

Installation Instructions: How to Install the Tahoe Slipfence

STEP 1 – Dig Post holes

9' POST SETTING for a 6' high Fence

Dig 8" diameter post holes at least 36" deep and fill the bottom with approximately 4" of gravel so that the hole depths are at least 32" deep from the gravel the ground level.

8' POST SETTING for a 6' high fence

Dig 8" diameter post holes at least 24" deep and fill the bottom with approximately 4" of gravel so that the hole depths are at least 20" deep from the gravel the ground level.

10' POST SETTING for a 6' high fence

Dig 8" diameter post holes at least 48" deep and fill the bottom with approximately 4" of gravel so that the hole depths are at least 44" deep from the gravel the ground level.





NOTES

Keep in mind the Post needs to be set 76" from the ground level to the top of the post because the Fence boards or "Pickets" are 6' high but need approximately 2" from ground to bottom of fence board to keep them dry and approximately 2" from the top of the fence board to the top of the post to accommodate the 1" post-cap collar and, b) to have the post 1" above the fence boards for a really nice look.

The reason for the gravel in the bottom of the hole is to allow the post to drain if by any chance water or condensation gets into the center of the hollow post.

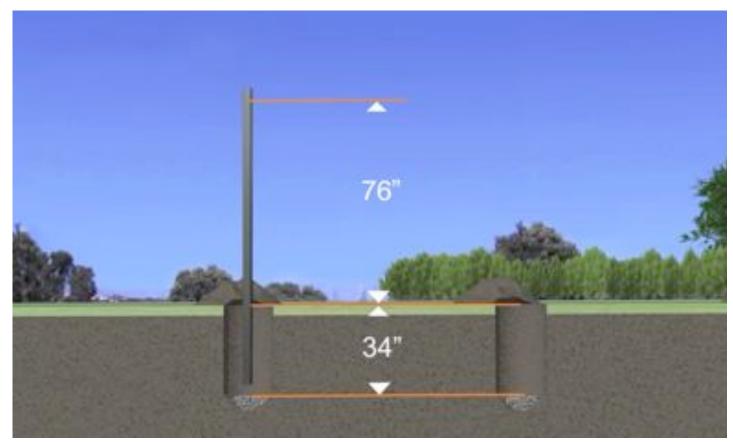
TIPS

Most areas of Canada and the USA only require a 36" hole. However, in colder climates where the frost line deepens, another 12" deeper hole may be required ie. 48"deep. If you are installing in this colder area please call TAHOE Slip-Fence or your local Tahoe Slipfence dealer to order 10' long Fence-Posts for a 6' high fence.

STEP 2 - Insert Posts

Insert the **3" x 3" x 9' square Aluminum Fence Post** into the center of the post hole ensuring that the post is at least 6'4" or (76"), above the ground level so the top of the posts will be 2" above the top of the regular 6' high fence boards which should be sitting 1.5" to 2" off the ground at the bottom to keep the fence boards dry.





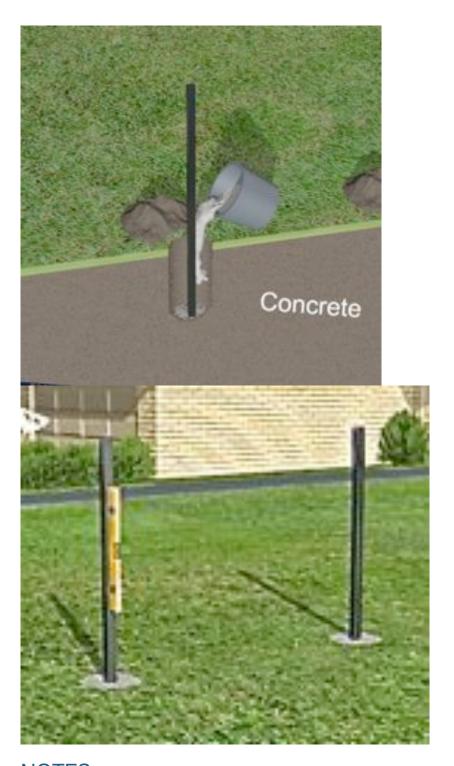
If you are installing a 5' high fence then dig 48" deep holes and make sure the 9' fence posts are only 5 '4" above the ground level, OR order 8' posts from your TAHOE Slipfence Dealer and only dig 36" holes.

If you are installing an 8' high fence in a non frost climate then make sure to order the Tahoe Slipfence 10' Posts (actually 124" long) and dig up to 36" deep holes, lay in your gravel and when inserting the post make sure your post are 24" into the concrete leaving 100" above the ground level. This leaves enough room for the 2" from ground to Fence board and on the top for the 1" Post cap and 1" space from cap to board.

