

A quiet revolution has taken place in the cabinet industry. All across North America, millwork companies have created lines of cabinet doors, drawers, and boxes that are shipped out as components to be assembled into custom cabinets at distant locations. The boxes might come from Utah, the doors from North Dakota, and the drawers from Arizona, shipped by truck or van in plain brown wrappers. A cabinetmaker, builder, or savvy homeowner can order anything from a single drawer to a whole kitchen's worth of cabinet parts.

A lot of forces push this trend. Computer-controlled woodworking machines, the buying power of high-volume operations, the lower overhead of shops in rural locations, and a great nationwide transportation system all have combined to facilitate the process of building and buying mail-order cabinets. Times have changed, Gepetto.

### But is the quality any good?

That's the first question I'm always asked when it comes to ordering out for cabinet parts. People can be rightfully suspicious of things that are mass-produced. In this case, however, mass production doesn't mean sloppy; it means accurate and uniform.

Consistency becomes the byword when you're making 40 doors and 30 drawers for a kitchen. Manufacturers know consistency. For a large run of doors, their grain matches look as good as or better than mine. Their

joints are tight and stay closed, and their sanded surfaces are generally excellent.

Component suppliers have created an industry minimum standard of flat and square to within  $\frac{1}{16}$  in., and they rarely exceed that. In my experience, fewer than one door in 75 comes close to failing. When it does happen, they replace a door without a squawk.

Cabinet quality is equally excellent. The joinery lines up and goes together easily (photo p. 78). The well-labeled pieces have clean and square cuts.

### How much do they cost?

When I price a kitchen, I figure the cost of the cabinets by the foot, beginning with the upper cabinets. Here's an example, using stock sizes and a simple door pattern.

A 30-in.-tall by 12-in.-deep by 18-in.-wide upper cabinet from Alpha costs \$39. A raised-panel door in pecan from Hutchinson costs \$33. That's a total of \$72 for an 18-in.-wide cabinet, which comes out to \$48 per ft.

A 36-in.-wide base cabinet with two drawers and one shelf costs \$88. Two doors and drawer fronts come to a total of \$74. The total for this 3-ft.-wide cabinet comes to \$162, or \$54 per ft.

Let's add in some typical additional charges. For example, I prefer to pay more for custom grain matching for doors and drawers. This service typically adds 20% to the door/drawer total but buys prettier wood and excellent panel matching. I add \$3 per ft. for hinges and another \$10 per ft. for miscellaneous details such as up-charges for nonstandard di-

# Mix and Match: Mail-

How to get well-made, affordable cabinets from companies that specialize in boxes, doors, and drawers

BY SVEN HANSON





**The style is your call.** Cabinet component companies are set up to build just about any kind of door or drawer you need. This kitchen by Joel Wheeler, for example, is composed of boxes by Cab Parts and doors and drawers by Hutchinson, detailed for a Southwestern look. For a hint at other possibilities, the lineup below includes (1) a dovetailed drawer from Top Drawer; (2) a glazed hickory and glass door from Meridian; (3) a painted MDF door from Scherr's; (4) a stainless-steel door from Denver; (5) a maple door with walnut pegs from Scherr's; (6) and a honey-finish cherry door from Conestoga.

# Order Cabinets





# A cabinetmaker, builder, or savvy homeowner can order anything from a single drawer to a whole kitchen's worth of cabinet parts

**They arrive at your door, flat as pancakes.** Cabinet boxes are packed together as a stack of flat panels, ready to assemble.



**Cabinets go together easily.** The author assembles a base cabinet from Alpha, which uses 20-mm screws to connect the side panels to the bottom and top rails.



**Joining door and box.** With the cup portion of the hinge secured to the door, the author affixes the hinge arm into the predrilled holes in the box and adjusts the final position of the door.



mensions, filler strips, and base materials for the toe kick. Finally, I have to add in the freight. I figure a charge of \$1 per lb. for large orders of materials traveling a third of the way across the country. By the way, that cost easily triples for small shipments or rush orders.

