



نظام الشارقة للسلامة والصحة المهنية
Occupational Safety & Health Sharjah

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هيئة الوقاية والسلامة
Government of Sharjah
Prevention And Safety Authority



Guideline

Scaffolding

OSHJ-GL-03

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1 Introduction

Scaffolding is a temporary structure which supports its own weight as well as the weight of employees and the materials they use. Types of scaffolding vary depending on the work activities required which can include; construction, maintenance, inspection and more. Regardless of the type and use of scaffolding, employees should be safe and protected from falling when erecting, dismantling or working on scaffolding.

2 Purpose and Scope

This Guideline document has been developed to provide information to entities to assist them in complying with the requirements of the Occupational Safety and Health System in Sharjah.

To achieve compliance in the Emirate of Sharjah, all entities are required to demonstrate a standard of compliance which is equal to or higher than the minimum acceptable requirements outlined in this Guideline document.

This Guideline document refers only to scaffolding systems, it does not include mobile access towers or mobile elevated work platforms (MEWP). This document is not a technical guidance document and does not give detailed recommendations or guidance on special scaffolds such as cantilever, truss-out or slung scaffolds. Information in this document needs to be read in conjunction with the manufacturer's manual and any scaffold design provided.

Further information on mobile access towers can be found in OSHJ-GL-04: Mobile Access Towers.

Further information on MEWP's can be found in OSHJ-GL-02: Mobile Elevated Work Platform.

3 Definitions and Abbreviations

Entities:	Government Entities: Government departments, authorities or establishments and the like in the Emirate. Private Entities: Establishments, companies, enterprises and economic activities operating in the Emirate in general.
Risk:	Is the combination of likelihood of the hazard causing the loss and the severity of that loss (consequences).
Risk Assessment:	The systematic identification of workplace hazards and evaluation of the risks associated. This process takes existing control measures into account and identifies and recommends further control measures where required.
Hazard:	Anything that has the potential to cause harm or loss (injury, disease, ill-health, property damage etc).
Competence:	The combination of training, skills, experience and knowledge that a person has and their ability to apply all of them to perform their work.
Scaffolding:	Is a temporary structure on the inside or outside of a building or structure made of metal poles fitted with metal or wooden scaffold planks used by employees when working at height.
Competent Person:	A competent person is someone who has sufficient training and experience or knowledge and other qualities that allow them to provide help properly. The level of competence

required will depend on the complexity of the situation and the particular need.

Working Platform:	Any platform used as a place of work or as a means of access or egress from a place of work, including any scaffold, suspended scaffold, cradle, mobile platform, trestle, gangway, gantry and stairway which is so used.
Scaffolding Contractor:	A contractor that erects, maintains or dismantles scaffolding as part of a contractual arrangement on behalf of the entity.
Safe System of Work:	A formal procedure that results from systematic analysing of a task in order to identify all the hazards. It defines safe methods to ensure that hazards are eliminated or risks reduced.
Manufacturer's Manual:	The instructions, procedures and recommendations provided by the manufacturer to ensure the safe operation, maintenance and repair of the equipment.

4 Roles and Responsibilities

4.1 Entity Responsibilities

- Undertake a risk assessment, identify hazards, assess the risks to safety and health and introduce adequate control measures, prior to the design, erection, use and dismantling of scaffolding;
- Ensure that the scaffolding is designed for the intended purpose of use;
- Ensure that before using the scaffolding, it is safe and suitable for the work activities being conducted;
- Ensure that during the use of the scaffolding, it continues to be safe for all users by conducting regular inspections and maintenance by a competent person;
- Ensure that scaffolding is erected, maintained, and dismantled by a competent persons, the scaffolding must be routinely and regularly inspected by a competent person and declared safe for use;
- Ensure that adequate control measures identified during risk assessment are in place to prevent users from falling from working platforms;
- Provide employees who use scaffolding with safety information, instruction, supervision and training and ensure they are competent to use scaffolding;
- Provide employees with personal protective equipment;
- Ensure that emergency procedures are in place to deal with emergencies and employees are trained on these procedures.

