



Building a Raised Platform Garden Railroad

A raised platform garden railroad is built more like a deck than a rock garden. But it:

- Vastly reduces maintenance and weeding,
- Uses materials and approaches designed to last a lifetime,
- Uses tools most people own already,
- Improves track support, and
- Costs about the same to install as a traditional garden railroad.

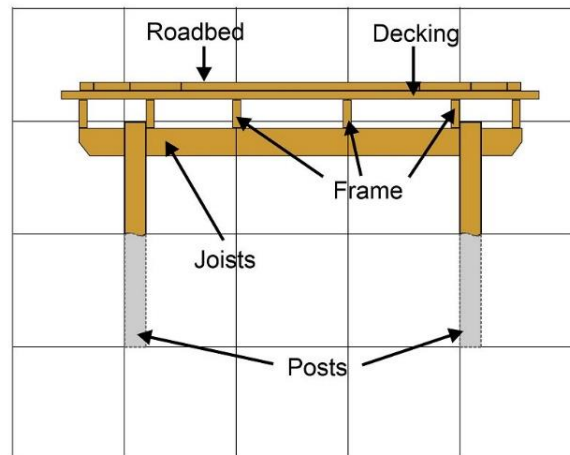
And once the structure is sound and your track is laid, you can plant all sorts of things. Think of it as an oversized window-box, if that helps.

Basic Construction Principles

For this article, we describe a small platform that uses methods and materials I have found most useful.

This example uses 4"x4"s for the posts and 2"x6"s for everything else. I use ground-rated lumber throughout, since the platform will be exposed to moisture above and below.

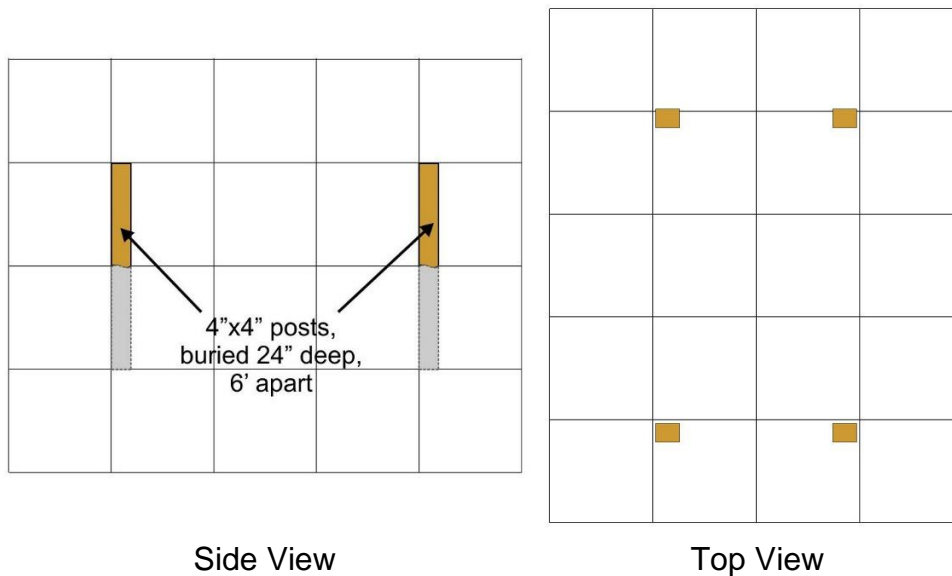
The platform itself will be a tad over 6'x8' and will have plenty of room to hold two loops of track, using 4' and 5'-diameter curves (LGB calls these R1 and R2). At the same time, most people would be able to reach most of the platform from a standing position.



The grids in this article all represent 2'x2' squares. Though you don't plan on holding parties on the platforms, you may wind up having to climb up on it for some reason eventually. For that reason, I recommend at least consulting your local codes for building backyard decks that people *will* be standing on.

Posts

The most common and cheapest way to get your railroad up off the ground is with ground-rated 4"x4" posts.



In this example, I assumed that two 4"x4"x8' posts have been cut in half, and buried 24" into the ground. That's just below the frost line in Ohio and the minimum for deck construction in many states.

Because the largest span they recommend for 2"x6" joists (below) is 6', I have put my posts 6' apart "lengthwise," while leaving the 4' apart the other way, to make access to the center of the platform easier.

