



Fact Sheet – Scaffolding in Construction

Scaffold Overview

The use of Scaffolding¹ in the construction industry is well established and common on many projects. Scaffolds are relied upon by principle contractors and a wide variety of trades to create a safe means of access for work at height, a temporary working platform and as a control in managing risks such as falling objects. The most visible form of Scaffolding is a perimeter Scaffold to a building however a Scaffold can take many forms including suspended (swing stage), hung, spur, cantilevered, birdcage, tower, or mobile. The choice of Scaffold will be influenced by factors such as building shape and location, the intended use and loadings on the Scaffold (such as heavy-duty loadings for bricklaying or light duty for access and minor works) as well as design considerations including the interaction with the building structure, plant and other activities occurring on site.

Although not always the case Scaffolding is often supplied and erected by specialist contractors who come and go from a project having provided the Scaffold for common use of workers on the project or for the sole use of an individual trade.

Scaffold risks in construction

Working with Scaffolding can involve a range of hazards and risks including falls from height, falling objects, structural collapse, working near powerlines, interaction with mobile plant and traffic, Scaffolding quality and manual tasks to list a few. All these hazards need to be considered and where applicable managed by accredited companies and their subcontractors. Planning before Scaffolding work starts and the development of robust systems can help eliminate many of the associated health and safety risks. An effective management system will address ways to protect persons who are:

- Erecting, dismantling, maintaining and altering the Scaffold
- Using the Scaffold and
- Working near the Scaffold including other worker and members of the public.

Failure to effectively manage hazards can be a significant threat to workers and the general public that can in turn lead to death or significant injuries.

¹ For the purpose of this information sheet **Scaffold** means a temporary structure specifically erected to support access or working platforms and Scaffolding means the individual components that when assembled form a Scaffold.

What should accredited companies be doing?

The requirements for Scaffold design, erection, dismantling and use are largely set out in State and Territory WHS regulation and supporting documentation including codes of practice and Australian Standards.

Accredited companies need to implement a systems-based approach to ensure they meet all State / Territory requirements as well as compliance with the FSC audit criteria including the adoption of the hierarchy of controls. Even though companies may engage the services of specialist Scaffold contractors, compliance with the FSC audit criteria requires accredited companies to be able to demonstrate how their system ensures all risks and hazards related to Scaffold are effectively managed. Purely relying on the expertise of a Scaffold contractor will not meet the accreditation requirements.

Focus on Scaffolding

The primary criteria used by the FSC to assess scaffolding work on site are contained within:

- WH 12 – HIRAC
- FP 4 – Management of Subcontractor WHS
- FP 6 – Training arrangements
- H1 – Working at heights
- H5 – Structural alterations / temporary structures

The principles of safe Scaffolding reflected in these criteria are detailed below and an expanded list of these Scheme Criteria is attached to this Guidance along with practical examples of steps that could be taken to meet each criterion.

Principles of safe Scaffolding reflected in the Scheme criteria

The referenced Scheme criteria includes safety principles that are applicable to the management of Scaffolding and are critical to ensuring the safety of workers and the general public. These include:

- **Risk assessment (HIRAC)** – project specific hazard identification, risk assessment and control to include the use of Scaffolding and its impact on other parties where applicable.
- **Provision of the risk assessment** - details of the project risk assessment / WHS plan for managing Scaffolding is to be provided to relevant subcontractors prior to the commencement of work.
- **Management of subcontractors** - health and safety considerations are to be included in subcontractor selection/procurement.
- **Safe Design** - qualified person/s are required to design a Scaffold with applicable drawings and design information provided.
- **Supporting structures** – foundations and supporting structures are to be assessed and deemed suitable for the loads prior to erection.
- **Training and licencing** – the training, competency, qualifications and licencing requirements for workers to erect, dismantle and modify Scaffolds is to be identified and verified.
- **Unauthorised access** - Workers on site are to be informed about safe systems of work including any restrictions in the use and unauthorised access to Scaffolding.
- **Safe systems of work** – Safe systems of work can include SWMS and are to be developed and implemented for erection and dismantling and for those using the Scaffolding. This includes an assessment and the management of hazards associated with;
 - **Falls from height**
 - **Falling objects**
 - **Access and egress**
 - **Overhead or energised electrical parts**
 - **Mobile plant** in proximity to the Scaffold
 - **Quality and suitability of Scaffolding components**
 - **Manual tasks**