4.2 Employee Responsibilities

- Not endanger themselves or others;
- Follow precautionary control measures to ensure work activities on scaffolding are performed safely;

- Cooperate with the entity and receive information, instruction, supervision and training regarding the erection, use, maintenance and dismantling of scaffolding;
- Report any activity or defect which they know are likely to introduce risks to the safety and health of themselves or that of any other person.

5 Guidelines

The design, use, maintenance and dismantling of scaffolding can be undertaken by either:

- The entity, who must ensure the design, use, maintenance and dismantling of scaffolding is carried out by competent employees under the direction of a competent supervisor; or
- Appoint a competent scaffolding contractor to design, erect, maintain or dismantle scaffolding. There must be agreement between the entity and the scaffolding contractor that clearly states who is responsible for scaffolding modification, maintenance and inspection and the fulfillment of other specific duties.

5.1 Risk Assessment

Scaffolding risks should be managed with effective control measures implemented to protect the safety and health of employees and others. The risk assessment should be based on the hazards specific to the type of scaffolding used and consider the following factors, including but not limited to:

- The nature of the work activities to be conducted;
- The intended purpose of the scaffolding;
- The delivery and unloading of scaffolding components onto site;
- The scaffolding support structures, surfaces and ground conditions;
- The erection, modification, maintenance and dismantling of scaffolding or access equipment;
- The load of the scaffolding from employees and materials that will be used;
- Access and egress of scaffolding;
- The potential for impact from cranes, vehicles, mobile plant and machinery;
- Overhead electrical services;
- The potential wind load from adverse weather;
- The use of personal fall protection;
- Loading from the site when removing scaffolding components.

The entity should adopt a safe system of work based on the risk assessment for employees performing work activities on scaffolding to ensure work is conducted safely. The safe system of work, including an emergency plan, should be communicated effectively to all employees involved and within the vicinity of work activities.

All managers and supervisors should be familiar with all aspects of the safe system of work. They should also review and revise the system as work progresses and inform and instruct employees accordingly.

Further information on risk assessment can be found in OSHJ-CoP-01: Risk Management and Control.

5.2 Management of Scaffolding

The entity should select scaffolding equipment based on a risk assessment that takes into account the nature of the work to be performed, the loads to be withstood and the height from which falls may occur.

The selection of scaffolding may be affected by and require consideration of the following, including but not limited to:

- The shape of the structure;
- The environment that the scaffolding is to be erected in;
- The nature and load capacity of the foundations;
- The duration that the scaffolding is to remain in place;
- The ability to provide ties to the scaffolding.

5.2.1 Layout

The initial layout will have a significant impact upon the safety of the completed scaffold. When considering the layout, the entity should consider the following points, including:

- The scaffold should be laid out to reduce the gap between the structure and the scaffold to as close as possible, except where guardrails will be erected adjacent to the structure;
- The standards should be positioned to avoid manhole lids or shallow drains, which may not be able to sustain the scaffold loading.

5.2.2 Structural Design of Scaffolding

The entity should ensure all forms of scaffolding above 10 meters in height, including non-standard scaffolding, should be subject to design and calculation by a competent scaffolding engineer. Once identified by the entity, a competent scaffolding engineer must be engaged, and a specific scaffolding structural design produced.

Structural drawings, designs and calculations for scaffolding must be prepared by a competent scaffolding engineer, for scaffolding over 10 meters in height or scaffolding which includes the use of, including but not limited to:

- Ladder beams;
- Mesh or shade cloth;
- Freestanding scaffolding;
- Suspended scaffolding;
- Non-standard ties or bracing.

The entity should ensure all scaffolding above 10 meters in height shall be erected, altered, used and dismantled in accordance with the structural design drawing or manufacturer's manual.

Where the scaffolding is below 10 meters a structural design drawing is not required, the entity should ensure the following:

- The erection of scaffolding is carried out by competent employees under the direction of a competent supervisor;
- The scaffolding manufacturer's manual and any drawings are followed and available at the site.

