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POOL FENCE & COVERS

Pool Fence

Installation Quick Guide Double Pole Truss

Step by step instructions



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**Helpful Videos showing the processes in this Quick Guide can be found at:
[Youtube.com/@allsafepoolfence/videos](https://www.youtube.com/@allsafepoolfence/videos)**

Note: This Installation Guide is not compatible with a paver deck.

Tools You Will Need

Drill Guide (optional but highly recommended)	1/8" Drill Bit
Hammer Drill (Heavy Duty)	5/32" Drill Bit
5/8" X 18 Masonry Drill Bit	Pliers
1/4" Masonry Drill Bit	Box Cutter
5/8" Rebar cutting bit	Marker (Pencil or Grease Pencil)
Cordless Drill (with hammer setting)	Chalk Line
#2 Phillips Bit	Garden Hose or Rope (for your layout)
#2 Square Drive Bit	Long Zip Ties
	Torpedo Level

Your Layout

Start by using a garden hose or rope to visualize the best layout for your yard. Keep in mind the minimum distance from the waters edge to the fence should be 20 inches but more room may be better for your needs.

A straight line across your yard from Fence to Fence will be the easiest to install.

Installing all the way around the pool with an oval, kidney or rectangle shape is a little more challenging but still well within the DIY or entry level install range.

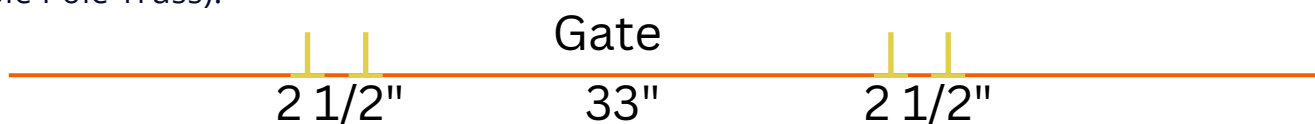
This tutorial will cover all three.

Marking the Gate and Fence **Straight Fence**

Note: If your yard has a wood fence, you should layout the fence to terminate at a main support. Look forward to the Wall Attachment section of this guide.

If you decide to install in a straight line across your yard, you should first snap a chalk line from wall to wall and then locate the placement of the gate. (Usually near the entrance of the pool or spa.) We suggest using **ORANGE** chalk for your line. The Blue chalk tends to be semi permanent.

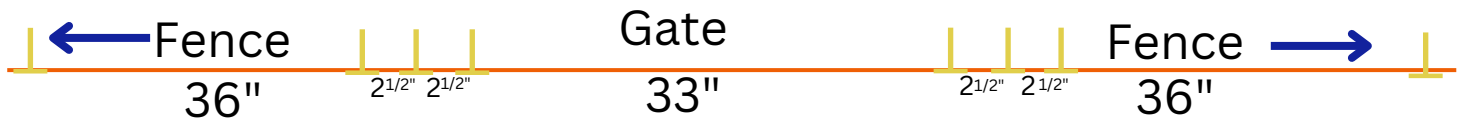
Using your tape measure, make two "T" marks on your chalk line 33 inches apart and then again at 2 1/2" out from your original 33"marks. This will be your gate opening (Gate with Double Pole Truss).



The "T" should be about 3/4" and will look upside down with the bottom of the "T" facing the pool

Now,... Let's add on to your layout by marking the fence. To the right and left of your Gate Truss marks, make a "T" mark at 2 1/2". This will be the first pole of your fence. Measure 36" and then make another "T" mark.

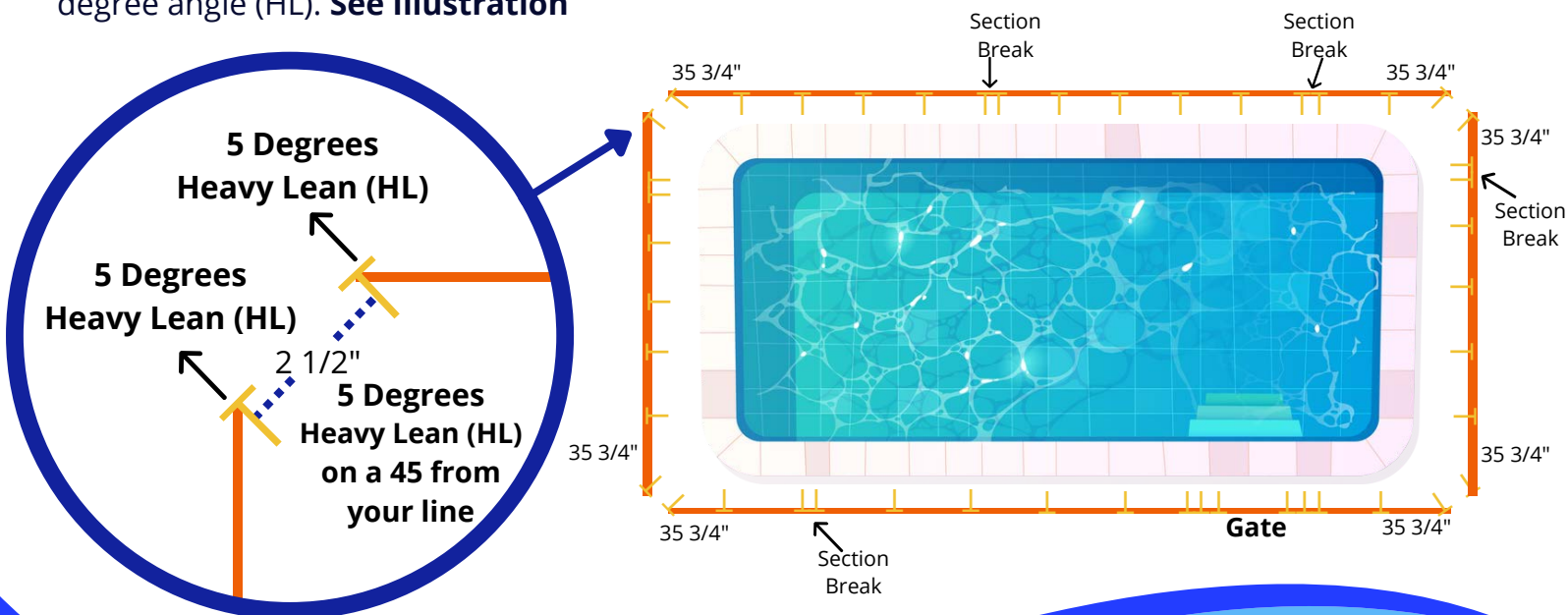
Pro Tip! Making accurate measurements and marks is very important and will determine the final look and function of your gate and fence.



