

# Wallock on Picking Balsa

*An Article Shamelessly Lifted from the December 2002 SCIF FlightPlug, Mike Myers, Editor*

The greatest myth perpetrated on the modeling community is the Balsa Weight Charts. Thank goodness they are printed on paper that could be used in an outhouse. These charts only tell you the AVERAGE Density of a stick or sheet of balsa. May I humbly suggest the following technique:

1. For thin sheets, hold up to a fluorescent light and observe the dark areas. These represent heavier pockets within the sheet. Uniform density looks uniform back lit.
2. Hold the sheet at about a 30-degree angle to a fluorescent light and look for the sign of Spider Webs. These are wind checks, caused by the tree bending excessively during growth. This wood is already broken; it just hasn't fallen apart yet. Another way to tell is to hold the wood between your thumb and first two fingers, with slight pressure, and wind checks will "GIVE" slightly as you pull the wood through.
3. I don't worry about gray stains. This was caused by dirty water during the felling, sawing process.
4. Remember, sticks are usually made from sheets that can't be sold as sheets. Stripping hides a lot of faults. Examine each stick for grain run-out, wind checking and non-uniform density from end to end.

After you've satisfied yourself that the integrity of the wood is to your satisfaction, weigh the wood on a good beam scale (Ed note: See 9/02 issue of Thermalier for source of inexpensive electronic gram scale — a lot less hassle than a beam scale) and divide into hard, medium and light groups. I pick the lightest sheet or stick and go up a few grams to set a range. I pick the heaviest sheet/strip and go down a few grams to set a range. What's left is called medium. You can set limits within the medium limits. It goes very fast. I like to further separate into quarter grain sticks, just because they look good. Wind checked wood is still useful for nonstructural applications like wing/stab tips and fuselage fill.

If you find you've used wind checked wood for ribs, run a little CA over the break. It'll stiffen it up to be acceptable. Really check main longerons and wing/stab spars for checks before you use them. I sorted 1000 pieces of 1/8 square this way and it took about 4 hours. Bob White came over to my shop (when I ran P & W) and sorted through 2200 sheets of 1/16 X 3 X 36. He spent about 4 hours and selected 104 perfect sheets for his World Class Rubber Models. He never used a scale.

Thermals, Gene Wallock