶ Sizes above 3.5m will come in two pieces, with an internal joiner. |
| 1.8m | 3.0m | |
| 2.0m | 3.25m | |
| 2.25m | 3.5m | |
| 2.5m | Custom | |

INSTALLING A TWO PIECE LOWER ACTIVE FLUE

Lower active flues over 3.5 metres are supplied in two parts and are joined internally with a flue connector. This assists installers in achieving a safe and successful installation.

Do not attempt to join these prior to attaching to the suspension bracket.

1. Attach the upper piece to the suspension bracket first.
2. When this is in place attach the lower part.

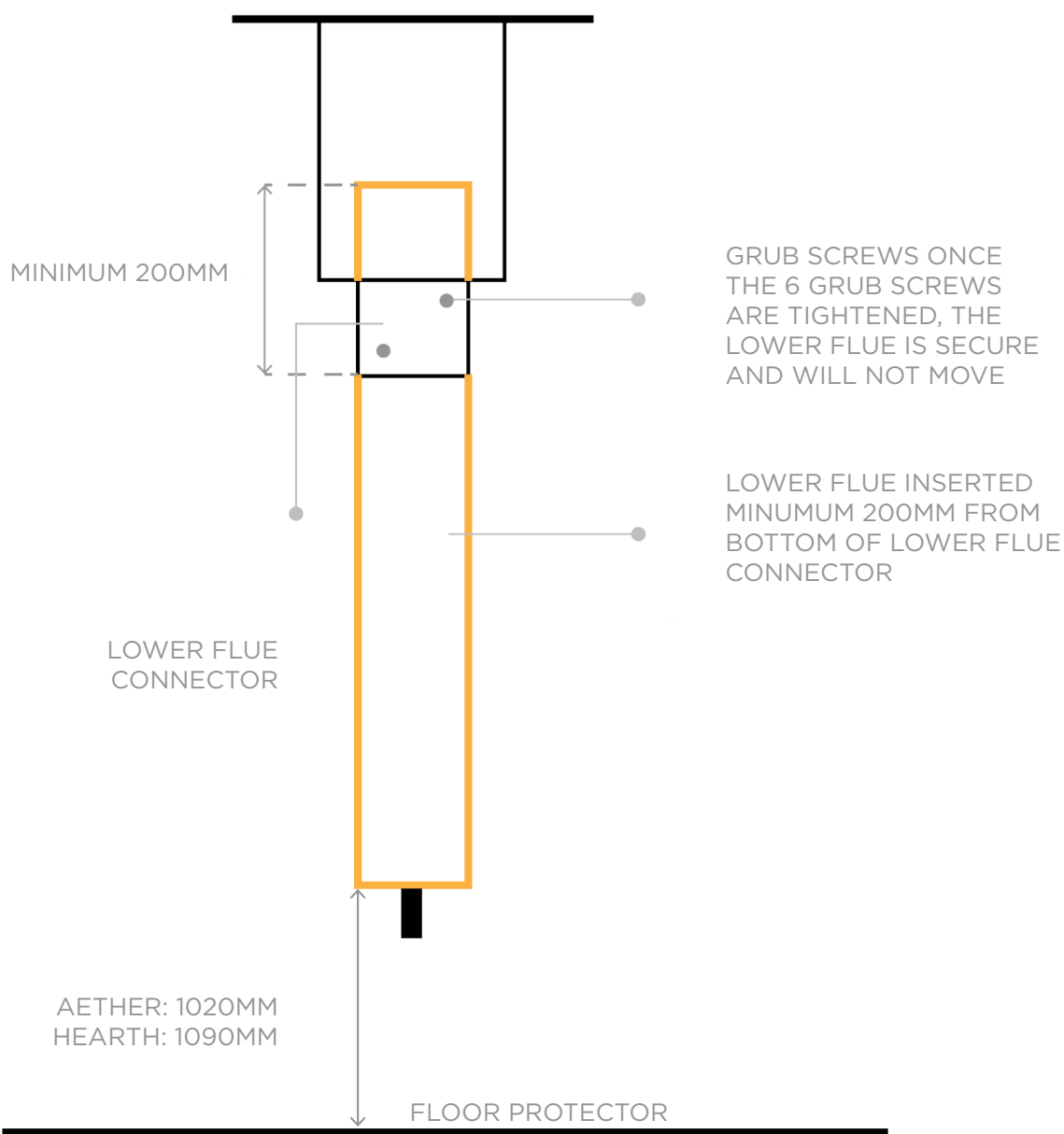
INSTALLING THE INTERNAL LOWER ACTIVE FLUE

The lower active flue is delivered with additional length to allow for small changes to set the correct firebox height.

1. First position the lower active flue inside the suspension bracket to obtain the correct height.

2. For aesthetic reasons the lower flue should be positioned with the seam facing away from the front of the fire (this wont be possible for installations in the centre of the room). As you are facing the fire the flue damper will be on the right hand side of the flue. For a centrally placed installation position the seam on the side which will be least visible.
3. Once the desired height is achieved tighten the 6 grub screws. Use a level to ensure that the flue is perfectly vertical.

IMPORTANT
 Lower flue pushed up a minimum 200mm into the ceiling bracket (200mm measurement taken from the point the lower flue enters the ceiling bracket). Mark the flue with chalk to assist with this.



