

LIFE CASTING

by Graham Holt

If you haven't ever done a life cast before, the prospect is daunting. For many it's the first step toward doing more professional and complex work, and it looks tough. But, in all truth, it really isn't. Making a life cast of another person (we don't suggest you try it on yourself) is actually quite easy, and doesn't take long either. We hope that this how-to will help you.

Materials --

We've used fairly cheap materials, and the cost for our life cast was about \$30, most of which is for alginate, but that can fluctuate depending on the quality and amount of materials that you buy.

Petroleum jelly
Bald cap (suggested, but not necessary)
Alginate
Plaster bandages
Plaster
A paint brush (can be a cheap one)

Before You Start --

Make certain that your subject is not claustrophobic! They should feel at ease with their face covered and should trust you so they aren't scared. You also have to be careful not to make your subject move their face (laugh or frown) while the alginate is setting. If their face moves it will distort your cast, and so the positive will also come out distorted

Making the Negative --

1. Have your subject clean their face well, and tied back their hair if it's long. Dampening their hair around the face and using a little hair spray or gel will help keep their hair out of the alginate.
2. If you have a bald cap put it on your subject, the alginate won't damage it and it will keep the alginate from sticking to the hairs around your subject's face (it isn't very fun to pick out afterwards). Smear a little petroleum jelly on any of your subject's face hair (eyebrows, lashes, mustache, etc.) you don't need to glob it on, just use enough to kind of grease the hair.
3. Cut the plaster bandages to lengths approximately 2 or 3 times the width, and then the length, of your subject's face and fold them in half or thirds so that they're the right length. Make sure to have a few extra pieces cut and have a few pieces that are only an inch or two to use around the nostrils. With the bandage it's better to over calculate than skimp and end up with a distorted casting.
4. If you feel you need to (or the subject wants it) use pieces of drinking straw in their nose to make sure that you don't block off their breathing. Usually if you're careful you won't need to use straws, but it's always a good precaution, specially for beginners.
5. Mix up your alginate (however the instructions say), you'll probably need 2 to 4 cups depending on the size or your subject's face. The alginate should be about the thickness of tomato paste or runny mashed potatoes, so that when you put some on your subject's face it will glop down slowly with most of it sticking. Using cool water will give you a little more time to work before the alginate starts setting up. Don't worry about the alginate sticking to the bowl or the counter, it'll peel off easily when you're done.
6. Start at the forehead, glopping the alginate on your subject's face. Kind of pat it on, don't wipe at it too much or you'll get thin spots. Be careful to get alginate into the corners of the eyes and mouth so that you don't get air bubbles on your final product. Work it over the entire face, almost to the ears and down the neck a little ways, making sure that you get a pretty thick coat. Check the nose to make sure the alginate is thick enough, it's easy to leave it too thin there and that will cause the nose area to distort or break. When you've done the face put any extra on spots that might be thin (like the forehead, cheeks and nose). If you get a little alginate over your subject's nostril just have them blow it out before it's set.
7. Lean back for awhile and let the alginate set, it doesn't take very long. You know it's set when it is solid and rubbery without being sticky. Now you can start with the plaster bandages.
9. Wet your plaster bandages, again the temperature of the water will change your setting time (colder = slower, warmer = faster). Just dip it in and then bring it out and rub the layers together slightly to saturate it well. Leaving it in the water too long will wash away the plaster. Squeeze the bandage out a little so it isn't sopping wet (but don't wring it dry), and start layering them over the alginate. Make sure that you cover the entire face well with plenty of bandage so that the negative won't bend out of shape too much when you remove it. Be careful around the nose and use one of your thin strips between the nostrils for strength there.
10. Wait for the plaster bandages to set. It will take longer than the alginate but probably no more than 15 min. or so. You could use some of this time to clean up a little of the mess you're making before your subject can see it.
11. When the plaster bandages are dry, have your subject lean forward slightly and wiggle their face while your hold the outside. You may have to help them by loosening it off around the edges. It should come off really easily and you'll have your negative done.
12. Now that you have the negative you need to make a positive. Alginate dries out fairly quickly and starts to shrink when it does so you should make the positive as soon as you can.

Making The Positive --

1. Take the negative and set it so that it sits flat. Sometimes a box of sand works well to hold it level and still, but just about anything will work, just be careful not to bend or stretch the negative too much.
2. Mix up your plaster. One way to judge how much you'll need is to carefully fill the negative just about full of water and then pour that into your mixing bowl (before you set it up level) then just mix it to the right thickness.
3. Use the paint brush to spread a layer of plaster in the negative. Just kind of glop with it, don't brush at it too much or you will make air bubbles. Be careful to get into all of the crevasses. This will make air bubbles on the outside layer of your positive less likely. Get down close and blow on the surface of the plaster to get rid of any bubbles that may be there.
4. Let that layer set up a little, but not for so long that the rest of the stuff you mixed up starts to thicken up and harden. Carefully pour the rest of the plaster into the negative, pouring as close to the surface as you can to eliminate the chances of air bubbles. Blowing on the surface will get rid of most that appear there.
5. Let the plaster set, long enough so that there's no doubt that the inside areas are hard enough that they won't break when you remove the negative.
6. Carefully work off the negative. Usually you can peel it off well enough that you could make another positive if you wanted to.
7. Voila! You've just finished making a life cast of your subject's face! I suggest leaving it alone over night so that the plaster can fully dry and harden before using it for anything. If you want it to stay fairly clean through whatever you use it for, try spraying it with a coat of clear acrylic spray, then you'll be able to wipe off most of any mess you make.