

Loading Platform
Rev: 2
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These plans are not really necessary for the construction of this model. You can go directly to the original plans in the July 1938 issue of Popular Science, pg. 93 which is available online at Google Books with the following URL:

http://www.google.com/books?id=rSgDAAAAMBAJ&lpg=PA93&dq=loading%20platform&as_brr=1&pg=PA93#v=onepage&q=loading%20platform&f=false

I have made a few changes from the original plan – increased the deck width by 8” (accident but since the resulting width is 12'-8” and the Army Corps of Engineers suggests a Side Loading Platform be 20' ..) and the ramp length explained below.

Notes:

Height of The Loading Platform : The plans have the top of the platform 3'-10" above the top of the rail. This can vary a bit as I have seen plans for the height of a freight platform at 3'-9" above the top of the rail. I doubt that your HO people will complain if it is off a little but you might as well use those numbers as a guide.

Height of Track: The height of the track depends on you. I used Atlas Code 83 HO Flex-Track to model this platform using a thin cork (used for shelf liner - supposed to be a yard). That means that this will affect two parts of the model: The posts and the ramp length. That means it would help to have your track installed prior to installing the Loading Platform. (yes, I know that you can modify the roadbed height .. but IMO that should be done as a last resort)

Construct Platform: Build the platform first, complete with Stringers (3"x12"), Cross Beams (8"x10") and Decking (3"x12"). The lumber dimensions above will have to be adjusted depending on what stripwood that you can obtain. I doubt seriously that you (or I) will be able to find stripwood that is an exact scale 3"x12" for example. That is of little consequence but will also affect the dimensions of the posts and the ramp.

Determine Platform Height: With the platform built, set in place and block to the correct height and level. Set the footings in place temporarily. This will allow you to precisely measure the height of the posts. Cut the stripwood for the posts and assemble the platform - Stringers, Cross Beams, Decking, Posts and Footings. Set in place

Ramp Length: . Now, you will be able to fit the ramps. The length of the ramps is up to you. The ramps that I modeled have about a 10° slope. Remember, that people had to move loads up and down those ramps. You should not exceed 1:12 (the US Army Corps of Engineers in EM 1110-3-150 state that the slope should not exceed 15 percent) in 'real' life.

In my example, the ramp measures 26' horizontally for a rise of 4' 7-53/64". This gives a 17.9 percent slope. Oops? Well .. that is up to you. This run and rise also gives me a 1:5.6 slope .. but .. in order for the ramp to meet that 1:12 slope (which by the way would be 8.34 percent or 4.7°) would require a ramp 55.8' long. To meet the 1:15 slope it would have to be 69.7' !!

