

for Woodworkers

MAKE IT ORGANIZED

BUILD THIS FAMILY
COMMAND CENTER
IN A WEEKEND p.14

NO-FAIL
FINISHING
TRICKS

COOL NEW
COMBO KITS
& DRILL BITS

5 PROJECTS
BIG RESULTS FROM
BASIC MATERIALS



GREAT IDEA!
INSTANT FROSTED GLASS p.18

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WELCOME

Let's Build Something Together is more than just a tagline, it's a mission. Every project featured in *Woodworkers* is meant to inspire you, and all of us who work on the magazine want to be inspired by you.

When the winter months are upon us, many of you find time to head to the garage, basement, shop, or craft room to build something for your home, and I happen to think there's nothing more satisfying. It's also the perfect time to learn new skills or read about and buy new tools—and then put them to use making your home a warmer place. So as you're working on projects, I'd appreciate your thoughts—and even project ideas—for future issues of *Woodworkers*. Send your ideas to: *Lowe's Creative Ideas for Woodworkers*, 1716 Locust Street, Des Moines, IA 50309-3023.

—JEFF MERTZ, WOODWORKERS EDITOR



SAFETY IS YOUR RESPONSIBILITY

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DRIVE SCREWS WITHOUT THE SPLITS

TIRED OF RUINED BOARDS AND SLIPPED JOINTS? TRY THESE TIPS.

Drill It

A pilot hole is key when driving screws, but don't forget the countersink—the tapered underside of a screw head can act as a wedge.

Glue It

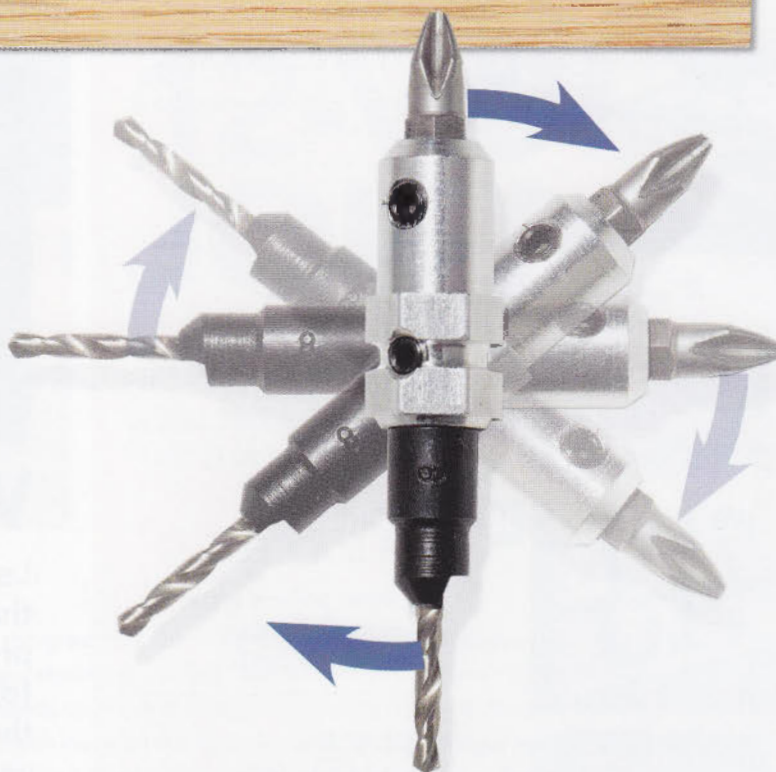
Use wood glue as a clamp. It provides holding power so boards stay put. Apply a small bead to parts, assemble, and align the edges. Let dry for 15 minutes before drilling pilots and driving screws.

Clamp It

One hole, one screw, repeat. When you need to drive numerous screws to hold parts together, drill and drive each screw separately. A drill bit can follow wood fibers and create unwanted misalignments, so drilling multiple holes all at once may not be as efficient as you think.

Control It

Most drills have two speed settings. Use them! High speed is great for drilling, while the slower setting provides torque and greater control when driving screws.



TIME SAVER

Kobalt 10-Piece Modular Drill and Drive Set (#280412)

BEST FEATURES: Bits for the four most common screw sizes—#6 ($\frac{3}{32}$ " pilot), #8 ($\frac{1}{8}$ " pilot), #10 ($\frac{1}{16}$ " pilot), and #12 ($\frac{1}{16}$ " pilot)—a built-in hex key for countersink and bit changes, plus $\frac{3}{16}$ " and $\frac{1}{2}$ " diameter counterbores, and a quick-change bit holder.



This handy bit holder lets you
**DRILL, FLIP,
AND DRIVE.**



q & a

LEARN HOW TO DO IT BETTER

q: I recently painted a child's rocking horse that I built from pine. The project turned out great until I painted it. When the paint dried, I could see discoloration wherever there was a knot in the pine. How can I prevent this?

a: That discoloration is caused by the resin in the knots bleeding through the primer and paint. We like to use a good stain-blocking primer such as BIN from Zinsser. The main purpose of a standard primer is to act as a bonding agent between the material being painted and the paint. However, BIN primer contains a substance called shellac, which acts like a sheet of plastic to provide optimal stain-blocking performance. BIN blocks stubborn stains from water/smoke damage and tree resin, plus it prevents odors from seeping through. Next time, prime the whole board and if you still have some trouble areas when

the primer has dried, spot treat those with a second coat. Allow the primer to dry and then apply two topcoats of oil or latex paint.

q: Making a project with doors always scares me—I'll make a great project, build a perfect door, and then ruin it because I can't get the hinges on properly. They always shift when I am marking or drilling the holes. Help!

a: Installing a door should not be a frightening experience. It should be a rewarding one—though we'll admit it used to scare us, too, until we discovered the magic of double-face tape. Apply a small piece to the back of one side of the hinge and set the hinge in position on the door. Predrill your holes and drive the screws; repeat for the other hinges and the second hinge leaf and install in the door opening.



To be sure that a hinge is positioned and won't shift when driving screws, apply double-face tape to the hinge back, trim, and set in place.

PROJECT DETAILS

SKILL LEVEL

INTERMEDIATE

START TO FINISH

6 HOURS

ESTIMATED COST

\$70

CUTTING EDGE



GOT AN AFTERNOON?
MAKE THIS CUTTING BOARD
AND WOW YOUR FAMILY AND
FRIENDS AT YOUR NEXT SOIREE!

PHOTOGRAPHER: PETER KRUMHARDT PRODUCER: LINDSAY BERGER

Make the Cut

To begin, cut a 4' maple 1×12 in half to make the top and bottom. One of these boards will accommodate magnets. Mark a $\frac{7}{8}$ " notch that matches the length of the 4 magnets, centering this opening on one end of the board.

- Use a jigsaw with a clean-cut blade to make the notch (**Cutting Diagram**). Cut as close to the mark as possible without removing the line. Sand the notch.

TIP To achieve crisp inside corners and make the magnets fit perfectly, use spray mount adhesive to attach your sandpaper to a hardwood scrap as a sanding block.

