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The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing structural building components. Further, SBC strives to ensure growth, continuity and increased professionalism in our industry, and to be the information conduit by staying abreast of leading-edge issues. SBC's editorial focus is geared toward the entire structural building component industry, which includes the membership of the Structural Building Components Association (SBCA). The opinions expressed in SBC are those of the authors and those quoted, and are not necessarily the opinions of Truss Publications or SBCA.

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## editor's message

#### Growing Up in the Business

Meet incoming SBCA President Scott Ward.

am honored and humbled to serve as President of SBCA this year, and I want to thank all of our members for entrusting me with this responsibility. I need to applaud Steve Stroder for the great work he has done leading our association over the past year; it was no small task. It has become obvious to me that Steve believes in SBCA's mission and goals, both through his leadership of the association and his efforts to guide ProBuild in a direction that has made a positive and tangible impact on the survival and growth of SBCA during the tough times of these past few years.

The kind words and support many of you have shown me as I take on this role is greatly appreciated, and I feel blessed to be surrounded by so many intelligent and knowledgeable people dedicated to enhancing, growing and, in particular, taking on work that is dedicated to the only mission that we truly have—serving the best interests of our industry.

My father, Bob Ward, started in the component industry in 1960. He spent several years as a member of the Board of WTCA and also served as President in 1991. I have watched his love for this industry grow year after year. As a child, I can remember riding my bike around the shop floor when he had to work weekends to keep the place going. So you could say that I really did "grow up" in the business.

Frankly, the truss business is all I ever remember wanting to do. While in my fourth year of college, I had the opportunity to return home and work for the family business. I can remember how excited I was when I started. Have you ever been told to be careful what you wish for? Here I am (20 years later) realizing that, although we are part of an awesome industry, it's real hard work, especially these last four years. Things always look easier from the outside looking in.

Fortunately, there were entrepreneurs like my dad, Rip Rogers, Dwight Hikel, Don Hershey, Staton Douthit, Koss Kinser, Lenny Sylk, Bill Alcom, Jack Littfin, John Herring, Lee Vulgaris, Merle Nett and so many others who laid the foundation we can continue to build upon today. Their love and dedication for this industry should always inspire us to strive for excellence in all that we do in our markets—for our customers and fellow component manufacturers.

My goal is to continue their legacy and do all I can to draw attention to the many ways SBCA can help members build their businesses and this industry. With the entire membership aimed toward that goal, I truly believe we can effectively build the case that we are the future of framing. I think the article, "The "Un-Socialized" Marketing Approach," (p. 18) in this month's issue does a good job of illustrating how past pioneers perfected this approach and forged a path we can all follow in our own marketplaces.

We have faced several challenges this past year, yet I know there are many more to come. If you have any doubts about the strength of our organization, find anyone who was a part of the Southern Pine design value process and saw SBCA in action at the ALSC meetings in 2011 and the inaugural Lumber in Components Council (LCC) Lumber Summit in 2012. Our industry united in a way that we have not seen in quite some time. We brought an accurate, strong and credible message to the

Continued on page 0

#### at a glance

- ☐ SBCA President Scott Ward grew up in the business and credits industry pioneers for laying the foundation CMs can continue to build upon today.
- As the housing market improves, CMs need to focus on bringing new and skilled labor back into the industry.
- □ Technical schools, community colleges, high schools and wfd.sbcindustry. com are excellent resources for finding employees.

#### **Editor's Message** • Continued from page 7

market, and our voice was heard. The outcome was a positive one that benefited members and non-members alike. It is crystal clear to me, personally, that had the outcome of SBCA's work been different, our business would very likely have been harmed significantly.

Beyond building passion among our membership to reach out and use the tools created by SBCA to help educate engineers, architects, building officials and builders, I believe we also need to turn our focus on our growing employment needs. As the economy recovers and the housing market continues to grow, workforce development will become an even more important aspect of our businesses. Serving as the SBCA Management Committee Chair over the past few years, I've worked with staff and other members of the Board to bolster SBCA's online resources (wfd.sbcindustry.com) to help us all bring new and skilled labor back into the industry.

