

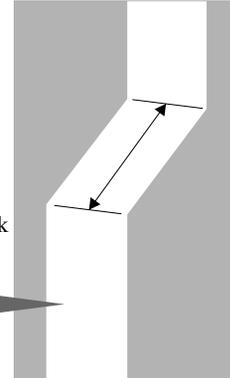
FOR USE BY APPROVED INSTALLERS ONLY

SUITABILITY OF USE

The ISOKOAT system is suitable for sealing the inside of existing leaking brick, block or stone chimneys for gas, oil, wood and solid fuel open fires. The maximum internal chimney dimension suitable for coating is 350mm square. If the chimney is taller than 15 metres then the chimney will need opening up to coat in two sections.

Bends longer than 700mm will need opening up for coating.

If ←→ is greater than 700mm, it will be necessary to break into the chimney.



HEALTH & SAFETY

ISOKOAT is not classed as a hazardous product. The mineral fibres used in ISOKOAT are not respirable fibres (i.e. they do not penetrate the lower lungs). However, as with all cement based products, personal protection must be taken seriously.

When handling, mixing and using ISOKOAT the following protection must be taken:

- Approved dust masks must be worn.
- The hands and other exposed parts of the body to be protected with suitable gloves and clothing to prevent possible irritation. People with delicate skin should apply barrier cream to unclothed areas.
- Safety goggles or masks must be worn to protect eyes.
- House occupants must be advised to keep clear of the materials, unless similarly attired.

FIRST AID

INHALATION remove from the scene of exposure.

SKIN CONTACT wash copiously with lukewarm soapy water. Do not rub excessively.

EYE CONTACT flush in cold running water for at least 10 minutes.

ALLERGY - remove from the scene of exposure.

All other site safety should be adhered to in accordance with the workplace Health, Safety and Welfare Regulations 1992.

TOOLS REQUIRED

WINCH FRAME ASSEMBLY

This is available from ISOKERN and consists of a suitable frame, winch, 19m of 6mm wire rope and D type shackle for connection to the steel brush assembly.

LINK CABLE

This is a 500mm length of 4mm wire rope and is used to connect from the main brush to the small brush.

D TYPE SHACKLES

For connecting steel brushes to the wire rope.

STEEL BRUSHES

A selection of steel brushes will be required. A set and spares are available from Schiedel Chimney Systems

CANVAS OR HESSIAN & FOAM

This is required to cover the steel brushes and is fully described in the brush assembly section.

MIXER

A cement mixer or rotary spiral plasterer's mixer with powerful drill is required.

BUCKETS

Standard 2 gallon builders buckets are required, at least 10 in quantity.

TRAILING LAMP & POWERFUL TORCH

A trailing lamp on along cable is very good to survey a chimney and to check if the chimney has been successfully coated. A powerful torch can also be used to see inside a chimney.

MIRROR

A small hand held mirror will often give a better view up a chimney.

CHIMNEY SURVEY CAMERA

This is a necessity. It will make surveying the inside of chimneys much easier, which must be done on any chimney where a Guarantee is being issued.

POLYTHENE SHEETING, PLYWOOD & TAPE

Polythene sheeting will be required to cover up the surface of the fireplace hearth and surround. A suitable size piece of plywood will be required to cover the fireplace opening when the ISOKOAT is being poured down the chimney.

PREPARATION

The chimney must be inspected to ascertain whether it is suitable for coating with ISOKOAT. The maximum angle of bend that can be coated without opening up the chimney is 30° from the vertical. The chimney must be thoroughly swept using traditional brushes. The chimney is then swept again using one of the steel brushes supplied by Schiedel Chimney Systems. This brush should be the same shape and double the size of the flue. You will need the winch frame assembly to pull this steel brush up through the chimney. Any debris and soot is to be removed and the flue is visually inspected until it is suitably clean for coating.

MIXING

ISOKOAT mixing proportions are as follows:

Isokoat mix	60kg
Ordinary Portland Cement	25kg
Hydrated Lime	1.5kg (Approx 3 litres)
Water	20-25 litres

HANDLING

- Gloves and a face mask to be used
- Mix the dry ingredients well using a cement mixer or rotary spiral type plasterer's mixer.
- Add water to give a thick, plaster like consistency.
- Mix for 5 to 6 minutes and use within 1 hour.

The proportion of lime used can be increased according to site conditions. The increasing of lime will give a better adhesion to non-absorbent surfaces.

The mixing proportions are written on all bags of ISOKOAT.

BRUSH ASSEMBLY

FOAM

A pad of foam is to be used between the brush and the canvas to ensure adequate pressure is applied to the walls.