- To laminate the top and bottom boards, use screws as "clamps." Stack the parts together, and

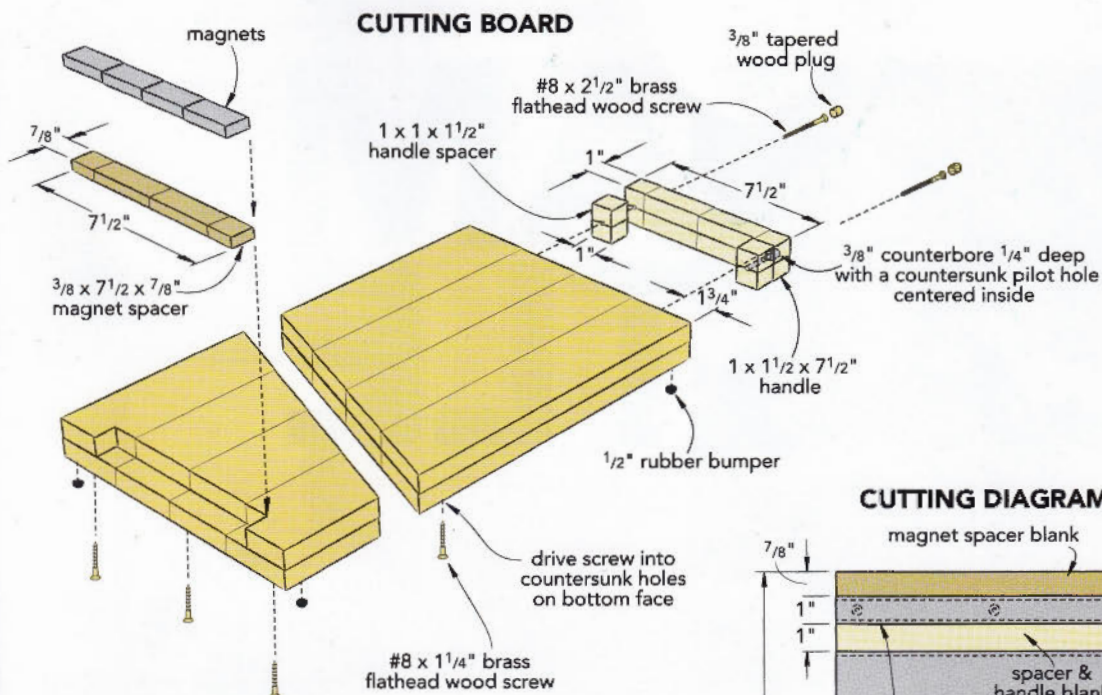
from the bottom face, drill countersunk pilot holes where shown. Drive steel #8×1¼" flathead wood screws; note that the screw locations are located clear of the cut lines.

TIP To avoid breaking or stripping soft brass screws in hardwoods, drive a steel screw into the hole and then replace it with the brass screw of the same size.

- Remove the steel screws and separate boards. Sand any stray fibers at each screw hole location that may prevent the boards from laying tight together; apply wood glue and "clamp" the boards back together with the steel screws; let dry.
- Replace the steel screws with brass screws (brass will not rust when the board is hand washed).



Use the magnet side to keep your knives organized; use the handle portion to chop and transport your ingredients.



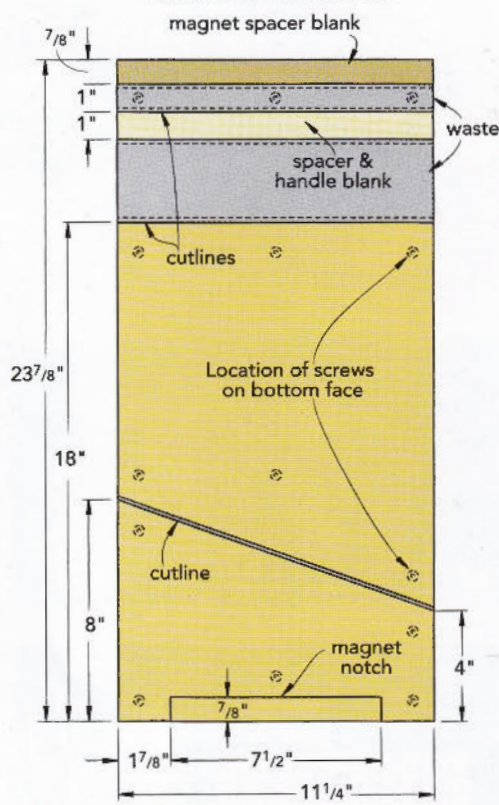
- For the magnet spacer blank, cut a $\frac{7}{8}$ " strip from one end of the blank (**Cutting Diagram**), then cut away the section where the screws were driven in the waste area earlier; cut a 1" strip for the handle spacer/handle blank.
- Cut the board to 18" in length and then cross cut the panel at an angle. This can be done on a table saw or handheld circular saw using a straightedge clamped to the board as a guide. Don't worry if you are a little off the line. The key is you get a clean cut, not one that perfectly matches the layout.

Assemble the Board

With the trimmed magnet spacer in hand, rip a $\frac{3}{8}$ x $\frac{7}{8}$ " strip off the spacer blank, and then cut it to length so it fits the magnet notch—this filler will raise the magnets flush with the cutting surface. Glue and clamp the filler in place; let dry.

- From the handle blank, cut two pieces 1" long to be used for the spacers and one $7\frac{1}{2}$ " long that will be used for the handle.
- Glue the pieces together centered on the end of the cutting board to form the handle; hold the pieces in place with painter's tape.
- When the glue has cured, drill pilot holes and countersinks to conceal the screw heads. The countersinks should be about $\frac{1}{4}$ ". Drive the screws, then apply glue to the holes and tap in $\frac{3}{8}$ " tapered wood plugs. Let dry and sand all surfaces with 180-grit sandpaper.
- Before applying the finish, use painter's tape to mask off the area that will hold the magnets.
- Remove tape; follow epoxy package directions to secure the magnets into the recess. Now add the rubber feet.

CUTTING DIAGRAM



LOWE'S LIST

1 1 x 12 x 48" maple board, #45156 (availability varies by market for lumber species and sizes)

Ceramic magnets, 2 packages, #185097

#8 x 1 1/4" flathead wood screws, 2 packages, #57233

#8 x 1 1/4" flathead brass wood screws, 6 packages, #57261

Water-resistant woodworker's glue (Titebond III Ultimate Glue), #627

Two-part epoxy, (Loctite Instant Mix Clear Epoxy), #20640

#8 x 2 1/2" flathead wood screws, #57486

#8 x 2 1/2" flathead brass wood screws, #52525

1/2" clear rubber bumpers, #55659

3/8" wood plug, #19435

Food-safe finish (Watco Butcher Block Oil), #43860

TOOLS

Table saw with combination blade

Drill and #8 countersink

Tape measure

#2 Phillips driver bit

Sanding block and 120-, 220-, and 320-grit sandpaper

Painter's tape

Painter's rags



FOOD-SAFE FINISHES

When applying a finish to wood that will contact food, safety is critical.

To that end, Watco's Butcher Block Oil & Finish was developed as a finish that's safe and suited for bowls, butcher blocks, cutting boards, and more.

APPLY THE FINISH Prepare the wood by sanding to 320-grit; remove all dust using a tack cloth. Next, flood the surface with Butcher Block Oil & Finish using a cloth rag. Allow the oil to soak in for a few minutes and then wipe off the excess. Let dry to the touch, then lightly sand. Clean and apply three more coats, alternating finish and sanding. Let the final coat dry for 72 hours before use. **Safety Tip:** Allow the oiled rags to dry thoroughly on a flat surface before tossing them in the trash; otherwise, they can spontaneously combust.

CARE FOR THE BOARD Clean your board after every use. Sanitize it every month using a mixture of 1 tablespoon bleach to 2 quarts of water; let dry and apply a new coat of Watco Butcher Block Oil & Finish. **Tip:** Use a separate cutting board for meats to avoid cross contamination.

PROJECT DETAILS

SKILL LEVEL

INTERMEDIATE

START TO FINISH

16 HOURS

ESTIMATED COST

\$170

DREAM CASTLE

DELIGHT THE PRINCESS OF
THE HOUSE WITH A FUN—AND
FUNCTIONAL—BOOKCASE
JUST RIGHT FOR DOLLS,
DISPLAYS, AND DAYDREAM.



PHOTOGRAPHER: CAMERON SADEGHIPOUR / SHOOTING WITH A TRICHT

▶ MAKE A PRETTY PALACE

Build this whimsical bookcase and make it the focal point of the room—paint it up and use the palette as the scheme for bedding, walls, rugs, and more.

Make a Case

- Begin by cutting sides **A**, top **B**, and bottom **C** to length (**Cutting List**, page 10). Drill three pocket holes on each end of the inside faces of the sides (**Case & Trim**, page 8). Sand all inside faces of the parts with 120-grit paper.
- Attach the sides to the top and bottom using wood glue and pocket hole screws.
- Cut the center back slats **D** to length and end back slats **E** to width and length and join the boards together using pocket holes, screws, and wood glue to form the back assembly.
- Lay out and cut the arch on the bottom of the back assembly (**Cutting Template**, page 11). The pattern for the front skirt **G**, front trim **I**, and back assemblies **D** and **E** use the same size cutout. Using a jigsaw, cut the opening and sand smooth.

