StrongHold™

Building Stronger Bonds™

StrongHold™ Engineered Composite Systems have been tested to establish structural strengthening performance and limitations for concrete and masonry. These full-scale tests dating back to 1996 pioneered the use of composites for strengthening reinforced concrete beams & columns. ACI 440.2R cites multiple tests run on StrongHold™ for confinement, shear and flexural strengthening of concrete members. Similar adaptations of these tests are utilized in ICC AC125 to establish the strengthening limits for beams, columns, slabs and walls. StrongHold™ materials are engineered to strengthen concrete, masonry, and steel structures for seismic loads, corrosion repairs, change of use, and historical retrofits. All systems are supported by sealed engineering calculations and drawings.

Durability

StrongHold™ has a proven +25-year in-service history with successful repair outcomes. The performance history is built on extensive durability testing in +300 chemicals at elevated temperature and service conditions. StrongHold™ retains over 95% of its strength and bond adhesion after being subjected to 20,000 hours of accelerated durability testing in acids, caustics, seawater, UV, humid heat, dry heat, and biologically active soil.

Specialized Systems

StrongHold™ incorporates a full range of surface repair materials including crack injection, polymer concretes & mortars, and cement based patching products. StrongHold™ is produced in a variety of specialized systems:

- StrongHold ™ CHEM - aggressive acid & caustic environments,
- StrongHold ™ NSF61- potable drinking water applications, or FDA Food Safe applications,
- StrongHold ™ SubSea – underwater and splash zone applications
- StrongHold ™ HT1 – high service temperatures
- Fully compatible with ChemSeal™ Coatings
- ASTM E84 Class 1A Rating
- ASTM E119 2-hour fire resistance

Common Applications

- Commercial Buildings
- Bridges & Overpasses
- Parking Garages
- Bulk Storage Silos
- Marine Piers
- Industrial Facilities

Benefits

- High Strength per ply = less layers, reduced cost and faster installations
- No post-cure required