Prepping Fiberglass for Paint

By David Mahaffey

Disclaimer and some of the Tools:

Before I go too far into this subject let me start by saying that the method and process shown here is one that I have used and therefore this may not be the exact same as others. As with all aspects of building you will find you own preferences and personal styles to accomplish this task. This tutorial is to cover the basic stepping stones to get to the painting and or detailing before the paint. Below are just a few of the tools and sand paper you will probably use throughout this process.

A little suggestion is to use a good quality sand paper. I have found that a good automotive sand paper last the longest and clogs the least. I have used others in the past and they tend to clog quickly.

I was browsing in the hardware store the other day and came across the foam sanding pads that have a sanding surface applied. They come in various grits so you should be able to find one for about all the applications.

When they wear out I just take a piece of sand paper and wrap around them like so.
Filling the Weave:

So for this I am going to use my FW190 wing that is already fiber glassed and the first coat of primer has been added. I like to use a high build primer for the first couple of coats. There are several brands to choose from. I have used a duplicolor brand but now the rusto leum brand seems to be sold just about everywhere and it seems to sand fairly well and quick.

Above this is the wing with the first coat of primer applied.

After a good first sanding this is about what you will end up. It is hard to tell in the pictures above but you will end up seeing some of the fiberglass weave. The spots that look like bare wood are not sanded through the fiber glass. Be careful not to sand through your fiberglass cloth.
So now it is time for a second coat and another round of sanding.

A before and after, the same process of sanding is used. Depending on the how you applied the fiberglass and other conditions more coats or even less coats may be required to fully fill the weave.

**Fixing Imperfections:**

So you have your primer applied and you are happy with the results minus a few imperfections bumps, maybe a little scratch or 2 from some moving it around the workshop. One of the tricks that I have used in the past is to run my hand over the surface. By doing this you will feel a lot of imperfections that you otherwise may not see. As I locate them I will circle them with a sharpie. This is an easy way to quickly identify where the work is.

Above you can see some the areas that need some attention. These are the areas that I will apply a filler. I like to use a spot putty/glazing putty. I generally just buy the small tubes of it as I don’t tend to use it very often.
Above is a before picture with the putty applied. Don’t be afraid to use plenty on the areas that you are working on. As you can see in the next picture most of it is gone and it sands away pretty easy.

**Final Primer coat and Sanding:**

So you are done with all of the steps above. You have filled the fiberglass weave and fixed any low spots, bumps or any other things you have wanted to fix. So now it is on to a final primer coat and sand. For this I like to use a regular build primer. It will go on just the same as the others. I have found that the Krylon brand primer is readily available, works well, and it dries in about 20 minutes depending on the temperature.

So a fresh coat of primer has been applied. If you notice it has a slightly darker look to it. Just a difference in brands. So for sanding this coat of primer I am going to use a finer grit sand paper. I have 400 grit laying around but 320 works good as well. I probably wouldn't go much below that though since this is the surface you will be applying your paint to. As with above I am using the same sanding sponge and wrapping it in the 400 grit sand paper.
The finer grit sand paper tend to get clogged a little easier, so I am wet sanding this final coat as well. This will help the paper cut as well. It can be a bit messy but you will like the results. You will end up with a very smooth surface.

This is the wing after the wet sanding. You really can see in the picture the smoothness that is there. It is something you have to eyeball and feel.

So that is it!! You are ready to move on to the paint booth with your project or maybe you want to add some detail to the surface. That however is a whole other tutorial. As I stated at the beginning of this tutorial this is a basic over view of the process. As you do more and more building and finishing you will find things that you like and things that you don’t like. Don’t be afraid to experiment and try something different. As I have found in this hobby there are not many things you can’t fix with a little effort.