All those additional elements bring the combined price for both upper and base cabinets to about \$150 per ft. To order, assemble, finish, and install these cabinets, I charge \$400 per ft. The \$250 difference between these numbers is where you can either make a living as a cabinetmaker/installer or save some money on your own project. This isn't easy money. There is plenty to do before the cabinets are finished and in place. But it does open up some possibilities.

## Doors and drawer styles are practically unlimited

One of the most appealing aspects of component cabinets is the amazing range of styles and finishes (photos pp. 76, 77). Multiple manufacturers offer a wide variety of panel molding, interior and exterior edge molding, and a selection of woods that's usually broader than what's available at your local supplier. For example, Hutchinson's catalog lists 19 wood species, 21 edge profiles, four raised-panel profiles, and 15 versions of panel frames, including those for divided lites.

Standard cabinet boxes are made of composite panels in one or two shades of white laminate. The material makes for bright, easy-to-clean interiors, durability, and water- and chemical-resistant surfaces. If you prefer, you can get boxes made of veneered plywood or medium-density fiberboard (MDF). But you will pay a lot more for them.

The standard base cabinet also will come with laminated composite drawers (top photo, p. 80). If you prefer wooden drawers, with or without dovetails, drawer makers will take custom orders ("Sources," p. 81).

In suburban Atlanta, I find that most of my fellow kitchen designer-builders still make their own cabinet boxes, then strap on component doors, drawer fronts, and moldings. This way, they can offer their clients an even broader choice of cabinet interiors and make the one-of-a-kind cabinet boxes that distinguish the truly custom job.

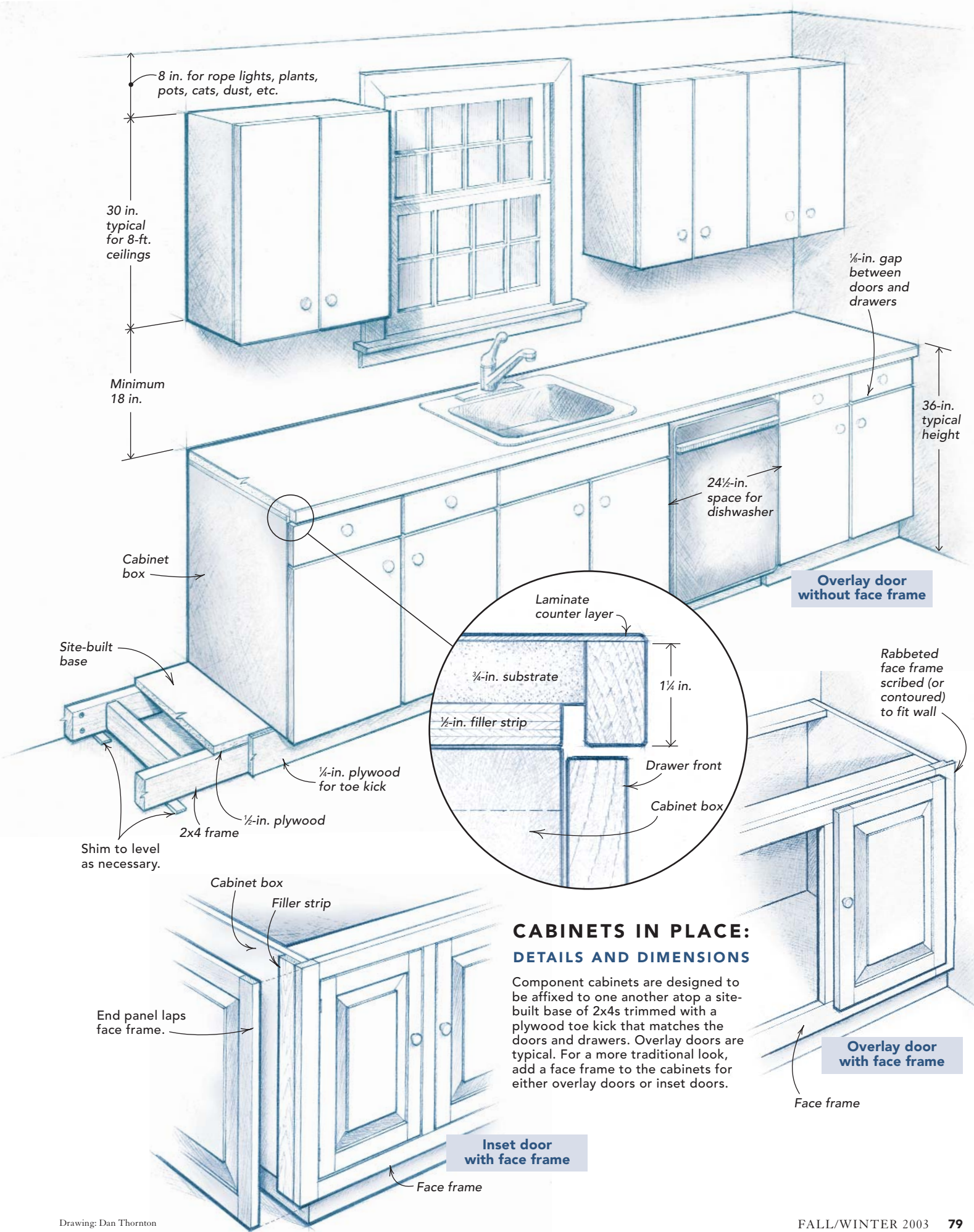
## What about oddball sizes for quirky conditions?

