

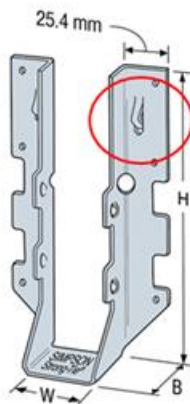
Market feedback response to 'Market Study into Residential Building Supplies'

The Hon Dr David Clark identifies in his terms of reference set out to guide the Commerce Commission study, "impediments to the entry or expansion of new or innovative building supplies" relating to "major components of residential buildings".

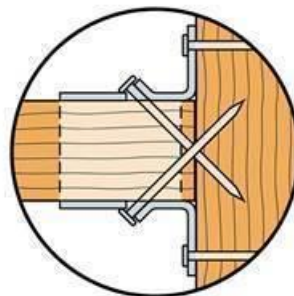
Simpson Strong-Tie NZ has been supplying, among other products, connectors and fasteners for use in residential construction since 1956 globally and as Simpson Strong-Tie in NZ since 2010. Globally Simpson Strong-Tie (SST) is a world leader in structural product solutions, originating in the US and now manufacturing and supplying construction products across Europe, Canada, Asia, South America, and Australia & New Zealand. SST's success is based on on-going innovative customer focused solutions that advance construction methods, improve cost efficiency, and provide 'safer stronger structures' to the end user (building occupants) rather than just code compliant/minimum ones.

New Zealand's entrenched residential construction supply chain and more importantly the undue influence of one controlling connector supplier linked to both off-site manufacturing (Frame & Truss) as well as merchants has proven a significant challenge in allowing NZ residential construction to benefit from SST's (and no doubt other similar businesses) globally driven and funded innovation particularly in light timber frame construction, but including mass and engineered wood products buildings also.

Innovative advances are achieved equally by complete new product solutions as well as improvements made to already well established construction products. SST's joist hangers for example have a 'speed prong' – a single bent tooth on each hanger flange designed to temporarily position and secure the connector for easier and faster installation. Further, to secure the connector to the supported member (joist), instead of having just simple holes for the required nails, preformed 'dimples' guide longer nails at a 45 degree angle through the connector and joist end penetrating right through into the supporting member (bearer). This double shear nailing method achieves a greater load carrying ability with fewer nails, resulting in material cost efficiency as well as faster installation.



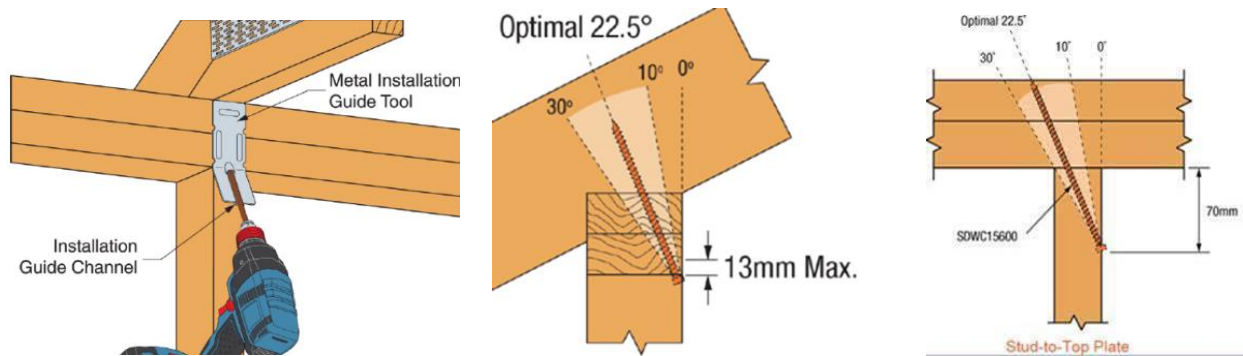
SPEED PRONG



DOUBLE-SHEAR NAILING

These innovative minor improvements to commonly used products ([joist hangers](#) , [angle brackets/'multigrips'](#) , [truss clips](#)) provide tangible improvements to NZ's residential building construction costs.

