01425 626171
sales@brightstarfires.co.uk
www.brightstarfires.co.uk

Hole in the wall - fireplace design guide

There are certain requirements that need to be addressed when building an outdoor fireplace for our gas burner. This guide is to help you design the fireplace structure only. Please download and read the product manual which contains important burner installation advice.

Burner specifications

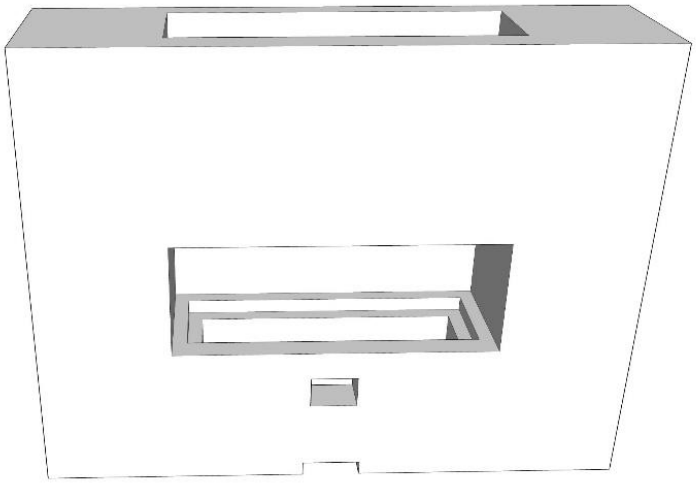
This design uses the rectangular burner. This unit has a 1000x 300mm mounting plate and flexible connections between the centre of the burner and the control box.

The control box is 160x 110x 72mm. The gas entry point is a ½ inch male BSP thread connection, located underneath the control box.

The pilot assembly, under the cage should be located at the front of the fireplace.

Structure design

This is an example of a simple fireplace design. The structure can be modified, as long as the principles are kept the same. Standard building materials can be used, however the burner generates a lot of heat that will transfer into the surrounding structure. We recommend protecting the back and side walls of the opening, as well as the lintel, with heat proof insulation board.



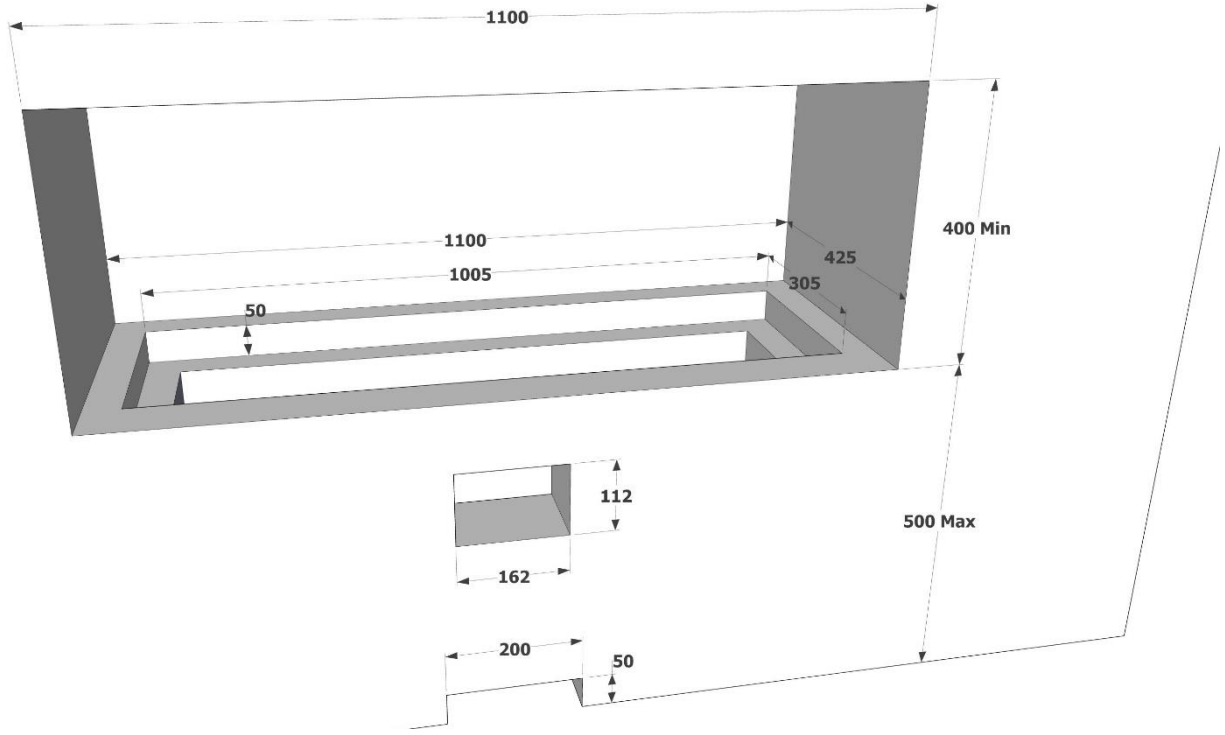
The area above the burner should be hollow to allow the heat and fumes to escape up the chimney. If there is no chimney the heat and fumes will travel up the front face of the fireplace. The chimney structure can be tapered. It is not recommended that any appliance is attached to the chimney breast, above the opening.

