

SCAFFOLD AND MOBILE SCAFFOLD

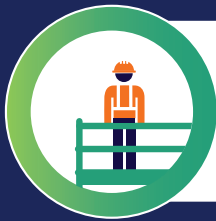
SAFELY CONTROLLING WORK CRITICAL RISK CONTROL DOCUMENT



We come to work free from impairment, alcohol and drugs



We ensure plant and equipment is safe to use



We work safely at height




We always observe walkways, safe zones and exclusion zones



We always follow the Permit process when a Permit is required



Our temporary works are appropriately designed, engineered and installed

DOCUMENT CONTROL			
Document Name	Scaffold and Mobile Scaffold		
Issue Date	01-June-2022		
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DOCUMENT REVIEW			
Date	Revision	Description of Change	Author
1-Dec-2021	1	First document	AE, MJ, OG
1-Jun-2022	2	<ul style="list-style-type: none"> • Combined the 2 documents (Scaffold and Mobile Scaffold) into 1 document • Included page numbers • Add comment about the importance of using a separate access bay • Included information about ground foundation and check for current and future underground services • Included additional information about scrim requirements (e.g. that they are always required for scaffold exterior, consider wind/environmental loads, etc..) • Ensure additional safety requirements are implemented when installing catch fans above all building entries • Added handover certificate requirement for major alteration works • Added ground condition check prior to erection of scaffold as a minimum control requirement • Added action items on what to do if a scaffold is no longer compliant • Scaffold register requirements are included (both mandatory and recommended) • Added information about scrim requirements to ensure it complies with manufacturers instructions • Added information about Engineer plans • Added information about brick guard requirement • Added information about securing fixed ladders • Added information about ZOI for potential future excavations • Added harness requirement as a minimum control requirement for scaffold erection, modification and dismantling • Added sentence for mobile scaffold that competent person must use safe methods to protect from a fall • Adjusted plan brace sentence for mobile scaffold • Added information about scaffold alteration • Added information about increase edge protection height when working next to the building outer boundary • Added information about training and competency requirement to ensure scaffolder has relevant training to scaffold being built, regardless of height (e.g. some scaffold under 5.0m require advanced scaffold training) 	AE, MJ, OG, AVR, JB

Scaffold and Mobile Scaffold

Scaffolding (scaffold) is a temporary structure used to support work crew and materials in the construction of buildings. Scaffold in itself is a control to minimize the risk of falls from height and dropped objects. Mobile scaffolds are a type of supported scaffold set on wheels/castors. They are designed to be easily moved for access where workers frequently change position.

There are many different job activities in construction that require the use of a scaffold. These may include but are not limited to:

- Accessways to multiple levels
- Bricklaying
- Plastering
- Interior and exterior works
- Façade works
- Maintenance work
- Loading bays
- Scaffolding access in excavation
- Use of handrail and edge protection

Related safely controlling work documents:

- [Working at Height, dropped objects and temporary work platforms](#)
- [Underground and overhead services](#)

Risks - What could go wrong?

- Fall causing a fatality or a potentially major injury such as dislocation, crushing strains/sprains, bruising/lacerations, fractures or serious head injuries
- Tools/materials/other objects falling onto one or more workers causing fatality or serious injury such as fractures, head injury, crushing or bruising/lacerations (see 'Working at Height, dropped objects and temporary work platforms' if your work poses a risk of dropped objects)
- Structural collapse/overturn/damage over time of scaffold due to incorrect setup, overloading, unauthorized adjustments, ground instability or earthquake causing fatality/s or a potentially major injury such as dislocation, crushing, strains/sprains, bruising/lacerations, fractures or serious head injuries
- Manual handling injuries such as strains and sprains from lifting components
- Electrocuting/electric shock from contact with overhead services, electrical components or lightning strike

Controls – How do I keep safe?

The identification of dropped object risks, and appropriate control measures, are to be fully detailed in a Safe Work Method Statement (SWMS), or similar risk-assessment document, prior to commencing any work involving working at height on or around scaffold.

The SWMS must be reviewed by an appropriate Ryman representative prior to any work commencing and following any changes to the task or environment.

Can I eliminate the risk?

Wherever work can be completed without working at height with the risk of using a scaffold, this should be the first consideration in eliminating risk. For example, working from the ground.