5.2.3 Principles of Design

The entity appointed designers shall ensure that when designing scaffolding, it is safe to erect, maintain, use and dismantle and use for the purpose it was designed for. The design process shall also take into consideration of the following factors, including but not limited to:

- The strength, stability and rigidity of the scaffold and the supporting structure;
- The intended use and application of the scaffold;
- The safety of persons erecting, altering and dismantling the scaffold;
- The safety of persons using the scaffold and persons in the immediate area of the scaffold;
- Scaffolding materials.

Scaffold stability depends on the entity carefully following the system scaffold manufacturer's manual, including but not limited to:

- The foundations should be adequate;
- Scaffolding should be tied to the permanent structure or to buttresses;
- Scaffolding should be braced;
- Scaffolding should not be overloaded.

5.3 Erection of Scaffolding

The entity should ensure that during the erection of scaffolding all work activities comply with OSHJ-CoP-04: Work at Height Safety.

5.3.1 Safety of Scaffolders

The major life-threatening hazards facing scaffolders are the risk of falls from a height, falling scaffolding components and contact with overhead electric lines.

The entity must protect the scaffolders undertaking work activities from the risks of falling. Either by the provision and use of collective safeguards such as; adequate working platforms and guard rails or, where this is not practicable, by the provision and use of safety nets or personal protective equipment such as suitable fall arrest systems, incorporating safety harnesses, lanyards and anchorages.

Collective safeguards should be specified in the risk assessment and/or safety and health plan. These will normally include, where possible, the use of ladders or stairs and the placing of decking and guardrails on each platform before scaffolders go onto it or else as soon as practicable.

The entity must prioritise collective protection of scaffolders over personal protection. Where practicable the use of scaffolding step systems, advanced guardrail systems and/ or other similar collective protective measures must be used to help eliminate risks to the scaffolder. Where the necessary collective safeguards will be inadequate during certain phases of the work, personal protective equipment including nets, fall arrest and/or restraint systems, should be used to supplement collective safeguards.

Construction of certain scaffold types or construction work that includes certain activities may present difficulties in providing collective safeguards throughout all phases of the work. Such work will normally require the supplementary use of personal protective equipment, including the fixing of anchorages, until collective safeguards become adequate, including but not limited to:

- Cantilever loading bays;
- Cantilever scaffolds;
- Truss-out scaffolds;
- Slung scaffolds;
- Protection fans and nets;
- Bridges and walkways;
- Work on temporary buildings and roofs;
- Fragile roof work;
- Work in confined spaces such as; sewers, deep excavations, lift wells and shafts, deep basements or sumps, where rescue may be required.

The entity should ensure when work at height is carried out over or near water, then a site-specific risk assessment must be carried out by a competent person. Factors such as water depth, tide changes, water flow and flood risks should be considered.

Where personal protective equipment is to be used, the safe system of work should specify the means of personal protection, how it is to be used, the means of attachment and the rescue procedures. Employees should also be provided with adequate information, instruction, supervision and training to ensure that personal protective equipment is used correctly.

Further information on working over or near water can be found in OSHJ-GL-25: Working On, Over, or Adjacent to Water.

5.3.2 Safety of Employees and Others

Employees or members of the public may be placed at risk during the erection of scaffolding, including from the dropping of tools or scaffolding components. The entity should ensure adequate precautions, including the use of exclusion zones as identified by risk assessment, should be taken to eliminate or reduce the risk.

The entity should effectively exclude other employees from the work areas by signs and/or solid barriers. The entity should use solid barriers or hoarding to exclude members of the public from the area. Where people cannot be excluded from the working area, or adjacent to the work area, the entity must protect them by the provision of designed and constructed crash decks or fans.

5.3.3 Incomplete Scaffolding

The entity should construct scaffolding so that it is left complete and is properly tied, braced and decked and has adequate guardrails and toe-boards. Where scaffolding is left incomplete, there is a risk that it will be used while it is in an unsafe condition. Where scaffolding is used at a place to which the public has access, such as footpath scaffolding, the entity should ensure effective precautions are in place to prevent members of the public from climbing the scaffolding.

The entity should ensure scaffolding, which is partly erected or dismantled, has prominent warning signs placed at each potential access point and barriers to prevent access, these signs should then be removed when they are no longer required.

