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workbench

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- » bathroom
- » kitchen
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- » basement



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crisis

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storage
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ON THE COVER



Why spend thousands on a commercial closet system? This easy-to-build organizer features drawers, shelves, and an enclosed cabinet — plus more space for hanging clothes — all at a much lower cost.

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easy weekend projects



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Ready-to-Roll Kitchen Cart

This unique kitchen cart offers good looks, loads of storage, and a large workspace. Best of all, it's simple to build because most of the work is already done for you.

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Folding Screen

Turn basic boards into a simple, sophisticated screen that will help you redefine your living space.

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Closet Door Makeover: From Drab to Dramatic

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Low-Cost Custom Closet System

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Don't let that space under the basement stairs go to waste! Here's a solution for turning the area into affordable storage.

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From low-profile vanities to corner cabinets, here are six great ways to bust clutter in the bathroom.

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ONLINE

WorkbenchMagazine.com
Get even more information about the projects and articles in this issue.

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- Slide Shows: Marble Painting Technique, Fixing Flawed Finishes
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stylish home makeovers



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Natural marble takes thousands of years to form, but you can recreate its great look in just one weekend with paint.

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Innovation, by definition, poses a challenge to convention. And this year's list of innovations certainly has some unconventional items!

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TRACK YOUR HOUSEHOLD POSSESSIONS WITH **Free Software**

Downloadable program makes it easy to keep a complete inventory of the products and components in your home.

It's always a good idea to keep an up-to-date inventory of your home and possessions to ensure that you are adequately insured. And this may be the best time of year to get started, while you can still find receipts and information on all those holiday purchases and gifts. But compiling

and storing the details, costs, and receipts associated with those items can be daunting.

To make the process simpler, check out *Home Inventory*, a free software package from the Insurance Information Institute.

Home Inventory allows you to set up rooms and then input the items used and stored there. You can attach



The main *Home Inventory* screen gives you a general overview of your home and the rooms you've "built" in it. You can also view information about your possessions by category.

photos and copies of receipts, sort items into a broad selection of categories, and print out reports.

The software also lets you store multiple copies of the file, so that you can keep one on your computer and

burn another to a CD and keep it in a safe-deposit box or fire safe.

Download the software at KnowYourStuff.org. For more insurance tips, visit the Insurance Information Institute at III.org.

TOP 4 LAUNDRY TIPS

- 1] Pre-sort laundry into lights, darks, and whites, so you'll have loads ready to go when you have time.
- 2] While sorting, close zippers, clasp hooks, and check pockets.
- 3] Wash small loads as needed between laundry days. Today's machines use less water and energy, which means you can do small loads when you have time.
- 4] Don't overload the washer or dryer. Clothes come out cleaner and less wrinkled when they can move freely.

UPDATED WEBSITE OFFERS

Laundry Help

Unfortunately, we can't send you someone to help with the laundry chores. But we can send you to a website that will help you with your laundry and fabric-care questions. Just head to the Whirlpool Institute of Fabric Science (InstituteofFabricScience.com), and you'll find a variety of helpful resources, including tips like the four at left.

The most useful area of the site, though, is "Laundry 101." There, you'll find information on everything from organizing your laundry room to stain removal to myths and facts about doing laundry.



Need a little help with laundry? InstituteofFabricScience.com offers tips to simplify the task.

FAST FACT:

According to Whirlpool, Americans do a staggering 35 billion loads of laundry every year. That's almost 96 million loads every day.

MEN IMPROVE MARS; WOMEN IMPROVE VENUS

Here's a shocker: Men and women have different attitudes about home improvement projects. That breaking news comes to us from the "Do-It-Yourself Index Survey" recently conducted by the folks at Dremel.

Among other interesting differences, the survey found that 44 percent of men feel that "working on home improvement projects with a family member strengthens the relationship" while only 31 percent of women feel the same way.

1900:

750-1,200 Square Feet
Two or Three Bedrooms
Two Baths
Average Price: Less than \$5,000
\$20,000 median family income

1950:

1,000 Square Feet
Two Bedrooms
One Bathroom
One Story
Average Price: \$11,000
\$12,119 median family income

2000:

2,300 Square Feet
Three or More Bedrooms
2 1/2 Bathrooms
Two Stories
Average Price: \$200,000
\$45,000 median family income

A QUICK GLIMPSE AT OUR Changing Homes

It's no secret that homes have changed in the last 100 years. After all, the lives we lead have changed dramatically in that time, so our homes have evolved in turn.

If you want a snapshot of what homes are like now compared to then, there's no better source than the National Association of Homebuilders (NAHB). That organization keeps a keen eye on the home building industry and occasionally publishes reports about interesting findings. One of those publications is *A Century of Progress: America's Housing from 1900-2000*.

For example, in 1900 America had 16 million occupied housing units. By 1950 the number grew to 43 million, and it swelled to 107 million in the year 2000.

As the number of homes grew, so did the homes themselves. Even as family sizes stayed the same or got smaller, our homes got larger as we demanded that they contain more amenities. For a few examples of how homes have changed, check out the timeline above. And for more interesting information about housing and homebuilding, visit NAHB.com.

Mold Project #2:

Tackling mold while you paint.



1. Visit a Home Depot Tool Rental Center for a fogger and Concrobium Mold Control.



2. Fog Concrobium Mold Control to coat room surfaces and stop existing mold.



3. Paint treated surface and allow to dry. Then, if desired, re-apply Concrobium Mold Control for mold prevention.



4. Enjoy a healthy home environment and lasting protection against mold.

Painting over indoor mold will not solve the problem.

Introducing Concrobium Mold Control

A new, EPA-registered mold fighting solution. It's easy to use and contains no bleach or other harmful chemicals. Treat surfaces with Concrobium Mold Control before painting to eliminate existing mold and re-apply after painting for mold prevention. Try fogging Concrobium Mold Control in large or inaccessible spaces.

Home Depot ToolRental

Available in the Tool Rental Center at your local Home Depot®
Visit homedepotrentals.com/moldcontrol.asp



Available in a convenient spray bottle for spot mold cleanup and prevention. Great for use in bathrooms, laundry rooms, closets, kitchens, around windows, hot tubs, RVs, cottages - wherever mold takes hold.
www.concrobium.com



In the next issue > Mold Project #3: Treating for mold during renovations.

NEED TO KNOW WHAT'S UNDERGROUND?

One Call Does It All

Before you take on any projects that require digging in your yard, you need to have all the underground utilities located. That way, you won't risk hitting a buried pipe, wire, or cable. At best, this can cause an inconvenience for you or your neighbors and, at worst, a life-threatening accident or injury.

Thankfully, the process of having your utilities marked is easy, and it's free. All you have to do is phone your local One-Call service, and they'll arrange to have someone come out to locate and mark all your underground utilities. And making that call is now easier than ever thanks to an organization called the Common Ground Alliance.

Just call 811, and you'll be automatically routed to your local One-Call center, where operators will route you to the appropriate utility companies to get your underground utilities located and marked.

The 811 number is new, so it hasn't been implemented everywhere yet. If you dial and don't get connected, just go to Call811.com, and you can find the regular toll-free number for the One-Call service in your area.



**Know what's below.
Call before you dig.**

WHAT DOES "GREEN" MEAN?

Many of us are trying to buy "green" products these days. Unfortunately, there's no standard for what "green" means.

That makes it tough to select even a simple product like construction adhesive. The folks from Liquid Nails advise that if you want a "green" construction adhesive, make sure the label says "Low VOC." That tells you that volatile organic compounds (VOCs) make up no more than 15 percent of the product's weight, as opposed to the 40 percent that's allowed in regular construction adhesive.

Are you buying the best?

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Unique fully integrated soft grip handle
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40% More Clamping Force than 8800C series QUICKGRIP Bar Clamps*
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Value Priced Clamps for over 100 years

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www.adjustableclamp.com

* When tested using the same input force. Quick-Grip is a registered trademark of Inco Industrial Tool Company.

Bar/Spreader Clamp
"Jorgensen" ISO

PROPER CHARGING IS THE WAY TO

Maintain Tool Batteries

Q: Should I leave my cordless tool batteries on the charger all the time or take them off once they are charged?

*John Long
Belle Plaine, IA*

A: Whether or not you should leave batteries on the charger depends on the type of batteries and the type of charger.

Though other types of batteries are becoming more common, most cordless tools still use Nickel-Cadmium (NiCad) batteries. The following rules apply to those batteries.

If your tool came with an inexpensive three-hour charger, it will keep charging the battery as long as the battery is attached. This will over-charge and overheat the battery, which can harm the cells. That means you should only leave the battery on for the recommended charge time. (There is one exception, explained in "Best Battery Practices" at right.)

To remove this hassle, better-quality cordless tools come with a "smart" charger that you can leave the battery on indefinitely. A smart charger shuts down once the battery is fully charged and then switches to a "trickle charge" (maintenance) mode. In this mode, the charger only occasionally turns on to maintain a full charge.



An inexpensive charger (back) will over-charge and overheat a battery if it's left plugged in. A "smart" charger (front) switches to a maintenance mode to prevent over-charging.

Best Battery Practices

Don't use the tool until the battery is completely spent. This can damage the cells. Instead, recharge the battery as soon as the tool begins to lose power.

Let the battery cool before charging. (Smart chargers won't charge until the battery cools.)

Every few months charge the battery for a bit longer than the charger's minimum to even out the charge in all the cells.

If your batteries have been sitting for more than a week, charge them before use to put them at full power.

When your cordless tool batteries are worn out, don't throw them away. Recycle them. Visit RBR.com to find out how.



A SKIN-FRIENDLY WAY TO

Clean Adhesive from Hands

Q: Do you know of a way to get construction adhesive off your hands without having to resort to harsh solvents that are hard on your skin?

*Robert Martin
Prairie Du Chien, WI*

A: For this one, we turned to people who know a thing or two about construction adhesive: the folks at Liquid Nails. They advise using baby oil. Just pour it on, let it soak in, and then rub it into the adhesive. The oil will help soften the adhesive without assaulting your skin. Once you have the adhesive off, you can wash away the baby oil, or rub it into your hands to keep your skin moist.



GOT QUESTIONS? WE HAVE ANSWERS!

Include your full name, address, and daytime phone number. You'll receive a free one-year subscription to **Workbench** (or a one-year extension to your current subscription) if we publish your question.

HOW TO SEND YOUR QUESTIONS:

Email: Ask@workbenchmag.com

Forums: forums.woodnet.net

Mail: Ask Workbench, 2200 Grand Ave., Des Moines, IA 50312

CHECK MOUNTING BOLTS TO AVOID Toilet Trouble

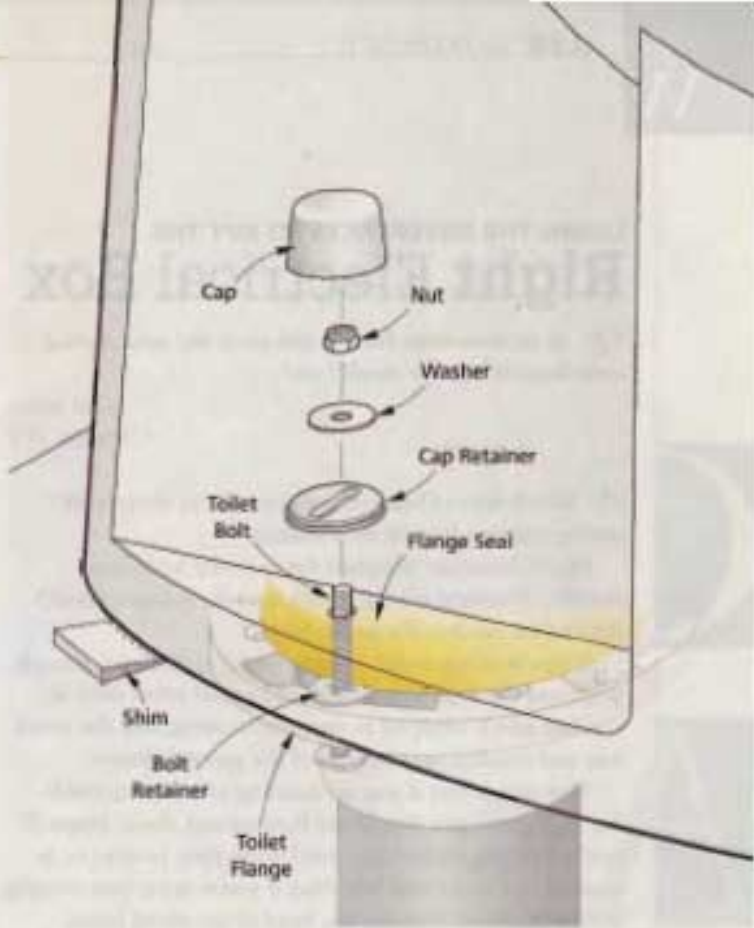
Q: I have a toilet that has become a little wobbly. Can I just tighten the bolts that secure the toilet to stop the wobble?

Carlos Hernandez
Chino, CA

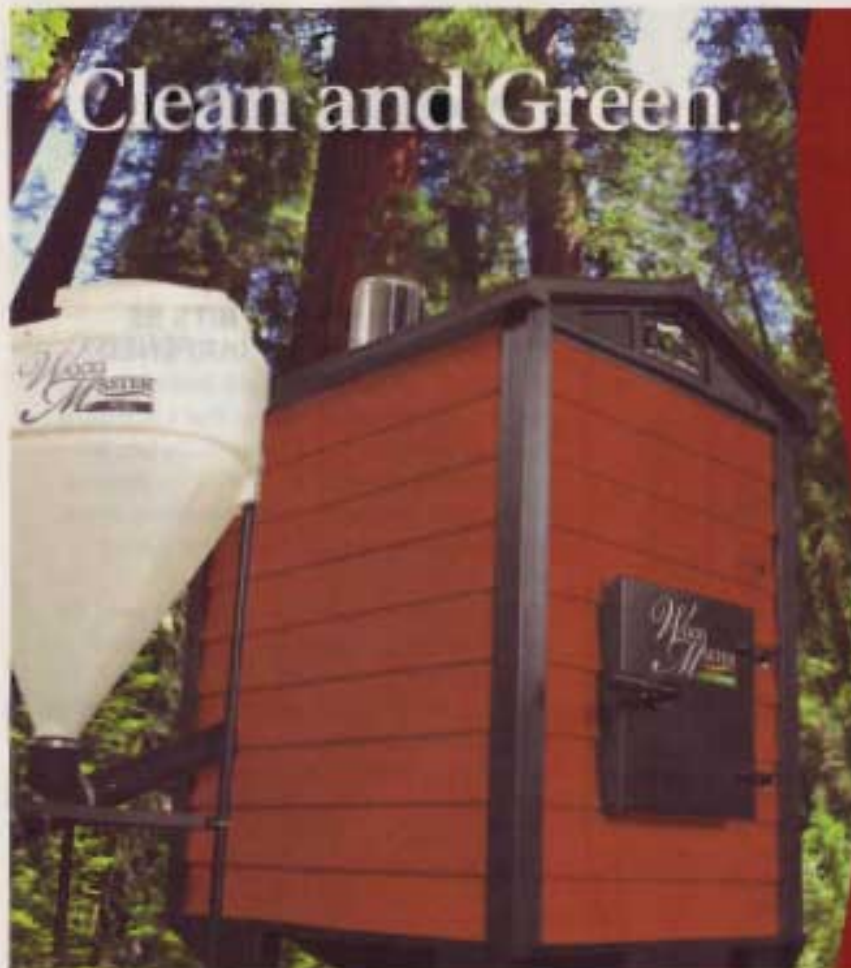
A: As you can see in the illustration, the toilet sits on a flange that's connected to the drain pipe. Bolts attached to the flange pass through the holes in the toilet base.

If the nuts are loose, tighten them by hand, and then use a small wrench to snug them about a quarter-turn beyond hand tight. Don't overtighten the nuts, or you can crack the toilet base and create a bigger problem.

If tightening the nuts doesn't stop the wobble, then pick up plastic toilet shims, which are available in the plumbing department. Slip a shim in under each side of the toilet, preferably near the back of the toilet, so they won't show. Don't force the shims under the toilet. Just push them under gently. Then retighten the mounting nuts. Once the toilet is secured, cut off any excess shim material using a utility knife.



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Product Information Number 248

LEARN THE DIFFERENCES TO BUY THE Right Electrical Box

Q: At the home center I've seen both plastic and metal electrical outlet boxes. Which type should I use?

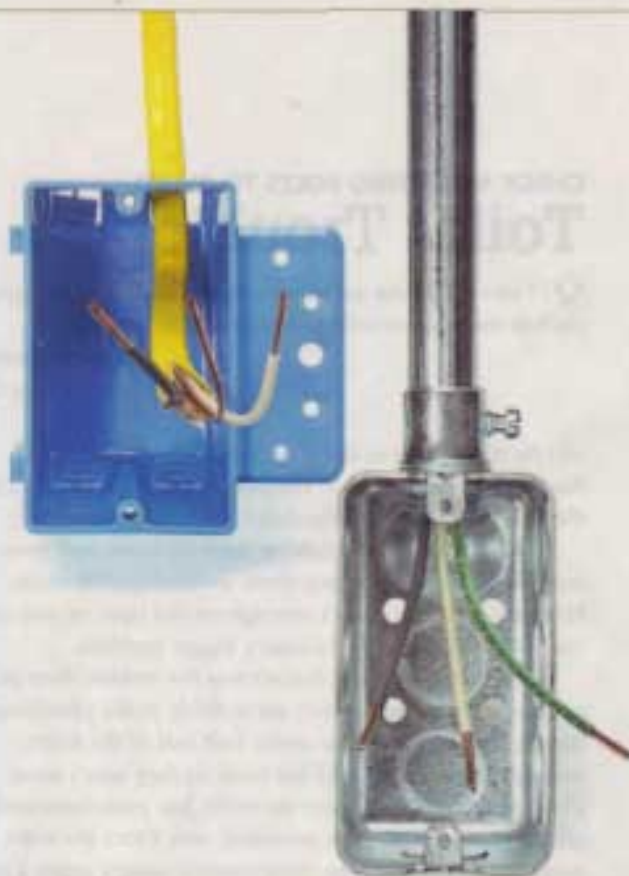
Carl Jeffries
Cheyenne, WY

A: Which type of box you use depends on the type of wiring that you have or are installing.

Plastic boxes are designed for use only with non-metallic (Romex) wiring. That's because Romex doesn't depend on the box for grounding.

If you're using metal conduit (rigid or flexible), though, you must use a metal box. The individual wires used in conduit aren't wrapped in protective casing, and the metal box and conduit may be part of the ground system.

This means that if you are running new wiring inside the wall cavity, you should use Romex and plastic boxes. If you're running surface-mounted wires, they have to be in conduit tied to a metal box. Also, if you're tying into existing wiring that's not Romex, you need to use metal boxes.



Why Buy Better Outlets?

Q: Why do some electrical receptacles cost about 50 cents, while others cost a couple dollars? Are the costlier outlets worth the extra money?

Dan Dixon
Des Moines, IA

A: Yes, the pricier receptacles (outlets) are worth the additional cost.

You can see in the *Photos* that the costlier receptacle is larger and is obviously made using better quality components that will last a lot longer.

But it's what you don't see—the components inside—that makes the biggest difference.

Namely, the electrical contacts inside the receptacle are made from thicker metal, and the contact points for the wires are more sturdy. That means the receptacle conducts electricity more efficiently, making it safer.



SHOULD DULL DRILL BITS BE THROWN OUT OR SHARPENED?

Bits that get used often or to drill through tough materials can get dull in a hurry. That's frustrating, especially given the high cost of quality bits. But just because a bit is dull, don't think it's destined for the trash. In fact, the bit still has plenty of life left. All you need to do is sharpen the cutting edges at the tips.

You can have bits professionally sharpened for only a few dollars. Just look in the phone book under "Sharpening Services."

Or you can do the job yourself with a tool called a Drill Doctor (DrillDoctor.com). It holds the bit at the correct angle, so you can sharpen the tip quickly and easily. A basic model sets for less than \$75, which you'll quickly recover by sharpening just a few expensive bits.

FOR A STRONG HOLD, SELECT THE RIGHT Wall Anchor

Q: The towel bar in my bathroom pulled right out of the wall, along with the screws and little plastic sleeves that held it in place. How can I remount it so this doesn't happen again?

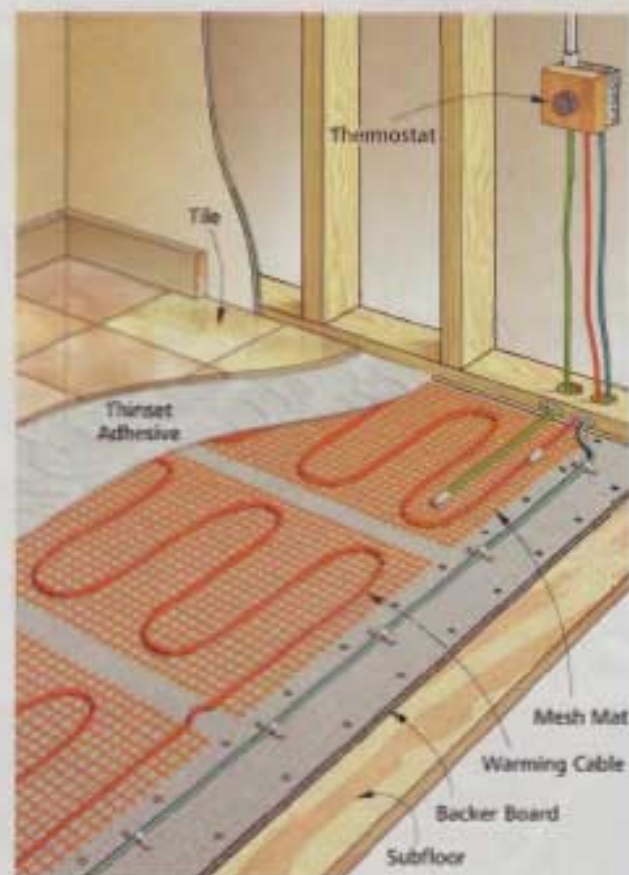
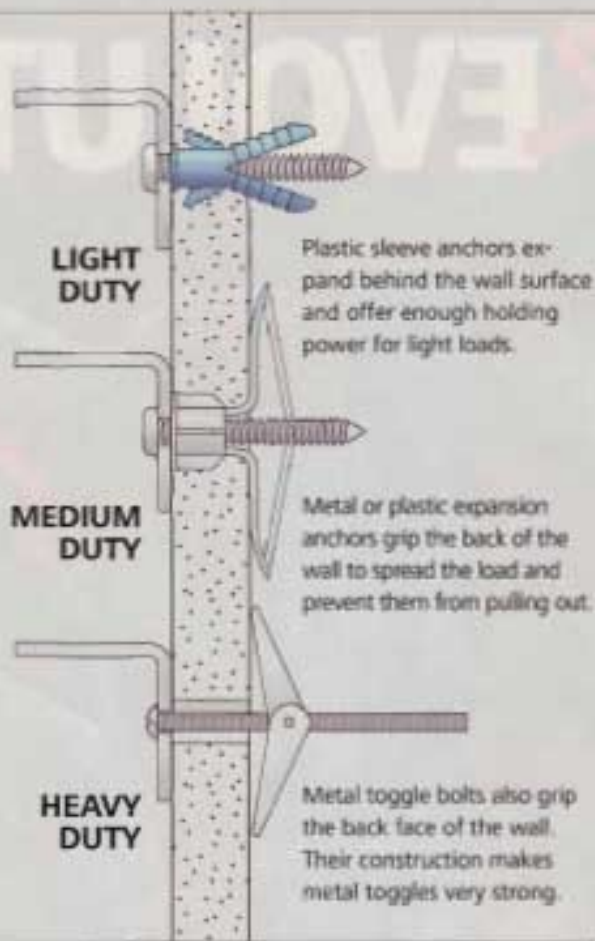
Angela Wright
San Antonio, TX

A: It's no surprise that the bar pulled out if it was just attached with expanding-sleeve style anchors. These anchors are only meant for light-duty use (illustration, right).

Though towels aren't heavy, pulling them off the bar repeatedly puts a substantial amount of stress on the anchors. It's almost inevitable that these anchors will eventually ream out their mounting holes and pull out, leaving the towel bar and a pile of drywall dust on the floor.

When you remount the bar, use an anchor that expands to grip the back face of the drywall. Several types are available.

Of course, also remember that a towel bar isn't designed to be used as a grab bar. If you need a grab bar, buy one and use heavy-duty anchors to secure it.



PUT COMFORT AT YOUR FEET WITH A Heated Tile Floor

Q: I'm going to lay a new tile floor in my bathroom and have considered installing one of those warming mats underneath. Can you tell me how these work and how they're installed?

Megan Andetien
Chicago, IL

A: Tile warming mats are made up of heavy-gauge electric wires that are woven into a plastic mesh. They work simply: The wires cause resistance when electricity flows through them, which makes them get warm. Installed under the tiles, the warmth from the wires heats the tile, making for a cozy floor.

Installing the mats is pretty straightforward, as shown in the illustration at left. In fact, adding a warming mat really only requires one extra step in the tile-laying process.

Just lay the mesh down over the tile backer board, and cut it to fit the space. Just be sure you don't cut through the wires. Then trowel on thinset adhesive, and press it firmly into the mesh. After that, lay the tile as you normally would.

You will, of course, need to connect the mat to your electrical system. You can simply install a switch and turn the mat on when you want to use it. Or install a thermostat to keep the floor warm all the time.

FOR MESSY JOBS,

Roll Out the White Carpet

Keep your workbench (or any other worksurface) clean as a whistle with this unconventional use for an average, ordinary window shade.

To a certain extent, a workbench is made to get dirty—that's why it's called a workbench, after all. But over time, all that stain, finish, paint, and glue can really muck up a workbench's surface and make it hard to, well, work on.

To protect his bench from these messy jobs and preserve its pristine surface, Joshua Shirey of York, Pennsylvania, mounted a window shade to the side of his workbench. These shades are available in a variety of different lengths and widths to fit just about any surface. And best of all, most cost under \$10.

The shade mounts easily to a pair of brackets that get screwed to the side of the workbench (Photo, right). These brackets are sold right next to the shades at the home center.

Now Joshua simply pulls out the shade whenever he has any staining, finishing, gluing, or even sanding to do (Photo, above). Then, when he's

done, a pull on the shade makes it retract back onto its roller until the next time he needs it. (Note: Before retracting the roller, let the stain, finish, or glue dry first to prevent the shade from sticking to itself.)



PRINGLES CAN ROLLER STORAGE

Chris Wasemann of Valparaiso, Indiana, discovered that a Pringles can is the perfect size for storing a paint roller if you plan to reuse it. Just put it in a plastic bag, so it doesn't get greasy.

BEST TIP WINNER!

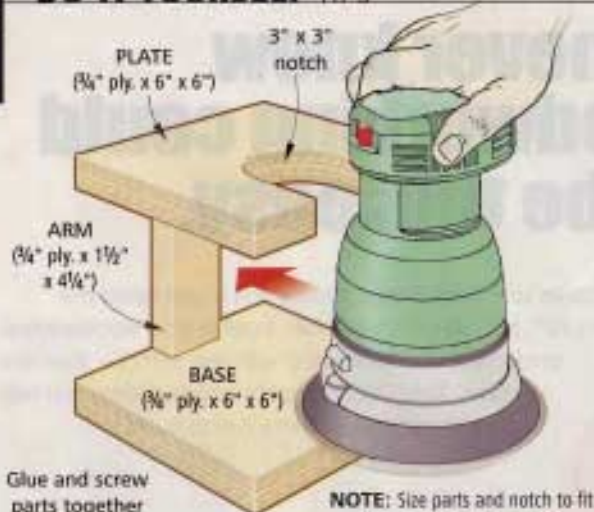
For his tip, Joshua Shirey wins a Ridgid 12" Dual Bevel Miter Saw (model #R4121)—a \$349 value!

SEND US YOUR GREAT TIPS

Mail: Workbench DIY Tips
2200 Grand Ave.
Des Moines, IA 50312

Online: WorkbenchMagazine.com





WOBBLE-FREE WIND-DOWN FOR YOUR Orbital Sander

Who knows how many years we DIYers have lost off our lives waiting for our random-orbit sanders to wind down before they can be set down? That's why Dave Ritter of Auburn, California, came up with the handy holder shown above. It's nothing but a three-piece scrap plywood assembly of a base, an arm, and a plate with a circular notch in it to hold the sander. Make sure to build yours to fit your sander.



PULL BACK FOR TACK

Construction adhesive will hold just about anything, but sometimes it doesn't form a strong bond right away. If you need to speed up the adhesion process, the folks at Liquid Nails suggest you try the "venting" method: After gluing the two items together, pull them apart for one minute, and then press them firmly together again. The bond should now be good and tight between them.

ARE YOU READY FOR THIS?

Check all that apply:

- I have a collection of old dull drill bits I just can't throw away.
- I'd rather spend my money on new tools than on buying more drill bits.
- I know I should sharpen my drill bits, but I don't have time to become a sharpening expert.
- I want to drill clean, precise holes every time.
- I'm tired of searching through all of my used bits trying to find one sharp enough to use.

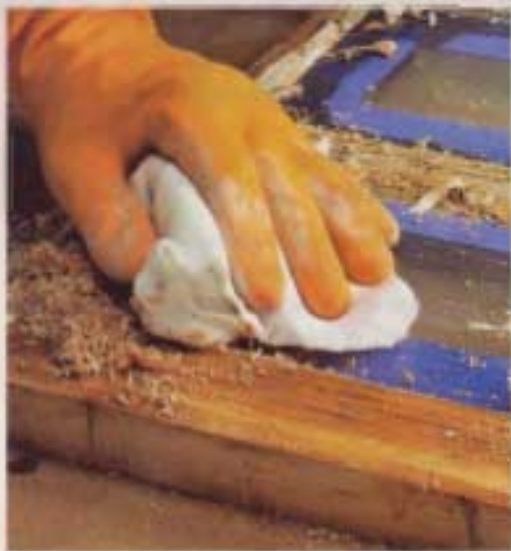
If you checked any of these, you're ready to sharpen your drill bits with Drill Doctor, THE Drill Bit Sharpener. See it in action online at

www.drilldoctor.com

1-888-MYDRILL (693-7455)



Look for the Drill Doctor at Sears, The Home Depot, Lowes, Northern Tool, and wherever you buy your tools.



WOOD SHAVING

Wipe Down

Paint and finish removers often leave a gooey mess on the surface you're trying to strip. To tame the mess, Steve Johnson of Des Moines, Iowa, uses wood shavings to soak up the excess stripper after scraping.

» **Domino Mock-up.** Laying concrete paving stones is a lot of work—especially if you make a mistake. To prevent that, James Enyvall of West Concord, Minnesota, plans his layout using dominoes first. Though not exactly to scale, they let him know if his design will work.



GET A GRIP ON BOLT HEADS

Few things are more frustrating than a bolt that constantly slips out of the socket, but you can't always hold onto the bolt when putting it in position. Kyle Musick of Indianapolis easily ends that dilemma by putting some paper around the bolt head. This secures it in place in the socket until you can drive it home.

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The photo behind is an application of Bolder Wrap™ 12" by 100' industrial size roll applied to a 48" diameter pipe. Now available in a ready to use 2" by 4' or 8' roll. For more information, please visit our website.

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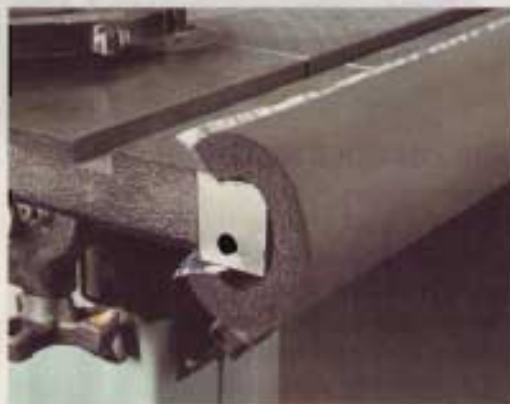
2008 TOP 10 INNOVATIONS workbench WINNER

Product Information Number 101

PUT A STOP TO SHARP

Tool Edges

Sharp tool edges are often at the same height as children's heads. To prevent his kids from getting bruises when they walk through the shop, James Moskal of Johnstown, Pennsylvania, covers the edges of his tools with soft pipe insulation. It comes in different diameters to fit almost any tool.



FOLLOW THE ARROW FOR CLEANER CAULK BEADS

Cutting the tip of a caulk tube at an angle is a great way to get a smooth bead when applying it. The problem is that the tip gets gunked up during use, hiding the angle from view. Jim Bontrager of McPherson, Kansas, simply marks the cut side of the tip and tube with an arrow.

» **Cleaner Cord Storage.** Ed Lynn of Stamford, Connecticut, got tired of cramming the cords of his electrical tools inside their plastic storage cases, so he glued a pair of dowels inside the case to give himself an area to neatly wind up the cord.

» **Collect Your Hardware.** Randy Roush of Gahanna, Ohio, discovered that his son's cases for sports cards were great for storing hardware. They fit nicely in a drawer, and they're compact enough to hold a small number of specialized pieces.

Sharpen All This

With This

Everybody likes to work with sharp tools, but not everybody likes the job of sharpening them. A wet sharpening system is messy and expensive. A bench grinder can be difficult and dangerous. Welcome to the new world of tool sharpening. With the Work Sharp 2000, grinding and sharpening just about any kind of bladed tool is fast, easy, and dare we say it?—even fun. See it for yourself online at www.worksharptools.com



Ask for it at Ace Hardware or wherever you buy your tools.

Product Information Number 348



FIND JOISTS UNDER Textured Surfaces

A heavily textured ceiling, such as one covered with "popcorn," has so many bumps and ridges that it's difficult to run a stud finder smoothly over its surface. The stud finder can damage the texture, and beyond that, it just doesn't work properly. That's why Bob Kelland of St. John's, Newfoundland, places a plastic putty knife under the stud finder when he is looking for ceiling joists. This not only allows the stud finder to move more easily, but it also prevents damage to the textured ceiling.



CLOSE QUARTERS PAINTING

While painting her bathroom, Cheryl Scheer of Windsor Heights, Iowa, didn't want to remove the toilet just to paint behind it. So she attached a paint pad applicator to a yardstick with double-sided tape to fit in the tight space behind the tank.

- A Finer Line.** When marking boards for cuts, William Lee of South Daytona, Florida, always uses a utility knife rather than a pencil. Not only does it produce a finer line, but it also reduces splintering on the cut line.

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Jay
Magna, Utah



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Product Information Number 172

FAST FIXES FOR

Flawed Finishes

Wood furniture takes a lot of abuse, and the finish is always the first thing to show the wear. But in most situations, there's an easy solution for making the finish look like new again.



SCRATCHES—EASY AS 1, 2, 3

FLAW **An Ugly Scratch:** Own a table or shelf long enough, and chances are good that eventually it will end up with a large scratch or two that expose the bare wood beneath the finish.

