



Fitting Guidelines.

To be left with the customer after installation.

Rio

Index.

Front cover.

Fitting guidelines. Pages 1 to 9.

Front cover.

Fitting Guidelines: RIO

(These guidelines consist of 9 pages).

Important.

- Please read all these guidelines and diagrams before commencing any installation.
- This fireplace **should be** installed by an experienced, suitably qualified, and competent fireplace fitter.
- The fireplace installation is **not** recommended as a DIY or single person installation.
- The fireplace installation **must be** in accordance with Current National laws, Building Regulations, and any Rules in Force.
Current Document J outlines various British Standards that cover all aspects of fireplace installation for England and Wales. The latest revision of BS 1251: 2015 refers to; Open fireplace components. The fixing of stonework is covered by BS 8298 “Code of practice for Design and Installation of Natural Stone Cladding and Lining.
- Refer to the Stone Federation of Great Britain, guidance on fire surrounds. (www.stonefed.org.uk)
- This fireplace **must only** be installed onto floors with an adequate load-bearing capacity. If an existing construction does not meet this requirement, suitable measures (e.g., load distributing plate) must be taken. **Must be** in accordance with Current National laws, Building Regulations & any Rules in Force.
- Should any conflict occur between these guidelines and any Current National laws, Building Regulations, and any Rules in force then the Current National laws, Building Regulations and Rules in Force shall apply.
- The fireplace installation **must be** in accordance with planning permission and local building control.
- Any solid fuel appliance installation completed in conjunction with this fireplace **must be** installed by a HETAS (England and Wales), registered installer or approved by your local building control officer. For further details go to www.hetas.co.uk . For areas outside England and Wales you must check the registered installer that may be required to ensure the appliance is installed to Current National laws, Building Regulations, and any Rules in Force. Also refer to the appliance manufacturers instructions.
- Before any electrical components are connected to the main electrical supply such as fireplace ambient lighting etc **must be** checked for suitability and safety by a suitably qualified electrician as below.
- Any electrical connections made whilst fitting this fireplace **must be** made by a suitably qualified and registered electrician and meet the requirements of Current National laws, Building Regulations, and any Rules in Force.
A recognised independent body for registered electricians in England, Wales, Scotland, and Northern Ireland is the National Inspection Council for Electrical Installation Contracting (NICEIC). Go to www.niceic where you will find a search facility to find NICEIC registered electricians.
- Any gas appliance installation made in conjunction with this fireplace **must be** completed by a Gas Safe registered gas engineer, or equivalent for other Nations in accordance with the gas fire manufacturer’s instructions, Current National Laws, Building Regulations, and any Rules in Force. You can find more information and registered Gas Safe engineers at www.gassaferegister.co.uk
- Only install the fireplace to a suitable solid brick wall of sound construction and suitable to support the full weight of the fireplace. The brick wall **must** meet the requirements of Current National laws, Building Regulations, and any Rules in Force.

