



HAZARD ALERT

No. 3

Sub-standard Punched Strapping and Tensioners

The most common application for punched strapping is in structural wall bracing. AS1684 is the primary reference in the BCA that governs the use of metal straps for wall bracing, and it is explicit regarding the minimum specifications required of the strap to achieve design load capacity:

Typical size	30mm x 0.8mm
Minimum nett section	15mm ² (Type A - 1.5kN/m bracing capacity), or 21mm ² (Type B - 3.0kN/m bracing capacity)
Minimum steel grade	G300
Minimum corrosion protection	Z275

It has come to the attention of the industry that not all punched strapping available in the market meets this standard. Some products are made from lower grade steel or with poor galvanizing quality; while others do not specify nor satisfy the minimum nett section area requirements after the holes are punched. Consumers are left to guess not only whether they are suitable for Type A or Type B applications but are also expected to assume suitability for use without any accompanying product specifications or certification that satisfies AS1684 requirements.

Although tensioners are not clearly defined in AS1684, their use must obviously not reduce the strength and stiffness of the metal straps that they are attached to. Their design should be verified by laboratory testing to be assured of adequate performance. Sharp corners or flexible shapes can prematurely snap or relax the straps before full design loads are reached.

Houses that are built with these sub-standard products risk excessive movement that can cause plaster cracking and potential failure before the full design bracing capacity is reached.

Consumers are warned against using generic punched strapping and tensioners unless the supplier is able to provide warranted product specifications that meet the requirements of AS1684. Buyers are advised to source engineered building products only from reputable manufacturers and avoid generic products that look similar but are not supported by any evidence of compliance.

MiTek supplies a range of engineered building products, including Structural Bracing Straps and Tensioners that meet the full requirements of AS1684. Their performance has also been verified by laboratory testing. These products are supported by a comprehensive product data sheet containing manufacturing specifications, load capacities, recommended applications and installation instructions. In addition, they are also accompanied by product certifications that warrant their full compliance with AS1684 and the BCA.

Further information

Visit MiTek's web site: www.mitek.com.au