

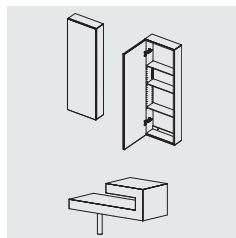
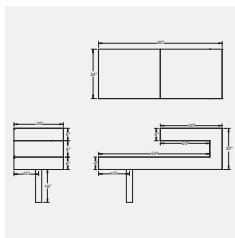
CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

CONSTRUCTION PLAN



Difficulty level: TT | MODERATE

Completion time: 1 day



CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

These elegant modern bathroom units – a vanity measuring 20" x 60" and a cabinet measuring 16" x 48" – feature sleek, simple lines and smooth, seamless surfaces that are free of knobs and handles.

A store-bought medicine cabinet and a backsplash in a complementary colour and finish harmoniously tie all the elements together to complete this contemporary look.

To complete the ensemble, a store-bought medicine cabinet is installed above the vanity. The two units are visually tied together with a backsplash, which can be made of white ceramic, laminate or any other material in a colour and finish that complements the overall look.



PLAN – VANITY UNIT

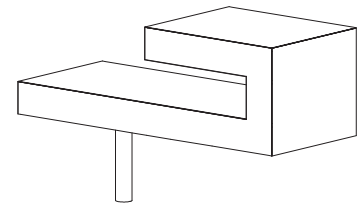
TOOLS AND MATERIALS NEEDED

TOOLS

- > Table saw with finishing blade
- > Driver drill
- > Fine-tooth jigsaw
- > Countersink bit
- > 1/4" bit
- > Hole cutter for drill
- > Hacksaw
- > Nailer
- > Measuring tape
- > Level
- > Pencil

MATERIALS

- > 2 sheets MDF, 5/8" x 48" x 96"
- > 2 sheets Formica laminate, 1/32" x 48" x 96" (special order)
- > 2 lengths pine, 1" x 1" x 96"
- > 1 steel (tube) furniture leg
- > Carpenter's glue
- > Contact adhesive
- > 1 1/4" nails for nailer
- > 2" nails for nailer
- > 3/4" No. 8 particle board screws
- > 1 1/4" No. 8 particle board screws
- > 3" No. 8 particle board screws



CONTACT ADHESIVE

Contact adhesive must always be applied to both surfaces, and each surface must then be left to dry for the manufacturer's recommended time – usually about 10-15 minutes. Then press the two surfaces together, applying pressure from the centre outwards. They will adhere instantly and do not need to be clamped. Once they are stuck, you will no longer be able to move or adjust them. It is therefore important to handle the parts carefully and position them accurately. Do this work in a well-ventilated room, away from excessive heat or open flame.

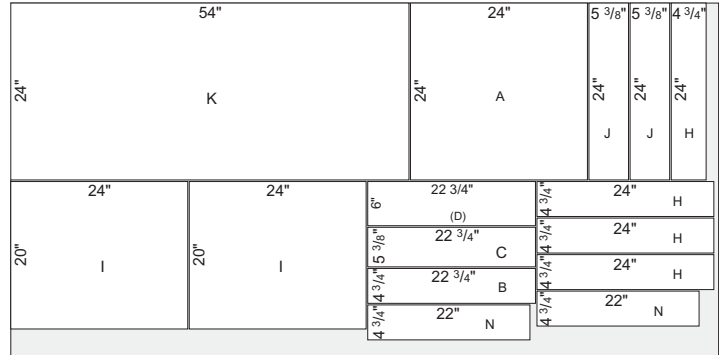
CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

BEFORE ASSEMBLY

CUTTING LIST

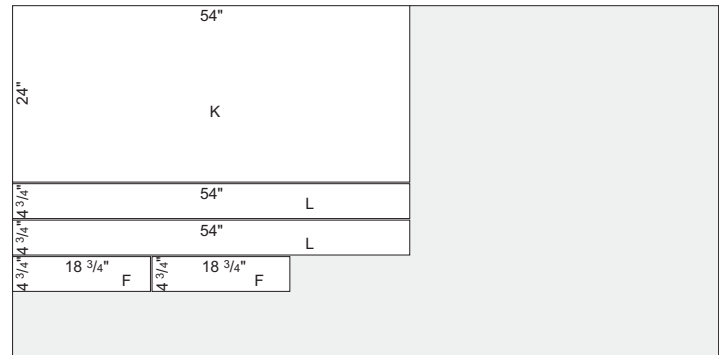
MDF, 5/8" x 48" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
A COUNTER TOP	1	24	24
B COUNTER FRONT	1	4 3/4	22 3/4
C COUNTER BACK	1	5 3/8	22 3/4
D COUNTER BOTTOM	1	6	22 3/4
F VERTICAL BOX FRONT/BACK	2	4 3/4	18 3/4
H BRACE	4	4 3/4	24
I VERTICAL BOX SIDE	2	20	24
J COUNTER SIDE	2	5 3/8	24
K SHELF TOP/BOTTOM	2	24	54
L SHELF FRONT/BACK	2	4 3/4	54
N BRACE	2	4 3/4	22



Formica laminate, 1/32" x 48" x 96"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
P COUNTER TOP OVERLAY	1	26	32
Q VERTICAL BOX EXTERIOR OVERLAY	1	22	26
R OVERLAY	4	8	26
S EDGE BANDING	1	1 1/4	20
T SHELF TOP OVERLAY	1	26	56
U FACADE OVERLAY	1	20 1/2	60 1/2

