ANTI-LEAKAGE PIPE SLEEVE SYSTEM (SOCKET)
~~PIPE CONNECTION SOCKET~~

Field of Invention

This invention relates to plumbing and more particularly to pipe fittings for plastics material pipes.

Background

This invention will be discussed generally in relation to low pressure plastics pipes for use in application such as drains, stormwater and waste piping systems but the invention is no so limited and may be applied to other pipe line systems such as plastic material pressure piping systems.

Plastics materials pipes can be joined using solvent welding techniques. In such a technique a pipe end is inserted into a belled end of another pipe or a pipe fitting with a close fit and the solvent welding is intended to ensure that there is no leakage in the joint. To ensure a good fit the bell socket has a slight taper so that the bell is slightly narrower at the base of the bell socket (the root) than at the opening of the bell socket (the mouth). This ensures that with the slight softening with the joining solvent that in optimum conditions a good joint is made.

There can be a problem that if there is a misalignment in the pipe and socket or if insufficient adhesive is applied the pipe joint can leak.

It is an object of this invention to provide a pipe joining system which will overcome this problem or at least provide the practitioner with a useful alternative.

Brief Description of the Invention

In one form therefore the invention is said to reside in a plastics material pipe connection socket, the pipe having an pipe internal diameter and a pipe external diameter; the socket comprising an inner sleeve with an outside diameter substantially the pipe internal diameter and an outer sleeve with an inside diameter substantially the pipe external diameter, the inner and outer sleeves defining between them an annular recess to receive a pipe end to form a joint.

Preferably the outer sleeve is longer than the inner sleeve. For instance, the outer sleeve can be longer than the inner sleeve by approximately 10 to 20%. This will assist with alignment of the pipe into the socket by enabling a user to insert the pipe end inside the outer sleeve and thereby holding the pipe end in a round shape before engaging the pipe end into the annular recess.

There may be further included an inspection aperture in the outer sleeve. The inspection aperture can for instance, have a diameter of 5 mm and be positioned near the bottom of the annular recess such as 7.5 mm from the bottom of the recess.