STRUCTURAL BUILDING COMPONENTS MAGAZINE (FORMERLY WOODWORDS)

November 1999

Executive Director's Message

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"Why WTCA Is Involved in Quality on a Global Level" by Kirk Grundahl

The process of building design and construction is very complex, as it requires the coordination of interrelated professions tackling separate and distinct design and construction activities. Often our industry is called upon to fill the gaps in this process, take on responsibilities and pay for litigation that has nothing to do with our businesses or responsibilities. This is why we are fully engaged in the "Certified Carpenter" program with the NAHB Research Center. This is a significant U.S. Government-funded project under the Partnership for Advancing Technology in Housing (PATH) initiative and a venture with NAHB-RC as the lead organization in partnership with WTCA. Our goal is to have a certification process in place by the end of 2000 that will:

- Provide a method for knowing what high quality framing is and the ability to objectively evaluate it.
- Reduce the entire industry's liability due to poor construction practices. Construction defect liability is becoming a significant factor in the planning of all of our businesses.
- Improve construction safety. WTCA's goal is to reduce the number of construction accidents that happen during the installation and temporary bracing phase of construction, particularly with trusses.
- Reduce the permitting and on-site inspection time.
- Reduce construction cycle time.
- Improve framing education and framing skills.

NAHB RESEARCH CENTER PERSPECTIVE

Framing accounts for 15 to 20 percent of the total cost of the house. It is one of the most critical construction factors, affecting cost, cycle time, quality and durability. If a house is framed properly, the installation of windows, doors, cabinets and floors is much quicker and easier. If framed correctly, houses will have much higher survivability in natural disasters. The NAHB-sponsored Housing Af-fordability Through Design Efficien-cy (HATDE) project has spent three years researching hurricane and earthquake failure modes to develop optimum, damage-resistant framing designs. A high priority objective of the HATDE project over the next several years will be to assure that these design concepts are implemented correctly during the construction process. Also, wood truss manufacturers want to ensure that the quality of the trusses they build is not compromised by poor field practices—storage, handling, installation, temporary bracing, application of connection systems and permanent bracing—all of which can easily damage the product and, in some cases, lead to injury and death.

In a 1998 Technology Roundtable for builders and manufacturers, builders voiced their frustration with the lack of high-quality framers in the marketplace. Skilled labor is hard to find and retain. Errors and defects in framing are frequent and costly. Undetected or uncorrected errors can create severe problems with finishing a house. These builders said they alternate between hiring framing contractors and bringing the framing "in-house," but neither approach solves the problem. Although ISO 9000 practices for quality assurance in design, development, production and servicing as contained in ANSI/ASQC Q9001-1984 are well established in conventional, in-plant manufacturing, they are not common in the home building industry. How-ever, the NAHB Research Center has recently been successful in adapting ISO 9000 quality management for trades and in the site-built home building industry. Those builders who have implemented these practices have experienced significant improvements in their operations and in the quality of their houses. The PATH project will be pivotal in establishing the value of quality management in the critical area of home construction framing and the application of related technologies. A second valuable output of the project is a set of training/educational tools that can be used by framing contractors across the country for implementing quality management.

Structural issues are fundamental to the durability and strength of houses. The industry needs to ensure that existing structural technologies are implemented correctly, and that the new structural technologies that PATH will introduce are integrated into a controlled construction environment. The environment includes not only manufacturers, builders and trade contractors, but also code officials, architects and engineers. The industry needs a process to facilitate all of these stakeholders working together to address one of the most challenging and potentially rewarding areas of residential construction. This is now being implemented through the "certified carpenter" concept that will move us more quickly toward solving most of the framing problems we see today and will see in the future.

CONCLUDING THOUGHTS

The housing industry has begun to move rapidly toward implementing ISO 9000 quality techniques to improve the construction process while simultaneously seeking to find more economic value in physical cost savings (less re-work, faster construction through better trained carpenters, speedier code processes, etc.) and insurance cost savings (less construction defect issues). This process also adds value to the homes they build through improved buyer satisfaction.

What does this mean to the building component industry? If our customer base is moving toward improved quality construction, they will be relying on their suppliers to provide products that meet certain quality criteria. This is certainly a large part of the reason that WTCA has developed ***WTCA QC***—so that there is a tool available for our industry to use to meet the future needs of our customer base in the quality arena.

SBC HOME PAGE

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