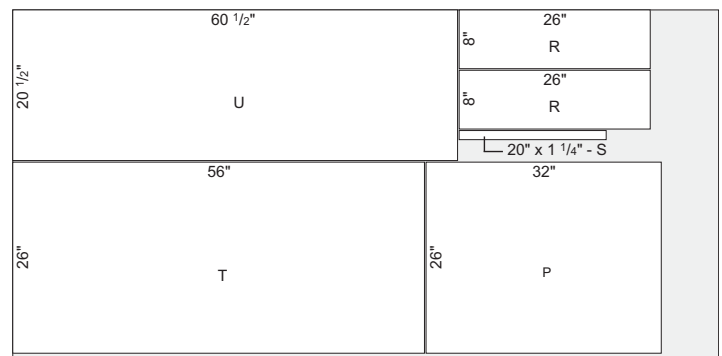


Steel (tube) furniture leg

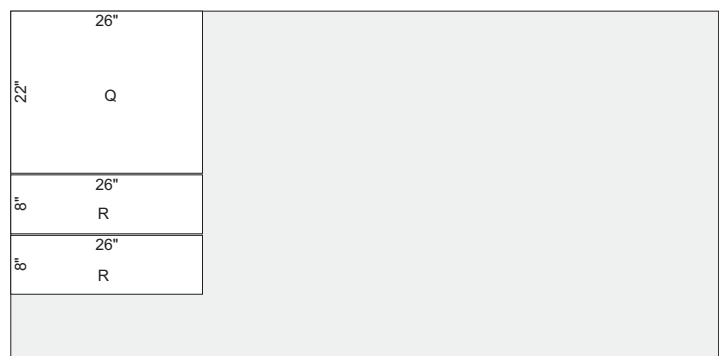
PIECES	QUANTITY	LENGTH (")
O LEG	1	Cut to height

Pine, 1" x 1" x 96"

PIECES	QUANTITY	LENGTH (")
E BRACE	2	22 3/4
G BRACE	2	18 3/4
M BRACE	2	52 3/4



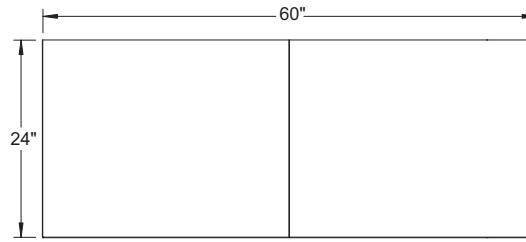
Note: The laminate can be cut with a table saw and finishing blade (which has many fine teeth).



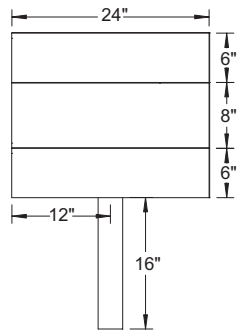
CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

BEFORE ASSEMBLY (CONT'D)