The most effective way of preventing access to incomplete scaffolding is by removing all decking and ladders. Incomplete scaffolding should be completed or dismantled as soon as practicable.

5.3.4 Materials

The entity should ensure scaffolding materials are inspected prior to their use on site. Inspection includes the following scaffolding materials, including but not limited to:

- A standard is an upright member;
- A transom is a horizontal member normally in the direction of the smaller dimensions of the working scaffold;
- A coupler is a device used to connect two tubes;
- A ledger is a horizontal member normally running in the direction of the larger dimension of the working scaffold;
- A base plate is used for spreading the load in a standard over a greater area.

The entity should ensure an area is set aside for damaged or defective materials. Signs should be erected indicating that the material is defective and is not to be used. If it is determined during the erection of the scaffold that an element is defective, scaffolders should put defective parts to the side and not incorporate it into the scaffolding.

5.3.5 Working Platforms

The entity should ensure working platforms are wide enough and be sufficiently boarded out to allow safe passage of employees along the platform. They should also be capable of resisting the loads imposed upon them, including high wind loads that could dislodge the scaffold boards. The entity in control of the workplace must assess risk for potential adverse weather conditions.

Where a person could fall a distance liable to cause personal injury, the working platform should be least 450 millimetres wide and maintained for persons to pass between stored materials and the side of the platform. The platform should be kept free from construction materials and waste to avoid causing an obstruction or a trip hazard.

5.3.5.1 Decking

Decking may consist of timber boards or proprietary decking units. Where timber boards are used they should be either:

- Strong enough for the intended work and not less than 200 millimetres wide if less than 50 millimetres thick;
- Strong enough for the intended work and not less than 150 millimetres wide if more than 50 millimetres thick.

The transoms of many system scaffolds are constructed to provide a secure support for standard length boards. Where the transoms do not positively restrain the boards from moving or tipping, the boards should be installed so that they overhang the transoms by at least 50 millimetres but by no more than four times their thickness. Boards that are nominally 38 millimetres thick and less than 2.13 meters long should not be used unless they are positively restrained to prevent moving or tipping.

The entity should ensure the platforms are maintained in a fully boarded or decked condition. Where a platform has not been fully boarded or has lost boards, either all boards should be removed, or, it should be fully boarded as soon as possible. The entity should take immediate steps to prevent access to partially boarded platforms by removing ladders, placing barriers across access points and placing “scaffold incomplete” warning signs at all potential entry points.

The entity should monitor the use of the scaffold to ensure that the manner in which the works are being undertaken is not damaging the working platform. The maximum number of boarded lifts for a system scaffold will be set by the manufacturer’s manual and should not be exceeded by the entity unless a bespoke design is carried out by a competent person with additional measures taken to support the structure.

Timber boards in particular are susceptible to damage such as mechanical damage, fissures, wane, distortion, insect attack and fungal decay. The entity must ensure the damaged boards are removed from site and put out of use. It is essential that timber boards are stored correctly when not in use to reduce the likelihood of damage.

5.3.5.2 Toe-Boards

Toe-boards help prevent materials from falling and they also help prevent people falling between the guardrail and platform. The entity should ensure toe-boards and end toe-boards are fixed to all working platforms where a person could fall a distance liable to cause personal injury or where an object could fall causing injury. The toe-boards should have a height of at least 150 millimetres above the platform and they should be securely fixed to the standards to ensure they do not become displaced.

5.3.5.3 Maximum Gap between the Building and the Platform

The entity should ensure the scaffold is erected as close to the finished structure as is practicable. The maximum gap between the scaffold and the structure should be 225 millimetres. Internal handrails should be used where the gap between the building and platform is required to be greater than 225 millimetres.

5.3.6 Guardrails

The entity should ensure the guardrails are provided on all working platforms, including boarded trestles, where a person could fall a distance liable to cause personal injury. The height of the guardrail should be at least 950 millimetres above the working platform. An

intermediate guardrail must be provided to ensure that the maximum distance between the rails and between the lower rail and the toe-board does not exceed 470 millimetres.