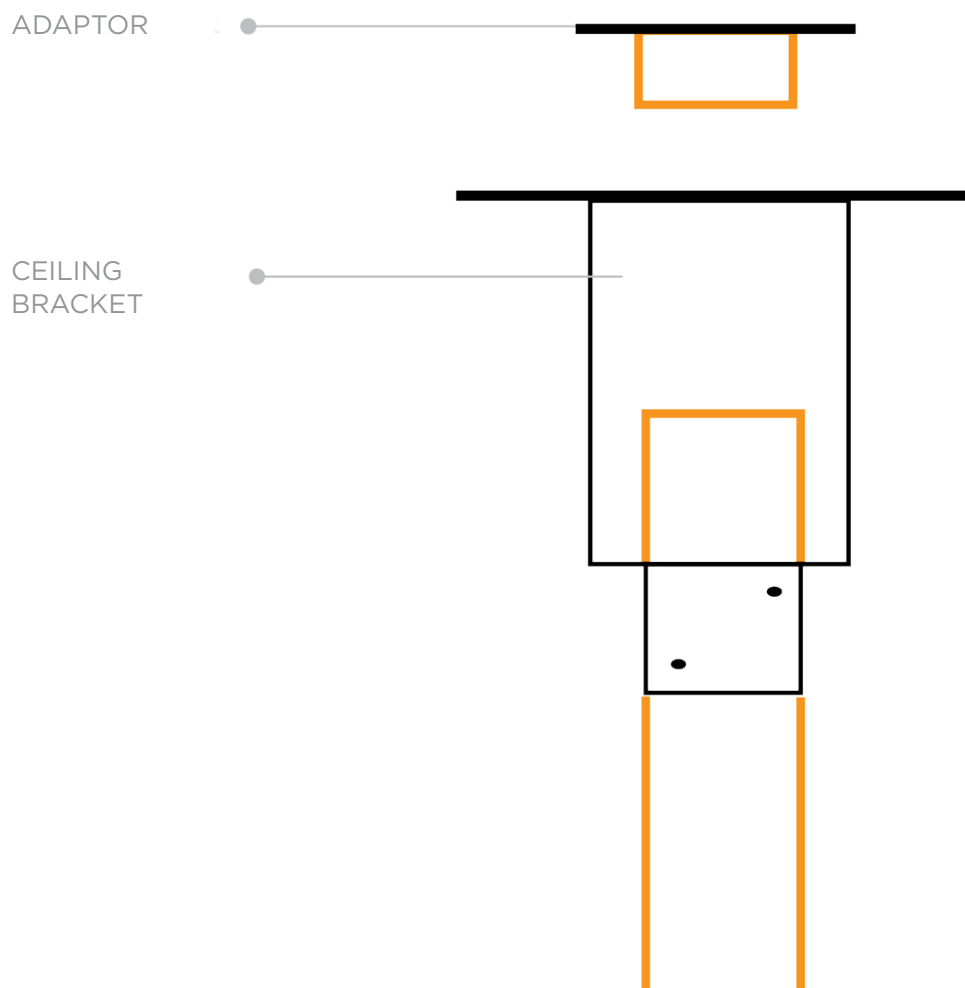
FLUE ADAPTOR

INSTALLING THE ADAPTOR

1. Push the the adaptor into the top of the lower active flue as far as it will go until it bottoms out. Use high temperature silicon sealant to ensure a good seal.
2. Install the triple skin flue into the ceiling bracket.

IMPORTANT

You must use high temperature sealant as regular sealant will melt.



