



FTMA TECH TALK

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PROTECT YOUR FRAMES AND TRUSSES

We are continuing to face difficult times in the building industry. The aftermath of COVID has seen disruption of supply chains and shifts in workforce demographics. With these disruptions, came extended project timelines and number of suspended building works.

With this in mind what can we do to protect our frames and trusses both off-site and on-site?

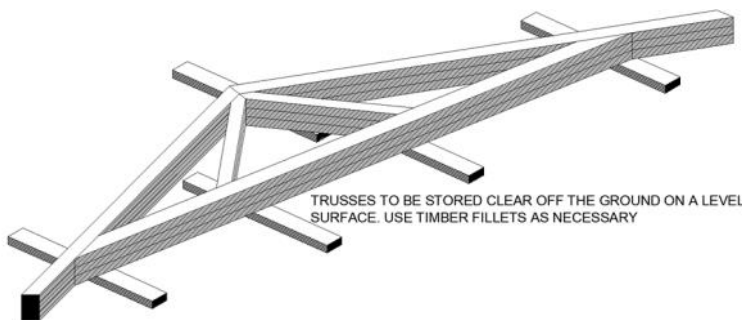
Let's start with off-site:

Protect Off-Site

Timber frames and trusses, that are awaiting delivery in your yard may be covered with tarpaulins or an impermeable membrane. They should be stored as per directives in AS 4440: Appendix E: E3 STORAGE. **The intent is to maintain environmental temperature and relative humidity of finished product.** If the prefabricated frames are breathing and remain relatively dry, they can be preserved for longer term.

Trusses when stored, should be on timber fillets clear off the ground and in a flat position to avoid distortion. Storage should be preferably in a sheltered location to limit exposure to UV radiations in direct sunlight, excessive thermal and moisture variations. Thermal and moisture variation together are a perfect recipe for nail plate back out. Prolonged exposure to UV radiations in direct sunlight will degrade cellulose structure of timber.

With use of LVL products in frames and trusses, it is even more important to control moisture exposure of the product.



Protect On-Site

Timber frames and trusses that have been erected on site also need sufficient protection. **All installed frames and trusses on site MUST carry minimum nominated bracing to keep them stable under natural forces of wind and storms.** While frames can sustain exposure to natural elements for up to 8 weeks, they tend to show signs of deterioration after that and would need an expert judgement to certify their 'fit-for-purpose' use.

It is best to complete roof cladding and to wrap wall frames in a permeable membrane on site. If roof cladding cannot be completed, at minimum would be to cover the roof system with permeable membrane, stapled or well secured in place.

If any ponding is noticed on floors on site, appropriate drainage provision should be made to remove excess water. All such works should be completed by a qualified trades person to maintain safety, compliance, and warranties on site.

At no point should we assume that such care is needed only for timber frames and trusses. Temperature variation and exposure to wetting plays an equally destructive role for steel frames and trusses. Fatigue failure and accelerated rusting of steel under stress are well known phenomenon. Storage and handling requirements of LG Steel is no different to timber products (Technical Bulletin TB-18, TB-7: BlueScope)

Considering we are all vested in our industry in one way or another, it is but prudent to safeguard our long-term interests if it comes at nominal expense.



This edition of FTMA Tech Talk was written by Varun Bharti, Technical Development Manager of our Principal Partner, MiTek.

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