

Extreme Measures

11½ Hours in the Life of Capital Structures

by Libby Maurer

Team Capital breaks framing record in an extreme effort to complete new home in just five days.

What can you accomplish in 11 hours? Play 36 holes of golf? Watch *The Sopranos* season 1 DVD without a break? Memorize 54 decks of playing cards? (Someone actually did this in 11 hours 42 minutes.) Capital Structures can frame a 3,800 square foot house in 11½ hours. And that's exactly what Steven Spradlin's Team Capital did on one unbearably hot and muggy Sunday in June as part of a team of extreme volunteers.

You know the drill with ABC's *Extreme Makeover Home Edition*, the number 1-rated prime time reality TV show. A down-on-their-luck family is surprised one morning with an in-your-face wake-up call from the DIY empire's celeb du jour, Ty Pennington. The family is promptly whisked away on vacation while a crew of hundreds invades their neighborhood, demolishes the old house and builds a new one in its place. What's the catch, you ask? Seven days is the catch. The new home must be "move-in" ready for the family's return in just seven days—a small price to pay to help a struggling family climb back from financial and emotional despair.

at a glance

- ❑ Capital Structures of Fort Smith, AR was selected to provide materials, component design, fabrication and framing labor for an *Extreme Makeover: Home Edition* project in June.
- ❑ Ninety-two degrees, 97 percent humidity, and no breeze caused Team Capital framers to endure brutal conditions for much of the day.
- ❑ The framers set a framing record of eleven hours and 30 minutes.
- ❑ The crew encountered one set-back: the foundation slab was off almost two inches in some areas, making the wall panels difficult to get level.

How they pull off this mammoth undertaking is no small feat. Is it the sheer number of volunteers? Is it an act of God? An illusion or sleight of hand? Some space age building material? Of course, what makes it all possible is no secret to the building components industry. Framing the American Dream® has been this industry's battle cry for years if not decades. But proof that building components really are the future of framing is now playing in a living room near you, thanks to ABC and component manufacturers like Capital Structures. That's right, you need not traverse a muddy jobsite to witness the power of components. The "wow" factor of component framing can be viewed nearly every Sunday in the comfort of your own home.

nated the family for an Extreme Home Makeover, and on Wednesday, June 8, exactly ten years to the day that Morgan disappeared, Colleen Nick and her family got the wake-up call of a lifetime. Demolition on their home began on Thursday, June 9, and the site was cleared and the plot leveled by Friday, June 10. ABC scheduled the framing to begin at 7 a.m. Sunday, June 12.

Unlike other Extreme projects, this episode did not feature a big production builder like Centex Homes, who commandeered the Rosanne Dore family's new Seattle-area B&B one year ago (see April 2005 issue of **SBC Magazine**). This time around, the Northwest Arkansas Home Builders Association



Abduction in the Dark

Over ten years ago at a baseball park near Fort Smith, AR, Morgan Nick played with friends, catching fireflies as night fell. That was the last time her mother, Colleen Nick saw her. After the experience of losing a child to abduction, Colleen started an organization called The Morgan Nick Foundation. Pouring her free time and resources into the foundation while raising children Taryn (11) and Logan (13), the Nick home in the small town of Alma, AR suffered. In recent months, the house was flooded and the family lacked financing to repair the subsequent water damage. Friends and relatives nomi-

(NWAHBA) headed the massive undertaking, and recruited Steven Spradlin's Capital Structures of Fort Smith to donate labor, materials and several framing crews for the Nick's new 3,800 square foot home.

Spradlin, a NWAHBA board member, was approached by a fellow board member who mentioned ABC had contacted their office to propose that they take the lead on Project 301, a new home for the Colleen Nick family. "[The HBA rep] asked if my company would be interested in working on the project," Spradlin said. "At that point, I had no idea how big

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it would get or really what kind of commitment it would require.” Spradlin said through the process, it turned out that Capital Structures became one of the major players in this project, working right alongside NWAHBA and other trades to organize and coordinated the effort.

