

## A HIGH-LOAD DECK WORK PLATFORM SYSTEM FOR A SAFER, FASTER BUILD



# METHOD STATEMENT





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# Introduction

#### RHINO LOAD DECK This

unique three-in-one safety platform system offers the optimum solution to difficulties caused by working at height. For use as a wall- to-wall safety platform, trestle and handrail setup or mobile tower arrangement, the Rhino Load Deck provides unrivalled versatility, ease-of-use, strength and durability, and cost-effectiveness.

RhinoDeck is available in both black and silver and the deck comes in both standard and heavy duty versions. All variants are totally compatible with all other components.

It can also be adapted for use as a 'catwalk' arrangement for access inside timber trusses. Its fast install and recovery characteristic provides site operatives with more time to attend to their tasks on site and increases build productivity along with a significant decrease in downtime.

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#### LOAD/IMPACT TESTING

The Rhino Load Deck system has been fully tested to test procedures set out by the British Standards Institute and wholly complies with the following standards;

Temporary Works Equipment BSEN 12811-1:2003 section 6.1.3 6.0kN/m2 , 6.2.2.3 & 6.2.2.4

Temporary Edge ProtectionSystems BS EN 13374:2004.

#### UNRIVALLED EASE OF USE

The Rhino Load Deck's composition of lightweight components which lock into place without the need for hand tools or fixings make the Rhino system easy and very fast to install (approximately 50 sqm / hour with only 2 workmen). Its flexibility enables it to follow the wall profile, around L-shapes and irregularities.



#### AN ENHANCED SAFETY SYSTEM

This system not only provides a safe working platform, but allows operatives to load the platform with necessary tools and materials for efficient task expediency.

Offering you a load capacity of 600Kg/sqm provides your site operatives with more than adequate loading requirement while allowing all site trades to utilise the platform.

Being completely selfsupportive, the Rhino system does not rely on your external or party walls for lateral support. Its composition of premium grade steel components, coated on all surfaces with a highly durable coating against corrosion, gives us the confidence to offer our clients a 5 year fit-for-use guarantee, providing the product is not abused and the due care instructions contained in the method statement are adhered to.





#### THERE IS NO BETTER OR MORE VERSATILE 3 IN I SOLUTION FOR ACCESS, LOADING AND WORKING

- market-leading load deck platform and trestle system
- fast and easy-to-install method allows safer working at heights of up to 4 metres
- can support loads rated at up to 600kg per square metre at a 3 metre platform height
- lightweight components lock into place without the need for hand tools or fixings
- unique use of materials minimises the weight needed to achieve its strength and durability
- unaffected by weather extremes
- needs minimal site space for storage and it is easy to transport from site to site



- up to ten times faster to install than traditional scaffolding
- does not require standing walls for support
- can be raised in height by building onto the legs and raising the framework and deck panels
- you can add to a trestle and handrail to develop a full load deck system, as needs dictate
- 5-year fit for use guarantee (subject to conditions).





#### I.0 PLACE AND PURPOSE OF USE

1.1 The Rhino Load Deck System is designed for use inside a building during construction. The system can be installed to provide a safe access platform for site operatives and therefore reduce the risk of fall potential. Figure 4.17 (page 11) is a typical illustration of a completed installation providing a 1.5m platform height for a site plot having an internal width measurement between wall elevations of 6.13m.

#### 2.0 SYSTEM LOADING

- 2.1 The Rhino Load Deck System is designed to carry a load of 600Kg/m2, (men, tools and materials) providing this is evenly distributed across two deck panels (Figure 1.1). Load weights may not exceed this maximum without written approval.
- 2.2 All loads placed on the system will be transferred directly to the base below and it is therefore an essential requirement that the base is capable of sustaining the combined total weight of the system together with any added load. The use of sole

plates at the base of each leg is recommended. Systems must be installed on a solid level floor with sufficient strength to support characteristic loads

Loads. 2.3 Loading on make-up panels (Section 4.12 & 4.13) is not recommended.

