Pine Country Armoire

OVERVIEW

Introduction

As useful as it is attractive, this 64" high country-style pine armoire is the ideal home for your computer and office accessories. You'll be able to use the instructions below and view the animated tutorial to understand how to build your own armoire. You can then customize the look of your furniture to suit your own personal style!

BEFORE YOU START…

SKILL LEVEL & TIME TO COMPLETE

- Beginner - about 7 to 8 days
- Intermediate - about 5 to 6 days
- Advanced - about 2 to 3 days

STEPS

1. **Construction-Pine Panels**
   Some of the parts you will need to complete this project will require pine shelving that exceeds the widest widths you're likely to be able to buy. Therefore, you'll have to buy eight 8-foot lengths of pine shelving. Edge-glue two assemblies of two 12" panels to form a 24" width panel, and one assembly of three for 36". Then edge-glue your eighth pine panel with one of your 1X6s. Use bar or pipe clamps and yellow glue, which should hold properly after only 20 or 30 minutes of clamp time.
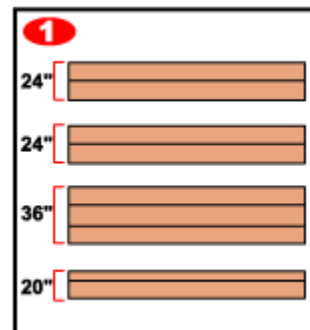
2. **Construction -Frames**
   Cut eight lapframe shorts to length from your pine panels. Then cut six lapframe longs to length from the same stock. Next, use a table saw to make lap cuts the width of the board. For your lapframe shorts, you'll make lap cuts on both ends. Four of your lapframe longs will also have a single lap cut in the center of each board, while the remaining two will only have the end cuts.
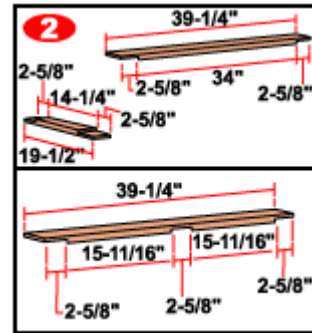
3. Now assemble two frames with the center crosspiece, and one without. You'll use the four lapframe longs that have center cuts for the frames with center crosspieces. Use C-clamps, making sure your frames are square before gluing them at the lap joints. When your glue is dry, sand the edges even and stack the frames to make sure they're the same. If not, sand off excess material.
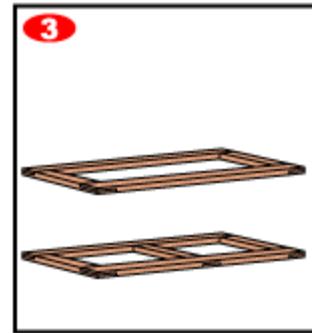
4. Cut three lapframe edge strips from good quality pine stock. These you'll glue to the front length of all three frames to cover up the lap joints.
   Cut the two center partitions from a pine panel. These you'll place on edge and center on the crossbar of the two frames that come with the crosspieces. Install the center partitions with glue and two 3/4" #8 screws inserted from underneath.
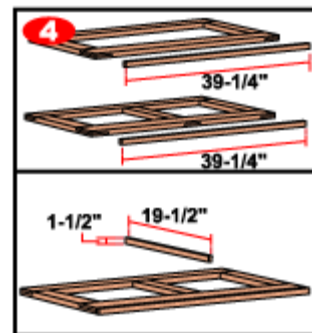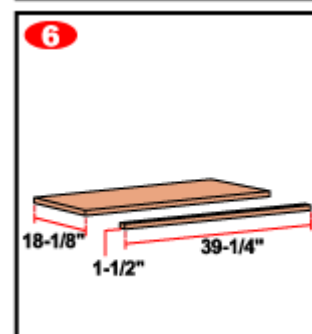
5. **Construction-Sides**
   Cut your two sides from the pine panels. Then cut three dados in both panels. The first will start 3" from the bottom, the second starts 16-3/4" from the bottom, and third starts 29-3/4" from bottom. Note that all but the third dado extend across the entire width of the board. The third one stops 1-1/2" from the front edge.
   Cut a rabbet along the top of the panel, and a narrower one along the inner rear edge.
   Also, drill columns of holes for the shelf support pins after first measuring your metal support pins for hole size. Don't drill all the way through the panels. Each column should be about one inch from panel edges and spaced at about one inch intervals, starting 46" from the bottom of the panel.
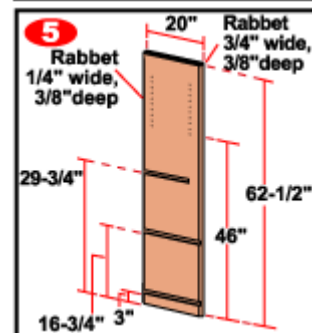
6. **Construction-Fixed Shelf**
   Cut the fixed shelf to 39-1/4" x 18-1/8" dimensions from the pine panels. Then cut the reinforcing edge to 38-1/2" x 1-1/2" from the pine panel stock. Glue the reinforcing edge to the outside edge of the shelf.