TIP Without an arch, the bookcase will rock if the floor is uneven; isolating the corners adds stability.

- Position case assembly on a flat surface; attach back assembly to the case assembly using wood glue and 1¼" brads.
- Cut the shelves **F** to length and drill pocket holes on the bottom face—three at each end and three on the edge joining to the back assembly. Position the shelves as shown (**Case & Trim**) and secure in position using wood glue and pocket hole screws.

Add the Details

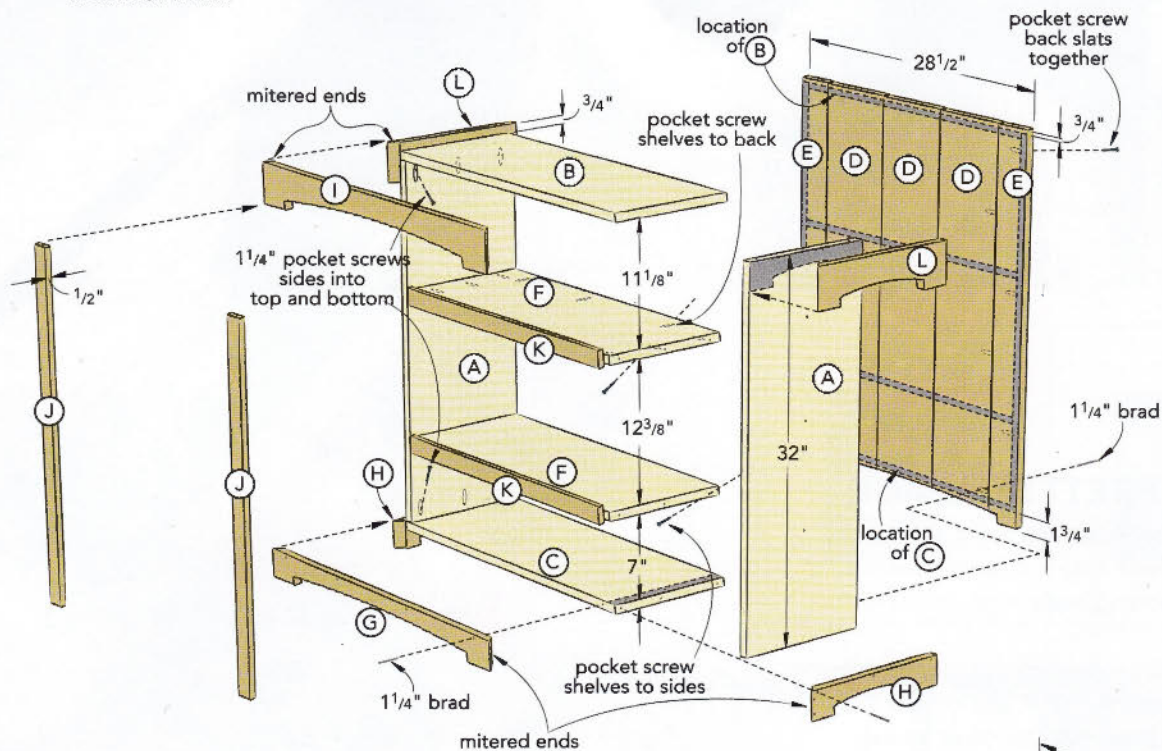
- Cut front skirt **G** and end skirts **H** to length (**Cutting List**). Miter-cut both ends of the front skirt and one end of each of the end skirts.
- Mark and cut the arch on the skirt boards (**Cutting Template**) using a jigsaw; sand smooth.
- Position the front skirt in place so the top edge



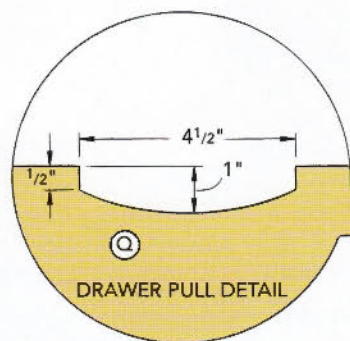
of the board is flush with the inside surface of the bottom and the miters align with the sides of the case. Secure with wood glue and brads.

- Align the miters and secure the end skirts in place using glue and brads.
- Cut front trim **I** to length and miter each end. Make the arch cut and sand smooth.
- Align the ends of the miters with the case sides and place trim so the top edge is ¾" above the top **B**. Install using wood glue and brads.
- From ½" material, rip the stiles **J** to width and cut to length to fit between the front skirt and front trim. Align outside edge of stile with outside face of the case; attach using wood glue and brads.
- Also from ½" material, cut the shelf nosing **K** to length to fit between the stiles. Glue and brad the nosings in position—centered on the width of the edge of the shelves.
- Complete the trim by adding the end trim **L**; cut parts to length, miter one end, and cut arch detail. Align the miters (**Case & Trim**); install using wood glue and brads.

CASE & TRIM



DRAWER



Build the Drawer

- Install a $\frac{1}{4}$ " rabbeting bit in a router table. Raise it $\frac{1}{4}$ " above the table and cut a $\frac{1}{4} \times \frac{1}{4}$ " rabbet (**Drawer**) along one edge of $\frac{1}{2}$ " material, long enough to make the drawer front **M** and the drawer sides **N**.
- From the boards, cut the drawer front and sides to length, then rip to the width (**Cutting List**).
- With the rabbet facing inside, position the sides flush with ends and bottom of the drawer front; attach using wood glue and $1\frac{1}{4}$ " brads.
- From $\frac{1}{4}$ " stock, cut the drawer bottoms **O** to length and width.
- Glue and nail drawer bottoms in position using $\frac{5}{8}$ " brads, setting the edge of the first board against the rabbet in the drawer front. Glue the second board in position against the first, securing to the sides with brads.

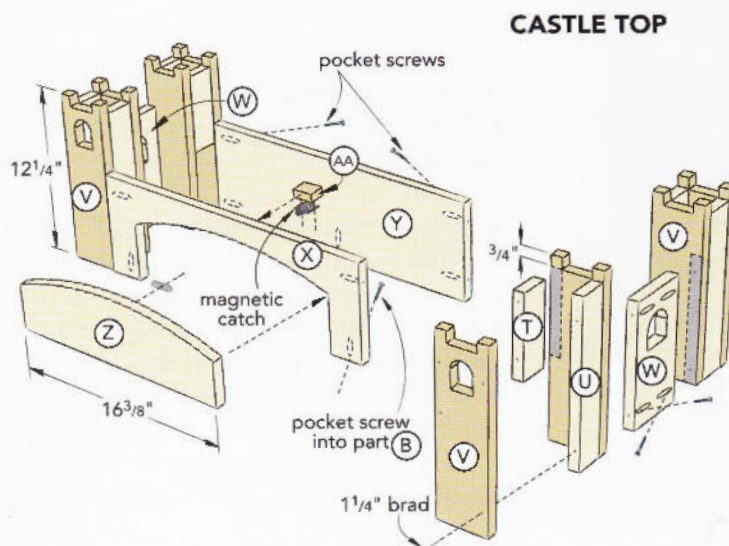
- Cut drawer back **P** to size; attach using wood glue and brads; align flush with the bottom and sides of the drawer.
- For drawer face **Q**, cut a $\frac{3}{4}$ " board to width and length. Cut the drawer pull detail and attach to the drawer box using wood glue and $1\frac{1}{4}$ " brads; position face so it's centered left to right and $1\frac{1}{16}$ " from the bottom of drawer assembly. Drive brads from inside of the drawer to minimize nail holes.
- From $\frac{3}{4}$ " stock, cut drawer runners **R** and case runners **S** to length. Apply two of the runners on the bottom of the drawer assembly $1\frac{1}{4}$ " in from each drawer end; position the third at the center of the drawer bottom. Attach with wood glue and brads through the runners into drawer front and back.
- Set case runners in position (**Finishing Touches**, page 10) and attach using wood glue and brads.