- **Use of fall restraint/fall arrest equipment** for erecting drop, hung and other relevant Scaffolds.
- **Handover certificates** - Scaffolds are to be verified as correctly installed prior to use (as per relevant legislation, codes of practice and Australian standards; and manufacturers' requirements; or where applicable the drawing/plan).
- **Regular inspections** - Scaffolds are to be regularly inspected to monitor the effectiveness of the system/ structure in accordance with relevant legislation, codes of practice and Australian standards; and manufacturer's requirements; or where applicable the drawing/plan.
- **Emergency procedures** – are to consider the Scaffold including scope of work, access and egress, use of fall arrest and other hazards or potential emergency situations that may be created by the use of Scaffolding.

In addition to the above principles, the Scheme in criteria H5.4, also requires a system to be adopted where a Scaffold plan developed by a qualified person is utilised or alternatively a risk assessment is undertaken to determine the need for a Scaffold plan. A system adopting the risk assessment approach will need to document the findings of each risk assessment undertaken.

For example, a risk assessment involving the use of a mobile Scaffold within a building or a standard stair access system may determine a Scaffold plan is not required as the Scaffold is to be erected in line with a standard configuration/design documentation prepared by the supplier/manufacturer and the specific Scaffold is considered low risk.

Where a standard Scaffold design is relied upon details are to be maintained on site to enable inspections and verification against the documentation being relied upon. This is a common area of non-compliance for companies under the Scheme.

For further information:

- Safe Work Australia – Guidance material <https://www.safeworkaustralia.gov.au/doc/scaffolds-and-scaffolding-work-guidance-material>
- Worksafe Queensland – Scaffolding Code of Practice - <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>
- Worksafe New South Wales – Scaffold inspection checklist and associated information <https://www.safework.nsw.gov.au/hazards-a-z/scaffolding>
- Worksafe ACT – Scaffold best practice - <https://www.worksafe.act.gov.au/health-and-safety-portal/safety-topics/physical-hazards/stop-construction-falls/best-practice-scaffold-usage>
- Worksafe Victoria - Construction safety focus: Scaffolding <https://www.worksafe.vic.gov.au/resources/construction-safety-focus-scaffolding>
- Safework South Australia – Scaffolding work <https://www.safework.sa.gov.au/workplaces/work-tasks-and-projects/scaffolding-work>
- NT Worksafe - <https://worksafe.nt.gov.au>
- Worksafe WA – Scaffolding publication <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/scaffolds.pdf>
- Safework Tasmania - <https://www.worksafe.tas.gov.au>
- Australian Standards
 - AS/NZS1576 Part 1: Scaffolding – general requirements
 - AS/NZS 1576 Part 6: Metal tube and coupler scaffolding – Deemed to Comply
 - AS/NZS4576: Guidelines for scaffolding
- Visit the FSC website at www.fsc.gov.au
- Contact the FSC Assist Line on **1800 652 500**
- Contact the OFSC via email at ofsc@jobs.gov.au

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**The Fair Work (Building Industry – Accreditation Scheme) Regulation 2016 (which was continued in force by item 11 of Schedule 2 to the Building and Construction Industry (Consequential and Transitional Provisions) Act 2016 as rules made by the Minister for the purposes of section 43 of the Federal Safety Commissioner Act (FSC Act)).*

WHS Accreditation Scheme criteria relevant to scaffolding and practical examples

* Please note that the example processes outlined in Column 3 are not mandatory process. These are intended as examples to assist companies in meeting the requirements of the Scheme criteria, and there may be other approaches that a company can implement that will still meet the intent.