7. **Construction-Body Assembly**

Install the frames and the shelf into the dado grooves with glue and finishing nails. Work quickly to square it up before the glue sets. Place the partition frames in the two lowest dados, making sure the front edges of the frames are even with the front edges of the sides. The rear edges of the frames and the fixed shelf must be even with the bottom of the rabbets, and the front edge of the fixed shelf 1-5/8" from the front edge of the sides. Install the reinforcing edge on the edge of the fixed shelf with finishing nails, and round over.
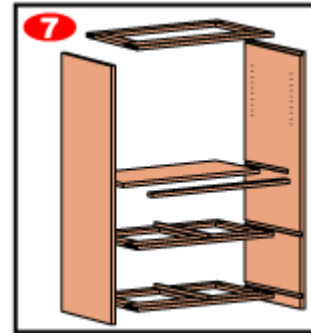

8. **Construction-Ventilation**

Cut the back, and then proceed to cut out ventilation area based on the configuration of your computer equipment. An opening of the size and shape of your computer and monitor will ease cable access and enable the equipment to protrude slightly in back if necessary for closing the doors. Also remember to cut holes for plugs and cables.
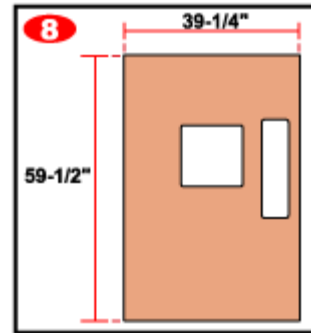

9. **Construction-Back and Top**

Install the back with glue and finishing nails. Mark the elevations of the shelves and frames. Form the top from a 2x8 cut into three 4' sections, then edge-glue the pieces together for a single panel about 21-1/2" wide. The top will overhang the drawer fronts by 3/4". Sand or plane the top face smooth and trim to a final length of 41-1/2". Sand the edges even and round them over, then install with glue and 1-1/2" #8 screws inserted from beneath.
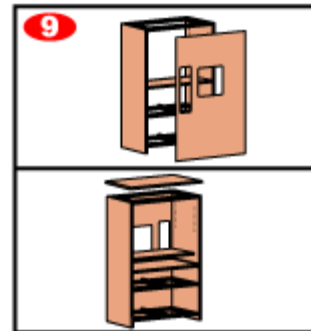

10. **Construction-Skirts**

Cut the front and two side skirts, and miter the corners. Round the top edges and shape the front skirt according to the contour. Sand the parts and install them around the base with glue and finishing nails.
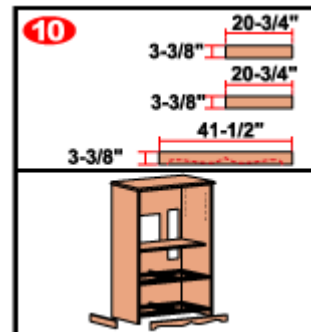

