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## **Technical Bulletin #6c**

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## **PREMIER PANEL FASTENERS**

Extreme Panels has completed the development of a panel fastener. This fastener was developed specifically, for the attachment of Extreme Panels to beams, purlins and posts made of wood and soft iron. Extreme Panels fastener uses state of the art tempering and coating technology to create a #14 screw that drives easily into wood, engineered woods and soft steel without bending, breaking or stripping out the multi-lobed head. The screw is corrosion resist and passes more than 15 cycles in the industry standard "Kesternich cabinet".

The screw has been designed with an aggressive thread pattern that demonstrates excellent pull out resistance. In independent code recognized laboratory testing, Extreme Panels fasteners exhibited 980 pounds of pull-out resistance when installed 1" into a typical SPF#2 2 x 4. The laboratory also checked the screw for resistance to shear. The test was designed to simulate a worst case scenario where a 14" Extreme Panels fastener was driven through a 12"thick panel and into SPF#2 dimensional lumber. The fastener withstood over 830 pounds of force without shearing. The failure mode was the screw head pulling through the OSB. The design of the screw head provides a pull-through capacity of 735 pounds. These values are the tested ultimate capacities.

The use of the Extreme Panels fastener is specified in the Extreme typical details. Wall connections require that screws be utilized 2' on center. The frequency of panel fasteners required to anchor roof panels is dependent on the imposed loads the panels must resist and the number of attachment points available. See the Extreme Panels typical details for recommendations and follow the requirements specified on the shop drawings.

The Extreme Panels fastener can be used in light gauge steel framing up to <sup>1</sup>/<sub>4</sub>" thick. Different points are used on the Extreme Panels fasteners that are used in these light gauge steel applications, so you will want to check with your Extreme representative for the requirements of your specific project.