FIX **Touch Up Stain & Finish:** Scratch repair involves two steps: matching the color and then repairing the finish. For color matching, stain markers have a fine tip that's perfect for filling in scratches (above). You may need to experiment by combining the stain from two or more markers before you find the right color match.

Step 1: Just like with regular stain, you'll want to "over-apply" the stain from the marker. Then let it soak in for five to ten minutes, and dab off the excess with a clean cloth.

Step 2: When the stain dries, fill in the missing finish with a fine-tipped artist's brush. Choose a sheen that's consistent with the existing finish.

Step 3: To prevent the new "line" of finish from standing out, blend it with the surrounding finish after it dries. To do this, use water and 600-grit "wet and dry" sandpaper to lightly wet-sand the finish.

WAX AWAY A DULL FINISH

FLAW **Lost Luster:** While a scratch is readily apparent, lost sheen is a more subtle finish flaw. But over time, the finish on a frequently used piece of furniture will gradually begin to fade from glossy to dull.

FIX **Wax On, Wax Off:** A little paste wax is sometimes all that's needed to revive the finish.

Step 1: Load a "0000" (very fine) steel wool pad with wax, and rub in the direction of the grain.

Step 2: Use a clean, dry cloth to buff out the wax, rubbing in a circular motion.



WIPE OUT WATER DAMAGE

FLAW **Moisture Made It Murky:** Water and other liquids won't immediately damage most finishes. Let it sit long enough, though, and it will eventually create a milky, cloudy stain.

FIX **Restor-A-Finish:** The traditional fix for water damage is rubbing alcohol, but we found that alcohol actually begins to remove the finish if not wiped off immediately.

A much more effective solution is Restor-A-Finish from Howard Products. It literally erased water spots we thought were permanent. To use it, place a small amount on a rag, wipe it over the surface, and then wipe it off.

SIMPLE STAIN-MATCHING TIP

Some finish fixes, such as the scratch repair shown at left, create a "problem within a problem"—having to find a close color match for an existing piece of furniture. Often, commercially available stain is close, but not close enough.

There are two solutions to this problem. One option is to take the piece to a local paint or stain shop and have them mix a stain that matches. The other option is to experiment with mixing stains together. And if you mix the stains on a piece of glass above the surface of the furniture you're trying to match, you can get an immediate sense of whether or not the color mixture will work (Photo, right).



"LOOK UP" — FOR A GREAT
**Garage
 Storage
 Solution**

Find more garage storage space in an area that's commonly overlooked — overhead — with a ready-to-assemble loft system.

No matter how big garages get (and they get bigger with every generation of new homes), we seem to have no trouble packing them full of clutter. Between tools, lawn supplies, sporting goods, and seasonal items, it's a miracle that we even have room for our cars!

A few manufacturers have solved this problem by adding storage to the one area that's been out of sight and out of mind for others — the ceiling — with a storage loft. Here, we'll walk you through the attributes of five readily available loft systems.



Complete Kits

Several loft systems make the shopping easy for you by providing everything you need to build and install the loft in one simple kit. One such system is from Hylot (Photo, above).

Hylot—The Hylot Ceiling Storage Unit features a sturdy wire shelf and support arms that are adjustable in height from 16" to 28". The

units come in three sizes: 36" x 36" (\$50), 42" x 42" (\$50), and 45" x 45" (\$60) with a white or hammertone finish. The smaller unit will hold up to 150 pounds, while the two larger units can safely store 250 pounds. The units can also be mounted side by side to form a larger storage system like the one shown above.

SafeRacks—Another loft kit option is the SafeRacks unit shown at left. Though it's more expensive than Hylot (prices range from \$150 to \$320), the SafeRacks system is made with heavier-gauge steel and can hold up to 600 pounds of gear.

The SafeRacks system is also available in seven different sizes ranging from 2-ft. x 2-ft. to 4-ft. x 8-ft., so you should have no problem finding a system to meet your storage needs. You can mount SafeRacks units side by side, as well, if desired. For more information, see the "Buyer's Guide" on page 28.




Just Add Lumber

Another way to create a storage loft is to start with a hardware kit, and then add your own lumber.

Quick-Shelf—The simplest and least expensive of these kits comes from Quick-Shelf, Inc. (Photo, above right). As you can see, it's nothing more than steel rods bent into U-shaped brackets that hang from eye-bolts installed in the ceiling joists.

After installing the brackets, you just cut panels to fit the width of the brackets to create storage shelves. The notches on the bottom of the brackets accept another series of brackets, so you can add multiple layers of storage if desired (Inset Photo). Kits are available in widths from 8" to 24" and in costs ranging from \$11 to over \$50.

Loft-Maker—Another hardware kit, the Loft-Maker, comes with four height-adjustable arms (24" to 36") and support brackets for making your own loft (Photos, right). Each kit sells for \$80.

This kit requires a bit more work, as you have to construct a 2x4 frame and add a plywood panel. The trade-off is that you can make each loft any size you like, up to 4-ft. by 5-ft. with each kit. As with the other systems, you can mount the lofts side by side for even more storage. Each finished loft will hold up to 300 pounds safely. 



BUYER'S GUIDE

HyLoft
HyLoft.com
800.990.6003

SafeLadder
SafeLadders.com
877.655.3443

Quick-Shelf
QuickShelf.com
314.789.4863

Loft-Maker
GarageWares.com
888.212.2080

HeavyLift
RacorInc.com
800.783.7725

Garage Home Solutions
HomeSolutions.net
800.790.1377

HOIST IT UP!

As you may have guessed, the only real drawback to a loft system like the ones shown here comes when you have to access it to get something out of storage. For around \$200, Racor offers a heavy-duty solution to this problem with its HeavyLift hoist system (Photo, right).

Capable of lifting and holding up to 250 pounds, the HeavyLift comes with a 4-ft. x 4-ft. platform that raises and lowers smoothly thanks to a system of cables and a winding axle. This also ensures safety, as the platform won't raise or lower unless the hand crank is being turned in the axle (Inset Photo). For more information, visit RacorInc.com.



put an end to closet clutter
with this affordable, easy-to-build system



WELL-DRESSED CLOSET ORGANIZER

A walk-in closet seems like it could swallow up any wardrobe with ease. But most walk-in closets are set up like the "Before" photo above, with just a couple of shelves and hanging rods. That means they fall far short of utilizing all of their space.

When it comes to organizing that closet, though, you usually have two options— inexpensive but inelegant wire systems, or high-end, high-dollar custom closets— unless you build your own closet system like the one shown at right. It's based on simple towers that you outfit with shelves, drawers, and even a hamper. Just build the number of towers you need, arrange them to suit your closet space, and then connect them with closet rods to hold your hanging clothes.

What you end up with is a closet system that has a high-end look but can be built for a fraction of the cost. Best of all, you can do it with nothing more than MDE standard lumber, and simple tools. We'll show you how to build the system step-by-step over the next few pages.





STORE MORE, SPEND LESS.....

If your closet resembles the cluttered mess in the "Before" Photo on page 30, then you may have explored closet organizer options.

One option is to install a wire system sold in home centers. These wire systems work fine, but installing one is a bit like assembling an Erector Set. And the style they offer is just about as appealing. Or you can opt for the faux-wood organizers that are sold alongside the wire systems. These look better, but cost more, too.

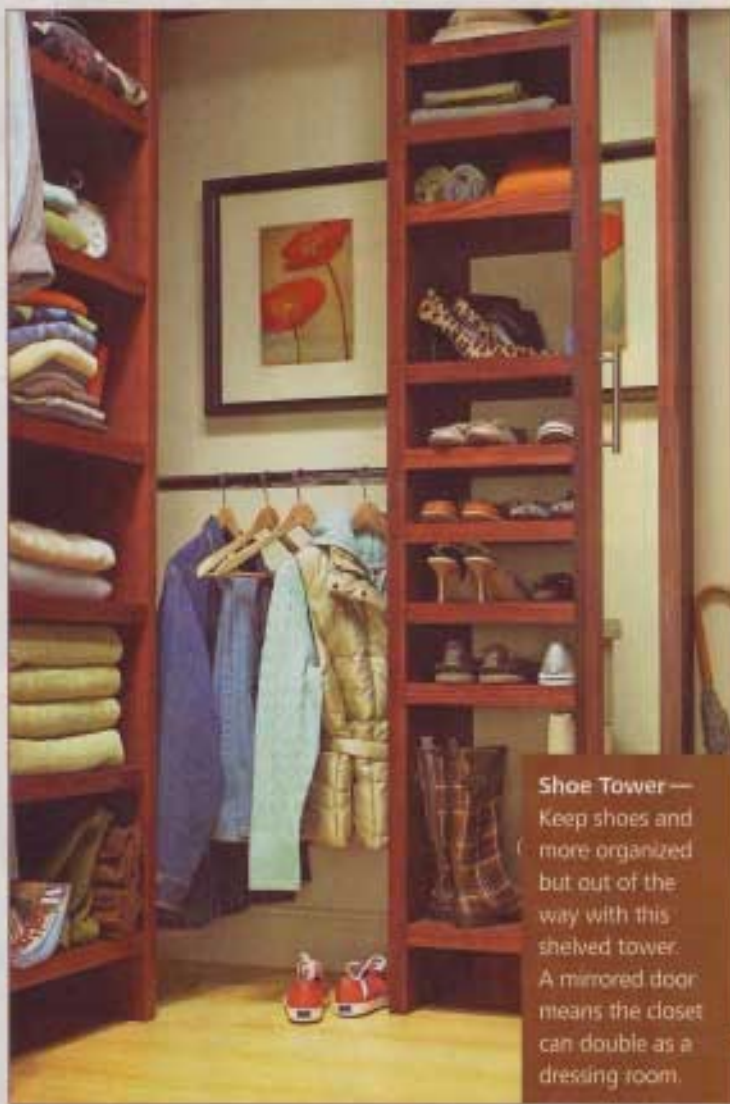
Of course, you also can spend more—way more—and have a high-end closet system installed. Or you could buy a decent used car or save for college tuition.

Low-Cost Custom—If you have basic DIY skills and tools, though, you can build a customized closet like this one. And you can do it for a fraction of the cost.

Features at a Glance—Look at the storage and high-end style this system offers, and it's easy to see why we think this is the best option of them all.

For starters, there are enough shelves to hold every folded sweater and shirt you own, with space left over for shoes, blankets, and more. In addition, this closet has two banks of drawers where you can stash all those small items that can't be stored adequately on open shelves.

It's even easy to add a hamper for dirty clothes, a full-length mirror, and lighting—all options you may not even find on high-end, high-dollar organizers.



Shoe Tower—Keep shoes and more organized but out of the way with this shelved tower. A mirrored door means the closet can double as a dressing room.

Simple Assembly—So you're thinking that building your own system will be tough, right? Nope. It's easy.

That's because the towers and shelves are built from ordinary MDF that's easy to cut with a circular saw. The face frames and drawer fronts are just 1x2 and 1x6 poplar boards. The drawer boxes are ordered as ready-to-assemble kits. And what about that rich, vibrant color? It's added easily using ordinary wood stains.



Drawers—Banks of easy-to-build drawers offer convenient, organized storage for much more than clothes.

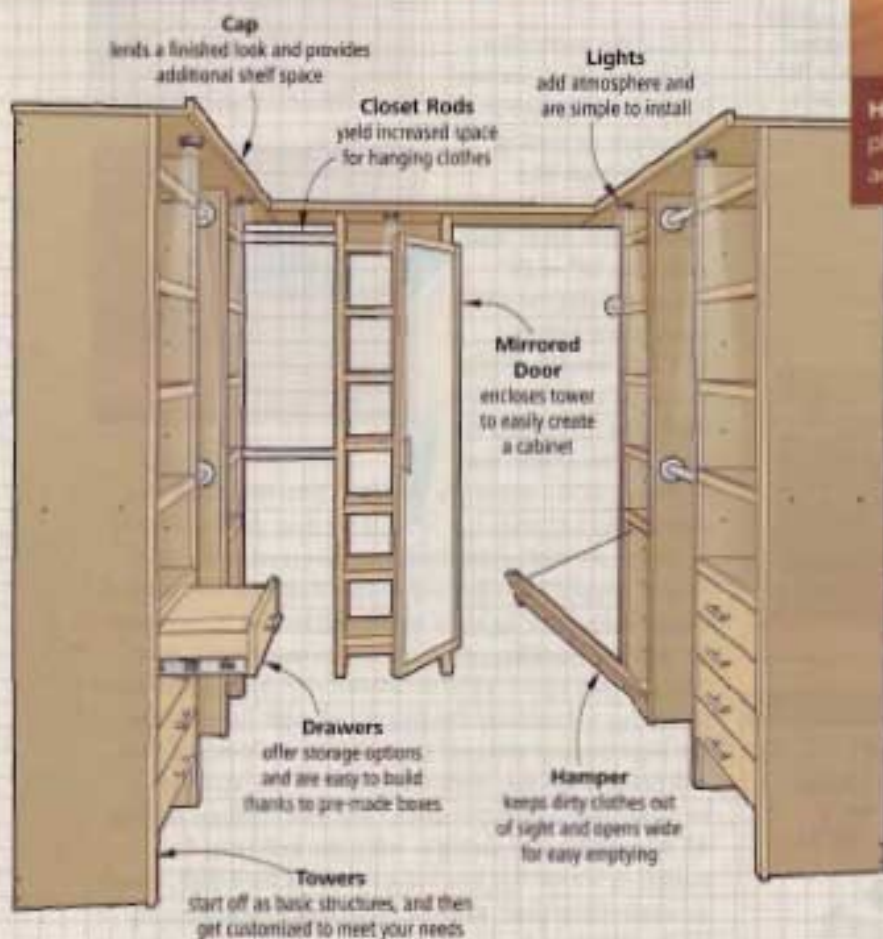
..... & DO IT WITH STYLE



Lighting—Halogen puck lights mounted above each tower make it easy to see all the contents of your closet. The lights install easily in a cap that can also be used to store seldom-used items.



Hanging Rods—Even with all the towers, well-placed double- and single-height hanging rods actually increase the space for hanging clothes.



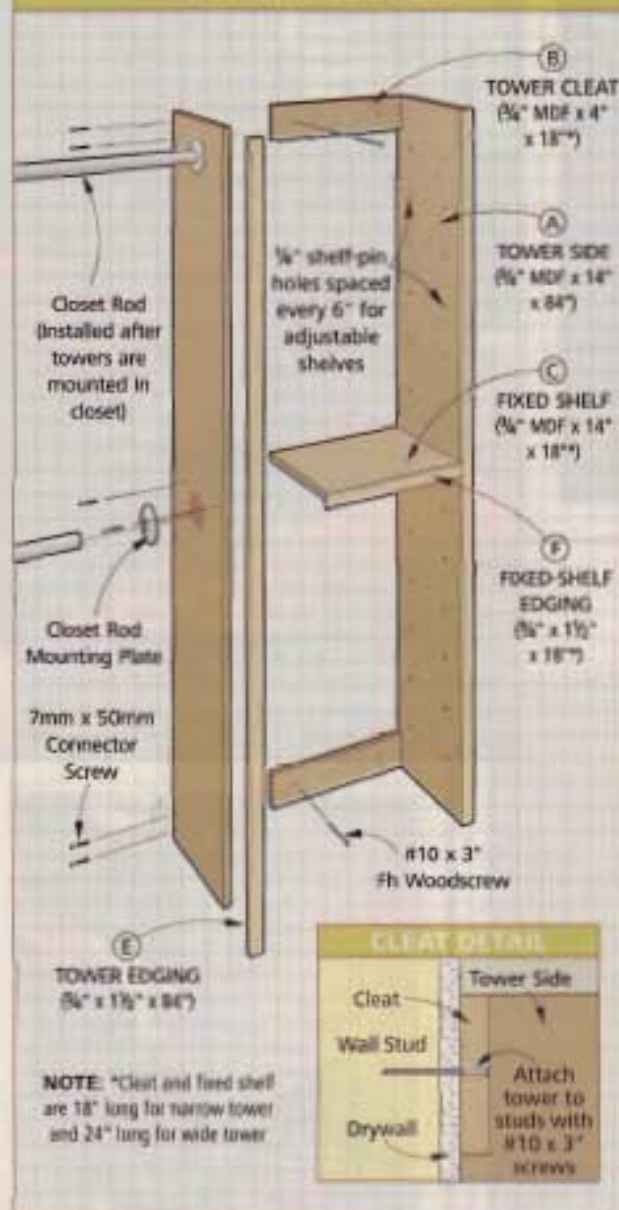
A CLOSET FULL OF FUNCTIONAL FEATURES



Hamper—Toss dirty clothes in the open-topped hamper. Then tilt the front open to gather them up easily.

TACKLE THE TOWERS.....

TOWER ASSEMBLY



The towers are the heart of this system. They're all 14" deep and 84" tall. We made them in two widths (given as the inside dimensions): 18" and 24".

Tower construction is simple. Each consists of two side panels made of MDF. The sides are joined in back by a pair of MDF cleats—one at the top and another at the bottom. A fixed shelf also joins the sides and stiffens the structure.

To dress up the towers, each has edging that's made from 1x2 poplar. The edging covers the leading edges of the sides and the fixed shelf.

Here's how the 18" tower goes together. The 24" tower is identical, except that the cleats and shelves are wider.

- 1) Cut the tower sides (A) to size using a circular saw and an edge guide. (For more on cutting MDF, see page 80.)
- 2) Cut a pair of cleats (B) to size. These are 4" wide and either 18" or 24" long, depending on which tower you're building.
- 3) Cut a fixed shelf (C) to size, as well. The fixed shelf is 14" wide and the same length as the cleats.
- 4) Now cut the adjustable shelves (D) to size. Note that they're also 14" wide but 1/4" shorter than the fixed shelf.
- 5) Before assembling the tower case, you need to drill two rows of stopped holes that will receive shelf pins. This is done using a shop-made jig and a special drill bit (Self-Centering Bit #22567, Rockler.com) made for the task (Photos, above).

The jig is just a piece of 1/4" hardboard with holes spaced every 6" that has a wood stop attached to one edge. To use it, you just align the stop with one edge of the tower side, and then drill holes. When you reach the bottom of the jig, realign it with one of the holes you drilled, and then continue drilling.

- 6) After drilling the shelf-pin holes, also drill holes for connector screws that attach the cleats and fixed shelf. There's an article about these screws at WorkbenchMagazine.com.
- 7) To drill these holes, first find the shelf-pin holes that are located 42" from the top end of the tower sides. Now use the bit that comes with the connector screws to extend these holes all the way through.



& ADD A BANK OF DRAWERS

8] Next, use this same bit to drill holes where shown for the upper and lower cleats.

9] Clamp the tower assembly together with the fixed shelf and cleats in position. Drill into the cleats and shelves, and then drive in the connector screws to temporarily assemble the tower.

10] Once everything fits well, disassemble the tower case. It's much easier to stain all the MDF parts (including the adjustable shelves) individually using a roller (Photos below right). Cover all the surfaces except the front edges of the tower sides and shelves and the ends of the cleats.

11] After the stain dries, reassemble tower sides, cleats, and fixed shelf.

12] Now cut 1x2 poplar edging to size. Start with the tower edging (E). Then cut fixed-shelf edging (F) and adjustable-shelf edging (G) to length.

13] Once again, you'll find it easier to stain these parts before gluing them to the towers. Once the stain dries, brush a couple of coats of water-based polyurethane on the front faces and edges, but not on the back faces.

14] After the polyurethane dries, you can glue the edging onto the tower, as well as onto the adjustable shelves. Just tape the edging in place until the glue dries.

Build the Drawers—With the towers assembled, our first step in customizing them was adding drawers. To make it easy, we ordered drawer boxes from Rockler.com. Then we added poplar drawer fronts (*Drawer Assembly*).

1] Once you get your drawer boxes, cut the fronts (H) to length. Then stain and finish them just like the edging.

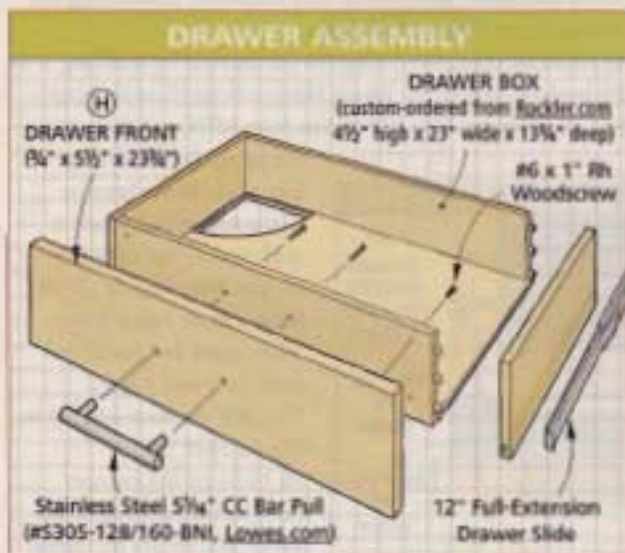
2] Now mount the drawers using 12" full-extension slides.

3] After mounting the boxes, it's time to install the drawer fronts. Start at the bottom, and position the drawer front, adhering it to the drawer box with double-faced tape. Then tape on the rest of the fronts, leaving a consistent gap (stacking two nickels works great) between each front. When the fronts are all positioned, screw them to the boxes.

4] Lay out and drill holes for the drawer pulls, and then install the pulls.



>>GET THE LOOK: STAIN ORDINARY MDF AND POPLAR BOARDS TO LOOK LIKE EXPENSIVE WOOD—WITHOUT THE COST!



The deep, rich color of this closet system is achieved using ordinary wood stains.

On the MDF, we rolled on a coat of Minwax Polyshades (Minwax.com) in "Bombay Mahogany." This finish is a mix of stain and polyurethane, so all you have to do is roll it on, and then wipe off the excess.

For the poplar, we found a perfect match with General Finishes "Georgian Cherry" gel stain (GeneralFinishes.com). Once this finish dried, we protected it with two coats of water-based polyurethane.

MORE CUSTOMIZING.....

Another great custom touch for this closet system is a door with a full-length mirror. We built the door for one of the 18"-wide towers. Here's how it goes together:

- 1] Cut a door backer (I) to size (*Mirrored Door Construction*). Then stain the back face and edges of the door backer.
- 2] Cut the rails and stiles (J, K) that frame the mirror from 1x2 poplar. Stain and finish the frame to match the edging, and then glue the door frame onto the backer (*Photo, left*).
- 3] To reinforce the hinge side of the door, cut a frame backer (L) to size, stain it, and then glue and screw it in place behind the face frame on the side of the tower where you want the hinge (*Door Hinge Detail*).
- 4] Mount the door to the tower using a continuous hinge. This is easiest if you first mount the hinge to the door. Then prop the door in place, and mount the hinge to the tower by drilling holes and then driving screws through the face frame and into the frame backer.
- 5] Have a mirror cut to fit inside the frame, and then adhere it to the door with mirror tape or mirror adhesive.

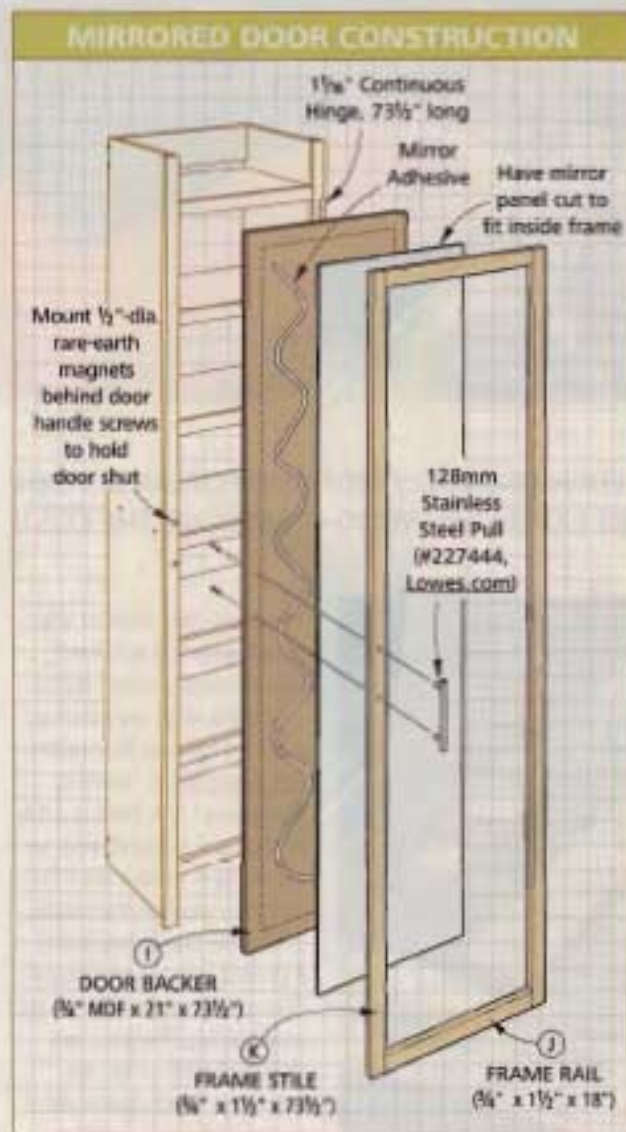
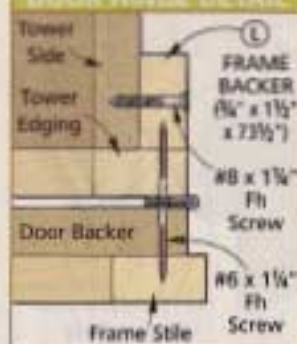
Have a Hamper—The last storage option we added to this closet system is a tilt-out hamper that's fitted into the lower portion of one of the 18"-wide towers. It's built to look like another bank of drawers. Here's how it's made:

- 1] Cut a hamper backer (M) and stain the back face, edges, and ends (*Hamper Construction*).
- 2] Cut hamper fronts (N) to length from 1x6 poplar. Then stain and finish them.
- 3] Mount the fronts to the backer. Once again, use double-faced tape to hold them in place and stacked nickels to create consistent gaps, just as you did when positioning the drawer fronts (*Photo, above right*).
- 4] Mount a continuous hinge to the hamper by screwing it to the bottom edge of the lowest hamper front (*Hamper Hinge*).
- 5] Cut a hamper base (O) to size from MDF and then stain

the upper face. Then slip it into place in the bottom of the tower, and attach it with connector screws.

- 6] Cut base edging (P) to length from 1x2 poplar. Then stain and finish the front face and edges.
- 7] Glue the base edging to the hamper base.
- 8] Now lay the hamper door in the opening in the tower, and secure the hinge.

DOOR HINGE DETAIL




.....THEN INSTALL THE SYSTEM



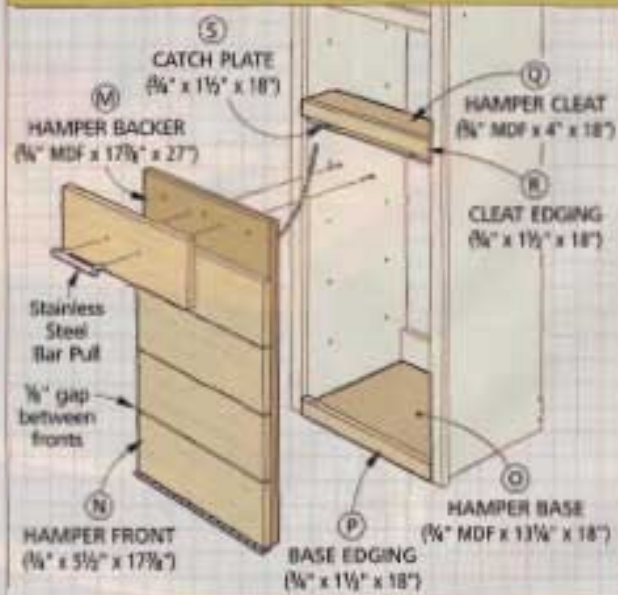
- 9] Cut a hamper cleat (Q) to size from MDF, and then stain it. Then cut, stain, and glue on cleat edging (R).
- 10] Close the hamper door, and then mark the mounting position of the hamper cleat.
- 11] Drill holes through the tower sides where needed for the connector screws that will attach it. Position the cleat, extend the holes into the cleat, and screw it in place.
- 12] Add a catch plate (S) to hold the hamper closed and a chain to keep it from opening too far (*Hamper Catch*).

Install the System—Once you've completed your towers, installing the system in the closet is easy. Here's how:

- 1] Move each tower into position, and make sure it's level. If possible, attach the tower to a wall stud. If you can't hit a stud, use hollow-wall anchors.
- 2] Once you have the towers installed, the last step is to add a cap that spans all the towers (*Cap Construction*). It finishes off the system for a true custom touch. Plus, it provides shelf space and a place to mount the puck lights.
- 3] Cut caps (T) to size from MDF, and then stain the top and bottom faces.
- 4] Screw the caps to the towers.
- 5] Where they meet, add cap cleats (U).
- 6] Make cap edging (V), and stain and finish it. Then glue it in place.
- 7] Lay out and install the lights on the underside of the caps. You'll need to drill holes for the wires to pass through.
- 8] To finish up, add closet rods. 

—Written by Dave Stove, illustrated by Matt Scott, project design by Mike Donovan

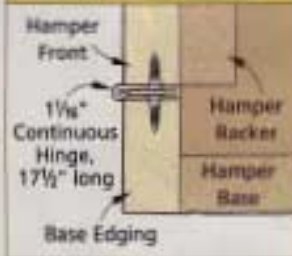
HAMPER CONSTRUCTION



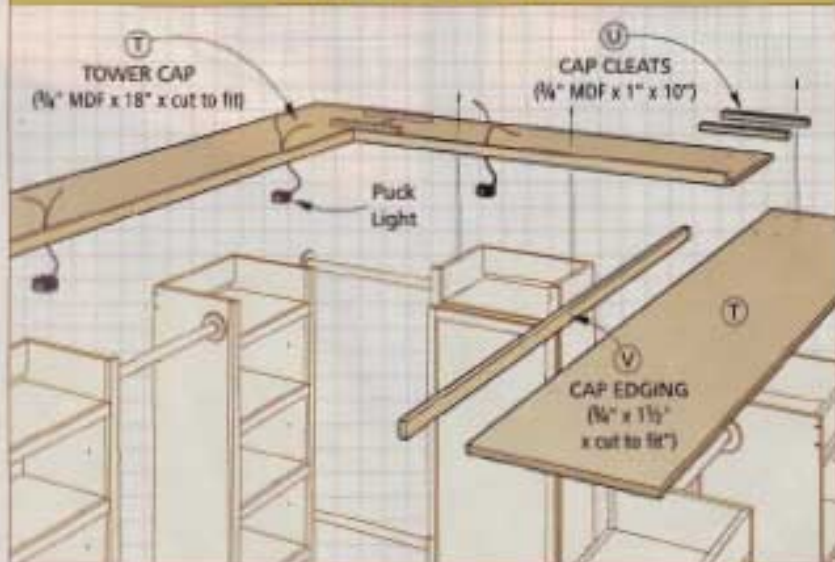
HAMPER CATCH



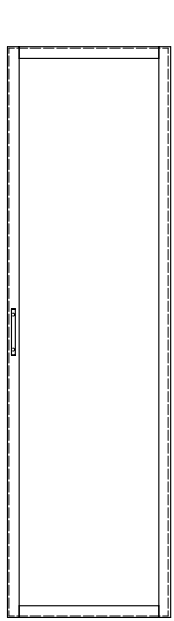
HAMPER HINGE



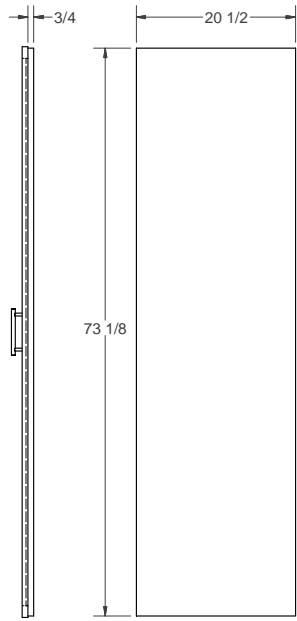
CAP CONSTRUCTION



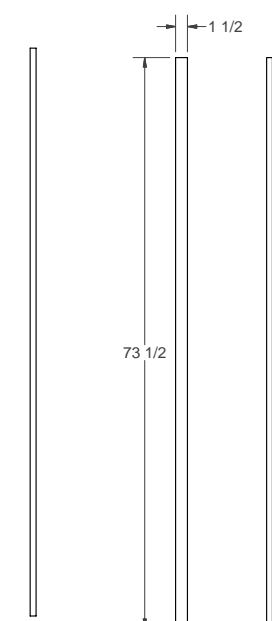




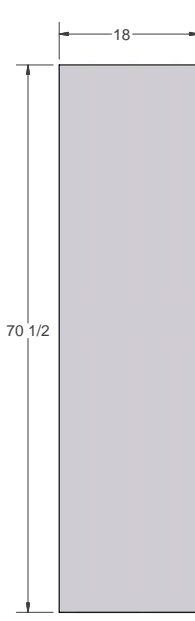
MIRROR DOOR



MIRROR BACKER



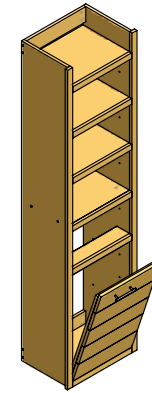
DOOR STILE TRIM



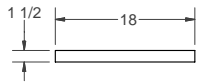
MIRROR



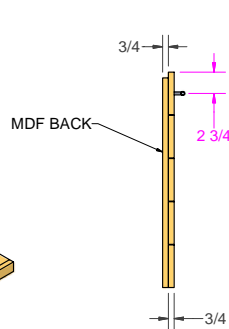
PIANO HINGE



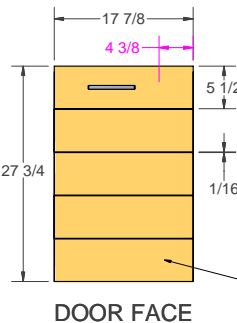
HAMPER OPT.