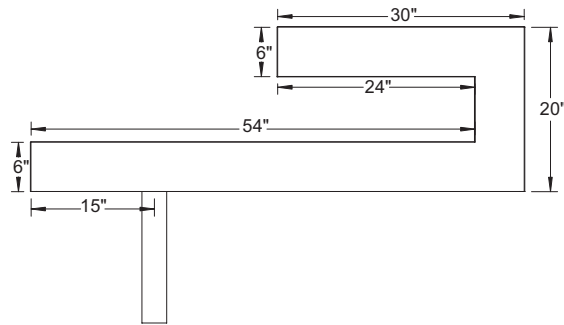
ELEVATIONS



Top view

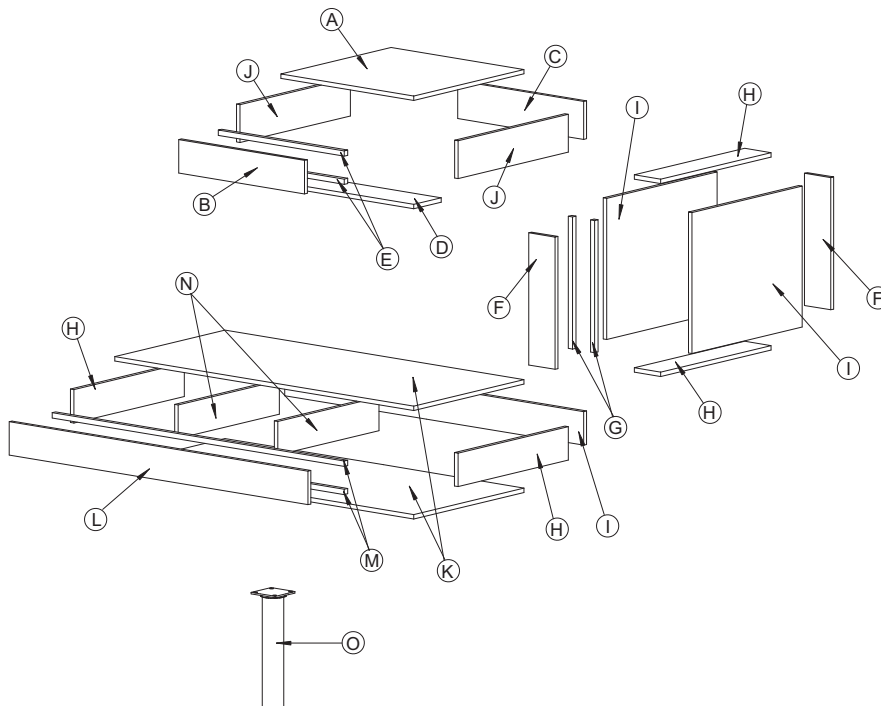


Side view



Front view

EXPLODED VIEWS

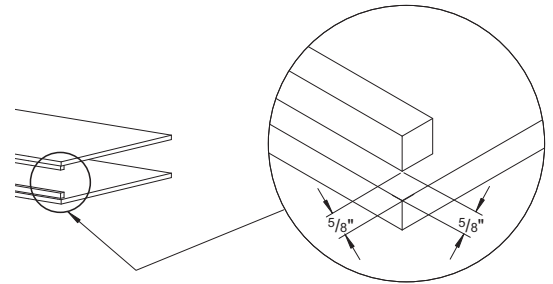


CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

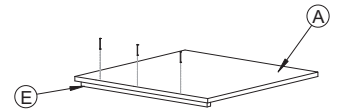
ASSEMBLY

GENERAL NOTES:

- All the parts are joined with carpenter's glue and nails (or screws, as indicated).
- Parts that are screwed together must be pre-drilled with a countersink bit.
- The braces (1" x 1" cleats) are nailed with 1 1/4" nails. All the other parts are joined with 2" nails.
- Each brace goes on the part of the piece that will be at the front of the finished unit. When the text mentions the back of a piece or assembly, it is therefore referring to the side opposite the side with the brace.
- The braces must be positioned 5/8" from the corners of the parts to which they are fastened.



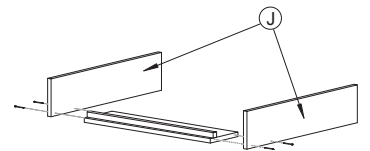
1 NAIL A BRACE E UNDER COUNTER TOP A (A-E ASSEMBLY)



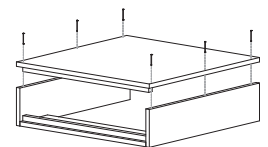
2 NAIL A BRACE E ONTO COUNTER BOTTOM D (D-E ASSEMBLY)



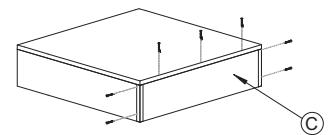
3 NAIL D-E ASSEMBLY BETWEEN TWO COUNTER SIDES J



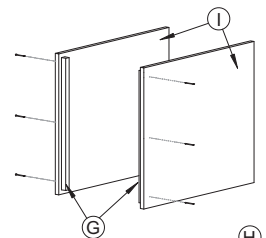
4 NAIL A-E ASSEMBLY TO D-E-J ASSEMBLY



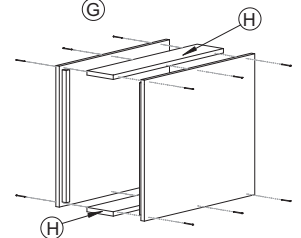
5 SCREW COUNTER BACK C TO THE BACK OF THE BOX FORMED BY PARTS A-D-E-J



6 NAIL A BRACE G TO EACH SIDE I (G-I ASSEMBLY)



7 NAIL TWO BRACES H BETWEEN THE ENDS OF THE G-I ASSEMBLIES



CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

ASSEMBLY (CONT'D)

- 8** SCREW VERTICAL BOX BACK F TO THE BACK OF THE BOX FORMED BY PARTS G-H-I.

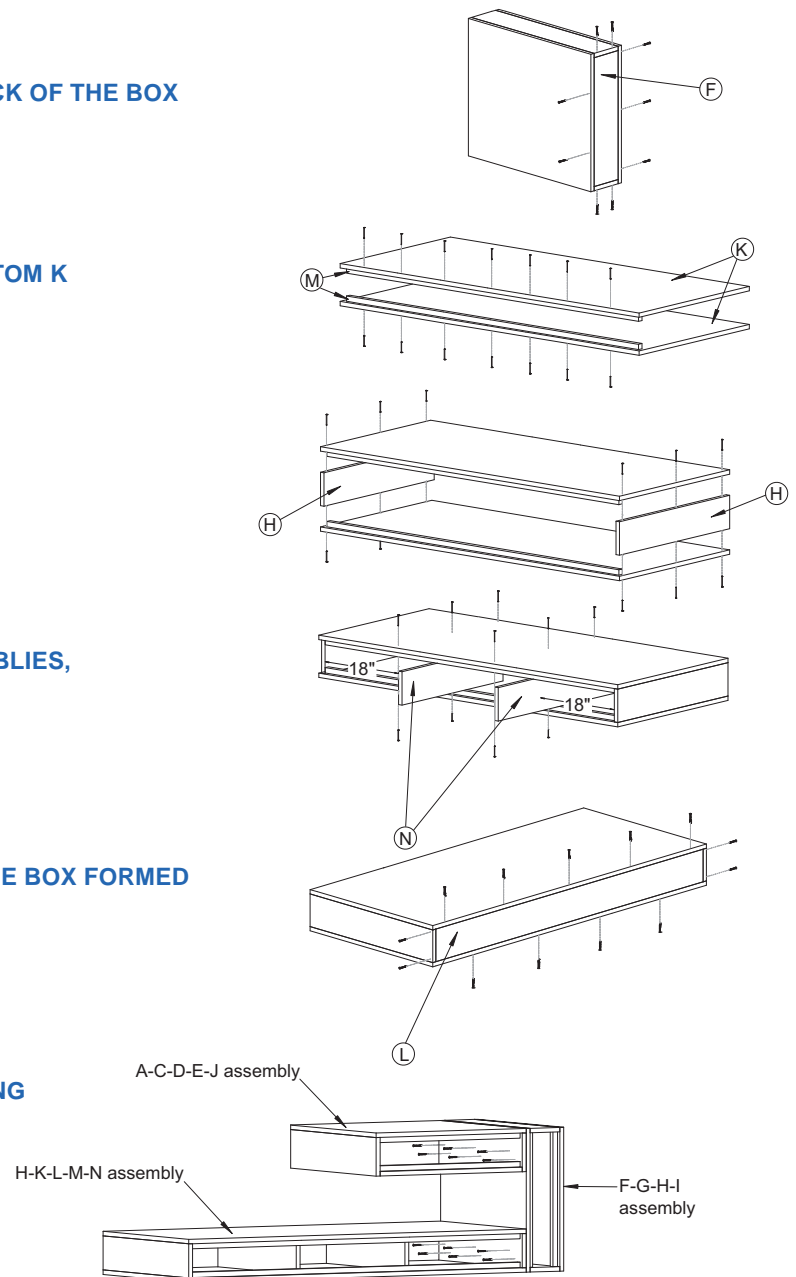
- 9** NAIL A BRACE M TO EACH SHELF TOP/BOTTOM K (K-M ASSEMBLIES)

