GANG-NAIL GUIDELINES No.115

ANOTHER MITEK ADVANTAGE

# TO MANUFACTURER'S SPECIFICATIONS

By TIM ROSSITER
*Chief Engineer,*
*MiTek Australia Limited*

The allocation of responsibility for decisions made has become more and more, one of the main concerns in the truss and frame industry.

Whether it involves OH&S issues or the correct identification of loads on structures or the responsibility for the correct installation of frames and trusses, all seem to be weighing heavily on the mind of the fabricator.

Although there have been many GN Guidelines on particular aspects of fabricator responsibility, there is now another to be added to the list.

It is well understood that the installation of trusses and frames has to be done correctly to ensure adequate performance.

It follows that installation in accordance with Manufacturers Specification will ensure the responsibility for performance remains with the manufacturer (See GN Guideline #65).

For the builder, when receiving ancillary products for truss and frame manufacture and subsequent installation, there is an assumed responsibility for the performance of these products (nail-plates, brackets and bracing) that rests firstly with the supplier (fabricator) and secondly with the manufacturer of those products.

For the fabricator there is the assumption that the specified products will be installed correctly.

For the manufacturer there is a high commitment to test and develop these products for specific purposes.

Along with this commitment goes on-going research and engineering support for the buyer of the products and the end-user.

The choice of product is of course up to the buyer (builder) and that continues to generate healthy competition resulting in improvements to products and development of new and improved systems.

However there is a misconception that steel is steel, and as long as the size and shape of a product is the same as an existing one then it must do the same job.

Steel comes in a multitude of strengths and protective coatings and is also available in various levels of reliability - as is the case in many other materials.

All parts of the structure contribute to its performance to withstand the various loads - permanent and temporary.

Some load conditions (for example wind and snow) will only occur very occasionally.

At those times the end-user and the supplier should be certain that all parts handle the stress.

Even if the loads are unexpectedly higher than anticipated, the safety margin required by good engineering principles should protect the structure from failure.

When conditions vary from the normal, which is becoming more and more common, the product supplier should be able to check the appropriateness of the product, or give an alternative.

The same can be said for the fasteners used with any product.

Testing of all products is a test of the complete implementation of the product and its connections - nails, screws or bolts.

Choosing to substitute alternate fasteners than those specified by the manufacturer moves the responsibility of the products performance from the manufacturer to the purchaser.

The risk taken is to expect that the alternative product performs the same as the specified combination of product and fasteners.

It is then imperative that if the products are fitted by others on site that they too understand the transfer of responsibility should they choose to use methods other than those specified by the manufacturer.

The final certification of the supplied frames and trusses by the fabricator to their customer includes all components.

As such the fabricator must be certain all products, including components, that are in the structure are certified and meet the required Australian Standards.

Alternatively the fabricator takes responsibility for their certification.

In the unfortunate eventuality that there is any problem in the future, the truss and frame supplier should be comfortable in the knowledge that the product he has supplied will in turn be supported by the manufacturer.

TTN