There are 6 poles in every section of fence so you will need a total of six marks extending out from your original Gate Truss marks. After the 6th pole mark you will need to measure and mark 2 1/2" for the beginning of the next section of fence. Each section of fence has six poles and is 15 feet long. Continue this process until you reach your yard fence line or termination point. Chances are the measurement will fall less than one full section of fence and less than a full 36" of that partial section of fence. Don't worry. We will cover how to cut and shorten the fence later. **Your last mark will be 2 3/4" from your property fence/ termination/anchor point.**

Rectangle with 90 degree Corners

You may have a rectangle pool. To surround the pool, you will layout the fence the same way as a straight line except you will need to have two poles at the 90 degree turn. First, snap your chalk lines at the desired distance from the pool on all four sides. Then mark where you would like the gate. Now on a 45 degree measure the 2 1/2" distance on each corner as you see in the illustration. You will measure from the first corner post 35 3/4" to the next mark on your line. (This will allow the pole to make the twist to a 45 degree and be much easier to connect using a section latch). and then 36" for the rest of the poles in that section. Your cut (shorter section than the 36") will fall at a section break or the gate. Just leave it long for now. We will deal with the shorter sections when we do the cut later in your install. The two corner poles will be drilled at a 5 degree angle (HL). **See Illustration**

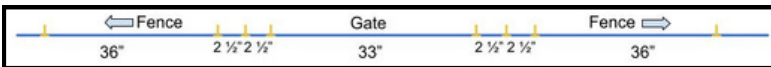
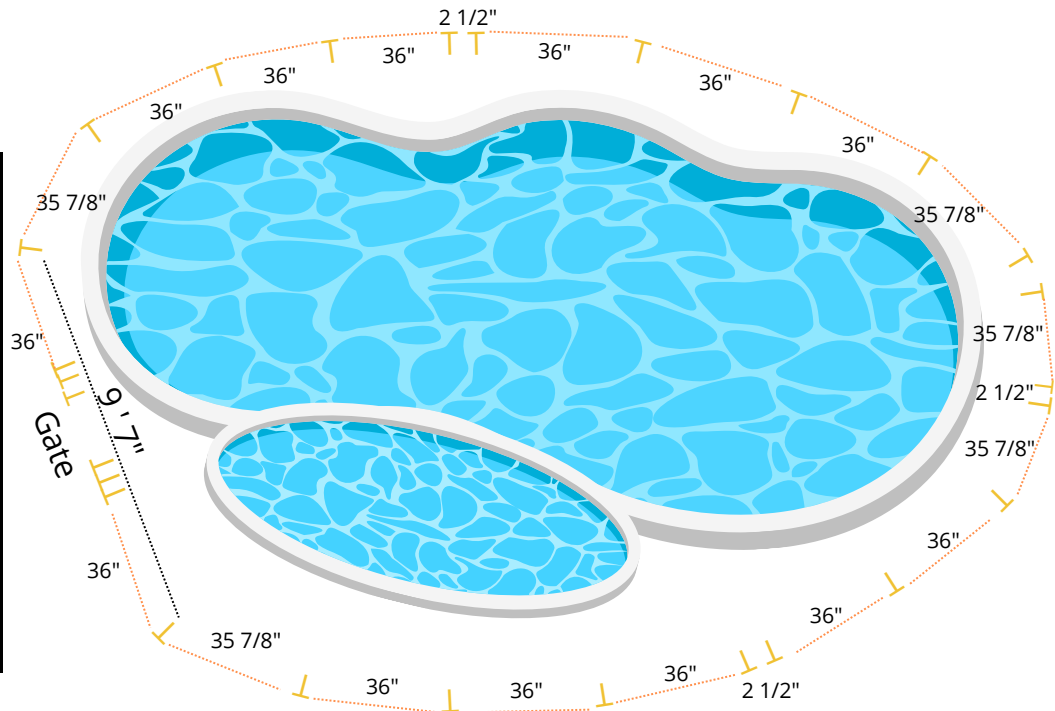
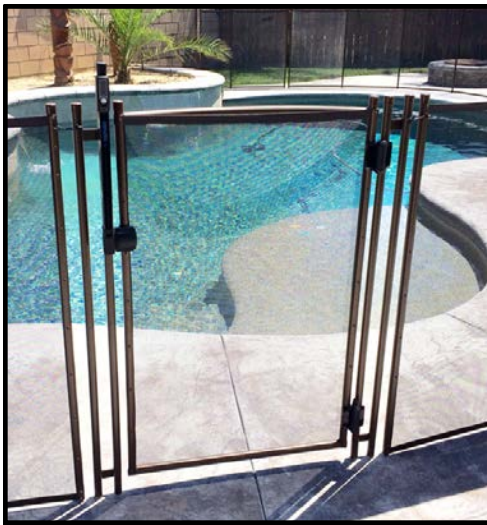


