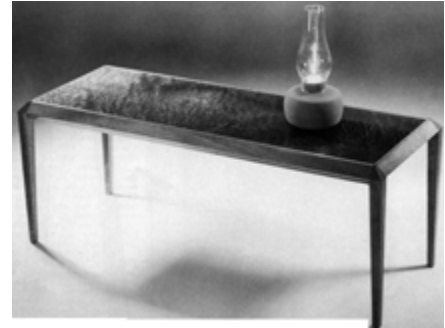


# Project 17631EZ: Contemporary Coffee Table

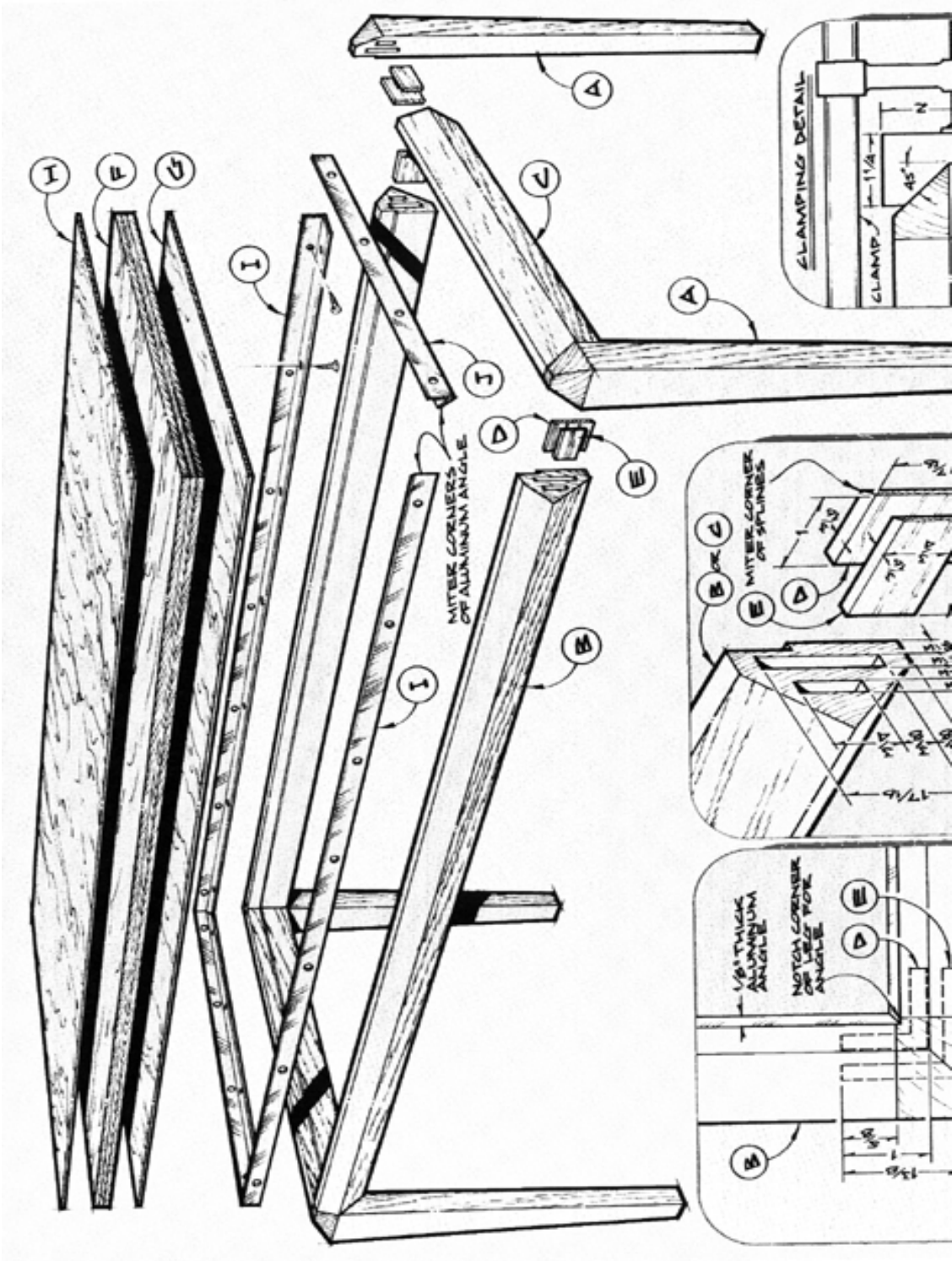


*Crisp, clean lines give this elegant little table a light and delicate look that's very pleasing to the eye. We used Honduras mahogany for all solid stock parts, with quilted mahogany veneer covering a birch plywood top. Aluminum angle is incorporated as a structural and decorative element.*

