

TECHNICAL GUIDE SUPERCUPLOK

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 **SUPERCUPLOK & CUPLOK** 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
А	SEPT 2023	First Release
В	FEB 2024	Second Release



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#### **1. Technical Specifications**

#### System Description

**CUPLOK & SUPERCUPLOK** are modular scaffolding systems that allow for versatile speedy solutions for scaffold access ways and provide bases for formwork.

**CUPLOK & SUPERCUPLOK** consist of varied lengths of steel standards and multiple horizontal cross bars that allow for scaffold bays to be erected and replicated with consitency and safety in addition to providing multiple forms of reinforcement and vertical access through stairways.

**CUPLOK & SUPERCUPLOK** system work together and share many components interchangebly, **SUPERCUPLOK** provides a stronger set of products for appplications requiring heavier loads.

#### Purpose of the Document

The purpose of this document is to provide guidelines for design, safe handling, transport and installation of the **SUPERCUPLOK & CUPLOK** system.

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 Formwork and Scaffolding has dedicated engineering services available for project assistance. We can provide design support for clients to determine the best way to specify and document. 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 **SUPERCUPLOK** system

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

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 erection and application instructions contained in this manual are the recommended methods to be used for **SUPERCUPLOK** 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 system must be in accordance with Australian Standard AS 3610 Formwork for Concrete, 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 **SUPERCUPLOK** 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 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's commitment to continuous product development and improvement, the information contained in this manual may be changed without notice. Please confirm with Acrow Engineering for the 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.

#### 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
	Structural Design Actions – General Principles	AS/NZS 1170.0-2002
LOADING	Structural Design Actions – Permanent, Imposed And Other Actions	AS/NZS 1170.1-2002
	Formwork for Concrete	AS 3610-1995
FORMWORK	Formwork for Concrete Part 1- Specifications	AS 3610.1-2018
	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
SCAFFOLDING	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



# 2. GENERAL PRODUCT INFORMATION

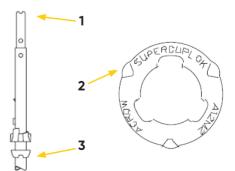


### Standards & Transoms

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Spigotted Standards		
5 5 5	There are five basic sizes of spigotted SUPERCUP used in conjunction with SUPERCUPLOK Open Er of the formwork support. Integral spigots 150mm Standard to make vertical connections with othe Standard incorporate 16mm dia. holes to enable Standards as and when required.	nded Standards to achie long, are provided at th er Standards. The spigot	eve the height le top of each s and base of each
	Standard 1.0m	SCS10	6.90
8	Standard 1.5m	SCS15	9.90
	Standard 2.0m	SCS20	13.00
8	Standard 2.5m	SCS25	16.00
	Standard 3.0m	SCS30	19.10
÷ 83 83 83 83 83 83 83 83 83 83 83 83 83	Open Ended Standards There are five basic sizes of SUPERCUPLOK Open Ended Standards. They are used at the top of the structure so that an Adjustable Base or Adjustable U-Head Assembly can be inserted to provide the final support to the soffit formwork. They are used in conjunction with the SUPERCUPLOK Spigotted Standards to build the structure to the correct height. The base of each Standard has a 16mm dia through hole to enable the use of locking pins to lock the structure together as and when required.		
	Open Ended Standards 0.8m	SCSOE08	5.20
8	Open Ended Standards 1.3m	SCSOE13	8.20
	Open Ended Standards 1.8m	SCSOE18	11.30
	Open Ended Standards 2.3m	SCSOE23	14.30
	Open Ended Standards 2.8m	SCSOE28	17.30

#### Features for identification of Standards:

- 1. Notch in top of Spigots.
- 2. Three ribs around each bottom cup.
- 3. Stamping of SUPERCUPLOK on each bottom cup.





#### Jacks & Braces

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Super Cuplok Solid Adjustable Base		
The SUPERCUPLOK Adjustable Base provides adjustment directly into the Standard and features a 48mm dia sleev enable bracing where necessary to be attached. The ster ensure the Adjustable Base stem has a minimum of 250m Fully opened the Adjustable Base extends 600mm from to the Adjustable Base extends 124mm from the end of Star			f the stem to traint feature to the Standard. dard. Fully closed stable Base is
	also used at the top of the structure to support t Detachable U-Head, depending on the applica		
	Adjustable Base Solid Form/ Scaff	ABSSC	10.00
	<b>Detachable U - Head Spigot</b> The Detachable U-Head Spigot features a spigot to locate into the top of a standard.		
	Detachable U Head Spigot	SCDUHS	4.50
	Full Thread Supercuplok Jack Provides the mounting point for the detachable U-Head to be secured with 3mm R-Clips through the pins. The full thread Supercuplok Jack provides 50mm to 300mm extension only. It does not have a location to attach a coupler for bracing.		
	Full Threaded Jack	SUCUP	7.80
	Detachable U - Head The SUPERCUPLOK Detachable U-Head attaches to an Adjustable Base to form an Adjustable U-Head Assembly. The Detachable U-Head has two 14mm dia pins which locate through the base plate of the Adjustable Base and the unit is held in place by the insertion of 3mm diameter R-Clips through the pins. The assembly is generally used at the top of the SUPERCUPLOK Support system to support formwork main bearers.		
	Adjustable U - Head Solid Form/ Scaff	SCDUH	4.00



#### Adjustable Braces

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
F	Adjustable Braces SUPERCUPLOK Adjustable Braces are used to provide node to node diagonal bracing for the support assembly. The brace comes in three sizes each covering a range of diagonal brace lengths for the varying grid and height dimensions. The brace is telescopic to facilitate a range of adjustment to achieve the required lengths. The two telescopic members of the brace are locked together by a 12mm dia pin with R-Clip. The end locking claw locks quickly over the Ledger with no need for further tightening. The use of a brace, which operates independently to the cups on the Standard, leaves the cup free to accept up to four horizontal components as required.		
	Extra Short Adjustable Brace	SCDBXS	8.70
	Short Adjustable Brace	SCDBAS	11.20
13	Long Adjustable Brace	SCDBAL	14.40

#### The charts below show the extension the braces should be set at to suit the various bay configurations.

#### SUPERCUPLOK Extra Short Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)
610	1000	1171
825	1000	1296
1046	1000	1447

#### SUPERCUPLOK Short Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)
825	1500	1712
1046	2000	2257
1270	1000	1616
1270	1500	1965
1270	2000	2369
1524	1000	1823
1524	1500	2138
1524	2000	2514

#### SUPERCUPLOK Long Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)
1829	1000	2048
1829	1500	2365
1829	2000	2710
2438	1000	2635
2438	1500	2862
2438	2000	3153



### Bracing Transoms & Cantilevers

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Bracing Bay Transoms SUPERCUPLOK Bracing Bay Transoms are used to p whilst allowing hooks and brackets to be attached the part.		
	Bracing Bay Transom 0.61m	SCBBT061	4.70
	Bracing Bay Transom 0.83m	SCBBT083	6.20
	Bracing Bay Transom 1.05m	SCBBT105	7.90
0	Bracing Bay Transom 1.27m	SCBBT13	9.50
	Bracing Bay Transom 1.52m	SCBBT15	11.40
	Bracing Bay Transom 1.83m	SCBBT18	13.60
	Bracing Bay Transom 2.44m	SCBBT24	22.40
	<b>Cantilever Frame</b> The Cantilever Frame is used to extend the d scaffold and incorporates spigot slots for har safe working platform around the scaffold.		
	Cantilever Frame	SCCF10	21.20



### Standards & Transoms

PRODUCT	DESCRIPTION PRODU		MASS (KG)	
ļ	1			
8	CUPLOK spigotted Standards are principally used also as a base structure for formwork support ap intervals. The captive mobile top cups are design welded bottom cups are made from high quality provided at the top of each Standard for making base of each Standard incorporate 16mm dia. ho Standards where necessary.	plications. They have cup ed to endure rough site h steel. Integral spigots, 150 vertical connections. The	joints at 500mm andling and ) mm long, are spigots and the	
	Standard 0.5m	CS05	3.90	
병	Standard 1.0m	CS10	6.90	
	Standard 1.5m	CS15	9.90	
8	Standard 2.0m	CS20	13.00	
	Standard 2.5m	CS25	16.00	
<b>3</b>	Standard 3.0m	CS30	19.10	
8	applications in conjunction with Spigotted Stand open ended design allows the insertion of an Adj provide the final support to the soffit formwork. The dia through hole to enable the use of locking pins required.	ustable Base or Adjustabl ne base of each Standard	e U-Head to d has a 16mm	
8	Open Ended Standards 0.8m	CSOE08	5.20	
	Open Ended Standards 1.3m	CSOE13	8.20	
8	Open Ended Standards 1.8m	CSOE18	11.30	
	Open Ended Standards 2.3m	CSOE23	14.30	
	Open Ended Standards 2.8m	CSOE28	17.30	
	Transoms CUPLOK Transoms are fabricated from twin struct a drop forged blade attached to each end. The 2 member welded below the flange section for add into a bottom cup and is locked in position by the leg of the angles supports the steel planks in a co to suit scaffolding and formwork applications.	2.44m Transom has an ad ded strength. The transon e top cup. The outward st aptive manner. Available i	ditional web n blade locates anding bottom n various lengths	
	Transom 0.31m	CT031	2.6	
	Transom 0.61m	CT061	5.0	
	Transom 0.83m	CT083	6.6	
	Transom 1.05m	CT105	7.9	
	Transom 1.27m	CT13	9.7	
	Transom 1.52m	CT15	11.5	
	Transom 1.83m	CT18	13.7	
	Transom 2.44m	CT24	22.4	



# Ledgers, Braces & Platform Brackets

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Ledgers		
	The CUPLOK Ledgers are manufactured fro ends which locate into bottom cups of the corresponding top cups. Ledgers are availe dimension for scaffolding or formwork.	Standards and are locke	d in place by the
	Ledger 0.22m	CL022	1.20
	Ledger 0.34m	CL034	1.70
	Ledger 0.61m	CL061	2.60
	Ledger 0.83m	CL083	3.40
	Ledger 1.05m	CL105	4.20
	Ledger 1.27m	CL13	5.00
	Ledger 1.52m	CL15	5.90
	Ledger 1.83m	CL18	7.00
	Ledger 2.44m	CL24	9.20
	Ledger 3.05m	CL30	11.40
	Their function is to provide transverse and lo brace is available in various lengths to suit	the combination of bay v	widths and heights.
4	Brace 1.62m	CB16	6.80
	Brace 1.71m	CB17	7.20
	Brace 1.83m	CB18	7.80
	Brace 1.97m	CB20	8.20
	Brace 2.14m	CB21	8.80
	Brace 2.37m	CB24	9.90
	Brace 2.51m	CB25	10.00
	Brace 2.71m	CB27	10.90
	Brace 2.86m	CB30	11.40
	Brace 3.16m	CB32	12.50
-	Brace 3.49m	CB35	13.70
	Brace 3.65m	CB37	13.90
	Platform Brackets CUPLOCK Platform Brackets enable 1, 2 or 3 the scaffold and the workface. The blade e the ends of the brackets are connected to	nd locates into the cup o	on the Standard and
	Platform Bracket 1 Plank	CHUB1	2.10
¥/	Platform Bracket 2 Plank	CHUB2	5.80
l l	Platform Bracket 2 Plank	CHUB3	7.8
-			7.0



#### Tie Bars & Transoms

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
9	Platform Brackets Spigotted	1	
	CUPLOCK Platform Brackets Spigotted enal between the scaffold and the workface in a handrail posts to be set up around the bay the Standard and the ends of the brackets	ddition to providing a mounti platform. The blade end loca	ng location for tes into the cup on
	Spigot Platform Bracket 1 Plank	CHUB1S	2.70
	Spigot Platform Bracket 2 Plank	CHUB2S	6.90
μη	Spigot Platform Bracket 3 Plank	CHUB3S	9.10
	<b>Tie Bars</b> CUPLOK Tie bars are used to interlock the e means of preventing the Planks from sliding of the tie locate into slots in the Platform Bro	off the end of the bracket. Th ackets.	e studs at the end
	Tie Bar 0.61m	CTB06	1.80
	Tie Bar 0.83m	CTB08	2.40
	Tie Bar 1.05m	CTB105	3.00
	Tie Bar 1.27m	CTB13	3.70
4	Tie Bar 1.52m	CTB15	4.50
	Tie Bar 1.83m	CTB18	5.30
	Tie Bar 2.44m	CTB24	7.00
	Tie Bar 3.05m	CTB30	10.80
	Transom Beams CUPLOK Transom Beams are designed for s capacity and large grid patterns. Transom Beam 1.83m Transom Beam 2.44m	pecial duty load applications CTBEAM18 CTBEAM24	a. Allows high deck 21.20 27.00
			27.00
	<b>Transom Truss</b> CUPLOK Transom Truss is designed for high protective structures. Connects at 4 points,		
	Transom Truss 1.83m	CTT18	40.10
	Transom Truss 2.44m	CTT24	52.40
- BE	Transom Truss 3.05m	CTT30	55.70
	Return Transom The Return Transom is used at the end of a s running at right angles to it. The U-shaped r ledger of the adjacent scaffold, closing off t	return section of the transom	hooks over the
LOC	Return Transom 1.3m	CTRET13	10.30



### Jacks, Fan Guards & Adapters

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)	
	Ladder Access Transom	1		
	CUPLOK Ladder Access Transom is used t to pass through it. The L.A. Transom is atta bay.			
	Ladder Access Transom 1.05m	CTLA105	10.60	
	Ladder Access Transom 1.27m	CTLA13	12.60	
	Ladder Access Transom 1.83m	CTLA18	15.20	
	Ladder Access Transom 2.44m	CTLA24	18.00	
	Adjustable Base Jack	,		
	The CUPLOK Adjustable Base is a generic systems and some AF&S formwork system which has a nut restraint to ensure the ste into the Standard.	s. It has a solid stem of 3	6mm nominal diameter	
	Adjustable Base (Solid) Form/Scaff	ABSFS	7.10	
	is used with scaffold 6mm nominal diameter n engagement of 150mm. 11.10			
A REAL PROPERTY AND A REAL	Fan Guard Bearer The CUPLOK Fan Guard Bearer is used to provide an angled external platform for protection against falling debris. The lower end connects to a cup on the Standard whils the top end is supported by the Fan Guard Tie. Consult AF&S Engineering Department for load capacity details.			
	Fan Guard Bearer	CFGB	10.70	
Fan Guard Tie         The CUPLOK Fan Guard Tie is used to support the end of the Fan Guard Bearer. The connects to the cup of a Standard and the twin plate end connects over the hook of Fan Guard Bearer.				
	Fan Guard Tie	CFGT	5.90	
OP Le De	Deck Adapter         The Deck Adaptor is attached to the top Standard in birdcage scaffolds to enable a fl ush top deck to be assembled. The top cup is screwed down to capture Ledgers and Transoms			
	Deck Adapter	CDA	1.70	



### Wall Ties & Ladder Beams

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Wall Tie Brackets	!	
	CUPLOK Wall Tie Brackets provide and anch face of a building typically at right angles. T 18mm dia hole to enable a 16mm dia fastene The swivel pin attachment enables the half	he angle portion of the b er or anchor to be used to	oracket contains an
	Wall Tie Bracket	WTB	2.00
	Double Wall Tie Bracket	DWTB	4.00
	Ladder Beams, and Uni-Beam		
	Ladder beams, and Uni-Beam available in a spanning entrance ways, large voids, or sup on the building/structure where it is not pos way from ground level.	porting scaffolds cantilev	vered off higher levels
	1.8m Ladder Beam	SLLB18	22.60
	2.0m Ladder Beam	SLLB20	24.20
	2.4m Ladder Beam	SLLB24	27.40
	3.0m Ladder Beam	SLLB30	34.60
E .	3.3m Ladder Beam	SLLB33	38.20
	3.6m Ladder Beam	SLLB36	42.30
	4.2m Ladder Beam	SLLB42	49.20
	4.5m Ladder Beam	SLLB45	53.00
	4.8m Ladder Beam	SLLB48	57.60
	5.4m Ladder Beam	SLLB54	64.20
	6.0m Ladder Beam	SLLB60	70.20
	6.3m Ladder Beam	SLLB63	74.80
0	Scaffold Tube Ties		
	0.3m Scaffold Tube Tie	STT03	2.77
	0.6m Scaffold Tube Tie	STT06	3.83
	0.9m Scaffold Tube Tie	STT09	4.90
	1.2m Scaffold Tube Tie	STT12	5.97
	1.5m Scaffold Tube Tie	STT15	7.04
	1.8m Scaffold Tube Tie	STT18	8.11
	2.1m Scaffold Tube Tie	STT21	9.17
	2.4m Scaffold Tube Tie	STT24	10.24



