# Build a wine rack

- **An easy-to-follow guide to achieving a perfect result.**
- **Outlines all the tools you will need for the job.**
- **Includes a materials checklist.**

**PLEASE NOTE:**
Before starting this project or buying any materials, it is worth your time to read all steps thoroughly first to be sure you understand what is required.
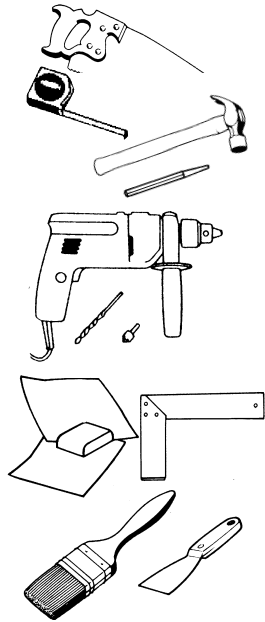
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**MIGHTY HELPFUL™ MITRE 10**

**Tape measure**

**Cordless drill / driver and bits**

**Hand saw or power mitre saw**

**Claw hammer**

**Nail punch**

**Sanding block**

**4cm dowel**

**Sandpaper (80, 120, 280, 400 grades)**

**Try-square**

**Putty knife**

**75mm paint brush**

**Rags**

## ✓ MIGHTY HELPFUL CHECKLIST

| | ORDER |
|---|---|
| **MAKES ONE CUBE** | |
| **Timber** | |
| 1/ 3.6m length of 240 x 19mm radiata pine | |
| 1/ 1.2m length of 19 x 19mm radiata pine | |
| | |
| **Hardware** | |
| 1 small pack 50 x 2.0mm bullet head nails | |
| 1 small pack 30mm x 8G wood screws | |
| 1 small tube of wood stop (putty): colour to match timber or stain | |
| | |
| **Other Materials** | |
| 500ml Wood stain (colour of choice) | |
| 500ml Clear satin polyurethane | |
| Sand paper - 80/120/280/400 grades | |

**Verbal quotes are indicative only. Written quotes on materials are available upon request from your Mitre 10 store.**

## ✓ CUTTING LIST

| PART | QTY | LGTH | WDTH | THICK | MATERIAL |
|---|---|---|---|---|---|
| A Top & bottom | 2 | 500 | 240 | 19 | Pine |
| B Sides | 2 | 462 | 240 | 19 | Pine |
| C Diagonal divider | 1 | 634 | 240 | 19 | Pine |
| D Diagonal dividers | 2 | 308 | 240 | 19 | Pine |
| E Cleats | 4 | 240 | 19 | 19 | Pine |
| **(all measurements in millimetres)** | | | | | |

# Show off your wine collection – with help from Mitre 10

**It's great to have a collection of wines at home for special occasions or when friends drop in. Wine is great to drink, but also good to look at! A collection of bottles creates an atmosphere of warmth and abundance. It also promises good times to come!**

**Displaying wine bottles is a fun challenge. There are hundreds of off-the-shelf racks to choose from, but if you prefer a wine rack that matches your decor or your personality you may have to make it yourself.**

**If you have the ability, you can design one yourself and make it from just about any material you can imagine.**

In this MitrePlan we show you how to make a simple wine rack from common timbers. This rack can easily be expanded or reduced in size to fit your available space or accommodate your collection, and you can make any number of cubes and stack them vertically, horizontally, or in steps. Screw the boxes together for stability – you don't want your valuable wine bottles smashing on the floor!

There are no complicated cuts or processes, everything is cut square and may be cut and assembled with hand or power tools. If you wish, you can improve the finish of the wine rack by cutting a double mitre on the dividers (they will also need to be longer) so they fit neatly into the corners. You can eliminate the cleats on the dividers by cutting a halving joint, or by using a router to make a housing joint.

Wine bottles are made in many sizes, from slender 60mm diameter bottles to 110mm magnums and even larger. Unlike some types of wine racks, this design will accommodate wine bottles (or any other type of bottle) of any size without the risk of them falling out or getting jammed.

