To open the door to a SecureTech built home of your own, please contact:

SecureTech™

Wall-Ties & Forms, Inc.
Manufacturers of Aluminum Forming Systems and Accessories for SecureTech Constructed Homes

4000 Bonner Industrial Drive
Shawnee, Kansas 66226
1-800-444-9692
Fax: 913-441-0076
Email: ask@wallties.com
www.wallties.com

SecureTech™

Open the Door…

…to a SecureTech™ built home of your own.

The Ultimate in Home and Light Commercial Construction

SecureTech Built Homes

- Rock Solid Construction
- Unparalleled Safety and Security
- Attractive Architectural Designs
- Low Maintenance
- Extremely Energy Efficient
- Environmentally Friendly
- Remarkably Comfortable and Quiet
- Affordable
- Reduced Ownership Cost

SECURETECH™ BUILDING ROCK SOLID CONCRETE HOMES

Inside a SecureTech™ built home, you'll find distinct advantages.

More and more homebuyers are discovering the advantages of solid concrete construction as the long-term, quality alternative to traditional wood- and steel-framed houses. Take a look at the benefits a SecureTech built home can offer you…

Rock Solid Construction for Unparalleled Safety and Security

A SecureTech built home can withstand fire, infestation, and forces of nature like tornadoes, hurricanes, and earthquakes significantly better than homes made of other building materials – for greater peace of mind in protecting yourself, your property, and your family.*

The Strength to Withstand Hurricane/Tornado Force Winds

In independent tests simulating 250 mile-per-hour ground level wind speeds equal to the strongest hurricanes and tornadoes, steel-reinforced concrete walls substantially outperformed typical wood- and steel-framed walls for: 1) reducing flying debris, the greatest hazard to homeowners during this life-threatening weather; and 2) withstanding collapsing and structure damage. Researchers at the Wind Engineering Research Center at Texas Tech University** concluded that walls built with wood or steel studs lack the strength and mass to resist the impact of wind-driven debris, while concrete walls consistently stood up to the test without structure failure.

The Power to Stand Up to Earthquake Forces

In a range of strength tests, concrete proved two to four times stronger than the maximum wind load and five to nine times stronger than the maximum earthquake load – bending strength considerably greater than the standards required by the Uniform Building Code.

The Toughness to Resist Fire

In countless fire wall tests, concrete has proven itself as one of the most fire- and heat-resistant construction materials. Unlike wood or steel, concrete does not burn, soften, or bend, so concrete structures are more likely to remain standing through a fire.

No Appeal for Insects or Rot

Unlike wood framing, concrete is not susceptible to rotting wood or damage by insects like termites that can cost thousands of dollars to treat or repair.

A Range of Beautiful, Low-Maintenance Design Options

A SecureTech home can be built in your choice of architectural styles, including contemporary, traditional, one- or two-story, in a single or multi-family home. Once cast, the exterior walls can be covered in any of a wide range of attractive, low-maintenance materials: from stucco to siding to brick or stone. Inside, plaster-finished walls with built-in crown moldings, distinctive floor coverings that include carpeting, tiles, hardwoods, and laminates, and other extra touches add warmth and personality to your home's appearance.

"My clients are surprised when I tell them that the SecureTech built home they're looking at is constructed with steel-reinforced concrete — you can't tell just from looking at it. But when they hear all the benefits of a concrete home, they're even more impressed."

Jon Rufty
President
Rufty Homes, Inc.
Cary, North Carolina

**Although concrete walls offer greatly enhanced safety, when disaster strikes, homeowners should always seek shelter in a "safe room", interior room, or other safe place to avoid injury from broken glass or other flying debris that could enter through doors and windows.*

***The Texas Tech University Wind Engineering Research Center testing is independent of the SecureTech built home.*

"Offering consumers a SecureTech constructed home gives us a superior option for our clients who are concerned with safety, affordability, conservation of resources, and comfort."

Larry Swearingin
Foundation Contractor
Swearingin Construction, Inc
Lawson, Missouri

Insulated for Enhanced Energy Efficiency, Comfort, and Quiet

Because of concrete's incredible thermal storage capacity, a SecureTech built home stays warmer in the winter and cooler in the summer than traditional houses. Airtight construction and rigid insulation also eliminate external air infiltration to keep inside temperatures consistent and comfortable. The Environmental Protection Agency (EPA) has consistently awarded SecureTech built homes a Five-Star Rating for energy efficiency through its ENERGY STAR® home program. Homes with the ENERGY STAR label are designed to use less energy, help you save money on utility bills, and help protect the environment. And, particularly in areas where homes are close together, solid monolithic concrete's sound-buffering qualities minimize noise from traffic, airplanes, and neighbors — as well as noise inside the home — so you can relax in an atmosphere of quiet and comfort.

Environmentally Friendly/"Green Building"

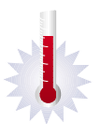
As ENERGY STAR homes, SecureTech built homes place an emphasis on conserving energy and reducing indoor air pollution. A SecureTech constructed home follows the "Green Building" objectives and also significantly conserves trees by reducing the need for lumber. In countries where lumber is scarce and with the conservation of natural resources a priority, homeowners have enjoyed the benefits of concrete, stone, and masonry homes for thousands of years. In recent years, more and more Americans have discovered the many benefits of concrete construction.