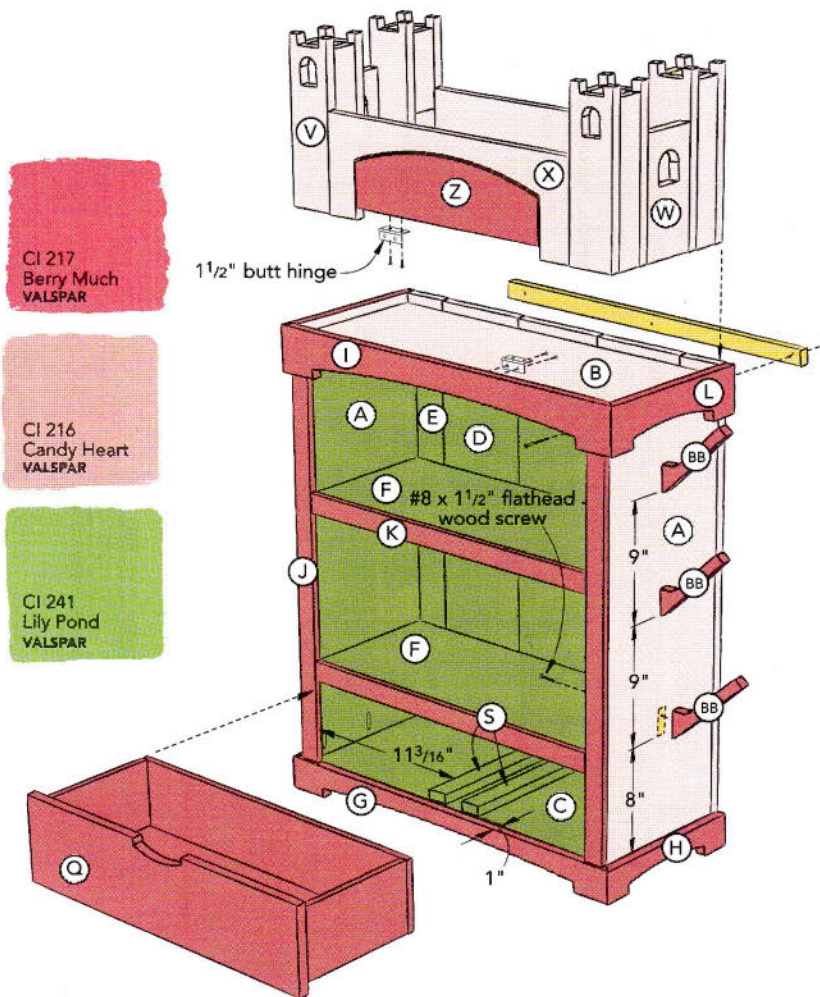
Build the Castle Top

- Cut the short tower sides **T**, long tower sides **U**, and tower ends **V** to size (**Cutting List**).
- Measure and mark the notches on the tower ends and window openings (**Cutting Template**) on two tower ends using the grid to transfer the pattern.
- Drill a $\frac{3}{8}$ " clearance pilot hole in the window openings for access with your jigsaw blade; cut out the window openings and notches.
- Position the short tower sides and long tower sides as shown so the tops of the sides are $\frac{3}{4}$ " below the tops of the tower ends; attach using wood glue and $1\frac{1}{4}$ " brads.
- Place the four tower assemblies flush with inside edges of the corners of the top of the bookcase assembly. Measure the distance between tower assemblies on the front and sides to get



CONTINUED ON PAGE 10

FINISHING TOUCHES



CUTTING LIST

QTY.	PART	T	W	L
2	A sides	3/4	11 1/4	32
1	B top	3/4	11 1/4	28 1/2
1	C bottom	3/4	11 1/4	28 1/2
3	D center back slats	3/4	7 1/4	36
2	E end back slats	3/4	3 1/2	36
2	F shelves	3/4	11 1/4	27
1	G front skirt	3/4	2 1/2	30
2	H end skirts	3/4	2 1/2	12 1/4
1	I front trim	3/4	3 1/2	30
2	J stiles	1/2	1 1/2	30
2	K shelf nosing	1/2	1 1/2	25 1/2
2	L end trim	3/4	3 1/2	12 1/4
1	M front	1/2	4	23 1/2
2	N sides	1/2	5 5/8	9 1/4
2	O bottoms	1/2	4 1/2	24 1/2
1	P back	1/2	5 5/8	24 1/2
1	Q face	3/4	6 1/2	25 1/2
3	R drawer runners	3/4	1 1/2	11
2	S case runners	3/4	1 1/2	11
4	T short tower sides	3/4	2	5 1/4
4	U long tower sides	3/4	2	11 1/2
8	V tower ends	3/4	3 1/2	12 1/4
2	W side walls	3/4	4 1/2	8 1/4
1	X front wall	3/4	7 1/4	21 1/2
1	Y back wall	3/4	7 1/4	21 1/2
1	Z drawbridge	3/4	4 3/4	16 3/4
1	AA catch block	3/4	1 1/2	1
3	BB doll hooks	3/4	1 1/2	7 1/4

measurements for the length of the front wall **X**, back wall **Y**, and the width of the side walls **W**.

- Cut front, back, and side walls to size; cut the window openings in side walls (**Cutting Template**).
- Position side walls flush with outer edge of the tower assemblies; attach using pocket hole screws.
- Cut the opening in the front wall for the drawbridge (**Cutting Template**).
- Attach the front and back walls to the tower assemblies and top **C** using pocket hole screws where shown.
- Cut the drawbridge **Z** to specified dimensions and transfer the pattern to the part; jigsaw the drawbridge and sand the cut smooth.
- Cut the catch block **AA** to size and secure in position (**Castle Top**, page 9), centering the catch 1/2" down from the inside top edge of front wall; use wood glue and 1 1/4" brads.
- Place the castle assembly on the case (**Finishing Touches**) and position the drawbridge centered

under the front wall; attach to the front trim with hinges and included hardware. Attach the two parts of the magnetic catch to the drawbridge and the catch block following the manufacturer's instructions.

- For the doll hooks **BB**, transfer the pattern to 3/4" thick stock and cut to shape with a jigsaw; sand smooth. Place a piece of masking tape at the locations for the hooks as indicated.

