CONTRACTOR SURVEY PINS SUCCESS TO PINNING STEEL

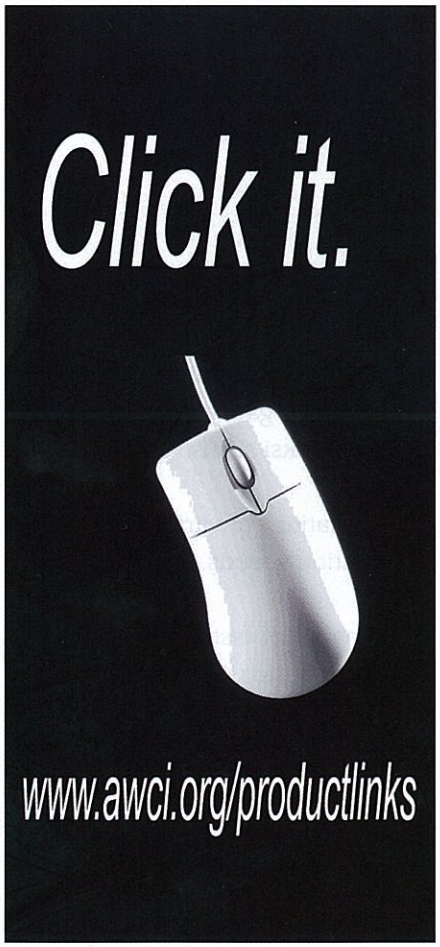
BY ROBERT J. SHLUZAS

More than 47 percent of builders and contractors surveyed by the Cold-Formed Steel Engineers Institute ranked Pin Fastening as their number-two priority for framing with cold-formed steel; number one was Training. And why not? Traditional methods forfastening CFS can be laborious, use excess materials, and not accommodate many of the fastening combinations encountered on today's jobs. ▶▶▶

HARDENED STEEL PINS HAVE BEEN USED SUCCESSFULLY IN CONSTRUCTION FOR DECADES. IRONICALLY, IT IS THIS LENGTHY HISTORY THAT CARRIES FORWARD "OUTDATED" TESTING AND PERFORMANCE EVALUATIONS OF PINS THAT CAN REDUCE THEIR USE IN MODERN DAY CONSTRUCTION WHERE CFS DESIGN OPTIONS INCREASE EVERY DAY.

Common uses for pins include fastening various materials or fixtures to a variety of steel gauges. Many of us have attached CFS to plywood, oriented strand board or gypsum board. But did you know that pins are being used successfully to join up to five layers of steel-to-steel, or fastening to structural steel, and that pins are installed at speeds that are five to 10 times faster than conventional fastening methods?

The growth in the use of CFS framing has created innovative designs for structural assemblies that require new fastening methods to create new economic viability for steel. The demand is growing rapidly, and pin fastening has kept ahead of the curve with in-



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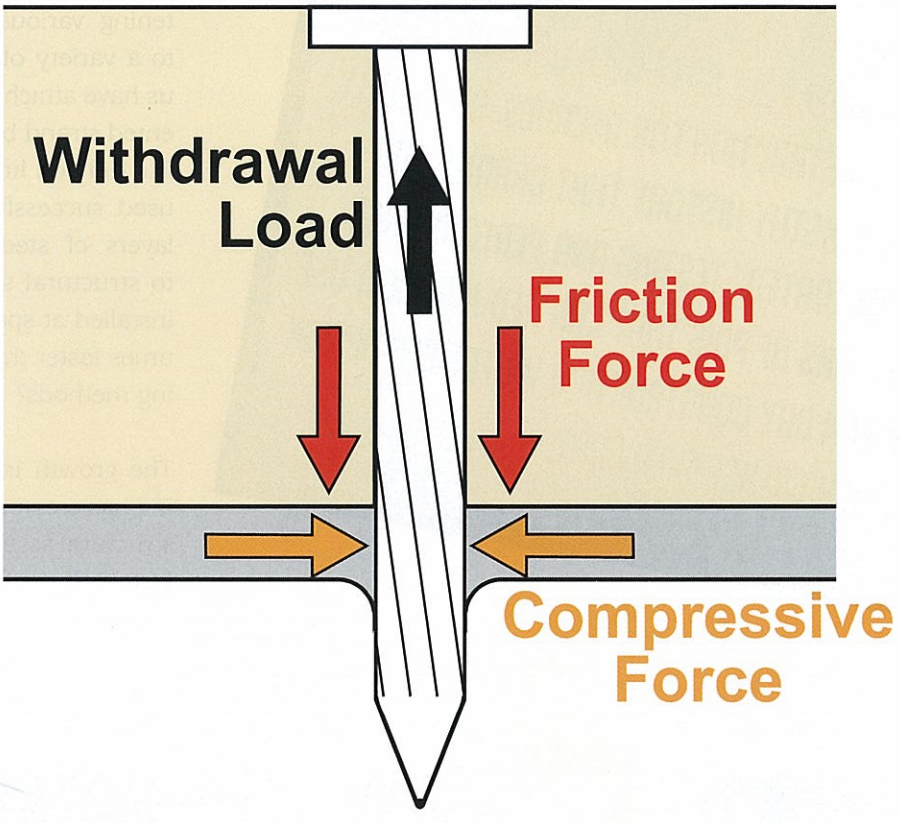

en without the development otocols, pins can exhibit vithdrawal and shear values qual to or greater than tening in cold-formed steel.

novative new pins and unique high pressure installation systems.

