

Campus Division

# Scaffold Procedure

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#### Version History

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1.0	<ul> <li>Replacement of HAS-GD-002, with new requirements which include:</li> <li>Requirement to include TG20 or design drawings to Permit to Work requests</li> <li>Non-working scaffolds must be inspected at least monthly.</li> <li>Requirement to alarm certain scaffolds.</li> <li>Requirement to log scaffold structures on scaffold register.</li> </ul>	04/11/2022	I.Mellings	19/12/2023

# Contents

1	Overview	3
1.1	Purpose	3
1.2	Clause Reference	3
1.3	Scope	3
1.4	Revocations	3
2	Definitions	3
3	Responsibility	4
3.3	Project Managers	4
3.4	Scaffold Orders	4
3.5	Maintenance Managers	4
4	Procedure	5
4.1	Scaffold Design	5
4.2	Scaffold Erection and Dismantling	5
4.3	Permits to Work	5
4.4	Scaffold Use.	6
4.5	Scaffold Inspection	6
4.6	Scaffold Inspection Reports	7
4.7	Scaffold Alarming	7
4.8	Mobile Scaffold Towers	9
4.9	LOLER	9
5	Forms to be Used	9
6	References	9
6.1	Internal References	9
6.1.1	Procedures and Policies	9
6.1.2	Other Internal References	9
6.2	External References	9

# 1 Overview

# 1.1 <u>Purpose</u>

- 1.1.1 One of the high risk areas for potential injury is the erection and use of scaffolding in and around buildings. Staff, students and members of the public will come into close proximity to scaffolds at one time or another. These people will not be wearing head protection and thus a potential risk exists of injury from falling objects whilst a scaffold is either in use or is in the process of erection or dismantling. Scaffolds are also at a high risk of unauthorised access from students and members of the public, who would therefore be at risk of falling from height. Therefore it is important to ensure scaffolds are kept secure to prevent this but also safe in the event of unauthorised access.
- 1.1.2 The purpose of this document is to set down procedures that must be followed to ensure that erection and dismantling of scaffold is carried out safely and to further see that whilst a scaffold is in place it is inspected regularly to ensure that it is safe to use.
- 1.1.3 Specific responsibilities are put upon members of the Campus Division to see that systems and procedures are followed. Naturally, the workplace cannot be kept under permanent surveillance and it is thus important that action is taken by anyone who sees a potentially dangerous incident occurring whilst a scaffold is in use.

## 1.2 Clause Reference

1.2.1 ISO 45001:2018 Clause 8 Operation, Planning and Control

## 1.3 <u>Scope</u>

This applies to any person[s] responsible for specifying, procuring, designing, erecting, altering, dismantling, managing and using of scaffolds on UOB premises.

## 1.4 <u>Revocations</u>

1.4.1 This documents replaces HAS-GD-002

## 2 Definitions

Clause	Term	Meaning
2.1	Installation	Putting into position
2.2	Assembly	Putting together
2.3	Scaffold Erection	To build a scaffold
2.4	Scaffold Dismantling	To take the scaffold apart
2.5	Scaffold Modification	Making alterations to the scaffold
2.6	Project Manager	The University or Campus Division representative who has commissioned the works. This may, for example but not limited to, a Building Surveyor, Maintenance Manager, or Facilities Manager
2.7	TG20:21	The National Access & Scaffolding Confederation definitive guidance for scaffolding constructed with tube and fittings throughout the UK.

## 3 Responsibility

- 3.1 The procedure is owned by the Campus Division Health, Safety & Quality Assurance Team.
- 3.2 Those responsible for the erection, dismantling, use and inspection of scaffolds on UOB property are also responsible for ensuring that all scaffolds and activities related to the scaffolds comply with the University requirements.

## 3.3 Project Managers

- 3.3.1 When contract documentation is drawn up for new build or refurbishment work the project manager (contract administrator) shall ensure that the procedures required under this instruction are detailed in the contract conditions (preliminaries).
- 3.3.2 Where there is more than one contractor engaged under separate contract it is advisable that only one takes the lead in terms of site co-ordination and access, N.B. this may require an additional payment for "attendance" upon others. It is essential that there is no confusion over responsibility for scaffolds; a particular hazard arises from unauthorised modification by untrained personnel which could lead to loose boards and falling bodies or objects. The project manager should have sufficient knowledge of the scope of work involved to ensure that responsibilities are fully appointed under contract terms. Project managers must also ensure that all scaffold structures are added to the scaffold register, and are alarmed as appropriate [see 4.7.1].
- 3.3.3 Project managers are responsible for the reporting and investigation, where necessary, of any scaffold related incidents or near-misses, such as unauthorised access or unsafe sites/structures.
- 3.3.4 Project managers must communicate the requirement to attend a Campus Division Contractor Induction to all contractors and subcontractors working with scaffolds.
- 3.3.5 Project managers must ensure that contractors engaged to erect on behalf of the University of Bristol are competent to design, erect, alter, dismantle or inspect scaffolds are trained and competent to do so. As a minimum, scaffolding contractors must have the appropriate CISRS or PASMA qualification, suitable for the type of scaffold structure they are working with.