- The foam must be a reasonable quality, usually referred to as “medium density”. It is available in 3” and 4” thick.
- The shape and size of the foam can be varied to suit the site requirements. For example, if slightly more pressure is required because the mixture falls past as the assembly passes round a bend, an extra layer of foam can be used.
- The foam should be the same shape as the flue.
- The pad of foam needs to be 50-100mm greater than the size of the brush so that it covers the bristles when they are bent downwards in the flue.
- For a square or rectangular flue, the corners of the pad can be cut out so that it folds neatly in the corners of the flue.

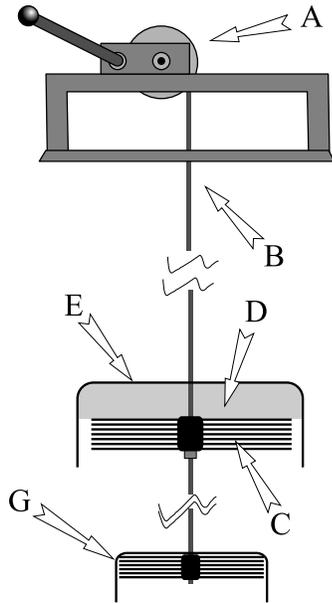
CANVAS OR HESSIAN

A double layer of canvas or hessian membrane should always be used over the brush. This should overhang the edge of the foam by about 50mm all round. The slit made to pass the brush loop through should be as small as possible. Over the top of this layer a locking pad made from a strip of canvas or hessian is used. This locking pad is made by cutting a strip of canvas about 150mm wide by 600mm long. It is then folded into a pad four thicknesses deep i.e. 150mm square. A small slit is made in the middle-just small enough to pass the brush loop through. This is then placed on top of the layer of canvas to prevent it ripping.

ASSEMBLY

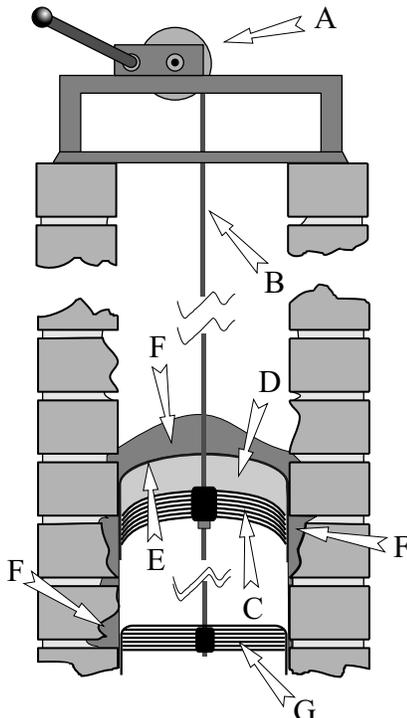
The usual starting point is to choose a main brush which is the same shape but twice the dimensions of the flue. This will be covered with a layer of foam, the double layer of canvas or hessian and the locking pad. Below this a link cable (0.5m long) with a small brush (150mm diameter), a pad of 4” thick foam and canvas can be used to help smooth the coating See diagrams on page 4.

Winch Frame & brush assembly



- A Winch assembly
- B Winch wire
- C Main brush
- D Foam pad
- E Canvas or hessian membrane
- F Isokoat mix
- G Supplementary brush & smoothing membrane

Assembly in use



INSTALLATION PROCEDURE

1. The winch cable is lowered down the chimney and the brush assembly is attached.
2. The brush assembly is guided into the bottom of the chimney ensuring it is correctly positioned.
3. A sufficient amount of water is poured down to moisten the chimney on the inside before coating. A fine hose spray until the chimney is moist (not running in water).
4. The 2 gallon builders buckets are used to pour the ISOKOAT mix down the inside of the chimney. The first pour is one whole bucket of mix, then for approximately each 600 - 900mm of chimney height, ½ a bucket of mix is poured down. On reaching a bend increase the material to one whole bucket, above the bend continue with ½ bucket loads. To avoid separation of ISOKOAT, re-stir before use. The mixture is gradually applied by slowly drawing the brush assembly up the flue.
5. Between two and four coats will be required to adequately seal the chimney.
6. On completion the chimney must be inspected to check that it has been successfully coated. Testing should be carried out as per the flue test procedure in Section J of the Building Regulations. A suitable checklist and Chimney Data Plate should be completed. These are available from Schiedel Chimney Systems.
7. The Customer should be advised to allow at least 72 hours drying time before lighting a small fire, and that subsequent fires should be gradually increased in combustion rate until a full and normal combustion capacity is reached.

AFTERCARE

The chimney must be swept at least once a year by a qualified chimney sweep at the start of the heating season using a suitable medium density polypropylene bristle brush of the same size as the finished flue way. Steel brushes **must not** be used to sweep a chimney sealed with ISOKOAT.

This information **MUST** be written on the chimney Notice Plate on completion of the installation as a condition of the ISOKOAT Guarantee.