Affordably Priced, With Added Cost Savings Through the Years

While the purchase price for a SecureTech built home is similar to a conventional home, over time the savings to homeowners can be much greater. In addition to lower maintenance costs, with an EPA ENERGY STAR home designation, a SecureTech built home offers:

Lower Monthly Utility Bills

Concrete's thermal capacity keeps your home warmer in the winter and cooler in the summer, allowing your furnace and air-conditioner to run during "off peak" times to take advantage of utility companies' power rate discounts. Energy savings on heating and air-conditioning can add up to thousands of dollars within a few years.



Reduced Insurance Premiums

Because building homes with concrete may significantly reduce property loss from hurricanes, tornadoes, earthquakes, and fires, insurance companies often recognize the disaster-resistant qualities of concrete homes by offering significant discounts on premiums. Check with your insurance agent for details.

Special Mortgage Options

To encourage the sale of energy-efficient homes, the EPA offers ENERGY STAR homebuyers access to preferred financing, including lower interest rates, closing cost reductions, and a two-percent stretch on standard debt-to-income ratios for loans. (Other special options are available — consumers should research your individual mortgage options or visit www.energystar.gov/homebuyers.

Rock Solid: The SecureTech

SecureTech's state-of-the-art construction technology allows a builder to create a high-quality home that's safe, secure, comfortable, attractive, and environmentally friendly. With added cost-saving benefits such as low maintenance and reduced ownership costs, a SecureTech built home may be right for you.

1. Wall Forms: After creating a reinforced structural concrete slab foundation for the home, aluminum forms (8-foot plus tall) are erected creating 4-inch reinforced concrete walls with 2 inches of insulation on the exterior and 6-inch concrete floors/ceilings.

2. Electrical/Mechanical/Plumbing: Electrical boxes, conduit, plumbing, and mechanical sleeves are cast in place.

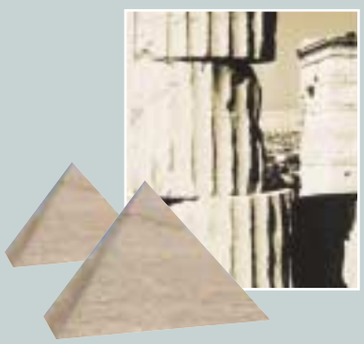
3. Pouring Concrete: Concrete is poured into the wall and deck forms. In just one day, the reinforced concrete is sufficiently cured and forms are removed. Work begins on the second level if a two-story structure. Walls, ceilings, and stairs are placed monolithically.

4. Interior Walls: Because the finished interior concrete walls and ceilings are so flat and smooth, drywall is not needed. Walls and ceilings are plastered, sanded, and painted.

5. Exterior and Roof: The exterior can be finished with stucco, brick, siding, or other materials. The roof is conventionally framed of lumber or steel atop the concrete deck that forms the first or second level's ceiling. This allows architectural flexibility in roof design while keeping the wood or steel used for the roof framing outside of the home's fire-resistant thermal concrete envelope.

6. The Finished Product
A beautiful new SecureTech built home.

Concrete Milestones



1824 Use of concrete materials goes back to the ancient Egyptians and Romans, but the invention of modern cement is attributed to Joseph Aspdin, a builder in Leeds, England, who obtained a patent for it in 1824.

1908 Thomas Edison secures a patent and builds 11 cast-in-place concrete homes in Union, New Jersey.

1923 Frank Lloyd Wright designs his first concrete home, La Miniatura, in Pasadena, California. His luxurious weekend home, *Fallingwater* in Bear Run, Pennsylvania, is perhaps the most famous of his concrete home creations.

Construction Process

"Our SecureTech built home is so quiet inside and out, our three active boys don't disturb us or the neighbors! We had a hot summer and a cold winter this year, and even with a 40-degree variance in temperature, we barely had to adjust the thermostat. We love the home's appearance, its energy efficiency, and the fact that it's so safe and quiet."

Andy Embrey
SecureTech home resident
Liberty, Missouri

ABOVE: New American Home photo courtesy of NAHB.

LEFT: Publicity rights to the name and likeness of Frank Lloyd Wright and his work used with permission from the Frank Lloyd Wright Foundation, Scottsdale, Arizona.

LEFT: Fallingwater photograph by Robert P. Ruschak, courtesy of Western Pennsylvania Conservancy.

1994 Concrete makes a splash when the National Association of Home Builders (NAHB) promotes a 5,000-plus square foot, $1.75 million concrete home as its New American Home.

21st Century Across America, new construction of concrete single-family homes, luxury townhomes, and duplexes abound as homeowners and builders discover the many benefits of concrete construction.

SecureTech steel-reinforced concrete methods are recognized by, partners with, or in alliance with the following organizations and programs:

The Federal Emergency Management Agency
(FEMA)
www.fema.gov

Wind Engineering Research Center
Texas Tech University
www.wind.ttu.edu

Project Impact
Building a Disaster-Resistant Community
www.fema.gov/impact

Partnership for Advancing Technologies in Housing
(PATH)
SecureTech building method is a PATH technology.
www.pathnet.org

The U.S. Environmental Protection Agency
and the U.S. Department of Energy
ENERGY STAR home program
www.energystar.gov
SecureTech built homes have consistently been awarded a Five-Star Rating.

NAHB Research Center
www.nahbrc.org

Brochure by –
Shannon and Company, Chapel Hill, NC
Graphic design by Alison Duncan Design, Durham, NC