#### Stairs & Steel Planks

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Stair Stringer		
	The CUPLOK Stair Stringer is a steel frame used in po form a full width access stair 1.27m wide. Planks are re clips. Stair Stringers are designed to be used in 2.44m between Transoms.	etained in place by built-	in retaining
	Stair Stringer 2m rise x 2.4m go	CSS	31.50
	Construction Stairs (1.5m Rise)		
	The Construction Stair enables a stairway to be asse Each end of the Stair is supported by a Transom. The enabling two units to sit on a Transom, thus a continu- height of the scaffold.	width of the unit is half t	he bay width
	1.5m Flight x 2.4 x 1.2m Wide Bay Construction Stair	CST15	26.00
×.⁄	Handrail to suit 1.5m Flight Construction Stairs	CPSTH	15.00
	A 1.5m and 2.0m vertical height (rise) modular alumin landings. The modular stair enables a stairway to be CUPLOK bay providing access to working platform. E Transom. The width of the unit is half the bay width e thus a continuous stairway can be built up the full he	assembled within a 2.44 ach end of the Stair is su nabling two units to sit o	x 1.27m pported by a
	2.0m Rise x 2.4 x 0.6m Wide Bay Construction Stair	MAS20B	6.00
	1.5m Rise x 2.4 x 0.6m Wide bay Construction Stair	MAS15B	8.00
	1.0m Rise x 2.4 x 0.6m Wide Bay Construction Stair	MAS10B	10.00
	Handrail to suit 2.0m Rise Construction Stair	M20HRB	22.00
	Handrail to suit 1.5m Rise Construction Stair	M15HRB	17.40
	Handrail to suit 1.0m Rise Construction Stair	M10HRB	14.00
	Steel Planks Planks to suit CUPLOK are formed from galvanised st provide a non-skid surface. Perforations are taken clu to provide even coverage over the whole assembled	ose to the ends and edg	
	Steel Planks 0.61m Bay	SPC061	4.80
	Steel Planks 0.83m Bay	SPC083	5.00
	Steel Planks 1.05m Bay	SPC105	7.20
	Steel Planks 1.27m Bay	SPC13	8.50
	Steel Planks 1.50m Bay	SPC15	9.20
	Steel Planks 1.83m Bay	SPC18	11.50
	Steel Planks 2.44m Bay	SPC24	15.50
	Steel Planks 3.05m Bay	SPC30	19.50



### Stairs, Brackets & Standards

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)	
	Stretcher Stairs		ļ	
	A 600mm wide by 2.0m vertical height (flight) alumini The 1.20m Stretcher stair is formed by bolting togeth The modular stair enables a stairway to be assemble providing access to working platform.	er two of the 600mm s		
	2.0m Rise x 0.6m wide Stretcher Stair Left Side	CST2024L	18.00	
	2.0m Rise x 0.6m wide Stretcher Stair Right Side	CST2024R	18.00	
	1.0m Rise x 0.6m wide Stretcher Stair Left	CST1024L	14.00	
	1.0m Rise x 0.6m wide Stretcher Stair Right	CST1024R	14.00	
	2.0m Rise x 0.6m wide Stretcher Stair Universal	7864	14.00	
	1.0m Rise x 1.2m wide Stretcher Stair	CST1013	13.00	
	The Step Bracket enables a step down of 0.25m which is mid height between adjacent platforms which have a 0.5m height difference. Useful for Birdcage scaffold and stair landings.			
No/	Step Bracket 1 - Plank Per Step	CSB	3.60	
	2 Step Bracket 1 - Plank Per Step	CSB2	6.30	
≪	<b>Stairway Trimming Standard</b> The Step Bracket enables a step down of 0.25m whic platforms which have a 0.5m height difference. Useful landings.	5	,	
9				
	CUPLOK Scaffold Castor The 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.			



### Mesh Guards, Corner Platforms & Toe Boards

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)	
2	Mesh Guards Mesh Panels are hung from the guardrail to p along the length of the platform. The unit ind midrail is not used when mesh guards are in	corporates a built in kick p	late and typically a	
	Mesh Guard 1.27m	MP12	10.80	
	Mesh Guard 1.83m	MP18	14.60	
	Mesh Guard 2.44m	MP24	18.40	
	Mesh Guard 3.05m	MP30	22.20	
the state of the s	Corner Platforms are designed to fill the ga intersect on an internal corner of the building and are connected to adjacent Platform Bro	g. The Platforms attach to acket by Tie Bars.	the corner Standard	
	Corner Platform 1 x 1	CCB1	5.00	
	Corner Platform 2 x 2	CCB2	11.50	
	Corner Platform 2 x 1	CCB2X1	9.50	
	Corner Platform 1 x 2	CCB1X2	9.50	
	Corner Platform 2 x 3	CCPD2X3	12.50	
	Corner Platform 3 x 2	CCPD3X2	12.50	
	Corner Platform 3 x 3	CCB3X3	15.00	
	Toe Board Clamp Toe boards are secured using the generic To Standard with its protruding prong holding t CUPLOK Toe Board Calmp			
	CUPLOK Return Toeboards	1		
	CUPLOK Return Toeboards are typically use parallel to the Transom. They are held captiv at one end and U-bracket arrangement at	ve between Standards by		
	Return Toeboard 0.61m	CRTB061	4.20	
	Return Toeboard 0.83m	CRTB083	5.20	
Щ	Return Toeboard 1.05m	CRTB105	6.30	
₩.	Return Toeboard 1.27m	CRTB13	7.30	
	Return Toeboard 1.83m	CRTB18	9.90	
	Return Toeboard 2.44m	CRTB24	15.00	



#### Plank infill

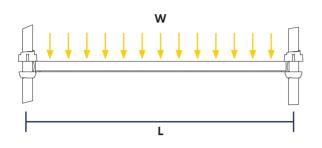
PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	Steel Plank Infills		
	Steel Deck Infill Panels are pressed from hig perforated surface to provide a slip resistar under the toeboard or at the outer edge of between planks in the working deck.	nt tread surface. Infill panels o	are typically placed
000	1.27m Steel Plank Infill	SPI13	4.20
00	1.83m Steel Plank Infill	SPI18	6.30
$\checkmark$	12.4m Steel Plank Infill	SPI24	8.30
	3.05m Steel Plank Infill	SPI30	14.30
	Steel Deck Infills are used with the Cuplok s platform that arises when the toeboard is re independent scaffold.		
	1.27m Steel Plank Infill	SDI 755013	6.90
	1.83m Steel Plank Infill	SDI 755018	10.10
	2.4m Steel Plank Infill	SDI 755024	12.40
	3.05m Steel Plank Infill	SDI 755030	16.80
			folding applications
	and plywood boards.	SCIP06-02	
	Infill Plate Type 2 - 0.6M	SCIP06-02 SCIP08-01	2.30
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M		2.30 2.99
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M	SCIP08-01 SCIP08-02	2.30 2.99 2.83
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M	SCIP08-01	2.30 2.99
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M	SCIP08-01 SCIP08-02 SCIP10-01	2.30 2.99 2.83 3.61
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02	2.30 2.99 2.83 3.61 3.48
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M Infill Plate Type 2 - 1.2M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01	2.30 2.99 2.83 3.61 3.48 4.38
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP12-02	2.30 2.99 2.83 3.61 3.48 4.38 4.01
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M Infill Plate Type 2 - 1.5M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP12-02           SCIP15-01	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP12-02           SCIP15-01           SCIP15-02	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41 5.23
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M Infill Plate Type 2 - 1.5M Infill Plate Type 1 - 1.8M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP12-02           SCIP15-01           SCIP15-02           SCIP18-01	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41 5.23 6.45
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 1 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M Infill Plate Type 2 - 1.5M Infill Plate Type 2 - 1.8M Infill Plate Type 2 - 1.8M Infill Plate Type 2 - 1.8M Infill Plate Type 1 - 2.4M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP12-02           SCIP15-01           SCIP15-02           SCIP18-01           SCIP18-02           SCIP18-01           SCIP12-01	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41 5.23 6.45 6.18 8.52
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.0M Infill Plate Type 2 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M Infill Plate Type 2 - 1.5M Infill Plate Type 1 - 1.8M Infill Plate Type 2 - 1.8M	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP15-01           SCIP15-02           SCIP18-01           SCIP24-01           SCIP24-02	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41 5.23 6.45 6.18 8.52 8.25
	Infill Plate Type 2 - 0.6M Infill Plate Type 1 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 2 - 0.8M Infill Plate Type 1 - 1.0M Infill Plate Type 2 - 1.2M Infill Plate Type 2 - 1.2M Infill Plate Type 1 - 1.5M Infill Plate Type 2 - 1.5M Infill Plate Type 2 - 1.5M Infill Plate Type 2 - 1.8M Infill Plate Type 2 - 1.8M Infill Plate Type 2 - 1.8M Infill Plate Type 2 - 2.4M Infill Plate Type 2 - 2.4M Steel Lap Plank Steel lap planks are placed on top of existin 12 x 100mm long Dome Head Rivet thru one	SCIP08-01           SCIP08-02           SCIP10-01           SCIP10-02           SCIP12-01           SCIP15-01           SCIP15-02           SCIP18-01           SCIP24-01           SCIP24-02	2.30 2.99 2.83 3.61 3.48 4.38 4.01 5.41 5.23 6.45 6.18 8.52 8.25

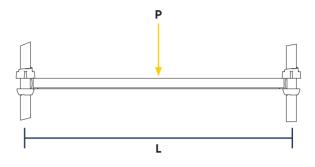


# 3. WORKING LOAD LIMITS (WLL)



#### Transoms





0.61m - 1.83m Transom



2.44m Transom



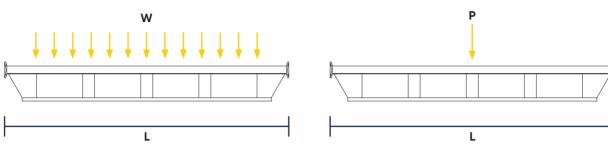
Code	L (M)	W = Universally Distributed Load (kN)	P (kN)
CT061	0.61	17.5	8.7
CT083	0.83	12.9	6.5
CT105	1.05	10.2	5.1
CT13	1.27	8.4	4.2
CT15	1.52	7.0	3.5
CT18	1.83	5.3	2.9
CT24	2.44	6.4	3.7

#### 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
- The Transom Working Load Limits shown in the table above are governed by the Operational requirements of AS/NZ1576.1
- Section 3. Typically, this limitation applies to working platform widths equal to transom size 'L' shown.
- 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.
- Working Load Limits (P & W) may be limited by other components or assemblies.

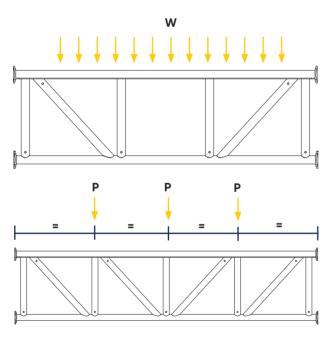


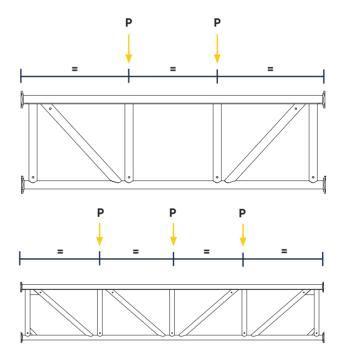
#### Transom Beams



Code	L (mm)	W = Universally Distributed Load (kN)	P (kN)
CTBEAM18	1829	23.7	11
CTBEAM24	2438	22.1	11

Transom Truss







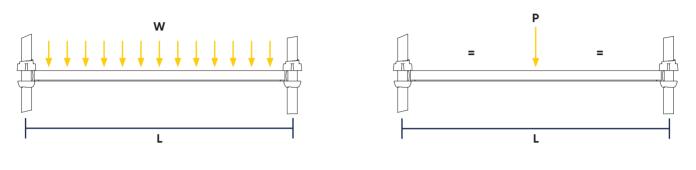
Code	L (M)	W = Universally Distributed Load (kN)	P (kN)
CTT18	1829	46.0	20.0
CTT24	2438	45.0	15.0
CTT30	3048	57.0 (check)	20.0

Notes:

• Transom Beams and Transom Trusses impose additional loads on the scaffold structure requiring the overall design of the scaffold to be checked and verified.



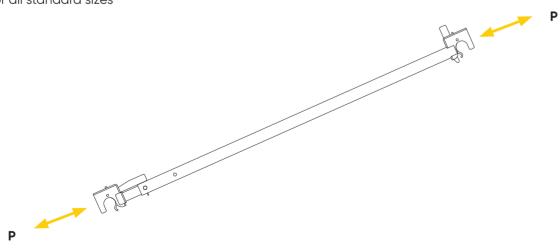
Ledgers



Code	L (M)	Universally Distributed Load (kN)	P (kN)
CL13	1.27	6.0	3.0
CL18	1.83	3.5	2.1
CL24	2.44	2.0	1.2
CL30	3.05	1.0	0.7

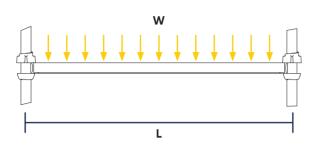
Adjustable Brace

P = <sup>+/-</sup> 10.0kN For all standard sizes

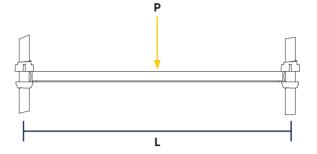


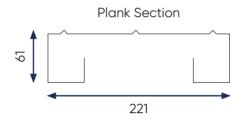


**Steel Planks** 



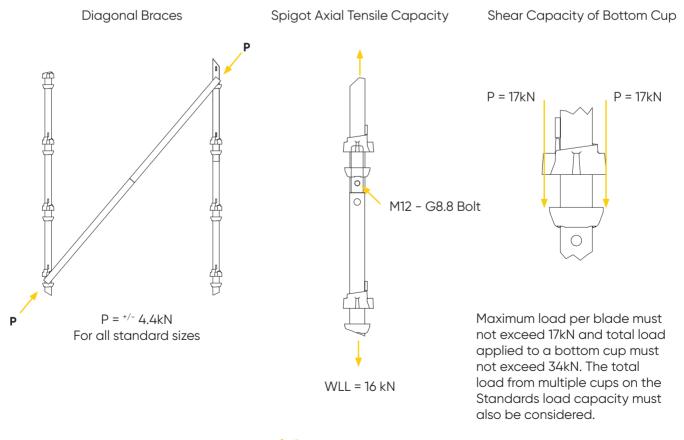
Code	L (m)	W (kN) Gap = 20mm	P (kN)
SPC13	1.24	29.6	4.1
SPC18	1.83	14.1	2.8
SPC24	2.44	7.9	2.1
SPC30	3.05	5.6	2.0





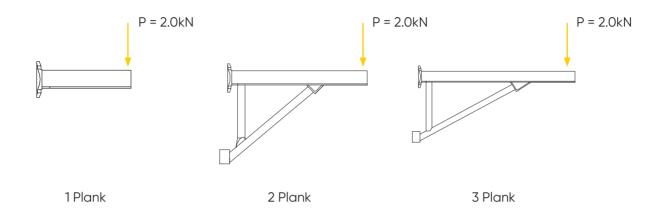
Notes:

- All Planks meet point load requirement specified for Heavy Duty Loading to AS1576.1
- The sum of individual loads applied to planks must not exceed the Duty Live Load for the platform per bay.

