



LANDMARK™ BY ANCHOR WALL SYSTEMS

A Positive Mechanical Connection Retaining Wall System

For high performance under extreme loading conditions, Landmark™ by Anchor Wall Systems is a positive mechanical connection retaining wall system that takes performance to new heights. Designed with a unique locking connection between block facing and grid, the system offers unparalleled connection strength with a wide range of geosynthetic reinforcement products.

For challenging projects, the Landmark system is a smart, aesthetically pleasing retaining wall solution.



Landmark™ units create a fresh, new vertical appeal in a constructed wall. Placed randomly in a wall, the textured face of the units creates a free form in-and-out stagger to the wall face, replicating natural rock formations. The blocks cast shadows that accent the overall presentation of the wall.

A UNIQUELY POSITIVE MECHANICAL CONNECTION

Landmark™ by Anchor Wall Systems offers an innovative solution for retaining wall construction. The unique system features a positive mechanical connection between the facing blocks and the reinforcement material that bolsters the wall's ability to withstand the forces of earth pressures, surcharges and seismic loads as it retains the surrounding soil.

How does the uniquely shaped Landmark system fasten to the reinforcement materials? A lock bar made from an engineered polymer, fits into a specially designed channel built into the blocks. This locking system mechanically and positively connects the block to a layer of reinforcing material. Uniquely shaped flanges establish a uniform course-to-course set back and ensure a strong resistance to shear forces.

Never before has a segmental retaining wall system demonstrated this level of strength with polyester reinforcements. The Landmark system was designed specifically for challenging projects such as tall walls over 4.5m, high load-bearing walls of any height, infrastructure, industrial and transportation applications and structures located in seismic regions. The performance features of the Landmark system enable cost effective design solutions using the American Association of State Highway Transportation Officials (AASHTO) design methodology and the National Concrete Masonry Association (NCMA). The system has been submitted to the Highway Innovative Technology Evaluation Center (HITEC) for evaluation.

Tested to outperform the competition

The positive mechanical connection ensures that the reinforcement will not pull out of the block channel. Tests demonstrate the connection system is capable of withstanding loads in excess of 300 percent of the reinforcement's allowable design strength. Overturning test results performed on the Landmark system demonstrate that the conservative overturning resistance is 450 percent greater than the overturning resistance of similar depth conventional segmental retaining wall units.

Finite Element Analysis performed on the Anchor lock bar confirms its ability to sustain the most severe loads even under extreme temperature conditions.

A cost effective solution for your tall wall needs

This positive mechanical connection system requires fewer layers of reinforcement material and provides greater flexibility in choosing the strength of reinforcement products. The result is lower material and installation costs.

A natural choice for your next retaining wall project

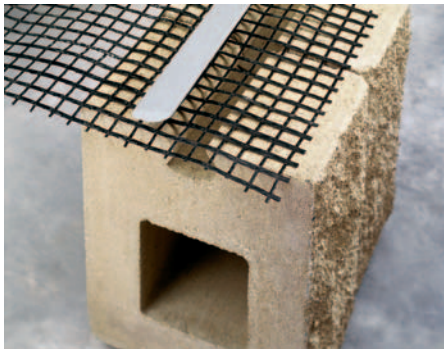
Both the blocks and the lock bar of the Landmark system are environmentally friendly and will perform in extreme heat and cold. The system is flexible enough to work with polyester geogrids and geotextiles and polypropylene geotextiles.

Installation

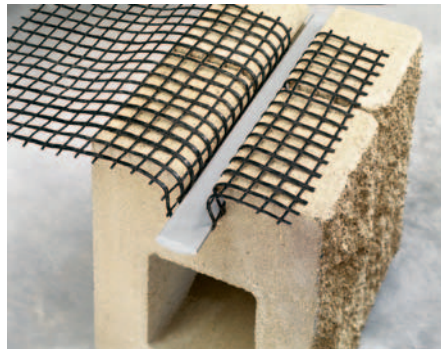
If you've worked with our walls before, installation of the Landmark system will come naturally. The installation of the Landmark system is similar to other Anchor blocks, but includes the step of installing the lock bar in the locking channel. A locating flange is built into each block, for uniform set back and overturning resistance. The flange actually makes installation easier, helping to guide the block into place. Follow these steps for installation.

- Install and bury the base course.
- Install the Anchor lock bar on grid layers only, flat side up, angled side to the back of the wall unit (see your wall plan).
- Follow conventional guidelines, back fill and compact soils before the next course is laid.

Contact Firth Industries on 0800 800 576 for estimating, design and installation assistance.



Lay geosynthetic reinforcement flat across top of block.



Maintain reinforcement within 25mm of front of block.



Proceed with next course, pushing the upper block forward to engage the locating flange to create set back and additional overturning resistance.

LANDMARK COMPONENTS

Landmark components are designed to work in conjunction with geosynthetic reinforcement to create tall walls capable of withstanding extreme loading conditions. Enlist the expertise of an experienced segmental retaining wall design engineer to ensure proper wall design. Contact Firth Industries on 0800 800 576 for information on estimating, design and installation assistance.



Full Component

Hollow core. No fill needed.
 380mm x 200mm x 320mm*
 380mm x 200mm x 300mm*
 37kg
 0.077 m² coverage
 25mm set back (4 degrees)



Cap

100mm x 450mm x 300mm
 30kg



Tapered Full Component**

For outside radius curves.
 380mm x 200mm x 320mm
 380mm x 200mm x 300mm
 36kg
 0.077 m² coverage
 25mm set back (4 degrees)



Anchor Lock Bar
 Extruded PVC
 1625mm long
 Grey colour



Tapered Half-High Component**

For outside radius curves.
 190mm x 200mm x 310mm
 190mm x 200mm x 300mm
 23kg
 0.039 m² coverage
 12mm set back (4 degrees)

Depths of units vary slightly to achieve a staggered, rock-like appearance once the wall is built. This variation does not affect estimating and does not require special installation. Actual unit weight, size and availability may vary by region. Specifications may vary or change without notice. See your Firth representative for details, standard and custom colour options, and additional information.

* Width dimensions taken from the bottom of unit.

** Length of the back of the tapered unit is 25mm less than the face of the unit.

*** All blocks are available in both split face and smooth face.



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- Most wash water returned from construction sites
- Highly durable, low maintenance buildings and no rot
- High degree of noise control
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