Curved or Circular Fence

The measuring and marking of an oval or kidney shape pool also starts with the gate location. Keep in mind when locating the gate placement, you will need 9' 7" of straight line to install your gate. (This tip will aid in keeping your gate functioning properly).

Snap a chalk line at the desired distance from the pool. 20 inches would be the minimum distance from the water's edge but you can decide how much deck space you will need inside the pool area. The curve shape of your pool will be made up with straight lines between each pole. You don't want to follow all the little curves of the pool. Wide sweeping turns are more pleasing to the eye and the fence will function much better.

Here is an example of gate placement and layout of the fence on an oval or Kidney shaped pool.



On your chalk line, make two "T" marks 33" apart and then two more at 2 1/2" out from your original marks. This will be your Double Pole Gate Truss for your gate. From your original gate truss marks, measure and mark "T" at 2 1/2". This will be the first pole in the section of fence. Continuing on your straight chalk line, mark 36" from your 2 1/2" mark.

The "T" should look upside down with the bottom facing the pool. **See Illustration.** Keep in mind that each section of fence has 6 poles. The next "T" mark will also be measured at 36" and will follow the shape of your pool at the desired distance from the water's edge. The areas where the pool makes a tighter turn you should deduct 1/8" off the 36" so your measurement will be 35 7/8". **See Illustration** This will allow the mesh to wrap around the face of the pole and not end up too tight. After measuring and marking your 6th pole, measure 2 1/2" and then start another 6 "T" marks for the next section of fence. Continue this process out from both sides of the gate until you have reached the back side of the pool. At this point, you will have a panel of the section that will be too long. Don't cut it yet. That will come later.

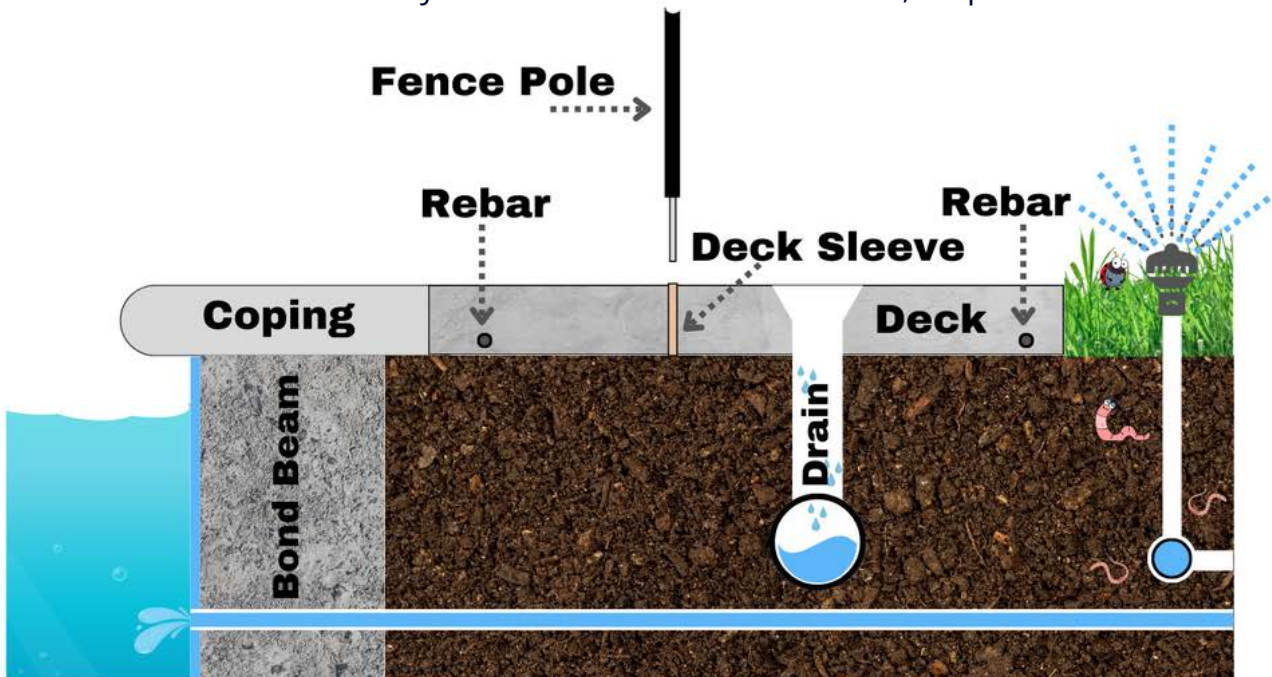


What's Under My Deck?