The structure must be designed so that the burner does not need to be disassembled to be installed. The controls should be fed down through the cavity opening and through the wall of the fireplace.

The area below the burner should be hollow with adequate ventilation through internal and external walls at ground level. At least 100²cm of clear ventilation is required for a single burner installation. This can be split across multiple smaller holes and be located at the front or back of the structure. Lack of ventilation will cause the burner to overheat.

Fireplace dimensions

The burner should rest on a shelf recessed 50mm into the structure. The ledge must not cover any of the holes under the burner tubes. The rectangle burner must be bolted down to the structure underneath to stop it twisting in the heat. Any coping stones or surrounding tiles must not overlap the burner tray. The burner must be able to be lifted out for future servicing.



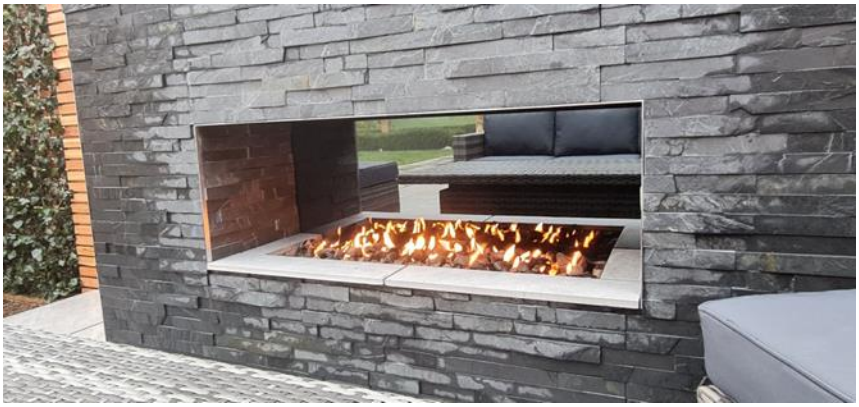
It is recommended that the opening is wide enough to allow for one of our weather covers to fit inside. The rectangle stainless steel cover is 105x 35x 5cm.

The hollow cavity underneath the burner must be clear of any combustible material. It is recommended that the cavity is as deep as the surrounding ground level, to meet with the ventilation holes. The cavity must not be deeper than ground level as LPG is heavier than air and any unburnt gas will collect in this area.

The rubber gas hose supplied with the LPG burners should **not** be laid out of site or run through a conduit. To connect to the gas supply MDPE, copper or Tracpipe equivalent is more suitable in this type of installation. The rubber hose can be used for the final connection onto an LPG bottle or tank. If plastic gas pipe is laid inside the cavity it can melt and cause a gas leak. MDPE must be buried underground and protected from sunlight as UV light will deteriorate the plastic.

It is highly recommended that advise is taken from a local gas engineer before finalising your design, and before building work starts, especially if you plan to lay underground gas pipes.

In the design below the burner is positioned against the back wall of the fireplace and a heat resistant mirror has been installed to create a double fire effect.



Control box location
The simplest installation locates the control box at the front of the fireplace, underneath the burner. If the controls are located here, then the standard length connections will work. If the controls are located to the side or at one of the ends of the structure, then longer or extended connections will be required, depending on the structure dimensions.

You should be able to see the pilot assembly when using the controls to check that the pilot has ignited, therefore it is not recommended that the controls are located on the back of the structure. If they are, this can make lighting a two-person job.

If you have any questions regarding your design or installation, please contact us.