- 10** NAIL TWO BRACES H BETWEEN THE ENDS OF THE K-M ASSEMBLIES

- 11** NAIL BRACES N BETWEEN THE K-M ASSEMBLIES, 18" FROM BRACES H

- 12** SCREW SHELF BACK L TO THE BACK OF THE BOX FORMED BY PARTS H-K-M-N

- 13** ASSEMBLE THE THREE BOXES BY SCREWING THEM TOGETHER FROM THE INSIDE



FINISHING

N.B.:

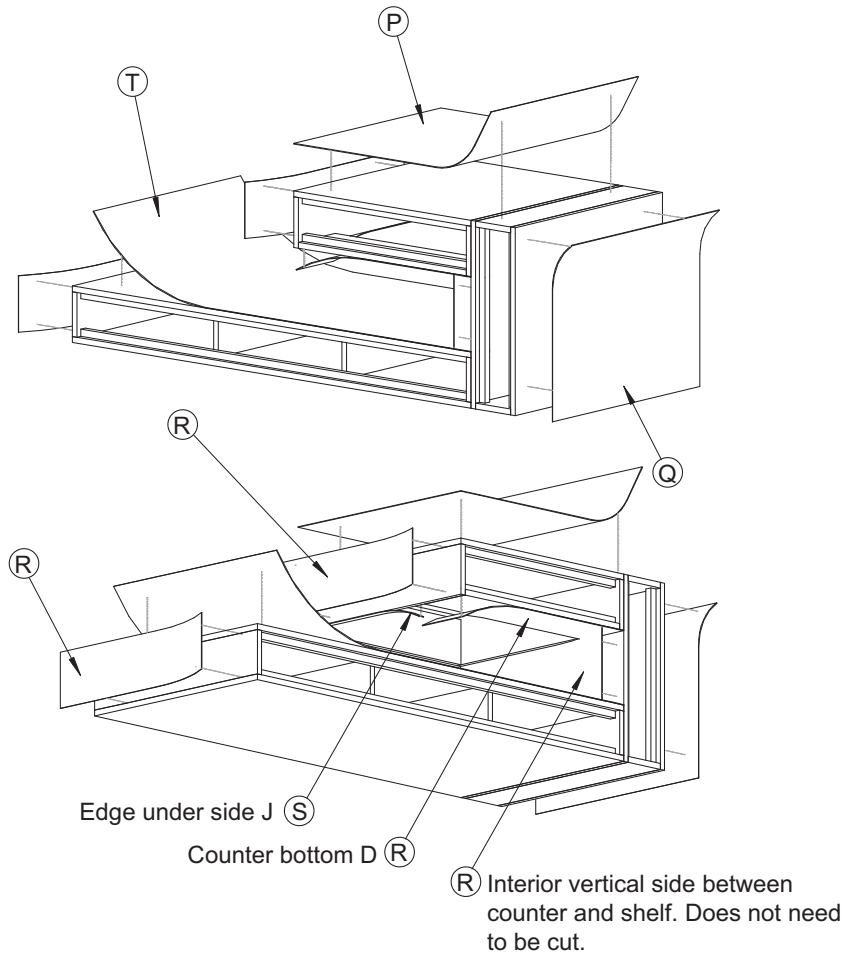
- The laminate overlay is glued with contact adhesive. Follow the manufacturer's instructions.
- Do not apply glue to all the parts and surfaces at once, otherwise by the time you come to attach the last parts they may not stick properly. Apply glue to one or two parts at a time, as well as onto the corresponding surface on the furniture.
- The sheets of overlay are all larger than the parts they have to cover, which means they must be filed down to size once they are in place. The only exception is piece R applied to the interior vertical side between the counter and shelf, which must stay its original size.
- Each overlay piece must be glued and then cut to size before installing the adjacent piece.
- The front (façade) overlay is installed at a later stage.
- The leg is fastened with $\frac{3}{4}$ " screws.

CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

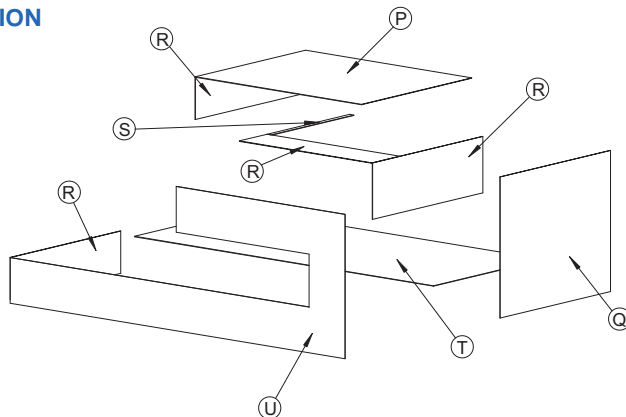
FINISHING (CONT'D)

14 INSTALL THE LAMINATE OVERLAY

- 14.1 Glue an overlay piece R to the interior vertical side, between the counter and the shelf. This laminate sheet is the only one that does not need to be re-cut after installation.
- 14.2 Choose another piece of pre-glued overlay (you can start anywhere) and centre it over the corresponding surface to be covered. Make sure it overlaps on all sides, then press it down well.
- 14.3 Cut away the excess laminate with a file, then move on to the adjacent piece.



EXPLODED VIEWS – LAMINATE INSTALLATION



CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

INSTALLATION

N.B.:

- The water supply lines and drainage pipes must be in place and ready to be hooked up to the faucet and sink.

15 MARK THE LOCATION OF THE UNIT

15.1 Make a mark on the wall where the vanity unit will be installed: 32" from the floor.

15.2 Have someone help you hold the vanity unit against the wall while you align the top of the counter with the mark made previously. Adjust the position of the unit sideways to line it up with the water pipes. You can also adjust the position upwards or downwards slightly, but not more than 1" either way. Once you have the unit in its final position, check for level and then pencil the contour onto the wall.

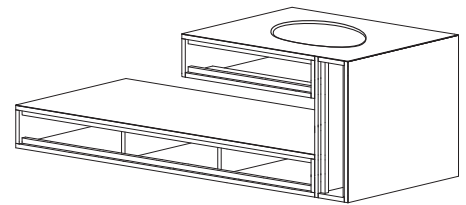
15.3 Still holding the unit in position, measure the height from the floor to the underside of the shelf, to obtain the height of the leg.

16 CUT THE OPENINGS FOR THE SINK AND FAUCET

16.1 Use the manufacturer's templates to mark the outline of the sink opening and the holes for the faucet supply lines.

16.2 Drill a 1/4"-wide hole on the sink outline, insert the jigsaw blade, then cut out the sink hole.

16.3 Drill the holes for the faucet on the top of the counter using a hole cutter or other suitable drill bit.

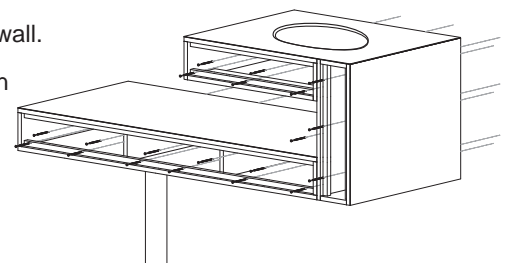
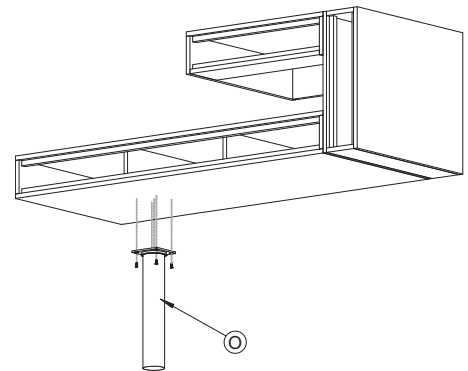


17 ATTACH THE LEG AND FASTEN THE VANITY TO THE WALL

17.1 Cut the leg to the previously measured height, then screw it to the underside of the vanity shelf, 15" from the far left-hand side and 12" from the front and back (see elevation).

17.2 Use a stud finder to locate the wall studs and mark their locations on the wall.

17.3 Line the unit up with the contour pencil lines made previously, check again for level, then fasten the unit to the wall studs with 3" screws.



CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

INSTALLATION (CONT'D)

18 INSTALL THE SINK AND CONNECT THE PLUMBING

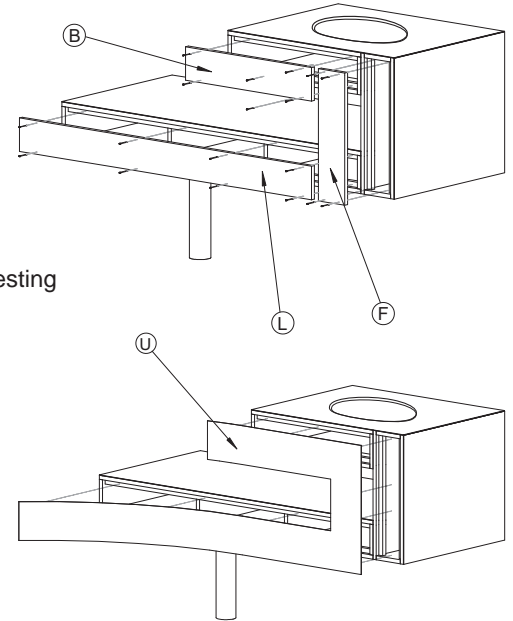
- 18.1 Install the sink according to the manufacturer's instructions.
- 18.2 Connect the P-trap to the sink and to the drain pipe.
- 18.3 Mount the faucet and connect it to the water supply lines.

