

Truss Submittal Packages and Jobsite Packages

Overview

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SBCA

SBCA has been the voice of the structural building components industry since 1983, providing educational programs and technical information, disseminating industry news, and facilitating networking opportunities for manufacturers of roof trusses, wall panels and floor trusses. **SBCA** endeavors to expand component manufacturers' market share and enhance the professionalism of the component manufacturing industry.

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Introduction

- Property damage, serious bodily injury and/or death are possible if the Contractor fails to properly handle, install, restrain and brace trusses.
- This presentation reviews what is required by building codes and industry standards regarding Truss Submittal Packages and Jobsite Packages



Background

- The *IBC* and *IRC* contain code requirements regarding Truss Submittal Packages, truss submittals, and truss bracing.
- **Truss Submittal Packages:**
 - 2303.4.1.4.1 Truss design drawings (*Wood*)
 - 2303.4.2 Truss placement diagram (*Wood*)
 - 2303.4.3 Truss submittal Package (*Wood*)
 - 2211.3.1 Truss design drawings. (*Cold-formed steel*)
- **Truss Submittals**
 - R502.11.1 Design.
 - R502.11.4 Truss design drawings.
 - R802.10.1 Truss design drawings.
 - R802.10.2 Design.
- **Truss Bracing**
 - R106.1.2 Manufacturer’s installation instructions
 - R502.11.2 Bracing.
 - R802.10.3 Bracing.

Background

- ANSI/TPI 1 is a standard referenced by both the IBC and IRC governing metal plate connected wood trusses that:
 - Establishes minimum requirements for design and construction
 - Defines the accepted responsibilities for all parties involved
- One of the Truss Manufacturer's responsibilities, as defined in *ANSI/TPI-1-2014*, is to supply the Truss Submittal Package to the contractor
 - **2.3.6.5 Required Documents.**
 - **2.3.3 Requirements for the Permanent Member Restraint/Bracing of Truss Systems.**
 - **2.3.3.1 Method of Restraint.**
 - **2.3.3.1.1 Standard Industry Details.**
 - **2.3.3.1.2 Substitution with Reinforcement.**
 - **2.3.3.1.3 Project Specific Design.**
 - **2.3.3.2 Absence of Truss Restraint/Bracing Method or Details.**
 - **2.3.3.3 Trusses Spanning 60 Feet (18 m) or Greater.**
 - **2.3.6.7 Truss Submittal Packages.**
 - **2.3.4.2. Information Provided to the Building Designer.**
 - **2.3.4.3 Truss Submittal Package Review.**

Background

- A Jobsite Package is a collection of documents sent by the truss manufacturer along with the truss delivery to promote safe installation practices
- Although the IBC and ANSI/TPI 1 are open to many possible methods of delivering this information, both reference BCSI as an industry standard for handling, installing, restraining and bracing trusses



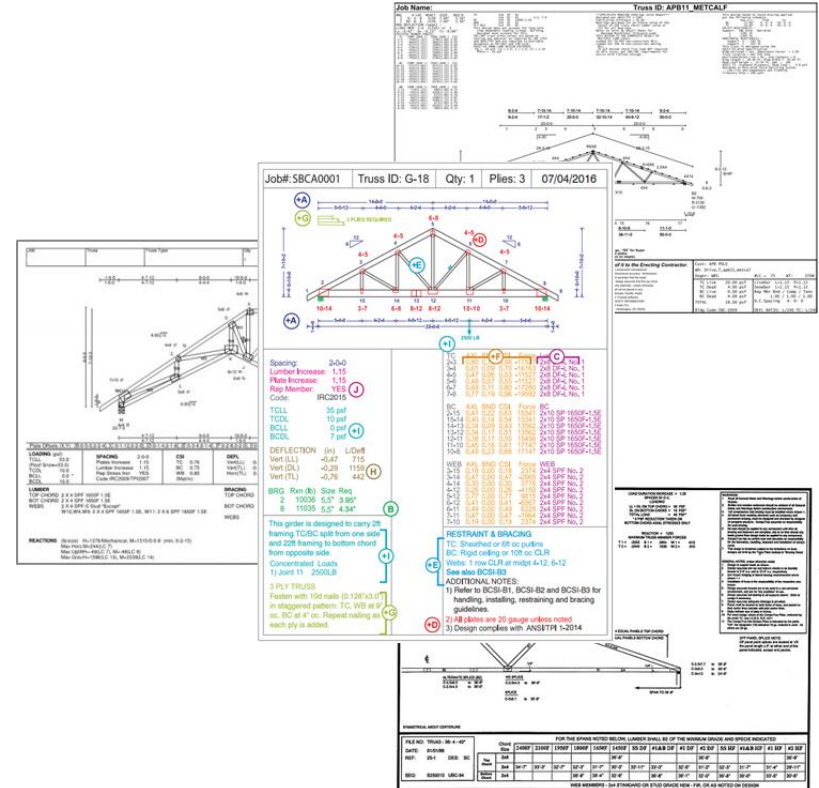
Background

- If correctly implemented, the information contained in BCSI helps to ensure consistent jobsite safety and acceptable structural performance.
- BCSI includes simple, safe and proven methods that are consistent with accepted framing construction practices.