What Else Is Being Done?

The Technical Development Committee for CFSEI has begun work toward creating new standards and design guides to increase the use of pins for CFS construction. They are causing the development of the following:

- Minimum test standard results that can be used to interpolate/extrapolate fastener performance.

- Data to support new "Safety Factor" recommendations for various Building Code Evaluation Services.

- Evaluations of various fastener testing in 20 gauge to 22 gauge and 33ksi to 90ksi steels.

- Evaluations of various fastener installation speeds.

- A matrix of test protocols for comparisons of fastening methods.

A key to the development and use of fastener evaluation protocols will be their effects on "safety factors" used to design CFS structures. As mentioned, the outdated use of the safety factors created for pins in

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Author

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more than 30 years. He
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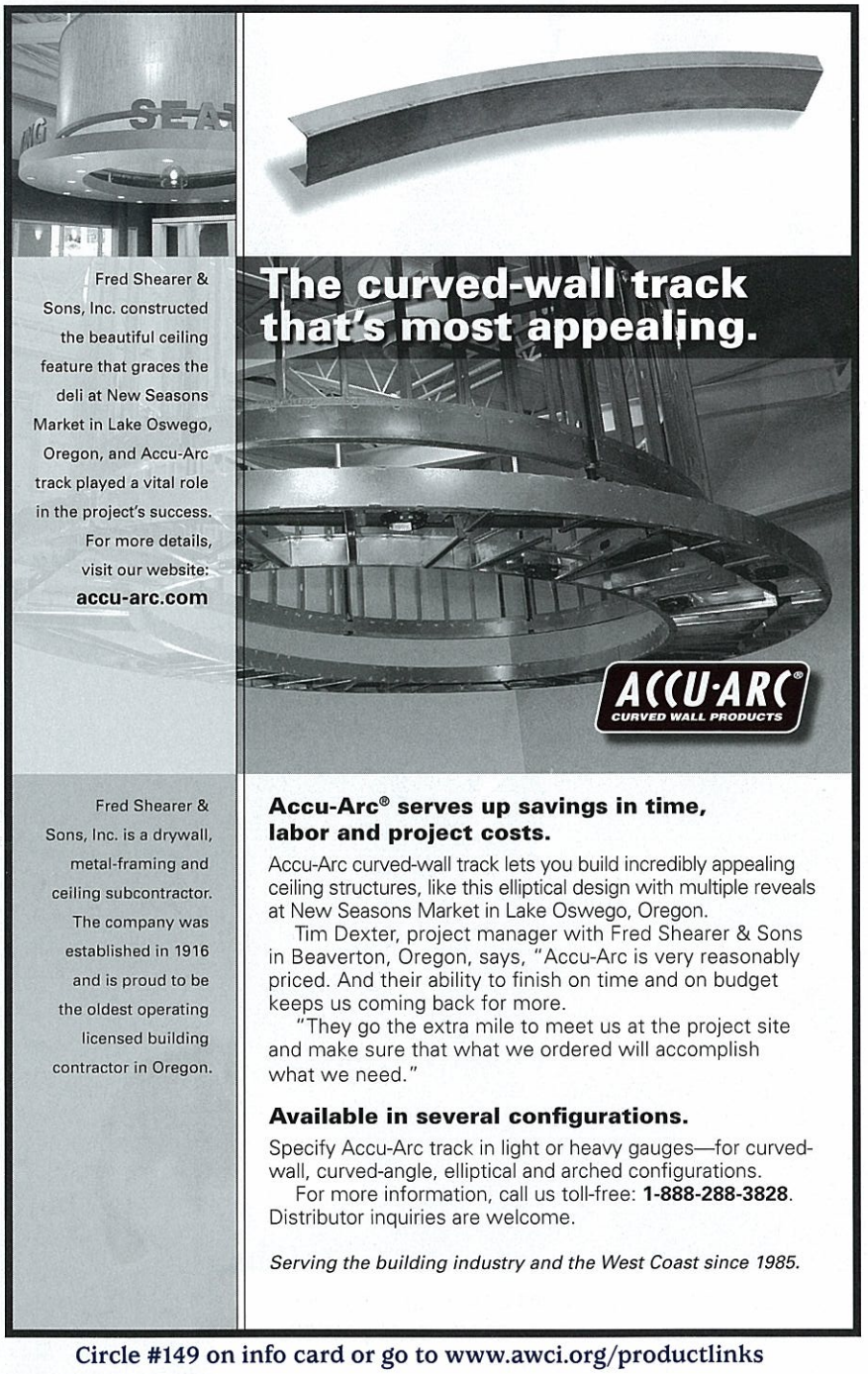
For More Information

You can learn more about pin fastening equivalency by contacting the Cold Formed Steel Engineers Institute, www.cfsei.org; from Aerosmith Fastening Systems, (800) 528.8183 or www.aerosmithfastening.com; or the Steel Framing Alliance at www.steelframingalliance.com.



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