19 INSTALL THE FRONT PARTS

- 19.1 Insert front parts B, F and L onto their respective boxes so that they are resting against the braces, then glue and nail them in place.

20 GLUE THE LAMINATE OVERLAY ONTO THE FACADE

- 20.1 Apply the pre-glued façade overlay sheet to the front of the vanity unit, positioning it so that it overlaps the surface on all sides, then press it down well.
- 20.2 Cut away the excess laminate with a file.



PLAN – CABINET

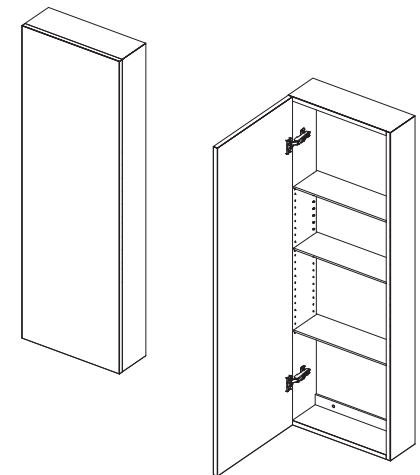
TOOLS AND MATERIALS NEEDED

TOOLS

- > Table saw with fine-tooth blade
- > Driver drill
- > 3/16" drill bit
- > 3/16" countersink bit
- > Depth stop
- > Nailer
- > Measuring tape
- > Pencil

MATERIALS

- > 1 sheet Masonite, 1/8" x 24" x 48"
- > 1 sheet MDF, 5/8" x 24" x 48" (special order)
- > 1 sheet Formica laminate, 1/32" x 24" x 48" (special order)
- > 6 shelf pins
- > 2 hinges
- > 3 glass shelves, 1/4" x 5" x 14 1/2"
- > Carpenter's glue
- > Contact adhesive
- > 1 1/4" nails for nailer



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.

CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

BEFORE ASSEMBLY

CUTTING LIST

MDF, 5/8" x 24" x 48"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
A SIDE	2	5 1/4	48
C TOP/BOTTOM	2	5 1/4	14 3/4
E DOOR	1	16	48

Masonite, 1/8" x 24" x 48"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
B BACK	1	15 3/8	47 3/8

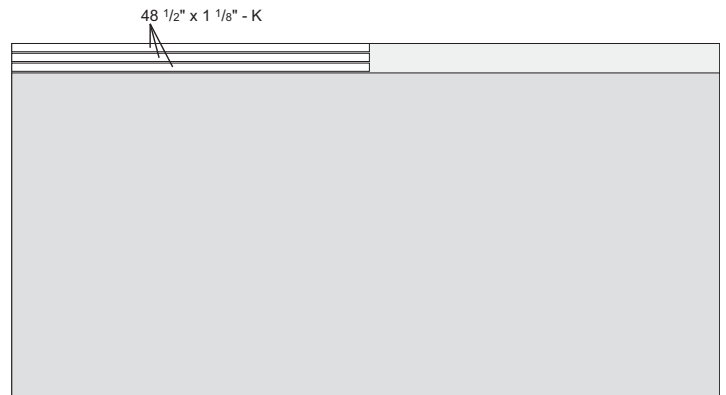
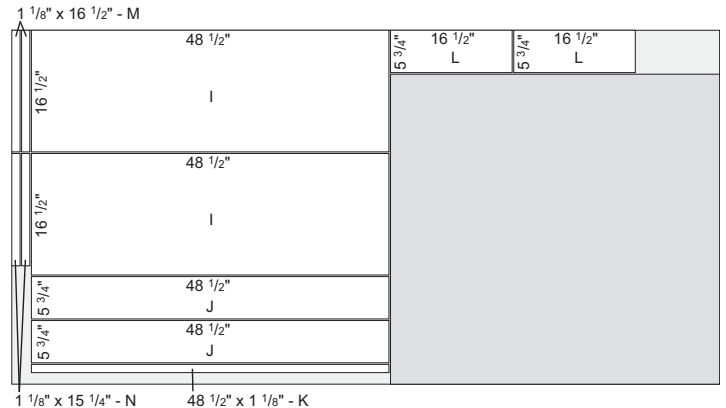
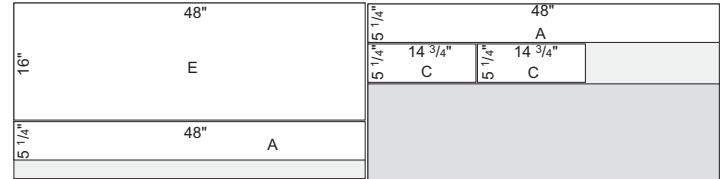
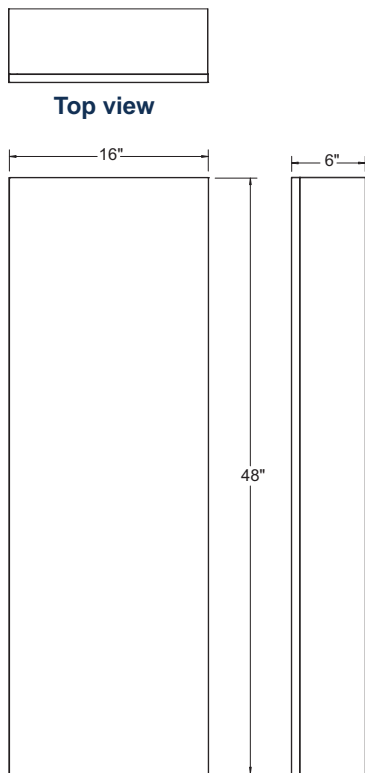
Pine, 1/4" x 1 1/2" x 96"

