



SOLDERING & BRAZING

melts solder (soldering) or filler (brazing) to join two metals. Soldering is done with either a torch or an iron heated up to 450 degrees. Brazing utilizes a torch and is 450 degrees or above. The lower temperatures than welding results in weaker joints. Because of this, soldering is often used for electronics and brazing for light load bearing projects. The smaller detailed work done with soldering and brazing often finds the user close to the heat source. This can result in burns and inhalation of potentially hazardous fumes, i.e. from lead or rosin. As with any heat source there is potential of fire from contact with material in the area, including clothing. Follow best practices and manufacturer's guidelines.

EXAMPLE BEST PRACTICES:

- Practice good housekeeping of the area
- Wear all PPE! Wear natural fibers NOT synthetics
- Use fire bricks when working with torches
- Use proper ventilation for the material used
- Use flashback and backflow devices on torches
- Use clamps to hold filler or solder, if possible
- Use proper handling and storage of cylinders
- Switch to lead free solder and rosin free flux
- Wash hands after completing work
- Do not eat or drink in the work area
- Read the SDS for the solder and flux you are using.

WHAT TO DO!

- Speak to you supervisor to receive training.
- Follow best practices and manufacturer's guideline!
- Bring questions and injuries to your supervisor!
- Direct additional questions to EHS.
- If working outside of the designated hot work area, you may need a hot work permit. Contact uofm@uoregon.edu
- In an emergency, call **911** and **UOPD**(541-346-2919 for immediate assistance!



Practice good housekeeping in the work area!



Use proper ventilation for the materials used!



Never touch the flame or heated elements!

