



# Octagonal Forts

## 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, several short pieces of 1"x3" strapping, a handful of 2" sheet rock screws with the appropriate drill bit, grade rake/garden rake, level, tape measure, field marking paint, plate compactor, hand tamp

### Notes:

- This kit comes as either an 8' fort or an ~11' fort. This measurement is made from the outside edges of two opposite flat faces/walls.
- There are two ways in which this fort may be installed: on a flat surface, or embedded into a surface, such as on top of a berm.
- The shape of the octagon can get distorted if you try to move it, or if you pack earth around it unevenly, so one way to keep its shape is to draw a square on the ground using the marking paint, divide each side into three parts, and then connect the dots to make an octagon shape. Then assemble the octagonal Fort within this square. To hold the shape, you can attach pieces of strapping across the tops of the walls in front of each of the posts.
- If you choose to draw the square, the square for the 8' Fort would be approximately 8' on each of the four sides; and approximately 10' 10-1/4" on each side for the 11' Fort. You can confirm that the corners are at 90° by making sure that the diagonal measurements from corners to opposite corners are the same. If it would be easier, use string and stakes to layout the square before you paint it on the ground.

### Instructions

1. Remove items from pallet or packaging. You should find eight (8) side assemblies/panels with 6x6 posts attached to four of the panels, and one (1) package of hardware.

*\*Note: if this fort is to be embedded in the ground, it can be installed on flat ground, then a hill built around it or you can excavate a big hole into an existing hill, then install the fort, finishing it off by backfilling against the outside of all the walls. If you are installing the Fort in this manner, you must drain the hole, or the Fort could fill up with water. Probably the easiest way to do this is to dig a hole inside the Fort walls smaller than the octagonal shape, and then fill the hole with drainage stone. If there is a lot of clay in the soil, water could still collect, so you may need a perforated drain from the bottom of the drainage stone to daylight.*

*\*Note: if you are using either of the above techniques to embed the Fort, you must backfill against the walls evenly. That is, put a small amount of earth, like 3 to 6 inches, around all sides and then begin packing it down, working your way around the outside of the Fort. If you don't do this slowly, the compacting with the hand tamp, but especially the compacting with the plate compactor, will distort the octagonal shape*

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2. Once you have the location chosen, whether it is on relatively flat ground or to be embedded into the earth in one of the two ways addressed above, it would be best to make sure that the base level is flat. Once it is, compact the area with a compactor or hand tamp.
3. Follow the directions above to draw the correctly-sized square, divide each side into three equal parts, and connect the dots to make the octagonal shape.
4. Begin setting up the Fort walls by choosing one with two posts attached to it. Place it upright on one of the flat sides of your octagonal shape, and fasten an adjacent wall to it (one that does not have posts attached to it). All of the sides should be numbered/lettered so that you can easily assemble the octagon.
5. To ensure that the sides stay in place, attach the strapping across the tops of the angled corners in front of the posts.
6. If the fort is embedded, slowly backfill fort and hand tamp good draining soil firmly around the sides. Install top soil to finish grade and plant grass to fill in around voids.
7. 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 (we have it available if you can't find it) once or twice a year to keep the wood from deteriorating.
8. Enjoy your octagonal Fort!

### **A note about climbing surfaces and fall zones:**

This fort contains no standing surfaces, which are defined as any surface that is a minimum of 2 in.<sup>2</sup> with less than a 30° slope. The edges of the 2x lumber used in the walls are 1.5" thick, and the tops of the 6"x6" posts are cut at 30° angles.

However, if this Fort is to be embedded in the ground, and the ground is brought up level with the top of the sidewalls, the ground could be considered a standing surface related to the Fort, and so a fall zone may be required as the floor of the Fort. To avoid this potential requirement, you could keep the ground 2" inches or more lower than the tops of the walls, or you could ask your licensing inspector for their opinion before the Fort is installed. If they insist on a fall zone material inside, it needs to be a minimum of 6 to 9 inches deep. If you want to keep the Fort walls as tall as they are at 21.75", you may want to make the drainage hole deeper, install the drainage stone, landscape cloth on top of that, and then the fall zone material. You could also eliminate the drainage stone, make the fall zone material deeper, and just use perforated drainage pipe at the base of the fall zone.

As noted above, the vertical drop from top edge of the Fort walls to the ground is 21.75". If this is too high for your age group, you could remove the bottom board on all the walls, cut the posts shorter to match, and follow the directions as above. Alternatively, you could fill the inside of the Fort with dirt, fall zone material, or etc.