

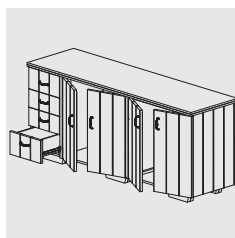
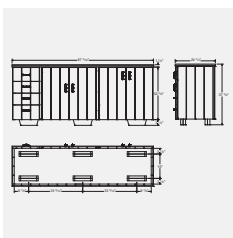
OUTDOOR KITCHEN ISLAND WITH PERGOLA

CONSTRUCTION PLAN



Difficulty level: **TTT** | **DIFFICULT**

Completion time: **2 days**



OUTDOOR KITCHEN ISLAND WITH PERGOLA

This outdoor kitchen unit is made up of an elegant pergola and a large work island. The pergola, 96" high by 112" long and 34 1/2" wide, is custom built to fit the island, which measures 37 3/8" high by 84" long and 23" wide. It features a countertop, sink and plenty of storage space in the form of cabinets and drawers. It can also hold an ice maker and a mini refrigerator.

Stylish and practical, the entire unit is made of cedar, which is naturally weather resistant. It can be stained for added protection, making an outdoor cooking station that you will enjoy for many years.



TOOLS AND MATERIALS NEEDED

TOOLS

- > Table saw
- > Mitre saw
- > Router
- > Driver drill
- > Jigsaw
- > 1/2" drill bit
- > Hammer (or nailer)
- > Measuring tape
- > Pencil
- > Carpenter's glue

MATERIALS

- > 1 board Baltic birch, 1/2" x 60" x 60"
- > 15 boards cedar, 1 1/4" x 6" x 120"
- > 3 sheets plywood, 3/4" x 48" x 96"
- > 2 boards cedar, 2" x 4" x 96"
- > 1 sheet Masonite, 1/4" x 48" x 48"
- > 4 – 32" piano hinges
- > 4 pairs 18" full-extension drawer slides
- > 8 cabinet pulls
- > 4 magnetic latches
- > 1 sink
- > 1 faucet
- > Water supply lines and drain pipes, including trap
- > Tiles, with tile adhesive and grout
- > 1 1/2" finishing nails (or nails for use with nailer)
- > 2" finishing nails (or nails for use with nailer)
- > 1 1/2" No. 8 screws
- > 2 1/2" No. 8 screws
- > 5/8" No. 8 screws

Note: the above table does not include the tools and materials required to install the sink and faucet or to tile the countertop.

ROUTERS

The router is a motorized tool that can be equipped with a wide variety of cutters, or bits, making it extremely versatile. Router bits exist for a panoply of woodworking projects, including making mouldings or casings, carving grooves (e.g. for inserting drawer bottoms or cabinet door panels), professionally finishing the edges of pieces of stock (boards, shelves, tables), planing surfaces and even making dovetail joints.

Router bits are often sold in sets, usually with illustrations of the shapes or patterns that they can cut. Depending on the model of router and type of work involved, the user can either move the router along the fixed material (e.g. to follow curves) or move the material itself along a fixed router table (e.g. to carve grooves). A number of routers are designed to be used either way and can be fastened upside down under a router table.

OUTDOOR KITCHEN ISLAND WITH PERGOLA

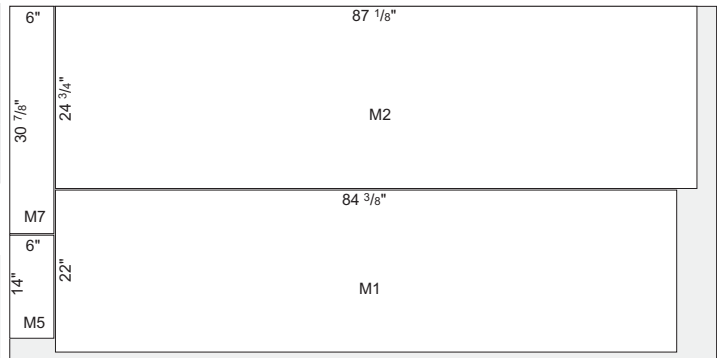
BEFORE ASSEMBLY

CUTTING LIST

Write the numbers on all the parts to clearly identify each one.

Sheets plywood, 3/4" x 48" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
M1 BASE	1	22	84 3/8
M2 COUNTER TOP	2	24 3/4	87 1/8
M3 CABINET SIDE	4	22	31 5/8
M5 BOARD	2	6	14
M7 BOARD	2	6	30 7/8

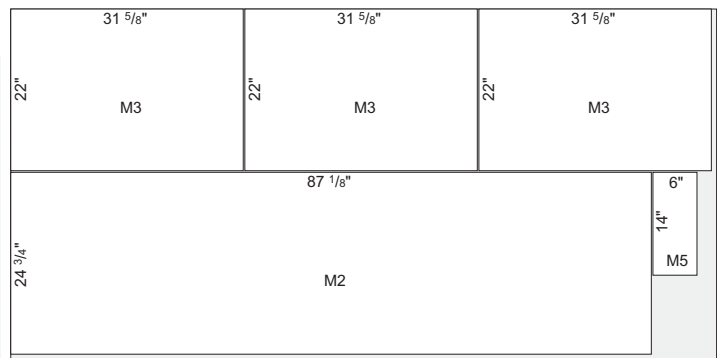


Boards cedar, 2" x 4" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
M4 FOOT	12	4	8
M10 BACK BRACE	2	3 1/2	36 1/2
M11 VERTICAL SUPPORT	2	3 1/2	30 7/8

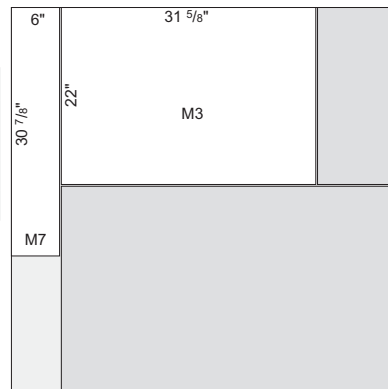
Boards cedar, 1 1/4" x 6" x 120"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
M6 CLEAT	2	1	14
M8 CLEAT	2	1	30 7/8
M9 CLEAT	4	1	21
C1 FINISHING BOARD	33	5 1/2	32 1/8
C2 FINISHING BOARD	2	4 11/16	32 1/8
C3 FINISHING BOARD	1	5 3/8	32 1/8
C4 SUPPORT FACADE	2	1 1/2	32 1/8
C5 DRAWER FACADE	3	5 1/2	8 1/2
C6 DRAWER FACADE	6	5 1/2	7 1/8
C7 DRAWER FACADE	3	5 1/2	9



