



Points of Construction

“BCB Homes builds the best homes in America. Period. The physics of building in the South Florida hot, humid climate are hard enough on their own, but BCB executes the details better than any other builder I know. It is truly state-of-the-art building science wedded to beautiful home design.”
— Joseph Lstiburek, Ph. D., P. Eng., Building Science Corporation



The finest products, systems and technology go into every BCB home.



Joe Smallwood, President/CEO

BCB Homes combines the latest in technology, methodology and craftsmanship throughout the various stages of new home construction. The result? A custom home built to withstand the South Florida climate. And a home that provides owners an enjoyable living experience for decades.

The hallmark of our success lies in the many subtle, yet important, details of our construction process. A tremendous amount of time and effort is spent researching the best methods, products, systems, and technology, all of which are installed under BCB Homes' supervision. Followed by extensive testing for worry-free installation and operation.

A variety of these techniques, which we call "Points of Construction", are highlighted in this brochure. Discover for yourself how our higher standards in building practices result in a better constructed, healthier, safer and more economical home. In addition, we invite you to speak with one of our many satisfied homeowners for personal testimonials on these practices and the results.

The result is a better constructed, healthier, safer residence requiring far less maintenance.



South Florida Climate

Florida is well known for its severe weather with heavy rainfall, extreme heat, high humidity, numerous storms and blistering sun. At BCB Homes, we build homes to endure these extremes. With minimal maintenance, a BCB home will withstand the test of time for years to come.

Wall Systems

A BCB wall system is constructed with materials that breathe. In the event of water intrusion during severe weather, our system provides an escape route for water, followed by a drying out period. BCB's design affords walls the opportunity to go through this wet and dry cycle an infinite number of times without compromising the structure.

Exterior walls constructed with materials that do not breathe, such as foil-faced insulation and non-permeable paint, trap moisture inside the walls. As water leaks through cracks in the stucco, it is trapped between the insulation and the painted surface of the exterior wall, which promotes mold and mildew growth and causes rotting of the wood components. Eventually, the water leaks to the interior through cracks, nail holes and other penetrations that will ultimately damage drywall, carpet, woodwork and other interior finishes.



Exterior Walls

Florida homes experience many severe weather events, during which it is possible for water to penetrate the home's exterior walls. BCB prepares for this possibility through the use of concrete and concrete block for its exterior walls, arches, columns and balconies. Why? Because concrete is strong, requires minimal maintenance, cannot be damaged by water and does not promote mold growth.



Wood, on the other hand, may incur extensive damage from moisture intrusion in the form of rot, swelling, warping, and mold growth. Plus, metal fasteners used in wood construction are susceptible to corrosion. The only way to guarantee the integrity of a wooden structure is to ensure that it never comes in contact with water. Which, of course, is nearly impossible in Florida and therefore makes a poor choice for exterior construction.





Water Intrusion/Mold

BCB's unique interior drainage systems ensure that in the unlikely event of water intrusion, moisture never reaches materials susceptible to moisture damage. Concrete has the ability to absorb and store a large amount of water that will evaporate from the wall system as it dries. In addition to the breathable materials outlined above, BCB's walls include an air pocket between the interior walls and the insulation to facilitate greater drying. Mold requires water and food to grow and survive. The components of a BCB wall system are carefully selected to avoid providing food for mold. Wood, paper, and glue are excellent food for mold and insects that are commonly found in many exterior wall systems. You won't find any of them in a BCB Home.



Wood wall systems can only absorb a small amount of water before moisture begins to seep into the interior of the home and damages the interior finishes while promoting bacterial growth. Waterlogged wood also can damage the structural integrity of the wall through rot, corrosion, swelling and movement of structural elements. Unprotected wood balconies will fail over time.



If relative humidity is not kept below 60%, dust mite infestations, mold and mildew growth will occur. Furthermore, the home becomes a breeding ground for bacteria due to high moisture levels, and higher amounts of VOCs will be emitted.



Indoor Air Quality

The hot and humid climate in Southwest Florida can create a multitude of indoor air quality issues. Elevated indoor humidity levels can cause both mold and mildew growth and allow unhealthy microbial organisms to populate the interior of a home. Furniture, fabrics and some building materials emit greater amounts of volatile organic compounds (VOCs) at higher temperatures and humidity levels. Native insects thrive at these high humidity and moisture levels as well.

A BCB home maintains a relative humidity level below 50%. Lower relative humidity is accomplished through the installation of high-efficiency air conditioning equipment, separate dehumidification equipment and sealed attics.

Many BCB homes include a device that introduces treated outdoor air into your home. This system provides fresh air to breathe and dilutes indoor air pollutants such as cleaning products, VOCs, odors and other household chemicals.

The use of a temporary air conditioning and dehumidification system controls the climate in your home during construction and prevents contaminants from entering your permanent air distribution system, which is not activated until the majority of the construction is completed.

All BCB homes are tested upon completion to ensure that the air conditioning, ventilation, and dehumidification systems are operating within their performance parameters.



Energy Efficiency

Customers today seek energy efficient homes to combat the rising costs of energy and alleviate environmental concerns. At BCB, our energy efficient homes include:

The installation of energy efficient appliances, the majority of which have received the federal government's Energy Star® rating.

Use of high-efficiency air conditioning equipment with programmable thermostats to cool your home when you are there and maintain minimal humidity when you are not.

Pools with high efficiency pumps.

