

## ULTRA ACCESS

### Scaffolding Tip: Braces

The various types, and why “lateral bracing” is considered the strongest

**Braces** in scaffolding provide the main strength and integrity within the structure, transferring various loadings back to the strongest points = the **Node Points** (the part of the scaffold where the Tubes are connected together using Load Bearing Couplers).

There are various bracing sections in a scaffold, with the most common being;

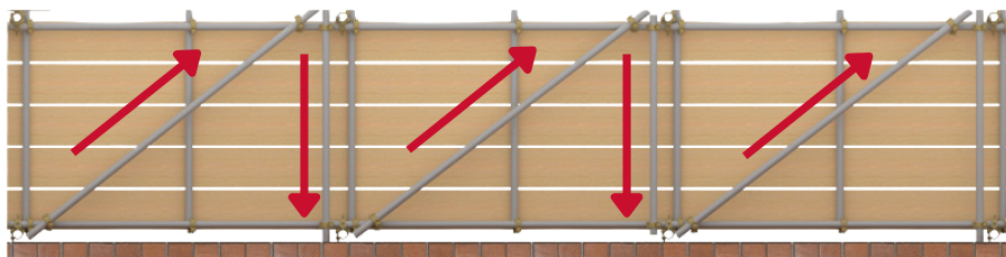
- **Ledger Bracing**, which is mostly installed at every other pair of (inside and outside) Standards (Uprights), and too within as close to the Node Point as possible, with a maximum tolerance being less than 300mm / 12 inches away as per **NASC's** TG guidance - they essentially reduce the chances of a scaffold from twisting outwards away from whatever it is tied in to.
- **Sway / Façade Bracing**, which reduces the amount of lateral / side-to-side movement in the structure, usually fixed into place with Swivel Couplers, and also being bound by the “300mm maximum from Node Point guidance”, as other Braces do.
- **Plan Bracing**, which is as the name suggests would be noticed if the scaffold was seen from the “Plan” viewpoint. It helps reduce the amount of force, which would otherwise lead the scaffold to buckle inwards into itself - where the “old way” to install this bracing was to “Dog Leg” them the guidance has since been changed in recent years due there being a strong way to install them...

There are other Braces like; **Knee Bracing** as used within Beamwork, **Church Bracing** which is sometimes used to structurally enhance Loading Bay “middle Ledgers”, especially when they are built deeper than others and **Cross Bracing** used to add considerably more strength to a structure - however it does somewhat restrict the movement of tradespeople through that part of the scaffold that has been “cross braced”, but for this publication we wish to speak about **Plan Bracing** specifically.

As demonstrated below, **Plan Bracing, installed Laterally**, used usually in Beamwork or in Pavement Scaffolds (should be installed using Load Bearing Couplers) and should “Chase”, **NOT** “Dog-Leg” the Structural “Aberdeen” Transoms along the length of the scaffold its needed for... as shown with the **RED ARROW** which highlights the direction of the impactal load, as it transfers outwards and back in, picking up every **Node Point** through the scaffold.

A much stronger Brace installation method, that's now both recognised as being TG compliant and to the current “best working practices”, due to the loading transference, leading back to each Node Point within the scaffold section.

**Added structural strength to a scaffold can only be a positive and safer overall option.**



\*Images used from current TG Operational Guidance book, owned by NASC