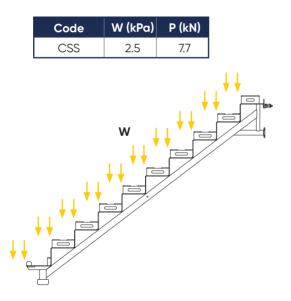




### **Platform Brackets**

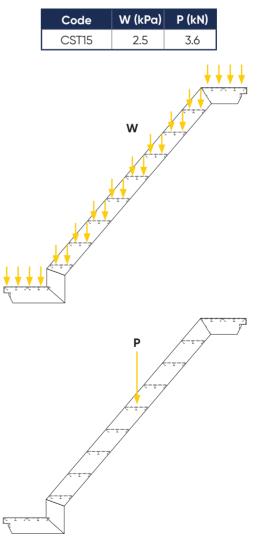


Stair Stringer (Used in Pairs)



Ρ

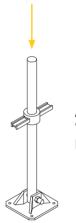










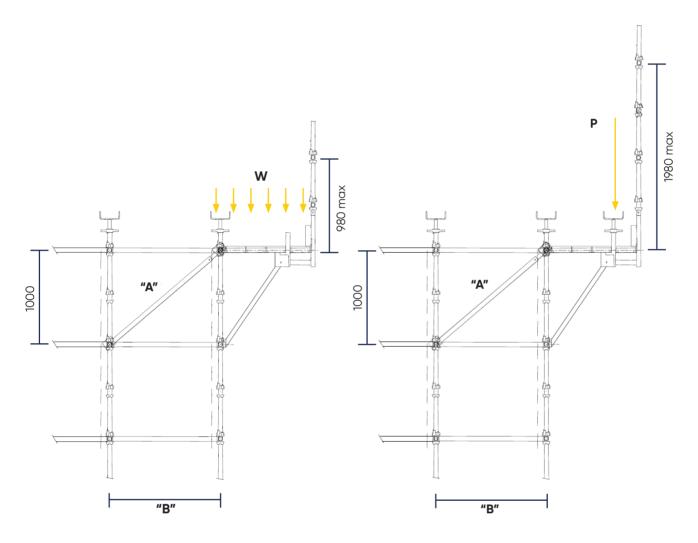


**ATBSS - Swivel Base Jack** WLL = 30kN at 450mm Extension



#### **Cantilever Frames**

These diagrams show the working load limits for the Cantilever Frames and must be read in conjunction with the data tables on the following pages.



B = Bay breadth as shown L = Bay length Brace "A" = Brace used to support Cantilever Frame as shown

Notes:

- 1. W = Uniformly distributed load (exclusive of self weight of Cantilever Frame, Steel Planks & Guardrails)
- 2. P = Point load (exclusive of self weight of Cantilever Frame, Steel Planks, Jack, Brace & Guardrails)
- 3. Values for W & P are tabulated on sheets 3 & 4  $\,$
- 4. The distributed & concentrated loads shall not occur concurrently
- 5. Limit state conversion factor = 1.5
- 6. Max capacities may be limited by other components or assembly as a whole. See relevant technical data.
- 7. For other load cases refer to AFS Head Office Engineering
- 8. Cantilever Frame is for access only and not suitable to support concrete loads



#### **Cantilever Frames Continued**

These tables show the load limits for SUPERCUPLOK Cantilever Frames and are to be read in conjunction with the Cantilever Frames load diagrams on the previous page.

	Bay Size (mm)		w	Р
Diagonal Brace (A)	В	L	kN	kN
		825	8.4	5.1
	825	1046	8.1	4.9
		1270	7.8	4.7
		1524	7.5	4.4
		1829	6.8	3.9
		825	10.1	6.2
		1046	9.7	6.0
	1046	1270	9.5	5.8
		1524	9.1	5.5
		1829	8.4	5.0
		825	11.2	7.0
SUPERCUPLOK Standard	1270	1046	10.9	6.8
Brace or Tube & Fittings with Check Couplers with		1270	10.6	6.6
10kN working load limit		1524	10.3	6.4
, , , , , , , , , , , , , , , , , , ,		1829	9.6	5.8
		825	12.2	7.7
	1520	1046	11.8	7.4
		1270	11.6	7.2
		1524	11.2	7.0
		1829	10.6	6.5
		825	13.0	8.2
		1046	12.6	8.0
	1829	1270	12.4	7.8
		1524	12.0	7.5
		1829	11.4	7.0



#### **Cantilever Frames Continued**

These tables show the load limits for SUPERCUPLOK Cantilever Frames and are to be read in conjunction with the Cantilever Frames load diagrams on the previous pages.

	Bay Size (mm)		w	Р
Diagonal Brace (A)	В	L	kN	kN
	825	825	4.0	2.0
		1046	3.6	1.8
		1270	3.3	1.6
		1524	3.0	1.4
		1829	2.3	0.8
		825	5.0	2.7
		1046	4.6	2.5
	1046	1270	4.4	2.3
		1524	4.0	2.0
		1829	3.3	1.5
		825	5.7	3.2
		1046	5.4	3.0
Tube & Fittings with 6.0 kN min working load limit	1270	1270	5.1	2.8
		1524	4.8	2.6
		1829	4.1	2.0
		825	6.3	3.6
	1520	1046	6.0	3.4
		1270	5.7	3.2
		1524	5.3	3.0
		1829	4.7	2.4
		825	6.8	3.9
	1829	1046	6.5	3.7
		1270	6.2	3.5
		1524	5.8	3.3
		1829	5.2	2.8



#### SUPERCUPLOK - Bracing Method Examples

#### Example of Side Elevation with Soffit Formwork Restrained Externally by Walls and Columns

- Soffit formwork is restrained externally in both directions (eg by walls, columns\*).
- Lifts are braced and braces are terminated at every lift.
- Jacks are not braced. (Only where braces are not required to transfer external transverse forces to foundation/footing as determined by design).
- Permanent structure (Project Engineer must verify suitability of structure.)



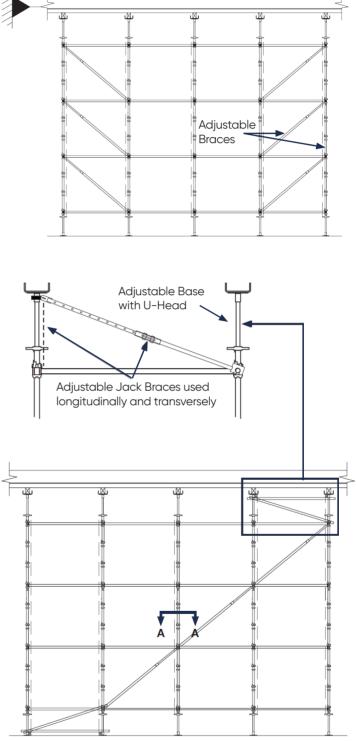
- Soffit formwork is not restrained externally
- Top deck is restrained with internal bracing.
- Bracing is continued from support to top Ledger to Adjustable U-Head.
- Continuous bracing is the preferred method.

Ledger (Typical)

• Bottom Adjustable Bases are restrained.

Adjustable Brace (Typical)

> Max 100mm (Typical)



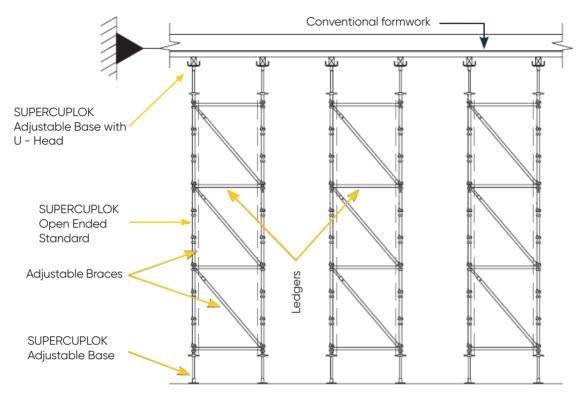
**Note:** Base plates may be required to be anchored to resist the horizontal and/or uplift components of the bracing force.

Section A-A

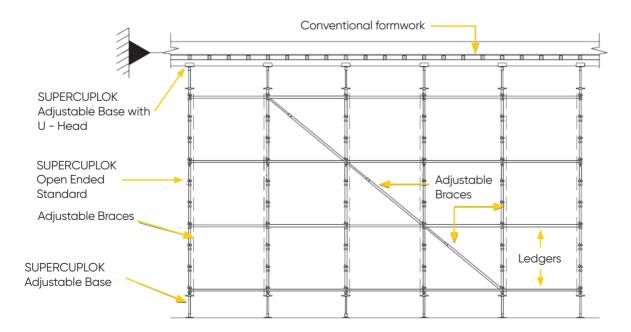


#### SUPERCUPLOK - Bracing Method Examples

#### Example of Front Elevation (Row or Tower Configuration)

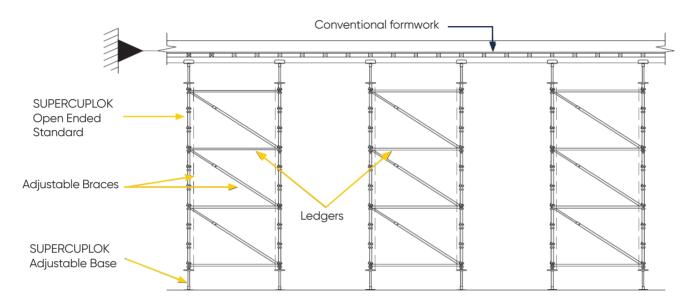


#### Example of Front Elevation (Row Configuration)





#### Example of Front Elevation (Tower Configuration)





#### SUPERCUPLOK Formwork Applications

Working Load Limits (WLL) given hereafter may be used in multi-bay systems when the requirements as set out in the General Guidance Notes and the Bracing Guidance Notes on the following page are met.

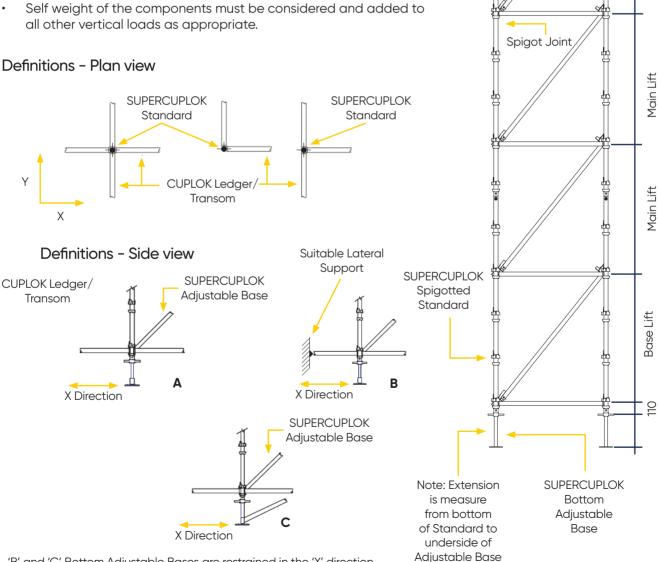
Working Load Limits as shown on the following pages are for two cases:

Case 1: Bottom Adjustable Bases and top Adjustable U-Head Assemblies are restrained in both directions.

Case 2: Bottom Adjustable Bases are not restrained but top Adjustable U-Head Assemblies are restrained as Case 1.

- Both cases cover internal and external Standards, each case has separate tables for 1.0m, 1.5m and 2.0m lifts. Suitable bracing has to be designed for the system, some guidelines can be found in the Guidance Notes on the following page.
- The eccentricity 'e' as referred to on following tables and graphs is the eccentricity of the applied load or the reaction as appropriate.
- To determine the WLL per Standard/lea, the least value of the appropriate tables shall be used for each case.
- Self weight of the components must be considered and added to all other vertical loads as appropriate.

### Definitions - Plan view



Note: Extension is

measure from top of

Standard to underside

of U - Head

SUPERCUPLOK

Open Ended Standard

SUPERCUPLOK

Top Adjustable

U -Head

Assembly

06

Top Lift

Top Lift

'B' and 'C' Bottom Adjustable Bases are restrained in the 'X' direction



#### **Guideline Notes**

#### General

- 1. The Standards, Adjustable Bases and Adjustable U-Head Assemblies must be checked to ensure that only SUPERCUPLOK components are being used.
- 2. Footings and/or foundation shall be satisfactory to support the imposed loads and prevent differential settlement.
- 3. All Standards shall be erected plumb.
- 4. After squaring up the initial Standards on the first bay, plan bracing is helpful to hold them during erection.
- 5. Each bay must have Ledgers/Transoms connected at the cup positions nearest the Adjustable Bases or Adjustable U-Head Assemblies ie: at top and bottom of each leg (and at intermediate positions at design lift heights).
- 6. The most recommended type of falsework is built by having continuous lines of Ledgers in both directions.
- 7. When very long runs of falsework are to be constructed, consideration shall be given to dividing the structure into smaller sections to avoid the build up of adverse tolerances.
- 8. No more than one spigot joint per Standard is allowed between vertical lifts of Ledgers/Transoms.
- 9. Spigot Joints shall be avoided in Base Lifts unless Adjustable Bases are braced.
- 10. Joints in Standards should be staggered if possible.

#### Bracing

- Bracing shall satisfy two conditions: (a) Provide nodal restraint. (b) Transfer transverse forces to supports. AS3610-1995 requires that each restraining element be designed to transfer a transverse load equal to the sum of 0.025 times the axial force in the compression member at the location of the restraint, and an additional load equal to half that value for each additional compression member being restrained, up to a maximum of seven members. This load shall be assumed to act in addition to other loads.
- 2. All nodal points which are considered in defining lift heights shall always be restrained if not refer to H.O.Eng for guidance. Tables for CASE 1 are applicable where all top and bottom Adjustable Bases are also braced/restrained. When top deck is restrained and braces are required to provide nodal restraints only, and top Adjustable Bases are braced but bottom Adjustable Bases are unbraced, tables for CASE 2 shall be used. When top deck is restrained and braces are required to provide nodal restraints only, but both top and bottom Adjustable Bases are not braced, tables for CASE 2 may still be used by using figures for bottom Adjustable Bases for top Adjustable Bases as well with their applicable jack extension. See also notes 4 and 8.
- 3. The correct amount of bracing shall be calculated, however a minimum amount must always be used. This requires one complete bracing system from top to bottom on each row of Standards, once in every 6 bays, in each direction.
- 4. Bracing can be provided externally (ie using the permanent structure to act as a brace, in this case it shall be stated in the project documentation with the magnitude of the force), or internally by SUPERCUPLOK bracing system.
- 5. Bracing should be installed immediately after each lift has been erected and fixed to the Ledgers as close as possible to the node points (not more than 100mm from the node point).
- 6. Transverse loads must act at node points on the Standards where Ledgers/Transoms are fitted (no secondary bending moments are permitted).



#### **Guideline Notes Continued**

- 7. If any brace is not continued to the support and terminated within the structure, the vertical compression component of the bracing force must be added to all other vertical compression forces and the total shall not exceed the published WLL. The horizontal component of the force must also be transferred to a suitable support (ie via butting/tying, to a suitable structure or other suitable bracing system as required).
- 8. When formwork deck is not restrained (eg. no permanent structure like walls or columns to provide lateral restraint) particular care shall be taken in the design to restrain the formwork deck and top Adjustable U-Head Assemblies.
- 9. Individual towers or narrow falsework systems shall be fully braced and the stability of the system be investigated in the design. The slenderness ratio of the system as a whole shall not be greater than that of the individual compression members.



