

These Guidelines should be available to all users of the scaffold

Ensure you've read and understood all of this document



## GUIDELINES FOR SAFE USE OF SCAFFOLD- ALUMINIUM TOWERS (NZ)

### Before using the Scaffold

- Ensure the Scaffold Tower is plumb and level.
- Check all Diagonal, Horizontal and Plan braces are installed, and that the whole configuration is built according to the supplier's instructions. Do not improvise, alter or deviate, and use only original components.
- Check that Ladder access is available to every platform.
- Check that Outriggers are fitted as required -refer Fitting Outriggers (overleaf)
- Check quardrails midrails and toeboards are fitted to all platforms over 2m high\* - refer note (overleaf)
- If mobile, check that all Castor brakes are locked on.
- Check and assess the Scaffold at the start of each day/ use. If it has any damage or defects, do not use the Scaffold but alert the supplier or person(s) controlling the Scaffold.
- Ensure access to incomplete scaffold is closed and warning signs placed.

### Using the Scaffold

- Ensure there are no persons or objects on the Scaffold whilst it is being moved.
- Always reapply all Castor Brakes and re-level the Scaffold after moving.
- Do not overload / exceed the specified safe working load of the Scaffold. *- Refer to Load ratings(below).*
- Never use ladders or any sort of device to gain additional height above a Scaffold platform.
- Never use or attach Hoisting equipment to the Scaffold
- Do not allow any part of the Scaffold to come within 4.0m of overhead power lines. Some lines may require up to 8m clearance- check with the appropriate power authority before approaching the wires.
- Do not use the Scaffold if you are tired, suffering any medical condition, or under the influence of alcohol or drugs which may cause lethargy or danger to yourself or others.
- Ensure the mobile scaffold is protected against impact from moving plant/ vehicles
- Ensure unattended scaffold is secure and access by unauthorised persons is prevented
- Do not use the Scaffold in extreme weather, or high winds. Scaffold should be anchored/secured to resist winds that are above 32kph.
- If in exposed or elevated area, secure the scaffold to a fixed structure(to prevent overturning) and tie down platforms(to prevent dislodgement).
- Be aware of situations where winds are magnified by funnelling effects e.g. at corners of buildings or between tall buildings.
- Never attach tarpaulins or other coverings to the scaffold as this may seriously increase its susceptibility to wind force.

### Care of the Scaffold

- Take good care of the scaffold: components should fit together easily without using force. Keep equipment, specially joints and moving parts clean.
- Care to be taken when dismantling scaffold, never let components drop to the ground as the impact could cause structural damage.
- Never modify or alter scaffold components in any way.
- Only persons authorized by the supplier are permitted to carry out repairs.
- Only original parts are to be used when replacing any parts of any Equiptec Scaffold components.
- Any damaged component must be reported to the person responsible for the supply of the Scaffold immediately.
- If scaffold is being used for an extended period in a corrosive environment, apply a lubricating spray to all brace gasper pins/ springs and check regularly to ensure they move freely and do not become stiff or seized.

### Do not use components if;

- Graspers, Brace ends are loose
- Graspers do not engage correctly(stiff or seized)
- Ladder stand off arm does not operate correctly
- Aluminium components are dented, deformed or cracked
- Castor wheels do not rotate freely
- Castor or screw jack adjustment nuts do not rotate freely
- Castor Brakes do not unlock or lock

### Transportation and Storage

- All loads must be fastened as slippage can occur with aluminium components
- Stack equipment securely to prevent falling

### LOAD RATINGS

**Total loading of any single Equiptec scaffold tower must not exceed 2000kg (including scaffold weight) evenly spread over 4 castors or screwjacks.**

#### Working Platform Live Load Ratings / Typical applications

Light Duty:	225kg (2.2kN) per bay single width, including up to 120kg (1.2kN) point load.
	<b>Typically used by painters or maintenance staff with light hand tools only</b>
Medium Duty:	450kg (4.4kN) per bay double width or multi platform width scaffold, including up to 150kg(1.5kN) point load
	Typically used by plasterers or builders with equipment or materials.
Heavy Duty:	675kg (6.6kN) per bay. Aluminium scaffolding CANNOT be used
	Typically used by bricklayers with heavy materials

