

EDITION .01

WaterPex INSTALLATION PROCEDURE

For WaterPex Multilayer Pex/Al/PeX
with Double Leak Detection Fittings



If it's Couta... It's the Best!



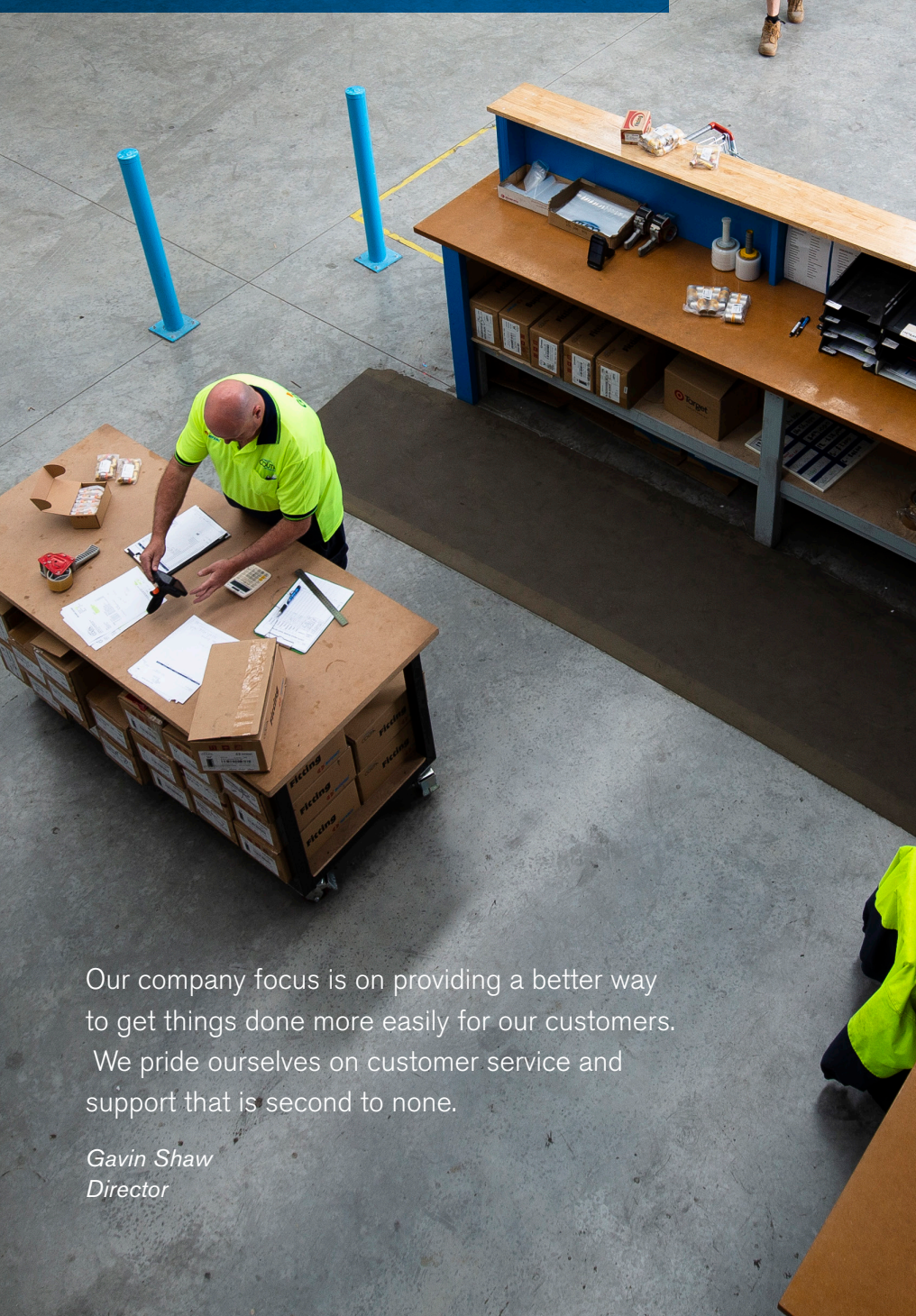


Our job is to make your job easier.

Installation Procedure for Waterpex Multilayer PeX/Al/PeX with Double Leak Detection Fittings

Contents

1. Cutting of the pipe
2. Bending of the pipe
3. Reaming of the pipe
4. Insertion of the pipe onto the fitting
5. Crimping of the fitting
6. Inspection of the crimp
7. Testing
8. Installation faults
9. Common installation faults that lead to leakage and failure of joints



Our company focus is on providing a better way to get things done more easily for our customers.