Scheme Criterion	What's generally required of Accredited Companies	Example process
<p>H5.1 The risks associated with structural alterations, structural support systems and temporary structures are identified, assessed and controlled in accordance with the Hierarchy of Control.</p> <p>and</p> <p>H1.1 The risks associated with the potential for a person falling are identified, assessed and controlled in accordance with the Falls from Height Hierarchy of Control.</p>	<p>This criterion requires the company to utilise the project HIRAC process with regards to Scaffolding on the project and implement controls consistent with the Hierarchy of Control.</p>	<p>Before Scaffolding work starts planning is undertaken, and a systems-based approach is adopted to address the management of Scaffolding hazards. A project specific risk assessment (HIRAC) is implemented to address the Scaffolding life cycle on the project. I.e. delivery, inspection, erection, use, modification, maintenance, dismantling and removal from site.</p> <p>The site specific HIRAC and systems approach takes into consideration ways to protect persons who:</p> <ul style="list-style-type: none"> • erect, dismantle, maintain and alter the Scaffold • use the Scaffold and • work near the Scaffold including other worker and members of the public.
<p>H5.2 Safe systems of work have been developed for the:</p> <ul style="list-style-type: none"> • erection and dismantling of structural support systems and temporary structures • prevention of persons falling • management of potential 	<p>This criterion requires the company to have a safe system of work in place to manage the erection and dismantling of Scaffolds, including potential falling persons, objects and penetrations.</p>	<p>Site-specific SWMS are developed for all high-risk activities such as those involving the risk of a person falling more than 2m while erecting Scaffolding or work in an area of the workplace where there is movement of powered mobile plant.</p> <p>In addition to this, safe systems of work such as SWMS/JHA/SOP are developed to address other hazards associated with Scaffolding.</p>

<p>falling objects and</p> <ul style="list-style-type: none"> management of penetrations. 		<p>SWMS/JHA/SOP are developed in consultation with workers/WHS representatives who are carrying out the work.</p> <p>A specific review is completed by the Principle Contractor to ensure the system of work meets the company requirements including those identified as part of H5.1.</p> <p>Examples of controls to prevent falls from height, falling objects etc. can be found in:</p> <ul style="list-style-type: none"> the Qld Scaffold code of practice https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice the Safework Australia – Scaffold and Scaffolding work guidance material https://www.safeworkaustralia.gov.au/doc/Scaffolds-and-Scaffolding-work-guidance-material individual state and territory websites (refer to Scaffolding fact sheet for references)
<p>H5.4 The system ensures that:</p> <ul style="list-style-type: none"> a Scaffold plan has been developed by a qualified person and changes to the installation design are authorised and signed off by a qualified person or a risk assessment has been conducted to determine the need for a Scaffold Plan. 	<p>This criterion requires the company to make sure that for Scaffold either:</p> <ul style="list-style-type: none"> a Scaffold Plan is developed where required (in accordance with relevant legislation, codes of practice and Australian standards) by a qualified person with changes to the Scaffold authorised/signed off by a qualified person or that a risk assessment has been undertaken to determine the need for a Scaffold Plan. 	<p>A Scaffold plan is prepared for all Scaffolding work with the type of Scaffold plan dependent on the type, complexity and height of the Scaffold. For example, this could be a plan depicting an engineer’s design or a manufacturers standard design drawing for a mobile Scaffold etc.</p> <p>All Scaffolds are built in accordance with the relevant Australian Standard (<i>AS/NZS 1576 Scaffolding</i>). What is constructed on site reflects what is in the Scaffold plan.</p> <p>Consultation occurs during the development of the Scaffold plan with:</p> <ul style="list-style-type: none"> the Scaffold designer, to discuss the design loads and the capability of the structure to support any additional loadings the principle contractor, to discuss the number and locations of working platforms, assess, the location of underground drains or pits etc. workers, workplace health and safety committees, and workplace health and safety representatives (WHSR), regarding safe systems of work for the erection, dismantling, maintaining and altering the Scaffolding.

