# **Benefits**

#### Benefits of Concrete Homes

Why build with concrete? Simply put, it's a better way to build a better home. Here are some of the tangible benefits of building with concrete (click the links for more information):• Beautiful Concrete can create any shape or size home that you can imagine

• Built to Last

A concrete home is a solid investment for your family both in terms of value and safety

• Energy Efficient

A concrete home can keep you comfortable year-round … while reducing your utility bills

• Low Maintenance

A concrete home requires far less work to keep it looking like new

• Environmentally Friendly

Building concrete homes helps save our precious forests

&bull: Quiet and Comfortable

The quiet comfort of concrete makes a concrete home a solid investment in lifestyle

• Solid Investments

A concrete home is a solid investment for your family in terms of value and safety

That's the Beauty of Today's Concrete There's more than one way to build your concrete home. Insulating concrete forms. Concrete masonry. Aerated concrete. Tilt-up concrete. Precast concrete. With volatile wood prices, logging's high environmental price tag, and a growing shortage of high quality lumber, concrete offers a variety of products and construction techniques to provide cost effective, quality alternatives to wood-frame home construction. All of these systems share the same basic virtues of concrete — beauty, strength, durability, low maintenance, energy efficiency, environmental friendliness, and peace and quiet. Which concrete building technique is right for you depends on the labor force and predominant building practices in your area. Whatever your choice, you can rest assured that your beautiful concrete home is built to last. Information provided courtesy of the Portland Cement Association. Beauty That's More Than Skin DeepDrive up to a new home today and you probably cannot tell how that home was constructed. That's because the "skin" covering a home - whether it's stucco, brick, wood or vinyl siding - provides the same finished appearance whether it's placed over wood-frame or concrete construction.

How can you tell what type of construction is behind a home's veneer? The walls in an unfinished garage or basement may give you a clue. But the benefits of solid concrete construction aren't apparent at first glance. They only show up years after the home is purchased - in the form of lower maintenance costs and lower energy bills. So, to be sure you make the right home buying decision, always ask the seller or builder what type of construction is behind that beautiful exterior.

### Limitless Possibilities

Concrete can create any shape or size home you can imagine. Because concrete takes any shape or form, it can create an unlimited variety of curves and angles. Concrete's strength can be used to create large open spaces - offering total flexibility in designing your home's floor plan.

# **Timeless Designs**

Whether a Victorian gingerbread home or a Colonial mansion, concrete homes are quiet, easy-to-maintain and safe from fire, hurricanes, termites and wood rot. Concrete also can be used to create classic, low maintenance floors with patterns similar to classic stonework but with a look all their own.

#### Contemporary Designs

Should your tastes lean toward traditional or contemporary, the strength and flexibility of concrete can create a home that looks like the 21st Century and, with minimum maintenance, will hold its beauty and value throughout the next century.

Concrete homes are low maintenance and energy efficient ... a solid investment for any family.

Back to Top Security That's A Solid InvestmentBuying a home can be the single largest investment of your life. If that home is constructed with concrete walls, your investment is naturally protected from the structural damage that can be caused by the effects of nature. As the owner of a concrete home, you'll benefit from lower annual maintenance and energy costs while living in a home that provides a secure haven for your family.

The solid investment value of a concrete home is just one of the reasons to ask what type of construction is behind a

home's stucco, siding or brick veneer. If the answer isn't "concrete," your investment may be compromised by maintenance and repair costs that could have been avoided or minimized.

### Worry-free Living

Fire can endanger the lives of everyone in the family and destroy those things that cannot be replaced. Insurance companies recognize concrete as being safer than any other form of construction when fire threatens a home. Living in a concrete home can bring peace of mind to homeowners concerned about fire.

#### Safe and Sound

When disaster threatens in the form of hurricanes, tornadoes or wild fires, your family will be safer in a home constructed with concrete walls. It's no accident that concrete is the material of choice for modern day fortresses and disaster shelters. This strong, durable material stands up to the fury of nature...including the more subtle threats of rot, rust and termites. Today's strongest residential wall systems are made of concrete.

### The Quiet Comfort of Home

Besides being stronger and more durable, the mass of a concrete wall provides an added benefit - a reduction in noise entering the home. So be sure to select a sound-proof concrete home when you're looking for a little peace and quiet.

Buying a home is the single largest investment of your life. Invest wisely... in a beautiful concrete home.