We pride ourselves on customer service and support that is second to none.

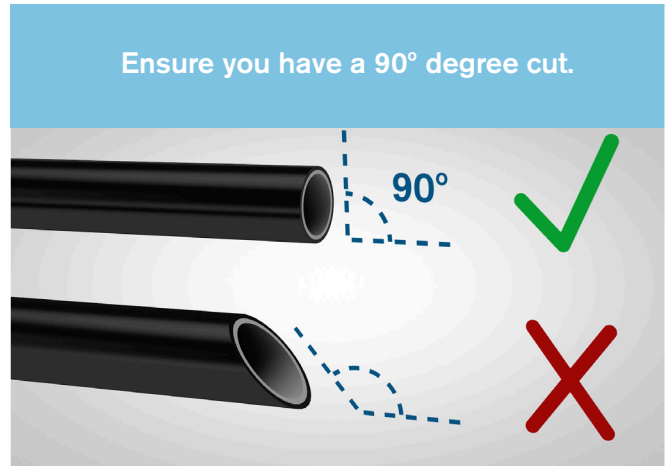
Gavin Shaw
Director

Step 1. Cutting of pipe

Use your pipe cutting tool to cut the pipe to your desired length.

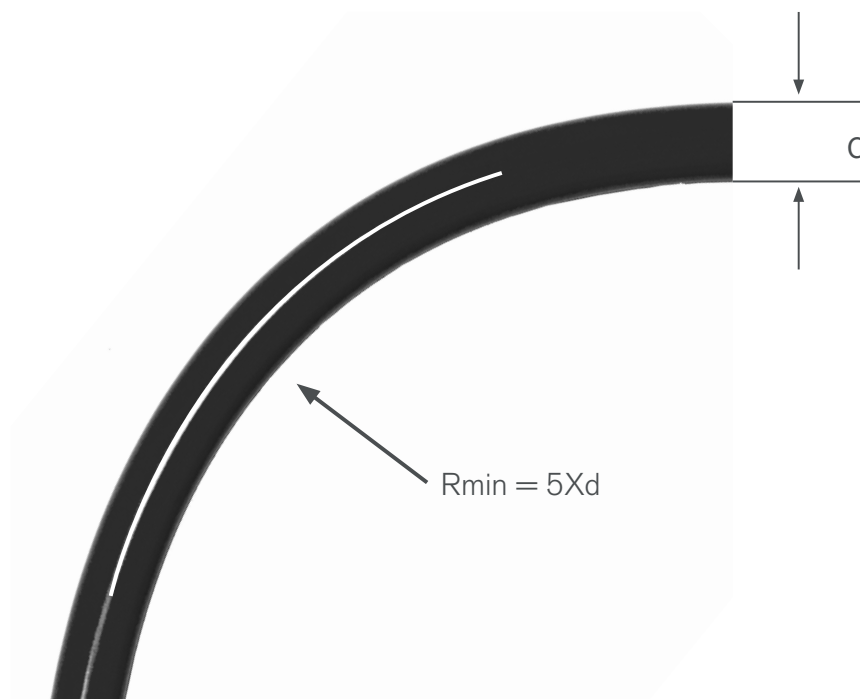


Ensure you have a 90° degree cut.



Step 2. Bending of the pipe

When bending the pipe the minimum bending radius is $5 \times D$ where D is the nominal outside diameter of the pipe. Bending may be accomplished by hand with an internal or external bending spring or a copper tube bender.



Step 3. Reaming of the pipe

The plastic and metal reamers perform 2 functions. The first function of the reaming tool is to round the pipe. The 2nd function of the reaming tool is to bevel the leading edge of the pipe to prevent damage to and rolling of the o-rings when the pipe is pushed on to the fitting.

To ream pipe correctly, push the reamer fully in to the pipe rotating it as it is inserted. Rotate the reamer at least 2 full turns to bevel the edge and then continue to turn the reamer as it is withdrawn from the pipe. When correctly reamed, the pipe will look as pictured left.



