



TECHNICAL GUIDE QUICKSTAGE

SCAFFOLDING

Any safety provisions as directed by the appropriate governing agencies must be observed when using our products. The pictures in this document are snapshots of situations at different stages of assembly, and therefore are not complete images. For the purpose of safety, they should not be deemed as definitive.

The loads featured in this document, related to the parts of the product, are approximate.

The company reserves the right to introduce any modifications deemed necessary for the technical development of the product.

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Technical Manual Release Notes

This page is intended to record all changes to the **QUICKSTAGE** technical manual pages.

Changes or additions to this manual will be itemised with a brief description and date when the amendments were made.

ISSUE	DATE	Amendment Description
A	SEPT 2023	First Release
B	FEB 2024	Second Release

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1. Technical Specifications

System Description

QUICKSTAGE is a multi-uses prefabricated modular scaffolding system. An easy to assemble scaffold structure due to its unique wedges connection mechanism. It provides quick and safe access to all part of a structure and is suitable for commercial and civil engineering projects.

QUICKSTAGE Scaffold is a heavy duty, flexible, strong, easy to install and dismantle modular scaffolding system. It is an effective and safe method of access work at heights on residential, commercial, and industrial projects. The **QUICKSTAGE** components are fully compliant with AS1576. Acrow Australia is ISO 9001:2015, ISO 45001:2018 (OHSAS 18001:2007) and ISO 14001:2015 accredited, meeting all relevant Australian Standards and codes.

The **QUICKSTAGE** range includes patented containment system, Uni-mesh™, LVL scaffold boards, tubing and stair systems for access, temporary strutting, edge protection and handrail solutions.

A range of basic modular components designed for multitude of uses in the construction industry including:

- A temporary platform to elevate and support personnel's and materials during the construction, repair, demolition, or cleaning of a structure
- A temporary structure erected to support access or working platform viewing platforms or event stages.
- Mobile scaffold
- Formwork support

The **QUICKSTAGE** scaffold systems has many advantages:

- The Quickstage modular components are relatively light which means better productivity, lower freight costs and faster construction program
- The modular system are designed to accommodate scaffold spans ranging from 600mm to 3000mm and single heights from 500mm to 3000mm .
- Strong, economic and durable system. The Quickstage scaffold products are hot dipped galvanized and manufactured from high tensile steel, enhancing safety Standards, and extending product life span. It is rust-resistant, reducing maintenance expenses
- Fast acting wedge connection at ends of each components. Each component has its own built-in connection to enable it to be joined to its mating component in the system
- No special tools required for assembly (hammer and spirit level only)
- Large range of accessories for scaffolding and formwork connections, to cater for site and construction conditions and to provide safe access. Accessories includes mesh panels, ladder access, staircase access and components to provide overhead protection
- The Quickstage system is fully tested and certified in accordance with AS1576

1. Technical Specifications

Purpose of the Document

The purpose of this document is to provide guidelines for design, safe handling, transport and installation of the **QUICKSTAGE** scaffold system. It is intended to be used by Structural Engineers and specialist in the field of scaffolding design and installation.

The document also outlines the various components of the system and features illustrations, working load limits, typical assembly arrangements, and safe transport and handling measures.

The information contained in this document is provided as a general guide only and does not replace the need for the design to be reviewed and checked by a qualified person in the field of temporary works design and installation, concrete, steel, building construction, and services.

This material has been prepared in the context of relevant Australian Standards and the National Construction Code (NCC). Users should make themselves aware of any recent changes to these documents referred to therein and to local variations or requirements.

This document is NOT a substitute for site-specific Safe Operation Procedures. It is the Installation Contractors responsibility to prepare safe work method statements and observe and comply with site specific health and safety regulations, Standards and policies.

Acrow has dedicated engineering services available for project assistance. We can provide design support for clients to determine the best way to specify and document **QUICKSTAGE**. Our technical experts can identify the most efficient temporary work design meeting project requirements, specifications and installation process.

Should the users require any further information or guidance, they are encouraged to contact their local Acrow branch.

Safety Information

This safety information is to draw the user's attention to possible musculoskeletal disorders as a result of manual handling during assembly and dismantling of the **QUICKSTAGE**.

It is recommended that users of the **QUICKSTAGE** system employ and implement appropriate procedures and control measures to eliminate or control any risk of Musculoskeletal disorder/injury while handling the **QUICKSTAGE**.

Refer to the Code of Practice on manual handling published by local Workcover Authority or other approved and recognised guidelines for correct and appropriate manual handling procedures.

1. Technical Specifications

Important Information

The installation and application instructions contained in this manual are the recommended methods to be used for **QUICKSTAGE** products.

Please use the information from this manual and its recommended assembly details to ensure the correct installation and performance of the product. Any deviation from the recommended usage will require a separate design and/or verification by Acrow Engineering.

The safe use and application of the **QUICKSTAGE** system must be in accordance with Australian Standard/ New Zealand Standard AS/NZS 1576 part 1 to 7: Scaffold, Occupational Health & Safety regulations, approved industry codes of practice and relevant regulatory authority requirements.

The illustrations in these assembly configurations are minimum guidelines only.

The combined use of the **QUICKSTAGE** system with equipment from other suppliers may entail performance issues and therefore requires a design check and/or verification by Acrow Engineering or a qualified experienced engineer.

Hazard Identification/Risk Assessments for the erection and dismantling of the **QUICKSTAGE** system are available from Acrow branches.

Site specific Hazard and Risk assessments may need to be generated for specific projects.

Disclaimer

1. The photographs and illustrations shown within this manual are intended to be used as a guideline only.
2. In line with Acrow commitment to continuous product development and improvement, the information contained in this manual may be changed without notice. Please confirm with Acrow Engineering for latest update.
3. While all reasonable effort has been taken to ensure the accuracy and adequacy of the information contained herein, Acrow accepts no responsibility or liability for any loss or damage suffered by any person acting or refraining from action as a result of this information.

Should users require any expert assistance, they are encouraged to contact Acrow Engineering department

1. Technical Specifications

Applicable Codes and Standards

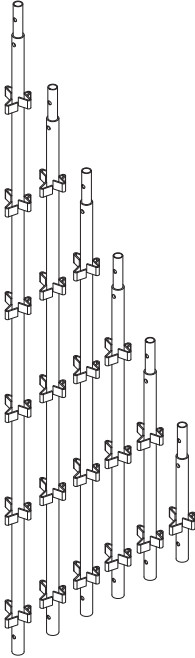
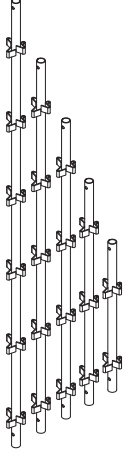
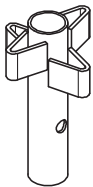
The structural design information and guide provided in this document are limited to the relevant codes nominated below. It does not include certification of any structures or works associated with a project.

ELEMENT	DESCRIPTION	CODE
SCAFFOLDING	Part 1: General requirements	AS/NZS 1576.1:2010
	Part 2: Couplers and accessories	AS/NZS 1576.2:2016
	Part 3: Prefabricated Scaffolding Requirements	AS 1576.3:2015
	Part 4: Suspended scaffolding	AS 1576.4:2013
	Part 5: Prefabricated splitheads and trestles	AS 1576.5:2015
	Part 6: Scaffolding - Metal tube-and-coupler scaffolding—Deemed to comply with AS/NZS 1576.3	AS/NZS 1576.6:2000
LOADING	Structural Design Actions – General Principles	AS/NZS 1170.0–2002
	Structural Design Actions – Permanent, Imposed And Other Actions	AS/NZS 1170.1–2002
STEEL	Cold-Formed Steel Structures	AS 4600–2018
	Steel Structures	AS 4100–1998
FORMWORK	Formwork for Concrete	AS 3610–1995
	Formwork for Concrete Part 1- Specifications	AS 3610.1–2018

2. GENERAL PRODUCT INFORMATION

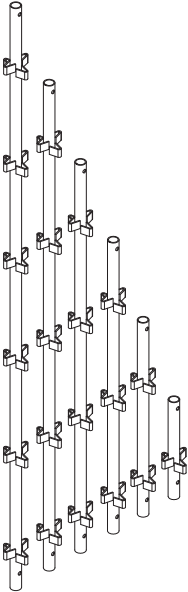

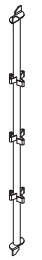
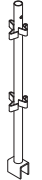
2. General Product Information

Standards

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG																		
	<p>Quickstage Standards</p> <p>A range of high quality steel $\text{Ø}48.3 \times 3.2\text{mm}$ steel tubes made from grade 350 steel.</p> <p>The Quickstage Standards are principally used in access scaffolding applications and also as a base structure for formwork support applications. The Standards features a V-connector clusters welded at 495mm intervals. Designed to endure rough site handling.</p> <p>Integral spigots, 150 mm long, are provided at the top of each Standard for making vertical connections. The spigots and the base of each Standard incorporate 17mm dia. Holes to enable use of locking pins to join Standards where necessary.</p> <p>Available in 6 sizes covering heights from 500mm to 3000mm</p>	<table border="1"> <tr> <td data-bbox="806 931 1133 966">0.5m Standard</td> <td data-bbox="806 931 1133 966">7005S</td> <td data-bbox="806 931 1133 966">3.17</td> </tr> <tr> <td data-bbox="806 966 1133 1001">1.0m Standard</td> <td data-bbox="806 966 1133 1001">7010</td> <td data-bbox="806 966 1133 1001">5.54</td> </tr> <tr> <td data-bbox="806 1001 1133 1036">1.5m Standard</td> <td data-bbox="806 1001 1133 1036">7015</td> <td data-bbox="806 1001 1133 1036">7.93</td> </tr> <tr> <td data-bbox="806 1036 1133 1071">2.0m Standard</td> <td data-bbox="806 1036 1133 1071">7020</td> <td data-bbox="806 1036 1133 1071">10.31</td> </tr> <tr> <td data-bbox="806 1071 1133 1106">2.5m Standard</td> <td data-bbox="806 1071 1133 1106">7025</td> <td data-bbox="806 1071 1133 1106">12.70</td> </tr> <tr> <td data-bbox="806 1106 1133 1141">3.0m Standard</td> <td data-bbox="806 1106 1133 1141">7030</td> <td data-bbox="806 1106 1133 1141">15.08</td> </tr> </table>	0.5m Standard	7005S	3.17	1.0m Standard	7010	5.54	1.5m Standard	7015	7.93	2.0m Standard	7020	10.31	2.5m Standard	7025	12.70	3.0m Standard	7030	15.08	
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2.5m Standard	7025	12.70																			
3.0m Standard	7030	15.08																			
	<p>Quickstage Open Standards</p> <p>A range of high capacity galvanized $\text{Ø}48.3 \times 3.2\text{mm}$ steel tubes made from grade 350 steel.</p> <p>The open ended design allows the insertion of another Standard via spigot or an Adjustable Base or Adjustable U-Head assembly</p> <p>Available in 5 sizes covering heights from 1000mm to 3000mm</p>	<table border="1"> <tr> <td data-bbox="806 1459 1133 1494">1.0m Standard</td> <td data-bbox="806 1459 1133 1494">7010O</td> <td data-bbox="806 1459 1133 1494">4.74</td> </tr> <tr> <td data-bbox="806 1494 1133 1529">1.5m Standard</td> <td data-bbox="806 1494 1133 1529">7015O</td> <td data-bbox="806 1494 1133 1529">7.12</td> </tr> <tr> <td data-bbox="806 1529 1133 1564">2.0m Standard</td> <td data-bbox="806 1529 1133 1564">7020O</td> <td data-bbox="806 1529 1133 1564">9.50</td> </tr> <tr> <td data-bbox="806 1564 1133 1598">2.5m Standard</td> <td data-bbox="806 1564 1133 1598">7025O</td> <td data-bbox="806 1564 1133 1598">11.88</td> </tr> <tr> <td data-bbox="806 1598 1133 1633">3.0m Standard</td> <td data-bbox="806 1598 1133 1633">7030O</td> <td data-bbox="806 1598 1133 1633">14.26</td> </tr> </table>	1.0m Standard	7010O	4.74	1.5m Standard	7015O	7.12	2.0m Standard	7020O	9.50	2.5m Standard	7025O	11.88	3.0m Standard	7030O	14.26				
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2.0m Standard	7020O	9.50																			
2.5m Standard	7025O	11.88																			
3.0m Standard	7030O	14.26																			
	<p>0.3m Standard Topper</p> <p>The Standard Topper is used for building platforms and event stage. It will ensure the Standard top end will finish at the platform level</p>	<p>7005</p>	<p>1.40</p>																		

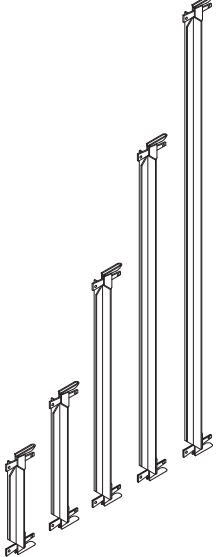
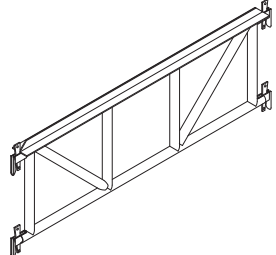
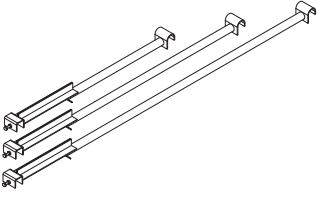
2. General Product Information

Standards

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	Quickstage Super Standards A range of high quality steel Ø48.3 x 4mm steel tubes made from grade 450 steel. The Quickstage Super Standards are principally used in access scaffolding applications and also as a base structure for formwork support applications. The Standards features a V-connector clusters welded at 495mm intervals. designed to endure rough site handling. Integral spigots, 150 mm long, are provided at the top of each Standard for making vertical connections. The spigots and the base of each Standard incorporate 17mm dia. Holes to enable use of locking pins to join Standards where necessary. Available in 6 sizes covering heights from 500mm to 3000mm		
	0.5m Standard	7005SS	2.75
	1.0m Standard	7010SS	5.53
	1.5m Standard	7015SS	8.32
	2.0m Standard	7020SS	11.10
	2.5m Standard	7025SS	13.88
	3.0m Standard	7030SS	16.67
	0.8m Stage Standard Used for building platforms and event stage. It will ensure the Standard top end will finish at the platform level	7008	3.78
	2.0m Intermediate Standard With bracket ends, the Intermediate Standard is essential for creating opening egresses in the scaffold structure	7020	9.86
	Quickstage Handrail Standards Handrail Standards used for the installation of physical barriers in platforms, walkways and stairs		
	1.0m Handrail Standard	7011	6.10

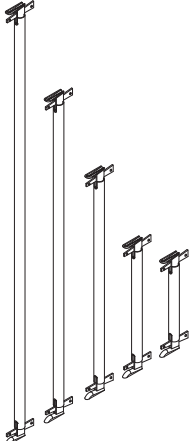
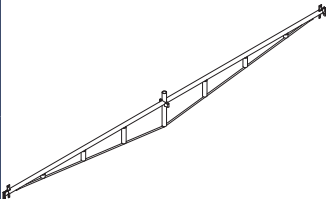
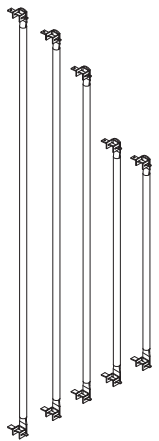
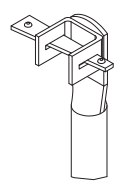
2. General Product Information

Quickstage Transoms

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Quickstage Transom</p> <p>The Transom incorporates a fabricated T section as the plank support member, (a twin structural angles welded back to back) with a spigot, wedge and saddle assembly welded at each end. The spigot locates into the V-connector on the Standard and the wedge locks it in place.</p> <p>The 1.83m and the 2.44m Transoms have additional web members welded below the flange section for added strength</p> <p>The outward standing bottom leg of the angles supports the steel planks in a captive manner. Available in various lengths to suit scaffolding and formwork applications</p>		
	0.56m Transom	7206	4.50
	0.76m Transom	7207	6.00
	1.2m Transom	7212	10.00
	1.8m Transom	7218	16.50
	2.4m Transom	7224	22.00
	<p>Quickstage Truss Transom</p> <p>The Truss Transom is designed for high capacity loading platforms and overhead protective structures. Connects at 4 points, enhancing the rigidity of the scaffold.</p>		
	1.8m Truss Transom	7226	30.20
	2.4m Truss Transom	7224T	35.26
	<p>Quickstage Ladder Access (LA) Transom</p> <p>The Ladder Access Transom is used to provide an opening in a bay allowing a ladder to pass through it. The L.A. Transom is attached to and spans between the Ledgers in the bay.</p>		
	1.2m LA Transom	7230	7.97
	1.8m LA Transom	7231	10.10
	2.4m LA Transom	7232	12.43

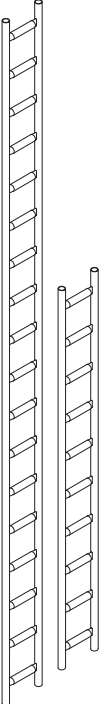
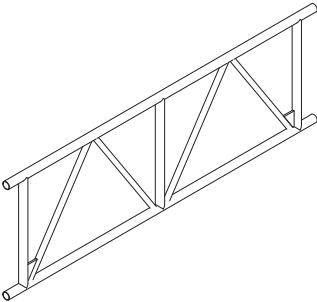
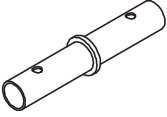
2. General Product Information

Quickstage Ledgers and Braces

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	Quickstage Ledger The Ledgers are essential members to horizontally join the scaffold components. It is manufactured from 48.3 mm O.D. tube with a spigot, wedge and saddle assembly welded at each end Ledgers are available in various lengths to provide the desired grid dimension for scaffolding or formwork.		
	0.6m Ledger	7106	2.76
	0.7m Ledger	7107	3.47
	1.2m Ledger	7112	5.28
	1.8m Ledger	7118	7.27
	2.4m Ledger	7124	9.44
	3.0m Ledger	7130	12.00
	3.6m Bridging Ledger	7136	22.00
	4.8m Bridging Ledger	7148	34.00
	Quickstage Diagonal Braces Diagonal Braces are made from 48.3mm dia tube with a swivel C section and wedge at each end for connection to the V-cluster on the Standard. Their function is to provide transverse and longitudinal bracing to the scaffold structure. The brace is available in various lengths to suit the combination of bay widths and heights.		
	1.7m Diagonal Brace	7317	8.00
	2.1m Diagonal Brace	7321	10.00
	2.7m Diagonal Brace	7327	11.50
	3.2m Diagonal Brace	7322	13.00
	3.6m Diagonal Brace	7336	13.50
	Bay Length x Height (m)		Brace Length (m)
	762x1486		1.7
	1270x1981		2.1
	1829x1981		2.7
	2438x1981		3.2
	2438x2477		3.6

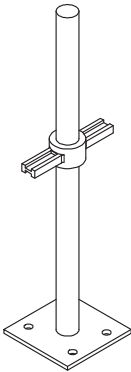
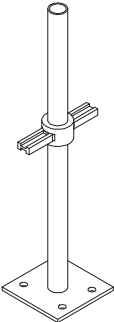
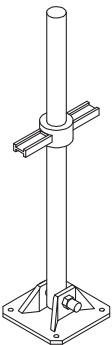
2. General Product Information

Quickstage Diagonal Braces and Ladders

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG	
	Ladder Beams			
	Ladder beams, and Uni-Beam available in a variety of sizes and are used primarily for spanning entrance ways, large voids, or supporting scaffolds cantilevered off higher levels on the building/structure where it is not possible, or practical, to install them in the normal way from ground level.			
	1.8m Ladder Beam	SLLB18	20.06	
	2.0m Ladder Beam	SLLB20	22.68	
	2.4m Ladder Beam	SLLB24	26.75	
	3.0m Ladder Beam	SSLB30	33.44	
	3.3m Ladder Beam	SLLB33	36.78	
	3.6m Ladder Beam	SLLB36	40.13	
	4.2m Ladder Beam	SLLB42	46.82	
	4.5m Ladder Beam	SLLB45	50.16	
	4.8m Ladder Beam	SLLB48	53.50	
	5.4m Ladder Beam	SLLB54	60.18	
	6.0m Ladder Beam	SLLB60	66.88	
6.3m Ladder Beam	SLLB63	70.23		
	450mm	2.0m Aluminium Beam	ALB4520	11.50
		3.0m Aluminium Beam	ALB4530	16.50
		4.0m Aluminium Beam	ALB4540	21.50
		5.0m Aluminium Beam	ALB4550	26.50
		6.0m Aluminium Beam	ALB4560	31.50
		8.0m Aluminium Beam	ALB4580	36.50
	750mm	2.2m Aluminium Beam	ALB7523	15.05
		4.2m Aluminium Beam	ALB7543	28.46
		5.2m Aluminium Beam	ALB7553	35.17
		6.2m Aluminium Beam	ALB7563	41.87
		7.2m Aluminium Beam	ALB7573	48.57
	38mm Lattice Beam Joint	2800L	0.54	

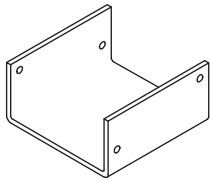
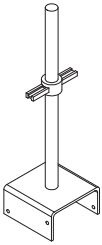
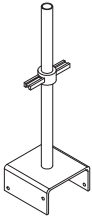
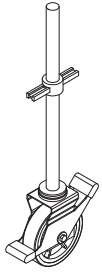
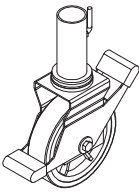
2. General Product Information

Quickstage Jacks

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Quickstage Adjustable Base Jack - Solid</p> <p>The Adjustable Base is a generic Acrow product which is used with all scaffold systems and majority of Acrow formwork systems. It enables accurate leveling of the scaffolding on uneven ground. (0-450mm height adjustment range)</p> <p>It has a solid Acme Thread stem of 34mm nominal diameter, stem minimum engagement of 150mm into the Standards</p>	ABSS	6.00
	<p>Quickstage Adjustable Base Jack - Hollow</p> <p>The Adjustable Base hollow jack has a higher jacking capacity due to its thicker nominal diameter of 38mm. Minimum engagement of 150mm into the Standards</p> <p>(0-450mm height adjustment range)</p>	2622H	4.20
	<p>Swivel-Base Jack</p> <p>Swivel Base Jack provides stability for uneven surfaces. The swivel jack has 180 degree rotation for extra flexibility. A generic Acrow product which is used with scaffold systems and some Acrow formwork systems.</p> <p>It has a solid stem of 36mm nominal diameter, minimum engagement of 150mm into the Standards</p>	ATBSS	7.61

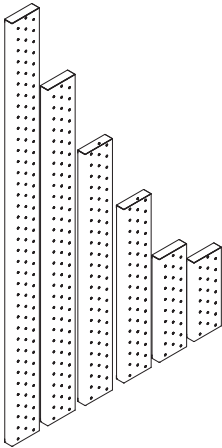
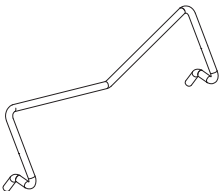
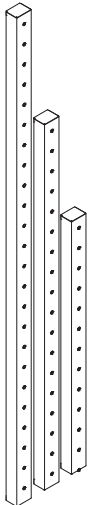
2. General Product Information

Quickstage Jacks

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>U-Head with 12mm Pins</p> <p>Removable U - Head attaches with pins to othe jacking points.</p>	2628	4.83
	<p>Adjustable U-Head - Solid</p> <p>The Adjustable U-Head is designed to hold twin 100mm wide bearers. A generic Acrow product which is used with scaffold systems. It has a solid stem of 36mm nominal diameter, a minimum engagement of 150mm into the Standards</p>	2619	9.40
	<p>Adjustable U-Head - Hollow</p> <p>The Adjustable U Head hollow has a higher jacking capacity due to its thicker nominal diameter of 38mm.</p>	2620	7.20
	<p>200mm Jacking Castor</p> <p>The 200mm Jacking Castor is designed for the maneuvering of assembled formwork as we as enable accurate leveling of the scaffolding on uneven ground. It features a swivel facility and a dual function locking mechanism which locks both swivel and rolling motion of the Castor</p>	2623	9.40
	<p>200mm Castor with 38mm spigot/sleeve</p> <p>The Quickstage Scaffold Castor is designed to fit into the bottom of a Standard. It features a swivel facility and a dual function locking mechanism which locks both swivel and rolling motion of the Castor</p>	2625	4.00

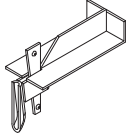
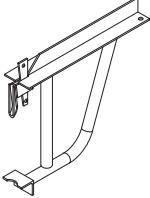
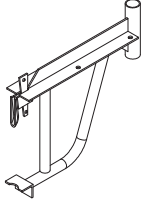
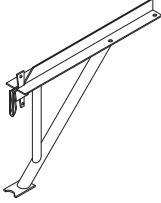
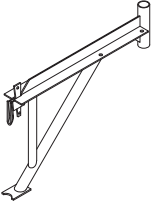

2. General Product Information

Quickstage Steel Boards (Planks) and Infills

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Steel Planks</p> <p>The Quickstage Planks are made from high tensile 1.5mm galvanised steel sheet with a perforated tread to provide a non-skid surface. Perforations are taken close to the ends and edges of the Plank to provide even coverage over the whole assembled deck.</p> <p>They are available in range of lengths to suit the complete range of scaffold bay lengths and widths</p>		
	0.5 m steel Plank	7405	3.13
	0.7 m Steel Plank	7407	3.96
	1.2 m Steel Plank	7412	6.39
	1.8 m Steel Plank	7418	9.06
	2.4 m Steel Plank	7424	11.96
	3.0 m Steel Plank	7430	14.96
	<p>JVD CLIP</p> <p>Retaining clip that secures steel boards to transoms</p>	7455	0.15
	<p>85mm Steel Infills</p> <p>Steel Plank Infills are principally used to reduce the gap between planks of the working deck within the bay. They are made from high tensile (Grade 450) galvanised steel sheet with the same depth and general section profile as a scaffold plank.</p> <p>They supported by the Transom in the same way as scaffold planks and typically only one of these infills is used per bay. Infills sizes are made to suit bay lengths of 1.27m, 1.83m and 2.44m</p>		
	1.2m Steel Infill (85mm)	7865	5.00
	1.8m Steel Infill (85mm)	7866	9.00
	2.4m Steel Infill (85mm)	7867	9.50


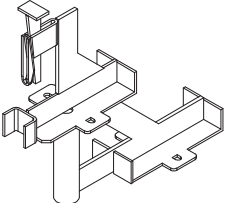
2. General Product Information

Quickstage Hop Up Brackets

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
<p>Platform Brackets (Hop-Up)</p> <p>Platform Brackets attach to the scaffold Standard and enable 1, 2 or 3 plank wide platforms to be placed between the scaffold structure and the work face.</p> <p>There are two types of Platform brackets: Board Hop-Up (BHU) designed to be connected to the Quickstage Standards. The BHU end are fitted with spigot, wedge and saddle assembly to enable the connection to the V-connector clusters welded at 495.3mm intervals assembly in the Standards. The 2 and 3 planks wide BHU have provision for a Guardrail post.</p> <p>While the Board Intermediate Bracket are designed to supports non-modular boards lengths. Their ends are fitted with 48mm scaffold coupler to enable the connection to Quickstage Ledgers and Transoms.</p> <p>The ends of both types of platform brackets are designed to be connected to each other by Tie Bars.</p>			
	1 BHU	7601	1.90
	2 BHU	7602	5.88
	2 BHU (With Spigot)	7602S	6.69
	3 BHU	7603	7.50
	3 BHU (With Spigot)	7603S	8.33
	2 BRD Intermediate BKT	7604	8.00

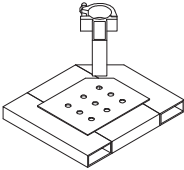
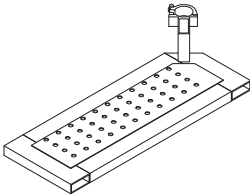
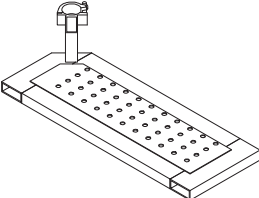
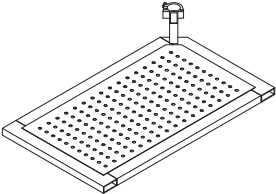
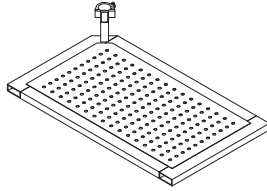
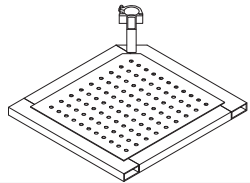
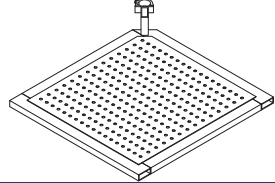
2. General Product Information

Quickstage Hop Up Brackets

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	3 BRD Intermediate BKT	7605	11.50
	1 Step Up/Down Bracket	7853	3.45
	2 Step Up/Down Bracket	7853A	8.31

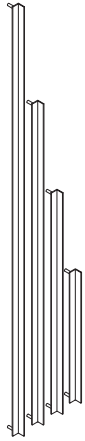
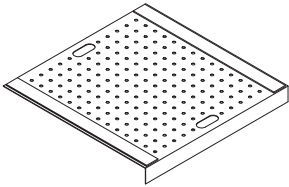
2. General Product Information

Quickstage Corner Boards

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
<p>Corner Panels</p> <p>The Corner Panel is designed to fill the gap left where two runs of 2 Plank Platform Brackets intersect on an internal corner of the building. The unit attaches to the corner Standard via 48mm scaffold coupler and is supported by the Platform Brackets.</p>			
	ICF (1X1)	7606	4.25
	ICF (2X1) Left	7607L	9.12
	ICF (2X1) Right	7607R	9.12
	ICF (3X2) Left	7608L	17.25
	ICF (3X2) Right	7608R	17.25
	ICF (2X2)	7610	11.68
	ICF (3X3)	7609	19.68


2. General Product Information

Quickstage Tie-Bar and LAP Plates

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Tie Bar</p> <p>The Tie Bar is designed to interconnect Platform bracket and support the outer side of the steel planks.</p>		
	0.7m Tie Bar	7611	1.85
	1.2m Tie Bar	7612	3.08
	1.8m Tie Bar	7618	4.43
	2.4m Tie Bar	7624	5.90
	<p>Lap Plates</p> <p>Quickstage scaffold lap plates are a multi-purpose platform that is used to span a small gap between scaffolding work platforms providing safe access. The steel lap plates have a folded returned to lock in between steel boards.</p>		
	1 BRD Steel Lap Plate	391B	6.49
	2 BRD Steel Lap Plate	392B	9.58
	3 BRD Steel Lap Plate	393B	12.68

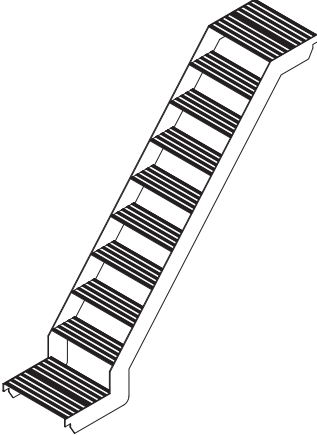
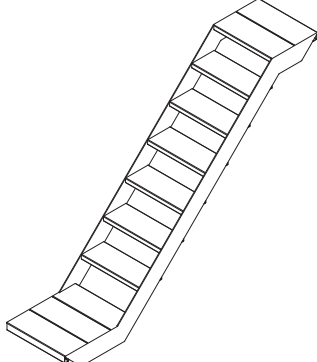
2. General Product Information

LVL Planks

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	LVL Planks A non-modular 230mm x 40mm Laminated LVL Scaffold Planks. The light-duty category spanning from 0.9M to 6.0M		
	0.6m LVL Scaffold Plank	TP06	4.19
	0.9m LVL Scaffold Plank	TP09	6.29
	1.0 LVL Scaffold Plank	TP10	6.99
	1.2m LVL Scaffold Plank	TP12	8.39
	1.5m LVL Scaffold Plank	TP15	10.48
	1.8m LVL Scaffold Plank	TP18	12.58
	2.1m LVL Scaffold Plank	TP21	14.68
	2.4m LVL Scaffold Plank	TP24	16.78
	2.7m LVL Scaffold Plank	TP27	18.87
	3.0m LVL Scaffold Plank	TP30	20.97
	3.3m LVL Scaffold Plank	TP33	23.07
	3.6m LVL Scaffold Plank	TP36	25.17
	3.9m LVL Scaffold Plank	TP39	27.59
	4.2m LVL Scaffold Plank	TP42	29.36
	4.5m LVL Scaffold Plank	TP45	31.46
4.8m LVL Scaffold Plank	TP48	33.56	
5.1m LVL Scaffold Plank	TP51	35.65	
5.4m LVL Scaffold Plank	TP54	37.75	
6.0m LVL Scaffold Plank	TP60	41.92	

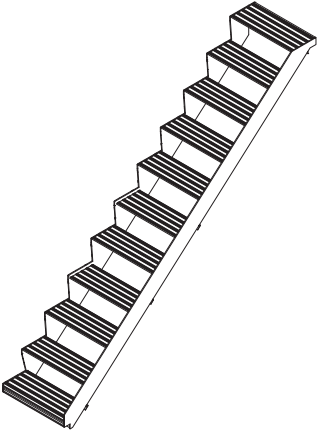
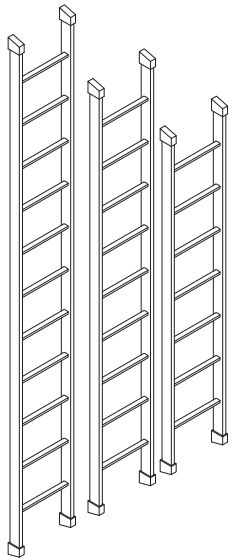

2. General Product Information

Construction Access Stairs

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Construction Stairs</p> <p>A 1.5m and 2.0m vertical height (flight) modular aluminium Stair with top and bottom landings. The modular stair enables a stairway to be assembled within a 2.44 x 1.27m Quickstage bay providing access to working platform. Each end of the Stair is supported by a Transom. The width of the unit is half the bay width enabling two units to sit on a Transom, thus a continuous stairway can be built up the full height of the scaffold. The stairway details also apply to temporary stairways for use on a general construction site.</p> <p>The Quickstage 2.0m construction stairs comes with a arrange of short height flights to accommodate differ platform levels (1.0 and 1.5m) and a arrange of fall prevention, barrier components providing safe access and egress to the stairway.</p>		
	2.0m Flight x 2.4 x 1.2m Wide bay Construction Stair	MAS20B	35.75
	1.5m Flight x 2.4 x 1.2m Wide bay Construction Stair	MAS15B	33.07
	1.0m Flight x 2.4 x 1.2m Wide Bay Construction Stair	MAS10B	32.54
	Handrail to suit 2.0m Flight Construction Stair	M20HRB	12.00
	Handrail to suit 1.5m Flight Construction Stair	M15HRB	9.00
	Handrail to suit 1.0m Flight Construction Stair	M10HRB	8.00
	Exit Handrail	MEHR	4.00
	1.5m Flight x 2.4 x 1.2m Wide Bay Construction Stair	7850	26.58
	Handrail to suit 1.5m Flight Construction Stair	7851	15.00
	Exit Handrail for 1.5m Flight x 2.4 x 1.2m Wide Bay	7852	21.00

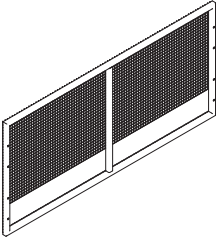
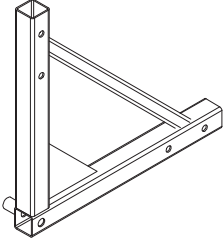

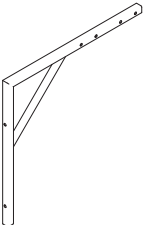
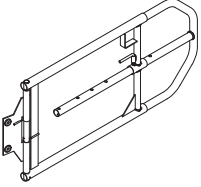
2. General Product Information

Stretcher Stairs and Access Ladders

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	<p>Stretcher Stairs</p> <p>A 600mm wide by 2.0m vertical height (flight) aluminium Stair. The 1.20m Stretcher stair is formed by bolting together two of the 600mm stairs.</p> <p>The modular stair enables a stairway to be assembled within a 2.44 x 1.27m Quickstage bay providing access to working platform.</p>		
	2.0m Fligth x 2.4m wide bay Stretcher (Set)	7864	36.00
	1.0m Stretcher Stair	CST1013	28.50
	<p>Access Ladders</p> <p>A range 2.4m to 6.0m, 300mm wide aluminium ladders used in providing safe access to, and egress from, scaffolds during the erection, dismantling of scaffolding and in mobile scaffolds. The ladders are secured into the scaffold bay using custom design Ladder Clip.</p>		
	2.4m LADDER - ALUMINIUM	AL24	9.49
	3.0m LADDER - ALUMINIUM	AL30	11.93
	3.6m LADDER - ALUMINIUM	AL36	14.32
	4.2m LADDER - ALUMINIUM	AL42	16.66
	4.8m LADDER - ALUMINIUM	AL48	19.10
	5.4m LADDER - ALUMINIUM	AL54	21.44
6.0m LADDER - ALUMINIUM	AL60	23.88	
	LADDER CLIP	1016	1.00

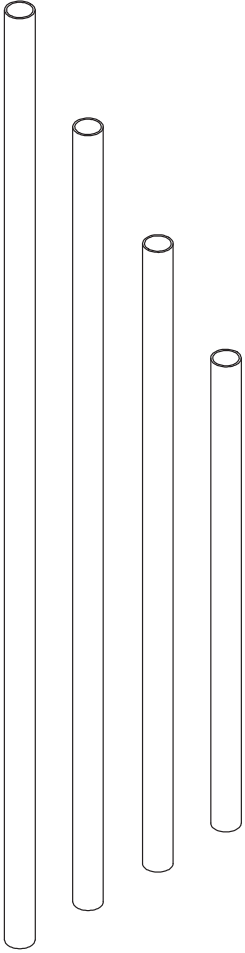
2. General Product Information

Safe Loading Bay and Swing Gates

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	Fence Panel	LBSW18	35.00
	Inner Corner Bracket		6.30
	Post		6.00
	Outer Corner Frame		7.20
	<p>Handrail Post, Swing Arms and Gates</p> <p>A range of posts fitted with a base plate for bolt in applications used in constructing safety barriers and handrails</p>		
	Adjustable Swing Gate - HDG	G1001	9.50

2. General Product Information

Scaffold Tubes

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS KG
	Scaffold Tubes A wide lengths of Ø48.3mm x 3.2mm thick grade 350 hot dipped galvanized tubes used in varies parts of scaffold construction including handrails, safety barriers, bracing and tying.		
	0.3M TUBE - HDG - 3.2mm	ST03	1.50
	0.6M TUBE - HDG - 3.2mm	ST06	2.50
	0.9M TUBE - HDG - 3.2mm	ST09	3.50
	1.2M TUBE - HDG - 3.2mm	ST12	5.00
	1.5M TUBE - HDG - 3.2mm	ST15	6.00
	1.8M TUBE - HDG - 3.2mm	ST18	7.00
	2.1M TUBE - HDG - 3.2mm	ST21	8.50
	2.4M TUBE - HDG - 3.2mm	ST24	9.50
	2.7M TUBE - HDG - 3.2mm	ST27	10.50
	3.0M TUBE - HDG - 3.2mm	ST30	11.50
	3.3M TUBE - HDG - 3.2mm	ST33	13.00
	3.6M TUBE - HDG - 3.2mm	ST36	14.00
	3.9M TUBE - HDG - 3.2mm	ST39	15.00
	4.2M TUBE - HDG - 3.2mm	ST42	16.00
	4.5M TUBE - HDG - 3.2mm	ST45	17.50
	4.8M TUBE - HDG - 3.2mm	ST48	18.50
	5.1M TUBE - HDG - 3.2mm	ST51	19.50
	5.4M TUBE - HDG - 3.2mm	ST54	21.00
	5.7M TUBE - HDG - 3.2mm 2	ST57	22.00
6.0M TUBE - HDG - 3.2mm 2	ST60	23.00	
6.3M TUBE - HDG - 3.2mm	ST63	24.00	
6.5M TUBE - HDG - 3.2mm	ST65	25.50	

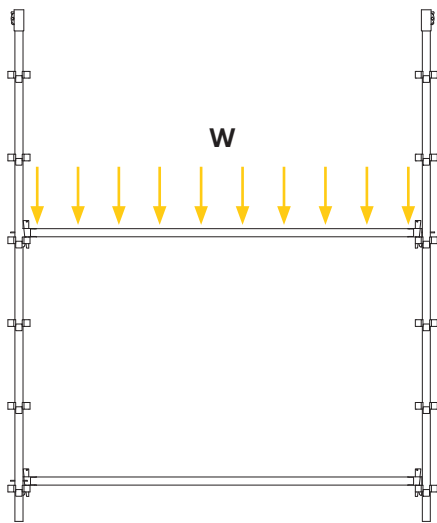
3. WORKING LOAD LIMITS (WLL)

3. Working Load Limits (WLL)

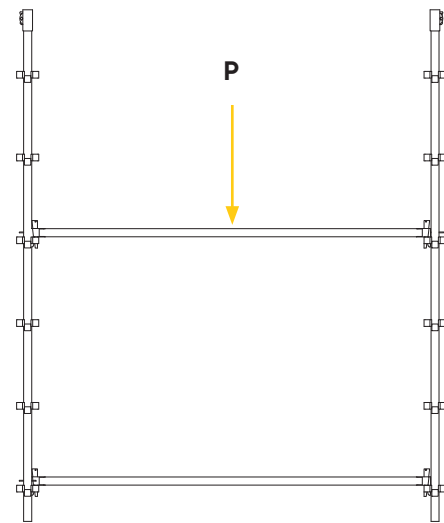
Working Platform Duty Action

The Quickstage system working platform duty actions are determined (limited) by its components Working Load Limits.