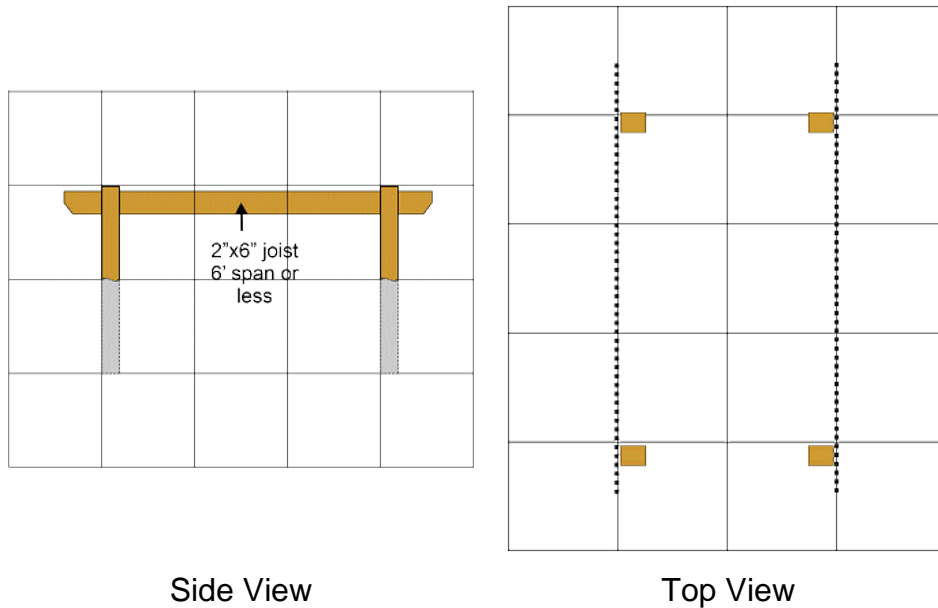
If you need deeper posts or want the railroad higher, all you have to do is buy longer posts - the cost of the rest of the project doesn't change.

Joists

These are boards that run between the posts. They will eventually support the frame. I use 2"x6"x12' boards for these, as they're about as large as I can easily handle, and they are very solid once they're installed properly.

In my example, the joists extend beyond the post up to 12" at either end. (Such an overhang is called a "cantilever," if you want to compare my example to your local codes.)

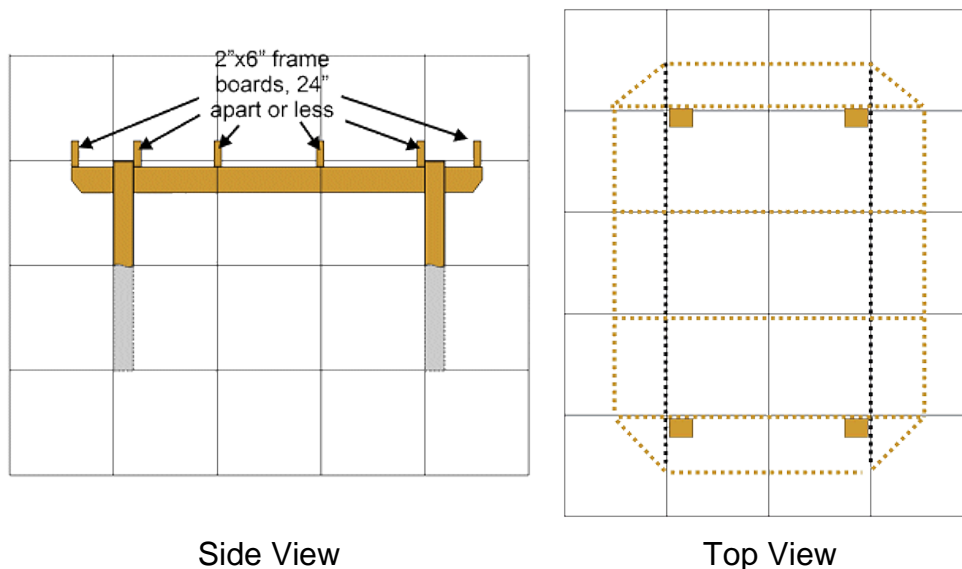
Since I'm using the same boards for the frame, the joists can be up to 6' apart. In this example, I chose to put them 4' apart. That way you'll still be able to reach most of the finished railroad without climbing on it. In the graphic to the right below, the joists are represented by the black dotted line.



