

Why test scaffold anchor ties?

The bones of scaffolding are made up of heavy metal tubes - each capable of inflicting heavy damage to people or property. Stack many of them up to the height of modern buildings in a populated high-street, or a busy building-site, and you have the potential for a disaster.

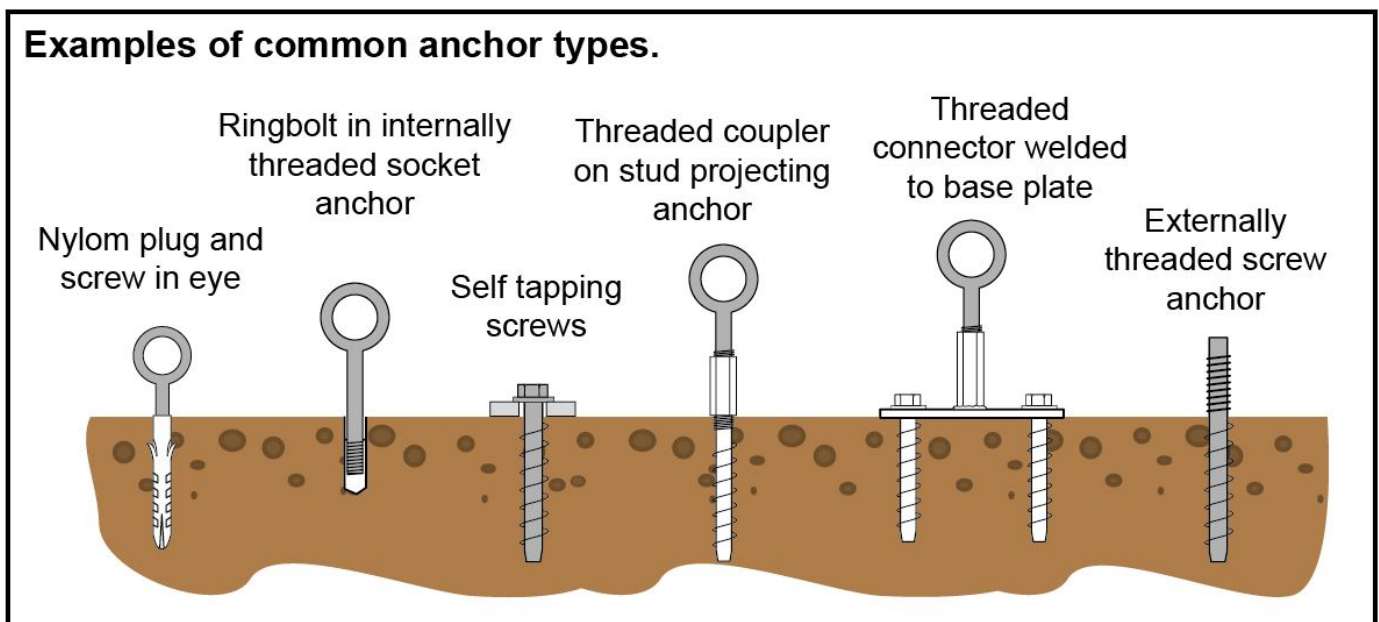
Even if damage or fatalities are avoided during a collapse - the scaffolder responsible could face a hefty fine and a custodial sentence. Also, the debris will have to be cleared and scaffold rebuilt - causing a delay in the completion and many wasted hours or days which will result in further costs.

These are more than enough reasons to ensure your scaffolding is safe and secure, and one important part of this is to test the scaffold anchor ties.



What is a scaffold anchor tie and what does it do?

The **National Access & Scaffolding Confederation (NASC)** is the trade body for access and scaffolding in the UK. The NASC Guidance Note '*TG4:19 - Anchorage Systems for Scaffolding*' describes several common anchor types, such as drop-in anchors, self-tapping screws and ring bolts.



Pictured above: Some examples of common anchor types.

A scaffold tie is the important connection that fastens the scaffolding to a solid building or body to prevent it from collapse. When installed properly in a system they create a resistance to opposing forces such as high winds and vehicle collision.

How should you test them?

An anchor may be strong enough and specifically approved for the job but if installed incorrectly or into a weak material they will be compromised and potentially fail. That's why testing on-site in the actual working conditions is so important.