Triangular plastic reamer



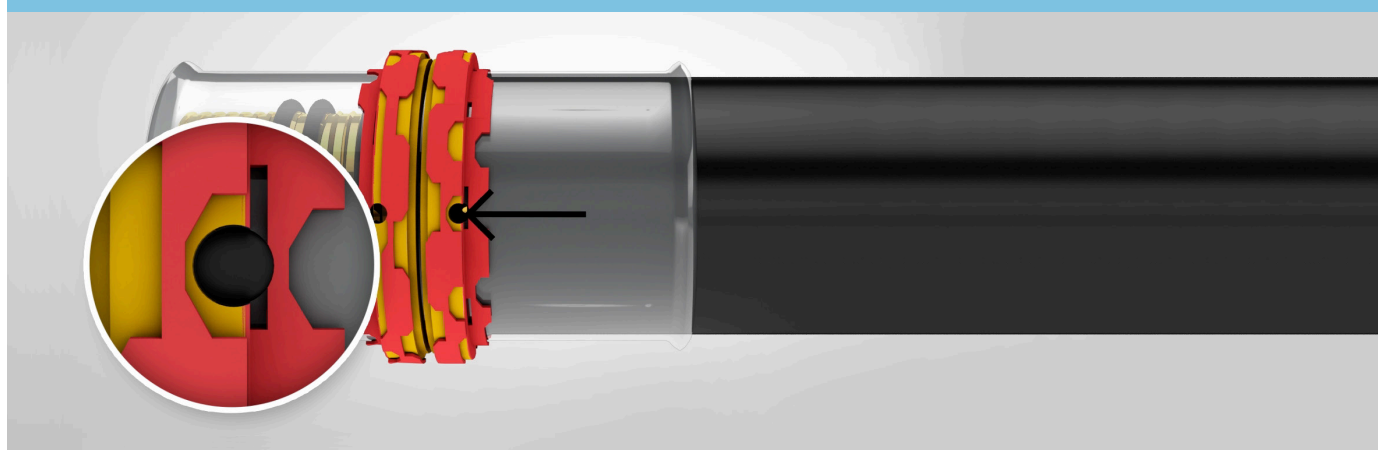
Metal Drill Reamer

There are 2 types of reamers available. A plastic reamer as shown to the left or metal reamer shown below. The advantage of the metal reamer is the handle can be removed and it can be put in a drill for ease of use.



Step 4. Insertion of the pipe onto the fitting

Push the pipe fully over the fittings so that it can be seen in the witness holes.



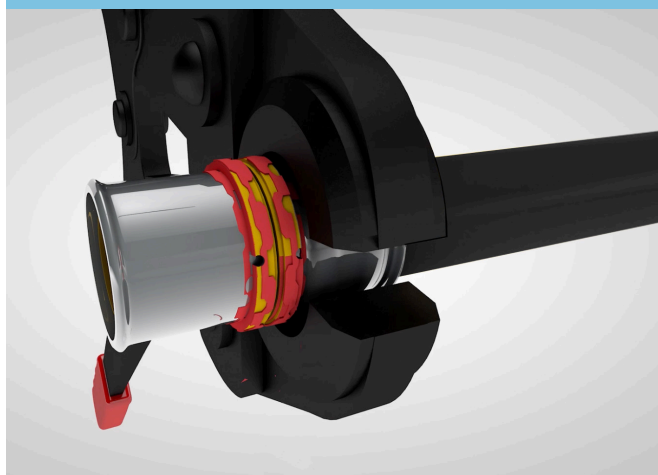
Step 5. Crimping of fitting

The Leak detect system requires a specific and unique pressing tong. The tong has the letters LD stamped on the face followed by the OD of the pipe that is to be used with. E.g. LD 20 - this is the tong for 20mm Leak detection fittings.

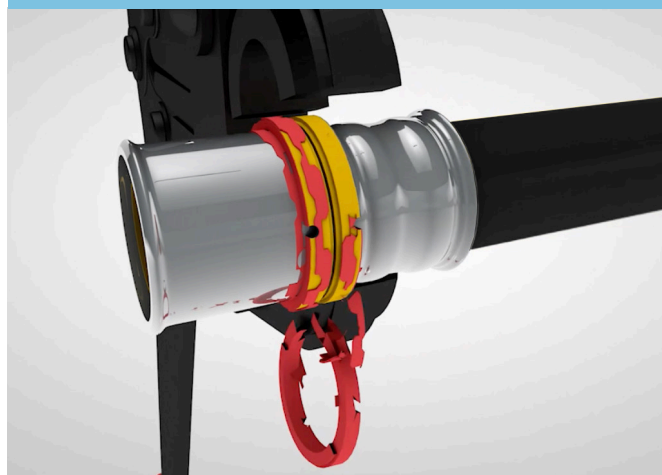


Ensure you are using the correct LD profile tong to crimp Leak Detection fittings as pictured.