5.3.7 Falling Object Protection

The entity must take measures to prevent materials from falling from working platforms. A risk assessment will identify the most appropriate precautions for different areas of the site. Exclusion zones may be possible below the works. Areas above pedestrian traffic, particularly those areas above entrances into the structure or above where employees are working, will present the highest risk and will require the greatest precautions, including but not limited to:

- Brick guards may be hung from the guardrails and secured to prevent outward movement;
- Sheeting may consist of debris netting, plastic sheeting, corrugated sheets or timber sheets. It should be fixed securely to prevent materials from passing through the sheeting. The entity should ensure sheeting is inspected regularly, particularly after strong winds. Sheeting will significantly increase the wind loading on a scaffold and on the ties and tie couplers. The entity must consider the fire risk from sheeting on scaffolds and flame-resistant materials should be used where possible particularly if there will be hot works on the scaffold or if the scaffold is near to the public;
- Fans normally consist of an inclined support extending from the building and covered in decking. Fans are often the most suitable method of protecting pedestrian traffic areas and access points into the structure. The loads imposed on a scaffold by a fan, including dead load, impact load and wind load, are usually substantial. The top of the fan should be tied to the scaffold where it is tied to the permanent structure and the bottom tube of the fan should be propped against the structure.

5.3.8 Access to Scaffolding

The entity must provide a safe means of access and egress to all working platforms on the scaffold must be provided. This may include gangways, stairways, landings, ladders, ramps or hoists. Priority should be given to providing an independent staircase access wherever practicable, particularly when there is high usage of the scaffolding or where materials will need to be carried between lifts by hand.

The entity must provide access points so that the employee may easily gain access to their place of work. An inadequate number of access points may lead to unsafe practices such as employees climbing scaffold components to gain access to or egress from their place of work.

5.3.8.1 Ladder Access to Scaffolding

The entity should ensure scaffolding ladder access should meet the following minimum standards:

- Ladder access towers, fixed to the outside of the scaffold, should be erected where practicable using single lift ladders and self-closing ladder gates to separate the access tower from the working platform;
- The top of ladder stiles should be securely fixed to the scaffold by lashings or a ladder clamp;
- The ladder should be set, where practicable, at an angle of 75 degrees, one meter out for 4 meters of height and allow sufficient room for the employees access and egress through the ladder access opening;

- The ladder should be supported by each stile resting on a firm and level footing;
- The ladder should extend at least 1 meter above the landing point unless a suitable alternative handrail has been provided;
- Ladder access should be restricted to employees and during work hours;
- Ladders should be removed to prevent access outside of working hours, where applicable.

5.3.8.2 Landing Places

The entity should ensure the scaffolding landing places meet the following minimum standards:

- The maximum vertical distance between landings should not be more than 9 meters;
- Where the ladder is internal, guardrails or other protective measures should be in place around the opening to prevent employees stepping into ladder access openings;
- The clear dimensions of an access opening in a platform shall be at least 450 millimetres wide, measured across the width of the platform, and 600 millimetres long;
- Landings on ladder access towers should be provided with guardrails and toe-boards and access openings protected with self-closing ladder gates or appropriate trap doors, where deemed necessary.

The entity should consider the provision of lifts, hoists, staircase towers or ramps where possible and when justified by the frequency of passage, height to be negotiated, duration of use or evacuation requirements.

5.3.9 Loading of Scaffolding

5.3.9.1 Loading Bays

The weight of pallets of building materials, such as blocks and bricks, are usually more than the recommended load ratings of the system scaffold manufacturers. A loading bay will therefore be required where it is necessary to lift pallets of heavy materials onto a scaffold. The entity should construct proper loading bays where necessary to avoid the excessive loading of access scaffolds and the obstruction of gangways that can otherwise occur.

The type of loading bay required will vary depending on the chosen method for transporting materials around the site and loading materials onto the scaffolding. A loading bay designed for use by a teleporter is different to a loading bay for use with a crane.

