



Stackwall Manufacturing, Inc.  
Installation Guide for Walls UP TO 6 FEET TALL

## Items Required

- Tape measure
- Level
- Post hole digger
- Shovel
- Wheelbarrow
- Line for laying out the site
- Ready mix concrete for footings
- Skill saw or grinder w/ diamond blade

## Before You Start

1. Measure fence footage and locate gate placement
2. Call DigAlert - 811 at least 2 working days prior to start the excavation to have underground utilities marked prior to digging. One easy phone call to 811 starts the process to get your underground utility lines marked for free. When you call 811 from anywhere in the country, your call will be routed to your local One Call Center. Local One Call Center operators will ask you for the location of your digging job and route your call to affected utility companies. Your utility companies will then send a professional locator to your location to mark your lines within a few days. Once your underground lines have been marked, you will know the approximate location of your utility lines and can dig safely, because knowing what's below protects you, homeowners and business owners.  
More information you can get at [www.digalert.org](http://www.digalert.org).

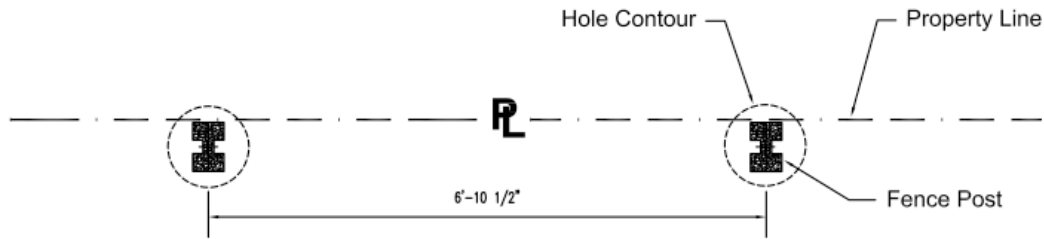
## Design Criteria

The fence design and installation condition are based on:

- Max wind speed 105 mph (3s Gust)
- Max spectral response acceleration parameter at period of 1s,  $S_d = 2.500$
- Soil Class 5 per Table 1804.A2 2010 California Building Code (worst case of soils conditions)

## Laying Out the Jobsite

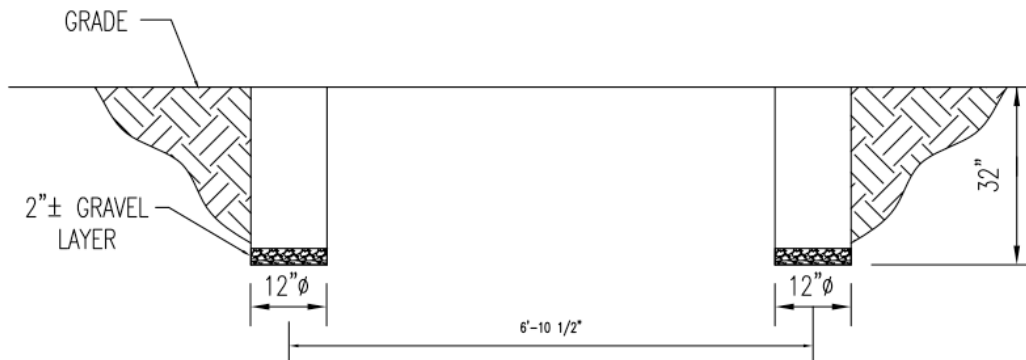
1. Mark each corner of the area you are working on. Pound a stake into the ground at each spot where the posts will go.
2. Run a string around the perimeter of your fence line. This will identify potential problems with hedges, trees, and other objects. Please remember, that the violation of the property line is against the law. So make an agreement with the neighbor(s) or follow the instructions per Figure 1.



**Figure 1. Required Post Location**

### **Regular Soil Post Hole Size Specifications:**

1. Posts should be 82.5" apart from center to center of each hole/post
2. For a fence up to 6 feet tall, hole must be 12" in diameter and 32" deep
3. Use a posthole auger or digger to make a hole at the post site.
4. Put 2 to 3 inches of gravel in the bottom of the hole for drainage



**Figure 2. Required Footing Pit Spacing**

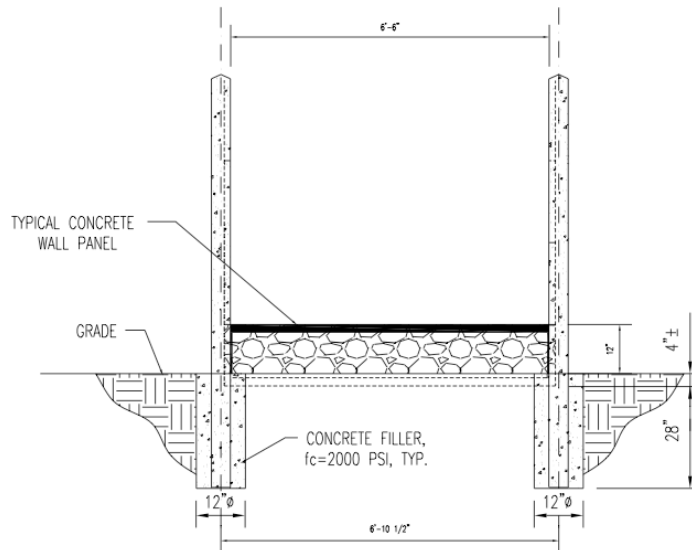
### **Installing Posts**

1. Place post in center of hole. Each post weight 250 to 330 lbs.
2. Make sure post "H" shape is aligned correctly with all other posts facing the designated direction
3. Fill post hole with pre-mixed wet concrete (Pre-mixed concrete: one part cement, two parts sand, three parts gravel. Add enough water to make it thick but not chunky.
4. Pour concrete into the hole up to ground level. Poke the air bubbles out of the concrete with a 1-by-2 board.
5. Level the post with a bubble level
6. Check the level and adjust the post if necessary.

