A11-Safe POOL FENCE & COVERS

Pool Fence

Installation Quick Guide

Rectangular Post Truss Peg

Step by step instructions





+800 786-8110



ALLSAFEPOOL.COM





Youtube.com/@allsafepoolfence/videos



Table of Contents

Tools you will need for your install	1
Starting your layout/ Straight Line Fence	1
Rectangle Pool with 90 degree Corners	2
Curved or Kidney Shaped Pool	3
What's Under My Deck?	4
Drilling Your Deck/ Drill Guide	5
Drilling Angles/ Installing The Flange to the Rectangular Post	6
Installing the Fence/Cutting the Shorter Sections	7
Wall Attachment	8
Connecting the Fence to the Rectangular Post	9
Rectangular Bracket/Finishing the Cut Short Sections	10
Installing the Hinges to your Gate Frame	11
Installing the Hinges/Installing the Trilatch	12
Installing the Trilatch	13
Installing the Trilatch	14
Adjusting the Trilatch	15

Youtube.com/@allsafepoolfence/videos

Tools You Will Need



Drill Guide (optional but highly recommended)

Hammer Drill (Heavy Duty)

5/8" X 18 Masonry Drill Bit

1/4" Masonry Drill Bit

Cordless Drill

#2 Phillips Bit

#2 Square Drive Bit

1/8" Drill Bit

5/32" Drill Bit

Pliers

Box Cutter

Marker (Pencil or Grease Pencil)

Chalk Line

Garden Hose or Rope (for your layout)

Long Zip Ties

Torpedo Level

Tape Measure

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 (according to ASTM) 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 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 for the yard fence. 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 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 more common blue chalk tends to be semi permanent and can be difficult to remove.

Using your tape measure, make two "T" marks on your chalk line 33 inches apart with your grease pencil. This will be your gate opening.

Gate

Pool Side

33'

Outside

To you the "T" 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" at 2 1/2". This will be the first pole of your fence. Then measure 36" and then make another "T" mark. Continue this measuring and marking process.



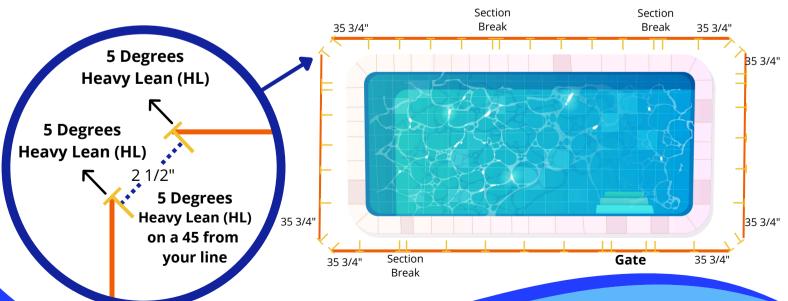
There are **6 poles** in every section so you will need a total of **six marks** extending out from your original gate truss marks. After the 6th pole mark you will need to measure and mark 2 ½" for the beginning of the next section of fence. Each section of fence with six poles is 15 feet long. Continue 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.



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

Rectangle with 90 degree Corners

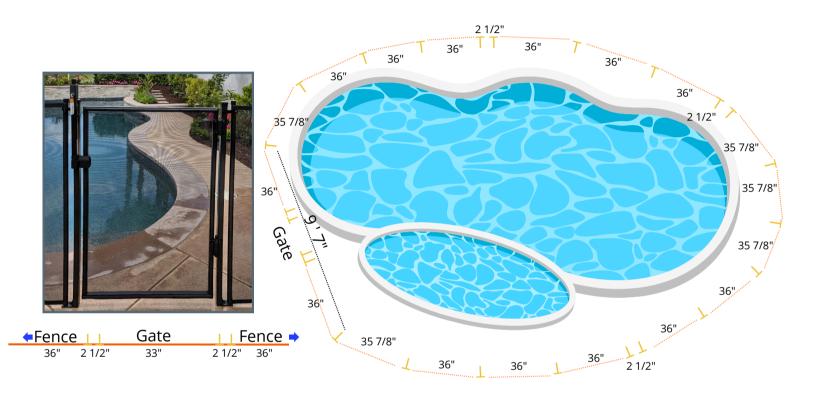
You may have a rectangle pool. To surround the pool, you will layout the fence the same way as a straight line except you will need to have two poles at the 90 degree turn. First, snap your chalk lines at the desired distance from the pool on all four sides. Then mark where you would like the gate. Now 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 waters edge but you can decide how much deck space you will need inside the pool area. Here is an example of gate placement and fence layout on an oval or Kidney shaped pool.