The entity should refer to the system manufacturer's manual for the erection of loading bays. Loading bays should be diagonally braced on all four sides or braced in compliance with the system manufacturer's manual. Where the internal façade bracing hinders access onto the scaffold from the loading bay, the brace may be placed on the main scaffold adjacent to the loading bay or in accordance with the system manufacturer's manual. The entity should consider the issues that require consideration, including but not limited to:

- Standard transoms at standard spacings and timber and/or steel decking's at standard spans are **not** usually adequate to carry the higher loadings in a loading bay;

- System scaffold loading bays incorporate special load-bearing transoms, often at reduced spacing;
- Where load bearing transoms are directly connected to the outside face of a scaffold, the capacity of the standards to support the combined loads imposed by the working platforms and the load-bearing transoms should be assessed;
- Loading bays are usually restricted to two working lifts; one fully loaded and the other at half that capacity. The entity should consult the manufacturer's manual or scaffold design for details specific to system being used;
- Plan/wing bracing should be installed from the outside corner of a loading bay to the main access scaffold and the main scaffold should be tied to the building with supplementary ties opposite these braces at intervals not exceeding 3 meters;
- Where guardrails must be removed temporarily to facilitate loading, effective compensatory measures to prevent falls should be provided. The use of loading 'up and over' gates and similar systems should be implemented. Other alternative measures may include other movable guardrails or panels, handholds or safety harnesses affording an equivalent standard of protection as guardrails. Consideration of loading and unloading must be taken at design stage and a competent scaffolder should construct the scaffolding accordingly;
- All modifications to the scaffolding can only be made by a competent scaffolder.

5.3.9.2 Load Warning Signage

The entity should ensure easily comprehensible signs showing the safe working load for each working lift are placed on scaffolds and loading bays. Warning signs must also be erected on a scaffold that is not available for use including; during its erection, dismantling or alteration and, where appropriate, the scaffolding should be protected by barriers or other suitable means, from unauthorised access or use. The entity should ensure scaffold 'tag' systems are available that clearly indicate if the scaffold is in use or not, usually at ladder access points.

5.3.9.3 Loading Charts

The entity should provide the supervisors and equipment operators, including; slingers, signallers, crane and telescopic handler operators, easily comprehensible loading charts showing the weights of the typical materials used on the site. This information will enable them to estimate the load they are placing on the scaffold and ensure that it is less than the safe working load indicated on the signs.

5.3.10 Overhead Services

Overhead electricity lines can present a serious safety risk, particularly in areas where construction activities are being carried out. The entity must take appropriate measures to identify and control the risk. The erection and removal of scaffolding near overhead electricity lines can present risks as scaffolding materials are normally good conductors of electricity, are handled manually and may have the potential to touch or come within arcing distance of the live overhead line conductors.

Once scaffolding has been erected, work activities being carried out on the scaffolding can present similar safety risks, especially while materials are being handled or long handle tools are being used. Risks can also arise in windy conditions from live conductors blowing towards or touching the scaffold and thereby making the entire scaffold live.

The entity should implement appropriate control measures based on a site specific risk assessment. These measures will normally include, but not limited to:

- Re-routing the lines;
- Having the lines switched off and earthed;
- Installing barriers or insulation between the scaffold and the lines.

Further information on overhead services can be found in OSHJ-CoP-09: Overhead and Underground Services.

5.3.11 Erection on Public Streets/ Places

The erection and use of scaffolding adjacent to public streets or places can create hazards for the public that are similar to those encountered by employees. The precautions will however need to be greater because of the large numbers of persons who may be at risk, their unfamiliarity with hazards and their curiosity about the work.

The entity should provide effective physical protection from the area around the work during scaffold erection, modification and dismantling. This may involve getting permission to close streets or footpaths while the scaffold is being erected or dismantled. Where the public cannot be excluded, effective physical protection should be provided to prevent persons being struck by falling tools or materials. Platforms can be double boarded with sheets of plastic or other material between them to prevent construction material and dusts from falling on anybody passing underneath.

Where necessary, the entity should also provide protective fans to be put in place. The entity must consider providing a safe covered walkway area for the public to pass by the scaffold in a safe manner. Where footpaths are closed, the entity should provide adequate provision for protection of pedestrians from traffic. The entity should prevent public access to the scaffold, so far as is practicable, by providing hoardings and/or sheeting and by removing or preventing the use of access ladders at a lower level.

