

Fabric Covering Adhesive Types

I recently bought some Diatex fabric to cover some models.

This fabric is used on ultra microlights (Full size) and is similar, weight-for-weight, to Oratex or the older Solartex.

The fabric is not sealed and has no adhesive on it which makes it very light.

It weighs in at 49g/m² and has a shrinkage rate of >15%.

I decided to find a suitable heat activated adhesive to apply the fabric and these are the test results I came up with.

I cut 4 1 inch wide or 25mm strips approximately 4 inches long or 100mm of diatex for testing. I

had a piece of balsa 1 inch or 25mm wide and used four areas for adhesion testing.

The four adhesives I used were :- B&Q own brand PVA glue - Balsaloc

- Deluxe Materials Edge Sealer - Hi-Tak Adhesive.

I applied each adhesive on one of each of the test areas and the results were as follows:-

The diatex was attached with a heat sealing iron and the test was carried out pulling the material at 90 degrees to the balsa wood.

I used a suitcase digital weighing scales to get close to accurate readings.

- The B&Q dial PVA glue came off in my hand!

- The Balsaloc gave a maximum of 0.8KG pull

- The Deluxe Materials Edge Sealer gave a reading of 0.75KG - The Hi-Tak adhesive gave a reading of 0.9KG pull

The results are quite obvious that HI-Tak followed by balsaloc if you can get it are the best closely followed by the Deluxe Materials.

It is important to remember that the test was carried out at 90 degrees to the surface and not pulling straight out.

It follows that the actual adhesion once the material is attached will have a considerable amount of strength in the longitudinal pull than just pulling straight up!

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