Standard cabinet boxes grow width-wise in 3-in. increments. In my experience, it's usually necessary to modify the width only at walls and corners and sometimes over the fridge. The cost of changing the width starts at \$5 added to the cost of the cabinet. If you want to change the height and depth of cabinets, it typically costs \$10 and \$15, respectively, per cabinet. That's cheap for one but painful for 20 boxes.

Doors and drawer fronts, on the other hand, are cut to whatever size you want, within the capabilities of the joinery details. There are no extra charges for nonstandard sizes.

## Figuring out what to order

If this is your first kitchen, you might want a good cabinetmaker or an experienced finish carpenter to give you a hand. Designing and



**CABINETS IN PLACE:  
DETAILS AND DIMENSIONS**

Component cabinets are designed to be affixed to one another atop a site-built base of 2x4s trimmed with a plywood toe kick that matches the doors and drawers. Overlay doors are typical. For a more traditional look, add a face frame to the cabinets for either overlay doors or inset doors.

**Overlay door  
with face frame**

**Inset door  
with face frame**



# If you can build a bookcase from scratch, or get help from somebody who can, you can assemble these cabinets

ordering kitchen and bath cabinets requires some good drafting and planning. You've got to get doors and drawer fronts right. Full overlay doors need a  $\frac{1}{16}$ -in. gap in from each edge of the cabinet and  $\frac{1}{8}$  in. between each other (drawing p. 79). If you choose to do a face frame for a more traditional look, the doors and drawer fronts will be a little smaller, on the order of 2 in. narrower and shorter. Don't forget the end panels; otherwise, where a cabinet run ends, you'll be looking at whatever material the boxes are made from instead of wood that matches the doors and drawers.

Traditionally, kitchens are designed starting at a sink base centered in front of a window. As you draw in cabinets to the left and right of this centerline, it's tempting to keep the upper- and base-cabinet widths equal, i.e., a 30-in. upper directly over a 30-in. base. In doing so, I have in the past been frustrated by windows, chimneys, vents, and other obstacles. Except for the stove, sink window, and other high-profile parts of a kitchen, I don't worry about achieving any sort of symmetry in upper and lower cabinets.