- If the fireplace cannot be permanently fixed to a solid brick wall, such as block work, studwork, or any other type of structure, then we recommend that you consult an architect or structural engineer for advice.
- The fireplace is only suitable for interior installations.
- All fireplace mechanical fixings **must be** at least galvanised steel but preferably Stainless-Steel and be totally corrosion and heat proof and of adequate size and strength to fix the fireplace safely & securely.
- The consequences of failure of a fireplace incorrectly installed and secured are extremely serious. It is essential that the fireplace is installed and secured to withstand foreseeable abuse such as a child pulling down on a cantilevered shelf etc.
- Always inform the user when the fireplace can be used for the first time considering the full drying times for adhesives etc that have been used.
- Fixing brackets **must be** used when installing the fireplace.
- Lock wire with anchorage points **must be** used when installing the fireplace.
- Fixing dowels **must be** used when fitting the fireplace shelf and to any other overhanging parts. The shelf and any other overhanging components should be adequately restrained in all instances as they are liable to tip forward so it is imperative any overhanging part is securely fixed back into the brick wall so there is no possibility of any piece tipping and falling.
- The fireplace **must be** completely adhered to the brick wall with suitable adhesive. Such products should only be used for applications approved by the manufacturer. If there is any doubt, the adhesive manufacturer should be consulted.
- Gypsum based products is not recommended as an adhesive and should **not** be used.
- **Never** use adhesive alone to fit the fireplace
- Bracket fixings, anchorage points and dowels to be installed into brickwork **not** plaster.
- All mechanical fixings to be chased into the mounting wall brickwork to enable complete contact to all mating rear surfaces of the fireplace to the brick wall, this is required so a total bond can be made when also adhering the fireplace to the brick wall.
- Ensure all mechanical fixings do not obstruct total face to face contact of any fireplace mating parts.
- Use suitable heat proof white or clear stone silicone adhesive between **all** mating stone pieces. (Ensure to protect fireplace visible stone surfaces from silicone over spill).
- **Never** drag mating stone pieces together when fixing, as this could chip and scratch the stone.
- Grouting of stone joints can be made by using suitable white tile glue ensuring you wash of residue with clean water.
- It is recommended that after installation and when the fireplace has completely dried, that a suitable stone sealer is used to seal all visible stone surfaces, only when the appliances being used is switched off and the appliance and fireplace are completely cold. Refer to your fireplace retailer for advice.
- You **must** supply and fit, in correct position a data plate showing all correct information in accordance with Current National laws, Building Regulations and any Rules in Force.
- Ensure that purpose provided room ventilation is provided in accordance with Current National laws, Building Regulations, and any Rules in Force.
- Ensure these fitting guidelines together with the fireplace Customer Care & Safety sheet are given to the customer. Subsequently these to be passed on to any new homeowner or occupier.

Important.

Ensure the fireplace is fixed to the brick wall safely and securely and fitted correctly to all Current National laws, Building Regulations, and any Rules in Force.

If this cannot be achieved **do not fit the fireplace** until any fault is rectified, to ensure a safe & secure fireplace installation.

Safety precautions.

- Use all necessary safety clothing, for example:
- Suitable dust masks where there is a risk of dust contamination
- Suitable protective gloves.
- Suitable Protective footwear.
- Suitable Protective eye goggles.
- Never wear loose clothing or jewellery.
- Ensure long or loose hair is adequately protected, so as not to be a hazard when using tools etc.
- Ensure all fitting tools and equipment to be used are in good working order and safety approved and suitable for the use intended.
- Always comply with all Current Health & Safety Regulations.
- This fireplace has parts that are irregular in shape and above 25kg in weight, therefore installation is recommended for more than one person or suitable lifting equipment to be used.

Types of fires suitable for the Rio.

- Inset gas fires manufactured to ^{UK}EN13139 / CE standards of compatible size for the fireplace, chimney, and flue.
- Inset electric fires manufactured and approved to ^{UK}EN13139 / CE standards suitable and compatible for the fireplace and chimney.

Chimney Type.

- Class 1. The chimney and flue **must be** in accordance with Current Building Regulations and any Rules in Force, with a suitable builder opening and flue, for your selected fireplace and appliance combination.
- Chimneys and flues **must be** swept, checked, and tested by an approved chimney sweep to confirm the chimney and flue is in good safe condition & suitable for the appliance being installed prior to fireplace installation,

Fireplace inspection and precautions.

- Before installation the fireplace **must be** thoroughly checked for faults or damage. If any fault or damage is observed the fireplace **must not** be installed and the problems reported to your fireplace retail supplier. No claims of this nature will be accepted after the fireplace is installed.
- Limestone is soft and therefore can easily be damaged on installation, therefore all precautionary measures must be taken to avoid these situations i.e., taking extreme care when handling stone and always use suitable covers to protect stone whilst using equipment and fixing materials.

Fitting Guidelines. (To be used in conjunction with diagrams).