So, what's under the deck? And, what could be **IN** the deck? Those are great questions. Its normal to be apprehensive about drilling into the unknown. With a pool, Irrigation, Drainage, Electrical, Natural Gas, Etc. There's a little information we should cover before you start drilling. Getting an understanding on what could be under there, and where it could be located will help relive some of the concerns you may have.

The term **Deck** refers to the concrete surrounding your pool. The concrete may have metal to reinforce the concrete to keep it from cracking. This is called **Rebar**. Rebar comes in different sizes ranging from 1/8" to 1/2". Unless you were on sight when the deck was poured, there is no telling where the rebar is or even if there is rebar at all. On a typical fence install, hitting rebar is not common but it could happen. A hammer drill bit will not drill through rebar. If you are drilling and the drill bit stops cutting into the concrete, stop and switch out the masonry bit for a rebar cutting bit. The rebar cutting bit is not meant to be used on the hammer setting on your drill or with the Drill Guide. Turn the Hammer setting to just **drill** and the **slowest speed** available on your drill. You will drill out the rebar **without the guide** (by hand). Drilling slow and adding a little water running from your hose into the hole as you drill will make the task a bit easier. As soon as you have cut through the rebar, switch back to the masonry bit with the drill guide and finish off the hole.

Now back to what's under the deck,... The average deck is around 4" thick. Other than rebar, there shouldn't be anything else in the concrete, but, their could be a water line or something else directly under the concrete. There are city codes that specify how deep the various lines should be buried, but on rare occasions those codes are not followed. For this reason we suggest when drilling, drill the concrete and when you hit the dirt on the other side, Stop!



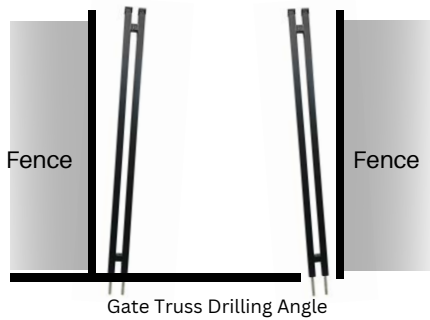
This illustration is just an example and not meant to be an exact representation of your deck

Drilling Your Deck

Before drilling the marks, double check the measurements and angles to avoid mistakes.

When drilling a fence that is in a straight line, all the holes will be drilled Plum (Straight up and down). With the exception of the gate. The gate trusses should be drilled at 3 degrees (Light Lean, LL) leaning in towards each other.

3 Degrees, Light Lean (LL) → ← 3 Degrees, Light Lean (LL)

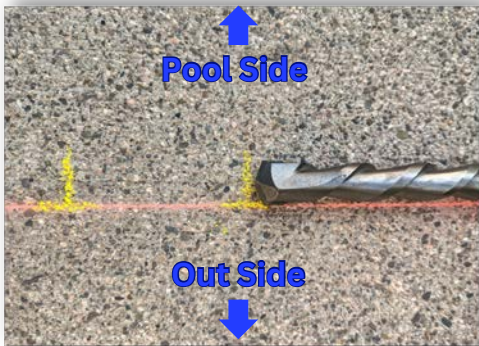


When drilling the gate truss, turn the drill guide sideways and drill on the Light Lean (LL) selection. Align the drill bit on your mark as illustrated below



Lets go over how to use the drill guide and the adjustments you will make

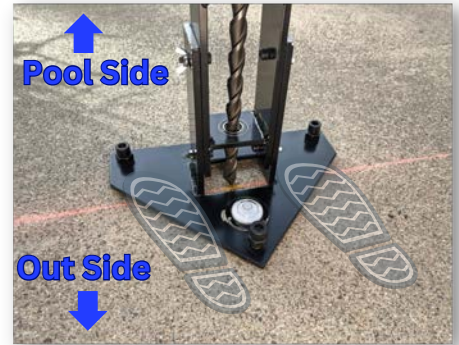
Place the drill and drill guide over your mark. Align the drill bit on the "T" mark. **See Illustration**



You will drill the line of your "T" with the side of the drill bit on your chalk line.



We recommend using the Drill Guide to aid in proper angles.



Adjusting the three Allen bolts up or down on the base of the Drill Guide will allow you to level the guide. You will know it is level when the bubble is in the middle circle.

You will have to repeat this for every hole that you drill.



No Lean (NL)



Light Lean (LL)



Heavy Lean (HL)