## Step 1: Getting ready

Decide on the number of cubes you want to make, and whether you'll make it to the size in this plan, or a size to fit a niche in your home. This style of rack can be a freestanding feature, and can also work well in the kitchen – fitted into a wall cupboard or floor cupboard. Other great spots include disused fireplaces, wall niches, wall units, or hanging from a wall.

This wine rack looks great made from common, affordable radiata pine, but can be made from any timber you choose – even recycled timber (such as packing-crate timber) for a rustic look that compliments the concept of wine perfectly.

Plywood, MDF or particleboard are also suitable, and it may be pre-finished in melamine or painted.

## Step 2: Cut and prepare the pieces

Accurately cut all the pieces to length, according to the cutting list.

Sand all of the pieces on the faces and edges that will be visible. You can do this by hand (with a block and sandpaper) or by machine with an orbital sander or belt sander. Gently remove sharp edges with your sanding block. Pay special attention to sanding the end-grain of the top and bottom, as these ends will be seen.
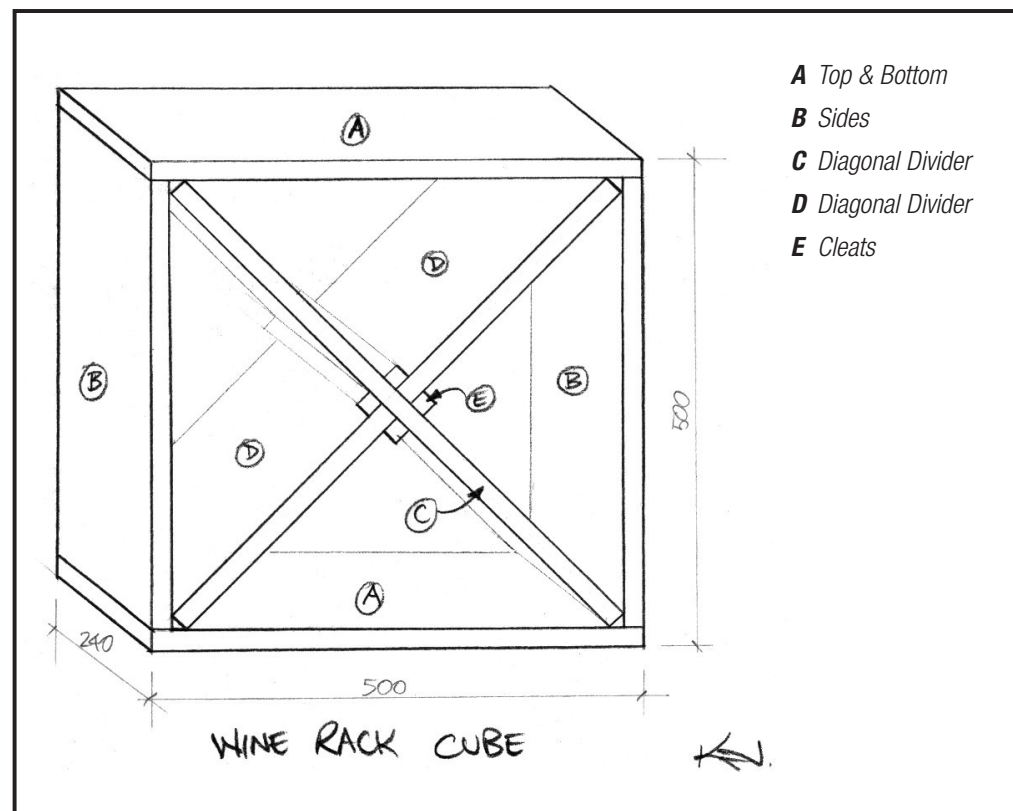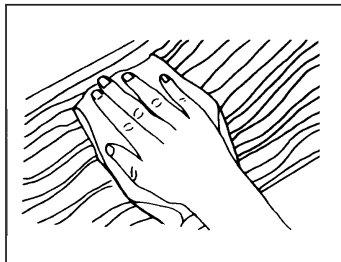
## Step 3: Assembly

Glue and nail the box together. If you have a vice, hold one of the sides in the vice and apply wood glue (such as PVA) to the end, spreading it evenly with your finger. Nail the bottom to it, flush on the outside face. Hold the other end in the vice and fasten the bottom in the same way.

