

## Fullflow Group takes pipe installation techniques to a higher level.

Ordinarily, syphonic rainwater systems are installed using polyethylene (PE) pipe. This material is light and easy to handle and the large range of available diameters allows the syphonic design engineer to design the most cost effective drainage solution for a building.

The methods of electrofusion and butt fusion joining of polyethylene pipe are tried and tested, with both these methods being extensively used for many years by the water and gas industries. However, as with any form of pipe welding, it is important to ensure that the correct jointing techniques and procedures are employed.

When using an electrofusion coupler to join PE pipes, the fusion process takes place hidden from view within the coupler itself. As a result, poor welds are not easily identified, making the electrofusion joints more prone leaks than the more visible butt fusion joint.

Butt fusion machines are relatively heavy and difficult to handle, especially when used at high levels within the roof space of a building. Combined this with the need for specific butt fusion welding parameters to be met, the formation of onsite butt fusion welds becomes almost impossible. BS 8490:2007, The British standard guide to syphonic roof drainage recognises this fact by clearly stating that any on site butt fusion welding should be carried out using a butt fusion welding machine that clamps the pipework securely, ensuring that weld pressure, time and temperature are monitored.

That is until now!

In their role of industry leading innovators, over the past 2 years Fullflow Group have continued to invest in a programme of research & development. A result of this is the development of a butt fusion welding machine which is not only specifically for use on pipework located at high levels within the building, but is also compliant with the requirements of BS 8490:2007.

Following a period of extensive testing of weld samples formed in many different locations, the machine has now been introduced to our site operatives for their exclusive use. The results of this introduction have been outstanding. Faulty or poorly welded electrofusion sleeves are now eliminated from the Fullflow system, greatly reducing the potential for pipework leaks.

In June the ground-breaking concept of the fusion machine was confirmed when a full Patent was granted.

This further underlines the originally and innovative design of this machine.

For further details of installation methods and advances in system integrity gained through the use of the patented fusion machine, please contact Martyn Bramhall, our Group Technical Manager.

