



Overhead (Horizontal) Ladder

Installation Instructions

NOTES: Please check for any damage caused by the shipping company and take appropriate steps to file a claim, if needed.

*Please call **Digsafe** and check for any underground utilities before digging anywhere.

Materials needed

Cordless drill/driver, T25 bit, T30 bit, 2 bubble levels, 2 speed clamps, min 25' tape measure, small sledge hammer, spade shovel, flat shovel, garden rake, post hole digger, and hand tamp, 8 pcs of 1x2 or 3 strapping from each of which you will cut 12" stakes. Make a point on one end of each stake. Sheetrock or other screws to attach the 1x3 braces to the posts and stakes. Bags of fast-setting premixed concrete (not included). Concrete amount required may vary depending on how deep you can get the holes. Concrete amounts can be easily calculated at <http://www.quikrete.com/Calculator/Main.asp>.

Instructions

1. Remove items from pallet or packaging. You should find one ladder assembly, four 6x6 PT legs, and eight 2x6 PT leg extensions, and all hardware. All pieces are labeled for easy assembly.
2. Determine where you want to install the horizontal ladder. The overall dimensions are 13ft long by 8ft wide, and the center of the pipes will end up being 6ft off the ground.
3. Lay the ladder assembly on the ground, oriented how you want it, and mark the post hole locations. Starting from the outer ends of the ladder, the center of each post will be 2-1/4" in lengthwise and 3/4" out widthwise.
4. Attach the 2x6 PT post extensions. Each 6x6 post gets two 2x6 post extensions. Attach the tops of the post extensions 2ft up from the bottom of each 6x6 post.
5. Move the ladder assembly out of the way to dig your post holes. Dig the post hole diameters to 1'-0," and post hole depths to approximately 4'-6" below final grade (depending on region). The bottom of hole should "flare" out a little to create a bell shape to prevent frost heaving the post where applicable. Check local codes for the frostline in your area.
6. Using the hand tamp, compact any loose material at the bottom of the holes, and place 6" drainage stone, if desired.
7. Test fit the posts in the post holes and make any adjustments to the hole location and depth, and make any adjustments needed to the length of the post so the post is at the appropriate height and surrounded by equal amounts of concrete when poured. Post are left intentionally long for areas that they need to extend below a frost depth.

*Note: If you encounter immovable objects the legs can be trimmed so the grade marks on the legs end up at finished grade.

8. Then set the posts into post holes oriented so that the notch faces in and the grade mark is at grade. Again, trim the bottom of the posts if necessary.
9. This is where it gets a bit tricky, because everything happens kind of simultaneously. All 4 posts need to be set in their holes, oriented properly, and then plumbed in 2 directions, and they all have to be in their exact finish locations to perform the next step. So - we recommend setting, plumbing, and bracing one post, then

Overhead (Horizontal) Ladder

Installation Instructions

measuring everything off of that one, bracing the other posts when you are comfortable/ready. in both directions by placing the level on two adjacent sides of each post. You can use speed clamps to hold them in place. Two levels and clamps makes the adjustment a whole lot easier

10. At some point in all of this, Lift up the ladder assembly and attach it to the posts with the hardware provided. The rails of the ladder assembly sit in the post notches.
11. Now you should start checking the entire structure to make sure everything is plumb and level. Check the posts, and check that the ladder itself is level by placing the level across the top of the ladder. As needed, make whatever adjustments are necessary to the post braces, until everything is locked in.
12. Fill 1/4 of the holes with fast setting concrete mix and add water per instructions on bag. Recheck to make sure posts are level and plum, and make any adjustments.
13. Fill the rest of the hole with concrete per instructions on bag, stopping four inches below the grade line marked on the posts. Recheck to make sure ladder assembly is level and plumb periodically while concrete cures. Let cure for 24 hours.
14. Backfill the top of the hole and hand tamp good draining soil firmly to 3” below finished grade. Install top soil to finish grade and plant grass to fill in around hole.
15. All wood is treated with kid-friendly preservative, but as is the case with all wood facing the elements, it needs to be cared for, so check it periodically for rough spots, splinters, etc, and sand them out, and treat it with kid-friendly wood preservative (available in our store [https://naturalplaygroundsstore.com/product/Wood-Protector-and-Preservative-\(1-gallon\)](https://naturalplaygroundsstore.com/product/Wood-Protector-and-Preservative-(1-gallon))) once or twice a year to keep the wood from deteriorating.
16. Enjoy your Horizontal Ladder!