This fireplace will require other fixing materials including:

- Suitable stainless-steel screws, washers, and wall plugs.
 - Suitable stainless steel locking wire and anchorage points (can be suitable stainless-steel screws, washers, and wall plugs).
 - Heat resistant silicone adhesive suitable for stone, brickwork & masonry in clear or white finish that must have a minimum temperature rating range from -20°c to $+1200^{\circ}\text{c}$.
Important: When silicone adhesive is mentioned in the guidelines then the above is the minimum requirement
 - Heat resistant Thixotropic two-part resin chemical anchor glue suitable for stone, brickwork, masonry, and metal with a minimum temperature range of -20°c to $+300^{\circ}\text{c}$.
 - **Important:** When Thixotropic chemical resin is mentioned in the guidelines then the above is the minimum requirement
 - Suitable sealer for stone and brickwork.
 - White dry lining wall adhesive or white cement and silver sand for bedding hearth.
Always follow manufacturer's instructions for all adhesives and cements.
- ⚠ Take all necessary measures to protect floor coverings / furnishings and any other items that could become damaged whilst delivering and during fireplace installation.
- ⚠ Ensure that any person or animal is restricted from any area whilst delivering and fireplace installation.
- ⚠ The holes drilled within the internal reinforcing blocks located to the left- and right-hand side of the internal top header, shelf and each leg provided to accommodate lock wire ties can vary.
- 1) With suitable testing equipment check for live electrical cables or gas pipes and any other obstructions or connections that maybe obscured within the area of intended fireplace installation. If found use a suitably qualified person to remove and make safe.
 - 2) Remove all wall coverings and emulsion in area of intended fireplace installation. Ensure the chimney face is completely sound, dry, dust, grease, and contamination free before fitting. Seal all fixing areas. (Note: subject to adhesive manufacturer's instructions. The rear edges of all fireplace components are sealed with a stone sealer prior to delivery).
 - 3) In properties with traditionally plastered / rendered brick walls the plaster / render should be cut back to enable the fireplace to be fixed directly to the brick wall. This is good practice as there will always be a risk of the fireplace becoming unstable should a failure of the plaster / render occur. The plaster / render can then be made good around the fireplace surround after installation. Cut the plaster / render back and remove from the area of fireplace installation, remove up to approximately 10mm outside the profile of the fireplace to be installed. Ensure the brick wall face is completely sound, dry, dust and grease free before fitting. Seal all fixing areas with appropriate sealer. (Note: Subject to adhesive manufacturer's instructions). **Note:** The rear mating surfaces of the fireplace that will require to be bonded to the brick wall at a later stage are sealed with a stone sealer prior to delivery.
 - 4) Correctly prepare the chimney builders opening. Refer to current Building Regulations and any Rules in Force including the appliance manufacturers instructions that relates to the appliance that is going to be installed to the Rio fireplace.
 - 5) Completely bed the hearth to the floor using with 1-part white cement and 5-parts silver sand, ensure the hearth is central to the chimney and builders opening and level in all planes.

Do not use any coloured cement or sand or any other coloured products as this will discolour the stone.