The duty action, as defined by Australian Standard AS/NZ1576.1, is the imposed action applied to a working platform within a bay which includes: The weight of persons, The weight of materials and debris, The weight of tools and equipment and Impact forces.



Uniform distributed load across the bay area.



A single concentrated duty load that produces the most adverse effect. 100 x 100mm Bearing Area.

3. Working Load Limits (WLL)

Working Platform Duty Action

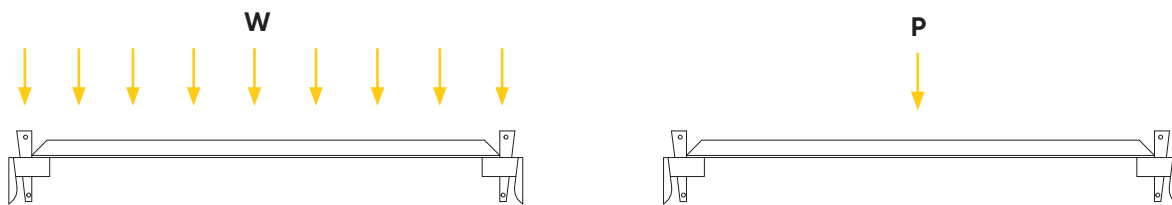
PRODUCT	DESIGN TOTAL LOAD (KG PER PLATFORM PER BAY)	DESIGN CONCENTRATED LOAD (PART OF THE TOTAL LOAD APPLIED IN MOST ADVERSE POSITION WITHIN BAY) (KG)	MINIMUM WIDTH OF PLATFORM (MM)
LIGHT DUTY < 3 metres during housing construction work < 2 metres during construction work e.g. painting, cleaning, fascia and gutter installation	125 (1.2kN)	100 (1kN)	225mm
LIGHT DUTY > 3 metres during housing construction work > 2 metres during other construction work	225 (2.2kN)	120 (1.2kN)	450mm
Medium Duty For example: Finishing trades where light materials are stacked on the platform.	450 (4.4kN)	150 (1.5kN)	675mm (for emergency access platforms minimum 900mm width)
HEAVY DUTY For example: Bricklaying and demolition work (special duty may be required for some demolition)	675 (6.6kN)	200 (2kN)	900mm (or 675mm where addition access is provided by a bay extension platform of not less than 450mm width)

ASN 1576.1 Scaffold Duty Actions

3. Working Load Limits (WLL)

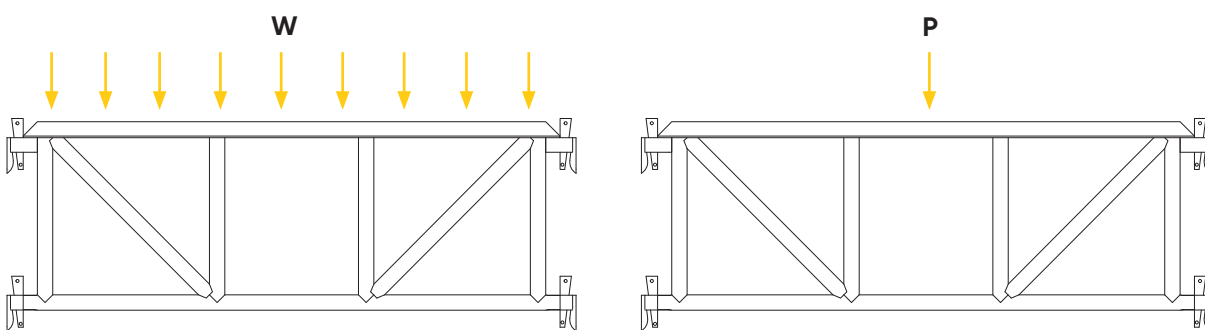
Transoms

Product Code	L (M)	Duty Action to AS1576.1	
		W (kN)	P (kN)
7206	0.56	Light (2.2 kN UDL)	1.0
7207	0.76	Light (2.2kN UDL)	1.0
7212	1.27	Heavy (6.6kN UDL)	2.0
7218	1.83	Medium (4.4kN UDL)	1.5
7224	2.44	Medium (4.4kN UDL)	1.5



Transom Truss

Product Code	L (M)	W (kNm)	P (kN)
7226	1.8	24.0	15.0
7224T	2.4	14.4	10.0



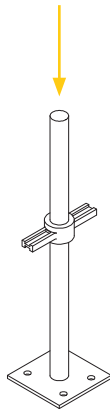
Notes:

- P = Working Load Limit for Concentrated (Point) Load. W = Working Load Limit for Uniformly Distributed Load
- Loads W and P shown are not simultaneous loads. Refer AS/NZS1576.1-2010, Clause 2.5.3.1.2 for loads definitions
- Where Special Duty design load is required, or design loads exceed Duty Live Load shown then contact your local Acrow Formwork and Scaffolding for design advice.

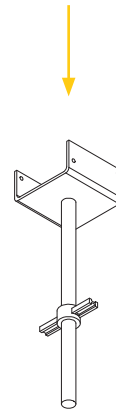


3. Working Load Limits (WLL)

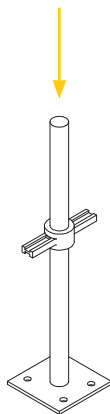
Quickstage Jacks



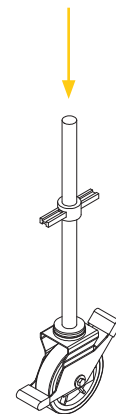
ABSS - Adjustable Base Jack Solid
WLL = 30kN at 450mm Extension



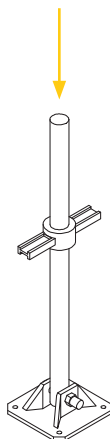
2619 - Adjustable U Head Solid
WLL = 30kN at 450mm Extension



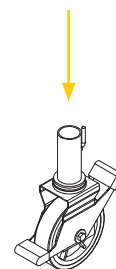
2622H - Adjustable Base Jack Hollow
WLL = 30kN at 450mm Extension



2623 - 200mm Jacking Castor
WLL = 750kg



ATBSS - Swivel Base Jack
WLL = 30kN at 450mm Extension

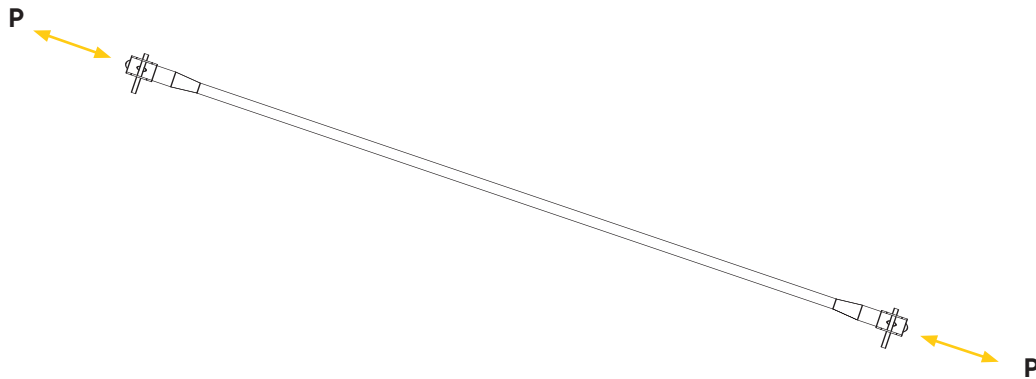


2625 - 200mm Jacking Castor with 38mm spigot
WLL = 750kg

3. Working Load Limits (WLL)

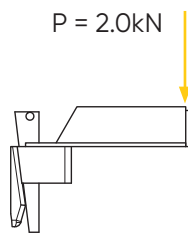
Diagonal Braces

The Working Load Limits of Diagonal Braces between Quickstage Standard is $P = 4.4 \text{ kN}$

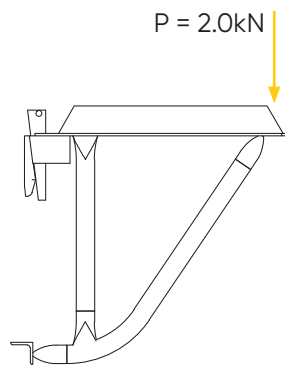


Platform Brackets

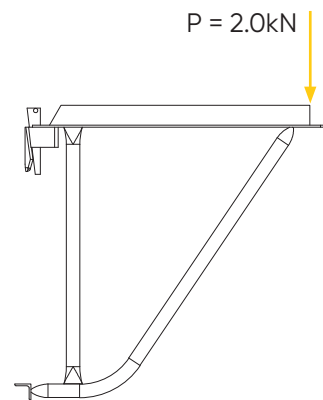
The Working Load Limits of each size of Quickstage Platform Bracket is $P = 2.0 \text{ kN}$



One Board Platform Bracket



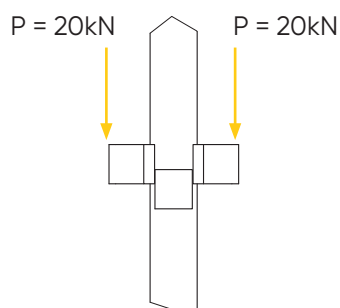
Two Board Platform Bracket



Three Board Platform Bracket

Standards

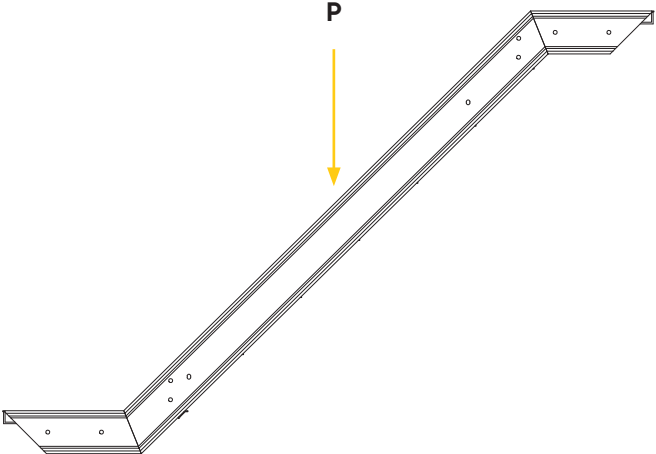
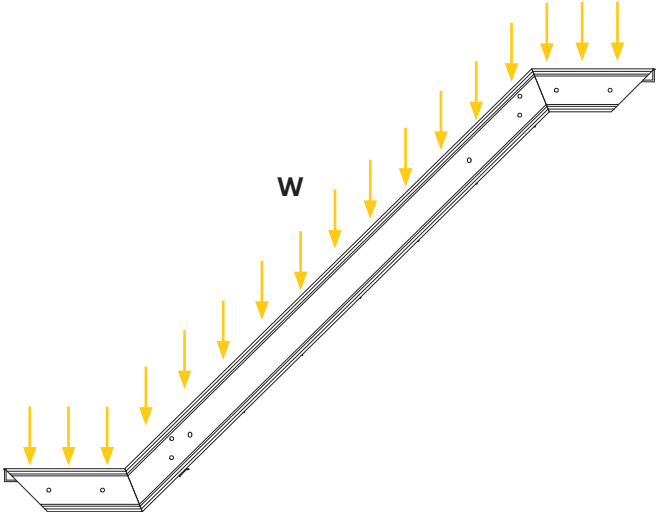
The Working Load Limits of each point of the Quickstage Star is $P = 2.0 \text{ kN}$

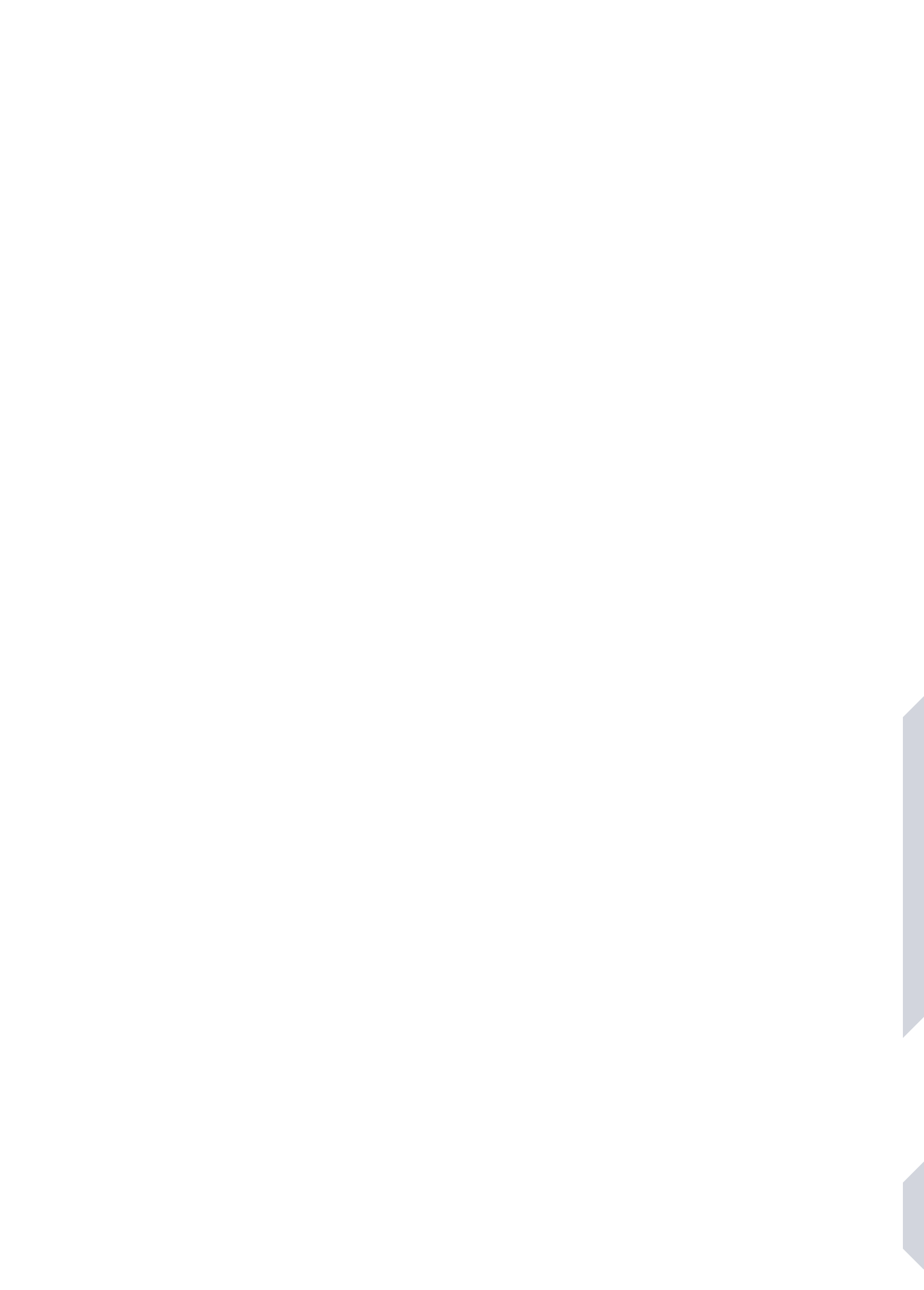


3. Working Load Limits (WLL)

Construction and Stretcher Stairs

Code	Stair	W (kN)	P (kN)
MAS20B		2.5kPa	3.6kN
MAS15B		2.5kPa	3.6kN
MAS10B		2.5kPa	3.6kN
7850		2.5kPa	3.6kN
7864		2.5kPa	3.6kN
CST2024L CST2024R CST1024L CST1024R		2.5kPa	3.6kN





4. System Details

4. SYSTEM DETAILS

4. System Details

Standards

Spigotted Standards

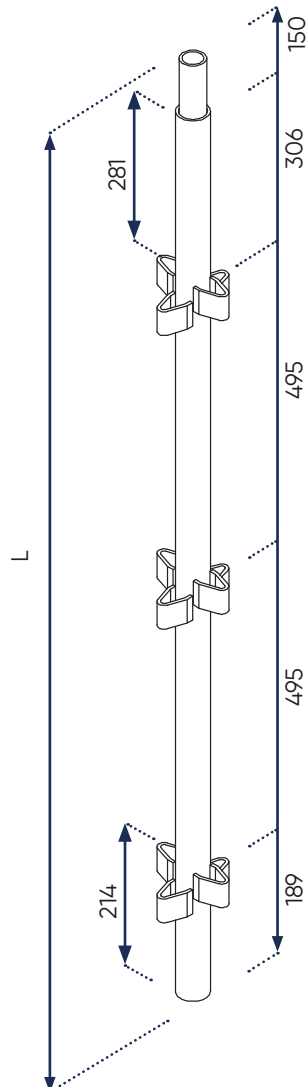
Used to access scaffolding applications and as a base for formwork. Cup joints at 50mm intervals designed to hold standard and transoms captive. Comes in multiple sizes to fit variety of jobs.

Spigot Standard	L (mm)
7005S	500
7010	1000
7015	1500
7020	2000
7025	2500
7030	3000

Open Ended Standards

Used in falsework or formwork support applications in conjunction with Spigotted Standards or as a single height unit. The open ended design allows the insertion of an Adjustable Base or Adjustable U-Head to provide the final support to the soffit formwork.

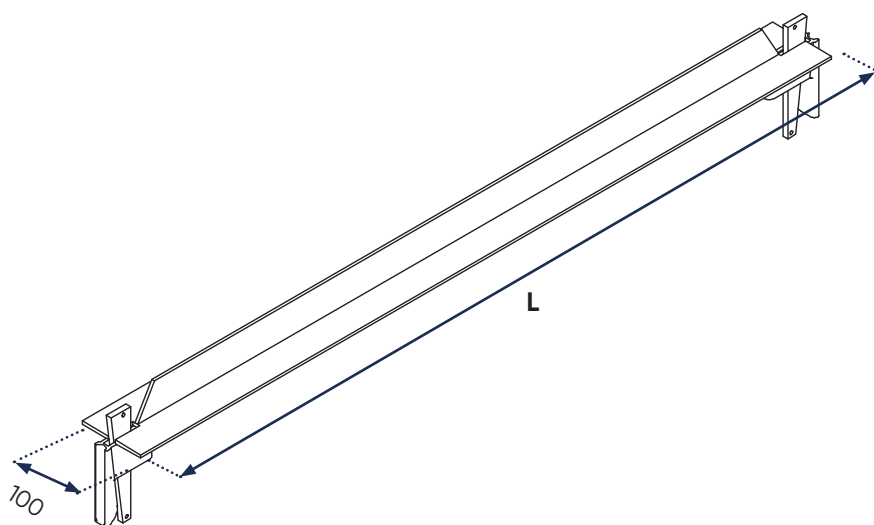
Open End Standard	L (mm)
7010O	1000
7015O	1500
7020O	2000
7025O	2500
7030O	3000



4. System Details

Transoms

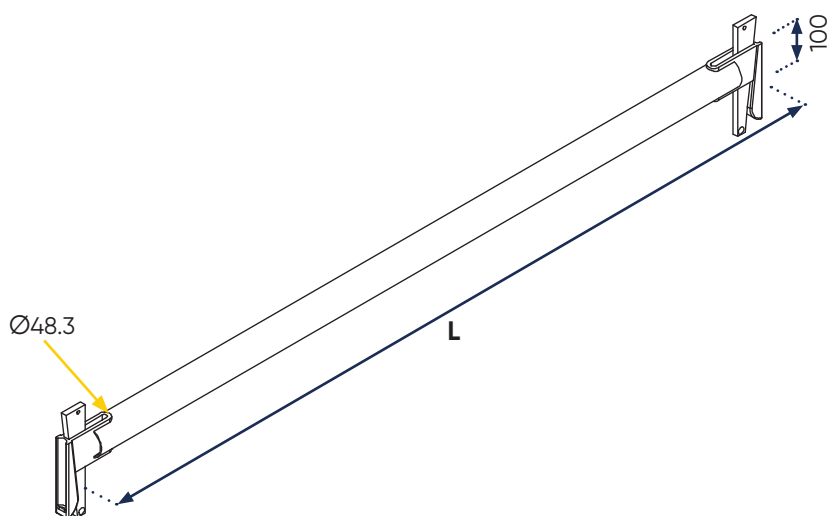
Transoms are fabricated from twin structural angles fixed back to back with a drop forged blade attached to each end. The 2.4m Transom has an additional web member welded below the flange section for added strength. The transom blade locates into a bottom cup and is locked in position by the top cup.



Transom	L (mm)
7206	0.6m
7207	0.7m
7212	1.2m
7218	1.8m
7224	2.4m

Ledgers

The Ledgers are manufactured from 48.3 mm O.D. tube with forged steel blade ends which locate into bottom cups of the Standards and are locked in place by the the corresponding top cups. Ledgers are available in various lengths to provide the desired grid dimension for scaffolding or formwork.

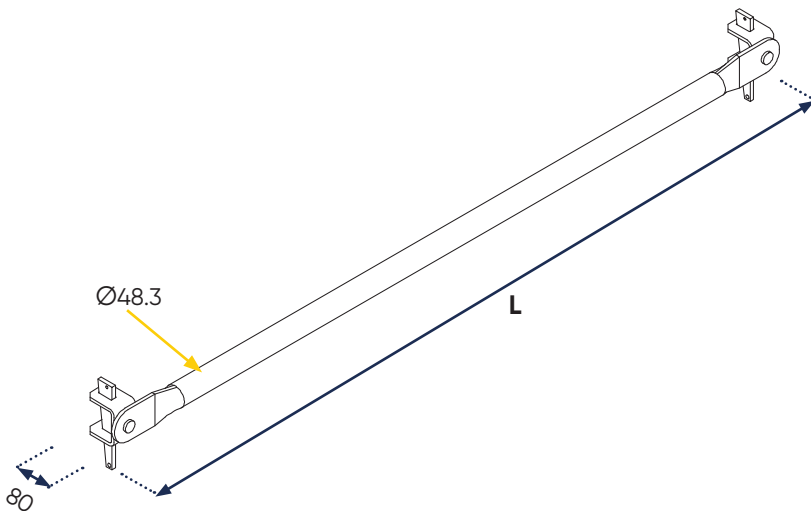


Ledger	L (mm)
7106	0.6m
7107	0.7m
7112	1.2m
7118	1.8m
7124	2.4m
7130	3.0m

4. System Details

Diagonal Braces

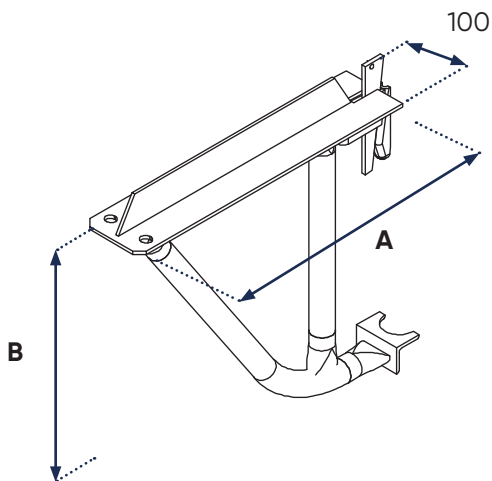
Diagonal Braces are made from 48.3mm dia tube with a swivel blade at each end. Their function is to provide transverse and longitudinal bracing to scaffold structures. The brace is available in various lengths to suit the combination of bay widths and heights.



Brace	L (mm)
7317	1.7
7321	2.1
7327	2.7
7322	3.2
7336	3.6

Platform Brackets

Platform Brackets enable 1, 2 or 3 plank wide platforms to be placed between the scaffold and the work face. The blade end locates into the cup on the Standard and the ends of the brackets are connected to each other with Tie Bars.

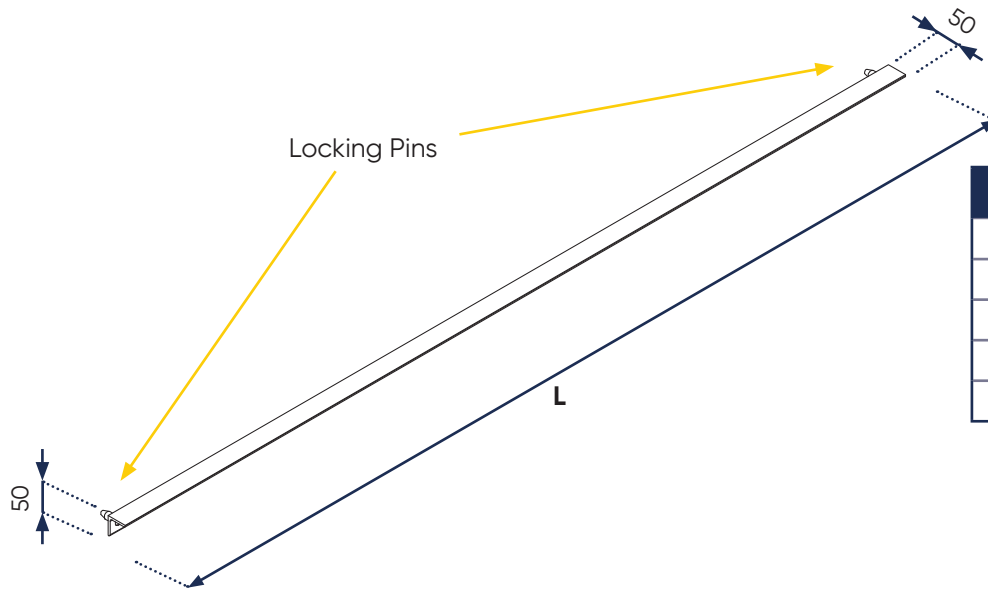


Platform Brackets	A (mm)	B (mm)
1 Plank	230	-
2 Plank	460	350
3 Plank	690	350

4. System Details

Tie Bars

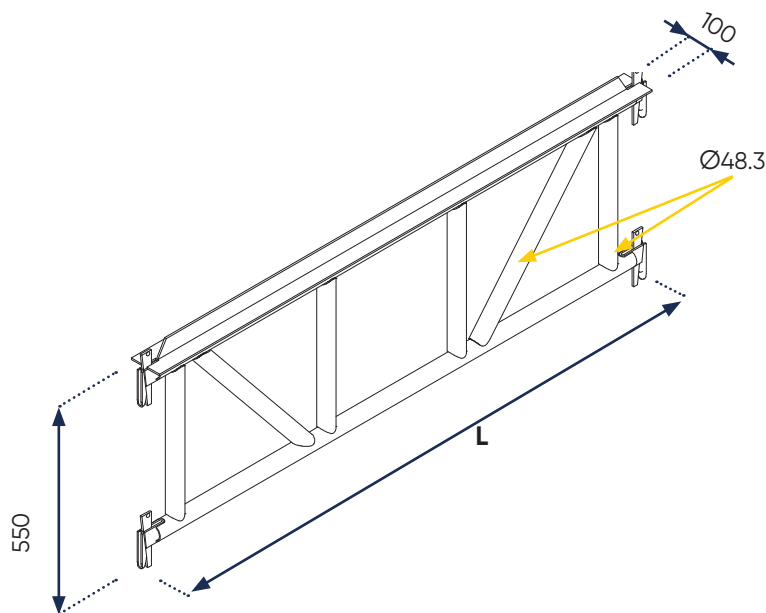
Tie bars are used to interlock the ends of Platform Brackets and to provide a means of preventing the Planks from sliding off the end of the bracket. The studs at the end of the tie locate into slots in the Platform Brackets.



Tie Bar	L (mm)
7610	0.6m
7611	0.7m
7612	1.2m
7618	1.8m
7624	2.4m

Transom Truss

The Transom Truss is designed for high capacity loading platforms and overhead protective structures. Connects at 4 points, enhancing the rigidity of the scaffold.

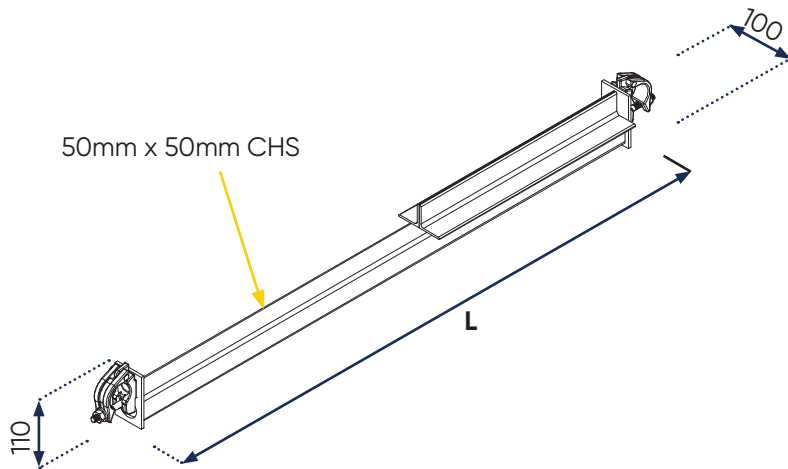


Truss	L (mm)
7226	1.8m
7224T	2.4m

4. System Details

Ladder Access Transom

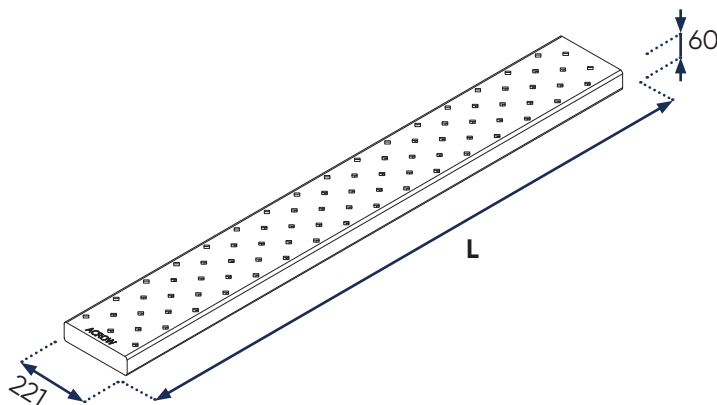
The Ladder Access Transom is used to provide an opening in a bay allowing a ladder to pass through it. The L.A. Transom is attached to and spans between the Ledgers in the bay.



Access Transom	L (mm)
7230	1.2m
7231	1.8m
4232	2.4m

Steel Planks

Planks to suit CUPLOK are formed from galvanised steel sheet with a perforated tread to provide a non-skid surface. Perforations are taken close to the ends and edges of the Plank to provide even coverage over the whole assembled deck.

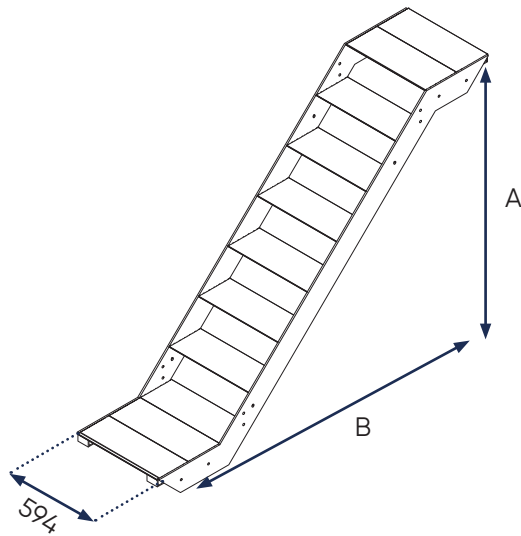


Plank	L (mm)
7405	0.5m
7407	0.7m
7412	1.2m
7418	1.8m
7424	2.4m

4. System Details

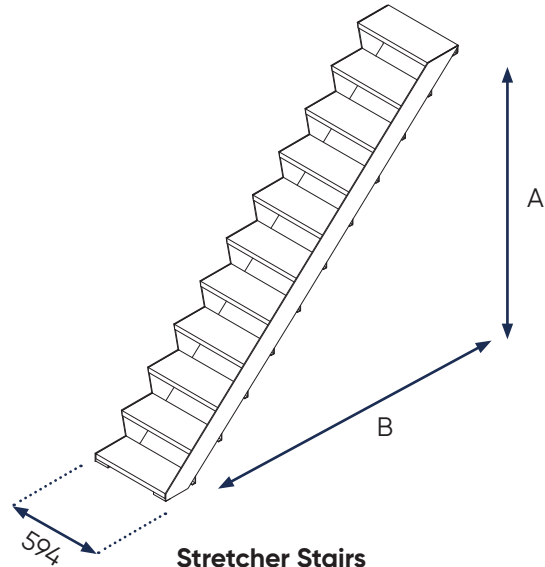
Stairs

The Aluminum Stair enables a stairway to be assembled within a 2.44m x 1.27m bay. Each end of the Stair is supported by a Transom. The width of the unit is half the bay width enabling two units to sit on a Transom, thus a continuous staircase can be built up the full height of the scaffold. Vertical height of the unit is 1.5m.



Construction Stairs

Stair	A (mm)	B (mm)
MAS10B	1000	2400
MAS15B, CST15	1500	2400
MAS20B	2000	2400

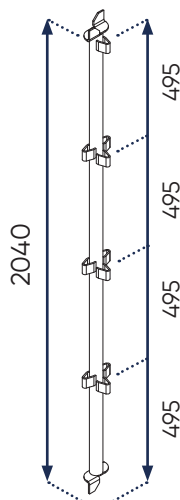


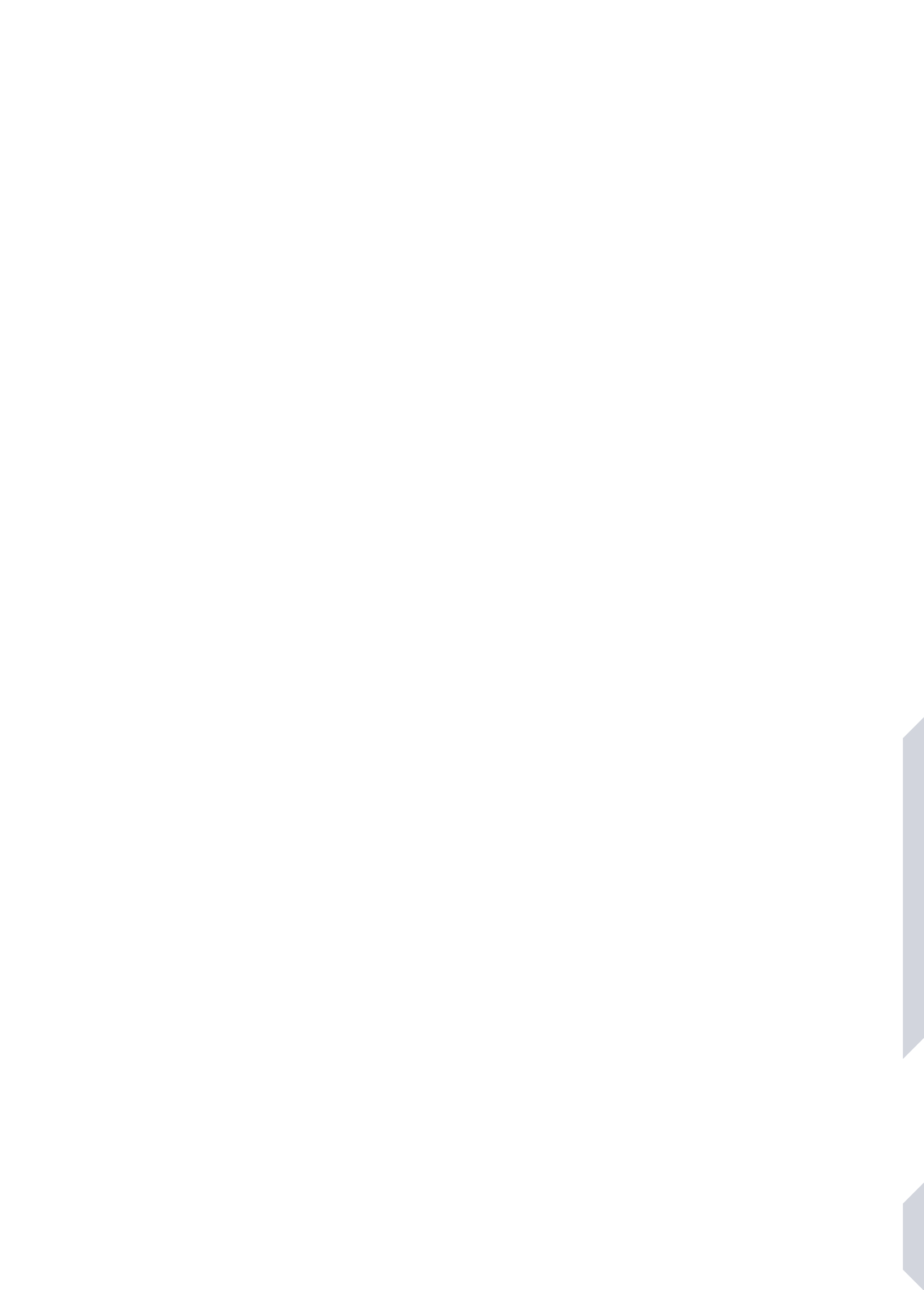
Stretcher Stairs

Stair	A (mm)	B (mm)
CST2024L	2000	2400
CST2024R	2000	2400
CST1024L	1000	2400
CST1024R	1000	2400
7864	1000	2400

Trimming Standard

The Stairway Trimming Standard is used in conjunction with Aluminum Stair to provide an access/egress point. The top and bottom of the Standard is captured between Ledgers. Additional Ledgers are used to connect the Stairway Trimming Standard to the adjacent Standard.