STEP 3 – Set Posts in Concrete

Pour Post Setting concrete into the post hole **around the post**, and while the concrete is still wet, make certain that the posts are exactly 8 feet, (or 96"), apart to the center of each post and also try to make sure for a 6' high fence that your posts are 76" from ground level to the top of the post. The closer you can get your posts to 76" from ground to tip at this stage the less you will need to cut posts later

Then Level each Post on both X and Y-axis. You can hold your fence posts level and in place for a few minutes with quick-setting post hole concrete or stabilize the posts with stacked fence boards to hold the post in place while drying.



DO NOT pour concrete into the post-hole and then insert post into concrete! This will eliminate any repair that you may need to do later. It also may offset your posts from being exactly 76" high from the ground.

It is imperative to set the posts in concrete and be certain to:

- a) Level post both ways
- b) Spread 8 feet apart, (or shorter), to centers.
- c) Measure 76" to top of post from the ground level.

You can actually use a stringer (plus leave a quarter inch on both sides), (or a 2×4 at 93" long), to lay on the ground as your exact space needed between posts

inside to inside.

TIPS

If you run into rocks or roots or some other obstruction wile digging your post holes that may prevent you from centering the posts exactly 8' apart, you can always make a post section shorter than 8' and cut the stringers, then go back to regular 8 foot sections.

NEVER make fence sections between posts longer than 8' from the center of two fence-posts as you cannot make the stringers longer than 8 feet.



Repeat this same procedure to set all of the remaining posts required in your fence project.

STEP 4 - Gate Posts

Make sure that Gate-post holes are the same depth and posts are set the same height above ground as the rest of your fence and approximately 30"-48" apart (or see instructions from Gate installation guide of gate), and if available use collar style aluminum hardware to fasten the gate hardware, if collar style is not available use self tapping aluminum gate hardware. (common lock and pin gate closure), to the 3" aluminum gate posts.

NOTES

If using self tapping hardware such as hinges it is wise to drop a $2 \times 3 \times 5$ down into the centre of the hollow Gate post so that the hardware has something to bite

into once tapped through the aluminum post This will keep the gate strong and true much longer than normal.



TIPS

If there is rain in the forecast before you are to complete your fence project, it is best to cover the hollow opening at the top of your post during construction. You can do this by placing the post-caps onto the tops of the posts temporarily (do not tap all the way on or they are very difficult to remove), so that no rain can enter the center of your fence posts during construction.

STEP 5 - Install End Brackets

When the concrete has dried, (overnight is best), and all of the fence- posts in your fence project are in place including your gate posts, Slide 2 **End Brackets** onto your first post with the bracket's stringer seat facing inward toward the fence section and make sure that the Stringer seat is positioned above the post bracket collar not below, otherwise the bracket is on upside down.





It is at this point that if you are running a string line to follow the grade instead of stepping your fence, that you should measure approximately 12" up from the ground to the bottom of your bottom End bracket collar and hand tighten the bottom bracket.

Then measure 51"" from the top of the bottom bracket collar to the top of your top bracket collar.

These two brackets are now your string line starting points. Pull the string-line tight along 5 posts down the fence line. (We recommend only 5 sections at a time so your string line doesn't sag), and these will be your tie on points for the other end of your string line.

Fasten the top and bottom brackets (likely Middle brackets), onto posts along your string line between your two string line points and repeat for the rest of your fence project 5 sections at a time.

TIPS

Make sure that the dome-side of your carriage bolt that are inserted at this stage are on all on the same side of the fence for all posts. This will be the side of the fence that will have the ripped half board on either end of the fence section, i.e. the HALF board hole side of the stringer. See step 8 picture.

STEP 6 - Run String-line

It is at this point that if you are running a string line to follow the grade instead of stepping your fence, that you should measure approximately 12" up from the ground to the bottom of your bottom End bracket collar and hand tighten the bottom bracket.

Then measure 51" from the top of the bottom bracket collar to the top of your top bracket collar.

These two brackets are now your string line starting points. You only need to run one string line from the bottom bracket and measure 51" up from the bottom bracket to the top bracket so the stringers run straight along your fence line. Then measure approximately 12"

up from the ground on a post 5 sections down the fence line. (We recommend only 5 sections at a time so your string line doesn't sag), and these will be your tie on points for the other end of your string line.



NOTES

Do not tighten this down with a wrench yet as there may need to be an adjustment to the height when the stringer is placed onto the bracket.