## 3.4 Scaffold Orders

3.4.1 Any person placing orders for scaffolds directly shall ensure that the necessary inspections, detailed in section 3, take place and for making the necessary arrangements with in-house inspectors.

## 3.5 Maintenance Managers

3.5.1 The Maintenance Managers shall ensure that relevant maintenance personnel are fully trained and competent in the inspection, erection and use of mobile scaffold towers. Refresher training is important given the relatively low frequency of use of the skills and knowledge involved. The equipment must be inspected at regular intervals as specified by the manufacturer to ensure that it is suitable for the works being carried out.

# 4 Procedure

## 4.1 Scaffold Design

4.1.1 All scaffolds must be built and modified to either TG20:21 or as a bespoke design scaffold by a competent scaffold designer.

#### 4.2 Scaffold Erection and Dismantling

- 4.2.1 The greatest risk of injury from falling objects occurs whilst scaffolds are being either erected or dismantled. If a scaffold spans a footpath or public right of way then steps must be taken to ensure that passers-by are protected. If possible scaffolds should be erected away from footpaths and roadways, if this is not possible then the occupants of the particular building must be informed in order to ascertain any particularly busy periods when risky work should be avoided. If a scaffold is to be erected on the highway the local authority will have to be consulted and a "pavement licence" obtained. Conditions attached to this issue of licence must be complied with.
- 4.2.2 During erection, dismantling or modification the area beneath the scaffold must be cordoned off to prevent bystanders entering the area. There are no specific requirements as to the dimension of such an area, this will depend upon the height of the scaffold and other local factors, e.g. other obstructions. It is recommended that a minimum distance of 2 metres around each side of a scaffold is cordoned off and signed before erection, dismantling or modification takes place.

#### 4.2.3 *Protecting the public*

- 4.2.3.1 When towers are used in public places, extra precautions are required:
  - erect barriers at ground level to prevent people from walking into the tower or work area;
  - minimise the storage of materials and equipment on the working platform;
  - remove or board over access ladders to prevent unauthorised access if it is to remain in position unattended.
- 4.2.3.2 It is preferable also to close footpaths completely rather than to leave a narrow corridor for pedestrians, even if this means that entrance and egress from a building is restricted.
- 4.2.3.3 Scaffolds must not be erected in such a way that emergency exits are not blocked or impeded; contractors and scaffolders must thus be made aware of the location of emergency exits. During dismantling or erection an emergency exit may become partially impeded, the length of time over which this occurs should be kept to a minimum and a scaffolding operative must be present during this closure.

#### 4.3 Permits to Work

- 4.3.1 A Permit to Work is required for both erecting/modifying/striking a scaffold, and working at height from a scaffold. See HAS-SP-006 Permit to Work Process, and the Campus Division Permit to Work page for more information: <u>Campus Safety and Health (sharepoint.com)</u>
- 4.3.2 Scaffold drawings must be submitted for approval during the permit to work process alongside risk assessments and method statements. Scaffolding permits to work will

not be approved without these drawings.

#### 4.4 Scaffold Use

- 4.4.1 All scaffold users shall be trained in the potential dangers and precautions required during use.
- 4.4.2 Unauthorised access to the scaffold shall be restricted at all times, especially when the scaffold is not in use. This includes scaffold alarming [see 4.7], fencing and barriers, removal of ground to first lift ladder, or use of ladder guards where ladder removal is not reasonably practicable.
  - 4.4.2.1 Ladder guards must be made out of a sturdy material, that are locked or padlocked into place. Rope lashing is not acceptable. They must make each rung unusable and should cover at least 6 rungs. They must not be able to slide over the ladder stile, thereby exposing the rungs. They must not be able to tilt or pull away from the ladder rungs should not be exposed at the front or be climbable from the rear. Carrying slots, if provided, should be vertical (along the long axis of the guard) not horizontal where they could be used as a foothold and handles, if fitted, should not provide an alternative foothold.

