

new style construction for an old town home



Photo: Architect Trey Wheeler

When Carter and Beth Newbold moved back to Signal Mountain from Boston a few years ago, they didn't have too hard a time finding a home – considering they both grew up in the same neighborhood as the 90 year old home they've come to call their own.

Of course, at that time they only knew it as the Joneses house – one of a handful of families to have inhabited the 1918 Arts and Crafts-influenced home in Signal Mountain's Old Town community. But in only a few short

months of relocating, the Newbolds took to transforming the house into a highly functional dwelling perfectly suited for a family of five.

And from the very start, they had a lot of work to do. That is, finding a way to transform the home without compromising its historic and stylistic integrity. Well that is where the Newbolds were able to explore a new style of construction in which architect, builder and subcontractors collaboratively design, plan and build custom projects.

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Photos: Architect Trey Wheeler

Upon moving back to Signal Mountain, the Newbold's first venture was to remodel some of the existing home to make it more fluid and more functional. But even after a successful remodel, many needs remained. Like more family space, kid space, storage space, garage space as well as defined and usable outdoor space. Space to spread out and grow as a family.

At that time, Beth's home office was the kitchen table. And with three children (ages 6, 9 and 11) in school and exploring various sports, hobbies and interests, the Newbolds also wanted a space that would help separate the stuff of work and play from the stuff of friends and family.

So their next venture was to tackle a home addition – one that could accommodate their needs while remaining true to the architectural heritage of the existing home. But it wasn't going to work apart from a new style of construction where the architect, builder, subs and the homeowners all collaborate to solve problems and accomplish goals.

"Integrated project delivery," explains architect Trey Wheeler of TWH Architects. The Integrated Project Delivery, or IPD method is a term used for describing a collaborative approach to ensure a better construction process and product.

Trey was introduced to the Newbold's project after initial struggles to develop a successful set of plans. "They (the Newbolds) explained to me what they needed as well as some of the challenges they were

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coming up against. What I wanted to do was bring a team approach to the project and ensure that the addition would blend seamlessly into the existing home.”

And beyond overcoming lot limitations and set-backs, drainage issues and a substandard mother-in-law suite, Trey set out to design an addition that would cleverly integrate a new family room and two-car garage with the “existing geometry of the home without blocking windows or detracting from its aesthetic character.” He explains, “I have lived in Old Town and I understood the architecture. That experience helped shape my approach to the design.”

Having served as lead architect on large commercial projects such as several of Erlanger’s clinical suites, Battle Academy Elementary, and others, Trey was familiar with complex projects. “Having input from all sides is what helps a lot of difficult projects succeed,” he explains. So Trey recommended that Collier come on board from the start. “Having a residential contractor involved from the beginning is paramount,” he explains. “The team approach just works better.”

The IPD method worked. The family room addition and accompanying new two car garage function as a logical progression from the rest of the home. The new family room flows from the original structure through a modest corridor that prevents the addition from blocking existing windows. A home-office and entryway mudroom were built off

each side of the corridor which also serves as a connector space that naturally leads into a charming family room with a double-sided wood burning fireplace.

“We were able to define the outdoor living space as well,” explains Trey. The outside fireplace, for instance, is the focal point of a patio seating area on one side of the addition. The other side features a sizeable driveway perfect for recreational use. And the garage includes an upstairs playroom that could someday be altered into an office. Either way, Carter and Beth’s kids have space to be kids – both inside and outside. And the Newbold family has space to do all the different things families do. Like entertain, relax and play.



Photo: Architect Trey Wheeler

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demystifying LEED

Bryan Youngblood



Photo: David Peck

Lately in Chattanooga, LEED has dominated headlines—coverage has spanned everything from exciting new LEED certified developments many months away to the latest building certifications. But for homeowners, the question remains, “so what is LEED and what does it have to do with me?” We thought our LEED AP Project Manager Bryan Youngblood could break it down and give some insight into the LEED process. He is an expert in green building, and serves as Collier Construction’s (not so) secret weapon.

