

# How to Install a Tahoe Slipfence

## Step 1

### INSTRUCTIONS

#### **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: a) 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

### INSTRUCTIONS

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.

### NOTES

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

## Step 3

### INSTRUCTIONS

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.

Then Level each Post on both X and Y axis. You can hold your fence posts level and in place by using stacks of the fence-boards that you will need to insert for each fence section. 24 pcs.

### NOTES

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 74" high from the ground.

You can actually use a stringer (or a 2 x 4 at 92.5" 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 while 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.**

## Step 4

### INSTRUCTIONS

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

### NOTES

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.

## Step 5

### INSTRUCTIONS

#### 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 48" apart (or see instructions from Gate installation guide of gate), and use aluminum self tapping hardware to fasten the gate hardware, (like the 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 x 3 x 5' down into the centre of the hollow Gate post so that the hardware has something to bite into once tapped through the aluminium 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 6

### INSTRUCTIONS

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.

## Step 7

### INSTRUCTIONS

Position Top bracket approximately 12 inches down from the top of the post and the bottom bracket up 12 inches from the ground then insert Carriage bolt #1( the smaller of the two sizes of carriage bolts), in sideways through square hole in End Bracket and tighten the nut slightly around the post to hold in place. Do the same for the remaining End Bracket.

### 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.

## Step 8

### INSTRUCTIONS

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 tighten these nuts only slightly to hold in place, top brackets 12" down from the top of post and bottom brackets 12 inches up from the ground.

### NOTES

**Middle Brackets** will have two #1 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 9

### INSTRUCTIONS

Place the **Stringers** "U" shape down onto the bracket seats making sure the board holes in both top and bottom stringer are aligned. Do not fasten stringers yet.

### NOTES

*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.

## Step 10

### INSTRUCTIONS

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 4 sections then at this point you would align one stringer with the string-line and measure the other stringer to be spaced 46" apart from the bottom of your top stringer to the top of your bottom stringer. This will achieve an even space between top and bottom stringers all along your fence line project.

### NOTES

*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 11

### INSTRUCTIONS

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 #2 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.

### NOTES

The best tool to be used here is the open end socket wrench. Because it is thin enough to get in under the stringer.

### TIPS

*Do not over-tighten.*

*If you are following the grade on 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. any more than 30 degrees up or down we advise stepping the fence section.*

*Also if there is a need to bend a section of fence but not a full 90 degrees, you are able to do so without 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.*

## Step 12

### INSTRUCTIONS

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 fence-boards 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 13

### INSTRUCTIONS

If the ground is somewhat level, Lay one 2" x 6" x 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.

### NOTES

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

## Step 14

### INSTRUCTIONS

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 x 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. This can be done with a level or if the ground is not completely level you can "eyeball" it.

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" x 3" x 6' fence board must be installed or if not available, a regular 1" x 6" x 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 15

### INSTRUCTIONS

Once all of the boards in a section have been inserted, through the board holes, fasten the fence-board to the Top and Bottom stringers with black wood screws inserted through the screw-holes in the stringers and into each fence-board. There are two screw holes on the top stringer per board and two on the bottom stringer per Fence-board.

## NOTES

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 in a "busy" area 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 ....

Then 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.

## Step 16

### INSTRUCTIONS

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 17 (LAST STEP)

### INSTRUCTIONS

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 board 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 !

The result is a Beautiful, Sturdy, Long lasting, weather enduring Fence, that was simple to install, simple to repair, and withstands all climates and seasons.

It is truly... THE GREATEST FENCE IN THE WORLD!

### TIPS

To trim aluminum fence posts you can use either a grinder with a metal blade, or a reciprocating saw with a long metal blade long enough to go through both sides of a 3" post.

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

# Tahoe Slipfence Frequently Asked Questions:

## **How deep do I dig the holes?**

Holes should be dug 36" to 48" deep for a regular 6" fence, and make sure to put 2" to 4" of gravel in the bottom of the hole for drainage. the Post should end up 6' 4" high from the ground to the top of the post.

## **Do I put gravel in the hole?**

Yes 2" to 4" of Gravel should be put into the bottom of the hole for Drainage. Make sure that the post stands 6' 4" or 76" tall from the ground to the top of the post once the post has been placed on top of the gravel in the hole before pouring in concrete.

## **How much gravel do I put in the hole?**

You should put approximately 2" to 4" of gravel in the bottom of the hole making sure the Post stands 6' 2" or 76" tall from the ground to the top of the post.

## **How wide should the holes be?**

An 8" diameter wide hole should be dug for the posts to be inserted for a solid Fence.

## **How far apart should the posts be?**

The Posts need to be placed Exactly 8 feet (96"), apart to the posts centers. If you encounter rocks, cement or other debris dis-allowing you to place the post at exactly 8 feet from the pervious post you can move the post slightly closer to the previous post But NEVER Further than 8 feet apart.