DOOR RAIL TRIM

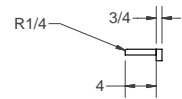


MDF BACK

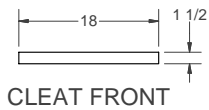


DOOR FACE

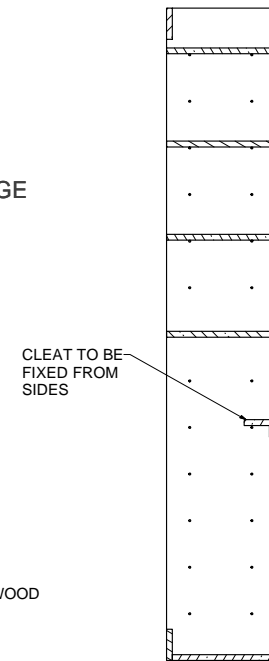
SOLID WOOD FACES



HAMPER CLEAT



CLEAT FRONT

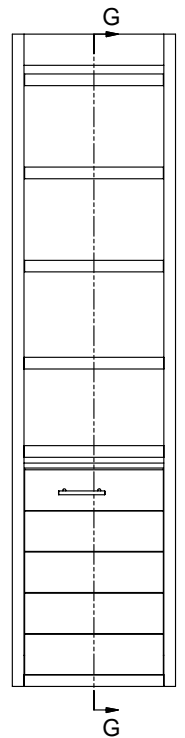


CLEAT TO BE FIXED FROM SIDES

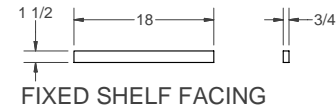
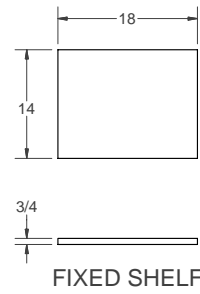
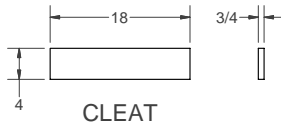
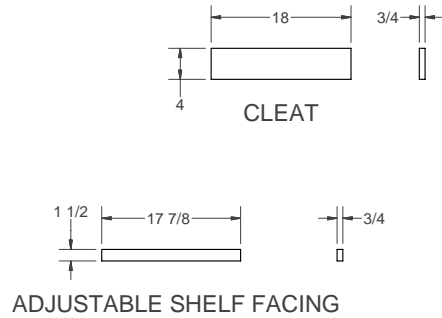
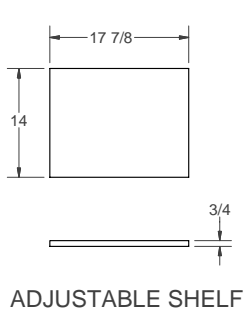
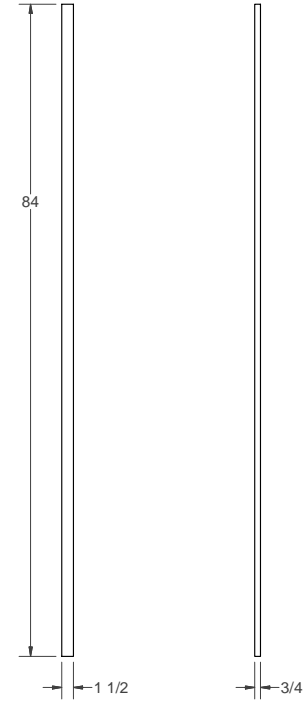
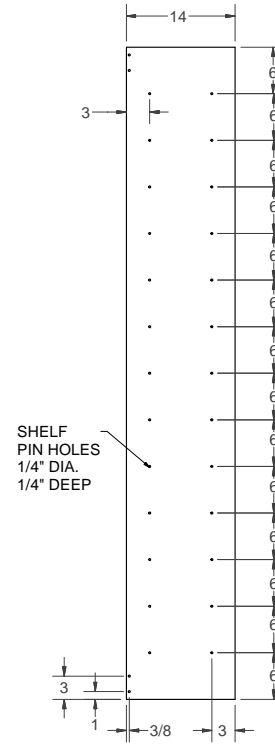
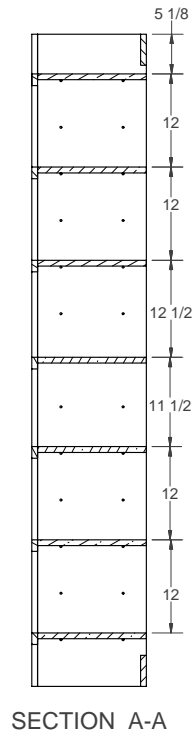
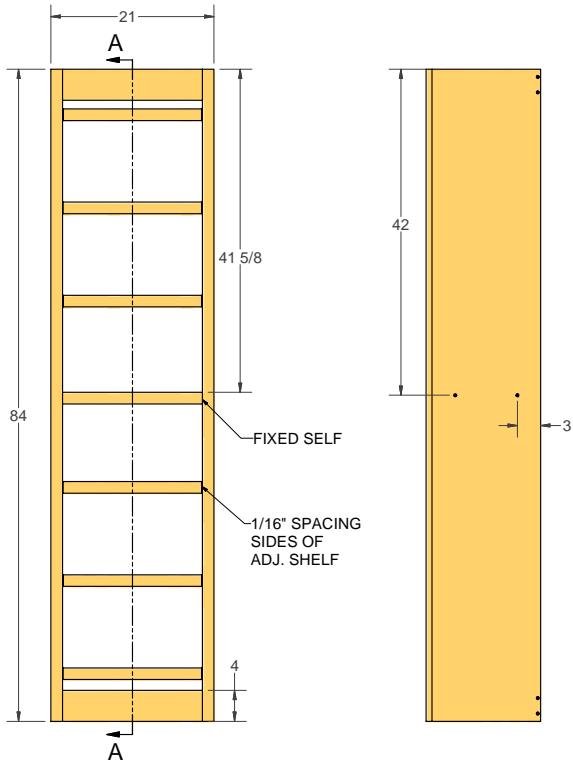
1/4" RARE EARTH MAGNETS FOR DOOR CATCH

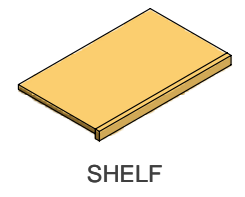
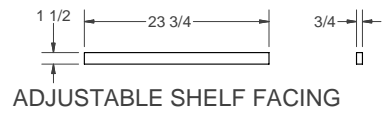
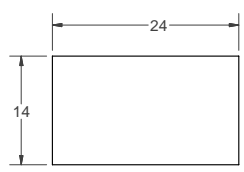
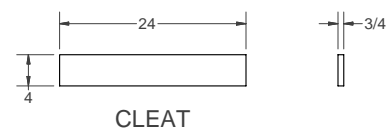
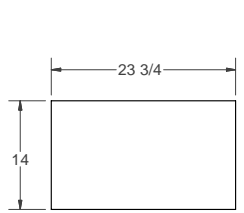
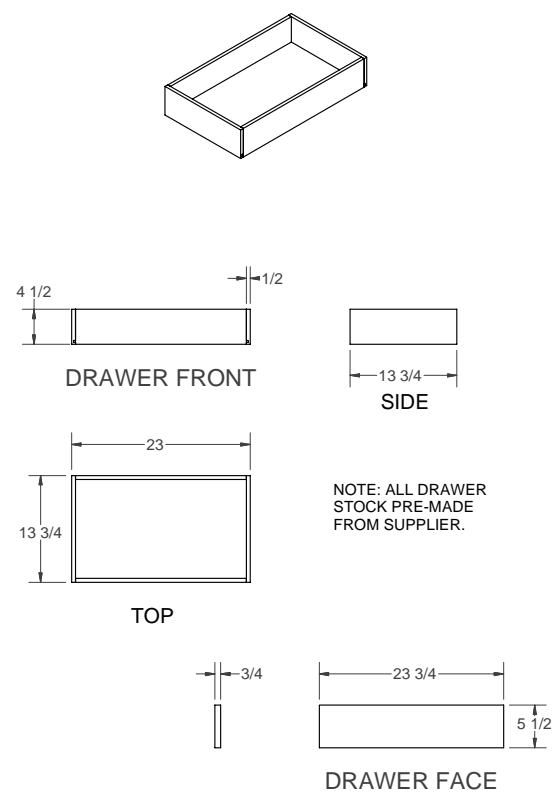
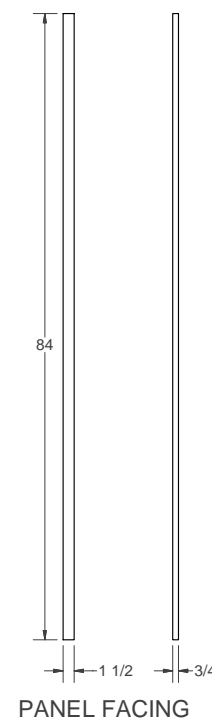
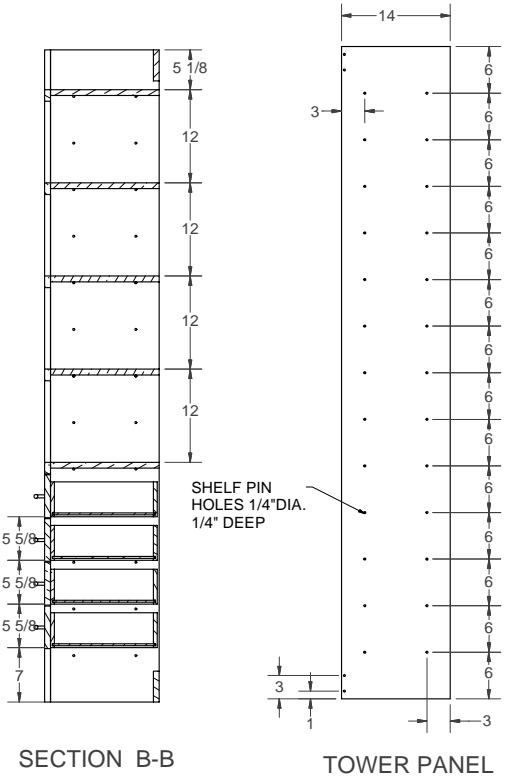
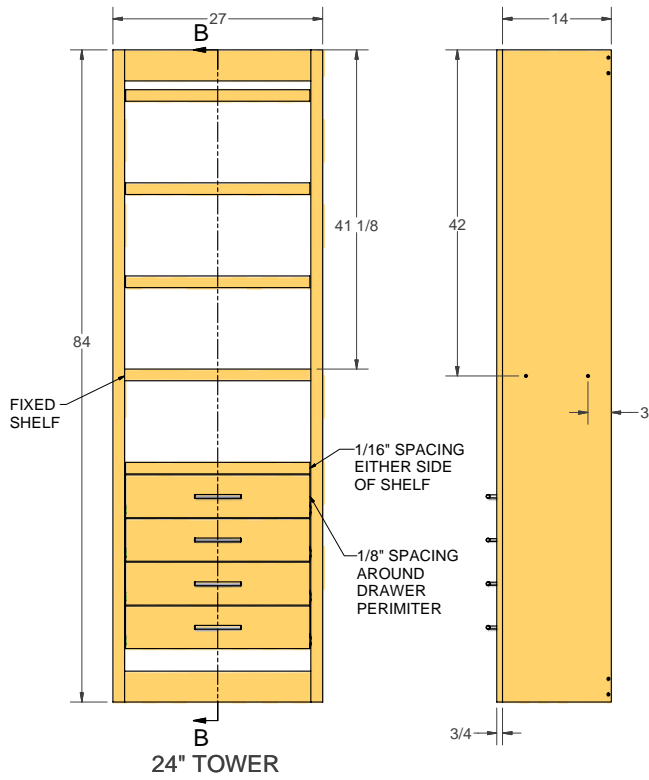
CHAIN CONNECTED TO DOOR AND CAB.

SECTION G-G



G







STYLISH
WORK SPACE
& sleek style to go



ready-to-roll kitchen cart

Need a quick cure for your crowded kitchen? Check out this sleek rolling cart. It offers loads of work space and storage in a compact package. Plus, it's amazingly easy and affordable to build. That's because it starts as an inexpensive rolling tool cart (*above*) that gets customized with a butcher-block top, a maple shelf, and unique hangers for utensils and accessories. Build one in a weekend and get rolling with kitchen organization.

storage,
work space,
& sleek style to go!

Drawers store kitchen necessities out of sight, while the open shelf cradles pots and rails keep utensils close at hand.



Kitchens undoubtedly rank among the most crowded rooms in any home. And curing that overcrowding can be difficult, not to mention expensive. But it doesn't have to be.

By using a little creativity, you can cook up a simple recipe for curing kitchen clutter. That's how we came up with this rolling kitchen cart. It serves up an extra-large portion of storage and work space without eating a big hunk of the room. And it offers a healthy helping of style in the process.

We quickly found, too, that this cart makes a great mobile serving center that's as at home in the family room or out on the deck as it is in the kitchen. (Photos, below right).

Interesting Ingredients—The secret to this success is that we started this project with a very unusual ingredient: a utility cart designed not for the kitchen, but for the garage. Ours came from Craftsman.com, but you'll find similar carts everywhere from auto parts retailers to discount stores. Made from heavy steel, the cart comes ready-to-assemble, which means you'll spend a lot less time cooking up your cart than if you started from scratch.

The thing to keep in mind when selecting a cart is that it needs to sit at a comfortable working height. Ours stands 36" high, which conveniently matches the standard height of a kitchen countertop. The butcher-block top adds another 1½ inches, but still leaves the worksurface at a height that fits for almost anyone.

Transforming the utility cart into a rolling work and serving center couldn't be much simpler. You can see how it's done in the *Construction View* at right.

Bring on the Block—The most dramatic change in this cabinet is also about the easiest to make: Adding a butcher-block top. The top we used is a 1½"-thick maple top made by John

Boos. (Visit JohnBoos.com to learn about models they offer and to find a local or online retailer.) We ordered a 25" x 36" top and then cut it to size.

After cutting the top, simply secure it to the cart lid with screws. Those screws pass through oversize holes so that the solid-wood block can expand and contract freely without the risk of cracking as humidity changes (*Block Mounting Detail*).

Lock Down the Lid—It's worth noting that this butcher-block top is very heavy. The cart we used had a storage bin under the lid, but the added weight of the butcher block made closing that lid a finger-smashing proposition. Plus, that compartment was only accessible if there was nothing sitting on the cart, so we decided simply to screw the lid shut once construction was done.

Slip in a Slatted Shelf—The large open area at the bottom of the cart offers ample storage for pots, pans, and kitchen appliances. To dress it up a bit, we made a shelf constructed from maple slats.

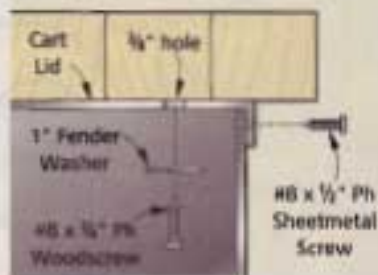
The shelf is also easy to build. Just pick up a couple 1x6 maple boards

at the home center. Then cut two risers and seven slats to size. Secure the risers to the slats from below with screws, making sure to keep equal gaps between the slats. Apply a couple of coats of clear polyurethane, and then slip the shelf into place.

Wrap It Up with Rails—Each end of the cart offers additional storage thanks to a slick system of chrome rails and hangers. These come from LeeValley.com and are sold as a "Wall-Mount Storage System" meant to fit onto a backplash in a kitchen. We simply cut the rails to size and then screwed the mounting posts to wood blocks placed inside the cart (*Rail Mounting Detail*). Attaching hangers to the rail completes the cart.

—Written by Dave Stone, illustrated by Erich Lage, project designed by Kent Welch

BLOCK MOUNTING DETAIL



RAIL MOUNTING DETAIL



CONSTRUCTION VIEW



With its great looks and easy mobility, the cart also works well for serving food and beverages almost anywhere in (or outside of) the home.

PRO TIPS FOR A PERFECT

paint



job

Your smoothest, most vibrant paint job ever is well within reach. Whether it's choosing the correct color, prepping the room, or brushing and rolling on a solid, smooth coat of breathtaking paint, we've got you "covered" from start to finish.

Of all the DIY projects out there, painting is the one that most homeowners feel comfortable tackling. The reasons are plentiful: The tools are basic; the results are dramatic and quick; and if you make a mistake, you can paint right over it.

Yet despite its seeming simplicity, there's a lot more to successfully painting a room than picking up a roller and slapping some paint on the walls. That doesn't mean painting is difficult—it just means you need to know a few "tricks of the trade" before you get ready to paint. And quite frankly, there's enough information—both right and wrong—about how to paint out there to make your head spin.

To help us determine which tips you need to know—and which ones you can ignore—we spoke with a number of painting experts. What we learned was that at every step of the painting process, just a few basic tips and tricks can spell the difference between success and failure.

Choosing Color—Of course, the first decision you'll need to make is what color you want to use. Color is very subjective, but a few hints will help you select a color you'll be happy with.

One easy approach is to try to match the color to the items in a room, rather than

struggle to fill the room with items that match a paint color (*Photo, below*). Then, once you find a few colors you like, don't be content to simply bring home those tiny paint swatches. Most paint centers will mix small sample pots for just a few dollars. Take these home, paint them on large pieces of cardboard or foamboard, and then set them in different locations around the room to get a sense of how they'll look.



Feel free to bring a pillow, vase, or another item from the room with you to the paint store. It makes it a lot easier to match the color.

HOW TO PREP LIKE A PRO

Getting good results when painting a room starts before you ever put a hand on a brush or roller—it really begins with how you prepare the room beforehand.

"I would say that about 80 percent of a paint job depends on the prep work before you paint," says Dick Seitz, the consumer brands director at Valspar. "It's one of the most important parts of painting, and it's also the part that's most often overlooked."

Now, we know this isn't the best news—who wants to spend time prepping a room when they could be painting? But we do have several bits of good news when it comes to room prep.

Sanding Not Required—For one, contrary to popular belief, you do not need to sand the walls prior to painting them. "Sanding is only necessary if you have a lot of cracks to patch, or irregularities, but otherwise, it's not necessary" says Seitz. "This is especially true if you use a high-quality paint that will adhere better to the surface."

Pass on Priming—Another piece of good news is that you can skip the priming step if a room has been painted before. Of course, if there are stains that you need to cover, or cracks or holes that are freshly patched, you will need to spot-prime these areas.

Clear the Room—Now that you know what you *don't* have to do, here's what you should do. First, clear the room of furniture, or at least push it to the middle and cover it up with dropcloths or plastic. Also cover the floors.

To Tape or Not to Tape—When it comes to covering up moldings and window trim, there are two schools of thought. Paint professionals—who are usually pretty adept with a

brush—recommend "cutting in" around these surfaces. Cutting in is the practice of painting as close as possible to an adjacent surface without actually painting on it. (We cover the process in detail on page 46.)

If your skills with a brush leave something to be desired, though, you're probably better off taping the areas that you don't want painted. To get clean results when taping, see the *Box*, below right.

Fixture Fixes—Next, remove any light switch plates, electrical plates, or other electrical fixtures from the walls (*Photo, above right*). Of course, make sure that you shut the power off before you remove these fixtures for safety's sake. And place a piece of

“About 80 percent of a paint job depends on the prep work before you paint.”

FAST FIXES FOR PROBLEM WALLS

Wall cracks are like telemarketers—no matter how many times you try to get rid of them, they just keep coming back.

According to Dick Seitz of Valspar, that's because people often don't prepare the crack properly to be patched. If it's a hairline crack, proper prep means widening it to about $\frac{1}{8}$ " with a 5-in-1 tool, so it will accept spackle or joint compound (*Fig. A*).

After filling the crack (*Fig. B*), an added bit of insurance to keep it from coming back is to apply a rubberized coating such as Good-bye Cracks (*Fig. C*). This coating stretches and moves with the crack to prevent it from reemerging.

Another common wall problem is a "popped" nailhead (*Fig. D*). These can just be set with the other end of the 5-in-1 tool before filling the hole.





It's much easier to remove any switch plates than to try to paint around them.



After removing the plates, cover the outlets with tape so you don't paint them.



Hold the caulk tube at a slight angle, and move it slowly to fill any gaps.



A quick cleaning with TSP and water will get the walls ready for paint.

painter's tape over the openings, so that you don't accidentally paint wires or switches (*Photo, above*).

For any towel bars, picture hangers, or other hardware you remove, place toothpicks in the holes if you plan to reinstall those items in the same location. This way, you can easily find the holes when you're done painting.

Fill Any Gaps—Before you cover up the trim or moldings in the room, look them over for any gaps first. You'll want to seal these gaps with caulk before you paint.

As simple as it seems, applying a smooth, tidy bead of caulk takes some

finesse. Start by cutting the tip of the tube to match the largest gap. Then hold the tube almost perpendicular to the joint. This way, the tip will smooth the bead as you run it slowly along the gap (*Photo, above*). Use a damp rag or your finger to smooth the caulk after you apply it.

Patch Problem Areas—This is also a perfect time to look for any flaws in the walls, such as holes, popped nails, or cracks. To see how to fix these flaws, check out the *Box* on the bottom of page 44.

Clean It Up—Sanding may not be required, but cleaning the walls is

recommended to remove dust and help the paint adhere. Use a five-gallon bucket with a solution of water and a TSP substitute (which is less toxic and safer to use than trisodium phosphate) to clean the walls, and a second bucket filled with warm water to rinse.

It's best to clean the walls with a helper, with one person cleaning an 8-ft. wide section of wall, and the second person immediately rinsing it. Wash from the bottom up to prevent streaking. Also, use sponge-head mops, which make it easier to reach the high and low spots on the walls (*Photo, above*).

// THREE SIMPLE TAPE TIPS //

Applying tape to the trim and molding in a room is the best way to keep paint off its surface. And as simple as it seems, a few basic techniques will help you make the tape do this job as efficiently as possible.

"Miter" the Corners—One place where it can be tricky to apply tape is in corners. Often, it's difficult to get two pieces to meet there without covering up part of the wall. For cleaner corners, create "miter joints" where the pieces of tape come together (*Fig. 1*). This way, they'll butt together cleanly and completely cover the corner (*Fig. 2*).

Burnish the Edge—Of course, even when you apply tape, paint can still seep under the edge. The best way to prevent that is to carefully align the tape with the edge of the trim, and then "burnish" it with a putty knife by running the knife along the edge of the tape and applying firm pressure downward (*Fig. 3*). This ensures a tight seal that will keep the paint out from beneath the tape. Also, you'll still want to brush carefully around the tape. It's there only to provide defense against errant brush strokes.



READY, SET....PAINT!



At this stage, only a couple of coats stand between you and a room with a great new look. And the tools and paint you use to apply those coats, as well as the techniques you employ, are critical to achieving smooth, even coverage.

The three most important tools in your arsenal are brushes, rollers, and the paint itself. Good-quality paint is a must, as it provides smoother, more even coverage than lower-quality brands. But you don't necessarily need to buy the most expensive paint. Check the label for some of the indicators of a good-quality paint, such as "100% acrylic," "scrubbable," "water-resistant," "mildew-resistant," and "self-leveling." For tips on selecting brushes and rollers, see the *Sidebar*s below and at right.

Paint as a Team—In addition to good tools, you'll also want to recruit a good helper. Though you can paint a room by yourself, it's better to paint as a two-person team. That's because the first step is to use a brush to cut in around the ceiling, corners, and trim. At the same time, though, you want to begin rolling this cut-in area while the paint is still wet, so that the rolled paint will blend seamlessly with the brushed paint.

To accomplish this, designate one person as the brusher, and the second person as the roller. This way, the brusher can cut in a small area first. Then, as the roller moves in to roll that section (*Box, below right*), the brusher moves on to cutting in the next section.



BASICS OF A BETTER BRUSH

The easiest way to identify a good-quality brush is by its wood handle. But you'll also want to run your hand over it—it should have soft, supple bristles, which will hold more paint and release a smooth, even line of paint with fewer brush strokes. These brushes are also put together better than the cheaper plastic brushes, so they're a lot less likely to leave stray bristles behind in the paint.

NARROW BRUSH

Great for tight spaces, as well as intricate profiles on molding.

WIDE BRUSH

If it's wide, but not quite wide enough for a roller, then a 3" or wider brush should do the trick.

SASH BRUSH

With its clipped head, the sash brush is your go-to tool for cutting in.



By working your way around the room in this fashion, you can be sure that the brushed paint will still be wet when it comes time to roll up to it. In addition, working in small sections like this ensures even paint coverage from the roller.

The Art of Cutting In—Professionals can cut in without even leaving a single brush stroke in the wrong place. Here is the secret: Start by loading the brush with just the right amount of paint, which is about 1" up the bristles. An easy way to do that is to fill a paint pot with just 1" of paint. This way, you can dip the bristles in until they touch the bottom. Then wipe the excess paint off along the edge of the paint pot before moving to the wall (Fig. 1).

Now start with the brush slightly away from the edge you plan to paint against, and brush gradually toward it, releasing a fine line of paint. Move toward the edge you are trying to match until you are painting smoothly right alongside it (Fig. 2). Your first pass with the brush is likely going to leave brush strokes in the finish. This is difficult to avoid, which is why it's a good idea to make a second pass over the cut-in portion, smoothing it and removing any brush strokes (Fig. 3).

Roll for the Finish—While some would say that rolling is the easier job, it still requires a bit of finesse. For one, it's important to overlap strokes of the roller as you fill in a section (Fig. 4). If you don't, you can end up with darker or lighter areas where the edge of the roller passed. Many paint experts suggest rolling in a "W-shaped" pattern, but it's really more important that you overlap strokes rather than trying to form a perfect "W." Also, if you have a room with tight spaces, it might be worth investing in smaller 4" or 6" rollers (Fig. 5).

The Second Coat—Once you have finished cutting in and rolling sections around the room, you'll likely need to apply a second, and sometimes a third, coat. Cutting in usually isn't necessary when applying additional coats of paint. ■

—Written by Wyatt Myers, illustrated by Matt Scott

THE RIGHT ROLLERS

High-quality rollers are critical to a good paint job. Luckily, they are easy to identify. They will be heavier, feel heavier than their competitors, and not shed any fibers when you run your hand over them.

But a quality roller alone doesn't ensure great results. The more important consideration when it comes to rollers is which nap thickness you choose. The thicker the roller, the more texture it will leave in the paint. And since some paints should appear smoother than others, it's important to match up the thickness of roller with the type of paint you plan to use. To do this, refer to the Chart below.

PAINT TYPE	ROLLER NAP
FLAT	1/2" - 3/8"
EGGSHELL	3/8"
SATIN	3/8"
SEMI-GLOSS	1/2" - 3/8"
GLOSS	3/8" - 1/2"

SMOOTHER WALLS STEP-BY-STEP



One common mistake people make when rolling on paint is trying to fill in too large of an area with a single loaded roller. Inevitably, one side of the area will end up oversaturated with paint, while the other side gets barely covered.

To prevent this, try rolling in smaller 3-ft. to 4-ft. wide squares. Just cut in the smaller section with a brush

first. Then load the roller by pulling a line of paint from the paint pan reservoir and moving it back and forth to coat the roller.

Now make overlapping strokes, completely unloading the roller in the smaller section before moving on to the next. The result is more uniform paint coverage across the entire wall.





UNDER-STAIR

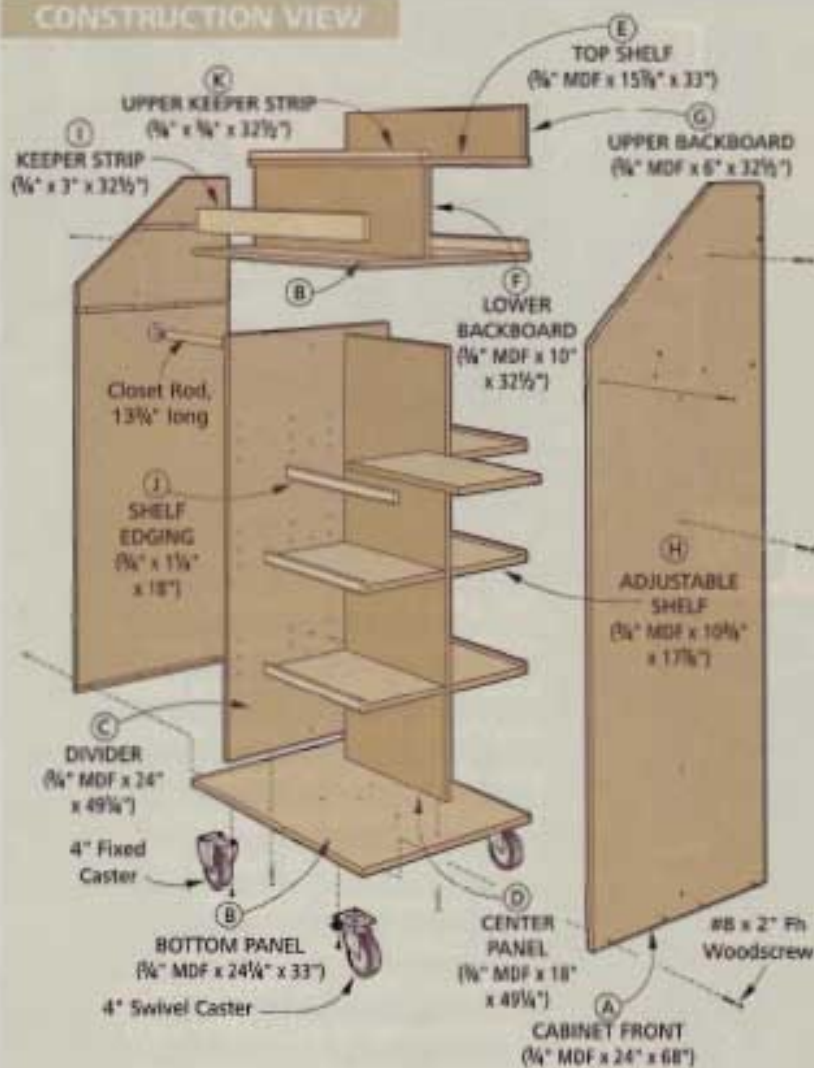
STORAGE CABINETS



Are you afraid of what might be hiding under your basement stairs? If they look anything like the ones above, you should be. You can tame that monstrous mess and reclaim living space in your basement, though, with these rolling storage cabinets. They're designed to squeeze every available inch of space out of an awkward area. The cabinets roll out for easy access to the items stored in them, and they add a finished look to the area when they're stowed away.



CONSTRUCTION VIEW



Show me a basement with a set of open stairs, and I'll show you a basement with untapped storage potential. This area is woefully underutilized simply because it's awkwardly shaped. That means most built-ins will simply chop it up into a warren of small, hard-to-access spaces.

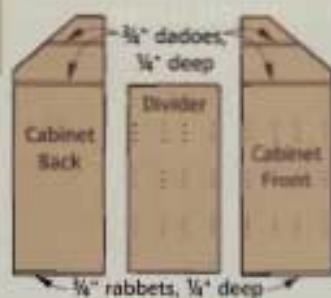
Custom-Shaped Storage—This under-stair storage system rolls right over that problem thanks to its uniquely designed cabinets. There are three cabinets in all, each a bit taller than the one before. The cabinets are narrow, at just 2-ft. wide, but they're deep to take full advantage of the area they occupy. And the cabinets are angled at the top to closely match the slope (rise and run) of the stairs.

Our stairs, by the way, had a fairly standard rise and run. If your stairs are exceptionally steep or shallow, you may need to adjust the cabinet dimensions.

Each cabinet is divided up a bit differently to maximize the space inside. The tallest features adjustable shelves and an area for hanging off-season coats and clothes. Fixed shelves in the smaller cabinets allow them to swallow tubs and boxes with ease.

All three cabinets roll out easily for access, too. And when they're rolled under the stairs, custom-fit front panels give the cabinets a finished, built-in look.

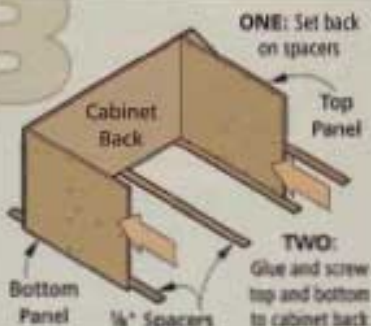
an under-stair cabinet step by step



1] Cut the front, back, and divider to size. Then rout dadoes and rabbets that receive the bottom and fixed shelves.



2] Now drill holes for pins that will hold the adjustable shelves. Exact dimensions for these are in the builder's drawings.



3] Set the back panel on $\frac{1}{8}$ " spacers, slip the bottom and top into place, and then secure them with glue and screws.

A Quick Overview—There's nothing difficult about the way these cabinets are built, but their construction is a bit unique. Some of that comes from the cabinets' unusual shapes. But strength is a consideration here, too. These are big pieces that will be tasked with holding a lot of weights, so we added just enough joinery to make them beefy without making the construction process unnecessarily complicated.

On the next few pages, we'll concentrate on building the biggest cabinet. It's the most involved and has the most parts. So once you understand how to build it, putting the others together is easy.

To be honest, though, we can't show you every small detail of the cabinets in just a few pages. But don't fret. We've put together a complete set of builder's plans that you can download free at WorkbenchMagazine.com.

Start by Cutting Parts—The first step in building this cabinet is to cut the major parts to size from medium-density fiberboard (MDF). You can refer to the cutting diagram in those online plans to see how to lay out the parts on each sheet.

Start by cutting the cabinet back and front (A), which start out identical. You can do this with a circular saw

and the simple edge guide shown on page 80. Go ahead and cut the top and bottom panels (B), divider (C), center panel (D), and top shelf (E), as well.

Rout Dadoes & Rabbets—Now grab the edge guide again, and equip your router with a $\frac{3}{4}$ " straight bit so that you can rout dadoes and rabbets in the front and back panels (Fig. 1). These allow the top and bottom panels, along with the top shelf, to lock into the front and back panels. This extra effort is worthwhile because that interlocking fit adds a lot of strength to the finished cabinet.

Make Places for Pins—The adjustable shelves that fit into this cabinet rest on pins that fit into holes in the front and divider panels. So drilling the holes comes next (Fig. 2). There are a lot to drill, but it goes pretty quickly once you get into a rhythm. Just make sure you lay out the holes carefully so that they'll align and the shelves will sit flat and won't wobble.

After you drill the pin holes, it's a good time to go back and lay out pilot holes for the screws that will be used (along with glue) to hold the cabinet together.

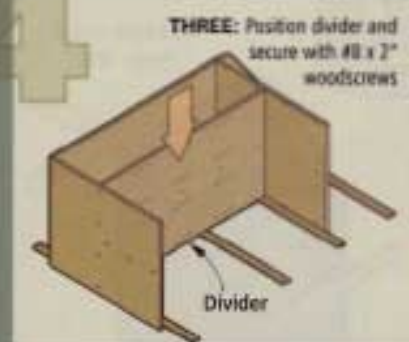
Get It Together—At this point, you're almost ready to assemble the parts you've prepared. But before that, you need to do a few things.



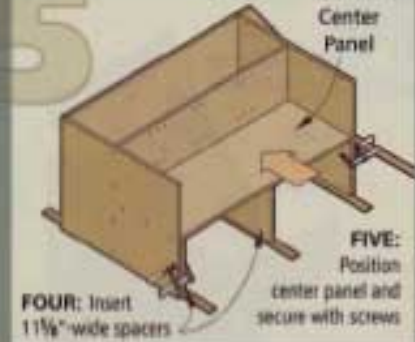
Large casters and beefy handles make these cabinets easy to roll out for access. Cleats on the floor guide them back in place without undue effort.

First, cut spacers from $\frac{1}{8}$ " hardboard. These are necessary because the top and bottom panels protrude $\frac{1}{8}$ " beyond the edges of the cabinet front and back. The spacers hold the front and back panels in position during assembly (Fig. 3).

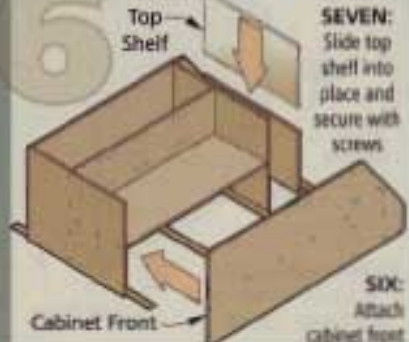
Also clear an assembly area, get your supplies ready to go, and recruit a helper to assist with holding the panels. After that, just follow the assembly sequence below (Figs. 3 through 6).