#### 3.0 SAFETY CHECKS

3.1 All components to be used should be thoroughly inspected by the platform installer before use as follows:

> a) Remove build-up of mortar, mud and other debris from components;

b) Visually examine components for any signs of structural damage, distortion or fatigue.

- 3.2 When the installation is complete, it should be signed off by an authorised manager. The system should also be visually inspected at the beginning of each work session, by a competent person, to ensure that none of the components have either been removed or damaged.
- 3.3 Any damaged components or components with excessive mortar build up must be segregated and removed from service.



Figure 1.1 Total Load - Men, tools and Materials







#### 4.0 INSTALLATION

- 4.1 Safety platform installation work shall only be carried out by trained personnel who are thoroughly conversant with the requirements of this Method Statement.
- 4.2 Installers should also adhere to all current Health and Safety Rules, such as the wearing of protective clothing, i.e hard hat, high visibility Vest/Jacket, metal toe capped boots and hand protective gloves.
- 4.3 Ensure that the base is of sufficient strength and of suitable composition to support the system and for the load to be placed on the system.
- 4.4 Ensure that the base provides a level surface.
- 4.5 Thoroughly clear the base space of all rubbish & debris.
- 4.6 Working from the furthest corner from the plot entrance and starting with the exterior walls lay the legs and cross braces flat on the base across the width of the plot. The gap between the platform and adjacent wall elevations should be kept to a minimum, but in all events should not exceed 100 mm.

The make-up panels are designed to bridge gaps of 780mm or less. It is good practice to ensure that gaps to be covered appear in the centre of the installation. It is for this reason that the installation is started at the exterior walls, working inwards. In dealing with irregular shapes every effort should be made to use regular shaped panels fully supported by cross-braces and legs before use of make-up panels.

Should the size or configuration of the site necessitate loading on to make-up panels, make sure that the pallet or load is level by strapping in additional make-up panels to create a level surface.





Figure 4.6.1



Figure 4.6.2



Figure 4.7.1



Figure 4.7.2

Stand two legs upright as shown in Figure 4.5.1. Align and insert each fin protrusion into each leg as shown in Figures 4.5.2 & 4.5.3. Note that uprighted legs should never be left unsupported at any time. Legs are available in the following sizes: 0.5m, 1.0m, 1.5m, 1.8m and 2.0m.

- Build up the remaining legs for 4.6 this platform as shown in Figure 4.6.1 and insert four Leg Braces as shown in Figure 4.6.2. For this application, as illustrated in Figure 1.1, Actavo (UK) Ltd recommend four as a minimum for each corner platform in the site plot.
- 4.7 Adjust the Leg Baseplates (Figure 4.7.1 & 4.7.2) to achieve a uniform platform level height.
- Build up the remaining 4.8 platforms across the rear wall (Figure 4.8) adjusting the overall level and height using leg baseplates.



4.9 Place Deck panels on the framework, ensuring that they are correctly positioned and secure (Figures 4.9.1 & 4.9.2). Provided that the panel will securely interlock as illustrated in Figures 4.9.1 & 4.9.2, and that there are no distortions in the frame that may prevent a safe fit, the panel may equally be installed within the framework rotated through 90°.

Place Deck Panels on the remaining platforms as shown.

4.11 Using a similar process, install platforms along the length of the plot as illustrated in Figure 4.11.





Figure 4.9.1

Figure 4.9.2





Figure 4.11





Figure 4.12



Figure 4.13

4.12 Use make-up panels to bridge gaps of up to 780mm between platforms and secure in place using Rhino Secure Ties, ensuring that the make-up panels are secured at the four corners, one tie at each corner.

> The make-up panels are designed to be used to bridge gaps between two or more platform systems for non-uniform plots. (See Figure 4.12).