In the coming months, we will continue to enhance this powerful tool, which allows employers to post job openings and people interested in getting into the truss industry to post their resumés. Over the past few years, so many good people have left the industry and have no immediate plans to return. It is vital we begin building a new crop of young workers to bring into the positions we need filled. It starts with each of us reaching out to our local technical schools, community colleges and even high schools, and SBCA will provide the support we need to make it easy to do.

I look forward to working with a number of you over the coming year as we tackle the many challenges facing our industry. Fortunately, with a strong association and a dedicated and determined membership, I believe there isn't a problem we won't be able to take head on. **SBC** 

SBC Magazine encourages the participation of its readers in developing content for future issues. Do you have an article idea for a future issue or a topic that you would like to see covered? Email your thoughts and ideas to editor@sbcmag.info.

#### 2012 Award Winners

Congratulations to the following award recipients, who were recognized at BCMC.

- Dick Bowman Industry Enthusiast Award Norm McKenna, MiTek USA, Inc.
- SBCA Hall of Fame Barry Dixon, True House, Inc.
- SBC Industry Leadership Award Rick Parrino, Plum Building Systems, LLC
- #1 SBCA Component Manufacturer Membership Recruiter Jack Dermer, American Truss Systems, Inc.
- #1 SBCA Supplier Membership Recruiter Rob Heri, MiTek USA, Inc.
- #1 SBCA Recruiting Chapter Truss Manufacturers Association of Texas (TMAT)

Watch for more information about the 2012 BCMC show in New Orleans in the upcoming December issue of **SBC Magazine**. **SBC** 



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## technical Q&A

#### Truss Storage

Protect trusses exposed to the elements using these strategies.

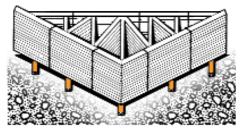


Figure 1. When stacking trusses, blocking should be used at 8' or 10' intervals.

#### at a glance

- ☐ The contractor should examine the trusses when they are delivered and determine if there is any damage that would impair the structural integrity of the trusses.
- BCSI recommends that trusses stored outside for more than a week be stacked on blocking and have a cover that provides adequate ventilation.
- ☐ The contractor is responsible for the construction means, methods, techniques, sequences, procedures, programs, and safety in connection with the receipt, storage, handling, installation, restraining, and bracing of the trusses.

t's always best to install trusses immediately upon delivery, but sometimes things don't go as planned. Follow these tips to store trusses safely and help protect them from damage.

#### Question

We have a customer looking for some information about trusses left exposed to the weather. Due to project delays, they were not able to install the trusses when they were delivered to the jobsite, and the trusses have been sitting for almost a month. Although there is no visible damage to the plates or lumber, there is a bit of discoloration and some bowing. Will the trusses be safe to use?

#### **Answer**

According to the Building Component Safety Information Series (BCSI), which is referenced in the International Residential Code and is also defined as "Standard Industry Details" in ANSI/TPI 1 and the International Building Code, trusses may be stored directly on the ground for up to one week. For trusses left exposed for more than a week, BCSI makes the following recommendations:

Trusses stored for more than one week shall be protected from the environment in a manner that provides adequate ventilation of the trusses. If tarpaulins or other protective covers are used, the ends shall be left open for ventilation. Tight fitting coverings are not recommended, since they can trap moisture.

and

If trusses are to be stored horizontally for more than one week, place blocking of sufficient height beneath the stack of trusses on eight to ten foot intervals (or as required) to minimize lateral bending and to lessen moisture gain from the ground. (See Figure 1.)

There is no hard limit for how long trusses can be exposed to the elements, and the duration depends on the temperature, moisture and humidity of the site.

Per ANSI/TPI 1-2007¹, the contractor should always examine the trusses delivered to the jobsite for: (a) dislodged or missing connectors, (b) cracked, dislodged or broken members, or (c) any other damage that may impair the structural integrity of the truss. Since the trusses in question were left outside for about a month, a thorough inspection of the lumber and the plates is even more important.