Place the tong hard up against the isolating ring and OVER the pink indicator before proceeding to crimp.



Complete the crimp by closing the tong. Open the tong and the pink indicator will break apart showing that the crimp has been completed. You only need to crimp once.

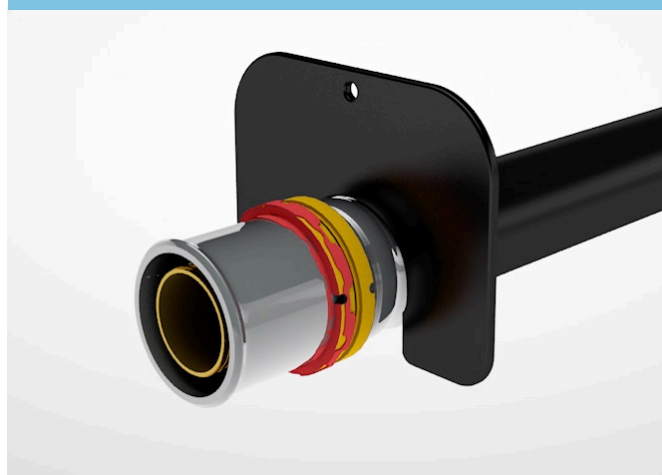


Step 6. Inspecting of the crimp

A successful crimp is when the pipe is visible in the witness holes, the pink indicator has broken away and you have 3 crimp lines as shown in the photo.



Check the crimp with the gauging tool. The gauging tool should slide over the crimp and rotate without force. If this does not occur, the crimped joint has been insufficiently crimped and the tool may need calibrating. Check correct calibration of the tool after the first crimp and after 60 crimps or at the start of each day.



Step 7. Testing

Visually check the installation and then pressure test the WaterPex systems as per AS/NZS 3500 Plumbing & Drainage-Housing installation code. This specifies a test pressure of 1500 kpa for 30 minutes with no pressure drop observed.

It is recommended that you use the SafeGuard testing system for your hydrostatic testing needs. Safeguard is a hydrostatic testing solution that provides a digital records of all tests and demonstrates that the job has been tested and conforms to requirements.

Step 8. Installation faults

If the pipe is not reamed and beveled you will damage/and or roll the O rings when you push the pipe on to the fitting.

This will result in leakage of the joint.



If the pipe isn't cut at 90 degrees then you will be unable to ream the pipe correctly.

This will then result in the o-rings being damaged when you push the pipe on to the fitting.

Damaged o-rings will cause leakage of the joint.



Pink indicator can build up in the jaws. You need to regularly clean the jaws to prevent a pinched crimp.



Step 8 Installation faults

Crimp pinching occurs when the jaws has not been kept clean of the pink indicator. Water will leak through the pinched area.



Crimp pinching can also occur when the tong has not been placed evenly on the sleeve. Water will leak through the pinched area.



Step 8. Installation faults

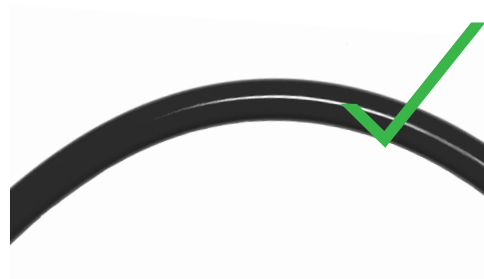
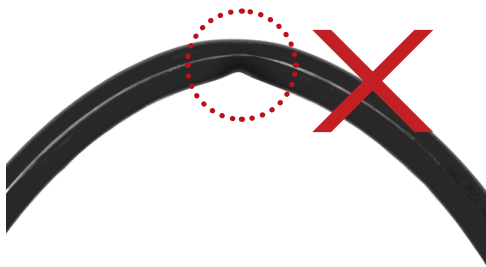
If the pipe is not visible through the witness holes this will likely result in leakage and/or total failure of the joint over time.



The pink indicator has not broken away after crimping which indicates that the tong has not been placed over the indicator ring during crimping. This will likely result in leakage and/ or total failure of the joint over time.



If you kink the pipe while bending you must cut it out.



Step 9. Common installation faults that lead to leakage and failure of joints

Pipe not cut at 90 Deg.

Pipe not reamed correctly.

Pipe not inserted all the way onto the fitting and is not visible in the witness holes.

Tong has not been placed correctly over the pink indicator before crimping.

Tool not calibrated.

Jaws not cleaned regularly.

No visual check of fittings and not pressure tested.

