The following Minimum Standard is applicable on all projects

This document provides a mandatory standard for the Unitas business to ensure the effective management of scaffolds, including Tube & Fit or System Scaffolds.

General Unitas Requirements applicable to this standard:

All Tube & Fit scaffolding must be erected in accordance with TG20:13 and scaffold operatives must work in compliance with SG4:15.

All scaffold companies working for Unitas must have a full copy of TG20:13 (including eGuide) and SG4:15.

System scaffolds must be erected as per the manufacturer's instructions and a copy must be supplied by the contractor to Unitas management for inspection purposes and be available on site.

All scaffolding contractors must have been vetted in line with Unitas Standards (NASC or equivalent based on independent audit).

Definition

TG20:13 is a technical guidance manual for Tube & Fitting Scaffolds Operations from the National Access & Scaffolding Confederation (NASC) that covers design, erection and use of scaffolds.

SG4:15 is the NASC guidance document for Preventing Falls in Scaffolding that has been developed to provide advice on the safest methods of erecting and dismantling scaffolds.

Planning

Scaffolding work must not commence until documented risk assessments and scaffold plan (Method Statement) have been provided by the scaffold contractor, with particular focus on the erection and dismantling sequence (including emergency rescue details).

Scaffolding work must not commence until a TG20:13 Compliance Sheet (or approved design), or the manufacturer's instructions (system scaffold) have been supplied.

Where the scaffold falls outside the scope of TG20:13 and specific scaffold designs have been provided then the design, calculation, must be processed using the Temporary Works Standard (SHEMS-STD-GR-048).

Edge protection for work on flat roofs requires a bespoke design in accordance with BSEN 13374.

All sheeting and netting must be installed on the external face of scaffolds as per TG20:13 unless design calculations have been provided and approved as per the Temporary Works Standard.

The use of impact wrenches by scaffold operatives, instead of or in addition to scaffold spanners is to be strictly controlled. Their use must be in accordance with NASC guidance which is available on their website www.nasc.org.uk

Inspection

Refer to the Post Inspection Form for guidance when undertaking a scaffold inspection (SHEMS-FOR-DPS-H-200 Post Inspection Scaffold Form)

Every scaffold must be inspected after receipt of the handover certificate and prior to use by a competent Unitas person wherever possible, ideally alongside the scaffolding supervisor.

Every scaffold must be inspected every seven days as a minimum by a competent Unitas person until handed back to the contractor, unless other arrangements have been put in place from an external provider.

Every scaffold must be inspected following any alterations, inclement weather such as high winds or anything that may have affected the stability of the structure e.g. contact by a vehicle.

All the above inspections must be recorded on form (SHEMS-FOR-GR-065) and logged within the scaffold register.

If contractors are used for pre-use inspections on behalf of Unitas then they must not be the same scaffolder/s that completed the erection and preferably a different company.

If contractors are employed to carry out inspections of scaffolds on behalf of Unitas then they will comply with this document standard.

Competence/Training

Any persons required to erect or dismantle any scaffolding must hold the specific competencies to undertake the work i.e. CISRS card including the additional system scaffold training.

Any scaffold that can be erected by a CISRS Scaffolder can be inspected by a CISRS Scaffolder…CISRS Advanced Scaffolder or a CISRS basic Scaffold Inspector.

Any scaffold that needs to be erected by a CISRS advanced Scaffolder (e.g. Temporary Roof) needs to be inspected by either a CISRS Advanced Scaffolder or a CISRS Advanced Scaffold Inspector (eg: Slung/drop scaffold, Cantilever drop, Dead, Raking or Flying Shoring, Temporary roof, Tube and fitting staircases over 1.5m high, Ramps).

External specialists may be required for the more complex design scaffolds.

Documentation

The following documentation must be checked and readily available:

- Scaffold request form and details
- Hand over certificate.
- Pull test details for ties (where installed).
- TG20:13 Compliance Sheet or Approved Design.
- Scaffold Plan (Method Statement), including risk assessment/s / SSOW which have been evaluated by Unitas.
- Proof that the Temporary Works Standard has been complied with including Permit to Load Certificates.
- Manufacturer's Instructions for system scaffolds.

<u>Physical Inspection:</u>

Never gain access onto an incomplete scaffold.

Ground Condition / Stability

Always start the scaffold inspection at ground level, starting with a general overview of the scaffold to get a feel for the quality of the structure.

Always carry out a detailed structured inspection, itemising separate elevations or sections for ease of reporting, give details of the scaffold type, size and specified use.

Start inspecting the scaffold by checking the ground conditions, sole boards, sole plates and the spacing of the standards in each bay, also check the standards are vertical.

