



TradePex[®]
LIGHTNING

Installation & Technical Guide

Quick. Easy. Safe.

For more info visit tradeplex.com.au

2022 



Table of contents

- 3 Important safety information**
- 3 About Lightning Lead Free system**
- 4 Making a TradePex Lightning connection**
- 5 Minimum distance between fittings**
- 5 Below ground installation**
- 6 Pressure testing & purging of drinking water pipes**
- 6 Advantages**
- 7 Disclaimer**

Important safety information

To reduce the risk of injury, read and understand this piping systems installation and technical guide before beginning any work. Read all product safety warnings and operator's manuals for the Milwaukee® Tool M12™, M18™ battery expander tool, PEX pipe cutters and other installation tools to operate those tools safely and correctly. Always wear safety goggles or safety glasses and approved ear protection when performing work.

TradePex Lightning Lead Free

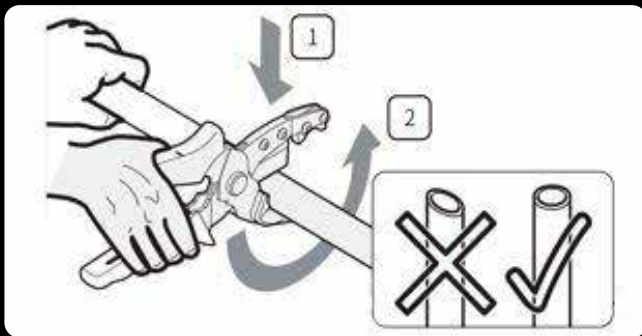
Here at TradePex, we believe that hassle-free plumbing shouldn't be a pipe dream. Combining fit-out versatility with durability, our new system will make your job easier without compromising on quality. Featuring superior materials with extra options, our PEX stands above the rest. Expand the pipe and the ring, then let Lightning do the rest. Take the stress and expense out of your next PEX installation with TradePex Lightning.



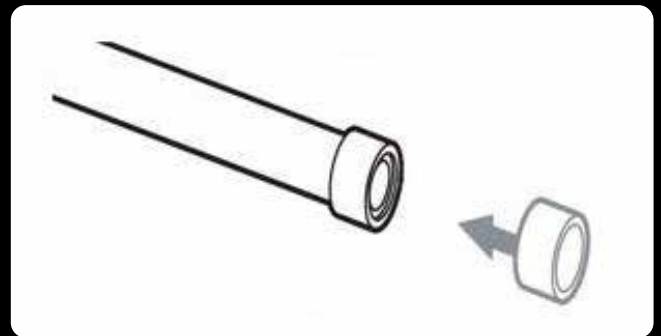
Important Installation Notes

Use only Milwaukee® expander heads. Using incorrectly sized expansion heads may result in faulty connections which could result in leaking and property damage. Milwaukee expansion head is designed to rotate during each expansion. This ensures no deep grooves on the inside of the pipe. Do not force the tool into the pipe. Improper lubrication (too much or too little) on the expansion cone and head may result in faulty connections which could result in leaking and property damage.

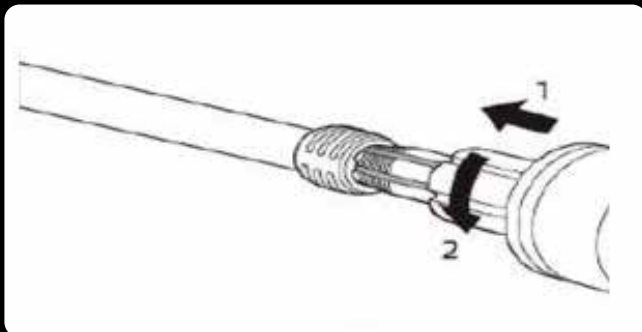
Making a TradePex Lightning Connection



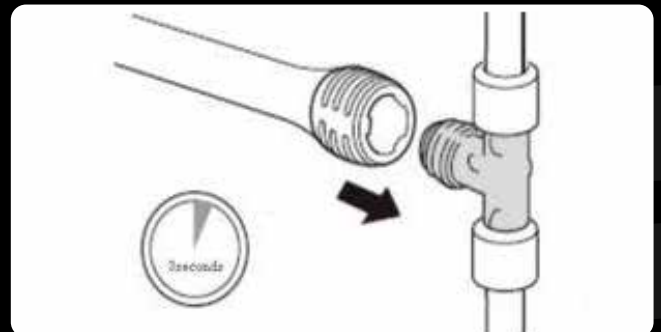
1. Square cut the PEX-a piping perpendicular to the length of the piping. Remove all excess material or burrs that might affect the fitting connection.