TIPS

Make sure that the dome side of your carriage bolt that are inserted at this stage are on all on the same side of the fence for all posts. This will be the side of the fence that will have the ripped half board on either end of the fence section. See step 8 picture.

STEP 7 - Install Middle Brackets

Slide two **Middle Brackets** onto the next post in the fence line, (if it is not a step section), making sure that the stringer seat is positioned above post bracket collar and in line with your string line, and tighten these nuts only slightly to hold in place.



Middle Brackets will have two short carriage bolts and grip nuts to hold the bracket onto the post temporarily until the Stringer has been placed on and leveled.

TIPS

Make sure that the dome side of your carriage bolt that are inserted at this stage are on all on the same side of the fence for all posts. This will be the side of the fence that will have the ripped half board on either end of the fence section.

STEP 8 - Install Stringers onto Brackets

Place the **Stringers** "U" shape down onto the bracket seats making sure the board holes in both top and bottom stringers are aligned. Insert the Longest Carriage Bolts through the top of the stinger and the bracket oval opening and tighten the bottom nut.



There will be a half sized fence-board hole on one side of each stringer, make sure that these half board holes are in line with both the top and bottom stringers so the boards will slip in nicely through each board hole in the top and bottom stringer.

Note: Once you place the half board holes on one side of the fence it is advisable to keep the half board holes on that same side of the fence to maintain a clean consistent look to both sides of the fence throughout the whole project.

TIPS

Make sure that the Half board hole in your stringers align with the dome side of your carriage bolt used to hand tighten the bracket onto the post so that the half board can slide easily into the half hole opening on each end of your stringer without being impaired by the grip nut. See image on step 8.

If the Long Carriage bolt doesn't provide enough threads for the nut to catch, then loosen the smaller bolt's nut so the bracket is not distorted and try again. You may need to clamp down the bracket seat to get the nut to catch. Longer bolts are available at Tahoeslipfence.com if required.

STEP 9 – Align Stringers

If you are installing a level section step style fence, at this point, place a level on both the bottom and the top stringers and adjust both bracket heights to level and then tighten all four brackets to the posts.

If you are installing a "Follow the grade" style fence and have a string-line stretched from among 5 sections then at this point you would align one stringer with the string-line and measure the other stringer to be spaced 51" apart from the top of your bottom stringer to the top of your top stringer. This will achieve an even space between top and bottom stringers all along your fence line project.



NOTES

The best tool to be used here is a half-inch open end socket wrench. Because it is thin enough to get in under the stringer and quick like a socket wrench.

If you need to dip or climb your fence section because of elevation changes in the grade of your property, you may want to install a "step" section or "rack" your fence. This will require some longer fence boards and some longer posts to accommodate the drastic elevation changes in your fence project.

Also, please see Hills, Swales and Changes in Ground Elevation in FAQ section of the website.



STEP 10 – Fasten Stringers

Once the brackets have been leveled and tightened onto the fence posts you can now fasten the stringer to the bracket seat on the post bracket with the carriage bolt, (the larger of the two in the bracket kit), and grip nut provided to both top and bottom End and Middle brackets in your fence project and tighten.





TIPS Do not over-tighten.

If you are following the grade in the property, the Stringers can be elevated and or dipped by approximately up to 30 degrees without having any fastening issues. Just tighten down the carriage bolt as you would normally if the fence line were straight. More than 30 degrees up our down we advise stepping the fence.

If you find that your bracket collar around the post is not gripping onto the post and the bracket is sliding on the post, make sure that you have already inserted your top bolt that fastens the stringer to the bracket and then tighten the short collar nut as tight as necessary to stop the bracket from sliding up or down on the post.

Also if there is a need to bend a section of fence but not a full 90 degrees, you are able to do so by cutting the stringer of up to approximately 30 degrees side to side. Any more that 30 but less than 90 you may need to grind off part of the inside flange of the stringer to make the bend in the fence project.

Repeat these steps to secure and level all of your stringers to your fence posts in your fence project.

NOTES

Dealer Note: Once these previous steps have been completed, inserting the fenceboards is extremely simple, and as such may be appealing to the customer to do it themselves for a discount in labor costs.

Remember that each 8' fence section requires two 3" wide fence boards and if this size is not available then one regular fence board must be rip-sawn down the center providing 2 pieces - 3" wide fence-boards to be inserted through the half board holes in the ends of the top and bottom stringers in each section on one side.