Check the height of the first ledgers and the couplers that have been used to attach to the Standards (these should be double couplers).

Check that the façade bracing is correctly installed at the correct angle (between 35 and 55 degrees) and secured within 300mm of the node point (where the Ledger meets the Standard) and a minimum of every six bays spacing, bracing is usually fixed using swivel couplers to the Standards.

Note that your inspection should include the area where scaffolding has been delivered to ensure the ground conditions have not been disturbed causing an unsafe condition on site.

Safe Access

Only access scaffolds that have been handed over to Unitas by the contractor and where Unitas have received a completed hand over certificate.

Inspect the underside of the scaffold boards on the first lift of the scaffolding for transom spacing, poor quality boards, full width boarding of the platform and possible trap ends BEFORE gaining access to that lift.

Where a ladder has not been provided to access the first lift then the inspection for scaffolds up to six meters high can be undertaken from ground level although it is preferable to access the scaffold.

Check that all ladder access points are safe for you to use including the ladder angle, secure ladder gates and drop down hatches are in place on multiple lift scaffolds. Check that gates etc. are in good order and that they work correctly. Check that ladders are correctly tied or clipped in place and that it extends above the platform by a minimum of 1.05m before using the ladder/s to access the higher lifts. ALWAYS use ladders to access scaffold, ALWAYS check that the platform is boarded and hand rails are in place before you walk along scaffold. NEVER gain access to scaffolds by walking up braces etc.

Before leaving the ground and starting to climb up subsequent lifts of scaffold, ensure that the scaffold is suitably secured by ties or rakers (this should be as detailed on the compliance sheet or the specific scaffold design. and compliant with TG20:13).

Check guardrail height and maximum spacing between rails and toe boards in accordance with the Work at Height Regulations 2005 (min 950mm, max gap 470mm) and that extra guardrails are in place when required e.g. roof access scaffold, change in platform level, etc.

Structural Stability

As you proceed with the inspection, check that the tie pattern is correct and wherever possible physically check by hand that a tie is secure and not loose. Where there is a doubt over the security of a tie, highlight this on your report identifying as far as possible the position of the tie (use the tag number where fitted). Consider recommending on your report that the tie is “pull tested”.

Check for adequate bracing as you proceed, as per the “compliance sheet” or design (e.g. ledger braces on alternate bay and end bays. (Ledger braces can’t be omitted from a scaffold unless the transoms are prefabricated transom units and it states so on the “compliance sheet” and that the transom units are TG20:13 complaint OR if it specifically states on the scaffold design drawing that the ledger braces can be omitted).

Carefully check scaffold couplers, highlighting on your report when incorrect fittings have been used, particularly important when fixing ties, i.e. always load bearing fittings. A minimum of 25mm of tube must protrude through the couplers.

Check on the loads imposed on the platforms by any equipment or material against the information on the hand over certificate, indicate on reports where this is present and noting whether it is safely stored / used.

Check very carefully the bracing (including plan bracing), connections and requirements for check fittings in beam work, cantilever, and slung scaffolds.

Is the structure the scaffold is tied into structurally sound and able to stabilise the scaffold?

Public Protection

Check on the level of public protection provided such as soft sponging on standards, barriers / fencing, warning signs, fans, means of preventing access from balconies and double boarded platforms over walkways/ Doorways etc.

Other Issues

Check for other hazards, for example overhead electrical cables etc.

Report

When recording any fault identified during the inspection, specify why the fault was present e.g. erection fault, interference by other trades, and advise the best way of rectifying the fault for the scaffold contractor.

Make a note on your report of any poor quality or defective scaffolding material. Digital photographs are to be taken where appropriate to record good practice and bad practice and any faults observed.

Record on your report if you observe during the inspection any Scaffolder or others working unsafely, removing or interfering with the scaffold, report this verbally to the site management (and confirm the name of the person informed on your report).

If you consider the scaffold (or part of the scaffold) to be unsafe for use, you must inform Unitas management *immediately* in order for work to be stopped and rectification of the issues to be undertaken.

Complete and sign scaffold inspection report sheet.

Record your inspection within the site register in accordance with Regulations 12, 13 and Schedule 7 of the Work at Height Regulations 2005.

As a guide, the following items are considered the most common serious faults that will determine the structure unfit for use.

- Imminent and foreseeable risk of injury to scaffold users or others in the area due to the construction or use of the scaffolding.
- Imminent and foreseeable risk of collapse or partial collapse of the scaffold due to major structural faults (e.g. lack of ties, not erected to “compliance sheet” / scaffold design, unauthorized scaffold alterations or other factors).
- Omissions / faults in the access/egress to the scaffold, working platforms, guardrails, toe boards, ladders etc. that is foreseeable to cause falls and / or injury to scaffold user or others.