The NASC Guidance Note 'TG4:19 - Anchorage Systems for Scaffolding' sets out requirements for two types of test:

- **PRELIMINARY TESTS** of scaffold anchors - to check the suitability and allowable loads of an anchor type in a particular base material

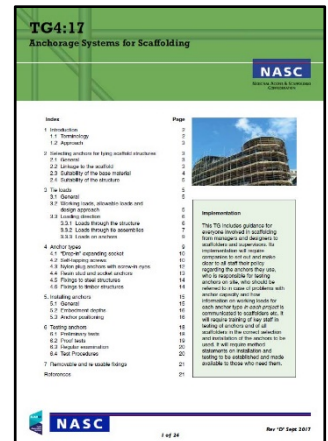
- **PROOF TESTS** - sample tests to check that anchors have been installed correctly – to be carried out on all jobs.

The TG4:19 describes a proof Load testing requirement is for a tensile test of 1.5 x the design load. For heavy duty ties with a capacity of 12.2kN this means a test load of 18.3kN.

The TG4:19 also describes the frequency of tests and appropriate quantities.

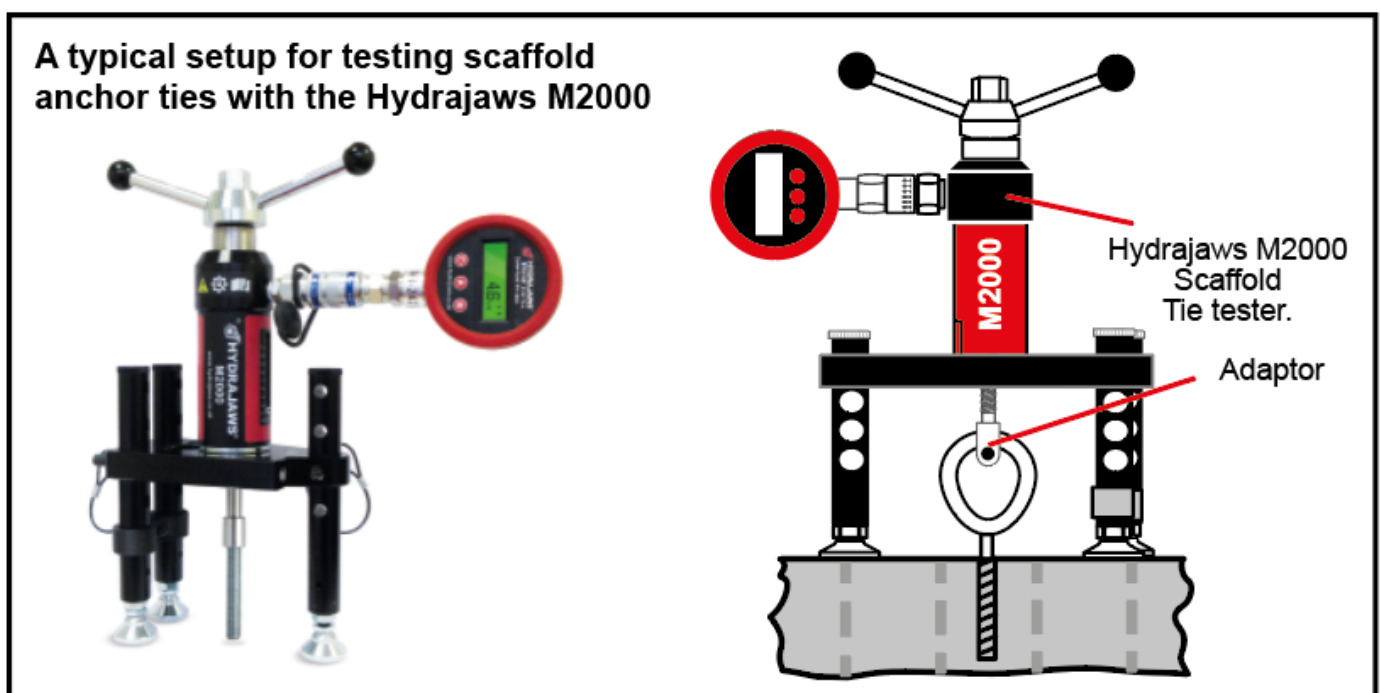
Download a copy from the NASC website for more information:

