

Photo 24

- 1. Leave the covered portion of the component for approximately 5 hours until complete hardening of the sealant. The sealant hardening time depends upon humidity and ambient temperature and may be as long as 3 to 5 hours.
- 2. The other side of the component is processed in the same manner, i.e. it is degreased first then the primer is applied.



Photo 24_1

3. Wrap the lower portion of the fabric around the trailing edge, mark using pencil and cut (photo 24_1), then apply sealant on the trailing edge first, spread it with toothed spatula and lay the fabric over it. The laid fabric should be pressed with solid roller through polyethylene strips and left for 1 hour for the sealant to dry.

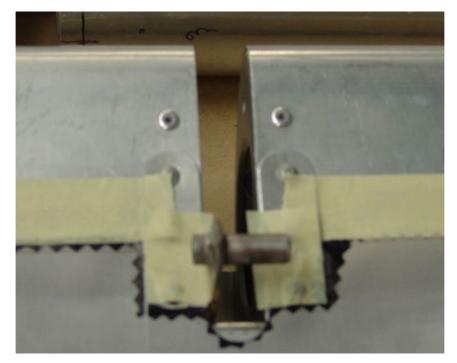


Photo 25

4. Put the paper sticking tape on the leading edge skin along the marked line and on such areas as hinge fittings, to prevent sealant from getting on the clean surface (photo 25).



Photo 26

5. Put preliminarily the fabric on the component (photo 26), mark and make cut-outs around hinge fittings (photo 26, 27).



Photo 27



Photo 28

6. After making necessary cut-outs remove the fabric and apply the sealant in the same manner as on the other side, i.e. in small portions, and spread with the toothed spatula (photo, 28, 29).



Photo 29

* On the end rib sides the fabric is laid over the portion of the rib and fabric with applied primer and covered with fabric (photo 29).



Photo 30

In length the pre-cut fabric must overlap the entire rib width as shown in photo 30.



Photo 31

7. Lay the fabric over the areas with applied sealant and press it with solid roller through polyethylene strips (see photo 31, 32, 33).

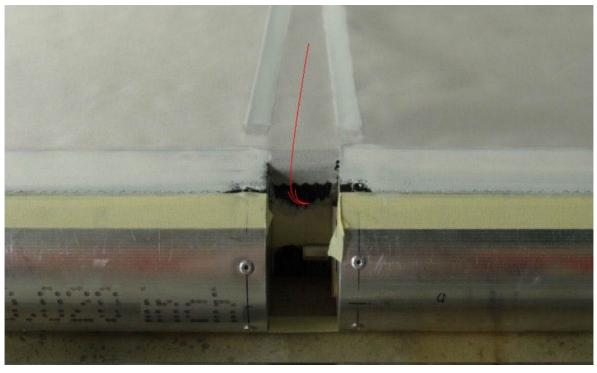


Photo 32 (fold the fabric over the spar in the area of hinge fittings as shown in the photo)

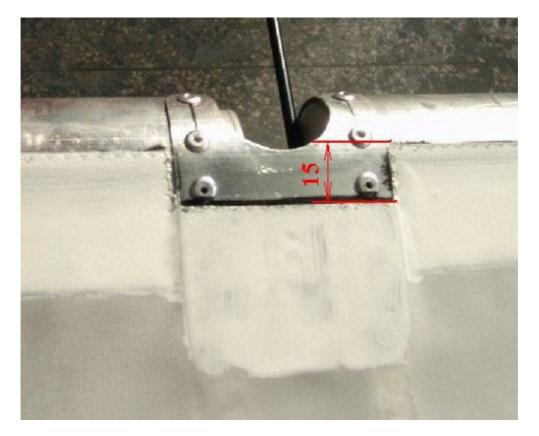


Photo 33 (make 15 mm cut out in the fabric for the doubler as shown in the photo above)



Photo 33 (at end ribs the fabric may be pressed down using a towel)

8. When the covering of component with fabric is finished, remove the sticking tape and let the sealant dry completely, approximately for 6 hours.