Leave a copy of the handwritten report on site where possible with contact details (unless instructed otherwise) and confirm date for next visit if required. Ensure that the electronic or paper copy of the report reaches management as soon as possible and not later than 24 hours following a statutory scaffold inspection.

Basic Scaffold Components:

Right angle coupler
A load-bearing coupler used to join tubes at right angles.

Putlog/Single coupler
A coupler used for fixing a putlog or transom to a ledger.
Not a load bearing fitting

Base Plate & Sole Board
Metal plate with a spigot for distributing the load from a standard or rakers. Sole board min 450mm x 220mm x 36mm. The bottom of the standard must be in good condition and the base plate must be centred on the sole board.

Swivel Coupler
A load-bearing coupler for joining tubes at any angle when the use of a right angle coupler is not possible.

Scaffold board clip
Used to secure scaffold boards to scaffold without creating a trip hazard.

Adjustable base plate
A metal adjustable base plate.

Sleeve coupler
An external coupler used to join one tube to another in line. The ends of both tubes must be square and inserted into the coupler until they touch the metal pin.

Node Point
Theoretical point where two or more members are connected together usually a Standard / Ledger / Transom/ Brace.

High Vis Treader
These are not a suitable replacement for sole boards and can only be used on independent scaffolds up to 3 lifts high.

Components not allowed on Unitas Sites
Spigot pins & reveal ties

Scaffold Design Matrix (These types of scaffold constructions will require a design)

Additional Scaffold Design input is required on any scaffold or element of a scaffold that is not classed as 'TG20 Compliant'.
The following scaffold structures normally require bespoke Scaffolding Designs.

1. Scaffolds for which a *"TG20 Compliance Sheet"* can't be produced
2. All shoring scaffolds (Dead, Raking and Flying)
3. Cantilevered scaffolds (if a *"TG20 Compliance Sheet"* can't be produced)
4. Truss-out Scaffolds
5. Façade retention
6. Access scaffolds with more than the 2 working lifts
7. Buttressed free-standing scaffolds
8. Temporary roofs and temporary buildings
9. Support scaffolds
10. Complex Loading bays (if a *"TG20 Compliance Sheet"* can't be produced)
11. Mobile Towers
12. Temporary ramps and elevated roadways
13. Tube & Fittings Staircases and fire escapes
14. Spectator Terraces and Seating Stands
15. Bridge scaffolds (if a *"TG20 Compliance Sheet"* can't be produced)
16. Towers requiring guys or ground anchors
17. Offshore scaffolds
18. Pedestrian footbridges or walkways
19. Slung and Suspended scaffolds
20. Protection fans (if a *"TG20 Compliance Sheet"* can't be produced)
21. Pavement gantries
22. Marine scaffolds
23. Boiler scaffolds
24. Power line crossings
25. Lifting gantries and towers
26. Steeple scaffolds
27. Sign board supports
28. Sealing end structures and temporary screens
29. Temporary Storage on Site
30. Masts, Lighting Towers and Transmission Towers
31. Advertising hoardings/banners
32. Rubbish chute

Note 1: The above list is not exhaustive and any system scaffold and or system component that does not comply with manufacturer's guidelines (including system scaffolding staircases) as published in handbooks will require a specific design produced by a competent person.

Responsibilities:

All senior managers are responsible for monitoring the implementation of this standard.

Operational Managers / Supervisors must ensure:

Compliance with this minimum standard.

Commercial / Procurement must ensure:

That scaffold contractors are either members of NASC or are audited by Unitas and authorised as an approved subcontractor.

Scaffold contractors must ensure:

They either have NASC membership or are audited by Unitas and authorised as an approved subcontractor.

They have a full copy of TG20:13 (including eGuide) and SG4:15.

All Tube & Fit scaffolding is erected to TG20:13 and in compliance with SG4:15.

They provide CISRS qualified teams.

They provide adequate supervision (including suitable ratio of supervisors to scaffolders).

They provide Unitas with all applicable documentation e.g.:

- Hand over certificate
- Pull test details for ties (where installed)
- TG20:13 Compliance Sheet or Approved Design.
- Manufacturer's instructions for system scaffolds
- Scaffold Plan (Method Statement), including risk assessment/s / SSOW
- Evidence of CISRS qualified teams and any other requested training e.g. asbestos awareness.