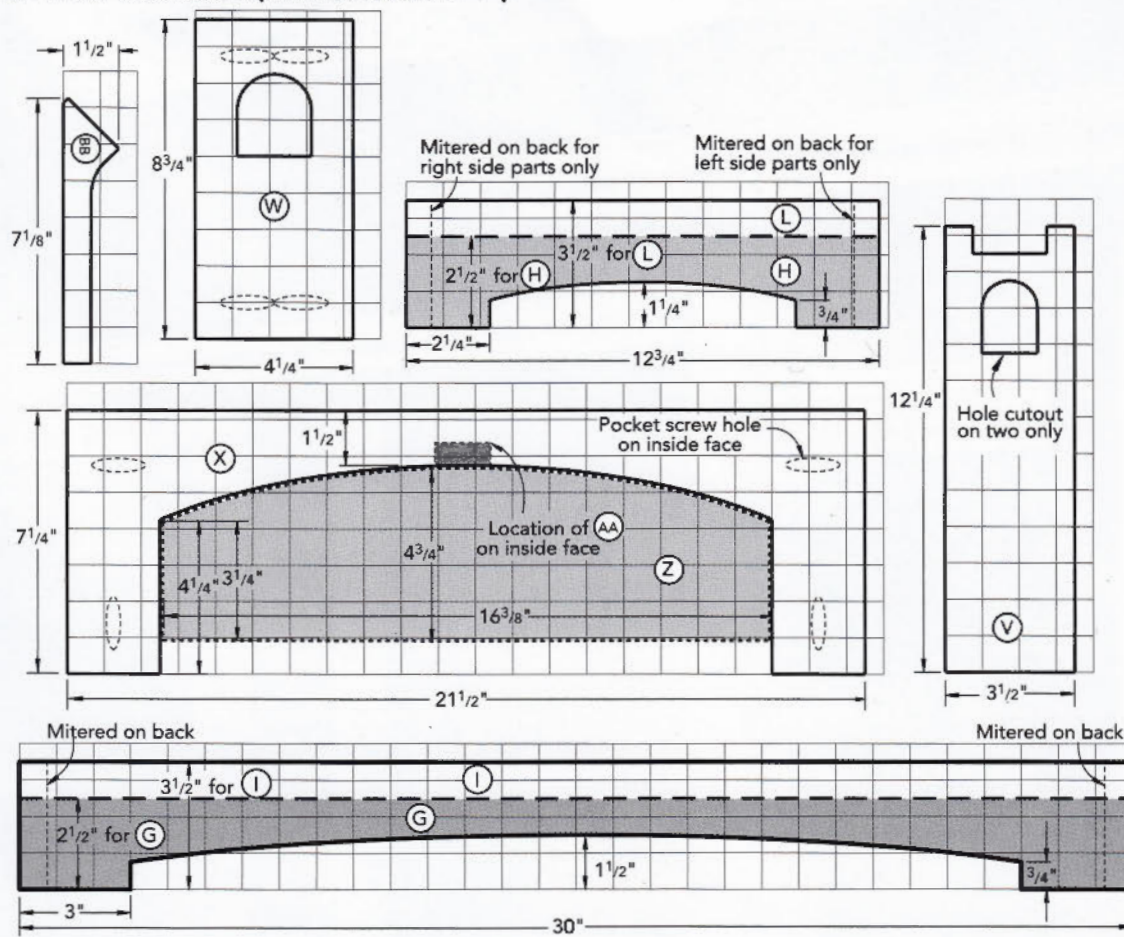
Add Finishing Touches

- Fill all holes with wood filler except for the pocket holes for the screws that attach the castle assembly to the top. Sand all surfaces with 150-grit paper.
- Remove hardware, prime and paint, and let dry.
- Reinstall the hardware and add the doll hooks—remove masking tape and glue in position, holding them in place with painter's tape until the glue dries. Remove tape and drive a screw from the inside to add strength to the joint as shown.

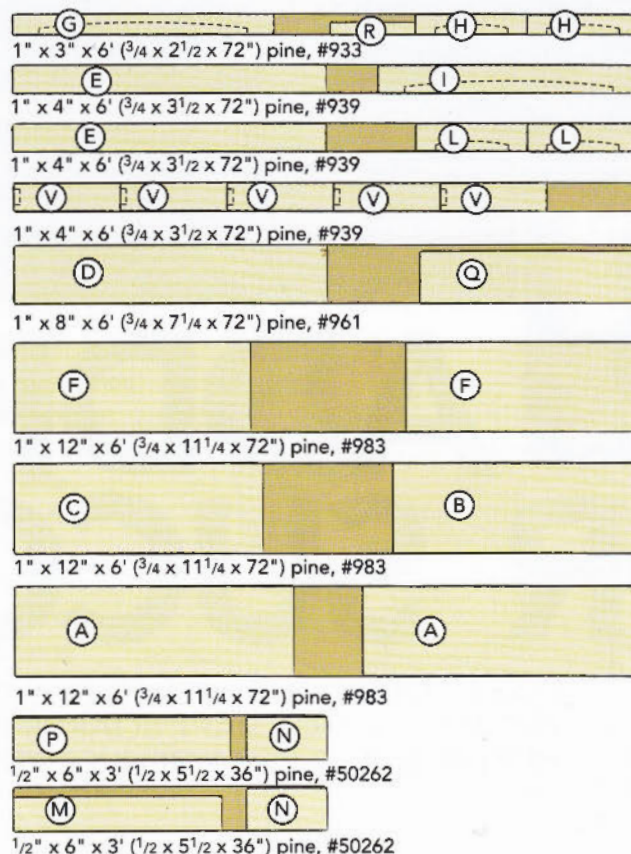
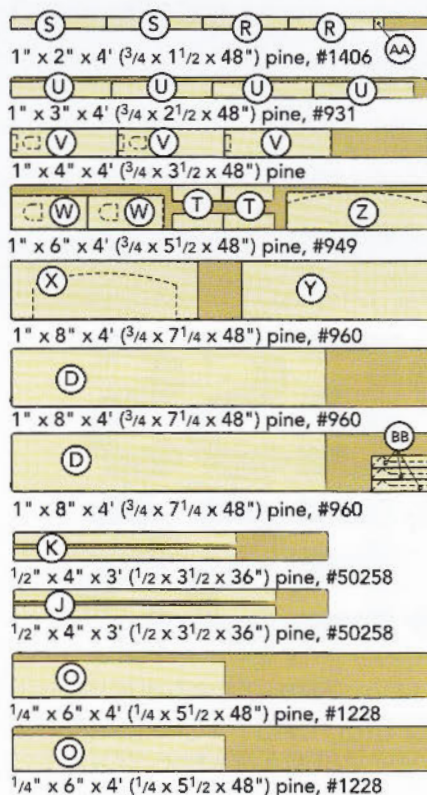


TO MAKE THIS VERSION AND WATCH A HOW-TO VIDEO, go to lowescreativeideas.com/bookcastle.

CUTTING TEMPLATE (ONE SQUARE = 1")



CUTTING DIAGRAM



LOWE'S LIST

1 1/4\" coarse thread
pocket hole screws,
100 Pack, #205317

#8 x 1 1/2\" flathead
wood screws, #57483

18 x 3/4\" wire brads,
#140456

18 x 1 1/4\" wire brads,
#128126

8 oz. wood glue, #627

1 pack 1 1/2\" narrow
hinge butt/mortise
hinge, #308969

Magic Touch magnetic
catch, #233963

See Cutting Diagram
for lumber list

ACCESSORIES

3-piece rectangular
woven-cord storage
basket, #320307

TOOLS

Table saw

Miter saw

Jigsaw

Router with a 1/4\"
rabbeting bit

Drill with bits and
#8 countersink

Pneumatic brad nailer

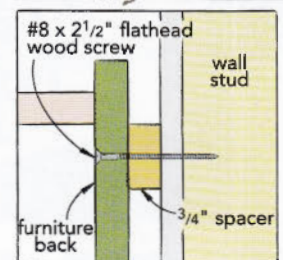
Kreg Jig K4, #3526

Power sander and
various sandpapers

Framing square

Clamps

Paintbrush/rags



**SAFE
AND
SECURE**

With little ones in the house,
it's a great idea to secure
sizable furnishings in place
to prevent mishaps. Be sure
to anchor this bookcase to
the floor or a wall once it
has been set in the room.

PROJECT
DETAILS

SKILL LEVEL
BEGINNER

START TO FINISH
3 HOURS

ESTIMATED COST
\$68

743

ADDRESS FOR SUCCESS

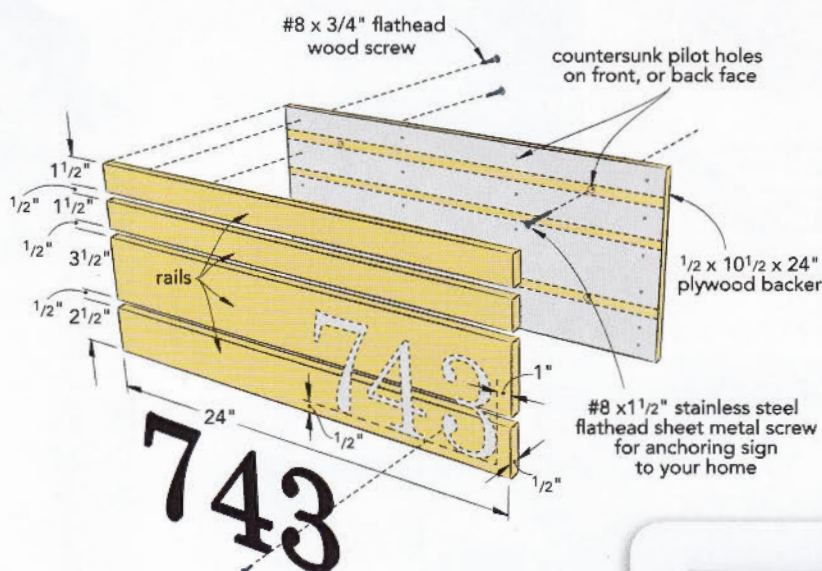
MAKE YOUR HOUSE STAND OUT WITH A SUPER-SIMPLE PROJECT USING CRAFT BOARDS AND BIG, EASY-TO-READ NUMBERS. THE PIZZA DELIVERY DRIVER WILL THANK YOU.