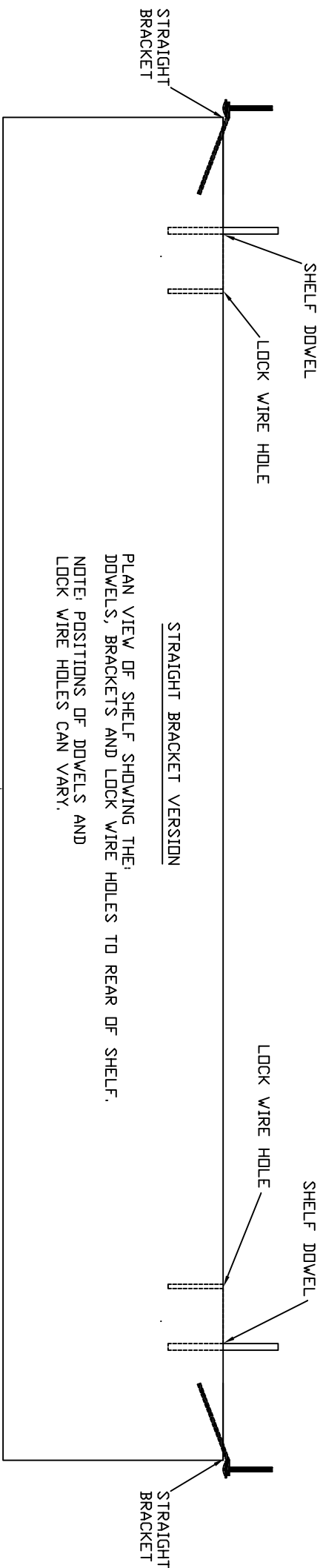
- 6) Screed the base of the chimney builders opening so it is level to the hearth top surface at the rear edge using the correct screed. Refer to current Building Regulations and any Rules in Force.
- 7) Position both legs on top of the hearth against the brick wall and adjust position so both legs will be in correct alignment with the top header and shelf when eventually fitted, do not fit at this stage. Mark the position of each leg to the brick wall. Horizontally pull each leg strap bracket positioned at the top of each leg taut against the brick wall and mark the fixing positions through the nearest strap bracket hole that meets the brick wall. Identify the holes to the top of the left- & right-hand leg that will accommodate lock wire at a later stage. Mark the brick wall for lockwire anchorage points horizontally from each hole. Remove both legs. Drill suitably sized holes in the brick wall in your pre marked leg bracket and anchorage point positions to accommodate suitably sized stainless steel wall plugs. Fit wall plugs.
Remove the legs.
- 8) Use silicone adhesive to fully adhere each leg mating surfaces to the brick wall to your previously marked positions. Using the strap bracket provided to the top of each leg, securely fix to the brick wall with suitable sized corrosion proof screws, washers, to the previously installed wall plugs. Locate the hole provided to the internal reinforcing block located to the top of each leg. Use suitable lock wire and thread through each hole and securely fix each leg to the brick wall using suitable corrosion proof anchorage points. Tighten the lockwire using the correct lockwire procedure ensuring each leg is securely & permanently fixed to the brick wall.
- 9) Place the top header into correct position on top of both legs and against the brick wall. Horizontally pull each header strap bracket positioned to the left- & right-hand side of the top header taut & horizontal against the brick wall and mark the fixing positions through the nearest strap bracket hole that meets the brick wall. Identify the holes to the top of the left- & right-hand side of the top header that will accommodate lock wire at a later stage. Mark the brick wall for lockwire anchorage points horizontally from each hole.
- 10) Remove the top header. Drill suitably sized holes in the brick wall in your pre marked header bracket and anchorage point positions to accommodate suitably sized stainless steel wall plugs. Fit wall plugs.
- 11) Depending on the appliance being installed the Rio would normally be supplied with either a 3-piece or 4-piece slip set. Securely bond the lower slip, side slips and top slip into correct rebate positions using silicone adhesive between all mating stone surfaces. (If using a 3-piece slip set omit fitting of the lower slip). All slips should be mechanically fixed to the brick wall, refer to page 9. Back fill the rear of all slips to the brick wall ensuring all slip mating surfaces are sealed to the brick wall with suitable fire cement.
- 12) Permanently fix the top header, use silicone adhesive between all mating surfaces of the top header to the brick wall, top of each leg and the top slip ensuring a total bond has been made. Using the header strap brackets securely fix the top header to the brick wall using suitable sized corrosion proof screws, washers into the previously installed wall plugs. Locate the hole provided to the internal reinforcing block located to each side of the top header. Use suitable lock wire and thread through each hole and securely fix the top header to the brick wall using suitable corrosion proof anchorage points. Tighten the lockwire using the correct lockwire procedure, ensure the top header is securely & permanently fixed to the brick wall.
- 13) Depending on the date of manufacture the shelf fixing brackets vary between 2 different types. Identify the shelf version as shown on page 8.
Straight bracket version. Permanently glue the two eyelet fixing brackets to each end of shelf using thixotropic two-part resin chemical anchor fixing glue ensuring they are fully pushed into

stone and leave to dry. If the fireplaces have strap brackets that are already bonded to the shelf omit this stage.