5. Assembly Details

5. ASSEMBLY DETAILS

5. Assembly Details

Installation Guidelines and Recommendations

The installation guidelines and recommendations below are the foundation principles for assembling a Quickstage scaffold structure. It covers generic assembly for facade access scaffold structure.

Always refer to project specific design and installation requirements. These guidelines are not a substitute for site-specific installation requirements and site safety procedures. Scaffolding must be installed in compliance with the requirements of Statutory Regulations and Australian Standards for Scaffolding (AS/NZS1576 "Scaffolding" and AS/NZS 4576 "Guidelines for Scaffolding") as applicable.

Installing the scaffold is a team activity. At least two qualified scaffold installers are required to assemble the Quickstage scaffold. Personnel who install, alter or dismantle scaffolding over 4m in height must hold a current National, State or Territory Certificate in Scaffolding to the appropriate class.

Should the users require any further information or guidance, they are encouraged to contact their local Acrow branch. Acrow Formwork and Scaffolding has dedicated engineering services available for project assistance. Our technical experts can identify the most efficient temporary work design meeting project requirements, specifications and installation process.

Safety Requirements

When planning the erection of any scaffolding, a site-specific Risk Assessment process must be carried out. Generic Hazard Identification/Risk Assessments/Control methods profiles and Safe Work Methods Statements for the erection, dismantling and the usage of scaffolding equipment are available from Acrow Formwork and Scaffold Branches. Site specific Hazard Identification and Risk assessments and Safe Work Methods Statements would need to be generated for specific projects.

Particular configurations of scaffolds and particular sites may require scaffolders to use safety harnesses and lanyard systems to provide protection against a fall when erecting the scaffold over a void or lean out from the scaffold or supporting structure without the protection of a guardrail. Harness should not be attached to the scaffold unless approved by Acrow's engineer. It is absolutely necessary that the safety harness is connected to a suitable point that can support the harness load and you must have undertaken safety harness training by an accredited training organization.

Scaffold installation and dismantling required manual handling. Scaffold installers must be competent in manual lifting techniques. Scaffolders installation, altering or dismantling scaffolding must follow the manual handling guidelines published by Regulatory Authorities or other guidelines and codes of practice recognised as being acceptable by such Regulatory authorities.

5. Assembly Details

Safe Work Method

Below are additional recommendations for working safely while installing the scaffold:

- a. Do not use damaged or faulty equipment. If any fault or damaged components are detected, place them to one side and inform the other scaffolders in your team. Damaged components are to be sent back to Acrow's yard.
- b. Do not install scaffold within the vicinity of overhead electrical wires without written authorization from the local electricity supplier saying that it is safe to erect or dismantle scaffold in that area.
- c. Do not install scaffolding where there are exposed reinforcing bars below the scaffold. These bars should have safe caps before the installation can be commenced.
- d. Do not install any scaffold on a structure or a soil unless it can support the weight of the scaffold and the loads that may be imposed on the scaffold. Refer to 8.3.1 Ground stability – Ground bearing capacity in this document.
- e. Always check the weather before and during the installation of Quickstage scaffold. Installation of scaffold can be unsafe during severe weather conditions.
- f. There are different methods of installation and dismantling scaffolding. Methods vary from state to state and client to client. You must comply with the safe working method prescribed by the State Regulator in the State you are working.
- g. You must fit external edge protection comprising guardrails, midrails and toe boards at every lift. Internal edge protection is required where the working face is 225 mm away from the working platform edge. Edge protection must be fitted bay by bay as each standard is erected.
- h. Again, and during dismantling of the scaffold, only dismantle edge protection bay by bay as the standards are to be dismantled. Edge protection is required wherever you are working.
- i. Sequential method of erection. Handrails must be fitted bay by bay as soon as the standards to each bay have been installed. You must not install the standards along the entire run of scaffold, they are to be installed one at a time. Handrails are to be fixed one bay at a time, this makes it safer for you when erecting and dismantling and also the handrail will be in place when the lift becomes a working platform. When possible stock handrails on the working level
- j. Erecting in 1 metre lifts. Working from a fully planked platform with handrails, build the next 2 metre lift. Now place transoms at 1 metre and place 2 boards on the transoms to work off.
- k. From this level you can install the standards above if required and fix the handrails and midrails on the lift above. When this is done remove the transoms and place the boards in the lift above.
- l. Erecting using a harness. Working from a fully planked platform with handrails, build the next 2 metre lift. From the working platform (2 metres from the top lift) attach the harness lanyard to the standard or ledger on the first bay ensuring that the scaffold is tied in accordance with the scaffold plan or this manual. Do not fix the lanyard to standard which has a join above the top lift.
- m. Erecting using step boards. Working from a fully planked platform with handrails, build the next 2 metre lift. Now place one step board across the midrail and one across the handrail adjacent to a pair of standards. From the step boards you can install the standards above if required and fix the handrails and midrails on the lift above. When this is done remove the step boards and place the boards in the lift above.
- n. Unused scaffolding components must not be left on a completed working platform as they be a trip hazard for later users of the scaffold. During breaks in scaffold erection, scaffolding equipment must be stacked in a safe manner to prevent it falling. The supply of containment is a suitable means of preventing stacked equipment falling out from the scaffold. Stacking scaffolding components vertically should not be done unless the components are secured.
- o. Erect the access stairs or ladders with the erection of the scaffold to provide access during the erection - unless there is a safe access to the scaffold from the building.

5. Assembly Details

- p. Steel boards must not be lapped over other steel boards. Lap plates that are designed to span gaps between steel boards without slipping should be used. Timber boards may be used provided they are secured against movement. When using timber boards to lap over steel boards on the length of a platform, trip hazards can be eliminated by fixing lengths of timber of the same thickness as the planks cut at a 45° angle, or fixing purpose-designed rounded end pieces, at the ends of the scaffold planks. At changes of direction of a platform, lapped planks are acceptable without additional measures because users will be conscious that they are about to change direction as they move along the scaffold platform.
- q. The use of ladder beams, trusses and or cantilevered needles must be accompanied by a design drawing of its intended use in each application. You must erect it as shown on the drawing unless your supervisor approves changes to the drawing.
- r. 16. Steel boards must not be lapped over steel components. Use only a timber board or a special cover plate, which is secured against slipping, for lapping on steel components. The maximum span for a timber scaffold plank is 1.8m.
- s. 17. It may be necessary to use a safety harness to erect and dismantle some other scaffolds such as drop or hanging scaffolds off needles, beams or trusses. In order to use a safety harness, you must have undertaken safety harness training by an accredited training organisation and have a current and valid certificate. Scaffolders must not climb the stars of the standards, because any slip can result in severe injury.

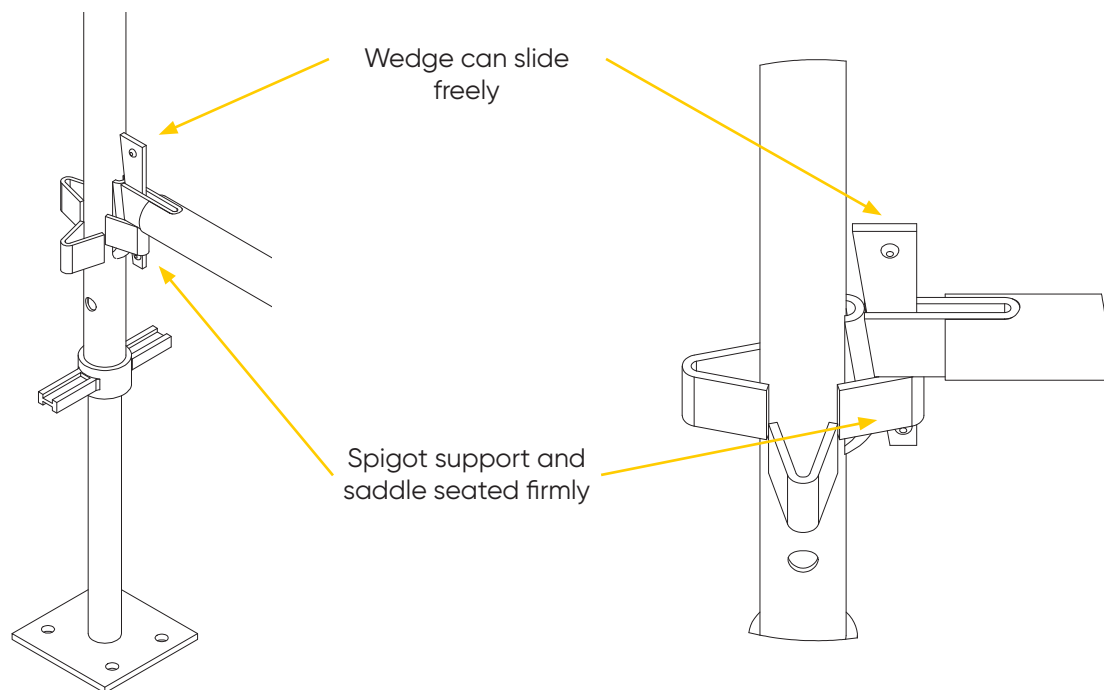
5. Assembly Details

Wedge Connection

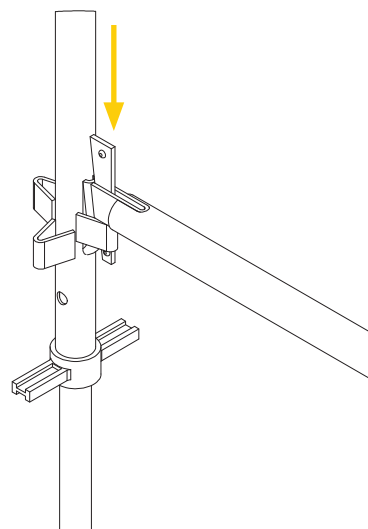
Each Quickstage component has its own built-in wedge/ saddle connection to enable it to be joined to its mating component in the system.

Check mating components are actively engaged including:

- Wedge can be slide freely into the star assembly (V-Connector) on the Standards
- The spigot support saddle is seated firmly and level with the star top surface
- The saddle is fully contact (no gap) with vertical components



Engaging and locking components required gently tapping the wedge. Using excessive force and hammering will damage the wedge and affect the scaffold structure stability.



5. Assembly Details

Installation Process

Ground Stability – Ground Bearing Capacity

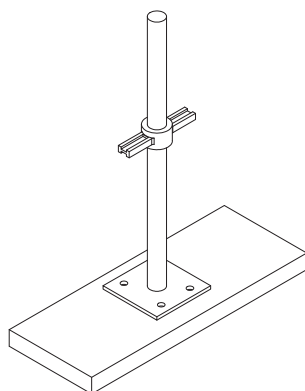
Before commencing the installation of any Quickstage scaffold, care should be taken to check that the ground is suitable and clear of loose rubble to provide a stable base and clear access for installation. Where the ground is soft or made up, it should be consolidated, and the scaffold should be installed on adequate timber soleboard.

The soleboards are a spreader plate that essentially takes the concentrated load from the leg above and distributes it over a greater area. The soleboards sizes and configuration will depend on loads applied to the ground and the ground bearing capacity. The Ground bearing capacity is the capacity of soil to support the loads applied to the ground from above. The bearing capacity of soil is the maximum contact pressure between the foundation/ soleboard and the soil which should not produce shear failure in the soil or excessive settlement.

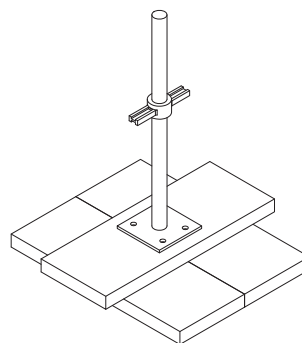
Before the scaffold installer starts the installation, they should request for the Geo-tech engineers confirmation on the ground bearing capacity when doing scaffold. All Acrow's drawings have a detail with the minimum required ground bearing capacity on it. It is the principal contractor responsibility to either provide a suitable and stable compacted surface that meets or exceeds the required ground bearing capacity, or they supply the ground bearing capacity and Acrow will design accordingly. No project should start until the principal contractor has confirmed the supporting ground is sufficient.

Soleboards requirements are:

- Quickstage scaffold can be installed on 35mm thick soleboards unless specified otherwise.
- The minimum length and width of the soleboard is to be 500mm long and 225mm wide.
- Soleboards must be hardwood. LVL scaffold planks can not be used as these are more susceptible to moisture and bend easier.
- The soleboards should be placed on a flat and level surface with full contact to the ground. Slight digging may be required to slightly bury them to ensure they are level and in full contact.
- Extra length of soleboard effectively provides no more benefit. There becomes a point where the length of the sole board will fail under the load and is not strong enough to spread the load out uniformly over the ground.
- Soleboard might not be required on concrete (Seek advice from structural engineer). However, a 50mm thick blinding is not sufficient to replace a sole board if the Quickstage scaffold is on a waffle pod slab, speak to engineering immediately as these typically cannot take large point loads.



Single SOLE Board



Triple SOLE Board

5. Assembly Details

Commence scaffold installation – Site Inspection and Planning

Inspect the site-specific Scaffold installation design / process, the site incline and check if any trench may excite within the scaffold footprint.

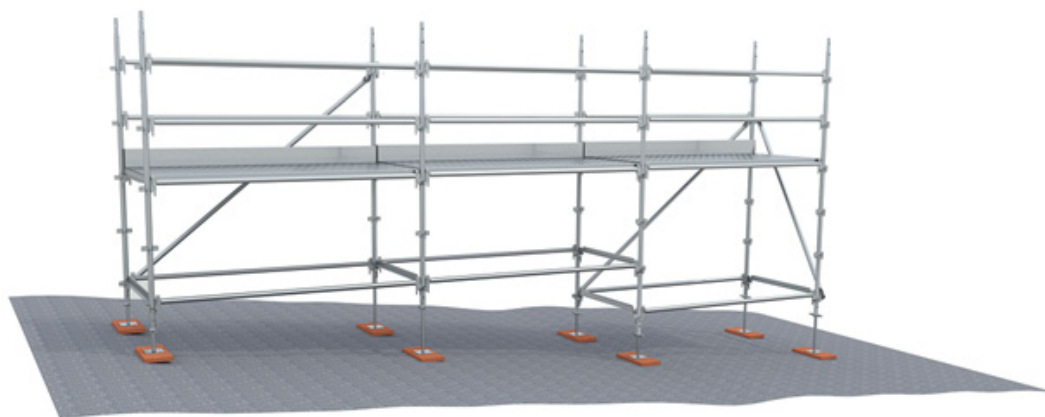
The installer should take note of any obstructions that may require adjust or alter the scaffold design. The installer should check for overhangs, trees or other protrusions that may interfere with the scaffold as it is installed.

Lay out enough components for the complete run of scaffold for 2 or 3 lifts high at least adjacent to the scaffold bays will be. It is more efficient to do this before installing the first bay.

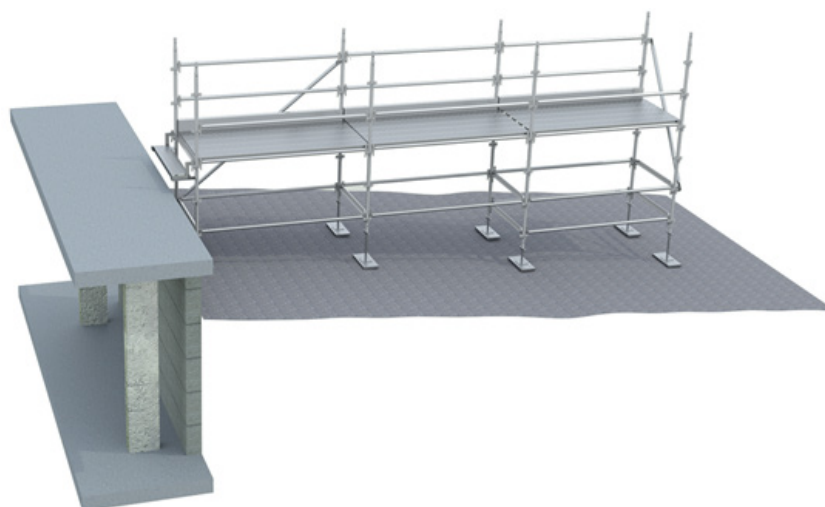
Avoid leaning scaffolding components against walls, columns, or other surfaces, unless they can be prevented from falling over and causing injury to persons or damage to property. Components need to be against a protection, or leaning into a corner, to prevent them sliding. If the components cannot be secured against falling over then lay them down.

When laying down any components, always ensure a clear walkway has been left, and that the components laid out are not an obstruction to you, your fellow workers, or members of the public.

Site Topography: Commence installation, where possible, on the highest point of the ground and work down the incline. This will make levelling easier as the scaffolding progresses horizontally.



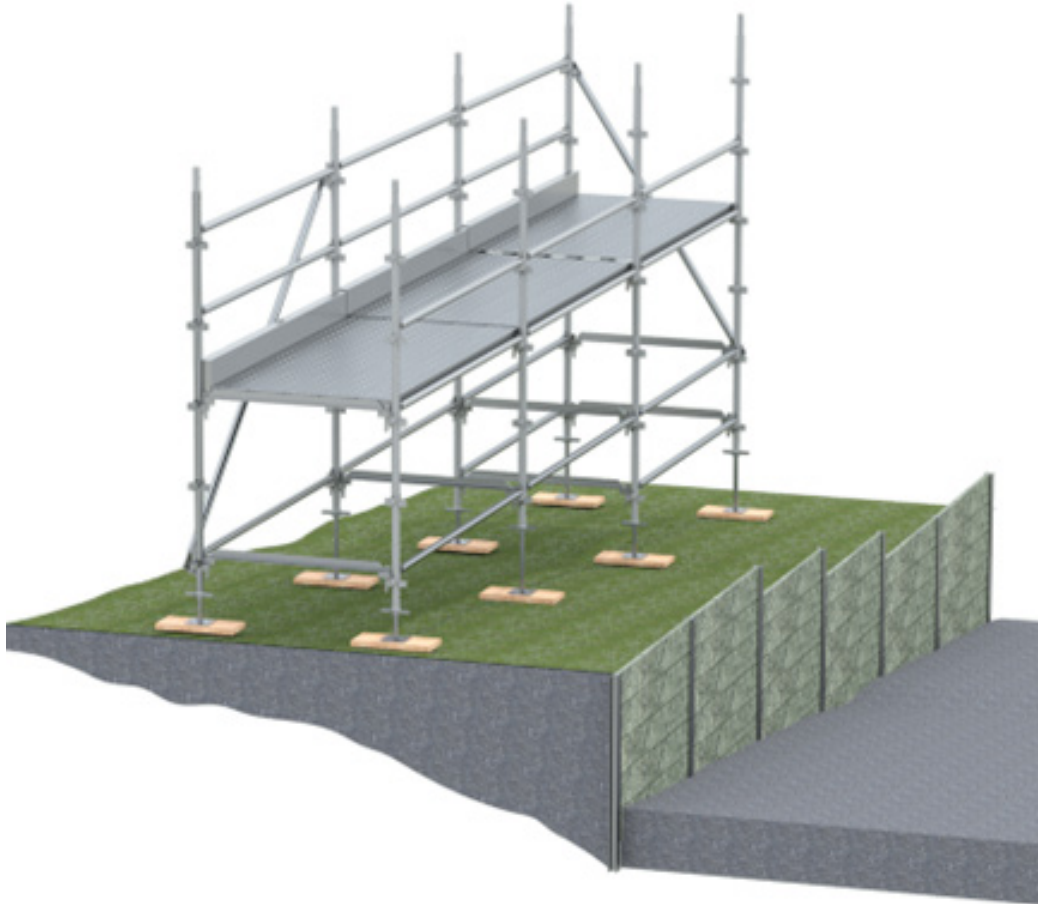
Access: Check the access to the scaffold. Platform Brackets are required adjacent to the work face, the installer needs to make allowance for the width of the Platform Brackets and increase the distance between the work face and the closest Standard.



5. Assembly Details

Retaining Wall and Trenches

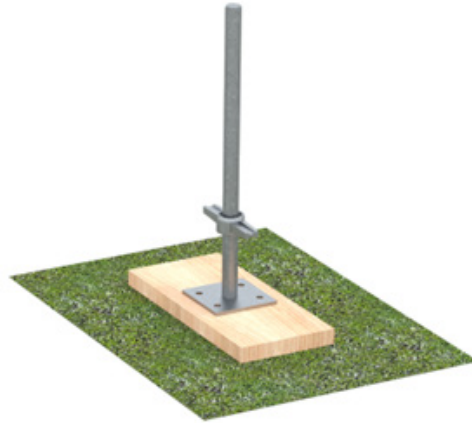
When placing the sole boards, consideration for any adjustment retaining wall or trenches must be made. Ground will typically fail at 30–45 degrees from vertical. Place scaffold leg away from the trench by at least 1.5 x the depth of the trench or batter from the edge. An example, if a scaffold is next to a retaining wall 1m high, the leg should be 1.5m from the edge of the retaining wall. This is just a guide and when placing a leg next to a trench or batter you need to seek advice from a Geo-tech engineer.



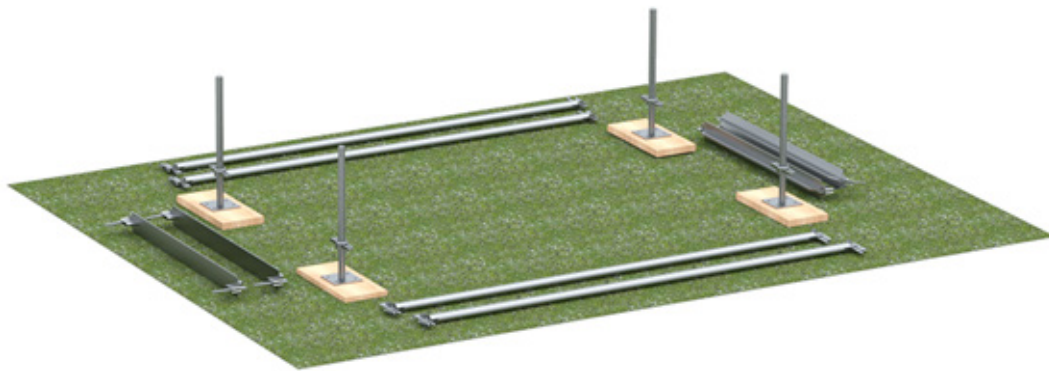
5. Assembly Details

Commence scaffold installation – Scaffold Assembling

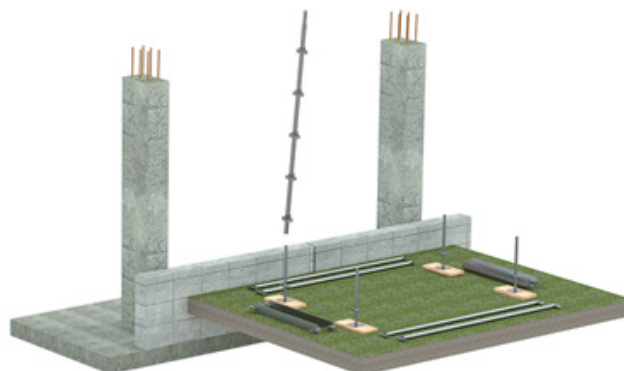
Set the nut of the Adjustable Jack near the bottom of the threaded stem to allow maximum adjustment as the scaffold progresses to lower ground levels. Leave at least 150mm gap between the nut and the base of the Adjustable Jack.



Lay out the Ledgers and Transoms for the first bay in the approximate positions. This will ease the process of installing the first bay



Install the first frame. Insert first pair of 2m and 3m Standards onto the Adjustable Jack which have been approximately leveled. Always maintain the sequence of a 3 metre Standard on the outside face and a 2 metre Standard on the inside for the base of the scaffold.

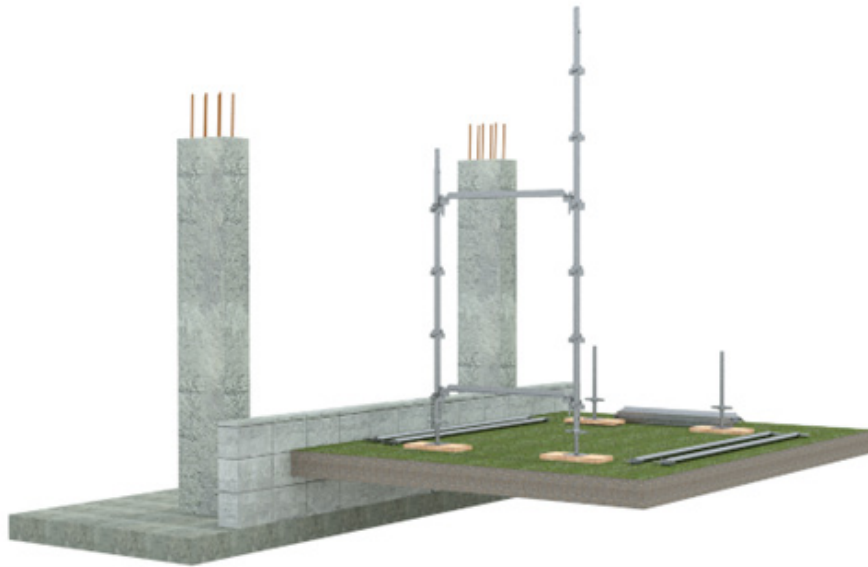


5. Assembly Details

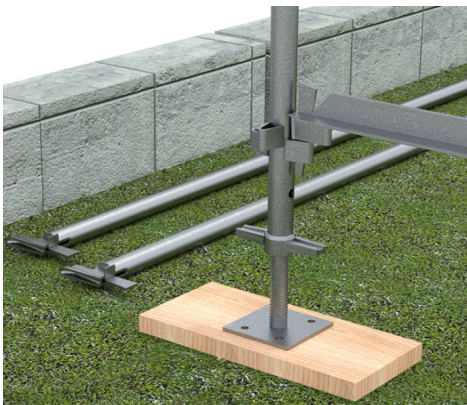
Commence scaffold installation – Scaffold Assembling

Form the first frame by joining the Standards with a Transom attached to the lowest star assembly (V-Connector) on the lowest cluster on the Standards

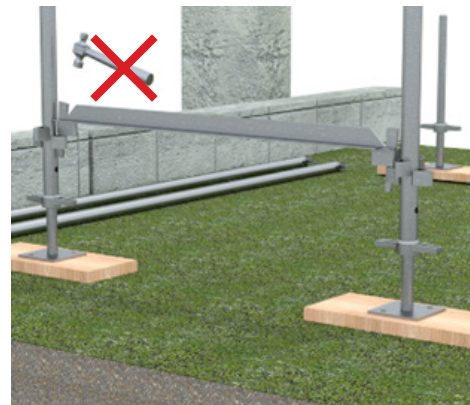
Position the frame so that the 2m Standard is closest to the construction side and the 3m Standard away from it. The Transom should be connected to the lowest V-Connector in the cluster, this ensures that the Ledgers when connected will be in the correct position for fixing Ladder Access Putlogs etc. Ensure that components are seated properly. **DO NOT TIGHTEN THE WEDGES – YET**



The Transom should be connected to the lowest V-Connector in the cluster



Do Not Tighten the Wedge Yet



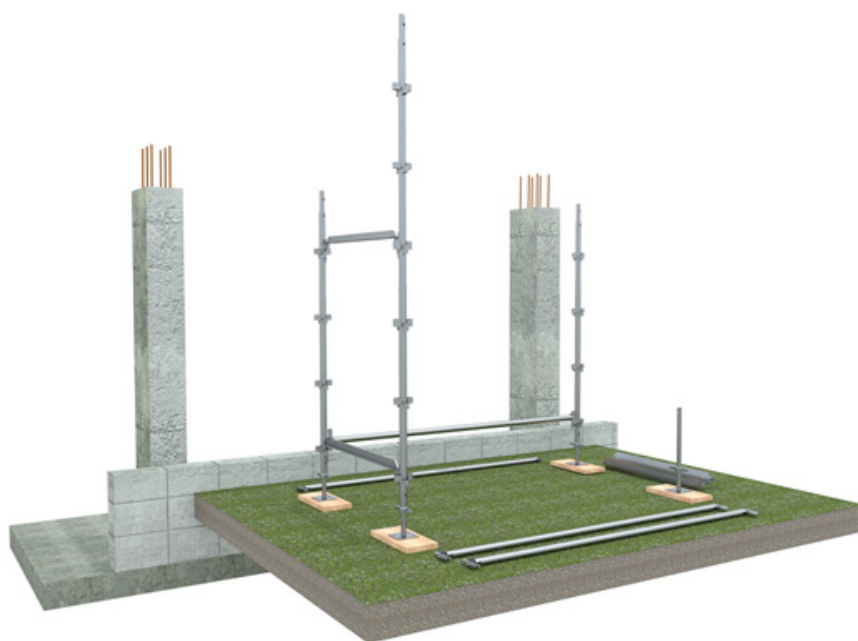
5. Assembly Details

Commence scaffold installation – Scaffold Assembling

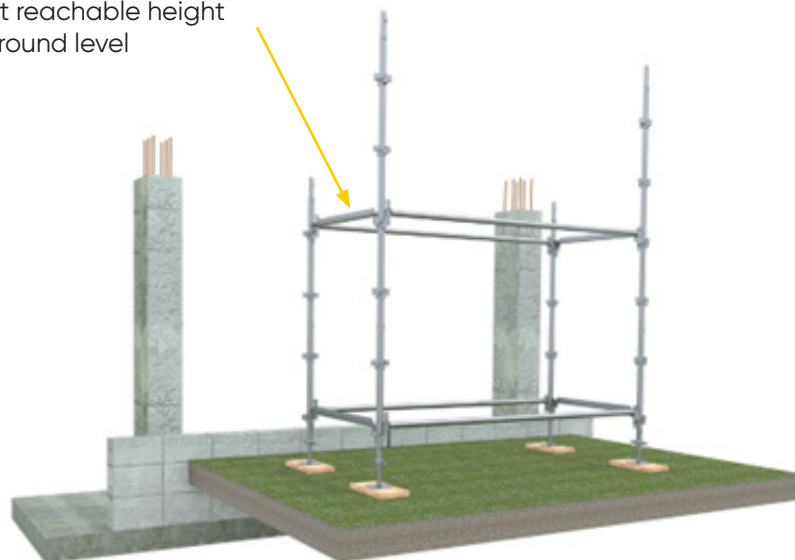
Installing the second frame. With one installer still holding the first frame square to the construction side, the second installer inserts a 2m Standard into an Adjustable Jack and connects it to the frame with a Ledger at the Standard that is closest to the construction side. This Ledger should now be positioned adjacent to the construction side and attached to the upper V-Connector in the cluster. The structure is now self-supporting and the second installer completes the rectangle with a further Transom, Ledger and 3m Standard.

Install second layer of Transoms and Ledgers at reachable height from ground level.

A reminder, always maintain the sequence of a 3 metre Standard on the outside face and a 2 metre Standard on the inside for the base of the scaffold. DO NOT TIGHTEN THE WEDGES – YET



Install second layer of transoms and Ledgers at reachable height from ground level

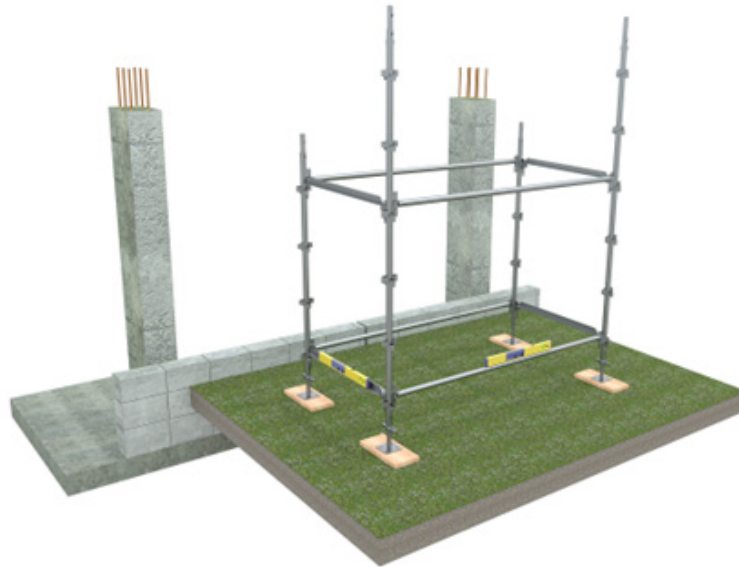


5. Assembly Details

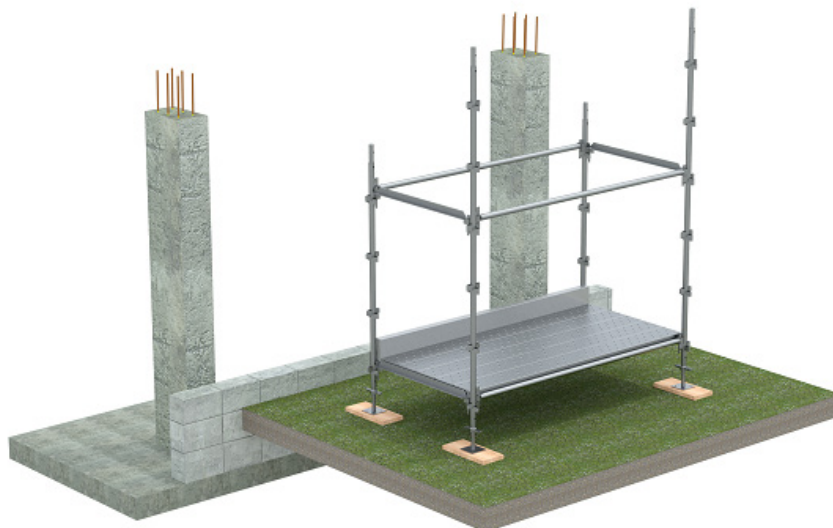
Commence scaffold installation – Scaffold Assembling

Level the bay. Starting from the highest point use a spirit level to adjust the bases so that Ledgers and Transoms are level. Accuracy in leveling at this stage makes for a good start and enables sight leveling to be made from here on.

DO NOT TIGHTEN THE WEDGES – YET



Place the Quickstage Planks on Transoms at the base level and complete the first lift of Quickstage with Transoms and Ledgers at the desired platform height (not more than 2m above the base members). Transoms and Ledgers above the base level must also be located at the same level.

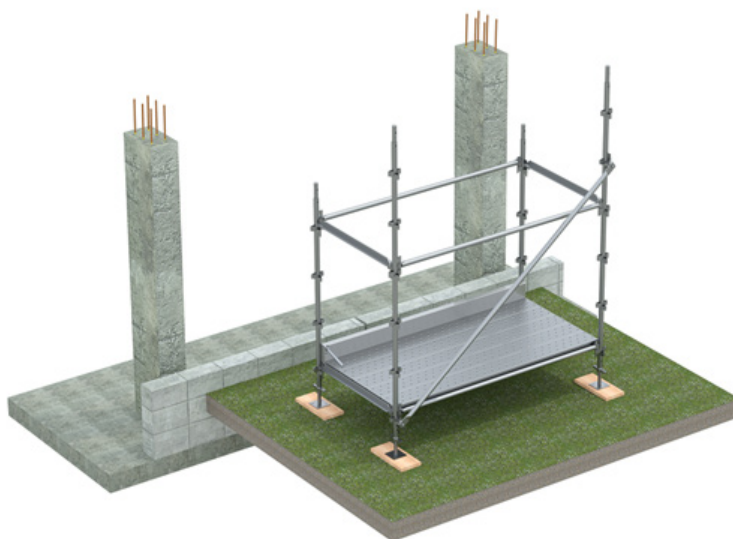


5. Assembly Details

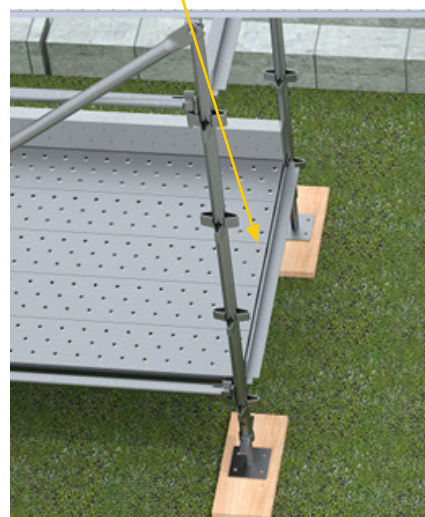
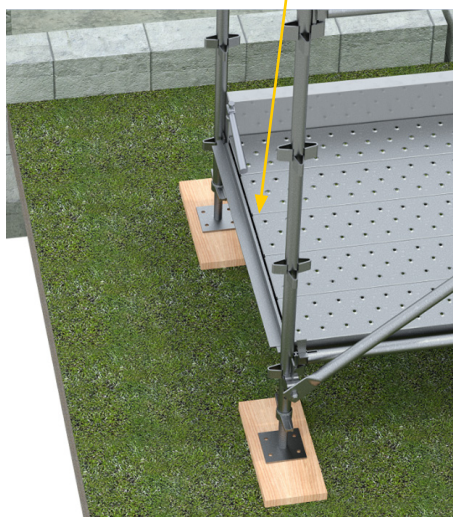
Commence scaffold installation – Scaffold Assembling

The bay should now be squared in plan and correctly located in relation to the structure being scaffolded. Check squareness across the diagonally opposite Standards. Checking squareness is assisted by placing the recommended number of Planks between Transoms and ensuring that Planks sit correctly with an even gap between the ends of the Planks and the supporting Transom.

