

Component Manufacturer Liability Increases with Truss Broker Involvement

by Kent J. Pagel

Beware of the additional liability you assume when going into business with a truss broker!

Imagine that a "truss broker" approaches your company with the opportunity to manufacture to the truss designs done by someone else. You convince yourself that the shop needs the extra work and your overtaxed design department will enjoy the break, so you agree. A few days later your production supervisor complains that the truss designs are poorly done, but given your low margins on this job, you simply tell him to do his best. Weeks later, you receive a demand from the project owner complaining of both truss design deficiencies and manufacturing defects. Given these claims, you are not paid for the trusses you manufactured. You also learn the truss broker has essentially no assets and no insurance; thus the project owner is expecting you to fully compensate him for his losses.

How likely is this type of scenario? Some manufacturers who have agreed to manufacture for "truss brokers" are finding themselves in such predicaments. This is one of the reasons WTCA adopted its

"Component Design and Manufacturing" policy (the "Policy"). In this article I will talk about the Policy, but I also make the case that: (1) those who buy components, and the owners of projects where components are used, are not best served when the component design and manufacturing is undertaken by more than one company as exemplified by the use of "truss brokers"; AND (2) component manufacturers' liability risk grows exponentially if they manufacture to designs done by others.

When referring to "truss brokers," I am referring to those who sell components to builders, contractors, and/or lumberyards, yet they maintain no manufacturing facility. With regard to design, they either carry out the design and placement of the components themselves or hire out such work to third parties, often dividing the work among various persons. After such design work is completed, they shop the designs to manufacturers for the lowest bid. (See Figure 1.)

The Policy, which was ratified by the WTCA Board of Directors in October 2002, reads:

The construction industry is not best served, and the component manufacturing industry will be harmed, if [component design software products] are leased to, sold to, licensed to or used by any person or entity that does not design, manufacture and sell components. The [component design software products] should therefore only be used by licensed component manufacturers for their own design, manufacturing and sale of structural components. Excluded from this policy would be any sale and design companies who sell and design components only for a particular component manufacturer under contract or any design companies who design components only for a particular component manufacturer under contract. In such cases the licenses to use the [component design software products] should contain appropriate restrictions.

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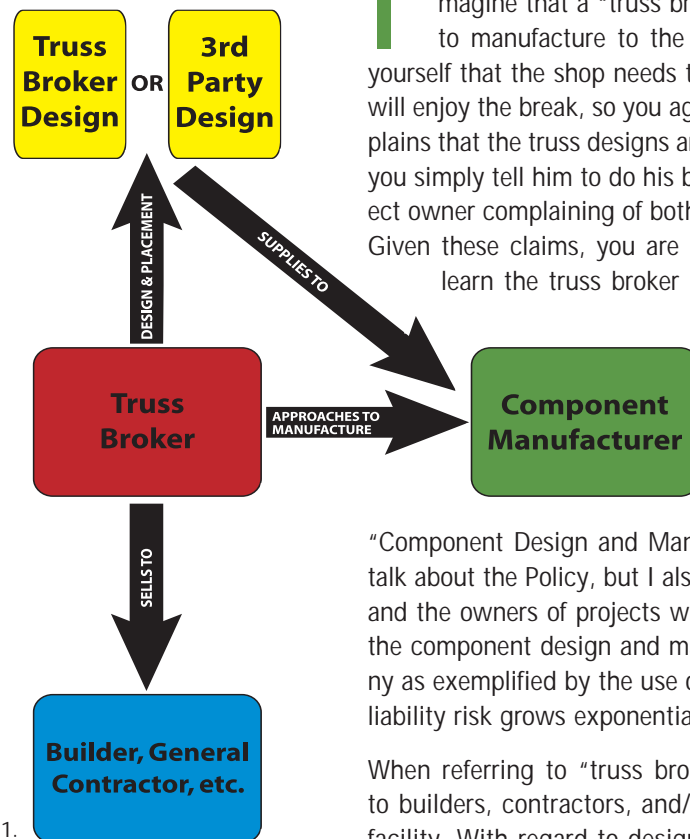


Figure 1.

at a glance

- ❑ Builders, contractors and lumberyards who buy components are not best served when the component design and manufacturing is undertaken by more than one company.
- ❑ "Truss brokers" sell components to builders, contractors, and/or lumberyards but maintain no manufacturing facility. They either carry out component design and placement or hire it out to third parties.
- ❑ Component manufacturers' liability risk grows exponentially if they manufacture to designs created by others.