STEP 11 - Space boards from ground

If the ground is somewhat level, Lay one $2" \times 6" \times 92"$ board on the ground between the two fence posts to ensure a 1.5" - 2" lift of your fence-boards off of the ground so that your fence boards do not sit directly on the moist grass or ground, and this also gives your fence

a nice straight look per section.



NOTES

You can eyeball this section but it makes it much quicker and easier if you are able to lay the 2×6 on the ground for your fence boards to stop while inserting them through the top stringers.

STEP 12- Slip in fence boards (pickets)

Slip in the fence-boards through the Board-holes in the top stringer first and then through the board holes in the bottom stringer, (leaving approximately 1.5" - 2" from the ground to the bottom of the fence-boards if you did not place a 2×6 on the ground).

If a step fence style then make sure that these Boards are fairly level at the top with each other in the fence section or the Fence will not look as level as it should. The bottoms of the fence boards can be cut to follow the grade, or you can also lay a 2×6 on the hill between your step section posts and this will give you a unique step section look with even space from ground to bottom of fence board.



If following the grade, make sure that the fence board tops are the same distance from the stringer all the way along the fence section for a nice even looking fence project.

NOTES

The reason that the board-holes are larger than the fence boards is so that when you need a fence section to drop below level for a swale or climb above level for a hill you are still able to insert fence boards level up to a 30 degree incline or decline.

Note: On both ends of one side of each stringer there is a half-board hole to which one $1" \times 3" \times 6"$ fence board must be installed or if not available, a regular $1" \times 6" \times 6"$ fence-board must be rip sawn down the center to provide 2 pieces of 3" wide fence boards to be inserted into the half board holes of each stringer on one side in either end to complete the section.

TIPS

Before inserting the wood screw, Push the boards to one side of the board hole either left or right to ensure fence-board levelness, and whichever side you push these first boards to, push all of the fence-boards to the same side throughout the full fence construction. This will ensure a nice clean level consistent fence.



STEP 13 – Fasten Boards to Stringers

Once all of the boards in a section have been inserted, through the board holes, Start with your centre board between the posts. Give the top stringer a little lift with your 2 fingers and fasten the fence-board to the Top stringer then do the same with the bottom stringer, little lift with two fingers then fasten the bottom of the board to the bottom stringer. This process provides a tiny bow in the stringers so that when the weight of wet boards are inserted the stringer will stay very straight. Once the boards are dried out then the fence will stay perfectly straight.



ALWAYS screw in both top and bottom screws in each fence-board before fastening the next fence board. following this instruction will eliminate any sag in the stringer.

2 top, 2 bottom, 2 top, 2, bottom... and so on, for each board.

TIPS

IMPORTANT: DO NOT SCREW IN ALL OF THE TOPS OF THE FENCE BOARDS AND THEN ALL OF THE BOTTOMS OF THE FENCE BOARDS!

This will create a SAG in the Fence section.

Screw the top of one board in and then the bottom of that same board in, then on to the next board, and so on.

Another tip to prevent any section sagging if the fence section is to slip the centre board in the section through the centre hole in both top and bottom stringers and let it touch the ground. Then slightly push up on the top stringer creating a slight bow and then fasten the board to the stringer. Do the same for the bottom stringer by pulling up on the bottom stringer while screwing in the wood screws through the stringer holes into the board. Then complete the rest of the fence section as normal ie. 2 top, 2 bottom, 2 top, 2 bottom etc.

After all other fence boards have been fastened to the stringer, remove the screws from the first centre "stabilizing" fence board and insert it as you normally would and fasten it to the stringers.

The result should be a fence section with a slight upward bow to withstand any extra weight or action that this section may be exposed to.

Repeat this same procedure for all fence sections until the last post and then use End Brackets for the last post just as you did for the first post.

Gates can be added anywhere in the TAHOE Slip Fence provided the gate hardware can fasten to a 3" Square Aluminum Fencepost typically via Aluminum Self Tapping screws, and Check the TAHOE Slipfence website for updates on gates.

STEP 14 – Tap on Post Cap

Once all of your Fence boards have been installed you can trim your fence posts if required to approximately 2" above the height of your fence boards to allow for a 1" post cap collar and 1" gap between the top of the fence board and the cap once installed. Once the tops of the posts are all consistent just tap on the Tahoe Slipfence Post cap with a rubber mallet and you are DONE!



TIPS

To trim aluminum fence posts you can use either a grinder with a metal blade, a Circular Saw with a metal blade, or a reciprocating saw with a long metal blade long enough to go through both sides of a 3" post or stringers. After cutting just file off the sharp edges and spray stringer ends with rust inhibiting black outdoor paint.

There is also a new hand held metal band saw that works quite well too.