5.3.11.1 Through Access

The entity should consider following precautions where members of the public are permitted to walk through the base of the scaffold, including but not limited to:

- As the bottom ledgers and transoms will be omitted, the scaffold will require a specific design;
- The provision of sufficient headroom;
- Ensuring there are no projections that may injure people or damage their clothing;
- Provision to prevent any materials falling through the scaffolding;
- Provision and maintenance of a good walking surface;
- Provision and maintenance of adequate lighting.

5.3.11.2 Adjacent Parking or Traffic

The entity should protect scaffold from traffic by appropriate warning signs, lights, barriers or traffic cones. Where vehicles are permitted to park adjacent to the scaffold, the risk of damage to the scaffold is high, particularly where vehicles park nose-in or reverse in, to the scaffold.

The entity should protect from vehicle damage by preventing such parking or by providing barriers. Where this is not practicable, the scaffold should be inspected frequently so that damage may be detected and rectified quickly.

5.4 Inspection and Handover

An adequate handover procedure for transferring control of the scaffolding from the erector to the user is an important part of managing scaffolding safety. Both the scaffolding erector and the user should be satisfied that the scaffolding can provide a safe working platform and can carry the imposed loads safely. The entity should ensure an adequate handover procedure in place and should include the following, but not limited to:

- Clearly identifying the areas of the scaffolding that have been handed over;
- Clearly stating the maximum capacity of the loading bays and working platforms and the tie spacing;
- Inspecting the entire area of the scaffolding before it is taken into use and record this information in a scaffolding inspection checklist;
- Scaffolding components must be inspected frequently, by a competent person, to ensure that they are in and continue to be in safe working order;
- The frequency of inspection will be determined by the manufacturer's manual and taking account of the conditions in which, the components are being used.

Where defective scaffolding components are identified, the entity should ensure:

- Any defective boards should be replaced and removed from site;
- The removal of "scaffolding incomplete" warning signs from the finished scaffolding and erecting "scaffolding complete" signs, using a scaffolding tag system or other similar system to identify which scaffolding sections are safe to use and which are not;
- Preparing a report of the inspection, a copy of the report should be retained on site.

The entity shall record and retain inspection and handover records.

5.5 Use, Modification and Maintenance

The entity should ensure scaffolding is not used, unless it has been properly constructed and is suitable for the purpose for which it is required and inspected by a competent person within the previous seven days.

The entity shall record and retain use, modification and maintenance records.

5.5.1 Scaffolding Users

The entity must provide the users of scaffolding with relevant information for the safe use of the scaffolding. Any users who discover a serious defect in scaffolding, which may adversely affect safety, should stop using the scaffolding and report the defect immediately to the entity.

Scaffolding users should:

- Be provided with relevant information on the conditions of use of the scaffolding, including the loading capacity of the scaffolding, in a comprehensible form;

- Not overload the scaffolding either locally or in general;
- Not interfere with or misuse the scaffolding;
- Promptly report defects in the scaffolding;
- Not leave scaffolding in a hazardous condition for current or subsequent users.

5.5.2 Scaffolding Modification

Uncontrolled modification of a scaffolding, particularly if carried out by an employee without adequate competence, can lead to instability and an increased risk of the employee falling from the scaffold. The entity should identify and rectify promptly the uncontrolled modifications to ties, bracing, ledgers, transoms and decking.

Only competent scaffolders can make any modifications to scaffolding.

5.5.3 Scaffolding Maintenance

The entity should maintain scaffolding in a safe condition for the entire period of its use. Manufacturers and suppliers of scaffolding systems and components have a duty to supply information to the purchaser. Suppliers that hire or lease system scaffold and components also have a duty to supply the manufacturer's manual to the entity.

The information should include the use for which the scaffold has been designed or tested, and any information necessary to ensure that the scaffolding may be erected, dismantled and used safely.

The entity must specify the system of scaffolding in use and provide copies of the manufacturer's manual. The manufacturer's manual must be comprehensive and product specific and shall provide all the necessary information and performance data necessary for the designer and scaffolder to carry out their work in a safe manner.