#### WORKING LOAD LIMITS (WLL)Maximum Live Load ratings

Single scaffold platform	-Light Duty eg 225kg (2.2kN)	
Working platform level (one, two or three adjacent platforms)	Single width (0.7m wide) towers Double width (1.3m wide) or Triple width (2.0m wide) towers	} -Light Duty eg 225kg (2.2kN) Uniformly distributed load -Medium Duty eg 450kg (4.4kN)Uniformly distributed load
Single bay scaffold tower :	Single width (0.7mwide) towers Double width(1.3m wide) or Triple width (2.0m wide) towers	either -up to 5 x Light duty platform levels or -up to 2 x Medium duty platform levels or -up to 5 x Light duty platform levels

FOR ANY SCAFFOLD CONFIGURATIONS OR LOADINGS OUTSIDE THE SCOPE OF THIS DOCUMENT CONTACT THE SUPPLIER

Further reference information can be obtained by contacting the supplier or contacting equiptec. +64 6 842 0222 www.equiptec.co.nz

These Guidelines should be available to all users of the scaffold  
**Competency / Work Practices**

0.7m Wide (Single width)

Scaffolding is to be used in accordance with current Australian and New Zealand standards, Worksafe or OHS/WHS requirements and codes of practice. Scaffolding is to be erected in accordance with suppliers requirements, acceptable safe work practices and appropriate control measures Including personal protective equipment.

### Risk Assessment/Planning/Preparation

Before commencing any work involving scaffolding at your chosen work area, plan ahead and be prepared. Ideally more than one person should do this. Seek expert advice if required. Always ensure that you understand and can comply with the regulations that apply to the erection and use of scaffolding in the area that you intend using this equipment.

- Conduct an inspection of the worksite
- Consult with other workers or those that might be affected by the work intended
- Ensure you have fully read and understood the instructions provided
- Review relevant local legislative requirements
- Identify Hazards – Find out what could cause harm
- Assess the risks – Understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening
- Control the risks- implement the most effective control measure(s)
- Review control measures to ensure they are working as planned.
- Determine if the situation requires Certified Scaffolders to erect the Scaffold (i.e. can a person or object fall more than 4m, including potential falls through any penetration or over any retaining wall, edge of floor etc.) All other scaffolds to be erected altered and dismantled by a competent person.
- Check that the surface is adequate for the point loads due to castors and outriggers (up to 500kg).

Soleboards (minimum 500mm x 200mm x 38mm – subject to ground conditions) may be required on soft ground

- Assess the intended travel path for safe movement of a Mobile Scaffold. Develop controls to avoid accidents.
- When working in a public area, ensure adequate public protection has been provided

### Risk Assessment Table

Examples of significant hazards/risks and appropriate control measures include but are not limited to, the following:

Serious Hazard Identified & Possible Risk	Control Measures
<b>Unstable Scaffold</b> ..... risk of : Collapsed Scaffold	Assembly instructions must be strictly adhered to. All Scaffolds from which a person or object could fall more than 5m, must be erected by a licenced scaffolder Check supporting surface is firm and adequate to support the scaffold Ensure scaffold is erected plumb and level. Outriggers, or ties to be fitted where required. <i>- Refer maximum height table (overleaf)</i>
<b>Power lines</b> ..... risk of : Electrocutation	Do not use Scaffold within 4.0m of overhead electric wires. Some situations may require up to 8.0m clearance. Check with the appropriate Electrical Supply Authority. Always look up and check before moving scaffold.
<b>Working at Height</b> ..... risk of :Falling from Scaffold	Guardrails and mid rails must be used on all Platforms over 2m high* - refer note (below) Do not ride on Scaffold whilst it is being moved. Always ensure the horizontal (yellow) braces are clipped to the inside of the standards. Do not stand or sit on midrails or Guardrails. Do not use a ladder or steps to gain extra height when working on scaffold platforms. Do not climb on inside or outside of scaffold framework. Use only the internal ladders provided for access.
<b>Material falling from Scaffold</b> ..... risk of :Injury or damage below	Toeboards must be fitted at all Platforms over 2m* in height. (* some states require all heights) Ensure there are no gaps. Platforms to be clear of materials when mobile scaffold is being moved.
<b>Sloping Ground</b> ..... risk of : Unstable Scaffold	Castors on mobile Scaffolds must have brakes which must be applied when Scaffold is in use. Do not use mobile Scaffold on any surface that slopes more than 5 degrees unless provision is made to take the load off the castors during use of the scaffold
<b>Wind , Horizontal Loading</b> ... risk of : Overturning of scaffold	Do not fit containment sheeting, banners or similar to scaffold. <b>Tie scaffold to solid structure, AND fit outriggers to lower height towers...</b> .... Where adverse weather conditions are expected, winds exceeding 32kph .... Where the scaffold is located in a wind funnelling location, between large buildings, or open exposed buildings .... Where the nature of work is applying horizontal forces at the working deck, e.g. drilling. .... When the tower is to be left unattended for any time, especially in areas of public access

