

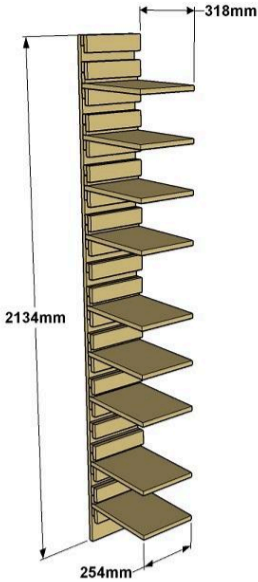
# Wall-Mounted Shoe Rack – Metric

Difficulty

Easy

This shoe organizer is compact enough to fit into a closet, simple enough for a beginning DIYer, yet stylish enough to create attractive shoe storage in your entryway or mudroom. Each shoe shelf is adjustable to suit changing needs, and the entire project is made from a single sheet of 19mm plywood.





# Tools

## Other Tools

- Circular Saw (cordless)
- Miter Saw
- Combination Square
- Drill (cordless)
- Sander
- Tape Measure

# Materials

## Wood Products

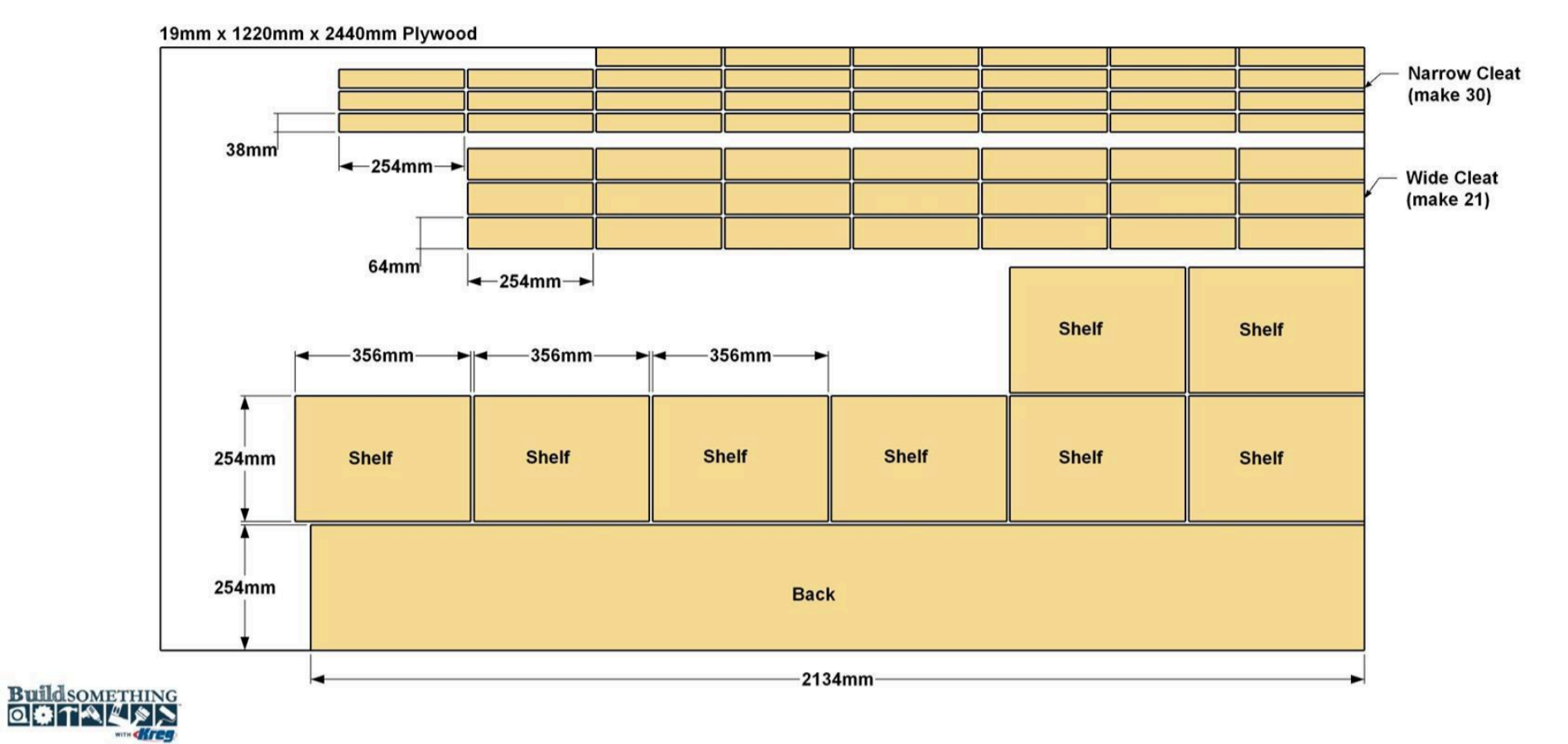
- 1** Plywood , 19mm X 1220mm X 2440mm Plywood , Full Sheet