Board Baltic birch, 1/2" x 60" x 60"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
M12 DOOR BACKING	4	12	28
T1 DRAWER SIDE	8	6 3/4	21 1/4
T2 DRAWER FRONT/BACK	8	6 3/4	13
T3 DRAWER BOTTOM	4	12 1/2	21 1/4

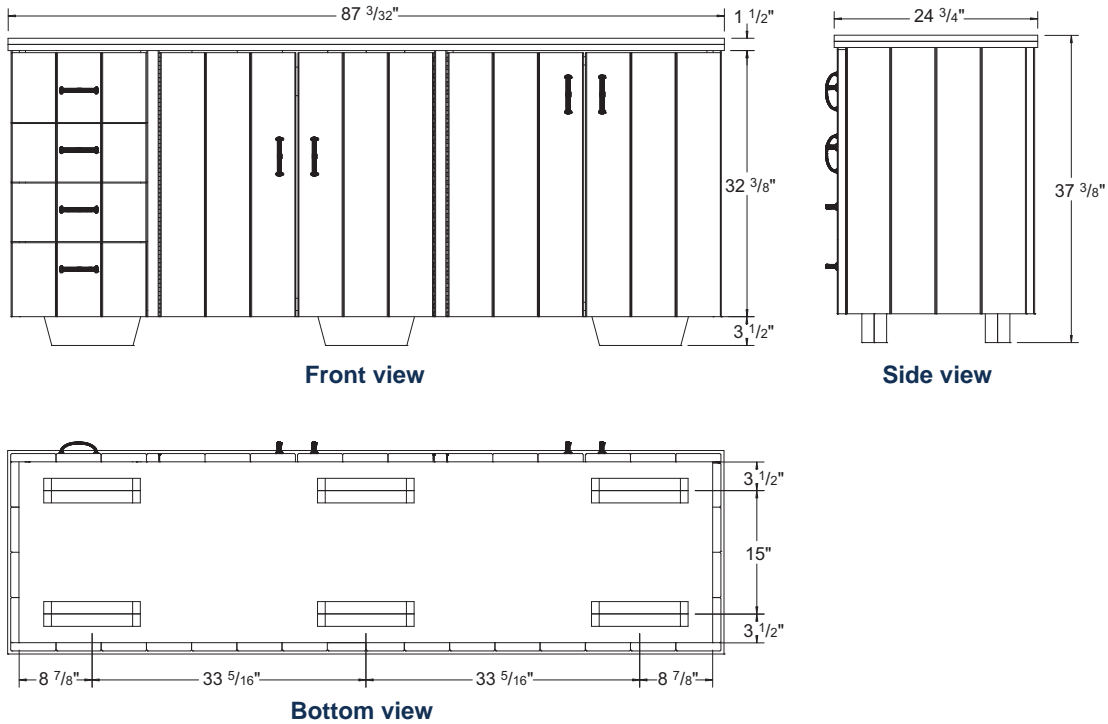


If you wish to stain the finishing pieces, do this before installing them.

OUTDOOR KITCHEN ISLAND WITH PERGOLA

BEFORE ASSEMBLY (CONT'D)

ELEVATIONS

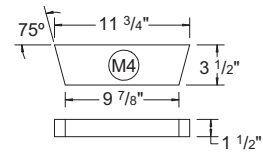


PREPARATION

1 CUT FEET M4

The unit stands on six feet, each made of two parts (M4).

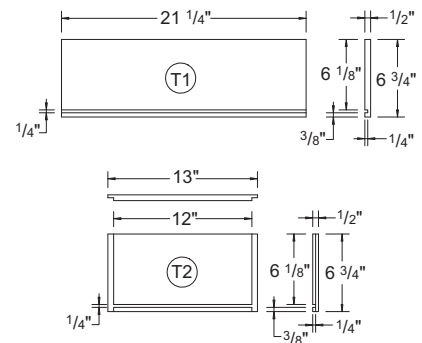
1.1 Cut the feet ends at a 75° angle.



2 ROUT DRAWER SIDES/FRONT/BACKS T1 AND T2

2.1 With a router, cut a groove $\frac{1}{4}$ " wide and $\frac{1}{4}$ " deep, $\frac{3}{8}$ " from the bottom of parts T1 and T2.

2.2 Carve an edge $\frac{1}{2}$ " wide and $\frac{1}{4}$ " deep on the ends of drawer fronts/back T2.

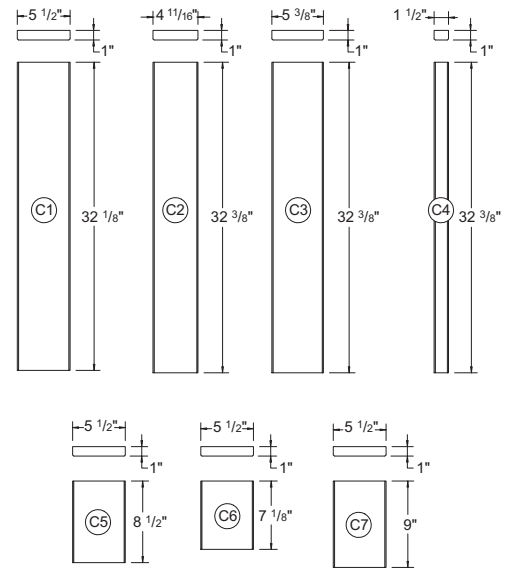


OUTDOOR KITCHEN ISLAND WITH PERGOLA

PREPARATION (CONT'D)