Some questions to ask while inspecting the trusses include:

#### What is the condition of the wood?

Discoloration on the trusses is not a concern because surface mold and mildew do not cause wood to rot or otherwise impact the strength of the trusses, but mold and mildew are symptoms of high moisture. According to the Wood Handbook, wood kept constantly dry does not decay, and even wood continuously submerged in water for long periods of time would decay very slowly. Most wood in use today is kept so dry at all times that it lasts indefinitely.<sup>2</sup>

#### Is the lumber warped or bowing?

If damage is discovered that would likely impair the structural integrity of the truss, per ANSI/TPI 1, the contractor shall ensure the truss not be erected<sup>3</sup> and contact

the truss manufacturer to determine an adequate field repair.<sup>4</sup>

#### What is the condition of the plated joints?

Repeated wetting and drying cycles cause expansion and contraction of the lumber, which might push the connector plate teeth out of the lumber. If the metal plates are still firmly embedded in the truss with no gaps between the connector and the lumber greater than 1/32"5 and the connectors are not discolored (as this may be a sign of corrosion) there may be no structural damage. Again, if the contractor discovers anything that would likely impair the structural integrity of the truss, he or she should contact the truss manufacturer to determine if an engineered repair might be necessary.

If the contractor has any uncertainty about using the trusses, the best course of action may be to hire a professional engineer with wood truss experience to inspect the trusses and determine if any damage discovered would likely impair the structural integrity of the truss. **SBC** 

#### resources:

SBCA offers a number of resources that discuss the topic and solutions to consider. For more information, visit <a href="mailto:sbcindustry.com/pubs">sbcindustry.com/pubs</a>.

- TTB Facts Regarding Mold on Wood Structural Building Components\*
- TTB Builder Advisory on Mold\*
- · BCSI book
- · B1 Summary Sheet
- \*Also available as an online Component Technology Workshop.



To pose a question for this column, call the SBCA technical department at 608-274-4849 or email technicalga@sbcmag.info.

<sup>&</sup>lt;sup>5</sup>According to ANSI/TPI 1-2007 Table 3.7-1, a tooth embedment gap less than or equal to <sup>1</sup>/<sub>32</sub>" (0.03") is equivalent to 100 percent tooth effectiveness.



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<sup>&</sup>lt;sup>1</sup>ANSI/TPI 1-2007 Section 2.4.4.6 Pre-Installation Check

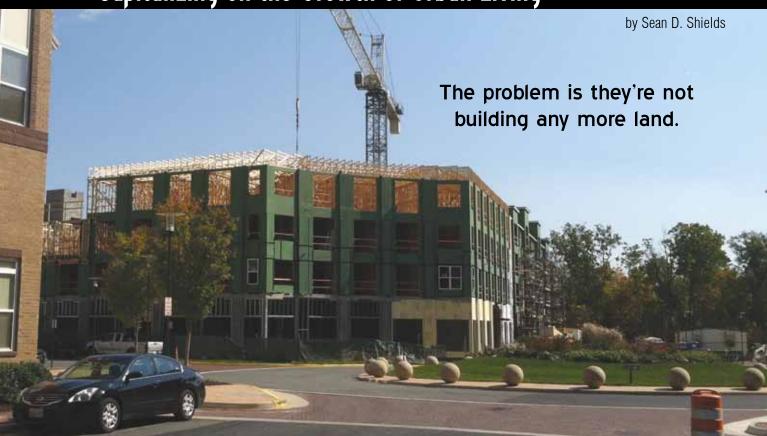
<sup>&</sup>lt;sup>2</sup>Wood Handbook: Wood as an Engineering Material, United States Department of Agriculture, Forest Service, General Technical Report FPL-GTR-190, Chapter 3: Physical Properties and Moisture Relations of Wood, Decay Resistance, Page 3-15: <a href="https://www.fpl.fs.fed.us/documnts/fplgtr/fpl\_gtr190.pdf">www.fpl.fs.fed.us/documnts/fplgtr/fpl\_gtr190.pdf</a>

<sup>&</sup>lt;sup>3</sup>ANSI/TPI 1-2007 Section 2.4.4.7 Post-Installation Check

<sup>&</sup>lt;sup>4</sup>ANSI/TPI 1-2007 Section 2.4.4.9 Truss Damage Responsibilities

## EMBRACE THE CITY SLICKER IN YOU

· Capitalizing on the Growth of Urban Living · · · · ·



f you do a web search for current trends in U.S. urban planning, article after article will discuss similar issues. Urban planners face new challenges as a result of the recent economic downturn, and subsequent sluggish growth. A few examples include: a higher percentage of renters over owners due to foreclosures and defaults; delayed housing purchases by Generation Y; a growing desire for alternative transportation choices and shorter commutes; all coupled with a decreasing availability of urban land.