- 14) Permanently glue the two dowels provided into the two holes provided to each end of the rear surface of shelf using thixotropic two-part resin chemical anchor fixing glue suitable for stone, metal and brickwork and leave to dry. Ensure both dowels are glued 50% of their entire length into the stone shelf, the remainder 50% of dowel will be glued into the brick wall at a later stage.
- 15) When dry place the shelf centrally onto the top header and mark the position of each straight eyelet fixing or strap fixing bracket depending on the version and dowels to the brick wall. Note: The straight eyelet shelf brackets will require to be slightly bent so the eyelet fixing is parallel against the brick wall. If the version uses the shelf strap brackets these will be required to be bent above the shelf to the rear edge to mark the position of the holes required for fixing to the brick wall, use the nearest strap bracket hole that meets the wall when the bracket is pulled fully taut. Remove the shelf. Drill holes into the brick wall in your pre marked positions for either the eyelet or strap bracket fixings depending on version to accommodate suitable sized stainless steel wall plugs. Fit wall plugs. Drill suitably sized holes to accommodate both dowel fixings. Ensure the shelf dowels do not have to be forced into the holes within the brick wall as this can damage the shelf either immediately or at a later date. It is recommended that the holes are oversize to give the dowels some tolerance to alleviate any possibility of the dowels being forced into the holes, the thixotropic resin when used will fill the tolerance. Ensure the holes within the brick wall to accommodate the dowels are totally clean and dust free with no contamination.
- 16) Pass stainless steel or galvanised steel locking wire through each hole provided to each end of the shelf and leave enough over length above the rear of shelf to enable fixing to the brick wall.
- 17) Permanently fix the top shelf centrally to the top header and brick wall using silicone adhesive. The over length locking wires to be positioned above the shelf. **Ensure a total bond** has been made to **all** mating pieces including **all** rear surfaces of the shelf to the brick wall. At the same stage use suitable thixotropic two-part resin chemical anchor fixing glue to bond the shelf dowels into the drilled holes within the brick wall. **Important.** As you are using silicone adhesive and thixotropic resin for the dowels ensure the two adhesives do not come into contact. Using suitable sized stainless-steel screws and washers through each shelf eyelet fixing or strap brackets and fully tighten into the stainless-steel wall plugs. Drill suitable holes into the brick wall and install suitable sized stainless steel anchorage points in a suitable position just above the shelf for both over length lock wire positioned above the shelf. Using stainless steel locking wire to the correct procedure fully tighten and secure to your brick wall anchorage points.
- 18) Make good the plaster / render to the brick wall around the fireplace surround taking extreme care and protection to ensure there is no plaster / render contamination to the stone fireplace. (It is recommended that when the fireplace has totally dried, to seal all visible surfaces with a suitable stone sealer and let fully dry before carrying out the plaster / render process).
- 19) **Important:** Ensure the area around the fireplace fitting area is restricted to all persons, animals and valuables until all fitting materials have fully dried and cured and all fireplace components are deemed to be installed correctly and safely.
- 20) **Inform the customer / user** when the fireplace with appliance can be used, taking into account the full drying times for all the materials used.
- 21) **Ensure** the customer care sheet and the fitting guidelines provided are left with the customer and user.
- 22) It is highly recommended that before use the stone fireplace is sealed with a suitable stone sealer. Ensure the fireplace is cold and fully dry before sealing. Ask your fireplace retailer for advice and refer to the stone sealer manufacturer's instructions.