Scaffold and Mobile Scaffold controls include but are not limited to:

	Control Type	Control Measure	Control Level	
Minimization	Elimination	Remove risk by not working at height (e.g. work at ground level)	Most Effective Control	
	Substitution	Substitution scaffold for any other access arrangements that are less hazardous - for edge protection		
	Isolation	Isolate the area below potential drop zones e.g. catch fans and/or physical barricades preventing access such as under bricklaying zones Guardrails, brick guards and kickboards to prevent people falling from height or dropped objects Scrim/mesh to prevent people falling from height or dropped objects		
	↑WORK ABOVE THE LINE WHERE POSSIBLE TO CONTROL RISK↑			Least Effective Control
	Engineering	Scaffold ties to secure scaffold to the building (as per engineers plan or manufacturers guidance) Engineered loading bays to support materials and rubbish and ensure SWL displayed Tortured paths and gates on ladder access ways Rakers/outriggers braced and well-footed Use tool bags or tethers to secure tools from falling Plan brace for mobile scaffold >3.0m Outrigger bracing for mobile scaffold to improve stability Hatches on ladder openings for mobile scaffold		
	Administrative	Weekly scaffold inspections by competent person as well as after adverse weather Scaffold Register Erect/dismantle scaffold at a time where no workers need to be in the working area		
	PPE	This includes the use of PPE, full body harnesses complying with AS/NZS 1891.1:2007, lanyards with integral shock absorbers complying with AS/NZS 1891.4:2009 and anchor point.		

NOTE: Where the risk cannot be eliminated, a combination of control measures may be appropriate.

Erection, alteration and dismantlement of scaffold:

- A SWMS or similar risk assessment should be in place (with adequate planning) for erection, alteration and dismantle of scaffolding
- Only trained and competent scaffolders can make adjustments, modifications or alterations to scaffolding
- A handover certificate to be provided by scaffolder for all major alternations. Major alterations include alterations that take more than 1 hour or affect structural integrity of the scaffold (e.g. alteration to ties and braces). Minor alterations include moving a kickboard/guardrail and working for less than 1 hour
- Use separate access bays wherever possible. Internal ladders and trap doors are less preferable (as hatch doors are normally left open) and should only be used when external ladders are not feasible
- Scaffolding and Temporary/Keder Roof systems should be inspected weekly by scaffolding contractor. Ensure the correct roof system is communicated to the scaffolding company

Minimum Control Requirements for scaffold (as per and in addition to [Good Practice Guidelines for scaffolding](#))

- Top and mid guard rails installed in all areas (as per and in addition to [Good Practice Guidelines for scaffolding](#)). Top rails 900-1100mm from platform and mid rails approximately halfway from the platform
- Green Scaff Tag displaying inspection (safe or unsafe) within 7 days. If a scaffold is deemed unsafe, the Green Scaff Tag must be removed and provided to the Scaffolder. If the scaffolder is not present on site, the Green Scaff Tag must be provided to the Ryman H&S team
- The loading limits are clearly placed on the Green Scaff Tag for each loading bay. Do not overload the scaffold and comply with the weight limit stipulated in the Green Scaff Tag
- Scaffolders to confirm with Ryman the suitability of the foundations to bear the intended loads (e.g. from ground work documents or concrete foundation engineer report or Geotech reports). Scaffolders must not commence erection of scaffold if not confident that ground foundations are suitable to withstand scaffold loads. Scaffolders to be provided with current and future underground services
- A register of all scaffolds will be kept in the site office which must include project/company details, site address, work location on site, independent reference number, SWL, Ryman contact person and comments/notes/description. Additional information may include photos, scaffold type and scaffold component details. It is recommended to use Aculog or Action tags for scaffold registers
- Scaffold must have all identified controls in place to managed risk of dropped objects
- A scaffolding plank/drop net is to be installed between the building and scaffolding (1 level above ground level) to ensure no one is at a risk of dropped object. The scaffolding plank/drop net may need to be removed once exterior works start to allow space (e.g. for bricklaying/glaziers operations). If the scaffold/drop net is removed, consider isolating the areas underneath

