PROTO II WALL SYSTEMS

POST-TENSIONED MASONRY FENCE SYSTEM
Engineered for Function, Durability and Style.

When you look at a Proto II™ Wall System, you see the architectural appeal of traditional masonry – but that is only half the picture. The real beauty of a Proto II™ Wall System lies within and beneath, in exceptional strength and stability that surpasses that of conventional masonry, pre-cast and wood fencing. Innovation is the key.

A patented post-tensioning process allows the Proto II™ System to be built up to heights of 13’4” (using narrower block) on cost-effective footings. This simple engineering solution provides an internal strength that allows walls to flex and withstand extreme forces of wind and seismic loading.

More than four million lineal feet of installation, combined with extensive testing, have proven the Proto II™ Wall System to be a superior solution for the majority of site wall and fence applications. Precision, split face, and slump stone blocks can be used to create a desired look that fits within the customer’s budget.

The most aggressively engineered masonry fence product on the market today, all engineering needed for approvals and construction is provided. The improved quality, combined with decreased material costs, makes the Proto II™ Wall System the perfect answer.


The Proto II™ Wall System Offers:

• Structural Stability
• Cost-Effective Construction
• Reliable Engineering
• Post Engineering
• Post-Tensioned Strength
• Quality Assurance Through Inspection
• Thinner Walls
• Smaller Footings
• Standardized Engineering
• Less Dirt Displacement
• No Grouting Required

Engineered to heights of:
13’4” for walls 8” wide
10’ for walls 6” wide
6’8” for walls 4” wide
The basic Proto II™ Wall System consists of high-strength tension rods (1) "L" hooked under a single #4 rebar (2) in the footing, with a 1/4" steel plate washer (3) and tensioning nut (4) near the top of the wall. And joint reinforcement (5) at specified locations.

Unique Footing
The footing design contributes many of the benefits of the Proto II™ Wall System. Only 8" wide, approximately 6" deep, with a series of dips (6), the footing is dug with a trencher at a much greater speed and with much less dirt displacement than a backhoe digging conventional footings.

Retaining
Proto II™'s innovative engineering provides retaining capabilities without any change in wall design. Measured in terms of “low soil” to “high soil” (7), a 4" wide Proto II™ wall can retain 1’4", a 6" wide Proto II™ wall can retain 2’, and an 8" wide Proto II™ wall can retain 2’8”. Engineering for higher retaining conditions is also available.

5’ to Daylight 2:1 Slope
Significant savings occur in 5’ to daylight, 2:1 slope condition. Standard Proto II™ footings with 2’4” deep pots meet the 5’ to daylight requirements without any buried courses (8). First course is at or near grade. In addition, the amount of dirt displaced can be one-third to one-fourth that of conventional walls.
Basalite, one of the largest concrete masonry products manufacturers in the Western United States, is the exclusive supplier for Proto II™ Wall Systems in Northern California. Established in 1924, the company's reputation for quality and service provide an important asset to the builder.

Basalite is a division of Pacific Coast Building Products, one of the leading, privately held suppliers of materials and services to the construction industry in the Western United States.

Additional information may be obtained from your Basalite representative.

An Independent Review

Gary C. Hart, Ph.D., President and Senior Consultant for Hart Consulting Group and a professor of civil engineering at UCLA, completed an independent review of the Proto II™ Wall System. Dr. Hart has a great deal of experience in structural engineering requiring practical application of highly technical, analytical methods and research. As a recognized expert in masonry engineering design, Dr. Hart has contributed much to the current engineering principles and applications in masonry.

In his findings, Dr. Hart states:

“…it is an innovative new product that I believe provides a valuable design alternative.”

“The Proto II design is based on sound structural engineering principals.”

“Mr. Scott, a structural engineer in California, has clearly demonstrated the design trail that must be followed to meet the intent behind the prescriptive requirements in the Uniform Building Code.”

“I would not hesitate to use this wall system on one of my projects or to recommend it for use…”

“…a very outstanding new system.”