

Purmo Pipe and Fittings

Fitting Instructions

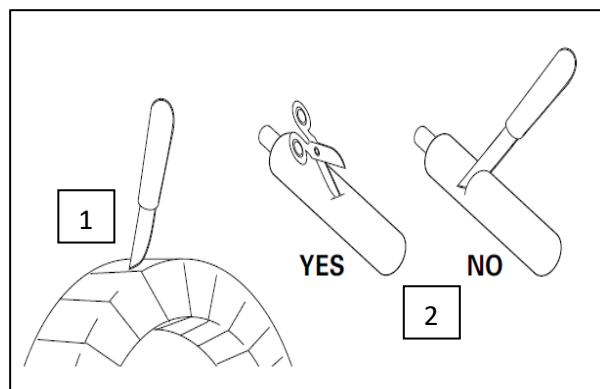
Installation and Storage Conditions

All installation operations must be carried out at temperatures above 0 °C and below 45 °C to avoid any possible damage to the materials.

In case of temperatures below 0 °C, store the materials (pipes and fittings) at a higher temperature before use.

Removal of packaging from the pipe

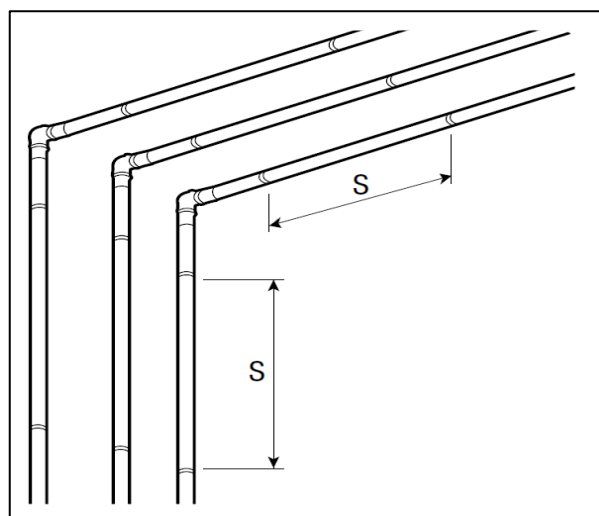
1. Pay attention not to damage the pipe when removing the packaging tape from the roll.
2. For insulated pipe, make sure you do not cut into the pipe when removing sections of the insulating sheath.



Surface mounted installation

For surface mounted installations, in false ceilings, in the gaps of dry wall systems (e.g. plasterboard) and in shafts, the pipes must be adequately secured with suitable fixings, placed at a distance of no more than the value shown in the table below. Maximum distance "S" for bracketing surface mounted pipes:

Pipe Dimension	Maximum Distance (S) for bracketing (cm)
16 x 2	100
20 x 2	125
26 x 3	150

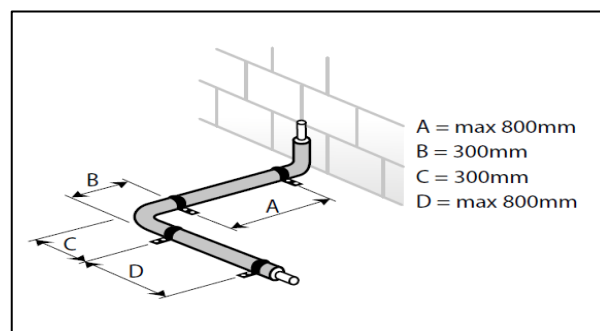


Embedded installation

For embedded installations, the pipes must be suitably secured with fixings and there must be a maximum distance of 80cm between fixings on straight lengths and placed 30 cm before and after each bend.

For this type of installation, it is preferable to lay insulated pipe that has a foam sheath covering or to pass the pipe through flexible tubing.

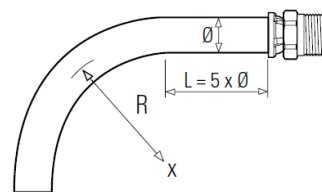
Press fittings: where these are embedded, the press fittings must be protected from corrosion that can result from contact with chemicals contained in plasters and mortars.



Minimum radius of bends

The bending of pipes must be carried out in accordance with the minimum values provided by the following table. Any fittings must be placed a minimum of 5 x Ø from the start of the bend.

Pipe Dimension	Maximum Radius of bend R	Minimum radius of bend R with hydraulic bender
16 x 2	5 x Ø	3 x Ø
20 x 2	5 x Ø	3 x Ø
26 x 3	8 x Ø	4 x Ø



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Pipe Preparation

Cutting

Cut the multilayer pipe with a pipe cutter or shears, verifying that the cut is perpendicular to the pipe axis. (Fig. A and B)

Calibration and deburring

Calibrate the cut end using the relevant calibrator, which calibrates and deburrs the ends of the pipe (Fig. C).

This operation is essential, as it ensures the correct internal diameter of the pipe and creates the chamfered internal edge that eases insertion of the fitting to prevent damage to the O-Ring seals.

Press fittings

Insertion of the fitting

Insert the fitting into the pipe fully home; the sight hole in the plastic ring ensures correct insertion can be seen (Fig. D).

Pressing with TH Profile Jaws

Place the TH Profile jaws around the black plastic ring (Fig. E) by matching the collar of the plastic ring with the groove of the jaws (Fig. F). Start the hydraulic press-fitting tool until it clicks, signalling the completion of the press-fitting operation (Fig. G). The operation must be done carefully so that the pipes are kept free of any tension. Once the fitting has been pressed, avoid placing the joint under any tension.

