## Clearview Stoves More Works, Bishops Castle, Shropshire SY9 5GB

www.clearviewstoves.com Tel – 01588 650401 mail@clearviewstoves.com

## The Importance of Correct Stove Design

Clearview Stoves have always been very clear that smoke spillage and fume emission into the room should not be tolerated. In the Clearview Stove Operating Guide written in 1993 it states

"Properly installed and operated, this appliance will not emit fumes (to the room). Fumes may occasionally occur from de-ashing and refuelling. Persistent emission must not be tolerated. If fume emission persists open doors and windows to ventilate the room, let the fire out and check flue and stove from top to bottom for restriction; do not relight until the cause has been identified"

A stove should be designed to work in a variety of situations, connected to varying chimneys/flues, not just with the perfect flue in mind. Clearview Stoves are designed with many basic, standard features that we consider essential to optimising performance. Flues should be of the correct diameter, particularly in relation to the door opening size. Flue outlets should be free from obstruction allowing gases to pass easily from the firebox to the chimney. There should be sufficient space both in front of and above the baffle to accommodate the extra air drawn into the stove when the door is open for reloading.

Unfortunately, in the quest for the title 'most efficient stove ever' many manufactures have forgotten or ignored some of the basic rules of stove design. This is particularly evident in many **so called 'Eco Design'** stoves where in order to meet the required standard flue gases are forced to spend longer in the stove. This may work in a lab under control conditions with an artificial draw, but has proved particularly unsuited to the real world. Even tall straight chimneys will struggle to overcome poor stove design, if the chimney is short, crooked, cold or in some other way less than perfect the stove simply may not work.

Recent studies demonstrating the presence of smoke spillage in some rooms when a stove was being loaded highlight the importance of correct stove design. We have been aware for some months of many 'Eco Design' stoves proving unfit for purpose and have seen first hand how one badly designed stove fitted to a good flue could rarely be opened for reloading without smoke spillage.

What is worse is that many manufactures are aware of these failings and have advised, stockists, installers and even stove owners to adapt the stove in order to get it to work to an acceptable standard. We can only assume that these manufactures are well aware that the real problem is bad stove design.

A stove should be fit for purpose and must work. Fume emission in the room will not be hidden but will be evident both during use and afterwards and should always be investigated. Many Clearview Stove owners will have used their stove for years and never experienced any noticeable spillage, the chances are therefore that the stove is working exactly as intended and often in conditions that are not ideal.