

ICC-ES and Simpson Strong-Tie Work Together on Evaluation Reports Compliant to the 2012 Codes to Provide Innovative Structural Solutions

ICC Evaluation Service® has been proactive throughout 2012 in working with numerous report holders who wish to update their existing ICC-ES® evaluation reports (ESRs) to show code compliance with the 2012 I-Codes®. The Pleasanton, California-based structural building products supplier Simpson Strong-Tie has taken a progressive role in updating several of their existing ICC-ES ESRs to the 2012 code requirements, including reports on concrete anchors and a wide range of wood connectors. At the time of this article, at least 15 Simpson Strong-Tie ICC-ES ESRs show compliance with the 2012 codes, a few of which are highlighted in this article.

Earlier this year, ICC-ES' Jason Smart, P.E., Staff Engineer, worked with other ICC-ES technical experts to revise several evaluation reports related to Simpson Strong-Tie products (ESR-2605, ESR-2320, ESR-1161 and ESR-3046).

While discussing the products reviewed in the Simpson Strong-Tie ESRs, Smart noted the Simpson Strong-Tie URS uplift rod runs evaluated in ICC-ES ESR-1161. "The Simpson Strong-Tie URS uplift rod runs are part of a continuous rod tie-down system (CRTS), which is the subject of the recently issued ESR-1161. This evaluation report is unique in that it is currently the only ICC-ES

evaluation report on continuous rod tie-down systems that have been evaluated in accordance with AC391."

Related to the CRTS evaluated in ESR-1161, several of the Simpson Strong-Tie shrinkage compensating devices recognized in the recently updated ESR-2320 may be used as components within the URS uplift rod runs recognized in ESR-1161. These devices remove slack in the continuous rod tie-down system when wood shrinkage or building settlement occurs.

"I would say that both the CRTS in ESR-1161 and the shrinkage compensating devices in ESR-2320 are among the most innovative of Simpson Strong-Tie products," Smart stated. "In fact, these two ESRs are closely linked because several of the products within ESR-2320 are used as components within the CRTS described in ESR-1161."

The Simpson Strong-Tie Titen HD® Screw Anchor (ICC-ES ESR-2713) was also among the products reviewed. The anchor is a patented, high-strength anchor used in concrete and masonry, and has been shown to perform well in cracked and uncracked concrete under both static and seismic loading conditions. ICC-ES staff ensured that compliance requirements for structural properties for the 2012 International Building Code® (IBC®) and International Residential Code® (IRC®) were included in the evaluation report.

"The Titen HD" Screw Anchor recognized in ESR-2713 is a versatile mechanical anchor that has been evaluated for use in normal-weight and lightweight concrete as well as concrete-filled composite steel deck applications. These screw anchors are among the most state-of-the-art post-installed concrete anchor solutions available today," said Jason H. Wagner, P.E., Staff Engineer.

Simpson Strong-Tie has, for more than 55 years, been an innovator in structural systems research and testing, working closely with industry professionals to provide codecompliant, field-tested products and solutions. Its products are intended to help structures resist loads from various sources, including high winds, hurricanes and earthquakes.

In speaking about his company's long-term relationship with ICC-ES, Jeff Ellis, P.E., S.E., Code Report and Branch Engineering Manager for Simpson Strong-Tie said, "Simpson Strong-Tie is committed to helping customers succeed by providing exceptional products, full-service engineering and field support, product testing and training. We value our ongoing relationship with ICC-ES and recognize the continuous process of improvements they are implementing. Simpson Strong-Tie appreciates ICC-ES' efforts to achieve consistency and quality without sacrificing timeliness. The entire industry benefits from new and innovative products that have been evaluated properly."

ICC-ES' Jason Smart continued, "The Simpson Strong-Tie engineers that I have worked with in completing these evaluations are all technically proficient, and they understand the complexities involved in evaluating their products for compliance with the code. That knowledge greatly streamlines the evaluation process and fosters a professional working relationship through which we can develop solutions that are acceptable to both ICC-ES and Simpson Strong-Tie, when writing ICC-ES evaluation reports."

All ICC-ES Evaluation Reports can be accessed and downloaded free of charge at www.icc-es.org/evaluation_reports/index.shtml, and are readily searchable based on attributes such as product type, manufacturer or report number. For more information, please visit www.icc-es.org.

^{*}This article is intended to provide information about products for which ICC-ES Evaluation Reports have recently been issued. It should not be construed as a product endorsement or a recommendation for use.

