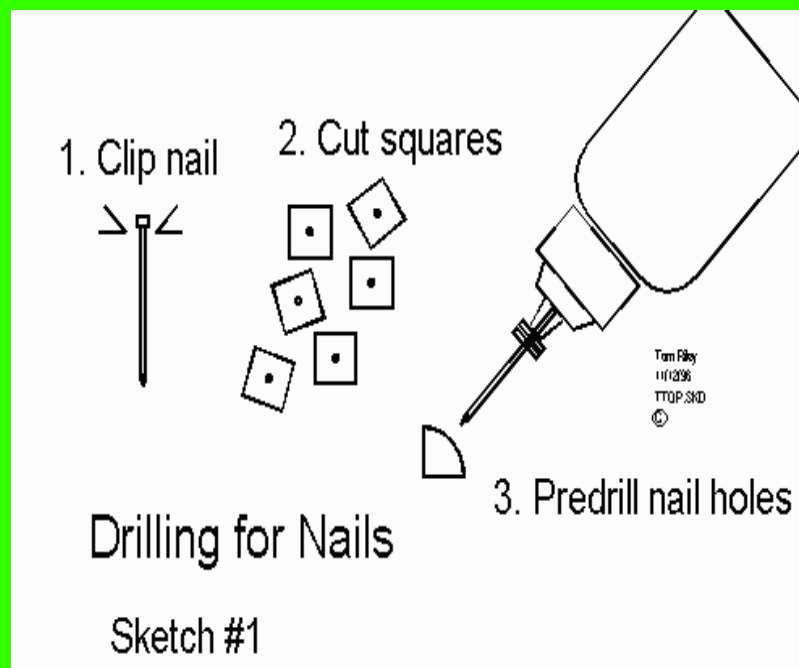


Woodware Designs -- Furniture Construction Hints

1. Purpose

The following are construction hints for woodworking details used in building many of our desks. We are providing them here free for our woodworking friends and as examples of the level of detail of our plans packages.

If you like our fun Freebies, remember we can only keep this Web site open if we sell our [Low-Stress Computer Furniture Plans](#) or you follow our ad links and make purchases from our sponsors. Thank you.



2. Nails in Hardwood

Several of our desks require you to drive finishing nails through hardwood or fragile wooden strips. These include the Armoire Desk and the Pie Safe Desk. You cannot simply take a hammer and drive in these nails. The nails will bend and the wood will split. The following is a solution

for this problem.

You can drill pilot holes for the nails with conventional drill bits. It is very hard to find a bit just the right size bit and it very easy to break them.

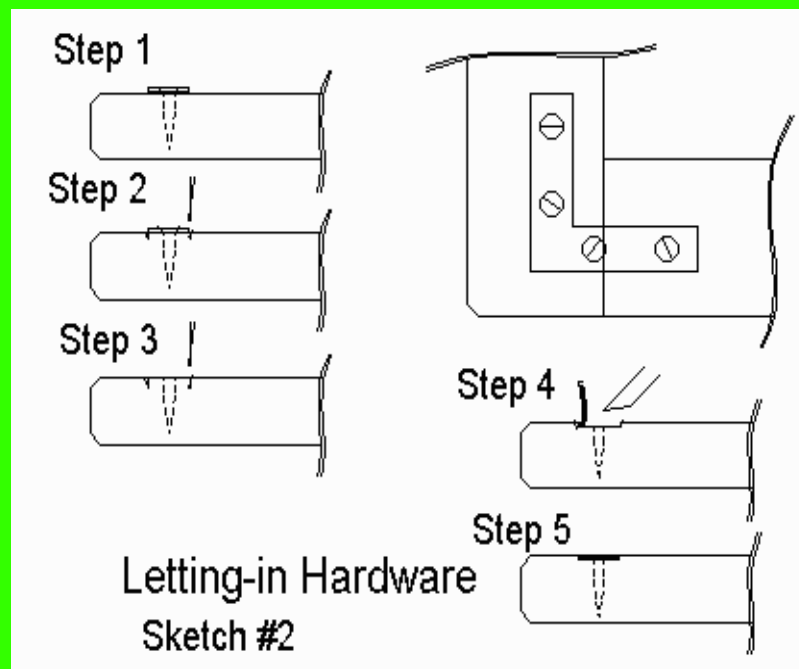
You can buy a special nail holder for your drill from a woodworker speciality house but they are expensive and difficult to use with very small brads.