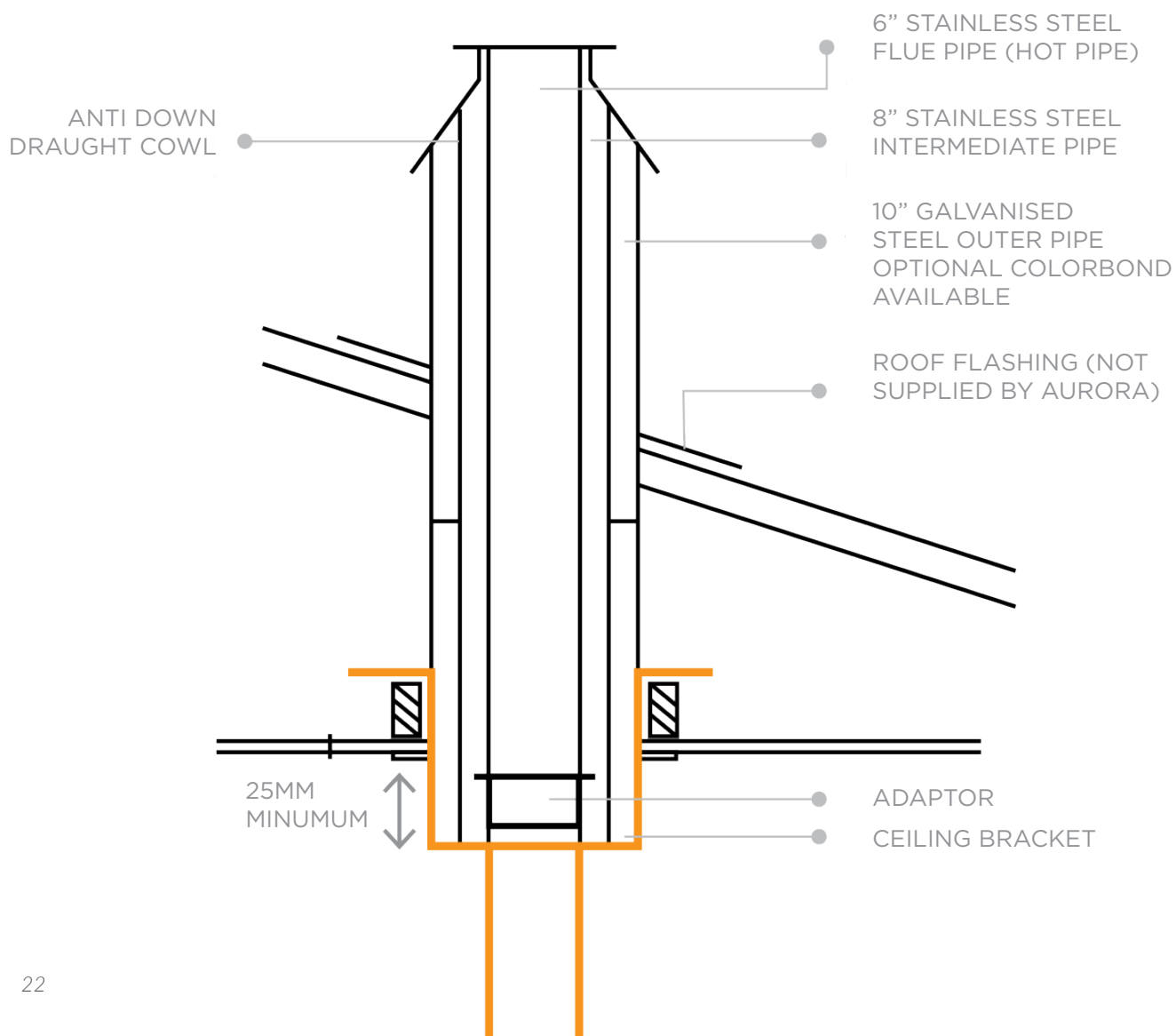
EXTERNAL FLUE

ASSEMBLING THE EXTERNAL FLUE*

- Crimps on 6 inch stainless flue to **point down**.
- Crimps on 8 & 10 inch flue to **point up**.
- The first 6 inch stainless flue has the adaptor connected to it.

MINIMUM TOTAL FLUE LENGTH

Minimum total flue length (lower & external triple skin flue combined) is 4.5 metres for optimal performance.



INSTALLING THE ANTI DOWN DRAUGHT COWL

An anti-down draft cowl is provided with your Aurora fire. These have been tested with our fires and workwell.

Occasionally your installer may recommend the use of another type of cowl, depending on the position of your external flue, in relation to the surrounds.

INSTALLING OFFSETS IN THE TRIPLE FLUE

If the flue requires an offset the following guidelines must be adhered to:

- 2 x 45 degree offsets are the maximum allowable.
- 600mm minimum run centre to centre.

When installing the offsets, it is advisable to use bracing, to ensure the connection to the lower active flue does not get disturbed.