PIECES	QUANTITY	LENGTH (")
D BRACE	2	14 3/4

Formica laminate, 1/32" x 24" x 48"

PIECES	QUANTITY	WIDTH (")	LENGTH (")
I DOOR OVERLAY	2	16 1/2	48 1/2
J SIDE OVERLAY	2	5 3/4	48 1/2
K EDGE BANDING – LONG EDGE	4	1 1/8	48 1/2
L OVERLAY – TOP/BOTTOM	2	5 3/4	16 1/2
M EDGE BANDING – SHORT EDGE (DOOR)	2	1 1/8	16 1/2
N EDGE BANDING – SHORT EDGE (CABINET)	2	1 1/8	15 1/4

ELEVATIONS

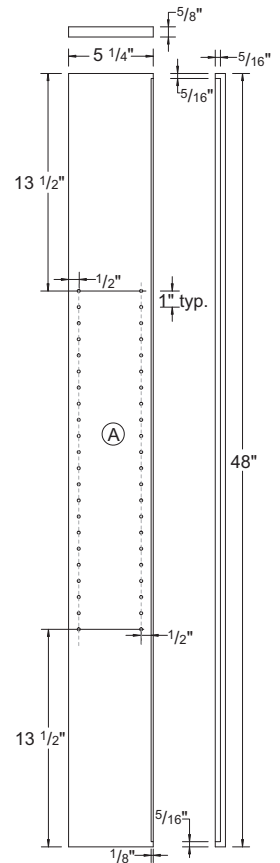


CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

PREPARATION

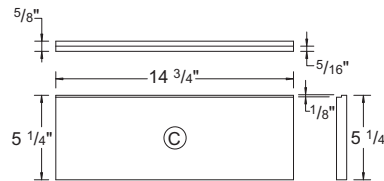
21 DRILL AND ROUT SIDES A

- 21.1 Using a router and straight bit, cut away $\frac{1}{8}$ " thickness of material by $\frac{5}{16}$ " wide along one long edge of each part A. Leave $\frac{5}{8}$ " intact (uncut) at each end.
- 21.2 Make a mark $13\frac{1}{2}$ " from each end of sides A, on one side only.
- 21.3 On the same side, draw a line between these two marks, $\frac{1}{2}$ " from each long edge of the part.
- 21.4 Mark the positions of the holes along this line, spaced at 1" intervals, centre to centre.
- 21.5 Drill these holes to a depth of $\frac{5}{16}$ ", using a drill with a $\frac{3}{16}$ " bit and a depth stop.



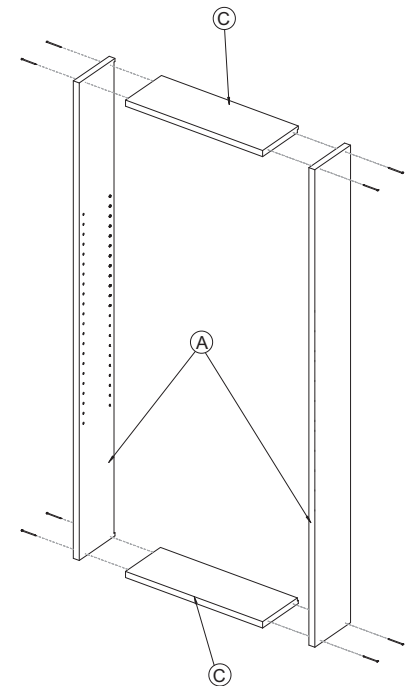
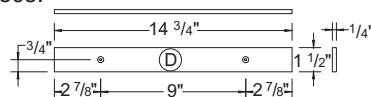
22 ROUT THE EDGE OF TOPS/BOTTOMS C

- 22.1 Using the router and straight bit, cut away $\frac{1}{8}$ " thickness of material by $\frac{5}{16}$ " wide along one long edge of each part C.



23 PRE-DRILL BRACES D

- 23.1 Using a countersink bit, drill a hole $2\frac{7}{8}$ " from each end of braces D, half-way across the piece.



ASSEMBLY

Parts A-B-C are glued with carpenter's glue and nailed with 2" nails.

24 FASTEN TOPS/BOTTOMS C BETWEEN SIDES A

- 24.1 Parts C must be flush with the ends of sides A.
- 24.2 The rabbeted edges made with the router must all be on the same side.

CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

ASSEMBLY (CONT'D)