The entity shall record and retain scaffolding maintenance records.

5.5.4 Inspection Before and During Use

The entity should ensure scaffolding is inspected by a competent person before use and again at least every seven days and after any circumstances that might affect the stability or safety of the scaffolding, including but not limited to:

- Modification;
- Period without use;
- Exposure to bad weather;
- Damage, including impact of traffic or site equipment with the scaffolding;
- After excavating close to the base of scaffolding.

Scaffolding inspection checklists can be used to record inspections. The entity shall record and retain records of scaffolding inspection.

5.6 Dismantling Scaffolding

The entity should plan the dismantling scaffolding to ensure that the scaffolding remains stable, employees are prevented from falling from height and employees working below are protected from falling objects.

The entity should examine the scaffolding to ensure that the foundation is adequate and that all ties and bracing are in position and are effective. Any defects found in the scaffolding should be rectified before dismantling begins.

The dismantling should restrict imposed loads from stacked scaffolding components and if required add additional strengthening and stabilisers to support additional loading. The entity should display warning signage prominently and employees prevented from entering hazardous areas.

6 Training

The entity should provide information and training on scaffolding for all scaffold users in languages and in a format that employees understand. The training and instruction may be provided as part of a site-specific induction for all employees who are likely to use the scaffolding, including but not limited to:

- Safe loading capacity and restrictions;
- Safety inspection requirements;
- Recognising common hazards and defects, including working at height, missing boarding, guardrails and toe boards and how to report defects where identified;
- Explaining the meaning and importance of safety warning signage and scaffold tagging system in use;
- Using only designated access points to scaffolding;
- The importance of not modifying any part of the scaffolding. Scaffolding can only be modified by a competent person;
- Ensure persons responsible for the periodic inspection and maintenance of scaffolding are trained and competent.

Periodic refresher training should be conducted to ensure employees competency is maintained, including but not limited to:

- Where training certification has expired;
- Where identified as part of a training needs analysis;
- Where risk assessment findings identify training as a measure to control risks;
- Where there is a change in legal requirements;
- Where incident investigation findings recommend refresher training.

The entity must record and maintain accurate training records of OSH training provided to employees.

Further information on training can be found in OSHJ-GL-26: Training and Competence.

7 Emergency Preparedness and Response

The entity should be prepared for emergency situations that may occur during work activities involving both scaffolding and working at height. Due to increased risks from working at height, the entity needs to have a plan on what to do when an emergency occurs and how to respond to that emergency, including but not limited to:

- Providing a rapid response in the event of scaffolding collapse;
- Providing information on how to evacuate safely from scaffolding;
- Providing a rapid and effective rescue response where employees working at height have activated fall arrest systems, rescue equipment shall be available to retrieve employees as any delay could have severe consequences;
- Providing first aid response to employees who have been rescued from height to prevent possible suspension trauma;
- Appointing emergency response personnel who can take charge and make decisions on behalf of the entity during an emergency and liaise with emergency services;
- Employees are trained in emergency response, including information of first aid arrangements and where first-aiders, first aid equipment and facilities are located;
- Employees are appointed as first-aiders and available at each location and on each working shift.

Further information on first aid can be found in OSHJ-CoP-16: First Aid at Work.

Further information on developing emergency plans can be found in OSHJ-CoP-18: Emergency Preparedness and Response.

8 References

OSHJ-CoP-01: Risk Management and Control

OSHJ-CoP-04: Work at Height Safety

OSHJ-CoP-09: Overhead and Underground Services

OSHJ-CoP-16: First Aid at Work

OSHJ-CoP-18: Emergency Preparedness and Response

OSHJ-GL-02: Mobile Elevated Work Platform

OSHJ-GL-04: Mobile Access Towers

OSHJ-GL-25: Working On, Over, or Adjacent to Water

OSHJ-GL-26: Training and Competence

9 Document Amendment Record

TITLE	Scaffolding		
DOCUMENT AMENDMENT RECORD			
Version	Revision Date	Amendment Details	Pages Affected
1	15 SEP 2021	New Document	N/A