Stained Glass Safety

Safety concerns to keep in mind when working with stained glass.

Step 1 — Overview

- It is important to take certain safety precautions when working with stained glass materials.
- You will be working with small sharp pieces of glass, solder that includes lead content, heating flux, and more.
- We recommend avoiding handing lead or flux if you are pregnant.
- Always wear eye protection when working with glass.

Step 2 — Lead Safety Precautions

- Solder is used to hold the pieces of glass together in one piece. Most commonly we use 60/40 Tin/Lead Solder wire. While it is possible to get lead-free solder, it melts at a much higher temperature and requires more practice.
- Lead can act as a neurotoxin that can build up in your system over time. It is important to practice safe lead handling from the start. Lead cannot be absorbed through the skin - only through ingestion or an open cut.
- Wash your hands thoroughly after handling any lead with Lead-Off Soap or Wipes. DLead, or other similar products can also work. These products are formulated to bond to the lead ions and wash them away.
- Do no eat or drink at the stained glass area. Do not touch your face or rub your eyes while working with lead. Wash your hands before you handle anything that you might put in your mouth. Bandage any open cuts on hands and fingers.
- Use only the slop-sink in the woodworking shop to clean glass or your hands after handling lead. Never use the kitchen sink.
- Use the marked and dedicated scrub brush and sponge found above the slop-sink for anything that is coming into contact with lead.
- The smoke that you see coming from the piece while soldering is not lead fumes, but rather flux fumes. We will talk about that next. Lead does not release fumes until it hits 900F, normally we are using a temperature under 410F.

Step 3 — Flux Safety Precautions

- Flux is a chemical agent that is used both to clean the metals and join the pieces. While solder fills the gaps between the pieces, flux removes the oxide layer so the solder can bond more readily and flow more easily.
- To avoid irritation to eyes and lungs always use flux in a well-ventilated area. Use a fan or fume extractor while working with flux.
- Avoid contact with skin. Wash off any flux that comes into contact with skin.

Step 4 — Glass Handling Safety

- Wear Safety Glasses or a face shield! Small glass shards are created when scoring and snapping glass. They can also be created when using the grinder or ring saw.
- Don’t run your finger along the edge of a piece of glass.
- Use a bench brush or something else to wipe off glass or surfaces after cutting to avoid glass splinters.
- The grid catches all of the dust and splinters. Make all scores and snap glass over the grid.
- Use the scrap bin for small pieces of glass rather than throwing them in a large trash bin.
- When working with the grinder or ring saw, be sure that they are appropriately filled with water to avoid airborne glass particles.
- Consider using cut protection, such as safety gloves when handling glass.