



Fallen Tree Sculpture

Install Instructions

NOTES: Please check for any damage caused by the shipping company, take a full set of hi res photos, and take appropriate steps to file a claim, if needed. Start with notifying the Natural Playgrounds Company.

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

Materials needed

Shovel, post hole digger, hammer, adjustable wrench to 1.5", measuring tape, large open ended wrench, 5 pieces of 1x3x8' strapping (cut in half) for anchoring, 2" sheet rock screws, cordless drill, several bags of concrete (you'll need about 33.3 ft.³, or 1.25 yd.³), water to mix with the concrete, if you're going to mix your own concrete, you'll need a mixing pan and hoe, level, drainage stone, and a large piece of machinery to manipulate the heavy logs. Also see discussion below about fall zones. If you don't have machinery to hold up the ends of the logs, you may want to provide some temporary bracing.

Instructions

Note: these logs are heavy, so prepare yourself with either equipment or several strong people to move the logs into position, and to manipulate them during installation.

1. Pull everything off the truck and make sure you inspect everything. The logs may have minor dings from bumping up against the truck interior, or from the unloading process, but those don't really matter. Do check the wooden cradles to make sure they have not been damaged.
2. Make sure you have your location chosen and marked. Now that you see the logs and their dimensions, recheck the location and whatever clearances are needed. There is a discussion below about fall zones; if you need one, make sure there is a 6' space (so it would be slightly elliptical, 20' long, 19' wide) around this entire sculpture. Typically fall zones are 1 foot deep such that perforated drainage pipe can be installed under the material, and then fill the fall zone area with fall zone material such as playground wood chips. Obviously, if you want a fall zone, that should be excavated first, and then the directions below apply to the earth that is at the bottom of your excavated hole (the working surface). You'll need to drain the fall zone.
3. Use heavy equipment or many strong people to move everything to your location.
4. Each of the logs comes with a Butt Cradle for the butt end that's on the ground, and with a Support Cradle that fits on the underside of each of the logs.
5. As this sculpture is intended for all age groups, you may want to configure it especially for your use, which you can do by moving the Support Cradle further in or out, but this also means that the log won't nestle nicely into the Support Cradle, so you may have to shim up the Cradle with earth or other material.

6. If you decide that the two smaller logs on either side of the large, center log are not going to be high off the ground, you may not need the Support Cradles under those two logs, preferring instead to use the earth, or large stones, or etc. as support. You can make that decision after you have installed the large center log. NOTE: sometimes we send logs that are longer than 8' so can experiment. You can always cut them shorter!
7. All three logs are installed exactly the same way, pivoting vertically on a support structure at their butt ends. We are referring to these support structures as the Butt Cradles.
8. You should always install the large diameter log and its Butt Cradle first, as that will dictate the location of the smaller log Butt Cradle supports on either side of the big log.
9. To install the Butt Cradles: because the footing holes are relatively close together, you should excavate one hole that's approximately 70 inches long, 20 inches wide, and about 42 inches deep. To fill this entire hole would take about 34 ft.³ or 1.25 yd.³ of concrete, less the volume of wood inserted into the hole.
10. You'll note that the log cradles are held together with a 2 x 10 frame around them. If you want a 12 inch deep fall zone around this Fallen Tree Sculpture, then the Butt Cradles should be set in the hole so that the tops of the 2 x 10 box frames are flush with the ground beneath the fall zone material. If you are not using a fall zone, you must still follow the installation guidelines, and where the fall zone material is shown, the top of the material would be considered the ground level, so you must still excavate where necessary. In this case, the concrete MUST NOT show above ground.
11. The easiest way to make this work, is to attach the Butt Cradles to each of the logs lying on the ground, and then to lift the logs so the Butt Cradles hang perpendicular to the logs, then center the cradles over their proper locations in the hole, then lower the logs so the cradles drop into the hole. Once the logs are all resting on the ground again, you can adjust the angles of the logs as they relate to each other (keeping in mind that 3" minimum spacing between them).
12. To attach each Butt Cradle: slide it into place over the tongue in the end of the log, and slide the 3/4" bolt into place.
13. Use one washer under the head of the bolt, and one washer under the nut. Keep in mind that the pressure treated wood in the cradle, and the log itself will continue to lose moisture and shrink, such that this nut may have to be re-tightened occasionally, but DO NOT ream it down. There is 1/2" play inside the tongue, which will grow as the log shrinks, so just keep the nut tight to the 2x10 frame.
14. **NOTE** that all logs must be at slight angles turning away from each other.
15. **NOTE ALSO** that the minimum spacing between the logs must be 3 inches or more at their closest point.