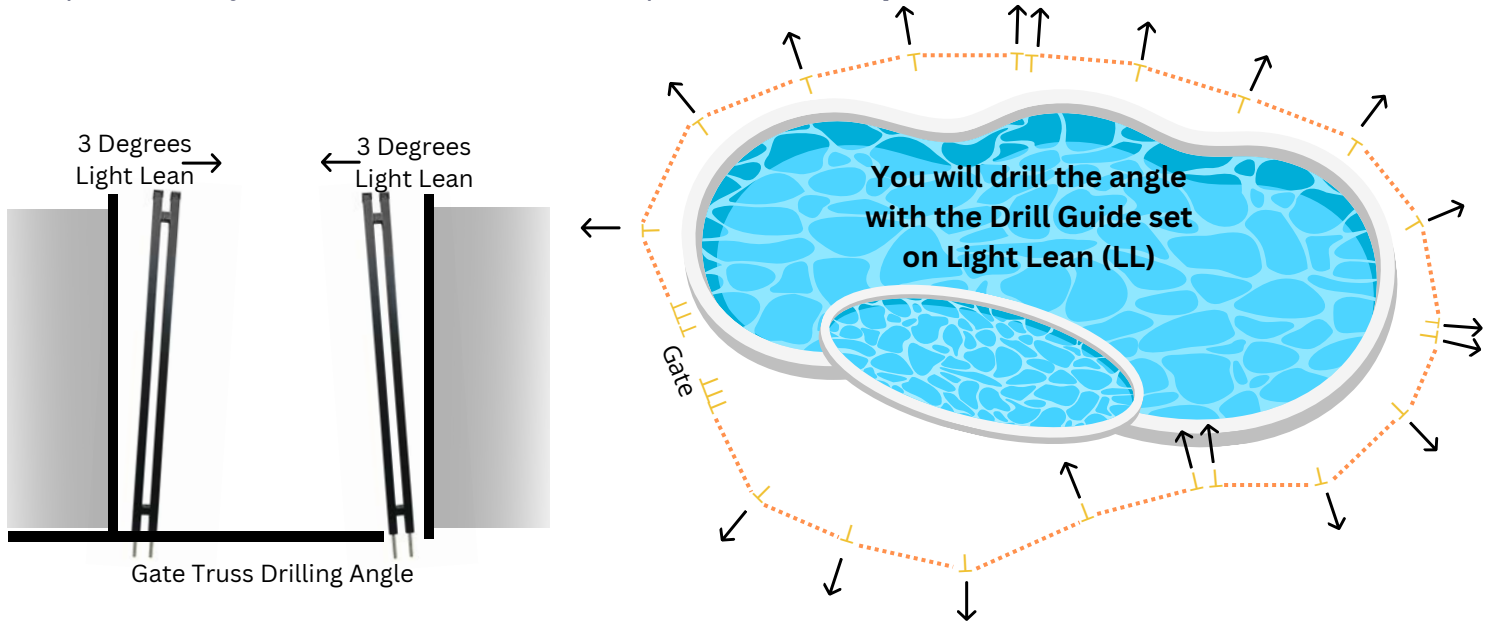


There will be two to three settings that you will need to make depending on what part of the fence you are drilling. If your fence is in a straight line then you will want to drill the poles "Plum" or straight up and down which would be **NL** (No Lean). The Gate Trusses should be drilled on **LL** (Light Lean). You will also use Light Lean (**LL**) for your fence poles that are in a curve. See example of the kidney shaped pool with spa on the next page. You will want to drill double pole corners on Heavy Lean (**HL**). **See Illustration on page 3**

Pro Tip! You can download a free level app on your phone and then use it to check your angles.

Double check the proper angle for each hole before you drill . Most pool decks are around 4 inches thick. The sleeves are 4 inches long so you will more than likely drill through the deck to the dirt and then stop.

When drilling an oval or kidney shaped pool, you will need to drill the holes on the Light Lean (LL). Be sure you are drilling so the pole will lean **away** from the pool unless the curve is headed into the pool, Then you would drill towards the pool. **See example below.**

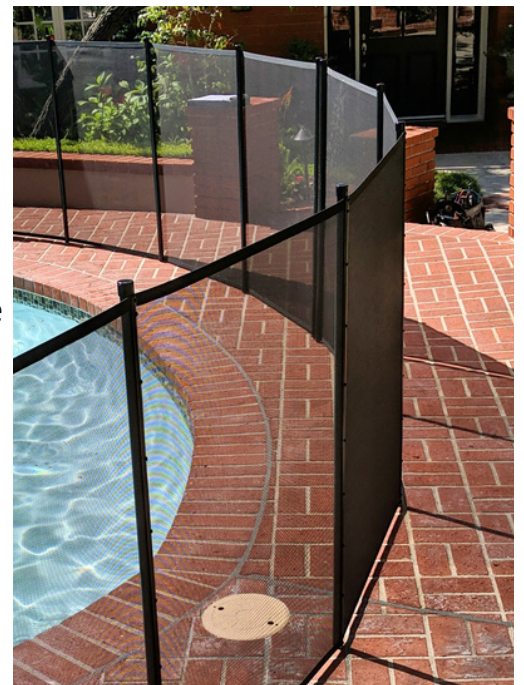


After drilling all the holes, rinse out the holes with a hose and then insert the sleeves. The sleeve may need a little tap from a hammer to get all the way in the hole. If the sleeve doesn't slide all the way in to the hole, pull it out and rinse the hole again.

Installing Your Fence

It's time to install the fence. The Gate Trusses will be the first to be installed. Insert the Gate Trusses and then the sections of fence. You should install the fence sections so the Mesh and Moldings holding the Mesh to the poles are facing away from the pool. The poles will be on the inside, (pool side) facing the pool.