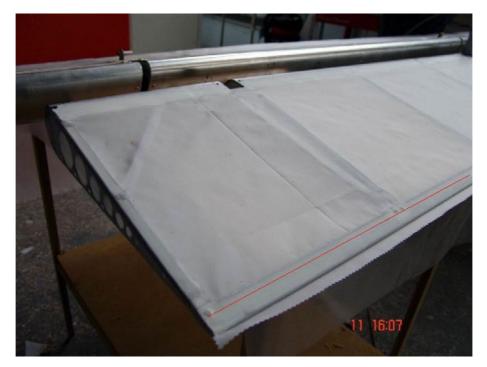


Photo 35

- 9. Fold the lower portion of the fabric over the trailing edge to determine the necessary length, mark and cut using zigzag scissors. The fabric edge must reach exactly to the rivets (red line on photo 35).
- 10. Apply the sealant on the trailing edge covered with fabric, spread it using toothed spatula, fold the lower portion of fabric on top and press it down using the solid roller.

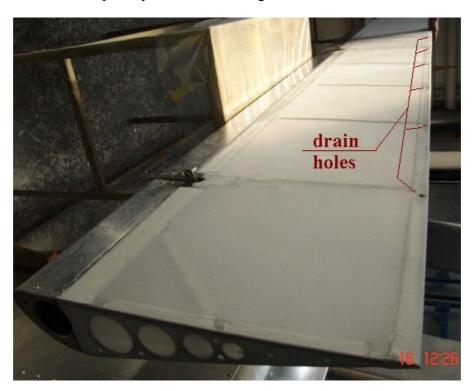


Photo 36

11. Before thermally shrinking the fabric puncture it with soldering iron at drain holes (photo 37).



Photo 37

12. One day later the fabric is shrunk thermally using an iron with temperature regulator set to "cotton-line" mark. Press the fabric with the iron gently, to avoid burning it through. Press the fabric along the trailing edge and ribs first (photo 37) smoothing out wrinkles that appear in the fabric, then inside the "square" and thus along entire component.



Photo 37

Then press the fabric over the end ribs (photo 38). Shrink the fabric in the same way on the other side too. Make sure that the fabric did cemented.



Photo 39

13. Before applying primer clean the component with an air gun (photo 39).



Photo 40

14. Apply 2 layers of Cecofill primer (using mohair brush 1-29-911 of Stanley company). First apply the first layer of primer along the leading edge skin and end ribs (photo 40).



 $\label{eq:Photo 41} Photo \ 41.$ Then apply the primer over entire surface by circular motions as shown on photo 41.



Photo 42 (* in areas with poor access it is better to apply the primer with a thin brush)



Photo 43

After that spread the primer evenly over entire surface and along the airflow using the mohair brush (photo 43).

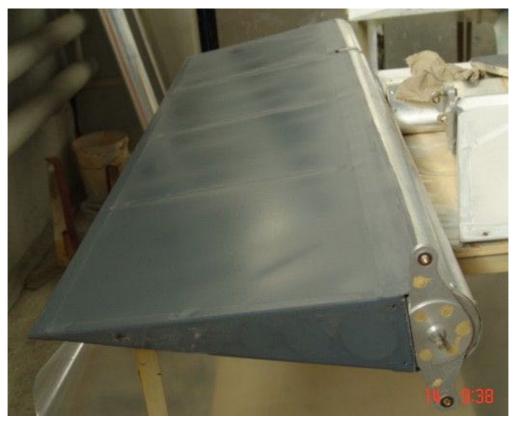


Photo 44

- 15. After applying primer on one side let the component dry completely (photo 44), approximately for 2 hours. After drying smooth out the primed surface with sandpaper. Do it using gentle motions.
- 16. Then apply the second layer and let it dry completely. The second layer is applied like the first one and smoothed out after drying with sandpaper.