Working away from the sink window, I arrange the uppers, aiming for cabinets that are 15 in. to 24 in. wide. Pick which side of the sink will hold the dishwasher and commit a 24½-in. space for it. If you can avoid it, don't put the dishwasher in the corner. If you must, allow at least a couple of inches of clearance to miss any adjacent door or drawer pulls.

I try to avoid narrow cabinets. However, a narrow base cabinet can be handy for cookie sheets, especially if it's near the oven. I don't like the look of an upper cabinet that is less than 14 in. wide. At that point, frame-and-panel doors begin to look odd because the field in the center of the panel becomes too narrow. That's a solvable problem. You just put a door without a panel (a slab door) on this cabinet.

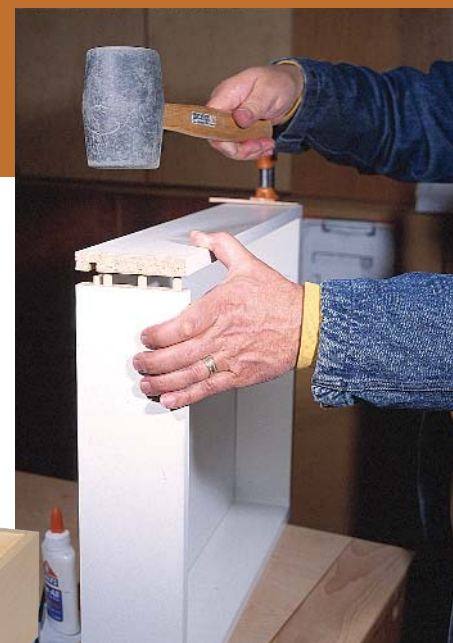
The simplest planning mistake is ordering a run of cabinets that completely fills the available space. With bulging wallboard and tiny gaps between the cabinets, a run of cabinets always measures more installed than it does on paper. On an 8-ft. run, I allow a 1½-in. gap at each end. It's a lot easier to fill the gaps where the cabinets meet the walls or each other than it is to modify the walls or cabinets.

Base cabinets typically intersect at an inside corner by way of a lazy-susan corner cabinet. At the intersection of upper cabinets, consider using the blind corner cabinet. Be sure to add at least 1 in. for the doors to swing correctly.

## Order the boxes first

Once you've calculated how many cabinets you need and how big they need to be, get the ball rolling by ordering the cabinet boxes. Suppliers typically will include the door and drawer-front sizes in their confirmation. Use them unless

**Some types go together with dowels.** A composite drawer box, with bottom panel in place, is tapped together gently with glue-coated dowels in matching holes.



**Drawer choices include wood or composites.** Valen Drawers sells birch plywood (1) or solid beech (2) drawers with doweled or dovetailed joints. The standard drawer from Cab Parts is made of laminated composites (3). A double-decker drawer from Meridian is great for flatware and utensils (4). The drawer fronts are unfinished paint-grade maple from Hutchinson (5), cherry frame-and-panel from Scherr's (6), and pickled maple from Meridian (7).



you've got a really good reason not to (such as a face-frame installation). A fax machine will come in handy to receive the confirmations. Read these faxes carefully because they describe what your supplier will make, what you will pay for, and what you'll assemble into cabinets.

### Are they hard to assemble?

If you can build a bookcase from scratch, or get help from somebody who can, you can assemble these cabinets. Some go together with dowels and glue, others with 20-mm screws. Use pipe clamps to draw the pieces together and a tape measure to check for square. The skills for designing, ordering, and installing far outweigh those needed for building the boxes.

The secret to success in building a kitchen has less to do with any strokes of genius or flights of fancy than with continuously avoiding mistakes. To that end, here's my list of mistakes to avoid.

- Don't attempt to be too space efficient. Use fillers at corners to give doors room to swing freely.