## Contemporary Coffee Table Materials List

| Part | Description         | Size                     | No. Req'd |
|------|---------------------|--------------------------|-----------|
| A    | Leg                 | 1-1/4" x 1-1/4" x 16"    | 4         |
| B    | Side Stretcher      | 1-1/4" x 2" x 40"        | 2         |
| C    | End Stretcher       | 1-1/4" x 2" x 13-3/4"    | 2         |
| D    | Wide Spline         | 3/16" x 1-7/16" x 1"     | 8         |
| E    | Narrow Spline       | 3/16" x 3/4" x 1-3/8"    | 8         |
| F    | Top                 | 3/4" x 13-5/8" x 39-7/8" | 1         |
| G    | Lower Laminate      | As required.             | 1         |
| H    | Upper Laminate      | As required.             | 1         |
| I    | Side Aluminum Angle | 3/4" x 3/4" x 40-1/8"    | 2         |
| J    | End Aluminum Angle  | 3/4" x 3/4" x 13-7/8"    | 2         |

# Contemporary Coffee Table Complete Schematic





# Contemporary Coffee Table Step-by-Step Instructions

1. Cut stock to 1-5/16" square x 16-1/16" long to begin making the four legs (A). **NOTE: Both dimensions allow a little extra material so that later, after assembly, the legs can be trimmed perfectly flush to the side stretchers (B) and the end stretchers (C).**
2. Lay out and mark the location of the mortises. **NOTE: The dimensions are measured from the top of the leg, which includes the 1/16" extra material to be trimmed flush after assembly.**
3. Use a sharp chisel to chop out each mortise, cutting and locating accurately to get clean, well-fitted joints.
4. Equip the table saw with a tapering jig.
5. Lay out and mark the tapers on the two outside surfaces of each leg.
6. Start at a point 15/16" from the top end (see mortise detail), and taper the stock to 11/16" at the bottom. **NOTE: This cut, like the ones before it, will leave some extra material to be trimmed off later on.**
7. Set the table saw to 90 degrees and the miter gauge to 45 degrees.
8. Set the miter gauge in the left hand slot to make the first 45-degree bevel on the top end of a leg.
9. Switch the miter gauge to the right hand slot and make the second bevel.
10. Do the same to cut the bevels on the rest of the legs.
11. Select stock that measures 1-1/4" thick x 2" wide to make the side and end stretchers.
12. Place stop blocks on an auxiliary fence clamped to the miter gauge to insure accurate cuts and tight joinery during assembly.
13. Cut the side stretchers to 40" long and the end stretchers to 13-3/4" long.
14. Lay out the mortises on the ends of each stretcher correctly.
15. Use a sharp chisel to cut the mortises accurately.
16. Set the table saw blade to 48 degrees.
17. Locate the rip fence 1/4" from the blade.
18. Use this table saw setup to cut the bevel on the lower edge of the stretcher (see stretcher detail).
19. Reset the table saw blade to 45 degrees.
20. Locate the rip fence 3/8" from the blade.
21. Use this table saw setup to cut the bevel on the upper edge of the stretcher.
22. Use the table saw or router table to cut the 3/4" wide x 1/16" deep rabbet that will accept the aluminum angle (parts I and J) to complete the work on the stretchers.

23. Cut the wide and narrow splines (parts D and E) from 3/16" thick stock.
  24. Miter one end of each piece to 45 degrees (see spline detail), making sure the grain runs in the direction shown.
  25. Begin assembly of the legs and stretchers by applying glue to the mortises and splines.
  26. Apply pressure with bar or pipe clamps, using clamp blocks to protect the beveled edge on the legs as shown in the clamping detail.
  27. Check for squareness and make adjustments as necessary.
  28. Allow the glue to dry, and then remove the clamps.
  29. Cut the 1/16" square x 3/4" long notch in the corner of each leg.
  30. Use a band saw to cut the 45-degree miters on each end.
  31. Use the disk sander to smooth the band saw cut.
  32. Clamp a board at 45 degrees on the disk sander table to help hold the aluminum at the proper angle.
  33. Cut the aluminum a bit longer than necessary.
  34. Drill and counterbore pilot holes in each aluminum angle (see exploded view for their approximate location).
  35. Use 1/2" long by #6 flathead wood screws to fasten the aluminum to the stretchers. **NOTE: The 3/4" x 1/16" rabbet in the stretchers comes in handy here as it serves to hold the aluminum in its proper location.**
  36. Cut the top (F) from 3/4" birch plywood to a width of 14" and a length of 40-1/2". **NOTE: The length and width dimensions allow extra stock.**
  37. Carefully measure the exact width and length of the opening for the top. **NOTE: The top should have a snug, sliding fit all around.**
  38. Cut the top to final length and width to fit the opening.
  39. Remove the top.
  40. Cut the 3/4" wide rabbet all around the bottom edge, making sure that the depth of the rabbet is such that the top is flush with the top edge of the aluminum.
  41. Use 1/2" long by #6 flathead wood screws to screw the top to the bottom leg of the aluminum.
  42. Sand the top end of the legs so they are flush with the stretchers.
  43. Plane, scrape, or sand the remaining areas of the legs.
  44. Sand the stretchers.
  45. Sand or scrape the top lightly with a cabinet scraper. **NOTE: The veneer is thin so don't overdo it or you risk sanding into the plywood.**
  46. Finish as desired.
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