GET ON BOARD

Before you begin, contact your local zoning board or post office to review house number regulations. Also, have your sheet of plywood cut to size in the lumber cutting department at Lowe's.

Build It

- Cut a piece of $\frac{1}{2}$ " plywood to size for the backer.
- Place the 24" craft board rails on the plywood as shown, leaving a $\frac{1}{2}$ " space between the rails. Use small pieces of double-stick tape to secure the rails to the backer.
- Turn sign over and predrill and drive $\frac{3}{4}$ " wood screws through the backer into the rails as shown.
- Turn sign back over and drill 4 countersunk holes in the $\frac{1}{2}$ " spaces between trim boards—these will be used to secure the sign to your home. Remove screws and sand all parts with 120-grit sandpaper.
- Prime all surfaces, let dry. Apply two coats of paint to all surfaces; let dry.
- Secure rails by reinserting and driving screws.
- Attach house numbers with the screws provided. (Example shown has the numbers positioned 1" from the end and $\frac{1}{2}$ " from the bottom.)



Install It

- Find a helper to hold the sign where you want to mount it. Stand back and assess its position. Use a level to adjust final position; mark the screw hole locations on the siding.
- For wood or engineered-wood siding, drive mounting screws directly into the surface. For brick, stucco, or other masonry walls, drill with a masonry bit and use expansion anchors for the screws. For a cleaner look, paint the mounting screw heads to match the backboard.

LOWE'S LIST

- 1 $\frac{1}{2}$ x 24 x 24" plywood, #7705
- 2 $\frac{1}{2}$ x 24" craft boards, #50246
- 1 $\frac{1}{2}$ x 4 x 24" craft board, #50257
- 1 $\frac{1}{2}$ x 3 x 24" craft board, #50249
- #8 x $\frac{3}{4}$ " flathead wood screws, 2 packages, #57231
- #8 x $\frac{1}{2}$ " stainless steel flathead Phillips-drive sheet metal screws, #82651
- 1 qt. stain-block primer, #45663
- 1 qt. paint for back board, #6003-1c
- 1 qt. paint for craft boards, #6007-1b
- House numbers shown
7, #214384
4, #214371
3, #214370

TOOLS

- Tape measure
- Paintbrush
- Drill and #8 countersink
- #2 Phillips screwdriver or driver bit
- Builder's level
- Sanding block with 120-grit sandpaper



BUY THE NUMBERS

FIND THE STYLE THAT'S JUST RIGHT FOR YOUR HOUSE.



CLOCKWISE FROM TOP LEFT:
5" satin brass number 7, #47190, \$4.48 (available online); 5" solid zinc number 6, #180842, \$4.98; 4" plastic reflective number 2, #63933, \$1.47; 3" vinyl number 1, #63798, \$4.44; 4" zinc satin nickel number 8, #60945, \$3.98; 4" zinc Venetian bronze number 9, #59253, \$3.98.



PROJECT DETAILS

SKILL LEVEL

INTERMEDIATE

START TO FINISH

10 HOURS

ESTIMATED COST

\$345

OFFICE ANYWHERE

PHOTOGRAPHER: CAMERON SADEGHPOUR HOW-TO PHOTOGRAPHER: DOUG WETHERINGTON PRODUCERS: MICHAEL DONOVAN AND WADE SCHERRER

NEED A COMPACT
WORKSTATION?
THINK OUTSIDE THE
BOX. DRESS UP SOME
VENTILATED SHELVING
WITH A SIDE DESK,
DOORS, AND BINS TO
KEEP CLUTTER (AND
A HOME OFFICE)
UNDER CONTROL.

LOOK FOR NOOKS

• Finding room to get organized can be a challenge, but at less than 5 feet wide, this small-scale workstation looks—and fits—great all around the house. Try it in the kitchen, a spare bedroom, or even a cozy corner in the family room.

Assemble the Tower

- Using the **Cutting Diagram on page 19** as a guide, draw cutlines on two pieces of 8' ventilated shelving to make the sides **A** and top/bottom **B**. Cut the shelving using a jigsaw with a clean-cut blade (**Photo 1**).
- On the bottoms of the two sides, nail on the $\frac{7}{8}$ " glides (**Desk, page 17**); this will prevent damage on the bottom of the unit during assembly.
- Break down the sheet of oak plywood (**Cutting Diagram**) and cut the four tower shelves **C** to size (**Cutting List, page 19**). Drill three pocket holes along the front and back edge on the bottom face for securing the shelf edging.
- From two 8' 1×2s, cut the seven pieces of shelf edging **D** to size and secure to the shelves (**Desk**) using wood glue and $1\frac{1}{4}$ " fine-thread pocket hole screws (**Photo 2, page 16**). Note: One shelf will get a plywood back edging later; the edging may be

glued only, but pocket holes speed assembly while the glue dries.

- Cut tower back **E** to size and secure to the back of the shelf with only a front edging using $1\frac{1}{2}$ " flathead wood screws and wood glue. Align the top surfaces (**Desk**).
- Sand the shelf assemblies, remove dust, and apply a semigloss clear finish following the manufacturer's directions.
- When finish has cured, assemble tower. Secure bottom, shelves, and top to one side of the tower using $2\frac{1}{2}$ " flathead wood screws and finish washers.
- Position the shelves as shown (**Desk**). Now add the remaining tower side (**Photo 3, page 16**).

TIP Finish washers add strength and detail.

- Where the desk will be secured to the tower, you will need to countersink these holes; the trim washers would prevent the assemblies from jointing flush to one another.



Place masking tape around the areas to be cut to help reduce splintering when using the jigsaw. Mark lines on the tape to guide your cut.



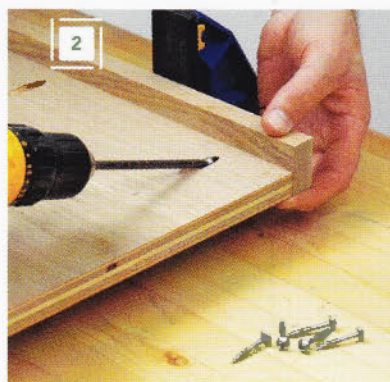
Build a Desk

- Cut the remaining 8' piece of ventilated shelving to length to make desk side **F** and desk back **G** (**Cutting Diagram**). On the bottom of the desk side, nail on the $\frac{3}{8}$ " glides.
- Drill a pocket hole on the bottom edge of the desk back (**Desk**). This is how the lower rail of the desk back is secured to the tower after the desk is assembled.
- From the remaining portion of oak plywood, cut desktop **H** to size. Drill four pocket holes along the front edge on the bottom face for securing the desk edging **I**.
- From an 8' 1×3, cut the desk edging to the same length as the desktop. Before attaching the edging, drill pocket holes on the inside face for securing to the desk side and the tower side (**Desk Edging Detail**). Be sure to position the screw holes as shown so after the desktop is glued to the edging you can drive the screws into the desk and the tower sides.
- Cut the desk side cap **J** from the remaining piece of 1×2 and temporarily clamp in position; drive pilot holes for the screws that attach the cap to the side. Remove the cap and sand the parts smooth.
- Apply finish to the desktop and cap as before, and allow the finish to cure.
- Secure the desktop to the desk back, driving screws up through the underside of the desktop into the lip that is formed on the inside of the back by the shelving rail (**Desk**).
- Secure the side cap in position using screws and finish washers in the previously drilled holes.
- Secure the desk/top assembly to the desk side, positioning the desktop 29 inches up from the bottom as shown (**Desk**).
- Set the desk assembly aside and begin the doors.

