

Green Building – A Builder’s Perspective

C.F. Evans Construction – Construction Management Services Since 1948



- Headquartered in Orangeburg, SC
- Specialize in market-rate apartments, senior living, student housing & affordable housing communities
- Geographic reach: SC, NC, GA, TN, KY, VA
- More than 4,000 units recently constructed
- www.cfevans.com



“We build it like it’s ours.”

Involvement with NAHB Green Building Program



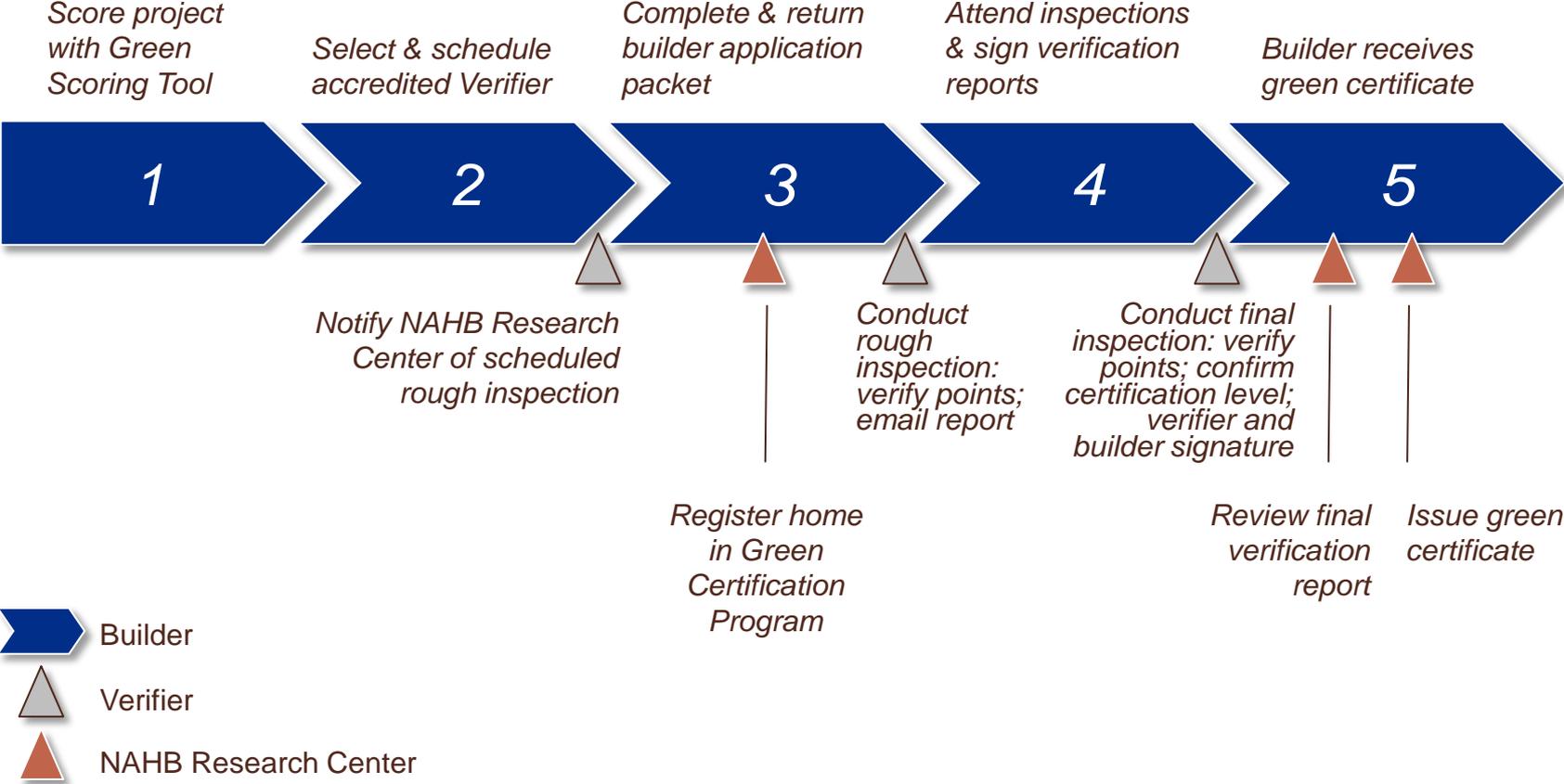
- 1st project in SC certified to National Green Building Standard; 3rd largest building in U.S. certified to National Green Building Standard (at the time of certification)
- 250+ units certified to date
- 450+ units under construction attempting certification
- 30 NAHB Certified Green Professionals on staff
- Member of NAHB Research Center's Consensus Committee for National Green Building Standard 2012 Update

Let's Face it – Costs: Time to Bust the Myth!