4] Drop in the divider with the shelf-pin holes facing toward the front. Make sure everything is square, then attach it.

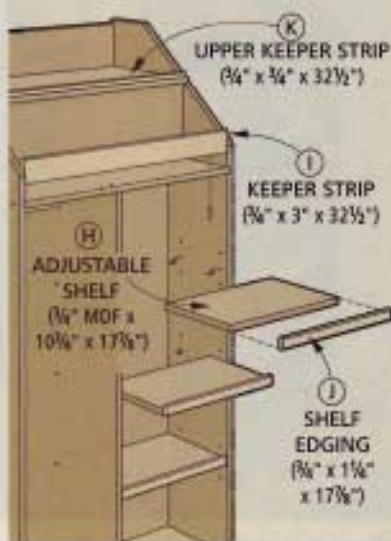


5] Spacers cut to the right height make it easy to position the center panel while you screw it in place.



6] Now all you have to do is slide in the front panel and secure it to complete the cabinet assembly.

SHELVES



For the rest of the cabinet construction, you'll want to have the cabinet standing up. Before you do that, though, it's a good time to go ahead and mount casters to the cabinet's bottom panel (Fig. 7). That way, you'll be able to move the cabinet around easily as you work on it.

When mounting them, keep in mind that the cabinet front that gets added later will hang down and conceal the casters. Because the front casters swivel, they need to be mounted far enough back to prevent them from striking the cabinet front when they swivel (*Install the Casters*).

Shelves & Keeper Strips—Now you can cut the rest of the MDF parts to size—that's the backboards (F, G), and the adjustable shelves (H). You can go ahead and install the backboards now (Fig. 8).

Then you need to make a few pieces out of pine. First are the keeper strips (I) that get installed on the top panel. They prevent items on the shelves from slipping off.

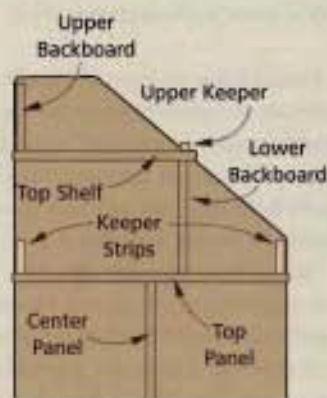
At the same time, cut pieces to make the adjustable-shelf edging (J). Again, these contain the contents of the shelves, and they prevent the shelves from sagging under load.

The best way to make these is to rip extra-long strips to width and then ease the sharp edges where necessary. You can see how to do that in the *Box* below.

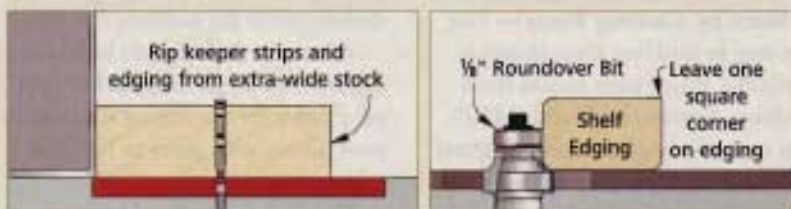
When you have the keepers and edging cut, you can attach them, as shown in Fig. 9 and *Shelves*.

There's one more strip needed to complete the cabinet construction. That's the upper keeper (K) that fits onto the top shelf. The steps for

BACKBOARD DETAIL

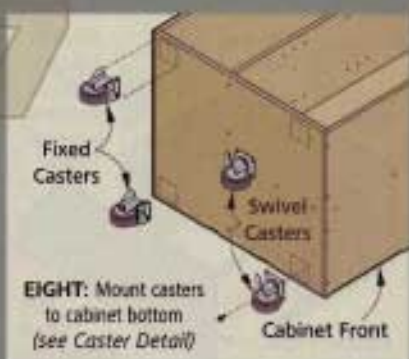


RIP STRIPS, THEN ROUND THEM OVER

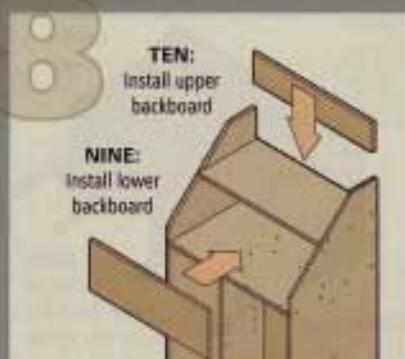


Rip strips to width for the keepers and shelf edging (left). Then round over the corners at the router table—two on the keepers, and three on the edging (right).

cabinet construction continued



7] Before you stand up the assembled cabinet, go ahead and add the heavy-duty casters that make it mobile.



8] Cut a pair of backboards to size, and then glue and screw them in place. These help corral the contents of the shelves.



9] Keeper strips made from $\frac{3}{4}$ " pine go in next. They simply slip into place and get glued and screwed down.

making this one, though, are a little bit different.

Because the upper keeper fits against the angled portion of the cabinet, it can't be as tall as the other keepers. But if you ripped this narrow strip and then rounded it over as you did before, that would put your hands a bit to close to the router bit.

So to make the upper keeper, you'll want to reverse the operations shown in *Rip Strips* at left: Round over the corners of a wider piece of $\frac{3}{4}$ "-thick pine first. Then rip the upper keeper to final width at the table saw. That done, attach the upper keeper to the top shelf on the cabinet.

The Big Finish—Now that the cabinet is complete, you'll want to protect it with a couple coats of finish. Even though these cabinets won't be seen most of the time, I chose clear finish instead of paint because it's durable. That means it won't show scuff marks caused by sliding boxes and tubs on and off the shelves.

There's a lot of surface area to cover here, but you can make the process easier in two ways. First, I advise using water-based polyurethane rather than an oil-based finish. It dries quickly, so you can apply a second coat in about an hour, rather

than having to wait overnight, as you'd have to with oil-based finish.

Second, instead of trying to brush the finish onto all the surfaces, use a 6"-wide foam roller to cover everything you can get to. Then brush the finish into the areas where the roller won't reach.

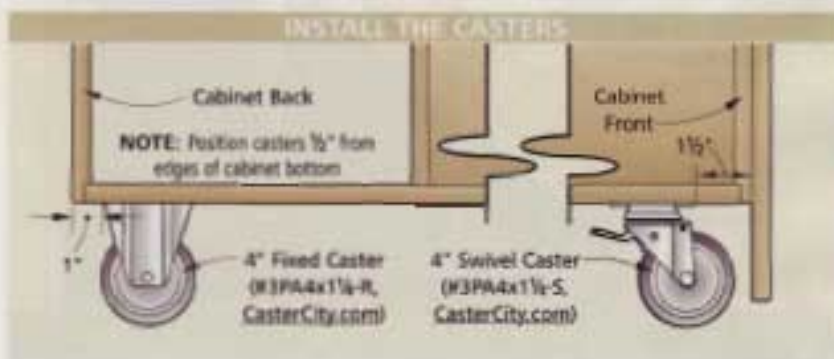
Craft Smaller Cabinets—After building the big cabinet, the smaller ones will be easy. As you can see in the *Sidebar* below, these cabinets are very similar to the tall version.

They are quite a bit simpler to build, though, because they have fewer parts. But the basic structures are the same.

Once you have all your cabinets complete, you'll be ready to install them under the stairs. We'll walk you through that process on the next two pages.



You'll be surprised by how much you can fit into a space that previously went to waste. And all you have to do is roll the cabinet out to get to everything.

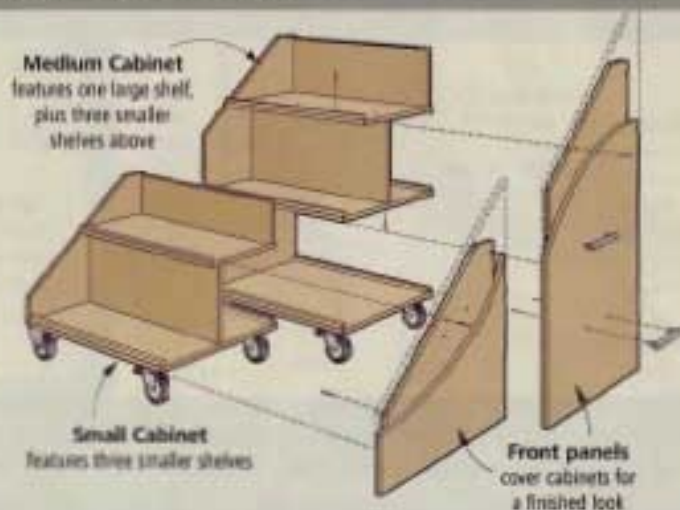


TWO SMALL CABINETS COMPLETE THE SYSTEM

The two smaller cabinets are very similar to the large version. But because of their size, they're outfitted only with fixed shelves.

The smallest cabinet is essentially a copy of the upper section of the largest cabinet, with two shelves and a pair of backboards. The mid-size cabinet adds another full-width shelf underneath.

In both cases, these cabinets feature the same sturdy construction and have keepers to make sure nothing slips off the shelves. You'll find details and dimensions for all three cabinets online at WorkbenchMagazine.com.



INSTALL THE CABINETS

With your cabinets built, it's time to install them. There are several steps in the process.

Installation Overview—You can get an overview of how the cabinets fit into the opening by looking at the *Cabinet Installation* below. As you can see, there are several inches of space between each cabinet. Just how much space depends on the slope of your stairs. These gaps will be covered by the front panels and by two filler panels.

To prevent the cabinets from banging into one another as you push

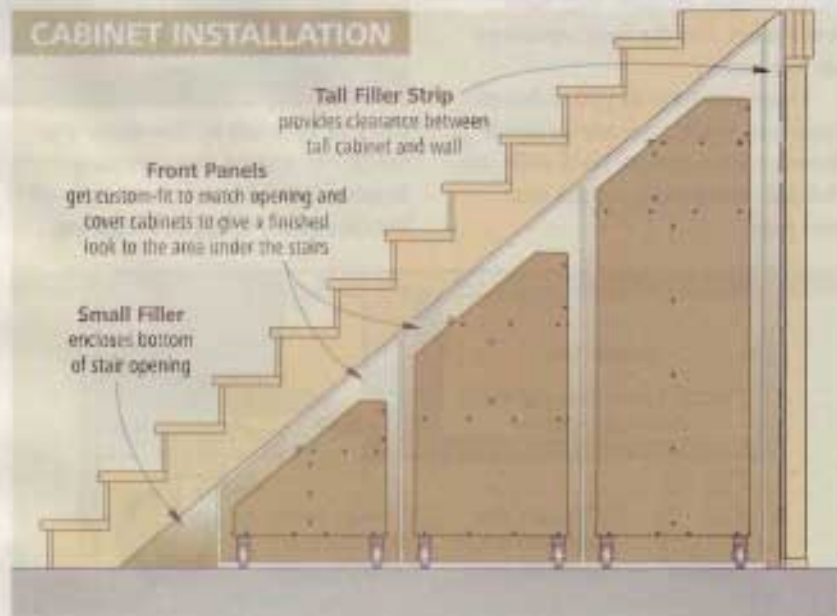
them into place, guide blocks get installed on the floor.

Start with a Filler Strip—In many cases, there will be a wall adjacent to the high side of the stairs. To provide clearance between that wall and the tall cabinet, you need to install a tall filler strip (L).

To install the filler, hold a 1x4 in the opening so it stands plumb. If necessary, scribe the edge that adjoins the wall. Then mark and cut the upper end to match the slope of the stair stringer. Slip the filler in place so it fits flush with the outside face of the stringer, and

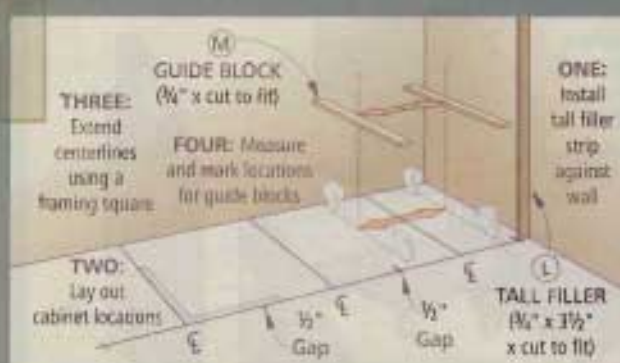
then drive a screw through the top end into the stringer. If you can, screw the bottom end into the adjacent wall, or just use tape or blocking to temporarily hold the bottom end in place.

Add the Guide Blocks—With the filler in place, you can lay out and install the guide blocks on the floor. To do that, first roll the cabinets into place and determine the width of the front panels. Remember that you'll want $\frac{1}{2}$ " gaps between the panels. In our case, the front panels ended up 28" wide. That done, you can roll the cabinets out of the way.

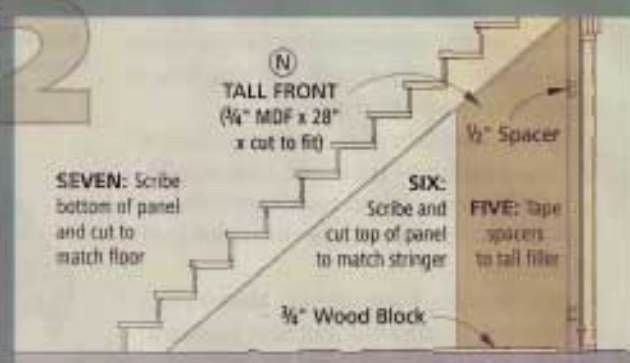


Guide blocks ensure that the cabinets roll smoothly. Position them temporarily with double-faced tape, and then secure them with masonry screws.

under-stair installation step by step



1] Measure both directions from the cabinet centerline to determine the location of the guide blocks. Position the blocks so there's about $\frac{1}{4}$ " between them and the casters on each side.



2] Hold the tall panel in position, and then scribe two lines—one that's $\frac{1}{2}$ " below the stringer, and the other $\frac{3}{4}$ " above the floor. Then cut the tall panel to final shape.

Now draw a line across the front of the stair opening. Then mark the centerline of each cabinet front panel, as well as the position of the gap between panels, on this line (Fig. 1).

Go back to the cabinet, and measure the distance between the outside edges of the back (non-swiveling) casters. Add $\frac{1}{8}$ " to that measurement, and then divide the total in half. Measure to



Double-faced tape comes to the rescue once again when mounting the cabinet fronts. Press the panel in place, and then drive in screws from behind to hold it.

each side of the centerline by that final measurement to determine the position of the guide blocks.

You can measure and mark the guide-block locations for the other two cabinets in the same way.

When the block positions are all laid out, cut the guide blocks (M) from $\frac{1}{4}$ "-thick stock, and mount them to the floor (Photo, page 54). Once they're in, screw the tall filler strip into the block that fits behind it.

Finish with the Fronts—At this point, all that's left to do is add the front panels to finish off the cabinets. Again, you'll start at the high end and work your way across.

Roll the tall cabinet into place. Then cut a tall panel (N) to width. Make it about 1" taller than the distance between the floor and the bottom of the stair stringer, and cut the top at roughly the correct angle, just so it won't hit the stair treads.

Now cut a couple $\frac{1}{2}$ "-thick spacers, and then tape them to the edge of the tall filler strip. Then stand the tall panel in place so that the upper end slips behind the stair stringer (Fig. 2).

Next, mark a line on the panel $\frac{1}{2}$ " below the lower edge of the stair stringer, and another line $\frac{1}{4}$ " above the floor. Pull the panel out, and then cut along these lines to bring the panel to its finished size.



The completed cabinets make the stairs look great and give little indication that there's loads of storage happening behind the finished facade.

To attach the panel, place several pieces of double-faced tape on the cabinet, and then press the front panel against them (Photo, left). Then pull the cabinet out, and drive a few screws into the front panel from behind to secure it.

With the tall cabinet under the stairs, follow the same procedures to make the medium and small panels (O, P).

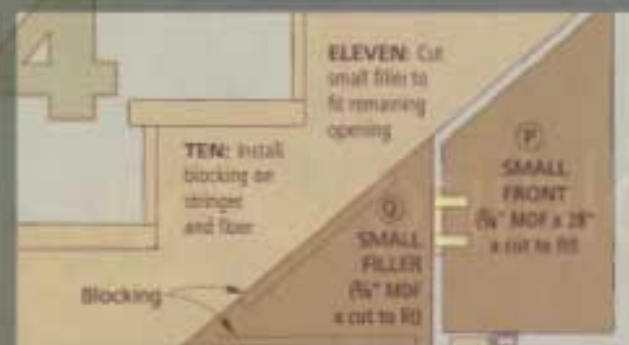
Finally, cut a small filler (Q) to enclose the remaining area under the stair stringer (Fig. 4).

Now you can wrap up this project by painting the front panels, and then adding the handles.

—Written by Dave Stone, illustrated by Erich Lage, project designed by Kent Welsh



3] Fitting the medium and small panels follows the same process as fitting the tall one. Move the cabinet into place, set the panel against spacers, and then scribe it to the stringer and floor.



4] The small filler fits into place to fill the remaining opening at the bottom of the stairs. Screw blocking to the stringer and to the floor, and then screw the filler in from behind.

workbench® Under-Stair Storage

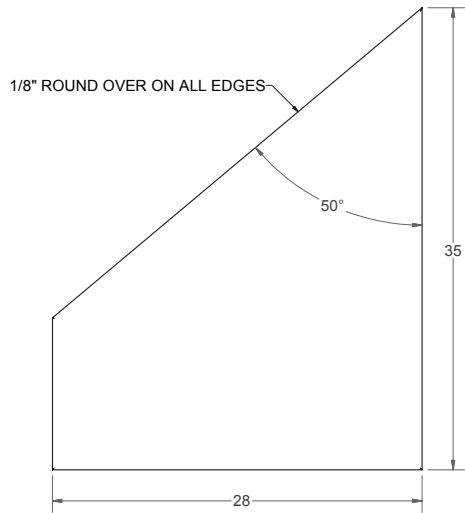
Issue 305 Volume 64 Number 1

February 2008

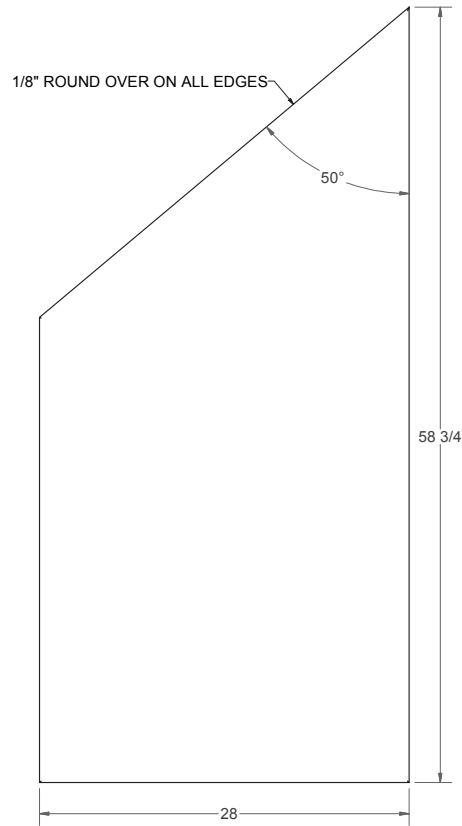


NOTE: THE HEIGHTS AND ANGLES SHOWN ARE "PERFECT WORLD" DIMENSIONS. THESE WILL NEED TO BE CUT OVERSIZE AND FITTED ON LOCATION.

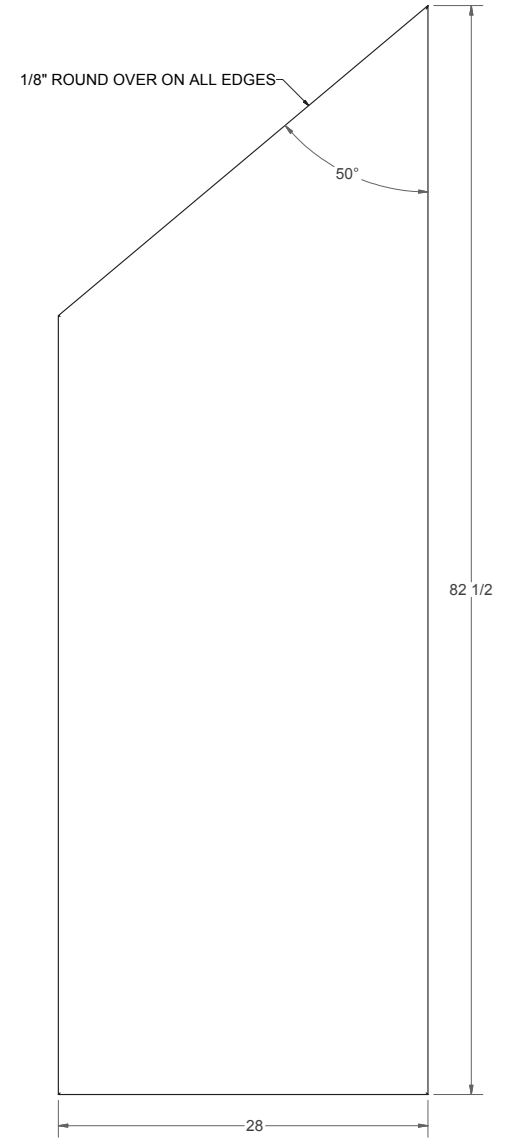
NOTE: ALL OF THESE FACE PANELS GET PAINTED



CASE #1 FRONT PANEL

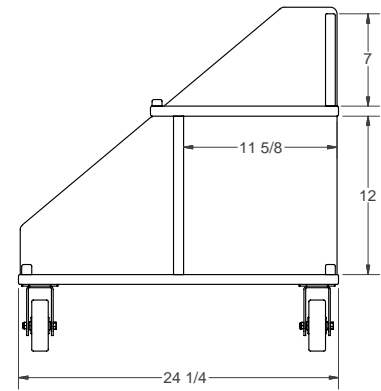
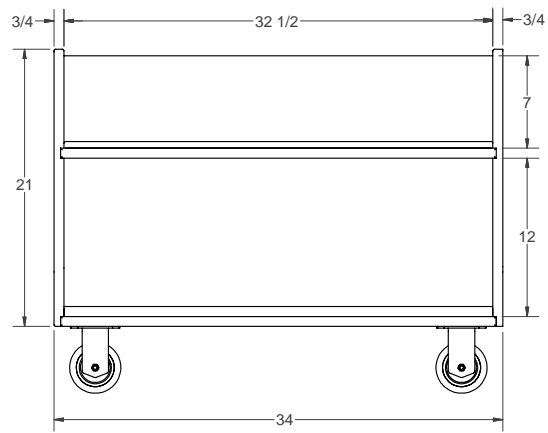
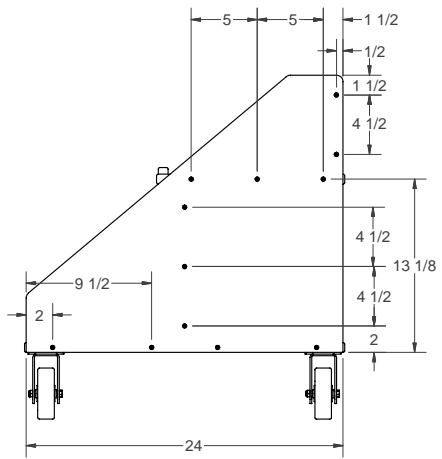


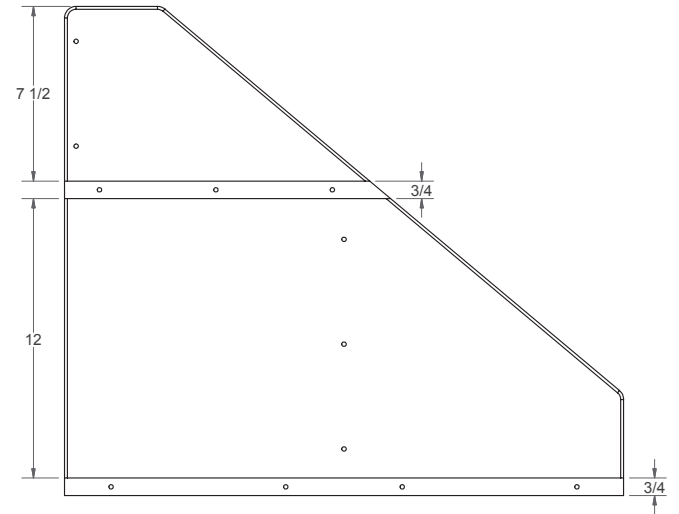
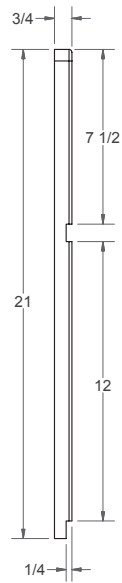
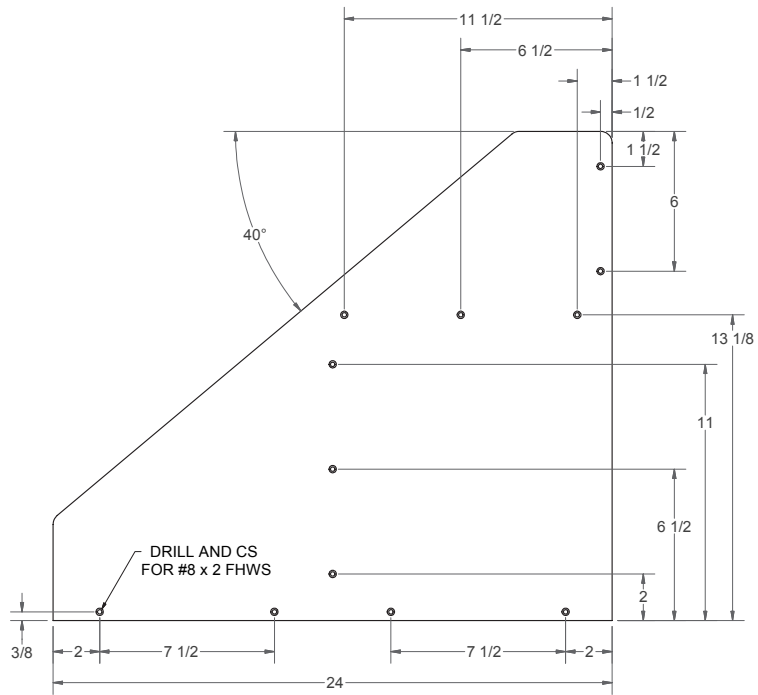
CASE #2 FRONT PANEL



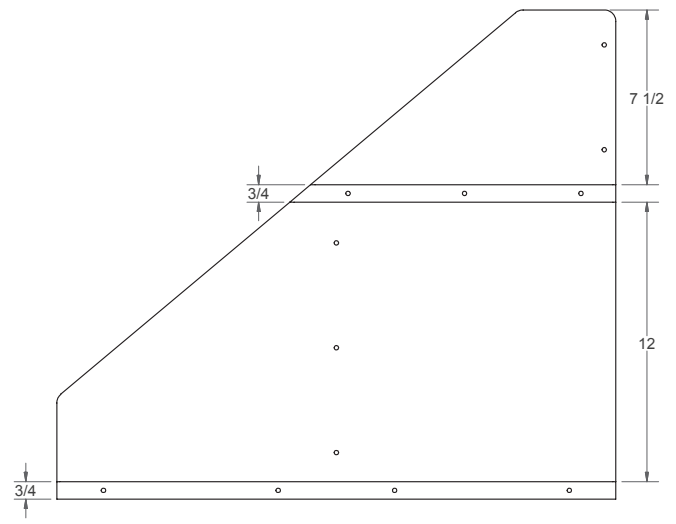
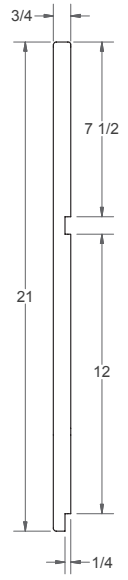
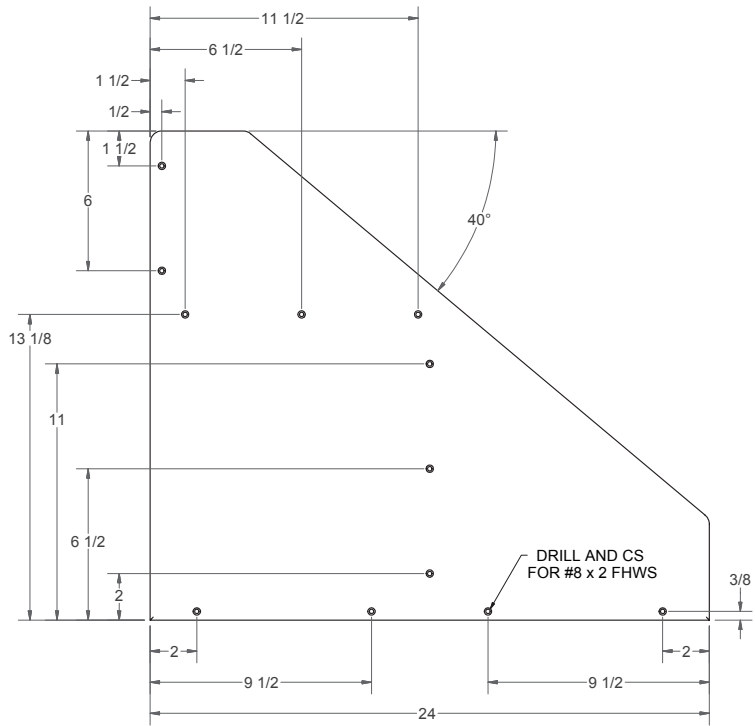
CASE #3 FRONT PANEL

Case 1

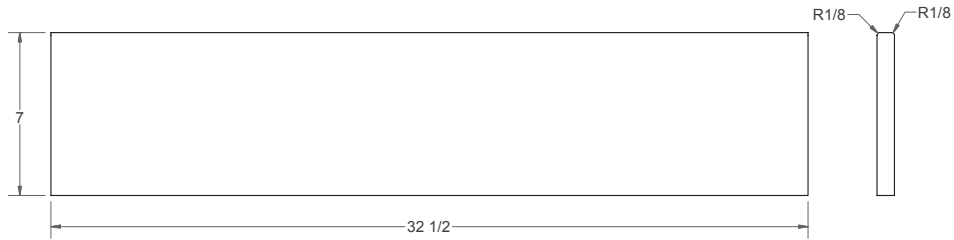




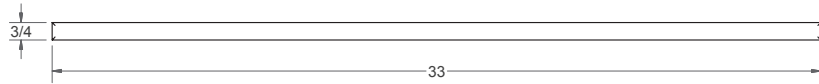
CASE #1 CABINET FRONT



CASE #1 CABINET BACK



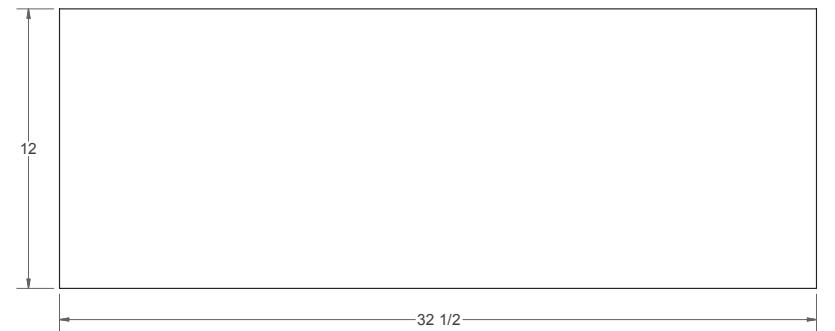
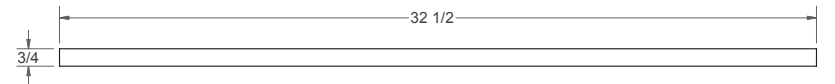
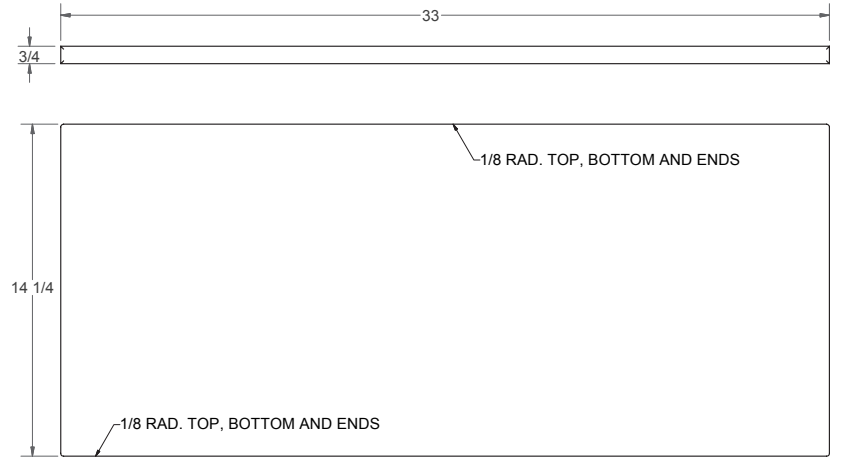
CASE #1 TOP SHELF BACKBOARD



CASE # 1 TOP SHELF

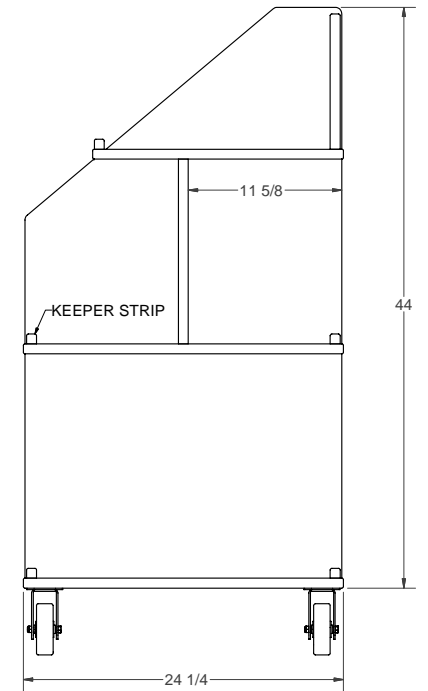
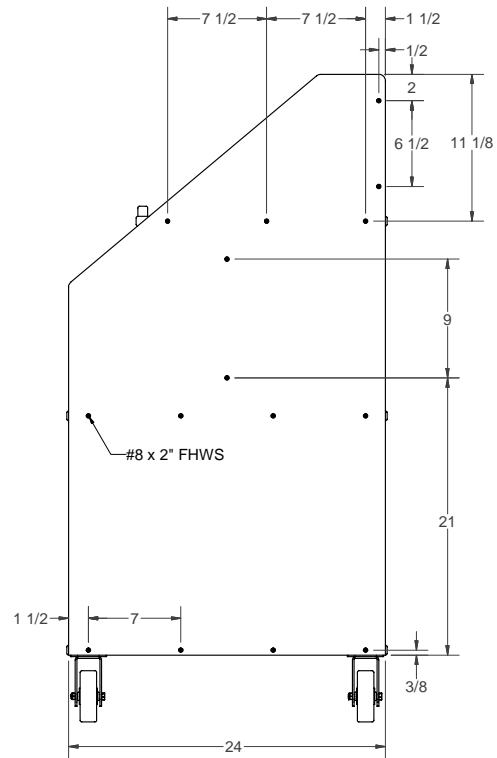
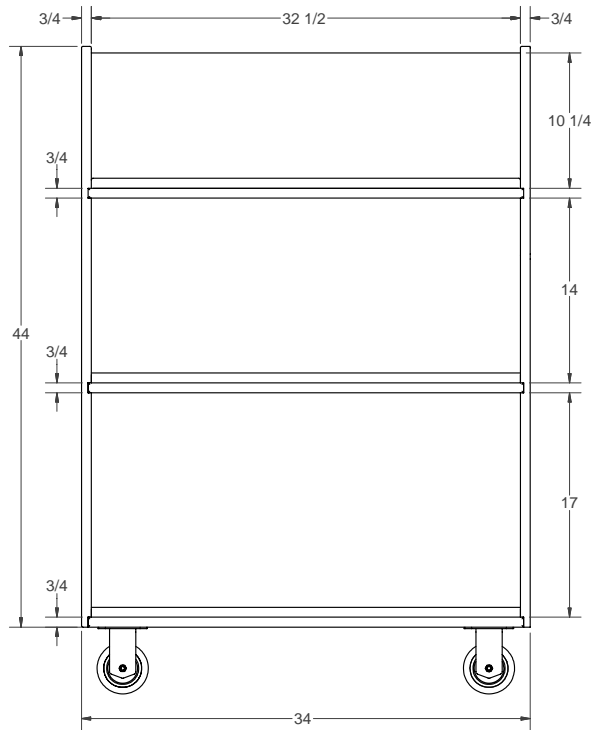