FOR MORE TIPS
ON USING POCKET
HOLE SCREWS, go
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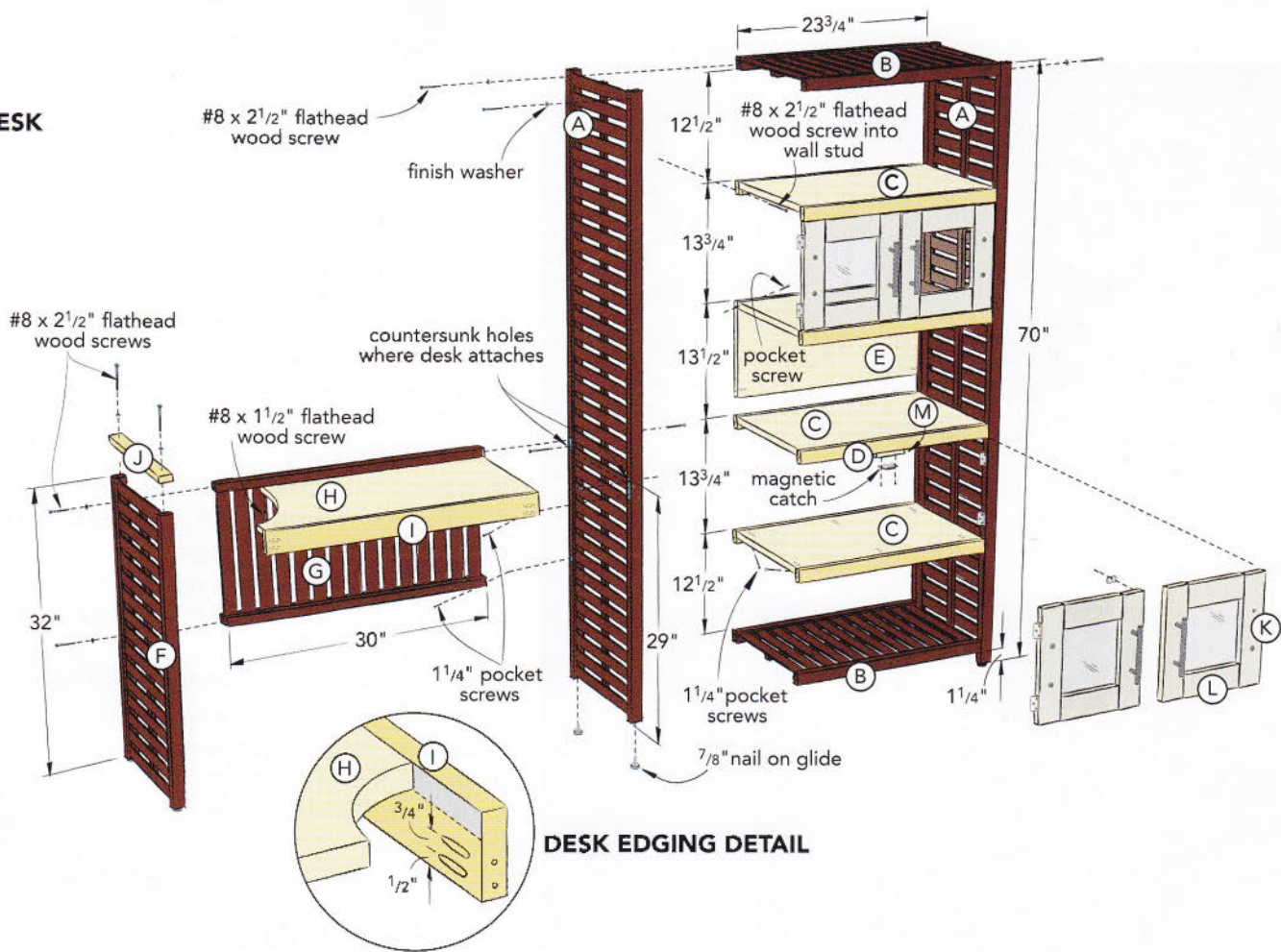
When adding the shelf edging, double-check the alignment while screwing to be sure it remains true.



Assemble the tower on the ground; drill pilot holes and secure the shelves using 2 1/2" screws and trim washers.



Use a face frame clamp to hold the pieces together while driving the screws. The clamp will prevent slips.

DESK CREATIVE
CARD
HOLDER

Keep cards, invitations, notes, and photos handy with this easy-to-make card holder. To learn how to make one for yourself, go to lowes-creativeideas.com/hangten.



Make the Doors

- Before you begin, you need to know the definitions of door parts: The stile is the vertical component, like a fence post; the horizontal parts are called rails.
- From the remaining 1×3 material, cut the door stiles **K** and rails **L** to length (**Cutting List**).
- Use a pocket hole jig to drill, glue, and secure the rails to the stiles (**Photo 4, page 16**).
- Secure the two rails to one stile, and then flip it over and join the second stile to complete the door frame assembly.
- To complete the doors and hide the pocket holes from sight when you open the doors, use oak pocket hole plugs to fill the screw holes. Apply a small amount of wood glue to the holes and set the plugs in place. When the glue has cured, sand the doors smooth.
- Take the assembled doors and ask a Lowe's associate to trim a piece of clear polycarbonate for the doors. To do it yourself, you can cut the material using a table saw and a fine-cut, carbide-tooth blade. The polycarbonate should be cut $\frac{1}{8}$ " narrower than the door assembly and to the same height as the door.
- Sand the edges smooth with 150-grit sandpaper and apply Valspar frosting spray following the directions on the can; this adds a nice decorative finish and also helps conceal the contents of your cabinet (**Photo 5**).



Peel only one side of the polycarbonate backing before spraying to prevent any overspray on the opposite side. When the finish dries, remove the remaining backing.



When drilling the screw holes, be sure to use a tape flag positioned $\frac{1}{2}$ " up from the end of the drill bit to prevent drilling all the way through the door frame.



Place the tower on its side and center the doors in the openings before drilling pilot holes and affixing the door frame. See the tip on **page 3** to make your hinges stick.

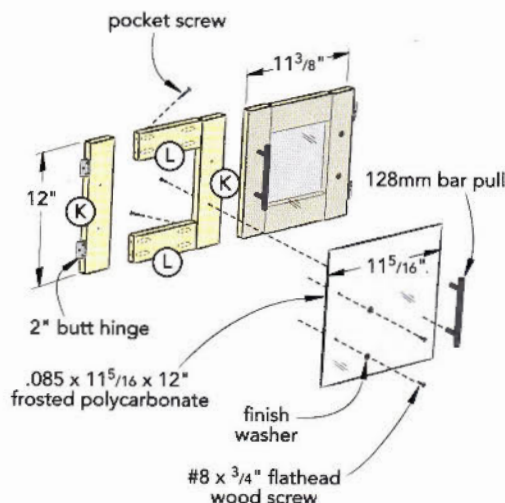
Put It All Together

- Using masking tape, position the polycarbonate on the door $\frac{1}{8}$ " away from the hinge edge and flush to the top, bottom, and remaining edge.
- Lay out evenly spaced holes for the hinges and screws (Photo 6). Along the hinge edge of the door, drill $\frac{1}{8}$ " pilot holes for screws and trim washers and $\frac{3}{16}$ " holes for door handles.
- Apply finish to the door assembly. When finish has cured, secure hinges to the door edge and mount the doors (Desk), centering the doors in the opening between the shelf edging D (Photo 7).
- From the remaining 1x2, cut two door catch blocks M and secure them to the underside of the shelves, centering them on the length of the shelf edging. Secure by predrilling and driving two $1\frac{1}{4}$ " flathead wood screws per block.
- Stand the tower up and add the polycarbonate sheets to the door, securing with screws, trim washers, and the door handle.
- Add the magnetic catches and the strike plates.
- Move the tower and desk components into place and complete the desk assembly by attaching the desk to the tower. Secure the desk by driving screws through the pocket holes in the desk edging and the desk back bottom rail—the desk surface should be 29 inches above the bottom of the tower side.
- Secure the tower to wall studs using $2\frac{1}{2}$ " flathead wood screws.