# SUPERCUPLOK 2.44m x 2.44m Bay

#### CASE 1

Top Adjustable U - Head:	Restrained, e = 0, 8, 15, 25 and 55mm
Bottom Adjustable Base:	Restrained, $e = 0$ , 8 and 15mm

Working Load Limit - WLL (kN) per Standard/ Leg

#### Lift = 1.0m Internal Standard

	Bottom	Adjustak	ole Base		
		Top Adj	iustable l	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	75.9	70.4	66.2	50.6	27.3
200	75.4	70.0	64.9	47.9	26.2
300	75.0	69.6	60.2	44.4	25.3
400	74.7	69.5	54.6	41.2	24.0
500	74.3	62.5	48.9	37.7	22.8
600	73.9	54.9	43.8	34.5	21.4

#### Lift = 1.0m External Standard

	Bottom	Adjustat	ole Base		
		Top Adj	justable L	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	72.7	66.4	58.9	47.8	27.3
200	72.3	66.2	58.1	47.3	26.2
300	71.8	65.7	57.5	44.4	25.3
400	71.5	65.3	54.6	41.2	24.0
500	71.0	62.5	48.9	37.7	22.8
600	70.7	54.9	43.8	34.5	21.4

#### Lift = 1.5m Internal Standard

	Bottom	Adjustak	ole Base		
		Top Adj	iustable l	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	51.4	47.7	44.8	39.5	27.3
200	51.1	47.6	44.6	39.2	26.2
300	50.9	47.3	44.4	39.1	25.3
400	50.5	47.1	44.1	38.7	24.0
500	50.4	46.9	43.7	37.7	22.8
600	50.1	46.7	43.4	34.5	21.4

#### Lift = 2.0m Internal Standard

	Bottom	Adjustak	ole Base		
		Top Adj	iustable l	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	32.8	32.1	31.5	30.7	26.9
200	32.8	32.0	31.5	30.7	26.2
300	32.8	32.0	31.4	30.6	25.3
400	32.7	32.0	31.4	30.6	24.0
500	32.6	31.9	31.3	30.5	22.8
600	32.6	31.9	31.3	30.5	21.4

#### Lift = 1.5m External Standard

	Bottom	Adjustat	ole Base		
		Top Adj	ustable l	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	47.1	43.0	39.4	34.0	23.9
200	46.8	42.8	39.3	33.8	23.8
300	46.5	42.5	38.8	33.5	23.8
400	46.2	42.3	38.5	33.3	23.7
500	45.9	42.1	38.3	33.0	22.8
600	45.7	41.9	38.0	32.9	21.4

#### Lift = 2.0m External Standard

	Bottom	Adjustat	ole Base		
		Top Adj	iustable l	J - Head	
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	29.3	28.5	27.8	26.9	21.4
200	29.3	28.4	27.8	26.9	21.3
300	29.2	28.4	27.7	26.8	21.3
400	29.2	28.3	27.7	26.8	21.2
500	29.1	28.3	27.6	26.7	21.1
600	29.1	28.3	27.6	26.7	21.1



# SUPERCUPLOK 2.44m x 2.44m Bay

#### CASE 2

Top Adjustable U - Head:	Restrained, e = 0, 8, 15, 25 and 55mm
Bottom Adjustable Base:	Unrestrained, e = 0, 8 and 15mm

Working Load Limit - WLL (kN) per Standard/ Leg

#### Lift = 1.0m Internal Standard

Top Adjustable U - Head					
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	75.9	70.4	66.2	50.6	27.3
200	75.4	70.0	64.9	47.9	26.2
300	75.0	69.6	60.2	44.4	25.3
400	74.7	69.5	54.6	41.2	24.0
500	74.3	62.5	48.9	37.7	22.8
600	73.9	54.9	43.8	34.5	21.4

Bottom Adjustable Base					
Extension (mm)	e = Omm	e = 8mm	e = 15mm		
100	75.9	70.4	66.2		
200	75.4	70.0	64.9		
300	75.0	69.6	60.2		
400	55.7	55.7	54.6		
500	43.8	43.8	43.8		
600	36.1	36.1	36.1		

#### Lift = 1.5m Internal Standard

Top Adjustable U - Head					
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	51.4	47.7	44.8	39.5	27.3
200	51.1	47.6	44.6	39.2	26.2
300	50.9	47.3	44.4	39.1	25.3
400	50.5	47.1	44.1	38.7	24.0
500	50.4	46.9	43.7	37.7	22.8
600	50.1	46.7	43.4	34.5	21.4

Bottom Adjustable Base					
Extension (mm)	e = Omm	e = 8mm	e = 15mm		
100	51.4	47.7	44.8		
200	51.1	47.6	44.6		
300	50.9	47.3	44.4		
400	50.5	47.1	44.1		
500	43.8	43.8	43.7		
600	36.1	36.1	36.1		

#### Lift = 2.0m Internal Standard

Top Adjustable U - Head					
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	32.8	32.1	31.5	30.7	26.9
200	32.8	32.0	31.5	30.7	26.2
300	32.8	32.0	31.4	30.6	25.3
400	32.7	32.0	31.4	30.6	24.0
500	32.6	31.9	31.3	30.5	22.8
600	32.6	31.9	31.3	30.5	21.4

Bott	Bottom Adjustable Base				
Extension (mm)	e = Omm	e = 8mm	e = 15mm		
100	32.8	32.1	31.5		
200	32.8	32.0	31.5		
300	32.8	32.0	31.4		
400	32.7	32.0	31.4		
500	32.6	31.9	31.3		
600	32.6	31.9	31.3		



# SUPERCUPLOK 2.44m x 2.44m Bay

#### **CASE 2** Continued

Top Adjustable U - Head:	Restrained, e = 0, 8, 15, 25 and 55mm
Bottom Adjustable Base:	Unrestrained, e = 0, 8 and 15mm

Working Load Limit - WLL (kN) per Standard/ Leg

#### Lift = 1.0m External Standard

	Top Adjustable U - Head					
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm	
100	72.7	66.4	58.9	47.8	27.3	
200	72.3	66.2	58.1	47.3	26.2	
300	71.8	65.7	57.5	44.4	25.3	
400	71.5	65.3	54.6	41.2	24.0	
500	71.0	62.5	48.9	37.7	22.8	
600	70.7	54.9	43.8	34.5	21.4	

Bottom Adjustable Base				
Extension (mm)	e = Omm	e = 8mm	e = 15mm	
100	72.7	66.4	58.9	
200	72.3	66.2	58.1	
300	62.5	62.5	57.5	
400	45.5	45.5	45.5	
500	32.9	32.9	32.9	
600	26.3	26.3	26.3	

#### Lift = 1.5m External Standard

Top Adjustable U - Head					
Extension (mm)	e = Omm	e = 8mm	e = 15mm	e = 25mm	e = 55mm
100	47.1	43.0	39.4	34.0	23.9
200	46.8	42.8	39.3	33.8	23.8
300	46.5	42.5	38.8	33.5	23.8
400	46.2	42.3	38.5	33.3	23.7
500	45.9	42.1	38.3	33.0	22.8
600	45.7	41.9	38.0	32.9	21.4

Bottom Adjustable Base					
Extension (mm)					
100	47.1	43.0	39.4		
200	46.8	42.8	39.3		
300	46.5	42.5	38.8		
400	45.5	42.3	38.5		
500	32.9	32.9	32.9		
600	26.3	26.3	26.3		

#### Lift = 2.0m External Standard

Top Adjustable U - Head						
Extension (mm)	e= e= e= e= e= Omm 8mm 15mm 25mm 55mm					
100	29.3	28.5	27.8	26.9	21.4	
200	29.3	28.4	27.8	26.9	21.3	
300	29.2	28.4	27.7	26.8	21.3	
400	29.2	28.3	27.7	26.8	21.2	
500	29.1	28.3	27.6	26.7	21.1	
600	29.1	28.3	27.6	26.7	21.1	

Bottom Adjustable Base				
Extension (mm)	e = Omm	e = 8mm	e = 15mm	
100	29.3	28.5	27.8	
200	29.3	28.4	27.8	
300	29.2	28.4	27.7	
400	29.2	28.3	27.7	
500	29.1	28.3	27.6	
600	26.3	26.3	26.3	



#### SUPERCUPLOK Selective Bracing Leg Loads

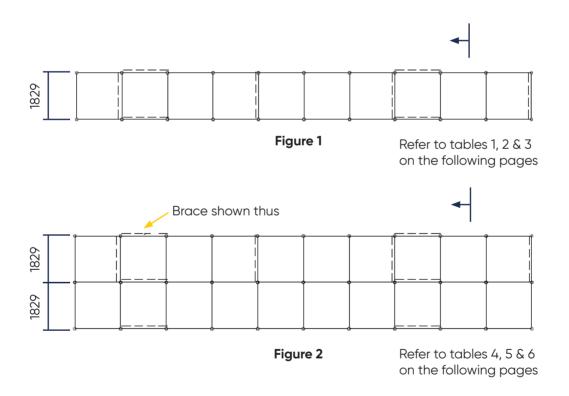
# The following tables state the Working Load Limits for SuperCuplok system when used and braced as shown in figures 1 and 2.

#### The tables are applicable only where:

- · Soffit is restrained (eg soffit is confined within existing walls and columns), &
- Bottom jacks are in full contact with firm and stiff foundation (eg concrete slab), &
- Top jacks are in full contact with bearers, & there is no horizontal load transferred to the falsework (where there is horizontal force on the falsework, the bracing system has to be designed to transfer the load).

The falsework system must be erected plumb with Ledgers/Transoms at top & bottom most cups and at lift intervals as per following tables, all used cups must be firmly locked. Spigot joints shall not be used in bottom and single lifts.

Self weight of all the components and continuity effects of the bearers and joists should be also considered when calculating the leg loads.

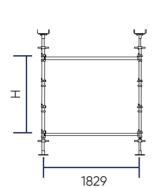


#### Notes:

- 1. WLL = Working Load Limit per leg
- 2. e = Load eccentricity in mm
- 3. LSCF (Limit State Conversion Factor) = 1.5
- 4. For single row three lift high falsework where overall height exceeds 5m a scaffold tie must be used near second horizontal member (Ledger/Transom) from top at every 3rd leg.



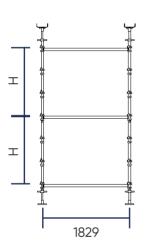
# SUPERCUPLOK Selective Bracing Leg Loads

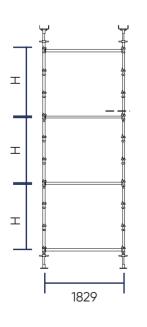


Lift Height (H)m	Jack Extension Maximum (mm)	Total Height (m)	WLL e < 25 kN	WLL e < 50 kN
	300	1.9	45.3	30.7
1.0	450	2.2	38.7	27.3
	600	2.5	32.7	24.7
	300	2.4	36.7	28.7
2.0	450	2.7	33.3	25.3
	600	3.0	30.0	22.7
	300	2.9	31.3	26.7
3.0	450	3.2	26.7	23.3
	600	3.5	25.7	21.3

Table 2

Table 1





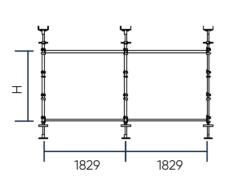
Lift Height (H)m	Jack Extension Maximum (mm)	Total Height (m)	WLL e < 25 kN	WLL e < 50 kN
	300	2.9	36.7	28.0
1.0	450	3.2	32.0	25.3
	600	3.5	26.7	22.0
	300	3.9	26.7	23.3
2.0	450	4.2	25.0	21.3
	600	4.5	23.3	20.0
	300	4.9	20.7	18.0
3.0	450	5.2	19.3	17.3
	600	5.5	18.0	16.7

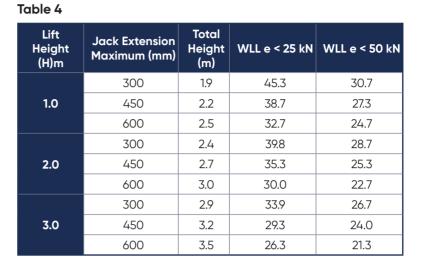
#### Table 3

Lift Height (H)m	Jack Extension Maximum (mm)	Total Height (m)	WLL e < 25 kN	WLL e < 50 kN
	300	3.9	31.8	25.3
1.0	450	4.2	28.7	24.0
	600	4.5	23.3	21.3
	300	5.4	22.2	19.3
2.0	450	5.7	20.8	18.7
	600	6.0	19.3	18.0
	300	6.9	15.5	15.3
3.0	450	7.2	15.0	14.8
	600	7.9	14.5	14.3

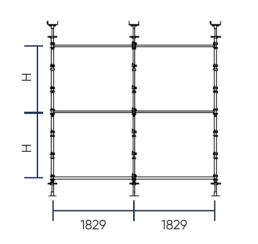


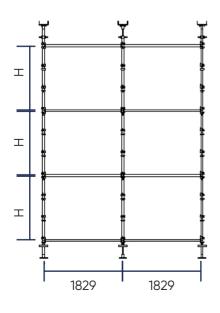
# SUPERCUPLOK Selective Bracing





# Table 5





Lift Height (H)m	Jack Extension Maximum (mm)	Total Height (m)	20.0WLL e < 25 kN	WLL e < 50 kN
	300	2.9	37.3	28.0
1.0	450	3.2	32.7	25.3
	600	3.5	28.7	22.0
	300	3.9	29.3	24.0
2.0	450	4.2	26.7	22.0
	600	4.5	24.7	20.0
	300	4.9	22.5	20.0
3.0	450	5.2	21.3	18.7
	600	5.5	20.0	17.3

#### Table 6

Lift Height (H)m	Jack Extension Maximum (mm)	Total Height (m)	WLL e < 25 kN	WLL e < 50 kN
	300	3.9	33.3	26.7
1.0	450	4.2	30.7	24.0
	600	4.5	26.7	21.3
	300	5.4	24.6	22.0
2.0	450	5.7	23.3	20.7
	600	6.0	22.0	18.7
	300	6.9	17.3	16.7
3.0	450	7.2	16.7	16.0
	600	7.9	16.3	15.3



**4. SYSTEM DETAILS** 

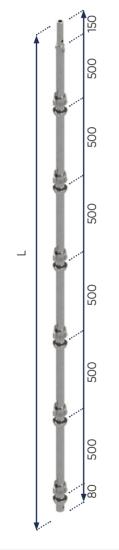


#### **Spigotted Standards**

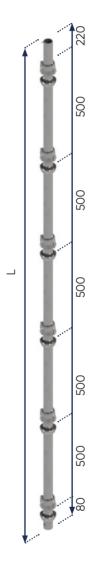
Used to access scaffolding applications and as a base for formwork. Cup joints at 50mm intervals designed to hold standards and transoms captive. Comes in multiple sizes to fit variety of jobs.

#### **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.



Spigot Standard	L (mm)	
CS05	500	
CS10	1000	
CS15	1500	
CS20	2000	
CS25	2500	
CS30	3000	

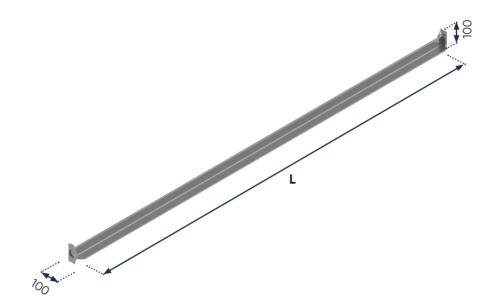


Open – End Standard	L (mm)
CSOE08	800
CSOE13	1300
CSOE18	1800
CSOE23	2300
CSOE28	2800



#### Transoms

Transoms are fabricated from twin structural angles fixed back to back with a drop forged blade attached to each end. The 2.44m 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)
CT031	310
CT061	610
CT083	825
CT10	1048
CT13	1270
CT15	1524
CT18	1828
CT24	2438

#### 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 corresponding top cups. Ledgers are available in various lengths to provide the desired grid dimension for scaffolding or formwork.

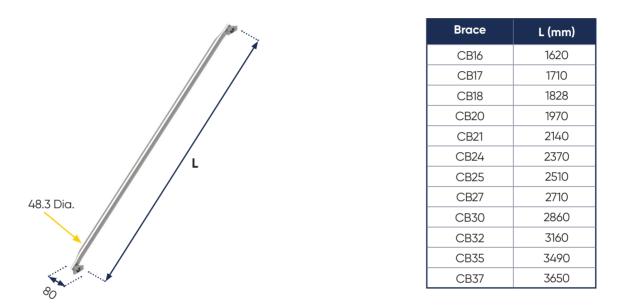


Ledger	L (mm)
CL022	220
CL034	340
CL061	610
CL083	825
CL105	1048
CL13	1270
CL15	1524
CL18	1828
CL24	2438
CL30	3048



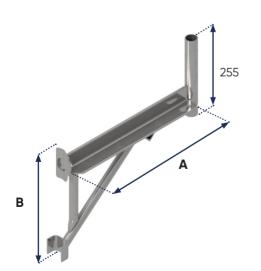
#### **Diagonal Braces**

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.



