RYMAN HEALTHCARE

WORK AT HEIGHT

SAFELY CONTROLLING WORK
CRITICAL RISK CONTROL DOCUMENT

May 2025 | Version 4

DOCUMENT CONTROL			
Document Name	**Work at Height**		
Issue Date	01/05/2025		
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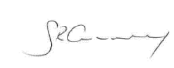
	Stewart Connolly	Regional Health, Safety and Environmental Lead	
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DOCUMENT REVIEW			
Date	**Revision**	**Description of Change**	**Author**
1-Dec-2021	1	First document	**AE, MJ, OG**
1-Jun-2022	2	Previous version available on request	**AE, MJ, OG, AVR, JB**

3-Oct-2024	3	• Changed title to Working at Height
		• Combined Working at height, Scaffold and EWP documents
		• Added Contents Page
		• Moved all references to bottom of document.
		• Replaced 3 controls tables with updated versions.
		• Moved all Training and competency requirements to end of document.
		• Removed extra links to other SCW documents in favour of a "found here" link on pages 5, 14 & 21.
		• Page 1, Reworded first paragraph to read clearer, shifted statistics paragraph from page 2 to follow first paragraph.
		• Page 1, Removed hyperlinks from SCW docs and replaced with a general 'can be found here' link for ease of changes in future.
		• Page 6, Risks – What could go wrong? – Consolidated sections from original documents into one section. Reworded to consolidate potential injuries into intro and bullets to scenarios.
		• Page 8/9, relocated harness comment in edge protection section (pg. 9) to use of harness section (pg. 8) bullet 2. Reworded to clear requirement. Added AS/NZS Standard to minimum controls.
		• Page 9, Edge protection – bullet 4 added "Swing" in front of gates for proper terminology.
		  ○ Under considerations changed "consider" to "prioritise"
		  ○ Changed 1000mm top rail to align with WorkSafe Guidance.
		• Removed duplicate mentions detailing Notifiable works specifications for working at height.
		• Page 11, Minimum Control Requirements – Removed mention of AS/NZS 1892 and removed "this is not the preferred TWP
			LT, NR, SC, GM, GC, MB, SM, MB

		option to be open to interpretation based on specific tasks being signed off by Ryman site management (first bullet point of last 4 TWP options). Removed any duplicate mentions covered by first bullet point. • Page 19, Scaffold under 5.0m – corrected U/S 13053 to correct title. • Page 20, Mobile scaffold up to 5.0m – removed Ryman Healthcare own training comment as process no longer used.	
1-Apr-2025		• Updated intro to define what risks this SCW document covers • Update intro with risk and Golden rules • Page 9, under height permits, removed the 2m comment from the statement "accessing or working on a roof where there is no physical edge protection.	**JA**

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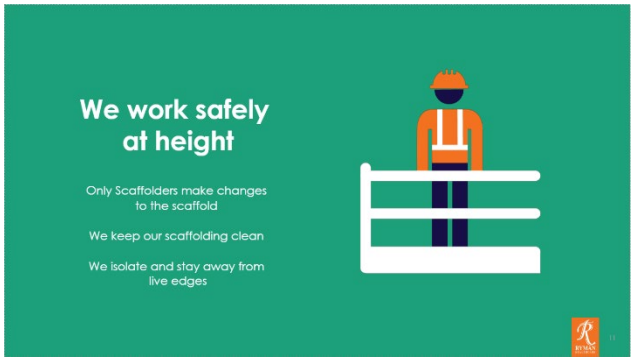
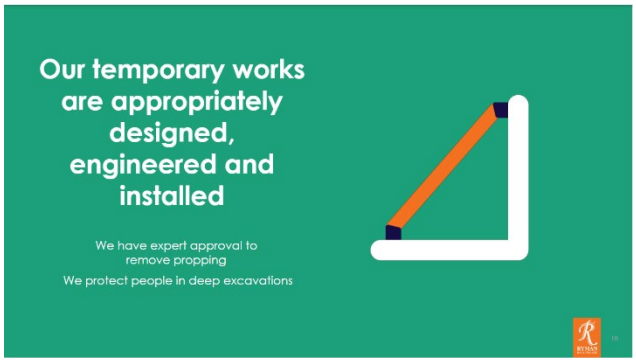
Work at Height