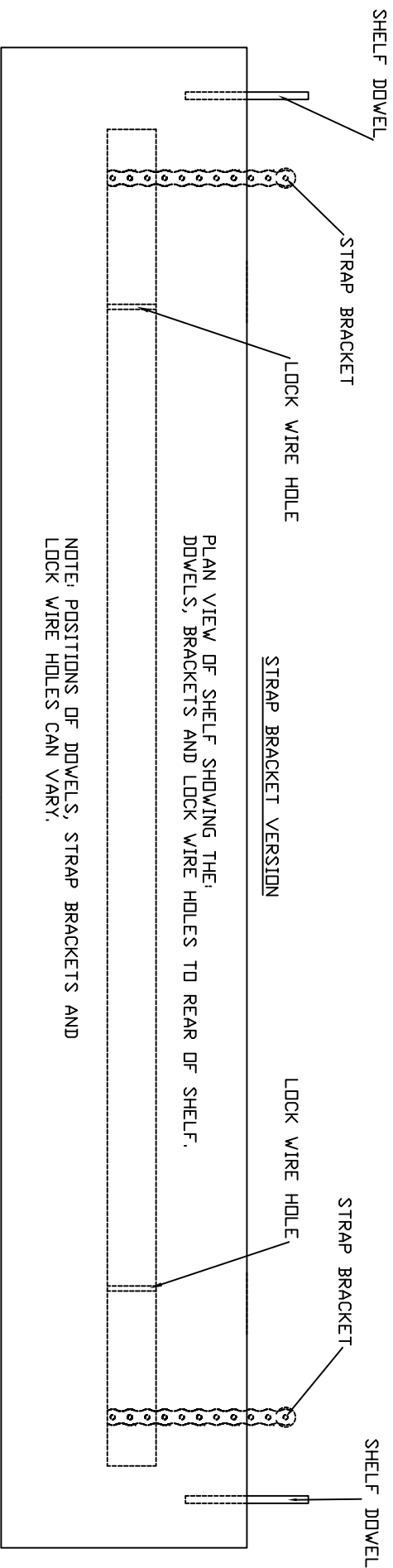
IMPORTANT

DEPENDING ON THE DATE OF MANUFACTURE THE SHELF USES TWO DIFFERENT BRACKET FIXING METHODS ONE HAS STRAIGHT EYELET BRACKETS AND THE OTHER USES STRAP BRACKETS, IDENTIFY THE SHELF FIXING BRACKETS FROM THE 2 DRAWINGS BELOW & REFER TO THE FITTING GUIDELINES.



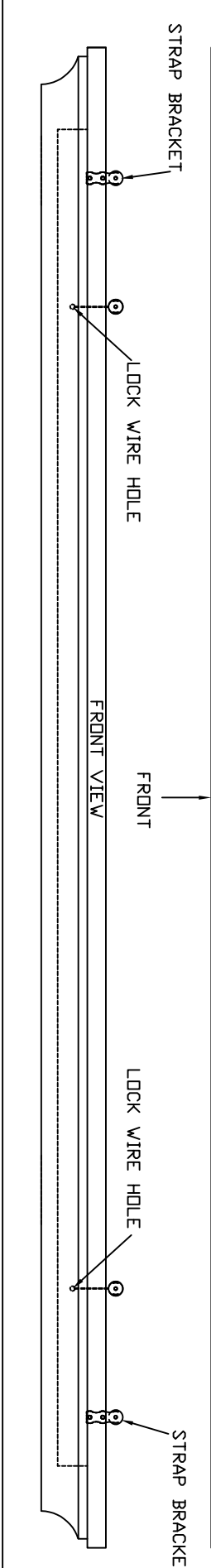
PLAN VIEW OF SHELF SHOWING THE DOWELS, BRACKETS AND LOCK WIRE HOLES TO REAR OF SHELF.
NOTE: POSITIONS OF DOWELS AND LOCK WIRE HOLES CAN VARY.

