

## ABOVE GROUND POOL GROUND PREPARATION GUIDE

**First things first! Contact your town officials responsible for building codes to be sure you do everything legally.** This is something that is taken care of at a local level and is different for all of us. Ask about above ground pool fencing regulations, as well. Most towns have some sort of pool fencing ordinance.

Above ground pools have many benefits; they are very affordable, DIY friendly and simple to service. **However, they are not designed to be buried in any way or depth**. The walls of an above ground pool typically consist of a thin steel or aluminum wall that holds the pool liner. The pool wall ultimately gets its strength from the pressure of the water pushing equally outward on the wall. Standard above ground pool kit walls are not made to withstand the force of the ground pressing back in on the pool. You need a much thicker pool wall such as a semi in-ground or in-ground pool structure if you intend on burying your pool.

Ready access to water and electricity are nice to have close at hand. For most pools, it's best to run underground conduit from the house breaker panel to the pump and filter location. You may also want to add other electrical items to your pool, such as a pool light or robotic pool cleaner. We strongly recommend consulting a local licensed electrician and obtaining permits for any new electrical connections/electrical modifications. **Please note that pool equipment should never be run on any sort of extension cord, and doing so may void your warranty.** When choosing your location, keep in mind that you will require access to a garden hose to refill the pool periodically.

Preparing your backyard for an above ground pool is all about working with what you have currently. Working against the natural layout and structure of your backyard will only result in more trouble and cost than it is usually worth. The key is to design a solution that will work with the natural terrain of your backyard, creating a seamless and unified space.

When preparing your backyard, it is also important to consider how you will add the finishing touches to your above ground swimming pool. Think of how you would like to landscape the area, and therefore what other site preparations may be required, and the layout and style of any pool decking.

Retaining walls are one of the most popular options for enabling you to build an above ground swimming pool into a sloped backyard. The retaining wall is built into the slope, creating a reinforced space that the pool can be constructed out from. Retaining walls are available in a number of different materials and options, depending on your budget and style. When choosing your retaining material, you may need to consider the size of the retaining wall to ensure that your wall will not erode or shift. If you are unsure how to choose a retaining material, please consult a local professional landscape company. You may also need to incorporate some form of drainage, such as weeping tile, to prevent any possible washout scenario or frost heaving.



We can't overemphasize how important it is to have a level pool. An uneven pool will put unnecessary stress on the side that gets the extra weight. It also makes it harder to keep the precise level in the pool for the skimmer to work properly, and could result in winter pool damage.

Ground Leveling: Now comes the real work. While digging out the grass, you should begin to do any leveling work that is required. If you have a sloping location or hillside to contend with, you may need to use a skid steer loader, bobcat, or otherwise get some mechanical help. If the ground is fairly flat, the work can be done with picks and shovels. A flat and square nosed shovel is a good tool to shave off high spots when the time comes. This step is very important to ensure that your new above ground pool won't be lopsided. A laser level or a transit is the easiest and most accurate way to accomplish this.

We recommend you install your new above ground pool on flat ground after replacing about 5"-6" of grass and soil with roughly 4" of crushed compacted clear (usually <sup>3</sup>/<sub>4</sub>") aggregate and 2" of compacted screening/brick mortar/sand.



(Using a 24 foot round as our sample) To start your above ground pool installation, place a stake in the center of the ground where you want the pool to be installed. Slip the end of the tape measure over the stake and measure to 13 ft. Measuring 13 ft from the center gives a diameter of 26 ft – so you will have 1 ft all around to work with. Walking slowly around the perimeter, use spray paint or lime to mark the outer perimeter of the circle. Remove all the grass and uneven top soil with flat shovels or spades, within the circle. You can rent a Sod-Cutter if you want to re-use the sod in another place.

After the pool floor area has been leveled, bring into the middle of the pool area your floor material – whether it will be sand, stone dust or vermiculite. Start to assemble the Bottom Track connectors to make your 24' round circle. Go back around and check to make sure it is the same diameter all around and not 23'6" one way and 24'6" the other way. Some 24 ft round pools do not necessarily measure exactly 24 ft. Some may be slightly smaller or larger, just make sure that it's not slightly oblong, but has been laid out in a perfect circle.



Set Blocks in Place: First, place a few stakes behind the assembled rail into the ground to prevent it from moving, while you continue to work. After the circle is round, dig down an inch, and place a 12" x 12" or larger patio block under each rail connector. Patio blocks look like flat cinder blocks, only 1.5" thick; you can get them at any Home Store. The blocks should be set into the ground, even with the surrounding ground, so you don't raise the bottom rail up and off the ground. The bottom rail must sit on solid ground all the way around, and on the patio blocks at each connection. Proceed to level the rail going from 1 block to the next. Make sure that all blocks are equally and exactly level to each other, and the rail is firmly supported all the way around.

Tamping: As the soil is loose, hand tamping it or using a motorized tamper is suggested. The pool will weigh from 50-110,000 lbs. when full of water, so be sure that your soil is properly compacted, or the pool will do it for you, but possibly unevenly. You can use water from a sprinkler to saturate the area and help loose dirt settle into place.

When leveling ground, remember: Lower high spots to meet low spots, do not fill low spots to meet high spots! Do not set your pool on loose fill dirt, it is VERY heavy when full of water. Remove high spots, to meet the level of low spots for even solid ground all around. At this point, we strongly recommend you verify one more time that your ground is level before beginning pool frame assembly. Once you have re-verified level, you are now ready to begin your pool assembly. Please refer to your manufacturers installation instructions for your specific model installation.



Pool Floor / Pool Base: To protect the pool liner, it is recommended to top your prepped base with sand or other smooth, compactable material. Two inches of brick/mortar sand makes a nice base for an above ground pool; it's cheap, readily available and soft to the touch. The problem with using sand is it is soft and over time it is common for heel marks and other floor irregularities will begin to show up. Type 3 and Type 4 polystyrene insulation foam board(tape the seams) is recommended for all round pool soft floors. When using a concrete base(hard floor), polystyrene insulation foam boards with Rhino floor pad and Gladon foam cove are required to prevent damage to your liner, and prevent any possible washout scenario.

If you have an oval shaped pool, please refer to your frame installation guide at this point for settling your channels and strapping as per your specific model's instructions.