#### **Platform Brackets**

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

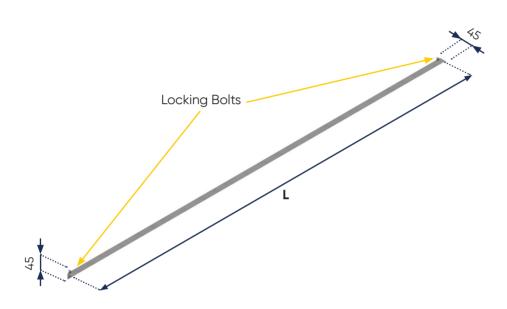


Platform Brackets	A (mm)	B (mm)
1 Plank	230	-
2 Plank	460	350
3 Plank	690	350



#### Tie Bars

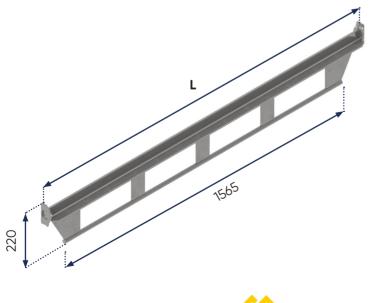
Tie bars are used to interlock the ends of Platform Brackets and to provide a means of preventing the Planks from sliding off the end of the bracket. The studs at the end of the tie locate into slots in the Platform Brackets.



Tie Bar	L (mm)
CTB06	610
CTB08	825
CTB105	1048
CTB13	1270
CTB15	1524
CTB18	1828
CTB24	2438
CTB30	3048

#### **Transom Beams**

Transom Beams are designed for special duty load applications. Allows high deck capacity and large grid patterns.

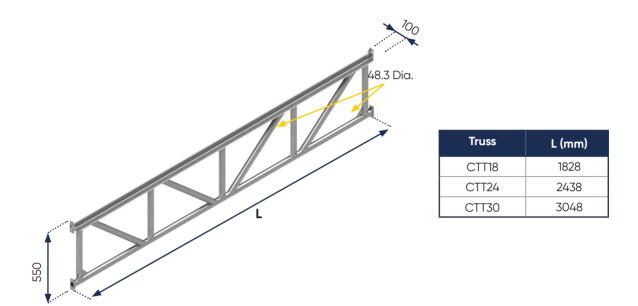


Beam	L (mm)
CTBEAM18	1828
CTBEAM24	2438



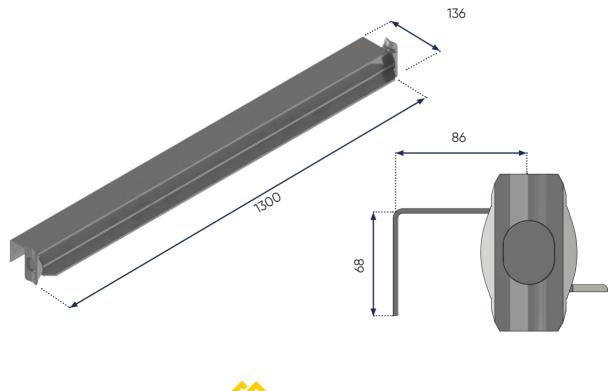
#### **Transom Truss**

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



#### **Return Transom**

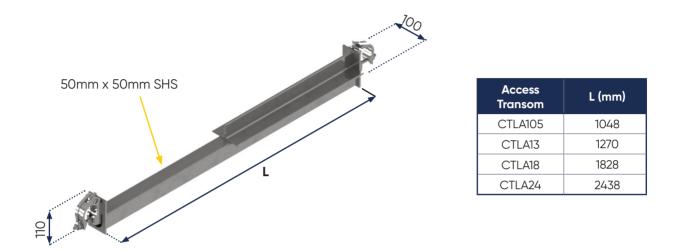
The Return Transom is used at the end of a scaffold run where it meets another scaffold running at right angles to it. The U-shaped return section of the transom hooks over the ledger of the adjacent scaffold, closing off the gap between the two scaffolds.





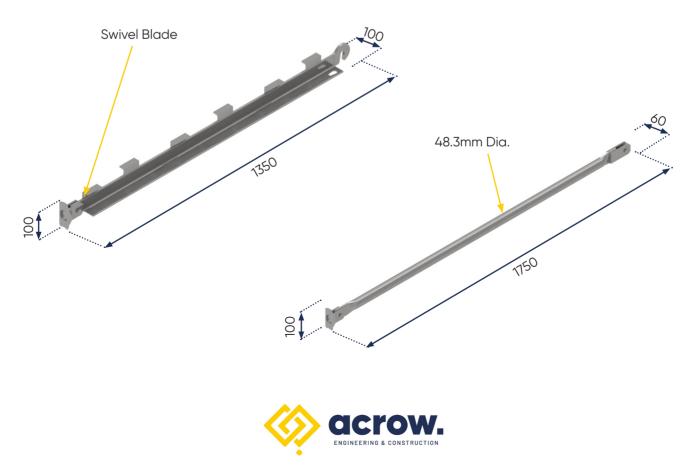
#### Ladder Access Transom

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.



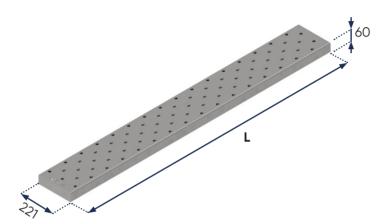
#### Fan Guard Bearer and Guard Tie

Fan Guard Bearer is used to provide an angled external platform for protection against falling debris. The lower end connects to a cup on the Standard whilst the top end is supported by the Fan Guard Tie. Consult AF&S Engineering Department for load capacity details.



#### **Steel Planks**

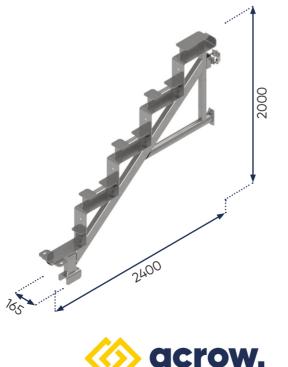
Planks to suit CUPLOK are formed from galvanised steel sheet with a perforated tread to provide a non-skid surface. Perforations are taken close to the ends and edges of the Plank to provide even coverage over the whole assembled deck.



Plank	L (mm)
SPC083	825
SPC105	1048
SPC13	1270
SPC18	1828
SPC24	2438
SPC30	3048

#### Stair Stringer

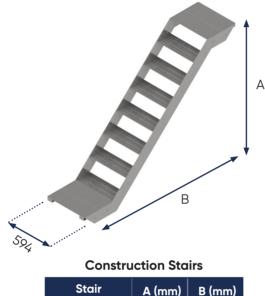
The Stair Stringer is a steel frame used in pairs in conjunction with Steel Planks to form a full width access stair 1.27m wide. Planks are retained in place by built-in retaining clips. Stair Stringers are designed to be used in 2.44m bays to provide a rise of 2m vertical between lifts.



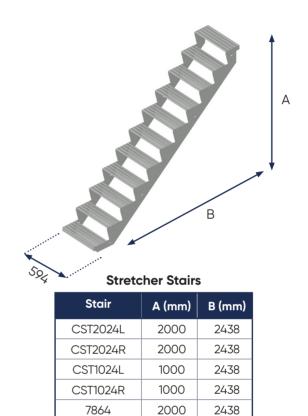
CONSTRUCTION

#### Stairs

The Aluminium 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.



Stair	A (mm)	B (mm)
MAS10B	1000	2438
MAS15B, CST15	1500	2438
MAS20B	2000	2438



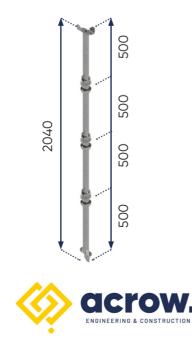
1250

1185

CST1013

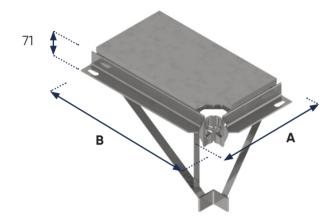
#### **Trimming Standard**

The Stairway Trimming Standard is used in conjunction with Aluminium 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.



#### **Corner Platforms**

Corner Platforms are designed to fill the gap left where two runs of Platform Brackets intersect on an internal corner of the building. The Platforms attach to the corner Standard and are connected to adjacent Platform Bracket by Tie Bars.

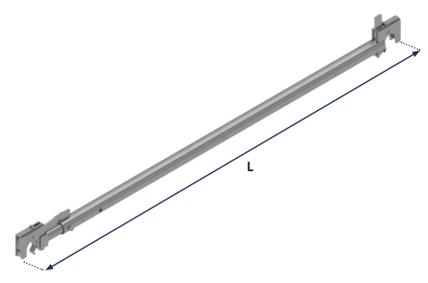


Board	A (mm)	B (mm)
CCB1	250	250
CCB2	500	500
CCP2X1	500	250
CCP1X2	250	500
CCP2X3	500	750
CCP3X2	750	500



#### Adjustable Braces

SUPERCUPLOK Adjustable Braces are used to provide node to node diagonal bracing for the support assembly. The brace comes in three sizes each covering a range of diagonal brace lengths for the varying grid and height dimensions.



#### SUPERCUPLOK Extra Short Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)
610	1000	1171
825	1000	1296
1046	1000	1447

#### SUPERCUPLOK Short Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)	
825	1500	1712	
1046	2000	2257	
1270	1000	1616	
1270	1500	1965	
1270	2000	2369	
1524	1000	1823	
1524	1500	2138	
1524	2000	2514	

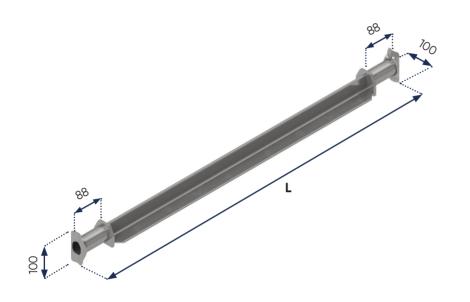
#### SUPERCUPLOK Long Adjustable Brace

BAY LENGTH (mm)	HEIGHT (mm)	EXTENSION 'L' (mm)	
1829	1000	2048	
1829	1500	2365	
1829	2000	2710	
2438	1000	2635	
2438	1500	2862	
2438	2000	3153	



### Bracing Bay Transoms

Bracing Bay Transoms allow steel boards and platforms to be erected whilst allowing for items such as Adjustable Braces to be clipped to either side of the transom.



Brace	A (mm)		
SCBBT061	610		
SCBBT083	825		
SCBBT105	1048		
SCBBT13	1270		
SCBBT15	1524		
SCBBT18	1828		
SCBBT24	2438		



# 5. ASSEMBLY DETAILS



#### CUPLOK & SUPERCUPLOK Assembly Recommendations

The following scaffold Assembly Recommendations provide guidance on how 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 Formwork & Scaffolding ranch. 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.

#### Notes:

- 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 Formwork & Scaffolding representative.
- 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 Formwork & Scaffolding 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 Formwork & Scaffolding unless attachment points for such systems are approved by Acrow Formwork & Scaffolding Engineers.

#### **Compliance to Statutory Regulations**

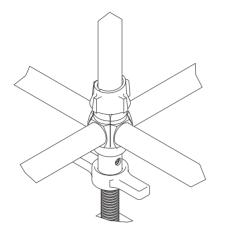
Scaffolding must be erected in compliance with the requirements of Statutory Regulations and Australian Standards for Scaffolding (AS/NZS1576 and AS/NZS4576 'Guidelines for Scaffolding') as applicable.

The following are some additional points, which should also be considered:

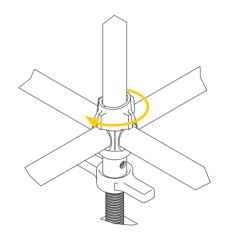
- Erection of scaffolding over 4 metres in height. Personnel who erect, alter or dismantle scaffolding having a working deck at greater than 4m in height must hold a current National, State or Territory Certificate in Scaffolding to the appropriate class.
- Risk Management. When planning the erection of any scaffolding, a site specific Risk Assessment process
  must be carried out. Generic Hazard Identification/Risk Assessments/Control method profiles and Safe
  Work Methods Statements for the erection, dismantling and the usage of scaffolding equipment are
  available from Acrow Formwork & Scaffolding Branches. Site specific Hazard Identification and Risk
  assessments and Recommended Work Methods Statements would need to be generated for specific
  projects.
- Manual Handling. As part of the risk management processes we draw your attention to 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.



#### CUPLOK Assembly Recommendations Continued



Blade ends of horizontal members (Ledgers or Transoms) are located in the bottom cup. The top cup is then slid down over the top of the blades and is rotated until it engages the locking bar.



The top cup is tightened by striking its lugs with a scaffold hammer. The inclined spiral top edge of the top cup acts against a fixed locking bar on the Standard to wedge the top cup tightly around the blades providing a positive and firm connection.

# SUPERCUPLOK Adjustable Brace

#### SUPERCUPLOK has additional assembly steps but follows similar erection steps as CUPLOK

Diagonal braces clamp securely over Ledgers using spring loaded locking claws. These braces must be located within 100mm of the cup.



#### CUPLOK Assembly Recommendations Continued

Before commencing the erection of any CUPLOK 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 erection. The scaffold must be erected on adequate soleplates and the foundation on which the soleplates are placed must have sufficient bearing capacity to support the imposed loads transferred from the scaffold. As a general rule, each soleplate should be long enough so that it supports at least two Standards. Bricks or masonry blocks are not suitable and must not be used.

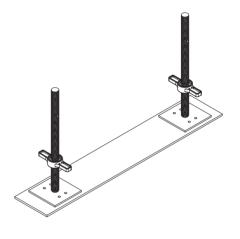
Check whether or not platform brackets are required adjacent to the workface. If so, you will need to make allowance for the width of the platform brackets and increase the distance between the workface and the closest adjacent Standard to the workface.

Commence erection - where possible - on the highest point of the ground and work down the incline - this will make levelling easier as the scaffolding progresses. Set the nut on the first Adjustable Bases to close to the bottom of the stem to allow maximum adjustment as the scaffold progresses to lower levels.

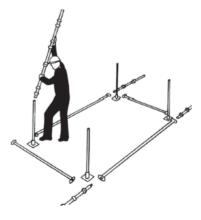
If the scaffold is founded on sloping ground, then the ground should be benched to provide a level surface for soleplates. If the scaffold is founded on sloping solid foundation, eg concrete, then adjustable bases should be wedged.

Lay out the Adjustable Bases, Ledgers and Transoms for the first bay in their approximate positions. Then insert an Adjustable Base into each of the first pair of Standards and position Adjustable Bases onto the soleplates.





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#### CUPLOK Assembly Recommendations Continued

Connect the Standards with a Transom in the lowest cup joint, by inserting the blades into the bottom cups. Approximately level the transom by raising or lowering the Adjustable Base. Always start the scaffold with a 3 metre Standard on the outside face and a 2 metre Standard on the inside.

#### Do not tighten top cups - yet.

With one erector still holding the first pair of Standards, the second erector inserts an Adjustable Base into the third Standard and connects it to the first pair with a Ledger. The top cups can then be dropped temporarily into the locking position. The structure is now self supporting and the fourth Standard can now be connected by a further Ledger and Transom and the bay levelled.

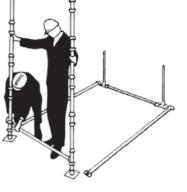
The bay can now be levelled. Starting from the highest point use a spirit level to adjust the bases so that Ledgers and Transoms are level. Accuracy in levelling at this stage makes for a good start.

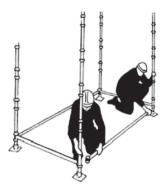
#### Do not tighten top cups - yet.

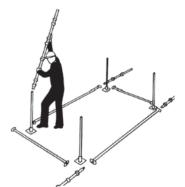
Connect the Standards with a Transom in the lowest cup joint, by inserting the blades into the bottom cups. Approximately level the transom by raising or lowering the Adjustable Base. Always start the scaffold with a 3 metre Standard on the outside face and a 2 metre Standard on the inside.

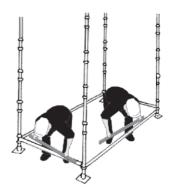
Do not tighten top cups - yet.









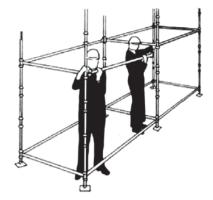


#### CUPLOK Assembly Recommendations Continued

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.

