



Build It With



— French Cleat —

WALL  
SYSTEM



## How to Build a French Cleat Wall System for Easy Tool Storage

Looking for a way to organize your shop or garage without taking up valuable floor space? Make yourself a handy French cleat shelving system to store a variety of tools, from drill bits and clamps to garden tools and hosing.

Follow along with this step-by-step project plan and get a detailed visual by checking out our video project tutorial: <https://youtu.be/Ao9zLms763s>. The video project also includes instructions for creating custom cleated utility boxes and trays.

Don't settle for a cheap shelving system from a big box store. Show off your woodworking skills with this sturdy and fully customizable shop improvement project!

### TOOLS NEEDED:

- Tape Measure
- Speed Square
- Framing Square
- Level
- Sandpaper
- Wood Glue
- Clamps
- Brad Nailer
- 18 Gauge 1-1/4" Brad Nails
- 18 Gauge 1-1/2" Brad Nails
- Drill
- Screwdriver
- Kreg 1-1/4" Screws  
(per manufacturer tool guidelines)
- Kreg Pocket-Hole Jig 720PRO
- Miter Saw
- Table Saw
- Compact Router
- Wood Glue



## Step 1

Before you begin, determine the space where you will hang the finished product. Find your open wall of choice and then measure the available space.

Once you know the dimensions, determine how big or small you need to go.

In our project, the available wall space was 70" in width. We knew that we wanted a 44" height, so we reduced the width by almost 20 inches to not overcrowd the space. The height used was chosen to match the height of the neighboring cabinets.

Our final measurements ended up being 51" by 44" (from outside to outside on the frame).

## Step 2

Once you've settled upon your intended size, cut your boards to size.

Use a [table saw](#) and miter box to cut your backer plywood and trim to fit the desired size of your space.

Use a table saw to rip the 1x3 material into cleats with a 45-degree angled end cut. Adjust length, as needed.

## Step 3

Use B054 picture frame moulding to conceal all four edges of the plywood. Cut each end of the moulding with a 45-miter cut to form a 90-degree angle at each corner. Attach to plywood backer.



MATERIALS NEED	
Qty	Material
1	<a href="#">1/2" Red Oak 4' x 8' Plywood</a>
6	<a href="#">1x3 (3/4" x 2-1/2") Red Oak S4S Lumber</a>
4	<a href="#">B054 Picture Frame Moulding</a>

## Step 4

Use a pencil to draw your actual physical layout on the plywood to determine the placement of the cleats.

We used 2" material as a gauge block to measure a side border on the plywood. Use a pencil to draw a line marking your own desired border.

A 3 1/2" gauge block was used to find the horizontal spacing at top top/bottom of the backer board and also between the permanently mounted cleats. Then (allowing for the border spacing from your gauge block), simply take your cleats up the shelf, marking their locations. Alternate between cleats and the spacer gauge until you reach the top of the board and every cleat location is marked.





## Step 5

Use extra material as a jig to determine where the cleats should be screwed to the plywood. We placed three screws on each cleat with the center screw directly in the middle.

Use the marked spacer board to mark the plywood where the screws will be placed. Drill small pilot holes in the plywood.

## Step 6

Take an orbital sander and remove markings before attaching permanent cleats.

## Step 7

Use gauge blocks (spacer materials) to ensure the cleats are in the correct places and then attach each cleat, working from the bottom up.

For each permanently mounted cleat, flip the wood over and apply wood glue. Drop the cleat directly onto the correct spacing (using both gauge blocks as your guide). Use a brad nailer to hold the cleat in place until the entire unit is flipped over to attach screws. (Nail at an angle to avoid going through the plywood backer.)

Repeat until all cleats are connected to the backer board.

## Step 8

Once all cleats are in place, turn the board over to attach screws.

Apply wax to the screws for optimum performance. Screw from the back to reinforce the cleat and plywood connection.





## Step 9

Determine where your wall studs are located and mount the finished shelf on the wall.

Due to the weight of this French cleat system, it's important to anchor the piece to the stud so that it doesn't fall off the wall or damage drywall.

## Step 10

Create or purchase utility boxes to your liking.

In our video tutorial, we created two storage options: a clamp shelf with support legs and drill bit organizer.

For the clamp shelf, drill some holes (using a Forstner bit) in the top shelf and then extend the cut lines (with a miter saw) to one edge of the top. Utilize pocket holes to attach the French cleat to the top piece and support legs.

To make a quick storage shelf for drill bits, simply draw out a grid of line spacings and use a Forstner bit to drill a series of holes big enough to hold the bits. Again, use pocket holes to attach the shelf to the French cleat unit.



## Customizable Wall Storage for Better Organization

You don't need to have your own workshop to enjoy a French cleat wall storage system. This simple project can easily be adjusted to fit your own individual needs – plus, it looks amazing and is fairly inexpensive to complete!

If you're looking for more great projects and inspiration, be sure to visit the Baird Brothers Content Studio – [contentstudio.bairdbrothers.com](https://contentstudio.bairdbrothers.com) – where you can find free plans, insider interviews, tips, tricks and real-life product applications.

Every day is a great day if you're making sawdust. Until next time!



# BUILD IT WITH BAIRD / FRENCH CLEAT WALL SYSTEM