At Collier Construction, we know that the future of homebuilding is sustainable construction, intelligent use of resources, local materials, and energy efficiency. We have worked to stay on top of the green building revolution by pursuing LEED accreditation and building LEED certified projects. Among them are the Madison Street Homes, green|spaces, and the Habitat House in Jefferson Heights. The LEED process forces us to be creative with materials and resources, try new applications, and to think differently about construction.

Among the six LEED certification programs, LEED for Homes helps owners and builders attain the ambitious goal of “green building” by providing a template and point system that clarifies the green building and design process. LEED for Homes is tailored to single and multi-family residential construction and differs from LEED for Commercial (LEED for NC), which has a more stringent accreditation process with more involvement from 3rd party consultants and energy raters.

Still, LEED for Homes is time consuming, and for most of us, the process is confusing. So here’s a way we can all understand it.

The Team

First things first. Where traditional homebuilding employs a single contractor to oversee the entire process, a successful LEED project begins with a team of professionals who start the design process together. These professionals have a multitude of specialties in a range of areas including architecture, design, sustainable construction, and landscape architecture—to name a few. Once you have a team, the design process begins.

To earn LEED certification, the design is tailored around green-conscious criteria that the team will implement during construction. The design of a LEED home includes a list of items that are specific to every component of a home including the project site, construction practices, materials and equipment. This list of design criteria is a preliminary part of the LEED process. It helps influence and shape the applicable LEED credits and is submitted to a green rater who will ultimately help verify that the home meets the LEED rating system requirements.

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Photo: David Peck

The Green Rater

The green rater is a 3rd party individual appointed by a LEED provider to review design and construction, verify that the home meets LEED standards and submits application for certification. The green rater is involved throughout the project to carry out inspections (LEED inspections do NOT replace local code enforcement inspections) and assist with the certification process. After effectively implementing the design and passing inspections, a home owner can confidently know that their home is sustainable.

The green rater assesses your design and assigns the project a preliminary HERS rating. HERS (Home Energy Rating System) is a rating based on the project's design criteria being implemented properly. From the outset, the design criteria and HERS rating should form a comprehensive plan and specific goals for the project as well as suggest the obtainable certification level (platinum, gold, silver or certified). After construction is complete and LEED testing is done the green rater will recalculate the HERS rating based on performance tests and actual construction methods.

A Whole Systems approach includes advanced framing, tech-shield roofing, open headers, and rigid foam sheathing. All seen here.

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Points & Credits

Because LEED is a points-based system, each design criteria specified in the beginning, if implemented correctly and verified, counts toward certification. This requires pre-planning, great attention to detail and much diligence from all team members. And each design criteria accomplished successfully is one part of a 'whole systems approach' to green building. This means that each LEED credit is a piece of a much larger 'whole system' puzzle and is necessary to bring the LEED project to fruition.

To effectively manage the LEED process, many tasks must be completed during construction. Design criteria such as properly sealing all of the ductwork and air gaps as well as managing storm water runoff and using native drought tolerant landscaping must be visually verified by the builder and green rater. Any paperwork or documentation for equipment and materials is filed for later use, and mandatory inspections must take place during and after construction. If all of the design criteria are followed, the last part of the process should be a breeze. All of the paperwork and verification must be pulled together in the LEED format and submitted for certification.

So Why LEED?

While a LEED certification may seem unnecessary to most homeowners, the rigorous process guarantees that a home is built to high standards and with many parties overseeing the entire process. For some customers, it is all about the peace of mind that comes along with LEED certification. And LEED is a great way to advertise your home's sustainability and add to its value. And the value of LEED certification remains constant throughout the lifetime of the home – no matter how many times the home changes ownership and no matter how many years pass, the home will always be LEED certified.

However, some of Collier's customers choose to go green without pursuing certification. And because Collier uses its whole systems approach with proven results, our customers receive the green benefits with no paperwork or additional administrative needs. These customers know their home is green because of their utilities bills and because they were expertly advised every step of the way. At Collier we believe that by building better quality with a more intelligent use of resources your home is automatically green.