## Hardware & Supplies

- 18** #8 X 38mm Flat-head Wood Screws
- 45** #8 X 51mm Flat-head Wood Screws
- 1** Countersink Drill Bit (For #8 Screws)
- 1** Wood Glue

# Cut List & Parts

- 1 Back , 19mm X 254mm X 2134mm Plywood
- 9 Shelf , 19mm X 254mm X 356mm Plywood
- 30 Narrow Cleat , 19mm X 38mm X 254mm Plywood
- 21 Wide Cleat , 19mm X 64mm X 254mm Plywood



# Directions

**1**

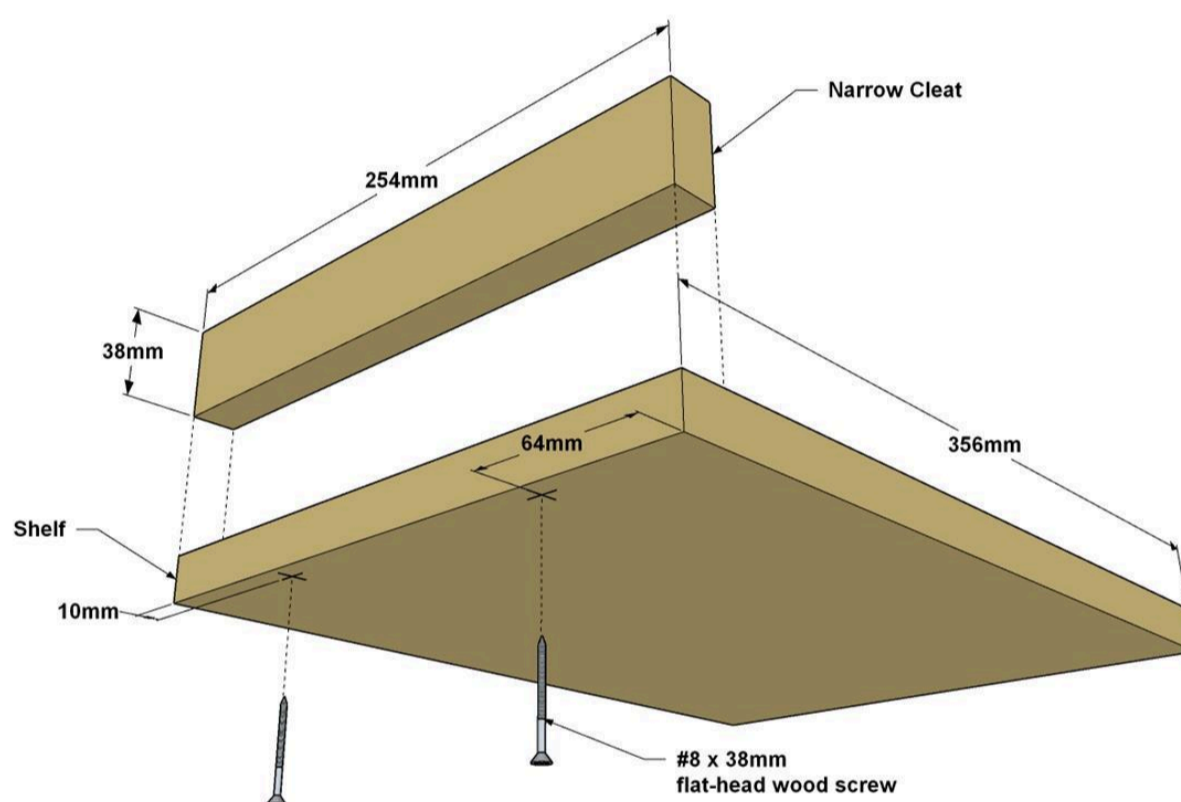
## Cut Out the Parts

From a single sheet of 19mm plywood, rip the Back, Shelves, and the two sizes of Cleats to width as shown in the cut diagram. The easiest way to do this is with a circular saw and a saw guide. We used the Kreg Rip-Cut. Just set the guide to each width as desired, and cut full-length strips at each specified width. Once you have all the strips cut, you can move to the miter saw, and then cut all the parts to final length.

