

How Can You Tell The Difference Between a 6" Masonry Wall and a 4" Proto-II™ Wall?



Answer: You Can't.

PROTO-II™ *Wall Systems*

Builders in Arizona Save \$\$\$Millions Using 4" Proto-II™ Walls

Since the 4" Proto-II™ Wall was introduced in 1985 over 5,000,000 lineal feet of wall has been installed in AZ. By using 4" Proto-II™ Walls in lieu of 6" and 8" masonry walls, builders in AZ have saved millions of dollars over the last three decades. In addition to the savings, builders have gained huge advantages by using the 4" Proto-II™ Wall.

While the 4" Proto-II™ Wall has the same appearance and uses the same materials as the 6" and 8" masonry walls, the engineering used is quite different. The 4" Proto-II™ Wall uses a patented post-tensioned engineering which actually meets or exceeds the strengths of competing 6" and 8" masonry walls.

One of the major advantages of the 4" Proto-II™ Wall is the retaining capabilities. The innovative engineering for the 4" Proto-II™ Wall provides soil retaining capabilities up to 16" without any change in wall design. This can mean tremendous time and money savings for the builder by eliminating retaining walls including the need for permits, inspections, grouting and backfill.



The 4" Proto-II™ Wall is also considered a "greener" product than the 6" or 8" masonry walls, using less concrete, cleaner steel, less masonry material and no grout. The use of less material contributes to the cost savings and efficiency of the system as well as the need for less labor and resources.

In View Fence applications, the 4" Proto-II™ Wall provides a huge advantage. In other masonry view walls, the posts are grouted into the masonry wall. Over time, the posts loosen and often result in warranty issues. With the 4" Proto-II™ View Wall, the view iron is welded directly to the post tensioned plate in the Proto-II™ Wall, incorporating the view iron directly into the structural elements of the wall. This procedure simplifies the installation process and drastically improves the strength and stability of the view iron. Maintenance is reduced to a minimum as loose block and iron are virtually eliminated.

How can you tell the difference between a 6" masonry wall and a 4" Proto-II™ Wall?

Answer: You Can't. (Except for all the money that you will save).

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Proto-II™ Walls Withstand Extreme Conditions

The masonry wall in the top two photos is an 8' high wall consisting of 6" wide and 4" wide Proto-II™. When the basement was excavated for this new home, the excavator dug too close to the masonry wall and the dirt collapsed under the wall footings. This Proto-II™ Wall remained standing, suspended in midair, for over a week until a track hoe had to be used to remove it.



In the bottom photo, a severe desert wind storm completely eroded the earth underneath the footings of this Proto-II™ Wall. Not only did the Proto-II™ Wall and footings remain intact and undamaged, the wall was able to bear the weight of a man standing on top of it!



Why does the Proto-II™ Wall stand where other walls would fail?

With any typical masonry fences, these undermined wall footings would unquestionably cause a collapse of the walls. Other masonry fences rely on reinforced concrete for support, which leaves the non-reinforced areas weaker and vulnerable. The Proto-II™ Wall uses post tension engineering, resulting in a compressive force distributed throughout the wall. The post tensioned force holds the wall intact and prevents it from failing, even in extreme conditions.

The Proto-II™ Wall was not designed for these extraordinary situations and there is no guarantee the wall system would withstand similar conditions. The fact that these Proto-II™ Walls remained standing and undamaged under these conditions is just an incredible reminder of how exceptionally strong, durable and failure resistant the Proto-II™ Wall System actually is.



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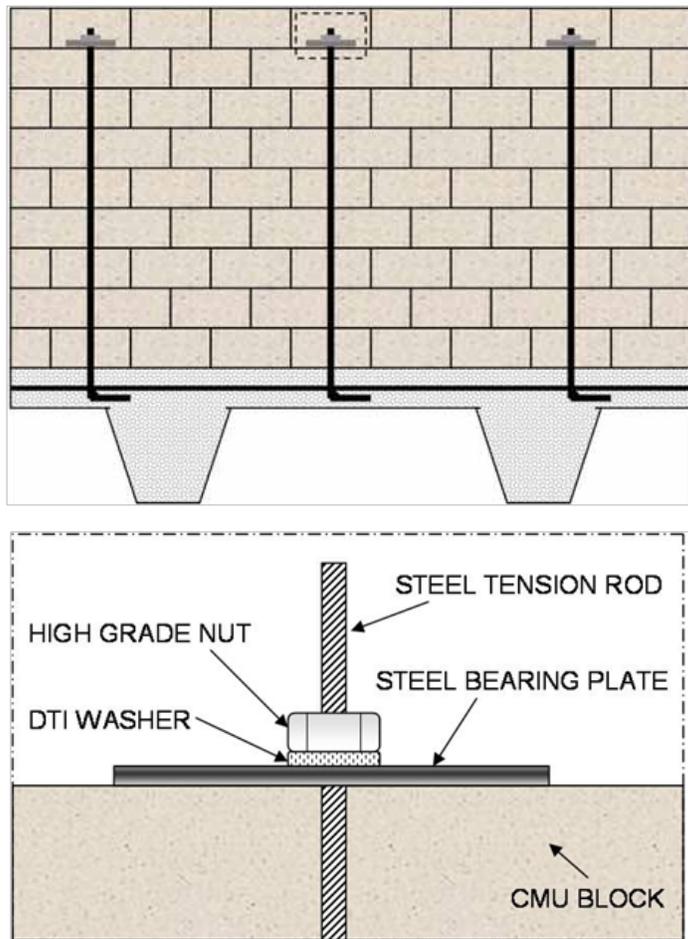
WHAT IS 4" PROTO-II™?

The idea of using post tensioning to structurally support masonry fencing in lieu of rebar and grout was unheard of in the mid 1980's. At that time, Proto-II™ Wall Systems had developed and patented a post tensioned masonry fence system called The Proto-II™ Wall.

The 4" Proto-II™ Wall System uses the same masonry block and has the same appearance as conventional masonry walls. The difference is on the inside: the post tensioned engineering that is used to structurally support the wall. This advanced technology provides a stronger, more efficient design.

THE DIFFERENCE IS ON THE INSIDE:

The 4" Proto-II™ Wall is constructed using concrete footings and standard concrete masonry units (CMU block). High strength steel tension rods are connected to rebar in the footing. A Steel bearing plate, a high grade nut and a Direct Tension indicator (DTI) washer are installed near the top of wall. The rod, plate and nut assembly are tightened to a specific torque rating which collapses the DTI to achieve the specified tension within a 3% tolerance. The tensioning results in compression distributed throughout the wall, dramatically increasing its strength and load capacity over conventional masonry walls.



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Answer: You Can't.

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