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ABSTRACT**

Title of abstract:	Efficient Design of Stramit Exacta® Purlins using the EX-facta™ software
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Abstract:	<p>Traditionally engineers in Australia have designed purlin systems using data provided by the manufacturers in the form of technical literature. This data did not allow for efficient design, where local pressure areas could be accounted for as well as point and axial loads. Stramit developed a patented method of design, the Member Moment Capacity Method, which could be used to design these systems with complicated loading. The method involves using a commercially available analysis software to determine the action effects, and then comparing the bending moment, shear and axial values to the capacities given in tabular form in the technical manual.</p> <p>In recent years, some manufacturers have started providing software to facilitate the design of their purlin systems. The EX-facta software developed by Stramit can be used to design the Exacta range of purlins, using the member moment capacity method. This eliminates the need to use another analysis software, and the entire design can be carried out easily within minutes if not seconds. The software allows for varying spans, bridging positions, lap lengths and changes in thicknesses to give an efficient design. Local pressure zones, axial and point loads can all be accounted for. The user can control the purlin sizes, move bridging and laps, allowing for interactive design. A print out can be obtained of the design process enabling any checks to be done. With this software, the design process is not only simplified, it is also a powerful tool which still allows the final control to be with the engineer.</p>