The following procedure is shown in Sketch #1 and works well:

1. Clip off the head of a nail.
2. Cup up small squares of light cardboard or plastic lids.
3. Stick the squares with an awl.
4. Chuck the cut nail just in the drill.
5. Place two squares on the nail.
6. Drill pilot holes.

The squares prevent the drill chuck from leaving circular marks on the wood. These are extremely difficult to sand out. Yogurt cup lids work well for these squares, but cardboard or double layers of masking tape will work. Be careful not to press down too hard with the drill even using the squares. The holes in the squares get sloppy quickly and the squares fall off. Make up a couple dozen for a job.

The pilot hole will cover about three-quarters the length of the nail. Finish driving the nail with a hammer and the set it.



3. Letting-In

Metal plates, hinges, and other pieces of hardware look best if let into the surface of the wood. This can easily be done in the following steps:

1. Mount the hardware on the surface in the exact location.
2. Lightly score around the hardware with a sharp knife..
3. Remove the hardware and carefully deepen the score.
4. Remove the waste wood with a chisel.
5. Reinstall the hardware.

Be sure that you initially install the hardware in exactly the right place and square to the edges of the work. Be careful to run the scores right into the corners but to not extend the cut into the good wood. On the second cut try to angle the knife so that the good edge of the score runs straight down and any slope is in the waste wood.

4. **270 Degree Door Swing**

The Armoire Desk and the Pie Safe Desk have doors that must swing through 270 degrees to be completely out of the way during use of the computer. Most door hinges only allow about 180 degrees of travel and leave the door quite in the way. Here are three ways to solve this problem.

1. **Speciality Hinges**

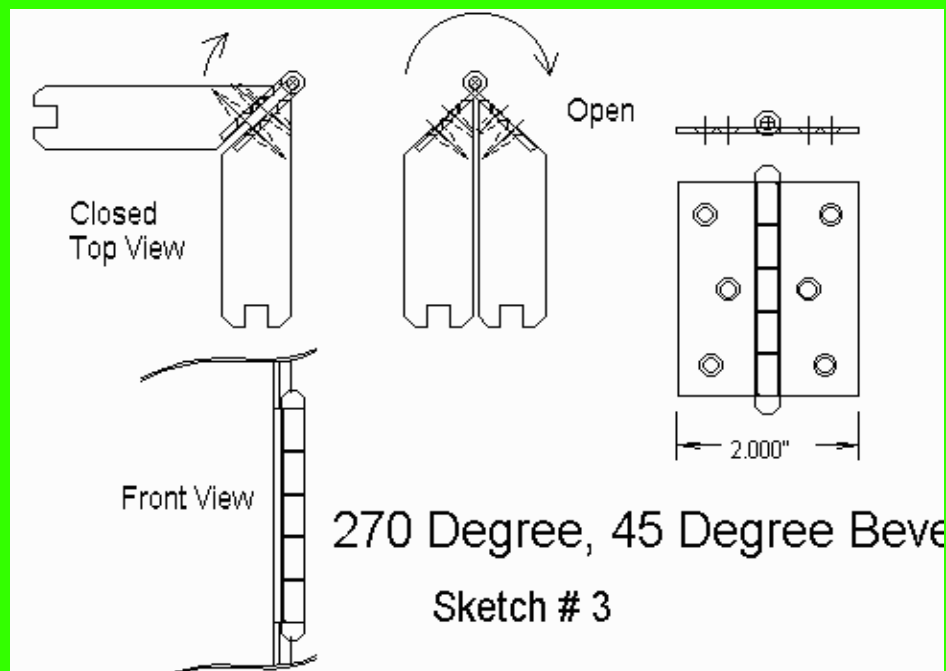
Armories for home entertainment centers have become so popular that mail order house now carry speciality hinges just for their doors. Examples include:

The Woodworkers's Store

15455 270 degree Overlay Hinge -- Painted steel -- \$6.00/pair 78527 270 degree Hinge for Wide Access -- Zinc die cast, nickel or black -- \$17.00/pair

Four pairs of either of these will work for our desk designs, but neither has the classical solid-brass look of an Armoire or the antique American look for Pie Safe.

If you purchase these speciality hinges, you will need to make slight adjustments in a few of the desk parts to suit your specific hinges. This is not difficult. You can email us for specific suggestions.



