In Search of a Better Bunk Bed

Reprinted from Camp Business Magazine *February 2007*

First, I'm going to guess that it's been quite a while since you've slept in one of your camp bunk beds. If you had, they'd be a higher priority.

Second, I'll bet your bunk beds are a pain in the neck (and back). Worst case, they're old, metal army-style cots that sag in the middle, squeak all night, and don't have safety guardrails. Maybe they're made out of wood, but even then they have four feet on the floor that we have to sweep around, four feet to scratch the floor when they get dragged around and left willy-nilly by the guests, and then there's still that darn squeak.

To start with, let's get rid of all four feet. That's right, hang 'em from the ceiling and the walls. Just run a 2x3 at the bunk's corner right up to the ceiling and bolt it to a joist. Easy to clean the floors, and it looks like a tree house. Add another 2x3 with some thick dowels in between and you've got a safe ladder to get up and down from the top bunk. Bolt the back sides of the bunks to the walls and they'll be strong enough for an army and won't squeak a peep. Use a piece of ½" OSB (Oriented Strand Board, the inexpensive and forgiving plywood substitute) as the foundation, and glue and screw it into place.

How big? Most standard camp beds are only 30" wide. (How wide are *you* these days?) My suggestion is to go 36" wide. More room to roll over, but more important, fitted sheets will fit the mattress. And make the mattress at least 5" thick. Still economical, but much more comfortable.

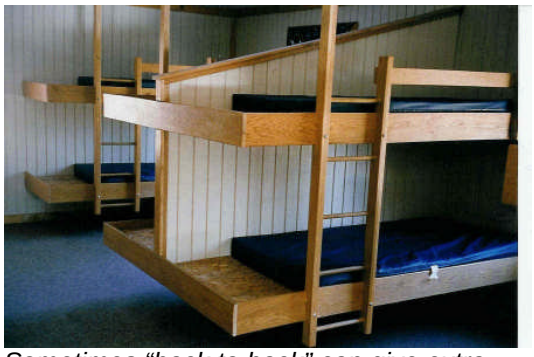
How long to make each bunk? Longer. Ever try to sleep on your stomach with no-place to put your toes? At least make your bunks 6'-6" long. But if your OSB comes 8' long, why cut it off? I always use the full length, giving the campers and guests extra space at the head of their bed as a built-in "night stand" for their ditty bag, stuffed animals, (and for chaperones) their cell phone and glasses. Really want to do it right? Add a duplex outlet (for a small fan, cell charger, etc) and a wall-mounted reading light.

The accompanying photos should get you started, but here's a few more details so you can go right to work.

If you're really on a tight budget, you can do everything out of 2-by framing lumber. But it's amazing how much nicer it will look, feel, and wear if you spend just a little more time. We use 2x3s to make the bed frame, covered with the 37" x 96" piece of OSB glued and screwed down. One for the upper bunk, one for the lower. Why 2x3 instead of 2x4? It gives an inch more seated headroom to both upper and lower beds, and for the ladder it just looks more like furniture than a 2x4 would. Here's the nice detail: surround the frame with a piece of 5/4" x 6" glued and screwed to the face of the 2x3. This creates a "boat" that holds the mattress nicely in place and gives a rounded, finished edge to the wood that's easier on the hands and looks more like real furniture. My first

choice is to do it out of oak, but we've done well with Southern Yellow Pine, too. I'd avoid pine or fir or cedar, as they're too soft and wear too quickly.

We make the ladders ahead of time in the shop; one side is the 2x3 that runs long to the roof (or through the ceiling) to be bolted to a rafter or a jack bolted across two rafters; the other side of the ladder sticks up high enough to catch the end of the guardrail. The rungs can be either be 2x3s laid flat like a ships ladder between the uprights in a slight dado (notch), or my favorite for looks and ease, 1 ½" closet rod glued in holes drilled 2/3rd of the way through. Feels solid in a camper's hand and round under foot.