Fix a Diagonal Brace to the outer face and end face of the first bay. Always start by fixing the Brace to the upper cluster first: this makes for safer handling.
WEDGES CAN NOW BE TIGHTENED IN THIS FIRST BAY.
TAP HOME THE WEDGE. NO NEED FOR HEAVY HAMMERING



Ensure Planks sit correctly with an even gap between the ends of the Planks and the supporting Transom



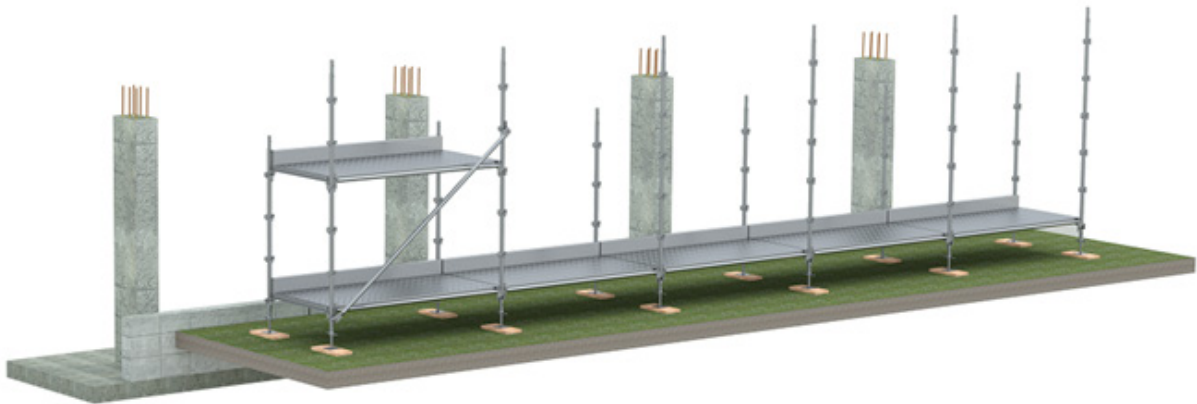
5. Assembly Details

Commence scaffold installation – Scaffold Assembling

Complete the base layout by adding bays horizontally, leveling and positioning each bay as you go before tightening wedges. Continue the 2m and 3m Standard combination for the full run.

Once the base lift has been completely leveled for the length of the scaffold, your spirit level should no longer be required. It is essential to implement safety procedures, installing and dismantling of scaffold bays should always be carried out from a fully decked platform or a platform.

Complete the base layout by adding bays horizontally

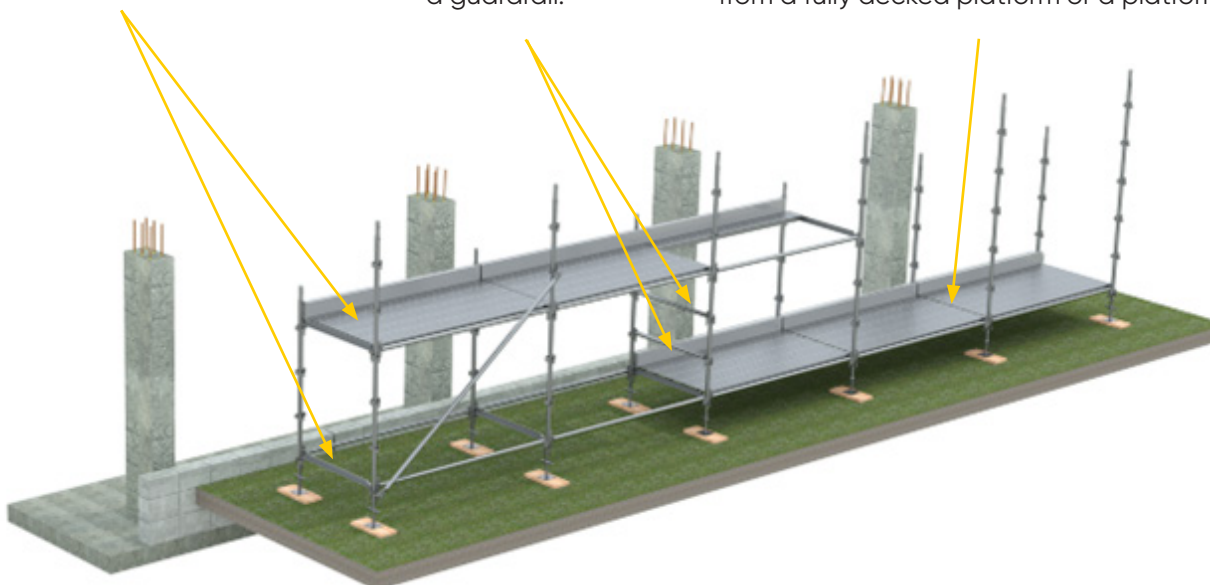


Planks are now moved up to fully deck out the first lift. When these Planks remain in place as a working platform, Ledgers are positioned at 0.5m and 1m above the planked level to form a guardrail and midrail. For working platforms, toeboards on the outer face are also required. A Mesh Panel which is 1m high incorporates a toeboard and can be used in lieu of a midrail and toeboard. Mesh Panels are supported from the guardrail.

Planks are now moved up to fully deck out the first lift.

Ledgers are positioned at 0.5m and 1m above the planked level to form a guardrail.

It is essential to implement safety procedures, installing and dismantling of scaffold bays should always be carried out from a fully decked platform or a platform.



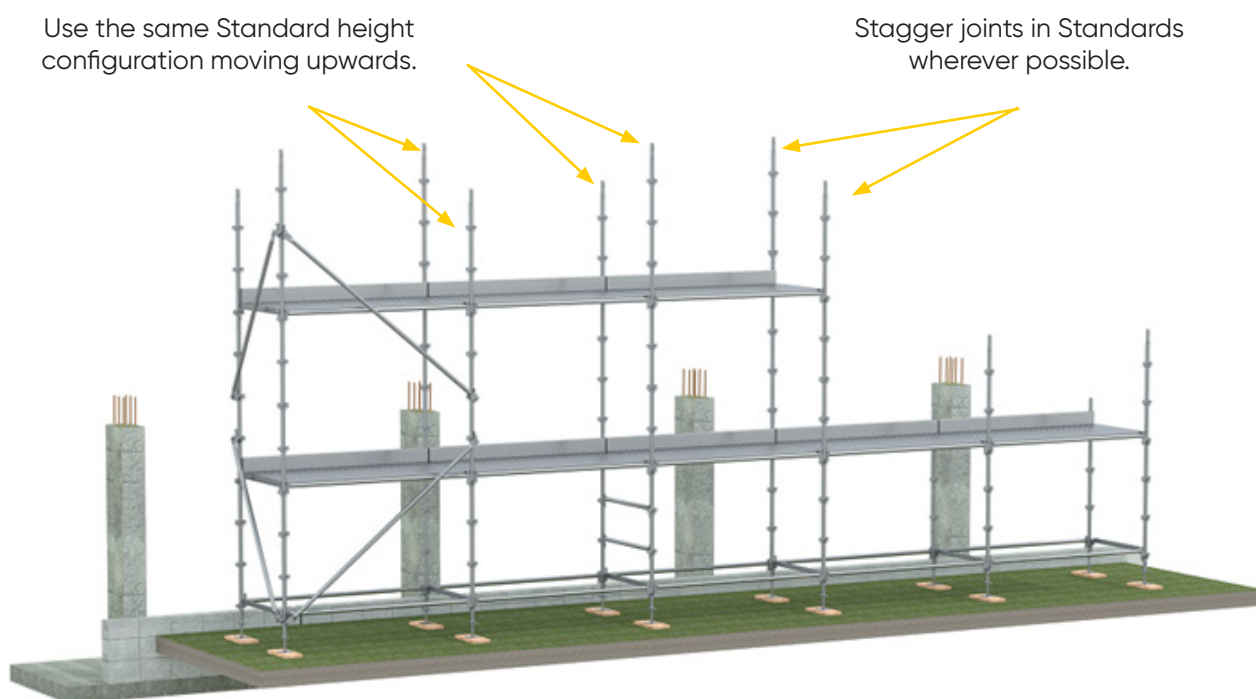
5. Assembly Details

Commence scaffold installation – Scaffold Assembling

Additional lifts can now be constructed simply by adding further Standards into sockets of the Standards of the lower lift and staggering joints wherever possible. Check that the V- connectors in the cluster on the upper Standard and camlock sleeve are in the same orientation as the lower Standard and engage the camlock sleeve. Transoms and Ledgers are placed at platform levels.

Working levels should be fully decked out and fitted with guardrails, midrails and toeboards (or Mesh Panels) at the required positions. Fully complete the longitudinal installation of a lift before progressing to the next lift.

Stagger joints in Standards wherever possible. If 2.0m Standards were used on the inside face of the first lift and 3.0m Standards on the outside face of the first lift and each successive lift uses Standards of the same height ie: inside and outside both 3.0m or both 2.5m or 2.0m then the initial stagger of the joints will remain through the height of the scaffold.

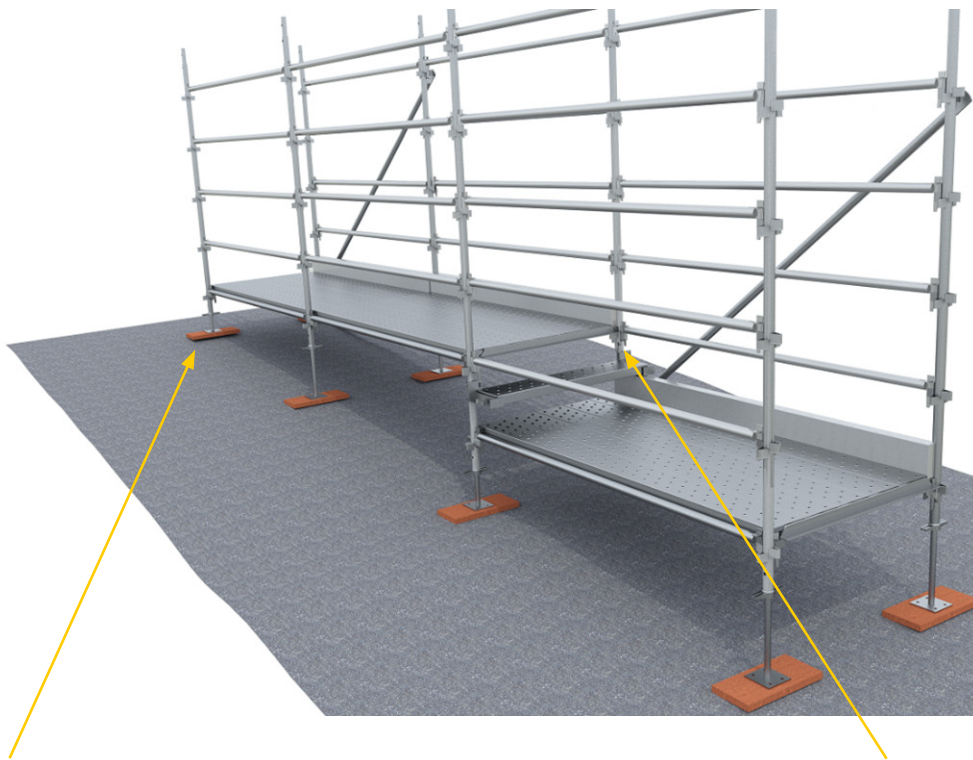


5. Assembly Details

Installation of Sloped Ground

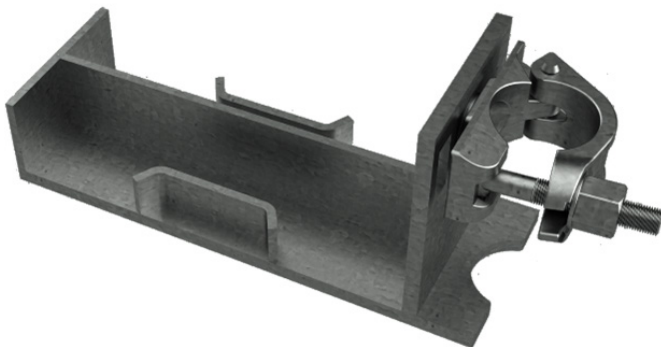
The following scaffold Installation Recommendations provides the foundation principles to assemble a basic scaffold structure in a sloped ground.

- Inspect the site-specific Scaffold installation design / process, the site incline and check if any trench may excite within the scaffold footprint.
- Commence installation - where possible - on the highest point of the ground and work down the incline, this will make levelling easier as the scaffolding progresses horizontally.



Commence installation on highest point

Single Plank Platform Bracket with Coupler fixed to Scaffold Standards



Single Plank Platform Bracket with Coupler

An independent step bracket designed to be fastened to the scaffold Standards, between the nodes (cups or star joint assembly). The bracket provides safe one step access to the stairway or the scaffold bay. It is a widely used in scaffold in sloped areas where all the cups and start joints are occupied.

5. Assembly Details

Scaffold Stability

Free standing scaffold have a potential to overturn and or twist regardless of its height. Thus it is essential that scaffold tower be tied to solid foundation, adjustment building or suitable structure to prevent inwards or outwards movement of the scaffold. As such they provide stability and enable effective performance of the scaffold structure as it grows in height and length.

Scaffold is a highly engineered product and there are ever increasing changes and requirements for full engineering design to ensure scaffold stability meeting site specific conditions.

There are many factors the Acrow engineers consider for defining the proper methods for stairs stabilization including:

- The purpose of the tower and what will it be used for
- Level of exposure to wind and direction of wind
- Ground capacity and if it adequate for the imposed leg loads
- If containment is required
- Will a banner be fitted on the scaffold tower
- If the boards will be strapping down the boards

There are few means for stabilizing the scaffold tower including but not limited to using any or combination of:

- Raker Bracing
- Face Bracing
- Tying to a structure

Below are general descriptions of scaffold stabilizing methods, their implementations and limitations.

Rack Bracing

The rack brace (tie) is an essential means to stabilise the first deck of the scaffold, especially when there are no other mean to establish positive tie between the scaffold tower and adjacent structure.

Essential information about racking bracing:

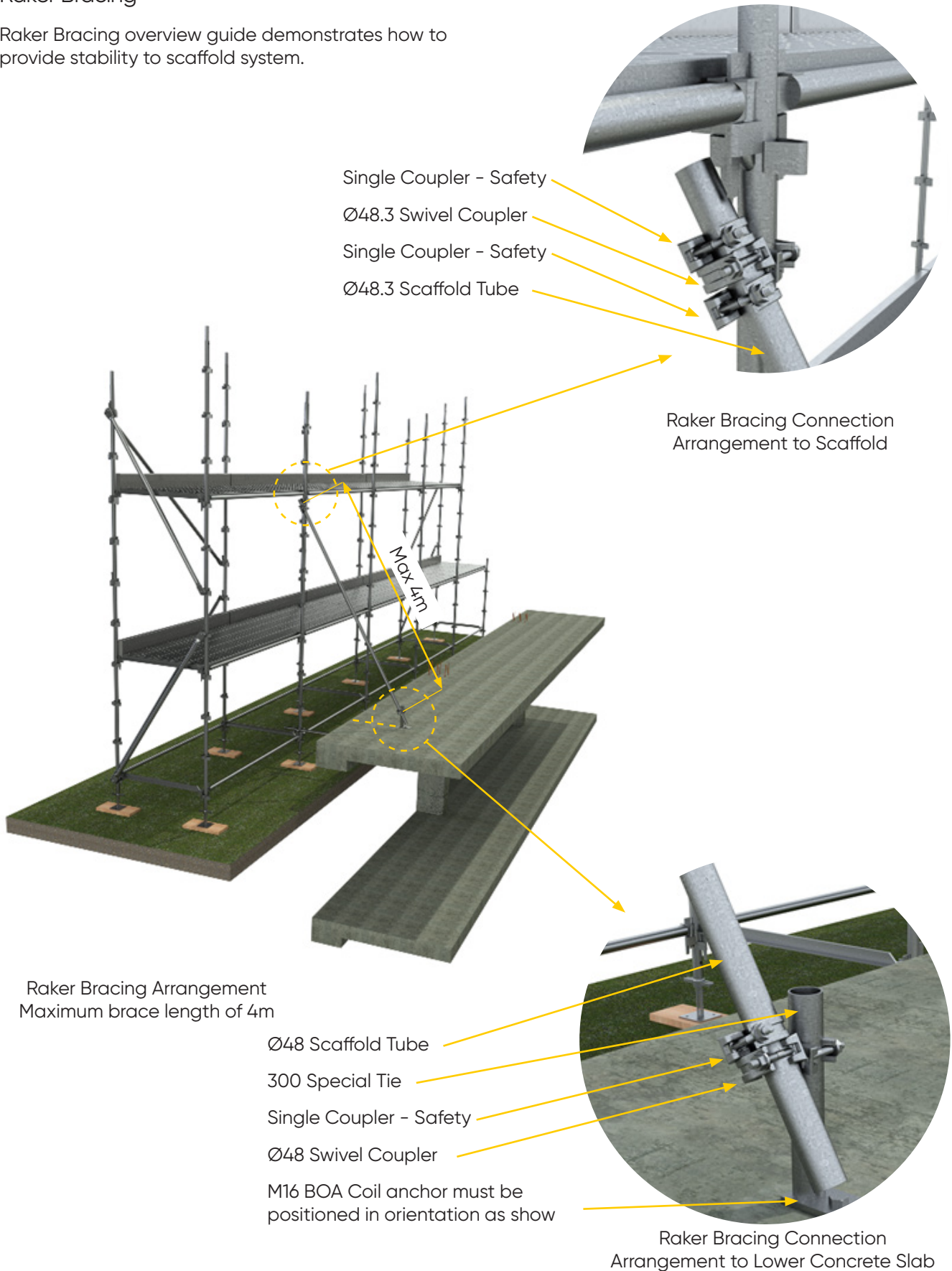
- It is critical that the first portion of scaffold is raker ties or designed with adequate buttress bays until a positive tie to the slab is installed. Raker tying of the first deck should not be delayed until the first slab has been poured.
- Raker ties over 4m in length must be knee braced back into the scaffold and the rakers linked together and braced.
- A raker brace into the ground will not substitute a raking brace fixed into solid foundation. The first option is only beneficial for wind blowing in one direction. The raker does not have sufficient weight to resist the overturning in the other direction.

To maintain stability of the scaffold structure the scaffold tower must be tied into adjacent structure in at least two locations. A positive tie should be established in addition to the racker brace. All anchors to be set as per manufacturers specification central into min. 200mm thick slab @ 25mpa min.

5. Assembly Details

Raker Bracing

Raker Bracing overview guide demonstrates how to provide stability to scaffold system.



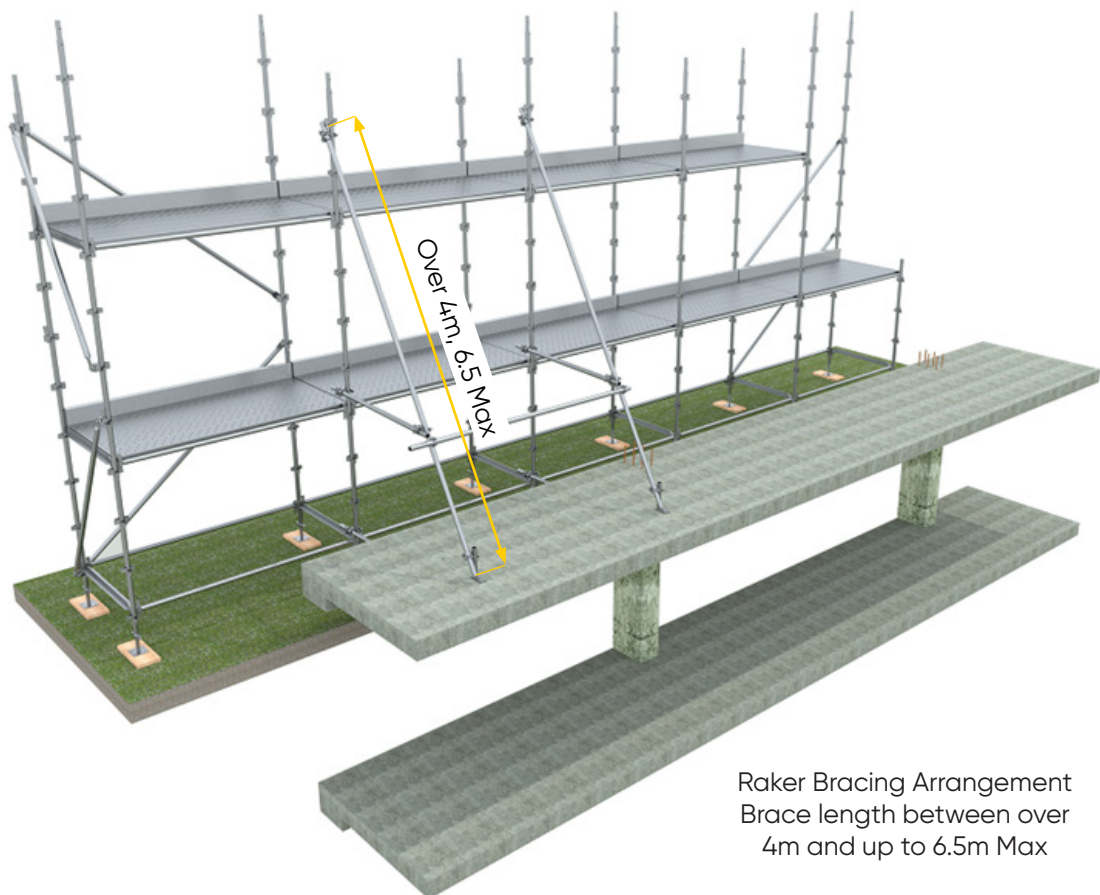
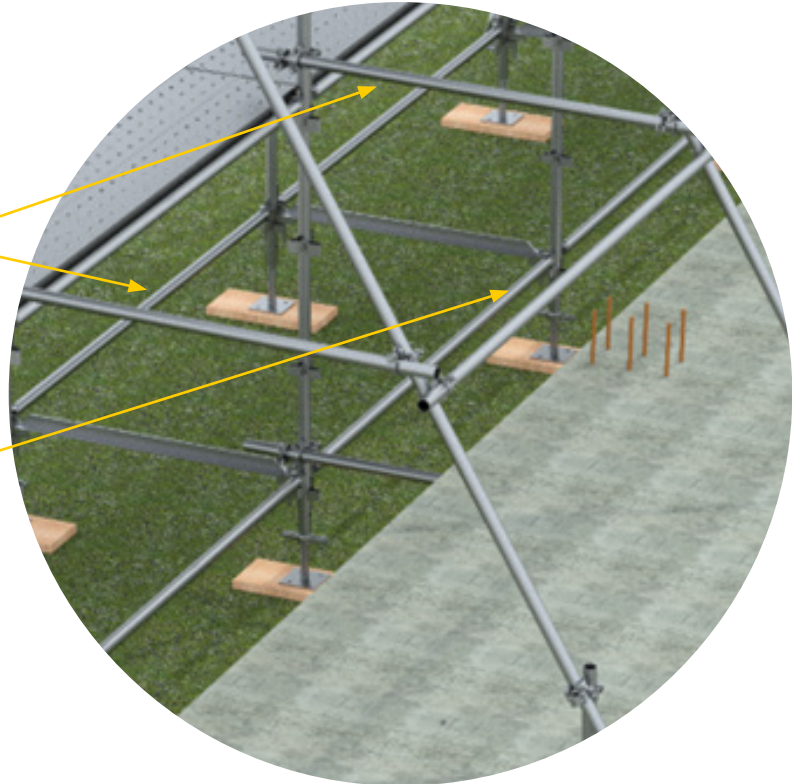
5. Assembly Details

Rack Bracing Continued

Raker tie over 4m in length must be knee braced back into the scaffold and the rakers linked together and braced.

Knee braced back into the scaffold tower using Scaffold tube and two swivel couplers

Rakers braces are linked together using Scaffold tube and two double couplers



Raker Bracing Arrangement
Brace length between over 4m and up to 6.5m Max

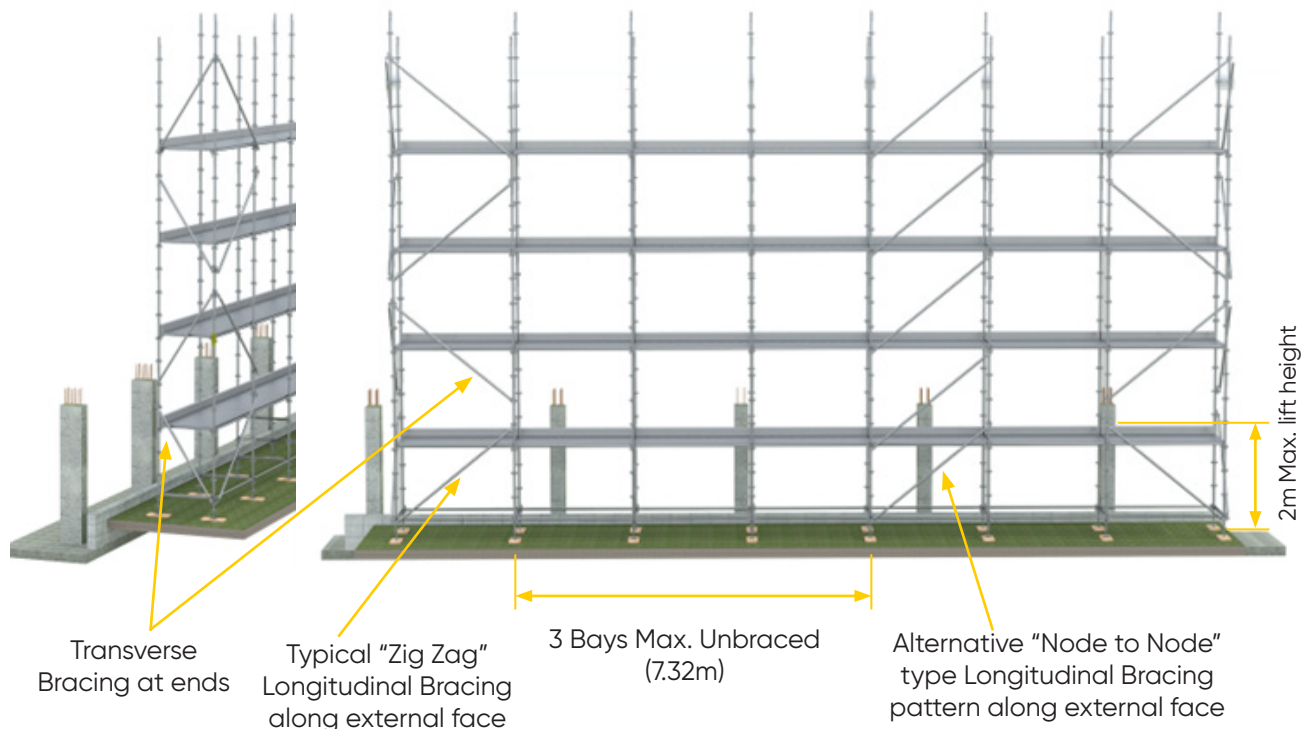
5. Assembly Details

Scaffold Face Bracing

Diagonal Braces provide stability to the scaffold and are used to brace adjacent Standards longitudinally or transversely. Before the scaffold goes beyond the second lift, Bracing should be added to the outside face and on the ends. Braces attach to the outward facing Vee cluster on the Standard.

Face Diagonal Braces are positioned in the end bays of a scaffold run on the external face of the scaffold. They extend from the first cup near ground level to the top working level. They are typically arranged in an alternating (zig-zag) manner to provide more stability to the scaffold. For scaffold runs exceeding 5 bays in length, intermediate bracing is required where a maximum of 3 bays can be left unbraced. Variations to this spacing must be checked by the appropriate designer and specified in the design layout.

End Diagonal Braces are used between end pair of Standards in the transverse direction. They extend from the first Vee cluster near ground level to the top working level in an alternating manner.



Further bracing must be placed on the scaffold as it progresses in length and height. Braces should span from lift level to lift level and cross over joints in Standards and be positioned all the way to the top of the scaffold

Diagonal braces connection at Standard lower node (V-Connection)

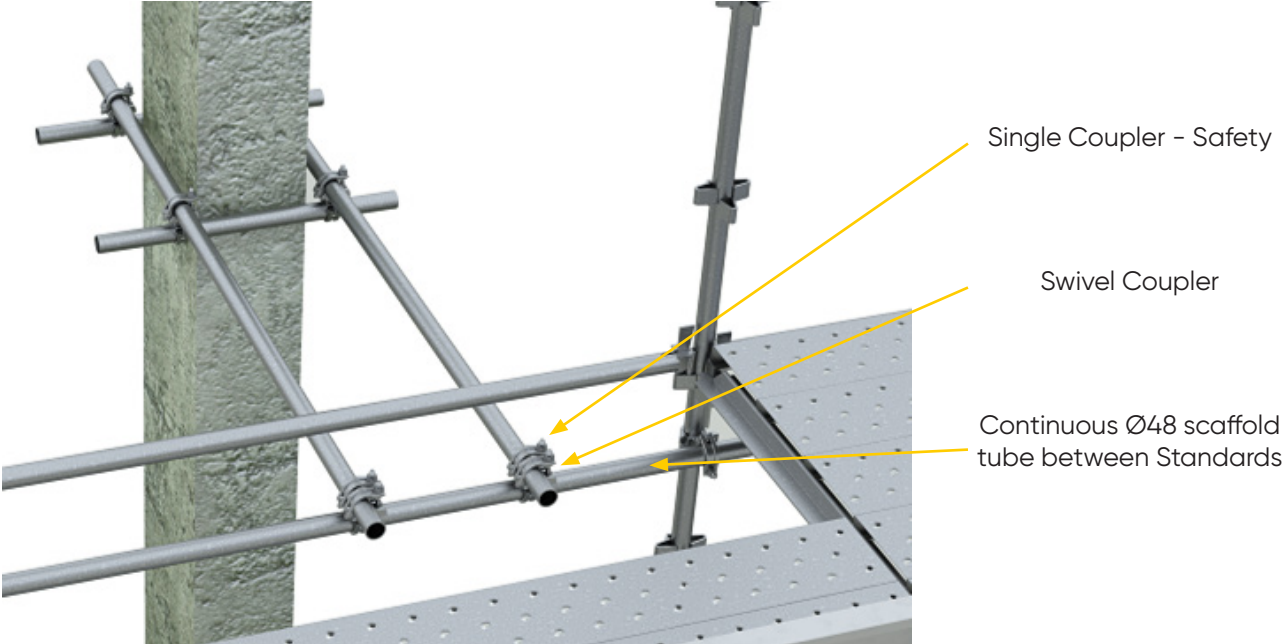
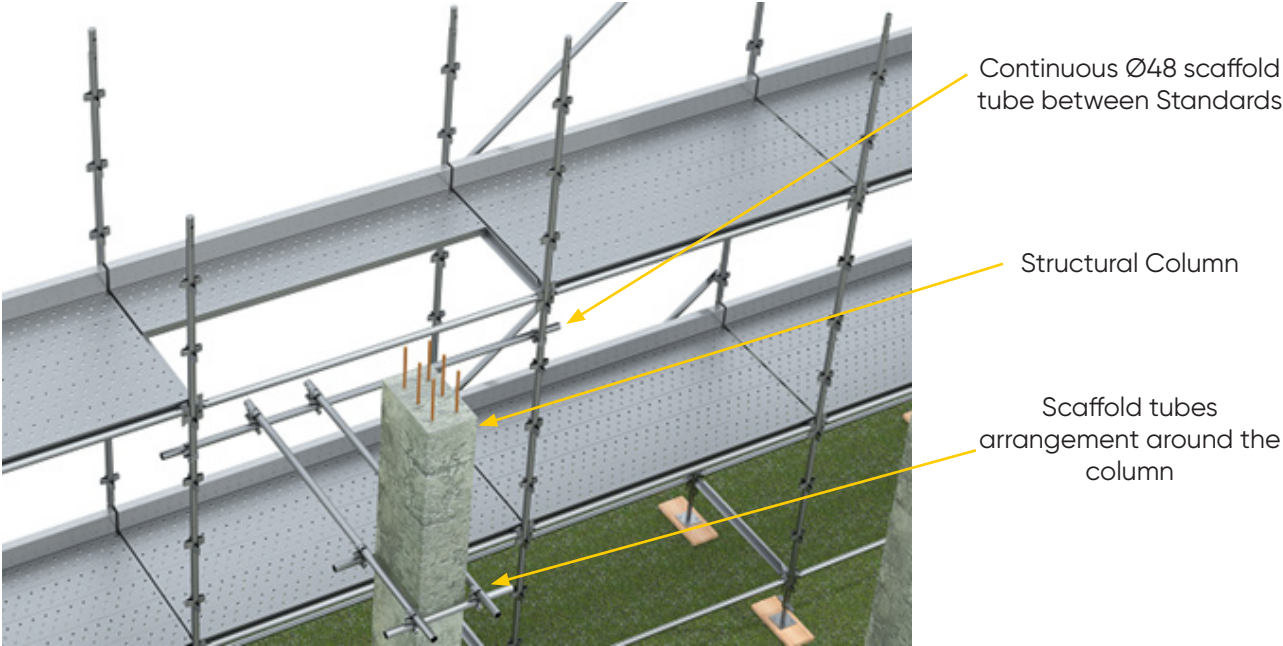


5. Assembly Details

Tying to a Structure

Below are common methods of tying the scaffold tower to a structure

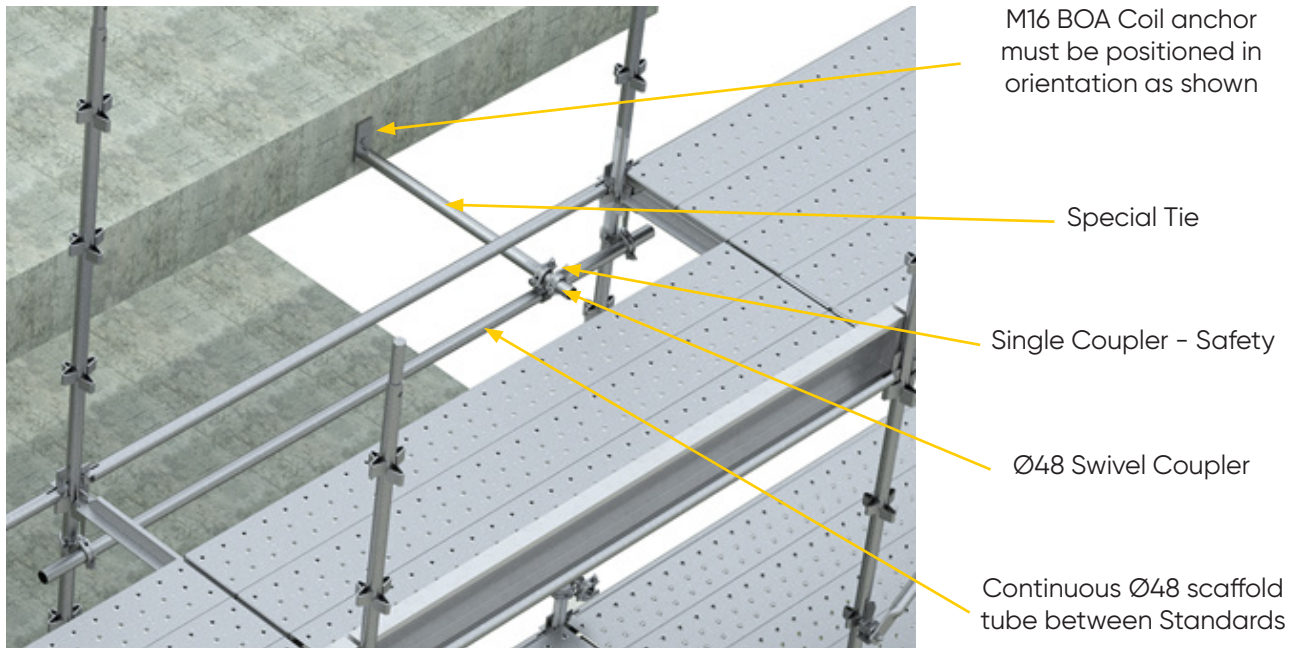
Tying to concrete column:



5. Assembly Details

Tying to a Structure Continued

Tying to concrete slab:

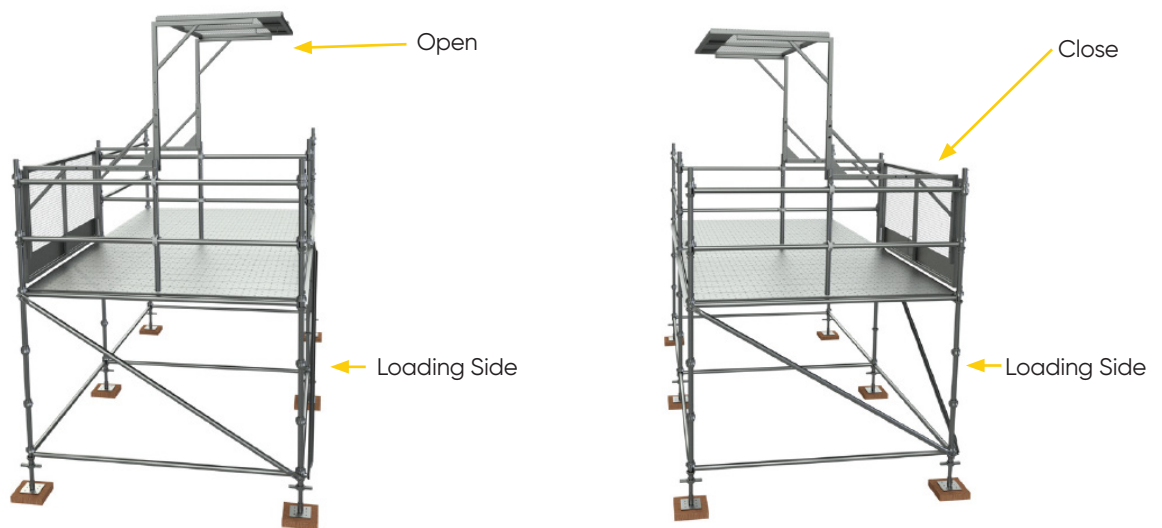


5. Assembly Details

Safe Loading Bay Gates

The Acrow Safe Loading Bay Gate system is designed for the safe loading and unloading of building material to scaffold loading platform or slabs. The easy to use system has a pivot point that rotates in the middle to allow the worker to remain behind a physical barrier at all times.

