

## Frequently Asked Questions

**Q. Is standard concrete used in making PERMA-COLUMNS?**

**A.** NO! Perma-Columns are poured in a controlled environment using the latest pre-casting and curing technology. Additives are incorporated to enhance strength, density, corrosion and freeze-thaw resistance, yielding a Hi-Dense concrete that has a compressive strength of 10,000 psi. Concrete is the most proven foundation material known to man... with centuries of success.

**Q. How is the steel "U" bracket attached to the concrete?**

**A.** There are four strands of 1/2" or 5/8" (depending on the model) of weld-grade rebar, robotically welded to the steel "U" bracket running the 5 foot length of the concrete pre-cast.

**Q. How do you set PERMA-COLUMNS so they are all level?**

**A.** Place a laser level on top of the auger head as the post holes are dug to insure that all holes are a uniform depth. Backfill the bottom of the holes with tamped stone before setting posts for greater accuracy..

**Q. Will treated wood corrode PERMA-COLUMN brackets and fasteners prematurely?**

**A.** Most current generation treated wood available today is designed to minimize corrosion. However, if you have a high moisture application or are concerned with this problem, place a barrier between the treated wood and steel bracket, and use stainless steel fasteners.

**Q. How is the treated splashboard attached to the concrete?**

**A.** Position the splashboard against the pre-cast concrete column, pre-drill the correct diameter hole through the splashboard two inches deep into the concrete, and then drive a split-drive anchor to attach. *Stainless steel drive anchors are required for highly corrosive wood treatments.*

**Q. How deep should PERMA-COLUMNS be placed in the ground?**

**A.** PERMA-COLUMNS are slightly wider in the dimension that resists lateral loads thus decreasing embedment requirements and are generally designed to have a base depth equal to or less than a standard wood column.

**Q Do PERMA-COLUMNS need to sit on a concrete footing?**

**A.** It is recommended that the same size footing required for a wood support column be used for a PERMA-COLUMN to insure that proper load-bearing requirements are achieved.

**Q How are the galvanized uplift anchors connected to the PERMA-COLUMN?**

**A.** A steel pipe is welded to the base of the four vertical reinforcing rods creating a sleeve in the base of the PERMA-COLUMN that accommodates the bolt-on uplift anchors.

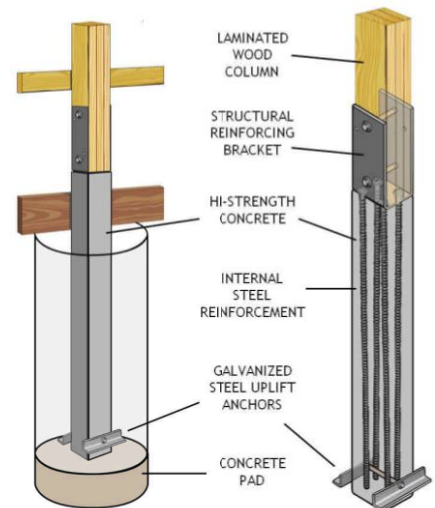
**Q What if the embedment depth exceeds the 5' length of a standard PERMA-COLUMN?**

**A. Option 1** - When it is required to go deeper into the soil profile, 6 and 7 foot PERMA-COLUMNS are available. The additional length is accomplished internally by extending 2 of the rebar and steel pipe within the lower portion of the pre-cast column.

**Option 2** - A column extender (stilt) is connected to the base of the PERMA-COLUMN lifting the columns to the desired height. Concrete is then poured around this extender, creating a combination footing and uplift anchor.

**Q How do PERMA-COLUMNS compare in cost to other concrete foundation?**

**A.** PERMA-COLUMNS provide the quickest and least expensive concrete foundation for post frame construction. There is no waiting on a concrete sub-contractor to complete his work before the builder moves in. Unlike a monolithic slab, the structure won't "float". Finally, the steel bracket to wood connection is elevated 12" to 16" above the floor ending all possibility of rotten posts!



*"The Permanent Solution"*