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economics:

...components are value-added products and component manufacturers should continue to enjoy better than industry average margins when they perform both the design and manufacturing. Take away the design function, and manufacturers may find themselves ultimately becoming commodity producers.

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The Policy's guiding principle is that **component manufacturers** are better off if they do both the design and manufacturing. The driver here is obviously economics; components are value-added products and component manufacturers should continue to enjoy better than industry average margins when they perform both the design and manufacturing. Take away the design function, and manufacturers may find themselves ultimately becoming commodity producers.

The Policy also states the **construction industry** is not being best served when the same company is not carrying out both the design and manufacture of components. The term **construction industry** refers to those who purchase components as well as the owners of projects where components are used. And while this is not specifically stated in the Policy, I submit that many manufacturers who choose to manufacture to the designs of others mistakenly believe they have less liability, when in fact they most likely have greater liability. It is with respect to these two points—customers and project owners not being best served and manufacturers assuming increased liability—that I want to direct our focus.

Manufacturing Mistakes & Increased Manufacturer Liability

Whenever design and manufacturing are separated between more than one company, inherent when the truss broker model is employed, this disconnect may lead to components manufactured in different ways than the truss design engineer intended or increased manufacturing mistakes. Components that have been incorrectly manufactured are problematic for everyone in this equation. And for the customer, more manufacturing problems translate into greater project expenses, more delays, and increased liability.

Why Does the Disconnect Lead to Manufacturing Problems?

When another person or entity (or multiple persons or entities) are involved in component design, they may not even know who the manufacturer will be. Even if they do know, they may have no knowledge of the manufacturer's:

- equipment and manufacturing processes used
- lumber raw material commonly used and in inventory
- connector plate type and sizes in inventory
- required design modifications which are dependent on truss plant handling, delivery and jobsite handling

Not knowing this information can easily lead to manufacturing mistakes. Also, dropping the proverbial "ball" in communicating critical information is more likely given that there are more people involved in the chain of information flow. The more mistakes, sometimes multiple mistakes on the same project, the less likely that traditional

safety factors can prevent failure and liability. As to the manufacturer's liability, it goes without saying that when the probability of manufacturing mistakes increases, so too does the manufacturer's liability!

Design Mistakes & Increased Manufacturer Liability

When this disconnect between design and manufacturing exists, there is also the increased chance for design mistakes to occur. There are many reasons for this. First, the manufacturer has very little incentive to catch any design mistakes because it is only being paid to manufacture. Also, consider the training and experience of truss brokers as compared to component manufacturers. For example, how many truss brokers use only trained and certified technicians? How many truss brokers are as experienced as component manufacturers and have learned the need to impose checks and balances in the design process to minimize the occurrence of design mistakes? It is also quite likely the truss brokers or those they hire to do truss and component design are inadequately capitalized and uninsured. How many truss brokers have abundant assets or any kind of insurance? I conclude that when the probability of design mistakes goes up, so too does the manufacturer's liability! Be warned that those who assert claims invariably will look to the deeper pockets of the manufacturer.

Who Warrants WHAT to the Customer?

When design and manufacturing are done by more than one company, what warranty or other recourse will customers have if there is a mistake either in the design or manufacturing? Those doing the designs, who as we have seen may have very little in terms of assets, will most certainly lay blame on the manufacturing procedures and process. The manufacturer will in turn blame those doing the designs. Where does this leave the customer? Most likely the customer is not well served in these circumstances. Plus, won't the customer try to find an avenue of recourse against the manufacturer who has assets and insurance in place? Once again, this is a major reason why the manufacturer's liability is greater when it manufactures to another's designs.

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Real-life Example

I will now refer to an actual example to illustrate the points discussed above. This example was still unfolding at the time this article was written and is the subject of litigation. Here are the facts as they are set forth in the pleadings filed in the litigation:

- Manufacturer A submits bid to Contractor for the sale of trusses and components for a multi-family project (the "Project").