16. Now it's time to mix and pour the concrete into the hole and around all the cradle feet. Do this slowly, as you don't want to move the cradles from their positions. Use your level to make sure the cradles are vertical/plumb in both directions. Use a piece of rebar or similar to work the concrete all around the wooden feet.
17. Once the cradle concrete sets (you should allow 24 hours)
18. Step back and look to make sure everything is as you want it. If you are using a fall zone, keep in mind that the finish level of that material is going to be 12 inches above your working surface.
19. Now you are ready to install the two side logs in the same manner.
20. Tighten all nuts.
21. Once you have installed the drainage and the fall zone material, this beautiful sculpture is ready to be enjoyed!

Final notes

There is no way to predict exactly what your Sculpture will look like, as every single tree has different diameters, but we try our best to get the most perfect logs to you that are as close to 12", 18", and 24" x 8'. There will still be individual characteristics, but we assure you that this is a beautiful looking product, and that you and your children (no matter what their age!!) will be very happy with it!!!

To make sure it lasts a long time on your playground (or in your yard), we sand the really rough spots, and then treat the ends with our fabulous new product that almost petrifies the outermost layers of the wood, so moisture neither leaves nor enters the fallen tree.

This pretty much stops the decay process, or at least slows it waaaaay down, so your kids will enjoy this feature for a very long time, which makes it an extremely worthwhile investment! **Nevertheless, you NEED to retreat the logs at east once a year to keep them from drying out.** It will behoove you to dig remove some of the fall zone material to expose the entire log, and then treat them. You can use a garden sprayer.

Let's talk about fall zones. Depending on lots of things, you may or may not "need" a fall zone. Technically, this is a climber, and climbers typically need a fall zone under them and 6' out from their perimeters, all the way around.

However, because there are no standing surfaces on this element (defined as a 2" square, flat surface within 30° of horizontal) because the trunk is pretty much round, you may not be "required" to have one -- or you could certainly present that argument.

Frankly, we think the playground safety gurus have gone way overboard in mandating safety requirements that remove every bit of risk from playgrounds (and they agree that they have gone overboard, by the way), so that kids grow up not knowing how to manage risk!

So we think that you might want to install this Fallen Tree Sculpture without a fall zone, and let the kids play on it for a while. Then make a decision based on whether you think the few, fun risks encountered by the children will add to their sense of self, and help them learn more about managing their bodies in space.

Without the giant, unattractive fall zone, the grass can grow right up to the sculpture so it looks beautiful!

NOTE AGAIN that if you do NOT install a fall zone, you will still have to dig into the soil 12" to install the Butt and Support Cradles.





