Building a ready-made fireplace
The Ready-made Fireplace

This is an ideal concept for someone who has limited experience with DIY brickwork but would like to have a fireplace in their home. The advantage here is that you purchase a Jetmaster or similar pre-fabricated and efficient fire unit, which can be installed and tested before you add the brickwork surround. The first three designs are based on a “Jetmaster Universal 700 D Fire Unit”.

When deciding to add a fireplace to an existing house, plans must be approved by your local authority before commencing brickwork. Corobrik recommends that you advise your house insurers that you are installing a fireplace, as this may not be covered in the fire cover you presently have.

Contemporary Style

The perspective cutaway drawing (shown opposite) shows a contemporary style with the stainless steel flue pipe exposed to view and simply running through the ceiling / roof space without damaging any outside wall brickwork. The hearth projects strongly forward and is clad in large size (400mm x 400mm) tiles, which are repeated on the platform above the fire unit. The wall behind the chimney flue pipe could be clad overall with mirror or could be painted to choice. A pale colour clay face brick would be a likely choice for this modern style.

Materials

- 310 Face Bricks
- 1m² Tiles
- 820 x 450 x 10mm Fibre Cement sheet (shuttering)
- Mortar: Buy bags of “Mortar-Mix” as required
- Concrete: Buy bags of “Concrete-Mix” as required
- Reinforcing Rod 6mm DIA: - 32 pieces 150mm long
Stainless Steel Flue Pipe

Various options here: plaster and paint, mirror, brickwork etc.

Facebrick columns on each side.

Glazed 400mmx400mm Floor tiles.

Existing wall (or a matching section of wall only wide enough to fill the rear area between the columns for a mid-room application).

Glazed 400x400mm Floor tiles

Jetmaster Universal 700D Fire Unit

Shuttering

Floor
Traditional Style 1
A traditional style is shown in the plan drawing (opposite) of the unit used with a mantel shelf and broad front hearth. Here the feature is the corbelled (stepped) brickwork used to project forward from the two side columns to provide support for a shelf made from hard wood. This style is echoed in reverse corbelling of the central panel of the chimney breast above the fire unit, which continues to set back until it abuts the back wall, giving a deep recess with a highly textured surface.

For this concept the chimney flue is taken through the outside back wall as shown. A chunky brick would most likely suit this design.

Materials
- 350 Face Bricks
- 1m² Tiles
- 30 NFP bricks
- Mantel Shelf
- Fireplace Unit
- Mortar: Buy bags of “Mortar-Mix” as required
- Reinforcing Rod 6mm DIA: – 22 pieces 150mm long
Traditional Style 2

A variation on the Traditional style 1 is shown opposite. Here we don’t have any corbelled effects, a greatly reduced front hearth and no mantel shelf. The visual appeal of this presentation relies on the central breast infill panel area, which rises vertically to hide the straight flue pipe rising up and through the ceiling/roof above.

In the main drawing, we have illustrated a herringbone bond for the infill panel, which will involve some brick cutting, but gives a visually spectacular effect, especially if a contrasting colour clay face brick is used here.

An alternative option is shown (below right on the drawings opposite) which results in a special visual effect that is not too difficult to achieve. This bond is called a “straight jointed snapped header bond” and shows the rough broken part of a brick “chopped” in half using a bolster chisel and hammer (especially attractive if using bricks which display a burnt “heart”). This effect can also be achieved by laying standard face bricks in a vertical straight jointed pattern.

The side column and base should ideally be built with smooth or travertine face brick, in the same or a toning shade to the central infill panel brick.

Materials

- 400 Face Bricks in total
  - 325 Face Bricks (columns and base)
  - 75 Face Bricks (infill feature panel)
- 0.5m² Tiles
- Mortar: Buy bags of “Mortar-Mix” as required
- Concrete: Buy bags of “Concrete-Mix” as required
- Reinforcing Rod 6mm DIA: – 22 pieces 150mm long
Front Elevation

Herringbone Bond feature wall panel

Jetmaster Universal Model 700D

See other plan drawing for dimensions

Quarry or glazed ceramic tiles

Vertical Section

Alternative feature panel, using snapped header bricks straight bonded.