Back to TopSolid Construction + Better Insulation = Lower Utility BillsIt doesn't take an Einstein to understand why concrete homes are more energy efficient than wood-frame homes. The mass of concrete slows down the passage of heat moving through the wall. This means that, with the same insulation, a concrete home stays warmer in the winter and cooler in the summer than a wood-frame home. Also, a concrete wall doesn't have as many air leaks as a wood-frame wall - and air leakage accounts for a large percentage of energy loss in the home.

Besides having the advantage of mass, today's concrete home building systems all utilize cost effective, highly efficient insulation to keep your home dry and comfortable year round while enjoying the benefits of lower utility bills.

# Solid Construction

Concrete forms an integral wall - solid, continuous and airtight. By comparison, a wood-frame wall is a collection of components - studs, sheet rock, sheathing and insulation. Each joint and connection is a potential air leak. As the air passes through these leaks, it takes your heating and air conditioning with it.

### Space Age Insulation

Today's concrete home benefits greatly from the progress that has been made in home insulation over the past 20 years. Many insulated concrete wall systems use polystyrene blocks or panels as the concrete formwork into which reinforcing steel and concrete are placed. These polystyrene forms are left in place to give your home an exceptional R-value. For concrete masonry homes, insulation choices range from foiled backed batts to polystyrene panels. Standard hollow masonry units can be filled with insulating materials.

### Smart Design = Savings

When designing today's concrete home, smart builders are able to realize considerable savings by using concrete's energy efficiency to justify smaller heating and air conditioning systems. This results in a comfortable home with correspondingly smaller heating and air conditioning bills. The bottom line - savings are realized up front and throughout the life of a home.

Back to Top Concrete's Low Maintenance = Ownership Made EasyThe beauty of a concrete home is that it requires far less work on the part of the homeowner to keep it looking like new. What are the three most common causes of exterior wall maintenance? Termites, rotting and paint peeling or fading. Concrete homes are rarely, if ever affected by termites or rot. As to paint, while some contemporary concrete homes have wood siding, most have a stucco or brick facade. Some use a concrete texture or other concrete products as finishes. None require painting.

All of this translates into a concrete home costing less to own than a wood-frame or wood veneer home.

# Standing Up To The Elements

Part of maintaining a home over the course of its lifetime involves repair of damage from such elements of nature as rain, wind and termites. A concrete wall is more resistant to the wind and rain of hurricanes, tornadoes and other major windstorms. When Hurricane Andrew roared through South Florida, concrete homes protected families far better than their wood-frame counterparts. Homes built with concrete walls can also be designed to withstand the destructive forces of earthquakes.

Two of nature's threats to homes - termites and dry rot - are more subtle than hurricanes, tornadoes, and earthquakes. But they can be just as costly. While an infestation of termites can cause severe structural damage to a wood-frame house, the structural walls of a concrete home are safe from their destructive efforts. Dry rot is actually a disease,

common to timber and caused by fungi. Dry rot does not affect concrete and is therefore not a worry for the owners of a concrete home.

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Whether a Victorian gingerbread home or a Colonial mansion, concrete homes are quiet, easy-to-maintain and safe from fire, hurricanes, termites and wood rot. Concrete also can be used to create classic, low maintenance floors with patterns similar to classic stonework but with a look all their own.

#### Fire Prevention

Concrete homes are more resistant to fire than wood-frame homes. This gives your family a better chance of avoiding injury due to fire. Even if a concrete home does catch on fire, the damage does not seriously affect the structure of the walls, making repair a simpler task.

# Today's Concrete Home

The concrete home building systems available today have evolved to the point where you can design your home to require a minimum of maintenance while providing a maximum of protection...and it will still look new for years after it is built.

Back to Top Concrete...The Natural Building MaterialIn this age of vanishing resources, we must choose our building materials more wisely, balancing the expenditure of natural resources with the benefits of a material over its useful life. Concrete draws upon some of the earth's most common and abundant minerals for its raw materials. The amount of land used to extract the materials needed to make concrete is only a fraction of that used to cut down our forests for lumber.

Concrete homes are more energy efficient than wood-frame homes and therefore require less energy to heat and cool. This reduces the amount of so-called green house gases produced by power generation plants.