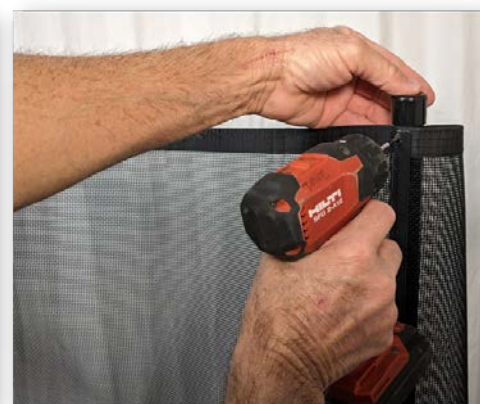
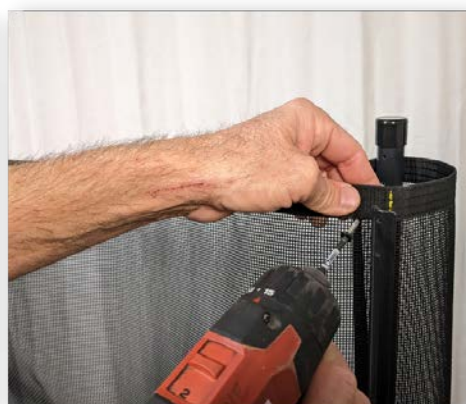
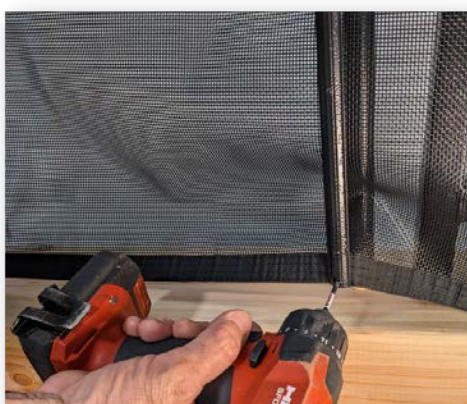
Now lets go back to the shorter sections of fence on the ends. Using your cordless drill, unscrew the molding from the pole from the last panel. Insert your loose pole back into the last hole.



Pull the bottom loose mesh snug across the loose pole and mark the bottom border at the middle of the loose pole. Measure from the middle of your last pole to the mark you made on the border. Transfer that measurement to the top border and mark it.



Screw only the top and bottom hole of the molding back onto the mesh at your marks. Then screw the molding and mesh to the top and bottom attaching it to the pole. Don't cut the mesh or screw the rest of the molding down yet. This will be done later.



Pro Tip! Double check your measurements to assure the function and look of your fence

Wall Attachment

Please review our Youtube video: How To: Install a Wall Attachment

Your wall attachment kit will come with two Hilti red wall anchors, two Section Latches, and two long Eye Screws





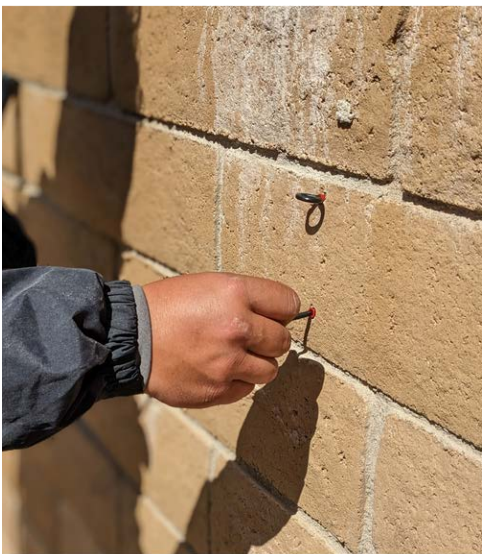
Using your torpedo level, make sure your last pole is plum (straight up and down).

Mark the wall with your grease pencil at the second and third screw hole from the top of the pole.

Drill the marks on the wall using your hammer drill and ¼" masonry bit.

Insert the red Hilti Wall Anchors into the holes so they are flush with the wall. Then screw the large Eye Bolts into the wall. You may need to use a small screwdriver to turn them in all the way. Attach the section latches provided with the wall anchor kit at the second and third hole in the pole. You will remove the small eye screws that are connected to the Section Latches. You will not use them for your install.

If you are attaching your mesh fence to a wood fence then you should terminate the fence at a main support. Drill the marks using your 1/8" drill bit. You will **not** be using the red Hilti wall anchors. Screw the large Eye Bolts into the wood support using a small screwdriver to turn them in, and then connect your fence.



Now let's connect the gate truss to the fence. This method will work with **round tube and square tube double pole trusses**. Make sure your fence is attached to the termination points (wall anchors) and all the sections are connected with the section latches. Also make sure the gate truss is firmly seated all the way in the pool deck.



Remove the second screw from the top on the fence pole. Use the zip tie around the top of the gate truss and fence pole. Tighten the zip tie pulling the two together. They should be about 2 1/2" apart on center. Mark the gate truss at the same level as the empty screw hole. Now, using your tape measure, find the middle of the truss and mark it



Drill the center of the truss with an 1/8" drill bit. Using the screw you removed from the pole, screw it into the truss and then remove it. This will pre-thread the hole for the section latch which you will now screw in the eye of the latch.



Screw the Eye into the Gate Truss. (A small screwdriver will help turn the eye to thread it into the truss). Then screw the Section Latch into the pole and connect the two. At this point you will remove (cut) the zip tie.



Now that your fence is connected to the gate truss and termination point, It's time to finish your end sections. We call this a Cut.

Starting in the middle of the pole, Pull the mesh snug but not too tight, and then reinsert the screw. Repeat this process for the hole above and then below until all the screws are installed in the pole. If this is a high traffic area, you can reinforce the Cut with extra screws. Using your 1/8" drill bit, Drill evenly between the existing screws and then screw in 5/8" Section Screws.

To cut the excess material off, disconnect the pole from the termination point.