- When necessary, pay a little extra for custom sizing. A real cook doesn't want the standard 11¼-in.-deep upper cabinets. That cook wants 13-in.-deep cabinets to hold serving platters. Pay for it.

- Don't order the cheapest hinges, cabinets, and doors. You'll pay later.

- All lower cabinets require a site-built base. Don't forget to level the base, beginning at the highest spot on the floor. A couple of levels and a 99¢ bundle of shims can make you look like a genius.

- Don't take your eyes off the corners. They are easy to draw, easy to botch, hard to fix. From the corner cabinet edges, give yourself at least 2 in. to the dishwasher, the stove, and the fridge.

- Don't cover up any heater or electrical outlets.

- Don't wait until you're half done to start thinking hardware. Buy the hinges first. Drill for hinges last.

- Don't drill for the pulls until the doors are all in place. This procedure sidesteps the unpleasant discovery of a pull near the bottom of a door.

- Avoid narrow cabinets, especially on low-end jobs. They cost nearly as much as big cabinets.

- Make sure you know what supplies you need for the project so that you can order everything at once. The shipping costs can add up fast. □

Sven Hanson builds kitchens and remodels houses in Marietta, Ga. Photos by Scott Phillips, except where noted.

### BUYING COMPONENTS ISN'T LIKE GOING TO THE LUMBERYARD

Some component manufacturers sell only to the trade. Others sell to both pros and nonpros, taking a retail/wholesale approach to pricing. But one rep at a company that sells only to cabinet shops said that "if you can sound like a cabinet shop, we'll sell to you." The important point is that you need to know what you want and how to ask for it at some of these shops. Other shops, such as Scherr's, welcome what they call "weekend wood warriors." By the way, some companies will apply finish to their products for an extra charge.

## SOURCES

### CABINET BOXES, DOORS, AND DRAWERS

#### Alpha

801-295-9417  
www.alphacabinets.com

Knock-down (KD) cabinet boxes and drawers of laminated composites

#### CabParts

970-241-7682  
www.cabparts.com

KD cabinet boxes and drawers of laminated composites

#### Components-Plus

888-321-8277  
www.components-plus.com

KD boxes, doors, and drawers of laminated composites

#### Conestoga

800-838-5841  
www.conestogawood.com

Face-frame cabinet boxes, doors, and drawers

#### Danver

888-441-0537  
www.danver.com

Doors and panels made of stainless steel over composites

#### Decore-ative Specialties

800-729-7277  
www.decore.com

Doors and drawers

#### Heritage Finishes

905-271-9176  
Laser-cut door panels in wood, composites, and stainless steel

#### Hutchinson Products

800-847-0091  
Solid-wood doors

#### Meridian

888-423-2804  
www.meridianproduct.com

Solid-wood doors, face frames, and drawers

#### Porta Door

203-888-6191  
www.portadoor.com

Solid-wood doors, drawers, and face frames

#### Real Wood

800-835-8752  
www.realwoodproducts.net  
Doors and moldings

#### Scherr's

701-839-3384  
www.scherrs.com  
Cabinet boxes, doors, and drawers

#### Top Drawer

800-745-9540  
www.topdwr.com  
Specialize in dovetailed drawers in standard and custom sizes

#### Valen Drawers

800-334-4825  
www.valendrawers.com  
Prefinished KD or fully assembled drawers in beech or birch ply

#### Valley Custom Door

800-236-8981  
www.valleycustomdoor.com  
Doors, drawers, and moldings

### HINGES, DRAWER SLIDES, KNOBS, AND PULLS

#### Amerock Corp

815-969-6308  
www.amerock.com

#### Julius Blum

704-827-1345  
www.blum.com

#### Hettich America

800-438-8424  
www.hettichamerica.com

#### Outwater Plastics Industries

800-631-8375  
www.outwater.com

#### Salice America

800-222-9652  
www.salice.com

#### Woodworker's Supply

800-645-9292  
www.woodworkerssupply.com



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