

simply Gluing & Joining PVC Plastic Pipes



Plastic plumbing looks easy to cut and join. There's more to an installation than meets the eye. Here are some tips for cutting and joining plastic pipes that will guarantee a longlasting, leakproof plumbing job.

TOOLS REQUIRED

Hacksaw
Tape Measure
Spirit Level
Cloth
Sandpaper 80grit

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MAKE SQUARE CUTS FOR THE STRONGEST JOINTS

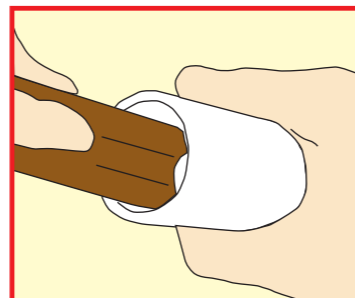
Square pipe ends fit snugly into the fittings, allowing plenty of contact area for the solvent cement to work. They also make a smoother interior surface for better water flow. A power mitre saw and other special tube cutters guarantee square cuts, but they are not really necessary. You can do the same job with just a handsaw and an improvised guide. The illustration shows an easy-to-use guide that's made by screwing together pieces of timber.

For the best results, use a saw with fine teeth and a blade that's 75 to 100mm wide. A hacksaw is a poor choice because the narrow blade tends to wander easily. Special saws for cutting plastic pipes are a worthwhile investment if you do much plumbing work. Should you not have these available, any finetooth saw will work.



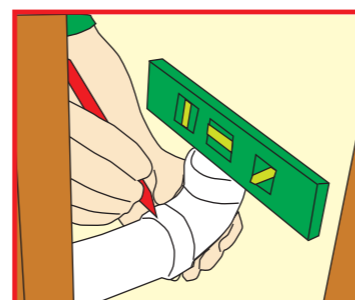
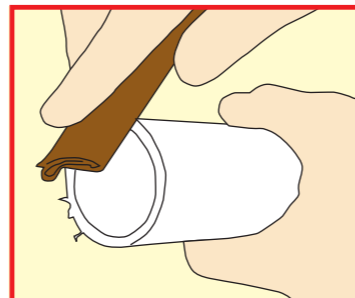
SAND OFF THE SAW BURRS FOR A BETTER FIT

Plastic burrs left from sawing can cause trouble. Outside the pipe they will interfere with a good fit. On the inside, they can collect debris and slow the water flow. Remove them with a file or pocketknife, but sandpaper is easier to use and works great. Simply roll a quarter sheet of 80grit sandpaper into a tube and flatten it slightly to match the curve of the pipe. Then hold the sandpaper at an angle and sand the inside and outside of the plastic pipe until you create slightly bevelled edges.



MARK THE PIPE AND FITTING FOR PRECISE ORIENTATION

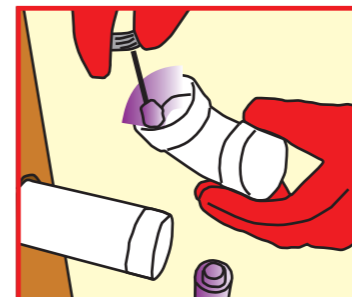
By the time you spread the solvent cement on both the pipe and the fitting and press them together, you have only several seconds to get the alignment right before the pieces are stuck together. It is good idea to make alignment marks beforehand on joints where orientation is critical. Dry-fit the pipe and fitting, using a torpedo level if needed to align the fitting, and make a mark across the fitting and pipe. Use these marks to align the fitting and pipe when you join them with solvent cement.



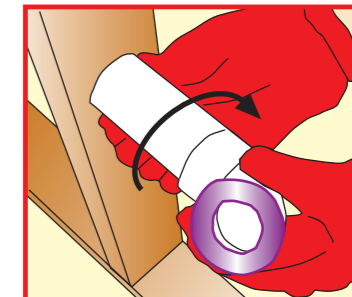
Caution

The solvent vapours from the cement can make you dizzy and are dangerous to your health. Make sure you have plenty of ventilation or wear an approved organic vapour respirator when working solvent cement.

Spread an even layer of solvent cement on the inside of the fitting and outside of the pipe.



Push the pipe into the fitting and twist until the marks are aligned. Press and hold the pipe for about 15 seconds.



WHAT IF I MAKE A MISTAKE?

With plastic pipes it is easy to correct a mistake. Simply cut out the messed up section, whether it's too long, too short or crooked. Correct the mistake and reassemble the joint with a coupling. In some cases, you can reuse the old section of pipe and fitting.

The assembled pieces do not reach the predrilled hole because we dry-fit the pipes and forget to allow extra length for "shrinkage".



Saw out the bad section. Fix the mistake, using new parts if necessary. Use a coupling to rejoin the parts. Cement the parts together.



ALLOW FOR SHRINKAGE IF YOU DRY-FIT THE PIPES

Most novice pipe-fitters find it reassuring to cut and assemble a group of pipes and fittings before gluing them together. It is okay to do this as long as you are aware of the pitfalls.

Do not jam the pipe and fitting together too tight. They will get stuck and can be difficult to get apart. If a fitting does get stuck, set a block of wood against the lip and pound the fitting loose with a hammer.

Leaving the fittings loose keeps them from getting stuck, but it creates another problem. You cannot assume that the final assembly will be the same size as the dry-fit parts. When you apply solvent cement to pipe and fitting and press them together, you will lose a little length at each joint. Keep this in mind if you dry-fit, and allow extra length where fit is crucial.

Another tip is to limit dry fitting to a small group of pipes and fittings. Join this group with solvent cement before moving to the next section.

USE THE PROPER SOLVENT FOR EACH TYPE OF PLASTIC

Read the label to match the solvent cement to the type of pipe you are using. If in doubt, ask your Build It retailer.

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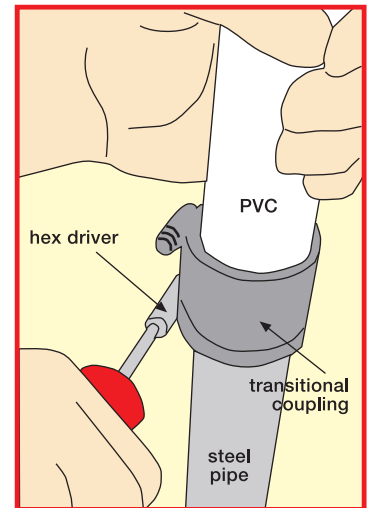
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USE SPECIAL TRANSITION COUPLINGS TO CONNECT DIFFERENT TYPES OF PIPES

Transition couplings have a flexible rubber sleeve surrounding by a metal sleeve and band clamps. They are handy for connecting plastic pipe to cast iron, copper or steel, especially if you cannot thread on an adapter. Each coupling is labeled with all the different types and sizes of pipes it can join. Read the label on the transition coupling to find out which pipe it joins. For the less common connections, contact or ask our plumbing department for advice.

Slide the pipe ends into the transition fitting. Turn the screws clockwise with a hex head driver to tighten the bands and seal the joint.



**SHOULD YOU HAVE ANY FURTHER QUESTIONS,
PLEASE DO NOT HESITATE TO CONTACT
YOUR LOCAL BUILDIT STORE.**

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