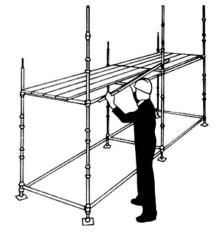
If the Standards are moved an appreciable distance in the squaring up process, then recheck the levels. Fix a Diagonal Brace to the outer face and end face of the first bay. Always start by fixing the top end of brace to the upper cup first: this makes for safer handling. The first bay of CUPLOK is completed by locating the upper Ledgers and Transoms.

#### Top cups can now be tightened in this first bay. No need for heavy hammering.



Now it is a simple matter to extend the scaffold structure by connecting Ledgers, Transoms and Standards to the existing bay checking the alignment of the Standards as the scaffold progresses.

The Working Platform can now be constructed using Scaffold Planks as decking and toeboards. Planks are supported by the flanges of Transoms and Toeboards are attached to Standards using Toeboard clamps.

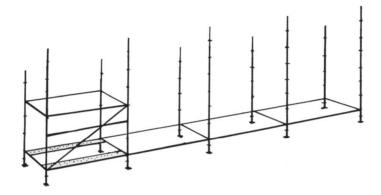




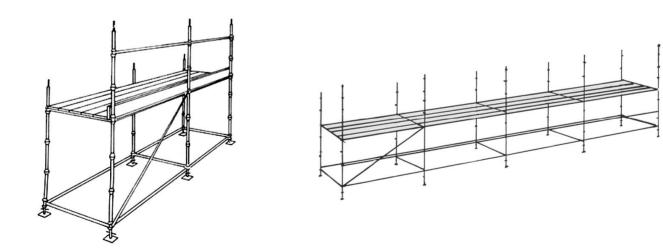
#### CUPLOK Assembly Recommendations Continued

Now complete the base layout by adding bays horizontally, levelling and positioning each bay as you go before tightening cups. Continue the 2m and 3m Standard combination for the full run.

**Note:** Erection and dismantling of scaffold bays should be carried out from a fully decked platform or as required by Code of Practice published by local Statutory authorities. Refer to local statutory regulations for further requirements.



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 mid-rail on the outer face. For working platforms, toeboards on the outer face are also required. A Mesh Panel which incorporates a toeboard 1m high can be used in lieu of a midrail and toeboard.

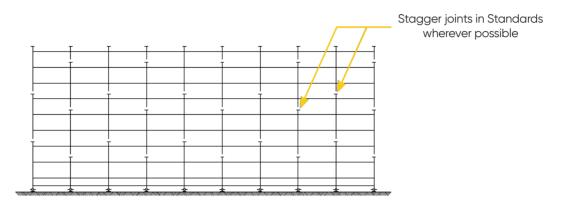




#### CUPLOK Assembly Recommendations Continued

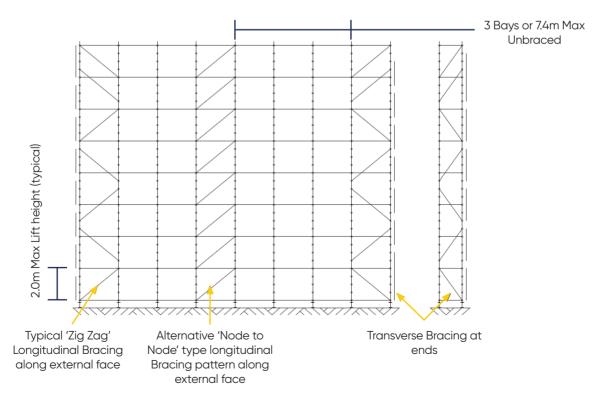
Additional lifts can now be constructed by adding further Standards into spigots of the Standards of the lower lift and staggering joints wherever possible. Transoms and Ledgers are placed at platform levels.

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



#### Face Bracing

All scaffolds require a certain amount of diagonal face bracing to eliminate any tendency for the scaffold to distort or sway. 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 of the cup on the Standard. 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.





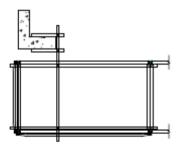
#### CUPLOK Assembly Recommendations Continued

Diagonal Braces provide stability to the scaffold and are used to brace adjacent Standards longitudinally or transversely. 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.

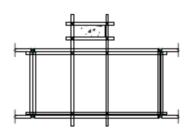
End Diagonal Braces are used between end pair of Standards in the transverse direction. They extend from the first cup near ground level to the top working level in an alternating manner.

#### Ties

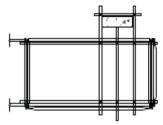
It is essential that scaffolds be tied to the building or suitable structure to resist a minimum design force 6kN (600kg) to prevent inwards or outwards movement of the scaffold. As such they provide stability and enable effective performance of the scaffold structure as it grows in height and length. As general rule, ties need to commence where the scaffold height exceeds 3 times its least width. Typically ties comprise scaffold couplers and are connected to the Standards with right angled scaffold couplers. Care must be taken that ties do not obstruct clear access along the full length of the working and access platforms. The scaffold must not be built to allow it to cantilever more than 4m without cladding beyond the last level of ties. If cantilevered section is clad, then consult AF&S Engineering for limits on cantilever height. The following examples shown, tie tubes are not connected direct to Standards but to horizontal tubes spanning between Standards.



Double Lip or U Tie



Box Tie



Column Tie with Butt Transom



#### CUPLOK Assembly Recommendations Continued

#### Note:

Where it is not possible to use the typical tie configurations, other tie methods are available. These methods have certain restrictions for use so, contact your local Acrow Formwork & Scaffolding Engineering Representative for assistance.

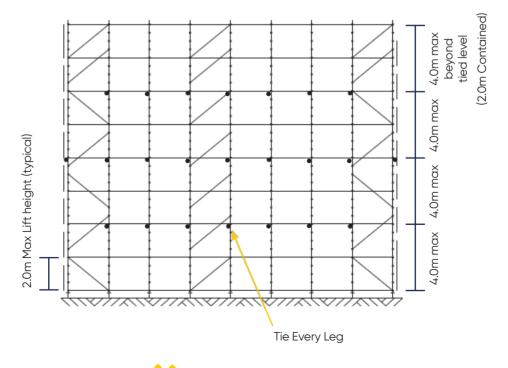
#### Warning:

Tie tubes must not be attached to Ledgers. Tie tubes must be attached directly to Standards, if this is not possible then scaffold tube must be fixed between Standards with right angled couplers and the tie tube is attached to this scaffold tube. Through Ties should be placed as close as possible to the window reveal and secured with right angle couplers.

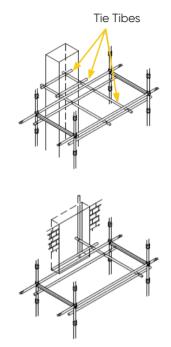
#### **Tie Configuration**

The image below shows an example of staggered tie configuration for scaffolding assembled with 2m lifts and without any cladding, such as shade cloth or other semi or non porous material. Ties are installed at no more than 3 bays apart for a maximum bay length of 2.44m in the longitudinal direction and 2 bays apart for bay lengths of 3.05m. Ties should have a 4m overlap in the vertical direction. Cladding the scaffold will cause wind loads to increase and tie spacings may need to reduce accordingly. Contact your local Acrow Formwork & Scaffolding Engineering Representative for assistance with tie spacing for clad scaffolds.

Note: When using 3.05m Ledgers, the max distance between ties is 2 Bays.





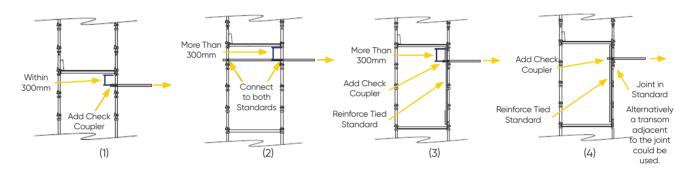


#### CUPLOK Assembly Recommendations Continued

Ties tubes must be connected to Standards and be parallel to transoms at a position adjacent to the junction of the Transom and Ledgers, with the following restrictions:

- 1. Within 300mm from the underside of the cup at the junction connected to the front Standard with addition of a Check Coupler.
- 2. Further than 300mm from underside of the cup at the junction Tie connected to both front and rear Standards.
- 3. If unable to connect to two Standards then reinforce front Standard for the full height of the lift with scaffold tube and swivel couplers with couplers attached at 900mm centres.
- 4. If tying is to a Standard with a spigot within the lift then the Standard needs to be reinforced using a vertical tube or alternatively, if space permits, by installing an extra transom adjacent to the joint.

**Note:** The 300mm distance given in (1), (2) and (3) may need to be reduced, subject to the amount of tie force.



In cases where ties cannot be placed in the correct position, where ties have to be removed, where tie spacings exceed those given in these assembly recommendations or in scaffolds which extend above the building, with the result that typical tie spacings given in these Assembly Recommendations cannot be achieved, then consult your local Acrow Formwork & Scaffolding Engineering Representative for technical design assistance with tie spacing and configurations to suit your specific needs.

#### **Maximum Height of Scaffold**

When determining the maximum height of a scaffold, a number of factors must be considered.

- · Live load of working platforms, for example Heavy Duty, Medium Duty or Light Duty.
- Number of Working Platforms.
- Live load of Platform Brackets.
- Dead load of scaffold, for example Standards, Transoms, Ledgers, Guardrails, Mesh Guards, Platform Brackets, Planks, Bracing, shadecloth and chainwire mesh.
- The position of the top tie in relation to the top of the scaffold.
- Wind Loading (in relation to tie forces).
- Strength of the supporting structure for the scaffold.

Scaffolding configurations can vary greatly, so for a CUPLOK scaffold of typically 1.27m wide, constructed using 2m lifts, braced and tied in accordance with patterns given in these recommendations, without cladding, with a maximum of two Heavy Duty Working Platform levels (6.6kN as per AS4576 and AS/NZS1576.1), two levels of Planks and Platform Brackets, guardrails at the outside face at 1m vertical spacing for full height of scaffold, diagonal bracing for full height, the maximum height of the scaffold constructed with bay lengths of 3.05m or less is 45m.

**Note:** Any additional equipment such as additional planked levels, Working Platforms, Platform Brackets, spurs or the like will increase leg load and hence reduce the maximum height of the scaffold. Therefore, where assessment shows that scaffold configuration exceeds the above conditions, consult your local Acrow Formwork & Scaffolding Engineering Representative for technical design assistance with the maximum heights of CUPLOK and tying configurations to suit your specific needs.



#### CUPLOK Assembly Recommendations Continued

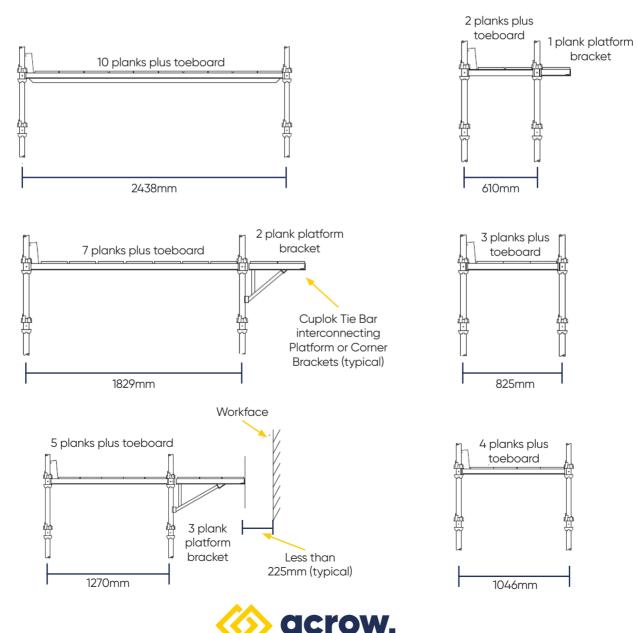
#### **Platform Brackets**

Platform brackets (also known as Hop Up brackets) are used to enable a platform to be placed between the scaffold and the building or structure and are therefore attached to the Standard closest to that workface. Widths vary from one to three planks wide. Platform Brackets are usually installed such that they provide a platform at the same level as the work platform or 500mm below the work platform. The outer edge of the platform provided by the Platform Brackets must be within 225mm from the workface.

When installing Platform Brackets, make sure that they are interconnected with a Tie Bar and that the open side of the Tie Bar angle faces inwards, enabling the steel plank to sit in the angle. This prevents accidental dislodgment of the Tie Bar.

Corner Brackets are also available to enable continuity of Platform Brackets around the internal corners of buildings. These units are attached to the Standard and connect to adjacent Platform Brackets with Tie Bars.

**CUPLOK Plank Arrangement** The diagrams below show typical plank quantities for various bay widths. Various combinations of Bay width and Platform Bracket size are achievable, however, care must be taken to ensure that the combination does not adversely affect the stability of the scaffold.

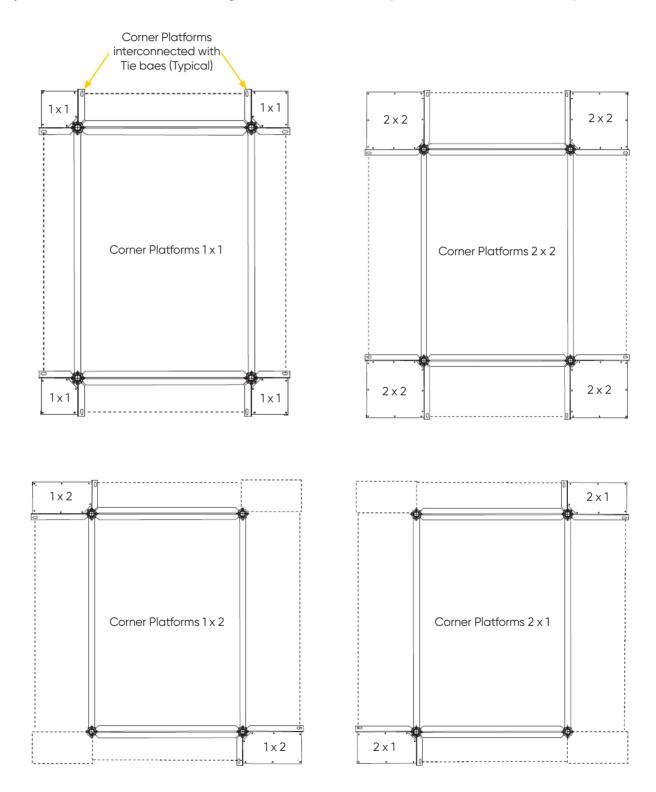


ENGINEERING & CONSTRUCTION

#### CUPLOK Assembly Recommendations Continued

#### **Configurations of Corner Panels**

The images below show plan view of the various sizes of Corner Platforms. Tie bars, which are used to interconnect Platform Brackets, are also used to interconnect ends of Corner Platforms to each other or to adjacent Platform Brackets. In the diagrams below, Tie bars and planks are not shown for clarity.





#### CUPLOK Assembly Recommendations Continued

Every working platform level must be provided with a safe and suitable access. This can be achieved by means of a built in ladder or stair access tower or by direct access from within the building or structure. Stair access can be constructed with either Aluminium Stair units or steel Stair Stringers as outlined on the following pages:

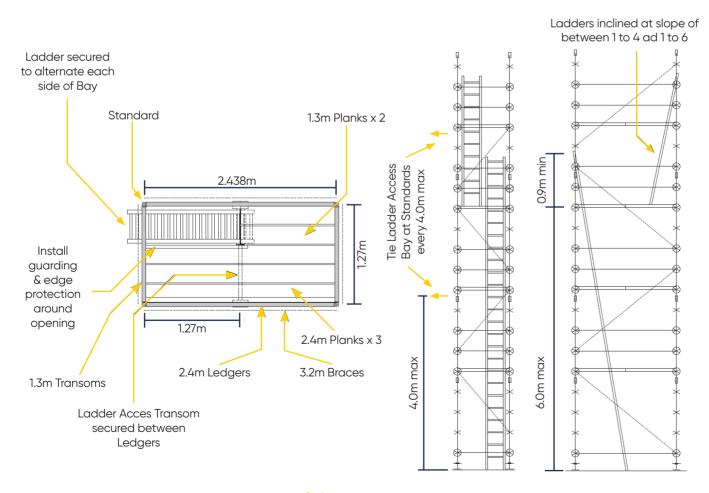
#### Ladder Access

Ladder access is typically used where only a few persons need access to the working platform and where tools and equipment can be delivered separately to the working platform (such as by rope and gin wheel, materials hoist or crane).

