how they did it

Prismatic patterns from a single plank

BY JONATHAN BINZEN

Laël Gordon compares the parquetry patterns he creates using a single species of wood to the "outfield grass effect" you see at the ballpark. He cuts the veneers so that the grain is perfectly quartersawn yet all the primary cells are oriented on a consistent slant. Then, depending on which way the individual tiles of veneer are turned, light will either be reflected by the cell walls, making the tile appear bright, or absorbed into the hollow cells, making the tile appear dark. If the light source is shifted from one end of the cabinet to the other, all the tiles will reverse, the light ones becoming dark and the dark ones becoming light. In very diffuse light, the pattern can disappear altogether. Gordon works from a full-size drawing, which he produces in a program called TurboCAD. For the veneer, he favors Douglas fir for its strong grain lines and its ability to take finish.

CELL SLANT CREATES THE EFFECT

By slicing along a plane diagonal to the vertical growth of the tree, Gordon generates quartersawn veneer in which the primary cells slant upward. These two tiles are from the same piece of veneer, but since one is turned end for end they reflect light differently.

1. RIP AT AN ANGLE

Select a perfectly quartersawn workpiece.

Cut it at about 25°. Then joint the diagonal edges.

2. SLICE VENEERS

Bandsaw $\frac{1}{8}$-in.-thick slices, jointing the workpiece between cuts. In the planer, mill the slices to $\frac{3}{32}$ in. thick.

3. CROSSCUT INTO TILES

Crosscut the slices into square and rectangular tiles on the tablesaw. Then mark the cell direction on each tile.

4. GLUE TILES INTO STRIPS

Using painter's tape on top, glue the tiles into strips 6 in. or so in length, weighting them down if need be.

When the glue dries, assemble short strips into longer ones. Then trim the strips to width.

5. ASSEMBLE STRIPS INTO A SHEET

After glue-up, send the sheet through a thickness sander, bringing it down to $\frac{1}{16}$ in. thick.

Use tape to edge-glue strips into the full pattern.

Photo: Allen King; drawings: John Tetreault