Available for 2.4m wide scaffold bays and either 1.8m or 2.4m deep. Custom made solutions also available on request.



5. Assembly Details

Construction Stair Guide

The Construction Stair System, also known as Stair Access System, is a part of the Acrow's Cuplok and Quickstage modular scaffolding systems. The following scaffold Assembly Recommendations of the Stair Access System will give you the foundation principles to assemble a basic scaffold structure. Through experience with the system, different and more complex configurations can be assembled.

For assistance with these recommendations contact your local Acrow outlet. Persons erecting or dismantling the components should be competent in this type of work.

For safety reasons, we recommend that no less than two erectors work as a team to erect Cuplok.
Note:

1. Where assistance is required in erecting more complex designs other than standard façade type independent scaffolding and configurations not shown in these recommendations, contact your local Acrow representative.
2. In certain areas scaffolding may be exposed to high winds and as such special precautions regarding tying in and cladding removal can apply. For assistance with design of scaffolding that may be exposed to high winds contact your local Acrow Engineering office.
3. In some cases, particular configurations of scaffolds and particular sites may require scaffolders to use safety harnesses and lanyard systems to provide protection against a fall when erecting the scaffold over a void or lean out from the scaffold or supporting structure without the protection of a guardrail. In such cases do not attached harness systems to scaffolding supplied by Acrow unless attachment points for such systems are approved by Acrow Engineers.

Compliance to Statutory Regulations

Scaffolding must be erected in compliance with the requirements of Statutory Regulations and Australian Standards for Scaffolding (AS/NZS1576 and AS/NZS 4576 "Guidelines for Scaffolding") as applicable. In addition, below are some specific areas for your attention:

Erection of scaffolding over 4 metres in height

Personnel who erect, alter or dismantle scaffolding over 4m in height must hold a current National, State or Territory Certificate in Scaffolding to the appropriate class.

The Scaffolding Code of Practice 2009.

Risk Management

When planning the erection of any scaffolding, a site-specific Risk Assessment process must be carried out.

Generic Hazard Identification/Risk Assessments/Control methods profiles and Safe Work Methods Statements for the erection, dismantling and the usage of scaffolding equipment are available from AF&S Branches. Site specific Hazard Identification and Risk assessments and Safe Work Methods Statements would need to be generated for specific projects.

5. Assembly Details

Construction Stair Guide

Manual Handling

As part of the risk management processes, we draw your attention the requirement that scaffolders must, as part of their competency, be competent in manual lifting techniques. Therefore, Scaffolders erecting, altering or dismantling scaffolding must follow the manual handling guidelines published by Regulatory Authorities or other guidelines and codes of practice recognised as being acceptable by such Regulatory Authorities.

1.5m Riser Construction Stair

An Aluminum Stairway unit fits within the Cuplok Standard 1.27x2.44 m bay. Each stairway unit is 0.6m wide and rises a 1.5m over the bay length of 2.44m and incorporates a landing at top and base of the unit.

A 1.27m x 2.44m bay needs to be dedicated as the stair access bay. This bay can either be incorporated within the main run of scaffold or adjacent to the run. The stair access bay typically shares common Standards with the main run, however this detail needs to be checked during the scaffold design phase as height conditions and wind loading can vary from site to site.

Commence the first lift by assembling 2.44m Ledgers and 1.27m Transoms at 1.5m vertical intervals, except at entrance and exit points to the stairway where head clearance of 2m (nom) is required.

Lift the first stair unit into place such that it is supported between the Transoms spaced at 1.5m vertical intervals and position the stair adjacent to the Standard. Note that stairway landings need to be adjacent access/egress landing points at working platforms.

Install Ledgers at 0.5m and 1.0m above the landing level in both transverse and longitudinal directions to act as midrails and guardrails respectively. Ledgers can be installed at 0.5m intervals on the exposed faces of the bay for the full height of the bay

Assemble the next lift of Standards Ledgers and Transoms and install the second stair unit such that its bottom landing commences from the Transom that supports the top landing of the lower stair unit. A zigzag pattern of stair ways should now be established.

Where it is necessary to construct a stair access as a bay independent of the scaffold, then, ensure that the stair access bay is adequately braced and tied to the main scaffold or other support structure. Tying and bracing need to commence at completion of the first lift.

Subject to space required to handle the stairs within the bay during installation, the internal handrails are to be installed at the earliest opportunity. The handrails bolt to the stair unit with four M12 x 50 long bolts and nuts. The handrail should be bolted through the holes provided to the inside face of the stringer part of the stairway. Holes are located towards the top and bottom of the stair unit.

This zigzag pattern of stairway units is maintained until the desired height is achieved.

Continue to build the scaffold tower framework so that the last level of Ledgers and Transoms is 2 metres past the top landing of the uppermost Stairway unit. Once the uppermost stair unit is installed, a Trimming Standard will need to be installed between the Ledger at 2m above the top stair landing and the Ledger adjacent to the uppermost stairway landing and positioned to give a 0.6m away from the corner standard next to the intended opening. 1.8m Ledgers are then attached between to the trimming standard and the corner Standard to give a 0.6m opening to the work platform. Planks can be installed to occupy the gap between the edge of the stair unit at the top landing and the edge of the bay.

5. Assembly Details

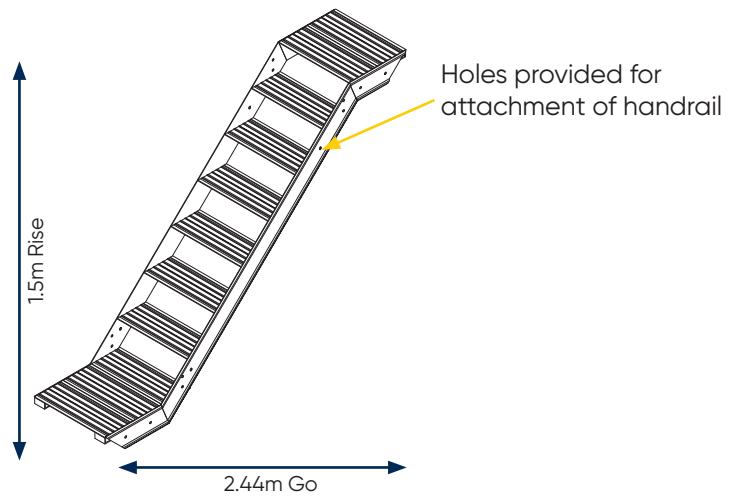
Construction Stair Guide

Note

- Edge protection (guardrails, midrails and toeboards) is required at access and egress points of working platforms.
- Care is to be taken to ensure that head clearance of 2m (nom) is maintained at these points.
- Gaps between the stair access landing and working platform levels can occur and must be kept to a minimum therefore, suitable landing infill (eg. lap planks) needs to be installed

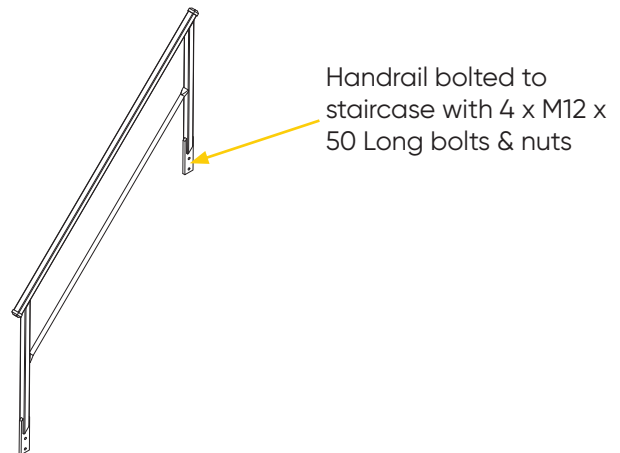
Aluminium Staircase 2.44 m Go x 1.5m Rise

The Aluminium Staircase enables a stair way to be assembled within a 2.44m x 1.27m bay. Each end of the Stairway unit is supported by Transoms at a rise of 1.5m and allows safe and easy movement.



Internal Handrail

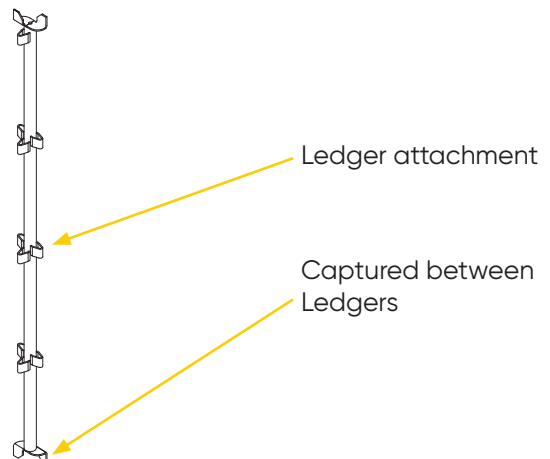
This handrail follows the slope of the staircase and is bolts to the inside face of aluminium staircase side members



Trimming Standards

Used with Aluminium Staircases to provide an access/egress point. Top and bottom of this standard is captured between Ledgers.

Standard connection points are provided to enable attachment of Ledgers to act as a guardrail and midrail



5. Assembly Details

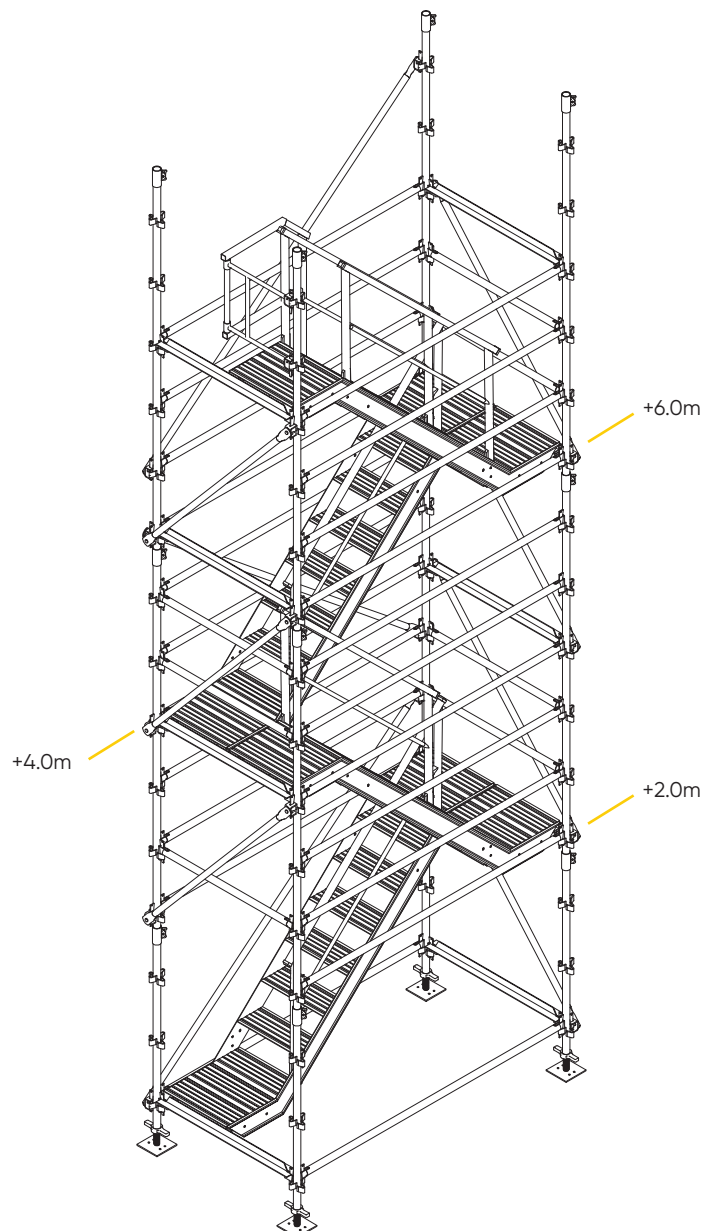
Construction Stair Guide

2.0m Riser Construction Stairs

A 2m flight modular Aluminium Stairway unit fits within the Kwikstage and Cuplok Standards 1.27x2.44 m bay. Each stairway unit is 0.6m wide and rises 2.0m over the bay length of 2.44m and incorporates a landing at top and base of the unit.

To accommodate various levels of the first landing, 1 and 1.5m flight stairs are used. These two stair units incorporate a landing at top and base of the unit and rises to their designed height over the bay length of 2.44m.

To assemble the 1.0m Riser Construction stairs, follow the same sequence as for the 1.5m Riser Construction stairs.

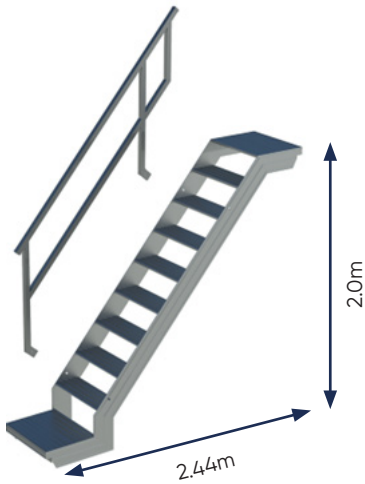


5. Assembly Details

Construction Stair Guide

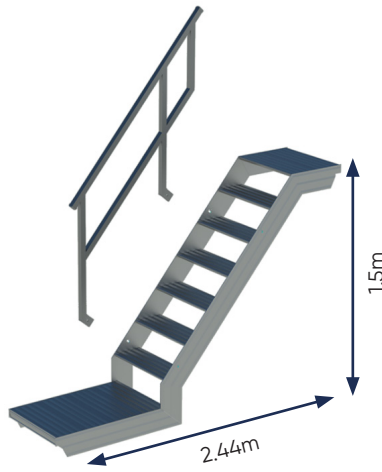
2.0m Construction Stairway Parts

The main parts of the 2.0m Aluminium Stairway are three types of staircases and a custom fitted handrail for each staircase.



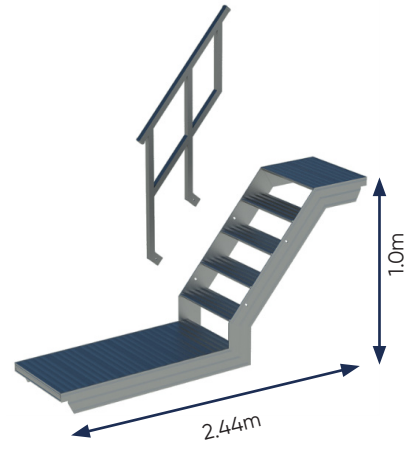
2.0m Aluminium Staircase & Handrail

2.44m Go x 2.0m Rise



2.0m Aluminium Staircase & Handrail

2.44m Go x 1.5m Rise



2.0m Aluminium Staircase & Handrail

2.44m Go x 1.0m Rise

Trimming (Intermediate) Standards

Used with Aluminium Staircases to provide an access/egress point. Top and bottom of this standard is captured between Ledgers.

Form a guardrail by fixing scaffold tubes to the trimming Standard using double coupler.



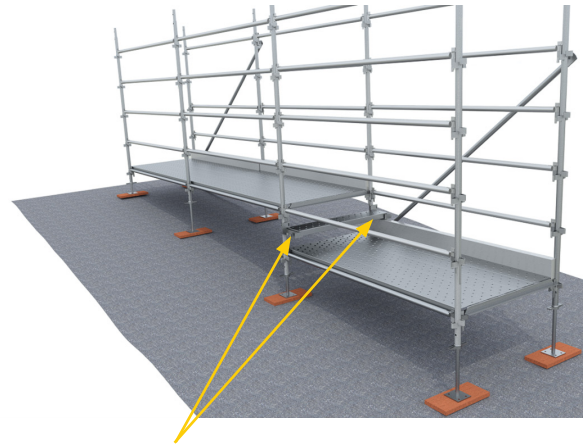
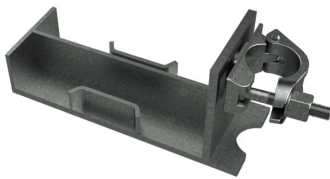
5. Assembly Details

Construction Stair Guide

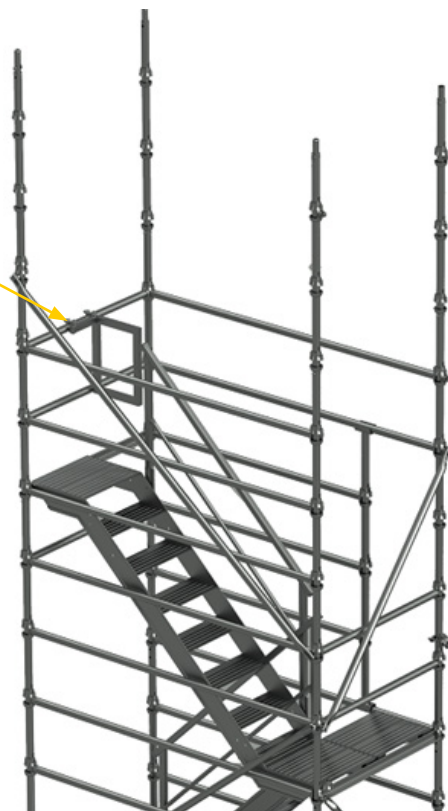
Single Plank Platform Bracket with Coupler

An independent step bracket designed to be fastened to the scaffold Standards, between the nodes (cups or star joint assembly).

The bracket provides safe one step access to the stairway or the scaffold bay. It is a widely used in scaffold in sloped areas where all the cups and start joints are occupied



Single Plank Platform Bracket with Coupler fixed to Quickstage Standards



Exit Handrail

Provides safety barrier during the installation and dismantle of Construction stairs. Preventing access to next level where stairs flights has not been installed yet.

The Exit handrail are fixed to ledger two using to built-in single Ø48 couplers

5. Assembly Details

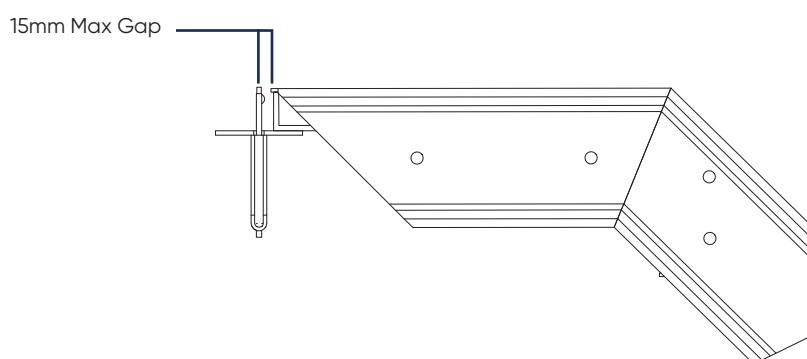
Construction Stair Guide

Stair Modular Support

Acrow's modular stair units are to be adequately supported by scaffolding transoms at both ends of the module.

With the module being pushed hard up against one of the transoms (i.e., so that there is no gap at one end), the maximum gap between the stair module and the vertical edge of the transom should not be greater than 15 millimeters.

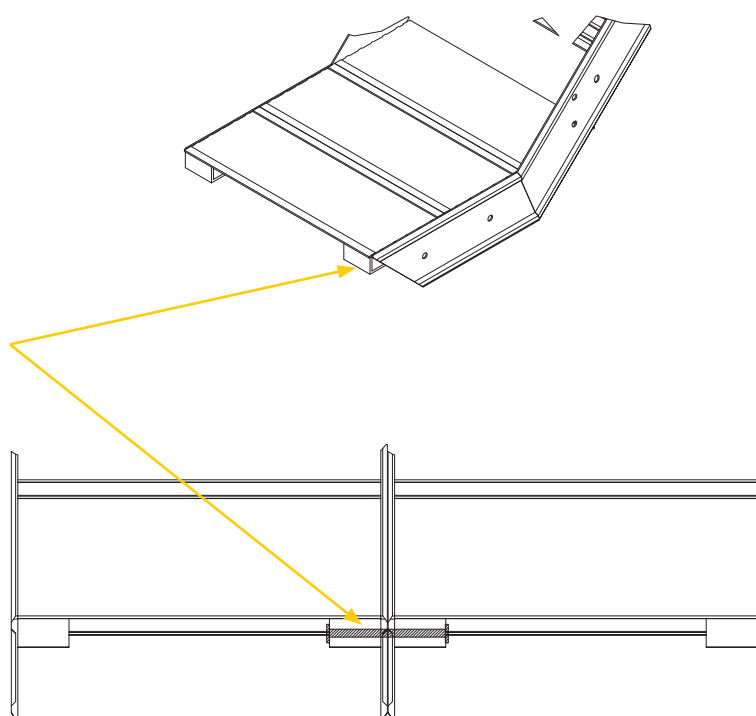
Ensure the gap does not exceed 15 millimeters, anywhere along the length of the supporting transom.



Stairs Locking Solutions

Option 1: Bolting Landing via the landings support bracket (1.5m Stairs)

The two 1.5m stair module units can be joined by using a M10mm x 200 Long bolt with 32 x 32 x 2mm galvanized washer running through the landing's support bracket.

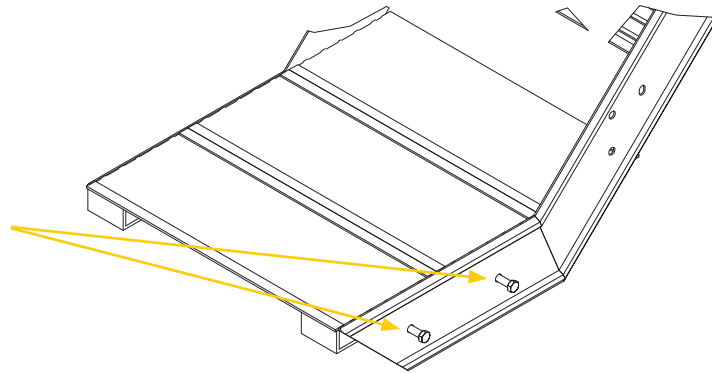


5. Assembly Details

Construction Stair Guide

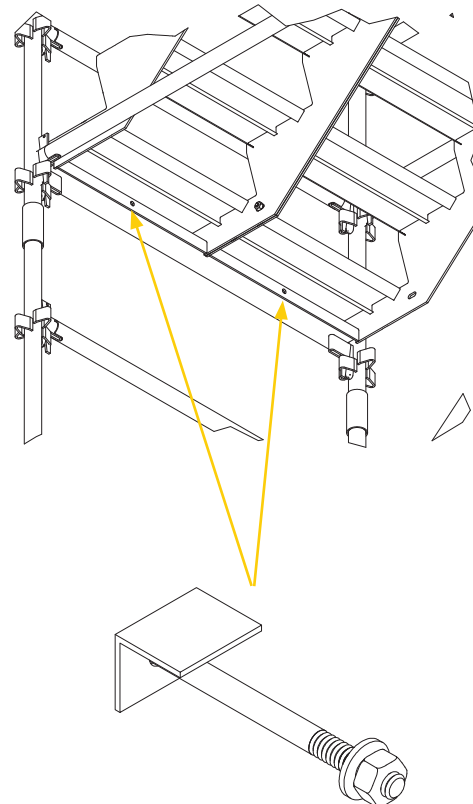
Option 2: Bolting the Landings via the landing's web (1.5m Stairs)

The two 1.5m stair module units are joined using a M12mm x 50 Long bolt through the pre-drilled 14mm hole in the landing web.



Option 3: Bolting the Landing using Bolting Bracket (2.0m Stairs)

The 2.0m stair module unit is fixed into transom at both landings using Bolting Bracket. Both landings are fitted with a steel Landing Angles for the purpose of locking the 2.0m stairs.

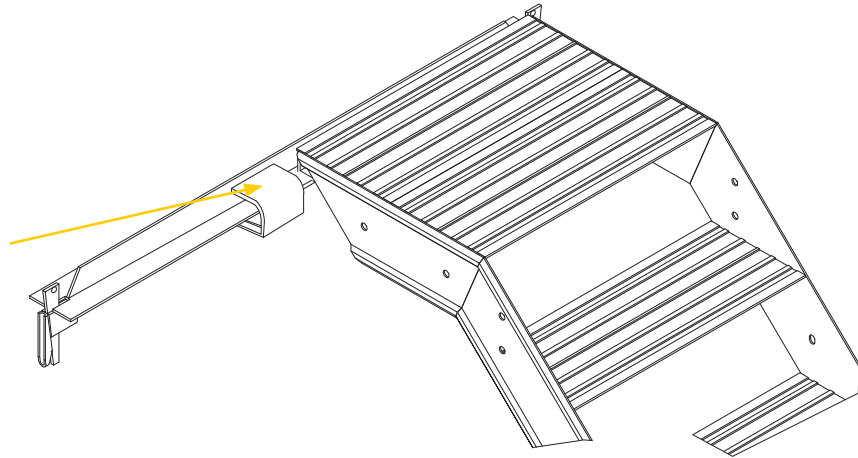


5. Assembly Details

Construction Stair Guide

Locking Top Stair Module

Fix a Gravlock Girder clamp on the Transom adjacent to the top stair's landing web to prevent the stair from shifting sideways.

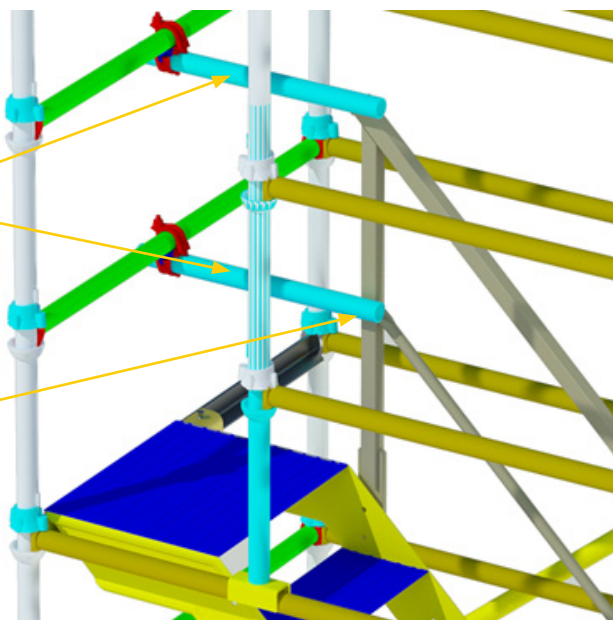


Land Handrail (Stop End Tubes)

Use 2 x 600mm long Scaffold tubes, secured to 1.3m ledger using Acrow's Double Coupler (90° coupler). These tubes should be installed inside of the stair's handrail.

Stop end tubes.
Use 2 x 600mm long
Scaffold tubes

Stop end tubes
installed on inside of
handrail

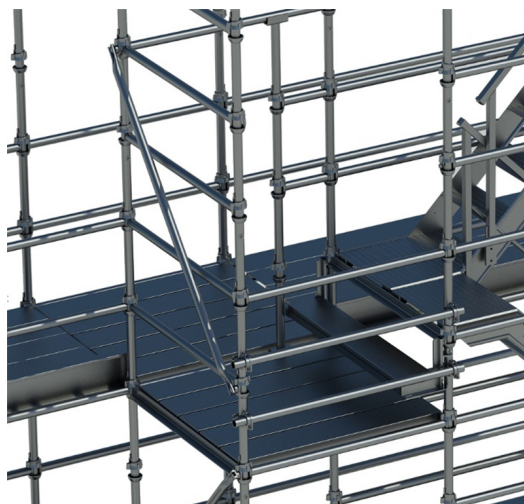
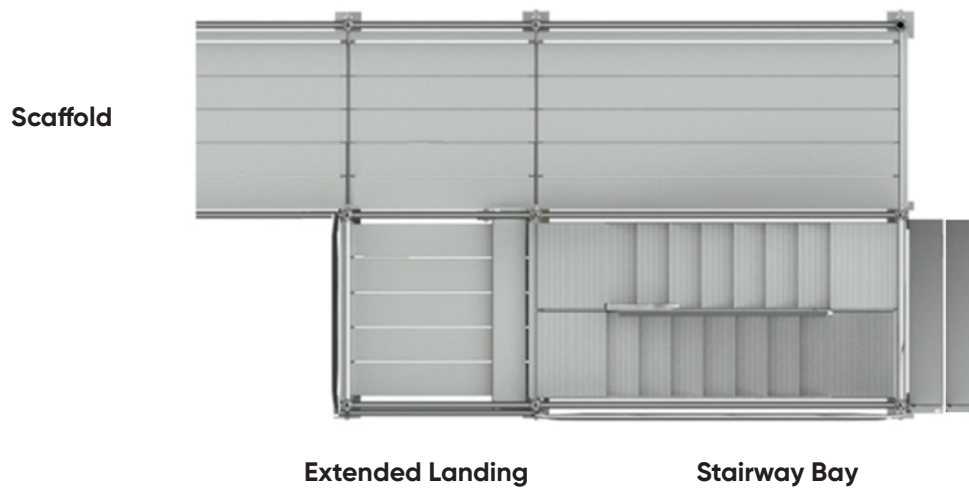


5. Assembly Details

Construction Stair Guide

Managing various scaffolding levels - Method 1: Extending the Stairs's Landing

There are two configuration methods to connect the Construction stairway to any 0.5m increments in the scaffolding levels.



Stepping Down Via
Extended Landing

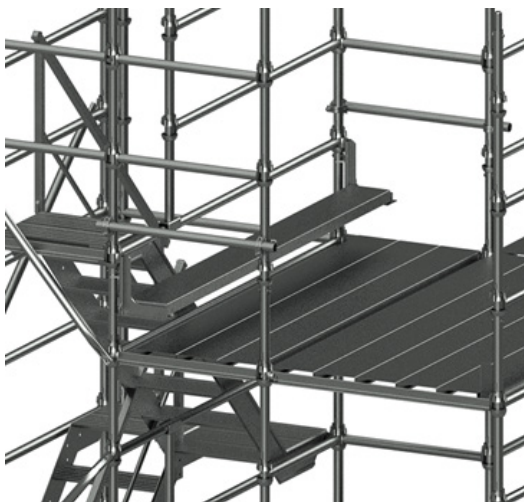
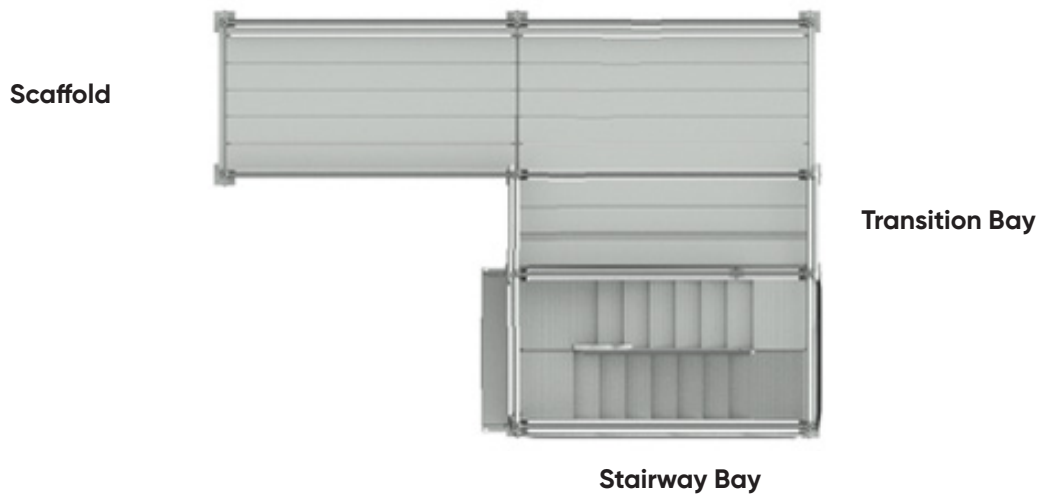


Stepping Up Via
Extended Landing

5. Assembly Details

Construction Stair Guide

Managing various scaffolding levels - Method 2: Transition Bay between Stairway and Scaffold



Stepping Down Via
Transition Bay



Stepping Up Via
Transition Bay

5. Assembly Details

Stretcher Stair Guide

The Stretcher Stair System is a part of the Acrow's Cuplok and Uni-spans Wedgelok modular scaffolding system. The following scaffold Assembly Recommendations of the Stretcher Stair System will give you the foundation principles to assemble a basic scaffold structure. Through experience with the system, different and more complex configurations can be assembled.

For assistance with these recommendations contact your local Acrow outlet. Persons erecting or dismantling the components should be competent in this type of work.

For safety reasons, we recommend that no less than two erectors work as a team to erect Scaffold
Note:

- Where assistance is required in erecting more complex designs other than standard facade type independent scaffolding and configurations not shown in these recommendations, contact your local Acrow
- In certain areas scaffolding may be exposed to high winds and as such special precautions regarding tying in and cladding removal can apply. For assistance with design of scaffolding that may be exposed to high winds contact your local Acrow Engineering office.
- In some cases, particular configurations of scaffolds and particular sites may require scaffolders to use safety harnesses and lanyard systems to provide protection against a fall when erecting the scaffold over a void or lean out from the scaffold or supporting structure without the protection of a guardrail. In such cases do not attach harness systems to scaffolding supplied by Acrow unless attachment points for such systems are approved by Acrow Engineers.

Compliance to Statutory Regulations

Scaffolding must be erected in compliance with the requirements of Statutory Regulations and Australian Standards for Scaffolding (AS/NZS1576 and AS/NZS 4576 "Guidelines for Scaffolding") as applicable.

In addition, below are some specific areas for your attention:

Erection of scaffolding over 4 metres in height

Personnel who erect, alter or dismantle scaffolding over 4m in height must hold a current National, State or Territory Certificate in Scaffolding to the appropriate class.

The Scaffolding Code of Practice 2009.

Risk Management

When planning the erection of any scaffolding, a site-specific Risk Assessment process must be carried out.

Generic Hazard Identification/Risk Assessments/Control methods profiles and Safe Work Methods Statements for the erection, dismantling and the usage of scaffolding equipment are available from AF&S Branches. Site specific Hazard Identification and Risk assessments and Safe Work Methods Statements would need to be generated for specific projects.

5. Assembly Details

Stretcher Stair Guide

Manual Handling

As part of the risk management processes, we draw your attention the requirement that scaffolders must, as part of their competency, be competent in manual lifting techniques. Therefore, Scaffolders erecting, altering or dismantling scaffolding must follow the manual handling guidelines published by Regulatory Authorities or other guidelines and codes of practice recognised as being acceptable by such Regulatory Authorities.

Stretcher Stair Configurations

Typically, a 12 Standard configuration is used to assemble the Stretcher Stair stairway giving overall plan dimensions of 4.98m x 2.54m. This bay can either be incorporated within the main run of scaffold or adjacent to the run. Where the stair access bay shares common Standards with the main run, the loading on the shared Standards needs to be checked during the scaffold design phase as height conditions and wind loading can vary from site to site and may limit the height of the stair access bay. Contact your Acrow Formwork & Scaffolding Representative for assistance with establishing maximum stair heights.

The Stretcher module is consisted of two 0.6 wide stairs bolted together after installation to form a 1.20m Stretcher stair.

Stretcher Stair module is designed to fit within the Standard 1.27m x 2.44m bay and are often used as a stretcher stair access bay. Each Stretcher Stair assembly is 2.54m wide and rises 2.0m over the bay length of 2.44m. The 12 Standard configuration is based out in the position required and the first 2m lift is erected so that Stretcher Stair can be installed. Ensure that Transoms and Ledgers are in the correct positions as shown on the Plan and Elevation views, as this will avoid clashes between components. Each end of the Stretcher Stair landing is supported by 1.3m Transom positioned at the top and bottom of each 2m lift.

Once the two units of Stretcher Stair module is placed over the Transom, they are bolted together using 3 x M12mm x 30 Long bolts through the pre-drilled 14mm hole in the stair unit web. Refer section 4 for details. Once the Stretcher Stair are installed, Landings for the stair access are assembled within the 1.27m square bays at each end of the Stretcher Stair bays using 1.27m Planks supported between Transoms. Once landings are in place the next lift can be installed making sure that guardrail and midrails are installed at 1.0 and 0.5m above landing levels as each lift is assembled. Standard 3.2m Face Braces (2.44 x 2.0m) are installed as handrails at approx 0.5m and 1.0m above the Stretcher Stair module.

Continue building the stair access bay making sure that each end of the bay is tied into a suitable structure at no more than 4.0m vertical intervals or as per the structural design specifications.

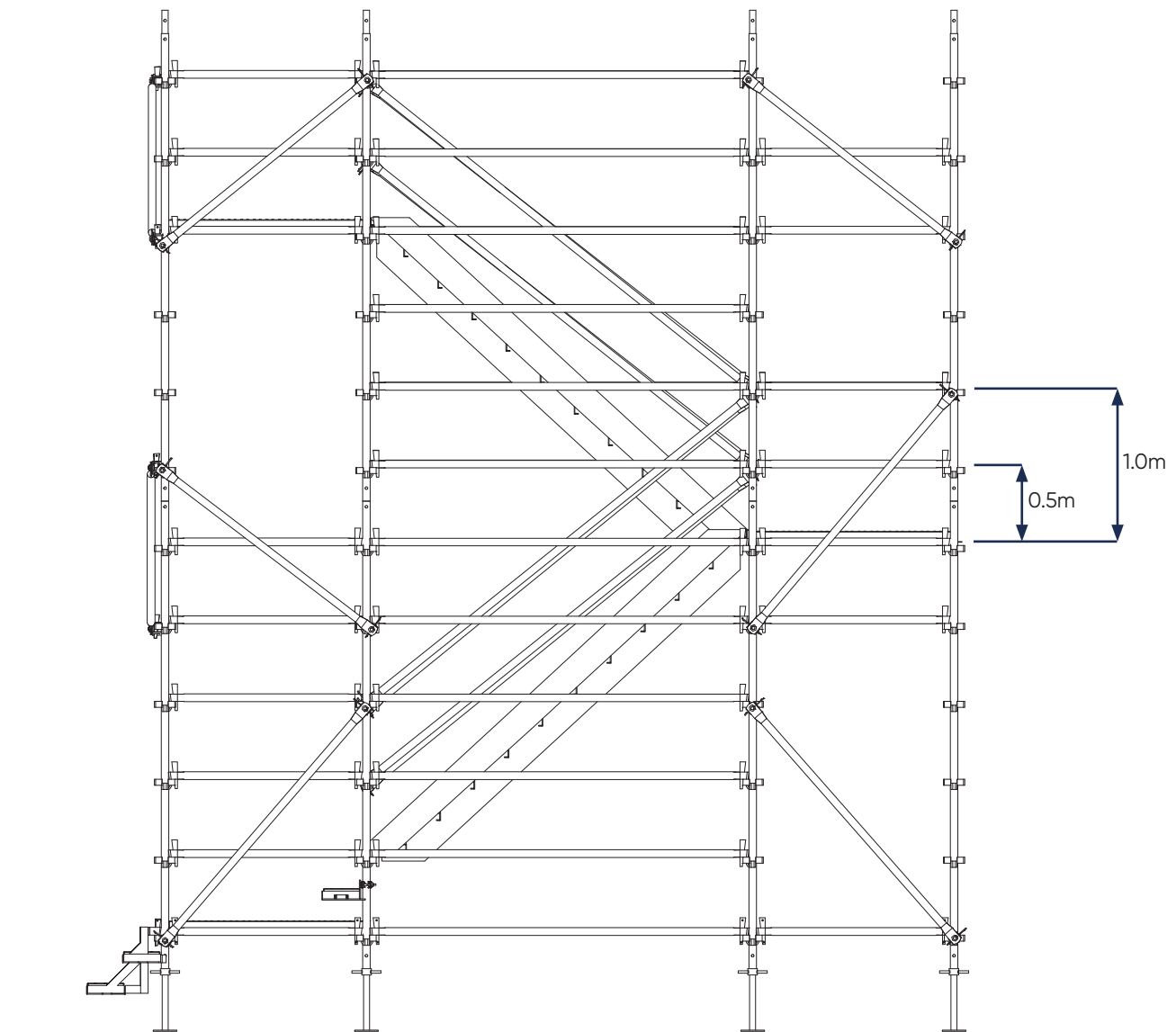
- Note: Edge protection (guardrails, midrails and toeboards) is required at access and egress points of working platforms.
- Care is to be taken to ensure that head clearance of 2m (nom) is maintained at these points.
- Gaps between the stair access landing and working platform levels may occur and these should be kept to a minimum. Suitable infill should be installed.
- Refer to Acrow engineering for stairway assembly lifting design.

