

SDM Cable Actuator Instructions

Day 1

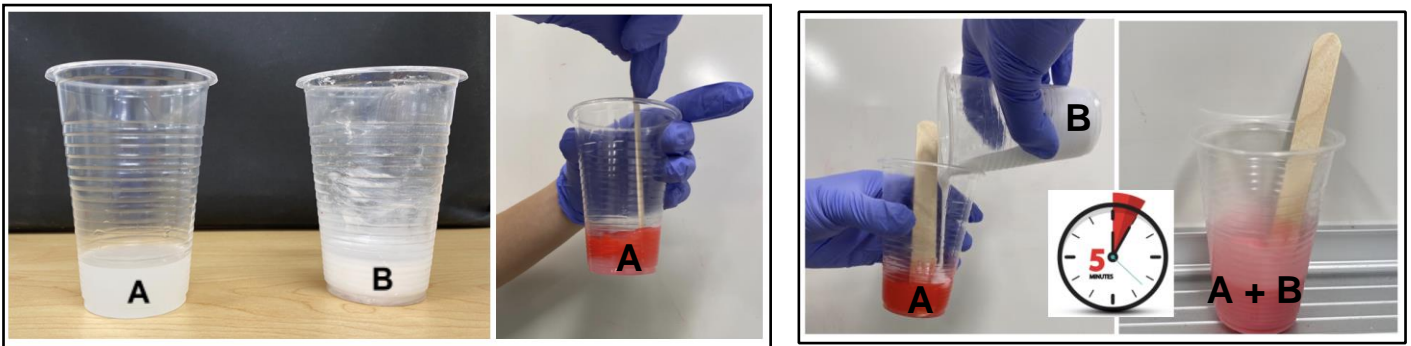
1. Feed the tubing into the mold so there is a loop on one end of the mold.



2. Spray the entire mold-tubing system with mold release spray (multiple coats).



3. Mix equal parts of EcoFlex 30 A and B until well combined in one cup with popsicle stick. Stir continuously for at least 5 minutes. Before mixing, you may add dye to cup A. Only add one small drop of dye, too much dye will cause issues later on.

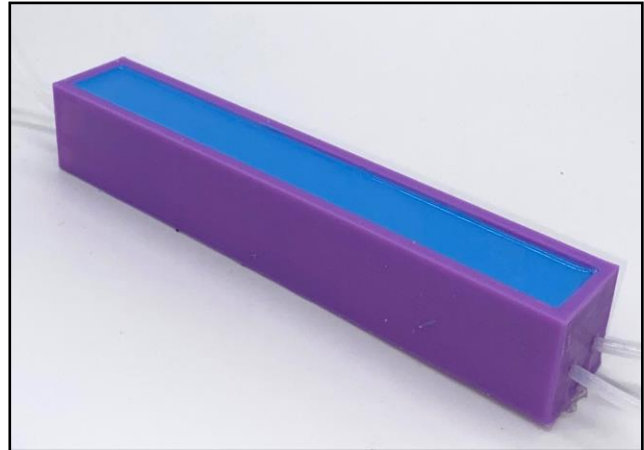


4. Pour the silicone mixture into the mold. Only fill the mold up to the ledges as seen below. Be sure to not overfill the mold since a second silicone mixture will be added later. This layer will take approximately 12 hours to cure at room temperature.



Day 2

5. Mix equal parts of MoldStar A and B until well combined in one cup with a popsicle stick - this will be the second layer to the actuator. Mix continuously for at least 5 minutes
6. Pour the silicone mixture into the cured mold until it is completely full.
7. Let the second layer cure for another 12 hours at room temperature

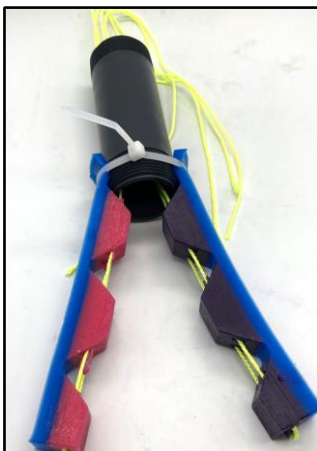
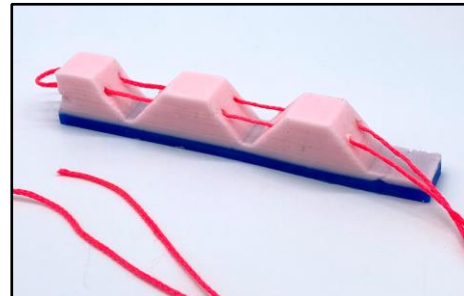


Day 3

8. Pull from the loop-end of the tubing to remove it from the mold. Slowly and carefully remove the silicone finger from the mold. If pulled too quickly, the silicone could rip.



9. Using a needle, lace the string into the holes of the silicone actuator as seen below. This string can then be pulled to control the movement of the finger.



10. Feel free to combine your actuator with another group's actuator to create a claw. Secure the ends along the outside of a tube with a zip-tie.