

ANOTHER MITEK ADVANTAGE

STRUCTURAL FASCIAS ARE STILL RELEVANT



by **ROBERT TAN**
Senior Engineer,
MiTek Australia Limited

The humble timber fascia has steadily been surpassed by the more popular metal fascia for some years now.

But unlike most metal fascias, timber fascias perform an important structural function that should not and must not be forgotten.

Under certain applications, their presence is imperative for safety, beneficial for truss economy and helpful to achieve better eaves appearance.

The overhang corners of hip roofs are one such example of ensuring safety whilst working on the roof.

Jacks and creepers closest to the hip corner require the support of a structural fascia (Photo 1), usually a timber member that spans between the hip overhang and the truncated girder overhang, and is inserted behind the metal fascia.

Without a structural fascia (Photo 2 (A&B)), anyone who walks on the roof risks injury from falling off the hip corners should they accidentally step

on an inadequately supported creeper.

Gable end roofs are not exempt either.

A structural overhang is similarly just as important to support the gable eaves junction.

The corner formed at the intersection between eave and verge overhangs must be supported by structural bargeboards as well as structural fascias unless some other support system is in place.

In terms of economy, the overhangs of a normal run of standard trusses also benefit from the presence of a structural fascia.

The building code requires all roof structures to support a 140kg point live load that can be applied anywhere on the roof, which includes the overhang.

The size/grade of an overhang member has to be stronger if it has

to support the entire point load by itself, than if it were able to share that load with adjacent truss overhangs.

In general, neither roof battens nor light metal fascias adequately spread that point load, whereas a timber fascia does.

Consequently, the inclusion of



■ A worker risks falling off the roof when hip creepers are not supported by a structural fascia.

structural fascias result in potentially more economic truss designs.

Builders should take note from the truss supplier, who in turn, should always advise when structural fascias are an integral part of their trusses delivered to site.

Large overhangs and cantilevers also benefit from the presence of structural fascias even if they have been designed to carry the full point live load.

This arises from an appreciation that timber is a natural product which is not always perfectly straight nor has equally the same stiffness.

With small to moderate overhangs, these differences in deflections are negligible.

But when the overhang and/or cantilever distances are large, the variation in deflections could be visible. A stiff structural fascia will help tie the ends together to ensure an aesthetically level eaves line is achieved.

So before we misguidedly discard the structural timber fascia into history, their use still remains imperative in all trussed roof construction today.

For more information, contact your local truss supplier or nailplate manufacturer.



■ A structural timber fascia has been properly installed behind the metal fascia at a hip corner.



■ A worker risked injury to install these battens on a hip corner not supported by a structural fascia.