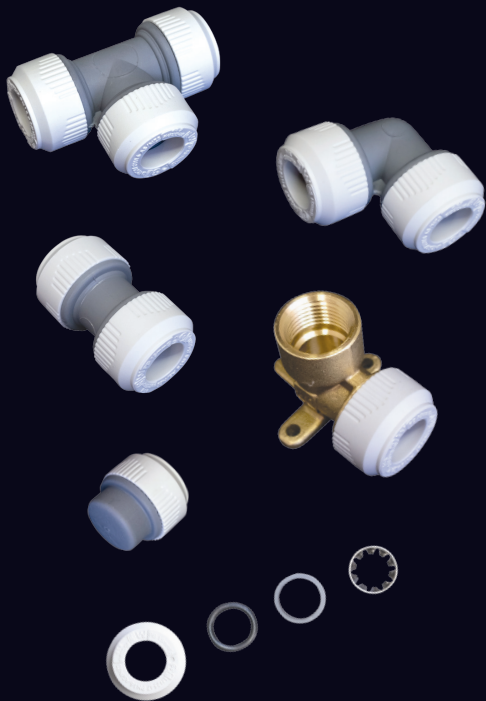


poly-T

INSTALLATION INSTRUCTIONS



Available at
BUNNINGS
warehouse

JOINTING PROCEDURE



1) Cut the pipe at a right angle using a recommended cutter at one of the indicator lines on the pipe or mark pipe at correct insertion depth. Do not use a hacksaw. Rotate pipe while cutting. Ensure pipe is clean and free from burrs and surface damage.



2) After removing any burrs, insert a support sleeve (metal insert, purchased separately to fitting) fully into the end of the pipe.



3) Hold the fitting horizontally to the pipe and push the pipe firmly into the fitting. The connection is complete when the socket of the fitting has reached the next pipe indicator line. Do not undo the retaining cap.



4) Test the connection by holding the fitting and pulling back on the pipe. The fitting is pre-lubricated and will be able to rotate freely around the pipe. This feature allows you to position the fitting to best suit the pipe.

DISMANTLING PROCEDURE



1) Unscrew the retaining cap from the fitting and pull out the pipe.



2) The grab ring, spacer washer and O-ring will be in position on the pipe. Slide the O-ring and spacer washer down the pipe and away from the grab ring.



3) Use pliers to flatten the teeth of the grab ring and remove. The spacer washer, O-ring and retaining cap can then be removed from the pipe.



4) Re-assemble the fitting by inserting a new grab ring together with the spacer washer and O-ring. Hand tighten the retaining cap. Check the end of the pipe for damage and re-cut if necessary.



Push-Fit Equal Tees
VT16 - 16mm x 16mm x 16mm
VT20 - 20mm x 20mm x 20mm



Push-Fit Reducing Tee
VTR221 - 20mm x 20mm x 16mm



Push-Fit Female Swivel
VF16 - 16mm x 1/2" BSPT



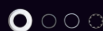
Push-Fit Inline Couplings
VS16 - 16mm x 16mm
VS20 - 20mm x 20mm



Push-Fit Reducing Coupling
VS2016 - 20mm x 16mm



Push-Fit Brass Male Adaptors
VM16B - 16mm x 1/2" BSPT
VM20B - 20mm x 3/4" BSPT



Push-Fit Copper Adaptor Set
VCA16 - 1/2"



Push-Fit Equal Elbows
VE16 - 16mm x 16mm
VE20 - 20mm x 20mm

POLY-FIT PRODUCT CHART



Push-Fit Brass Fixed Female Swivels
VFF16B - 16mm x 1/2" BSPT
VFF20B - 20mm x 3/4" BSPT



Push-Fit Female Swivel Elbow
VFE16 - 16mm x 1/2" BSPT



Push-Fit Brass Female Wing Back Elbow
VWE16B - 16mm x 1/2" BSPT



Push-Fit Pipe End Plugs
VPG16 - 16mm
VPG20 - 20mm



Push-Fit Pipe Inserts
VI16 - 16mm [5 pack]
VI20 - 20mm [5 pack]



Push-Fit Grab Rings
VGR16 - 16mm [5 pack]
VGR20 - 20mm [5 pack]

STORAGE AND HANDLING

- (a) Store fittings so that they cannot be damaged by heavy tools, etc. It is a good idea to have a tool box to carry the range of fittings available.
- (b) Take care to keep the Poly-Fit fittings and any uninstalled PB pipe away from chemicals, solvents, cements, oxidising agents or petroleum products.
- (c) Store the Poly-Fit system away from direct sunlight and high temperature sources (e.g: heaters, boilers, gas / central heating / appliance vents).
- (d) Avoid dragging pipe across rough surfaces to prevent possible damage to pipe surface.