The reason for this is that the Stringers can be cut shorter than 8 feet but cannot be extended.

## **How high should the posts be?**

Once you have your Gravel in the hole and you place the posts into the hole the post must stand 6' 2" or 76" tall from the ground level to the top of the Post. This allows for up to 2" clearance on the bottoms of the fence boards and 2" on the top from the fence board to the top of the post to allow room for the post cap collar.

## **Gate?**

A standard gate can be used anywhere in your Tahoe Slipfence project and the hardware can be fastened to the aluminum post as if it were wood. We recommend dropping a 2 x 3" piece of wood down the center of the gate-posts to provide the hardware screws something to bite into after drilling through the post.

## **How do I install a gate?**

A standard gate can be used anywhere in your Tahoe Slipfence project and the hardware can be fastened to the aluminum post as if it were wood. We recommend dropping a 2 x 3" piece of wood down the center of the gate-posts to provide the hardware screws something to bite into after drilling through the post. Silicone around where holes were drilled through the aluminum posts is recommended to eliminate any moisture getting inside of the post.

Hall gate hardware can be fastened to the Aluminum post as if it were wood.

## **What if I hit rocks while drilling post-holes?**

If you hit rocks that disable you to drill the Post hole exactly 8' from the previous post you can always drill slightly shorter than 8 feet from the previous post because the stringers can be cut. NEVER drill a post hole further than 8 feet from the previous post or the stringers will not fit. The stringers cannot be made longer than 8' but can always be cut shorter. Once you have re-assigned the post to avoid the rock then continue from that point forward with your 8' sections.

Even if you need to drill 2 feet shorter for one fence section it should not be noticeable.

## **What if a post has been set already in concrete further than 8' apart from the previous post?**

If the posts have been set in concrete further than 8' or 96" from the previous post then it is recommended RE-drilling and resetting 4 posts that are 6 feet apart to cover the same 24foot span. Then after resetting the 4 fence posts in concrete 6 feet apart, cut the 8 stringers to 6 feet and continue with the rest of the fence sections being 8' apart.

## **Can I make the post-holes longer than 8'?**

NEVER MAKE THE POST HOLES LONGER THAN 8 FEET APART !!

Shorter than 8 feet apart is OK because the Stringers can be cut to length but cannot be lengthened.

## **Can I make the post-holes shorter than 8' apart?**

Yes the post holes can be shorter than 8 feet apart to accommodate for rocks or debris that you are unable to drill in that exact spot.

## **Can I place the posts shorter than 8'?**

Yes the posts can be placed at a shorter distance than exactly 8 feet, (96") apart because the stringers can be cut to size if necessary.

## **Can I place the post further apart than 8'?**

NEVER PLACE THE POSTS FURTHER THAN 8 FEET APART TO THEIR CENTER !!

Shorter is better than longer because the stringers can be cut to size but cannot be lengthened.

## **How do I cut the stringer?**

Stringers can be cut with a Metal saw, Hack Saw, Aluminum Saw or Power saw with metal cutting blade. Anything that can cut metal will cut the stringers. We recommend using a long metal blade on a reciprocating saw.

## **Can I cut the stringer?**

Yes the Stringers can be cut to size if necessary. Try to cut on exactly a half board hole so the board widths look uniform in the fence section if you must cut down the stringer to shorter than 8'.

## **Does the carriage bolt go on the top or bottom?**

The carriage Part of the bolt which is the domed top is to be inserted from the top through the square stringer hole and then through the Elongated bracket hole and the grip nut should be screwed onto the bottom of the Carriage bolt that is sticking out from the bottom of the Bracket and tightened when level.

## **How to install the brackets.**

First make sure your brackets are at least hand tight on the post with the short carriage bolt inserted through the side of the bracket and make sure that the domed end of the bolt is on the same side as the half board hole in your stringer. This will make it easy for your last ripped half board to slide in through the half board hole. If this carriage bolt is on backwards the last half board will hit the nut that tightens the carriage bolt and should be switched around.

Then seat the stringer on top of the bracket seat and insert the longer carriage bolt through the top and through the oval hole in the bracket. Screw the nut onto the bottom and tighten. Make sure that your stringer is either level or following the grade level and then tighten the other carriage bolt that holds the bracket to the post. Repeat the same procedure for all brackets and stringers.

## **What if my posts aren't level?**

It is very important to set your posts level in concrete. If they are not level you have 2" of play on each post with the elongated hole in each bracket to which you fasted the stringers to so the stringers should still be able to fasten to the posts even if the posts are not level. One thing that will be very noticeable in any fence construction project is if the posts are not set level in the concrete. It is very important to take the extra time when setting your Fence posts in concrete to get them level and as close to exactly 8 feet apart as possible. By doing this and having the posts set level and exactly 8 feet to the center of each

post, the rest of your fence construction will be much quicker and easier to assemble.

