

C. Making the Joint

1. Cutting

Tube must be squarely cut to allow for the proper interfacing of the tube end and the fitting socket bottom. This can be accomplished with a miter box saw or wheel type cutter. Wheel type cutters are not generally recommended for larger diameters since they tend to flare the corner of the tube end. If this type of cutter is used, the flare on the end must be completely removed.

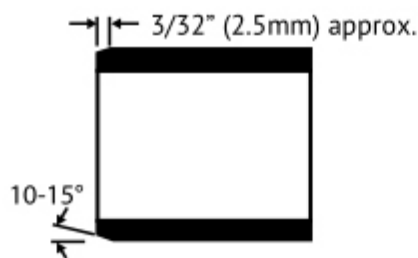
NOTE:

Power saws should be specifically designed to cut plastic tube.

2. Deburring

Use a knife, plastic tube deburring tool, or file to remove burrs from the end of small diameter tube. Be sure to remove all burrs from around the inside as well as the outside of the tube. A slight chamfer (bevel) of about 10°-15° should be added to the end to permit easier insertion of the tube into the fitting. Failure to chamfer the edge of the tube may remove cement from the fitting socket, causing the joint to leak.

For pressure tube systems of 2" and above, the tube must be end-treated with a 15° chamfer cut to a depth of approx. 3/32". Commercial power bevelers are recommended



3. Test Dry Fit of the Joint

Tapered fitting sockets are designed so that an interference fit should occur when the tube is inserted about 1/3 to 2/3 of the way into the socket. Occasionally, when tube and fitting dimensions are at the tolerance extremes, it will be possible to fully insert dry tube to the bottom of the fitting socket. When this happens, a sufficient quantity of cement must be applied to the joint to fill the gap between the tube and fitting. The gap must be filled to obtain a strong, leak-free joint.

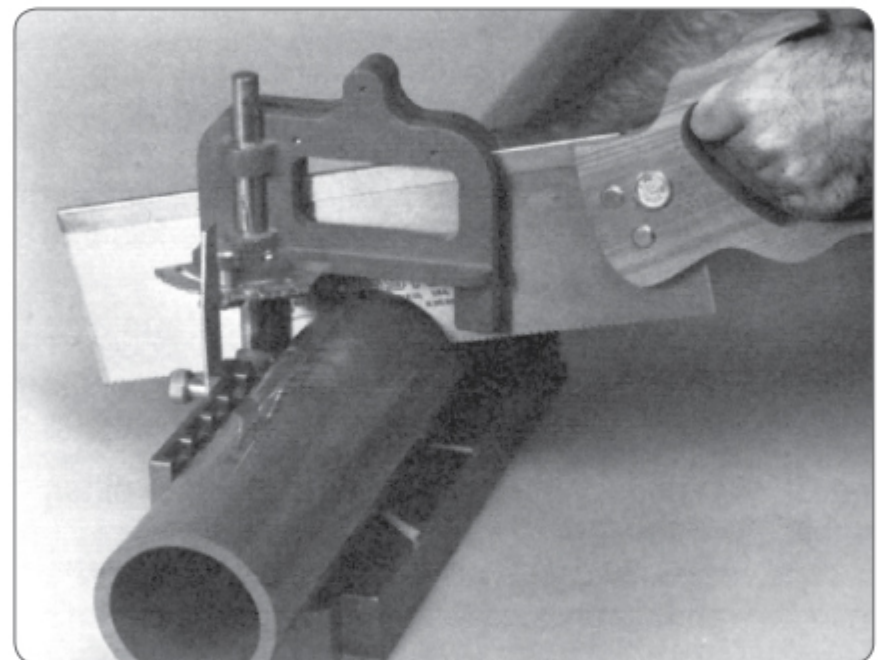
4. Inspection, Cleaning and Priming

Visually inspect the inside of the tube and fitting sockets and remove all dirt, grease or moisture with a clean dry rag. If wiping fails to clean the surfaces, a chemical cleaner must be used. Check for possible damage such as splits or cracks and replace if necessary.

5. Depth-Of-Entry Mark

Marking the depth of entry is a way to check if the tube has reached the bottom of the fitting socket in step #7. Measure the fitting socket depth and mark this distance on the tube O.D. You may want to add several inches to the distance and make a second mark as the primer and cement will most likely destroy your first one.

Apply primer to the surface of the tube and fitting socket with a natural bristle brush (see chart on page 7.21). This process softens and prepares the PVC or CPVC for the solvent cementing step. Move quickly without hesitation to the cementing procedure while surfaces are still wet with primer.



STEP 1



STEP 2



STEP 4