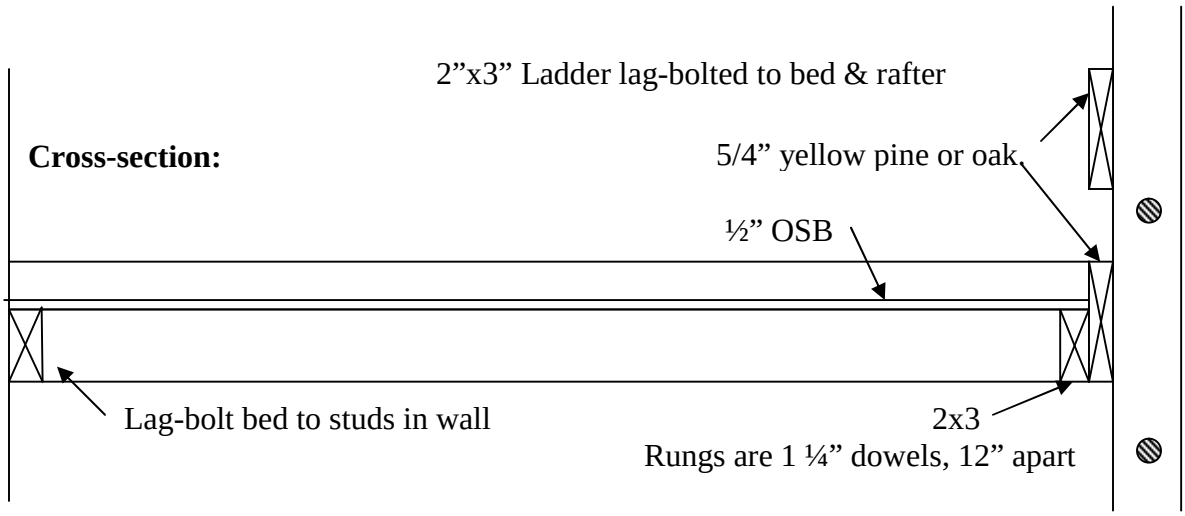
Sometimes "back to back" can give extra floor space and a little privacy.

The bed "boats" are lag-screwed directly to the walls while being temporarily braced on the outside by "story-poles" (2x4s with cleats at the right heights to hold the "boats" up with jiffy-clamps.). The ladder then looks for a ceiling or roof joist to be carriage-bolted to when it's cut to length. Then it's bolted to each of the bed frames. Counter-sink the nuts on the inside so the mattress doesn't get ripped. Some people put the lower bunk so the top of the mattress is 18" off the floor so it's comfortable to sit on. I suggest just a little higher so standard Rubbermaid ® footlockers will slide underneath. The "headroom" distance between the top of the lower bed frame and the bottom of the upper bed frame is typically 35" in store-bought beds. Adjust that depending on how much headroom you have for the guy in the upper bunk.

The final step is to add a guard rail from the short ladder upright to the wall (or end of the bunk). The important dimension here is the distance *between* the top edge of the bed frame (the 5/4 x 6" if you used my surfacing suggestion) and the bottom of the identical 5/4 x 6" guard rail. By code it can't be more than 4". That's so a young child's head can't fit through the gap. The top of the guard rail must be at least 5" above the top of the mattress when installed. You can check your dimensions against the federal standards at http://www.cpsc.gov/businfo/bbletter.html

If your bunk beds stick out into the room, you'll need an addition 2x3 support hung from the ceiling, and additional guard rails, too. But I discourage you from sticking the beds into the room "barracks style." Kids feel much safer having a wall on one side so the can't be "snuck up on." More important, it frees up a lot of floor space for sitting or playing in the middle of the room. Windows? Just put guard-rails in front of them. If you're designing a new cabin, have separate slider windows (sideways) for the top and bottom bunk. Not enough wall space? If you're going to stick a bunk out into the room, why not do it twice and put them back-to-back (see photo.) By putting sheets of plywood in between you save all the extra space between beds, again creating much needed floor space.

Finally, if you're smart you'll do all the finishing on the beds before you bring them to the cabin. That includes giving them a coat of a golden-oak urethane stain (nothing too dark so it doesn't show when it starts to wear). Another smart trick is to paint both sides of the OSB with dark brown porch paint. For the bottom side, it prevents graffiti because what camper will write their name if no one will see it? For the top side it prevents mildew and stains from a "liquid accident." (Back when I was a counselor, we called them "Midnight Sailors!")



Only have inexpensive materials and little space? It still works.

Big room? Tons of fun!

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