3 ROUT THE EDGES OF FINISHING BOARDS C1 TO C7

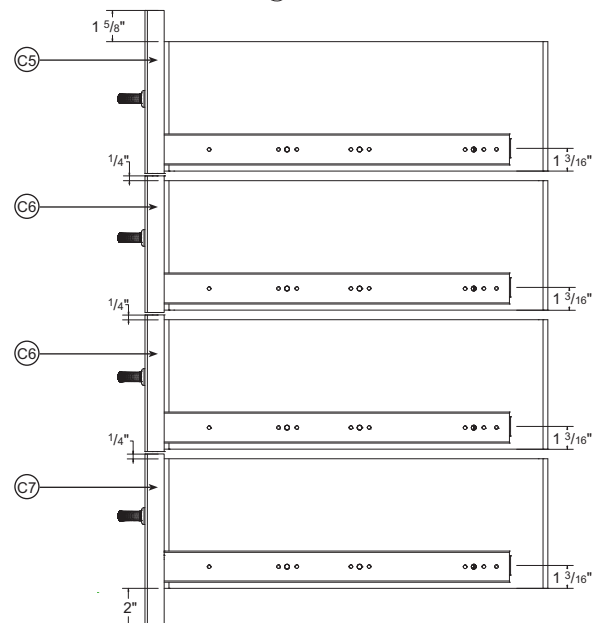
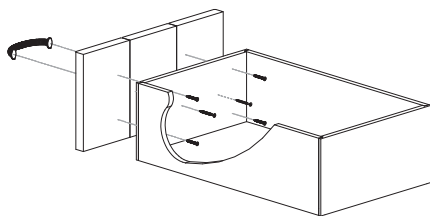
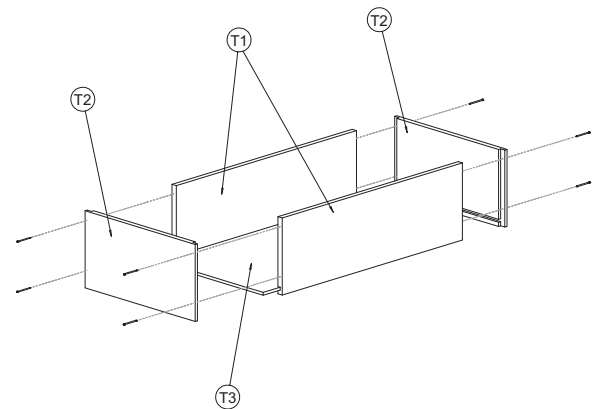
3.1 With a router, round off the longest edges of each finishing board, C1 to C7, on one side only.



ASSEMBLY

4 ASSEMBLE THE DRAWERS

- 4.1 For each drawer, nail (1 1/2" nails) and glue a back T2 to the ends of two sides T1.
- 4.2 Slide drawer bottom T3 into the grooves on parts T1 and T2.
- 4.3 Glue and nail one front T2 to the ends of sides T1 to complete the drawer.
- 4.4 Glue, then screw from the inside (1 1/2" screws), facades C5, C6 and C7 onto the fronts of the drawers, following the order and positions illustrated.
- 4.5 Attach the drawer pulls.
- 4.6 Fasten the slides to the sides of the drawers, in the positions illustrated.

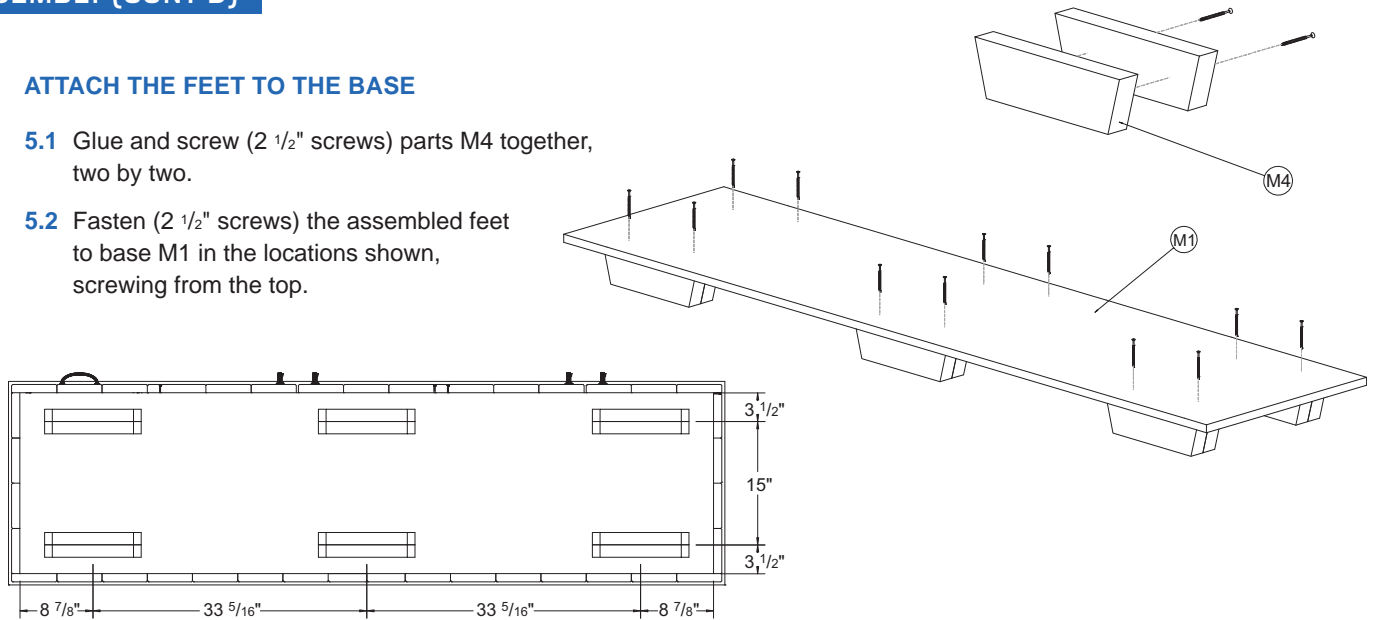


OUTDOOR KITCHEN ISLAND WITH PERGOLA

ASSEMBLY (CONT'D)

