

# STOLLOWEEN

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People that build props using papier mache as their primary medium know that it is economic, strong, and suitable for creating most anything imaginable. They love their mache and don't understand why everyone doesn't work with paper and glue.

People that have never used papier mache tend to view the medium as something shrouded in mystery, strange voodoo made with glue and paper. They read the tutorials and see the pictures but are still hesitant to put their hands in the paste.

Papier mache is simply paper and glue, no mystery, no voodoo, this is the reason it is a staple in elementary school art rooms. With a little knowledge and creativity it can be taken to new levels resulting in some truly fabulous creations. Papier mache is a medium that costs little money and brings those ideas lurking in the dark recesses of your mind to life.

Confusion and mystery stems from the multiple terminologies used and the fact that it's not an exact science. Unlike mixing a batch of silicone it doesn't require exact measurements or controlled temperatures. Papier mache is very open to interpretation and experimentation.

People that may have at one time dismissed papier mache as a child's medium are now discovering its economic and versatile strong points. This article will provide a brief introduction to papier mache and point you in the right directions for more information.

There are basically two different papier mache techniques.

The first is strip mache meaning that you dip strips of paper into a glue or paste and layer them onto some form. Strip mache is also sometimes referred to as layering or laminating.

The second technique is paper pulp. This technique is unfamiliar to most people and involves taking paper fibers, mixing it with some form of glue and using it in the same manner as clay. This technique is also referred to as papier mache clay, papier clay, pulp mache or pulp clay. In some cases it is called by the commercial brand names of Celluclay, PaperClay or Instant Papier Mache.

This first thing to figure out is what kind of paste or glue to use. An internet search for papier mache paste recipes will yield many results. Recipes range in complexity and call for combinations of such ingredients as flour, white glue, corn starch, liquid starch, wallpaper paste and the list goes on.

Here's a secret, they all work.

Some people boil the paste, some don't, some add mold deterrents and some don't, some people like flour and water and some loath it. Papier mache is open to interpretation and experimentation, my suggestion is to start simple, mix some flour and water and see what happens. Pastes that contain flour or corn starch will mold if left at room temperature for several days. Cover and refrigerate left over flour and starch pastes. You can also add mold inhibitors such as salt, bleach or anti-microbial dish detergents to extend the life of paste.

*My paste recipe is six cups of flour + one cup of liquid starch + one cup of white glue.*

The next question is what kind of paper can be used. Again everything pretty much works but each type of paper yields differing results in texture and durability. Newspaper, paper grocery bags, glossy newspaper ads, tissue paper, paper towels, toilet paper and crepe paper can all be used with papier mache. Newspaper seems to be the most common when dealing with strip mache.

As a rule of thumb it is better to tear the strips of paper opposed to cutting them with scissors or a paper cutter. Tearing gives a nice frayed edge which helps the strips blend together when applied to a form.

The size of the paper strips is determined by your project. A large project such as a pumpkin can use big strips while a small or intricate prop such a hand will require smaller pieces of paper.

The basic concept behind papier mache is that you need to apply the strips of paper onto something. You need an armature, also called a form or a base. Armatures are an

area where you can get highly creative and make great use of many different recycled materials.

For example let's say that you want to create a life sized human skull, what are your options? What can you use that will give us the basic shape to start creating a papier mache skull? Possible items are an inflated balloon, a plastic grocery bag filled with crumpled paper, a Styrofoam wig head, a wadded ball of newspaper or tinfoil formed into a skull shape. Check the recycle bin to find materials that can be used to build the basic shapes for your props. Creating an arm or leg bone is as simple as rolling up an old magazine into a bone-shaped tube. Gargoyle bodies can be made from empty water bottles and pumpkins can be made from trash bags stuffed with crumpled newspaper. The ideas are endless and part of the fun of creating with papier mache.

Another method is using molds. To create a human skull for example you could apply strips of newspaper soaked in paste over your favorite human skull prop. Covering the prop with tinfoil, plastic wrap or petroleum jelly will allow you to remove the papier mache once dried resulting in a nice paper replica of the original prop. Materials used to prevent the papier mache from sticking to the original form are called release agents.