		<p>The Scaffold plan includes a site layout plan and sufficient detail to adequately describe the Scaffold to be erected and may include section and elevations details. It is made available for inspection at the worksite. The Scaffold plan addresses issues such as:</p> <ul style="list-style-type: none"> • basis of design • foundations (including ground conditions, slope and loadings) • supporting structure • access and egress • tying • bracing • type of Scaffold • edge protection • number of plank levels • number of working levels (Note: the number of working levels often varies to the number of plank levels erected on the Scaffold. This information should be clearly communicated at handover and to the end user. Using more than the designed working levels at once will exceed the nominated leg loads and may overload the Scaffold).
<p>H5.5 The system ensures that the building structures/materials/foundations have been assessed and controls are in place prior to starting alterations to the structure or construction of temporary structures.</p>	<p>Scaffold foundations should be able to carry and distribute all the weight of the Scaffold, including any extra loads, for example, perimeter containment screens, placed on the Scaffold. This criterion requires the company to make sure that assessments are made on the structure/material/foundation to ensure that the Scaffolding can be safely supported during its full life cycle.</p>	<p>Advice from an engineer is obtained before erecting Scaffolds on verandas, suspended flooring systems, compacted soil, parapets, awnings and similar structures. The Scaffold is designed for the most adverse combination of dead, live and environmental loads that can reasonably be expected during the period that the Scaffold is in use.</p> <p>The dead, live and environmental loads are calculated during the design stage to ensure the supporting structure and the lower standards are capable of supporting the loads. The design of Scaffolds and ties are approved by a competent person/engineer. The specifications of the manufacturer, designer or supplier are followed for the maximum loads of the Scaffold.</p> <p>Propping or additional ground works is undertaken where the supporting structure is not capable of bearing the most adverse combination of loads.</p>

<p>H5.6 The system ensures that structural support systems and temporary structures are installed by a competent person and verified as correctly installed prior to use in accordance with:</p> <ul style="list-style-type: none"> • relevant legislation, codes of practice and Australian standards • manufacturers' requirements or • where applicable the drawing/plan. 	<p>This criterion requires the company to make sure that:</p> <ul style="list-style-type: none"> • Scaffolds are erected, modified and dismantled by competent and qualified persons. In performing Scaffolding work where a person or thing may fall more than four metres from the Scaffold, a Scaffolder must hold a basic, intermediate or advanced high risk work licence as specified under the relevant local WHS Regulation and • certification of the installation in accordance with the drawing/plan is obtained before use of the Scaffolding. 	<p>Minimum training, competency, qualification and licensing requirements for workers performing Scaffolding work have been established that address both the type of Scaffolding and whether a person doing the Scaffold work could fall more or less than 4m.</p> <p>There is a documented process to ensure identified minimum WHS training, competency, qualification and licensing requirements are verified before Scaffolding is commenced.</p> <p>The Scaffold is not used until the company receives a handover certificate (written confirmation) from a competent person* that construction of the Scaffold has been completed and the Scaffold has been erected in accordance with:</p> <ul style="list-style-type: none"> • relevant legislation, codes of practice and Australian standards • manufacturers' requirements or • where applicable the drawing/plan. <p>An Example handover certificate can be found:</p> <ul style="list-style-type: none"> • in appendix 4 of the Qld Scaffold code of practice https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice • The Safework Australia – Guide to Scaffold inspection and maintenance https://www.safeworkaustralia.gov.au/doc/Scaffolds-and-Scaffolding-work-guidance-material <p>* the documented process includes a definition and details to describe the required competencies to perform the initial and subsequent inspections. Due to the complexity or critical nature of some Scaffolds this may involve the use of an engineer eg. erection of a suspended Scaffold.</p>
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<p>H5.7 The system ensures that structural support systems and temporary structures are regularly inspected to monitor the effectiveness of the system/structure in accordance with:</p> <ul style="list-style-type: none"> • relevant legislation, codes of practice and Australian standards • manufacturer’s requirements or • where applicable the drawing/plan. 	<p>This criterion requires the company to have a process in place to make sure that structural supports in use on site are checked for effectiveness, and compliance with the drawings, on a regular basis.</p>	<p>All Scaffolding components are inspected prior to erection to assess the overall condition including the surface coatings to prevent corrosion, welds, fabrication issues and need for further maintenance.</p> <p>Regular inspections are also undertaken of the Scaffold:</p> <ul style="list-style-type: none"> • before first use (refer to H5.5) • prior to use after an incident or repair • after adverse weather that could affect Scaffolding integrity or stability and • at regular intervals not exceeding 30 days. <p>Note: The inspection intervals should take into consideration the workloads (for example a Scaffold used for demolition work may be subjected to greater workloads), site conditions, weather, type, size, and risks associated with a Scaffold collapse. The standard intervals listed above may need to be increased. For example, higher risk Scaffolding such as a suspended Scaffolding or Boaswain’s chair should be subjected to additional inspections including daily user safety checks.</p> <p>The regular inspections of Scaffolding are recorded using an inspection checklist, Scaffold tags are placed on the Scaffold to inform workers and a new handover certificate is issued.</p>
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<p>H5.8 The system ensures that emergency procedures are established specific to the scope of works.</p>	<p>This criterion requires the company to develop site-specific emergency procedures to manage potential emergencies associated with structural alterations and temporary structures. Issues around access to temporary structures and structural supports should be considered when developing emergency procedures.</p>	<p>A risk assessment is undertaken by a qualified person as part of the broader first aid and emergency equipment assessment to identify all of the foreseeable project-specific emergencies that may occur from the use of Scaffolding (such as structural collapse of Scaffolding, falls from height, fire involving perimeter containment screening on the Scaffold, medical emergency where there is restricted access etc.), and an Emergency Management Plan is developed that includes emergency procedures and equipment to address these situations.</p> <p>Where the Scaffolding is intended to be used as part of the emergency access for the project (for example stretcher stairs have been provided at various locations on the Scaffold) the Scaffold design has considered the applied loads in an emergency situation, lighting requirements, signage etc. and the emergency plan includes procedures for temporary closure of sections of the Scaffolding (due to modifications or specific work related hazards etc.) and communication of alternative arrangements to ensure safe emergency access and egress is maintained.</p>
<p>H1.4 Safe systems of work have been developed to ensure that where fall restraint/fall arrest equipment is being used on site:</p> <ul style="list-style-type: none"> • workers have been formally trained in the use of such equipment • there is a maintenance and inspection schedule for the equipment • attachment points are designed and certified by a qualified person and • attachment points are installed by a trained person 	<p>This criterion requires the company to develop and maintain systems for the management of fall restraint/fall arrest equipment, and to make sure that the equipment being used is used by formally trained persons, appropriately maintained/inspected, and attached to points that are certified to be adequate to sustain the potential force of a falling person.</p>	<p>All workers required to use fall restraint/fall arrest systems during the erection or use of Scaffolding have successfully completed the nominated working safely at height course.</p> <p>Workers are allocated fall restraint/fall arrest equipment that is:</p> <ul style="list-style-type: none"> • subjected to pre/post use external visual & touch inspections (undertaken by the working safely at height trained worker deemed competent to perform inspections) to ensure there are no apparent defects; and • 6-monthly inspections by a height safety equipment inspector with the inspection documented and then recorded on the maintenance register used to track the maintenance of all equipment as per the Australian Standards and manufacturers specifications. <p>All attachment points are:</p> <ul style="list-style-type: none"> • designed and certified by an engineer • installed by a suitably trained and qualified Scaffolders/rigger • visually checked before use and