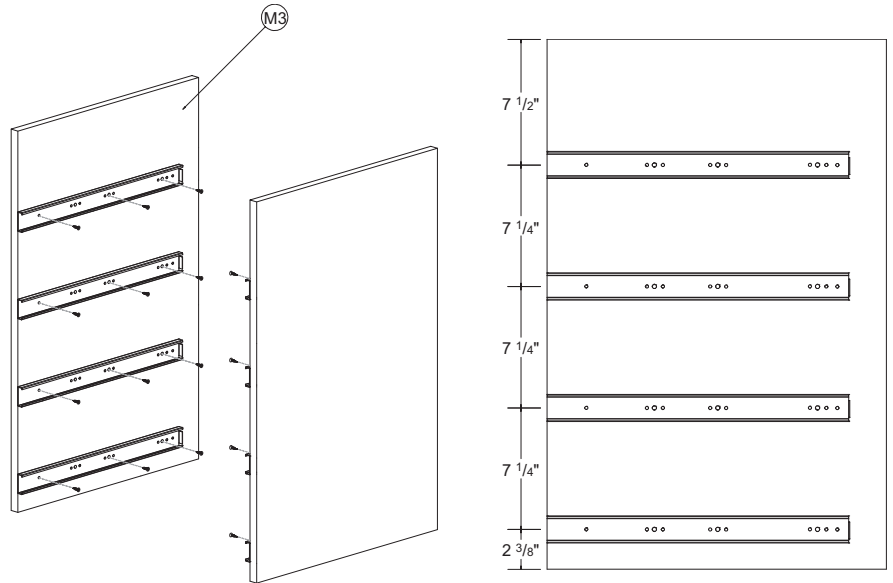
5 ATTACH THE FEET TO THE BASE

- 5.1 Glue and screw (2 1/2" screws) parts M4 together, two by two.
- 5.2 Fasten (2 1/2" screws) the assembled feet to base M1 in the locations shown, screwing from the top.



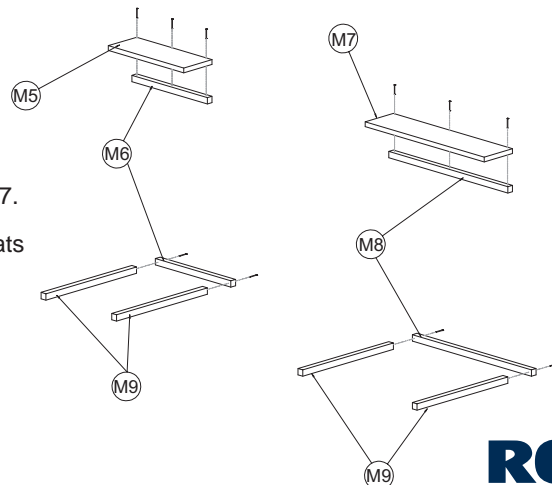
6 FASTEN THE SLIDES TO CABINET SIDES M3

- 6.1 Screw the drawer slides to cabinet sides M3, in the positions shown.



7 ASSEMBLE THE CABINETS

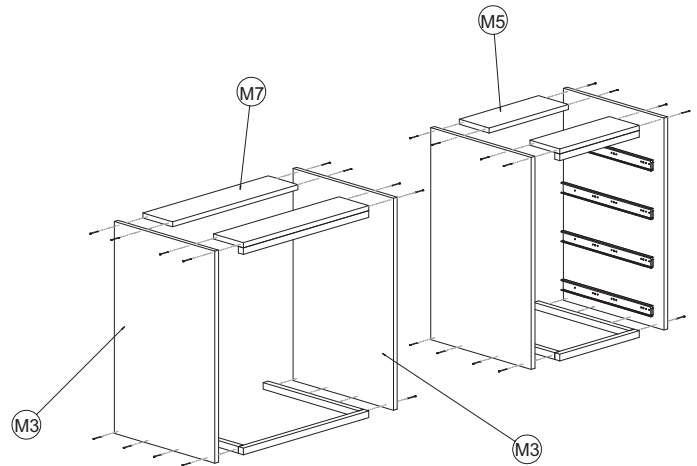
- 7.1 Glue and nail (1 1/2" nails) a cleat M6 to the underside of board M5, and a cleat M8 to the underside of board M7.
- 7.2 Glue and nail (2" nails) a cleat M6 to the ends of two cleats M9 to form a U shape. Repeat with a cleat M8 nailed to the ends of two other cleats M9.



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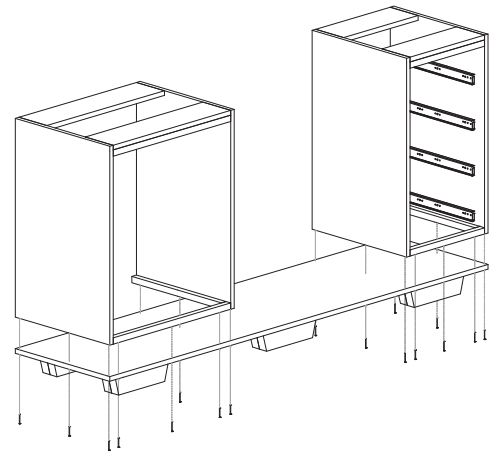
ASSEMBLY (CONT'D)

- 7.3 Glue and nail (1 1/2" nails) the two cabinet sides M3 without slides to the previously assembled cleats M8/M9. The «open» side of the U shape formed by cleats M8/M9 should be facing the front of the unit.
- 7.4 Glue and nail (2" nails) a board M7 as well as the M7/M8 assembly between the two above-mentioned sides M3. Board M7 should be flush with the front of cabinet sides M3, and the M7/M8 assembly should be flush with the back of the unit.
- 7.5 Glue and nail (1 1/2" nails) the two cabinet sides M3 with slides to the previously assembled cleats M6/M9.
- 7.6 Glue and nail (2" nails) a board M5 as well as the M5/M6 assembly between the two sides M3 with slides. Board M5 should be flush with the front of the unit and M5/M6 should be flush with the back.

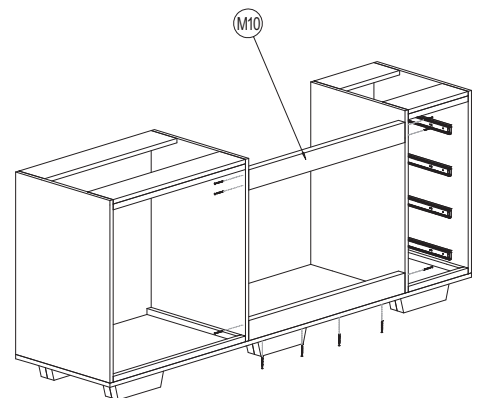


8 MOUNT THE CABINETS ON THE BASE

- 8.1 Glue and nail (1 1/2" nails) the cabinets to base M1, from underneath. Make sure the cabinets are flush with the ends of M1.