This SCW document covers two key risk areas:

1. Falling from heights from any source eg from one level to another, and from temporary work platforms.
2. Objects falling from height

Three golden rules are also related to this SCW document:





Work at height means working in a place where a person could fall from one level to another. This can be above or below ground level and at any height level. Work at height does not include slipping, tripping or falling on the same level.

Dropped objects hazards are any objects overhead that could fall and cause harm which may include tools or building materials. Dropped objects are often the result of poor housekeeping, openings and unprotected edges. Temporary Work Platforms (TWP) provide a place to work when working at height.

They are most often used for work under 5m. Temporary work platforms include straight ladders, platform ladders, safety steps and other types of work platforms if authorized.

Falls from height is one of the biggest causes for work-related fatalities and serious injuries in New Zealand. Investigations into construction falls from height show that more than 50% of falls are from less than 3 m and approximately 70% of falls are from ladders and roofs. A tool weighing only 3kg falling from a height of 20 meters has an impact force of 600N, which is a force of approximately 60kg. This could cause a potentially fatal injury.

Below is a non-exhaustive list *of activities on our construction sites that could involve working at height:*

- Working on ladders/TWP (e.g. podium /folding platform, safety step, etc.)
- Working on and erecting/dismantling scaffold and mobile scaffold
- Use of an elevated work platform
- Working on a roof/façade or near a trench, opening or live edge
- Man Cage, swing stage, rope access, abseiling.
- Lift/window installation/lift shaft
- Working on flat deck trailer
- Temp structure
- Unloading precast elements
- Concrete pours
- Maintenance works
- Lifting operations or tower crane erection, service and dismantling
- Rib and infill installation.
- Material storage at height
- Demolition work

Related safely controlling work documents can be found here:

Risks - What could go wrong?

Working at height is identified as a critical risk at Ryman Healthcare. The works present a risk of potential fatalities multiple disabling injuries such as serious head injuries, crushing, dislocation, fractures, strains/ sprains, bruising/ lacerations, and suspension trauma to name a few. Below is a non-exhaustive list of what could go wrong:

- Falls from height.
- Tools/materials/other objects falling onto one or more worker.
- Unsecured materials falling from height or being blown by the wind.
- Tripping/ Slipping to level below.
- Falling through floor/ roof openings or loose and/ or corroded surfaces.
- Scaffold/ Mobile Scaffold, EWP or Temporary work platform collapse, overload, or overturn.
- Manual handling caused injuries from setup of working at height system (e.g. lifting components to scaffold or setup of fall arrest system)
- Electrocution/electric shock from contact with overhead services, electrical components, or lightning strike
- EWP collision with people, other plant, or objects.
- Medical events requiring emergency rescue.

Controls – How do I keep safe?

The identification of working-at-heights or dropped objects 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. There is no minimum working height to implement controls.

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 or use of TWP, this should be the first consideration in eliminating risk. Could structures be built at ground level? Could long-handed tools be used from ground level? Could materials not be taken at height?

Work at height, dropped objects and TWP controls include but are not limited to:

