Chimney Lining

In order for a chimney and stove to function correctly the chimney must quickly and safely remove any flue gases, including carbon monoxide, created by the stove during the combustion process. This in turn also helps the stove to perform more efficiently. It works because the hot gases rise and anything inside the chimney which causes the flue gases to slow and cool down should be eliminated. The most cost-effective and reliable way of doing this is to use a flexible chimney liner.

WHY LINE A CHIMNEY?

BETTER PERFORMANCE Fitting an approved solid fuel stainless steel flexible twin-wall liner with a diameter matched to the flue outlet size of your stove will improve its performance and ‘controllability’ and also remove many typical chimney problems (see left). Since the consistent diameter of a liner is a major ‘quantifiable’ component in the flue system, fitting one should always be the preferred option.

BETTER UP-DRAUGHT A significant advantage of flue liners is that they provide a degree of insulation (especially when back-filled with vermiculite) which helps maintain the temperature of the flue gases to create a better ‘pull’. This is a big advantage where a chimney is on an outside wall and is subjected to a prevailing wind chill.

BETTER BOILERS If you plan to install a boiler stove then a flue liner is essential because boiler stoves operate at a much lower temperature than basic stoves. The boiler inside the stove works like a car radiator drawing the heat from the fire to warm the water so that the flue gases are already at a significantly reduced temperature, even before they enter the flue system. Liners help to stop them cooling further.

BETTER PROTECTION A liner also offers protection to paint finishes and wall coverings on the chimney breast from potential damage caused over time by the build-up of condensates and tars.

BETTER SAFETY Cooling flue gases reduce the effectiveness of the up-draught so that they rise more slowly, thus cooling down further. This can cause a smoky chimney (possibly nuisance smoke), creosote problems and most certainly additional soot deposits which can quickly clog the chimney or cause a potential chimney fire. In the worst cases this can lead to dangerous carbon monoxide entering the living space. Liners help to keep flue gases moving fast stopping them from cooling.

WHAT TYPE OF LINER DO I NEED?

There are two grades of flexible twin wall liner (316 and 904) based on the thickness of the stainless steel and these are available in two diameters used for stoves (125mm and 150mm). The decision to choose one grade above the other should not be made purely on cost but on the application (overnight burning), type of stove (boiler / Defra) and type of fuel to be burned (wood / coal).