CUTTING LIST

	QT.	PART	T	W	L
TOWER	2	A sides (shelving)	$\frac{3}{4}$ "	11 $\frac{1}{4}$ "	28 $\frac{1}{2}$ "
	2	B top/bottom (shelving)	$\frac{3}{4}$ "	11 $\frac{1}{4}$ "	32"
	1	C shelves (oak ply)	$\frac{3}{4}$ "	11 $\frac{1}{4}$ "	28 $\frac{1}{2}$ "
	7	D shelf edging (oak)	$\frac{3}{4}$ "	7 $\frac{1}{4}$ "	36"
	1	E back (oak ply)	$\frac{3}{4}$ "	3 $\frac{3}{4}$ "	36"
DESK	1	F desk side (shelving)	$\frac{1}{2}$ "	4"	23 $\frac{3}{4}$ "
	1	G desk back (shelving)	$\frac{1}{2}$ "	5 $\frac{5}{8}$ "	9 $\frac{1}{4}$ "
	1	H desktop (oak ply)	$\frac{1}{4}$ "	4 $\frac{1}{2}$ "	24 $\frac{3}{4}$ "
	1	I desk edging (oak)	$\frac{1}{2}$ "	5 $\frac{5}{8}$ "	24 $\frac{3}{4}$ "
	1	J side cap (oak)	$\frac{3}{4}$ "	6 $\frac{1}{2}$ "	25 $\frac{3}{4}$ "
DOORS	8	K stiles (oak)	$\frac{3}{4}$ "	2"	5 $\frac{1}{4}$ "
	8	L rails (oak)	$\frac{3}{4}$ "	2"	11 $\frac{1}{2}$ "
	2	M catch blocks	$\frac{3}{4}$ "	1 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "

DOORS



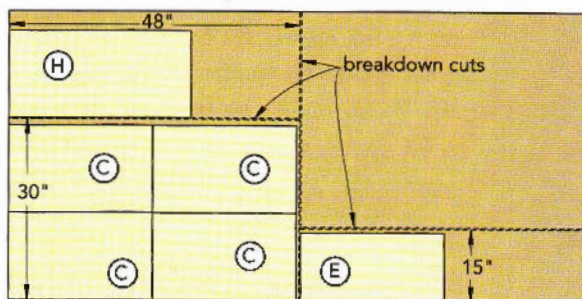
CUTTING DIAGRAM



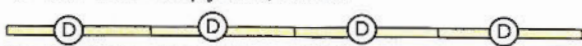
1 3/8" x 16" x 8' Ventilated Shelf, #56777 (2 required)



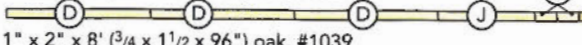
1 3/8" x 16" x 8' Ventilated Shelf, #56777



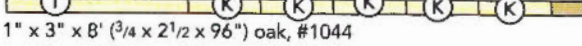
3/4" x 48" x 96" oak plywood, #16422



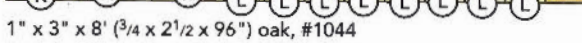
1" x 2" x 8' (3/4" x 1 1/2" x 96") oak, #1039



1" x 2" x 8' (3/4" x 1 1/2" x 96") oak, #1039



1" x 3" x 8' (3/4" x 2 1/2" x 96") oak, #1044



1" x 3" x 8' (3/4" x 2 1/2" x 96") oak, #1044

LOWE'S LIST

3 16x96" Cappuccino Ventilated Shelves, #56777

$\frac{1}{8}$ " plastic nail on glides, 2 packs, #246570

$1\frac{1}{4}$ " pocket hole screws, 100 pack fine thread, #205309

Titebond III Ultimate glue, #627

#8x1 $\frac{1}{2}$ " flathead wood screws, 2 packs, #57483

#8x2 $\frac{1}{2}$ " flathead wood screws, 50 pack, #68356

#8 nickel finishing washers, 2 packs, #58169

Oak pocket hole plugs, 50 pack, #132604

#8x $\frac{3}{4}$ " flathead wood screws, #57223

4 128mm satin nickel bar pulls, #227444

4 2" butt hinges, #308970

4 magnetic cabinet catches, #233959

28x30" clear polycarbonate sheet, #60407

1 1-oz. can Valspar frosting spray, #105953

Minwax Polycrylic clear finish, #45888

See Cutting Diagram for lumber list

ACCESSORIES

Copper rectangular basket, #24632

Linen milk crate, #320323

TOOLS

Table saw

Miter saw

Jigsaw

Kreg Jig K4, #3526

Random orbit sander with abrasive disks

Carpenter's square

Drill with bits and #8 countersink

Bar clamps

Paintbrush & rags

Painter's tape



12-VOLT JOLT!

FOR BIG-TOOL POWER IN A COMPACT, LIGHTWEIGHT KIT, GO FOR PRO-QUALITY WITH THESE NEW TOOLS READY-MADE FOR THE HOME DO-IT-YOURSELF.

With all the great drill kits out there and all of the choices of battery types and voltages staring at you from the store shelves, determining the best tool for your needs can be a challenge. Shopping is simple though with this small kit from DeWalt, which loads all the features (and power) of larger tools into a package as much at home in the kitchen utility drawer as it is in the shop. And with lithium-ion batteries on board, more power comes in a smaller package—nine times more watts per pound than nickel-cadmium batteries. On one charge, the kit's impact drove 110 2½" deck screws and the drill/driver made enough pocket holes to build 1½ bookcases like the one shown on page 6. Lithium-ion batteries hold their charge, too, which means casual users don't have to recharge every time the tool is needed. You can replace a few cabinet knobs in January, install a new address sign in March, and find that when it's time to replace some fence boards in July, you'll still have charge in the battery.

DeWalt 12V MAX Drill Driver/Impact Driver Combo Kit DCK211S2 (#83525). Drill/driver (#83529) and impact driver (#50507) also sold separately.





BITS & PIECES

When it's time to buy drill and driver bits, remember that standard driver bits are made of cast steel and can break when used with the full force of an impact driver. What to do? Look for black "impact-ready bits" like the ones in this DeWalt set. The rough-and-tough bits are made of forged steel versus cast steel and can handle the power of all the DeWalt impact tools. FYI: The impact will hold all 1/4" hex-shank, quick-insert bits, and the drill/driver 3/8" chuck will handle any bit the chuck can tighten up to 3/8" diameter, including 1/4" hex-shank, quick-insert bits.

28-Piece DeWalt Impact Ready Accessory Kit (#175477)

MAKE AN IMPACT

Impact drivers work much like a mechanic's air tools to break lug nuts free: They use repetitive high power "impacts." Cordless impact drivers deliver high forces without the need of an air compressor and do so without creating twisting forces that effect how you hang on to the drill. They are great for drilling holes with large spade bits and allow you to drive big fasteners one-handed—you can hold on to a ladder while driving screws overhead with its quick-change 1/4" chuck. The "impact" force also makes stripped screws a thing of the past. In fact, this may be the best feature.

All good, but do you still need a standard drill? Yes! The features that make an impact great are not as convenient for more mundane work like drilling common holes or driving small screws. Use them both, and you'll soon get a feel for which tool to grab when you have work to do.

1 DeWalt 12V MAX LED Worklight DCL510 (#48071)



2 DeWalt 12V MAX Screwdriver Kit DCF610S2 (#49942)



3 DeWalt 12V MAX Inspection Camera DCT410S1 (#47656)



4 DeWalt 12V MAX Infrared Thermometer Kit DCT414S1 (#47783)



THE REST OF THE 12V MAX LINEUP

Inspection camera and infrared thermometer may be special order in your area.



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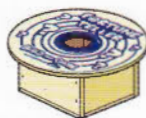
UPCOMING PROJECTS



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MARCH 12, 10 AM
Shoot Around
Basketball



MARCH 26, 10 AM
Fortune Teller



APRIL 9, 10 AM
Sports Pinball



APRIL 23, 10 AM
Birdhouse



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