	Control Type	Control Measure	Control Level
Minimisation	**Elimination**	• Remove risk by not working at height (e.g. work at ground level), not using TWP or not having objects at height	Most Effective
Minimisation	**Substitution**	• Substitute or replace a hazard or hazardous work practice with a less hazardous one (e.g. provide alternative means of access such as a safe walkway or use a lighter object at a lower height)	
Minimisation	**Isolation**	• Isolate or separate the hazard (e.g. barricade the fall risk area with edge protection, covering open penetrations, barricade area underneath). Barricade may include temporary barriers, using scrim and kickboards around scaffold, flags, bunting etc.	
	WORK ABOVE THE LINE WHERE POSSIBLE TO CONTOL RISK		
Minimisation	**Engineering**	• This includes use of a fall injury prevention system (e.g. fall prevention designed for precast panels with parapet walls or safety nets). This also includes using engineering controls to stabilise a TWP (e.g. using panel ladders to derig concrete panels). Other engineering controls include use of dropped object prevention (e.g. use tool tether, tool bag or carrier)	
Minimisation	**Administrative**	• Introduce work practices that reduce risk (e.g. place warning signs for exposure of fall/ dropped objects) • Monitor weather conditions for impact on work • Scheduling work to limit risk exposure time to workers • Regular inspection of propriety systems as per the manufacturers guidance	
Minimisation	**PPE**	• Use of full body harness that complies with AS/NZS 1891.1:2007, Lanyards with integral shock absorbers complying with AS/NZS 1891.4:2009. Use of hard hats that complies with AS/NZS 1801:1997, to potentially reduce head impact caused by dropped objects. Use of chin straps to minimise the likelihood of a hard hat falling.	Least Effective

Height Permit

A height permit is required where potential for a fall exists due to a non-routine job activity. Such non-routine job activities include, but are not limited to:

- Working on a swing stage, man cage or suspended scaffold
- Erecting or dismantling a tower crane.
- Using a harness for tasks that are not performed regularly or performed for first time.
- Using a harness for a maintenance job (scheduled/unscheduled e.g. piling rig maintenance, servicing tower crane).
- Accessing or working on a roof where there is no physical edge protection. If a roof has a pitch of 25 degrees or greater, a height permit must be obtained (regardless of whether there is edge protection or not).
- Installing edge protection where a potential to fall is 2.0m or more e.g. roof/excavation.
- Working at height activities using precast concrete panel ladders.

See the Work at Height Permit for further information (on Donesafe).

Use of harness systems

Recommendation

- Alternative fall control measures should always be considered such as edge protection, scaffold, or work platform.
- A harness system is to be used when there is an otherwise uncontrolled risk of falling from height (e.g. no edge protection, scaffold or TWP).
- Fall prevention/restraint systems should be given preference over fall arrest systems as they prevent a worker from falling rather than suspend them from a fall to the ground.

Minimum Control Requirements

- The harness must tested to AS/NZS 1891.1:2020, have its date of manufacture on label (must be within 10 years with ordinary use), be inspected every 6 months and have a current inspection tag and the harness must be inspected by the user for damage prior to each use.
- Use of an anchor point or equivalent that is capable of withstanding the force of a fall.
- An emergency rescue plan must be in place, considering scenarios such as a fall in a fall arrest system or a medical event at height. Suspension trauma (also known as harness hang syndrome) can be life threatening when a worker sustains a fall and is suspended in a harness.
- If fall arrest is the only option, then the harness lanyard to be equipped with a 1-2m shock absorber (ensure fall distance is greater than impact distance – see point below). It is recommended to have suspension trauma leg straps just in case a person falls from height with a harness.
- The fall distance calculation (distance from working anchor point to ground) must be greater than the impact distance calculation (distance from anchor point to ground + height of person using harness + harness /lanyard length + shock absorber length)
- Calculate the swing distances and ensure the anchor points are positioned appropriately to minimize swing back/pendulum effect.

Edge protection

Edge protection must be installed where there is an exposed edge with a fall potential.

Minimum Control Requirements

- Mid and top guard rails to be installed in all areas. Top rails should be installed between 900mm and 1100mm from platform and mid rails installed halfway between working platform and top rail.
- Kickboards installed where there is a risk of dropped objects.
- The guard rails must withstand 600N force and 350N force per lineal metre.
- Where there is a potential to fall from the access, access points to have swing gates, chains, or other means to minimize risk.

Considerations

- Prioritise scaffold edge protection (steel/scaffold) instead of timber/other alternatives. Where it is not practical to use scaffold edge protection (e.g. due to floor/ground that cannot be bolted into), the edge protection must be engineered as suitable to protect from falls and installed 1.0m or more from the edge if possible.