Using a box cutter with a new blade, **carefully** cut the border and mesh material along the side of the molding.



Installing Your Self Closing, Self Latching Gate

Please review our Youtube video: [Double Pole Truss Install](#)

You need to decide which way you would like the gate to open (left or right). The gate door should **always** swing out, away from the pool.



The weep holes are an indication of the bottom of the gate frame.

Remove the second screw from the top on the side molding of the gate frame. Then remove the fourth screw from the bottom of the side molding on the frame.



Using the black screws included with your gate latch kit, screw the hinge into the existing hole on the frame. Then, using your 5/32" drill bit, pre-drill the remaining hole and then screw it to the frame.

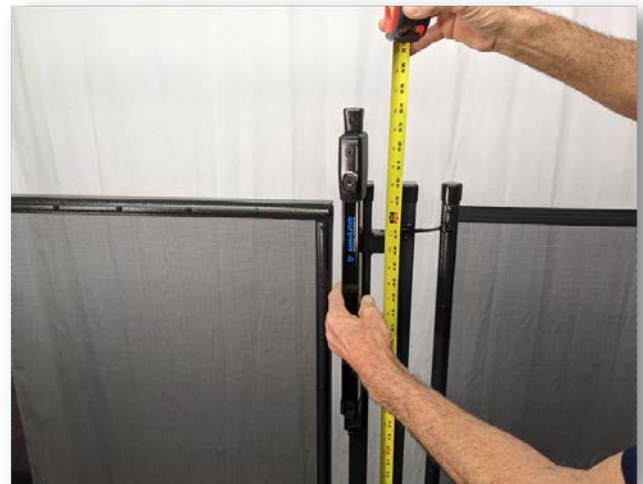


Lining up the top of the gate frame to the top border of the mesh, pre-drill the top hole and then screw it into place using the black screws. Now repeat this on the on all three remaining holes.

Hold the gate frame open. Pre-drill and screw all 8 holes.



Now, slide the latch mounting brackets onto the latch. One bracket towards the top of the latch and one on the bottom.



The latch location will be where the top of the pull nob is at 54" per ASTM standards

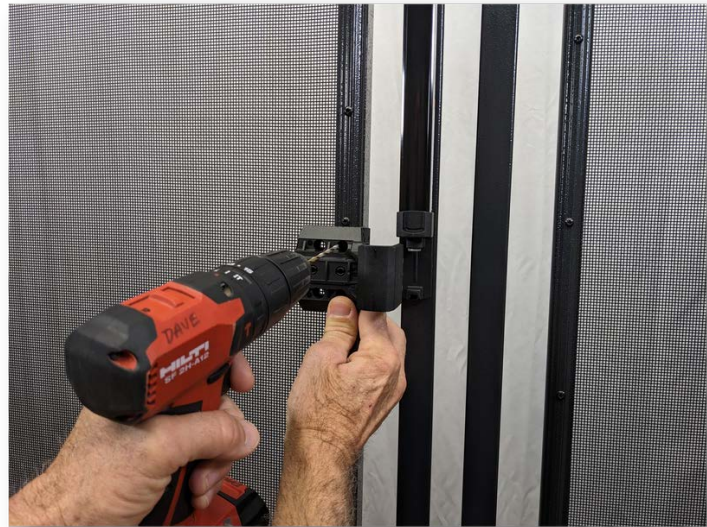
Once you have marked the location of the gate latch brackets, slide them off the latch body and install them by pre-drilling and screwing them onto the gate truss.





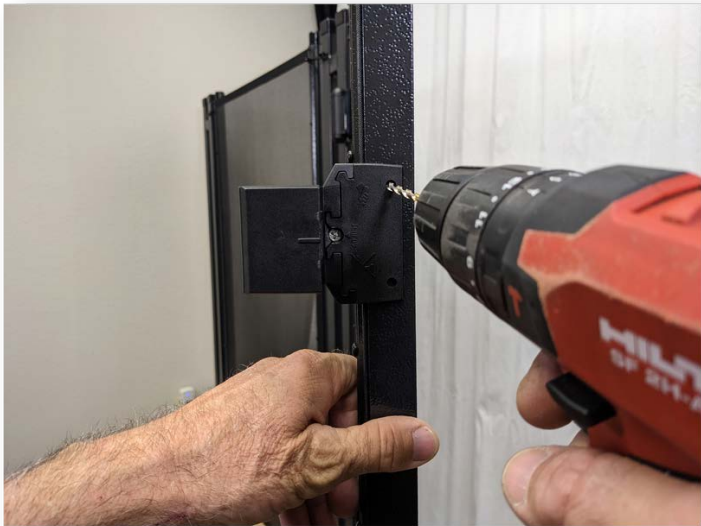
Once the brackets are installed on the truss, slide the latch body onto the brackets. The bottom bracket will line up with the bottom of the latch.

Hold and mark the striker body on the gate frame. There should be about 1/8" gap between the striker body and the latch body. Pre-drill and screw the front of the striker body.



