

RHINO

Operating Manual

Product Introduction

RhinoDeck is a unique three-in-one safety platform system which provides the optimum solution for working at low/medium height. The system is designed to combine the strength of traditional scaffolding with the efficiency of a plastic decking system. RhinoDeck™ lightweight components which lock into place, removing the need for hand tools or fixings. This combination makes the Rhino system quick and easy to install (approximately 50 sqm / hour with only 2 workmen).

Flexibility with no compromise

RhinoDeck™ is fully adaptable to the needs of the site team. The bays can be set out to fill the working area through the use of varying cross braces and make up panels. Additionally the platform can be easily raised as work progresses upwards. Handrail can also be installed to ensure workers are protected from a potential fall.

RhinoDeck™ can be used as a freestanding system with no need for external or partitioning walls for support. It can be used in all-weather conditions thanks to its premium grade steel components which are fully coated with a highly durable Zinc coating to protect against corrosion.



Load/Impact Testing

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

Temporary Works Equipment

BS EN 12811-1:2003 section 6.1.3

6.0kN/m², 6.2.2.3 & 6.2.2.4

Temporary Edge Protection Systems BS EN 13374:2004.

Place and Purpose of Use

The Rhino Load Deck System is a free standing system 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.

System Loading

The Rhino Load Deck System is designed to carry up to 600Kg/m², (men, tools and materials) providing this is evenly distributed across two deck panels. Load weights must not exceed this maximum without written approval.

All loads placed on the system will be transferred directly to the base below. 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. Systems must be installed on a solid level floor with sufficient strength to support characteristic loads.

Loading on make-up panels is not recommended.

Safety Checks

- All components to be used should be thoroughly inspected by the platform installer before use as follows:
 - Remove build-up of mortar, mud and other debris from components;
 - Visually examine components for any signs of structural damage, distortion or fatigue.
- When the installation is complete, it should be signed off by a trained and 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.
- A FASET training course is available which leads to a recognised CSCS Qualification – please contact RhinoDeck for further details.
- Any damaged components or components with excessive mortar build up must be removed from circulation.

Installation

Safety platform installation work should only be carried out by trained personnel who are familiar with the RhinoDeck System and meet the requirements set out in this Operating Manual.

A FASET training course is available which leads to a recognised CSCS qualification – please contact Sayfa Group for further details.

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, and metal toe capped boots and hand protective gloves.

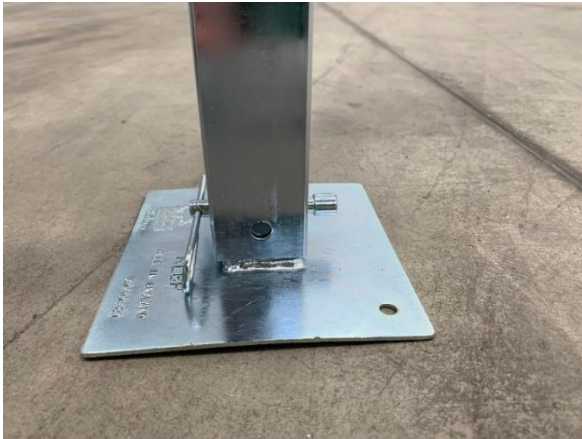
Site Preparation

- 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.
- Thoroughly clear the base space of all rubbish & debris.
- Ensure that the base provides a level surface.

Assembly

If you are working in an enclosed area start from the furthest corner from the plot entrance. 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 not exceed 100mm.

1. Using the R clips and Pins connect the leg to the leg base.



2. Stand four legs upright. Align and insert each fin protrusion into each leg.



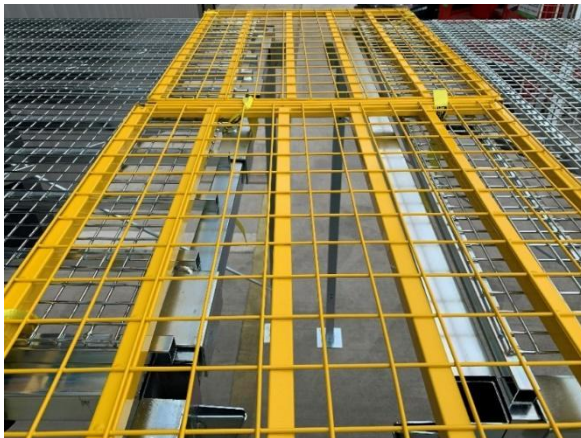
3. Place Deck Panels on the structure, ensuring that they are correctly positioned and secure. We recommend alternating the direction of the panels for easier use. The panel should securely slot on to the cross brace and there should be no distortions in the frame that may prevent a safe fit.



4. Insert two Leg braces diagonally on all corner bays. Leg braces are only required in bays at the corners of the system. Two braces are recommended as a minimum for each corner bay. When using make up panels this creates two separate systems so leg braces are required in the corners along the makeup panels.



5. Repeat steps 1-4 to build up the remaining bays to cover the working area.
6. Where gaps between bays is less than 400mm make up panels should be used to connect the bays. These are placed on top of the platforms to bridge the gap. Makeup panels are secured in place using Rhino Secure Ties one tie at each corner of the panel.



7. Proceed to install the remaining platforms and make-up panels to create the full working platform for the plot.



Hand Rail

If hand rail is required then after completing your system follow the below steps. When installing handrail supports and handrail or guardrails do not work on or near any unprotected edges. Alternative means of access such as steps or step ladders can be used to install the handrail from below.