So, whether you're talking about traditional infill, or the recent surge in specialized housing (student housing, for example), there is an increasing demand for multi-story urban residences. One company that has been successful at capitalizing on this trend is Trussway Manufacturing, Inc. "You saw a few of them scattered around the country a few years ago," recalls Dickie Vail, Vice President of Operations for Trussway. "However, in the past two years, it has really picked up. Now everyone's building them."

To understand how a component manufacturer can succeed on these types of projects, we need to look at the buildings in greater depth, explore the new challenges and opportunities they represent for component manufacturers, and understand where this trend is headed.

#### It's Not an Over-sized Pastry

One building type that is becoming more and more prevalent is called the "Texas Donut." "The cost of dirt is becoming so high in more and more urban areas, forcing

developers to push up as opposed to out," says Vail. "It used to be two-story projects were the most popular; now, there's a push for four to six stories."

The Texas Donut is a common name for a complex of retail, commercial, residential, or mixed-use units wrapped around an above-ground parking garage. These donuts have become popular by solving two issues in one fell swoop. They provide parking in urban areas, which is always in demand, while simultaneously hiding the unsightly garage from the landscape.

"They've become very popular for student housing, as urban universities try to build more units close to campus and also provide much-needed parking," explains Vail. The good news is that, as the demand for these buildings has increased, so has the push for them to be made more efficiently and at a lower cost. As a consequence, many developers are turning to componentized wood construction due to the relatively low cost of the raw material and the reliability of the engineering and pre-fabrication of the framing components.

#### It's Simple Economics

In addition to lower raw material prices, the intense competition among component manufacturers over the past few years, coupled with efficiencies in production and lower labor costs for installation, created a "perfect storm" of factors that made wood construction of multi-story buildings a no brainer.

"Cost is the biggest factor for the contractor," said Vail, "followed closely by the speed of construction. By designing and building them with wood structural components, they can build them a lot faster."

In addition to a decrease in the amount of time it takes to frame the building, wood construction also allows the contractor to complete the outside of the building quickly. Sheathing and finishing materials can be applied directly to the wood framing, as opposed to finish-outs (i.e., frame-outs, false framing, etc.) required by traditional steel and concrete construction.

Further, using pre-fabricated components, which can be delivered to multiple jobsites right before they're needed for installation, results in fewer work stoppages for the contractor. "One of the ways we have really added value is by providing just-in-time delivery," said Vail. While it adds value for the contractor, there's a simple logistical reason for doing it this way. "There's no place to offload the components," explains Vail. "We have to stick to a pretty concise delivery schedule because, most of the time, they have to close down a road while they offload and install the components."

#### It's Not Without Its Challenges

Just-in-time component delivery is not without its challenges. "Frankly, it creates a logistical nightmare," laughs Vail. "We can't just deliver a stack of components, roll them off and leave them anymore." To the contrary, each truckload needs to be stacked in as close to sequential order as possible so that the components can be taken and installed right off the



While not a full "Texas Donut," this photo illustrates how the parking garages are hidden from the landscape. (Photo courtesy of Aerial Innovations of Georgia, Inc. ©2010.)

back of the truck. To pull that off, it takes a lot of planning by the production lines to produce and group the right quantity and type of each component so they can be staged, bundled and loaded in the optimal way.

These types of buildings also present several design challenges. "In the 1970s and '80s, all the buildings were rectangles," said Vail. "But now the size and shape of the property is driving the shape of the building." Add to this the trend of architects trying to make buildings more interesting to look at, and you get buildings with a lot of angles that can be challenging to componentize. "We are helping them do crazy things, frankly, because we can. A building used to have just six to eight truss types. Now that custom look keeps the truss designers working late nights," said Vail.