<https://www.nasc.org.uk/shop/technical-guidance/tg4-anchorage-systems/>



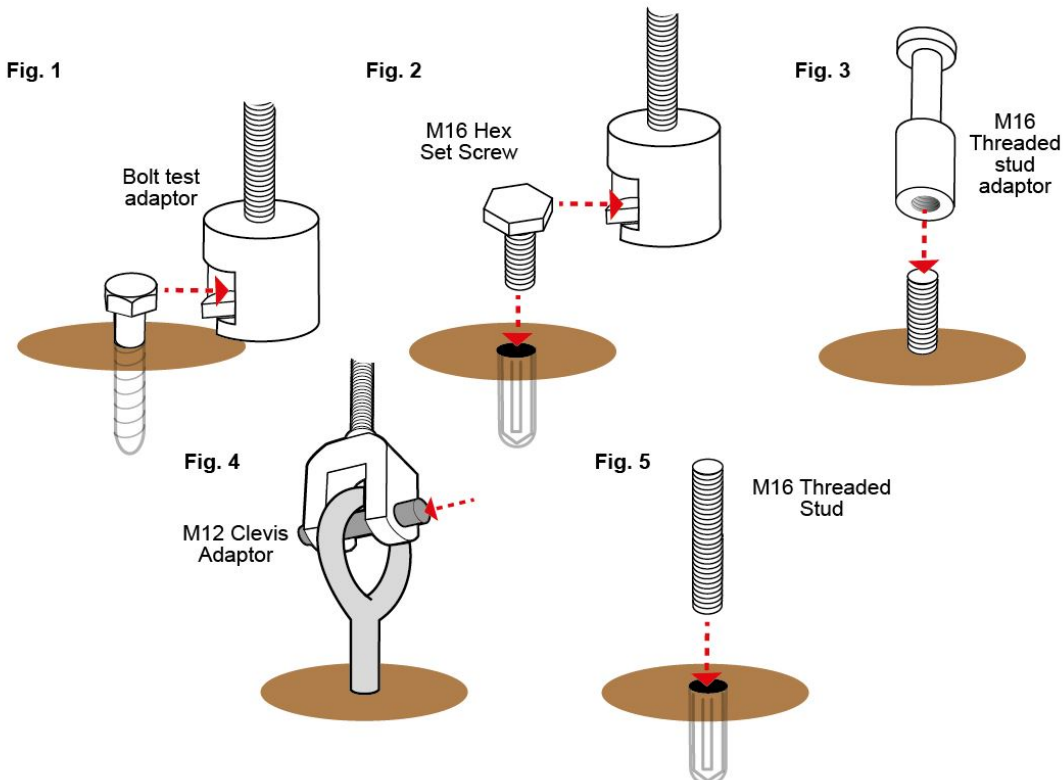
What can you use to test them?

The Hydrajaws Model 2000 Scaffold Tester kit is specifically designed for this job. It is easy to use and light to transport. It comes complete with a comprehensive full colour user manual and the backing and support of our technical team at Hydrajaws.



The Hydrajaws kit comes with several adaptors, to fit many common anchor tie fixings, including:

- 1. Bolt test adaptor.** This will test a typical hex bolt screw. This may have to be loosened off slightly to get underneath (fig 1).
- 2. M16 Hex set.** This can be placed in anchor holes and used with the ring bolt adaptor (fig 2).
- 3. M16 Threaded stud adaptor.** This can test anchors with exposed thread (fig 3).
- 4. M12 Ring bolt Clevis adaptor.** Used to test a typical eye bolt or anchors with screw-in eyes (fig 4).
- 5. M16 Thread.** Used with the threaded stud adaptor, this can test anchor points where no thread is exposed (fig 5).



And the addition of the 100mm Hex Extension legs give the unit extra reach and strength required for Scaffold Tie Tests.

Who can you trust to provide equipment?

You want your scaffold to be safe, compliant, professional and stable. At Hydrajaws we have been making portable tension testers for over 30 years and have the experience and knowledge to provide support and advice to help you avoid any problems testing the ties. All kits come with a full colour manual and several helpful videos are available on-line.

Scaffold safety can never be underestimated so only trust **reliable and established suppliers** - especially for your test equipment.

Call Hydrajaws 01675 430 370 or send an email to news@hydrajaws.co.uk for our latest deals.