

Plumbing & Heating System Testing

Pressure testing of pipe systems is essential. However, a successful pressure test using the following steps is not a guarantee of complete and correct installation and only ensures that pipes have been inserted into fittings passed both the 'O' ring and the grab ring. If pipes are scored or scratched during the installation process this could lead to weeps which may not be highlighted with a high-pressure test alone.

First Fix Installations

1. Pipe and fittings only should be tested, any parts of the system not designed to take these pressures should be isolated from the test.
2. The system should be completely filled using water at an ambient temperature, ensuring all air is expelled from the system.
3. Pressure testing should be carried out as follows:
4. A low-pressure test of 1bar should be applied for 30 minutes, the system should be inspected for leaks whilst the pressure is applied.
5. If the test is successful and no leaks are present this should be followed by:
6. A high-pressure test of 18bar for 30 minutes, the system should be inspected for leaks whilst the pressure is applied.
7. Joint security can be checked visually and by tugging at joints or using the In-Cert[®] feedback technology on PolyPlumb[®] Enhanced fittings to confirm the pipe is fully inserted.

Second Fix Installations

Complete installations including appliances should be tested with water to the maximum test pressure allowed by manufacturers of the appliances and fittings.

Underfloor Heating System Testing

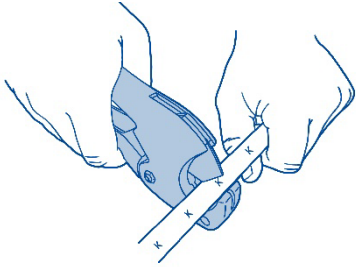
Underfloor heating pipework should be pressurised to 6 bar for 1 hour to check the integrity of the system before laying any screed or finished floor coverings, this can then be reduced to 3 bar while floor coverings are being installed. For further information consult the Polypipe Plumbing & Heating Installation Guide.

Pressure Testing in Sub-Zero Temperatures

Special precautions are necessary if the pressure testing is to take place in sub-zero temperatures. This applies particularly in underfloor central heating systems using the screeded floor system where most of the pipe is encased in concrete. Due to the contact between pipe and floor panel on screeded installations, where the screed does not completely surround the pipe, there may be points where strain is created on the pipe in freezing conditions which is not normally present. Therefore, it is advisable to drain the underfloor central heating system once testing and screeding has been completed. Precautions should also be taken where installations contain large quantities of fittings which, due to the rigidity of their construction, may put undue pressure on the pipe.

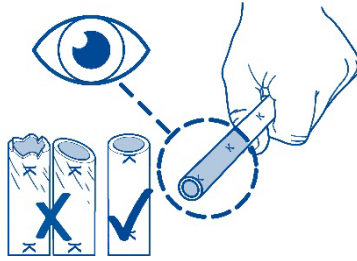
Please note, due to Health and Safety reasons Polypipe products must not be air tested.

Joining Instructions for PolyPlumb® Enhanced



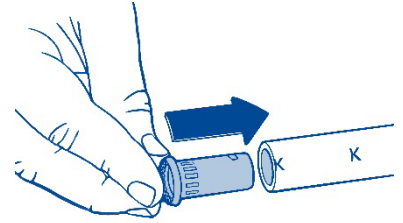
Step 1:

Cut the Polypipe Pro-Straight® pipe to your desired length at the centre of the 'K' mark, ensuring your cut is straight.



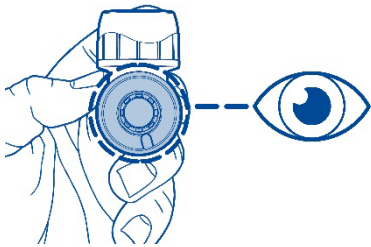
Step 2:

Visually check the cut of the pipe to ensure there is no obvious damage and that the cut is straight.



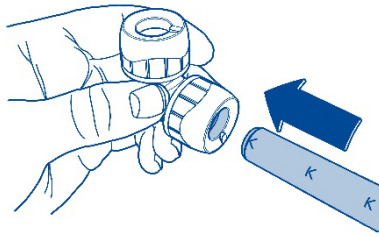
Step 3:

Insert the correct IN-Cert® Pipe Stiffener into the pipe, pushing in firmly to ensure the pipe end is seated against the lip of the stiffener.



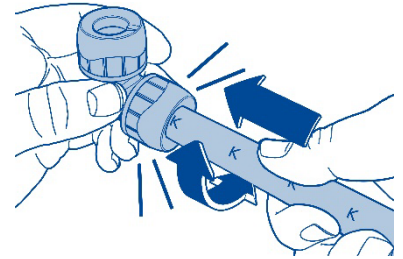
Step 4:

Visually inspect the fitting, making sure the grab ring and seals are all in place and that there is no debris present.



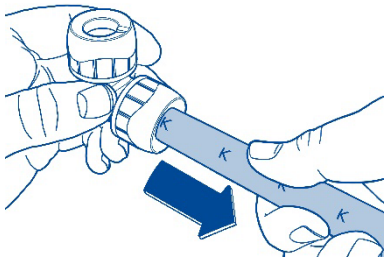
Step 5:

Insert the pipe end with the stiffener into the fitting, pushing in firmly to the next 'K' mark from the cut made in step 1.



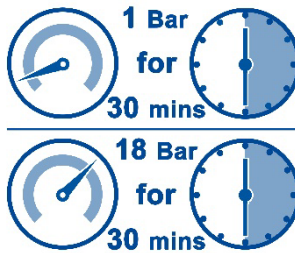
Step 6:

The haptic click of the In-Cert® technology gives real confidence the joint has been made; just push the pipe home, twist and you know the jobs done



Step 7:

Once you're happy that you can feel a rumble and the pipe is inserted correctly, give the pipe a tug to activate the grab ring.



Step 8:

Pressure test the join/system at 1 bar for 30 minutes then 18 bar for 30 minutes, ensuring there is no leaks present.



Step 9:

DO NOT rejoin the fitting once disassembled.