An example of a complete shift in construction method using new specifically developed products is the SDWC fastener to connect roof framing members to supporting wall frames below, as well as top or bottom plates to studs. Traditionally these connections were achieved using various different connectors nailed/screwed into roof and wall framing members. The introduction of SST's SDWC fastener to the NZ market provided a much simpler solution using a specifically developed screw to replace the traditional connectors. The screw provides numerous benefits including cap head style screw head to fully countersink and avoid interference with interior/exterior linings, installation from inside the structure and using the QuikStik with the installer remaining standing at ground level, and a single screw install compared to a connector (or connectors) each requiring multiple fasteners to attach to roof and wall framing. The load carrying ability is achieved by a combination of withdrawal and shear load transfer – that approach still remains unique even as other screws (acting simply in withdrawal) have been introduced to the NZ market since the launch of SST's SDWC.



The SDWC has driven a change in the industry to move away from traditional connectors to screw alternatives (not just SST's SDWC), providing not only various cost efficiencies through reduced material costs and faster installation, but also results in improved on-site health & safety with installers not needing to gain access at the top plate level.

These are just two of many examples that could improve productivity and cost efficiency if new innovative solutions were easier to get accepted in NZ's market. Of particular concern to SST is the unethical behaviour and 'bullying' tactics used by a well established connector supplier to protect their market dominance – we estimate they control ~80% of connector sales via merchants and similar percentage of Frame & Truss (F&T) via fabricators. A monopoly? As a result of their engagement with both merchants AND fabricators/Frame & Truss, we have heard anecdotally of instances where threats have been made relating to supply/pricing/support of F&T business if an associated merchant was to engage with SST on connector supply. Similarly do we anecdotally believe that the current monopoly supplier has written to council inspection authorities threatening to withdraw truss warranties if they approve the change in truss hold-down connection to Simpson Strong-Tie product (interestingly despite the fact that they themselves sell and market an identical product to our SDWC in other markets globally). Not only a disappointing way to engage with customers to protect market share, but a significant contributor to NZ being left behind in advances in residential construction as it makes providing innovative cost effective solutions very difficult to introduce to NZ.

SST is also aware of the same supplier exerting their dominance in F&T to stop interested fabricators in advancing their operations from simple frames and trusses to greater off-site manufacturing. Indeed there has been at least one fabricator that was left with no choice but to change to a different F&T supplier in order to be able to realise their aspirations in greater off-site manufacture. Existing NZ F&T fabricators would otherwise be well placed to progress from their current off-site manufacturing of simple frames & trusses to more advanced panelisation, which would result in more efficient material usage and speed up construction.

It would be beneficial for the market study to investigate the level of control the current dominant supplier has (or similar suppliers have), and what changes could be implemented to allow other suppliers to, on a fair basis, introduce new innovative products with proven overseas history and properly adopted for NZ code requirements and building methodology.

There are other connector and fastener suppliers attempting to introduce their product into NZ also, some of which simply refer to overseas (often European) load data which has not been properly adjusted to be aligned with NZ standards and code requirements. Simply because the European load/design data refers to 'characteristic' does not mean it is equivalent to NZ 'characteristic capacities' determined using NZ Standards or the acceptable solution NZS3604 and shouldn't be used as a simple alternative to NZS3604 stipulated solutions. SST is trying to educate the market on this, but given the potential safety concern around resulting non-conservative construction this may be an area the study may want to capture also. Many of these overseas products are of benefit to NZ residential construction and should be introduced, but this must be done properly to align with our local standards, codes, acceptable solutions, and design practices.

SST would welcome informing the market study by providing more detail, and look forward to hearing further as the project progresses.

Simpson Strong-Tie New Zealand Limited
52A Arrenway Drive, Albany, Auckland 0632
09 477 4440 | www.strongtie.co.nz