<p>and regularly inspected by a competent person.</p>		<ul style="list-style-type: none"> • inspected by a height safety equipment inspector at not less than 6 monthly intervals (where it is permanently fixed and in regular use). <p>Note: A fall arrest system may be used as part of the controls to address fall from height hazards during the erection or use of Scaffolding (E.g. erection of a cantilever Scaffold, use of a swing stage etc.) however it is not typically suitable for the erection of perimeter or birdcage Scaffolding.</p> <p>Before a fall arrest system is specified for use an assessment is undertaken to ensure there is enough distance available for a person using the system to fall to prevent the person hitting an object, the ground or another surface, other than a vertical surface. Whether there is enough distance available is worked out by taking the following into account:</p> <ul style="list-style-type: none"> • the person’s height • the height and position of the anchorage point • the length of the lanyard • any slack in the static line • any stretching of the lanyard or static line when extended by a fall • the length of the energy absorber when extended by a fall • any other relevant factor.
<p>H 1.6 The system ensures that there is safe access and egress for all areas where work at heights is being undertaken.</p>	<p>This criterion requires the company to have a process in place to make sure that there is safe access/egress to/from areas where work at height is being completed.</p>	<p>The system of work addressing H5.2 includes safe access and egress during the erection and dismantling of Scaffolding and work at height.</p> <p>Where practical access to Scaffolding is provided by stairs rather than ladders and the accessway is kept free of materials and rubbish.</p> <p>Access to incomplete Scaffolding is blocked off and signed.</p> <p>Scaffolders do not climb standards except when harnessed and working on hung, cantilevered or spurred Scaffolds, and other means of access/egress are not practical.</p>