LAYING INTO CONCRETE & MASONRY

Poly-Fit fittings and PB pipe can be laid into concrete and masonry provided that they are installed into junction boxes and conduit pipe to ensure access should the need arise to carry out any maintenance. Insulation is also recommended to protect against frost and heat loss.

UV EXPOSURE

The Poly-Fit System and PB pipe should be adequately protected against exposure to direct sunlight when located (either vertically or horizontally) on the exterior of a building, either using pipe sleeving, lagging or water-based paint.

BENDING RADIUS

Polybutene-1 pipe should be installed ensuring any bending radius is at least 10 times the outside diameter of the pipe.

Sharp bends should be made with appropriate fittings.

Pipe Size	Minimum Bending Radius
15mm (O.D. 16mm) (Type 18 PN 16)	160mm
20mm (O.D. 22mm) (Type 22 PN 16)	220mm
25mm (O.D. 28mm) (Type 28 PN 16)	280mm

PIPE CLIPPING

- (a) Remember that PB Pipe is flexible but must not be "anchored tightly" between two points.
- (b) Pipes unsupported by clips are unsightly and can be damaged.

Maximum Spacing of Clips (metres)		
PB-1 Pipe	Horizontal or graded pipes	Vertical pipes
15mm (Type 18)	0.60	1.2
20mm (Type 22)	0.70	1.4
25mm (Type 28)	0.75	1.5

CONNECTING TO A HEATING APPLIANCE

When connecting to any heating appliance you must ensure that at least 1 metre of copper pipe is firstly connected to the heating appliance on both the flow out and the return before connecting to PB pipe.

SOLAR HOT WATER

As solar hot water systems are an uncontrolled heat source, temperatures over 80°C are frequently experienced, therefore the Poly-Fit Plumbing System must be installed in a manner to protect the system from excessive temperatures.

- (a) The Poly-Fit Plumbing System is able to be connected to a solar heated storage cylinder outlet provided it is connected after an approved solar tempering valve only.
- (b) Individual tempering valves are then fitted as required to control water supply temperature to the wet areas in accordance with AS/NZS 3500 Part 4.2.
- (c) Do not use Polybutene pipe for solar heater-to-cylinder plumbing.

RECIRCULATED HOT WATER SYSTEMS

It is not recommended to use the Poly-Fit Plumbing System on recirculated hot water systems.

FREEZING CONDITIONS

PB pipe is the best choice for water reticulation in climates where freezing conditions are possible.

Due to its flexible nature, PB pipe will absorb the expansion of frozen water within itself and will absorb the additional expansion created by the water freezing inside a rigid fitting and expanding into the pipe, without splitting.

Minimise possible problems by taking the following precautions:

- Make sure that any metal pipe to PB pipe joints are made in a non-freezing area.
- Ensure 150mm between fittings so that ice expansion from a rigid pipe or joints can be absorbed by the PB pipe.
- Bury PB pipe where practical.
- Insulate PB pipe heavily where freezing conditions may prevail.
- Avoid placing PB pipework within 'polar-facing' walls, where practical.

WORKING PRESSURE

As stipulated in ISO 10508, the lifetime of Polybutene-1 pipe is 50 years and longer according to permissible working pressure / temperature.

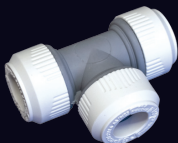
PN 16 PB-1 Pipe		
Temperature	Pressure	
20 °C	1600 kPa	232 P.S.I.
40 °C	1370 kPa	198 P.S.I.
60 °C	1050 kPa	152 P.S.I.
70 °C	880 kPa	128 P.S.I.
80 °C	740 kPa	108 P.S.I.

NOTE: These pressure / temperature combinations are maximum and should not be exceeded.

POLY-FIT

12 months Guarantee

Poly-Fit warranties our fittings for 12 months from the date of manufacture against defects in manufacturing, provided the installation is carried out by a licensed plumber in accordance with this guide and complies with local and national plumbing regulations.



***For technical assistance,
please call 0800 288 354 or email tech@poly-fit.co.nz***