- Catch-fans (crash decks) must be installed over all building entries/exits. Consider whether additional scaffolding requirements are needed to install catch fans safely onto the scaffold
- Safety mesh/scrim must be in place on the scaffold exterior. This includes scaffolding that is used as access to work areas (e.g. include staircases), due to the potential risk of dropped objects. The mesh/scrim installed must cover from the first working platform level to 2.0m above the top platform. The scrim must be secured using suitable fasteners and no gaps. The scaffold scrim must be built with suitable fixing and be part of the weekly inspection. Scaffold contractors must supply the necessary documentation (e.g. Design verification) to ensure strengthening has been calculated and is sufficient to withstand the increased wind/environmental loads caused by installing mesh/scrim (e.g. lip ties installed on the top due to higher wind conditions)
- An Engineers Plan must be available for shrink-wrapped scaffold, propping/shore loading, loading bays, support for suspended scaffold, vertical construction (building that is 10 storey or higher), large spans with trusses (8.0m+ span) and load going into building (e.g. podium/balcony)
- Scaffold ties to secure scaffold to the building (as per engineers plan, if required). Scaffold ties need to be removed or altered during the construction process. Planning is critical to ensure that when scaffold ties are removed or altered, that is done by a scaffolder (e.g. not bricklayer or roofer) under the direction of Ryman.
- Internal hop-up/kickboards, mid and top rails are in place when the scaffold is in a temporary state prior to the facade
- Scaffolding height built to a height that is 1m or less from building roof height
- Kickboards in all external and internal areas. Internal kick boards may be removed to allow for exterior cladding works only (e.g. bricklaying, painters, glaziers etc.)
- Self-closing gates installed on each stair access to all platforms of scaffolding
- Brick guards in all areas (where bricks are being laid) unless the scaffold is shrink-wrapped
- Loading bays must display Safe Working Load (SWL) signage
- Any shrink-wrapped scaffold will require full engineering design. The Engineer design will confirm additional scaffold components required. Follow the wind loading requirements set out in the Engineers Report. Any shrink-wrapped scaffold must have a handover certificate and verify components are correct from Ryman Structural Foreman
- During activities that require scaffold alternations made to access building (e.g. bricklaying) a competent person (scaffolder) to be available for bricklayers to request alterations from. An adequate number of scaffolders must be assigned for the work
- Fixed ladders must be fixed and secured in 2 points/places (top and bottom or top and middle) to stop the pivot action and scaffold planks must be secured
- Sole boards to be used (not on slabs) and the base plates to be centered on the sole boards
- Maintain at least a 1.0m distance from the zone of influence (ZOI) of any excavation. Some scaffold may be installed before excavation works starts so ZOI may be impacted after scaffold has been erected. If unsure on how to calculate the ZOI, ask the civil team that has excavated the area
- Scaffold checks to be performed by scaffold users and any defects to be reported to the Ryman Site Management Team

- Fall protection (Harness) must be used if there is a potential to fall from height during erection, modification or dismantling of scaffold. Scaffolders can tie to the building or other structure based on their experience as long as they are trained to install anchor points (as per NZQA U/S 15757)
- Only scaffolder who are responsible for the scaffold are authorized to alter their scaffold. Alterations to scaffolds from other companies require written approval from the scaffolding company responsible for that scaffold

Minimum Control Requirements for mobile scaffold (as per and in addition to [Good Practice Guidelines for scaffolding](#))

- The scaffold is erected and dismantled by a competent person using safe methods to protect from a fall
- Green scaffold tag available and signed off weekly (inspected within 7 days and immediately after being dismantled and moved) by a competent person
- Do not overload the scaffold and comply with the weight limit stipulated in the Green Scaffold Tag
- Ensure appropriate access/egress to mobile scaffold
- Visually inspected by the user prior to use (make sure all planks, access, bracing, rails and kickboards are in place)
- Exclusion zones are established/demarcated around mobile scaffold where there is risk of falling objects (as deemed by the risk assessment)
- Ensure scaffold is braced as per manufacturers instruction (e.g. Plan brace installed)
- Outrigger bracing and diagonal bracing installed to improve stability
- Top guardrail at 1 meter and mid rail at 0.5 meter above deck on all sides
- Platform hatches/trap doors must be closed after accessing the platform
- Toeboards/kickboards in place on all sides
- Ladder must be secured
- Be set up on firm and level ground
- Castor wheels have breaks which are locked when in use
- Workers must not be in the mobile scaffold as its being moved
- Maintain at least a 1.0 distance from any excavation edge
- Consider increasing the edge protection height if working on a mobile scaffold next to an unprotected edge/building outer boundary (e.g. balcony) as the scaffolder/worker can fall the building height