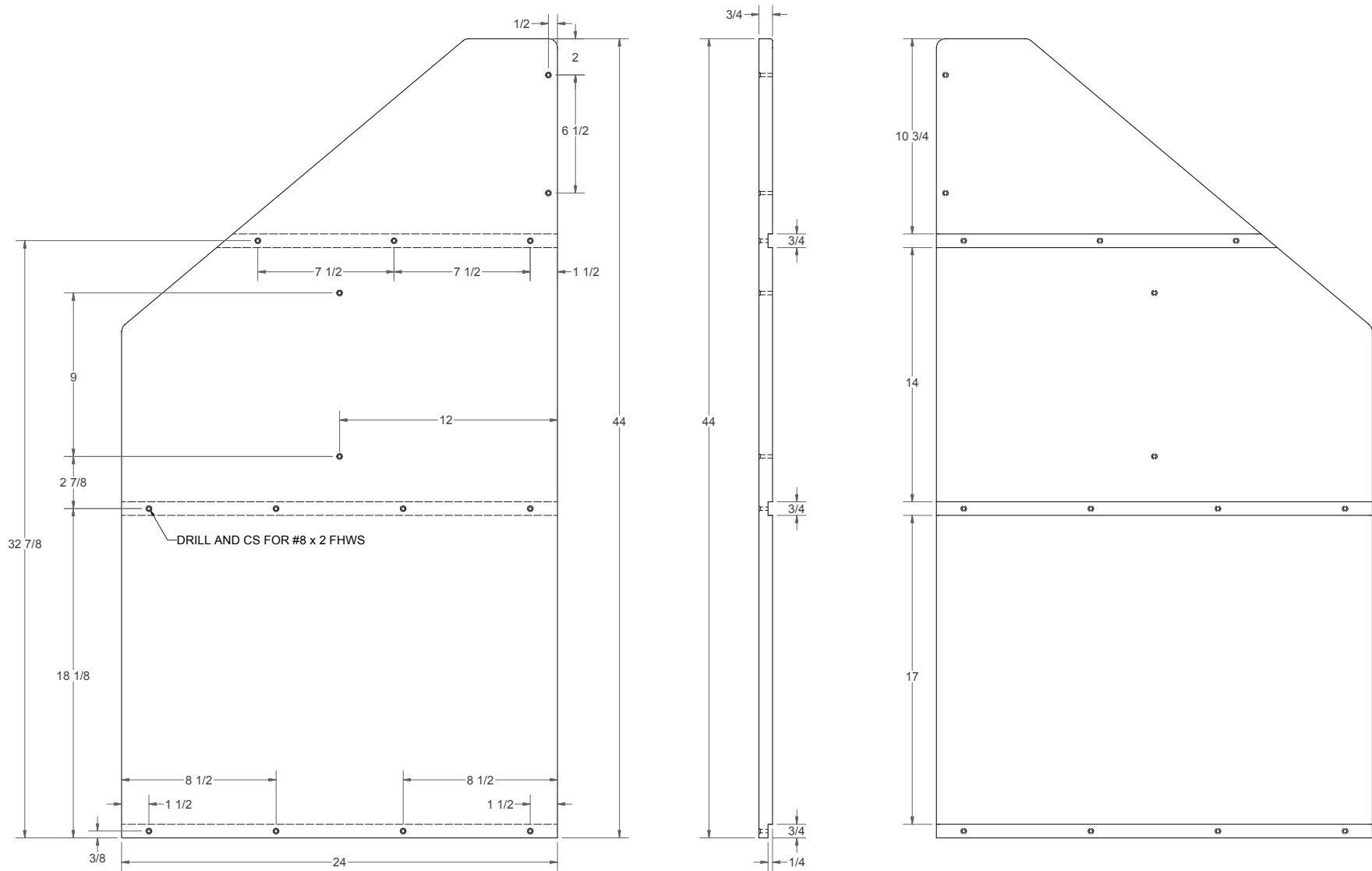
CASE #1 BOTTOM PANEL



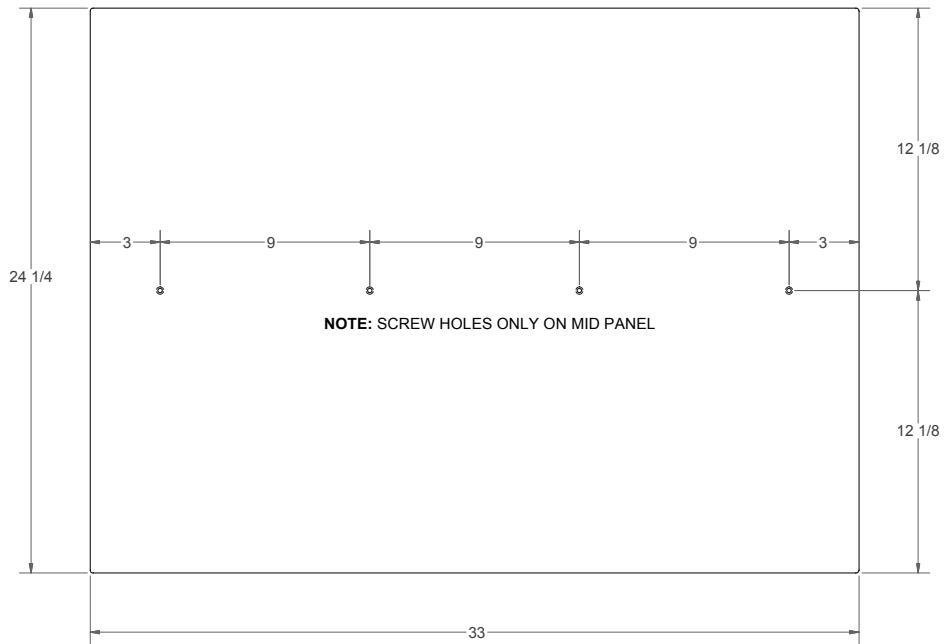
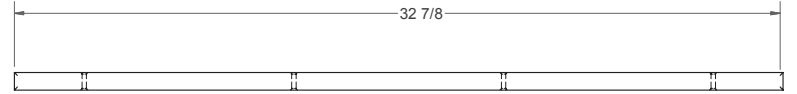
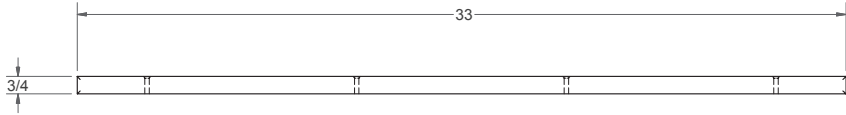
CASE #1 DIVIDER

Case 2

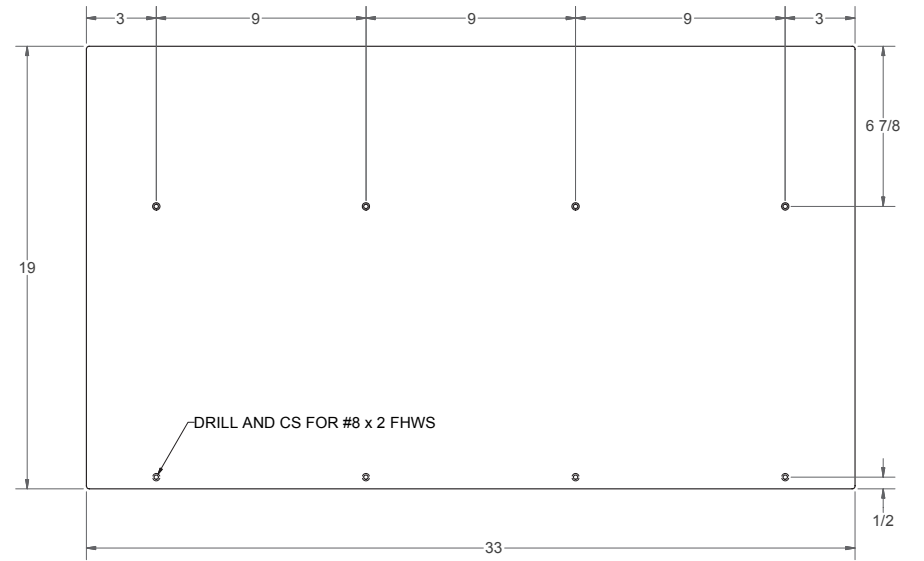




CASE #2 CABINET FRONT

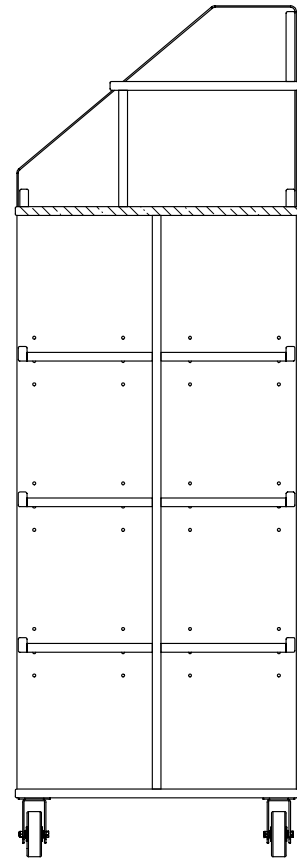
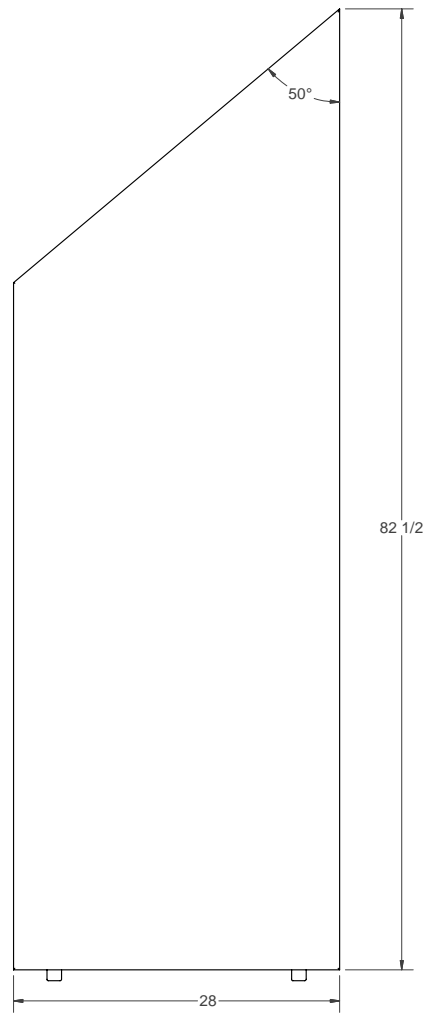
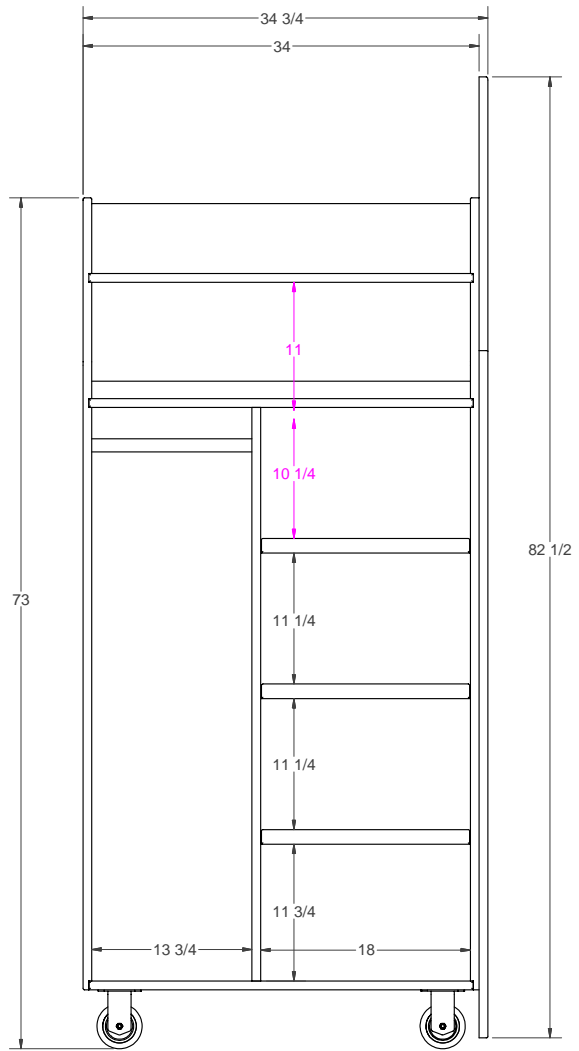


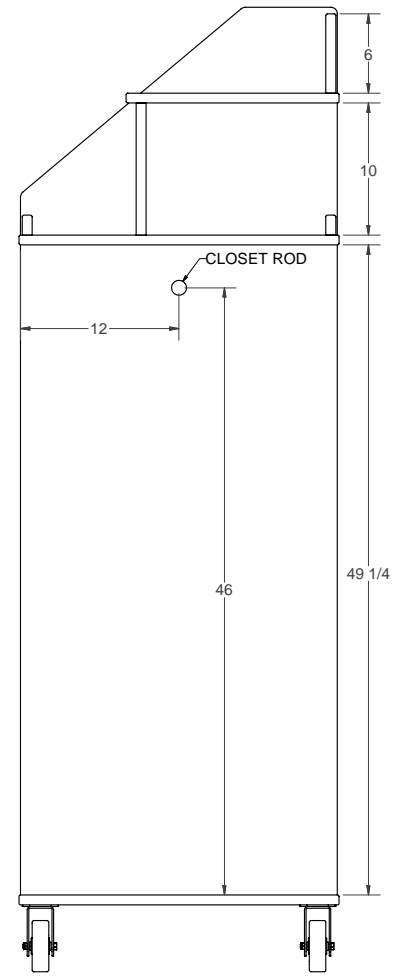
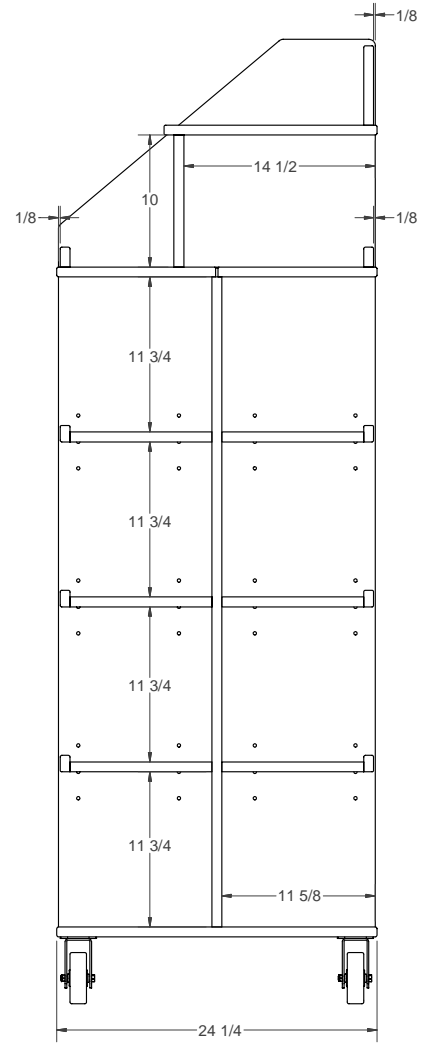
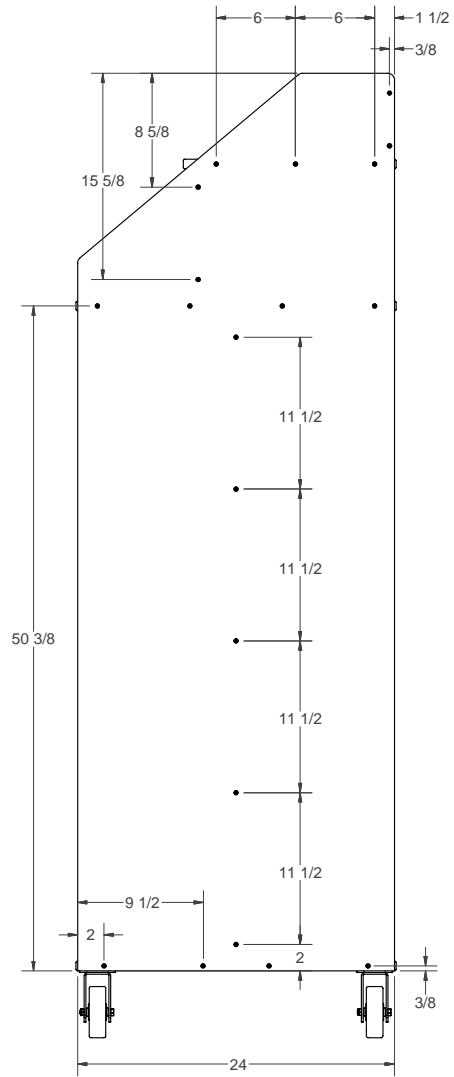
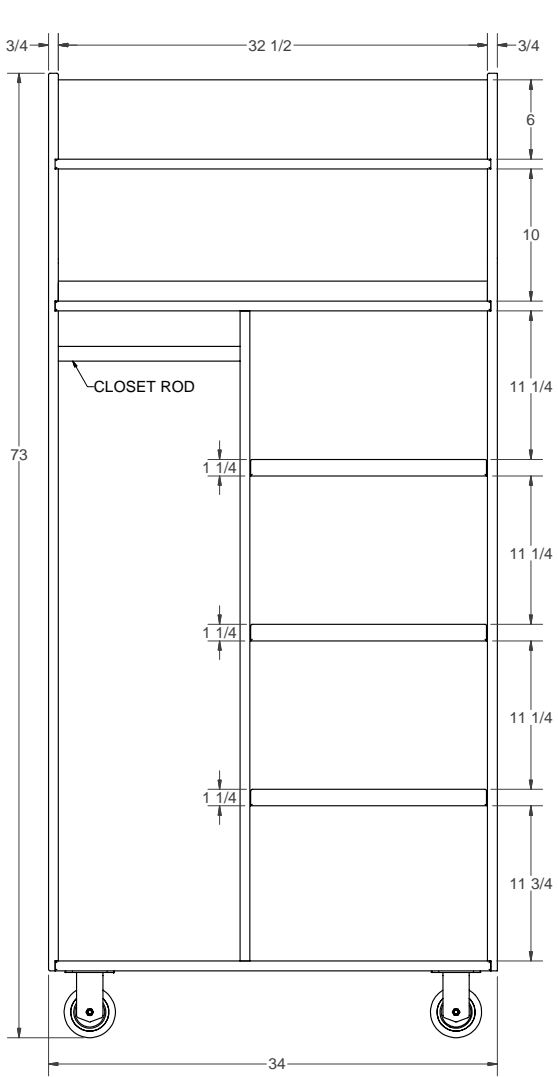
CASE #2 BOTTOM / MIDDLE PANEL

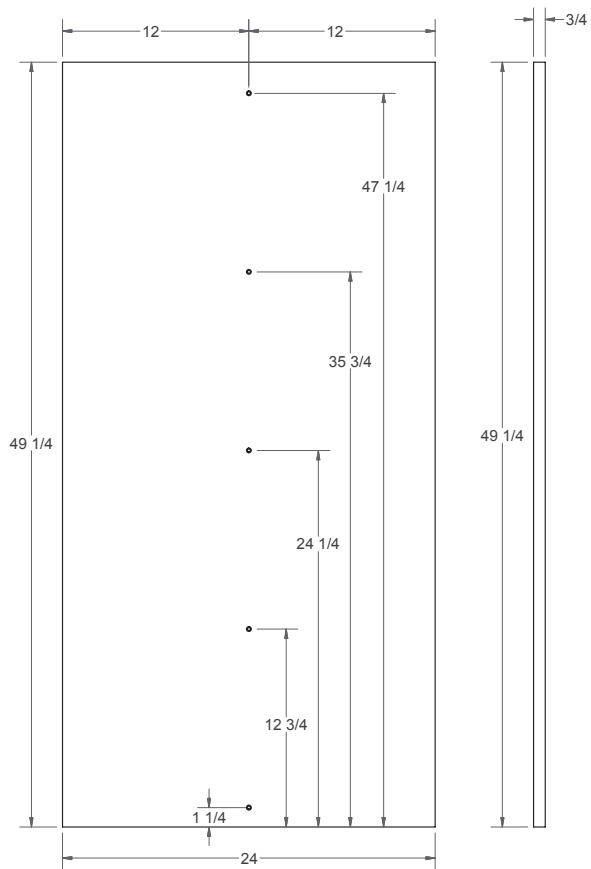


CASE #2 TOP PANEL

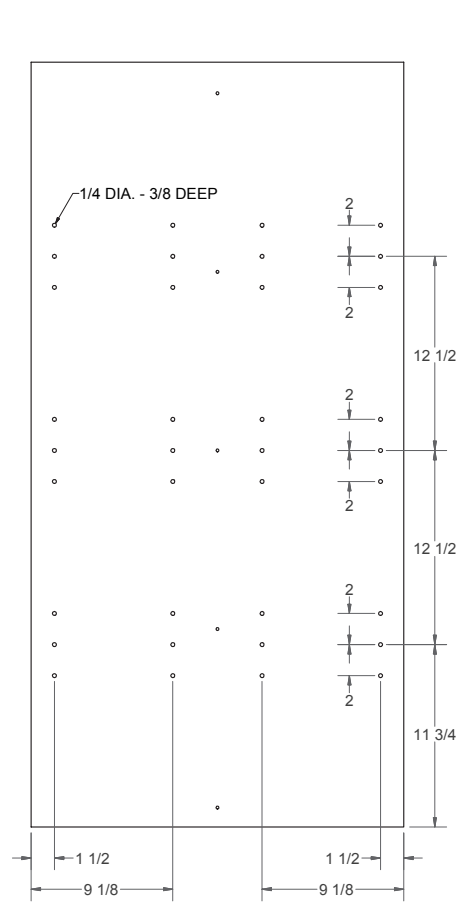
Case 3



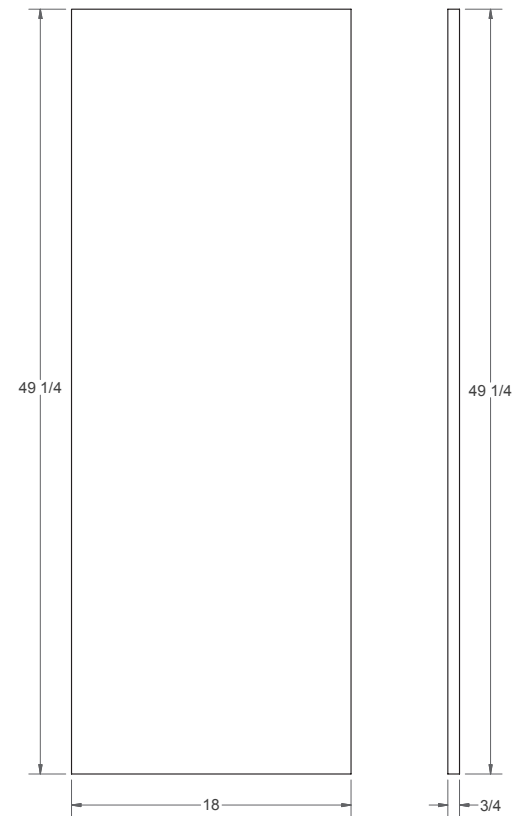




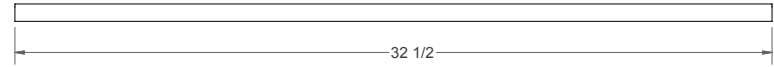
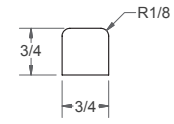
**DIVIDER PANEL
(BACK FACE)**



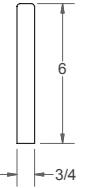
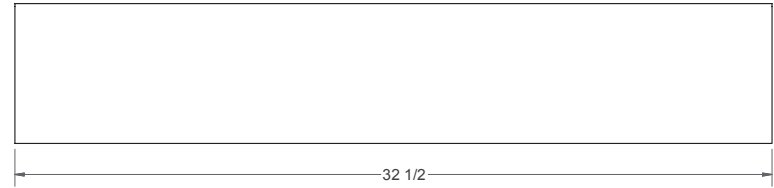
**DIVIDER
(FRONT FACE)**



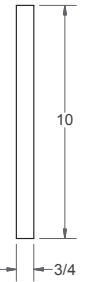
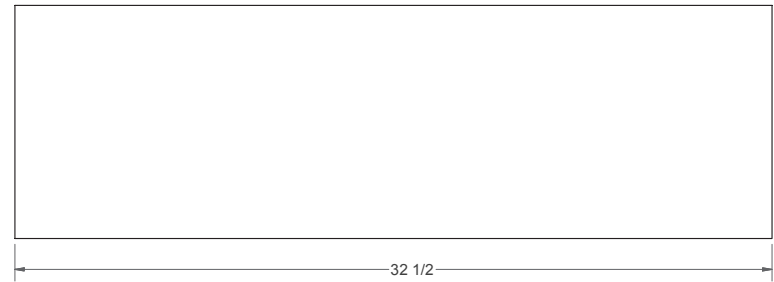
CENTER PANEL



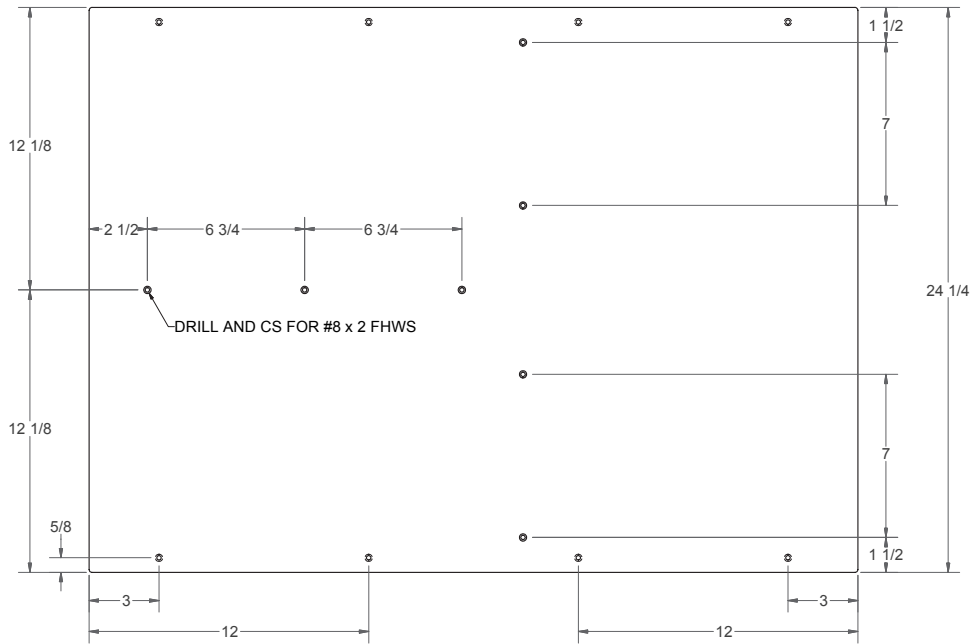
UPPER KEEPER STRIP



UPPER BACKBOARD

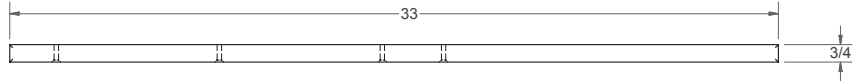


LOWER BACKBOARD

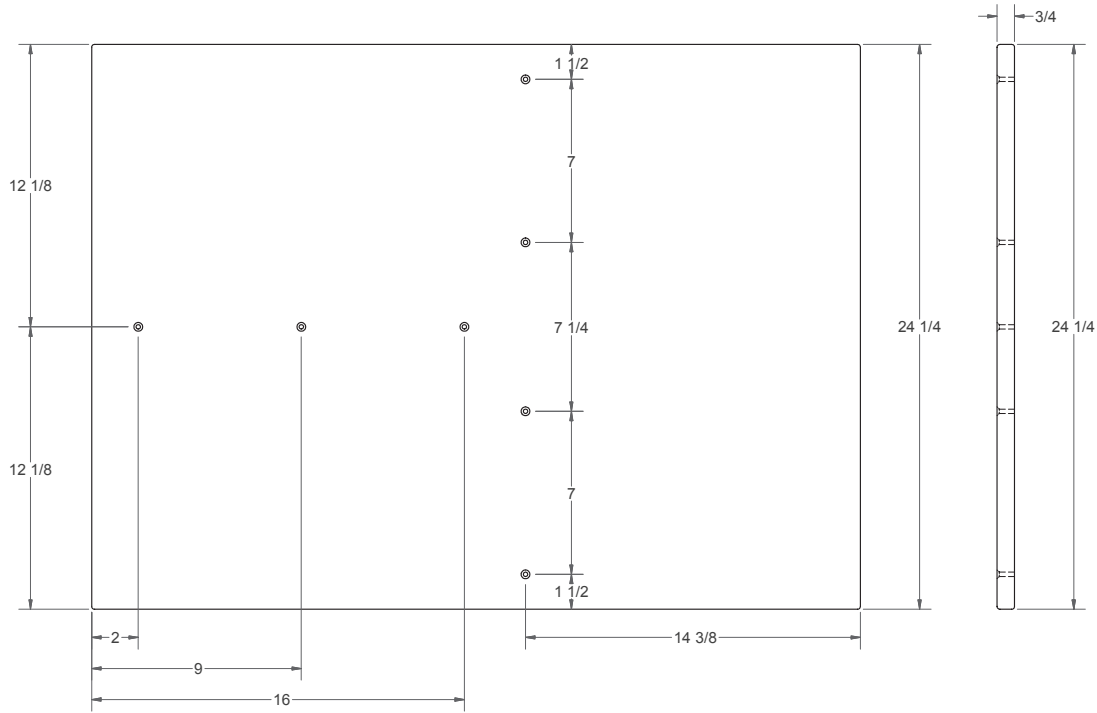
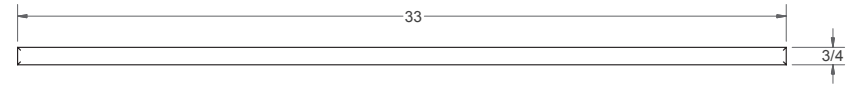


CASE #3 TOP PANEL

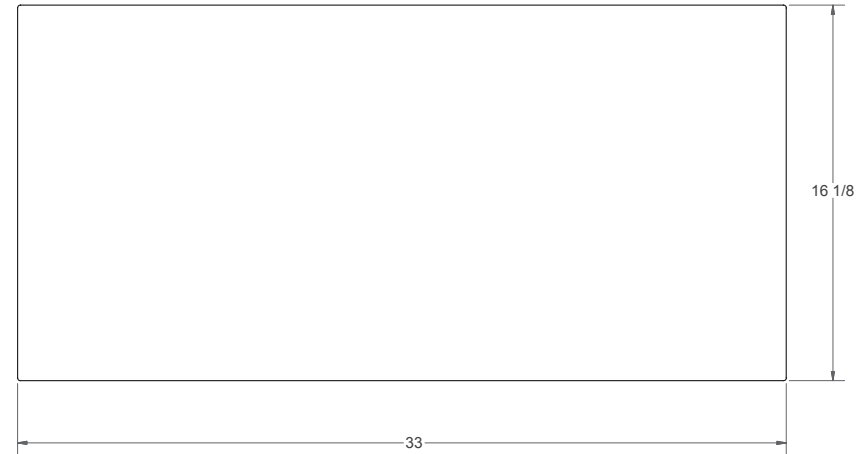
NOTE: PANEL IS 1/4 WIDER THAN THE END PANELS AND THE EDGE THAT EXTENDS GETS A 1/8 RADIUS AROUND THE PERIMETER



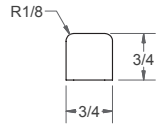
NOTE: PANEL IS 1/4 WIDER THAN THE END PANELS AND THE EDGE THAT EXTENDS GETS A 1/8 RADIUS AROUND THE PERIMETER



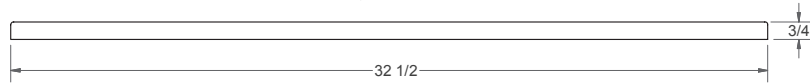
**CASE #3 BOTTOM PANEL
(BOTTOM VIEW)**



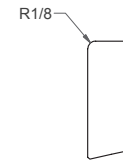
CASE #3 TOP SHELF



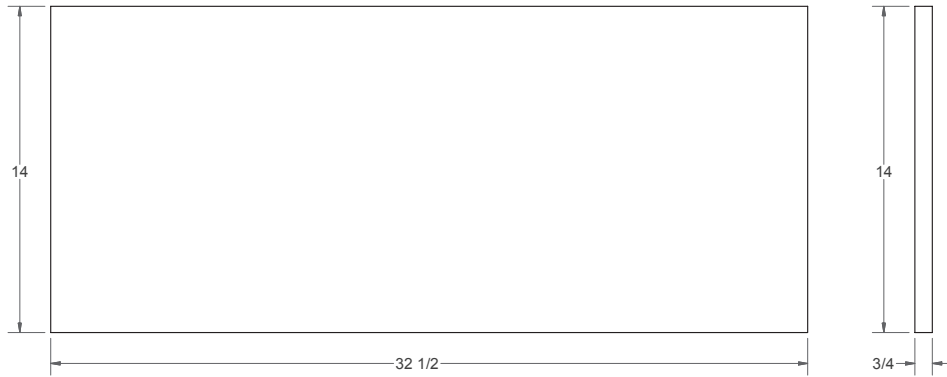
FOR THE TOP SHELF, ROUND OVER THE ENDS TOO