Having the post sticking up a little is fine, because you can fasten the frame to it for extra stability. For cosmetics, I saw the lower corner off my joists.

Frame

If you plan to use 2"x6"s for the decking, the frame boards can be up to 24" apart. (Most other materials require 16".) Note that on the ends, I extend the frame boards 12" beyond the joists, another "cantilevering" practice.

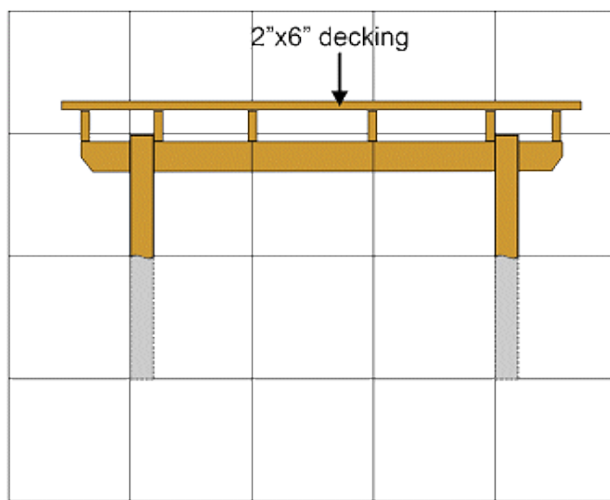


Before you start building the frame, measure each post to make certain it won't protrude above the frame itself – it will interfere with the decking.

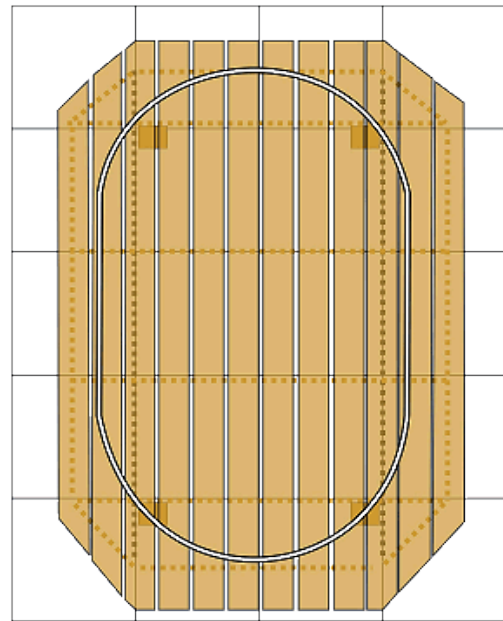
I attach the frame boards to each other with 3" screws made for pressure-treated wood. If a frame board goes up against the stub of a post, I fasten it to that to give a little extra strength. Each place a frame board crosses a joist, I "toenail" the frame to the joist.

Decking

Ground-rated 2"x6" boards, running perpendicular to the frame boards make the structure more solid, and resist moisture. Be sure and leave 1/2" gaps between the boards where you can.



Side View



Top View

When I'm fastening the deck boards down, I leave a few extra inches on the ends. Then I set the track where I think it's going to lay before deciding exactly how to trim the edges. This also gives me a bit of "fudge factor" in case I underestimated how much room the track curves would require.

In the photo to the right, you can see a line I drew along the edge so I would know where to trim the boards. You may use curves instead of straight lines if you prefer.



Liner

Even if you've used ground-rated boards for the decking, it's a good idea to keep the dirt away from the lumber itself.

I like to use an impermeable membrane like heavy black plastic or used billboard vinyl, which is often available for under .15 a foot. I staple it down to the decking and around the edges.



Don't worry about patching it – you'll need to poke holes in it for drainage anyway, so water doesn't pool up and flood things or kill your thyme.

By the way, so-called weed-resistant "landscaping fabric" is useless for this purpose. Weeds will take root in it eventually, no matter how long the supposed warranty, and when you pull them out, you will pull everything else up at the same time.

