Platform Bed – Bill of Materials

Two sheets of suitable plywood:About \$40.00 eachBolts, washers, wing nuts:About \$4.0010 Cinder blocks (6" x 8" x8"):About \$0.80 eachPacking tape:About \$4.00Cost:Approximately \$100 (Dec 2008).

I had intended to use a couple of 36" x 80" hollow core doors to make a platform for my new California King, memory foam mattress (84" x 72"). Looking over the available doors and other materials, we decided to use plywood instead (two 48" x 96" sheets). The store was willing to cut the materials at almost no cost, so that influenced our decision.

I had the store cut off a 12" x 48" board from each sheet of plywood, leaving 48" x 84" pieces. Then they cut off a 12" x 84" board from the remaining pieces (leaving two 36" x 84" sheets for the platform). The 12" boards are used beneath the platform for stability and support. I had the 12" x 84" boards cut to 12" x 72 ", but you will see from the photos that 12" x 66" would probably be better. They actually charged me \$1.00 for two extra cuts (no biggie).

The platform is supported by the four 12" boards, 12" x 48" boards near the head and foot, and the two 12" X 72" boards closer to the center. In the first photo, you can see how the materials fit together. By spacing the cinder blocks (6" x 8" x 8") carefully, there is room between them for under-bed storage containers. You can also see that the longer support boards go to the edge of the platform. A better design would be to shorten them, so they wouldn't show much.



## Photo 1... Inverted Platform

In the second picture, you see the assembled platform, and may notice that I bolted (using wing nuts below) the platform to the supporting boards. Without access to a shop, I just decided to put clear packing tape on all the edges and bolts to prevent splinters. The wood grain looks great, but a nice finish would make this project look even better.



Photo 2 ... Bolted together, edges taped.

Photo 3 shows the finished project. The mattress and platform do seem to float, and the dimensions are such that you are unlikely to hit the platform with your shin! I never understood platform beds with hard edges beyond the mattress dimensions. Placing the (rather heavy) mattress onto the platform would be a problem if the whole thing weren't bolted together well. Yet the design (and use of wing nuts) make the whole thing modular enough to disassemble and move (say to paint the room). The base is very sturdy, and I believe will not sag anywhere. We tested it by jumping and walking on top of the bed.



Photo 3 ... It floats!

It has storage underneath, but needs only a clever headboard design.

Awaiting inspiration... and blue tape.

Brian Smith – Dec. 2008 http://www.datasmitty.com/gallery/Platform-Bed

The next step was to design the headboard. We began by putting blue painter's tape on the wall at "just the right height. A number of clunky designs came and went, but finally we saw an example in a furniture store that we thought we could mimic. It was a "floating padded headboard."

The finished project is in the next photo, followed by some of the steps in putting it all together.



The padded headboard hangs on the wall, slightly above the top of the mattress. There are no legs required, just a clever system to hang it from the wallboard.

Here is a fairly accurate bill of materials (Labor Day Weekend, 2009):

1 sheet 24" x 48" plywood (3/8" thick).	\$6
1 sheet 24" x 24" plywood	\$4
Two boards 1" x 4" x 5' (five feet).	\$4 total
Multiple sets of French Cleat hangers (four actually)	\$8 each
24" x 72" x 2" foam	\$32
27" x 2 1/3 yards batting	\$8
2 1/3 yards Ultra Suede material	\$42

## Roughly

\$94 + tax

Compared to the price of the mattress, this is all just the cost of another fun weekend project. And, we love our mattress!!!

So here's how we did it.



French Cleats on the 1" x 4" and on the wall. The blue paper tape estimates the size and location for the headboard.

Tip: Do NOT put the French Cleats at the edge of the 1" x 4" like we did. The cheap pine boards are likely to split, but only when you are about 97% finished! Go for the middle.



Of course the board hangs on the wall, and it needs only to be approximately level. You will see why shortly. The other 1 x 4 holds the two pieces of cheap plywood together.



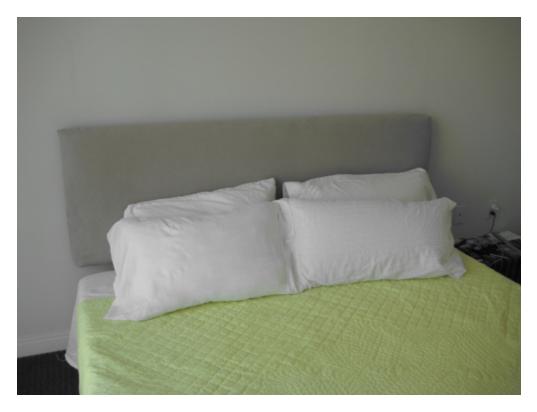
Next, turn the plywood section around and level it. Screw it to the other 1" x 4" on the wall.



This needs to be fairly level and the right height. It worked out well for us. Here is the sandwich: the fabric, the batting, the foam, the plywood. We did the project right on the bed.



Next there came a lot of stapling, tugging, folding, trimming (and a few exclamations). Sorry, I didn't get photos, and I don't want to mislead you: getting the corners right took some patience and concentration. Pretend you're wrapping a package.



Finally, a good headboard merits some nice reading lights. One light is more expensive than the whole platform and headboard! Some things can't be done on the cheap.

We chose Bruck LED lights – they provide enough light to read by at night, don't use much electricity, and should last for-ev-er.