- 4.13 Proceed to install the remaining platforms and make-up panels to create the full working platform for the plot as illustrated in Figure 4.13.
- 4.14 Install handrail support posts if required as shown in Figure 4.14.
- 4.15 When installing handrail supports and handrail and guardrails do not work on or near any unprotected edges. Alternative means of fall protection such as Airdeck can be used. For more information please visit www.altradgeneration.com



4.16 Install Guard Rails and Timber Guards as illustrated in Figure 4.16.



Figure 4.16

4.17 The Load Deck is now suitable for use by bricklayers and workmen at the installed height, up to but not exceeding the specified load capacity, as shown in Figure 4.17.







Figure 5.1



Figure 5.2



Figure 5.3



Figure 5.4









#### 5.0 RAISING THE LOAD DECK

- 5.1 To raise the load deck remove any handrails from the base, insert connection spigots into all four corners of one complete deck section (Figure 5.1).
- 5.2 Next, insert the required extension leg into the tops of the spigots and ensure that they are seated securely (Figure 5.2).
- 5.3 Insert the 4 cross braces to the extensions and push securely into place (Figure 5.3).
- 5.4 Finally, lift the deck panels one at a time, either around or through the extension and secure into place at the higher level (Figure 5.4).
- 5.5 If required, this process can be repeated across the full structure until the entire platform sits at the new required level.

This method negates the need to dismantle and reassemble the platform for use at a greater height (Figure 5.5).

- 5.6 Once the entire platform is raised, bricklayers and workmen can operate safely and without the risk of falling, thereby increasing build productivity (Figure 5.6).
- 5.7 This method of construction also allows for Supports and Extensions to be added on an "as needed" basis. This allows sections of the platform to remain at the initial height, whilst other sections are raised (Figure 5.7 opposite page).
- 5.8 When raising the platform never work near any exposed edges of the platform without using an alternative form of fall protection such as AirDeck. For more information please visit www.altradgeneration.com



#### 6.0 DISMANTLING SAFETY PLATFORM

- 6.1 Clear the entire platform of all building materials, tools and debris.
- 6.2 Remove timber handrails, guardrail gates & handrail support posts.
- 6.3 Working from the base, remove make-up panels & deck panels.
- 6.4 Disconnect and remove all leg braces.

Figure 5.7

- 6.5 Carefully remove cross braces, one at a time, and lay unsupported legs on the ground. Upright legs should never be left unsupported at any time.
- 6.6 All components should be inspected for damage whilst being dismantled. Any damaged components should be stored separately for repair or replacement by Sayfa Systems.
- 6.7 Any components with excessive dirt or mortar build up should be cleaned and checked for damage.

6.8 Components should be packed, stored and transported in stillages available from Altrad Generation.

#### SAFE WORKING LOAD OF PLATFORM SYSTEM – INCLUDING MEN, TOOLS, AND MATERIALS

#### 600Kg/m2 at a maximum height of 3.0m

#### **300Kg/m2** at a maximum height of 3.5m

#### 150Kg/m2

at a maximum height of 4.0m

Refer to Altrad Generation for heights over 4.0m.



## METHOD STATEMENT FOR LINEAR WORK PLATFORM SET UP

#### 7.0 PLACE AND PURPOSE OF USE

7.1 The Rhino Load Deck System is designed for use inside a building during construction. The system can be installed to provide a safe access platform for site operatives and therefore reduce the risk of fall potential.

#### 8.0 SYSTEM LOADING

- 8.1 The Rhino Load Deck Linear Work Platform is designed to carry a Uniformly Distributed load (UDL) of 600Kg/m2 for platform heights from 0.5-2.0m. Load Weights may not exceed this maximum without the written approval of Actavo (UK) Ltd. Any platform heights constructed over 2.0m must be checked with altrad generation for design suitability.
- 8.2 All loads placed on the system will be transferred directly to the base below and it is therefore essential that the base is capable of sustainingthe combined totalweight of the system together with any added load.