Glass shaded by landscaping, rooflines, awnings and shutters on southern and western exposures, which reduces the amount of solar radiation absorbed.

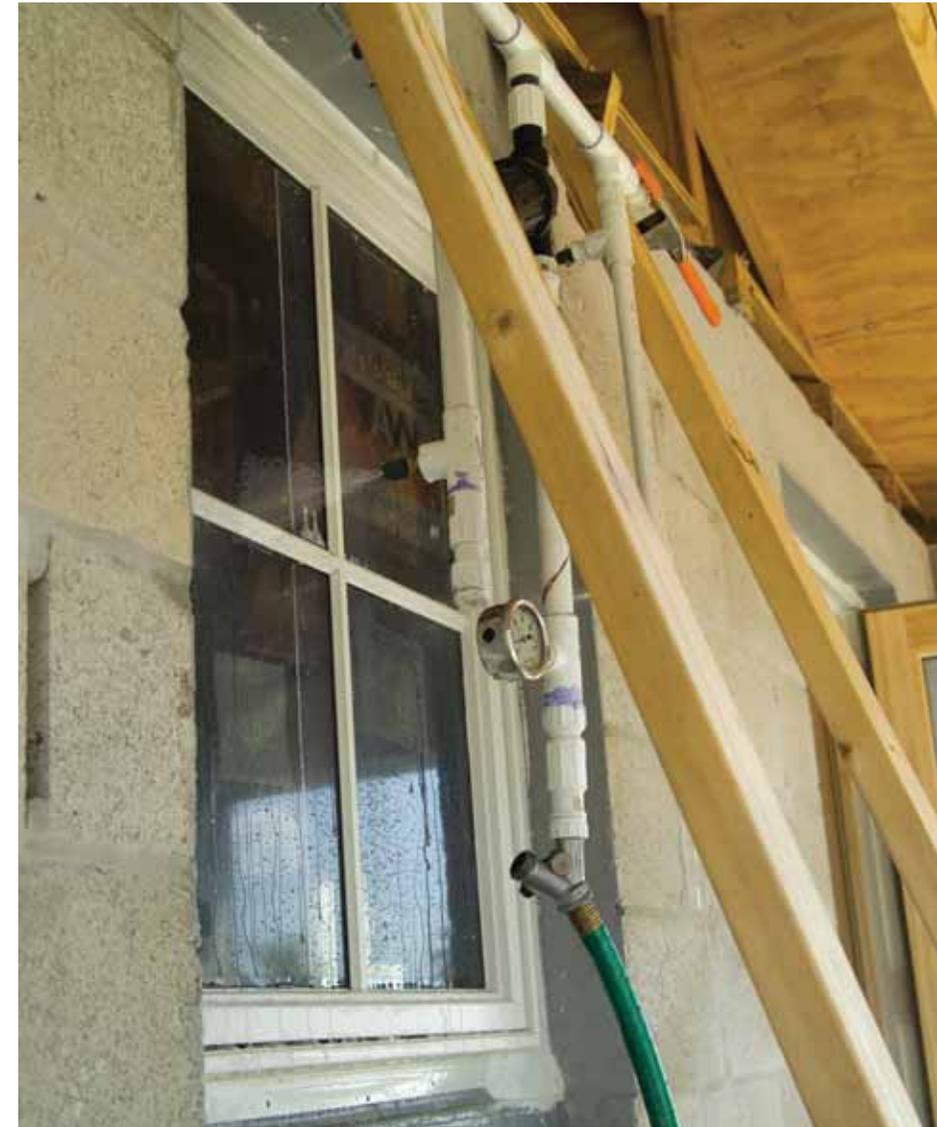
Recommendations for high performance glass that limits the amount of solar energy entering the home.

Construction of non-vented attics with insulation applied directly to the underside of the roof to provide a cooler attic environment resulting in more efficient heating and cooling equipment operation.

"BCB Homes is truly a leader in providing durable, efficient, healthy homes that are beneficial for the environment."

— Jennifer Languell, Ph. D., Trifecta Construction Solutions





Windows & Doors

Most do not realize that although the Florida Building Code dictates windows and doors must be constructed to endure hurricane force winds, many are not constructed to prevent water intrusion from hard driving rains. In light of this, it should come as no surprise that many window systems that meet codes for wind will leak during a normal summer thunderstorm.

BCB windows are installed using a waterproofing system that prevents moisture from reaching the interior while also allowing it to drain outside during extreme weather conditions.

BCB Homes tests all windows and doors for water intrusion to ensure correct factory construction and proper installation. Many windows from top manufacturers are delivered with defects that cause them to leak during testing. This testing program affords BCB Homes the opportunity to catch and correct these defects before they become a customer's problem.

Conventional building techniques attempt to seal windows and walls as if the house were an aquarium. When water enters such a system, which eventually it will, it becomes trapped in the exterior wall system until it accumulates and enters the home.



Unorganized wiring makes future additions, alterations and troubleshooting difficult for homeowners.



Service & Maintenance

Our service before, during and after construction is unmatched. Consider for instance:

We educate our customers, designers, architects and engineers on the products and systems that are best suited for their home.

Monthly construction reports are generated outlining the budget, schedule, open issues and include job progress photographs.

After construction is complete, we assist homeowners with a variety of needs: from maintenance advice to repairs to remodeling. And not just for a specified period of time. For as long as they own their home.

Our service personnel are on call 24 hours a day for all home related emergencies.