11. **Construction-Moveable Shelf**

Cut the moveable shelf to size to fit the cabinet. Like the fixed shelf, it will be cut from the edge-glued pine shelving. Trim it to fit the shelf support pins and insert into the holes at the desired height.
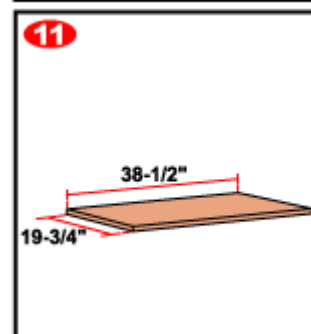
12. **Construction-Keyboard Drawer**
    Cut the keyboard drawer to size. It should be 1" narrower than the opening, allowing for the metal drawer slides. Then cut the drawer edge to size and round over the edges and ends. The ends of the drawer edge will overhang the surface of the drawer. Center it and attach it to the front edge of the keyboard drawer with glue and finishing nails. Sand the surface flush.
    Install the drawer slides on the sides of the keyboard drawer, and the cabinet slides inside the cabinet on both sides at the height of the bottom edge of the keyboard drawer. Mount the slides with screws sized to fit the holes.
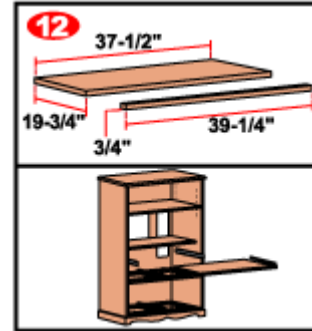

13. a **Construction-Media, File Drawers**
    Cut the four sides for the two media drawers, the four for the two file drawers, and the partitions for the media drawer. Then cut a rabbet on each end of each side. Along the bottom edge of each side, cut a groove 1/4" from the bottom edge.
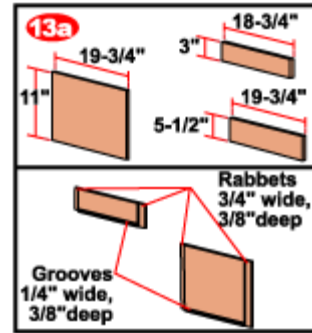
13. b On the media drawer sides, cut a series of 1/8" saw kerfs about 1-1/4" apart. This is for the dividers that will be later installed for disk storage. Repeat the same pattern of saw kerfs on both sides of the partitions, making sure the groove patterns line up on both parts.
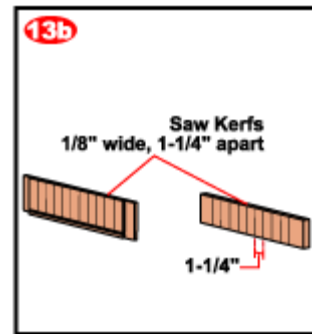
14. Measure the width of each drawer opening on the cabinet, and cut the drawer backs and sub-fronts to 1-3/4" narrower than the opening. Cut to size the bottoms of all drawers. Then, working with the drawers upside down, insert the drawer bottoms into the slots in the sides. Apply glue to the ends and bottoms of the back, and insert between the sides. Nail the sides to the back and repeat with the sub-fronts. Square up, and nail the bottoms onto the back and sub-front.
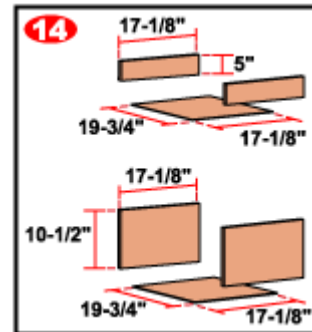

15. To install the partitions in the media drawer, mark the center positions in the drawer. Apply glue sparingly to the ends and bottoms of the partitions, and nail them into position with finishing nails through the front and back of the drawer. Tap in a few 1" nails through the bottom, centering them carefully so they won't come out into a slot. Make as many movable dividers as you wish.
    Cut all four drawer fronts to size from the pre-glued pine shelving. Sand the edges, and apply a profiled edge with your router bit. Install the drawer slides on the cabinet and on the bottom of the drawer sides with #6 screws 5/8" or 3/4" long.
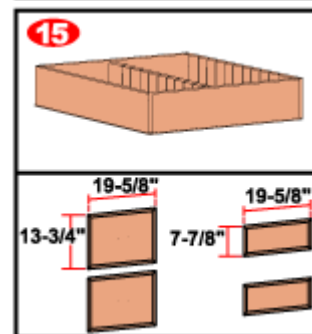
16. a Construction-Doors