**2**

## Assemble the Shelves

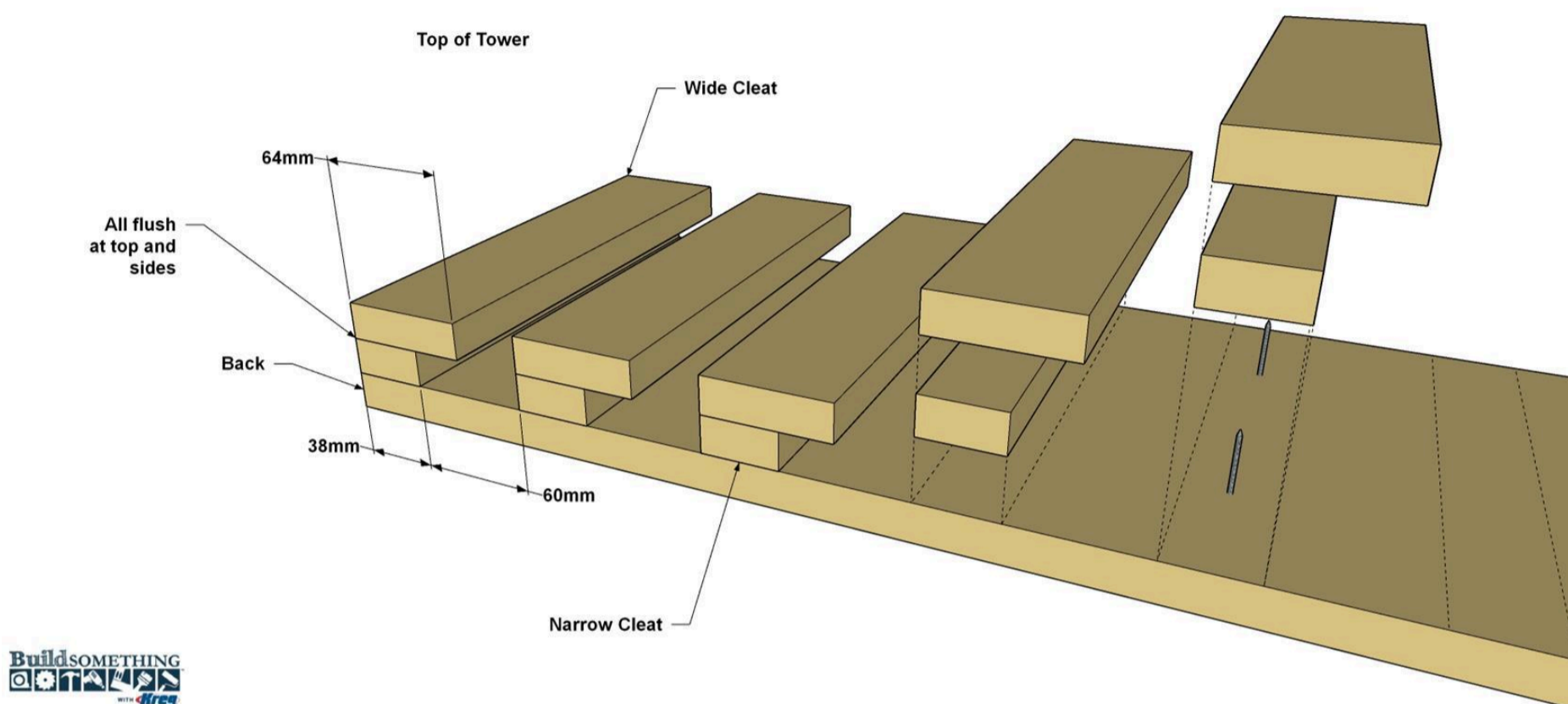
Glue and clamp one Narrow Cleat to the edge of a Shelf as shown. Make sure the edges are flush. When the glue dries, drill two countersunk pilot holes where shown. Drive two #8 x 38mm flat-head wood screws into the Cleat. Repeat this for each of the shelves.