1. Handrail posts are slotted securely in to the leg posts along the edge.
2. When the posts are in, begin creating the handrail starting with the top cross brace between the two posts. Once the top cross brace is in do the same for the lower brace.
3. After slotting the two cross braces, clip the timber guard in place along the bottom of the posts.

The system is now suitable for use by bricklayers and workforce at the installed height, up to but not exceeding the specified load capacity.

Raising the Load Deck



For instances where the load deck needs to be raised the existing Rhino Deck system can be adapted to allow for this.

1. To raise the load deck remove any handrail and from the base replace the handrail posts with the leg joining supports into all four corners of the bay.
2. Next, insert the required extension leg into the tops of the joiners and ensure that they slot securely in place.
3. Insert the 4 cross braces to the extensions and push securely into place.
4. Finally, lift the deck panels one at a time, either around or through the extension and secure into place at the higher level.
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.

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. When raising the platform never work near any exposed edges of the platform. Alternative means of access such as steps or step ladders can be used to raise the platform.




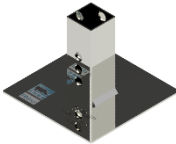
Protected Ladder Access

1. Standing below the installed decking select the bay where you wish to install the access point. Remove one of the two RhinoDeck panels.
2. Remove the 1280mm cross brace that now has no panel adjacent to it.
3. Slide the shoe of the sliding handrail post, over the cross brace to about mid-way, ensuring the fins point down and the handrail post points up.
4. Replace the cross brace, with the sliding hand-rail attached and replace the deck panel.
5. Safely accessing the deck from above, insert handrail posts at all four corners of the selected bay.
6. On all sides with no sliding hand-rail post, put in 1280mm cross-braces in the top and middle locations.
7. On the side with the sliding hand-rail post, put in a 640mm cross-brace in the top and middle location between one corner post and the sliding hand-rail post. In the remaining gap install a gate with the hinge located on the corner post, making sure that it opens inwards.
8. From below remove the deck panel adjacent to the sliding hand-rail post and install a ladder inclined so that the top of the ladder rests against the cross-brace running at right angle to the corner post supporting the gate.
9. Using RhinoDeck ties, secure in place to the supporting cross-brace at the top, and to the cross-brace at deck level.
10. You can now safely access the deck from below using the ladder and the access gate.





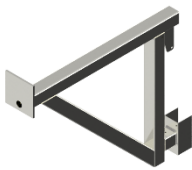
Dismantling Safety Platform

1. Clear the entire platform of all building materials, tools and debris.
 2. Remove timber handrails, guardrail gates & handrail support posts.
 3. Disconnect and remove all leg braces.
 4. Working from the base, remove make-up panels & deck panels.
 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. All components should be inspected for damage whilst being dismantled. Any damaged components should be stored separately for repair or replacement.
 7. Any components with excessive dirt or mortar build up should be cleaned and checked for damage.
 8. Components should be packed, stored and transported in stillage available from RhinoDeck Ltd.
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Components List

	Part No.	Description	Detailed Description	Image	Width (mm)	Depth (mm)	Length (mm)	Net Unit Weight (kg)
R h i n o D e c k S y s t e m	SSRL500	Leg 500mm	Standard leg to support the working platform		135	135	500	1.25
	SSRL1000	Leg 1000mm			135	135	1000	1.80
	SSRL1500	Leg 1500mm			135	135	1500	3.20
	SSRL1800	Leg 1800mm			135	135	1800	3.50
	SSRL2000	Leg 2000mm			135	135	2000	4.50
	SSRLJSS	Leg Joining Support	Enables the extension of the standard leg.		37	37	200	0.40
	SSRTL2000	Trestle Leg 2000mm	Allows for easier elevation of the platform.		135	135	2000	5.00
SSRLBP	Leg Base Plate	Standard Base plate to be used with all systems		125	125	90	0.40	

SSRCNP	R Clips & Pins	Clips and pins are used to secure the feet into the legs		50	50	50	0.04
SSRCB400	Cross Brace	Used to secure the legs together and allow the panels to be fitted		40	135	400	0.90
SSRCB640				40	135	640	1.27
SSRCB1280				40	135	1280	2.50
SSRLB1000	Leg Brace	Leg brace provides additional support to the system		120	70	1380	0.80
SSRLB1500				120	70	1600	0.85
SSRLB2000				110	80	1930	1.10
SSRDP400	Deck Panels	Deck panels create the platform for the system		400	80	1300	5.74
SSRDP640				640	20	800	9.40
SSMUO8064	Make Up Panels	Make Up Panels bridge any awkward gaps between bays and deck panels		640	20	800	5.00
SRTIE	RhinoDeck™ Safety Tie	Used to secure makeup panels to the system		25	1	500	0.01

H a n d r a i l S y s t e m	SSAYHRP1100	Handrail Post	Inserted in to the top of the leg post to provide fixings for the hand rail		135	135	1200	2.80
	SSRTKB400	Kick Board	A wooden board to prevent tools and materials falling over the edge		725	500	400	1.05
	SSRTKB640				725	500	640	1.25
	SSRTKB1280				725	500	1280	1.54
L a d d e r A c c e s s S y s t e m	RSHRP1100	Sliding Handrail post	Allows handrail to be formed for ladder access		200	50	1050	2.80
	SSRGRG	Guard Rail Gate	Allows safe access from the ladder to the decking		800	800	640	3.02
	SSRLB	Ladder Bracket	To be attached to the outside of the system to attached		500	465	500	2.57

FASET
Fall Arrest Safety Equipment Training



**SCAFFOLDING
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