- Contractor rejects Manufacturer A's bid and purchases the trusses and components from Manufacturer B.
- The truss and component design is undertaken by multiple persons and companies under the direction of the Truss Broker.
- The Truss Broker, apparently unable to find qualified truss technicians, solicits technicians who were either working for or had worked for Manufacturer A. These technicians in turn used Manufacturer A's licensed component design software which had been licensed to Manufacturer A by Connector Company X. This software is used in violation of the terms and conditions of Connector Company X's software license (which I discuss in more detail in the sidebar). Essentially the technicians working for the Truss Broker have "pirated" the software in exchange for a fee paid to them by the Truss Broker.
- The designs worked on by the technicians are submitted to a local truss design engineer who seals the truss and component design drawings. The engineer had been sponsored by Connector Company X to prepare truss and component design drawings and seal them for designated manufacturers including Manufacturer A, but Manufacturer B was not one of the designated manufacturers.
- Manufacturer B in turn manufactured the trusses and components per the sealed truss design drawings.
- Since Manufacturer B was not a connector plate user of Connector Company X, Manufacturer B used connector plates from Connector Company Y. Manufacturer B failed to: (a) re-run the truss and component design drawings, (b) undertake any type of conversion analysis, and/or (c) seek the approval of either the Contractor or the Project Owner as to the change in connector plates. Furthermore, since different lumber inventories were maintained by Manufacturer B, different lumber sizes and grades were used in manufacturing.
- Further negatively affecting the project, Manufacturer B failed to build to the specifications and tolerances stated in the approved truss and component designs.
- It was also ultimately discovered that many of the truss and component designs worked on by one or more of the

truss technicians utilized by the Truss Broker were deficient in many respects.

In summary, all of the mistakes that occurred in the example are directly attributable to the involvement of a Truss Broker and the fact that the design and manufacturing of the components was undertaken by more than one company.

How was all of this uncovered? For some strange reason Manufacturer A's name was boldly placed on many of the drawings at the Project. This led to further inquiries and all of this was brought to the attention of the Project Owner and the Project Engineer of Record. It is estimated that hundreds of thousands of dollars will need to be expended in engineering analyses, in the subsequent repair of the components, in attorneys' fees, and to reimburse the Project Owner for delays. As a consequence, the Project Owner has held back money due the Contractor and in turn the Contractor has held back hundreds of thousands of dollars invoiced by Manufacturer B for the components. One lawsuit has been filed thus far by Manufacturer A, and it would not surprise anyone involved if more lawsuits are filed in the future.

How could all of this have been avoided? Quite simply, had the Contractor purchased trusses designed and manufactured by Manufacturer A, none of this would have occurred.

Who has been harmed the most? The Contractor—the company purchasing the components as well as the Project Owner for whom the Contractor was building the Project—and Manufacturer B who was not paid! Others harmed include Manufacturer A, who lost the income that it would have received from this project and any downstream work that would have been generated because of this project.

Additionally, this project has thrown a spotlight on the reputation of the wood truss industry, because no one had anticipated that the mismatching of component designs and manufacturing could possibly happen to this degree. Fortunately, these mistakes were discovered prior to completion and occupancy. Had they been discovered years later, the damages could have soared to include not only the cost of correcting the deficiencies, but also the cost of vacating the tenants/occupants, alternative housing and related costs, and even personal injuries.

Again, tort lawyers tend to sue the people with money even if 99 percent of the defect was caused by the Truss Brokers. The best protection against litigation liabilities is through what is referred to as loss avoidance, preventing defects in the first place. Defects are minimized by avoiding the types of business arrangement I have discussed in which there were several extra middlemen involved in the business transaction. This leads to poor communication and quality control, which generally presents a good foundation for litigation. **SBC**

Kent J. Pagel is the President and Senior Shareholder of Pagel, Davis & Hill, a professional corporation. He also serves as the outside counsel for WTCA.

sidebar:

In this article I spoke to some of the "boilerplate" terms that are commonly found in truss design software license agreements. It is important to manufacturer licensees to abide by these terms both from a business and legal perspective.

The truss and component design and placement software is made available to component manufacturers—the licensees—through license agreements. These license agreements all contain restrictions which exist for good reason. Those who own the component design software—the licensors—do not want the value of their intellectual property to be diluted. If it is, there is less economic incentive in the future for licensors to invest in the further development of their intellectual property. That result would hurt the entire industry.

The licensors may also have concerns as to their own liability—in other words, if the software is operated by persons unknown to the licensor or by those who are untrained as they are not associated for example with a component manufacturer, this may place unwanted liability on the licensor. For these reasons, such license agreements contain restrictions that are usually found in the terms and conditions section of the license agreement.

Restrictions that are commonly included:

- The software may not be sublicensed, resold or distributed by the person or company to whom it is licensed (the licensee) for any purpose whatsoever.
- The software may be limited for use to the component manufacturer's own review, design and sealing of truss and component designs generated by such software and for no other purpose whatsoever.
- The software and all copies of the software are to be treated as the confidential and trade secret property of the licensee, which may include taking measures to cause employees to preserve the confidentiality of such software.
- The software may not be used, distributed or in any way divulged to any other person by the licensee.

Component manufacturers and software licensors need to be vigilant with regard to Truss Brokers to make sure design and placement software are not used in violation of the license agreements. **SBC**

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