8.3 Additional security can be provided by inserting leg braces in both axes in accordance with paragraph 4.6

#### 9.0 SAFETY CHECKS

9.1 All components to be used shall be thoroughly inspected by the platform installer before use as follows:-

> a) Remove build-up of mortar, mud and other debris from components;

b) Visually examine components for any sign of structural damage or fatigue.

- 9.2 When the installation is complete, it should be signed off by an authorised manager. The system should also be visually inspected at the beginning of each work session to ensure that none of the components have either been removed or damaged.
- 9.3 Any damaged components or components with excessive mortar build up must be segregated and removed from service.







Figure 10.1







#### 10.0 INSTALLATION

10.1 Safety platform installation work shall only be carried out by trained personnel who are thoroughly conversant with the requirements of this Method Statement.

> Installers should also adhere to all current Health and Safety Rules, such as the wearing of protective clothing, i.e hard hat, high visibility Vest/Jacket, metal toe capped boots and hand protective gloves.

Ensure that the base provides a level surface.

Thoroughly clear the base space of all rubbish & debris.

Stand one leg upright as shown. Please note that upright legs must never be left unsupported at any time.

Fit the cross brace in the first leg cleat. These braces must stay in position at all times, regardless of the platform height.

10.2 Align and insert a cross brace into the leg at lowest position and join up further legs as shown.

> Continue to erect this first lift at lowest position using the first leg cleat. Build the linear metre run to the required length.

10.3 If the platform height is to be
0.5m, place the deck panels in position. Always include 1 x
640mm cross brace per linear run. This will be used as the ladder access point.

Figure 10.3





Figure 10.4

10.4 Install toe-boards if required. The toe-board must run on the inside of the leg and be secured by a retaining clip which fits around the leg.





10.5 Install handrail as required. Handrail must be at maximum of 1.0m above the deck panel with an intermediate handrail at 0.5m centres.



10.6 Install the access gate on the 640mm bay. The gate must always open inwards and close against a leg cleat.



Figure 10.7

10.7 Attach the ladder bracket on the leg cleat 0.5m above the work platform deck.





10.8 Attach ladder to ladder bracket. Fasten the ladder with Sayfa ties. The ladder must extend at least 1.2m above the work platform deck.



10.9 Completed system at 0.5m platform height.





Figure 11.1

#### 11.0 RAISING THE LINEAR WORK PLATFORM

11.1 Locate handrail posts and insert in the top of the legs.





11.2 Insert cross braces at next platform lift height and at the required handrail height. Cross braces must stay in the 0.5m leg cleat and at no more than 1.0m centres thereafter.





11.3 Remove deck panels. Always keep the first cross braces at the 500mm level in position, regardless of platform height, for stability. Install deck panels at required lift height. Never install deck panels while standing on the deck with an exposed edge. Always fit deck from below or be harnessed to a suitable anchor point.



Figure 11.4

#### 11.0 RAISING THE LINEAR WORK PLATFORM (CONTINUED)

11.4 Adjust height of ladder bracket, ladder and gate to suit. Install toe-boards and complete the system.



#### SAFE WORKING LOAD OF TRESTLE PLATFORM SYSTEM – INCLUDING MEN, TOOLS, AND MATERIALS

600Kg/m2 at a maximum height of 2.0m Refer to Altrad Generation Ltd for heights over 2.0m.

#### 12.0 DISMANTLING LINEAR WORK PLATFORM

- 12.1 Clear the entire platform of all building materials, tools and debris.
- 12.2 Remove timber handrails, guardrail gates & handrail support posts.
- 12.3 Working from the base,remove make-up panels & deck panels.