#### 4.5 <u>Scaffold Inspection</u>

4.5.1 The Work at Height Regulations 2005, Regulation 12 detail the standards required of completed scaffolds and the on-going routine inspection of them until dismantling:

'(2) Every employer shall ensure that, where the safety of work equipment depends on how it is installed or assembled, it is not used after installation or assembly in any position unless it has been inspected in that position.

(3) Every employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations is inspected—

(a) at suitable intervals; and (b) each time that exceptional circumstances which are liable to jeopardise the safety of the work equipment have occurred'.

See regulation 12 for more details.

- 4.5.2 Once erected and before being taken into service any scaffold must be inspected by a competent person, which includes:
  - CISRS Scaffolder cardholder
  - CISRS Advanced Scaffolder cardholder
  - CISRS Basic Scaffold Inspection Training Scheme Course SITS for basic scaffold structures.

Whilst being used as a working scaffold thereafter there shall be an inspection once per week. Additionally, an inspection shall take place after bad weather or after any modifications have taken place. All scaffolds, even when not in use, shall be inspected at least once a month, or more regularly if deemed necessary in the risk assessment.

- 4.5.3 Inspection Responsibilities
  - 4.5.3.1 The scaffolding company engaged on behalf of the contractor is responsible for the regular inspection of scaffolds by a competent person, and recorded, as detailed above.
  - 4.5.3.2 The contractor is responsible for arranging scaffold inspections and monitoring to ensure these are done by competent persons and recorded in accordance with UOB procedure.
  - 4.5.3.3 Campus Division is not responsible for carrying out routine inspections of scaffolds. However, project managers of any works including scaffolding must monitor to ensure that the required inspections are carried out and that evidence of the inspection is available, either on-site on the scaffold itself or in a record book kept centrally.
  - 4.5.3.4 All employers and people in control of construction work should make sure that places of work are safe before they allow their workers to use them for the first time.
- 4.5.4 In a construction or refurbishment environment it is important that contractors follow the required procedures in full, with particular reference to sub-contractors who may organise their own access either directly or by a further level of sub-contract.
- 4.5.5 All scaffolds erected on University premises which are in excess of 2m in height from the ground shall carry a "Scafftag", or similar, inspection record which contains removable record card on which inspections are entered. Should a scaffold be unsafe to use the record card is removed revealing a "DO NOT USE" sign warning personnel not to use the scaffold. This system fails safe in that if the record card is missing it will be assumed that the scaffold is unsafe to use, it further gives a quick and easy reference that inspections are up-to-date.
- 4.5.6 Stop work if the inspection shows it is not safe to continue.
- 4.6 Scaffold Inspection Reports
- 4.6.1 All scaffold inspections need to be recorded in a scaffold inspection report. This report should be submitted to the project manager within 48 hours with a copy on site until the project/work is complete. The contents of a scaffold inspection report are a statutory requirement, as defined by the Work at Height Regulations 2005 (Schedule 7), and these are:
  - The name and address for the person that the inspection was carried out for
  - The name and position of the person carrying out the inspection
  - The date, time and location of the inspection
  - A through description of the scaffolding structure
  - Clear details of any risks identified
  - Clear details of the actions taken out to rectify issues
  - Details of any further action that is deemed necessary
- 4.6.2 Reports must be kept on site until the work is complete. Reports should then be kept for three months at an office of the person for whom the inspections were carried out.

#### 4.7 <u>Scaffold Alarming and Register</u>

4.7.1 Scaffold alarms are a pre-requisite where intrusion is reasonably foreseeable. This includes but is not limited to scaffold structures erected in areas at possible risk from unauthorised persons seeking to climb the structure or are located in remote or isolated locations. The scaffold must be fitted with a local scaffold alarm able to detect persons climbing up or through the scaffolding. The installation of scaffold alarm to be in place on the day of scaffold erection, to avoid a gap in cover post

erection. In line with UoB arrangements, all work involving the erection, modification, use and/or striking of scaffold requires a permit to work.

