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## "Technology & Truss Hangers" by Bill Loeffler

Most truss manufacturers are in the hanger business. Some started 15 years ago with the realization that they were the last to really know what kind of truss-to-truss connector was needed. Since it was not available at the lumber yard, these pioneers began to offer a hardware package. They were undaunted by talk about taking additional responsibility because they knew that a failure of "hangers by others" would draw them into litigation in any event.

Ten years later, ANSI-TPI 1-1995 set the standard requiring the designer to call out the connector for all truss-to-truss connections. With that and now code adoption, truss-to-truss connectors and field splices have drawn nearly every manufacturer into some level of truss hanger sales. Connector usage has grown as code officials look for "metal" on the job and as states add to their code, such as last year when Wisconsin required hurricane ties on all roof members for the first time.

There are many more connector products to choose from today as devices for specific conditions hit the market. Despite this, there is more and more call for custom parts to fit the slopes, angles, heavy loads and multiple member connections that roof systems require. Where perhaps the stick framer depended on toenailing skill and a "prayer," the truss framer uses an engineered connector.

What's the future vision for hardware? In the short term, truss design software will address the hanger callout and, in effect, take on the responsibility that so concerns manufacturers. The software will consider ANSI-TPI load conditions, select the best hanger (even telling why others were not chosen) and total the hardware takeoff. Activities like picking tickets, inventory control, purchasing, pricing, invoicing and profit reports will feed off the design output.

In the long term, especially if the NAHB experts are correct, the roof, wall and floor systems will come as components to a jobsite—probably from the same supplier. In the case of residential systems, we see the component supplier calling out the hardware needed for the load path from roof to foundation.

**[Editor's Note:**This is beyond the typical scope of work for most current truss manufacturers and does get the truss manufacturer into the realm of building systems design work. Please seriously consider your compensation for both the work and the risks of an error or omission that could occur by providing this type of a service.]

To recover some of the design cost, he will also sell the hardware that has always been a good profit center. Hopefully a software solution will quickly do the detail work. The very computer that made possible the elaborate roof designs which required all the hangers in the first place will come to the rescue and tell us what connectors to use.

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