For the doors, begin by cutting out the four rails and the four stiles. Then use your table saw to cut away half of the thickness of the parts to 2-1/2" x 2-1/2" lap cuts. Use the best face of the wood for the rail lap cuts, but the worst face of the stiles. Sand the faces of all parts. Assemble both frames with glue and clamps. Check that the frame is square, then sand the faces and edges smooth and flush. Then rabbet the inner edges of the two frames to accept the raised panel.
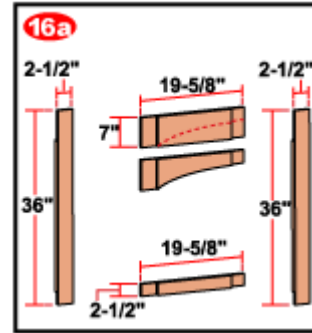
16. b Prepare the two door panels by edge-gluing the pine panel stock to width. Trim the finished panels to fit the rabbets in the frames with about 1/8" of play in both directions.
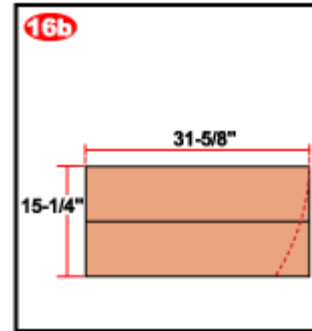
17. To produce the raised panels on your table saw, adjust the blade to 1 1/4" height and approximately 15 degrees. The teeth of the blade should just barely emerge from the surface of the panel. After cutting the angled surfaces, complete the panels with hand sanding.
Install the raised panels by dropping them into the rabbets on the inner openings of the frames, and cut strips of wood for retainer strips. Cut them 1/4" x 1/4" and to the required lengths, and tack them in place with 5/8" or 3/4" brads.
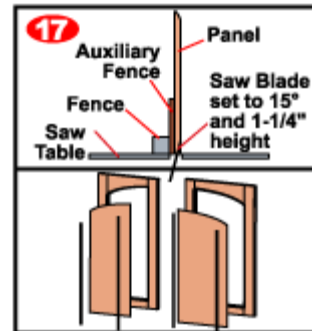
18. Cut the piano hinges to fit the outside edges of the doors. Drill pilot holes and install them with 5/8" #6 screws. Then install the doors onto the cabinet with the same fasteners, leaving about a 1/8" gap between doors.
You're finished with a pine computer armoire that will be the centerpiece of your office or study. Finish it as you'd like, so that the paint or stain matches your own personal style.
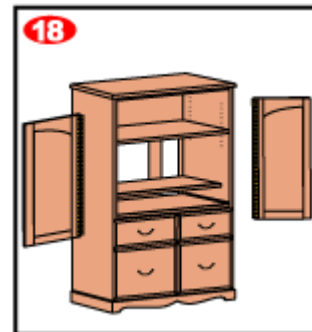
SHOP LIST

Materials List
(1) 12' 2x8 Pine or Spruce
(1) 8' 1x8 Pine or Spruce
(2) 8' 1x6 Pine or Spruce
(8) 12" x 96" Preglued pine panels (sold as shelving)
(5) sets of metal drawer slides, 20" long (actual length 19-3/4")
(4) Drawer handles
(2) Door handles
(3) 36" Piano hinges, brass or stainless steel, 3/4" wide
(1) Sheet of 1/4" G1S plywood
Finishing nails, 3", 2", 1" lengths
#8 Screws, 1-1/4"

#8 Screws, 2" or 2-1/4"
#6 Screws, 5/8" (sized for attaching drawer slides and piano hinge)

Tools List
Jigsaw or band saw
Drill w/ drill bits
Bar or pipe clamps
Sander
Table saw
Router with table
Basic hand tools