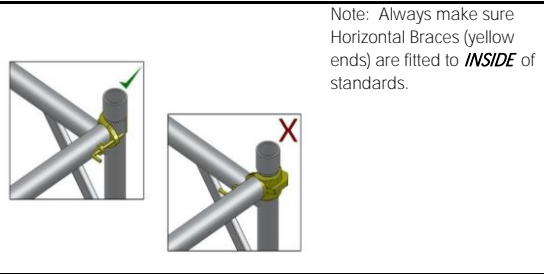
\*Note: the 2m platform height relates to the distance a person or object could fall from the platform. Edge protection may be required at lower heights/ all heights - check your local requirements. (Note: New Zealand requests edge protection is provided for platforms at all heights unless a full written risk assessment has been carried out that proves no risk of harm exists.)

SUPPLIED TO YOU BY:

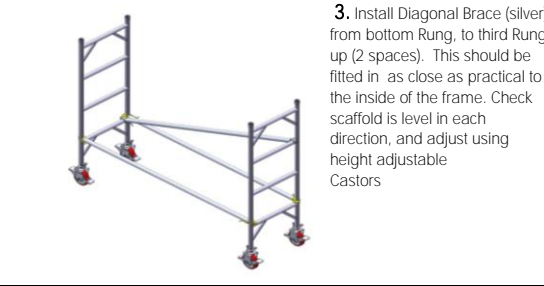
## Erection Instructions 0.7m wide (single width)



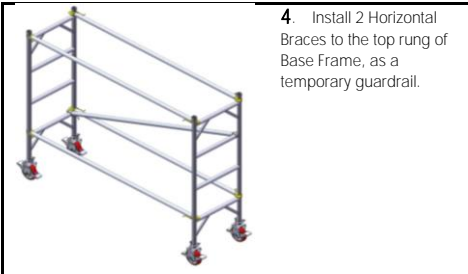
1. Lock brakes on Castors and insert into 1<sup>st</sup> Base Frame. Attach 2 Horizontal Braces (yellow ends) to **INSIDE** of standards (vertical member) above bottom Rung (horizontal member).



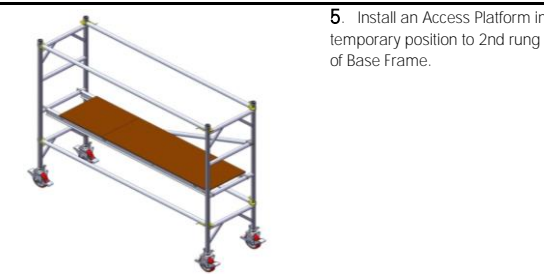
2. Lock brakes on Castors and insert into second Base Frame. Attach 2 Horizontal Braces to **INSIDE** of standards, use threaded adjusters to approximately level scaffold.



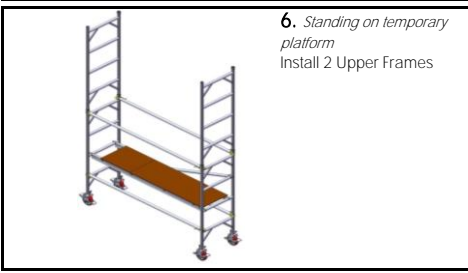
3. Install Diagonal Brace (silver) from bottom Rung, to third Rung up (2 spaces). This should be fitted in as close as practical to the inside of the frame. Check scaffold is level in each direction, and adjust using height adjustable Castors



4. Install 2 Horizontal Braces to the top rung of Base Frame, as a temporary guardrail.



5. Install an Access Platform in temporary position to 2nd rung of Base Frame.



6. *Standing on temporary platform*  
Install 2 Upper Frames



7. Install 4 x Horizontal Braces (as guardrails and Midrails for next deck)  
2 x Diagonal Braces  
2 or 4 x Outriggers\*