"Having so many truss configurations does slow down production, and unfortunately raises our costs," conceded Vail. "However, it simultaneously brings up our perceived value because the engineering and design is so much more important, which, in turn, strengthens our relationship with that customer, adds to our reputation in the market and gives us more clout during the bid process."

#### It's About the 'Value Added'

"Advancements in truss design software have put us in a situation where we can do almost anything," said Craig Aufderhar, an Executive Account Manager for Trussway who has worked on several of these projects. "So essentially, creativity and physics are our only limiters." For many of these projects, the component manufacturer can get involved in the project before the plans are even 50 percent completed. This is beneficial for the manufacturer because it means many of the design challenges can be worked out collaboratively on the front end of the process, as opposed to having to make and get approval of changes on the back end. "It also allows us as a company to really differentiate ourselves in the marketplace by offering value-based design," said Aufderhar.

Component manufacturers can also add benefit by respond-



Above: Trussway Rough Openings (TROs) installed on the jobsite help contractors achieve additional green building points. Inset: TROs coming off the production line at Trussway.



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#### Embrace the City Slicker in You • Continued from page 13

ing to the needs of the contractor. "Some of these buildings have been built to attain certification under a green building standard," explained Aufderhar. "In those cases, we are able to come back to the contractor with designs that include roof trusses with raised heel heights or thicker wall cavities for better insulation."

To help contractors achieve additional green building points, as well as address a pressing concern (literally) for framers when building vertically, Trussway designed a unique component they call Trussway Rough Openings (TROs). "The TROs are engineered, pre-fabricated components for door and window openings," explained Aufderhar. "When the framer gets to a point where there is a load bearing opening, they just insert a TRO." This solution not only eliminates jobsite waste, it guarantees a square opening. "Contractors appreciate them because they make it easier to install doors and windows," added Aufderhar. "With tighter variances for these openings, you get increased moisture control and energy efficiency."

#### It's Better to Lead than Follow

"Despite the challenges these projects represent, we would much rather be at the leading edge of this trend than behind it," says Vail. Certainly, it appears that Trussway has succeeded at capturing some of the early market share of these kinds of urban residential projects. There doesn't appear to be any indication this type of construction is going away. In fact, the opposite appears true. It makes sense economically in that a 300-400 unit project can now be contained in two to three buildings, as opposed to 10-12 buildings in the past.

"The old projects were simpler, and you could do more volume," said Vail. "But these projects give us the opportunity to showcase our best assets: our design capabilities and our flexibility to meet and exceed their needs." So the lesson here is to showcase your uniqueness as a component manufacturer, embrace this emerging trend, and start building up! SBC

Editor's Note: This article would not have been possible without the contribution and insight of Joe Kannapell, Senior Vice President of Sales for MiTek USA, Inc. Thank you, Joe.

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A heritage of integrity, leadership and putting the customer first







by Sean D. Shields

asy multiple-choice question for you: Which do you think is a better way to construct a roof?

- A. Structural roof trusses
- B. Conventionally framed rafters

Most of you reading this article would unequivocally answer A. It's your business, after all. But what do you think the majority opinion would have been if a group of building inspectors was asked that question 60 years ago? It's safe to say you would have expected them to answer B.

Beyond the advancements in component design software and the engineering that supports the use of truss plates and lumber, along with increased efficiencies through improved component production machinery and sheer experience, there is a fundamental reason why roof trusses, for example, command approximately 67 percent market share: daily market development accomplished through constant interactions in local markets.

To understand the how and why behind the brilliance of local market development, and appreciate why it is best done by you and not your suppliers, trade association or competition, we need to start with a history lesson and end with a modern-day tale.

#### **A History Lesson**

The structural components industry became what it is today not just by devising a better product, but also by reaching out and convincing architects, engineers, builders and contractors that there was a better way to do things than what they had always been doing.

Recent **SBC Magazine** articles about early pioneers such as Stan Suddarth. Don Hershey, Bill McAlpine and Jack Littfin, chronicle how the early days of the structural components industry were full of entrepreneurs whose biggest challenge was crafting effective arguments for how components could provide framing solutions that had economic and other advantages over conventional stick framing methods.

