



TIM ROSSITER
Chief Engineer, NSW

PROTECT AND SERVE

The best builders and fabricators take pride in their work. It should come as no surprise that looking after the products in your care is one of the easiest and cheapest things you can do to ensure quality.

To help you along this path, here are two simple Do's and one Don't.



- DO protect trusses from weather prior to them being installed, both off and on site.
- DO install trusses only when it is expected that they will be covered within a week (or two at most) particularly when wet weather is predicted in the foreseeable future. Be especially wary of installing trusses just before knocking off for the Christmas holidays and leaving them to the mercy of alternating summer storms and hot dry days for several weeks.
- DO NOT simply lay roof cladding if the trusses have been accidentally left to weather for a lengthy period, particularly if multiple cycles of wet and dry conditions occurred during that time. Under those circumstances, the trusses must first be re-inspected

by a specialist and be re-certified as being fit for purpose. If they require rectification, make sure the remedial instructions are properly carried out – don't take the matter into your own hands and never "just bang 'em back in with a hammer". It will be significantly cheaper than having them repaired after more serious damage years later.

Just recently, I've conducted a spate of inspections where at least one of the "Do's" wasn't followed and the "Don't" was certainly ignored.

The pictures are a reflection of what I saw – nailplate after nailplate with significant "backout" or "rebound".

Nailplates that are not fully embedded have the potential to worsen over time and eventually lead to joint or, in a worst case scenario, truss failure!

The other issue that arises from unprotected trusses is bowed timber – it's difficult to get a level ceiling if some trusses are down and others are up. (Refer Guideline No. 29).

The common factors that connected all these sites were:

1. Nasty damage to cornice lines that brought about my inspection in the first place;
2. Weathered timbers. I also noted that the timber underneath expelled plates were just as weathered as timber around it, which tells me that the plates were already expelled before the roof was installed but this was ignored by the builder.
3. The jobs were between 5 - 8 years old.



ADVICE TO THE BUILDER:

Here's some homework – review GN Guideline No. 80.

If you don't have it, contact your fabricator or download it from the MiTek website below.

While you're at it, look up No. 130 and No. 92 as well.

The Truss Installation Standard, AS4440 stipulates that "Stored trusses should be protected from the elements in a manner that provides adequate ventilation".



The key points are – Protection with Ventilation.

The installation booklet supplied with each lot of trusses contains similar advice.

A small amount of prevention now will avoid a much greater amount of cure later.

Incurring avoidable engineering inspection fees should be enough deterrence, let alone being hit by extensive rectification works and potential compensation to house occupants displaced during the repairs.

ADVICE TO THE FABRICATOR:

Remember too that while the trusses are in your yard, their protection is your responsibility.

Treat them as you would expect them to be treated on site - store them flat with enough bearers on the ground and, when necessary, covered.

A good idea is to pin a note onto your delivery docket that instructs the recipient on the relevant requirements for storage.

Reflect on this - **Protect** your trusses and they will **Serve** you well.