- 8.2 Glue and nail (1 1/2" nails) two braces M10 between the backs of the two cabinets, in the positions illustrated.

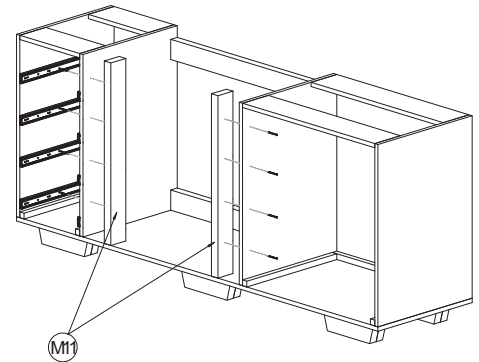


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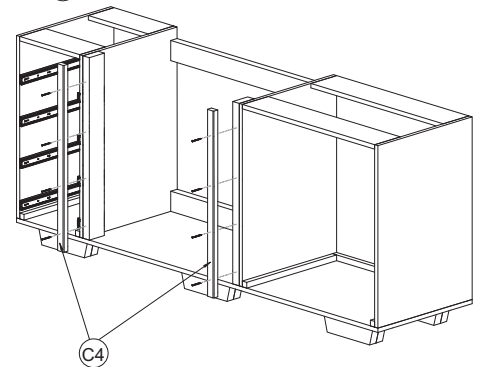
ASSEMBLY (CONT'D)

9 INSTALL VERTICAL SUPPORTS M11

9.1 Glue and screw (1 1/2" screws) vertical supports M11 to the front sides of the cabinets, from the inside of the cabinets, as shown.



9.2 Glue and nail (1 1/2" nails) a support facade C4 to each vertical support M11.

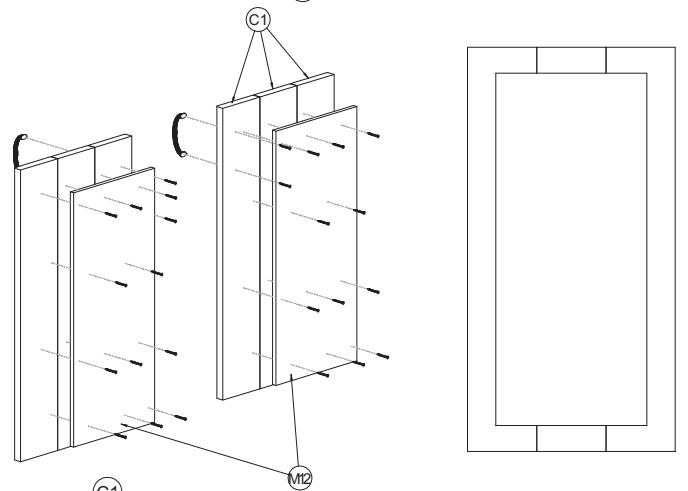


10 ASSEMBLE THE DOORS

10.1 For each door, glue three finishing boards C1 together to join them as illustrated. Make sure the sides with the routed (rounded-off) edges are all facing the same way (front). Lay them down on a perfectly flat surface and hold together with clamps.

10.2 Glue and screw (1 1/2" screws) door backing M12 to the middle of the back of each pre-assembled door front.

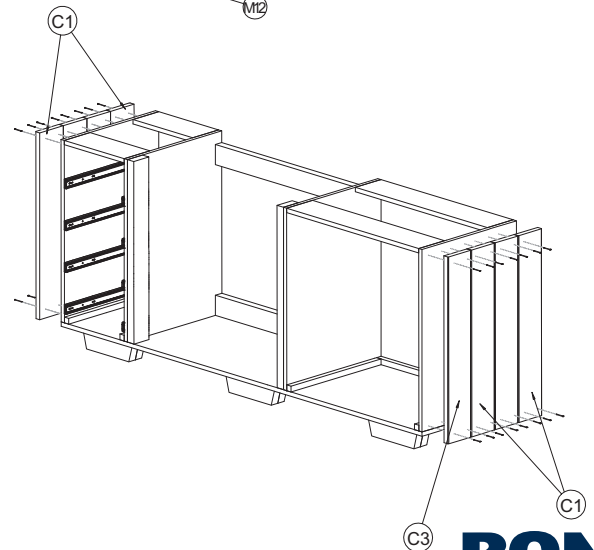
10.3 Screw the handles onto the doors.



11 ATTACH THE FINISHING BOARDS

11.1 Glue and nail (2" nails) finishing boards C1 to the sides of the unit.

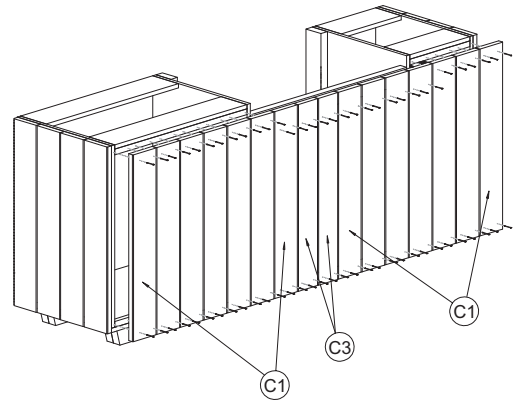
Note: for a more professional-looking finish and greater strength (especially if the unit needs to be moved), screw the boards (from the inside) instead of nailing them.



OUTDOOR KITCHEN ISLAND WITH PERGOLA

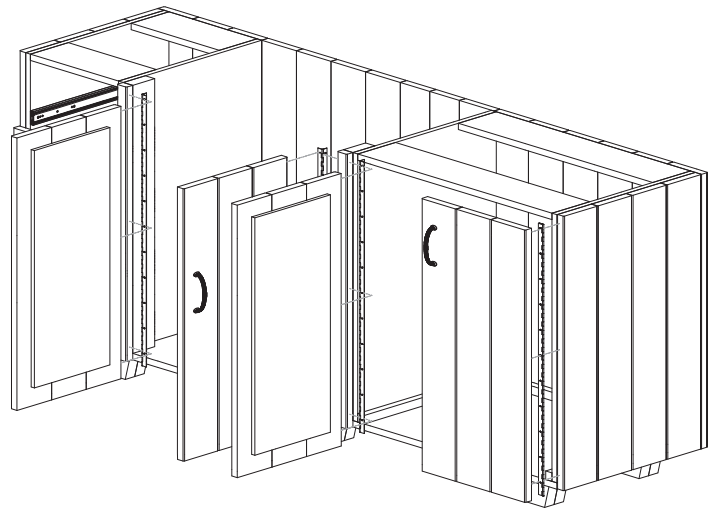
ASSEMBLY (CONT'D)

- 11.2** Glue and nail (2" nails) finishing boards C1 and C2 to the back of the unit. Follow the order shown in the illustration.