scale

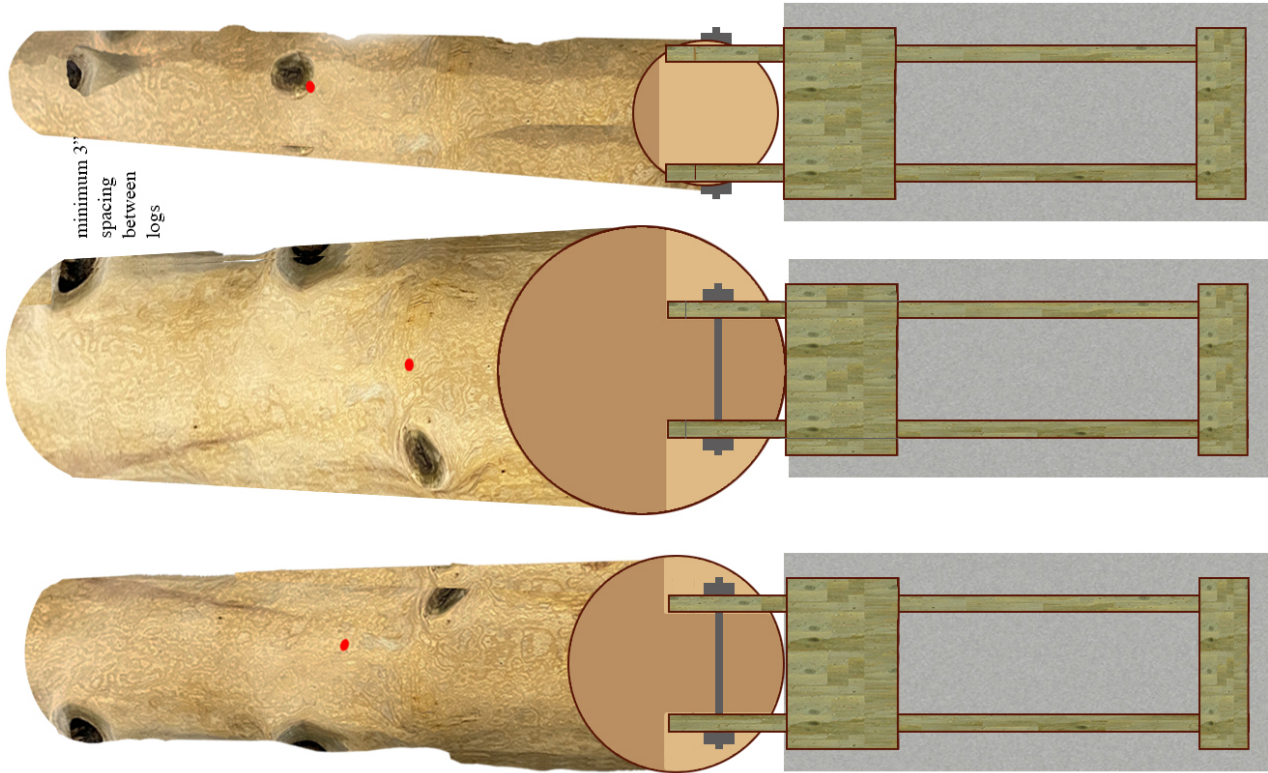


bird's eye view
of layout



bird's eye view of layout
with fall zone

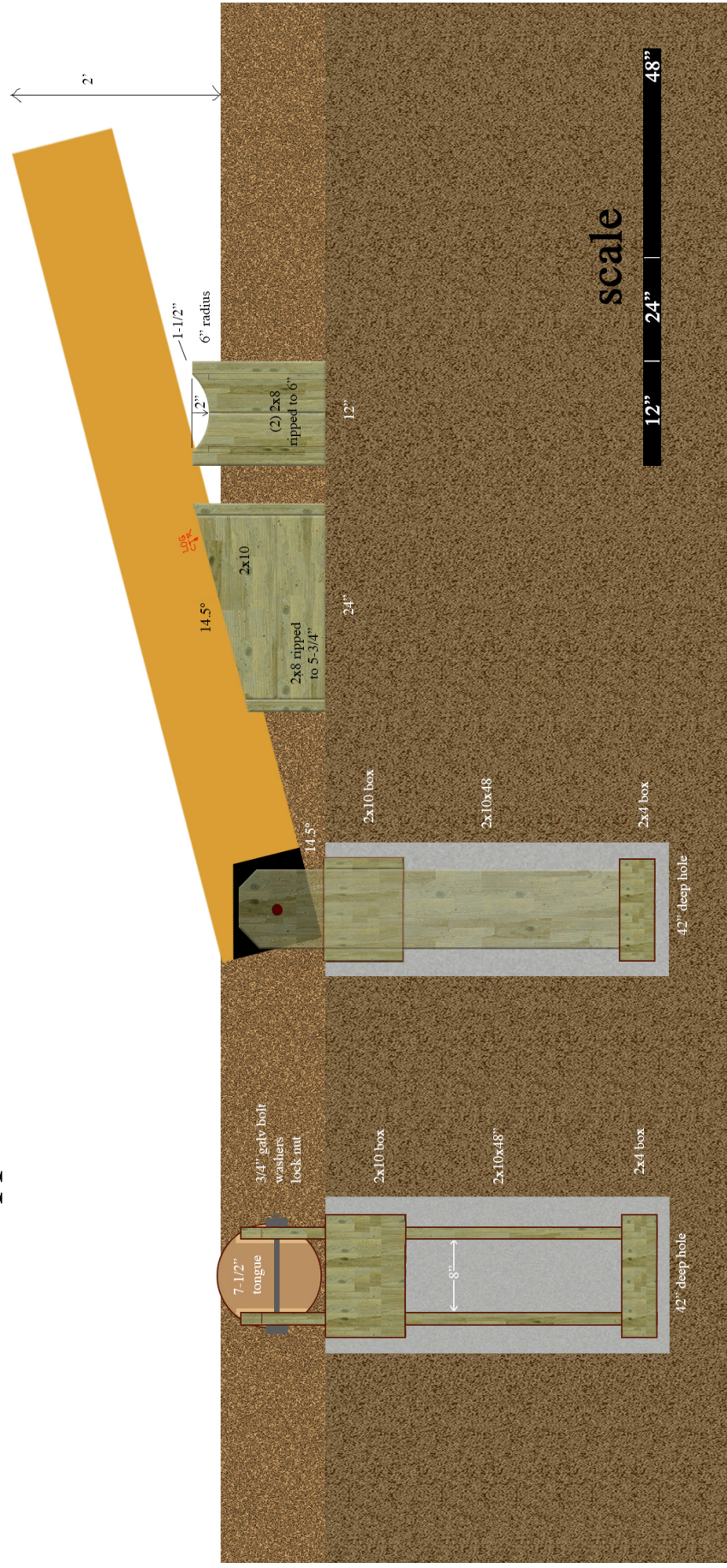
For the installation footing, excavate a hole approximately 20"x70"x42" at the base of the fall zone material.