Existing (or new) outside brick wall

Floor

Jetmaster Fire Unit

Concrete Infill
Method of Bonding the New Fireplace Brickwork to an Existing Brick Wall (All Fireplace Types)

At all contact points between the new fireplace brickwork, it will be necessary to drill the existing wall at every fourth joint vertically and in the points of contact horizontally.

Drill at a slight downward angle (±10°) as shown. Put some epoxy adhesive into this hole and drive in a 6mm diameter reinforcing rod (overall 150mm long) in the prepared hole to about half its length. Bend the 75mm part protruding down into a horizontal position and build this into the mortar joint of the new fireplace wall to create a mechanical bond between the wall units which will minimise any cracking problems when using your fireplace in the future.

Also, create a neat rebated mortar and plaster joint detail at the external junction between the existing and the new (fireplace) walls, so that if any cracking takes place due to the heat differential it will be hidden. Alternatively, you could put a timber moulding here which could be varnished or painted to blend with the walls.

With all of the above style fireplaces, a clay quarry tile or glazed ceramic tile can be used for the hearth floor. We have also featured the ready-made fire unit from the nationally available Jetmaster range Universal 700D. If you wish to use a different model, the designs of the above style fireplaces will need to be modified.

On all of these designs it is important to use the metal reinforcing rod anchors (as shown in the detailed illustration) to tie the new brickwork into the existing wall.

NOTE:
This method of securing the new brickwork to the existing wall is very important, for safety as well as appearance aspects, and will apply to all of the fireplaces shown in this leaflet.
Obviously, if the fireplace is part of a new extension area in your house, this is not necessary as you can bond in the brickwork. You can also, in this case, project part of the chimney breast and flue to the exterior of the house wall and have it flush or only slightly protruding on the room side.
Alternative Design for a Modern Free Standing Unit

This is a very simple project to create a plinth effect for a standard Jetmaster Hex free-standing fire unit. This unit stands on a metal plate and tube assembly, which lifts it off the floor and our design proposal is to create a face brick circular skirt around the base. We have based our drawing on the Hex model 1000 which will require a brick "ring" with an outside diameter of 1100mm.

First decide where your fireplace will be sited (with this type of unit, it can be almost anywhere in your room, including the centre). Next, using the centre point of your selected position, mark out a circle to the diameter required (check with your supplier installation team that they can pierce the ceiling and roof space in this position). Please note that smaller Jetmaster Hex units can be built using a smaller plinth. Construct the brickwork ring using bricks on-end facing outwards as shown and almost butting the inside edges to prevent the outside joints becoming excessively thick.

Once the brickwork is fully set, apply a haunching fillet of mortar all around the inside to add strength and support. Your brickwork will be about 230mm high and the gap below the standard hex unit is smaller than this, so you will need to create an inner platform to raise the unit when installed. You can use paving bricks thick set on a bed of mortar, as illustrated, or you could just extend the mortar haunching right across to create an elevated platform.

Almost any brick from the Corobrik face brick range will be suitable for this plinth, so choose one to suit your lifestyle image.

Materials

- 40 Face Bricks
- 8 Paving Bricks
- Mortar: Buy bags of "Mortar-Mix" as required
Quantities of Materials

We have listed adjacent to each of the various style drawings the quantities of clay face bricks and clay plaster bricks, pavers, tiles, cement and sand etc. that you will need. We have assumed that you will be building straight off a concrete floor slab and that the ceiling height is at 2,6 metres from the floor.

Add extra bricks and mortar requirements for below wooden floors and for higher ceilings. We have also based the brick requirements on a chimney stack height of 2,5 metres above ceiling height.

Please note that where you are building on a wooden floor you will need to consult with a registered structural engineer in order to build a foundation suitable to carry the fireplace.

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