



## Well connected

We asked John McLoughlin, heating and plumbing engineer to try out and review for HPM readers the 'new to the market' product Just-for-Copper, solderless bonding...

Copper tube, plastic tube, end lead or soldering fittings, push fit or compression fittings and more besides, so who uses what? The answer is most are used by most plumbers from time to time, some more than others. Here's another solution.

'Just-for-Copper' is a WRAS approved, solderless, non-toxic copper bonding. Claimed to be an easy to use, permanent cold weld for installing and repairing rigid copper pipe in hot and cold drinking water and heating applications. It is unsuitable for gas carrying copper pipe work and is not for use with soft copper.

### The 'test'

Okay, let's give 'Just-for-Copper' a go, following the instructions, clean the pipe exterior and fitting interior using 60 grit sandpaper (supplied). I used a Monogram pipe cutter for a square, non-pinched tube end and a Monogram pipe and bore cleaner; then used the sandpaper, it'll last longer! Shake the bottle and apply a thin bead around the entire beading edge of the inner diameter of the copper fitting and using a wavy pattern, the leading edge of the outer diameter of the copper pipe.

There is no panic, you have several minutes to make the joint but once the joint is started you have 5

seconds to fully insert the pipe into the fitting and twist through 360 degrees (the pipe not you). The weld is set in 10 seconds, fully bonded in 45 seconds and ready for the next joint after 1 minute.

After 7 minutes the joint will withstand 200 p.s.i. (13.8 bar) allowing pressure tests to be conducted or the water turned on within 10 minutes. After 24 hours it will withstand 500 p.s.i. (34.5 bar) and has been tested up to over 2000 p.s.i. (130 bar) without failing! Shelf life is 3 years; once opened, 12 months. So who will use 'Just-for-Copper'? Most of us will from time to time, some more than others.



We asked a couple of other HPM regulars for their thoughts too - here's what they said...



Calvin Borden

"After using the 'Just for Copper' bonding solution under a sink, I found that it was ideal for this type of situation as it gives you more flexibility in awkward spaces.

"However, if you use the bonding solution on a job and then another plumber comes along a year or two later, it could be more difficult for them to see where the joint has been made.

"Also once you have put a thin layer around the edge of the copper fitting, and inserted the pipe, you have to ensure that you quickly smooth and wipe off the excess solution before it sets.

"It is also ideal for those who do not want to use a flame when soldering a joint."



Dale Wallace

"My first impression was that it was an impressive product, but I was a bit concerned when I read the label which said that it can't be used on gas! From that, my thoughts are that perhaps it is more

suited to the DIY market.

"I initially tested it on pipes and found that once you had used the solution, you had to wait for it to dry, or move on to the next job and come back to it.

"I did try to pull it a part and it wouldn't budge. I had to really give it a bit of stick before I saw any movement.

"I can't ever see it replacing soldering but it may have a role."