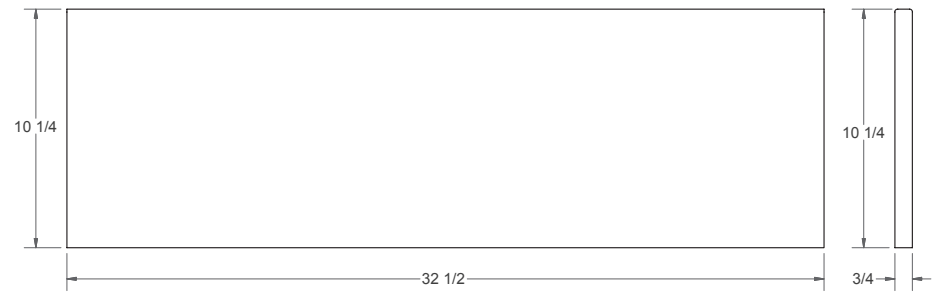
KEEPER STRIP



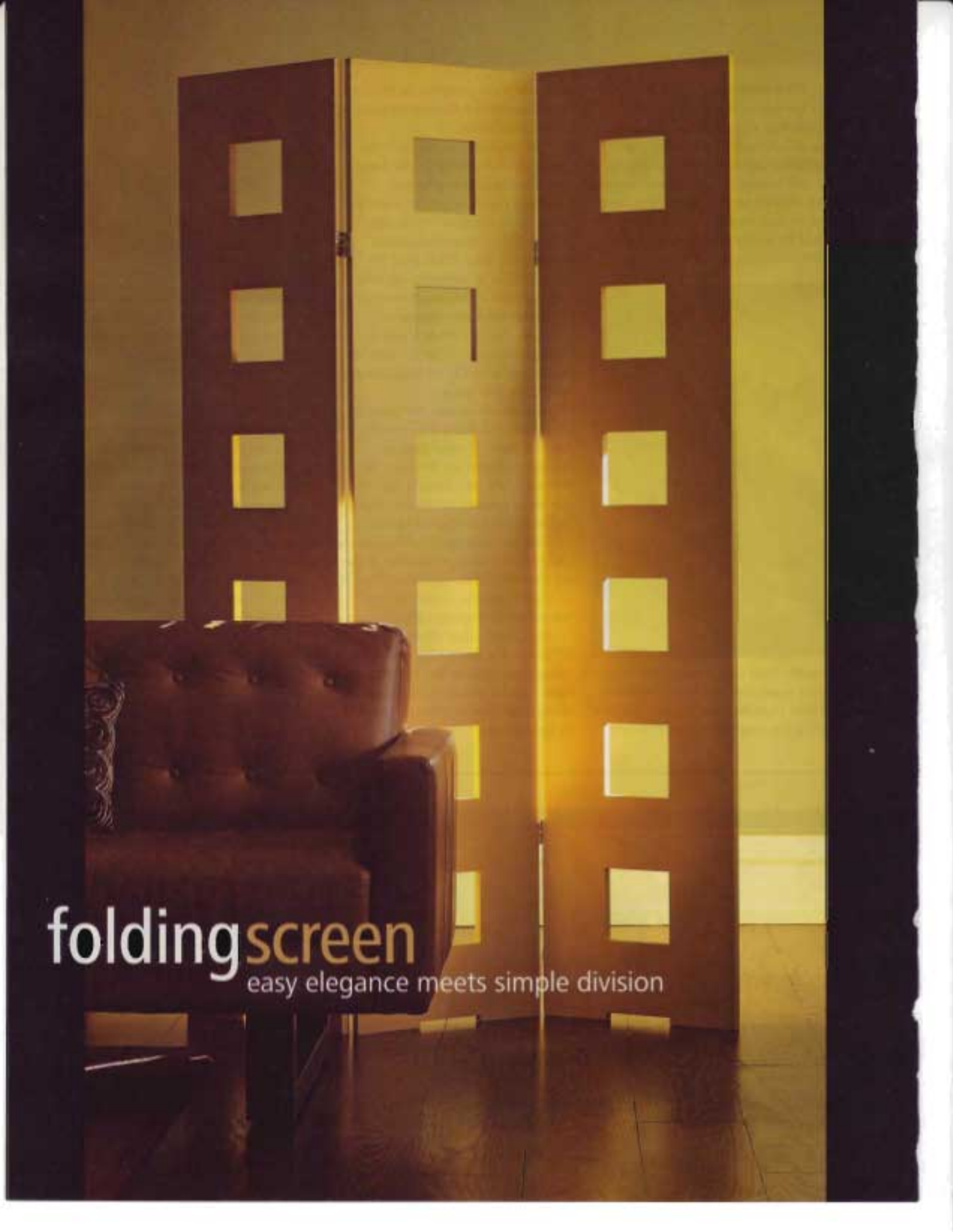
**TOP EDGE OF
BACKSLASH**



CASE DIVIDER / TOP SHELF SUPPORT



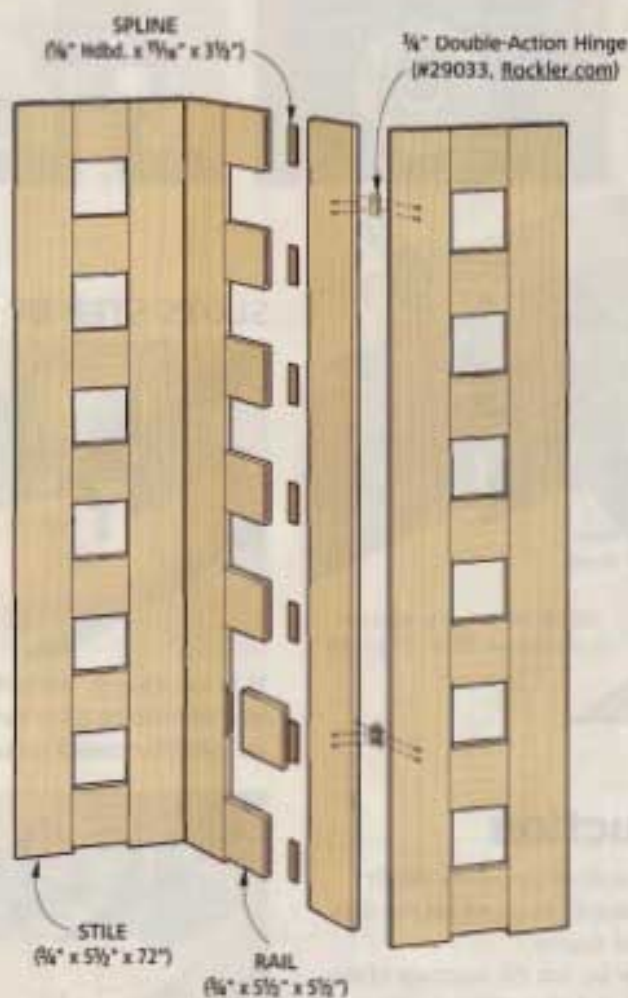
TOP BACKBOARD

A photograph of a folding screen with a tufted leather chair in a dimly lit room. The screen is composed of three panels, each with four square cutouts. The lighting is warm and yellow, creating a cozy atmosphere. The chair is in the foreground, partially obscured by the screen. The background is a plain wall and floor.

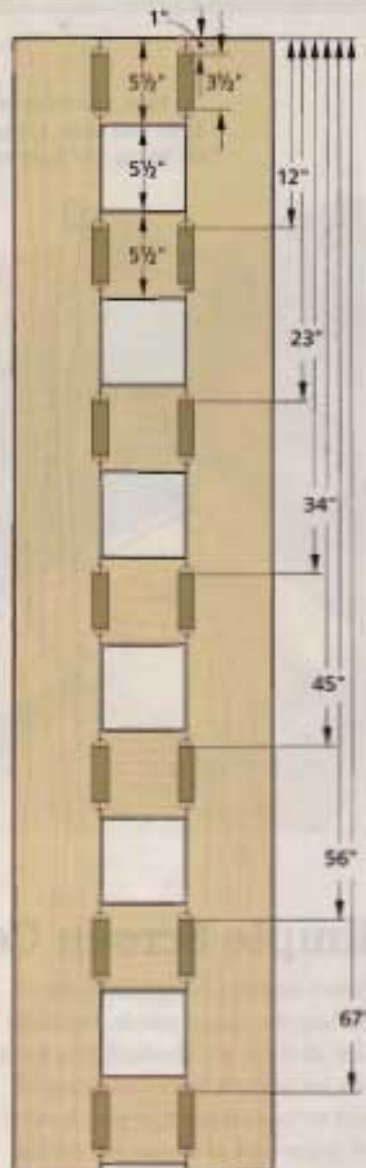
foldingscreen

easy elegance meets simple division

CONSTRUCTION VIEW



SLOT LAYOUT



Define and refine your living space by adding a folding screen. Use it to break up a space, add a touch of privacy, or provide a decorative backdrop in any room.

Whether it's serving as a piece of art, hiding a radiator, or dividing a large space into smaller ones, this folding screen can fill a variety of roles in just about any room.

Simple virtues are what make this folding screen shine. It's prominent enough to discreetly redirect traffic. The square openings can either frame or hide what lies behind the screen.

And the design lets you configure the screen in a variety of shapes.

Simple construction adds more allure to this great-looking screen. It consists of three panels that are made from 1x6 poplar boards (*Construction View*). That means all you have to do is cut the individual parts to length.

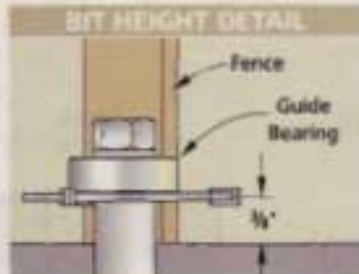
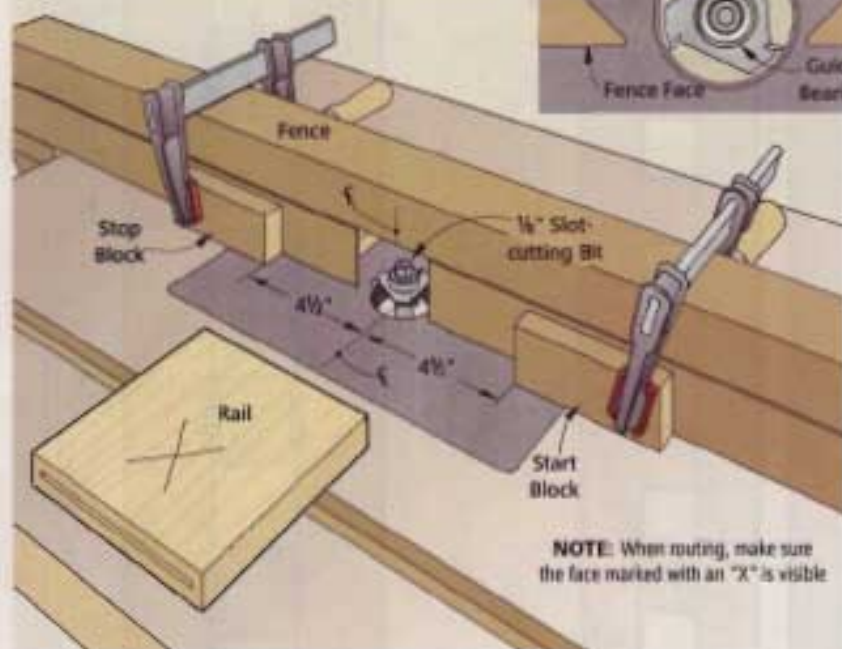
Each panel is a simple assembly of stiles and rails. To ensure that these pieces align correctly and stay together for the long haul, they're joined using hardboard splines.

Those splines fit into slots that get cut using a router table. If you're not familiar with using this versatile tool, this project presents the perfect opportunity to learn how it works.

We'll walk you through how to rout slots for the splines on page 58. If you want an even more in-depth look at the process, check out the online video at WorkbenchMagazine.com. While you're there, you can download a free set of builder's drawings for the folding screen.

ROUTING THE SLOTS

Mark centerline of bit on fence and table. Clamp start and stop blocks $4\frac{1}{2}$ " from the centerline

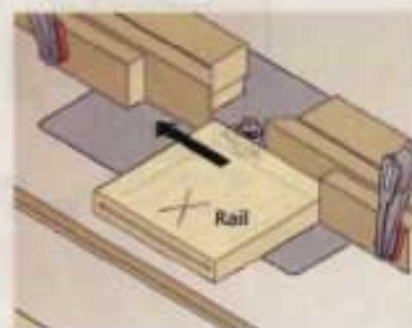


NOTE: When routing, make sure the face marked with an "X" is visible

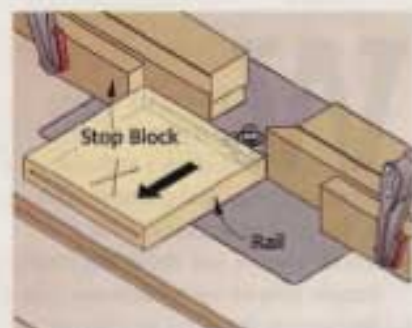
SLOTS STEP BY STEP



1] To rout the slots, first turn the router on. Then hold the rail so it sits against the start block but doesn't contact the bit.



2] Pivot the rail into the bit until the rail contacts the fence face. The spinning bit will hold the rail against the start block.



3] Push the rail left, holding it against the fence. Once the rail contacts the stop block, pull it away from the fence.

Simple Screen Construction

There's nothing complicated about building the screen panels, especially since all three are identical. But there are a lot of parts to cut, and they all need to be consistent in size. A miter saw is the tool of choice for cutting them because you can use a stop block for surefire repeatability.

Make the Rails—Start by setting up your saw with a stop block $5\frac{1}{2}$ " from the blade. Then cut a test piece and make sure it's square. Once everything checks out, go ahead and cut seven rails for each panel.

Move on to the Stiles—Now you can cut the six stiles to length, as well. Unless your miter saw is equipped with a long fence, you won't be able to use a stop block, so make sure all the stiles are the same length.

Get Ready to Rout—Before you rout the slots, mark an "X" on one face of each rail and stile. When you rout the slots, always keep the "X" visible on each piece. That way,

the faces of all the pieces will fit flush, even if you don't get the slots centered exactly.

Now lay out the positions of the slots on the stiles (*Slot Layout*, page 57). As you do this, just remember the stiles are mirror images of one another. So lay the stiles side by side in pairs with the "X" faces up, and then draw layout lines for the slots across the stiles where they meet.

Rout the Slots—Now you're ready to rout the slots. Start by installing a slot-cutting bit in a table-mounted router (*Routing the Slots*). Then raise the bit so that the cutter will be centered on the thickness of your workpieces (*Bit Height Detail*).

Now move the fence into position (*Fence Detail*), and mark it above the centerline of the bit. If there's no place on the fence face to make this mark, just apply a piece of tape (*Photo*, page 59). Also mark this centerline on the router table.

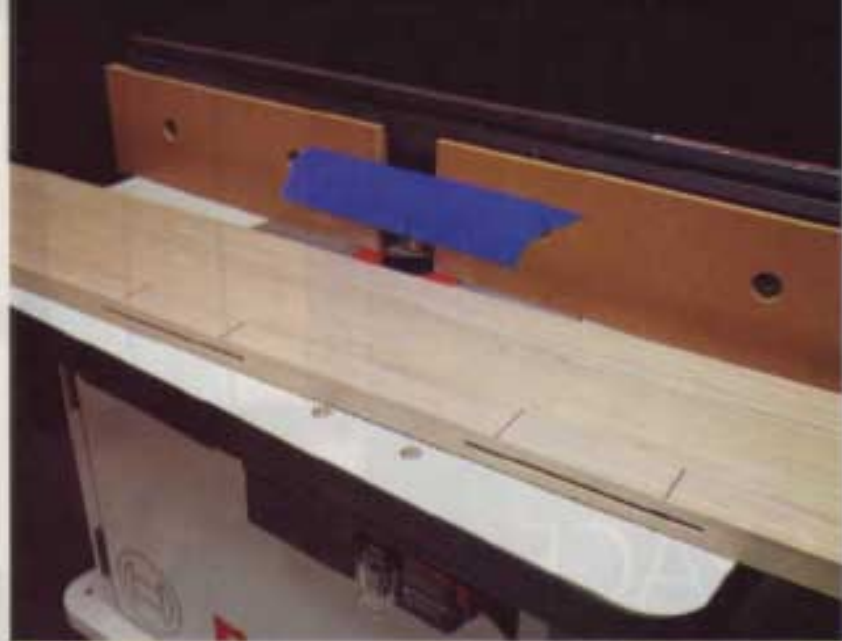
Next, set up start and stop blocks on the fence as shown. Then you can rout slots in each rail.

To do that, place the rail against the right-hand (start) block, making sure the face with an "X" is up (Fig. 1). Then push the rail against the bit (Fig. 2). Slide the rail to the left until it hits the left-hand (stop) block (Fig. 3). Now pull the rail away from the fence. Then turn the rail end-for-end, and rout the slot on the other end. Repeat this process on the rest of the rails.

Routing the slots in the stiles is a similar process, except that you can't use stop blocks because the stiles are too long. So you'll just have to line up the start and stop lines by eye as you rout each slot (Photo, right).

Splines & Assembly—After routing all the slots, the last things left to make are the splines. They're cut to size from $\frac{1}{4}$ " hardboard. You'll need 14 for each panel.

After cutting the splines, you can assemble the panels. Before you glue



A line on the fence marks the centerpoint of the bit. Line it up with the layout lines for the slots, and you'll know exactly where to start and stop your cuts.

the panels together, though, it's a good idea to "dry fit" everything to make sure it fits right. Once you're sure it does, glue each panel together. As you clamp the panel, make sure the openings are all $5\frac{1}{2}$ " tall.

Add Hinges & Paint—All you need to do now is install unique double-action hinges. There's no special trick to mounting them. Just

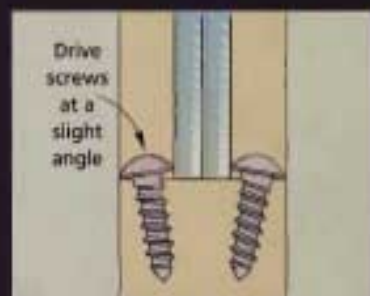
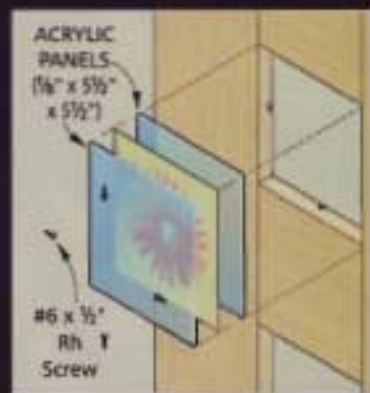
connect the first two panels, and then add the third panel.

After that, remove the hinges, and give each panel a final sanding. Then prime and paint them before reassembling the screen. ■

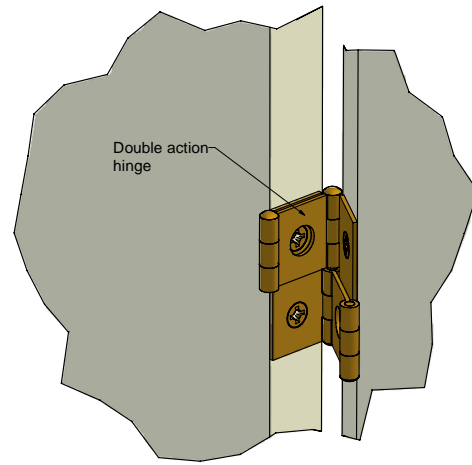
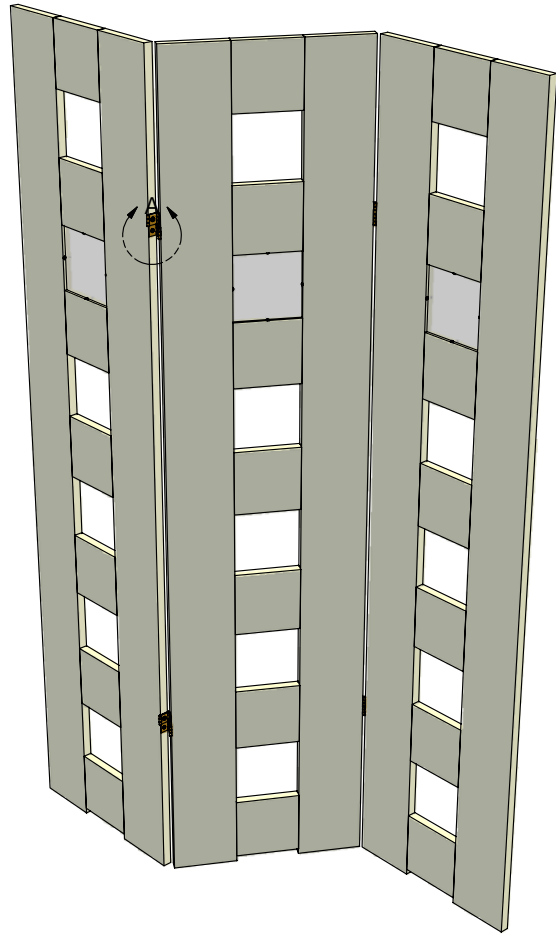
—Written by Dave Stone with Erich Lage, illustrated by Erich Lage, project designed by James R. Downing

ADD ARTWORK OR PHOTOS FOR A CHANGE OF VIEW

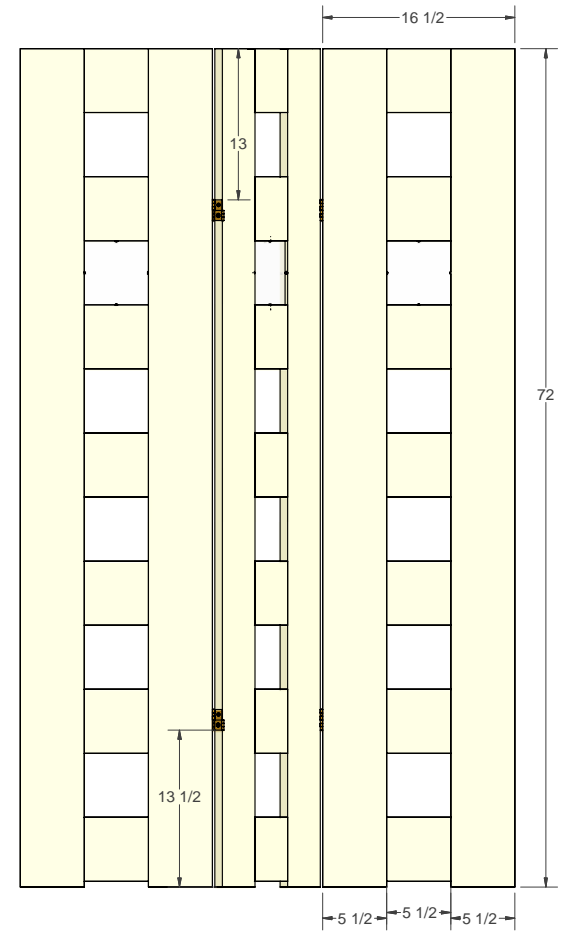
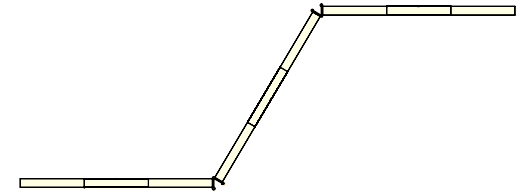
Another way to personalize the room divider is to turn the openings into frames for photos, dried flowers, or almost anything else that can be flattened and fit into the opening. For each opening you wish to fill, just cut $\frac{1}{8}$ "-thick acrylic plastic into a pair of $5\frac{1}{2}$ " squares. To hold the panels in place, drill holes and drive in roundhead screws on all four sides of the opening (illustrations, right).

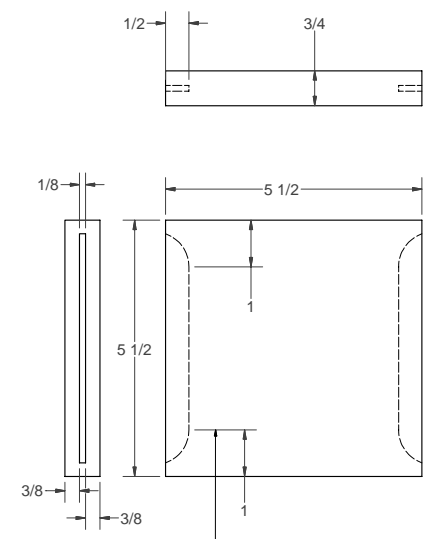
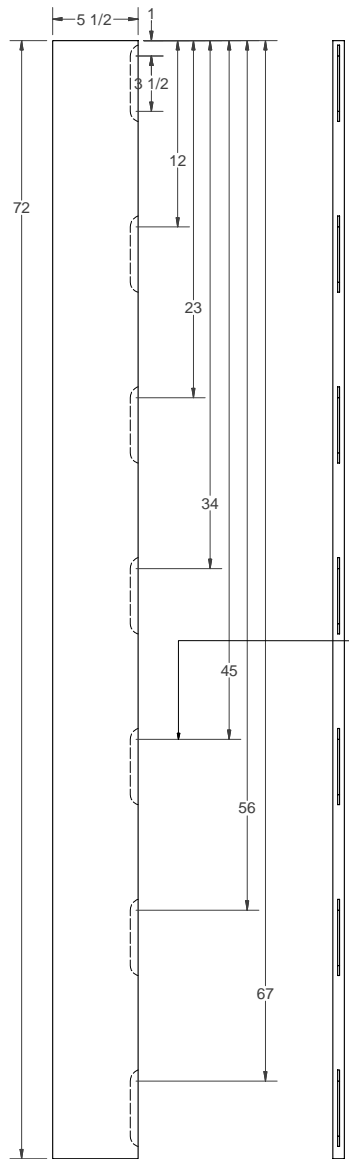
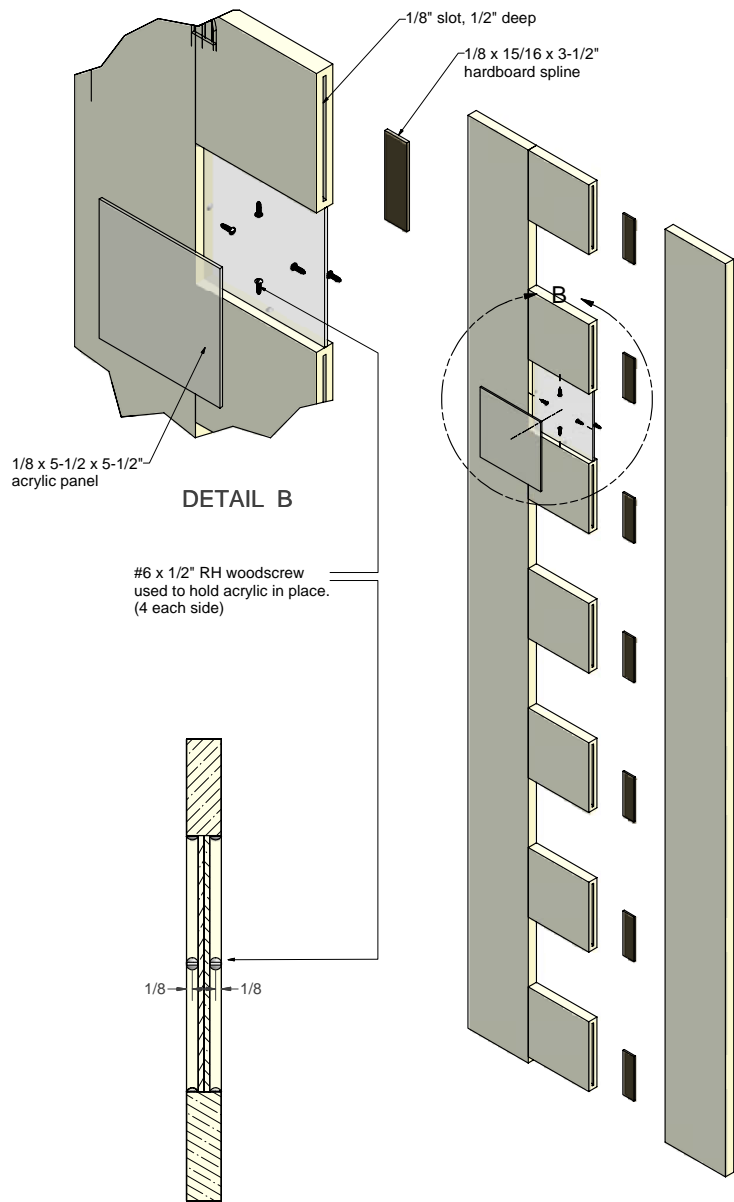




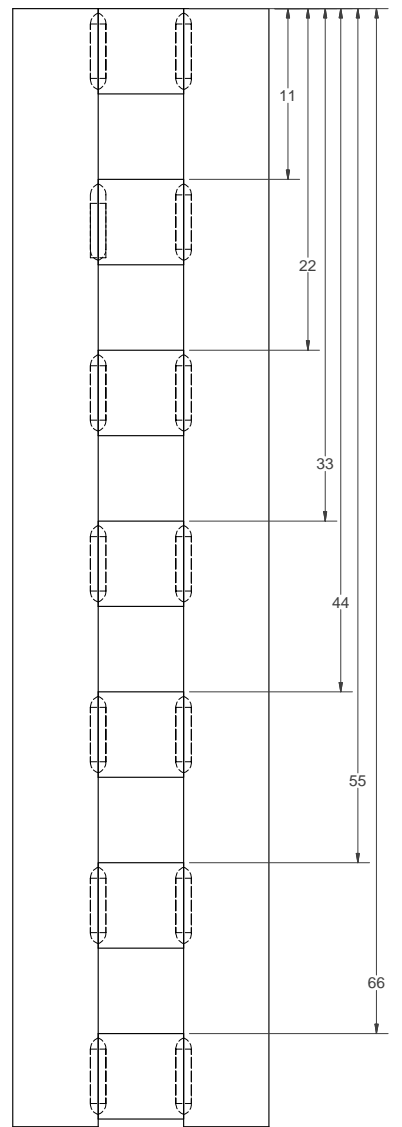


DETAIL A

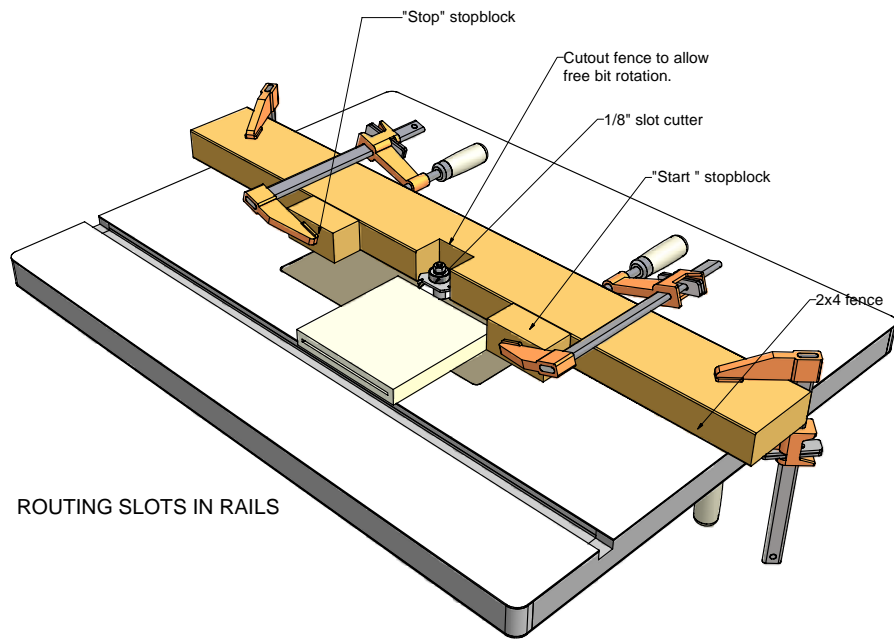




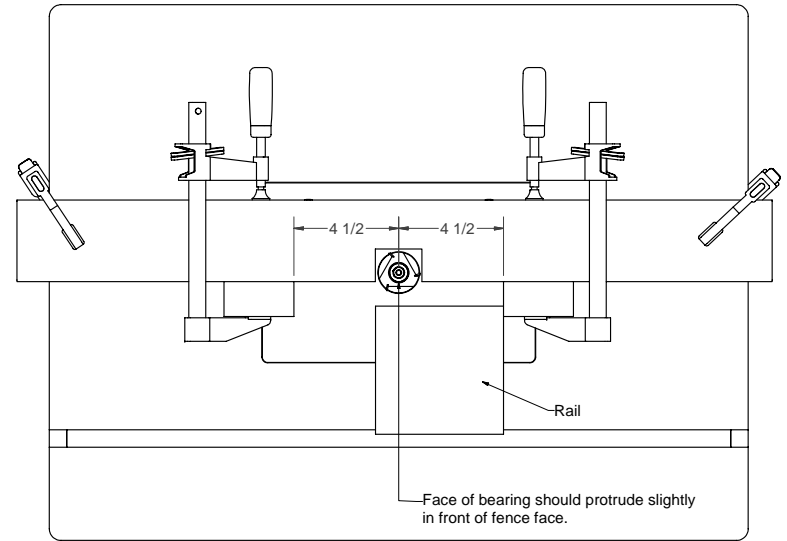
Slot-cutter router bit centerlines



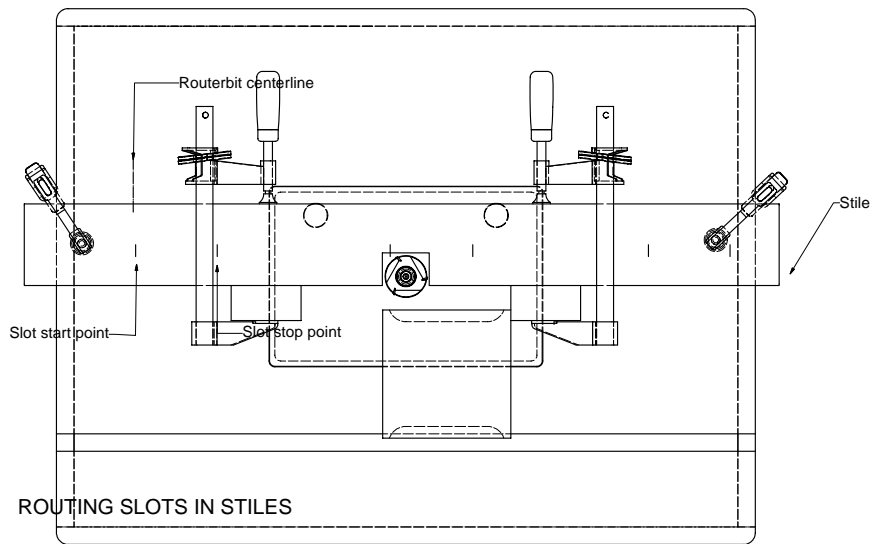
SECTION VIEW



ROUTING SLOTS IN RAILS



ROUTING SLOTS IN RAILS



ROUTING SLOTS IN STILES

simple bathroom

SPACE SAVERS

Few rooms in the home pose a greater storage challenge than the bathroom. You won't find many areas where you have to cram more items into a smaller space. Thankfully, several companies have broken the mold with new and innovative ways that your bathroom can organize all those necessities, and still look great doing it. Here's how.