2. Push the PEX-a ring onto the pipe all the way to the stopper.



3. Push the Milwaukee® tool to the ring and start the expanding process, expansions will depend on the ambient temperature.



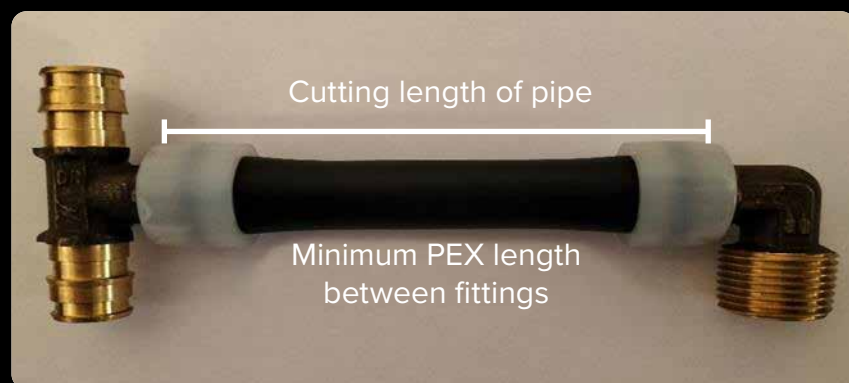
4. Insert expanded pipe and ring over fitting and hold for 3 seconds.

By using the thermo-elastic memory of the Pex-A material, the pipe and ring constantly apply increasing pressure against the fitting surface to guarantee a safe and strong sealing performance for both cold and hot water. The product composition of Pex-A is such that once expanded, the molecular structure will always return to its original form, thereby creating a joint that continues to increase in strength over time.

TradePex pipe offer the following benefits:

- Corrosion resistance
- Acoustic insulation, offering minimal noise caused by water transfer
- Pipe flexibility resulting in minimal noise associated with water hammer PEX-A pipes have outstanding memory properties adding to installation efficiency
- No build-up of lime or scale in the bore of the pipe
- Strong material, with superior performance against abrasion and impact.

Minimum distance between fittings



Pipe size	Minimum cut length of pipe
16mm	51mm
20mm	64mm
25mm	76mm
32mm	89mm
40mm	114mm

Below ground installation

All TradePex piping systems are approved to be buried directly into the ground if the following criteria is met:

1. Lightning Fittings are made of DZR lead free Brass but advise that they be wrapped in a waterproof material for added protection.
2. Care to be taken during the backfilling process that no sharp objects are placed on or around the pipe.
3. Recorded testing to take place prior to backfilling.

Pressure Testing & Purging Of Drinking Water Pipes Pressure Test & Flushing

Systems should be visually inspected to ensure that all Joints have been pushed to the stopper on the fitting. Testing to be completed 30 minutes after the last expanded ring fitting.

Flushing of the system should occur prior to and after pressure testing. Installers must comply with AS/NZS 3500 requirements. With initial pressurisation care must be taken to avoid air pockets. This usually entails releasing air from the furthest point of the system when first pressurised. All pressure testing must be conducted in accordance with the AS/NZS 3500. The successful execution and documentation of a pressure test that complies with AS/NZS 3500 and these guidelines is a prerequisite for any warranty claims from TradePex. WATER PRESSURE TESTING Water services shall not show any leakage when subjected to a hydrostatic pressure of 1500 kPa for a period of not less than 30 min. The test shall be performed on installed piping prior to burial or concealment. It should be noted that when a pressure test is carried out, it may be necessary to disconnect and cap the water service to isolate it from the water main, fixtures and appliances, which may be damaged by the test pressure applied. Further, fire services are subject to individual testing by some network utility operator at a higher pressure and for varied periods of time. Please refer to AS3500 for further details. After completion of the test, complete the TradePex pressure test form which is available at tradeplex.com.au

Advantages

Better Water Flow

Bigger internal bore of the fittings ensures better waterflow minimising pressure drop

Easier Installation

Using only one tool saves up to 30% on installation time. Compatible with both SDR 7.4 and SDR 9 Pex-A pipes

Safer Joint

Both the pipe and the expansion ring create permanent pressure on the joint that increase pressure over time

Healthier

DZR Lead Free Brass
Lead content below 0.2%



Disclaimer

Our verbal and written advice relating to technical applications is based on experience and, is to the best of our knowledge, correct but is given without obligation. The use of TradePex products in conditions that are beyond our control or for applications other than those specified releases us from any obligation in regard to claims made in respect of the products. We recommend that the suitability of any TradePex product for the intended application should be checked. Use and processing of our products are beyond our control and are, therefore, exclusively your responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you. Our warranty assumes consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale.