

Ceramic Firepot Installation Guide

(The Installer must leave these instructions with the consumer.)

VERY IMPORTANT:

The installation of the Earthfire pot has several aspects that may seem arbitrary to the general builder, fireplace installer or owner installer, however, these details are very important to the function and safety of the firepot. Failure to adhere to instructions will void the warranty and could result in a fire hazard.

PLEASE NOTE

- ♦ Like any fire place, the Earthfire firepot is a potential fire hazard if not installed correctly, compliant with your local by-laws and building codes. (Part V of the National Building Regulations [SABS 0400] in South Africa).
- ♦ The chimney flue should pass no closer than 300mm to any combustible material without adequate insulation -1m in the case of thatch.
- ♦ The firepot itself should likewise be no closer than 300mm on either side to combustible materials and 500mm in front.
- ♦ Earthfire herewith specifically excludes responsibility for damages arising from whatsoever cause concerning the installation and use of Earthfire fireplaces.
- ♦ Take care of the lid during installation - it is most vulnerable prior to installation. It could get chipped if the edge is bumped carelessly against the pot.
- ♦ Take great care in insulating the ceiling and roof timbers from the flue, flue temperatures will exceed that of metal type fireplaces.

CHOICE OF CHIMNEY FLUE

The chimney pipe must have an 125mm internal diameter (ID) for use with the firepot. Stainless steel is recommended, but the pipe can also be enamelled. Galvanised or brass pipe will not work - galvanised pipe will burn through in one season and brass will slump from the heat.

Double-walled insulated pipe (available from Earthfire or our dealers) is recommended for use from the ceiling up and exiting the roof. Fibre cement pipe of 125mm ID (150mm ID if not available) can be used on the outside for wall-exit installations. Elbows may be used in your installation if you can't go straight up.

WARNING: Fibre cement pipe is heat resistant but not an insulator. Read the section on insulation and follow the instructions with care. Everite fibre cement down pipe is rated as a chimney flue, but is not suitable for use in the roof space.

RECOMMENDED CHOICE OF SITE

The firepot should ideally be free-standing, although it may be positioned inside an existing conventional fireplace if that is high and wide enough to accommodate at least one length of 0.5m flue. The existing masonry chimney should be blocked off with a heat resistant board to prevent heat loss and ensure adequate heating of the room, as well as proper draw.

If the firepot is free-standing, a base of durable material is essential. Tile should extend at least 600mm in front of the fire and 200mm on either side. A wrought iron stand is available to elevate the firepot, or it can be placed directly on a hearth or plinth - it looks best at about 150 - 300mm above floor level. This plinth could be made of bricks, cement or wood covered with tiles. The firepot should be positioned at least 1.0m from the closest furniture. As long as the base is fire resistant, neither the plinth nor the wrought iron stand is required for the safe operation of the firepot. However, we feel the firepot looks best when on a stand and 150 - 300mm high plinth.

ROOF SEALING

The flue/roof joint can be sealed against the elements with aluminium, lead or silicone flashing.

WARNING: Do not use silicone flashing with a non-insulated pipe. Bitumen or waterbased flashing material is also not suitable, even with an insulated pipe - the movement allowed with these materials is not enough. (see below)

The flashing must be fixed to the roof in such a way as to allow for vertical pipe movement. The reason for the flexible flashing concept is that allowance must be made for the expansion of the metal flue. The flashing must allow the flue to slide up when hot and back again when cool. If adhered to, the system described ensures that the flue/roof interface will not leak due to expansion strain.

INSULATION

It is recommended that you use an insulated endcap flue protruding through the ceiling into the room. If that is not possible the non-insulated pipe can join the endcap above the ceiling.

THIS IS A CRITICAL AREA FOR INSULATION: The pipe at this point is still very hot and the ceiling which is in close proximity must be insulated from the heat.

Wrap ceramic fibre blanket (provided) around the flue in the ceiling hole. Even when using an insulated endcap flue, the ceiling must be cut back at least 50mm from the pipe. The unsightly hole and insulation material is then covered by a stainless steel ceiling plate. Thoroughly insulate the flue where ever it is in proximity to combustible material. Also insulate the double-walled insulated pipe where ever it passes close to combustible material. Extra insulation material will be provided at a small cost.

CHIMNEY HEIGHT REQUIREMENTS

The chimney must extend 1m above the level of the roof penetration and a minimum of 0.5m higher than any roof surface within 3m horizontally to achieve a stable draft. Due to prevailing winds, local terrain, adjacent tall trees or structures; additional chimney height, a special chimney cap or an extractor may be required to ensure optimum performance.

DO NOT:

- ♦ Narrow the flue at all!!
- ♦ Join the pipes wrong way around.
- ♦ Use fibre cement pipe that fits inside the metal flue (it must fit over the outside).
- ♦ Use fibre cement within the first 2m of flue
- ♦ Use non-approved pipe.
- ♦ Force the pipe into the lid hole - it should slide in freely.
- ♦ Use bitumen or waterbased flashing
- ♦ Forget to rivet the pipes together.
- ♦ Use fire cement sealant on the outside of the pot.

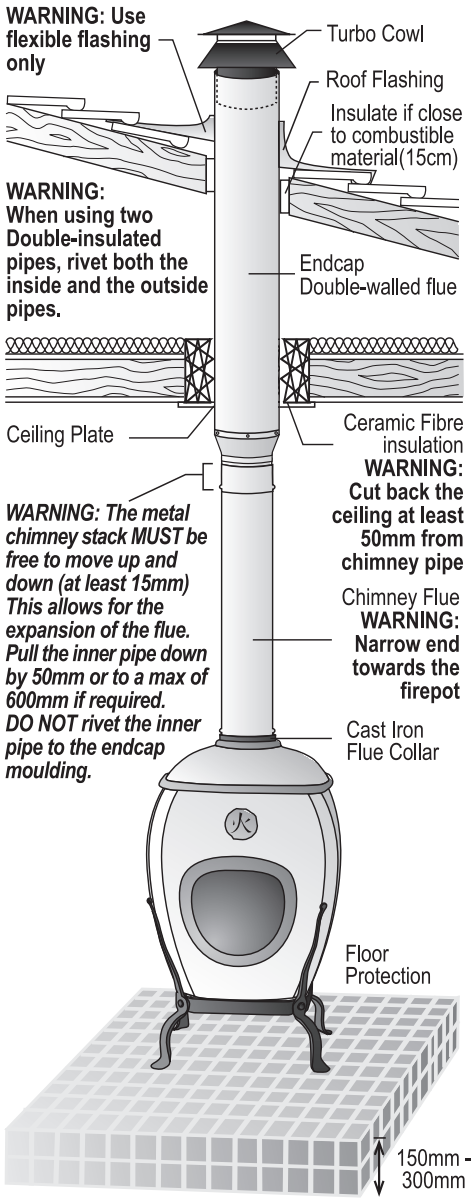
THATCH INSTALLATION

The main aspect of a safe thatch installation is adequate insulation. Use only insulated flues through and outside the thatch and cut back the thatch at least 100mm around the pipe. Wrap the pipe with extra insulation material. The ceiling plate must be at least 400 x 400mm.

WARNING: To avoid a fire hazard due to radiant heat from the flue, the endcap flue MUST start at least 1m below the thatch. Only use a cowl that has a spark arresting mesh.