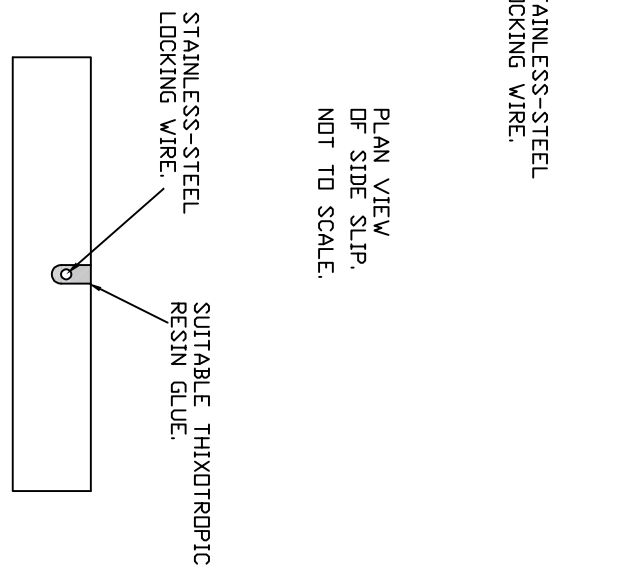
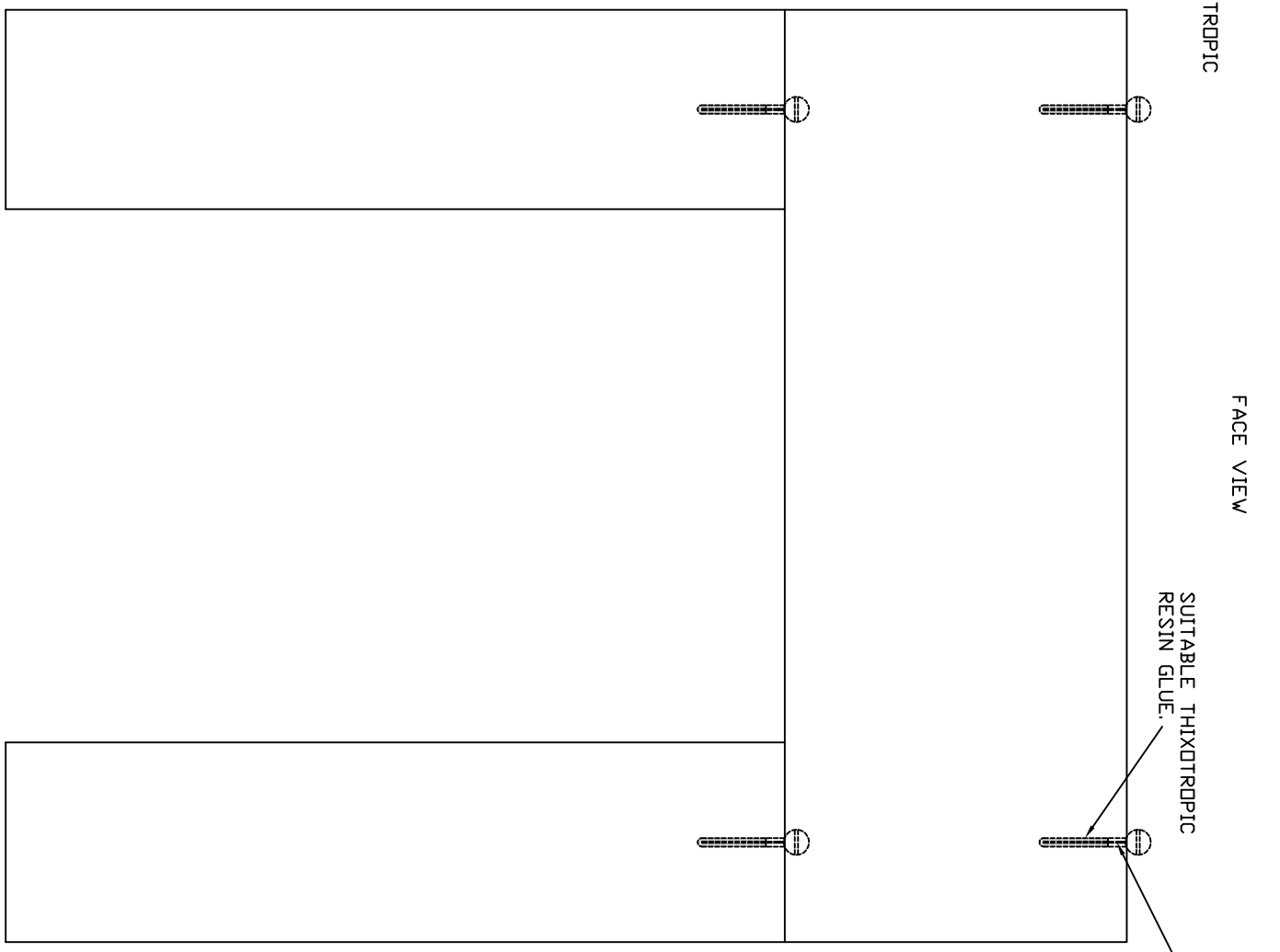
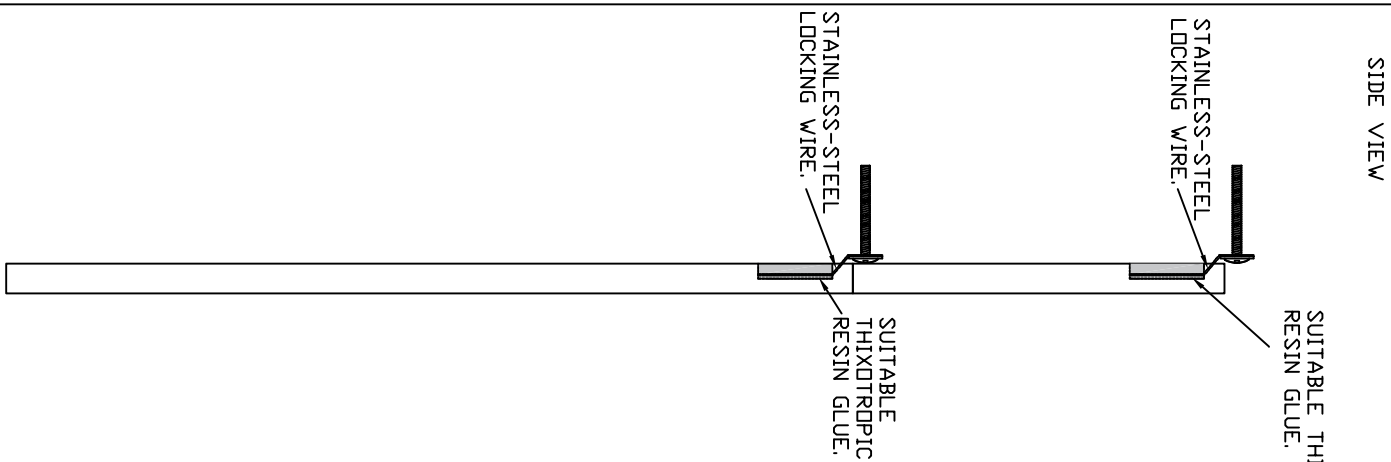
FRONT