ENGAGING THE FIREBOX

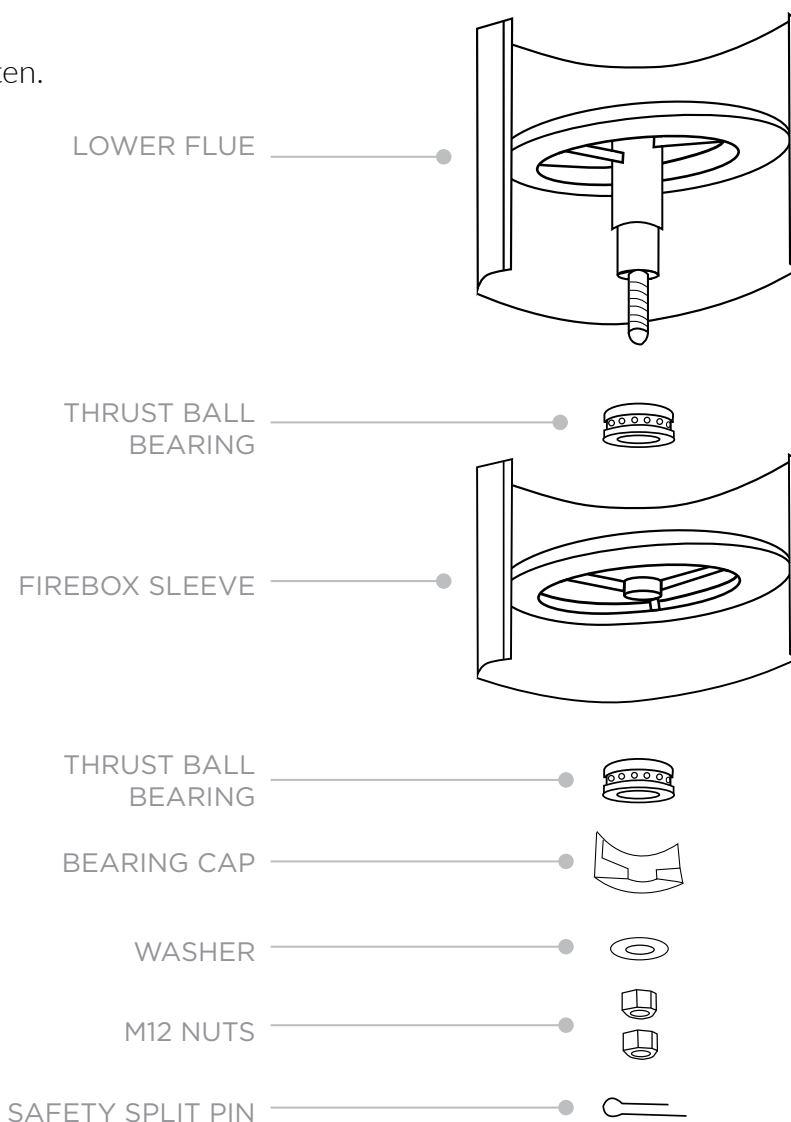
FOR UNLOCKED FIRES WITH 360 DEGREE ROTATION

Assemble the shaft & bearing system in the following order:

1. Push thrust bearing over shaft
2. Engage the firebox.
3. Push 2nd thrust bearing over shaft.
4. Fit bearing cap.
5. Fit washer.
6. Fit M12 nut & tighten.
7. Fit 2nd M12 nut & tighten.
8. Fit safety split pin.

IMPORTANT

Ensure the threaded shaft does not knock against the firebox when engaging. This can damage the thread.



LOCKING THE FIREBOX IN A FIXED POSITION

If the firebox is 1200mm or closer to combustibles the firebox must be locked in a fixed position.

To do so follow the steps outlined on the previous page for engaging the firebox with the following exception:

Remove the top thrust bearing in step 1 and replace with the thin spacer.

Remove the bottom thrust bearing in step 3 and replace with thick spacer and tighten nuts until firebox does not rotate.

INSERTING THE GRATE

It is recommended that you place a protective cloth over the lip of the firebox when inserting or removing the grate to prevent scratching the paint.



DO NOT OPERATE WITHOUT THE USE OF THE GRATE PROVIDED.

BUILD WOOD FIRE DIRECTLY ON THE GRATE PROVIDED. DO NOT ELEVATE THE GRATE OR ALTER IN ANY WAY.

FLOOR PROTECTOR REQUIREMENTS

You will require a floor protector to protect any combustible floor beneath the firebox. Your floor protection must extend 30cm beyond the diameter of the firebox in all directions.

If installed directly on combustible material, the floor protector must be made of a 12mm thick sheet of non combustible material.