See drawing on the other side of leaflet

CEILING EXIT INSTALLATION

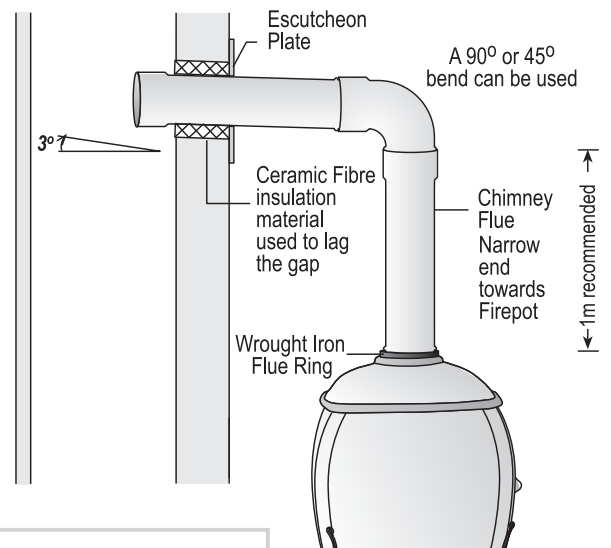


- 1 Make sure the site selected for the fireplace allows for the installation of the chimney. A series of bends can be used to get around roof support structures.
- 2 Using a plumbline, mark the spot for the hole in the ceiling. Cut back the ceiling material at least 50mm from the pipe.
- 3 Using a plumbline, mark the spot for the hole to the outside.
- 4 Push the metal pipes together firmly on the ground. Make sure the pipes are joined the right way - narrow end at the bottom. (See drawing).
- 5 Push the wider end of the endcap pipe through the hole in the ceiling. Insulate where it enters the ceiling and anywhere close to combustible material.
- 6 Rivet the pipes together - don't rivet the enamelled pipe. When using more than one double-insulated pipe, rivet both the inside and the outside pipe.
- 7 Insert the pipe into the lid. (See below for detailed instructions.)
- 8 Hold up the lid after the pipe has been inserted and slide the pot in underneath it.
- 9 If the endcap flue alone is not long enough, insert another double-insulated flue.
- 10 Fit the cowl on the end of the chimney and rivet in place.
- 11 Seal the chimney exit point with aluminium, lead or silicone flashing. (See section on roof sealing)
- 12 Ensure and equal overhang of the lid all round (slightly greater in front) and also position the pot to give a straight chimney line.
- 13 Apply fire cement to the inside of the pot/lid join and fill the bottom of the pot with building or sea sand to just below the mouth. **IMPORTANT: Dry sand only.** (See below for detailed instructions.)
- 14 Wait 12 hours for the fire cement to dry.

WALL EXIT INSTALLATION

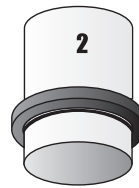
WARNING: To ensure proper draw when using a 90° bend, make sure the horizontal flue slopes up at 3°.

WARNING: If venting into an existing chimney, the chimney entrance must be blocked off to prevent the entry of secondary air.



FITTING THE PIPE INTO THE LID

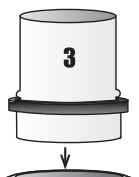
NB: see separate document for more detail



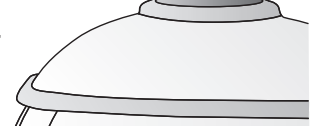
1. Slide the flue ring up to the bump on the narrow end of the pipe. Put the seam in the pipe and the gap in the flue ring facing the back.

2. Wrap insulating rope around the pipe just below the flue ring. **This is all that is required to stop smoke weeping at the pipe-lid join.**

3. Insert the pipe into the lid. Push down on the pipe firmly to squeeze the rope into place. Use a blunt knife to push all visible bits of rope under the ring. **Do not apply fire cement here.**



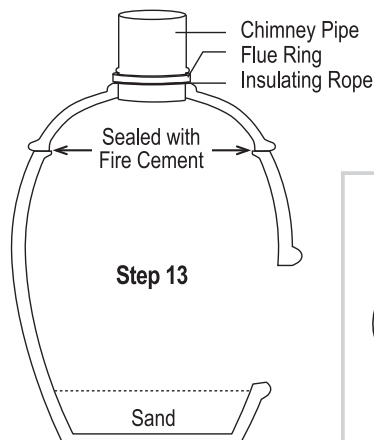
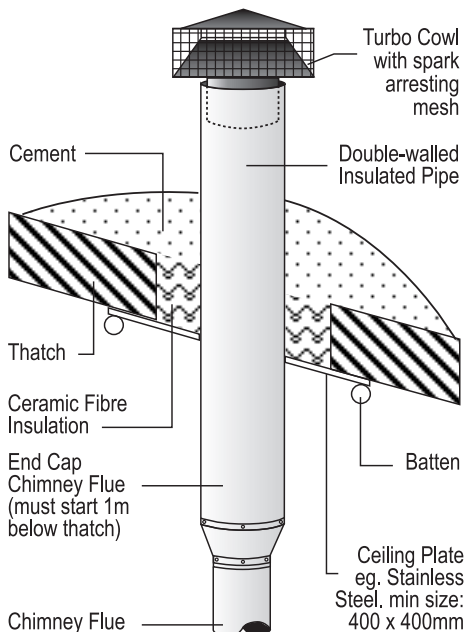
Step 7



4. Take a bit of time to position the lid squarely with an equal overhang around the pot (slightly more in front). Reach inside through the mouth and push fire cement into the join between lid and pot.

Only apply fire cement after the lid is in position - don't use it to make a gasket. Do not apply any fire cement to the outside of the pot

THATCH INSTALLATION



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