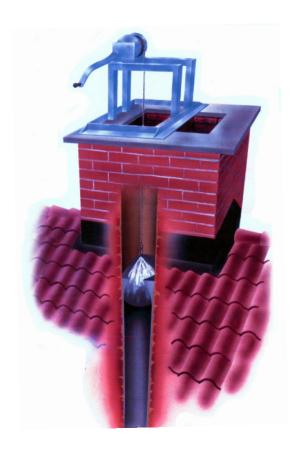
# ISOKOAT®

## CHIMNEY REPAIR AND RENOVATION SYSTEM



#### **Customer Information**

In old chimneys the mortar joints between the bricks or stonework fail. The mortar becomes porous, turns sandy and crumbles away. Then poisonous fumes, tars and condensation can all leak out of the flue into the home. **ISOKOAT** is applied under pressure and forced into the cracks and fissures, sealing them, re-pointing the joints and strengthening the flue wall. Mineral fibre reinforcement in the **ISOKOAT** ensures that the wet material will not pour or leak away through larger cracks, but will be forced into and fill and bridge them. The coating is built up usually using between 2 and four applications to provide a smooth, gas tight flue which will withstand the effects of flue gases for years to come. The flue is fully repaired and sealed with virtually no reduction in size; very important if the correct flue size is to be maintained for the appliance served by the chimney.

This **ISOKOAT** flue coating and renovating system developed by ISOKERN, has been used by thousands of installers in Europe since the 1950's. The system has demonstrated its simplicity and reliability and given many an old or leaking chimney a completely new lease of life.

Product Guarantee When your chimney is repaired by an Approved **ISOKOAT** Installer under the **ISOKOAT** Guarantee scheme, it is guaranteed for 10 years. See over for full details.

Approval The ISOKOAT system is listed by HETAS an independent approval body responsible for the utilisation of solid fuels.

## The ISOKOAT repair process

A hand cranked winch assembly, **A**, is temporarily secured to the top of the chimney.

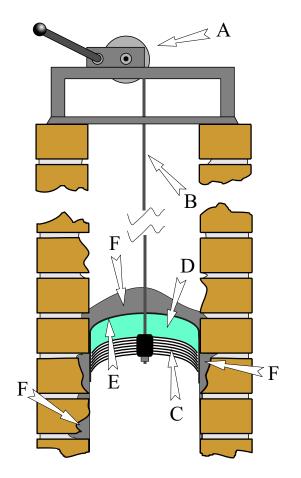
At the bottom of the flue being repaired, the pulley wire, **B**, is secured to a special steel bristled brush, **C**, which has been cut to dimensions larger than the chimney flue shape, whether round or rectangular.

The steel bristled brush supports first a heavy duty sponge section, **D**, and then a hessian, or similar membrane, **E**.

As the assembly is drawn up the flue, measured quantities of the unique **ISOKOAT** filling material, **F**, are systematically poured into the top of the flue and rests on the membrane, **E**.

The weight of the ISOKOAT filler, combined with the pressure exerted onto the wall of the flue by the upward moving brush and former assembly, forces the **ISOKOAT** into any cracks, gaps or fissures in the flue wall. The procedure is repeated until the installer is satisfied that the chimney is fully repaired.

The process is designed just to fill any gaps, and leaves flue wall materials intact, so retaining the original chimney size and shape.





#### Material specification and application limitations

The materials used for the **ISOKOAT** system consist of two special cement powders and a liquid which are bonded with a mineral fibre. Subject to the appraisal by the **ISOKOAT** approved installer, they can be used to repair the flues in all types of masonry constructed chimneys where the flue internal dimension does not exceed 350mm, (14").

Whilst the system is designed for repairing and filling gaps in the chimney flue, as with any type of relining or repair process, **ISOKOAT** does not strengthen the chimney to the extent that it can be used as a substitute for mechanical repair or bracing of chimneys which are structurally unsound.

## Chimney inspection and repair

Before the chimney is repaired, the approved ISOKOAT installer will thoroughly clean the flue, and may use a video camera to determine the degree of flue damage. The data will also determine whether there is a need to provide interim break-in locations in the chimney wall from which further inspection as well as repair functions can be administered. **ISOKOAT** can often be applied without having to open the walls of the chimney. Whether or not this is possible depends upon several factors but primarily the angles of any offsets in the flue. It is at the discretion of the installer whether openings will need to be made to apply the **ISOKOAT**. After the process has been completed, a video camera inspection will be made of the chimney flue by the installer, to ensure that the flue has been correctly repaired.

#### **Completed chimney operating conditions**

The **ISOKOAT** system is very robust and has a proven ability to accommodate the high flue gas temperatures associated with the use of wood and solid fuels. However, sustained excessive temperatures caused by chimney fires and over firing of combustion equipment has the potential to damage ANY chimney system. The material temperature limitations will normally permit an ISOKOAT repaired chimney to be classified under the European chimney designation category of T450 N2 S D 3

### Product credibility and conditions of application

The **ISOKOAT** chimney renovation system is listed by HETAS. As such the system can only be installed by technically trained and competent personnel. Schiedel Chimney Systems are responsible for the training of companies and installers registered to use the **ISOKOAT** system. Details of approved installers can be obtained from Schiedel Chimney Systems.

The **ISOKOAT** approved installer scheme is accredited by HETAS, who will be in receipt of details of all completed installations, and who are, via Schiedel Chimney Systems, responsible for regular checks on random installations to ensure that the systems are being installed to the high standards set by the **ISOKOAT** approved installer training process.

On completion of the installation, a certificate is issued to the customer by Schiedel Chimney Systems.

**ISOKOAT** is guaranteed for ten years against functional failure provided that the installation has been carried out by an approved **ISOKOAT** installer. Installation must be carried out in accordance with application and installation instructions by Schiedel Chimney Systems and as per the agreed HETAS approved process.

#### **Conditions**

It is a condition that the chimney/flue is correctly dimensioned for the appliance which it serves, and that normal appliance and chimney maintenance and cleaning is carried out regularly. In the event of an **ISOKOAT** process failure, Schiedel Chimney Systems. will repair the system free of charge, depending upon the structure and structure prevailing at the time of initial application. Although flues are correctly sized, environmental conditions may cause problems. Positive proof of purchase date must be presented with an eventual claim to the approved installer.

#### Limitations

Consequential damage resulting from **ISOKOAT** failure is not covered by this guarantee. Failure due to misuse, faulty workmanship and/or installation procedure will not be the responsibility of Schiedel Chimney Systems. The effects of products of combustion other than from normal fuels i.e. solid fuel, wood, peat, oil and gas (excluding condensing boilers) are not covered by the guarantee. Exceeding the temperature limits set by Schiedel Chimney Systems, or the injection of water or other fluids into a hot flue, will invalidate the guarantee.

## **Schiedel Chimney Systems**

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