

How to Cure Wing Warps

by Chris Brownhill

Don't get them in the first place by doing the following:

- Make sure the building surface is flat and square by using a level or yardstick.
- Before gluing the ribs to spars and leading edge, measure the height of the ribs above the building surface to ensure that the distance is uniform across the span.
- Use a leveling bar under the ribs (assuming a symmetrical airfoil section is being used) to raise the trailing edge portion of the ribs off the work surface.
- If the wing is tapered, use wing rib platforms to ensure that the trailing edge is level before proceeding to glue anything!
- Only attach trailing edge and centre section sheeting while the wing is pinned down.
- Check and recheck to make sure that the wing is straight throughout the building process.

If you do get a warp, you can try the following:

- Remove the centre section sheeting and pin the wing down to the building board, rechecking to see that the trailing edge is straight.
- Carefully reinstall the centre section sheeting being careful not to twist the wing in the process.
- If the warp is induced after the wing has been covered, the use of a heat gun to remove the twist can sometimes be effective.
- If none of the above works, consider building a new wing!