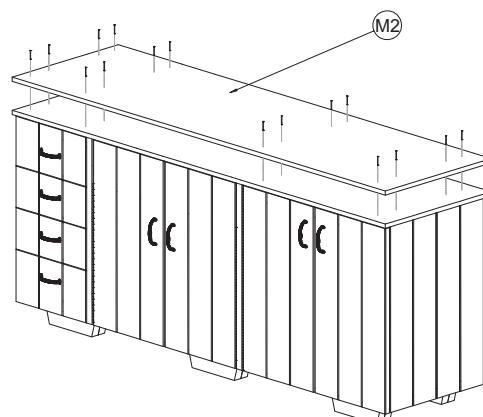
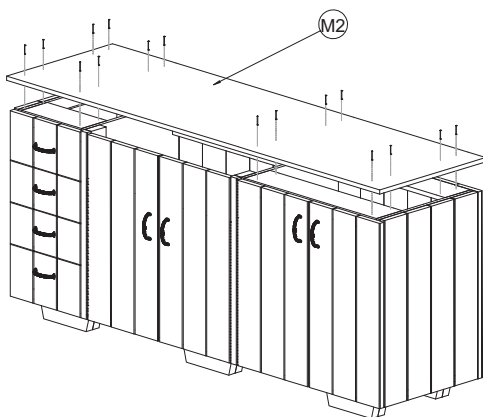


12 MOUNT THE DOORS

- 12.1** Screw (5/8" screws) the hinges to the doors.
- 12.2** Mount the doors by fastening (5/8" screws) their hinges to the edges of the finishing boards on either side of the openings.



13 FASTEN THE COUNTER TOPS



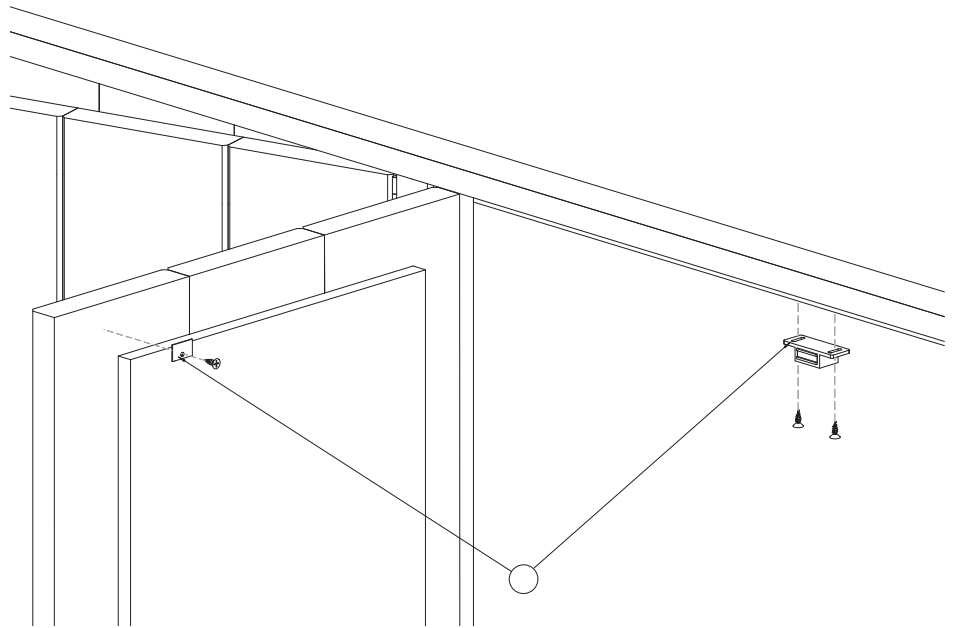
- 13.1** Glue and nail (1 1/2" nails) a counter top M2 to the top of the unit, making sure it is centred.
- 13.2** Glue and nail the second counter top M2 on top of the first, taking care to line up all the edges.

OUTDOOR KITCHEN ISLAND WITH PERGOLA

ASSEMBLY (CONT'D)

14 ATTACH THE MAGNETIC LATCHES

- 14.1 Screw the magnetic latches into position as shown.



15 CUT THE OPENINGS FOR THE SINK AND FAUCET

- 15.1 Trace the outline of the sink hole on the top of the counter, using the manufacturer's template.
- 15.2 Drill a 1/4" hole through the line.
- 15.3 Lower the jigsaw blade into the hole and cut out the sink opening.
- 15.4 Trace the outlines of the faucet holes.
- 15.5 Cut out the faucet holes.

16 TILE THE COUNTER

- 16.1 Tile the counter's top surface and edges. Some tiles will have to be cut to fit around the sink hole. The faucet holes can be cut with a diamond hole saw.
- 16.2 Seal the joints.

17 INSTALL THE SINK AND FAUCET

- 17.1 Insert the sink in the opening and attach it according to the manufacturer's instructions.
- 17.2 Insert the faucet tailpieces into the holes and caulk the base with silicone sealant.
- 17.3 Connect the water supply and drain pipes to the faucet and sink.

OUTDOOR KITCHEN ISLAND WITH PERGOLA

PERGOLA FOR OUTDOOR KITCHEN ISLAND

For greater stability, we recommend anchoring the pergola as follows:

- 1- On grass or earth: either use metal stakes to support the posts, or use 144" posts driven into the ground to a depth of 48".
- 2- On a wood or concrete surface: fasten the posts to metal brackets screwed to the floor.