DECK THE WALLS

1

If you think the walls of your bathroom are limited to holding towel bars, then you'll be pleasantly surprised by some of the new storage and organization items available. They range from sleek floating shelves (*left*) to towel bar/shelf combinations (*below*) to unique hidden shelves (*above right*).

And if you've been turned off by the somewhat clunky designs of bath étagères (over-toilet storage shelves) in the past, you'll want to give them another look (*right*). Many of the newer options provide a touch of style in an area that's usually just wasted space.



“ Despite their smaller size, the low-profile vanities that are popular today still offer a surprising amount of storage space. ”

REINVENT THE VANITY

2

One encouraging trend in bathroom design is that the vanity no longer has to dominate the space. Yet despite their smaller size, the low-profile vanities that are popular today still offer a surprising amount of storage. Plus, their tiny footprint allows you to incorporate a small vanity into a half-bath where previously you would have had to settle for a pedestal sink. These small vanities are available in a variety of styles, either to hold popular basin sinks (*far left*) or more traditional drop-in sinks (*near left*).

Of course, another way to save space is to forego the vanity entirely in favor of a smaller sink. Some of the newest models (*right*) are so tiny that they open up plenty of storage space elsewhere in the bathroom.





MODERN MEDICINE

3

It's funny that the mirrored cabinet above your sink is still referred to as a "medicine" cabinet, since that's rarely what is stored there these days. Today's medicine cabinets are increasingly becoming more functional storage. Some now feature 6" of depth or more for storing items much larger than pill bottles or toothpaste. Many also house built-in outlets for charging razors, toothbrushes, and other rechargeable bathroom "tools."

Of course, this extra function certainly does not sacrifice style, and you have more choices in the look of your cabinet today than ever before—whether your tastes swing more toward the contemporary (left) or classic (right).



Photo: Kellan

“Pairing a slim, low-profile sink and vanity combination with a floating vertical cabinet makes for a stylish alternative to a traditional large vanity.”



ADD ON CABINETS

4

Cabinets have long been a staple in the kitchen. But despite their popularity there, few people consider them to be a viable storage option for the bathroom.

That attitude may soon change, though. As you can see here, pairing a slim, low-profile sink and vanity combination with a floating vertical cabinet makes a stylish alternative to a traditional large vanity. And best of all, this setup offers about the same amount of storage.

Vanity manufacturers seem to be aware of this trend, too, as a growing number of companies are adding cabinets to their bath furniture lines.



Photo: Kellan

“ Today’s manufacturers offer plenty of options for filling a bathroom’s corners. This is especially helpful in small bathrooms where space is at a premium. ”



CONQUER CORNERS

5

In most bathrooms, the corners are just wasted space. But in the past, this was for good reason, as a lot of the furniture and fixtures that were made to fit in a corner were seriously lacking in style.

As you can see, though, this has changed. Whether it’s a sleek, contemporary wall-mounted shelf (left) or a small sink (above), today’s manufacturers offer plenty of options for filling a bathroom’s corners. This trend is especially helpful in half-baths and other small bathrooms where space is at a premium to begin with.



STAND TALL

6

Of course, you also shouldn’t overlook the options among freestanding cabinets and shelves when planning your bathroom’s storage space.

The best thing about a free-standing unit is the freedom it gives you to put it wherever you want. And by choosing a tall, narrow cabinet, you can gain plentiful extra storage without sacrificing floor space. As you can see here, just about any style is available, from basic wire shelving to more ornate wood-and-glass enclosed cabinets.

—Written by Wyatt Myers



BUYER’S GUIDE:

Kohler
800.456.4537
US.Kohler.com

Moen
800.289.6636
moen.com

Porch/American Standard
800.442.1902
Porch-us.com

Cole & Company
888.633.2264
VanityBath.com

Pottery Barn
888.779.4044
PotteryBarn.com

Organize-It
800.310.7712
OrganizeIt.com

Pegasus
800.553.3199
PegasusInfo.com

Lacava
888.522.2823
Lacava.com

'08



top 10 innovations

Successful innovation, it would seem, is based largely on having the proper timing. A good idea that's too far ahead of its time may never gain traction with the general public. On the other hand, an idea that is only slightly overdue can create a ground swell of excitement from consumers who have been waiting for just such a solution. Of course, there are also those innovations that arrive right on time, as though scheduled to intersect the problem they solve at the precise moment that a solution is required.

As I was compiling this year's list of the *Workbench* Top 10 Innovations, it occurred to me that there is at least one example of each of those in this group. Rather than spoil the fun and tell you which I think is which, I'll leave it to you to draw your own conclusions on the timing of these items.

However, no matter what you decide about the timing or plausibility of these products, I'm sure you'll agree that more than one of them turns convention on its ear. And that, more than simply the usefulness of a product, is what innovation is all about.

INNOVATION: CNC for the Hobbyist



CarveWright Home CNC Carver

COMPUTER NUMERICALLY CONTROLLED, or CNC, woodworking machines have come home—or at least the first one has. The CarveWright Woodworking System, which is also sold as the Craftsman CompuCarve and built by LHR Technologies, is the first example of a computer-controlled power tool that is sized and priced for the hobbyist. Granted, the \$1,800 price tag means you'll have to be a *really* enthusiastic hobbyist, but keep in mind that VCRs once sold for \$800 or more.

The CarveWright, as the name implies, is a carving machine that can carve intricate patterns but can also rout, cut, and joint project pieces using a variety of bits. And despite the "CNC" designation, there's no need to connect the machine to a computer. Rather, you can transfer project files between your computer and the carver using an included memory card. Projects can stem from your own designs, images from the included library, or other imported sources.

For complete details on the CarveWright, including sample projects and videos of the carver in action, visit CarveWright.com or call 713-473-6572.

Dow SafeTouch Insulation

IT'S BEEN A LONG TIME COMING, but Dow has finally figured out how to make R-13 and R-19 batt insulation that doesn't leave you feeling like you've been rolled in fiberglass after you install it. That's because they've replaced the fiberglass fibers with polyester fibers. Polyester, it seems, is non-irritating (except when worn by door-to-door salesmen).

The point is, you can now install insulation wherever you need it without first donning gloves, a mask, goggles, and a full jumpsuit. In fact, SafeTouch is actually rather pleasant to feel, almost like an expensive teddy bear. Most importantly, though, it won't irritate your skin, eyes, or throat.

Of course, SafeTouch has all the same thermal and acoustical properties of conventional insulation and requires no special installation procedures. In fact, it's even simpler to install since you can easily rip it to length by hand.

What's more, Dow has done away with many of the harmful preservatives and binders that are typical of fiberglass insulation. SafeTouch contains no formaldehyde or acrylic binders and no borates. And despite the lack of borates, the insulation is formulated so that it does not provide a food source for mold.

Dow SafeTouch Insulation will be available exclusively through Lowe's stores. At the time of this writing, it is

INNOVATION: Itch-Free Insulation



available only in select markets. Nationwide distribution is expected in mid-2008. Expect to pay about \$50 for a 77½ square-foot roll of R-13 or 58 square-foot roll of R-19 (which is comparable to the prices of conventional fiberglass insulation).

For more information on SafeTouch Insulation, call 866-583-2583 or visit Dow.com, or contact your nearest Lowe's store for availability.



Milwaukee Battery Reader

WHEN A CORDLESS TOOL winds down prematurely, it's easy to jump to the conclusion that you've got a bad battery, and you may be correct. But what you don't know is *why* the battery went bad. Did it just get old? Was it overheated at some point in its life? Or what if it's not a battery problem at all, and it turns out your charger isn't doing its job?

Well, if you happen to own V18 or V28 tools from Milwaukee, there's now a diagnostic tool available to help you sort all that out. The Milwaukee Battery Service Reader connects to any V-series lithium-ion battery and provides a complete pedigree, including when the battery was first charged, how many times it's been charged, the



maximum temperature attained by the battery, and even the voltage of each individual cell within the battery.

Of course, the \$140 price tag on the battery service reader is probably only worthwhile if you have a fleet of batteries to manage, but it's interesting to wonder if this is the harbinger of things to come, like onboard battery diagnostics.

For more information, visit MilwaukeeTools.com or call 800-729-3878.



INNOVATION: No Food, No Fungus (or Mold or Insects)

PureWood Decking

BY NOW YOU'RE AWARE that virtually every chemical used to protect wood from rot and insect damage also has unfortunate implications for humans and/or the environment. So what's a homeowner to do if they don't care to serve up their deck to the elements, but also don't want to sit, walk, eat, and entertain on chemically-treated wood? Bay Tree Technologies offers one alternative. The company's PureWood Decking uses heat rather than chemicals to repel attacks from nature.

Okay, not heat exactly, but rather heat treating. PureWood is "thermally modified" to remove the food source that attracts insects, mold, and fungus. By drying the wood and heating it to temperatures as high as 482° Fahrenheit, the wood sugars are changed into a substance that cannot be digested by decay-causing organisms. And since the wood isn't saturated with chemicals, it's lighter and more dimensionally stable than pressure-treated wood.

At this time, PureWood is only available as deck boards, so you'll have to use either chemically-treated or naturally-resistant materials for the structural components of your deck. The price of PureWood will be similar to cedar or redwood. For more information, visit PureWood.net or call 901-692-5571.



Flambeau Rust-Stopping Toolbox

UNTIL NOW, THE ONLY THING a plastic toolbox protected against rust was itself. But Flambeau's new Zerust Tool Brute toolboxes promise to offer the same protection to the tools inside.

Zerust is a proprietary vapor corrosion inhibitor (VCI) that's infused in the plastic molding. It works by emitting an invisible, odorless, non-toxic, rust-inhibiting vapor that saturates the inside of the box and clings to tools until they are removed. The simple experiment, shown above, demonstrates how effectively Zerust protects against corrosion.

As futuristic as it sounds, similar VCI technology has been used for years to protect critical components in



INNOVATION: Rust Protection for Tools

aircraft fuselages, military weapon systems, and medical devices. This is the first time it has been applied to a consumer toolbox, however.

Flambeau offers a variety of Zerust-treated toolboxes ranging in price from \$11 to \$50. To learn more about Flambeau's rust-stopping toolboxes, purchase one, or locate a dealer in your area, visit FlambeauHardware.com or call 800-457-5252.



Work Sharp Sharpener

IF YOU DON'T HATE SHARPENING, you probably haven't done enough of it. But for those of you who've had enough of tedious hand techniques or sloppy sharpening machines, I recommend the WS2000 or WS3000 from Work Sharp Tools.

Both models simplify sharpening by taking the guesswork out of bevel angles and offering a clear view of the edge being sharpened, even when sharpening underneath the grinding wheel (*Photo, right*). Most remarkably, though, the sharpeners use air and heat sinks rather than oil or water to keep the cutting edge from overheating. That makes for a much cleaner process.

For more information, visit WorkSharpTools.com or call 800-597-6170.



INNOVATION: See-Through, Slop-Free Sharpening

INNOVATION: VOC-Free Paint



The FreshAire Choice

LESS IS MORE WHEN COUNTING volatile organic compounds (VOCs). And VOCs are closely regulated because of the negative impact they can have on air, soil, and water quality when released into the environment. You've probably noticed all kinds of adhesive, caulk, and paint labeled as "low" or "no" VOCs.

An interesting note about paint, though, is that although the *base* color may be free of harmful chemicals, the average paint colorant (tint) adds up to 150 grams of VOC back into the paint once it's mixed in.

However, a new paint line from ICI, called The FreshAire Choice, is completely VOC-free in both the base

and tint colors. The secret is the innovative tinting system, which uses a solid colorant rather than a liquid. The colorant is pre-measured at the factory and packaged in tint packets that are placed directly into the base, wrapper and all, to dissolve.

Not only does this create a more eco-friendly paint, but it also ensures precise color matching since the tint quantities are controlled by the factory, rather than at the store.

The FreshAire Choice paint (\$35 to \$38 per gallon) will be available exclusively at Home Depot beginning in April 2008. For more information, call 866-880-0304 or visit TheFreshAireChoice.com.



INNOVATION: Wall-Mounted Wiring



FlatWire Ready

THE ADVENT OF WIRELESS ELECTRICITY seems unlikely. So adding a light fixture or audio/video components to a finished room still requires wiring, at least for the foreseeable future. But that doesn't mean your only choice is to tear into walls or find elaborate wiring routes through the attic or basement. Instead, you can use FlatWire Ready components.

This system uses paper-thin copper conductors rather than conventional wiring. So once it's mounted to the wall (with spray adhesive), you can hide the wiring with common joint compound and a couple coats of paint. Then you simply attach the components, and you're in business.

For more in-depth information on FlatWire Ready products, including pricing, visit FlatWireReady.com or call 888-352-8947.



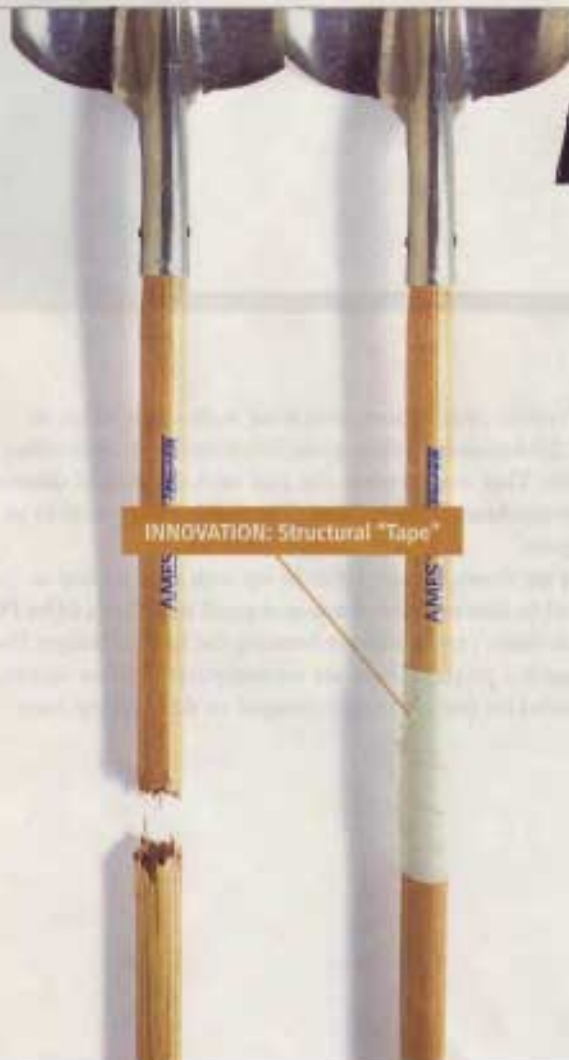
INNOVATION: Eco-Friendly Flushing

Sink Positive

ARE YOU GREEN ENOUGH to wash your hands in the toilet? Okay, not *in* the toilet, precisely, but *over* the toilet, using the water that's on its way to fill the bowl. Anything to reduce water waste, right?

This is apparently an idea that's been in practice in Japan for some time. There, toilets commonly have this feature built in. Now Environmental Designs brings the idea to the U.S. with its Sink Positive toilet tank lid replacement. Current Sink Positive models (\$90 to \$110) only fit rectangular tanks, but other shapes are forthcoming.

For more details, including a video of the sink in action, visit SinkPositive.com or call 615-217-8066.



Bolder Wrap

WHEN DUCT TAPE SLEEPS, it dreams of being Bolder Wrap. That's because Bolder Wrap isn't just sticky; it's structural. So it can actually make the kind of repairs that duct tape has tried and failed at for years: broken handles, cracked pipes, and even fence posts.

In fact, it's not really even fair to call Bolder Wrap "tape." It's actually a structural composite fabric, developed by Comptek, which has long been in the business of reinforcing communication towers and oil and gas pipelines. So fixing your shovel handle is a walk in the park for these folks.

At the heart of Bolder Wrap is a fiberglass fabric. This fabric is saturated with a proprietary polyurethane adhesive. Together they create a super-rigid, super-strong repair for just about any surface you can imagine.

Bolder Wrap is packaged in 2"-wide by 4-ft. (\$10) and 8-ft. (\$15) rolls and comes with a pair of rubber gloves for application.

For more information or to find a retailer in your area, visit BolderBond.com or call 866-876-0659.

—Written by Bill Link

FROM DRAB SLABS TO DRAMATIC DOORS

Why settle for boring slab closet doors when it's so easy and inexpensive to give them a classic frame-and-panel makeover? Best of all, it only takes a weekend and a few pieces of off-the-shelf pre-cut molding.

It's easy to love bi-fold closet doors, with their wide-open access to closet contents. Unfortunately, their great functionality is often offset by inferior aesthetics. That was certainly the case with the bi-fold doors on the entryway closet in this home (*Before Photo*). They added little style to an otherwise attractive space.

Rather than replace the doors, though, we came up with a simple way to transform these dreary slabs into attractive frame-and-panel style doors (*After Photo*). Now they highlight this home's entry without breaking the family's budget. The other great thing about this project: There are no complicated joints or cuts. Instead, the rails and stiles are just glued and clamped to the existing door.





BEFORE

AFTER

The only trick is that you can't add too much thickness to the doors, or they will hit the jambs when you open them. Thin stock in long lengths is difficult to find, but pre-cut base molding is widely available and priced very reasonably. Just be sure that the molding is less than $\frac{1}{2}$ " thick, so you don't have a rubbing problem.

Choose Your Boards—The first step in transforming the doors is to select molding to create the "frames." To match our oak doors and create a classic look, we chose oak base molding at our local home center. What we found is $\frac{3}{16}$ " thick and

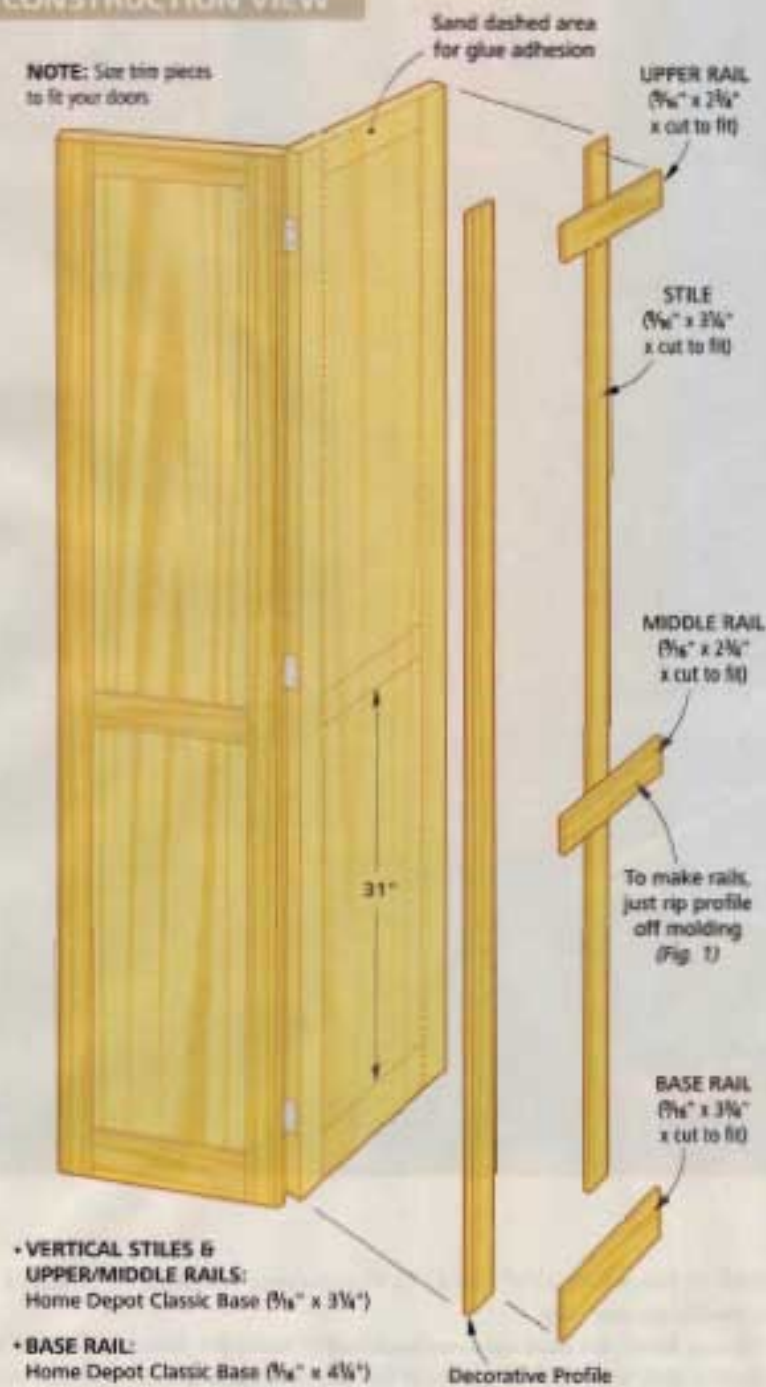
available in two widths ($\frac{3}{4}$ " and $\frac{1}{2}$ "¹). The molding features a flat face with an ogee profile on one edge.

For our doors, we used narrower molding to make the vertical stiles. For the horizontal rails, we used two pieces of the narrow molding at the middle and top, and one piece of wider molding at the bottom. To create a clean look, we ripped off the profiled edge before installing the rails.

Your own molding choice will depend on the doors you have. There are moldings available in various styles, widths, and species. That means you can choose a wood that can be stained or painted to match your doors, and your project can have its own unique style.

CONSTRUCTION VIEW

NOTE: See trim pieces to fit your doors.



- VERTICAL STILES & UPPER/MIDDLE RAILS:
Home Depot Classic Base (3/8" x 3 3/4")
- BASE RAIL:
Home Depot Classic Base (3/8" x 4 1/4")

Decorative Profile

PROFILE DETAIL



Prepare the Doors—Once you have your molding, it's time to remove the doors from their opening. To do this, just release the wheels from the overhead track and then lift the doors up to release the pins they sit on. Then disassemble the pairs of door panels by removing the hinges.

Now prepare your molding stock. Cut the vertical stiles to length first, so they match the height of the door. Once they're cut, lay a pair on each door panel, so the profiled edges align with the outer edges of the panels. Either clamp or tape the stiles in place.

Next measure between the stiles to determine the length of the rails. Cut enough pieces of narrow and wide molding to form the rails. Make these pieces extra-long.

Now rip the profiled edge from these extra-long pieces (Fig. 1), and then cut them to length to fit between the stiles. Then temporarily position them on the door panels, as well.

With the stiles and rails in place, lightly trace around them with a pencil to mark their locations. Then remove the stiles and rails, and set them aside for now.

Before you can glue the parts to the doors, you need to sand off the finish in the traced area to allow the glue to adhere. Do this with 100-grit sandpaper on a small block. It's a good idea to tape off the areas you don't want to sand to prevent damaging the door's finish.

You will also need to sand the frame pieces to ensure that they're ready for finishing. A quick once-over with 150-grit sandpaper should be adequate.

Finish the Frames—When it comes to matching the color of the rails and stiles to the doors, there are two approaches. One option is to experiment with stain colors on scraps of leftover molding. Just buy small cans, or try the color sample pouches that some companies offer. If you find that no single color matches exactly, then blend colors together.

Another option is to take one of your doors and a scrap of molding to a paint/finish store and have them blend a stain to match for you.

Just how you'll finish the frames depends completely on the finish on your doors. In our case, the doors are clear-finished oak. But they have been exposed to the sun and air for 20 years, so the color has changed. We found that a good match for this aged clear oak is Watco's "Golden Oak." Since it's a Danish Oil, it acts as both a stain and finish in one product. If you don't use Danish Oil, you'll want



1] To turn off-the-shelf molding into stiles and rails with the perfect thickness, just rip the profiled edge off the pieces you use for rails before installing them.



2] Watco's Danish Oil in "Golden Oak" best matched the time-yellowed look of the doors. A foam brush works great for applying the finish.



3] The moldings are relieved in back, so when you glue them on, you'll need to place a bead of glue near the edges. Apply glue sparingly to avoid squeeze-out.

to topcoat the frame pieces after applying stain.

Once you've found a stain or finish that matches, apply it to the frame parts (Fig. 2). Don't stain the back faces that will get glued later.

Mount the Frames—All that's left to do now is to attach the frames. Start by gluing and clamping the vertical stiles in place. Apply glue sparingly, so it doesn't squeeze out onto the door panels. If any does squeeze out, wipe it away immediately with a damp sponge or rag. Now add the rails (Fig. 3). The middle rails are difficult to clamp,

so just use masking tape or weights to hold them in place until the glue has dried.

Reinstall the Doors—After the glue dries on the frames, you can remount the hinges to reconnect the door panels.

We chose to change out the dated-looking pulls for antique brass-finish pulls that better fit the doors' new style. The screws included, though, were too short due to the additional thickness. We bought 2 1/4" screws and added washers to prevent the screw heads from pulling through the back side of the hollow-core doors.

That done, reinstall the doors using the reverse of the sequence that you used to remove them.

With the doors reinstalled, try carefully opening and closing each door to make sure it doesn't strike the door jamb. If it does, you may have to adjust or remount the pins the doors sit on.

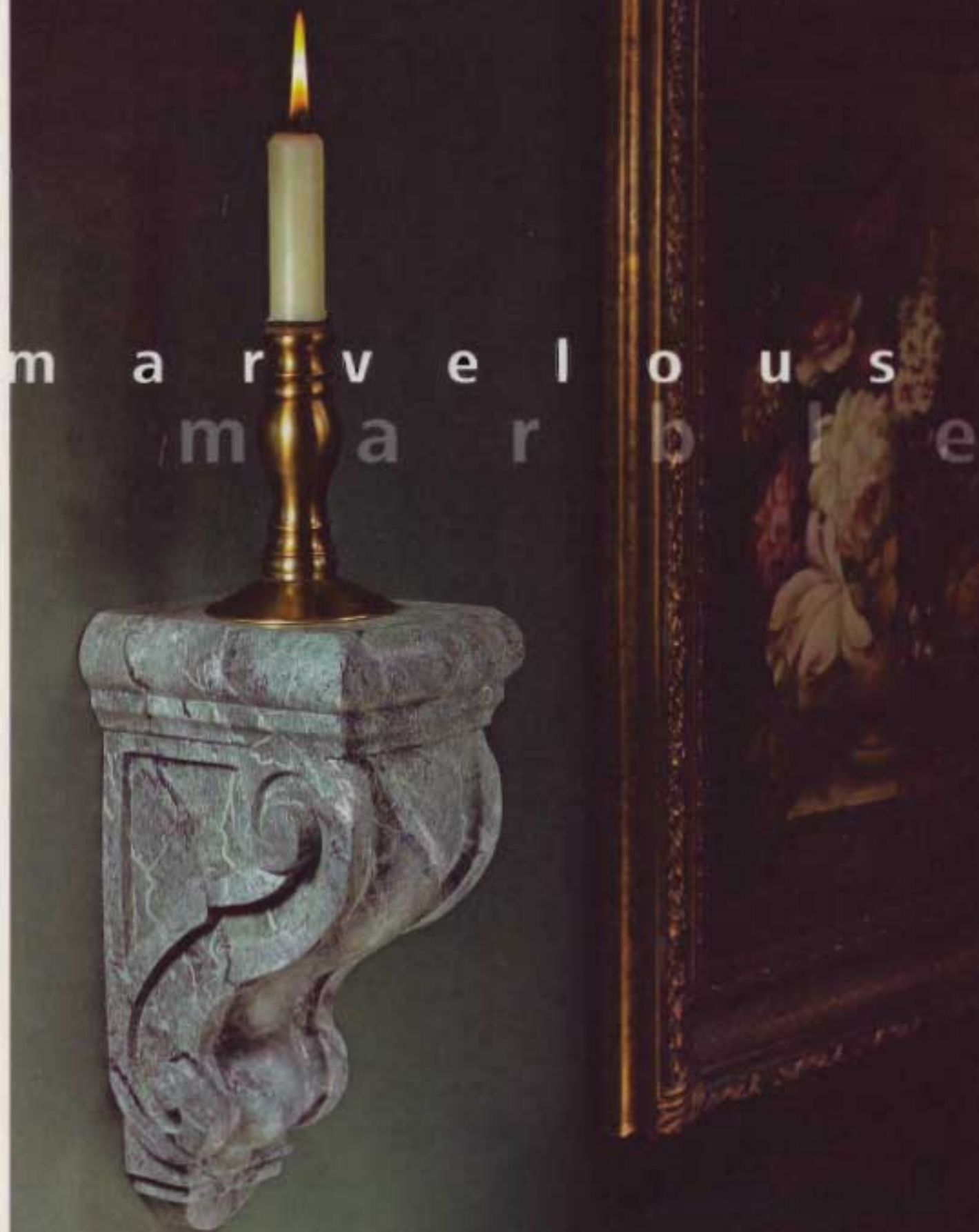
—Written by Louise Ritchhart, illustrated by Matt Scott, project designed by Ted Kralick



PAINT POWER



The Romans perfected faux-marble painting centuries ago, and now you can be a modern master! Whether on columns or corbels, this nearly goof-proof technique will add old-world charm to your home's decor.



m a r v e l o u s
m a r b l e

ADD A TOUCH OF CLASSIC SOPHISTICATION TO THE MODERN HOME WITH A PAINTING TECHNIQUE THAT'S AS FUN AS IT IS EASY.

Painted faux marble dates back to the Renaissance, when sculptor Michelangelo was the hot artist of the day. Apprentices shadowed a master faux painter for years before working on their own, and highest honors went to painters who could trick observers into believing their faux marble was the real thing.

Fortunately, with the products available today it takes minutes, not years, to learn the basics of faux-marble painting. With our step-by-step directions even novice painters can successfully recreate the timeless look of the world's classiest stone. The result is a high-end look for not a lot of money.

"People always assume that faux marble is one of the hardest painting techniques to do, but it's really fast and easy to pull off," says decorative painter Kelle Collins of Des Moines, Iowa. "It gives the feeling of weight and substance to whatever you're painting. And a faux-marble object is always much cheaper than one made from real marble."

Collins chose to demonstrate her faux-marbling technique on a decorative corbel. Made from wood, polyester resin, or plaster, corbels have surged in popularity in recent years. Whether it's accenting a kitchen counter, fireplace mantel, interior entryway, or used as a small decorative shelf, a corbel adds elegance to your home. (Other good starter projects for faux marbling include bookends, vases, statues, and small tabletops.)

Choose Your Colors—Faux marbling looks best when you choose colors in the same family, so select two or three shades from one paint swatch. Plus, use a bit of white and

black to add depth. You don't need to exactly replicate natural stone. Our project has a finish based loosely on Verdi or Serpentine marble. (For other examples of faux painted marble, see "Endless Options" on page 79.)

The Magic of Marble—In nature, marble is formed when lowly limestone, with its many parallel layers, is subjected to great heat and pressure. The process creates a much harder stone and gives marble its interesting streaks and veins. You can recreate this look by dabbing on layers of paint, and then using plastic wrap to blend them. Let your painted stratifications follow the angle of the corbel itself, much like classic sculptors angled the marble to enhance their piece's beauty and strength.

Primed for Success—Before you can begin the marbling technique, you need to prime the corbel. Some of this basecoat will remain exposed even after the technique, so have your primer tinted to the same shade as your lightest color selection.

As the primer dries, start preparing your four mixing plates with paint. We used dark and light blue, black, and white (see *Supplies at right*). Also, put a small dab of clear glaze on each plate next to the paint, but don't mix them together.

SUPPLIES

Paint:

Benjamin Moore Eggshell Latex: Vanderberg Blue (#721), Stratton Blue (#HC-142), Black (#2132-10), White (#37901), Primer tinted with Stratton Blue; AquaGlaze and AquaGuard Gloss (FauxMarketplace.com)

Other Supplies:

Chip brushes, artist's brush, veining feathers, paint eraser (Loew-Cornell.com), plastic wrap, small foam or plastic plates



// DAB & PRESS, THEN REPEAT //



1] Using a chip brush, dab on the dark and light shades of blue in roughly parallel lines across the corbel.



2] Repeatedly press wadded up plastic wrap on the freshly painted lines to help blend paint into the surrounding area.

Picking up a dab of glaze with each dab of paint will significantly extend your paint's open time and help you get the look just right.

Dab on Paint—Starting with your darker shade, load a chip brush with paint, and then dip it in the glaze. Begin painting the corbel with a dabbing motion, creating a pattern that mimics natural marble (Fig. 1). You will eventually cover about 80 percent of the corbel's surface with the paint/glaze mixture; about 20 percent will be exposed primer.

Blend with Wrap—Now ball up a fistful of plastic wrap, and press it into the wet paint. This will blend the paint, creating softness and irregularities that mimic the unique look of stone (Fig. 2).

Repeat the Process—Next, switch to your lighter shade, loading your brush and dabbing the paint in the same way. Switch back and forth between pressing with plastic wrap and applying paint. This process of applying paint in multiple layers replicates nature, where marble gets built up in layers as time goes by.

Next, dab on some black for shadows and white for highlights. But load your brush lightly; a little black and white go a long way, and you don't want to overpower the other colors (Figs. 3 & 4).

Once you have applied all the colors, continue working back and forth between the chip brush and plastic wrap, adding and blending colors until you're satisfied with the corbel's overall appearance (Fig. 5).

Let the Veins Begin—With the layers of paint applied, you can

// ADD SHADOWS & HIGHLIGHTS //



3] Lightly dab on a few black shadows, following the loosely parallel pattern you started on the corbel.



4] Switch to white paint, and then dab on highlights. These should be subtle and not stand out too much.



5] Continue blotting gently with wadded up plastic wrap to ease brush marks and blend the four colors together.



// VEINING TECHNIQUES //



6] A paint eraser works great to create veins by removing paint. Make the lines slightly jagged like lightning bolts.



7] A feather creates natural-looking veins. Simply dip an edge in white paint, and then drag it with a wiggling motion.



8] Use an artist's brush to paint stand-alone veins or to add shadows to white veins with black paint.

start creating veins to add character and depth to the faux marble. When veining, avoid making lines in a set pattern. Instead, try to mimic a natural, tree-like branching pattern.

There are three different techniques for veining. You can use a paint eraser to create "negative" veins by removing paint (Fig. 6). You can also dip a feather in paint, hold it at a slight angle, and then drag it across the surface (Fig. 7). Or simply paint on veins using an artist's brush (Fig. 8).

—Written by Louise Ritchhart, project designed by Kelle Collins

// HAVE IT YOUR WAY //



Not happy with a paint effect you just applied? Use the wadded-up plastic wrap to manipulate the surface's overall look. This makes "mistakes" disappear. But know when to stop, or you'll end up with a muddy look.