- 12.4 Carefully remove crossbraces, one at a time, and lay unsupported legs on the ground. Upright legs should never be left unsupported at any time.
- 12.5 All components should be inspected for damage whilst being dismantled. Any damaged components should be stored separately for repair or replacement by Sayfa Systems.
- 12.6 Any components with excessive dirt or mortar build up should be cleaned and checked for damage.
- 12.7 Components should be packed, stored and transported in stillages available from Altrad Generation.
- 13.0 For the purposes of product improvement and development please report any accidents or incidents immediately, to Altrad Generation.

È	Rhino

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# RHINO DECK COMPONENTS LIST



t No.	Description	Detailed description		Width	Depth	Length	Nett Unit weight (Kac)	Pack weight
ш	Sayfa Safety Tie	Used to secure the make-up panel.		50	20	20	0.020	0.21
dN	R Clips and Pins	Clips and pins are used to secure the feet into the legs		20	20	20	0.035	0.92
ВР	Leg Base Plate	Standard Base plate for use with the Rhino Deck Trestle and handrail system as well as the load and Workdeck system		200	150	560	0.395	4.15
CB640	Cross Brace 640mm	Cross braces of varying lengths to fit the Rhino Deck Trestle and handrail system as well as the load and Workdeck system	1	400	135	640	1.265	13.28
CBES	Cross Brace 640mm - extendable swivel ends	Cross brace which is adjustable from 640mm - 1280 mm with swivel ends to accommodate corners and infil panels	Į	40	135	640	3.010	3.16
CB1280	Cross Brace 1280mm	Cross braces of varying lengths to fit the Rhino Deck Trestle and handrail system as well as the load and Workdeck system	L	400	135	1280	2.345	24.62
CB400	Cross Brace 400mm	Cross braces of varying lengths to fit the Rhino Deck Trestle and handrail system as well as the load and Workdeck system	L	400	135	400	0.845	8.87
B1000	Leg Brace 1000 mm			120	20	1380	1.145	12.02
_B1500	Leg Brace 1500 mm	<ul> <li>Durational of the Burder of ensure inguity for use with the Rhino Deck Trestle and handrail system as well as the load and Workdeck system</li> </ul>		120	20	1600	1.065	11.18
B2000	Leg Brace 2000 mm		1	110	80	1930	0.880	9.24

Part No.	Description	Detailed description		Width (mm)	Depth (mm)	Length (mm)	Nett Unit weight (Kgs)	Pack weight (Kgs)
SSRL1000	Leg 1000 mm		I	1350	135	1000	2.110	22.16
SSRL500	Leg 500 mm	Standard legs for use with the Rhino Deck		360	135	500	1.250	13.13
SSRL1500	Leg 1500 mm	Trestle and handrail system as well as the load and Workdeck system		1350	200	1500	3.085	32.39
SSRL1800	Leg 1800 mm			1350	200	1800	5.025	52.76
SSRL2000	Leg 2000 mm			1350	200	2000	3.660	38.43
SSRTL2000	Leg 2000 mm - trestle leg	2000 mm trestle leg - a standard component for both the Rhino Trestle and handrail system and the Rhino Load and WorkDeck system	To a local de la comparisación de la comparisa	1350	200	2000	5.065	26.59
SSAYHRPP1100	Hand Rail Post	Inserted into the top of a leg to provide the fixing brackets for hand rails	ţ	006	300	1200	2.755	28.93
SSRDP640	Deck Panels 640	Deck panels are available as both 640 x 1280 and 400 x 1280 to enable easy configuration of the RhinoDeck system		640	800	1300	9.405	49.38
SSRMUP8064	Make up panel	For use with Sayfa ties to cover over irregular areas in the decking configuration. Yellow in colour to draw atention to the fact that they are slightly raised		640	120	800	4.250	22.31
SRGRG	Guard Rail Gate	Timber kickboard to prevent materials and tools dropping over the edge of a RhinoDeck structure. They match the sizes of the decking		800	800	640	3.020	3.17
SSRDP400	Deck Panels 400	panels Deck panels are available as both 640 x 1280 and 400 x 1280 to enable easy configuration of the RhinoDeck system		1000	800	1300	5.825	30.58
SSRTKB1280	Timber Kick Board 1280mm			725	500	1280	1.535	16.12
SSRTKB400	Timber Kick Board 400mm	Timber kickboard to prevent materials and tools dropping over the edge of a RhinoDeck	Li vi li	725	500	400	1.045	10.97
SSRTKB640	Timber Kick Board 640mm	panels		725	500	640	1.250	13.13
SSRLB	Ladder Bracket	To fit on the side of any Rhino Deck structure to allow for the safe use of a ladder.	1	500	465	500	2.565	2.69
SSRLJS	Leg Joining support	The leg joining support enables extension of the standard leg to take a handrail system	1	145	315	380	0.395	4.15
		T: 0800 779 7112 email. on	line@altradge	eneration.c	om		altradgener	ation.com