5. Assembly Details

Stretcher Stair Guide

Internal and External Handrails

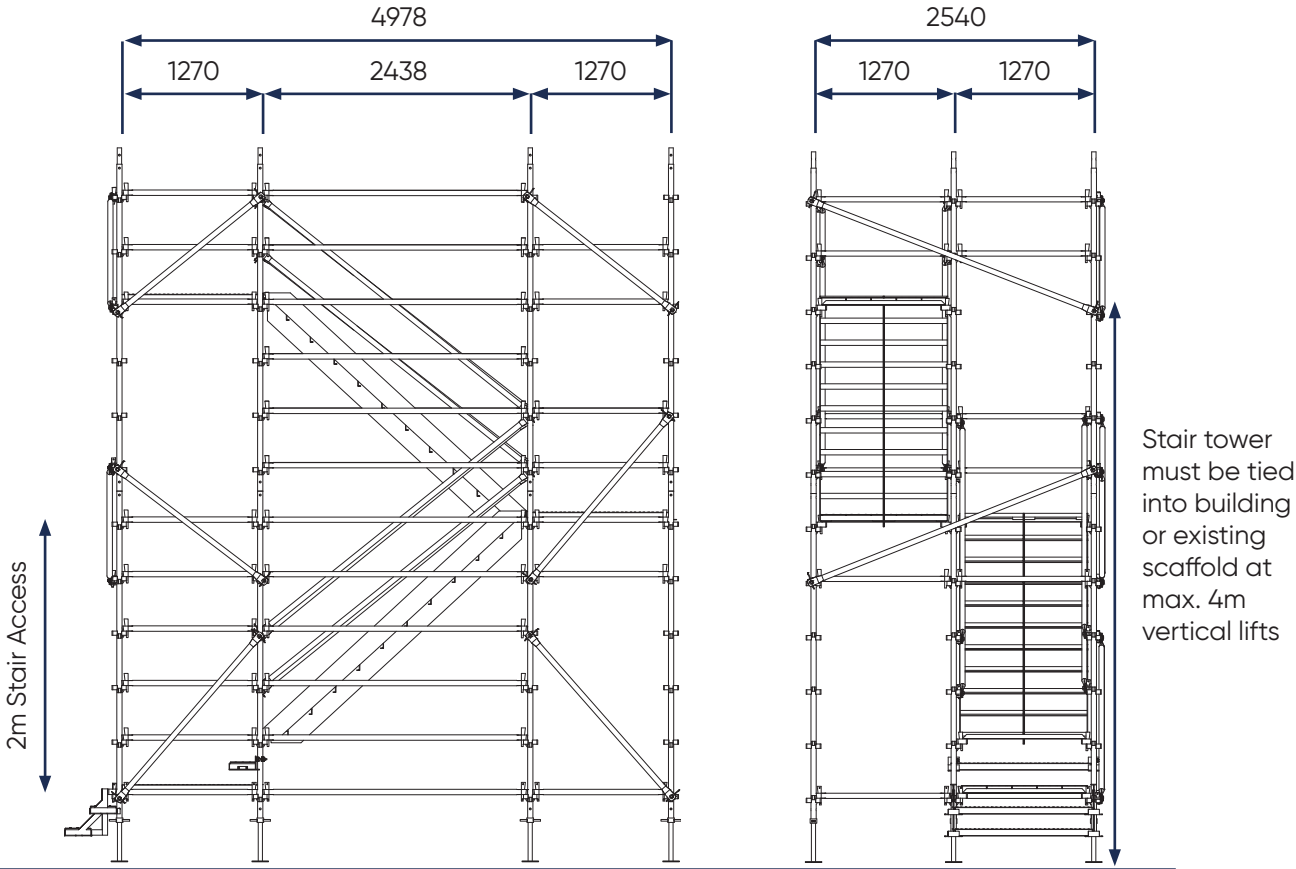
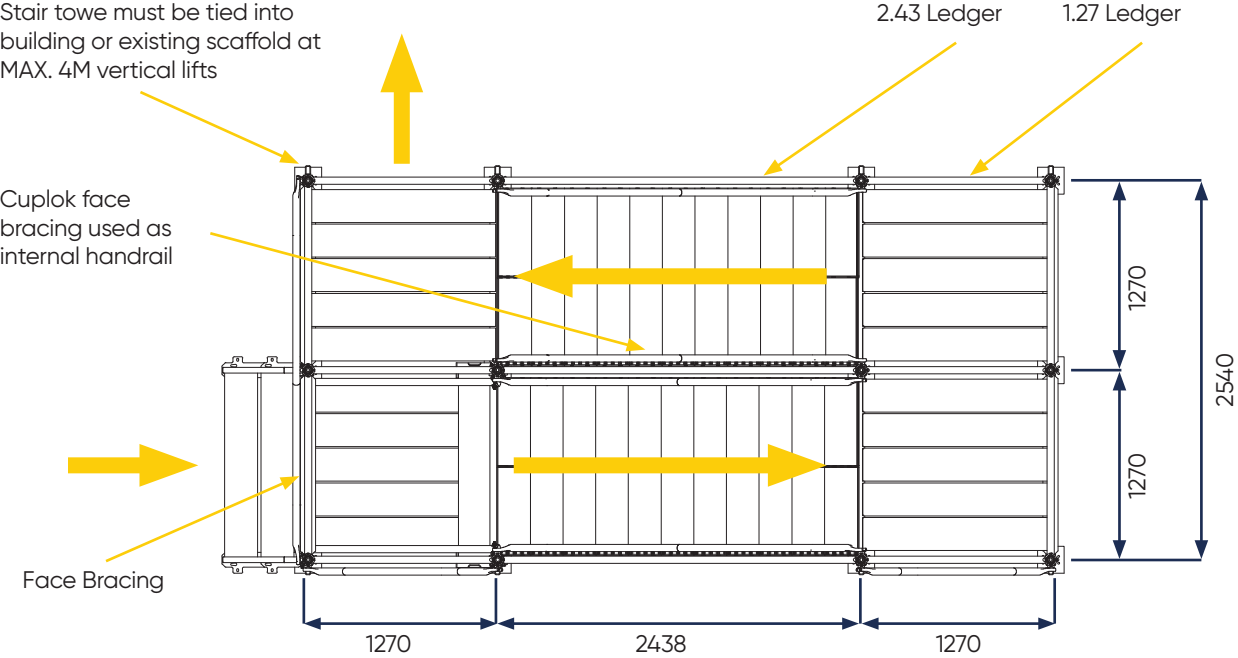
This handrail follows the slope of the staircase. Handrail is installed at 1.0 and 0.5m above landing levels as each lift is assembled. Standard 3.2m Face Braces (2.44 x 2.0m) are installed at both sides of the stairway, internally and externally.



5. Assembly Details

Stretcher Stair Guide

Stair tower must be tied into building or existing scaffold at MAX. 4M vertical lifts



5. Assembly Details

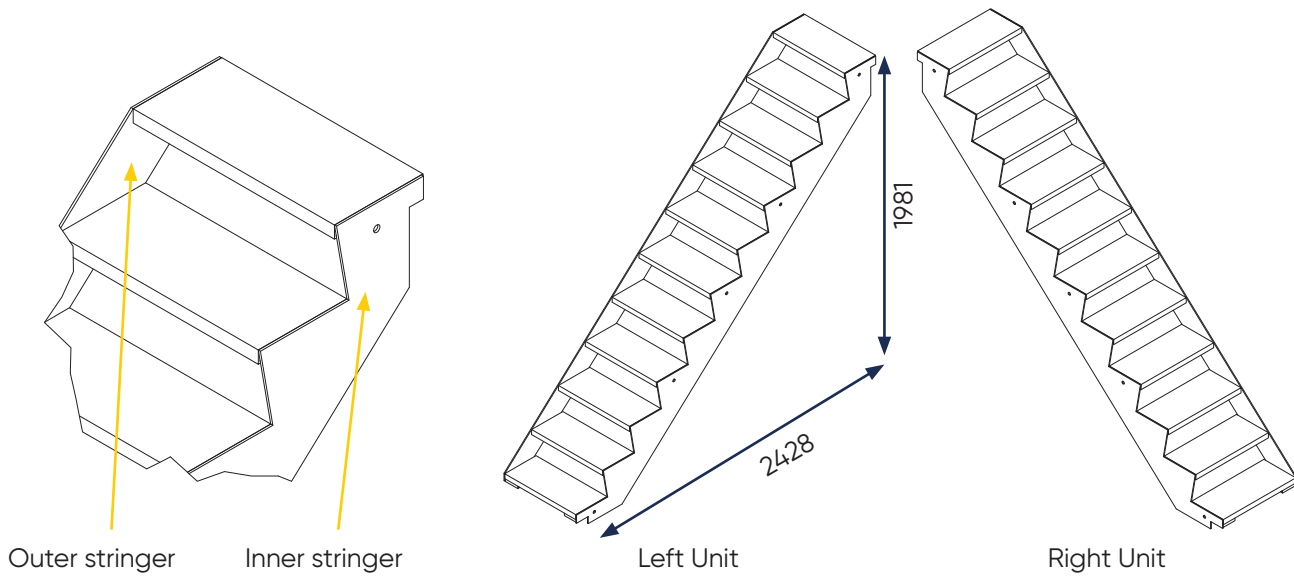
Stretcher Stair Guide

Stair Module

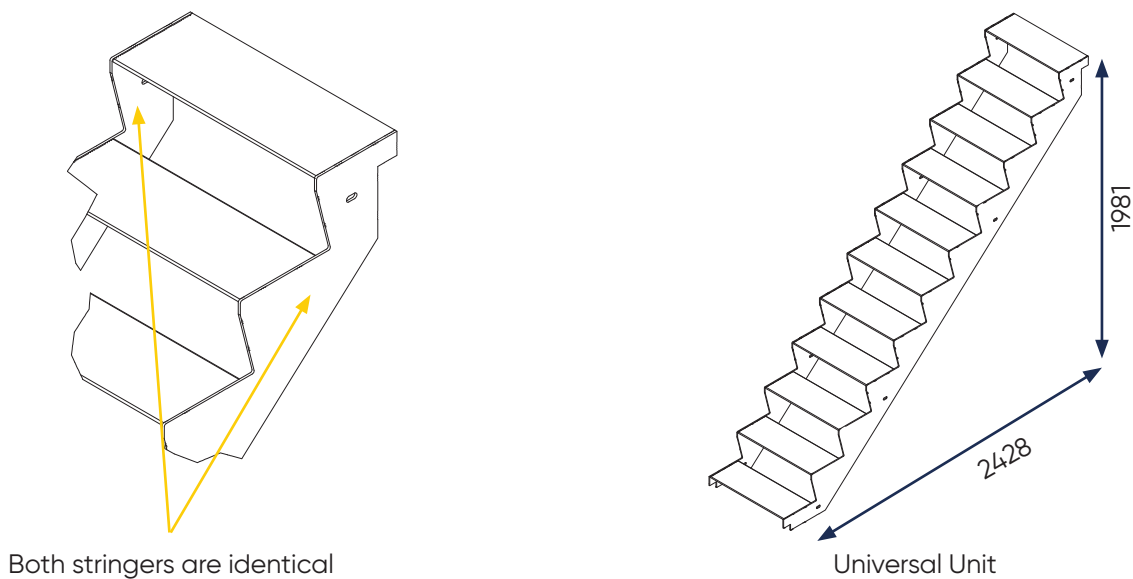
Acrow offers two types of stair module:

A pair of left and right flight, and a Universal flight unit. Both modules have similar geometry. The stringers of the universal stretcher stair unit are identical and follow the steps profile up the flight.

Paired Stretcher Stair



Universal Stretcher Stair



5. Assembly Details

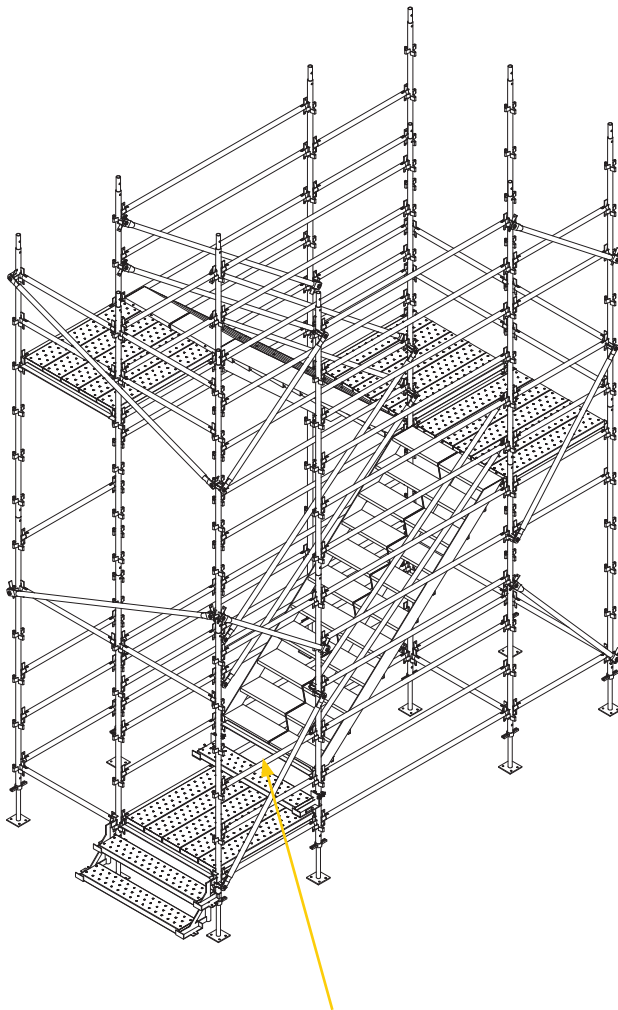
Stretcher Stair Guide

Access and Egress Assembly Details

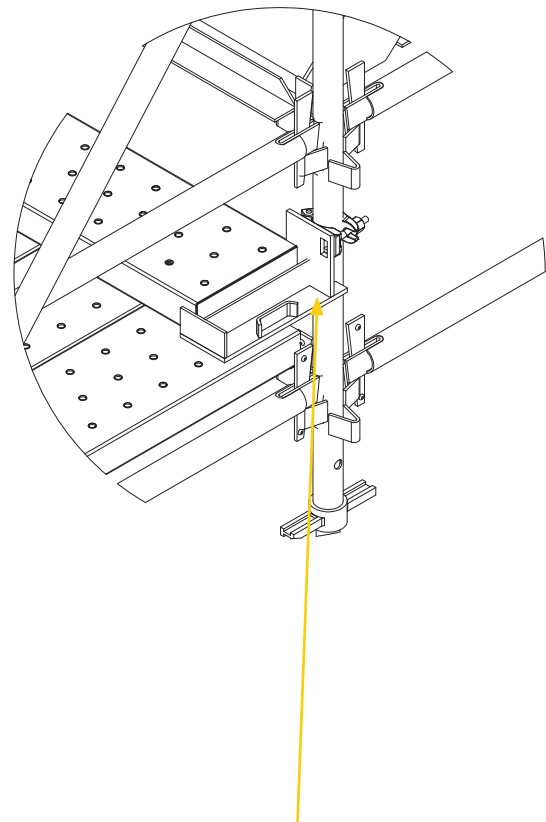
Arrange of step brackets can be used to provide safe access to the stretcher stairway including single and double brackets step fixed into the Standards nodes (cups or star joint assembly).

Connecting the stretcher stairway to any 0.5m increments in the scaffolding levels can be managing using an independent step bracket designed to be fastened to the scaffold Standards, between the nodes (cups or star joint assembly).

Hanrails for 0.5m increments in the scaffolding levels can be achieves by using Ø48 scaffold tube and swivel couplers.



Handrails for 0.5m increments in the scaffolding levels can be achieved by using Ø48 scaffold tube and swivel couplers



Single Plank Platform Bracket with Coupler

An independent step bracket designed to be fastened to the scaffold Standards, between the nodes (cups or star joint assembly). The bracket provides safe one step access to the stairway or the scaffold bay

5. Assembly Details

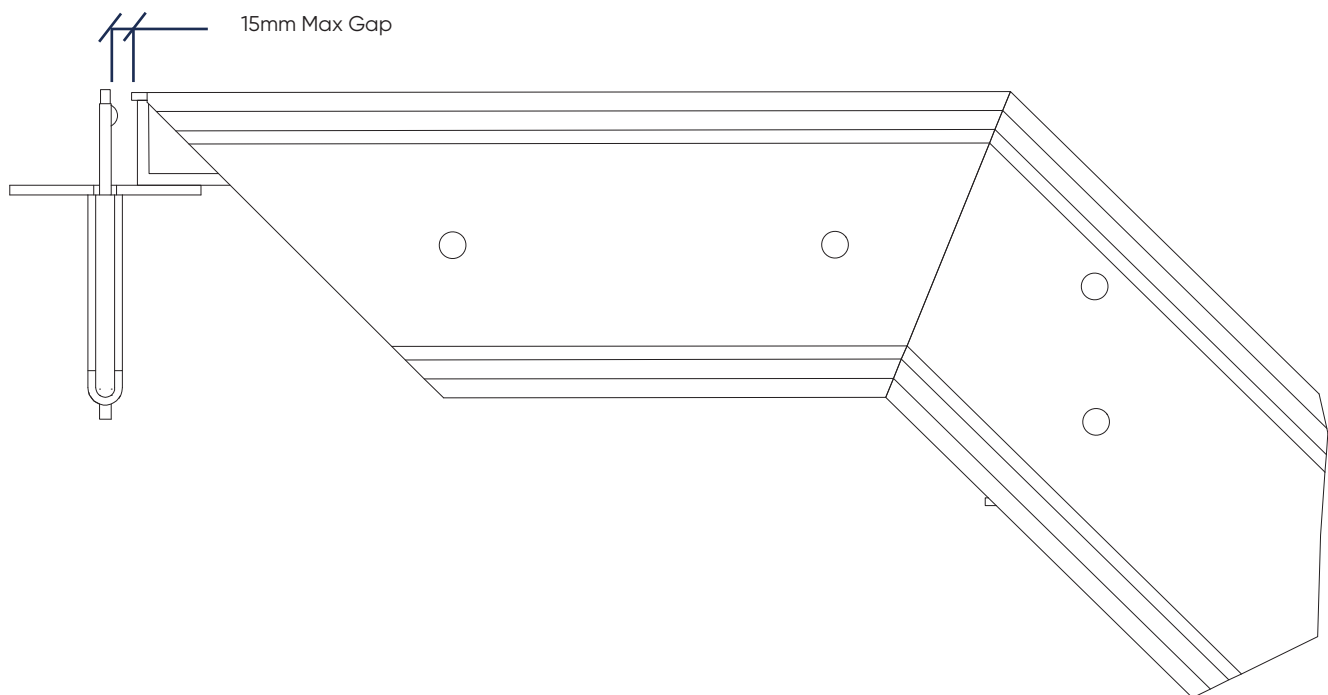
Stretcher Stair Guide

Stretcher Stair Modular Support

Stretcher modular stair units are to be adequately supported by scaffolding transoms at both ends of the module.

With the module being pushed hard up against one of the transoms (i.e. so that there is no gap at one end), the maximum gap between the stair module and the vertical edge of the transom should not be greater than 15 millimetres.

Ensure the gap does not exceed 15 millimetres, anywhere along the length of the supporting transom.

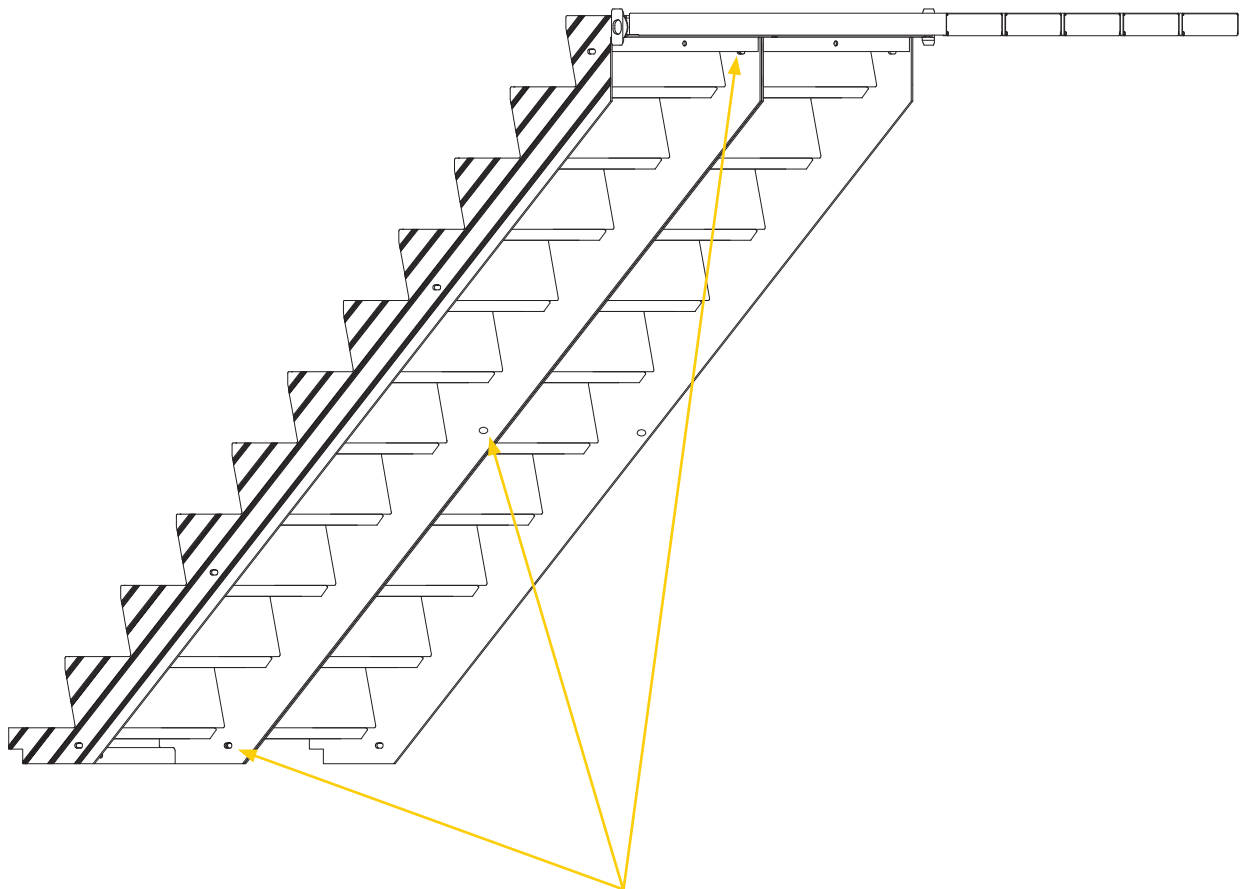


5. Assembly Details

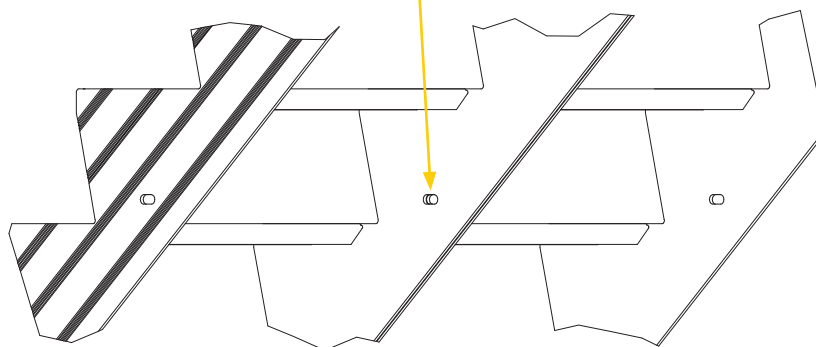
Stretcher Stair Guide

Stretcher Stairs Unit Bolting

To ensure stability of the stretcher stair units, once the two units of Stretcher Stair module is placed over the Transom, they are required to be bolted together using at least 3 x M12mm x 30 Long bolts and nuts through the pre-drilled 14mm hole in the stair unit web. Ensure bolting at the top, middle and bottom of the stair's web.



Bolting locations:
Use 3 x M12mm x 30 Long Bolts



5. Assembly Details

Stretcher Stair Guide

Stretcher Stair Stabilising Options

To eliminate any stair's movement and to reduce the gap at the landing levels, an additional support and locking system on the stair modules can be used:

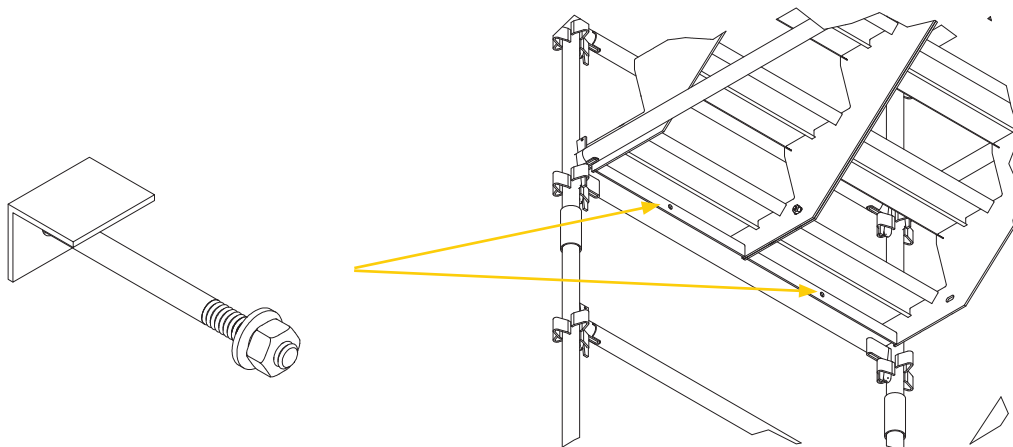
Stretcher Stair Putlog - Eliminating Stairs Movement

Attach a Stretcher Stair Putlog to ledgers close to mid height of the stretcher stair. Then secure the stretcher stair units to the stair putlog using a Stairs Clip. The stair's putlog assembly will eliminate any stair's movement.



Bolting the Landing using Bolting Bracket (Only applicable for some Universal Stretcher Stairs)

The 2.0m stair module unit is fixed into transom at both landings using Bolting Bracket. Both landings are fitted with a steel Landing Angles for the purpose of locking the stretcher stairs



5. Assembly Details

Stretcher Stair Guide

The Stair's Surface Slip Resistance

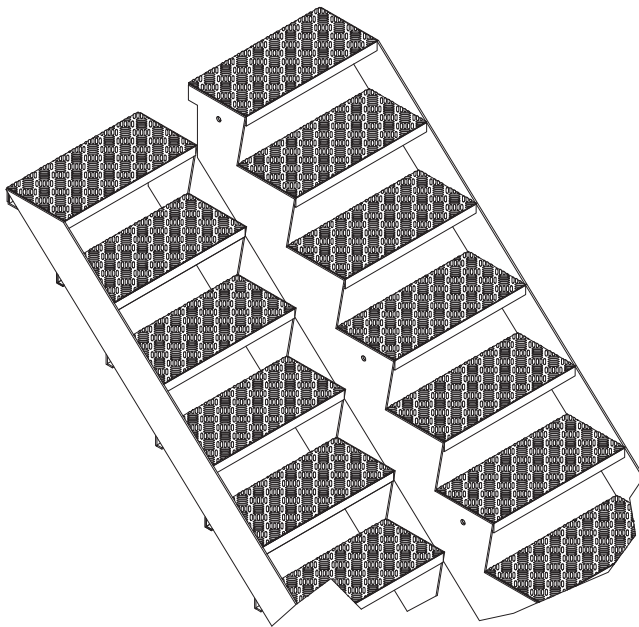
The surface of every Stretcher Stair's tread is extended across the full effective width of the stairway and the tread surface is slip resistant.

The slip resistant surface is formed by a checker or ribs extrusion. Both type of surfaces provides adequate level of slip resistant and they are compatible.

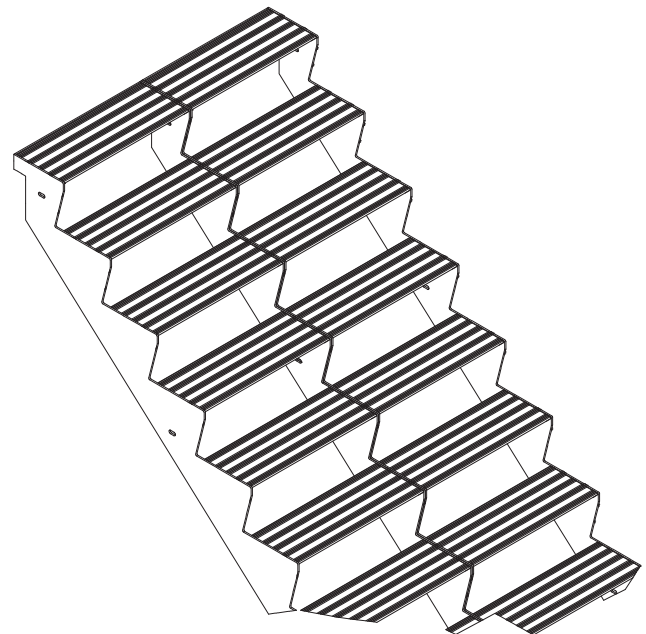
The group aims to offer the two 0.6m units of the Stretcher Stair of the same slip resistance surface as a matched pair.

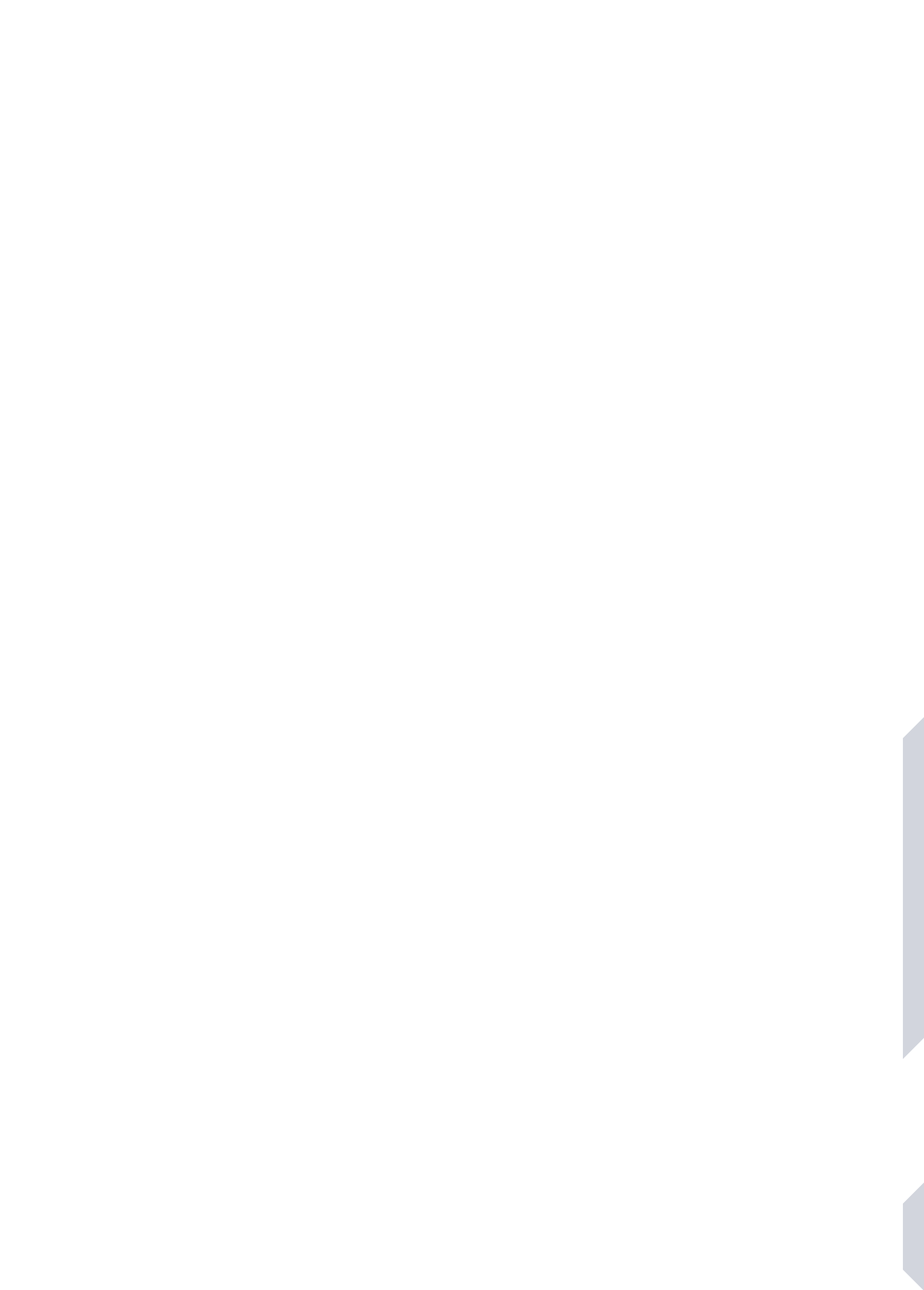
Having different types of slip resistance surfaces in a stairway is acceptable and it will not affect the structural integrity of the stretcher stair.