Design

Capital senior designer Cole Klineline spent the better part of the next month designing the floors for Project 301. “I designed all the floors, Mike [Kelley] did all the walls, and Steven

didn’t get the final plans until a few weeks before the build, which were quite different from the originals in terms of roof shape and square footage,” he recalled.

Klineline said Spradlin received official word Saturday around noon—less than 24 hours prior to framing—that there would be a significant design change affecting the second floor layout. “They wanted to add an entire bedroom, bath and closet to the second floor,” he said. By that time, the component systems had all been built, sequenced, bundled and shipped on semis to the off-site staging area. “We went back to the drawing board to see if we could accommodate their request



did quite a bit of the roof,” he said. Spradlin worked hand in hand with the engineers and architects involved in the project to develop the layout of the house. His background in component design only worked to his benefit. “I knew how I wanted to fabricate the house sections off site so I guided the home design with that in mind,” he said. No matter how much the design team organized, planned and prepared, the home’s wall, roof and floor design sustained both major and minor changes up until the eleventh hour—literally. Klineline said they received the first set of preliminary plans around four weeks prior to the build. “Those plans changed twice, and we

and still salvage the work we had already done. We pulled it off without having to completely rebuild any sections. Production built a few new floor trusses and we rearranged a few headers, and also planned to do some minimal work on site.” Apart from the last minute design alteration, Klineline estimated the design team dedicated roughly 60 to 70 percent of their time on Project 301 the week leading up to the build.

Fabrication

Andy Pipkins, Capital’s plant manager, began building the roof and floors during the last week of May. “The design

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team had numerous changes in the process. But at one point, we thought it was safe to go with the final design and start building." A team of plant volunteers stayed after hours to assemble the components. "Of course, learning about the extra bedroom the day before framing was scheduled to begin threw a wrench in our system. We had to come back and build new walls and floors," he said. With those changes coming in less than 12 hours from the scheduled framing time, "it was pretty challenging," he recalled. Kline line expressed his pride that the design and production teams both

rallied to make it happen. "That to me speaks volumes about how this company pulled together. The fact that we made a change like that happen is big," he said.

Componentization

Gerald Horton, Capital's maintenance manager, took on the task of preassembling, decking and sequencing the major roof components. He helped devise a clever plan to make sure each and every part fit together like a puzzle once they arrived on site. In a project where wasted minutes could spell disaster, Team Capital had to know with absolute certainty that each component was manufactured and assembled with precision. Horton said, "We made sure each section was plumb and would fit together perfectly onsite by setting up beams in the yard in the shape of the upstairs wall layout." The components were lifted into place and checked by the assembly team. "Our quality control guy, the maintenance crew, floor foreman, and wall panel foreman devoted 12 hours a day for about a week and a half," Horton said. Once they were satisfied with how the pieces fit together, they pulled them apart in exact order in 12- and 13-foot sections. Next, they were loaded on trucks bound for a staging area just miles from the jobsite.

On-Site Conditions

On Sunday, June 12, Mother Nature graced northwest Arkansas with a beautiful, bright, sunny, cloudless day. Unfortunately, 92 degrees, 97 percent humidity, and no breeze to speak of forced a stifling blanket of humidity to descend on the Team Capital framers. Heat exhaustion and heat stroke were a constant threat; the Capital wives devoted most of their energy to keeping bottled water on ice and in the

hands of framers who didn't have a minute to spare for a water break.

