

SOLDERING WROT COPPER FITTINGS

1. Cut the tube square.
 - Before cutting, make sure the length is accurate. If the tube does not reach all of the way into the fitting socket, a good joint cannot be made.
 - Be careful not to damage or deform the tube when cutting.
2. Remove burrs on the cut end of the tube by reaming.
 - Be careful with annealed tube. Too much pressure can cause the tube to get out-of-round.
3. Clean the outside of the tube to the depth of the fitting with sand cloth or sand paper and the inside of the tube to the stop with a wire brush and sandpaper or sand cloth.
 - Oxides, oil, and surface soil can interfere with joining. Make sure to remove all dark spots.
 - Be careful not to remove too much material.
 - Be careful not to touch tube with bare hands after it has been cleaned.
4. Apply a light, uniform coat of soldering flux to the outside of the tube and the inside of the cup of the fitting. Use flux sparingly.
5. Slide the tube into the fitting, up to the tube stop. Twist the tube a few times to evenly distribute the flux.
6. Using a propane or butane torch, apply heat first to the bottom of the joint where the tube enters the fitting, then to the rest of the joint. Heat the joint evenly. When solder placed at the joint melts, the proper soldering temperature has been reached.
 - Be careful not to overheat the joint.
 - Do not direct flame into the face of the fitting cup.
7. Remove the torch and feed solder into the joint until a ring of solder appears at the end of the fitting.
8. Remove excess solder with a small brush or cloth.

