

ULTRA ACCESS

The Lifespan of a Scaffold

How long should a scaffold remain erected and what effects it

Scaffolds are usually built to take far greater loadings, and to stand firm in all kinds of weather than they seem (on the surface) to be able to. But, once a scaffold is built, and regardless of how well an inspection regime is set up for it, due to the very nature of how they are built, not as solid units, fabricated - but as many, sometimes thousands of components and elements, all connected together, for a specific purpose - to become one singular structure...

... and because of this, there is a limit on the amount of time a scaffold should remain erect, before serious considerations have to be made into significant replacement / repair works, or to completely dismantle and rebuild from the ground up again.

Why? Well, heres 3 reasons: **Weather**, (natural) **Decay** and **Vibration**.

- **Weather** - if a scaffold is adversely affected by the weather / elements over a prolonged period of time, it would eventually have an impact its structural integrity.
- (natural) **Decay** - rust, rot and general wear and tear over many months, even if the scaffold is fairly well protected from the elements, it will eventually cause weaknesses, that could lead to safety issues.
- **Vibration** - is the one that catches out many Scaffolding Inspectors, Site Management and the like out, and its surprising how much vibration plays a significant role in making a scaffold structurally unsafe over long periods.

Lets not forget that scaffold fittings are only CLAMPED around a round Tube, not tacked / welded, or joined on any other kind of conventionally fixed way, like via through bolts, etc.

Even Impact Wrenches only have a certain level of torque, and once that is reached - the scaffold fitting is as tight as its going to get, and thats it... but in time, vibration could and has, on a number of occasions caused fittings to become loose and the scaffold to become unstable.

Theres 2 factors that causes these vibrations to occur - a **natural** one and a **human** one.

- **Natural factors** would be if the scaffold is fully encapsulated with Monarflex Sheeting, Shrink Wrapping, or something that lets little-to-no wind through. Then as the wind hits the structure, it would cause plenty of vibrations to reverberate through, and in time cause instability.
- The other being **human factors** where things like peoples and their equipments' movement along the scaffold, or even things like vibrations from vehicles close by, or trains etc - as well as within heavy mechanical plant rooms could cause, overtime said fittings to become loose.

NASC guidance states (paraphrasing) that a Tube and Fitting scaffold should be erect for:

- **6-12 months** - if the scaffold is situated in areas of outdoor harsh environments like those mentioned that could be adversely affected by the weather, decay, or vibrations.
- **12-24 months** - if the scaffold is situated in outdoor areas being exposed to mild and constant weather conditions, etc.
- **24-36 months** - if the scaffold is situated either indoors, or with significant sheltering from the elements, within a less challenging environment.

So, taking all that into account, please consider the points above when planning your scaffold works, and remember to include the costs in your prices / budget for possible, either significant repair programs or complete rebuilds after a certain amount of time, **it could save you money in the long run...**