### **What if my stringer sags?**

The stringer should not Sag before you start attaching fence boards to it. If it is sagging prior to attaching the fence boards then the stringer could be bent so a straight stringer should be used. If the Stringer sags after you have attached your fence boards to it with the wood screws then the fence boards were fastened to the stringers incorrectly. To fix this sag you must un-screw the wood screws until all of your fence boards in that section are now released from the stringer. Then eyeball the stringer from the end to make sure that it is now straight without the weight of the Fence boards on it. Do this for both top and bottom stringers. Then once you have made sure that then stringers are straight you must attached the fence boards one at a time by first screwing through the top two screw holes into the boards and then the bottom two for each board. NEVER, screw in all of the top screws and then all of the bottom ones after. This will cause the Stringers to sag.

Screw in the top two, then bottom two, for each board one at a time.

Another tip if the boards are really wet and weighing down the stringer during installation, is to place your centre board in through the centre board hole in both the top and the bottom stringer and push it all the way down to the ground. Then push up on your top stringer creating a little bit of a bow in the top stringer and fasten the board to the top stringer with the two screws provided. Then do the same with the bottom stringer. Pull it up creating a bow and fasten the board to the stringer with the two bottom screws.

### **What if my fence sags?**

The stringer should not sag before you start attaching fence boards to it. If it is sagging prior to attaching the fence boards then the stringer could be bent so a straight stringer should be used. If the Stringer sags after you have attached your fence boards to it with the wood screws then the fence boards were fastened to the stringers incorrectly. To fix this sag you must un-screw the wood screws until all of your Fence boards in that section are now released from the stringer. Then eyeball the stringer from the end to make sure that it is now straight without the weight of the Fence boards on it. Do this for both top and bottom stringers. Then once you have made sure that then stringers are straight you must attached the fence boards one at a time by first screwing through the top two screw holes into the boards and then the bottom two for each board. NEVER, screw in all of the top screws and then all of the bottom ones after. This will cause the Stringers to sag.

Screw in top two then bottom two for each board one at a time.

### **What if I don't have 8' for a section?**

If your last or first section in your fence project is less than 8 feet that is fine. The stringers can be cut to size for a shorter section with any Hack saw or Metal saw, metal bladed circular or reciprocating saw.

### **What concrete should I use?**

Try to use Post Hole setting Concrete as it dries quickly and you can get started on your fence installation quicker than regular concrete. Although, either will work.

### **What tools do I need?**

Tools required for the installation of your fence are the following:

- 1) Post hole Digger
- 2) Level
- 3) ½" socket wrench, (open end style socket wrench is ideal and quicker)
- 4) Philips #2 screwdriver or drill with Philips bit.
- 5) Metal Saw
- 6) 2" x 6" board 7 feet long
- 7) Rubber Mallet

### **Do I need concrete tubes?**

Concrete Post tubes are an optional means to set your posts into the ground. However, in frost climates there is a theory that tubes make it smoother to be pushed out by the frost. Tubes can be used or not there is no recommendation for the use thereof. If tubes are to be used then 8' diameter should be the size used. If no tubes are used them an 8" diameter hole should be dug for the posts and then set the posts to the correct height and pour concrete around the post. Don't pour concrete into the hole and then sink post into wet concrete. This will eliminate the ease of repair on the post if needed.

### **How do I repair a Broken Fence-post?**

There is a Tahoe Slipfence Repair sleeve available to repair broken Fence posts. Simply cut the broken fencepost at a level approximately 2-4" above the ground level. Insert the repair sleeve 12" (half way), into the remaining post that is in the ground, tap it in with a rubber mallet if needed then drop a piece of 2 x 3 down inside of the post sleeve and post, until it hits the bottom and make sure the 2 x 3 is sticking out of the repair sleeve by at least another 12". Then slide a new fence post onto the repair sleeve and tap down with rubber mallet if needed until the post reaches the remaining ground post and the sleeve is completely hidden. Next you should drill 2 screws into each side of the new post above the seam and same below the seam so there will be 16 screw holes needed and screw in black screws

provided in the repair kit in through the holes and into the wood inside the post to make for a good solid sturdy post. Attach your stringers as you would normally which will also add strength to the repaired post and trim the top of the post to the correct height and tap on a post cap to finish the repair.

### **How do I repair broken fence-boards?**

Unscrew the wood screws holding the fence board in place and simply slip the broken board out and slip a new fence board in through both stringers making sure it is level with the other boards in the section and then screw in the wood screws first top and then bottom.