Training and Competency

Any workers erecting, altering, or dismantling scaffold must be trained and competent. If the scaffolder is under training, they must be supervised by a scaffolder who is permitted to erect, alter, dismantle the scaffold as outlined in the table below. Persons training, or supervising inexperienced workers, must be appropriately trained and competent to train or supervise others within that field. Scaffolding company must supply a training matrix for all workers prior to starting work. When assessing the level of supervision required by a trainee, the supervisor or trainer must assess several factors, including but not limited to;

- The worker's experience and competency;
- The nature of the work e.g. scaffold height and complexity; and

- The nature of the risks associated with the work including the worksite.

Inexperienced workers require ‘close supervision’, this means there must be direct and constant supervision in place.

Approval must be sought from the Project Manager or delegate authority prior to any inexperienced scaffolders commencing works on site

Height of scaffold Measured from ground to the highest component	Person permitted to erect, alter and dismantle the scaffold must hold
Scaffold up to 5m	13016 - Demonstrate knowledge of the erection and dismantling of scaffolding up to five metres in height 13053 - Demonstrate knowledge of the erection and dismantling of scaffolding up to five metres in height 9184 - Erect and dismantle non-notifiable prefabricated frame scaffolding up to five metres in height (Some scaffold under 5.0m require the scaffolder to hold the appropriate class of certificate of competence from SARNZ – New Zealand Certificate in Scaffolding (Level 3 – Level 5) OR National Certificate Equivalent
Scaffold 5m and above	Holder of the above and the appropriate class of certificate of competence from SARNZ – New Zealand Certificate in Scaffolding (Level 3 – Level 5 but ensure correct certification for type of scaffolding) OR National Certificate Equivalent
Mobile Scaffold up to 5m	Minimum Requirement: Ryman Healthcare Construction (RHC) internal training - mobile scaffold with Mobile Scaffold Certificate OR As deemed competent by contractors own training processes OR Recommended: 13016 - Demonstrate knowledge of the erection and dismantling of scaffolding up to five metres in height 13053 - Erect and dismantle scaffolding up to five metres in height

Mobile Scaffold 5m and above	Holder of appropriate class of certificate of competence from SARNZ – New Zealand Certificate in Scaffolding (Level 5) (Advanced)
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Note: Scaffolders may require the use of a harness. See Harness Competencies within the 'Working at Height, dropped objects and temporary work platform' document for further information.

Scaffold Inspections

Scaffold type	Inspection frequency	Inspection done by
All scaffolds, regardless of height, that are in use for a week or more	Every 7 days while in use Monthly while set up but not in use. When not in use must display red Scaff tag. After each structural alteration, repair, addition or change of anchorage After any storm or event that could adversely affect the safety of the scaffold	Certified scaffolder or competent person, depending on the type of scaffolding
Notifiable scaffolds	As above	Certified scaffolder
Suspended scaffolds	As above and before first use Daily as part of the pre-start check	Certified scaffolder Competent user

Notifiable Scaffold:

Where erecting or dismantling scaffolding with a risk of falling 5 metres or more notify WorkSafe. Notifications can be made via the [WorkSafe website](#). Notification must be made by the Ryman Site Management Team and the Subcontractor.

Notifiable Work at Height:

Where height work is 5 metres or higher notify WorkSafe if there is a risk of falling. Notifications can be made via the [WorkSafe website](#). Notification must be made by the Ryman Site Management Team and the Subcontractor. Exclusions include:

- Work in connection with a residential building up to and including 2 full storeys;
- Work on overhead telecommunication or electric lines;
- Work carried out from a ladder only; or
- Maintenance and repair work of a minor or routine nature

Ryman is not required to make a new notification for each stage of the project, if an all-encompassing hazardous work notification is in place for the project for Notifiable Work at Height/Scaffold.

References and Resources:

- [Good Practice Guidelines for Scaffold in New Zealand](#)
- [Ryman Healthcare Mobile Scaffold Safety Poster](#)