\*For details of when Outriggers are required refer to:

- Fitting Outriggers
- Maximum Freestanding Tower Height
- Risk Assessment Table



8. *Standing on ground*  
Remove- 2 x Horizontal Braces acting as temporary guardrails

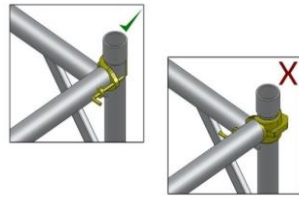
Move- Access platform up 2 rungs

Install- Ladder to the same rung as the platform in line with access hatch.



9. Install Toeboards.

Note: Always make sure Horizontal Braces (yellow ends) are fitted to **INSIDE** of standards.



10. The first full working platform is now complete. Standing on the full working platform, repeat steps 4-9 for each additional platform level.

Note: When installing subsequent platforms the hatch must be installed at the opposite end to the hatch of the working platform below.

*Safety Note* :Step 8 removing temporary guardrails and moving temp platform up 2 rungs needs to be done in a safe and controlled manner when working at height in a single width tower. Follow the simple steps below.

1. To remove the Horizontal braces acting as temporary guardrails, unclip them at the end away from the access hatch only leaving them resting on the rung.

2. Standing on work platform below and within the open hatch of the temporary platform, unclip the other end of temporary guardrails and remove.

3. Facing the centre of the scaffold, lift platform to disengage hooks and slide forward to rest on frame rung. Lift the platform and reinstall two rungs higher. Contact the supplier for clarification if needed.



### Fitting Outriggers

Adjustable Outriggers are normally used to increase the base size of a scaffold. Outriggers can be used at the base of any width tower with standard base and upper frames.

To be effective, Outriggers need to be set up at an angle of approximately 1 horizontal to 2 vertical. If room is limited, they can be set up steeper - refer to requirements in columns 5 and 6 of "Maximum Height Table".

Only two Outriggers are required when the scaffold is against a wall or solid structure which extends up to the height of the top platform, along the full length of the scaffold.

When the scaffold is not against a wall or solid structure, four outriggers are required: one on each corner of the scaffold.



### Maximum Freestanding Tower Height

The stability of a mobile tower must comply with AS/NZS 1576.1

Refer to Maximum Height Table (below) for guidance on maximum top working platform heights.

NB Also refer to Risk Assessment Table for additional requirements in adverse wind or loading conditions.

### Maximum Height Table

(Height to top working platform - overall tower heights are 1.0m higher; including edge protection)

Assembly by competent person

<4.0m

Assembly by licenced Scaffolders only

>4.0m

Tower Width	Maximum Height (without Outriggers)	Maximum Height (with 2m Outriggers)	Maximum Height (with 3m Outriggers)	Maximum Height - above top of Outriggers	Minimum base dimension -Including Outriggers
0.7m	1.4m	4.0m	5.0m	2.0m	1.7m
1.3m	4.0m	6.0m	8.0m	4.0m	2.2m
2.0m	6.0m	8.0m	9.0m	6.0m	2.9m

For higher Scaffolds obtain the suppliers recommendations.

### Dismantling Instructions

The dismantling process for the Mobile scaffold tower is the reverse method of the erection process. During dismantling, stability of the scaffold must be maintained at all times.

### Dismantling Key points...

1. Ensure the safety of other people and property in the vicinity of the scaffold
2. Ensure Castor brakes are locked .
3. Remove all materials, debris and equipment from working platforms
4. Starting at the top of the tower dismantle in reverse order of the erection sequence.
5. Avoid overloading due to stacking excessive equipment on the tower
6. Components should be lowered to the ground in a controlled manner and not dropped to avoid structural damage to the components
7. Horizontal guardrails should not be removed before the removal of scaffold decks of the same level. *See also safety Note above.*
8. Do not remove diagonal braces until it is necessary to remove the frames to which they are attached.
9. If the scaffold is stabilised with outriggers or tied to a supporting structure, removal of any outriggers or ties should not be done until the dismantling is down to that level which they are attached.

Carefulness, common-sense and caution are factors that cannot be built into scaffolding. These must be provided by the user of the equipment.