# Playful Furniture

### Unorthodox construction brings cabinets to life

### BY JUDSON BEAUMONT

f all the furniture I design and make, the Cindy dresser is the most popular. Like most of my furniture, it is curvaceous and playful. It also is completely functional, as furniture should be. However, to make it I had to forego traditional methods of furniture construction, relying instead on techniques inspired by aircraft construction and the human body. I begin with an internal skeleton, assembled with a nail gun, and then skin it with thin sheets of plywood, which in turn can be either veneered or painted.

My technique can be used to make just about any shape, so I can design furniture with dramatic curves, exploding

or compressing parts, or distinctly human postures. The possibilities are truly unlimited. That's why I'm sharing my methods with you—your designs should be limited only by your imagination, not by the traditional techniques of furniture making. Some of you will be offended, I'm sure, but I hope that most will be inspired.

### I start with a drawing and templates



**Start with a sketch.** Beaumont spends time every morning sketching out his ideas. His office is full of drawings, from quick sketches of rough concepts to detailed illustrations of mature designs.

I spend a lot of time sketching out my designs. When I'm happy with

a design, I do a full-size drawing on paper, standing back to check that everything works at full scale. Only then do I begin building. I first make a template of the front, including the drawer pockets,

and every drawer front and back. I use the template of the front for the back, too. I make the templates from <sup>1</sup>/<sub>4</sub>-in.-thick MDF. I cut them out with a jigsaw and smooth the curves with rasps and files, trusting my eye and hand to tell me when they're fair. I'm constantly stepping back and checking that the lines flow nicely.

### Then I build the skeleton and add the skin

After I've finished the templates, I get to work on the bones of the cabinet, using the templates to make the front and

CINDY DRESSER

## That Breaks the Rules



### How to blow up a box

try to give my furniture a personality, one that will surprise, shock, and amuse, but I don't pursue those goals at the expense of functionality. No matter how whimsical a piece might be, it must work as furniture.

I arrive at that personality by asking, "What if?" Often I think in terms of human behavior and ask questions like "What if this dresser sits, reclines, or puts it arms on its hips?" But there are times when I'm a bit more aggressive and wonder what a piece might look like if it were to explode or melt. These questions help me see furniture as something that can do things and have things done to it.

Also, I don't worry about the *how* until I've designed the *what*. That lets me throw out the rule book and allow my imagination to run wild. But I do get stuck now and then. When I do, I turn my attention to designing something different, but related. Sometimes I design elaborate birdhouses, but I've also dabbled in baby bottle and radio design. These side steps help to open up the channels I need to unstick the stuck design.

— J.B.

### His usual process for unusual pieces

### START WITH A FULL-SIZE TEMPLATE

Beaumont's techniques are quick but effective. He makes curvaceous pieces like the Cindy dresser using sheet goods, air nailers, and a variety of adhesives. His front-view sketch on MDF becomes a template for the front, back, and drawer fronts.



**Refine the design at full size.** Beaumont draws on ¼-in.-thick MDF, using sandpaper as an eraser and working the drawing until it pleases his eye.



**Cut the template with a jigsaw.** He drills a hole in each corner of the drawer openings and then saws between them to remove the waste.



**Rout the front flush.** After smoothing all the edges of the template, inside and out, Beaumont uses it to rout the front (and back) of the cabinet using nails to hold them together temporarily.

back from MDF, and the drawer fronts and backs from plywood. Then I use plywood ribs to connect the front to the back.

I secure the template to a piece of  $\frac{1}{2}$ -in.thick MDF with a few brad nails and trace it onto the MDF. Then I remove the template and cut out the openings with a jigsaw, leaving about  $\frac{1}{8}$  in. of waste. I place the template back on the workpiece and secure it with finish nails, then rout the workpiece flush to the template.

I first attach wide ribs on both sides of the drawer pockets. These ribs serve as both a mounting surface for the drawer slides and as a way to strengthen the cabinet. They're made from <sup>1</sup>/<sub>2</sub>-in.-thick Baltic-birch plywood, which is lighter and stronger than MDF. It also holds nails better, and I use nails, along with a bit of glue, to secure the front and back to the ribs. As for driving the nails, there is no better tool than a pneumatic nailer. It drives the nails so fast that I can easily hold the ribs in place while securing them.

Next, I attach narrow ribs—also made from <sup>1</sup>/2-in.-thick plywood—to the front and back, taking care to keep them flush with the edges of the front and back.

After the skeleton is complete, I add skin to the outside. I use <sup>1</sup>/s-in.-thick Balticbirch plywood, cut so that the grain runs from the front to the back of the cabinet for better flexibility. I spread white glue on the cabinet parts, lay the plywood in place, and secure it with an upholstery stapler, with the staples running in the same direction as the grain. Otherwise, they make dimples that show up in finishes.

At this point you can veneer the skin with either paper-backed wood veneer or countertop laminate. I use veneer on pieces that will be stained. The smooth surface of laminate is a great base for paint. I apply the veneer or laminate to the sides of the cabinet first, and then to the front and back, using a router and flush-trimming bit to re-cut the drawer openings and trim the outside edges. For both veneer and laminate, I use Wilsonart  $H_2O$ , a water-based contact adhesive, and I have never had a failure.

Judson Beaumont is the founder of Straight Line Designs Inc., a custom furniture company in Vancouver, B.C., Canada.

### A FLEXIBLE SKIN **COVERS A RIGID SKELETON**

Inspired by aircraft construction, Beaumont uses ribs to connect the front and back of the dresser. He then covers the ribs with a thin, flexible piece of plywood, which makes for a very strong case.



First, attach wide ribs to the back. Beaumont uses an MDF spacer to check that the ribs are parallel to each other to accommodate drawer slides.



Then, glue and nail on the front. After the front and back are attached, the drawer pockets are complete.



with the edges of the front and back so that the outer skin can be stapled on tightly.

Finally, staple the skin in place. Beaumont rolls glue on its inside surface and holds it in place with clamps. The staples run with the grain so that the outer veneer doesn't dimple. Then he veneers or laminates the entire exterior for a seamless look, using contact cement to make the job a snap.