While heated arguments with architects or building officials may have been one form of "market development" back then, the more common and successful approach took the form of empirical truss testing, showing that trusses worked to save overall job costs. In addition, excellent customer service ensured that relying on components was a positive experience even when hiccups occured. However, one thing all market development efforts had in common back then was that they were carried out exclusively by the individual companies themselves, one marketplace and one customer at a time.

A good example of how companies successfully marketed themselves and their products is Trus Joist Corporation. Back in the early 1960s, Trus Joist (TJ) had success selling open-web floor trusses, primarily to light-commercial construction projects. In 1966, the company branched out and introduced an I-joist system to optimize lumber and plywood use through engineering. At the same time, this product addressed a key consistency issue that was a concern in the market, resulting in the "Silent Floor" system. Marketplace knowledge combined with testing and engineering yielded a successful new product line for TJ.

"However, by the mid-70s, it was clear that, if they were going to have further success growing as a company, they had to penetrate the residential construction market," said Bob Berch, who was hired by TJ to do exactly that. The first rule in successful market development: know your market. "It was evident to me that products like MicroLam® and TJI® were a perfect complement for component manufacturers," said Berch. "That's why I approached them first, even though everyone thought I sounded like a heretic." Berch knew that the strength of the components

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industry was its sound engineering foundation. "I'd always seek out the engineers first, because I knew they would understand what I was actually trying to sell them. It wasn't the actual product, it was the design properties," explained Berch.

This leads to the second rule in successful market development: **know the strengths of your product**. "I would sit down with a manufacturer's engineer for just ten minutes and ask them to focus on the strength values of LVL and point out to them that you couldn't approach those values with an ordinary piece of wood," said Berch. "Then, I'd leave and let them think about that for a couple of weeks." More often than not, when Berch returned, he found a willing buyer.

"Once they were buying LVL headers, the next step was introducing them to TJI®," said Berch. "It was a logical progression." That's rule number three: once you have buy in, find ways to increase their appreciation and use of your product. "After a while, the most challenging part was convincing my own company to buy into my approach," remembered Berch. "But as the sales continued to grow, they weren't left with much other choice."

Finally, rule number four: leave no stone unturned. "At the same time that I was going to component manufacturers, I was also approaching builders and building officials," said Berch. "By the 1980s it was evident that 2x12s were not what they used to be. They couldn't hold up over the same spans." In fact, in some cases, builders were opting to sandwich steel in between boards to provide greater rigidity. Of course, that practice increased labor and material costs as well as construction times. "I would go in and just talk to them about their workers' compensation insurance premiums," explained Berch. "By eliminating the steel on the jobsite by using LVL for those headers, their premiums would go down. When they found out that was true, they came to trust me."

In the mid-80s, TJ created a wide variety of marketplace educational pro-

grams, each of which was focused on a separate market segment: lumber dealers/component manufacturers, builders/framers, specifiers and building officials. It wasn't long before the entire market was aware of new TJ product features and benefits, which engaged the entire supply chain. Eventually, this type of fact-based, technically sound marketplace education became a sales engine and ultimately a game changer.

Today, many component manufacturers across the country fully embrace Berch's early sales approach, and have added LVL, PSL, LSL, Glulam, I-joists and trimmable end trusses to their product lines from a number of EWP manufacturers. His "heretical" market development approach established a mainstream practice in the industry. You never know when or where the next opportunity to make such an impact will present itself, but one thing is for certain: if you don't advocate for yourself, you won't be able to seize these opportunities.

#### A Modern-Day Tale

Just so you don't think all good market development is a thing of the past, let's turn our sights to a current example. Construction and installation of structural framing members in today's homes requires a good understanding of the load paths through the building and the strengths of materials and fasteners.

Unfortunately, the skill sets needed to meet the many and various structural challenges these homes present may sometimes be lacking in the field. That is certainly what Steven Spradlin, President of Capital Structures, has observed in some of the markets he delivers to in Arkansas and Kentucky. "There are some fundamental framing problems that just aren't being addressed by conventional framers," said Spradlin. "What makes it hard is that the building officials don't necessarily recognize the problem even when they see it."