Application

- Truss Submittal Packages should include:
 - Individual Truss Design Drawings (TDD)
 - Truss Placement Plan (TPP)
 - Individual Truss Member Restraint/Bracing Locations (if required)
 - Jobsite Package
 - For Sloped Roof Trusses: BCSI-B1 and BCSI-B3 Summary Sheets
 - For Floor and Flat Roof Trusses: BCSI-B1 and BCSI-B7 Summary Sheets
 - Additional Pertinent Information (i.e. hanger installation guides, LVL details, etc.)



Application

- Including the Jobsite Package in the Truss Submittal Package with each truss delivery not only fulfills the truss manufacturer's duty to provide information for builders, it can protect the manufacturer legally.
- SBCA's legal counsel Kent Pagel provides the concepts behind this recommendation in his Structural Building Components (SBC) Magazine article entitled "Legal Edge: He Who Supplies the Jobsite Package 'Makes the Rules' in Litigation" (June/July 2009)
 - Some component manufacturers include a charge for the jobsite package, to prove that the manufacturer fulfilled their duty to educate and warn while providing customers with key installation and safety information.



Legal Edge

He Who Supplies the Jobsite Package
"Makes the Rules" in Litigation

by Kent J. Pagel

Why JOBSITE PACKAGES are a "golden defense."

June 2009 does not mark a time that wood and steel structural component manufacturers are facing new risks or liabilities. Builders and contractors on the other hand, midway through 2009, are finding themselves embroiled in new-angled litigation as they defend "Chinese Drywall" and illegal/manipulative loan and mortgage lawsuits. Builders and in particular, condominium contractors/developers, have also seen an increase in construction defect lawsuit filings asserted by homeowners who now find their homes valued far below their mortgage balances and are desperately looking for some means of relief. During times of an accelerated decline in used home prices, it's common for homeowners to think "since I can't sell my home for even what I owe, it must be due to poor design or construction." Unfortunately, as blame shifting in the construction industry seems to be the norm, the increased numbers of construction defect lawsuits will inevitably involve lower tier suppliers, including component manufacturers.

While component manufacturers are not facing NEW risks or liabilities at this time, aside from defending an increased number of construction defect suits, the everyday risk of contractual liability and products and completed operations claims is still very much in play. What we mean by "contractual liability" are the risks assumed when structural components are sold to builders and contractors to a written contract or verbal order. In the June/July 2008 issue of SBC, I addressed contractual liability in "7 Contract Provisions to Never, Ever Overlook." Take a minute to re-read that article, or better yet, enroll in **ORisk** and make sure you and other company employees study the more than 60 modules that deal with customer contracts. With the market above and margins at historic lows, builders and contractors are using the fact that component manufacturers need business to shove very one-sided customer contracts down their throats.

at a glance

- ❑ Builders and condominium developers have seen an increase in construction defect lawsuit filings asserted by homeowners whose homes are valued far below their mortgage balances.
- ❑ The increased numbers of construction defect lawsuits will inevitably involve lower tier suppliers, including component manufacturers.
- ❑ Being able to document that a JOBSITE PACKAGE was received by the customer and the truss erector is a risk management measure that can protect component manufacturers from products and completed operations risks.
- ❑ The JOBSITE PACKAGE is a "golden" defense much of the time to product and completed operations claims asserted against component manufacturers and their plate connector suppliers.

With respect to "product risk," we are referring to the risks component manufacturers face after products are delivered to the jobsite. Product risks include charge backs for under-designed or mis-manufactured materials, surface mold claims, non-conforming product claims that are asserted after installation, design responsibility risks, and fall-down or collapse claims. The category of "completed operations risks" includes construction defect claims asserted by an individual homeowner or group of homeowners (in the case of a condominium claim) that pertain for example to a sagging floor or ceiling, or a falling wall if provided by the component manufacturer.

While there are many best practices component manufacturers should follow to minimize product and completed operations risks, many of which we have outlined and will continue to outline in **ORisk**, providing a JOBSITE PACKAGE (Copyright © 2008, SBCA) and being able to document that it was duly received by your customer and the truss installer, is a risk management tool that in our opinion can VERY much protect component manufacturers from product and completed operations risks.