2. Beveled Door Edge

English cabinetmakers have a way of using conventional hinges to achieve the 270 degree door swing. They bevel the edges of both the door and the side panel at 45 degrees. This is the approach shown in the desk plans. It has the advantage of using widely available hardware but does require care in installation.

Sketch #3 shows a cross section of the door and side stiles with the hinge mounted this way. You rip these stiles at 45 degrees leaving an 1/8-inch flat nose.

The hinges must be at least 2-inches wide when laid flat. They must bend backwards to 90 degrees. If they do not bend quite far enough back, you can probably remove the pin and file on the plates to increase movement.

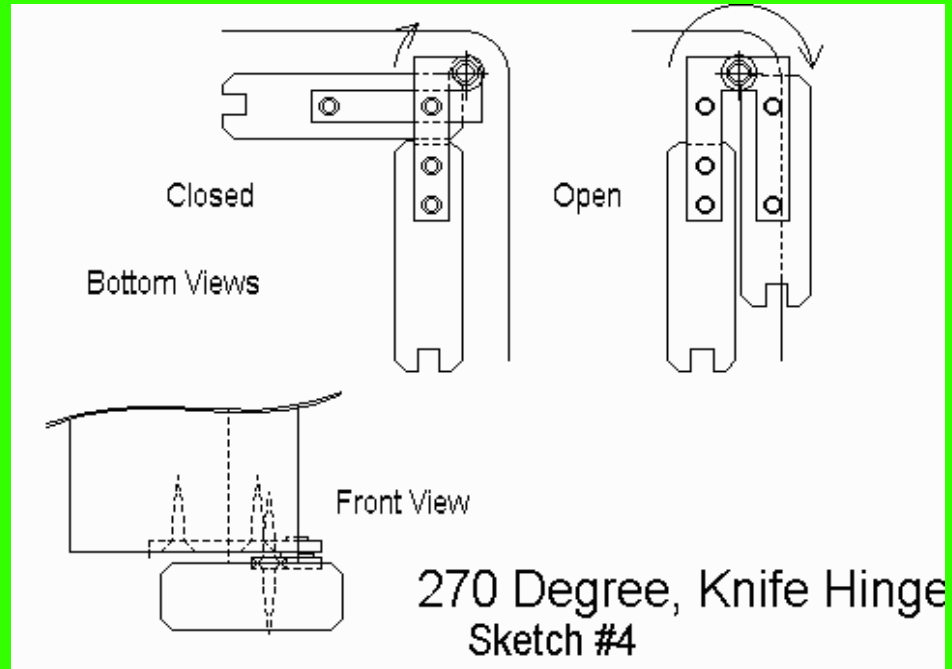
Clamp the door and the side panel back to back with a thin piece of cardboard between to let in the hinge. Manilla folder cardboard is about right to space them apart. Place the hinge in the position shown in the 'Open' view and mark its size. You will have to remove a little extra wood along the outside edges to let the hinge settle down into its mortis.

The hinges screws are a problem. You can either carefully install them so they do not show or intentionally let them show. Mark all the drill holes but open the door and panel up before drilling them so that you do not mar the other surface. If you are very careful you can stop the holes short of breaking through the surface. You can then file the screws to match the holes

Alternately, you can drill through the surface and install the screws so they stick out at

first. You then file the screws off in place using a flat file laid right on the surface. This produces a pattern of small metal spots. You might think this adds interest to the piece or you might not.

In any event, you need to practice this installation on scrap before deciding which way you want to go.



3. Knife Hinge

You can use knife hinges to make a 270 degree hinge as shown in Sketch #4. The hinge pin has to be on the outside corner of the door. You will need large knife hinges at least 3/8-inch wide and 1/8-inch thick. Also the two parts of the hinge must come apart so one piece can be turned over.

Install one hinge at the top and one at the bottom of each door. You will need to drill an extra screw hole in the hinge.

Do not bevel the doors and side panels. Increase the width of the doors by 3/4 inch and reduce width of the side panels by the same amount.

You will need to remove wood from the ends of the door stile for the hinge. You will need to remove wood from the trim piece and the top for the other part of the hinge.

5. Lubricating Screws

The best lubricant for sliding wood-on-wood or wood-on-metal is candle wax. After all finishing

is complete, simply rub a candle stub on both sliding areas. Do not do this before finishing as the wax will prevent the finish from sticking.

6. **Closing**

Thanks for visiting Woodware Computer Furniture Designs and please drop us [an email](#) on your dream computer desk and how well we have meet your needs.

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Woodware Designs jriley@charm.net