- 4.7.2 Acceptable scaffold alarm system installation:
- 4.7.2.1 An alarm linked to the University of Bristol Security Control Room can be installed by request via the Security Systems Manager, or the Security Systems Coordinator, by email. This can be found on the <u>Security Contacts page</u>.
- 4.7.2.2 Alternatively, a third-party scaffold alarm system may be used if the alarming is installed to a suitable standard as set out below:
- 4.7.3 Scaffold Alarm Specification
- The system must be installed by a professional alarm installer qualified to BS EN 50518
- To meet the minimum requirements of the SSAIB Temporary Alarm Systems for Scaffolding or the NSI standard NCP115, the entire first vulnerable lift and the end of the scaffolding must be fully protected by way of Infrared Photoelectric beam Sensors and Dual Tech PIRs creating an active alarmed perimeter around the building or structure. However, depending on the size, shape and other factors including flat roofs, vulnerable windows, neighbouring high walls, or where access can be gained from within a building etc additional sensors maybe required for complete protection.
- Sensors specifically designed for external outdoor use resistant to intrusions usually caused by wildlife, inclement weather and loose construction materials are recommended to prevent/reduce false alarm activations.
- The alarming must be monitored by a third party UKAS approved alarm receiving centre (ARC) monitoring service on a 24/7 basis. The ARC will monitor the alarm and are tasked with contacting the UoB Security Control Room if the alarm goes off.
- If the system becomes faulty, the ARC must provide 24-hour response by qualified engineer to resolve the issues.
- Where required, all relevant information to allow access to alarm engineers to resolve any issues must be in place and be appropriately communicated to all relevant parties i.e., the UoB contact, UoB Security, Contractor Site Manager/Supervisor etc.
- The alarm panel keypad must be located in an area where it can be accessed so it can be silenced, reset, re-armed etc, and necessary codes provided to all relevant parties.
   The alarming regime for when the alarm is active must be agreed and shared with UoB Security. (e.g. activated weekdays end of day at 5pm and deactivated 8am next morning then activated 24/7 Saturday and Sunday etc.)
- Consideration must be paid installing a 'Silent alarm' bell with strobe lighting on activation in areas where scaffold is installed in those areas determined to be of considerable residential use.
- Access to the keypad must be 'safe' easily accessible at ground level and outside of the building site/area. However, the alarm panel should be located in a more secure location. Ideally protected by the alarm itself.
- 4.7.4 Scaffold Alarm register: The CD Scaffold alarm form and register can be accessed online via SharePoint. This enables all internal parties real time access to the register. Non UOB staff can request a copy of the register from their UOB contact, a member of the CD HSQA team, or any UOB staff member. All scaffold structures must be added to the Scaffold Register, even when an alarm is not required.
- 4.7.5 Emergency Works: In the event of emergency works, if the scaffold structure remains

in situ, a permit to work request must be submitted within 48 hours, and this permit to work request must state whether or not the scaffold is yet alarmed. Additionally, the scaffold must be logged on the scaffold register, and a scaffold alarm must be installed retrospectively, to cover the remaining period of the installation.

#### 4.8 Mobile Scaffold Towers

- 4.8.1 Mobile temporary access towers shall only be erected by trained personnel and shall be subject to the requirements above if they are required to stay up for a period exceeding 7 days. For periods less than 7 days the competent person erecting the scaffold shall ensure that the structure is safe to use.
- 4.8.2 Mobile Scaffold towers should only be used where access is required for suitable short duration tasks, they are generally unsuitable for major installation work or that involving the use of heavy tools.

## 4.9 <u>LOLER</u>

4.9.1 All lifting equipment used must be inspected and examined in accordance with LOLER Regulation 9

## 5 Forms to be Used

- 5.1 Scaffold Register Form
- 5.2 Scaffold Register for Contractors Form

#### 6 References

- 6.1 Internal References
- 6.1.1 Procedures and Policies
- 6.1.1.1 HAS-SP-006 Permit to Work Process
- 6.1.1.2 HAS-SP-012 Working at Height Manual
- 6.1.1.3 HAS-GD-009 Rules for Contractors
- 6.1.2 Other Internal References
- 6.1.2.1 None

## 6.2 External References

- 6.2.1 The Work at Height Regulations 2005
- 6.2.2 The Lifting Operations and Lifting Equipment Regulations 1998
- 6.2.3 Safety in Construction Works (Scaffolding), H&SE guidance note 6D.
- 6.2.4 Tower Scaffold Info Sheet Construction Information Sheet No 10 (Revision 4)
- 6.2.5 Inspections & Reports Scaffolding Construction Information Sheet No 47(rev1)
- 6.2.6 BS EN 12811-1 Temporary works equipment Part 1: Scaffolds Performance

requirements and general design

- 6.2.7 TG20:21 A Guide to Commissioning Scaffold Design
- 6.2.8 <u>HSE Scaffolds</u>