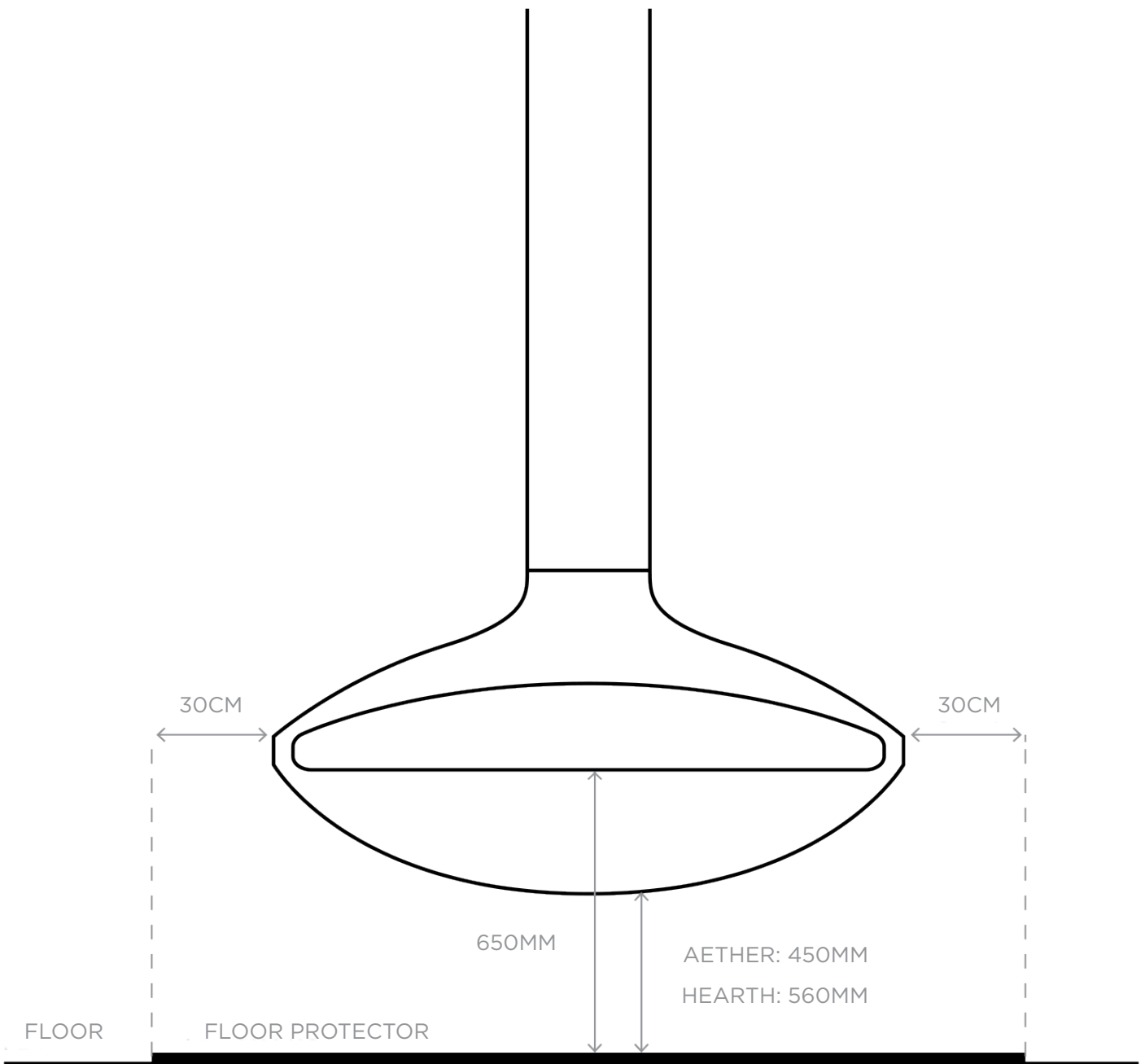
If the combustible floor is installed on concrete, you can replace the combustible material with a non-combustible material laid directly onto the concrete.

Floor protectors can be made of non combustible materials such as:

- Tile
- Stone
- Steel
- Toughened Glass
- Polished Concrete

View the floor protector page on our website for inspiration.

See over page for height specifications.



BIOETHANOL FIREPLACE

The fireplace (the Aether or the Hearth) is fitted with either a scope 340 EcoSmart grate insert & stainless steel burner or an EcoSmart XL500 burner which both use bioethanol fuel.

The burner comes fitted with a grate designed for our fireboxes. As bioethanol gives off nothing but water vapour there is no need for an external flue, therefore the lower active flue will be capped inside the suspension bracket. Fit the lower active flue as normal and then put the flue cap onto the end, inside the suspension bracket. This will stop any heat transference into your roof space.

NOTE

To install the bioethanol fireplace please follow the instructions.

See over the page for instructions on inserting the bioethanol burner and grate.

BIOETHANOL FIREPLACE CLEARANCES

| Wall Material | Position Of Firebox | Firebox To Combustible | Ceiling Dropbox To Combustible |
|-----------------|---------------------|------------------------|--------------------------------|
| Non-Combustible | Fixed | 100mm | 25mm |
| Non-Combustible | Rotating | 100mm | 25mm |
| Combustible | Fixed | 100mm | 25mm |
| Combustible | Rotating | 100mm | 25mm |

1. Insert the grate.
2. Ensure the opening in the grate lines up with the bioethanol burner.
3. Check that the burn chamber is in the centre of the firebox.
4. Insert the burner into the grate.

