

Flame while Laser Cutting Acrylic

Who needs to read this?

All Curtin University Staff

Incident Details

On Wednesday 6 October a laser cutter (Emblaser 2) was cutting 3mm black acrylic when a small open flame appeared. The machines in-built alarm system sounded which alerted a nearby staff member who used a fire blanket to extinguish the flame.

No injuries were sustained and there was no permanent damage to the laser cutter.

Information

- The machine was supervised during operation and the black acrylic in use was approved by the manufacturer.
- Manufacturer advice for the Emblaser 2 is outlined below;
- Remove backing and protective paper from the acrylic
- Raise it off the bed to allow air flow beneath
- Use the Material Library settings and [Magclips](#)
- Choose the correct speed to reduce the risk of heat build-up/fire – the risk of heat build-up/fire increases the slower the laser is travelling
- This advice is specific to the Emblaser 2 however all laser cutter handbooks should be reviewed for their specific operating procedures

Key Messages

If you use laser cutters familiarise yourself with manufacturers manual and online resources to confirm the correct settings for your equipment and designs that are to be cut.

If a problem arises contact their support teams for advice on correct settings and materials. **Who do you call with questions?**

If you have any queries, please contact Health and Safety on 9266 4900 or email healthandsafety@curtin.edu.au.

Date of Issue

24/11/2021