The second papier mache technique is using paper pulp mixed with glue to make clay. Again the recipes and materials vary but the end result is similar. Paper pulp can be made by boiling scraps of paper then shredding the paper to create a fine pulp. Cellulose insulation can also be used eliminating the mess of boiling your own paper. The paper pulp is then mixed with a paste or glue mixture until it has the consistency of modeling clay. Often extra ingredients are added to the pulp and paste such as ground chalk, latex paint, sawdust, joint compound to act as a binder and stabilizer. In most cases strip mache and paper pulp are used in tandem with the clay being applied over a base created from strip mache. Clay is a great way to add three dimensional details and texture to a piece allowing you to do things not possible with strip mache.

*My clay recipe involves mixing cellulose fiber insulation and drywall joint compound (about one cup of compound to six cups of paste) with my papier mache paste until it is an nice, firm and workable consistency.*

Commercial versions of paper clays are also available with the most popular being Activa Celluclay and Creative Paperclay both available at art and craft stores. Commercial clays vary in price and each has some unique characteristics which make them worth checking out.

You now have a paste formula, a clay recipe and know what kind of paper you will be using. Here are a few more tips to help make the process successful and enjoyable.

**TOOLS.** When working with papier mache it is advisable to use tools designated solely for the purpose of papier mache, this avoids any concerns with contaminating things like bowls or blenders that you would also use for food preparation. Dollar stores and thrift stores are good sources for inexpensive tools and materials.

**PREPERATION.** Before you start a project mix the paste, make the clay and tear the newspaper strips, have everything ready to go. Protect your environment by covering work surfaces with sheets of newspaper or inexpensive plastic table coverings. Have a bucket of warm soapy water and a brush available so that you can quickly clean your hands if you need to answer the phone or grab a cup of coffee. Papier mache paste is easy to clean off surfaces when wet but incredibly difficult to remove once dry. Clean all tools and work areas before the paste or clay hardens.

**EXPERIMENT.** Mix your mediums. Don't be afraid to incorporate other techniques into your project. Monster mud is very compatible with papier mache, if you are creating something with fabric use the monster mud technique. Papier mache isn't appropriate for everything, small details such as eyes, teeth or claws can be made from polymer clays or some other medium. Incorporating plastics, foams, and other materials will make for a wonderfully creative prop.

**PACE.** Work in small steps; don't try to create everything in one sitting. A few layers of strips or a small thickness of clay dries fast, so do a little, let it dry then keep adding. Doing too much at once results in a very wet, mushy and heavy piece. Give yourself time to learn the way that mache works, if you have never worked with papier mache before don't expect to complete your first masterpiece in 24 hours.

**DRYING.** Place wet pieces in front of fans, using several fans will dry a piece amazingly fast. The use of a dehumidifier also speeds up the process.

**SEALANTS.** Finished and painted papier mache sculptures need to be sealed with some form of commercial product. Sealing your prop protects the paint job as well as the papier mache from moisture. Products made to protect wood such as urethanes, varnish and shellac work well to seal papier mache.

Always read the manufactures directions and use caution when working sealants especially with regard to fumes or vapors.

No mystery, no voodoo or magic, just some scraps of paper, some glue and some old fashioned creativity that can get you on your way to fulfilling all your prop fantasies.

## TEMPLATES

One of the techniques I use for almost all of my props is templates or cardboard cutouts that can be used to create an armature representing facial features such as eyes, nose and jaws.



Measuring and mapping the proportions and placement of the eyes, nose, teeth, cheekbones and jaw line allow the creation of a basic template that will allow you to create a three-dimensional version of flat, two-dimensional artwork.

Choose an existing three-dimensional skull prop or decoration. The size of the prop does not matter as the templates can be enlarged or reduced to fit your requirements. My recommendation is to use a skull that is close to normal or life size as this allows for more detail when mapping the details.



Measure the circumference of the skull using a flexible measuring tape. Record this information for future use.



Record the size of the “mouth-contour” or roof of the mouth by using a flexible curve and bending it around the mouth or teeth. The length of the mouth contour should be no longer than the position of the last tooth. Trace the resulting shape onto a piece of paper, this will become the template for the mouth contour.