Instead of complaining about it, Spradlin decided to take matters into his own hands and sought to get better information into his marketplace about Continued on page 20

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#### "Un-socialized" Marketing... • Continued from page 19

building code requirements. "The cool part is that building officials are hungry for educational opportunities. They're always seeking continuing education credits," said Spradlin. "So I started with a presentation to some local code officials."

Once he got into it, he noticed that architects and engineers tend to focus on particular building methods and materials (i.e., wood, steel, concrete, etc.) because they're familiar with it. "I found that having an opportunity to talk with an engineer about a solution, a truss shear block for example, ended up being very valuable," explained Spradlin. "I'd find myself talking with architects about how to deal with shear in the floor cavity and how putting LSL into the floor system for restraint, and then coming back and putting OSB sheathing over the top of that, was redundant and unnecessary."

After a while, Spradlin found himself sought after by many different groups of engineers, architects and building officials. "Last year, I was presenting at a structural engineering association meeting and found myself talking to a room full of guys who design wood structures," remembered Spradlin. "Young and old, they all heard something they weren't aware of. We assume engineers are well educated in all materials and methods, but that isn't necessarily the case."

After several presentations on his own, and witnessing other presentations given by industry suppliers in his market, Spradlin worked with SBCA to create a more detailed presentation to address problematic conventional framing practices he continued to see in his market. The presentation promotes structurally sound framing practices in residential construction by examining field examples of common problems with conventional framing (i.e., traditional joist and rafter construction and site-built walls), and how many of these issues can be resolved by using structural building components. While SBCA lent its expertise, it was still up to Spradlin to effectively deliver the presentation at the local level.

"We have always said that education is the key in our industry, particularly in times of growth," said Spradlin. "Presentations like these give me a golden opportunity to go in and put my products front and center with the individuals who are most influential in helping me convert builders from conventional framing to components in my market."

Remember rule number four? Leave no stone unturned. In addition to the many presentations Spradlin has given (and has planned), he also works through various suppliers to the residential construction market he serves. "If the guy the builder relies on to build his roofs advocates roof trusses because they're easier and safer to install, the builder is more likely to use trusses," said Spradlin. "That's why we got into the framing business." He also works with the heating and cooling subcontractors. "They prefer to work with open web floors because it makes installation so much easier for them," he added. "Those HVAC guys sell more trusses for me than my own sales staff sometimes."

#### Conclusion

As the housing market continues to improve, and all indicators appear to be pointing in the oh-so-positive, upward direction, the structural components industry finds itself at another crossroads. Labor is in short supply and less skilled than in the past. This is a golden opportunity to use the educational tools that SBCA members have created and solidify the structural building component position in the market as the logical way to frame a house. Market development efforts today have the potential to become another game changer.

The key is the initiative taken by each individual company to focus on your unique strengths and differentiate yourself in the way that you use your capabilities to advance your value-added construction methods. Then go out and convince engineers, architects, building officials and builders in your local market that your company's approach provides the best framing solutions and value.

While it will require a commitment and effort on your part, just as it did for Berch and Spradlin, it doesn't have to be a struggle. SBCA members have created several programs and tools to assist with building your own market development, which will help you create your own unique brand. With SBCA's tools, you don't have to reinvent the wheel. Just take the first step by calling SBCA, or check out SBCA Consulting services at <a href="mailto:sbcc">sbc</a>industry.com/custom/services.php.

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## faces of the industry

#### **BUILDING** Communities | MAKING Connections

**NAME:** Steve Baker

**COMPANY: Plum Building Systems, LLC** 

**POSITION: Plant Manager (Waukee, IA)** 

YEARS IN THE INDUSTRY: 17

• I • How did you get started in the components industry?

I started with Plum Building Systems in December 1995 as a truck driver. We do a lot of hiring from within and you learn as you go. As plant manager, I'm involved with the Operation Safety and In-Plant WTCA QC included in

SBCA's SCORE program.

