

QBCC TECHNICAL FEATURE

October, 2016

Restraints for internal partition walls

By Gary Stick, Manager, QBCC Technical Standards Unit.

A recent audit of north Queensland building sites by the Queensland Building and Construction Commission (QBCC) revealed widespread use of non-compliant practices in relation to restraints on the tops of internal partition walls.

The QBCC identified a number of builders restraining the tops of internal timber walls by firing framing nails into metal ceiling battens installed onto the underside of roof truss bottom chords.



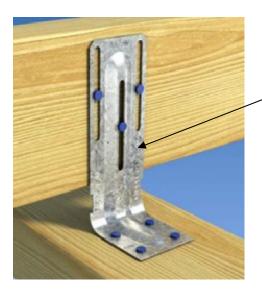
Internal partition wall restrained at top by gun nails fired into metal ceiling batten.

This non-compliant building practice is not in accordance with Australian Standards AS1684 or AS4440, which are the documents referenced by the Building Code of Australia for timber framing and roof trusses.



When construction work of this nature has been detected, contractors are required to bring the construction into conformity with Australian Standards or seek a Performance Solution under the Building Code of Australia.

The traditional and most popular form of restraining the tops of internal partitions remains the use of metal partition "L" brackets (as shown in the photograph).



Traditional and compliant method of restraining tops of internal partitions.

The "L" bracket system is compliant with AS1684 and AS4440, and is recommended by timber truss manufacturers throughout Queensland. The "L" bracket not only provides lateral restraint to the tops of partition walls, but also allows for vertical movement of the bottom chord of the roof truss via the slotted fixing channels. This is a requirement for the accepted performance of the roof truss system.

In discussions with Timber Queensland and the Cyclone Testing Station at James Cook University, the QBCC has been unable to identify any testing that has resulted in verifiable data to justify the "gun nail into metal ceiling batten" method of partition-top restraint currently being utilised by some practitioners.

The QBCC maintains its strong stance on the non-compliance of this construction method. Any potential changes to relevant Australian Standards to validate this practice would require testing to verify its performance and may take some time to then be adopted.

The QBCC will continue with its agenda to inform and educate builders, trade contractors and certifiers of the risks associated with this non-compliant construction method.

For more information call the QBCC (24/7) on 139 333 or visit www.gbcc.gld.gov.au