Each of the documents contained within a JOBSITE PACKAGE provides the requisite information for component manufacturer customers and erectors to properly and safely unload, handle, store, install and brace manufactured structural components. Typically manufacturers also add their truss design drawings and truss placement diagrams, and at times, some company-specific additional information to their JOBSITE PACKAGES and then make sure to include a JOBSITE PACKAGE with each delivery. For proof



Application

- Another SBC Magazine article “The Jobsite Package: A Critical Picket in Your Fence of Protection” (March 2008) gives further reasons why it is in the manufacturer’s best interest to provide a Jobsite Package:
 - Prevent potential truss collapse
 - Provide helpful information geared to builders and erectors
 - Practice good risk management by conforming to industry-based guidelines and documentation
 - Acting proactively to warn, instruct and educate can help prevent disputes, including legal disputes



S In August 2003, Steve Yoder wrote an article in *SBC* on the need for component manufacturers to “Build a Fence of Protection Around” their companies. He then described how, as president, he and his team had done this for Stark Truss Company. The “protection” Steve viewed as necessary was due to the ever increasing frequency and severity of claims asserted against Stark even when the company had done nothing wrong. The “fence” signified Stark’s proactive approach to quality, professionalism and risk management. The pickets of the fence were comprised of various industry and company programs Stark had in place, including those available from WTCA.

Protect yourself with the WTCA JOBSITE PACKAGE.



I believe the Stark Truss metaphor very much applies to this industry five years later. In the litigation situations that we see, many component manufacturer companies are simply not doing enough to protect against the everyday risks they face. In this article I will discuss one very important part of the fence of protection—the jobsite package. Aside from a carefully prepared or negotiated customer contract, which is extremely important, a properly assembled jobsite package and the ability to document that it was duly received by your customer and the truss erector, is the one risk management practice that, in my opinion, best serves the component manufacturer.

In Figure 1, I have identified three Case Break examples involving truss collapses where the collapse may never have occurred if jobsite packages had been provided, and the component manufacturer would have been able to successfully defend the claim.

What should be eye-opening is the fact that the first two Case Break examples actually occurred. The third example is a hypothetical, but the manufacturer’s conduct is alarmingly common. I firmly believe it is time for these manufacturers to think in terms of “if you keep doing what you’ve always done, you’ll keep getting what you’ve always gotten.” It’s time to think about assembling part of the fence that Steve Yoder referred to five years ago.

Here is what the collective structural component industry experience has shown. Truss performance depends not only on proper design and fabrication, but also installation vertically, in-plane, and at specific spacing, and braced properly. Through experience and data, we further know that a majority of accidents involving trusses and components occur because of mistakes made with regard to installation and bracing. After the customer contract is signed, the component manufacturer’s liability largely begins once product leaves the plant.

While it would seem a truss collapse lawsuit against a component manufacturer would be easily defended if the manufacturer could prove the direct cause of the accident was either improper installation or bracing, unfortunately that result is not typical. Juries like construction claimants! Why? The claimant has usually been a hard worker all of his life. Is often a family man, may have children under the age of 18, and usually has no other employment training and the injury may mean their trade career could be over. Juries furthermore expect and demand that genuine warnings and instructions

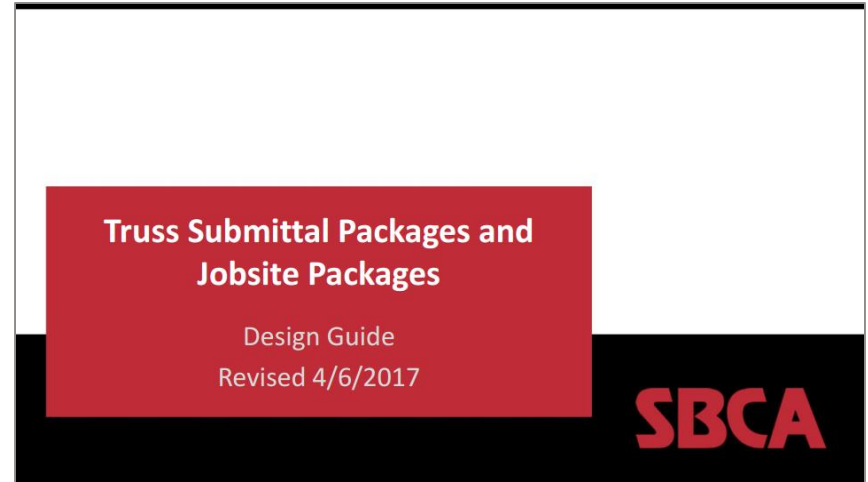
at a glance

- ❑ Several years ago, a component manufacturer erected a fence of protection made up of WTCA programs designed to lower its risk.
- ❑ A manufacturer’s liability does not end when the product leaves the plant.
- ❑ Protecting your company against jobsite risk is possible with the use of the WTCA JOBSITE PACKAGE.



Conclusion

- A Truss Submittal Package, including a Jobsite Package, should be sent to the job site with each truss delivery
- SBCA's Jobsite Package offers best practice information in a standard format to meet building code requirements, increase safety, and ensure truss manufacturers responsibilities are satisfied.
- See [DrJ Design Guide](#) for detailed information on selecting a Jobsite Package



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