

An Elegant Poster Bed "Made Simple"



The dictionary defines a bed as: An article of furniture to sleep or rest on. From the beginning of the age of enlightenment, man has gone well beyond this simple definition. The bed has become the most glorious piece of necessary household furniture in history. There have been so many elaboration's of the same basic components that it would make quite a list of designs. Every culture claims at least one rendition of the "Bed" to be its own. Through the years, I have had the extreme pleasure of building many different bed concepts for both lodging establishments, and individuals around the country. At some point along the way, I decided to blend some of the best features of several bed styles into one.

The English "poster bed" features four tall corners that are either turned, tapered, or in some cases, kept square. Sometimes in these beds the top is resolved as a canopy that is held up by the four corners. On the other hand, the provincial style bed features the use of curves in the head and foot boards as well as in the skirting. Both of these disciplines will often times incorporate the use of draperies that make the sleeping spaces very private. Where Provincial styled pieces are not necessarily elegant, they do have style. The English renditions are courtly by design, and offer a lot to choose from when looking for features to elaborate upon for a new design. My "elegant poster bed" borrows a little from both of these styles, and at the same time has many amenities of it's own. This bed is quite simple to build, and would be an admirable addition to any home.

The bed that was decided upon for the purpose of this article was built for a standard queen sized box spring and mattress. The length and width of the bed are a specific set of dimensions, but the height, of course is optional. I decided upon 84" high which works good in just about any room. Keep in mind that the cutting list, and dimensions given in this article may change according to the mattress size, and height that are chosen. This bed was built of nominal size, (already surfaced), 4/4 Alder which can be purchased by the board ft., (random width and length), or pre-dimensioned at the mill. Any specie can be substituted according to shop capabilities, material availability, or personal taste.

As with any building project we will start with the foundation. The core of the sleeper base is built as a rectangular plywood frame with ribs (figure 1). I rip one plywood or composition 3/4" x 4' x 8' panel into six strips that are 7 7/8" wide by 8' long. This formula allows 1/8" for each saw kerf which means there will be no remnants or waste. This cutting procedure will yield enough material to make a base that is 75 1/4" by 44 1/2". After this has been built a three sided mitered layer of 3/4" finished plywood is added onto the butt-jointed base to eliminate any unsightly plywood edges, or screw heads. The dimensions of the sleeper base will be 7 7/8" high x 46" wide x 76" long when completed.. This fully assembled base will support the plywood bottom panels, (two - 3/4" x 30 3/4"W x 87"L), and leave 8" of overhang on the two long sides, and the front

(figure 2). Incidentally, the two remnants from the full sheets used for the bottom panels can be cut down for the outside finished plywood layer of the sleeper base.



Figure 1



Figure 2

Once the base has been completed, focus can be turned to the four corner columns. These columns serve as the structuring from which all else is suspended. For these parts you should start with some relatively flat, and straight pieces of $\frac{13}{16}$ " thick material, (if nominally size hardwood is used). Cut four pieces that are 5"W. x 83 $\frac{1}{4}$ "L, and four pieces which are 5 $\frac{13}{16}$ "W. x 83 $\frac{1}{4}$ "L. These eight pieces will go together in a butt-joint fashion (figure 3) to make the four corner columns which will later be routed with a traditional shape to minimize the glue seam.



Figure 3



Figure 4

Once the parts have been cut, they should be laid out in order on the bench, and marked for biscuit or dowel jointing (figure 4). The upper outside edges of the columns will have a scrolled detail which begins 5" down from the top. Because this shape is typical on both sides of the individual columns, I usually will cut the detail on one of the smaller parts, (before assembly), and then use this piece as a template for the seven remaining parts. This way I am assured that the detail will be perfectly aligned on all four of the columns (figure 5). A flat bench, or counter top serves as a good strong back while gluing. Make sure that you use a framing square on the inside while clamping (figure 6). To correct any tilting that may occur, just adjust the individual clamp angle while tightening that area of the post. If this is done while working from one end to the other, the entire post will dry square.



Figure 5



Figure 6



Figure 7

After the columns have been fabricated, the indent notches can be cut into all four corners of the plywood platform (figure 7). Note that this is an area of the plywood which overhangs the sleeper base. The corner columns start at the floor, and give an independent support to the bed frame which is separate from the sleeper base. Attached to the plywood edges with 2" counter sunk screws, the columns are "tacked" in place while the rest of the parts are being cut and fit (figure 8). The screw heads in this area are ultimately covered by either the bottom plinth blocks, or one of the bottom perimeter trim pieces. On final installation a hardwood corner block will be attached to the underside of the notched plywood where it meets the columns.



