

# Fabrication Experience Logs

## Plaster Cloth Shape-Capture for Negative Mold

Created By: Yaron Adar  
yadar@u.rochester.edu

### Motivation

Needed a cheap way to capture the shape of a Baja car frame plus added details for making snugly-fitting body panels.

### Safety

Dry plaster cloth makes a lot of dust, wear a dust-mask if you have a respiratory condition.

#### Safety Equipment:

- Safety Glasses
- Dust Mask (optional)



### Tools and Resources

- Plaster Cloth
- 10:1 volume ratio of Tap Water : Murphy's Oil Soap in a Spray Bottle
- 5-Gallon bucket of room-temperature water
- Large scissors (preferably abrasion-resistant)
- A workspace where you can make a lot of dust and can leave your plaster to dry for up to 48 hours.
- A clean surface for preparing plaster cloth on

### Steps

1. Cut plaster cloth into wide strips, enough to cover the object with multiple layers plus 1-2" extra at each edge. Also cut thin strips to cover mistakes.
2. Spray a light layer of oil soap (enough to make the surface shiny, not enough to form drops) on the object to make removal easier.
3. Briefly dip each strip of plaster cloth in the bucket of water, lay it on the object, and push the cloth into the object's details. You should finish before the first strip dries (15-30min.)
4. If the plaster feels dry after sitting on the object for 5min, sprinkle water on it until the dryness goes away.
5. Remove the plaster when it has dried – should feel gritty, stiff, and room temperature (not cold). Should be 12-24 hours if you didn't over-soak it.

### Tips

- I recommend using at least 3 layers. For my big object, I used 5-8 layers.
- The plaster should feel a little too dry right after you dip it – the water will spread over time. Over-soaked plaster takes a long time to dry.
- Line the water bucket with a trash bag to make cleaning it much easier.
- I got a lot of plaster cloth for very cheap by ordering a box of random-size scraps online.