# WHAT IS ELDFAST?

#### A MODERN MATERIAL:

ELDFAST is a <u>wholly ceramic</u> material composed of two elements: a refractory ceramic aggregate in powder form and a resin bonding agent that together create a "slurry" with adhesive properties when applied under pressure.

Traditionally, only materials containing water, lime/clay mortar or cement have been available to re-parge a flue internally, these materials are now known to be prone to acid attack and deterioration.

# **CHARACTERISTICS / BENEFITS:**

### (1) PRESERVES X-SECTIONAL AREA:

Eldfast is an in-situ applied lining, drawn through the flue by means of a "plug", leaving a 4mm nominal thickness of material on the flue face (see method of installation for further details)



As demonstrated above, Eldfast will follow the contours of the flue (although some rounding of corners is likely), rather than drastically reduce the free area, this is of particular benefit when wishing to retain future usefulness of the fire-place for open fires (requiring a minimum 8 inch / 200mm cross sectional area) or when dealing with smaller flue areas initially.

## (2) MINIMAL DISTURBANCE TO DÉCOR

Eldfast is designed to be installed without the need to break into the flue externally, this is due to the "plug drawn" method of installation (see method of installation for further details). Many other in-situ systems specifically require brickwork to be removed at regular intervals to centralise "formers" and enable lining around bends in the flue.

### (3) INCREASES UPDRAUGHT

Due to the ceramic nature of the Eldfast, your chimney will gain certain advantageous properties following lining with the material:

As the refractory aggregate does not easily let heat permeate through, it acts as an insulator, keeping the temperature of the gasses passing through at a higher level and therefore reducing the likelihood of condensates within (try to imagine space shuttle tiles inside the chimney!!). This may also have some useful applications for thatch property owners, where the temperature at the point of intersection for flue and thatch can be considerably lowered from that achieved through only the brickwork.

Also, as the material fills over jointing and missing parging within the flue providing a gastight surface, this surface will then dramatically improve updraught as a consequence of its smoother gas passage.

### (4) TEMPERATURE IMPERVIOUS

Again, a benefit derived from the ceramic nature of the material (and one that is particularly relevant to solid fuel users). The results achieved under practical test conditions demonstrated that the product showed no signs of deterioration at temperatures approaching 2000 degrees centigrade– indeed, it would vitrify and effectively become stronger/harder. Put into context, a chimney fire may generate 1100 degrees centigrade, your flue lining is <u>guaranteed</u> to withstand it.