For instructions on lighting the burner refer to the EcoSmart instructions in the burner box.

BIOETHANOL WOOD HYBRID

BIOETHANOL WOOD-HYBRID FIREPLACE INSTALLATION

The bioethanol/wood hybrid is a fully flued wood fireplace with a custom fitted bioethanol burner as an added extra.

You receive two grates, one for burning wood and one for bioethanol. When you wish to burn wood you simply swap grates and remove the bioethanol burner.

To get maximum available heat output when using the bioethanol burner the damper must be fully closed during operation. This will keep the warmth from escaping out the flue system.

NOTE

This only applies to bioethanol operation. The damper must be fully open at all times when burning wood.

To install the Bio Ethanol-Wood Hybrid follow the installation instructions for standard wood fire installation.

See previous page for bioethanol burner & grate installation.

FOR INSTALLERS

CLEANING UP

If the fire paint has accumulated dust, fingerprints or other residue during installation Wipe the firebox and lower flue down with a little water and a scratch free glass polishing cloth. Use a light spray of WINDEX if required.

DO NOT RUB THE PAINT. A LIGHT PRESSURE IS ALL THAT IS NEEDED.

HANDING OVER CHECKLIST

- Read the Users instructions and instruct the user on the operation of the fireplace and cleaning methods. Leave instructions with the customer.
- Inform the customer that any odours are due to the newness of materials and will disperse after the initial burn instructions are followed.
- Advise the customer on the operation of the flue damper.
- Advise the customer on the importance of an adequate air supply.

INSTALLATION CHECKLIST

INSTALLATION MUST TAKE PLACE IN THE FOLLOWING ORDER

- | | |
|---|--|
| <p><input type="checkbox"/> Suspension bracket installed plumb and clear of combustibles. Dropbox to protrude minimum 25mm below ceiling. More than 25mm should only be used if the roof space prohibits a 25mm drop.</p> <p><input type="checkbox"/> 25mm clearance gap between the bracket and the ceiling. This gap will be covered by the ceiling cover plate.</p> <p><input type="checkbox"/> Lower active flue installed BEFORE triple skin flue & set to correct height from floor.</p> <p><input type="checkbox"/> Lower flue pushed up a minimum of 200mm into the ceiling bracket (200mm measurement taken from the point the lower flue enters the ceiling bracket). Mark the flue with chalk to assist with this.</p> <p><input type="checkbox"/> Flue seam facing the back of the fire, if possible.</p> <p><input type="checkbox"/> Grub screws tightened.</p> <p><input type="checkbox"/> 6 inch stainless flue adaptor pushed into the top of the lower active flue as far as it will go until it bottoms out & sealed with a high temp silicone sealant. If this is not done correctly, it may result in a weak draw.</p> <p><input type="checkbox"/> Flue adaptor sealed correctly.</p> | <p><input type="checkbox"/> Triple flue installed to make up a total flue height (internal flue & triple flue) of 4.5m minimum.</p> <p><input type="checkbox"/> 25mm minimum clearance from the triple skin flue to any combustible material within the roof space.</p> <p><input type="checkbox"/> Triple skin flue sealed with a high temp silicone sealant & flashing installed. Braced (if required). If necessary precautions against capillary action taken.</p> <p><input type="checkbox"/> Anti-down draft cowl installed.</p> <p><input type="checkbox"/> Firebox lifted into position evenly to protect the shaft from damage. Bearings assembly installed in the correct order and tightened to close the gap between firebox and lower flue to approximately 1mm to 2mm. Firebox rotates freely, if required.</p> |
|---|--|

IMPORTANT

This must be ticked and signed by the person who installs your fire and returned to aurora suspended fires following installation for any warranty claims to be honoured.

NAME _____

SIGNATURE _____

DATE _____



Aurora

65B Piper Drive, Ballina NSW 2478 Australia

www.aurorasuspendedfires.com



AUSTRALIAN
HOME HEATING
ASSOCIATION INC.