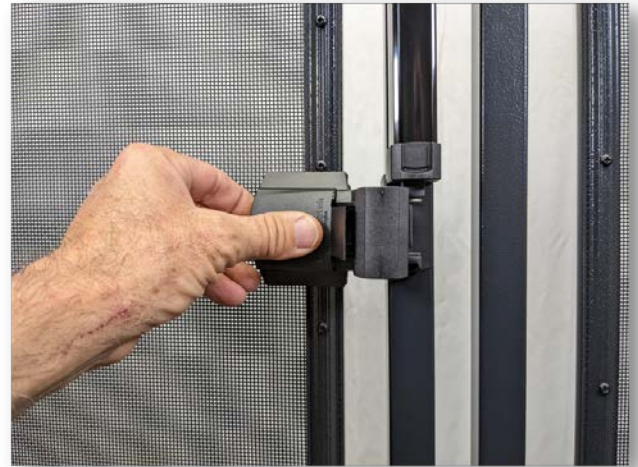
Next, Pre-drill and screw the side of the striker body to the gate frame.

Note: If there is a screw on the gate frame molding that is in the way of the placement of the striker body. You must remove it. The striker body must sit flat against the molding.





Snap the striker body cover plate onto the front of the striker body.



Snap the hinge cover plate onto both sides of each hinge



Using a flathead screwdriver, You will need to adjust the springs on the hinges



Insert a flathead screwdriver into the slot on the top of the hinge. Before you turn the screwdriver, you will need to push down to disengage the teeth holding the spring tension. **Note that when you push down, you will feel the spring suddenly try to unwind.** Do not let it unwind. Instead, you should add one notch counter clockwise and then allow the adjustment to align with the teeth and come back up.

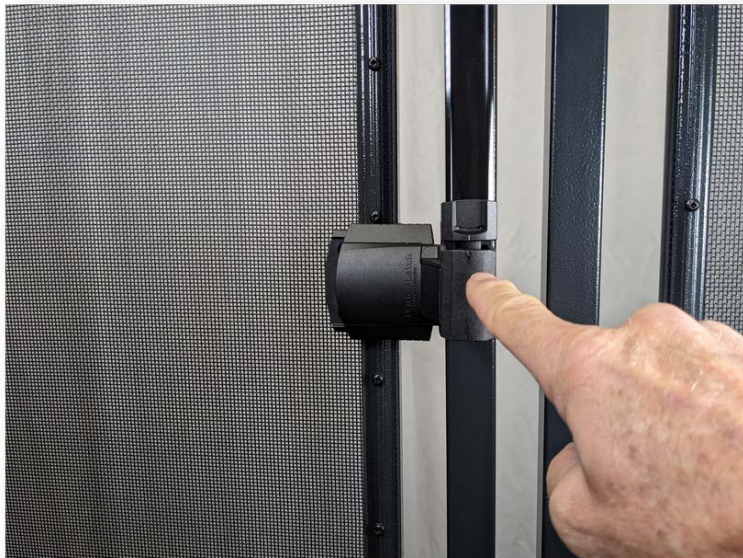


At this point you can install the hinge safety cap onto the bottom hinge. This will keep the hinge from becoming a foothold if a child were to try to climb over the gate.

its time to adjust the gate latch. You may need to do this periodically throughout the life of your fence.

**Please review our Youtube Video:
How To Adjust Your Pool Fence**

Locate the silver screw on the inside middle of the striker body. Turn the screw with a phillips head screwdriver clockwise. This will move the striker body to your right. Conversely if you turn the screw counter clockwise, it move to the left.

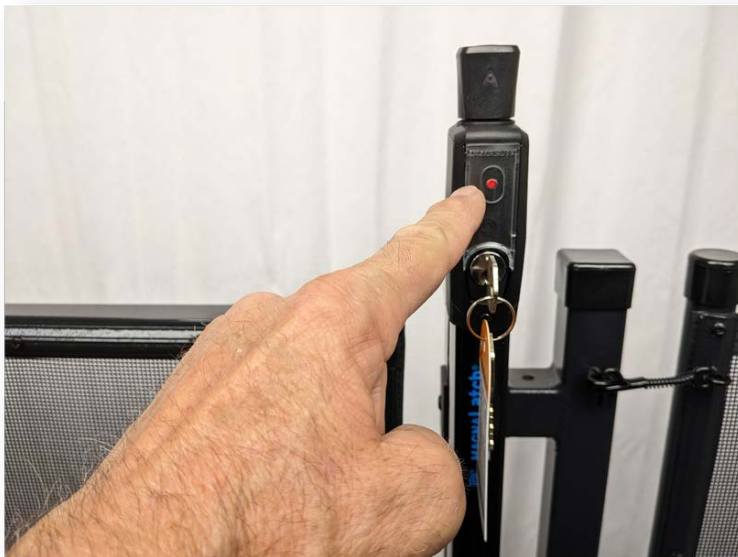


For this adjustment, you will use the reference marks on the front of the latch and striker body. These two marks should be lined up.

Next you will check the reference marks on the side of the latch. You can slide the latch body up and down to line it up.



Without moving the latch body, open the gate and insert the small stainless screw into one of the three holes on the side of the latch body. choose the one that lines up with the holes in the Latch Body Bracket



The gate should now open by pulling up on the top nob and when you let go of the gate frame, it should close on its own. Check to make sure it will close completely unencumbered.

To lock the gate, you will insert the key, turn it one full rotation counter clockwise. You will see a red dot appear in the indicator window.

to unlock it, turn the key one full rotation clockwise. The red dot will go away.

The Magnalatch utilizes a tumbler lock system similar to your front entry door. If you have a salt pool or if you live near the coast, the tumblers can get sticky with salt. if the key feels tight, a quick shot of WD-40 will free it up.