#### Concrete Uses Recycled Materials

Portland cement, which makes up about 10 percent of concrete, is manufactured from limestone, clay and sand. Scrap tires and other combustible waste that would otherwise take valuable land in land fills are often used as a fuel source in the cement manufacturing process. Sources of aggregates are diverse and plentiful: sand, gravel, crushed stone, and an ever-increasing array of consumer and industrial waste products - fly ash from coal burning electric power plants and blast furnace slag from steel mills. Crushed concrete from demolition is often used as aggregate for concrete. Concrete's nearly inert matrix of materials makes it an ideal recycling medium, with absolutely no degradation of strength or performance.

#### Limitless Possibilities

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#### **Healthy Living**

Concrete promotes a healthier indoor atmosphere, since it is practically inert, and requires no volatile organic-based preservatives like wood does. It's naturally waterproof and fire-resistant, so it doesn't need special coatings or sealers. Concrete can also be easily cleaned with organic, non-toxic substances.

#### **Built To Last**

Since wood rots and decays, and is extremely susceptible to natural disasters, it is central to a wasteful construction cycle of frequent disposal and replacement. Concrete, on the other hand, requires little or no maintenance, stands up to hurricanes, tornadoes, earthquakes, and fires. It can't be eaten by termites and won't rust or rot. Concrete's sheer durability over decades of use goes a long way towards waste reduction.

Back to Top The Peace And Quiet Of ConcreteLand for homebuilding is becoming more scarce and we're forced to build our homes closer together and near noise sources like highways, railways, and airports. Concrete homes provide the necessary sound reducing qualities to provide the kind of quiet comfort we all look for in a home.

The greater mass of concrete walls can reduce sound penetrating through a wall by over 80 percent when compared to wood-frame construction. Although some sound will penetrate the windows, a concrete home is often two-thirds quieter than a wood-frame home.

# Comfortable Living

Because concrete homes are built with solid concrete walls they are more air-tight than wood-frame. The continuous layer of rigid insulation used in concrete construction provides a consistent thermal barrier unlike wood-frame and batt insulation which has gaps in the insulation. This reduces drafts and cold spots inside your home resulting in more comfortable living spaces throughout your home.

#### Thermal Mass = Even Temperature

The mass of the concrete also has the heat-absorbing property called thermal mass. This smoothes out swings in temperature over time. It keeps the house from overheating or getting suddenly cold when the furnace or air conditioner cycles on and off throughout the day. It also helps keep the house cool in the summer and warm in the winter resulting in year-round comfort.

# Lower Energy Bills

The same qualities that bring you the quiet comfort of a concrete home - thermal mass and consistency of insulation - also brings the peace of mind of saving money. Concrete homes can often reduce energy bills by over 50 percent compared to wood-frame homes. It's not often an investment pays that kind of a return.

Make an investment in life style with a quiet concrete home and save money on energy bills at the same time.

Back to Top Savings That Add Up Year After Year

Buying a home is probably the single largest investment you'll ever make. Invest wisely. A beautiful concrete home will pay you back in terms of operating cost, resale value, and quality of living. Over the long run, benefits like energy efficiency, disaster and fire resistance, and durability reduce the cost of owning a home. Reduced noise and more even temperatures mean quiet comfort that you can enjoy year round.

### Lower Utility Bills

Concrete homes save energy in two ways. The mass of the concrete slows down the passage of heat or cold moving through the wall. With the same insulation, a concrete home stays warmer in the winter and cooler in the summer. Also, concrete walls are more air-tight than wood-frame walls. Since leaks account for a large percentage of energy loss in the home, concrete homes enjoy savings in energy consumption. That adds up to lower utility bills. A survey, conducted by Dr. Peter VanderWerf at Boston University, found that using insulating concrete forms (ICFs) reduces energy used for heating by about 44% and for cooling by about 32%.

# Reduced Insurance Premiums

Concrete homes resist fire. They're stronger than wood frame homes and safer during tornadoes, hurricanes, and earthquakes. Insurance for concrete homes is often 15% to 25% lower. One insurance agent in St. Louis, Missouri, offers discounts on homeowners insurance policies of up to 25% for ICF homes. No one, however, can put a price on the peace of mind that comes with owning a concrete home.

### Quiet Comfort

Concrete homes make the world go away - a haven from traffic and the neighbor's leaf blower. The mass of a concrete wall makes it an effective barrier to sound. Although some sound will penetrate the windows, a concrete home is often two-thirds quieter than a wood-frame home.

### The Quality Payback

Concrete homes cost a little more than wood-frame homes. But lower energy bills and insurance premiums can offset the slightly higher mortgage payment. The real payback is in quality...the intangible benefits of a quieter and more comfortable home. Back to Top