TOOLS AND MATERIALS NEEDED

TOOLS

- > Table saw
- > Circular saw
- > Jigsaw or scroll saw
- > Router table
- > Driver drill
- > 1/2" drill bit at least 4" long
- > Monkey wrench
- > Hammer (or nailer)
- > Wood chisel
- > Measuring tape
- > Sandpaper
- > Pencil

MATERIALS

- > 4 cedar posts, 4" x 4" x 96"
- > 7 cedar beams, 2" x 6" x 120"
- > 2 cedar boards, 1 1/4" x 6" x 96"
- > 1 cedar privacy lattice, 48" x 96"
- > 8 - 3/8" x 8" bolts
- > 2 - 3/8" nuts
- > 8 metal washers

BEFORE ASSEMBLY

CUTTING LIST

Cedar posts, 4" x 4" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
A POST	4	3 1/2	96

Cedar privacy lattice, 48" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
B LATTICE	2	23 15/16	66 1/4

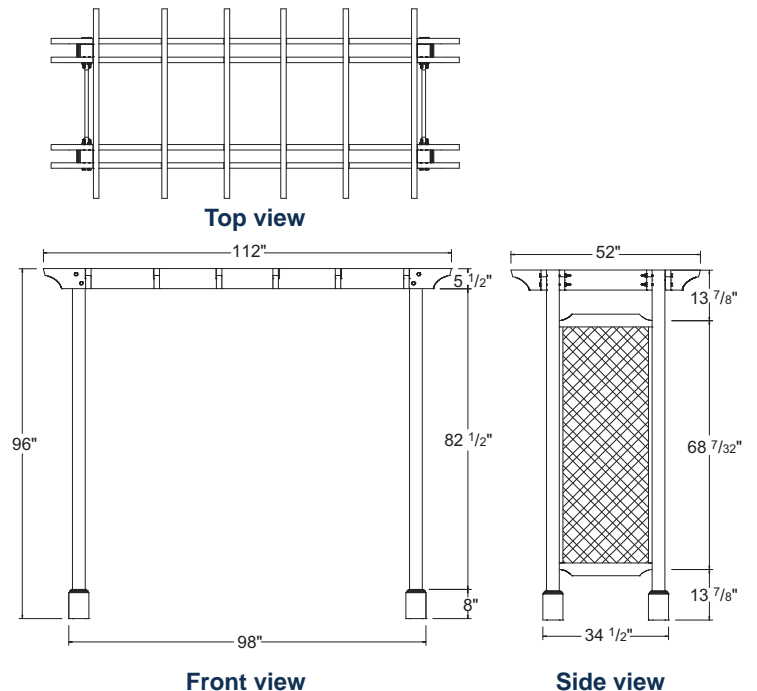
Cedar beams, 2" x 6" x 120"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
C LONG RAFTER	4	5 1/2	112
D SHORT RAFTER	6	5 1/2	52
G VERTICAL RAIL	4	1	64 3/4

Cedar boards, 1 1/4" x 6" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
E LATTICE TOP/BOTTOM	4	3 1/2	25 1/2
F POST BASE	16	5 1/2	8

ELEVATIONS

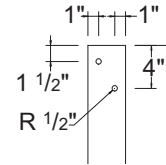


OUTDOOR KITCHEN ISLAND WITH PERGOLA

PREPARATION

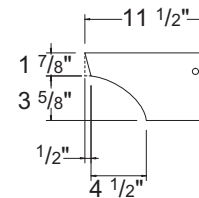
18 DRILL HOLES AT THE TOP OF POSTS A

- 18.1 Make a mark 1" from one edge of post A and 1 1/2" from its top, and another mark 1" from the opposite edge and 4" from the top, as shown.
- 18.2 Drill right through the post on each of these marks using a 3/8" bit.



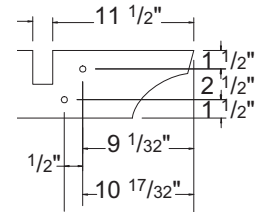
19 CUT THE ENDS OF RAFTERS C AND D

- 19.1 Using a circular template (e.g. a margarine tub lid), draw an arc 3 5/8" high and 5" wide on each end of rafters C and D.
- 19.2 Cut out the arcs with a jigsaw. Above each arc you will have an uncut portion 1 7/8" wide.
- 19.3 If you like, you can cut a triangle with a 1/2" base out of this 1 7/8" portion, so as to make an angle, as illustrated.
- 19.4 Lightly sand the cut edges.



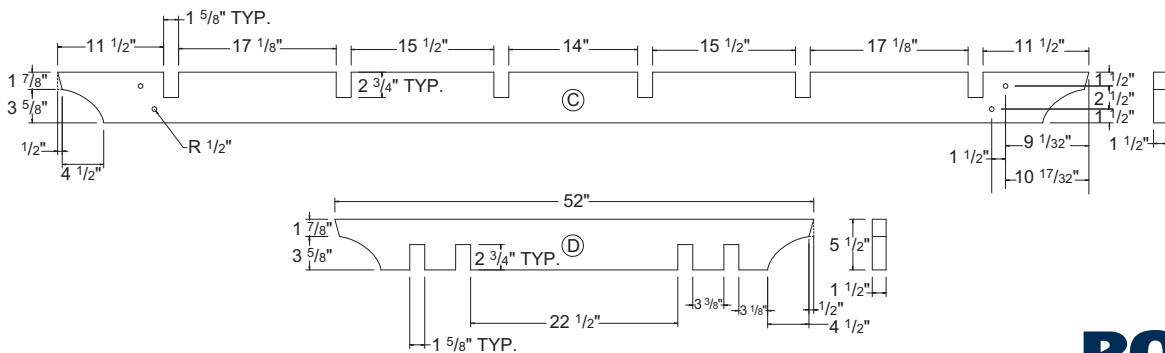
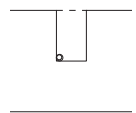
20 DRILL HOLES IN LONG RAFTERS C

- 20.1 Make a mark 1 1/2" from one edge of the rafter and 9 1/32" from its end, then another mark 1 1/2" from the opposite edge and 10 17/32" from the other end, as shown.
- 20.2 Drill right through each of these marks on rafter C using the 1/2" bit.



21 CUT THE NOTCHES IN RAFTERS C AND D

- 21.1 Mark the outlines of notches 1 5/8" wide by 2 3/4" deep on rafters C and D, in the locations shown.
- 21.2 With a 1/2" bit, drill a hole in an inside corner of each notch.
- 21.3 Using a jigsaw, cut along the lines marking the sides of the notches. **Note:** make sure that the blade only just cuts into the lines, so as not to cut the notches too big.
- 21.4 For each notch, insert the jigsaw blade into the hole made previously and cut along the bottom line to remove the block of wood.
- 21.5 Sand as necessary.