Use of safety nets (fall arrest systems)

Key requirements for the safe installation, use and maintenance of safety nets include (as per and in addition to (Safe use of safety nets – Good Practice Guidelines):

Minimum Control Requirements

- Any nets supplied must meet the appropriate standards for New Zealand and are inspected to be in good working order.
- Net installers are trained and competent.
- Safety nets are attached with tie ropes or karabiners to the supporting structure or to specifically designed anchor points on the structure. Correct use of anchorages/ties/foundations that are suitable for the application (designed to a standard/engineered specification – that they will withstand the amount of force if a person falls)
- Deflection and catching widths in case of a fall to be calculated by installer.
- Enough clear space maintained below the net so that as the net deflects, the person who has fallen does not strike an obstacle or the ground.
- Nets to be inspected daily for wear/damage/alterations. Any fallen debris to be removed and damaged/alterations remedied.
- A current test label must be displayed on all safety nets older than 12 months:

  showing the net has been tested in the past 12 months and meets the manufacturer's minimum test energy absorption capacity.
- Once the nets have been installed, the installer should give handover documentation to the site. The documents should verify the safety net system is fit for purpose, as well as giving written instructions on:
  - rescue procedures (A rescue plan must be in place before work on the nets begins)
  - inspection procedures
  - removing debris from the nets

Use of stilts

- Key requirements for the safe use of stilts include (NZ Best practice guideline for working at height in New Zealand):

Minimum Control Requirements

- Stilts can only be used for light duty tasks and preferably for short time duration (less than 2 hours at a time and less than 6 hours per day)
- Use a platform ladder or safety step (see below) for mounting and removing stilts.
- Use stilts on level/even/flat ground.
- Ensure work area has good housekeeping prior to using the stilts.
- Avoid using stilts around penetrations. If not possible, ensure penetrations are closed or barricaded.
- Stilts must be maintained, stored, serviced, and checked as per the manufacturer's requirements.
- Workers must be competent (e.g. complete in-house training from their company) in the use of stilts.
- Workers must avoid leaning forward, overreach or kneeling when using the stilts.
- Workers must not carry heavy items while using the stilts. Workers can carry small hand-held tools and tools without leads.

Selecting the right TWP for the job

TWP should only be used for temporary access. Considerations when selecting equipment include the below. TWP's should only be used for short duration, low complexity tasks.

What is the duration of the work?	Work that is longer in duration should be completed from a structure such as a mobile scaffold or scaffold that offers improved edge protection.
How complex is the work?	Do you need to use both hands frequently and/or move around on the platform? If so, a mobile scaffold may be a safer option as it offers edge protection and a greater working area. Make sure during prestart there are no conflicting activities that may affect the complexity of using a TWP.
What are the ground conditions?	Is the ground flat and firm? If not, consider using a different means of access that poses less risk, or a TWP with a wider base. Make sure there is sufficient space and a clear working area for the equipment base to sit level.

Recommendation

- Time on the access platform should be limited wherever possible e.g. do as much of the preparation work as possible on the ground.
- Platform ladders are the most preferable temporary work platform as they offer some edge protection and a working platform. Stepladders, trestles, and a-frame provide no edge protection and are the most undesirable form of temporary work platform.

