## Hale Wood Construction



All wood used for Hale products is kiln-dried hardwood containing moisture content of 5% to 7% at the time of fabrication. Each piece of wood is hand selected for uniformity of gain and color. Wood used for internal parts is selected to be structurally sound.

Each of Hale's section assembly begins with solid hardwood frames 7/8" thick. The frames are assembled using mortise and tenon construction. This oldest, widely used construction in woodworking is very strong and has a positive registration. All components interlock for stability. The end panels consist of 13/16" thick solid hardwood lumber glued together to form solid wood ends. They receive a series of milling treatments, which allows the 3/8" thick backs, 7/8" front molding and 13/16" thick locking rails to be attached.





Each 3/8" thick, veneer core plywood back on a section is milled to form a locking connection with the section above it and below it. The backs are fastened using vinyl coated finishing nails.

Applied to each section are two types of locking rails, which add stability to the section. The 13/16" tall by 33" long top rails are nailed in place using a 1.25" vinyl coated finishing nail, and forms a male/female connection with the above section.

## Hale Wood Finishes

Each Hale bookcase is handcrafted from quality lumber, plywood and hardwood veneers by artisans whose trade goes back four generations. The solid lumber is custom-dried in Hale's own kilns to create a classical look of fine furniture with the durability of solid wood construction.

In the manufacturing process, hardwood parts are cut to size, glued, machined and finish sanded on a 2-head wide belt-finishing sander. Finish sanding of veneer panels and hardwood parts include the use of 100, 120 and 150 gritsanding belts. Hale uses a multiple of both medium and fine grit-sanding belts in order to gently work from a moderate to a finish sanding. This method leaves cases polish-sanded smooth with all edges and corners eased.

After all the parts are assembled into a freestanding unit, final hand sanding and inspection prepare the unit for the first finishing step. The selected color finish is hand applied and cloth wiped to provide a uniform color.

One coat of sealer is applied with a hot airless sprayer system for even coverage and allowed to cure. After curing, the sealer is sanded with 220 grit, very fine, finish sandpaper to create a consistently smooth surface.

A final high-grade, high solid lacquer is applied by an airless sprayer and cured in a heated drying room. The topcoat dries smooth to approximately a 30-sheen finish, which is resistant to normal wear and scratching.

Shown below is Hale's selection of beautiful solid Birch, Oak and Walnut finishes. (300 Series deep sectionals only available in Birch and Oak finishes)