### 3

#### Glue the Cleats to the Back

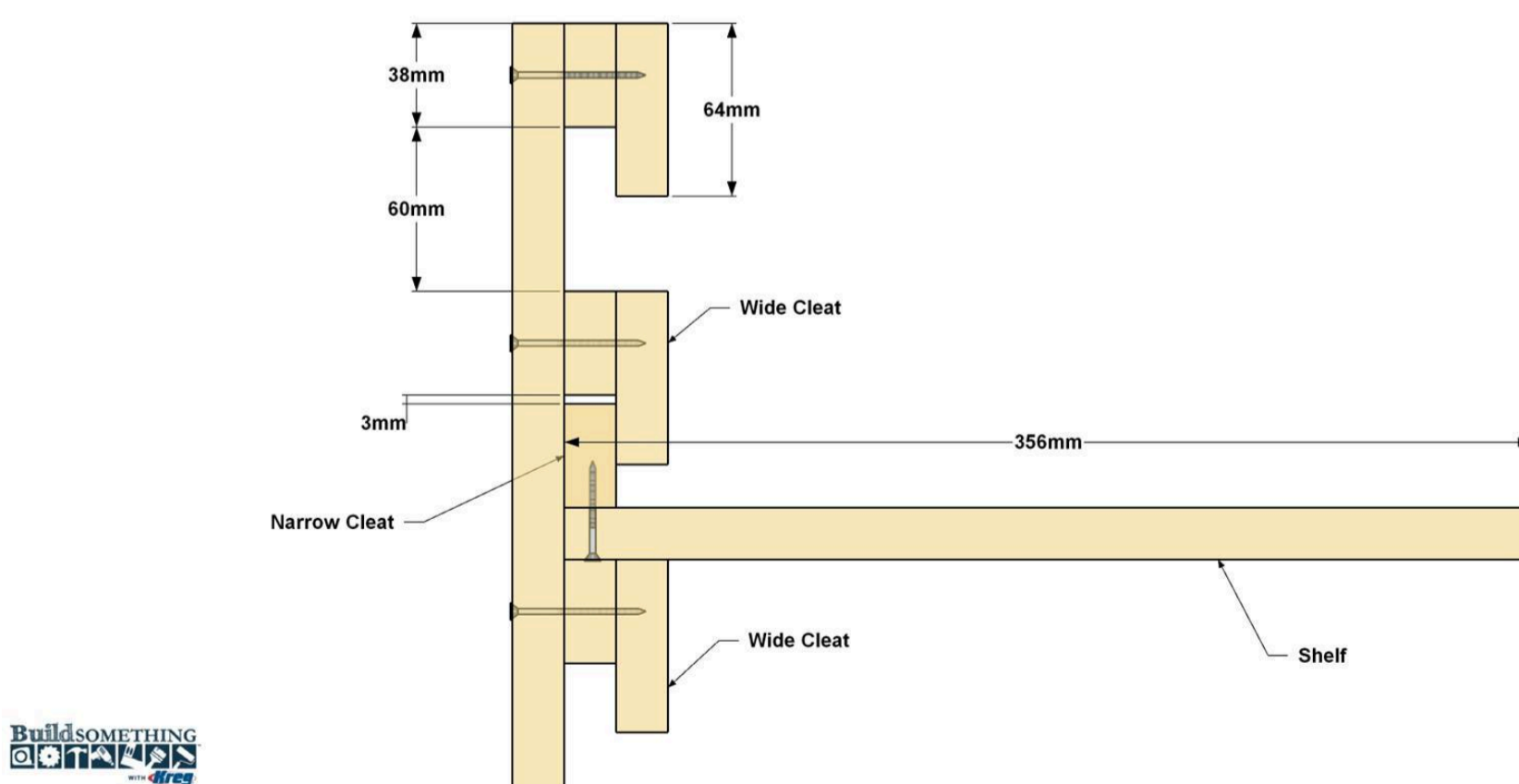
Spread glue on both faces of one Narrow Cleat, and then position it flush with one end of the Back, as shown. Place one Wide Cleat on the Narrow Cleat, so that the ends and one edge (the upper edge) are flush. Clamp the Cleats to the Back as shown. Let the glue dry for 10 minutes or so before you remove the clamps. Wait for the glue to dry before removing the clamps. While that glue is drying, you can spread glue on another Narrow Cleat, and then clamp it and a Wide Cleat in at the next location, as shown. Use a square to make sure these cleats are positioned properly. Repeat this process with the rest of the cleats.



### 4

#### Add Screws to the Cleats

After all the Cleats are attached to the Back, flip the assembly over, drill two countersunk pilot holes through the back of each cleat. Make sure you don't drill too deep and accidentally drill through the front face of the Wide Cleats. Drive #8 x 51mm flat-head wood screws into each Cleat for some added strength.



**5****Apply Finish to the Rack**

Sand the edges of the Back/Cleat assembly to make sure all of the surfaces are flush. Then Sand the edges of each Shelf/Narrow Cleat assembly. Clean sanding dust and debris from the surfaces, and then apply the finish of your choice. We used a natural oil to give the plywood a little color. Paint isn't a great choice for this project, because it can make it hard to slip the shelves in place. If you want a color instead of the natural-wood look, you could use a solid-color stain.

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**6****Mount the Rack on the Wall**

When the finish has dried, decide where you'd like to position your shoe rack. If possible, attach the rack to a wall stud. If there's a stud, mark its location, hold the rack in place and make sure that it's plumb (straight up and down). Drill countersunk three pilot holes through the Back and into the wall stud near the top, bottom, and middle. Then drive #8 x 51mm flat-head wood screws through the Back and into the stud. If there's no stud where you want the rack, you'll need to use wall anchors. In this case, hold the rack in position, and then drill through the back and into the drywall. Remove the rack, and then enlarge the holes in the drywall to fit the wall anchors. Reposition the rack, and drive in the screws.

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