Sit the assembly on your bench, with the ends upright, apply glue and nail the top to the ends. Use a fine nail punch to punch the nails about 2mm below the surface of the timber. Don't putty the nail holes yet. Lay the box flat on its back and measure the diagonals. If they're not exactly the same, give the box a squeeze until both diagonals are equal, then leave until the glue sets.

Check the fit of the long diagonal divider. It should slip neatly into the box without force. Trim to fit if necessary.

Measure to find the centre of the divider's length. Measure 9.5mm either side of this mark and draw two lines each side to mark the position of the other dividers. Use a try-square to make sure your lines are square and parallel. Screw the cleats along the lines so that the short dividers will slip between the cleats without force. Use three screws in each cleat and do not glue it to the divider. Drill loose clearance holes in the cleats for the screws).

**A** *Top & Bottom*

**B** *Sides*

**C** *Diagonal Divider*

**D** *Diagonal Divider*

**E** *Cleats*

WINE RACK CUBE   KN.
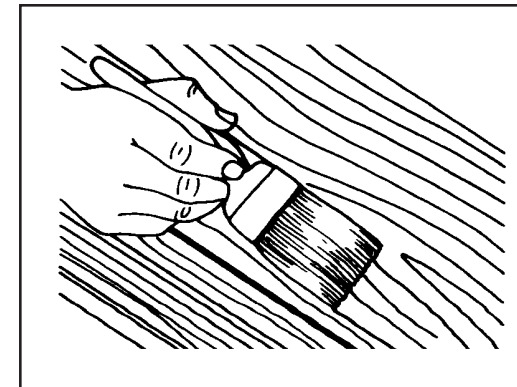
240    500

## Step 4: Apply a finish

It's best to apply your chosen finish before assembling the wine rack completely, otherwise the tight corners will be very difficult.

Give all the parts a final hand-sand with 280 grit abrasive paper, removing any pencil marks.

Apply your chosen stain according to the manufacturer's instructions and allow it to dry.

Apply the first coat of clear polyurethane and allow it to dry. Now apply wood stop to the nail holes and allow it to dry fully. Use 280 grit abrasive paper to flush off the wood stop and to sand the first coat of polyurethane. Apply a second coat of polyurethane and allow it to dry.

If necessary, sand all parts again with 400 grit abrasive paper and apply a final coat of clear polyurethane.

## Step 5: Lock and load!

When all of the parts are dry, slide the diagonal dividers into the box. If they are tight you can leave it like this, or you can lock the pieces together with nails driven in the back edges (where they won't be seen).

Now you can stack the cubes and load your new wine rack with wines of your choice.

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## MIGHTY HELPFUL HINTS TO MAKE THE JOB EASIER

■ Putty nail holes after the first coat of polyurethane to prevent ugly stains around the nail.

■ Never glue cleats across wide boards. Timber shrinks and swells most across its width, and if it's prevented from moving it may split.

■ Protect your eyes and ears when you use power tools.

■ Some Mitre 10 stores have a cutting service. You can have your timber cut to accurately to size – saving you time, effort, noise and dust!

■ Timber is a natural product – appreciate its variations in grain and texture. You might even make a feature of knots, figured grain or insect damage.

■ These wine rack cubes can be stacked three or four high without fastening to each other, or fixing to a wall – BUT, if wine bottles are stacked mainly on one side they may overbalance and fall. They can be stacked to virtually any height if they are screwed together and fixed to a wall, post or other solid structure.



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**WARNING:** There may be by laws or regulations of councils or other statutory bodies that you must comply with when following this MitrePlan Project Planner.

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