PLAN VIEW OF SHELF SHOWING THE DOWELS, BRACKETS AND LOCK WIRE HOLES TO REAR OF SHELF.
NOTE: POSITIONS OF DOWELS, STRAP BRACKETS AND LOCK WIRE HOLES CAN VARY.

FRONT





GUIDELINES.

WITH A STONE CUTTING ANGLE GRINDER MAKE SLOTS TO THE TOP OF SIDE SLIPS AND TOP SLIP, APPROXIMATE SIZE 50mm LONG BY 10mm DEEP AND 6mm WIDE.

WITH SUITABLE THIXOTROPIC 2 PART RESIN BOND ADEQUATE LENGTHS OF STAINLESS-STEEL LOCKING WIRE INTO THE SLOTS, WHEN DRY USE SUITABLE STAINLESS-STEEL WALL PLUGS, SCREWS & WASHERS TO SECURELY FIX THE BACK PANEL TO THE BRICK WALL USING THE CORRECT LOCK WIRE PROCEDURE TO THE THE BACK PANEL SLIPS TO BRICKWORK.

THIS METHOD TO BE USED FOR ONE OR MULTI PIECE BACK PANEL SLIPS, CHAMBER PANELS & ANY OTHER STONE, MARBLE & GRANITE PARTS NOT PROVIDED WITH BRACKETS TO THE FIREPLACE.