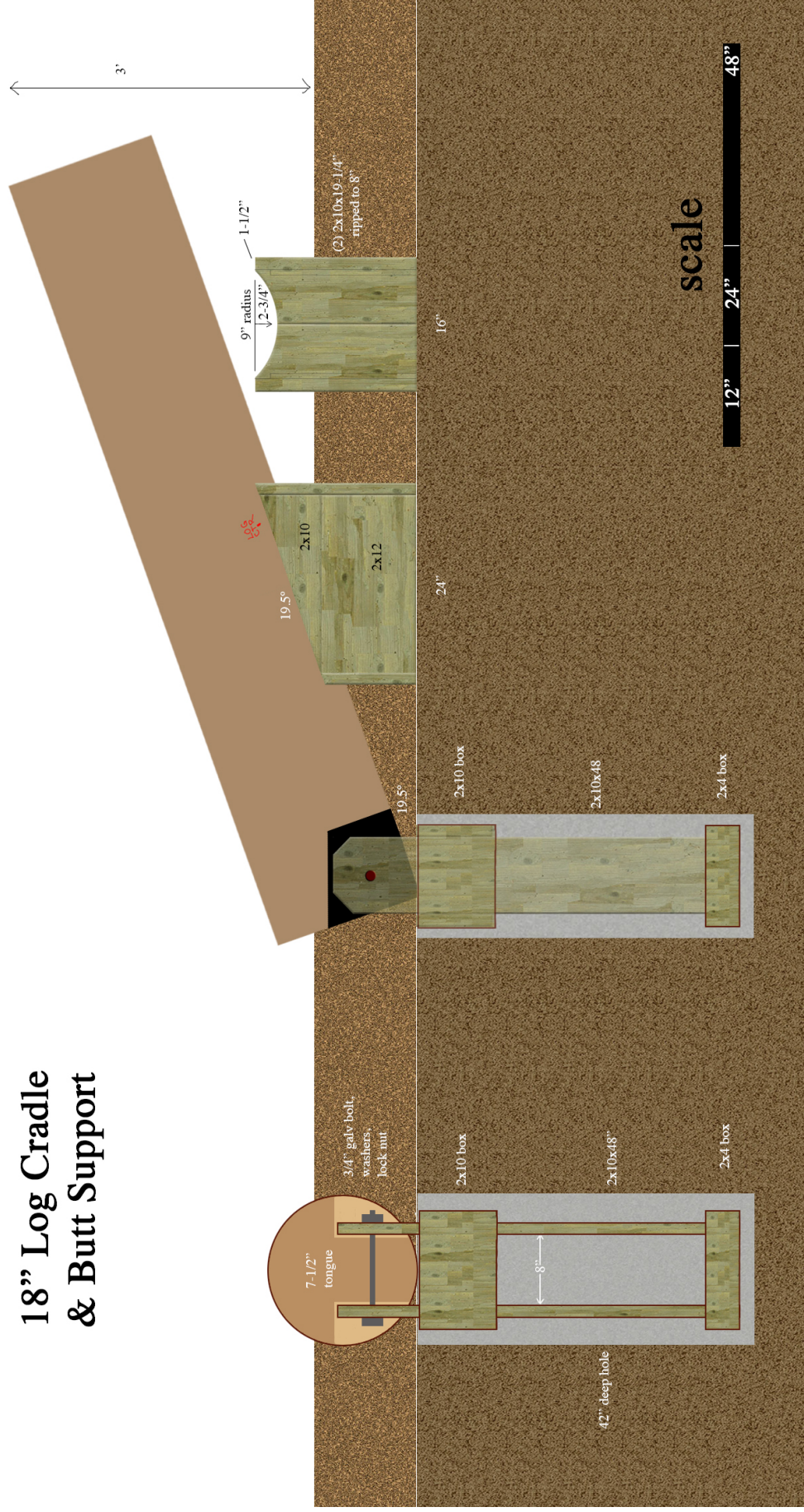
scale



12" Log Cradle & Butt Support



18" Log Cradle & Butt Support



24" Log Cradle & Butt Support