Due to the compressed timeframe in which to erect the new home, a product called hot mix concrete was used to set the foundation of the Project 301 home. It allows a very quick setting process, which was crucial in this case to allow the framing crew to move in as fast as possible. One drawback of using hot mix, however, is how the material actually sets once poured, as Team Capital found. When setting the first floor walls, it became clear that the foundation was less than level. Kline line recalled, "From front to back, the slab was off

about two inches. And from side to side, it was off about one inch. We started setting the walls at two opposite corners of the foundation, so we didn't realize the slab was off until we started the middle section." That made plumbing the walls of Project 301 very difficult, causing a lag of about two hours in the project. "When we hit the plumb and level part of the first floor, it cost us some time—maybe even a couple hours. There were some discrepancies between the slab and the frame that needed adjustment," he recalled. Purchasing manager Dave Mills said even though taking the time to plumb was slowing the process, not doing it would cause even bigger problems on the second floor. "When you ignore the out-of-plumb problems on the ground floor, it carries up through the second floor and the problem just gets worse."

Slab troubles forced the framing crew to power through the hottest part of the day with warm concrete below and no overhead cover or shade, but plenty of water, positive attitudes and a spirit of teamwork prevailed. "With nothing over the top of us, no shade, it almost killed us down there," Kline remembered. "The slab did set us back, but we didn't blame anyone for it, it was just something we had to deal with. I think the feeling was if that was the only problem we had to deal with, it was okay," Kline said.

A Company-Wide Effort

You might expect Capital's design and production staff to be cheering the framing crew on from the sidelines. Not a chance. Capital employees like sales manager Justin Williams and Wes Sadler stepped up to participate in the event and lend a hand to the framing crew. Capital truss technician John Robertson, a former Atlanta-area Habitat for Humanity crew volunteer, was also on site to pitch in. "A Habitat house pales in comparison to project of this size," he said. Along with Dave and Jeff Earnhart, Robertson devoted the last four weeks of his time to making sure the company's major commercial jobs were kept on track. Kline credited them for "making sure our regular customers were not neglected or held up."

"Everybody worked for a common goal to get it done and get it done right. We didn't have to beg anyone to get it done, that's for sure!" Pipkins said. Kline noted, "The most

memorable part of the experience was how all the different trades who normally compete worked together. You didn't hear any complaining even though it was brutally hot and there were problems with the slab." Horton said all he remembers from the build was exhaustion. "That day was pretty much a blur. Probably the hardest work we've ever done in our lives," he said.

Spradlin spoke about his team's extraordinary display of preparation and organization that contributed to the success of Project 301. "My entire team volunteered their time and talent to this project. These guys gave 110 percent. I have

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never been more proud in my life," he said, noting that the sheer size and complexity of the house was not forgotten by anyone. "It would normally take us two weeks to frame a house of this size," Spradlin said. "Pulling it off in under twelve hours is huge. I'm extremely proud of our guys."

The Episode

The special two-hour episode aired on ABC Sunday, August 14. Although the framing segment was short, Spradlin was spotted in a bright yellow shirt on more than one occasion. At the very end, he and a group of NWAHBA volunteer captains stood with a very emotional Nick family outside the new home. "Meeting the family was exciting. I got to see first hand how they felt," he said. But his disappointment about the perception that the ABC cast participated more than they did



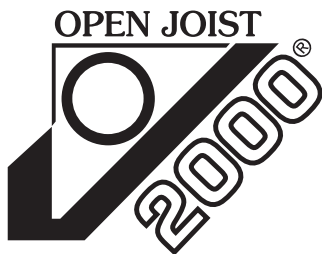
was evident. "The show did a wonderful job of showing what the family had lived through and why the cause was important. But they didn't do a good job recognizing the time and effort the trades put forth to make it a success," Spradlin said firmly.

Despite the show's skewed image, in their own minds, every member of Team Capital knows just how much of a difference they made. Spradlin is no exception. "It was amazing to see how they all came together and put their hearts, backs and minds into it like nothing I've ever seen. I think they put a lot into it and got a lot out of it in the end. It was extremely rewarding, and also a heck of a challenge to exceed expectations," he said. **SBC**

For more details about this and other Extreme Makeover projects, go to the "Framing the American Dream" section of WTCA's web site at www.woodtruss.com.

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