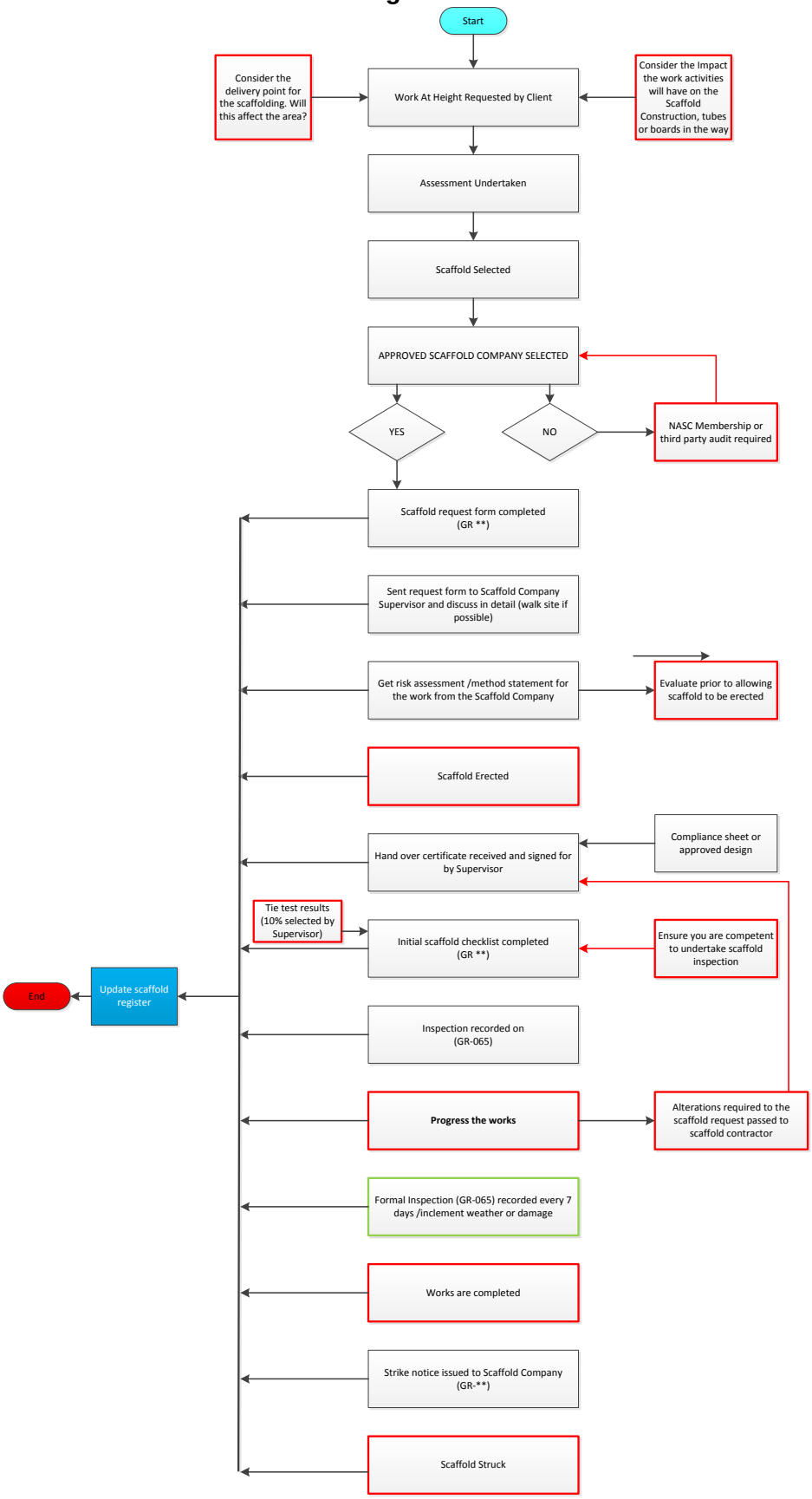
Operatives must ensure:

They work in accordance with their training and the agreed safe systems of work.

They do not make any unauthorised adjustments to the scaffold.

Unitas management are made aware of unsafe situations.

Other guidance:

- Working on, Near or Adjacent to Water Standard (SHEMS-STD-GR-047)
- Temporary Work Standard (SHEMS-STD-GR-048)
- Work at Height Standard (SHEMS-STD-GR-049)
- Tethering of Tools Minimum Standard (SHEMS-MST-DPS-0006)
- Preventing Unauthorised Access onto Scaffolds from Occupied Premises Minimum Standard (SHEMS-MST-DPS- 0016)
- Protection of Public Minimum Standard (SHEMS-MST-DPS-0019)

Scaffold Management Flowchart