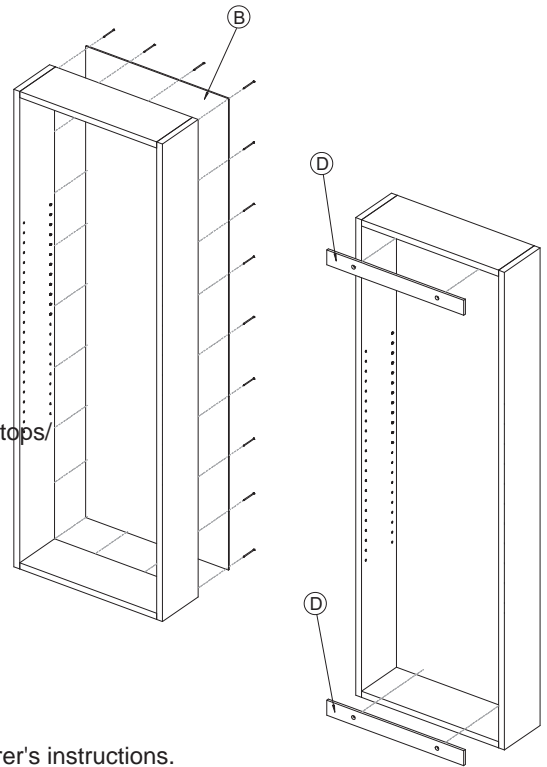
25 GLUE AND NAIL BACK B TO A-C ASSEMBLY

25.1 Insert back B into the rabbets in parts A-C, its finished side facing the inside of the box.

26 ATTACH BRACES D

26.1 Glue braces D onto back B, inside the cabinet. Press them against tops/bottoms C. Leave the glue to dry.

26.2 Drill holes in back B opposite the holes in braces D.



FINISHING

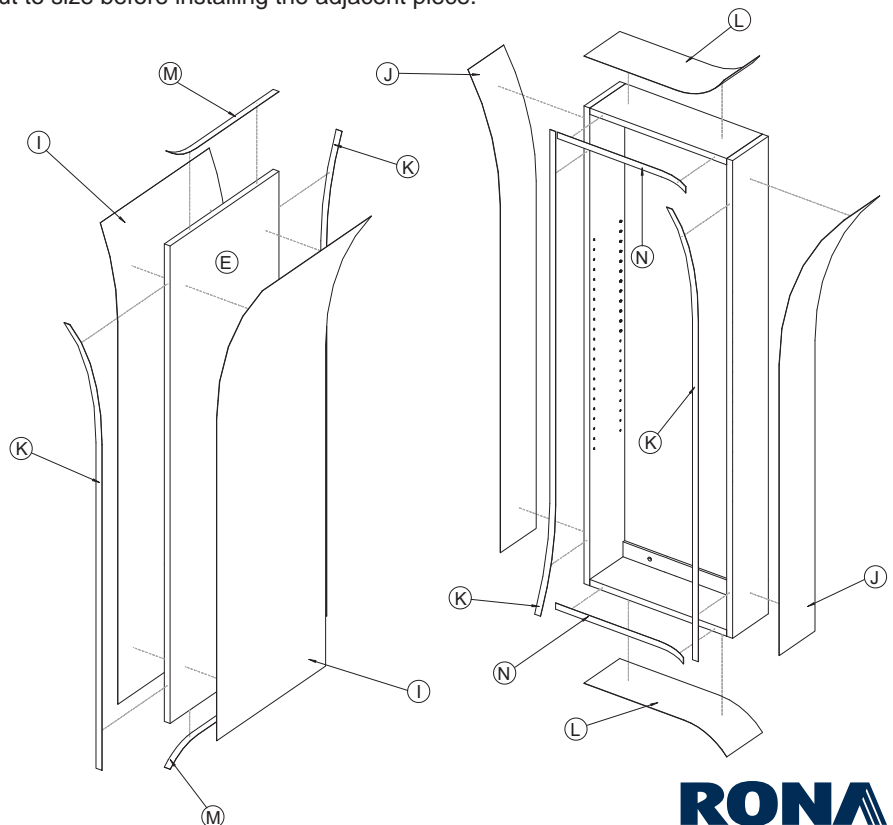
N.B.:

- The laminate overlay is glued with contact adhesive. Follow the manufacturer's instructions.
- Do not apply glue to all the parts and surfaces at once, otherwise by the time you come to attach the last parts they may not stick properly. Apply glue to one or two parts at a time, as well as onto the corresponding surface on the furniture.
- The sheets of overlay are all larger than the parts they have to cover, which means they must be filed down to size once they are in place.
- Each overlay piece must be glued and then cut to size before installing the adjacent piece.

27 APPLY THE LAMINATE OVERLAY TO THE DOOR AND FRAME

27.1 Place a pre-glued piece of overlay onto the centre of the part to be covered, so that it overlaps on all sides, then press it down well.

27.2 Cut the excess overlay with a file, then move on to the adjacent piece.

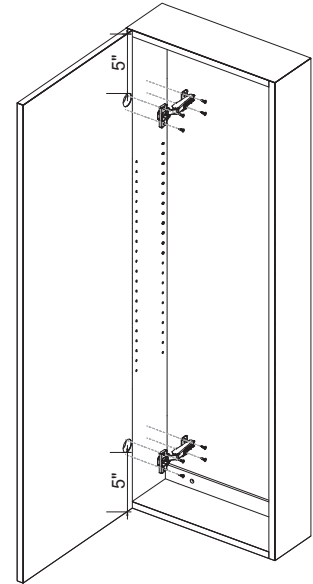


CONTEMPORARY-STYLE VANITY UNIT AND WALL CABINET

FINISHING (CONT'D)

28 INSTALL THE HINGES

- 28.1** Fasten the hinges to the door and to the frame, 5" from the top and the bottom, following the manufacturer's instructions. For some types of hinges, holes need to be drilled using a hinge bit or Forstner bit.



INSTALLATION

29 MOUNT THE CABINET ON THE WALL

- 29.1** Position the cabinet on the wall, check for level, and insert a pencil through each of the four holes in braces D to mark the location on the wall behind. Ask someone to hold the cabinet for you while you do this.
- 29.2** Locate the wall studs. If necessary, fasten anchor dowels to the wall on the marks made previously.
- 29.3** Secure the cabinet to the wall with 3" screws.

30 INSERT THE SHELVES

- 30.1** Insert the shelf pins into the holes at the desired heights, then insert the shelves.