- Let the posts dry 24 hours before sliding panels in between the posts

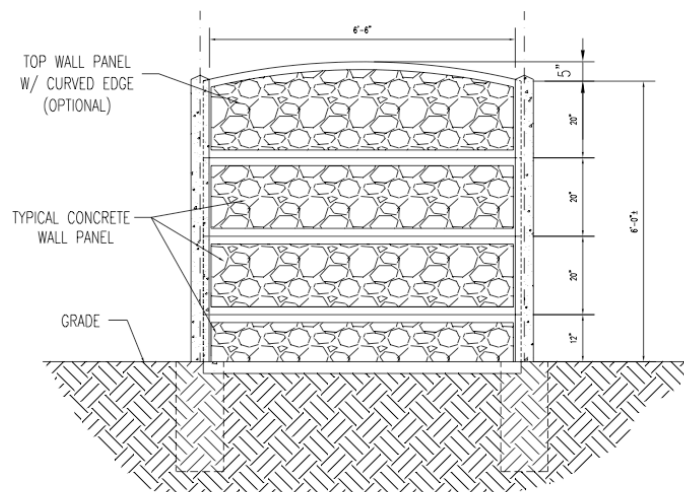
## Placing Panels

- Panels can be placed in between the post slots 24 hours after the posts are installed.
- Most panels weigh between 160 - 230 lbs., depending on the design, so 2 to 3 people are needed to lift and position them. Make sure all panels are oriented the same way. If short panels are needed they can be cut with the skill saw or diamond blade.
- Begin with one panel and slide in between the pre-set posts into the "H" shaped lots, vertically. If installing a double-sided design, sanding the edges of the panels with a diamond blade might be needed to fit the panels in place.

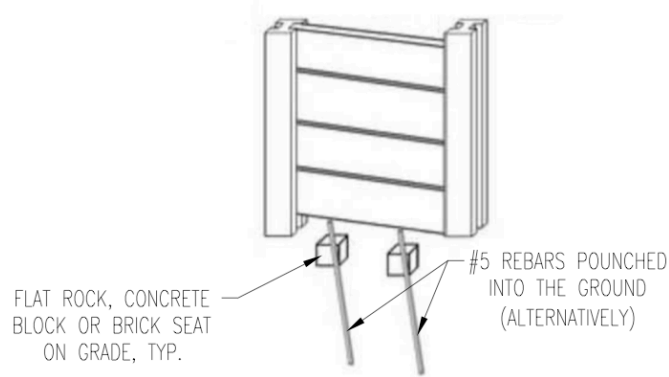


**Figure 3. First Panel Installation.**

- Repeat step 3 and stack each panel vertically one on top of the other.



**Figure 4. Full Section Installed**



**Figure 5. Leveling the Wall Panels.**

### **Stepping with Slope**

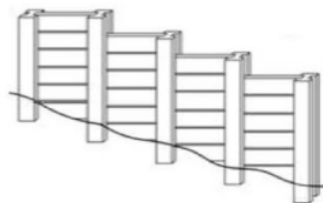
There are two types of stepping that can be done. Which one will be used is often based on personal preference although when there is a relatively steep slope the continuous stepping looks the best. For a severe slope, consider reducing the distance between posts.

### **Occasional Stepping and Continuous Stepping**

When installing posts for occasional stepping, longer posts are required, which depend on the stepping gradient. Posts can be made up to 12' in length total. Depending on the stepping gradient, posts might require being 6' to 8' above the ground. For continuous stepping usually the slope is relatively even and on the high side of the post, thus giving a constant drop or rise of 1 inch per 5 feet.



**Occasional Stepping.**



**Continuous Stepping.**

## **Top Rails**

If installing panel toppers with fence, they are installed after panels have been slid into place and wall is complete. Commercial grade Quikrete mortar repair is distributed on the top panel and the top rail is then glued and set into place.

## **Filling in Gaps Between Panels**

Option 1: Natural Concrete Colored Wall

Once the panels are installed, the gaps in between them can be filled with Quikrete mortar repair and smoothed out with a damp sponge.

## **Option 2: Integrated Color Wall**

Once the panels are installed, the gaps in between the colored panels are best filled in with a similar colored grout. Just fill in the gaps and smooth out with a damp sponge.

## **Optional Washing**

After completion, the fence needs to be washed with a light mixture of water/muratic acid (1" acid in a bucket) using an acid brush obtained at your local hardware store. The acid wash reduces color fluctuations on the wall.

## **Post Cap Installation**

Each decorative post cap is glued using commercial grade Quikrete mortar repair glue and placed on the top of each post.

## **Painting**

Any exterior paint color can be used to color the wall once it is fully complete and installed. A sprayer, a paintbrush or a paint roller can color the wall. It is best to use an exterior masonry paint to ensure longevity of paint.

## **Frequently Asked Questions**

1. How much concrete do you need for wall posts placement?

Usually, about two 90lb. bags of ready mix concrete are needed to fill each postholes when installing posts.

2. Do I have dig down to exactly a 32" deep hole to install the posts?

Yes, it is important to dig out the exact measurements for each post to ensure proper installation.

3. What if a panel section doesn't fit exactly and I need a shorter piece?

All panels and all posts can be cut with a concrete diamond blade cutter to fit any piece exactly to where you need it to fit.

## **For any additional questions, please contact us at:**

888-622-9255 Toll Free / 909-397-5350 Direct / 909-397-5352 Fax

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\* For a fence over 6' tall, StackWall Manufacturing Inc. provides a separate set of installation instructions