Checker Slip Resistance Surface



Grid Slip Resistance Surface





6. Transport & Handling

6. TRANSPORT & HANDLING

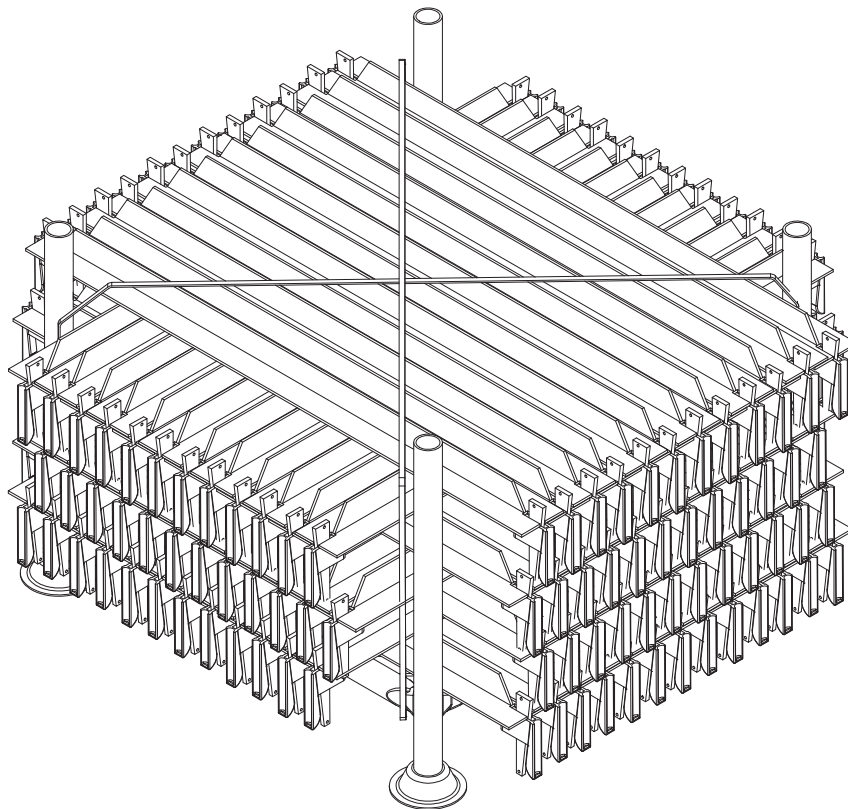
6. Transport & Handling

Transom Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Transom 0.8 m	5.50	100	590	MP
Transom 1.2 m	9.20	70	690	MP
Transom 1.8 m	13.60	50	740	MP
Transom 2.4 m	17.50	50	940	MP

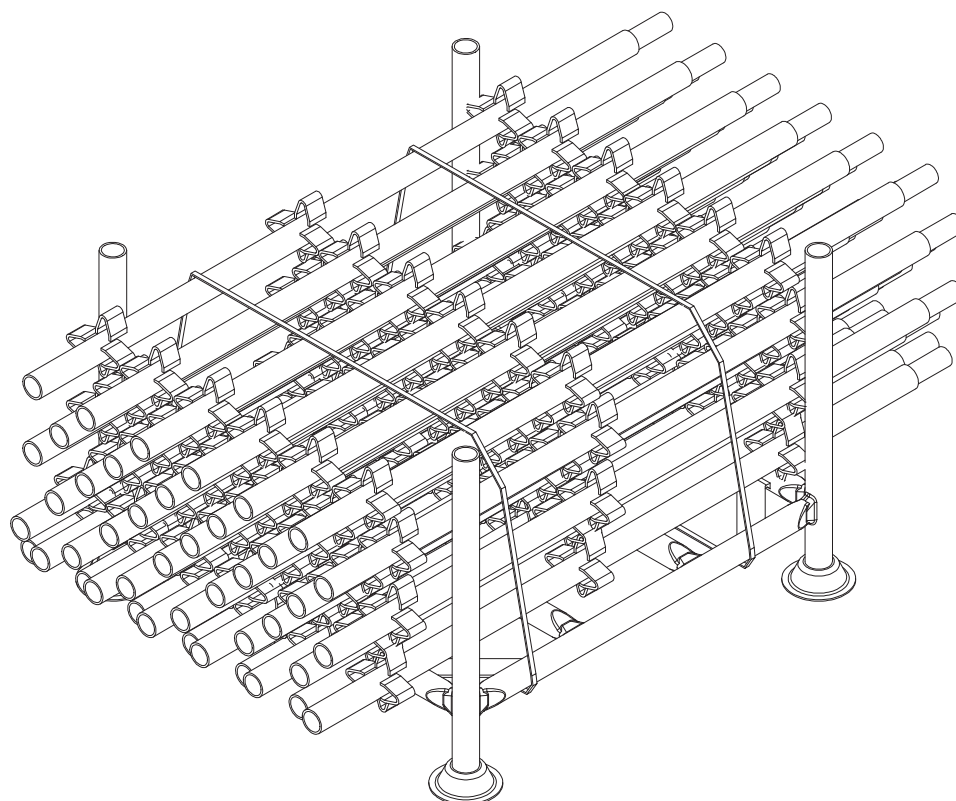
6. Transport & Handling

Standards Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Standard 1.0 m	6.10	70	490	MP
Standard 1.5 m	8.50	70	640	MP
Standard 2.0 m	11.10	70	840	MP
Standard 2.5 m	13.60	70	990	MP
Standard 3.0 m	15.50	70	1.125	MP

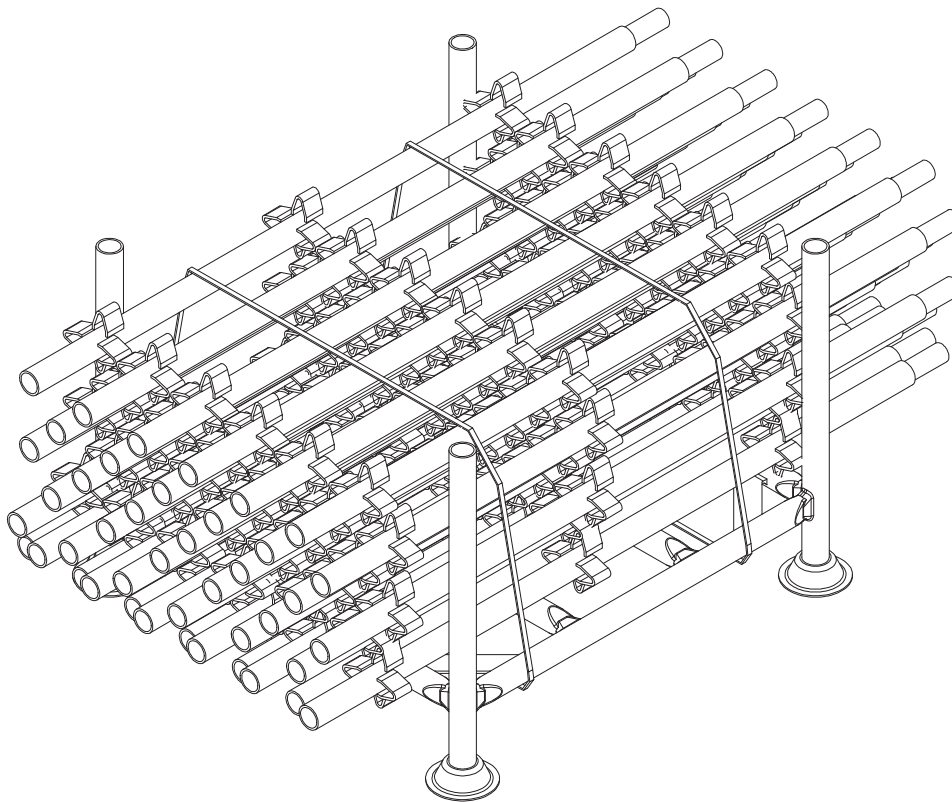
6. Transport & Handling

Open End Standards Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Open End Standard 1.0 m	6.10	70	490	MP
Open End Standard 1.5 m	8.50	70	640	MP
Open End Standard 2.0 m	11.10	70	840	MP
Open End Standard 2.5 m	13.60	70	990	MP
Open End Standard 3.0 m	15.50	70	1.125	MP

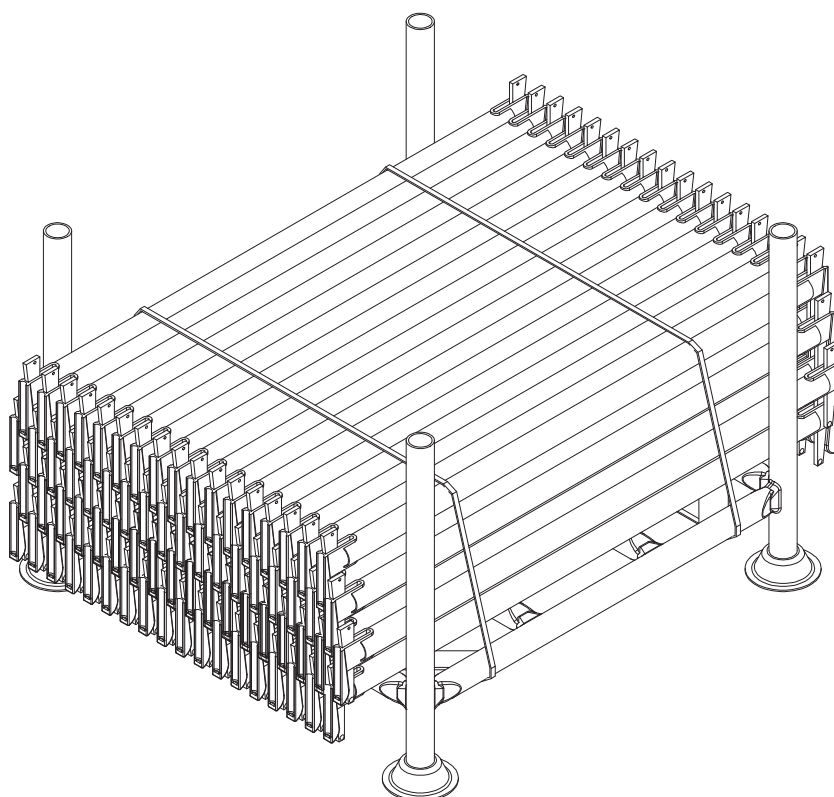
6. Transport & Handling

Ledger Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
G.r. Ledger 0.76 m	3.50	100	390	MP
G.r. Ledger 1.2 m	5.50	100	590	MP
G.r. Ledger 1.8 m	7.50	100	790	MP
G.r. Ledger 2.4 m	10.20	100	1040	MP

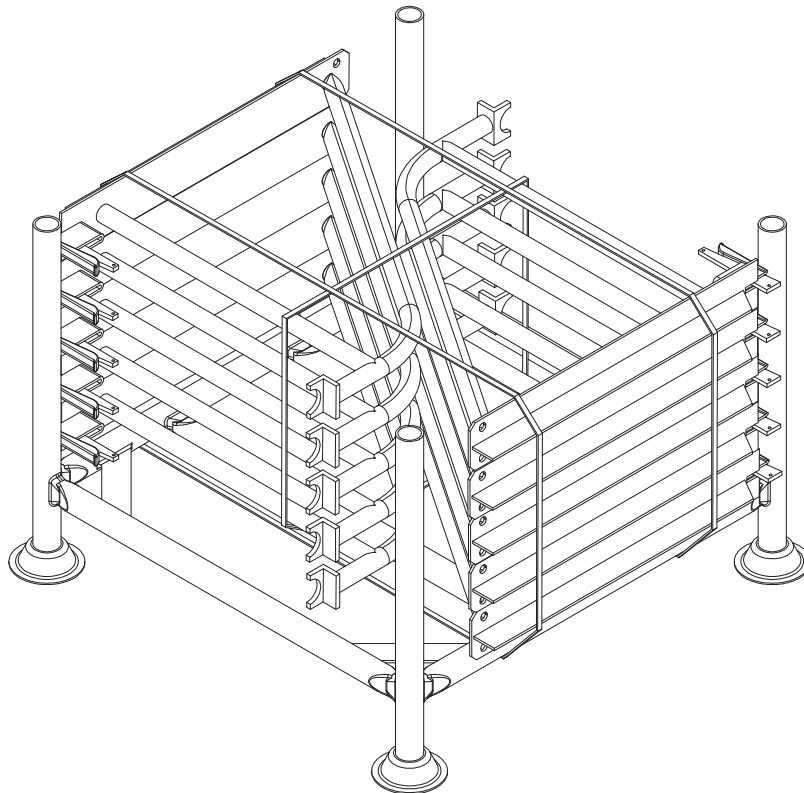
6. Transport & Handling

Hop Up Bracket Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Hop Up Bracket 1	2.50	50	125	MEP
Hop Up Bracket 2	6.50	50	325	MP
Hop Up Bracket 2 Spigot	7.00	50	350	MP
Hop Up Bracket 3	10.50	24	252	MP
Hop Up Bracket 1 Spigot	11.00	24	264	MP
Hop Up Bracket 2 Intermediate	8.00	12	96	MP
Hop Up Bracket 3 Intermediate	11.50	12	138	MP

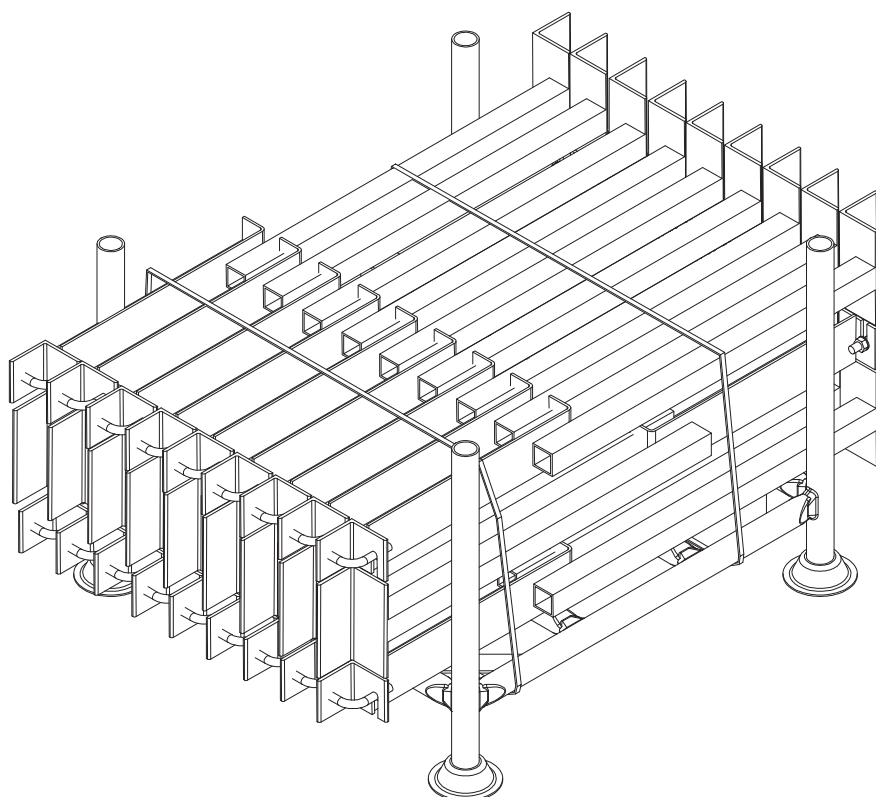
6. Transport & Handling

Ladder Access Putlog Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Ladder Access Transom 1.2m	2.50	50	165	MP
Ladder Access Transom 1.8m	6.70	50	390	MP
Ladder Access Transom 2.4m	11.90	14	240	MP

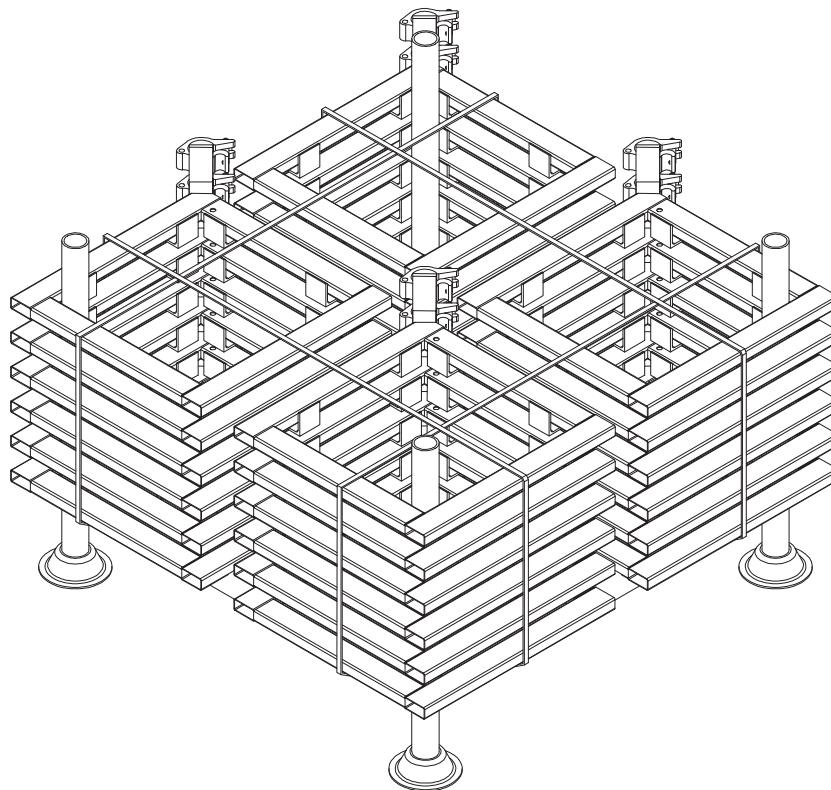
6. Transport & Handling

Plank Corner Panel Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Quickstage lcf (1x1)	4.50	12	96	MEP
Quickstage lcf (2x1) Left	8.00	12	96	MP
Quickstage lcf (2x1) Right	8.00	12	96	MP
Quickstage lcf (3x2) Left	17.00	12	204	MP
Quickstage lcf (3x2) Right	17.00	12	204	MP
Quickstage lcf (3x3)	21.5	10	215	MP
Quickstage lcf (2x2)	12.00	12	144	MP

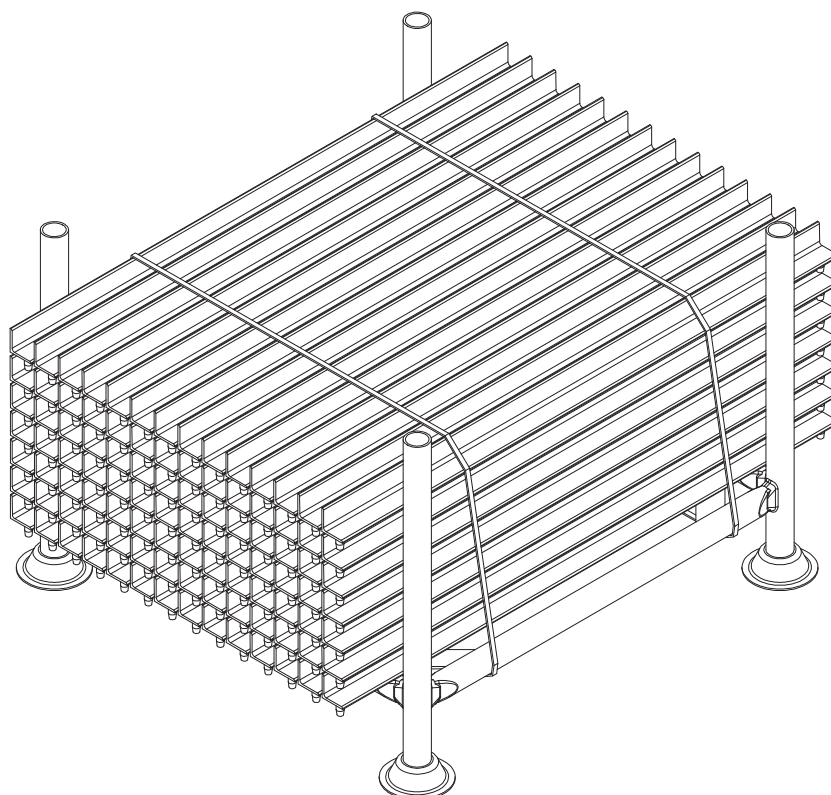
6. Transport & Handling

Tie Bar Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Tie Bar 0.6m	2.00	168	336	MP
Tie Bar 0.7m	2.00	168	336	MP
Tie Bar 1.2m	3.00	144	432	MP
Tie Bar 1.8m	4.50	144	648	MP
Tie Bar 2.4m	6.00	144	864	MP

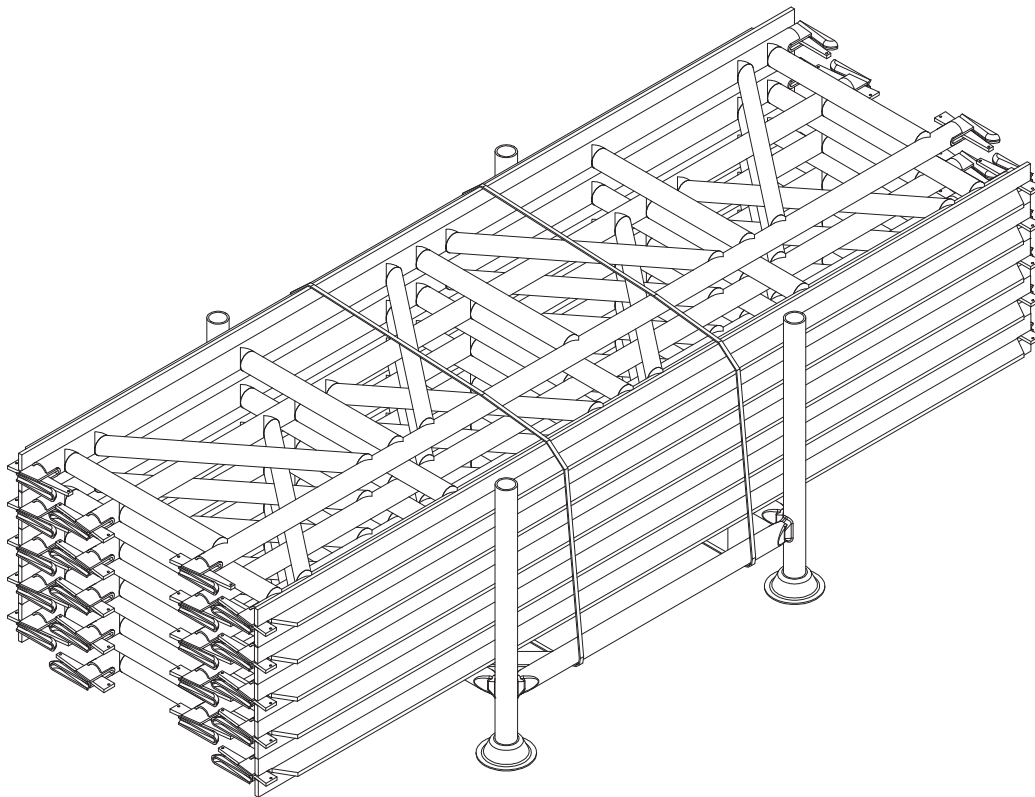
6. Transport & Handling

Truss Truss Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Truss Transom 1.8m	37.50	10	375	MP
Truss Transom 2.4m	40.00	10	400	SP

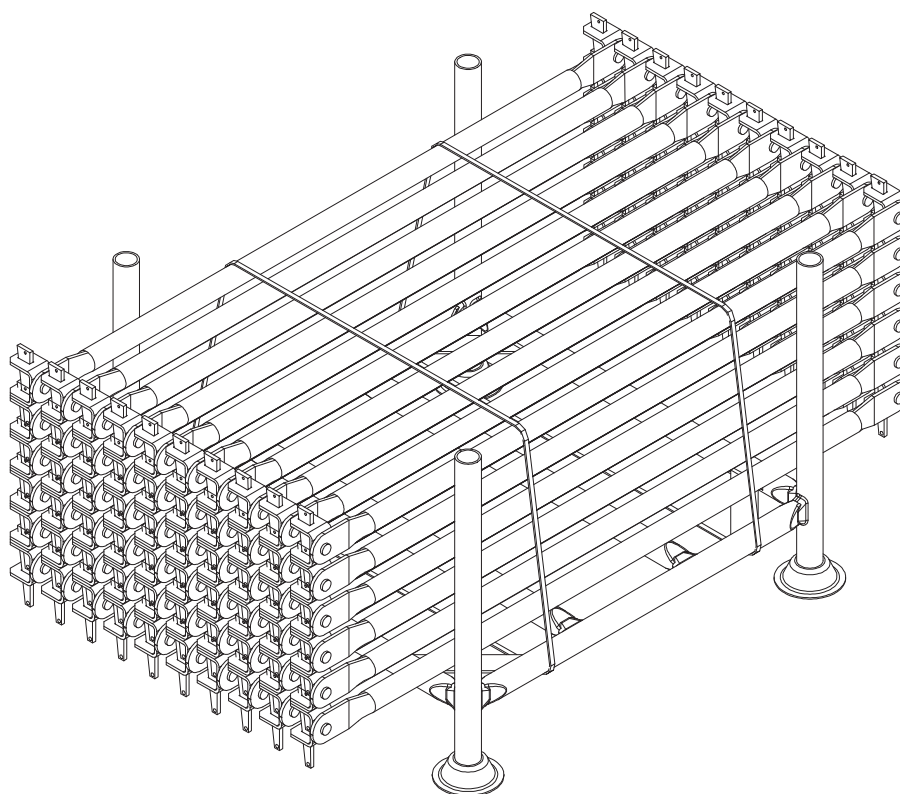
6. Transport & Handling

Diagonal Brace Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



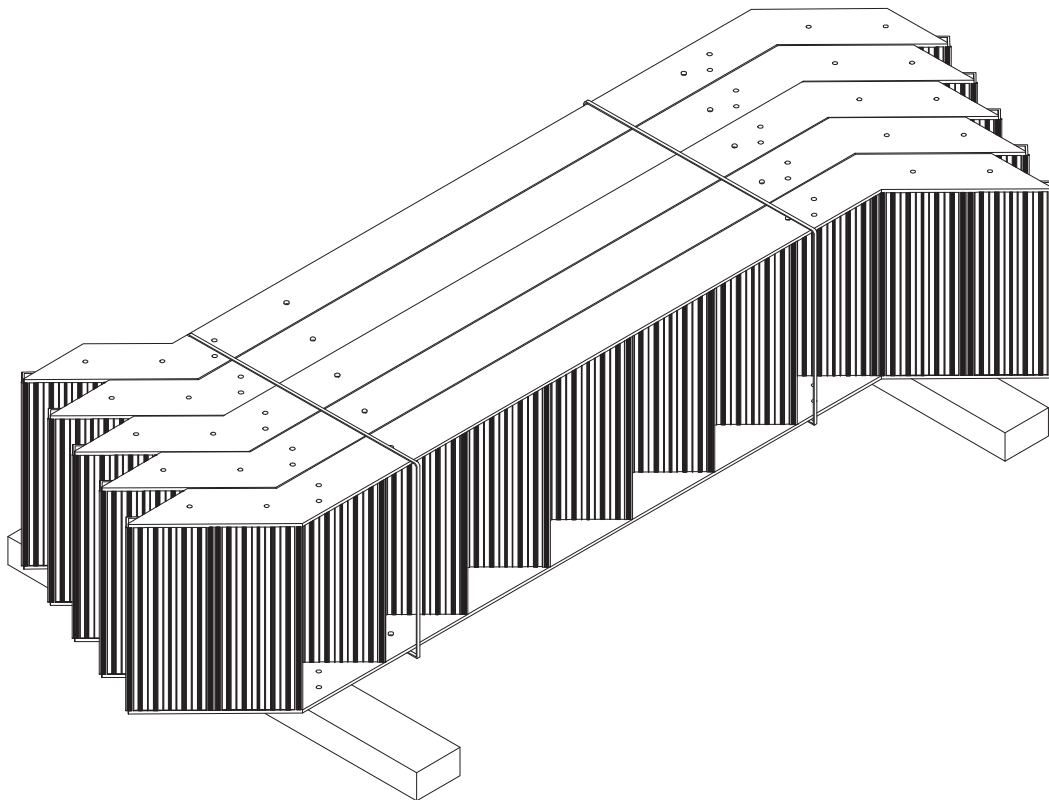
COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Brace Diagonal 1.7 m	8.00	80	640	MP
Brace Diagonal 2.1 m	10.00	80	800	MP
Brace Diagonal 2.7 m	11.50	80	920	SP
Brace Diagonal 3.2 m	13.00	80	1040	SP
Brace Diagonal 3.6 m	13.50	80	1080	SP

6. Transport & Handling

Construction Stairs Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used, ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
Construction Stairs 1.5m Rise	113	5	565	BUNDLE
Construction Stairs 2.0m Rise	140	5	700	BUNDLE
Stretcher Stairs 1.5m Rise	105	5	525	BUNDLE
Stretcher Stairs 2.0m Rise	130	5	650	BUNDLE

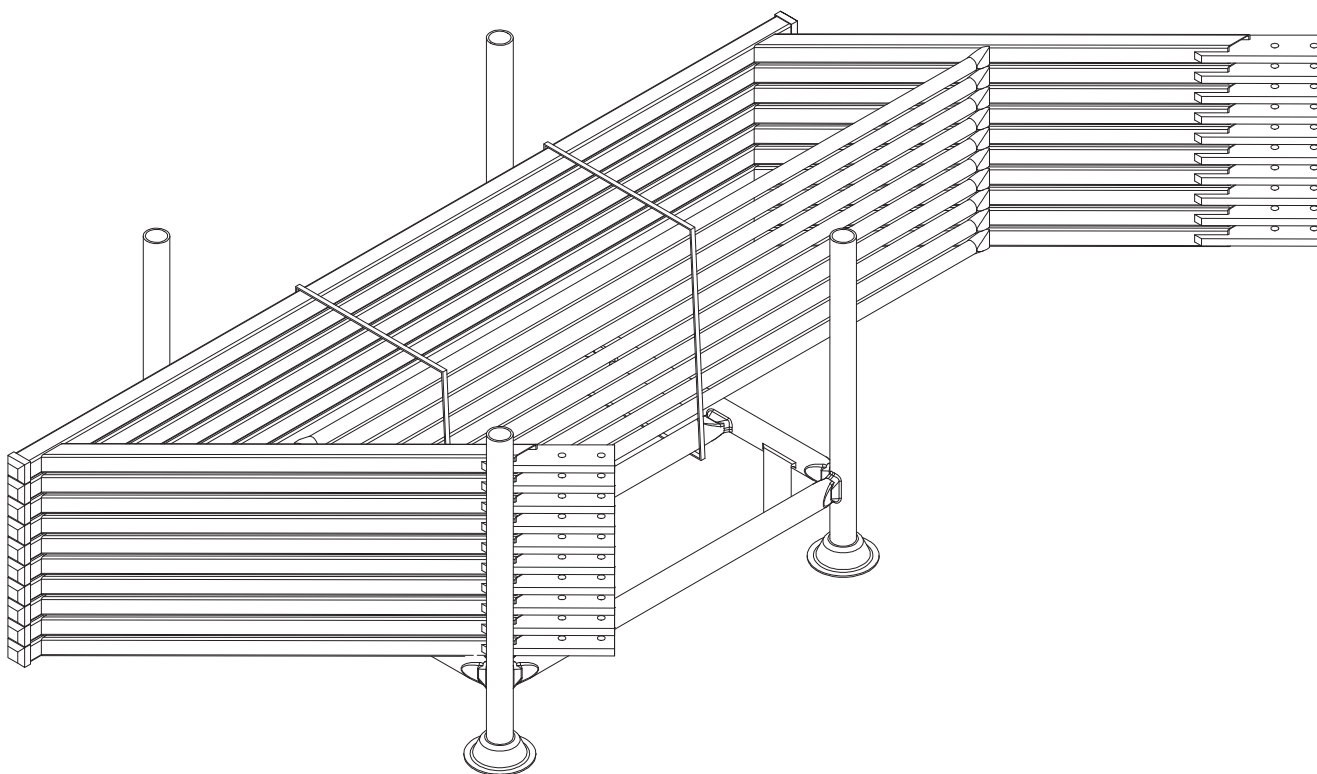
6. Transport & Handling

Construction Stair Handrail Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



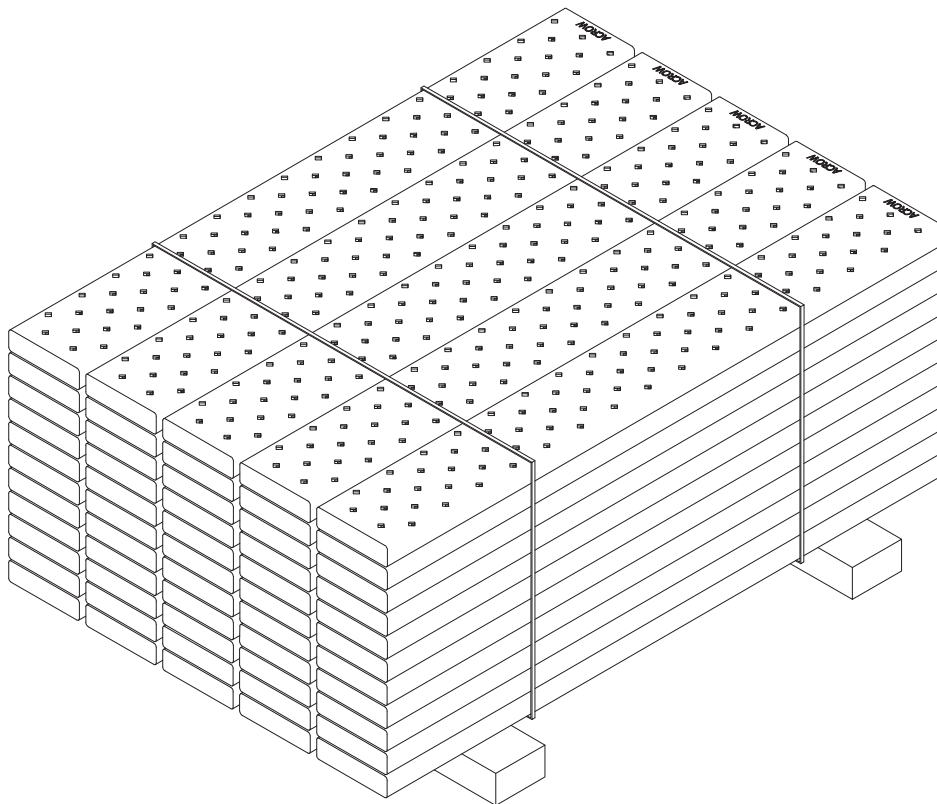
COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
1.5m Handrail	17.40	10	174	SP
2.0m Handrail	22.00	10	220	SP

6. Transport & Handling

Steel Plank Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used, ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
0.83m Steel Plank	5.00	50	275	BUNDLE
1.05m Steel Plank	7.20	50	396	BUNDLE
1.27m Steel Plank	8.50	50	467	BUNDLE
1.83m Steel Plank	11.50	50	605	BUNDLE
2.44m Steel Plank	15.50	50	852	BUNDLE
3.05m Steel Plank	19.50	50	1072	BUNDLE

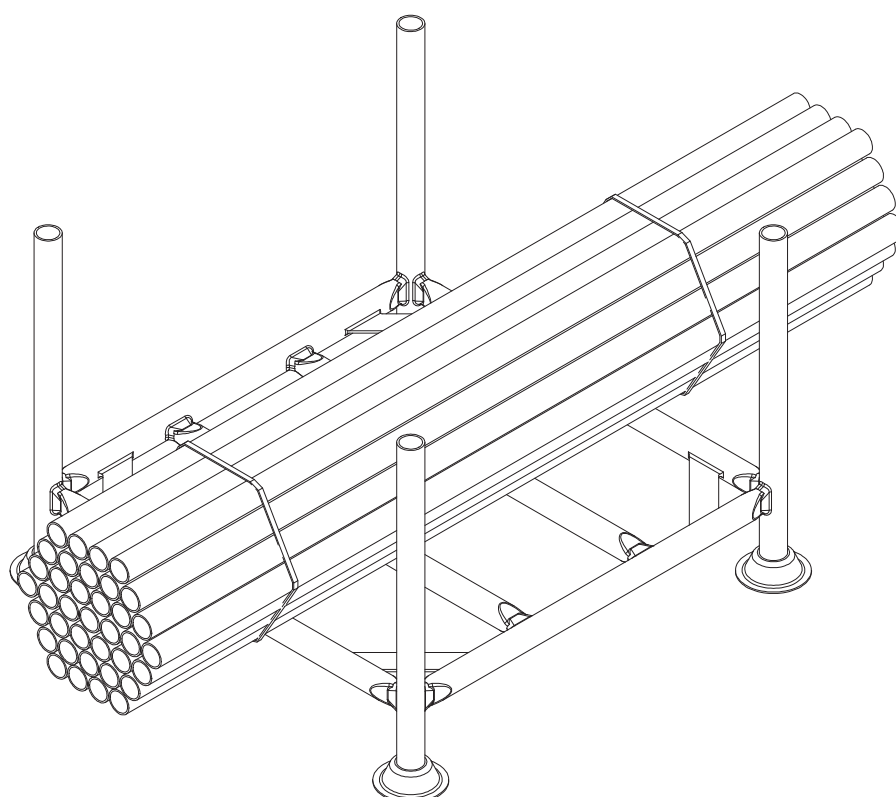
6. Transport & Handling

Scaffold Tube Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
0.3m Tube - HDG - 3.2mm	1.50	136	204	MP
0.6m Tube - HDG - 3.2mm	2.50	136	340	MP
0.9m Tube - HDG - 3.2mm	3.50	136	476	MP
1.2m Tube - HDG - 3.2mm	5.00	136	680	MP
1.5m Tube - HDG - 3.2mm	6.00	136	816	MP
1.8m Tube - HDG - 3.2mm	7.00	136	952	MP
2.1m Tube - HDG - 3.2mm	8.50	136	1156	SP
2.4m Tube - HDG - 3.2mm	9.50	136	1292	SP

6. Transport & Handling

Scaffold Tube Transport Continued

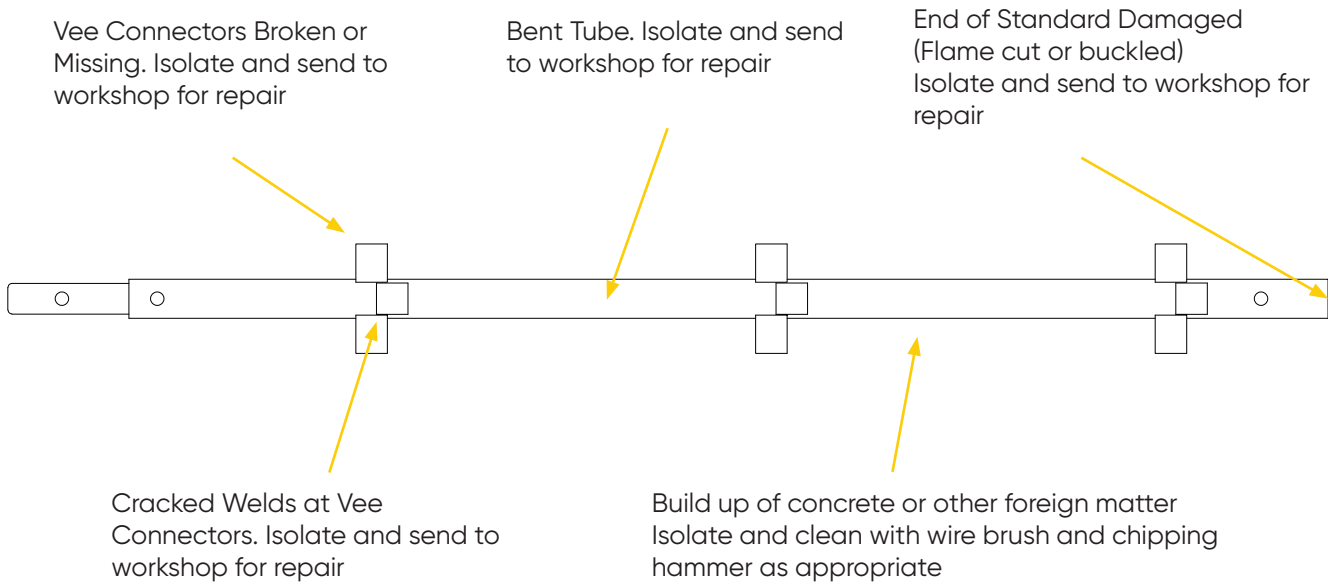
COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
2.7m Tube - HDG - 3.2mm	10.50	136	1428	SP
3.0m Tube - HDG - 3.2mm	11.50	121	1391	SP
3.3m Tube - HDG - 3.2mm	13.00	107	1391	SP
3.6m Tube - HDG - 3.2mm	14.00	100	1400	SP
3.9m Tube - HDG - 3.2mm	15.00	93	1395	SP
4.2m Tube - HDG - 3.2mm	16.00	87	1392	SP
4.5m Tube - HDG - 3.2mm	17.50	82	1394	SP
4.8m Tube - HDG - 3.2mm	18.50	77	1386	SP
5.1m Tube - HDG - 3.2mm	19.50	73	1387	SP
5.4m Tube - HDG - 3.2mm	21.00	66	1386	SP
5.7m Tube - HDG - 3.2mm	22.00	63	1386	SP
6.0m Tube - HDG - 3.2mm	23.00	60	1380	SP
6.3m Tube - HDG - 3.2mm	24.00	58	1392	SP
6.5m Tube - HDG - 3.2mm	25.50	56	1400	SP

7. MAINTENANCE & INSPECTION

7. Maintenance & Inspection

Standards

The Quickstage Standard is a principle load carrying member in the scaffold framework and is available in a range of lengths from 0.5m to 3m. It incorporates cup type connections for ledgers, transoms and platform brackets. It has a Camlock sleeve at one end to allow end to end connection Standards. It must be straight, vee connectors must not be deformed or missing.



Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Standard coated with concrete	No concrete build up permitted at connections	Remove concrete with wire brush and/or chipping hammer
Tube bore at ends clogged	No concrete build up permitted at spigot ends & 150mm in bore at bottom of Standard	Clear bore with drift
Bent tube	See Reference Sheet	Straighten on Flypress or cut down to next useable size
Dents in tube	Less than 3mm depth	Cut back to next size down
End of standard damaged (flame cut)	Such damage not permitted	Cut back to next size down
Spigot tube weld cracked (old type)	Cracked welds not permitted	Grind and reweld
Camlock Sleeve tube bent or flattened	Bends, flattening or not permitted	Cut down Standard to next available size and replace with new camlock
Vee Connector broken or missing	Broken or missing components not permitted	Grind and reweld vee connector
Missing Camlock	Missing components not permitted	Replace Cam and associated rivet
Cracked welds at Vee Connectors	Cracked welds not permitted	Grind cracked weld and reweld

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

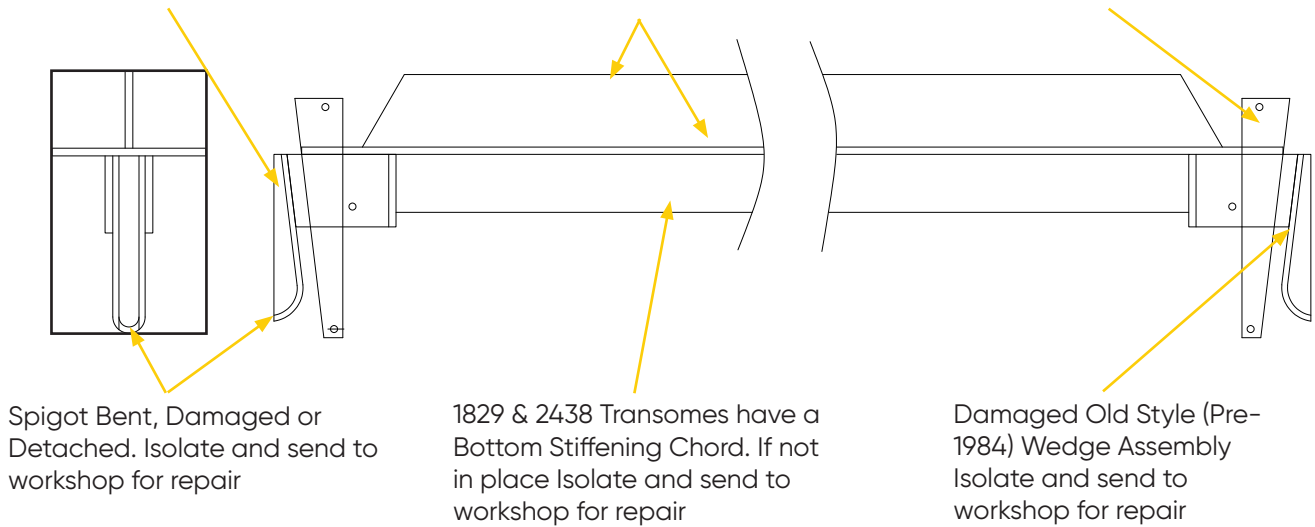
Transoms

The Quickstage Transom is a load bearing member and incorporates a wedge assembly at each end. Transoms range in length from 1.2m to 2.4m. Together with the Ledger, the transom connects to the Standard by means of the wedge assembly to form the basic scaffold structure. They must be straight and the wedge assembly must not be damaged or deformed.

Cracked Welds at Spigot
Isolate and send to workshop for repair

Distorted or Bent Flat Sections
Isolate and send to workshop for repair

Wedge Bent or Missing
Isolate and send to workshop for repair



Spigot Bent, Damaged or Detached. Isolate and send to workshop for repair

1829 & 2438 Transoms have a Bottom Stiffening Chord. If not in place Isolate and send to workshop for repair

Damaged Old Style (Pre-1984) Wedge Assembly Isolate and send to workshop for repair

Inspection

Generally, visual inspection checking for the possible faults listed below.

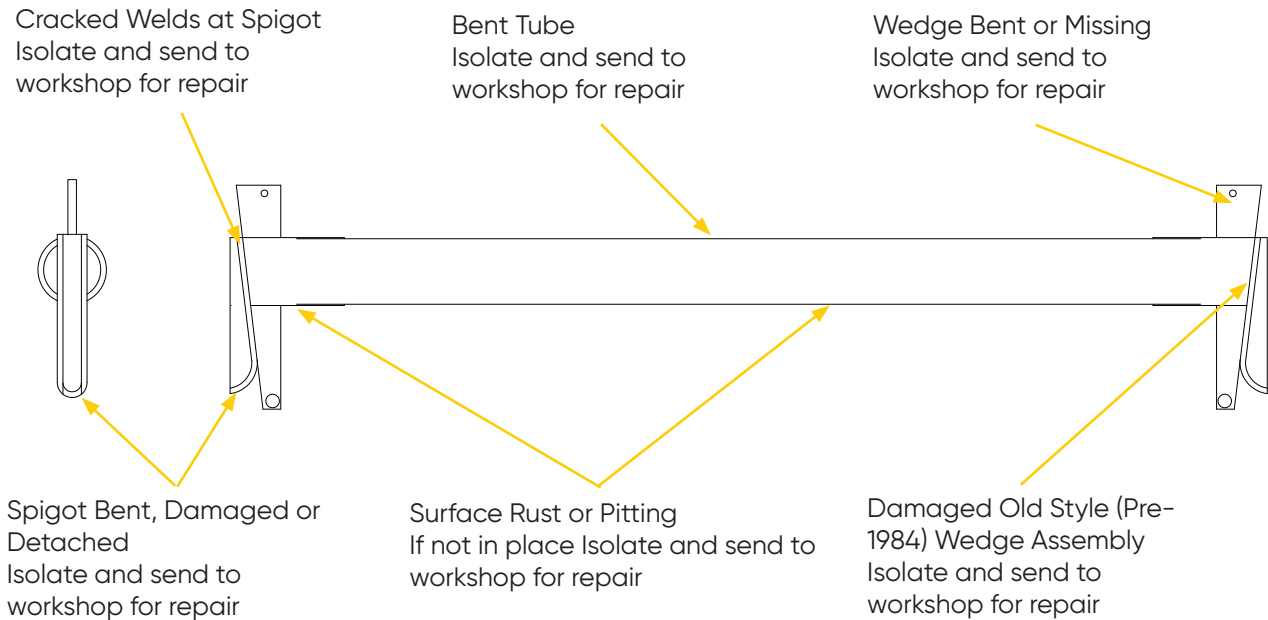
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on tube or at connections	Remove build up with wire brush and/or chipping hammer
Cracked welds	Cracked welds not permitted	Grind weld and replace welds as per Work Instruction
Distorted or bent flat sections	More than 4mm depth	Straighten or replace section
Spigot connection bent, damaged or missing	3mm bend or damaged	Straighten if bent less than 6mm. Re-weld new spigot if damaged or detached. Refer Work Instruction
Cracked welds at spigot connection	Cracked welds not permitted	Grind and reweld. Refer Work Instruction
Wedge bent or missing	Damaged or missing wedges not permitted	Replace with new wedge
Damaged or bent Old Style (pre 1984) Wedge Assembly	Damaged assemblies not recommended for repair.	Replace with current style Wedge Assembly. Refer Work Instruction
Surface rust or pitting	Visual assessment.	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted.
Bottom Stiffener missing on 1829 or 2138 Standard	Must be intact	Straighten or remove and replace

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Ledgers

The Quickstage Ledger is a tubular component and incorporates a wedge assembly at each end. They range in length from 1.2m to 2.4m. Together with the Transom, it connects to the Standard by means of the wedge assembly. It must be straight and the wedge assembly must not be damaged or deformed.



Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on tube or at connections	Remove build up with wire brush and/or chipping hammer
Bent tube	See Reference Sheet	Straighten on Flypress
Dents in tube	More than 3mm depth	Cut back to next size down
Spigot bent, damaged or missing	3mm bend or damaged	Straighten if bent less than 6mm. Re-weld new spigot if damaged or detached. Refer Work Instruction WI-GE-100
Cracked welds at spigot connection	Cracked welds not permitted	Grind and reweld. Refer Work Instruction
Wedge bent or missing	Damaged or missing wedges not permitted	Replace with new wedge
Damaged or bent Old Style (pre 1984) Wedge Assembly	Damaged assemblies not recommended for repair.	Replace with current style Wedge Assembly. Refer Work Instruction
Surface rust or pitting	Visual assessment.	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted.

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

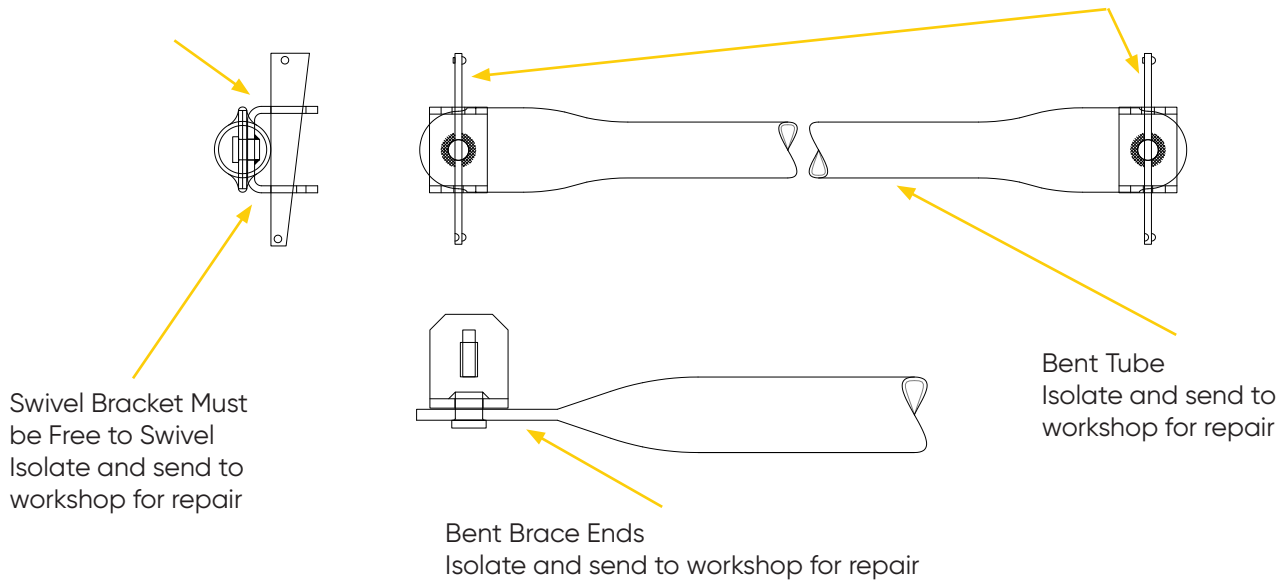
Braces

The Quickstage Brace is a tubular component with flattened ends and incorporates a Swivel bracket and wedge assembly at each end. Braces connect to the vee connectors on the Standard by means of the Swivel bracket and wedge assembly to assist scaffold stability and they range in length from 1.6m to 3.6m.. It must be straight and the Swivel bracket wedge assembly must be free to rotate and not be damaged or deformed.

Swivel Bracket Damaged or Detached. Isolate and send to workshop for repair

Surface Rust or Pitting
Isolate and send to workshop for repair

Damaged or Missing Wedge(s)
Isolate and send to workshop for repair



Swivel Bracket Must be Free to Swivel
Isolate and send to workshop for repair

Bent Tube
Isolate and send to workshop for repair

Bent Brace Ends
Isolate and send to workshop for repair

Inspection

Generally, visual inspection checking for the possible faults listed below.

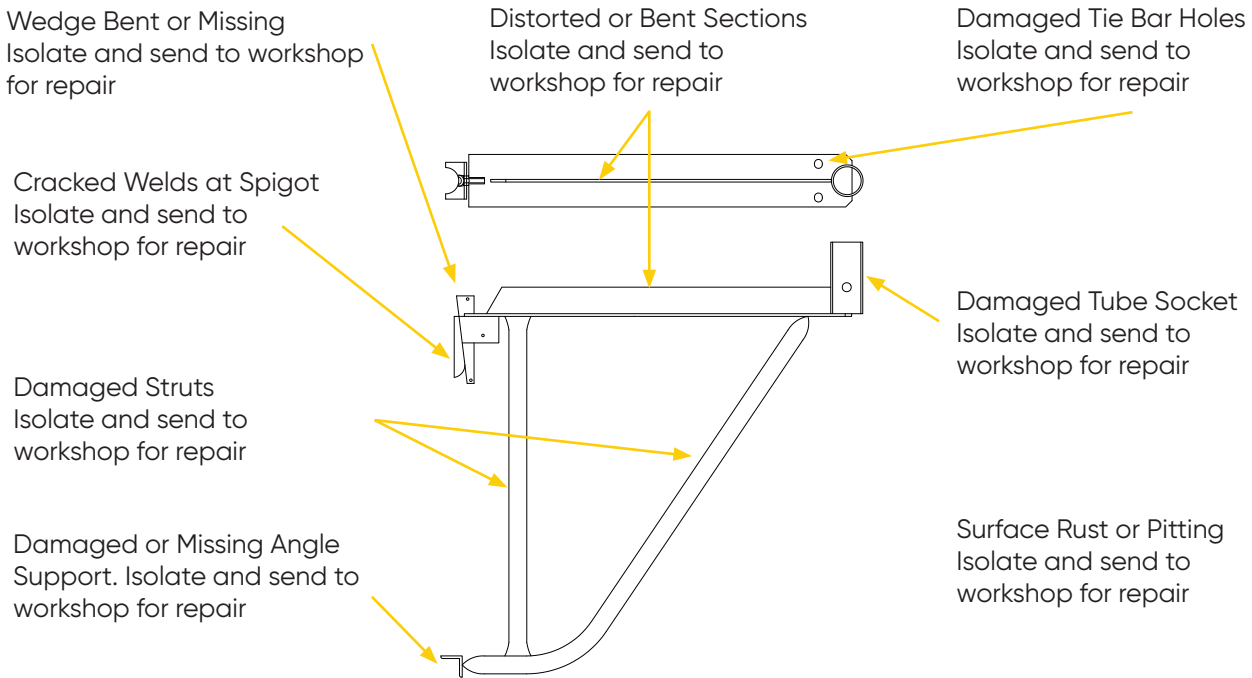
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on tube or at connections	Remove build up with wire brush and/or chipping hammer
Swivel bracket not free to swivel	Ends must be free to swivel	Check and remove obstructions, replace Swivel bracket ends and rivet if required. Refer Work instruction
Bent tube	See Reference Sheet	Straighten on Flypress or cut down to next size. Refer Work instruction
Bent brace ends	No more than 5mm	Straighten on Flypress. Ensure ends are parallel to tube centreline
Dents in tube	No more than 3mm depth	Cut down to next size
Damaged or missing Swivel Bracket	Damaged or missing Swivel brackets not permitted	Replace new swivel bracket. Ensure brace centres are correct overall length. Refer Work Instruction
Damaged or missing Wedge	Damaged or missing Wedges not permitted	Replace Wedges
Surface rust or pitting	Visual assessment.	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Platform Brackets

The Quickstage Platform Bracket (also known as a “Hop Up Bracket”) is load bearing member and incorporates a wedge assembly at one end. Platform Brackets range in size to support either 1, 2 or 3 Acrowskaf Planks and connect to the Standard by means of the wedge assembly. Pairs of Platform Brackets are interconnected and stabilised with a Tie Bar to form the basic structure which supports the planks. They must be straight and the wedge assembly must not be damaged or deformed.



Inspection

Generally, visual inspection checking for the possible faults listed below.

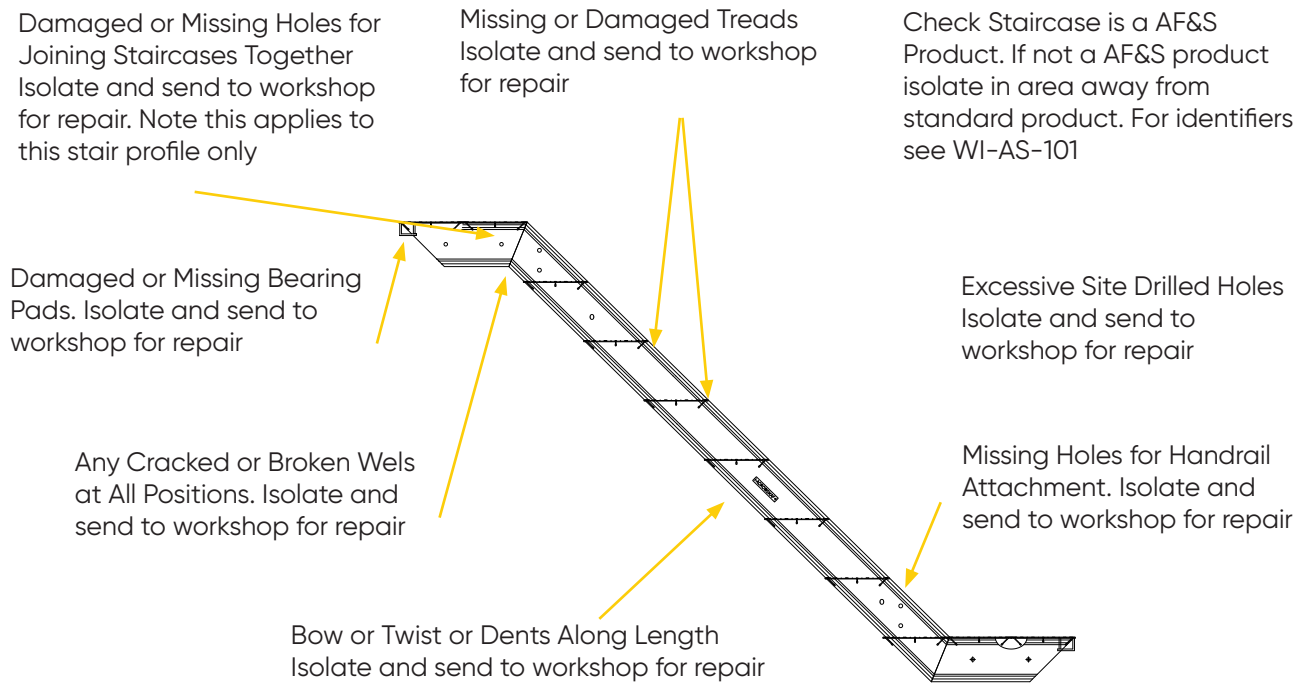
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted of flats or at connections	Remove build up with wire brush and/or chipping hammer
Cracked welds	Cracked welds not permitted	Grind weld and replace welds as per Work Instruction WI-GE-100
Distorted or bent flat sections	More than 4mm depth	Straighten or replace section
Spigot connection bent, damaged or missing	3mm bend or damaged	Straighten if bent less than 6mm. reweld new spigot if damaged or detached.
Damaged Tube Socket	Damaged socket not permitted	Repair or replace Tube Socket
Wedge bent or missing	Damaged or missing wedges not permitted	Replace with new wedge
Damaged Struts	Cracked welds not permitted	Grind and reweld. Refer Work Instruction WI-GE-100
Damaged holes in flat	Not permitted	Weld repair of holes
Damaged or missing Angle support	Not permitted	Replace Angle support
Surface rust or pitting	Visual assessment	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted.

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Aluminium Staircase

The Quickstage Aluminium Staircase is a fabricated aluminium component which fits within the Cuplok scaffold bay and is supported at each end by transoms. Acrowskaf Aluminium Staircases come in one size to give 1.5m stair rise. They must be undamaged, straight, free from twist and bow.



Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Staircase is not a AF&S product	Because staircase is not a AF&S product its strength cannot be determined therefore it must not be used	Isolate to an area where it will not be mixed with standard product and tag to identify it.
Build up of concrete or other matter	No build up permitted	Remove build up with wire brush and/or chipping hammer
Damaged, dented or cracked treads	No cracks permitted. No dents more than 3mm depth	Straighten with care to achieve original profile. Check for cracks in welds and treads after straightening
Missing treads	Missing treads not permitted	Replace
Cracked welds	Cracked welds not permitted	Re-weld all cracked or broken welds see WI-GE-100
Distorted or bent sides	No more than 5mm distortion	Straighten or replace
Bow or Twist along length	No more than 12mm on the overall length	Straighten with Fly Press
Damaged or missing handrail attachment holes. Holes missing in landing areas	Holes for connection of handrails & stair to stair must be in correct place and serviceable	Drill holes as required. If multiple holes have been site drilled then follow instructions on WI-AS-100 to cover up holes & redrill
Missing ID Tag	ID tags must be attached	Replace tag

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

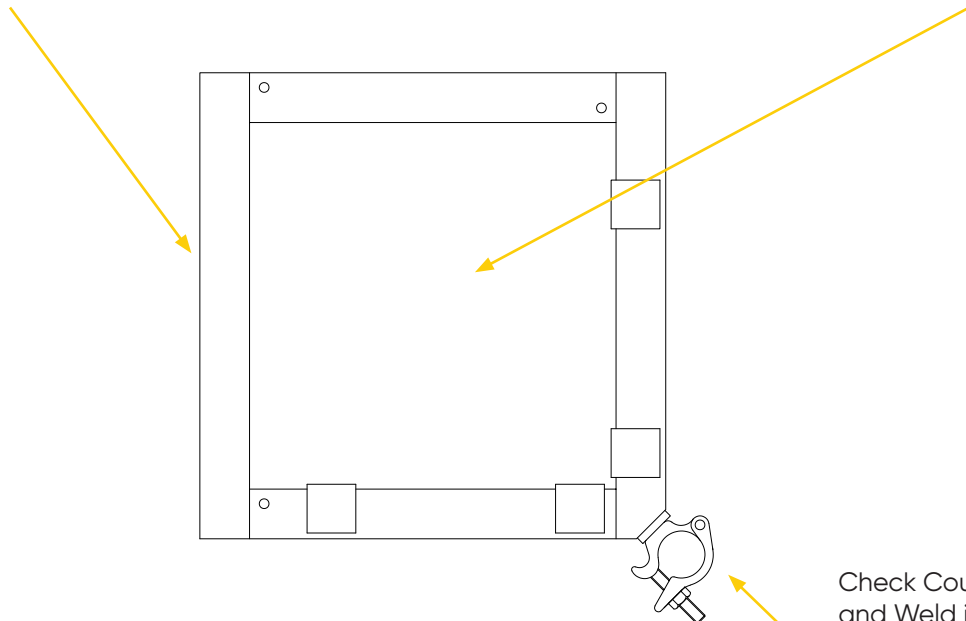
7. Maintenance & Inspection

Plank Corner Panel

The Corner Panel is used at the corner junction of a run of platform brackets

Check Frame is not Twisted or Bent. Isolate and send to workshop for repair

Check Plywood is not Damaged. Isolate and send to workshop for repair



Concrete Deposits on Corner Panel
Clean concrete off from ensuring coupler is clear. Ensure plywood is clear

Check Coupler Still Functional and Weld is not Broken / Cracked. Isolate and send to workshop for repair

Inspection

Generally, visual inspection checking for the possible faults listed below.

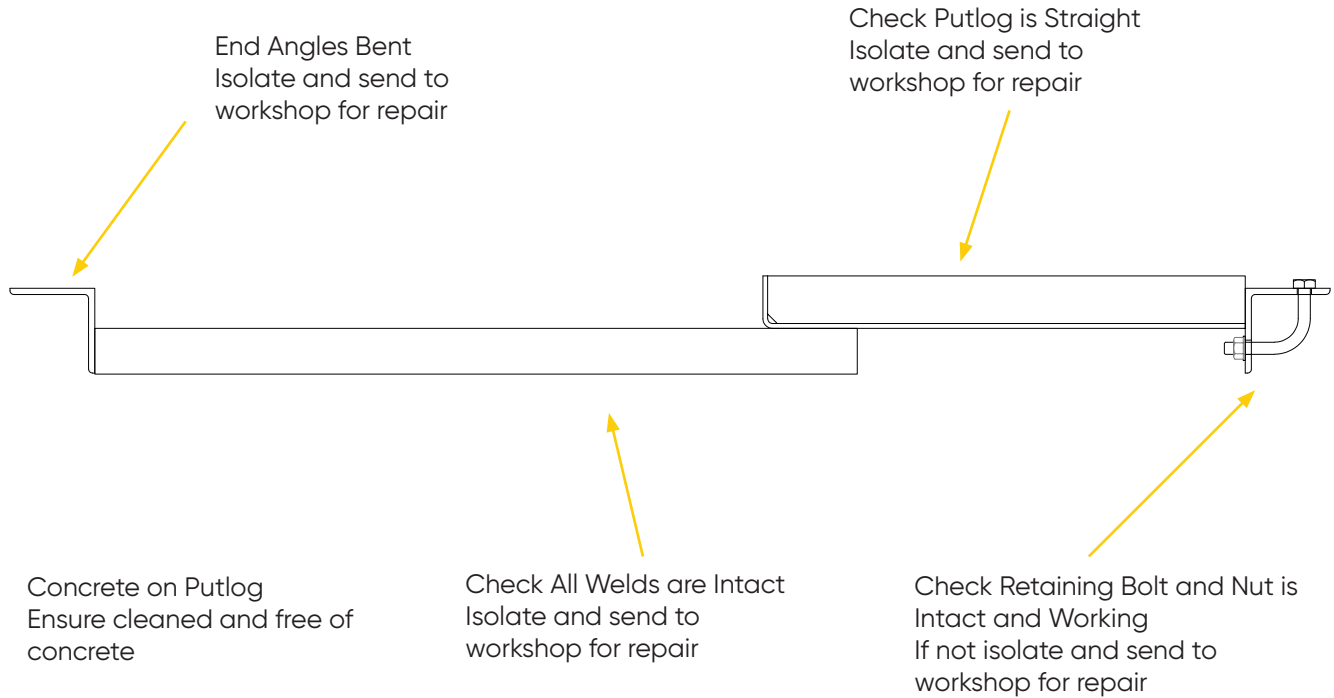
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Frame bent or twisted	Frame must be straight and free of twist	Straighten with flypress, if unable to straighten then the unit must be scrapped* (* See WI-GE-103 for reference)
Welds cracked or broken	All welds must be intact	Grind back and reweld* (* See WI-GE-100)
Plywood is damaged	Plywood must be sound with the surface free of any trip hazards	Replace plywood
Coupler damaged or not functioning properly	Coupler must function correctly	Remove by grinding back weld then replace with new coupler
Concrete deposits on frame	Frame must be free of concrete deposits	Remove concrete deposits particularly around latch pin area and internally at ends of each leg

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Ladder Access Putlog

The Ladder access Putlog is used in a bay of scaffold to provide an opening in the plank arrangement through which the ladder passes.



Inspection

Generally, visual inspection checking for the possible faults listed below.

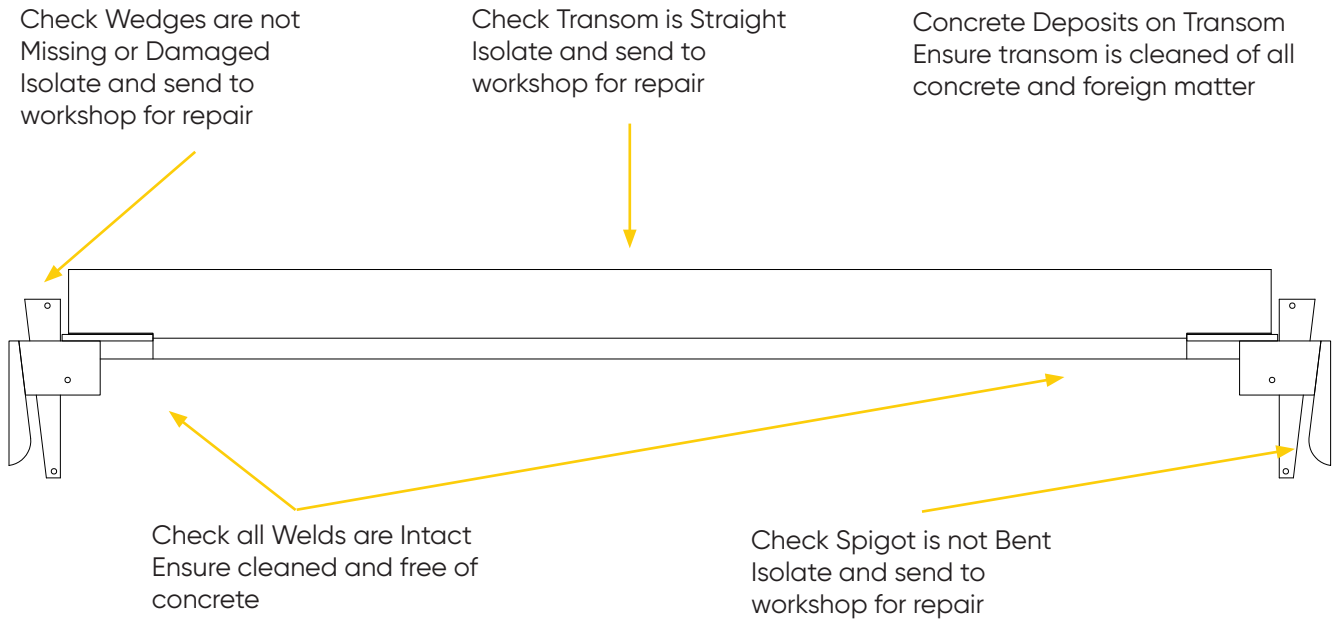
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Putlog bent or twisted	Putlog must be straight and free of twist	Straighten with flypress, if unable to straighten then the unit must be scrapped* (* See WI-GE-103 for reference)
Welds cracked or broken	All welds must be intact	Grind back and reweld* (* See WI-GE-100)
End angle bent	End angle must be square (90 degrees)	Straighten
Retaining bolt damaged or nut not turning freely	Bolt must be correct shape and nut must turn freely	If problem is the nut ,oil and try to free otherwise replace If bolt bent out of shape then replace
Concrete deposits on putlog	Putlog must be free of concrete deposits	Remove concrete deposits

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Return Deck Transom

The Return Deck Transom is used at the junction of two runs of scaffold which are at right angles to each other. The return lip of the transom covers the gap between the planks.



Inspection

Generally, visual inspection checking for the possible faults listed below.

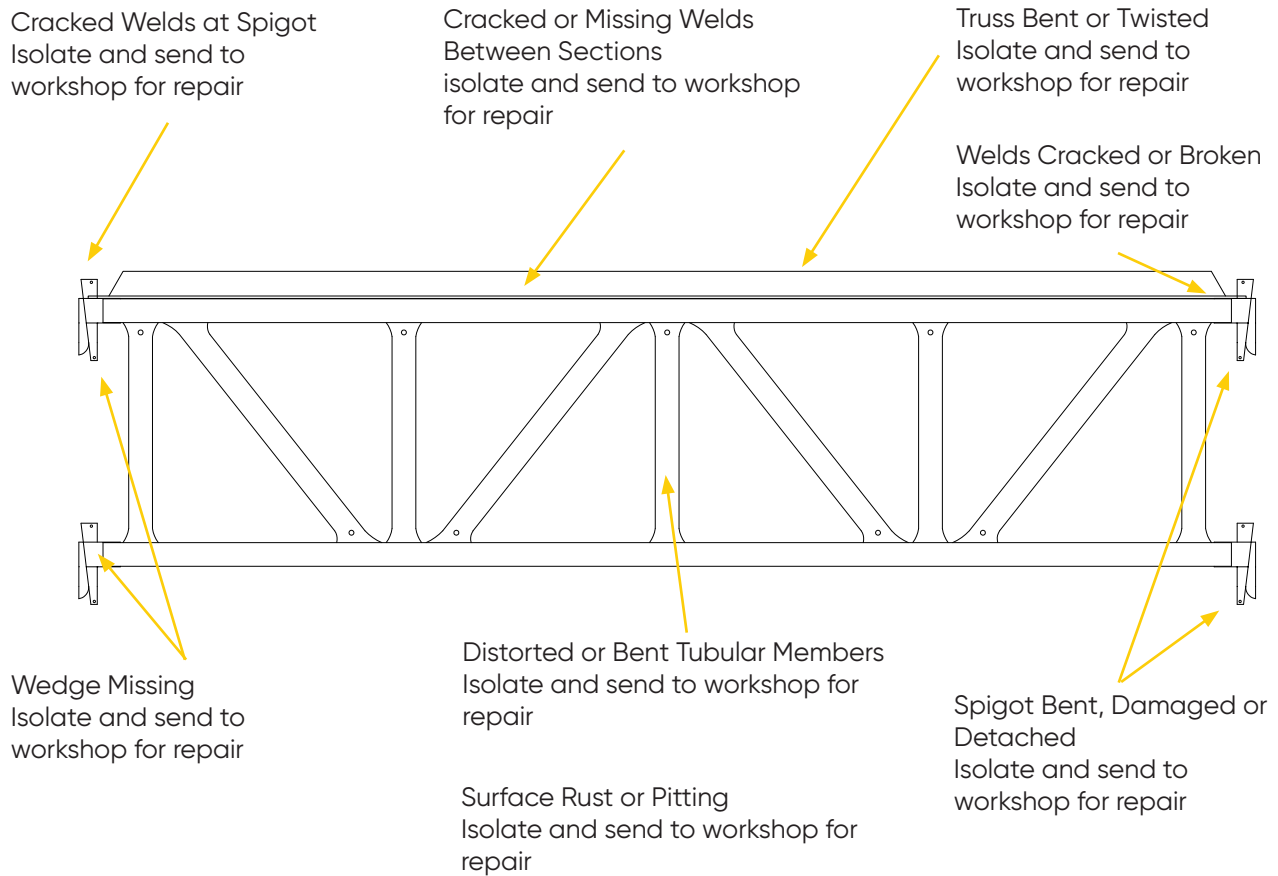
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Transom bent or twisted	Transom must be straight and free of twist	Straighten with flypress, if unable to straighten then the unit must be scrapped* (* See WI-GE-103 for reference)
Welds cracked or broken	All welds must be intact	Grind back and reweld* (* See WI-GE-100)
Spigot is bent or broken	Spigot must be straight with the outer edge at right angles to the line of the transom	Grind off damaged spigot & saddle assembly and weld on a new one. See WI-ASK-102 for guidelines
Wedge damaged or missing	An undamaged wedge must be in place in the spigot & saddle assembly at each end	Replace with new wedge ensuring a cello pin or dag of weld is placed at small end of wedge to make it captive
Concrete deposits on transom	Transom must be free of concrete deposits	Remove concrete deposits

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

Transom Truss

The Quickstage Transom Truss is a load bearing member and incorporates twin spigot & wedge assemblies at each end. The Truss is used in situations where a heavy duty loading is required. They must be straight and free of twist and the blade ends must not be damaged or deformed.



Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on tube, angle or at connections	Remove build up with wire brush and/or chipping hammer
Truss bent or twisted	Truss must be straight and free of twist	Straighten if possible otherwise scrap. See WI-GE-103 for reference
Wedge missing or damaged	Wedges must be intact	Replace with new wedge
Cracked or broken welds	Cracked or broken welds not permitted	Grind weld and replace welds as per Work Instruction
Distorted or bent tubular struts members	No more than 4mm depth	Straighten or replace section
Spigot end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new spigot if damaged or detached. Refer Work Instruction
Surface rust or pitting	Visual assessment.	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

7. Maintenance & Inspection

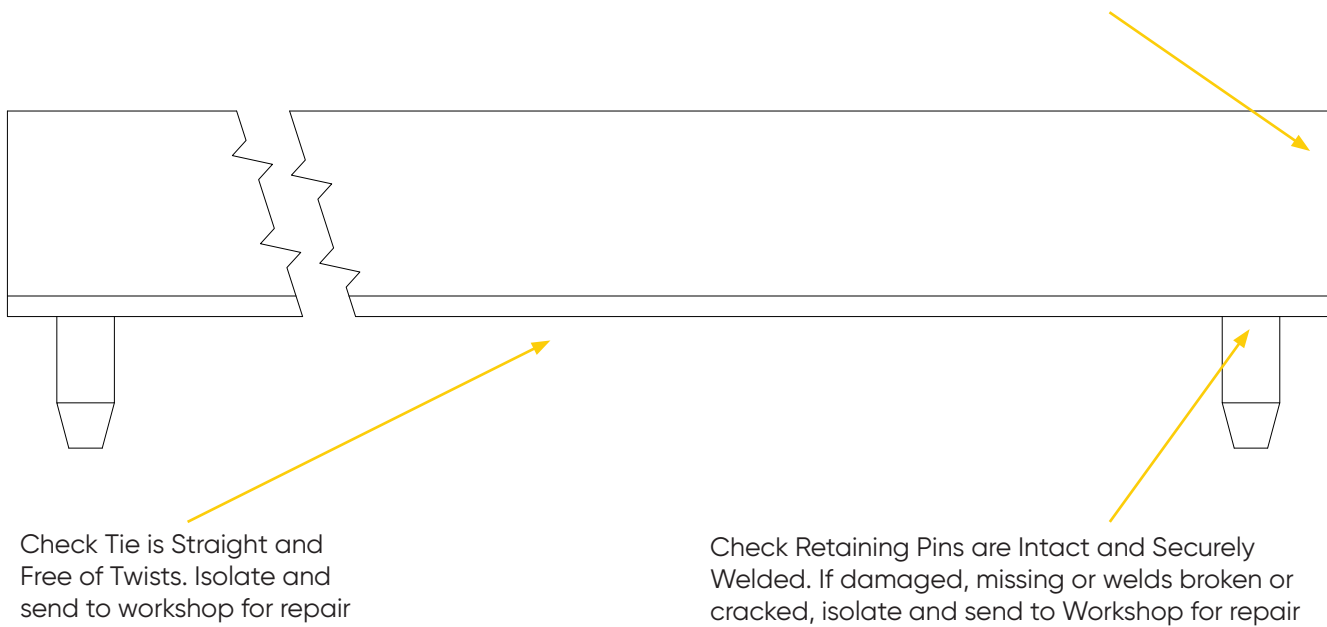
Tie Bar

The Quickstage Tie Bar is attached at the ends of the platform bracket to control their movement. The retaining pin fits into the hole in the end of the platform bracket.

Surface Rust or Pitting
For surface rust, repaint/
touch up. If excessively
pitted, isolate and send to
workshop for repair

Concrete Deposits on Tie Bar
Clean concrete deposits off Tie
Bar paying particular attention
to ensure retaining pins are
clean

Check the Cross Section of the
Retaining Pins Have not Been
Reduced by Rusting or Pitting
If pins are not in workable
condition, isolate and send to
workshop for replacement.



Check Tie is Straight and
Free of Twists. Isolate and
send to workshop for repair

Check Retaining Pins are Intact and Securely
Welded. If damaged, missing or welds broken or
cracked, isolate and send to Workshop for repair

Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	Tie Bar should be clear of concrete deposits	Remove build up with wire brush and/or chipping hammer
Cracked or broken welds on retaining pins	Cracked or broken welds not permitted	Straighten if possible otherwise scrap. See WI-GE-103 for reference
Distorted or bent angle	No more than 4mm depth	Replace with new wedge
Retaining pins missing or damaged	Retaining pins must be intact	Grind weld and replace welds as per Work Instruction
Surface rust or pitting	Visual assessment	For surface rust, repaint or touch up as applicable. Scrap component if excessively pitted
Retaining pin cross section reduced by rusting or pitting	Pin must retain its cross section	Replace with new pin

Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed

LOCATIONS

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