

LIGO-E2600290 Weld-On Acrylic Procedure

1. Supplies Needed

- ❖ Weld-On Fast Set Acrylic (*Figure 1.1*)
- ❖ Applicator bottle with needle tip (*Figure 1.1*)
- ❖ Small funnel
- ❖ Clamps - 2 per pane
- ❖ Flat surface with protective layer (cardboard, newspaper, etc)



Figure 1.1

2. Notes

- ❖ The bond works best with minimal texture between the surfaces.
- ❖ The area beneath the clamp will not receive full coverage (*Figure 2.1*), so ensure the clamp does not extend to the edge of the assembly to allow the end to bond properly.
- ❖ The acrylic was tested with the application done before clamping, and the result showed many air bubbles, so it's best to clamp as the first step.

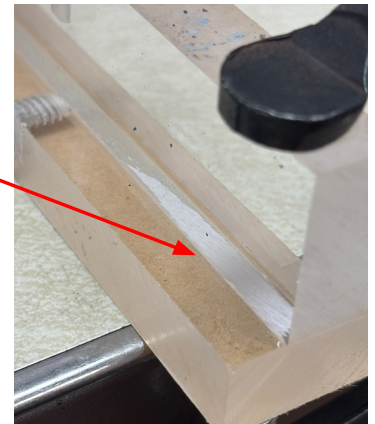


Figure 2.1

3. Procedure

1. Clamp the handle to the door in the desired arrangement on a flat, horizontal surface.
2. Fill the applicator bottle with Weld-On Acrylic using a small funnel. Put the cap on and uncover the needle tip.
3. Hold the bottle vertically and squeeze some air out. As you tip the bottle to apply the acrylic, slowly unsqueeze the bottle to create a vacuum so the liquid doesn't spill out.

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4. Position the needle at the point of bonding. Allow liquid to flow out of the needle into the gap between the mating surfaces and slowly drag the needle nose along the line of bonding (*Figures 3.1-3*).

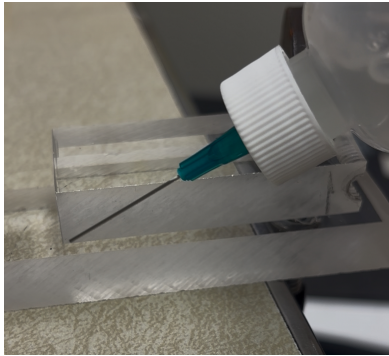


Figure 3.1

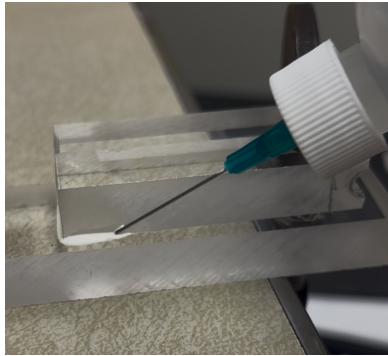


Figure 3.2

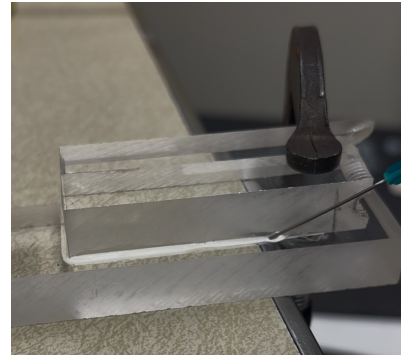


Figure 3.3

5. The liquid should create an unbroken capillary effect at the junction of the pieces (*Figure 3.4*).

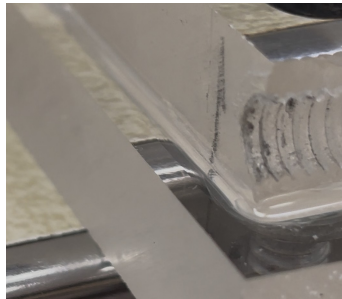


Figure 3.4

6. Allow to set for 24-48 hours while clamped. When finished, an invisible bond should hold the pieces firmly (*Figure 3.5*).

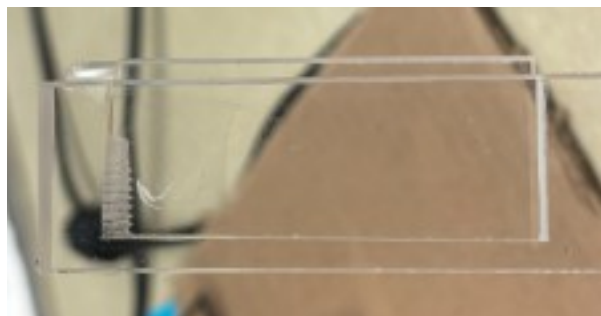


Figure 3.5