	% Differential
Site Work	0%
Building	.15%
Inspection Fees	36%
Certification Fees	100%
TOTAL	0.31%

Representative of bronze certification for 3-story garden-style project

Implementation – Process Overview



Case in Point – Metro 808



- Charlotte, NC
- 237 units; 219,498 total heated SF
- Bronze level certification
- ~0.18% Increased cost (as a % of total)
- Examples of solutions / techniques used
 - Site selection of an infill lot that was previously developed
 - ENERGYSTAR® appliances
 - (CRI) Green Label Plus carpet and GREENGUARD Children & Schools CertifiedSM insulation
 - Low volume irrigation systems
 - Storm water management plan with underground detention systems

Case in Point – The Summits Apartments (In Progress)



- Graniteville, SC
- 120 units; 132,400 total SF
- Bronze level certification
- 0.31% Increased cost (as a % of total)
- Examples of solutions / techniques used
 - Resource Efficient Materials: Roof Trusses & Floor Trusses
 - Building Thermal Envelope
 - HVAC System Protection Measures Structural systems/advanced framing techniques optimize material usage
 - Erosion reduced through the use of retaining walls, landscaping and restabilization



Case in Point – Terry Village



- Orangeburg, SC
- 14 units; 10,475 total SF
- Bronze level certification
- 0.24% Increased cost (as a % of total)
- Examples of solutions / techniques used
 - Water Efficient Landscaping
 - Natural Irrigation
 - Preservation of Wetlands
 - High performance windows
 - Increased insulation and air sealing



Projects Under Construction / Planning



Verde Vista
Asheville, NC
252 units

Triangle Towne Place Apartments
Raleigh, NC
339 units



Takeaways – Before Construction Begins



- Introduce program and it's merits to Client/Developer
- Determine the level of certification owner wishes to achieve
- If possible, coordinate with the design team before design is completed (helps avoid re-design: some points may require design / specification changes to meet required performance levels)
- Determine who's hiring the Green Verifier – the owner or contractor
- Verifiers are like building inspectors: understand their expectations before the project begins

Takeaways – During Construction



- Ensure your superintendent & field team understand the requirements & quality expected
- Add language in contract scopes ensuring subcontractors are responsible for achieving relevant green points
- Meet with building inspectors to make sure they know what you're trying to achieve
- Work with subcontractors to ensure proper installation of relevant items
- Make sure verifier inspections are scheduled on time – once items/systems are covered up, you will be disqualified for those points

Takeaways – Post Construction



- Educate leasing agents on green features
- Highlight energy savings for residents (Energy Star appliances, sealed ductwork, etc.)
- Invite press to visit the project & write an article about green features
- Press releases

Community Goodwill



C.F. Evans breaks new ground as NAHB bronze-level green building

C.F. Evans Construction has completed the first multiunit buildings to be certified to the National Green Building Standard as a Bronze Level Green Home by the National Association of Home Builders Research Center. The four buildings, located at Terry Village in Orangeburg, incorporate green methods such as water-efficient landscaping, natural irrigation, preservation of wetlands, high-performance windows, and increased insulation and air sealing. Terry Village is a project of Mental Health America of South Carolina, an organization whose mission is to improve the lives of people

GREEN TO BRONZE

C.F. Evans builds first S.C. multifamily units to earn organization's award

By GENE ZALESKI
T&D Staff Writer

An Orangeburg-based construction company has gone green.

C.F. Evans Construction recently completed the first multiunit facility, Terry Village, to be certified to the National Green Building Standard as a Bronze Level Green Home. The National Association of Home Builders Research Center provided the certification.

It is the company's first green building project and the first multifamily building in the state to be certified to meet the NGBS.

The grand opening of the Bowman Street housing complex will be held Thursday, Sept. 1, at noon.

The four buildings at the Terry Village, which is an affordable housing community, incorporate green methods such as water-efficient landscaping, natural irrigation, preservation of wetlands, high-performance windows and increased insulation and air sealing.

Terry Village is a project of Mental Health America of South Carolina. MHASC provides affordable housing for low-income South Carolinians diagnosed as mentally ill.

Joy Jay, MHASC executive director, expressed

her excitement about the project.

"This is the first time we had the opportunity to go green," Jay said. "We felt like it was just so exciting to be able to do that and we will be leaving a smaller footprint for the residents. They are thrilled when we tell them."

"We hope their power bills will be lower," she said. "Everything we put in there we went green on."

Jay said the need for housing for the mentally ill is crucial as many suffering from mental illness currently reside in substandard housing.

"We have 14 units and we started out with 37 on the waiting list," Jay said. "We could have filled it up almost three times."

Jay said Terry Village occupancy is on a first-come, first-serve basis.