Figure 8

In the next step, the upper skirt boards are fit to the top of the corner columns. These four perimeter boards have a many fold purpose. Primarily used to square, and strengthen the top portion of the bed, they are also a means of tying the posts together in an aesthetic way. The skirt boards also serve to support the top canopy frame. At the widest area of detail the skirt boards are all $6 \frac{3}{4}$ " wide. The scroll pattern is a little different according to the two different lengths, but both patterns begin at 5" wide on the ends. When designing a pattern of your own, try using the same approach of drawing, and cutting one quadrant, and using it as your template for the rest of the parts.

After all four boards have been scrolled, and edge sanded, (ready for routing), the ends can be prepared for biscuit, or dowel jointing. At this point, the two shorter skirts on the ends, or width of the bed, can be permanently glued to the corner columns. The back of the bed which will ultimately become the headboard, has the top skirt board only to be glued into place. This can be done by simply separating the two columns at the top, (which are attached to the plywood base), just enough to fit the glued board, and its biscuits or dowels. The front, or foot of the bed, will have two "rails" to contend with (figure 9). The bottom skirt, which is the same length as the top skirt, ($50 \frac{3}{4}$ "), is cut $6 \frac{1}{2}$ " wide. Because this skirt rests on the plywood bottom between the two columns, one of the columns will have to be removed temporarily during the gluing process. The idea here is that when all is said and done, these assemblies at each end of the bed will become two completed sections which can be removed for transporting, and installation purposes.



Figure 9

With the two ends of the bed glued, and in place, the top skirt boards can be fitted. These boards will be approximately 75 1/2" long for this size mattress, but it is a good idea to measure the distance at the bottom between the posts just above the plywood, and then cut the top skirts accordingly. These boards are not glued into place because they must be removable for transportation. While the clamps are holding the biscuited, or doweled boards in place, a diagonal screw is driven in each corner into the posts. The clamps can then be removed without fear of the boards coming loose. Now the main structure of the bed is complete.



Figure 11

At this point we move back to the headboard end of the bed. Remember, this end has only the top board glued in place, and is tacked to the plywood at the bottom. A frame can now be built on the inside of the columns which not only completes the structure, but is also used to nail the headboard pieces (figure 11). The height of this back panel is approximately 35" from the plywood deck. About 20" of that will be covered by the mattress at the bottom so it is a matter of opinion whether the finished panel should continue all the way down to the top of the plywood. I do run mine all of the way down. For this size mattress width, you will need twelve pieces 5 1/16" wide to complete the panel. For this bed I used a V-groove and bead treatment where the boards come together on the edges. I also used a simple pre-stained, loose spline system so you will never see daylight if the boards expand, and contract. I always lay the boards out on the bench first to achieve the exact size that I need before they are installed (figure 12). Depending upon your equipment, or taste, you may elect to use another type of headboard treatment such

as a frame, and beveled panel for your bed. I have made them many different ways, and they all look good.



Figure 12

With the headboard complete, it is time to focus on the top frame and crown skirt. The top frame is made of four pieces that are $\frac{13}{16}$ thick, and $5\frac{3}{4}$ " W. This formula allows for about $2\frac{1}{2}$ " of overhang on the sides, and front, and still leaves room to screw the frame down to the top skirts and posts. For this size bed, the boards are cut to $89\frac{5}{8}$ "L, and 56"L. A simple butt joint with biscuits, or dowels is used for this frame. Once the boards are ready, the frame can be clamped and glued together right on top of the bed (figure 13). This will save floor space etc.



Figure 13

The crown skirt pieces which occurs under the top frame is applied during the final installation. This piece will run on the two sides and front only. These pieces which are $\frac{13}{16}$ " X $2\frac{1}{4}$ " wide should be edge shaped with a shaper or router. They are then mitered on the ends where the pieces meet, (figure 14), and kept square in the back where the bed will go against the wall. I attach this piece with screws from the back so that it can be removed if the bed ever has to be relocated. You may elect to use a different type of crown skirt, again depending upon your capabilities, and taste. Remember the piece is a mix of both French provincial, and English so there is a lot of play in the area of design.



Figure 14

There are two side bottom retainer boards which also go on during the final installation (figure 15). I put a heavy bull nose on the edges of all three retainer boards due to their precarious positioning. The front retainer board, which is an important part of the end frame, is already in place.



Figure 15

Now all that is left on our bed is the garnishing. I like the use of boots, or plinths, (also shown in figure 15), on all four corners of the bed. The headboard section only requires plinths on each side, but the fronts should have a two piece mitered plinth which encompasses the whole corner. These blocks not only cover the screws which hold the columns to the plywood bottom, but also serve to protect the column where it meets the floor. All of the plinths should be screwed on from the back so that they can be easily removed. There is also a plywood edge on three sides which has to be covered. For this I use a simple molding which is 1/2" X 13/16". This piece can be made from some of the downfall edges of the solid stock. A simple traditional shape should be routed on both of the edges on this piece.