- Ladder access bays can be constructed within the main run of the scaffold, however, where space permits it is preferable that a separate ladder access bay be placed adjacent to the main run.
- Single ladders need to extend at least 0.9m above the landing level, secured at top and base and successive landing levels should be vertically spaced at no more that 6m.
- Pitch ladders at a horizontal to vertical slope of not less than 1 to 4 or more than 1 to 6.
- CUPLOK Ladder Access Transoms are used to enable the formation of an opening within the deck through which the ladder can pass. These Transoms span between Ledgers and are typically positioned at mid-span of the Ledgers or at the appropriate position to support two shorter length Planks. The remaining bay width is decked out with Planks that span between Transoms in the usual manner.

#### Important:

Ensure that guarding and edge protection is installed around openings in Ladder Access Bays that are in or beside working platforms.





### **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 Formwork & Scaffolding 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 Formwork & Scaffolding 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 Formwork & Scaffolding 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 Formwork & Scaffolding unless attachment points for such systems are approved by Acrow Formwork & Scaffolding 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.



# Construction Stair Guide

Every working platform level must be provided with a safe and suitable access. This can be achieved by means of a built in ladder or stair access tower or by direct access from within the building or structure. Stair access can be constructed with either Aluminium Stair units or steel Stair Stringers as outlined on the following pages:

#### **CUPLOK Construction Stair**

CUPLOK Aluminium Stair units fit within the Standard 1.27m x 2.44m bay. Each Stair unit is 0.6m wide and rises 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.

The stair access tower should be constructed with 2.44m Ledgers and 1.27m Transoms at 1.5m vertical intervals, except at entrance and exit points to the stairs 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 unit adjacent to the Standard. Note that stair landings need to be adjacent to 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.

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 Stairs 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.

Subject to space required to handle the Stair units within the bay during installation, the Stair Handrails are to be installed at the earliest opportunity. The Handrails bolt to the stair unit with 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 Stair units. Holes are located towards the top and bottom of the Stair unit.

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 Stair unit. Once the uppermost Stair unit is installed, a Trimming Standard will need to be installed between the Ledgers at 2m above the top stair landing and the Ledger adjacent to the uppermost stair landing and positioned to be 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.

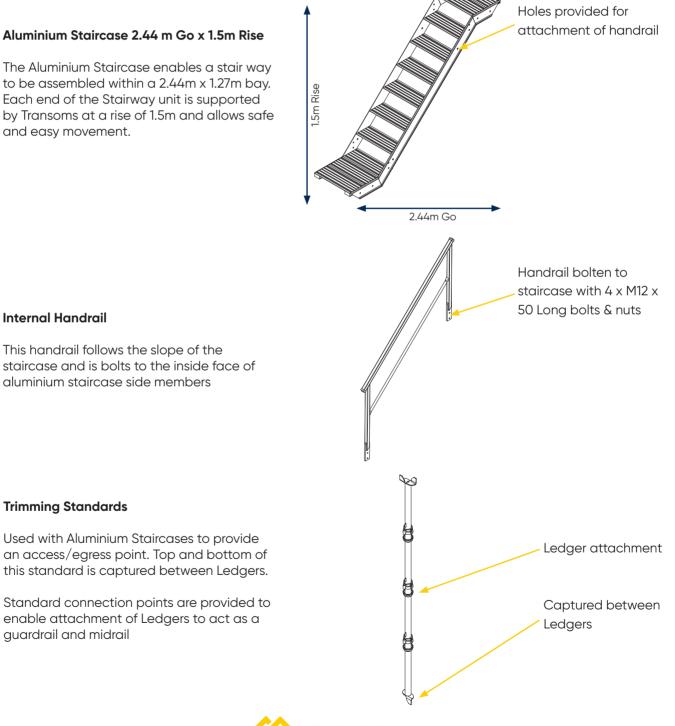


### **Construction Stair Guide**

#### **1.5m Riser Construction Stairs**

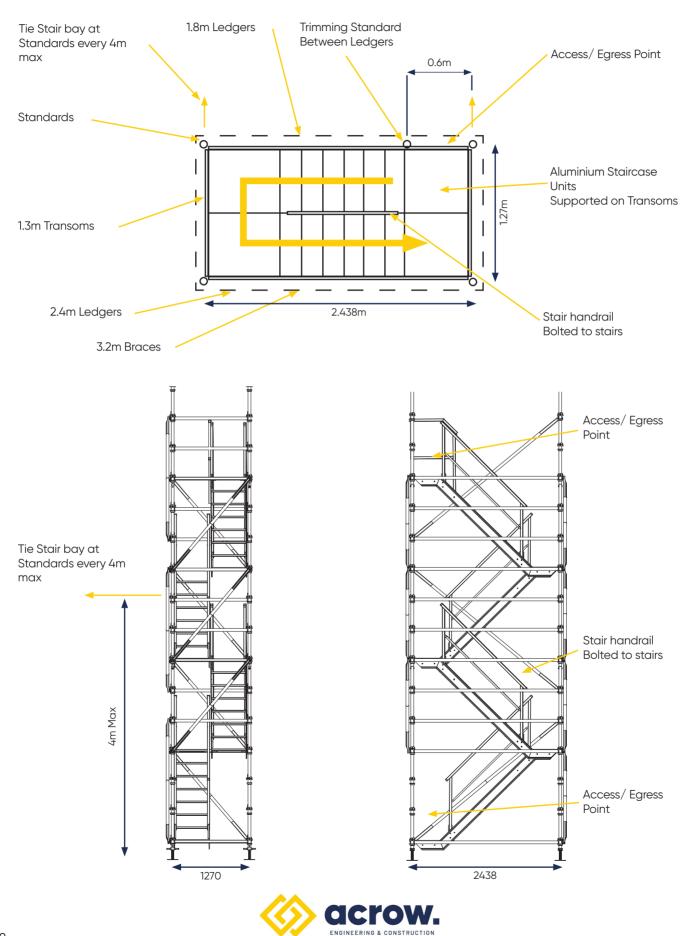
Note

- 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





# **Construction Stair Guide**



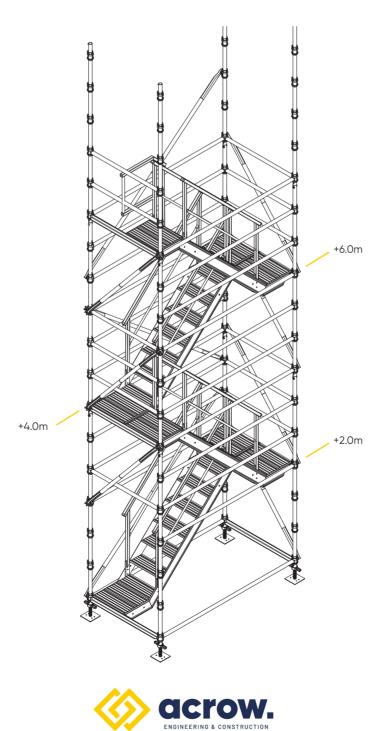
### **Construction Stair Guide**

#### 2.0m Riser Construction Stairs

A 2m flight modular Aluminium Stairway unit fits within the 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.

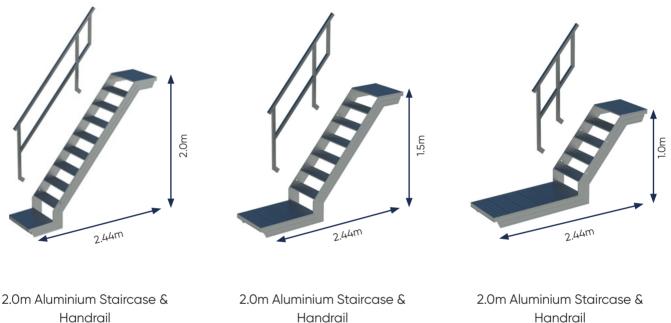
To assemble the 1.0m Riser Construction stairs, follow the same sequence as for the 1.5m Riser Construction stairs.



### **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.



2.44m Go x 2.0m Rise

Handrail

2.44m Go x 1.5m Rise

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.





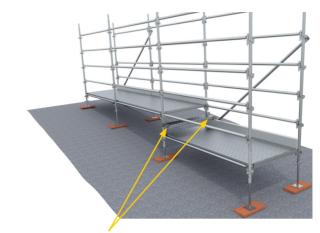
### **Construction Stair Guide**

#### 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





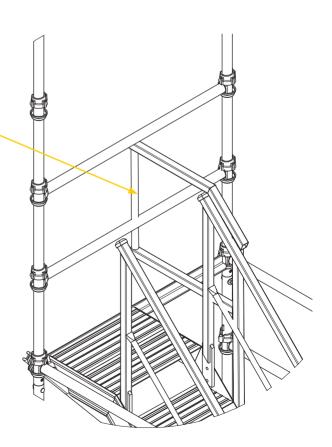
Single Plank Platform Bracket with Coupler fixed to Quickstage Standards



#### **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 builtin single Ø48 couplers





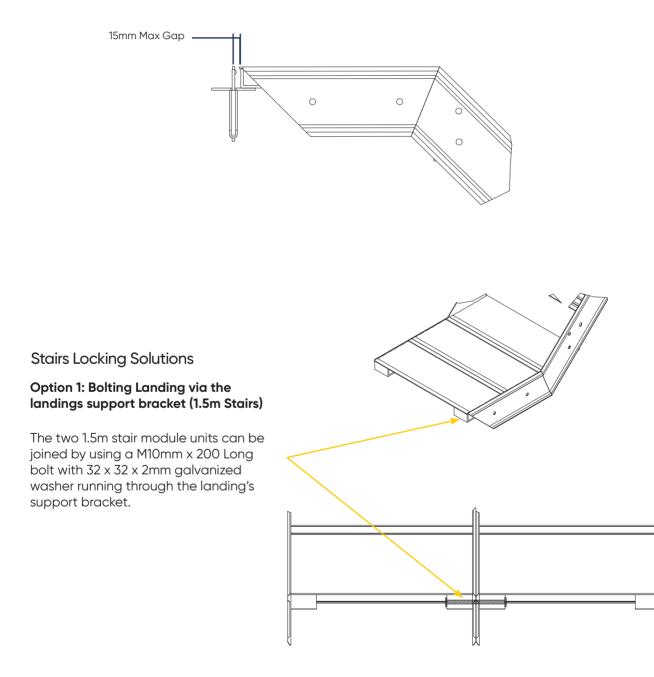
### **Construction Stair Guide**

#### **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 millimetres.

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

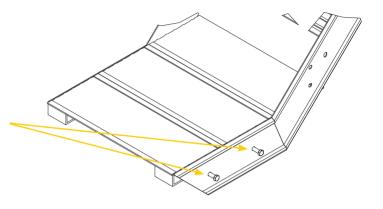




Construction Stair Guide

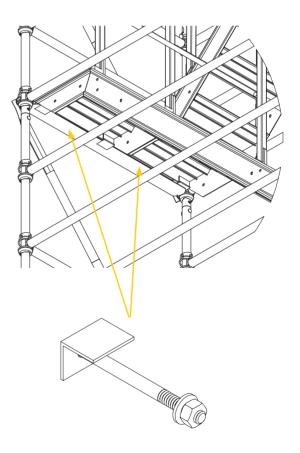
# Option 2: Bolting the Landings via the landing's web (1.5m Stairs)

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.

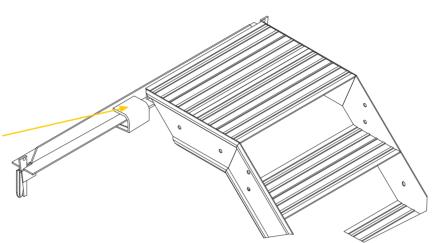




### **Construction Stair Guide**

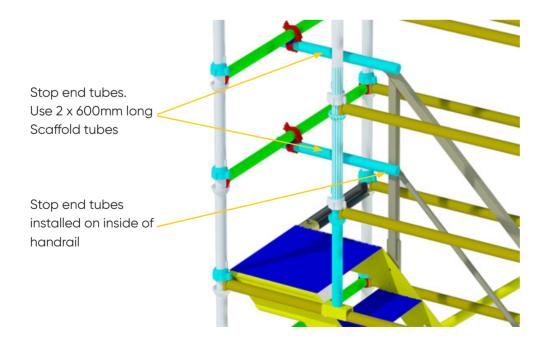
#### Locking Top Stair Module

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



#### 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.

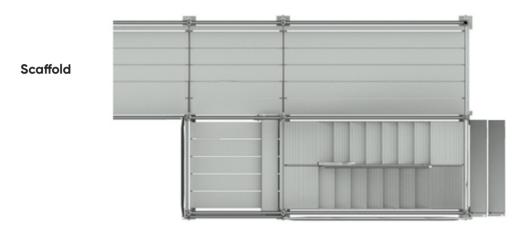




### **Construction Stair Guide**

### 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.



**Extended Landing** 

**Stairway Bay** 



Stepping Down Via Extended Landing

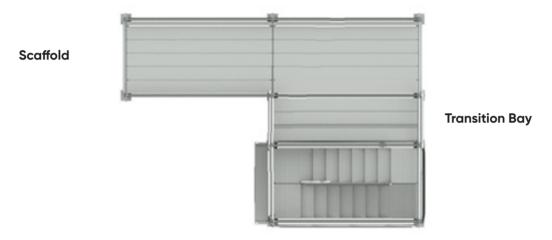


Stepping Up Via Extended Landing



# Construction Stair Guide

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



**Stairway Bay** 



Stepping Down Via Transition Bay



Stepping Up Via Transition Bay



### 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 Formwork & Scaffolding 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 façade type independent scaffolding and configurations not shown in these recommendations, contact your local Acrow Formwork & Scaffolding representative.
- 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 Formwork & Scaffolding 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 Formwork & Scaffolding unless attachment points for such systems are approved by Acrow Formwork & Scaffolding 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.



### 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 by1.3m 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.

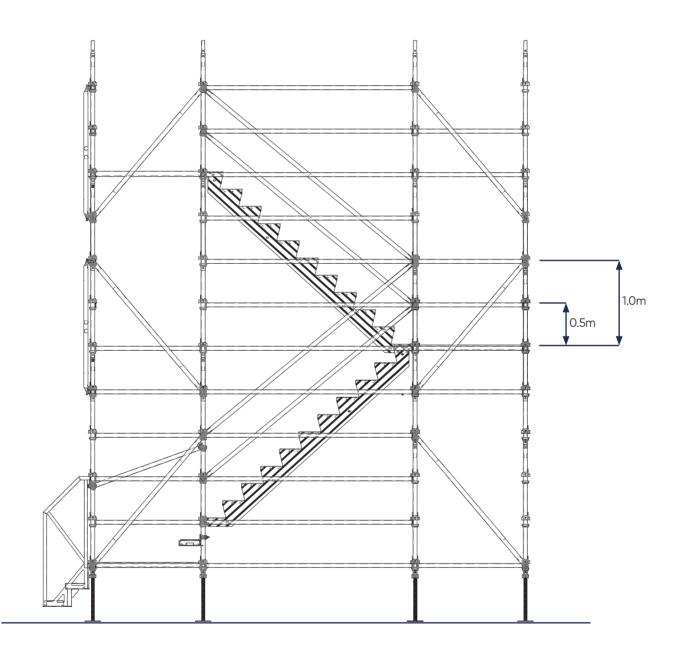
- Note:Edge protection (guardrails, midrails and toeboards) is required at access and egress points of working platforms.
- Care is to be taken to ensure that head clearance of 2m (nom) is maintained at these points.
- Gaps between the stair access landing and working platform levels may occur and these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



### Stretcher Stair Guide

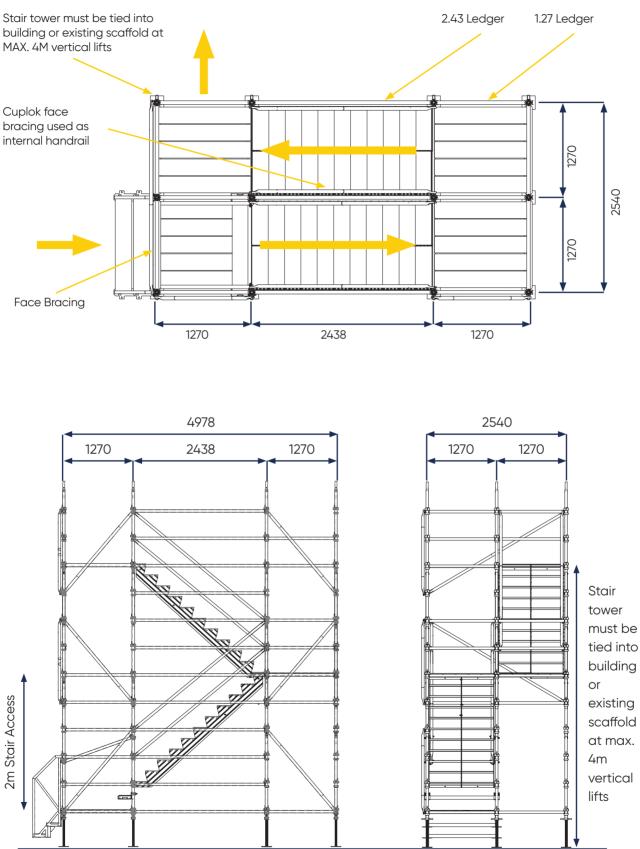
### Internal and External Handrails

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.