// ENDLESS OPTIONS //

As you get ready to create your own marble finish, it helps to carefully study the real deal. There are dozens of unique marbles, each with their own characteristic hues, swirls, and veins. Let the faux-painted samples below inspire you in your efforts to simulate these beautiful stones. Most of all, feel free to experiment with different techniques when creating a faux-marble finish. This paint process celebrates individual style and truly lets you make the project your own.



Serpentine



Italian Black



Travertine



Whether you need to make a straight cut with a circular saw or rout a perfectly placed groove, this simple edge guide makes it easy. Just align the appropriate edge with your layout lines, and then guide the tool along the built-in fence!

ONE GUIDE—TWO TOOLS

Simple Straightedge

Make dead-straight cuts and rout perfect grooves every time with this double-sided edge guide. It's easy to make and even easier to use.

Large cabinets (such as the closet system on page 30 and the under-stair storage cabinets on page 48) are best built using sheet goods like medium-density fiberboard (MDF). This material is very stable, readily available, and inexpensive. But MDF and other sheet goods like plywood are also big, heavy, and unwieldy to work with. That's why it's easiest to machine these sheet goods with a handheld circular saw or router. The secret to success is having an edge guide to ensure that your cuts are straight and positioned correctly.

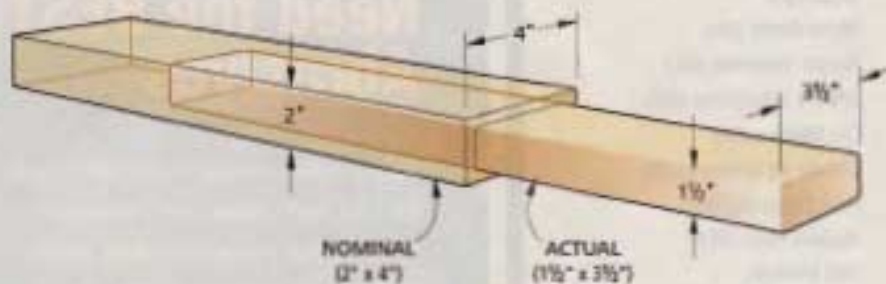
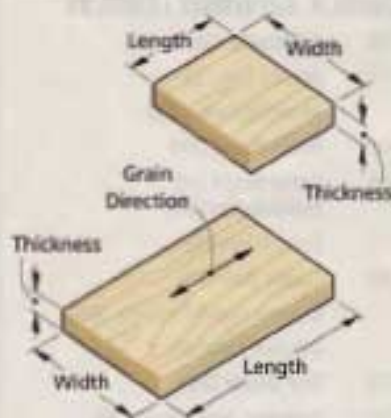
Thankfully, you don't need an expensive or complicated guide system to do that. You can make the simple edge guide shown here. It consists of a base made from $\frac{1}{4}$ " hardboard that the saw or router rides on and a solid-wood fence that guides the edge of the tool.

To make the guide, start with a piece of $\frac{1}{4}$ " hardboard about 16" wide by 4-ft. or 8-ft. long. Then glue or nail on a straight piece of wood (I used a strip of 1x2 poplar) near the center of the hardboard. This will become the fence. Don't worry about aligning the fence parallel with the edges of the hardboard. You'll use your saw and router to do that.

Now you can custom-fit the edge guide to your circular saw. Just place the saw on the base with one edge against the fence. Then cut the base to width, making sure you keep the saw tight against the fence.

To fit the guide to your router, start by mounting the bit you'll want to use in the router (in this case, a $\frac{1}{4}$ " straight bit for cutting dados and grooves). Then run the router along the fence to trim the other side of the base to width.

Using the edge guide is easy. Just position the base so the appropriate edge hits your layout marks, clamp it in place, and then cut or rout.

SIZING EXPLAINED

GO WITH THE GRAIN

GET THE RIGHT STOCK BY UNDERSTANDING Board Sizing Basics

Buying boards shouldn't be one of the most challenging parts of a project. But if you're not familiar with how lumber is sized, the purchasing process can be anything but easy. That's because the size you see isn't really what you get.

Nominal vs. Actual Size—When you look at the labels on boards, you'll see simple sizes like "1x6" or "2x4." But that's the nominal size of the board, which describes the board's dimensions before it was machined to finished size. The finished size, known as the actual dimension, will be slightly less, as shown in the illustration, above, and the Chart at right.

Thickness, Width, & Length—When building projects, you also need to understand how boards are described in terms of thickness, width, and length. That's because a project plan may actually call for a board that's as wide or wider than it is long. This can be confusing.

Just remember that length is always measured in line with the grain. Width is measured across the grain, and thickness is measured on the edge of the board, as shown in the illustration, above right.

COMMON BOARD SIZES

NOMINAL SIZE	ACTUAL SIZE
1x2	3/4" x 1 1/2"
1x3	3/4" x 2 1/2"
1x4	3/4" x 3 1/2"
1x6	3/4" x 5 1/2"
1x8	3/4" x 7 1/4"
2x2	1 1/2" x 1 1/2"
2x4	1 1/2" x 3 1/2"
2x6	1 1/2" x 5 1/2"
2x8	1 1/2" x 7 1/4"
4x4	3 1/2" x 3 1/2"
6x6	5 1/2" x 5 1/2"

// USE A KEEN EYE TO GET THE BEST BOARDS //

Once you understand board sizing, you'll be ready to purchase what you need for your projects. But don't think you can grab just any boards off the lumber rack and get exactly what you need.

That's because boards tend to bow, warp, and twist. So you need to examine each board to make sure it's flat and straight.

To do this, hold the board under one eye, close the other eye, and look along the length of the board. Look at the edge first (near right) to check for twist and bowing. Then look at the face (far right) to see if the board is bowed or crooked.



Tool Report

More lithium-ion than ever before, a couple of new angles to work, and a new urban-assault tool.

RYOBI STEM SELLS—Ryobi isn't the first consumer brand to offer lithium-ion cordless tools, and yet the release of their line of **Lithium 18V (1)** tools is remarkable for a couple of reasons. First, the tools are green—form your own opinion on that. But the second, and more meaningful, thing here is something that Ryobi *didn't* change—the battery stem. In fact, that hasn't changed since Ryobi launched their 18-volt platform back in 1996. That means that every 18-volt Ryobi battery on the planet (roughly 10 million of them) will fit every 18-volt Ryobi tool on the planet, and that includes the new lithium-ion tools and batteries.

The point here is that when you decide to upgrade to a new Ryobi lithium-ion kit, your existing 18-volt Ryobi tools aren't obsolete. In fact, new lithium-ion batteries might just breathe new life into an old drill or circular saw. Not surprisingly then, Ryobi is also offering lithium-ion battery upgrade kits, so you can buy a new battery and a charger to power the Ryobi tools you've already got.

Here's how it shakes out: An upgrade kit, which includes one battery and a charger, goes for about \$100. A two-piece kit that includes a drill, flashlight, one battery, and charger costs \$160. Finally, if you want to go all-in, the four-piece kit with drill, flashlight, circular saw, reciprocating saw, two batteries, and a charger will set you back about \$260.

KREG KLAMPS DOWN—The one place I struggle with pocket-hole joinery is in the assembly. It often feels like I need a third hand to hold workpieces together while I drive the screws. Fortunately, Kreg Tool—the company that brought pocket-hole joinery to the masses in the first place—now offers a simple solution for that problem. The **KKS1000 Klamp Table (2)** is modeled on Kreg's larger, commercial face-framing tables.

The table is actually a system that includes a 22"×34" worksurface, a couple of accessory tracks, five clamping blocks, and two clamps for registering and securing workpieces. The blocks and clamps can be secured anywhere along the length of either track, and the clamps rotate 360 degrees for ultimate flexibility.

The KKS1000 (including clamps, blocks, and tracks) sells for \$250. For another \$150, you can add an adjustable-height steel base.

RIGHT-ANGLE RIDGID—Ridgid's new **R4121 (3)** 12" dual bevel miter saw may be "built for the professional," but at just \$350, it's bound to show up on some home-shop workbenches, too.

Along with its impressive price, the saw offers huge capacities for crosscuts (9 $\frac{3}{4}$ "), nested crown molding (7 $\frac{1}{2}$ "), bevels (48°), and miters (58°). The saw also features an adjustable laser outline indicator, so you can be sure of highly accurate cuts every time.

And just like all Ridgid power tools sold these days, this one comes with a Lifetime Service Agreement that



1 Ryobi Lithium 18V



2 Kreg Tool KKS1000



3 Ridgid R4121



4 Arrow CT30

5 Creative Sales Company Professional Ladder Utility System



provides free parts and service for the registered owner, so be sure to register the tool when you get it home.

SPACE-AGE STAPLER—Arrow Fastener's new **CT50 Professional Cordless Staple Gun (4)** brings stapling into the 21st century. This cordless, powered stapler boasts a 10.8-volt lithium-ion battery that can drive up to 1,500 staples on a single charge. And features like a depth-of-drive control and LED "guide light" help to ensure that every staple hits its mark.

You'd probably need a fair amount of flooring or upholstery work on deck to justify the \$185 retail price tag, but if you can find a deal on a CT50, it could sure save a lot of strain on your stapling hand.

LADDER PLUS—It's safe to say that the Professional Ladder Utility System, or **PLUS (5)**, is "professional" in name only. It's clearly priced and built for a more casual user. Nonetheless, if you've got any painting or other projects that will have you climbing a ladder, you'll want to consider one of these utility kits.

The PLUS 6-Piece Pro Kit that I looked at consists of a universal ladder attachment that lets you mount a tool tray, paint pan, or tool hanger (all included) on just about any type of ladder imaginable. That includes the popular multi-function ladders that don't have a built-in work shelf. Best of all, the universal attachment can be mounted on any rung you choose, so you can position your tools or paint precisely where you need them for each new project.

A variety of PLUS kits, ranging from \$18 to \$40, are available through the company's website, Sears catalogs, or Sears.com.

URBAN SKELETOOL—Leatherman, the company that set off the pocket survival tool craze 25 years ago, has just introduced the **Skeletool Urban Multi-Tool (6)**. And like its predecessors, this model has only the essentials for enduring even the most perilous urban survival challenges: Full-size pliers with wire cutter, outside accessible blade that can be opened quickly with one hand, and a bit driver that can be customized for any screwdriving job. Most impressive, though, is that this tool packs the legendary Leatherman beauty, durability, and functionality into a mere five ounces.

The Skeletool is available in an all-stainless steel model for \$72 or the CX version, which is also stainless steel but has a protective tungsten coating, for \$96.

WRONG ANGLE FINDER—In the real world of home improvement, there's no such thing as a right angle. Even the most square-looking wall, floor, and ceiling intersections are at least one or two degrees off of perpendicular. That's precisely why the new Starrett ProSite **CP505A-12 Combination Protractor (7)** can be such a boon if you've got any projects that require turning corners, such as framing doors and windows or installing crown molding. It can even make it simple to determine the pitch of a roof or stairway.

All told, the protractor has five functions: a protractor to measure angles, an angle-conversion scale to determine pitch, a compound-cut function, a miter-cut scale, and a single-cut function for cutting one piece to butt into another. In most cases, the number you read on the protractor can be transferred directly to your miter saw. In other cases, you'll need to refer to one of the conversion scales printed on the protractor or use the protractor itself as a setup guide. The CP505A-12 Combination Protractor is available from select Starrett dealers and retail outlets for approximately \$90.

MODULAR POWER—Black & Decker's new **VPX Interchangeable Lithium-Ion Battery System (8)** may be the smartest thing in cordless tools to come along in quite awhile. At the center of the VPX system is a 7-volt lithium-ion battery that fits a multitude of tools, with even more on the way.



FOR MORE INFO:

Ryobi

RyobiTools.com
800.525.2575

Kreg Tool

KregTool.com
800.447.8638

Ridgid

Ridgid.com
800.474.3443

Arrow

ArrowFastener.com
201.847.6900

Creative Sales Company

ProLadderSystem.com
866.889.8115

Leatherman

Leatherman.com
800.847.8865

Starrett

Starrett.com
978.249.3551

Black & Decker

BlackAndDecker.com
800.544.6966


EZ Paint Tools

EZCleanPaintBrush.com

This system distinguishes itself in two ways: First, some tools in this group require a single 7-volt battery, while others require two. That means you have two different voltage platforms (7 and 14) within the same system. Second, the tools already in the line, and those planned for future expansion, are tailor-made to the home user. Currently, the line includes both 7- and 14-volt drills, a 7-volt screwdriver, a flashlight, a cut saw, an inflator, and a 14-volt hand vacuum. Expansion plans include additional power tools, kitchen and cleaning appliances, and even lawn care tools.

A good way to buy into the system is with the VPX Starter Set, which sells for about \$100 and includes the 7-volt screwdriver, cut saw, flashlight, one battery, and charger. You can then expand your kit by purchasing additional batteries and tools individually.

ACHIEVE INNER CLEANLINESS — Paint brushes are like envelopes—there's not a lot of opportunity to improve on the basic design of either one. Nonetheless, the folks at EZ Paint Tools have come up with a paint brush that offers a new twist on cleanup. The **EZ Clean Paint Brush (9)** is designed to be cleaned from the inside out.

It works just like a conventional brush for applying latex paint, but when you're done painting, simply attach a garden hose (or the faucet on most utility sinks) to the handle of the brush and turn on the water (gently!). In about one minute, the bristles will be completely paint-free. Various sizes of the brush are available on the company's website for between \$11 and \$15. 



Black & Decker
VPX System

EZ Paint Tools
EZ Clean Paint Brush

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www.mylanstairs.com Factory Showroom Mon-Fri 9-6, Sat 9-1

Product Information Number 195

EXPANDED AND INTERCHANGEABLE

Homelite Lawn Care

Homelite has your yard covered with a new line of blowers, chainsaws, trimmers, edgers, and interchangeable attachments.

Over the winter, Homelite rolled out a long list of new yard-and-garden implements for grooming your property from curb to fence.

Electric—The new additions to the electric lineup consist of three chainsaws (\$50 to \$100), including a pole saw with a 15-ft. reach, as well as three hedge trimmers (\$30 to \$100), a two-speed leaf blower (\$30) with 150-mph maximum airspeed, a string trimmer (\$27) with dual-line auto feed, and a 12-amp curb runner/edger (\$80) that weighs in at just 12 pounds.

Gas-Powered—For you fossil-fuel devotees, Homelite added three new string trimmers (\$64 to \$90), including a split-boom model that accepts a variety of attachments.

There are also three new blowers, including a handheld model (\$69), a blower/vacuum/mulcher model (\$99), and a backpack blower (\$149).

Expand It—Finally, Homelite is offering a full line of attachments (\$50 to \$100) to fit most popular brands of split-boom string trimmers. These accessories

attach quickly and easily without tools to turn your gas-powered string trimmer into a hedge trimmer, blower, edger, pruner, or garden tiller.

Visit Homelite.com or call 800-242-4672 for more information.

Homelite's new Versa-Tool string trimmer (right) accepts a variety of attachments, like a tiller (left), to get multiple functions out of the same motor.



Rubber particles, an airtight tip, and gel-like consistency make this Gorilla Glue more super than others.

NEW! SOFTER, SQUISHIER Gorilla Glue

The most common complaint about super glue: The bond is too brittle and the repair doesn't last. The second-most common complaint: The shelf life is too short after it's opened.

Gorilla Glue takes on both problems with their new Impact-Tough formula that includes tiny rubber particles to make the glue less brittle. It also comes packaged with an anti-clog, airtight tip, so it will remain pliable between repairs.

Expect to pay about \$5 for a 15-gram bottle of Gorilla Super Glue. Go to GorillaTough.com or call 800-966-3458 for more information.

STEAM-CLEANING

Whirlpool Duet

There are few forces in nature—or the laundry room—more powerful than steam.

Now Whirlpool offers a pair, or Duet, of laundry appliances that put the power of steam at your fingertips.

The Duet Steam Washer uses steam to remove the worst stains, including grass and grease. It also sanitizes towels and sheets without the need for bleach. Nonetheless, if you do want to use stain-fighting chemicals, the washer includes a timed-release dispenser option.

Steam is used in the Duet Dryer to remove wrinkles from clothes that can be worn again without going through the complete wash cycle, or that you just

forgot to remove from the dryer when it spun down.

Both appliances use conventional water connections to supply their steam reservoirs, unlike competitive brands that require manual filling of the reservoir every few cycles.

Efficiency—Along with their steam-cleaning power, the Duet machines have some impressive efficiency ratings. The washer, for example, uses 73 percent less water and 77 percent less energy than conventional top loaders.

Steam This—Whirlpool is confident enough in the Duet's cleaning power that they've accepted the challenge of washing the clothes worn by Mike Rowe



of *Dirty Jobs* television fame. Rowe claims to burn or bury his clothes after each episode, but he agreed to let Whirlpool have a go at them after he completes his 150th dirty job.

The Duets will set you back about \$2,900 for the pair. Visit Whirlpool.com or call 866-698-2538 for more.

Whirlpool Duets (shown in Aspen green) can be accessorized with optional towers, worksurfaces, and pedestals.

GROUNDBREAKING NEWS FROM Ryobi Outdoor

Familiar power-tool brand Ryobi is looking to extend their household name to that area immediately outside the household: the yard. To that end, they've just announced the extension of their outdoor power line with the release of two cultivators (one gas and one electric) and a 15-amp log splitter.

Both cultivators benefit from Ryobi's "Just-Add-Sand" adjustable weight system that allows you to add up to 13 pounds of ballast to keep the unit from skipping and bouncing. A 12-amp motor on the electric unit and 25.4-cc motor on the gas model provide ample power for most home uses. The electric model (RY46501) sells for \$199; the gas model (RY60511) costs \$217.

Also new for 2008 is Ryobi's electric log splitter (RY49701). The splitter provides up to four tons of force to split 20"-long logs up to 12" in diameter. Despite its power, the tool weighs less than 100 pounds and is nearly silent during operation. It sells for \$299.

Visit RyobiTools.com or call 800-525-2579 for more.

Easy transport and good ergonomics are hallmarks of Ryobi's new outdoor power equipment.





PRODUCT PICKS

VERSATILE, CUSTOMIZABLE

StoreWall Polymer Shelves

For all the fancy boxes, hangers, and racks you can now purchase for storing just about anything, the lowly shelf still reigns supreme among storage solutions.

The one problem with shelves, though is that they don't always work

well for small, round, or irregular-shaped items. Well, StoreWall, a manufacturer of modular storage systems, saw the problem and solved it.

Their answer is a 5"-deep polymer shelf that can be cut to length with just about anything that's sharp and then drilled to create vertical storage of tools and utensils.

The shelves come in 8-ft. lengths and are designed to work with StoreWall panels and conventional slat wall.

Visit StoreWall.com or call 866-889-2502 for pricing and package availability.



LIGHTING IN A BOTTLE

Meyda Lighting just popped the cork on a new line of lighting fixtures—made from olive-oil and wine bottles.

The fixtures are made from authentic bottles and are offered in green, etched green, blue, and white. Each fixture uses a 40-watt bulb, which makes them perfect for accent lighting. Prices range from \$175 to \$215 per fixture.

Visit Meyda.com or call 800-222-4009 for more information.

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Product Information Number 221



OVER-THE-TOP

Window Shelves

Here's a novel approach to window treatments: Instead of settling for ordinary drapes or blinds, frame your view with a unique display shelf.

Window treatments are a great way to personalize your home. But traditional treatments such as drapes and blinds just cover up the window. And unless you lay out big money for custom coverings, you'll have to settle for off-the-shelf items that look just like what everyone else has. These window treatments break away from that mold with an idea that's quite literally over the top.

Instead of just adding drapes, blinds, or a valance, we installed unique display shelves. They give the effect of a valance but also take advantage of that narrow space above the window that normally goes to waste by turning it into a decorative highlight instead of a decorating dilemma.

You'll find three ideas on the next few pages—one whimsical, one traditional, and one in between. All three can be put together in just a little time. In fact, two require little more than wrapping molding around the edge of a board. Even the delightful dolphins below, which are made entirely from scratch, are easy to build. Plus, all three are affordable. You'll really appreciate that if you've priced window treatments lately.

Whether you use one of our ideas or shelve them in favor of a design of your own, we think you'll agree that topping your window with a shelf makes a great way to improve your outlook when it comes to decorating your home.



dolphins on display

IDEA Catch a fun wave in a kid's room with an ocean-inspired shelf supported by two dancing dolphins.

COST \$75

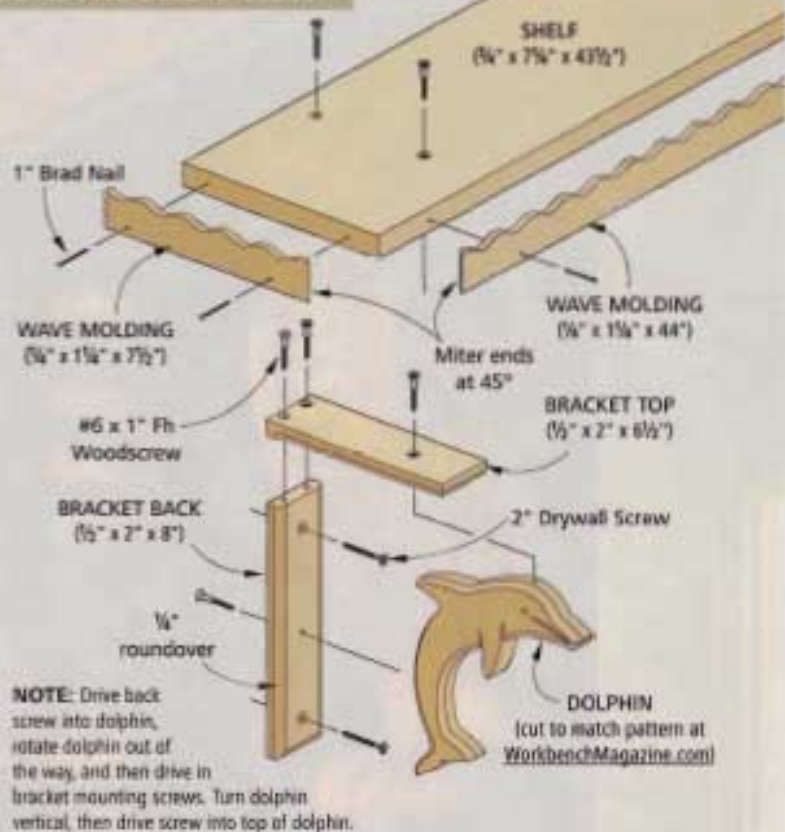
TIME Two days

TIPS Download the patterns, as well as complete builder's drawings, from WorkbenchMagazine.com. Cut the dolphins out of 1/4"-thick poplar using a jig saw. Sand to ease the sharp corners, and then paint the dolphins. Build the brackets from 1/2"-thick poplar, and then paint them. Now cut a 1x8 poplar shelf to fit your window. Cut the wave edging from 1/2"-thick stock with a jig saw, and then glue it in place around the ends and front of the shelf. Paint the shelf blue. Install the shelf as shown in the illustration, below.

MATERIALS Lumber: (1) 1x8 poplar, 6-ft. long; (2) 1/2" x 4" poplar, 4-ft. long; Hardware: Screws, brads, glue; Paint: Gray, green, and blue enamel; primer



CONSTRUCTION VIEW





traditional with a twist

IDEA Mix metal rope-twist brackets, a piece of poplar, and a decorative molding to create a striking shelf.

COST \$50

TIME One day

HOW Create the shelf by ripping a 1x8 poplar board to width to match the shelf brackets. Cut molding to fit around the board, mitering the corners for seamless joints. Now glue on the molding, so the top edge sits flush with the upper face of the board. Then stain and finish the shelf. Install the brackets, and then mount the shelf to the wall above the window.

SUPPLIES Brackets: Real Organized Rope Twist (#262450), Lowes.com; Lumber: 1x8 poplar, 4-ft. long; Molding: beaded rope, purchased locally; Stain: Antique Walnut; Screws: (4) #8 x 1" panhead screws



classic corbels

IDEA Add old-world elegance with a shelf that's wrapped in leaf-motif molding and sitting on carved corbels.

COST \$135

TIME One day

HOW Wrap a maple 1x6 with molding by mitering the molding pieces to length and then gluing them to the shelf, so that the shelf is centered on the height of the molding. Drive screws through the shelf and into each corbel. Coat everything with clear polyurethane. Mount the shelf using the built-in keyhole hangers.

SUPPLIES Shelf: 1x6 maple, 4-ft. long; Molding: Leaf & acorn motif, purchased locally; Corbel: Large Vineyards Corbel (#B-IM-CA56), Lowes.com; Finish: Clear polyurethane



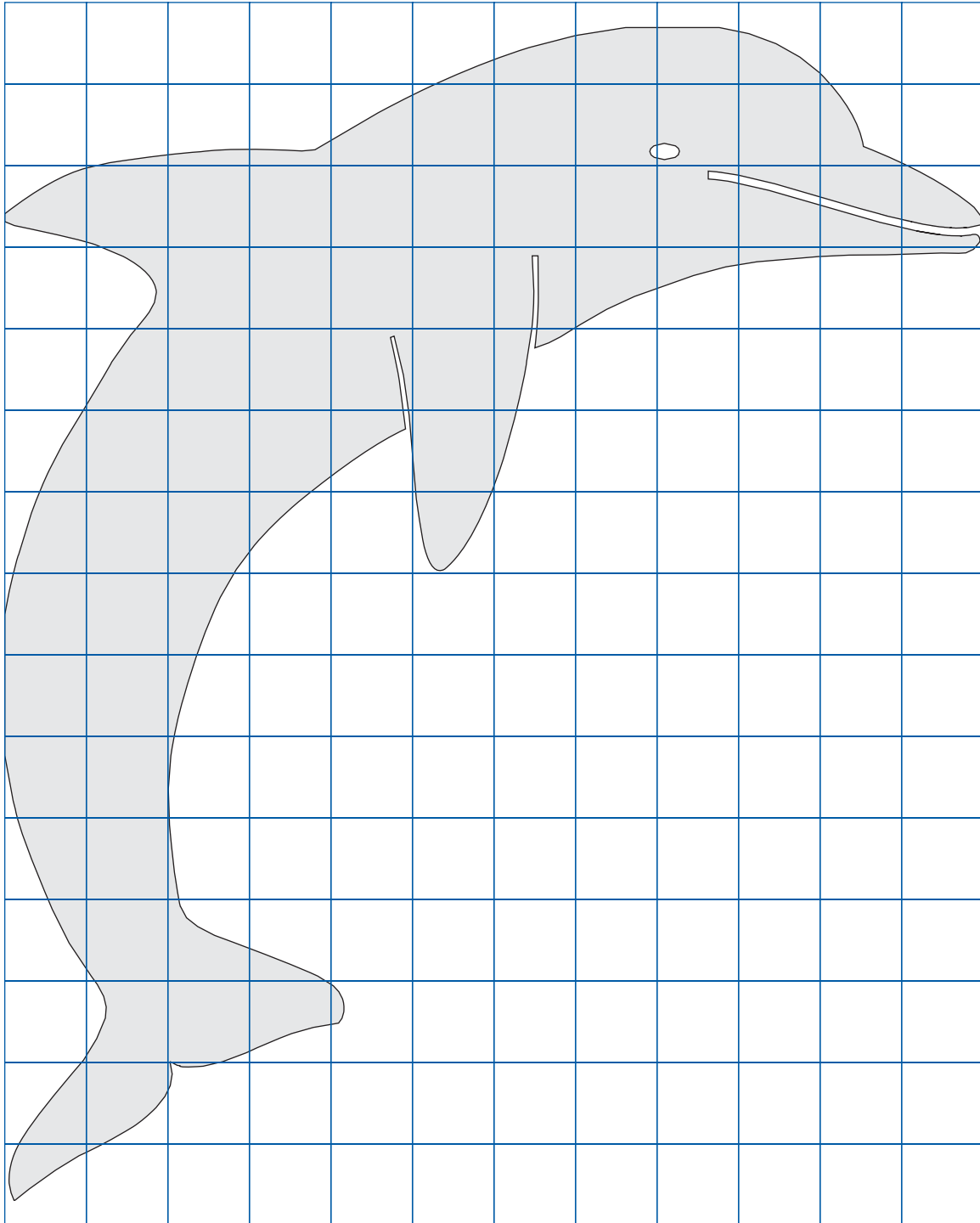
workbench® Window Shelves

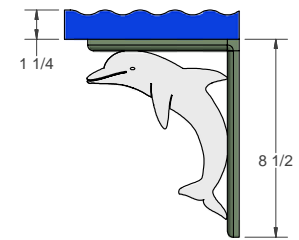
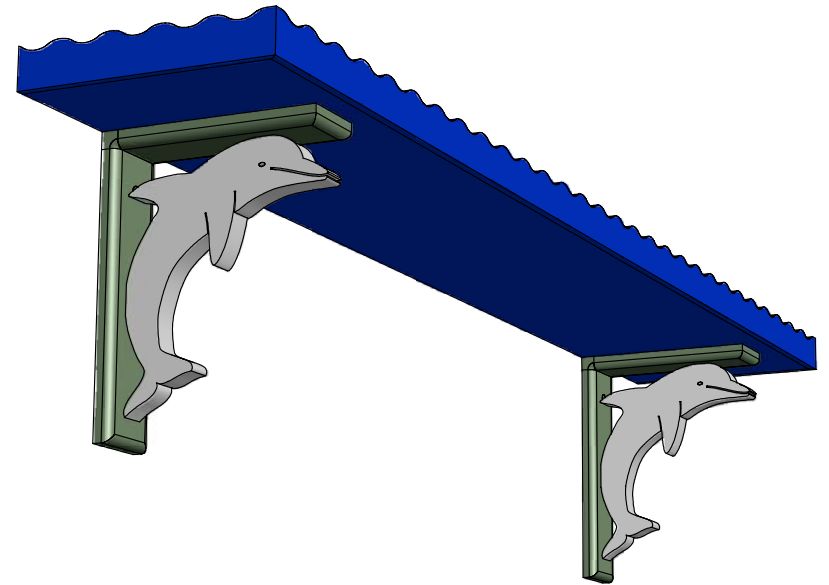
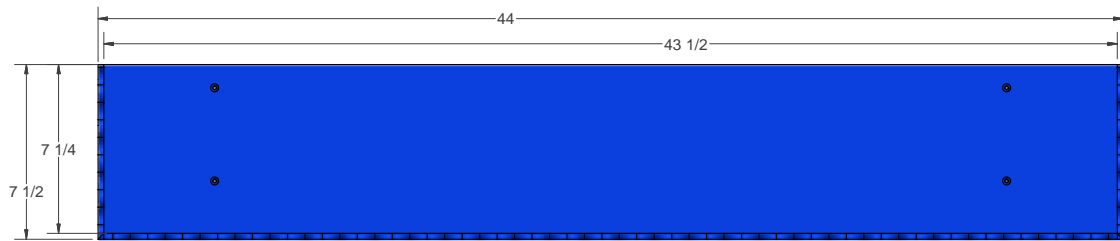
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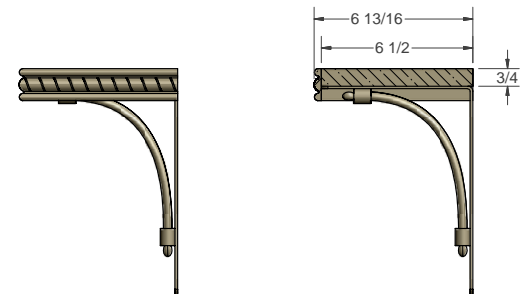
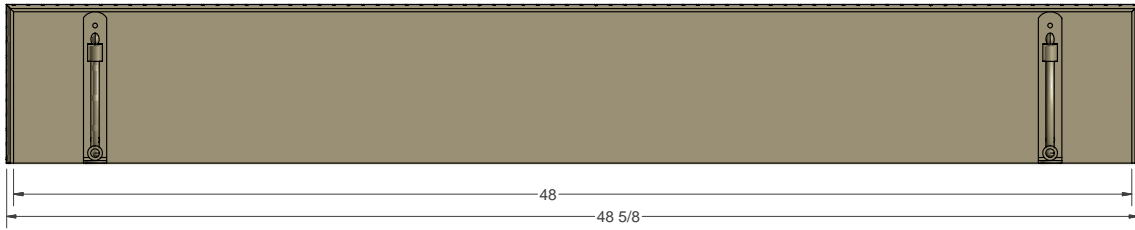
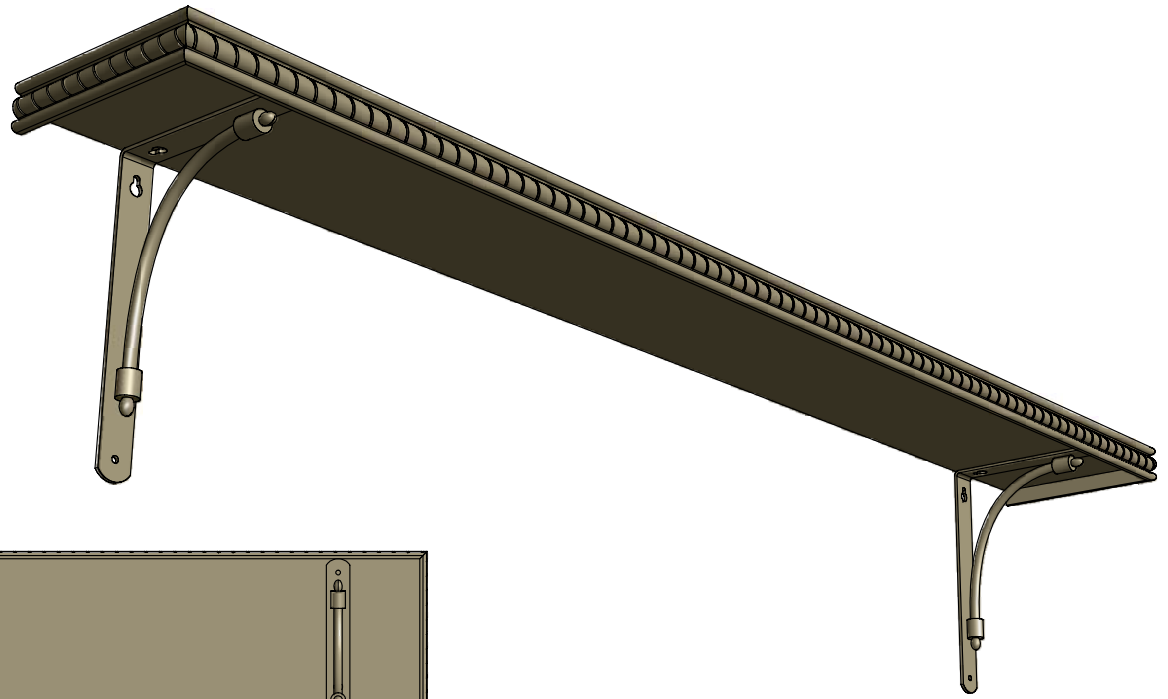
February 2008



Patter at Full Scale







SECTION A-A