Completion of pressing

Open the jaws and remove the pressing device.

Compression Fitting Adapters

Purmo Multi-Layer Pipe can also be used with Purmo developed compression fittings to connect to 15, 22 and 28mm copper compression fittings, radiator valves and isolation valves.

Pipe Connection

Once the pipe has been prepared, as above, it should be inserted into the monoblocco fitting. Please ensure that pipe is aligned, then push onto fitting. Do not turn on insertion as this could potentially disturb or damage the double O-ring. (Fig. H) The pipe is clamped onto the brass insert of the fitting by the split olive when tightened onto the compression fitting as shown. Tighten the fitting by hand then tighten by a further $\frac{1}{2}$ - $\frac{3}{4}$ turn with a suitable spanner. Take care not to over tighten the fitting onto the compression connection as this could damage the O-ring seal on the face of the fitting.

Pressure Testing

The system should be pressure tested with water after installation to 1.5 times the working pressure.

Maximum pressure rating is 10 bar

Maximum temperature rating is 95°C

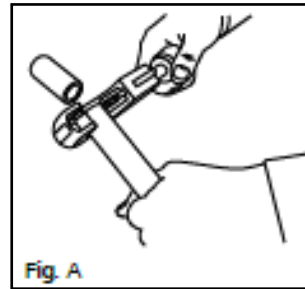


Fig. A

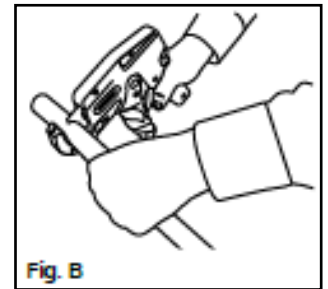


Fig. B

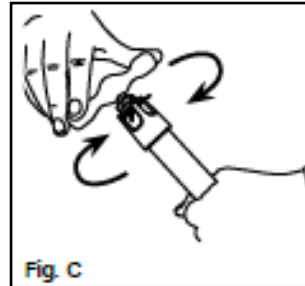


Fig. C

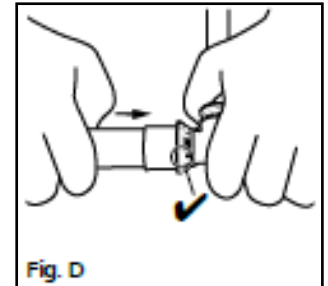


Fig. D

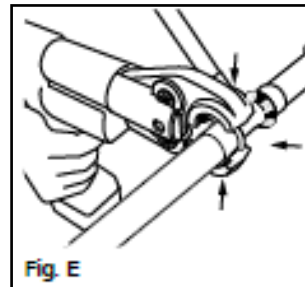


Fig. E

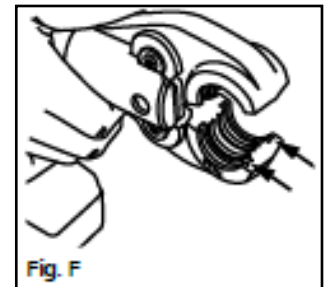


Fig. F

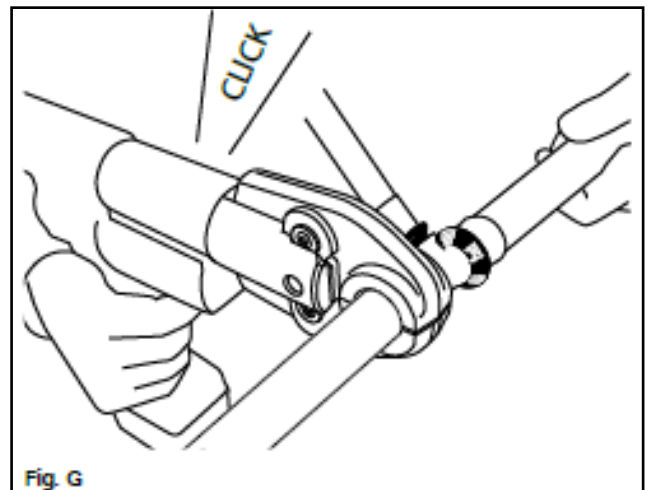


Fig. G

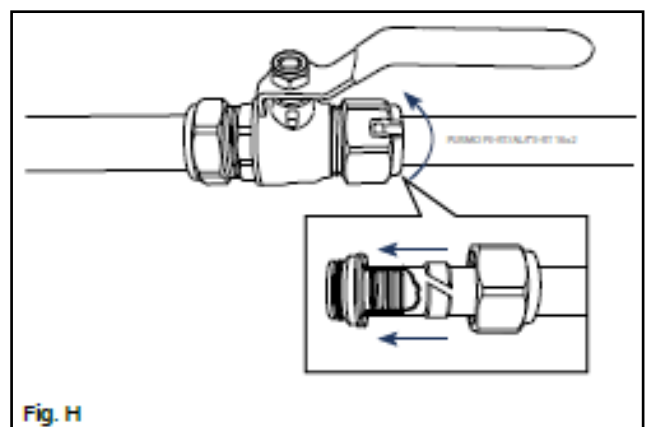


Fig. H