Minimum Control Requirements

Platform ladder/stairs	• Commercially rated to a minimum weight of 150kg. • Inspected prior to use for signs of wear and damage including rungs, feet, stiles. • Ladder/stair placement planned so that platform edge protection is correctly utilised
Safety steps	• Commercially rated to a minimum weight of 150kg • Only to be used without the need to overreach to do the task.
Straight ladders	• **Authorized and approved use only for certain access, egress and works where other means are not possible. These tasks and use must be approved by Ryman Site Management team and have an appropriate risk assessment in place.** • Commercially rated to a minimum weight of 150kg. • Secured at the top e.g. with hooks or footed. • Inspected prior to use for signs of wear and damage including rungs, feet, stiles. • Set up 1m out at the base for every 4m at height
Trestles	• **Authorized and approved use only for certain works where other means are not possible. These tasks and use must be approved by Ryman Site Management team and have an appropriate risk assessment in place.** • Commercially rated to a minimum weight of 150kg. • Inspected prior to use for signs of wear and damage
A-frame ladders	• **Authorized and approved use only for certain access, egress and works where other means are not possible. These tasks and use must be approved by Ryman Site Management Team and have an appropriate risk assessment in place.** • Commercially rated to a minimum weight of 150kg. • Minimize leaning out and over-reaching. • Inspected prior to use for signs of wear and damage
Others	• **A risk assessment must be in place including reason for selection of this TWP and controls to minimize the risk posed.** • Authorized use required and approved by the Ryman Site Management Team

Most preferable platform

Dropped Objects

Recommendation

- Exclusion zones should be established to isolate any area at risk of dropped objects. The location and size of the exclusion zone should consider the distance in which objects could land as identified in a risk assessment. If exclusion zones are not possible, other controls (e.g. drop nets) should be deployed to catch any dropped objects.

Minimum Control Requirements for Dropped Objects

- When working from safety nets there must be a risk assessment to identify controls to protect workers below
- Works must be coordinated and communicated between workers to make sure no conflicting activities pose additional risk to workers of dropped objects.

Training and Competency

For any work at height activity relevant, all workers must be trained and competent. Competencies include:

Activity	Training and Competency
Use of fall arrest system, prevention/restraint harness	Unit Standard 23229 – Use a safety harness for personal fall prevention when working at height
Installation and disestablishment of an anchor point or lifeline	Unit Standard 15757 – Use, install and disestablish proprietary fall arrest systems (such as lifelines, anchor points) when working at height
Installation and maintenance of safety nets	A person who has acquired through a combination of training and qualifications or experience, the knowledge and skills to correctly perform the required task.
Developing an emergency rescue plan	Recommended: Unit Standard 23232 – Develop a rescue plan for recovery of a suspended individual after a fall
Using an EWP	See the Elevated Work Platform (EWP) document for further information.
Erecting/dismantling/altering /inspecting mobile scaffold	See the Mobile Scaffold Section in the document for further information.
Erecting/dismantling/altering /inspecting scaffold	See the Scaffold Section in the document for further information.

Supervision

Person's training, or supervising inexperienced workers, must be deemed appropriately trained and competent by their company to train or supervise others within that field.

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
- The nature of the risks associated with the work including the worksite.
- The control measures in place while the worker being supervised is carrying out the work.

Inexperienced workers require 'close supervision', this means there must be direct and constant one-on-one management in place.

Approval must be sought from the Project Manager or delegated authority prior to any inexperienced workers working at height.

WorkSafe NZ Notification:

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. Notifications must be made by Ryman and the contractor. Exclusions include:

- Work in connection with a residential building up to and including 2 full story's;
- 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 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 can be found here:

Controls – How do I keep safe?

The identification of risks associated with erection, alteration, dismantling and use of scaffolding, including but not limited to falls from height and dropped object risks are to have appropriate control measures 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
Minimisation	**Elimination**	• Remove risk by not working at height (e.g. work at ground level)	Most Effective
Minimisation	**Substitution**	• Substitute scaffold for any other access arrangements that are less hazardous (e.g. edge protection)	
Minimisation	**Isolation**	• Isolate the area below potential drop zones (e.g. catch fans and/ or physical barricades) preventing access to area. • Guardrails, brick guards, scrim/ mesh, and kickboards to prevent people falling from height or dropped objects	
	WORK ABOVE THE LINE WHERE POSSIBLE TO CONTOL RISK		
Minimisation	**Engineering**	• Scaffold ties to secure scaffold to the building (as per engineers' plan or manufacturers guidance) • Engineered loading bays to support materials and rubbish. Ensure SWL is displayed. • Rakers/ outriggers braced and well footed. • Tortured paths and gates on ladder access ways • 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	
Minimisation	**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	
Minimisation	**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 points.	Least Effective