In the middle of your gate chalk line, make two "T" marks 33" apart. This is your gate opening. Then from your gate truss marks, measure and mark "T" at $2\,\%$ ". 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. This creates a straight line to help the function of the gate. After the second mark of your fence, you can start to turn the fence around the pool.

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 being too tight. After measuring and marking your 6th pole, measure 2 ½" and then start another 6 "T" marks for the next section of fence. Continue this process 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.

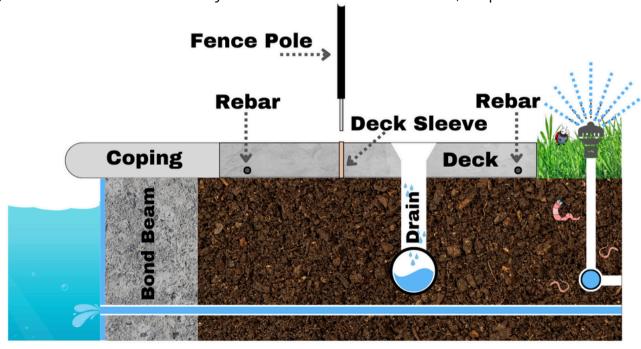


What's Under My Deck?

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

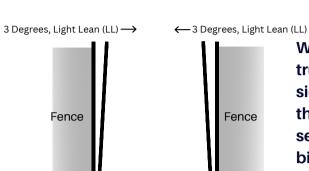
Drilling Your Deck

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 trusses. The gate trusses should be drilled at 3 degrees (Light Lean, LL) leaning in towards each other.

Please watch our YouTube Video

lease watch our YouTube Video on the Hammer Drill Guide



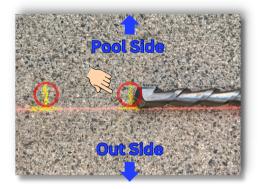
Gate Truss Drilling Angle

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



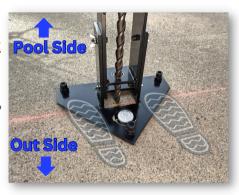
Lets go over how to use the drill guide and the adjustments you will make

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. The red circles indicate where your holes will be.

We recommend using the Drill Guide to aid in drilling straight holes.



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)

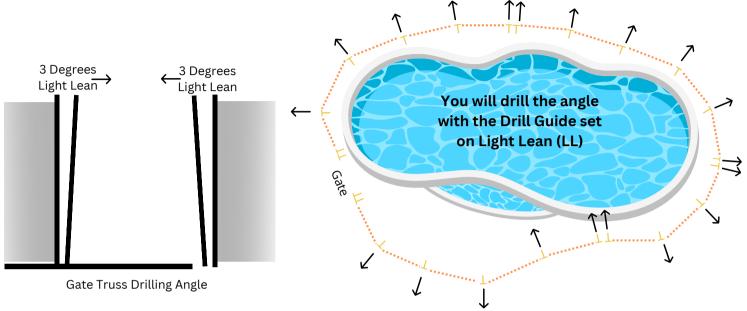


There will be two to three settings that you will need to make depending on what part of the fence you are drilling. If your fence is in a straight line then you will want to drill the poles "Plum" or straight up and down which would be **NL** (No Lean). The Gate Trusses should be drilled on **LL** (Light 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 thoroughly 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.

Now its time to attach the Gate Flange to the bottom of each Rectangular Post. Use the 5/8" section screws provided in the attached package with your #2 Phillips drive with a Drive Extender.





For Tips on how to install or replace the Bolt On Flange,

Check out our video on Youtube

Installing Your Fence

Insert the Gate Trusses into the deck and then install 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**, 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 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 middle of the last pole still attached to the fence mesh to the mark on the mesh you just made. Transfer that measurement to the top border and mark it.









Screw the top and bottom hole of the molding back onto the mesh at your marks. Screw the molding and mesh to the top and bottom of 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

Each Wall Attachment Kit is sold separate













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.

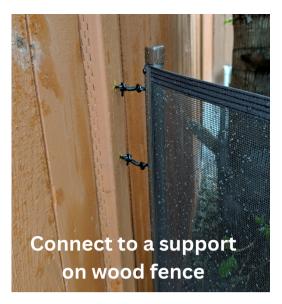
Drill the marks on the wall using your hammer drill and ¼" masonry bit.

