

ULTRA ACCESS Scaffolding Node Points

The strongest part of the scaffold structure

In the field of construction, scaffolding serves as a critical temporary structure that provides safe access / working platforms for other contractors during building, maintenance, or repair tasks. Central to the integrity and stability of any scaffold is the **Node Point**, which is also a fundamental concept in both scaffolding design and structural engineering.

A **Node Point** refers to the specific intersection or connection point / cross section where multiple scaffolding components meet and are securely joined. Typically, this is the junction between vertical **Standards** and horizontal **Ledgers**, with diagonal **Ledger Bracing** and **Structural "Aberdeen" Transoms** adding increased strength.

The significance of the Node Points cannot be overstated, as they are the critical load-transfer parts of / within the scaffold framework.

Properly secured Node Points ensure even distribution of forces - be it from workers, materials, wind, or other loads - preventing localised stress that could lead to buckling or worse.

Industry standards (and best practice), such as those in BSEN 12810 or **NASC's** TG20 guidelines, emphasise that (for instance) Scaffolding Ties anchoring the scaffold to the building should be placed as close as possible to the **Node Points** to maximise stability and resist lateral movement, or twisting - when under duress.

As shown here on this image the cross-section where the Double Coupler / Load Bearing Fitting connecting the Standard and Ledger, is a Node Point.

Now... **ULTRA ACCESS** would conclude that a Node Point, can be any part of the scaffold, that is both structurally important, and is connected together using Load Bearing Couplers.



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

Secure **Node Points** offer several key benefits.

They enhance overall structural rigidity, reducing the risk of sway or deformation under adverse conditions like strong winds.

They facilitate safe load distribution, supporting heavier forces without failure.

Not too mention that well-maintained Node Points extend the scaffold's service life and minimise accidents - loose and/or damaged connections have historically contributed to falls or collapses.

During the erection, alteration, or dismantling of a scaffold - it is **HIGHLY RECOMMENDED**, that the scaffolders take their time to check that each Node Point is suitably tightened and secure.

In short: the **Node Point** is the "backbone section" of a scaffold: a seemingly simple intersection that underpins the entire structures integrity.