

News Release

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AISI REPORT INTRODUCES NEW DESIGN METHODS FOR LOAD-BEARING CLIP ANGLES

WASHINGTON, D.C. – The American Iron and Steel Institute (AISI) has published a research report introducing new design methods for three limit states of cold-formed steel clip angles: shear, compression and pull-over of the screw connections. Details of the testing and results are included in "RP15-2: Load-Bearing Clip Angle Design." A free download is available <u>here</u> (58 pages).

The research was conducted by Cheng Yu, Ph.D., Associate Professor at the University of North Texas, and his team. The scope of the project was to investigate the behavior of loadbearing cold-formed steel clip angles and develop appropriate design methods for their use when subjected to three different loading conditions. For each limit state, a test program was conducted to investigate the behavior, strength and deflection of the clip angles. The test results were then compared with existing design methods for members similar to, but not exactly the same as, cold-formed steel clip angles. The research team developed new design methods for each of the three limit states studied in the project. LRFD (Load and Resistance Factor Design) and LSD (Limit State Design) resistance factors and ASD (Allowable Strength Design) safety factors were provided to apply to the proposed design equations for nominal strength.

"This comprehensive research is significant because it provides a method for designers and specifiers to more accurately predict the strength of cold-formed steel clip angles," said

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Jay Larson, P.E., F.ASCE, Managing Director, Construction Technical Program. "We appreciate the detailed work and new design methods developed by Dr. Yu and his team, which will advance cold-formed steel design practices in the marketplace."

AISI's codes and standards work is conducted under the Construction Market Council of the Steel Market Development Institute (SMDI), a business unit of AISI, which oversees the industry's investment in advancing the competitive use of steel by meeting the demands of the marketplace. For more information on SMDI's Construction Market program, visit <u>www.smdisteel.org</u>.

AISI serves as the voice of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the preferred material of choice. AISI also plays a lead role in the development and application of new steels and steelmaking technology. AISI is comprised of 19 member companies, including integrated and electric furnace steelmakers, and approximately 125 associate members who are suppliers to or customers of the steel industry. For more news about steel and its applications, view AISI's Web site at <u>www.steel.org</u>.

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