Using Eze-Kote and glass cloth

Eze-Kote is a water-based resin coating for wood, foam and other materials, produced by Deluxe Materials. It is brushed on and forms a smooth surface even if you overbrush. It dries in about twenty minutes in a warm room but longer in lower temperatures. It is completely odourless and safe to use, though the makers suggest taking care to wash it off your skin. Wash brushes in water. Do not be tempted just to wash them in a jar of water. They will clog and harden. Always wash thoroughly after each use.

It is quite expensive but it does spread a long way. A 500 ml bottle will cover about 6.5 m2 single coat, and because it does not need mixing like epoxy it can be poured back into the bottle. One practical point is that you must clean up the bottle top before screwing the top back on or it will stick. It is resistant to all but the most corrosive fuels. Eze-Kote can be used as a coating on its own or as a resin for applying fibreglass cloth.

I want to use it for a curvy glider fuselage which would be planked with balsa. Fortunately (!) I found I had to repair the front end of a foam model so tried it out on that. I decided to use 24 g/m2 glass cloth to add strength and found it easy to smooth the cloth round compound curved surfaces. For extra strength you could use 48 g/m2.

Eze-Kote seemed very good, so I thought I would do some weight testing and take pictures to show the technique. I cut a 100 mm square of 2 mm lite ply, so weights would be multiplied by 100 to give a weight per square metre.

Method

Sand the surface to be coated as smooth and flat as possible. Brush the first coat on the bare surface and allow to dry. Then sand with very fine paper (800 or finer).



Cut the cloth with some excess all round. Place the cloth on the surface and brush on a coat of Eze-Kote. Use a combination of brushing and light dabbing to make sure it goes through the cloth. Bubbles and creases are easy to smooth out.



Allow to dry and sand lightly. Brush on a final coat and allow to dry for 24 hours, or longer if cold.



The surplus at the edges can be sanded off or cut with a very sharp blade and the whole piece given a final sanding to flatten it for painting. I used acrylic but the makers say it will take any paint.

This is the finished piece ready for me to practice airbrushing (report coming soon). The surface is not perfectly smooth. I will now spray with primer which will finish the process of flatting. If I was not painting it I would apply one more thin coat of Eze-Kote and sand again.



The repair to a foam fuselage using thin ply and soft balsa

This is the repaired front before sanding, priming and painting.



This is the join



One word of warning. Eze-Kote does not stick to foam as well as to wood. It only matters if you want to put patterns in the finish. A single colour is fine. However masking tape might well pull the coating off the foam when you remove it. It would probably be best to use a plastic film instead of masked painting.

Weights

Bare wood	11.03 g
After first coat, sanded	11.77 g

Weight of one coat of Eze-Kote 0.74 g (74 g per m2)

Square of glass 0.41 g (more than 0.24 g because of the excess)

After third coat, sanded 12.60 g
Weight of coating and glass 1.57 g
Weight of coatings and glass per m2 157 g
Weight with acrylic primer and top coat 12.98 g

Weight of primer and top coat 0.39 g (39 g/m2)

Weight with finish varnish coat 13.04 g
Weight of gloss varnish coat 0.06 g

Total weight of glass and coatings 2 g (200 g/m2)

Costs

Eze-Kote about £18 for a 500 ml bottle (6.6 m2) 24 g/m2 glass cloth about £12 (for a piece 1 m x 3 m)

There are plenty of video and written guides to using it, including the maker's own site: https://www.deluxematerials.co.uk/gb/rc-modelling/82-eze-kote-5060243900746.html

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