"People do have to be diagnosed with a mental illness and have to be willing to continue their services," she said. "It is so hard for folks to really get on the road to recovery when they are living in substandard housing."

Terry Village will be the third MHASC housing development in Orangeburg.

Currently, there is Elderly East and Allen Heath in Enderly Street near Knart. Both these facilities have a total of 34 units.

Janet Bowler, C.F. Evans Construction director

of marketing and leadership in energy & environmental design green associate, touted the importance C.F. Evans has placed on the environment.

"C.F. Evans is dedicated to building awareness and embracing environmentally responsible practices both in the office and on the job site," Bowler said.

"We are committed to educating our employees and our partners on how to minimize impact on the environment and we will work to reinforce environmental stewardship and strive for continuous improvement."

Terry Village was completed in July 2011. There are a total of 14 one-bedroom units. Each is approximately 553 square feet. There is one handicap unit and one visual/hearing impaired unit, however all units are handicap adaptable.

The village has a gazebo, community center, mailboxes and EnergyStar appliances.

Founded in 1948, C.F. Evans & Co. is a construction management and a general construction firm specializing in preconstruction services, project management and construction of office buildings, health care facilities, churches, schools, and other commercial and industrial buildings.

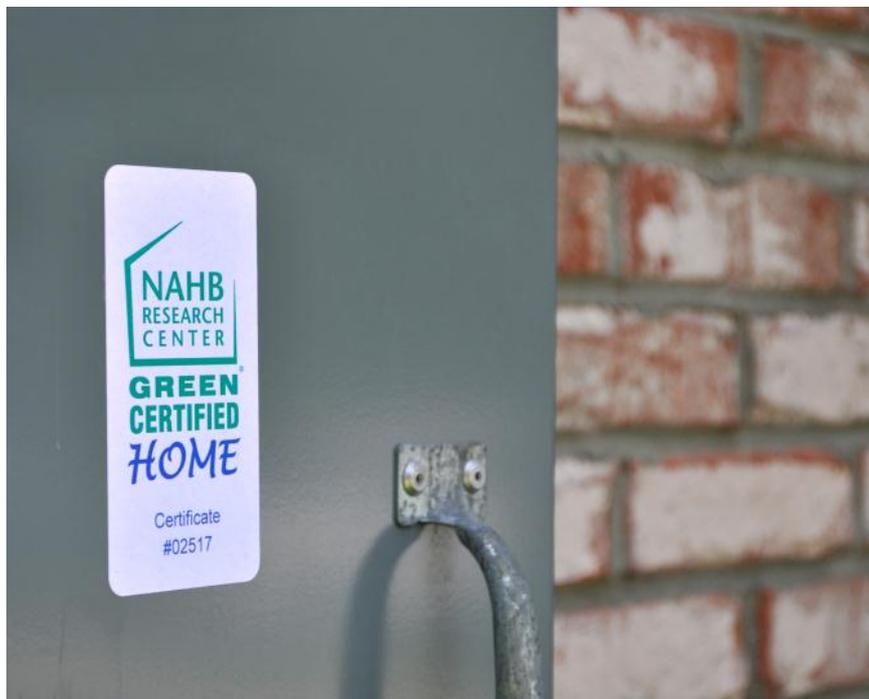
Contact the writer: gzaleski@timesanddemocrat.com and 803-533-5551.

a 100% recyclable, corrugated packaging product used in the food industry, at the facility. Miller-Valentine Group's design-build team is executing improvements to the office and manufacturing areas, including improvements in utilities, foundations and infrastructure in preparation to receive production equipment. The project is expected to be completed in time for fall 2011 occupancy. The building is located in the former Smurfit Stone building. The company investment, of more than \$13 million, is expected to generate 60 new jobs. Interstate Container is a subsidiary of Interstate Resources Inc., headquartered in Arlington, Va.

Key Hurdles & Recommended Solutions

HURDLE		SOLUTION
<i>Getting owners on board</i>		<i>Proactively educate owners</i>
<i>Getting architects on board (may not be familiar with NAHB)</i>		<i>Proactively educate architects – e.g., Lunch ‘N Learns</i>
<i>Controlling costs during construction</i>		<i>Make sure requirements are covered in subcontract scopes</i>
		<i>Ensuring proper installation & quality</i>
		<i>Ensure field team understands expectations / quality verifier will require</i>
<i>Project Management / Field Management don't see value of green – they want to build like they always have</i>		<i>Corporate buy-in / culture from the top & throughout entire organization</i>

So What? Benefits for the Builder



- Higher installation quality standards - will increase the quality of all subcontractors & team members
- Builds increased awareness regarding the costs of waste - & building a culture of recycling & sustainability - leads to cost efficiencies throughout your company
- Increased credibility in industry by holding yourself to higher standard & bringing solutions to the table