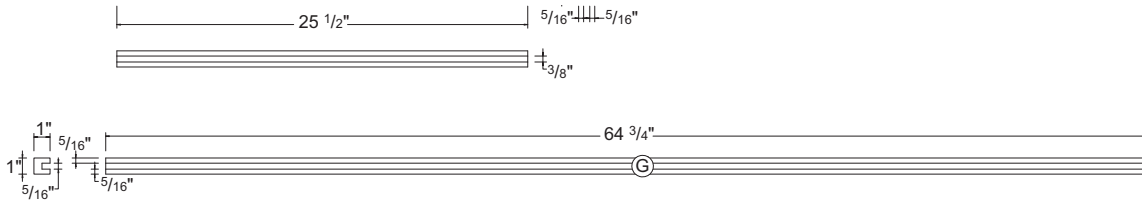


OUTDOOR KITCHEN ISLAND WITH PERGOLA

PREPARATION (CONT'D)

22 MAKE GROOVES IN LATTICE TOP/BOTTOM E AND IN VERTICAL RAILS G

22.1 Using a router equipped with a $\frac{3}{8}$ " bit, cut a groove along the entire length of one edge of each part E and G, in the centre of the thickness. You can also cut this groove on a table saw by moving the fence several times and making several passes until you reach the required width.



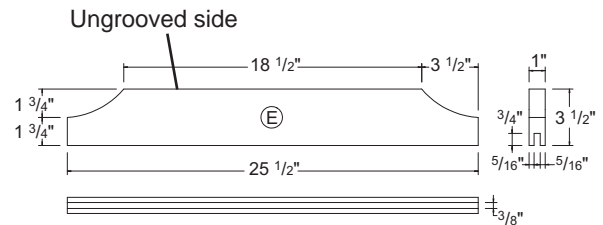
23 CUT THE ENDS OF LATTICE TOP/BOTTOM E

23.1 Using a circular template (e.g. a margarine tub lid), draw an arc $1\frac{3}{4}$ " high and $3\frac{1}{2}$ " wide on each end of lattice top and bottom E.

Note: these arcs must be made on the ungrooved side of E.

23.2 Cut out the arcs with a jigsaw.

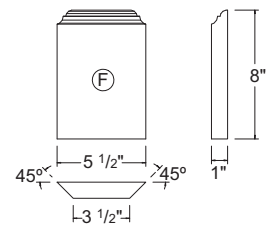
23.3 Lightly sand the cut edges.



24 ROUT AND CUT POST BASES F

24.1 Rout one of the $5\frac{1}{2}$ " ends of each post base F with your choice of router bit.

24.2 Using a table saw or sliding mitre saw, cut the sides of bases F at 45° , across their thickness, as illustrated.

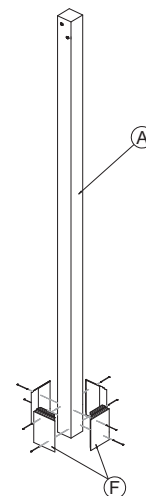


ASSEMBLY

25 ATTACH BASES F TO POSTS A

25.1 Nail all four bases F to the bottom of each post A.

Note: If the posts are going to be inserted into metal brackets for screwing down to the floor, bases F should be positioned just above the brackets. If the posts are going to be mounted on stakes, make bases F a little wider, in order to hide the metal bracket at the top of the stake. If the posts are going to be driven directly into the ground, bases F should be positioned just above ground level.

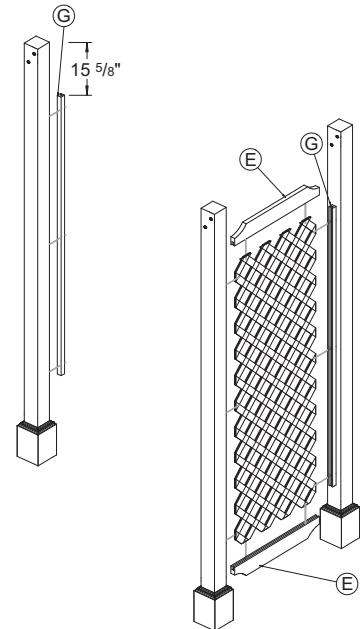


OUTDOOR KITCHEN ISLAND WITH PERGOLA

ASSEMBLY (CONT'D)

26 SCREW VERTICAL RAILS G TO POSTS A

- 26.1 Screw vertical side rails G to posts A, 15 5/8" from the top ends of the posts. Screw into the centre of the thickness of the posts.

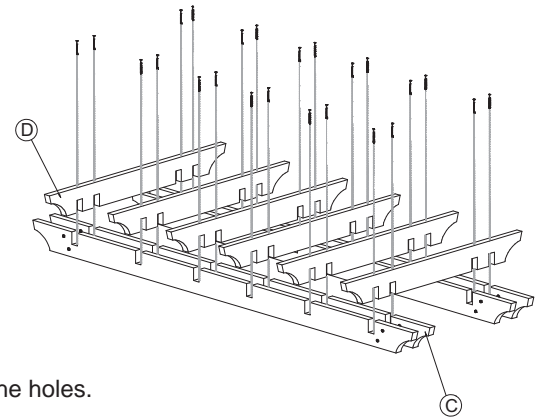


27 ATTACH LATTICES B TO POSTS A

- 27.1 Screw lattice bottom E under the ends of vertical rails G attached to the two posts.
- 27.2 Slide lattice B into the grooves on the vertical rails.
- 27.3 Screw lattice top E to the top ends of vertical rails G.

28 JOIN THE LONG AND SHORT RAFTERS (C AND D)

- 28.1 Assemble the rafters C and D as illustrated, so that their notches fit into one another. If you find the pieces hard to slot together, put a board on top of rafters D and hit it with a hammer or mallet to lock the pieces firmly together.
- 28.2 Screw all rafters D to rafters C.



29 BOLT THE ROOF ONTO POSTS A

- 29.1 Slide the top ends of posts A between the ends of rafters D, lining up the holes.
- 29.2 Insert bolts into the holes and fasten with the nuts. Tighten firmly.

