

SUBSTITUTION OF FASTENERS IN ENGINEERED BUILDING PRODUCTS

Most *Light Framed Timber Constructions* are held together by humble *Light Gauge Steel Timber Connectors*. These connectors have proven to be quite reliable and have supported our constructions for more than 50 years.

**Primary reason for their reliability:
They are Engineered Building Products [EBP]**

What does that mean? This means; these products are *scientifically designed and tested, to deliver the desired load carrying capacities and desired performance, from the connections.*

Manufacturers of EBPs recommend how they are to be installed on site [correct orientation], where they can be used [fit-for-purpose] and what fasteners are to be used to achieve the desired outcomes.

SPECIFICATIONS:

Steel Grade	G300
Thickness (Total Coated)	1.0 mm
Galvanized Coating	Z275
Nails	MiTek 30 x 2.8mm hot dipped galvanized reinforced head.
Screws (alternative fixing with JoistHanger JH70160 and JH95150)	MSA1430 – MiTek No. 14 x 30mm anti-split self-drilling HD galvanized screws for fixing into single supporting beam
	MSA1465 – MiTek No. 14 x 65mm anti-split self-drilling HD galvanized screws for fixing into double 35mm or 45mm wide supporting beam
Product Code	See Table 1

Use of alternate fasteners in EBPs on site, can affect the load carrying capacity as well as performance of these connectors. In many cases, alternate fasteners, may even render the connection in-effective.

Of late, there has been an influx of numerous fasteners, which are a look-alike of recommended fasteners and claim to deliver equivalent capacity. No data sheet to support these claims, are however available. This ‘passing off’ practice, can cause serious safety concerns for end users and our community.

To ensure reliability in construction, Non-Conforming Building Product [NCBP] legislations, have been adopted by various states. Worth mentioning is the Non-Complying Building Products Tribunal at QBCC in Queensland.

The Australian Building Codes Board defines NCBP as:

“Non-conforming building products (NCBPs) and materials are those that:

- claim to be something they are not
- do not meet required standards for their intended use; or
- are marketed or supplied with the intent to deceive those who use them”

<https://www.abcb.gov.au/ncbp/what-are-ncb-products>

The reliability of EBPs can be ensured in simple ways:

- When procuring fasteners for connectors; ensure they are as per recommendation from manufacturers. If they happen to be generic fasteners, do not hesitate to ask for testing data to support their structural adequacy. Even generic fasteners are to be tested as per AS 1649 and must meet capacities as specified in AS 1720.1
- Do not use look-alike fasteners or ‘passing off’ products. This only brings liability to your business

Safety in Building Construction is non-negotiable.