- 17. The other side is covered with primer in the same manner, i.e. apply first layer of primer, smooth out, then second d layer, leave it to dry completely and smooth out.
- * Covering of the wing is carried out similarly to elevator, in accordance with the drawing (Appendix 2, photo 45-49).

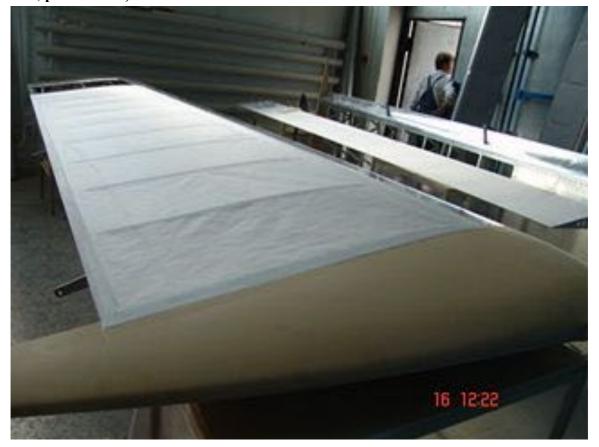


Photo 45



Photo 46

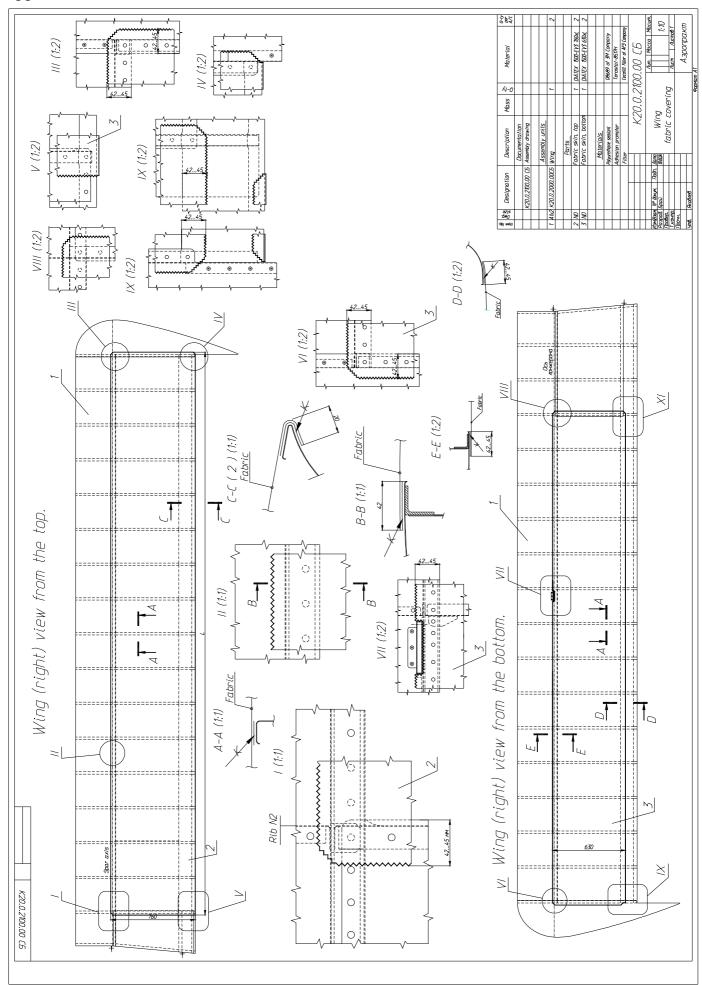


Photo 46, area II

Before covering rework the areas of wingtip joint with trailing edge and skin (photo 46, areas I and II). Scrape with coarse sandpaper 40 and apply the polyester primer of U-POL company.



Photo 49



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