# RECORD OF INSPECTION CHECK LIST

A HIGH-LOAD DECK WORK PLATFORM SYSTEM FOR SAFER, FASTER BUILD



This document is to be signed off by the Site manager and kept as a matter of record

Project:

Location:

	Name	Position	Company	Date
First check				
Second check				
Third check				

# COMPONENT CHECK PRIOR TO USE AND AT END OF JOB

		First		<u>c</u>	Secon	d		Third	
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
STRAPS:									
<ol> <li>Check straps are not frayed or part cut through and that the buckle is still intact and operating</li> </ol>									
DECK PANEL									
1. Check that no Deck Panel is suffering from permanent deflection									
2. Check that all welds are intact									
<ol> <li>Check that no deck wires are broken or projecting</li> </ol>									
4. Check that no end-hooks are twisted or distorted									
OTHER COMPONENTS									
Check that no other components are evidencing distortion or buckling									
Check that no component is suffering from excessive mortar build-up									
ANY ITEMS SHOW	ING AI	NY OF	THE A	ABOVE	FAUL	.TS			
SHOULD EITHER BE SE	t asie	)e foi	r Rep <i>i</i>	AIR OF	R DISC.	ARDEI	$\mathbf{D}$		
- PRIOR TO INSTALLATION	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
<ol> <li>Is the access route to the construction location clear and safe?</li> </ol>									
2. Is the room clear of debris?									
3. Check that all components are safe for use – refer to component checklist									
4. Make sure you have the correct PPE									

## SAFETY CHECKLIST – POST INSTALLATION AND PRIOR TO USE

		First		C	Secon	d	Third			
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	
1. Are there any exposed edges?										
2. If so is handrail or other protection in place?										
3. Are kickboards in place if required?										
3.1 Is there suitable access to the platform?										
lf no, add: 3.1.1. Ladder bracket – secure ladder with Rhino ties										
3.1.2. Access/Guard rail gate										
3.1.2. Are Deck panels seated securely and flat on the cross braces?										
4. Are the correct number of leg braces in place and securely located?										
5. Check system for rigidity and assess the need for additional leg braces										
6. Check system has base plates in place and the location pins are in the correct position to ensure a level deck										
7. Check that any gaps of more than 100 mm are covered using yellow high vis make-up panels and that they are secured using at least 4 Rhino straps/panel										
8. On linear systems ensure that the extra cross braces are in place										



✓ = Correct, or now OK ¥ = Not OK								
1. Check that all Deck and make-up panels are still in place								
2. Check that no Deck panels have been permanently deflected due to overloading. Replace as necessary								
3. Check that all make-up panels are undamaged and that any Rhino straps used are not frayed, cut or damaged. Replace as necessary								
4. Check that any access system is still in place and secure								
5. Check that all handrails and kickboards are still in place and secure								
6. Check that all legs remain undamaged and vertical								





Generation UK Trinity Street, Off Tat Bank Road Oldbury Birmingham West Midlands B69 4LA

Phone : 0800 779 7112

E-mail: online@altradgeneration.com