

## Bio Ethanol Burner Boxes – Bespoke Install Guidance

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CVO Fire : 01325-301020 : [www.cvo.co.uk](http://www.cvo.co.uk) : [sales@cvo.co.uk](mailto:sales@cvo.co.uk)

Use this sheet in line with the Bio Ethanol burner boxes which are sold on the website [www.easyfire.co.uk](http://www.easyfire.co.uk). Overall dimensions of the trays are shown on the [www.easyfire.co.uk](http://www.easyfire.co.uk) website and also on the individual specification sheets for the burner trays which are available by calling 01325-301020.

- **Fuel:** the boxes must be used with denatured Liquid Bio Ethanol Fuel for Fireplaces Only.
- **Operation:**
  - Read the separate instructions supplied with the burner box purchased.
  - Fill the tray to no more than ¾ full.
  - Light the bio ethanol fuel with a long lighter or match.
  - Use the tray lid to regulate the flame and to shut off the fire. By closing the lid to reduce flame height it is possible to increase the running time of the fire by up to 2x.
  - Never re-fill the tray when the burner is alight or still hot.
  - A fire extinguisher of “dry chemical” type is a compulsory accessory.
- **Fireplace Design and Installation:**
  - Converting an Existing Fireplace: In order to keep the heat from escaping through the flue, place a panel of non-combustible heat reflective material such as stainless steel across your flue opening.
  - All existing gas connections or pipelines near the new fireplace must be disconnected and made safe by an appropriately qualified professional prior to installation
  - Multiple burners may be installed however the clearance and ventilation requirements must be adhered to at all times.
  - DO NOT INSTALL DIRECTLY BESIDE OR NEAR WALLPAPER, LAMINATE, VENEER OR ANY SURFACE THAT HAS NOT BEEN FIRE RATED (the heat will impact the material, and in some circumstances the glue used for its application). THIS INCLUDES THE DETAILING/FINISHING MATERIALS USED ON THE DECORATIVE SURFACES AROUND THE INSTALLED FIREBOX.
  - The trays must be installed into a non-combustible material ONLY – for example stainless steel, concrete, brick, stone. If installing in stone consideration should be taken for the effect of heat causing heat shock and cracking of the stone. This is easy to avoid with correct design.
  - The bio ethanol burner trays must be installed :
    - within a “Twin Skin”. The top tray must be situated within a lower tray to form a barrier to capture any accidental spillage. Most of the burners we sell include a safety tray as standard. If creating your own safety tray this must undergo a “water tight” test prior to inserting the burner tray into place and using the fire.
    - into a fixed and secure position before filling, lighting and operating
    - in a position that eliminates the risk of accidents caused by fuel spillage.
    - into a level platform otherwise the fuel will burn unevenly or spill out.
    - into a setting that has a square back – the incorporation of angled backs alters the aerodynamics of the flame environment and could lead to an unstable flame behaviour
  - We recommend that:
    - Any furniture items or fittings directly above or beside the bio-ethanol fire installation be deemed suitable for heat tolerances by their manufacturer e.g. plasma television screens.
    - A heat reflective panel made of non combustible material (ideally stainless steel) should be installed as the surround and top of the fireplace setting to assist in heat distribution.
    - Any reconstituted materials you wish to use be checked in terms of strength and suitability around such high temperature variations as some materials will crack. Glass or mirrored surfaces near the fire installation must be toughened.

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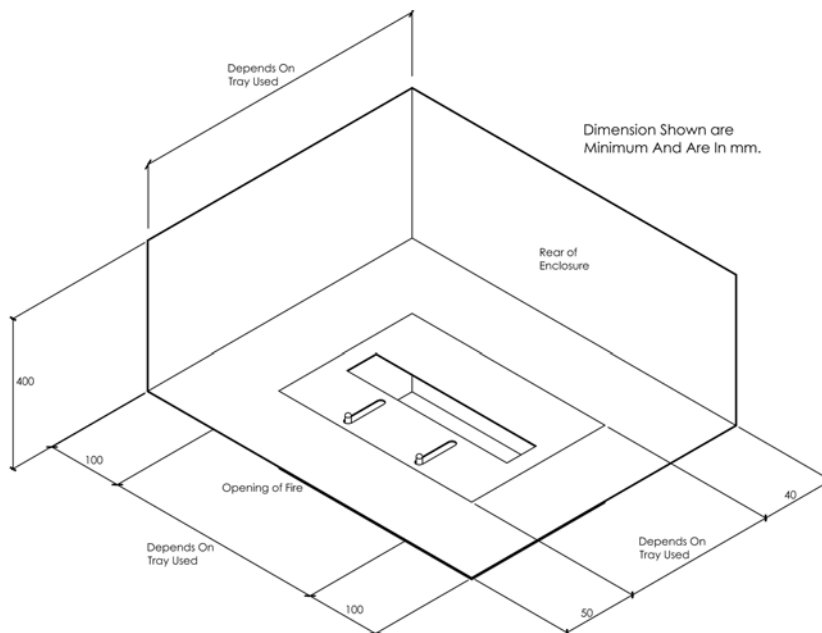
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Visit [www.firevault.co.uk](http://www.firevault.co.uk) or call 01325-301020 for full contact details, location maps and directions.

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- **Fireplace Clearances (Using an Enclosure)**
  - The enclosure must be made of a non-combustible material such as metal or stone. Where the enclosure comes into contact with a combustible material there should be a series of 20mm spacers fitted to create an open barrier (air gap) between the enclosure and combustible material to eliminate heat transfer. Very careful consideration should be given to this requirement. There should be clearances around the tray as shown below. Where the safety tray comes into contact with the custom made enclosure there should be an allowance given of 5mm to 10mm depending on tray size to allow for expansion of the tray due to heat.
  - If designing your own enclosure you accept full responsibility for the suitability and safety of the final design. We advise buying the standard enclosure we have designed to match the tray and installing this in a non-combustible fire chamber. This is the safest way of installing the burner trays.
- **Fireplace Clearances (Without an Enclosure)**
  - NOTE: If the burner tray is not sited within an enclosure the flame quality will not be as good as a fire within a full enclosure. This is due to heat convection causing the flame to rise. Read the instructions provided with the burner tray.
  - REAR: A minimum of 40mm (1.6in) space between the burner edge/top tray edge and the rear wall (which should be a non combustible material). The rear wall should be a non combustible material. If the rear wall is combustible, a distance of 600mm (23.6in) must be allowed for.
  - FRONT: A minimum of 65mm (2.6in) space between the burner and the front edge.
  - OVERHEAD: A minimum clearance of 1500mm (59.1in) forms the burner mouth to the nearest combustible.
  - SIDES: A minimum clearance of 600mm (23.6in) from the burner edge to the nearest combustible.
  - BASE: Must be made of non-combustible material.
- **Suggested Design (guidance only)**



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