

## **Installation Hints and Tips**

You'll need to first mark off the area with paint for the hole size you need. It's best to mark it about one foot wider and two feet longer to give you room to level the shelter. Remember that the floor extends out an extra two feet front and rear. That means that the 6x8 shelter will have a 12' long floor. We're saying this for those digging before the shelter is there. It was not insulting your intelligence. The standard depth shelters will need to be just under 7' deep. There is an angle iron piece right under the hinges. Typically, We measure so that it will be covered. Adjust this if the yard turns into a pond after rain or the yard slopes toward the shelter. Also, raise it three inches if you might one day want to make a patio in the area for a slab. It's better to get it too high than too low. You don't want an underground swimming pool. Usually, setting the shelter on firm ground is good enough. If you're in a very wet area or can fish off your back porch, you might put a load of gravel in the hole first to keep pressure from pushing up on the shelter, causing it to float.

Using a laser level to get the hole as level as possible is highly recommended. Also, consider if the ground is not very level anyway. Do you want the door up high or the turbine? In some cases, you might use the excess dirt to build up the lower area. When you get the hole the proper depth, have someone with a rope or safety device attached to them go down in the hole and rake the dirt as smoothly as possible. Removing debris or rocks and breaking up dirt clogs. The smoother and more level the hole is, the fewer times you'll need to pull the shelter in and out to fix the issue.

Except for the 6x12 model, the hook on the roof closest to the stairs is relatively balanced, so you can hook a single chain to only it and not both hooks if you're gentle. Run a chain through both hooks on the 12' model or even the 10' if it has the extra depth or many options that might add to the weight. If you're using a backhoe, grab a good load of dirt in your frontend loader to offset the weight. If using a small mini-ex and you notice the rear tracks coming off the ground, just trying to lift it straight up. It's probably too small to lift it down into the hole.

After you have it in the hole, let some slack in the chain and have someone check the level. Open the door and measure the edges of the staircase, front to back and side to side. Don't measure it by laying the level on the door. It can be warped a little from the welding process. You can also measure the floor instead. Getting one 100% is next to impossible. Usually, if it's "in the bubble," that's pretty good. Make sure the shelter is on solid ground and is not rocking around. Cover the turbine hole with a trash can or the likes to prevent dirt from getting in the shelter when backfilling.

Backfilling. Don't use your front blade or front-end loader to speed up the process. You'll cause it to shift and become unlevel. Put dirt on each side as you go. Not all on one side then the other. Same on the front and rear. If you have access to a water hose, have someone hose the dirt down as you backfill. Try and create a mudslide to help fill under the staircase. This will save you or whom your

installing the shelter from much backache and filling in after it rains. DON'T USE HEAVY EQUIPMENT TO PACK THE DIRT TOO CLOSE TO THE SHELTER. We had one installer that dented the roof doing that.

Use a shovel to add dirt under the stairs. That's the hardest area for a machine to try and fill in without hitting the shelter. Because the staircase slopes back toward the shelter, this is where the most filling back in after the rain will be, so the more you can fill now, the less later. Also, note that a large hole could form if you don't wet the dirt with a water hose after it rains. Fill that back in ASAP. It could be dangerous left open. Put the black fiber mesh screen over the turbine vent pipe, then slide the turbine sleeve down over it. Now bolt the turbine head to the sleeve. Note, if you bolt the head to the sleeve and then try to push it down over the vent hole, you'll probably damage the turbine trying to push it down far enough. Not screwing the turbine to the shelter allows it to be lifted off for the mesh screen to be cleaned after mowing and when needed.

Remember, these are simply tips, not professional guidelines or requirements. Use common sense. Follow safety procedures. Cozy Caverns or any member is not responsible for what you follow or don't follow in this document. Call before you dig, 811. Asking the city or county if you need permits could cause you to pay them some \$\$\$. We're not saying not to, however. We've had a few customers install them at night so that no one would know, including neighbors.

Check the shelter often after it has been installed. Some may sweat at first. It seems while it still has air pockets around it. Keep it wiped down. You might also put some "Damp-Rid" buckets in it to absorb moisture. Most never sweat but check it. Sweating is not a shelter defect, and re-painting is not covered under warranty. Keep the shelter touched up. Rust-oleum satin or semi-gloss white spray paint works well and is a close match. Make sure the turbine spins free. They are 14" if your child takes a bat to it or you total it out with a riding lawn mower. If you have any other questions or concerns, Email works best, info@cozycaverns.com

Thanks again!