• **I.** • What effect has SCORE had in your plant? We've participated in SCORE for about three years, but we were using the safety and QC programs prior to that. On the safety side, awareness is a big thing—making sure everything gets done and the checklists are completed. Operation Safety has helped us with our documentation.

For QC, our quality and the appearance of our product has jumped way up. The lumber going into our trusses is much better, and everything is documented too. For example, if you start having problems with quality, you can go back and determine if it was due to a person or a piece of equipment. The ability to have data to help manage items like this is very helpful.

• I • How does the training included in SCORE compare to the training you used previously? Before Operation Safety, we used to cover one safety topic a month. From the late '90s to the mid 2000s, our safety record wasn't very good and we had a number of injuries. We implemented Operation Safety and now have a safety committee. The program has improved our day-to-day processes because everyone is accountable. It really increased awareness and got people talking about safety.

Before we had the In-Plant WTCA QC program, shop errors weren't uncommon. We definitely had some quality issues and would get calls about once a month. Today, I don't think we've had more than four or five quality calls all year. The program has saved us a ton on warranty work.

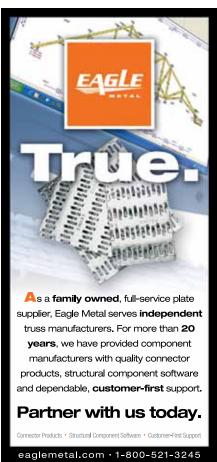
• | • What feedback have you gotten on SCORE from employees? Our guys average about two to three years of truss experience. The programs have made them very aware that they could get inspected, and that's made them more picky. Employees now have the attitude that, "If it's not good enough to go in my house, it's not good enough for anyone's house."

I also get a lot of feedback from customers. They want our trusses because our quality is high.

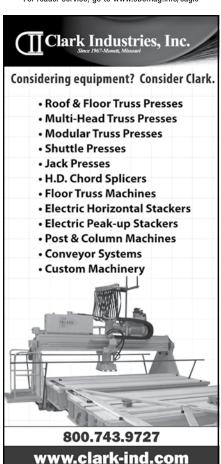
- **Which training program have you found to be the most valuable?** Operation Safety has definitely helped with staff orientations. We've doubled our staff in the plant over the last year, so we've been doing a lot of training. All new hires, whether they're from a temp agency or full time, watch our safety program. I used to spend about four hours going over safety with each new employee. Now, I set them up with the online training that takes them about an hour and 20 minutes, it's documented, and they sign off that they completed the training. That saves me at least two and a half hours for every employee I hire. Plus, the safety training gets them thinking in the right direction from the start.
- | What do you do in your free time? I like to spend time with my family and I coach high school football. SBC



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## forparting shots

Share your stories and photos with us! Send submissions to partingshots@sbcmag.info.

In case you ever needed a picture to define the importance of diagonal bracing in the context of lateral restraint (i.e., top chord purlins as well), these photos of long span trusses say it all. The 80' trusses for this 80' x 130' x 18' high agricultural storage building were manufactured by BBL Buildings & Components, Ltd. in Perryville, MO, and then installed by a local contractor, who didn't follow the BCSI bracing documents provided with the truss delivery.

The trusses soon started deflecting, and BBL was called to take a look at the jobsite. "We went out to investigate the problem and found that the trusses were bowed and out of plumb by 3 to 4 feet. The entire roof system was at the point of collapsing," said Dale Schemel, General Manager at BBL. "The owner asked what could be done to straighten the trusses, and we advised him that they should be taken down immediately."

Luckily, no one was hurt due to this dangerous construction practice. After the trusses were taken down, BBL performed a thorough inspection of the chords, webs and plates on each truss and determined they could be used as 2-ply trusses attached with screw fasteners. BBL redesigned the components to alternate every 2-ply truss followed by a new single-ply truss spaced 4'-0" o.c.



The trusses for this agricultural building, which weren't installed per BCSI recommendations, bowed and were out of plumb by 3 to 4 feet.



#### **After**

The original trusses were converted into 2-ply trusses; each 2-ply truss was followed by a new single-ply truss spaced 4'-0" o.c., with proper bracing. **SBC** 





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