

## **GN GUIDELINES**

NO.220

**ANOTHER MITEK ADVANTAGE – NOVEMBER 2015** 



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## Haste makes waste: training apprentices

o apprentices always receive the training and supervision they deserve? By mistaking haste for efficiency, identifying when an apprentice has received the appropriate level of training is something that can easily slip through the gaps unless a conscious effort is made. This could result in a shambolic situation that comes back to bite you.

Here I will present two real-life examples of roof construction errors, found during recent site inspections. It is a well-known and fundamental carpentry practice that any timber members that cross must be nailed together. Yet, in both cases, the jack rafter extensions where they cross over the horizontal top chords of truncated standard trusses were left without any connections, despite the truss installation standards clearly underlining the need to do so should the installer plead ignorance after the event.

Critically, truss top chords rely upon this fixing to provide restraint and stability. In the instances mentioned above, the complete absence of fixing the timber members caused the truncated trusses to bow and twist out of shape, with a run of five adjacent truncated standard trusses, all of which were leaning over by up to 350 mm. Some nailplated joints were damaged as a result, and some sections of roof over the

hip areas were undulating so badly that they were on the verge of collapse.

I am sure that an experienced installer would not have missed this basic connection, so it is my presumption that a young apprentice must have been responsible for the omission. Either he or she was never trained correctly by the supervisor, or the individual forgot to nail the junction because they were rushing to complete the job, and consequently the supervisor failed to check the work. Both circumstances are not a satisfactory excuse.

Supervisors are expected to provide on-thejob training for their apprentices, which is achieved only by checking the 'rookie's' work. They should not simply assign tasks assuming the apprentice will somehow know what to do.

In this industry we should all work together in a joint effort to train new apprentices so they become competent roof truss installers. Nailplate manufacturers regularly run accredited truss installation courses, focusing on the erection of roof trusses according to the Australian Standards (AS). Those who satisfactorily complete their assessment are at the end of the course, awarded with an accreditation card to support their new qualifications.

Nailplate manufacturers are keen and willing to work alongside truss fabricators and their builders to organise in-house

training sessions for their supervisors, carpenters, and apprentices - all of which are free of cost for the participants. Fabricators who facilitate this service with the customer often gain their trust and confidence as a quality supplier.

In addition, fabricators can help the rookie with the fixing of hip ends by showing all fixings on their truss layout, including jacks to truncated trusses. It is tempting to leave these obvious and commonly known fixings off the drawings for clarity, but it may help the those that are training who may not know the basic carpentry practice of skew nailing all crossing timber members together.

However, the onus remains with the supervisor to guide their apprentices along the right path by teaching them the correct methods, encouraging them to read and understand AS 4440 Installation of nailplated roof trusses or the truss instruction booklets supplied with every job, and to attend training courses on the subject. They are fundamental pre-requisites for installing roof trusses, and will protect you from things going pear shaped – literally! T

For more information on this issue, please contact your truss fabricator or nailplate manufacturer.



Absence of fixing between rafters and trusses.



Badly bowed trusses from lack of fixing.



Dislodged plates from twisted trusses.

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