Insert the red Hilti Wall Anchors into the holes so they are flush with the wall. Then screw the **large** Eye Screws 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 Screws 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. 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 and all the poles are firmly seated all the way in the pool deck.



Remove the 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. After screwing in the eye to the pole, hold the rectangular bracket level, and then use the center hole of the Rectangular Bracket to drill the Rectangular Post with a 5/32" Drill Bit. Now you can use the black screws to attach the bracket to the post. Repeat this process on the second Rectangular Post.









Turn the eye to the horizontal position, attach and screw the quick link closed.



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

Starting in the middle of the pole, Pull the mesh snug and then reinsert the screw. Repeat this process for the hole above and then below until all the screws are installed in the pole.

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



Watch the video on how to assemble the Gate Kit



The weep holes are an indication of the <u>BOTTOM</u> of the Gate Frame.

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.

You will start by measuring and marking the location of your hinges. Measuring from the TOP of the Gate Frame, make a mark at 7 inches and then at 8 1/2 inches. Then measuring from the BOTTOM of the Gate Frame you will make a mark at 10 1/2 inches and then at 12 inches. These marks are where you will Pre-Drill the holes for the hinges with a 5/32" drill bit.







As you can see in the illustration above, the molding on the Gate Frame has a center line. The screws holding the molding and mesh to the Gate Frame are located on the center line. You will want to pre-drill the 5/32" holes **just off the center line closer to the mesh side**. In the illustration above it is just to the right of the center line. Use a sharp drill bit and start drilling slow as to not allow the drill bit to shift and drill through the mesh on the Gate Frame. At this point you will only predrill the front holes (two holes for each hinge). You will predrill the holes on the inside of the hinge later.

Using the screws provided with the hinges, screw the hinges onto the Gate Frame. You will need to remove the Phillips screw on the molding near the bottom hinge to allow the hinge to sit flat on the Gate Frame.

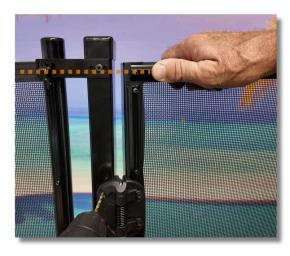




Line up the top of the Gate Frame with the top border of the fence mesh.

Push the hinge down so it sits flush on the front and side of the Rectangular Post. Pre-drill the top hole with a 5/32" bit and then screw it into place. Now repeat this process on the bottom hinge before drilling and screwing the second hole for the top hinge.

Next, hold the gate frame open and Pre-drill and screw all 8 holes on the inside of the hinge.









Now, slide the latch mounting brackets off the latch. Align one of them just under the Rectangular Bracket. Holding the side flush with the side of the Rectangular Post, pre-drill and screw it into place. Pre-drill and screw in the lower hole and the side hole as well.







Now that the top bracket is installed, Slide the latch body onto the top bracket. Slide it down until the top pull knob body is at 54". ASTM standards suggest the 54" rule to keep little ones from reaching the pull knob.

Slide the bottom mounting bracket into the bottom of the Latch Body making sure you don't move the Latch Body from it's 54".





Pre-drill the side hole and screw it into place.

Now slide the Latch Body off the mounting brackets and then pre-drill the remaining two holes. Screw the top hole in but leave the bottom hole empty. The bottom hole will accept the one longer black screw that will be installed once you slide the Latch Body back onto the mounting brackets.











To mount the Striker Body mounting bracket, locate the raised indicator on the bracket and the latch body. With the two raised indicator lines lined up, Pre-drill the two front holes and then screw it into place. And then pre-drill and screw the two side holes.

Note! You may need to remove the Philips head screw that holds the molding in place if it is in the way of installing any part of the Trilatch or Hinges.

















To mount the Striker Body, slide the Striker Body onto the Mounting Bracket. Turning the Silver Screw clockwise will thread the Striker Body onto the Mounting Bracket. Turn the screw until the Striker Body and Mounting Bracket are flush with each other as shown in the illustration above.









Secure the Latch Body by using the one long black screw that you set aside. Screw it all the way in and then cover the hole with the cap provided with the Trilatch Kit.

It's time to adjust the gate latch. You will need to do this periodically throughout the life of your 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 left. Conversely if you turn the screw counter clockwise, it move to the right.





When the latch is adjusted correctly, there will be even spacing between the Striker Body and the Latch Body. And the tell is that the Gate will close and latch completely unimpeded.

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



