MICRO-X WOOD GRAIN ANALYSIS

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Since indoor and outdoor models vary significantly, the wood uses do also. ~ Do Not Confuse The Two!

Indoor Wood Uses

A Grain: Characteristics: *very* easy to bend across the grain. Actually the most flexible wood per weight. Good for cowlings. Uses: Mainly for spars where sharp bends are necessary, like wing tips, stabs, rudders, prop outlines. Not for rolling bodies. Excellent for indoor ribs.

BA Grain: Characteristics: A little more resistant to bending than A Grain. Also stiffer across the grain. Looks much like A Grain except for stronger grain lines. Uses: Good spar stock. Stiffer wing tips. Cannot bend quite as sharp as A Grain. Not for rolling bodies. BA Grain and A Grain are both excellent spar material.

B Grain: Characteristics: A mottled appearance. Sometimes unattractive looking but stiff wood for its weight. Good all around wood. Uses: Makes good straight spars. Excellent for wing center section spars. Can be used for ribs. Not for rolling bodies as well as BC or C. Strips have equal strength in both directions.

BC Grain: Characteristics: A *very* mottled appearance. Much stiffer across grain than A or BA and also a little stiffer lengthwise. Uses: Good for rolling bodies. Does not lend itself to spars as it tends to get wavy after a time.

C Grain: Characteristics: Looks like mother-of-pearl chips running crosswise in it. Is *very* stiff both across the grain and lengthwise too. Uses: Very good for rolling bodies. Good for outdoor ribs & bulkheads. Not good for spars.

Notes to Remember: BA Grain is used as A Grain. BC Grain is used as C Grain. B Grain, in a pinch, can be used as A or C Grain. Quarter-Sawn wood was original name for C grain.

We hope this little resume of wood grains will help you to understand wood selection and enable you to build stronger, lighter models. Several decades of wood-cutting experience have made it possible for Micro-X to bring you the finest indoor and outdoor wood with highest strength-to-weight ratios available today

Outdoor Wood Uses

A Grain: Planking for wing leading edges and body sides on *RIC* models. Used where wood will be bent or must flex.

Good for rolling bodies with 1/16" sheet or thicker.

B Grain: A stiffer wood used when C grain is not available. Some companies call this tangent cut, i.e. an easy way to say the wood is not A Grain nor C Grain, but somewhere in between.

C Grain: Very stiff wood. Generally will crack before it will bend! Good for bulkheads, solid ribs (as opposed to the hollow indoor-type ribs), wings and tail surfaces of hand launch gliders, as A will not stay straight. Good for wing and tail outline parts on printed wood. Good flat sheeting and trailing edge of wing planking.

Strips: A modeler must check all his strips by flexing them gently. Pick all the stiff ones and color code the ends with a felt

marker. Then pick medium ones and code them, and pick the lightest strips and color code the ends. Put the coding in the pack with the wood and use the same color coding all the time!

Stiff: Body longerons, wing spars, main spar on stab.

Medium: Outline of stab & fin.

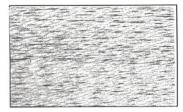
Light: Cross pieces in stab and body, possibly fin outline, scale items that are not structurally relevant to strength of model.

This explanation and selection of wood will allow you to make lighter, stronger, better flying models!

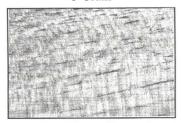
Now, to allow Thermalier readers to visualize what the above discussion is about, here's what the three basic grain patterns look like:



A Grain



B Grain C Grain



And here's how they cut it from logs:

