DEMO:



PROOF: 10 cement blocks held together with only amazing strength of carbon fiber. one Fortress carbon fiber strap (on bottom side only).

1996

BASEMENT TECHNOLOGIES⁺

WATERPROOFING & FOUNDATION REPAIR

TEST CONDUCTED 1.08.01

FORTRESS STABILIZATION SYSTEM IN ACTION

Ford F-350 Extended Cab ramped up onto a row of cement blocks. There is no mortar between the blocks – only one strap of carbon fiber on lower side. This is a serious and accurate demonstration of the amazing strength of carbon fiber.

Proudly Represented by:

FREE ESTIMATES

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BASEMENTTECHNOLOGIES

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Rock Solid Wall Reinforcemen Using Advanced Carbon Fiber

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Fortress is committed to the R&D of carbon fiber as a structural reinforcement.

Fortress Stabilization is a pioneer in developing products and procedures that will add new life to existing structures. Fortress tests different products, materials, epoxies and application techniques in order to deliver the strongest, most durable, and versatile structural reinforcements

Replacing steel with carbon fiber

Carbon fiber is now a proven popular alternative to steel for reinforcing structural substrates in residential and commercial applications. Carbon fiber is highly effective at adding tensile strength to concrete. It is superior to steel since it is stronger, stiffer and non-corrosive. It also can be bonded to the surface of a concrete structure at any time to stop bowing and cracking. This allows limitless applications for new construction, repair, retrofit, and seismic upgrades.

FORTRESS Rock Solid Wall Reinforcements

The history of carbon fiber

Until recently, carbon fiber was exclusive to aerospace and military – where cost was not a consideration. Now carbon fiber is produced in large quantity, in an assortment of forms, and utilized in a wide variety of industries. The increased production lowered the cost into the range for residential, commercial, and industrial construction and restorations.

Studies conducted over the last 20 years confirm that carbon fiber is a strong, durable and safe product. Carbon fiber does not rust nor is it susceptible to alkali deterioration. Once carbon fiber is encapsulated in an epoxy matrix it's strength is locked in. It will not stretch, creep, or bend over time.

Fortress Stabilization is committed to developing products with the performance characteristics of this material in a simple reliable application method. When Fortress introduced their Carbon Fiber/Kevlar™ Grid system they revolutionized the foundation wall reinforcement industry with quality, strength and a level of standard that is second to none.

The Fortress Carbon Fiber/Kevlar™ Grid System

This unique grid system delivers properties unmatched in the market today. The patented Fortress grid is the only pre-cured product that is fully encapsulated in epoxy. Others are simply glued onto the wall and can

peel off. Every hole in the grid allows the outer epoxy to touch the inner epoxy forming an epoxy rivet. These rivets act as rip stops preventing the grid from peeling off. In addition it allows visual inspection for resin voids and air pockets.

The grid is very thin allowing it to form around a bowed wall. Used in conjunction with the vacuum lamination system it is possible to reinforce bowed walls where solid plates would spring off.

The Fortress Stabilization System[™] advantages:

- Cost effective
- Non obtrusive lays flat to substrate
- No destructive attachments made to the floor or ceiling
- Inclusion of Kevlar[™] provides additional shear strength.
- Grid is fully encapsulated in epoxy anchoring it in place
- Able to conform to bowed walls
- Can be painted for a smooth clean look
- Quick labor saving installation
- Vacuum clamping system ensures regulated void-free bond every time
- The Fortress Clean-Peel[™] backing strip provides a clean prepared bonding surface
- Pre-mixed toughened epoxy

Stop this disaster...



Soil pressure can fracture a block or concrete foundation wall causing horizontal and vertical cracks and/or bowing. The foundation must be stabilized to assure that you will retin the full value of your home.

A fractured basement wall is serious trouble and a major hamper on the value and sale of your home.

...with Fortress Stabilization



Fortress Stabilization Systems has developed a Carbon Fiber/Kevlar™ grid that will halt any further movement of a block or concrete wall. It will do it easily, safely and without any outside excavation.

The grid lies flat against the wall and when painted over are hardly noticable. Your wall will NEVER bow or crack again.

Contractors and home owners trust the results



Protects the life and value of your home investment.



These hi-tech Fortress Carbon Fiber/Kevlar grids will permantely repair cracked or moving foundations without steel I-beams or tie-backs, leaving your walls with no unsightly obstructions and ready to paint. The repair is permanent and guaranteed for the life of your home. In most cases, certified installers can finish an installation in one day, leaving your wall ready to be painted.

ROCK SOLID GUARANTEE

A Fortress Stabilization System repair is permanent and guaranteed for the life of your home.



After

Fortress Carbon Fiber/ Kevlar grid (shown here) has been tested both in the field and by an independent engineering firm. A foundation with our carbon fiber grids installed is more than **THREE times stronger** than without them. These grids will not rust, stretch or move over time.