

SAFE PROPPING FOR BUILDERS

BACKGROUND

The Australian Roofing Tile Association (ARTA) is the peak body representing the concerns and interest of more than 90% of the roofing tile industry in Australia.

It is the builder's responsibility to assess site conditions, ensuring a high level of safety is maintained throughout the project. A separate Safe Work Method Statement (SWMS) can be prepared for each high-risk construction activity. ^[1]

INSPECTION

Props should be thoroughly inspected upon arrival for physical defects such as damaged/bent members or missing parts. These are deemed unsafe and should be replaced immediately.



INSTALLATION

Before installation, ensure:

- Top and base plate designs are suitable for the job
- The ground, masonry wall and roof/ceiling timber is in a stable condition and fully level
- The acrow prop is supported with sole boards for the base plate to rest on
- Props are positioned such that they will not be knocked or displaced during construction
- Personal protective equipment (PPE) should be used when working with acrow props

It is recommended to use 150x150mm steel plates with drilled holes for securing acrow props at the top and bottom to the adjacent timber members. Ensure no load is applied until the prop has been fastened and the props are structurally sound.



Load Distribution via Timber Frame

Vertically Upright Perpendicular to Ground and Roof

Even and Stable Ground Condition

Fixed Bottom with Base Plate and Correct Bolting

REVIEW (WHILE IN USE)

For any form of propping, the following rules and regulations must be strictly followed

- Avoid overloading which can cause the props to buckle and lead to collapse of the shoring system
- The props should remain perpendicular to the ground and the roof i.e. they should be perfectly vertical

MAINTENANCE AND STORAGE

Workers should inspect props-in-use before and after work commences ^[2].

Electrical wiring and cables should not be incorporated into propping systems.

All aspects of work with loadbearing construction should be carried out by competent person(s) with the advice and verified designs of a structural engineer ^[2].

Do not repair props on site without approval from the manufacturer.

Bundles (or individual props) should be stored flat and kept dry.

LEGAL REQUIREMENTS

All personnel on-site have a legal obligation to notify Workplace Health and Safety of any notifiable incidents including those exposing personnel to serious risk, regardless if no one is injured.

The minimum legal requirements as specified by Safe Work Australia when a notifiable incident occurs are that:

- The regulator must be notified;
- Written notification provided within 48 hours if requested; and
- Work is discontinued, the site is preserved until a regulator conducts their investigation.

An exemption to this rule is made when aiding injured personnel on-site and increase site safety.

REFERENCES

Roof installation works should be constructed in compliance with applicable regulations and legislation.

^[1] Safe Work Australia, December 2014, Safe Work Method Statement for High Risk Construction Work Information Sheet

^[2] Safesite Facilities: A Complete Guide to Acrow Props