

Technical Bulletin

No. A003AU
Release Date: 01/2007

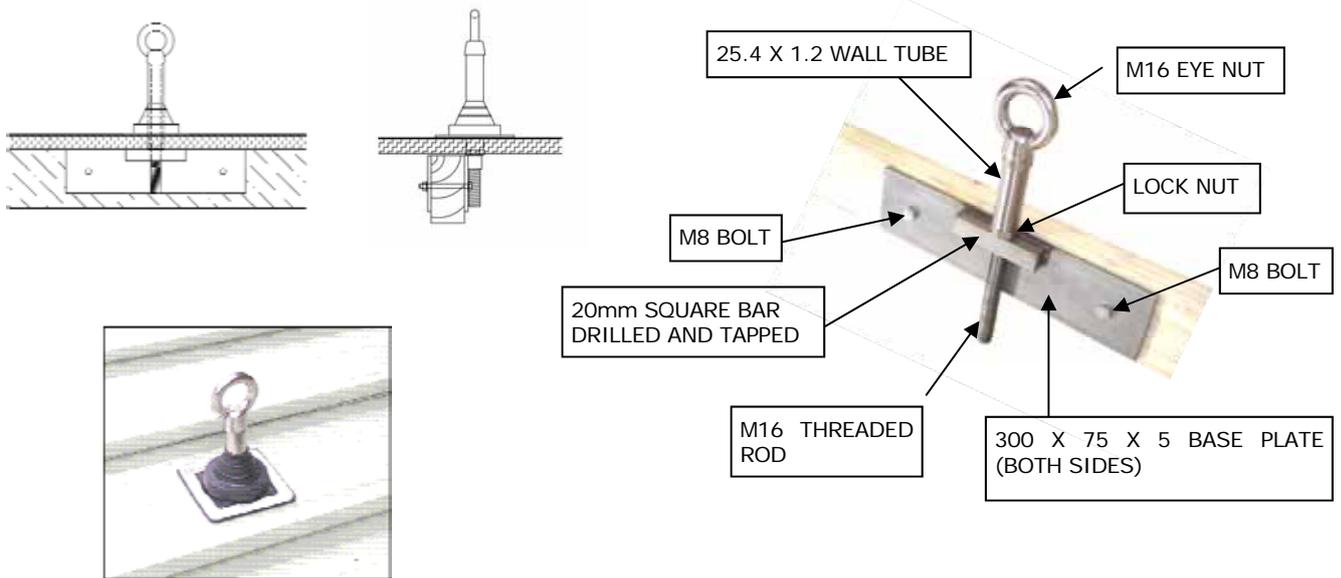
Permanent Roof Anchor (Model L4544)

The DBI-SALA Model L4544, 316 grade stainless steel Roof Anchor is designed and tested to fit a wide range of timber trusses, manufactured from F5 grade structural pine, including sizes 38mm x 90mm and 45mm x 90mm. It is suitable for both metal and tile roofs.

The roof anchor distorts during a fall, reducing the load applied to both the structure and the end user. Once the applied force rises above 200kg, the anchor deforms to dissipate the fall arrest loadings and prevent unnecessary bending in general use.

The anchor has been tested to ensure that loadings of 15kN can be statically applied to timber trusses, without releasing the load (required for a single person anchorage under AS/NZS 1891.4).

The drawing and pictures below show the roof anchor in its fixed position with the flat plates fitted to both sides of the timber truss using M8 bolts.



All static load tests conducted at Capital Safety's NATA accredited laboratory were carried out on both 38mm x 90mm and 45mm x 90mm F5 grade structural pine timber trusses. All tests were completed by applying a static force in the direction of load, along the length of the timber truss and were held for 3 minutes.



Capital Safety • 20 Fariola Street • Silverwater, NSW 2128 • Phone 02 9748 0335 • Fax 02 9748 0336

Roof anchors are typically used with fall arrest equipment manufactured to AS/NZS1891.1, designed to ensure that fall forces are kept to 6kN or less. Forces kept in this range significantly reduce the potential damage to the roof and materials, including the timber truss.

After an incident involving distortion of an anchor, a competent person is required to inspect the roof structure before refitting a new anchor. Roof anchors must also be inspected every 12 months by a competent person for signs of deterioration as per manufacturer's instructions.

AS/NZS 1891.1 defines a competent person as: *"A person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to correctly person a specified task."*

Capital Safety provides a warranty on product performance within the guidelines illustrated above. It is the responsibility of the building designer or building owner to ensure that the structure to which the roof anchor is attached will support a load of at least 15kN. If there is any doubt about structural adequacy, consult a qualified person such as a professional structural engineer to receive endorsement.