

From: ["Tandy C. Walker" <tandyw@flash.net>](mailto:tandyw@flash.net)

To: [Undisclosed-Recipient:](#)

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Subject: 123 Sailplane Starting to cover the Wing with Polyspan Lite

I received a great tip from Gene Wallock on how to make sure covering sticks to the bottom of an undercambered wing that I want to share with you. In preparing a wing for covering, I coat the structure with a mix of 50% clear nitrate dope / 50% nitrate thinner three times with light sanding in between coats. Then apply a coat of 100% straight clear nitrate dope to only the bottom edges of the undercamber ribs to insure a good bond with the Polyspan light.

Gene says to apply thinned Duco Cement instead of the 100% straight clear nitrate dope to the bottom edges of the undercamber rib for the last coat. The Duco Cement is thinned with Acetone and brushed on the bottom of the ribs. The Polyspan Lite is laid on the structure and Acetone is used to dope through the Polyspan to activate the Duco Cement to bond the Polyspan Lite covering to the ribs. Then later when you are dopping the covering, the dope does not dissolve the Duco Cement and the covering stays attached to the bottom of the ribs.

The Duco Cement comes in a green tube as shown below and it says it is a multi-purpose household glue for China, Vases, Plastic, Wood, Metal, and crafts of all kinds.



I bought some Duco Cement and tried it out on a test sample. It does work well, but the covering seemed a little rough or bumpy over the bonded area. Therefore, I decided to go on and use 100% straight clear nitrate dope, since I am familiar with how that works. However, I will definitely do some further experimenting with Gene's Duco Cement at a later time.

Sue took the picture below of me applying clear nitrate dope to the bottom of the ribs through the Polyspan Lite covering on the center section of the wing. Notice the heating iron on the floor. I keep it at a medium temperature to take out any creases in the covering and to roll the edges of the covering over on the leading and trailing edges as I dope them down.



I managed to get the bottom of the wing's center section and the bottom of the left inner panel covered with Polyspan Lite this afternoon as shown below before Sue called me to dinner. I plan to go on and cover the bottom of the left tip panel this evening before I go to bed tonight.....Tandy