If you don't have a flexible curve, use a thick piece of wire, such as a coat hanger, to measure the mouth contour.



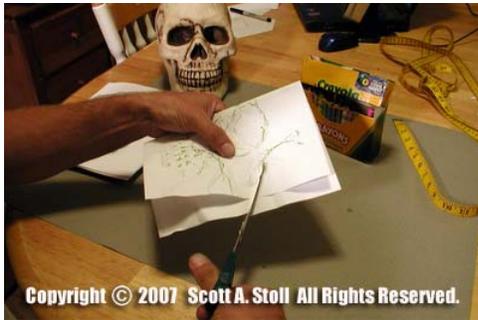
Create a texture map of the skull's face by taking a blank piece of white paper and creating a rubbing. The rubbing is made by wrapping the piece of paper around the skull then using a dark colored crayon. Burnish the paper to pick up the texture details.



Concentrate on the eye sockets, the nose, the teeth, the cheekbones and the indentation on the side of the skulls. The rubbing details the size, proportions and placement of the basic skull features.



Fold the paper in half using the nose as the centerline and cut out the template. Use the photos as reference.



Repeat the same procedure for the jaw. Again fold the paper in half at the center point of the jaw to perform the cut.



Folding the paper in half allows for a symmetrical template, insuring balance. Trace the cutout templates onto a piece of heavy poster board and cutout.



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You now have a template and dimensions for the skull face, the skull jaw, the mouth contour and the circumference of the skull. It is suggested that you make copies of the templates and keep these for future use eliminating the need to repeat the mapping procedure.

NOTE: The size of the templates can be reduced or enlarged to fit your needs. If you want to create a skull that is twice the size of the original model used, simply double the size of the templates and skull circumference. Using a photocopier, using a software program such as Photoshop, using an art projector or using a grid system can accomplish reducing or enlarging.

## WATERPROOFING

Waterproofing is probably the biggest concern for anyone considering working with papier mache. Who wants to spend countless hours putting your all into projects only to have it end up as a pile of soggy mush? There are a few things that can be done to insure that your papier mache (or monster mud) masterpiece survives the elements to see the next Halloween.

First there is a great article by Jackie Hall, the owner of The Papier Mache Resource website. Jackie's article "Waterproofing Papier Mache" chronicles the effectiveness of different sealants on papier mache. The results are interesting and impressive, especially the piece sealed with yacht varnish (marine varnish).

### "Waterproofing Papier Mache"

My 2007 Halloween display was set-up for six days and five nights and unfortunately it rained and was very damp for the majority of that time. The good news is that all the props survived intact without any damage. My method for waterproofing /weatherproofing is as follows:

Once the papier mache prop is completely dry, a coat of Spar Urethane is brushed onto all exposed surfaces. Spar Urethane is about \$30 per gallon at home improvement stores such as Lowe's or Home Depot. The yacht varnish or marine varnish that was used in above mentioned article runs about \$90 per gallon.

Once the Spar Urethane has completely dried exterior latex paint is used for the base coat. Latex paint adds extra protection and is also an economical solution to painting props, especially the base coat. For dry brush techniques, black latex paint is used. For airbrushing or sections of props that require bright colors I used exterior white primer, then use small bottles of appropriate color acrylics and an airbrush.

After all the painting is complete and dry, a matte polyurethane sealant is applied (brushed or sprayed).

These techniques offer three layers of protection. The Spar Urethane protects the papier mache prop. The latex paint also helps protect the prop but more importantly eliminates the high gloss of the urethane. The final coat of sealant protects the paint, especially if you are using water based paints such as acrylics.

A few things to remember about papier mache and waterproofing:

- If the sealant used does not protect the prop and it gets soft or damp don't freak out. Place the prop in front of a box fan and it will dry, harden and can be resealed.
- As a rule of thumb the more toxic and nasty the sealant, the more effective. Use caution when working with urethanes, varnishes or shellacs. Fumes can be very toxic and flammable.
- Water based sealants I have found are not very effective.
- Make time in your production schedule to thoroughly seal your papier mache and don't skimp on the quality of sealant. Properly sealed props can last for years, actually much longer than latex props.
- Use common sense and caution when working with these materials, read the labels and follow the manufacturer's guidelines.