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 adjust, make modifications or alterations to scaffolding.
- A handover certificate to be provided by scaffolder for all major alterations. 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 to the top rail.
- 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 groundwork 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 the below:
  - 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.
- Scaffolding planks and drop or safety netting are to be installed between the building and scaffolding (1 level above ground level) ensuring there are no gaps to reduce the risk of dropped objects. The scaffolding plank and drop net may need to be removed

once exterior works start to allow space (e.g. for bricklaying/glazier's operations). If the scaffold or 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 scaffold scrim must be fixed with suitable fixings with no gaps and inspected weekly. 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 engineer's 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.
- Scaffolding height built to a height that is 1m or less from building roof height.
- Kickboards in all external and internal areas, mid and top rails in place during and after scaffold installation. Internal kick boards and handrails 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 centred 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 if 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 as per manufacturers specifications 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 as per manufacturers specifications.
- Top rails installed between 900-1100mm from platform and mid rails approximately halfway from the platform to the top rail.
- 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. Person's 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 delegated authority prior to any inexperienced scaffolders commencing works on site.

Height of scaffold Measured from ground to the	Person permitted to erect, alter, and dismantle the scaffold must hold
Scaffold up to 5m	Unit Standard 13016 - Demonstrate knowledge of the erection and dismantling of scaffolding up to five metres in height. Unit Standard 13053 - Erect and dismantle scaffolding up to five metres in height. Unit Standard 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: 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)

Note: Scaffolders may require the use of a harness. See Harness Competencies above in the working at height section page 12 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.

Elevated Work Platforms (EWPs)

Elevated work platforms (EWP) are a type of 'plant' or equipment that facilitate working at height. They consist of a working platform on an extending structure and chassis, with controls for operation.

Some activities on our construction sites that involve use of EWP's objects include:

- Using Scissor Lift
- Using Knuckle Boom/cherry picker/boom lift
- Using Vertical Lift
- Using Trailer Mounted EWP
- Using a truck Mounted EWP

Related safely controlling work documents can be found here:

Controls – How do I keep safe?

The identification of hazard and risks from EWP operations, 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 an EWP.

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?

