

PREMIUM STRUCTURAL SOLUTION

Recent media attention in nail plated timber structure failures has highlighted the risks associated with some engineered floor joist products.

In some truss-type joist products, the Engineer may specify a certain size for extra stiffness or strength (i.e. deliberately over span), the final product that is supplied, however, may have been 'economised' by reducing the number of web components to match the shorter span loading. This practice however can compromise the stiffness behaviour, strength and safety. The Engineer may not be aware his design has been modified, unless he gets feedback on such things as excessive vibration. The current practice of specifying the next size joist may not achieve what the Engineer or Builder had intended.

A significant benefit in using Tecbeam floor joists is the safety inherent in this product. Testing and installation in thousands of homes, residential units, commercial buildings, hospitals, schools and factories have confirmed the reliability, superior performance and safety of Tecbeam floor joists.

The graph below illustrates typical load vs deflection performance curves for various types of floor joists. Note the high ductility of Tecbeam floor joists and the residual capacity due to the continuous ductile steel web (approx. 50% of the working load).