Trim

Consider putting a little "lip" on the edge of the platform to slow dirt and gravel from sliding off the edge. I use pressure-treated fencing board, sliced in half and trimmed it to fit.

I align the lower edge of the trim with the lower edge of the deck boards. This usually gives me a lip that is 3/4" or so high, enough to corral ballast, gravel, or dirt.

If you want the edges of your platform rounded off, you can use vinyl trim "boards" from the siding section of your hardware store.



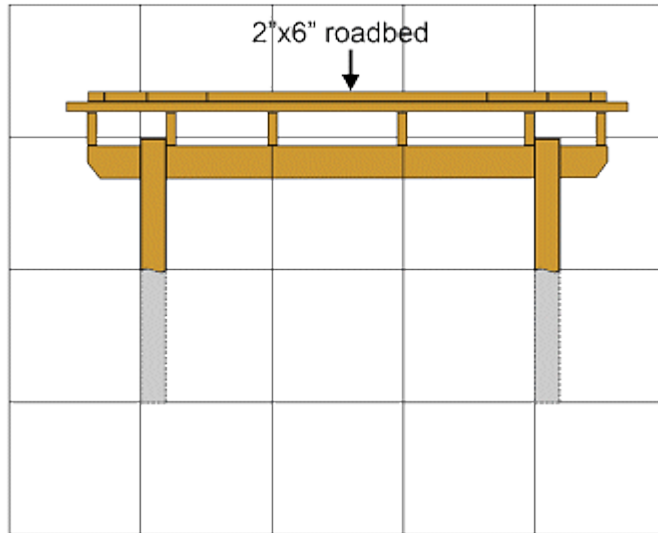
Roadbed

The final mechanical part of my process includes cutting 2"x6" lumber to go under the track all the way around. This helps to keep the track from becoming uneven even if the decking boards warp in years to come.

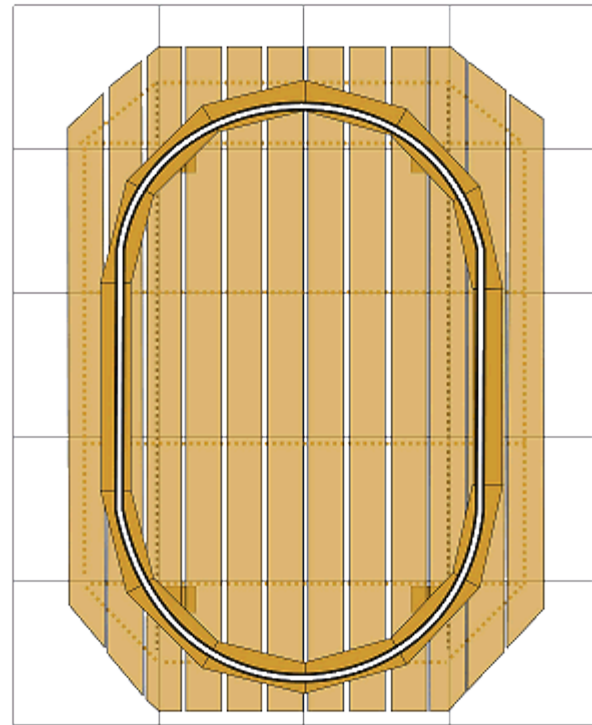


It also lets me put an inch and a half of dirt right up to the edge of the roadbed. That will support a lot of low-profile succulents in Ohio and many other regions.

Our "[Simple Wooden Roadbed](#)" article includes instructions and templates for cutting the pieces shown.



Side View



Top View

After the roadbed is fastened down, I set my circular saw to 1.5" depth and trim off the outside 'corners' for a more rounded look.

Dirtscaping

I've been filling the area between the roadbed and the trim boards with gravel, to keep access to the track clear. Inside the roadbed, I use dirt and rocks, piled as high as I can without overwhelming the roadbed. The dirt settles, so I will need to add a little more every so often.

But it will support succulents, and if you can carve out an area that is several inches deep, you may even have luck with small conifers. I have kept two Hicksii Taxus and one Dwarf Alberta Spruce alive (and growing very slowly) on my raised railroad for almost four years now.



However you decided to tweak my designs or finish your platform, I know that you will be glad to have an infrastructure that lets you enjoy your trains far more often, with far less hassle.