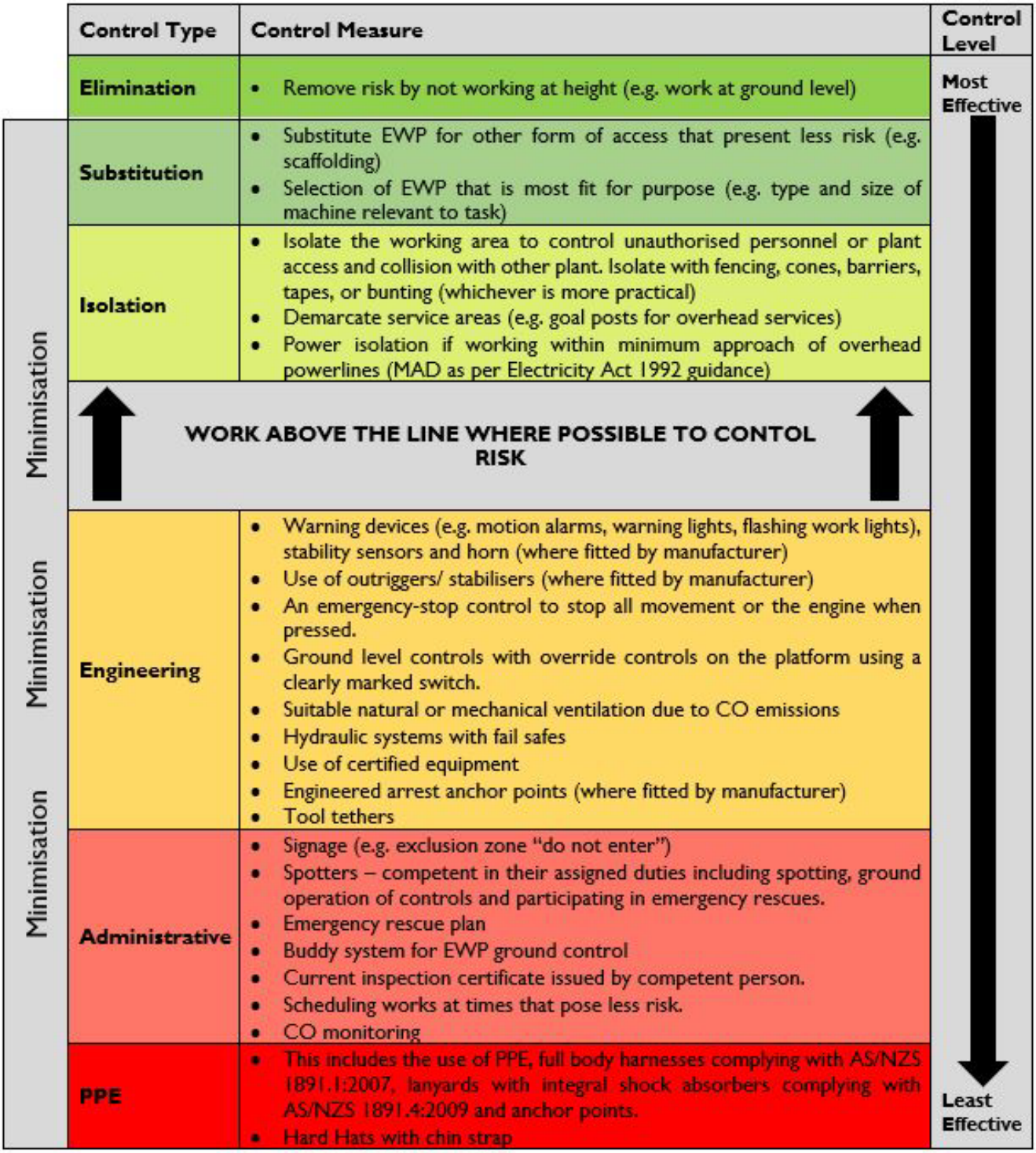
Wherever work can be completed without the use of an EWP, this should be the first consideration in eliminating the risk. For example, completing the work on the ground or use of prefabricated materials.

Selecting the right equipment for the job

Before using an EWP, make sure to consider if it is the right equipment for the job. Considerations when selecting equipment include:

- Would a mobile scaffold or other temporary access platform pose less risk? (substituting the equipment for a safer option)
- What are the ground conditions - Is the ground flat and firm? Are there any drop off points? How much room is available for the equipment?
- How far do I need to reach from a safe setup area?
- How much weight is the EWP going to need to hold? - Consider the operators and any tools/materials

EWP controls include but are not limited to:



Control Type	Control Measure	Control Level
Elimination	• Remove risk by not working at height (e.g. work at ground level)	Most Effective
Substitution	• Substitute EWP for other form of access that present less risk (e.g. scaffolding) • Selection of EWP that is most fit for purpose (e.g. type and size of machine relevant to task)	
Isolation	• Isolate the working area to control unauthorised personnel or plant access and collision with other plant. Isolate with fencing, cones, barriers, tapes, or bunting (whichever is more practical) • Demarcate service areas (e.g. goal posts for overhead services) • Power isolation if working within minimum approach of overhead powerlines (MAD as per Electricity Act 1992 guidance)	
WORK ABOVE THE LINE WHERE POSSIBLE TO CONTOL RISK		
Engineering	• Warning devices (e.g. motion alarms, warning lights, flashing work lights), stability sensors and horn (where fitted by manufacturer) • Use of outriggers/ stabilisers (where fitted by manufacturer) • An emergency-stop control to stop all movement or the engine when pressed. • Ground level controls with override controls on the platform using a clearly marked switch. • Suitable natural or mechanical ventilation due to CO emissions • Hydraulic systems with fail safes • Use of certified equipment • Engineered arrest anchor points (where fitted by manufacturer) • Tool tethers	
Administrative	• Signage (e.g. exclusion zone "do not enter") • Spotters – competent in their assigned duties including spotting, ground operation of controls and participating in emergency rescues. • Emergency rescue plan • Buddy system for EWP ground control • Current inspection certificate issued by competent person. • Scheduling works at times that pose less risk. • CO monitoring	
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 points. • Hard Hats with chin strap	Least Effective

Minimisation Minimisation Minimisation

Minimum Control Requirements:

- Operator must be trained and competent and authorized to operate the EWP.
- Set up the EWP on firm and level ground. As required, confirm ground conditions are suitable for outriggers use and correct EWP selection (e.g. consult Ryman Civil Foreman). This may mean geotechnical engineering approval if in doubt.
- Use of fitted outriggers.
- Harnesses must be worn on EWPs that have a rated anchor point (e.g. boom lift, truck mounted and trailer mounted EWPs).
- Pre-start inspection and logbook completed before use.
- Always face direction of travel when moving
- Stay clear of overhead electrical hazards.
- Exclusion zones (on the ground where there is risk of objects falling)
- Emergency rescue plan completed (e.g. via SWMS), and all workers involved in the task inducted to the plan. This may require two people to be present during EWP operations depending on the operation risk. For lone work activities controls to manage this risk must be specified in the risk assessment.
- A certificate of compliance issued within the past 6-months.

Training and Competency

All personnel involved with the operation of mobile elevated work platforms (EWPs) shall have the appropriate training and **current operator ticket/certificate** for the equipment being used:

Equipment Type	Training Requirements
Operation of a scissor lift	• Unit standard 23960: scissor lift and; • Unit standard 23966: Describing types of elevating work platforms (EWPs), and legislative requirements for their use
Operation of a truck mounted elevated work platform	• Unit standard 23961: truck mounted elevated work platform and; • Unit standard 23966: Describing types of elevating work platforms (EWPs), and legislative requirements for their use. • Unit Standard 23229: Use safety Harness System when working at height.
Operation of a self-propelled boom lift	• Unit standard 23962: self-propelled boom lift and; • Unit standard 23966: Describing types of elevating work platforms (EWPs), and legislative requirements for their use. • Unit Standard 23229: Use safety Harness System when working at height.
Operation of a trailer mounted elevated work platform	• Unit standard 23963: trailer mounted elevated work platform and;

	• Unit standard 23966: Describing types of elevating work platforms (EWPs), and legislative requirements for their use. • Unit Standard 23229: Use safety Harness System when working at height.
Operation of a powered self-propelled vertical lift	• Unit standard 23964: vertical lift • Unit standard 23966: Describing types of elevating work platforms (EWPs), and legislative requirements for their use
Spotter	• Competent in the duties/s assigned to them which may include spotting

Note: Workers who require use of a harness in the EWP must also be trained and competent in use of the harness. See the 'Work at Height' document for harness competencies. Harnesses must be worn on EWPs that have a rated anchor point (e.g. boom lift, truck mounted and trailer mounted EWPs

References and Resources:

- NZ Best practice guideline for working at height in New Zealand
- NZ Best Practice guidelines for working on roofs
- ACC Risk Card – Work at Height
- Safe use of safety nets Best Practice Guidelines
- Safe working with ladders and stepladders fact sheet
- Temporary Work Platforms
- WorkSafe Fact sheet 1: Planning a safe approach to working at height
- Fact sheet 2: Selecting the right equipment for working safely at height
- Fact sheet 3: Short duration work at height
- Fact sheet 4: Edge protection
- Fact sheet 5: Temporary work platforms
- Fact sheet 6: Total restraint system
- Fact Sheet 7: Be safe working on roofs
- WorkSafe NZ Mobile elevating work platforms
- Good Practice Guidelines for Scaffold in New Zealand
- Ryman Healthcare Mobile Scaffold Safety Poster