# Stretcher Stair Guide





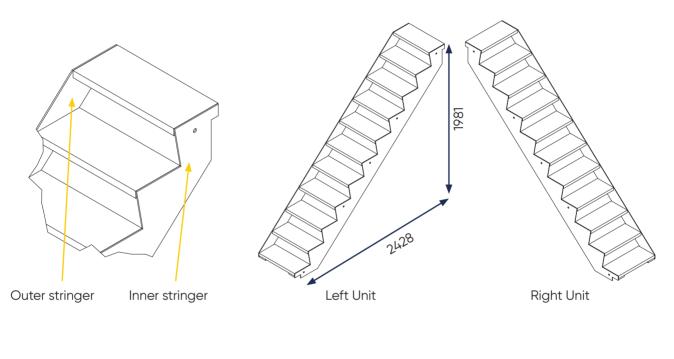
### Stretcher Stair Guide

#### **Stair Module**

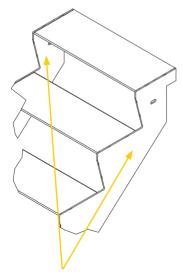
Acrow offers two types of stair module:

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

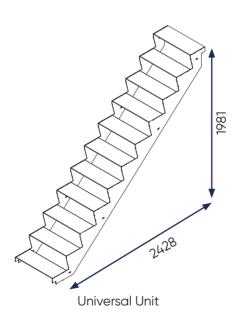
#### **Paired Stretcher Stair**



#### **Universal Stretcher Stair**



Both stringers are identical





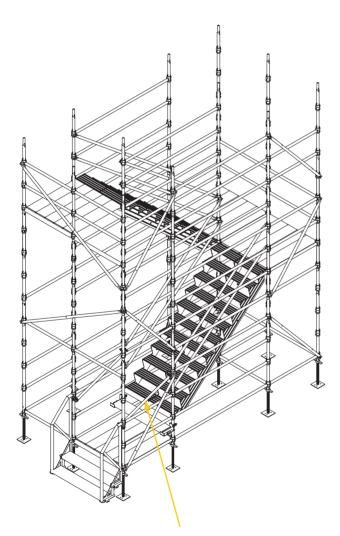
## Stretcher Stair Guide

#### 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).

Handrails 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



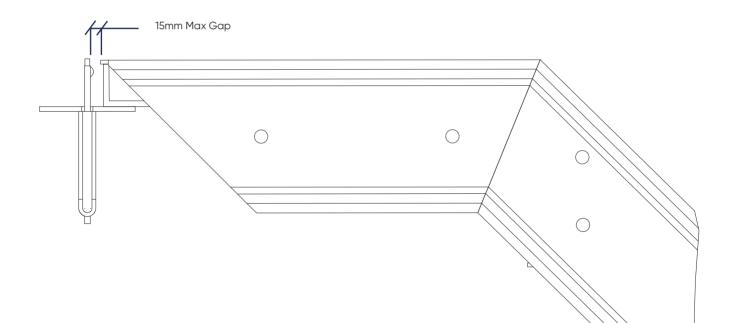
### Stretcher Stair Guide

### 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.

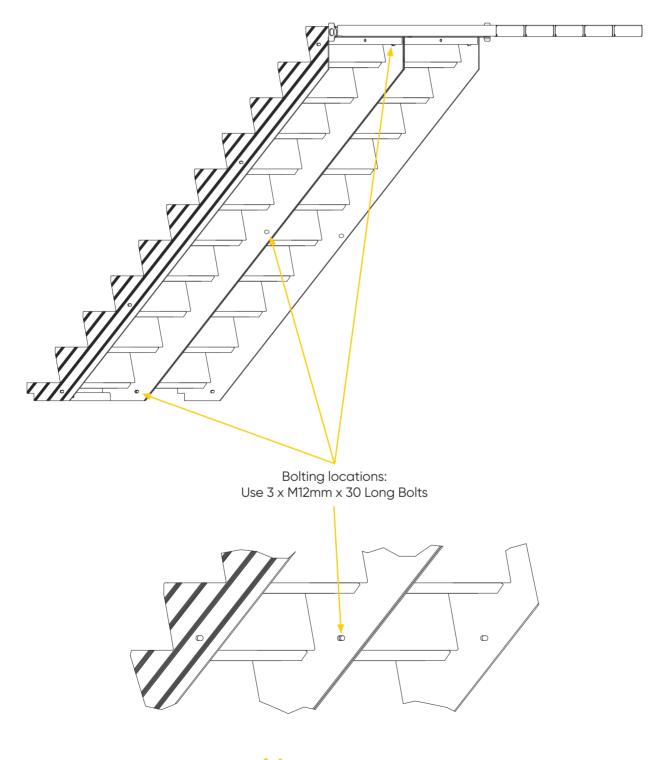




### Stretcher Stair Guide

### 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.





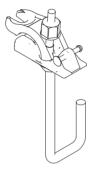
#### Stretcher Stair Guide

#### Stretcher Stair Stabilsing 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:

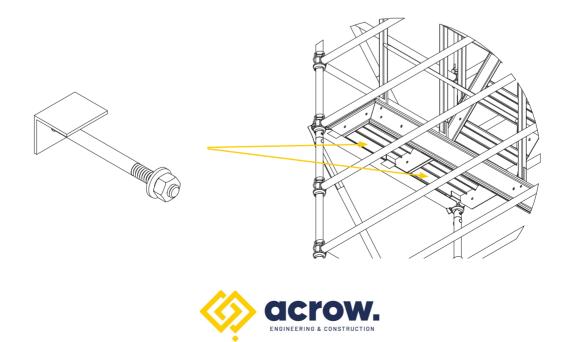
#### Stretcher Stair Putlog - Eliminating Stairs Movement

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



### 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.

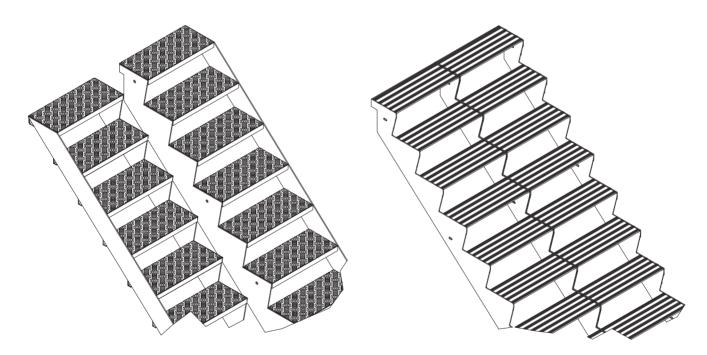
The slip resistant surface is formed by a checker or rips extrusion. Both type of surfaces provides adequate level of slip resistant and they are compatible.

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





## CUPLOK Assembly Recommendations Continued

#### Dismantling

# Care must be taken when dismantling scaffold as the stability of the scaffold must be maintained at all times.

- After removal of materials and equipment from the working platforms, dismantle the scaffolding generally in the reverse order of the erection sequence.
- Avoid accidents and damaging material by appropriately lowering materials and not dropping them (bombing) when dismantling.
- Removal of ties to the permanent structure should progress at the same rate as the dismantling process.
- Do not remove ties until dismantling of the scaffold reaches the level of the ties.
- Do not remove diagonal braces until it is necessary to remove the Standard to which it is attached.
- Ledgers should not be removed from any working level before the removal of scaffold planks from the same level.
- Localised overloading by stacking of dismantled equipment on partially dismantled scaffold must be avoided.
- Stack materials neatly in the appropriate stillages or on pallets.

#### Transportation

- Loose items are to be stacked in Stillages and be secured in such a way that they are able to be contained within the vehicle during transport.
- Materials are to be secured for transport in such a way that the securing process (stacking, strapping, tying down) does not damage or deform them.
- Care must be taken during unloading such that release and removal of load restraints does not allow the materials to fall out of their containment or Stillages fall off the transport.

#### Storage

- Materials are to be stored in Stillages and on Pallets as appropriate and in a manner that prevents damage.
- Avoid injury and damage to materials by taking care when releasing strapping such that materials do not fall out of their containment.
- Components must not be stacked higher than the top of the Stillage to enable proper stacking.
- AF&S Stillages (tubular or enclosed) must not be stacked more than FIVE high.

#### Maintenance

- Acrow Formwork & Scaffolding Branches have in place a quality system, which includes inspection and maintenance procedures in accordance with the AF&S Inspection and Maintenance Manual to ensure all scaffolding returned from hire is inspected prior to being returned to stock. Any damaged or non-conforming components are removed and isolated for repair or scrapped where appropriate.
- Maintenance of Acrow Formwork & Scaffolding equipment is only to be carried out by Acrow Formwork & Scaffolding and its authorised repairers.

### Working Platform Duty Loading

- Duty Live Loads for Working Platforms are typically dependent on Platform Width and Length as specified in AS/NZS1576.1. For Cuplok Scaffolding Duty Live Loads are shown on page 9 of this brochure and are for platforms lengths of up to 3m.
- Where design loads exceed Duty Live Loads specified herein or greater that two working platform levels is required then consult with AF&S Engineering for design guidance.



### CUPLOK Assembly Recommendations Continued

### Number of Working Platforms

- The maximum number of Working Platform levels within a bay is two. A bay is typically "the enclosed spaced between four standards" and this space extends from ground to top working platform for the full height of scaffold.
- Where greater than two working platform levels or greater than two levels of planks is required, consult with AF&S Engineering for design guidance.

### Scaffold Safety Rules

The following are some common sense rules designed to promote safety in the use of scaffolding. These rules do not purport to be all inclusive or to supplant or replace other additional safety and precautionary measures. They are not intended to conflict with or supersede the requirements of statutory or government regulations; reference to such specific authorities should be made by the user.

- Inspect all equipment before using. Never use any equipment that is damaged or deteriorated in any way. If in doubt contact your supplier.
- Ensure that personnel erecting, altering or dismantling the scaffold are certified to the appropriate level.
- Inspect erected scaffolds regularly to ensure that they are maintained in a safe condition.
- Consult Acrow Formwork & Scaffolding when in doubt. Don't Take Chances.
- Always check foundations and use adequate soleplates. Foundations for a scaffold must have adequate bearing capacity to carry imposed loads.
- Use Adjustable Bases instead of packing to adjust uneven grade conditions.
- When scaffolds are to be partially or fully enclosed, specific precautions must be taken to check the frequency and adequacy of ties attaching to the building due to increased load conditions resulting from effects of wind and rain. The scaffolding components to which the ties are attached must also be checked for additional loads. Consult your Acrow Formwork & Scaffolding Engineering Representative.
- Equip all planked or working levels with proper edge protection (guardrails, midrails and toeboards or guardrails and mesh guards) along all open sides and ends of scaffold platforms.
- Ensure that buildup of debris on working or access platforms is removed.
- Power lines near scaffolds are dangerous use caution and consult the power authorities and local Regulatory Authorities for advice and local requirements.
- Do not use ladders or makeshift devices on top of scaffolds or place planks on guardrails/midrails to gain extra access height.
- Do not overload scaffolds.
- Planking
- 1. Use CUPLOK Steel Planks wherever possible.
- 2. Timber scaffold planks may be used if intermediate putlogs are attached to CUPLOK Ledgers on either side of the Standards to provide adequate support within plank span limit requirements. Timber planks must be provided with intermediate supports between CUPLOK Transoms.
- Adjustable Bases when fully extended shall have a minimum engagement of 150mm length of the spindle remaining inside the Standard tube. In any case, the maximum extension from the baseplate to the bottom of the Standard shall not exceed 450mm.



### CUPLOK Assembly Recommendations Continued

- Connections between components should be firmly secured.
- All scaffolding and accessories shall be installed in accordance with the recommendations of Acrow Formwork & Scaffolding Pty Ltd
- Important! Always ensure that any joints in standards are below the last transom position.
- Under no circumstances are guardrails to be attached to a standard cantilevering from a joint above the platform level.
- When a scaffold has been completely erected it must be fully inspected by a qualified Scaffolder and a handover Certificate issued to the user verifying the scaffold is complete and safe to use. See your local Acrow Formwork & Scaffolding Branch for further details.

#### Note:

- The term ENGINEER referred to herein is in accordance with the definition of a person qualified for corporate membership of the Institute of Engineers, Australia, and with experience in the area of Scaffolding.
- The term COMPETENT PERSON referred to herein refers to a person who has been adequately trained, has a number of years practical experience in the Scaffolding construction industry and is capable of interpreting and applying the design requirements as specified in the Scaffolding documentation.

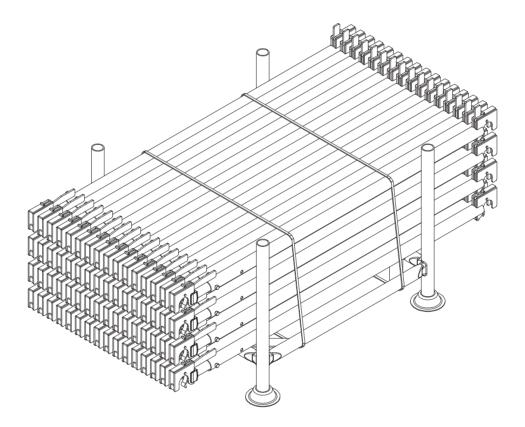


# 6. TRANSPORT & HANDLING



### Adjustable Braces

- 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.

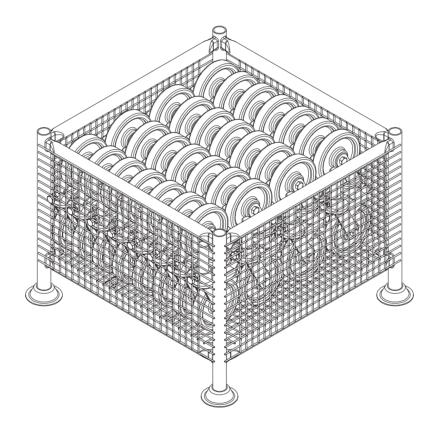


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
SCDBXS	Extra Short Adjustable Brace	8.70	64	556	MP
SCDBAS	Short Adjustable Brace	11.20	64	716	MP
SCDBAL	Long Adjustable Brace	14.40	64	921	MP



### **Castor Wheels**

- 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.



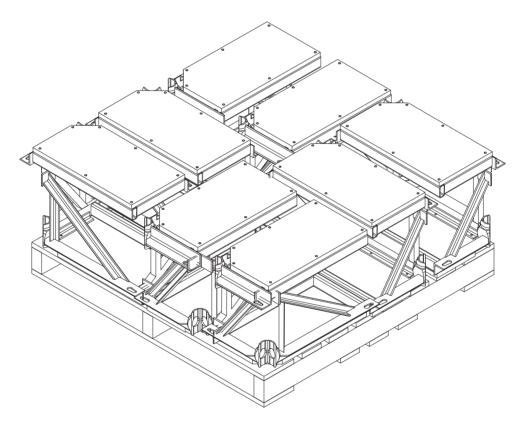
Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CC200	Scaffold Castor Wheel	4.50	56	252	MP



### **Corner Platforms**

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.

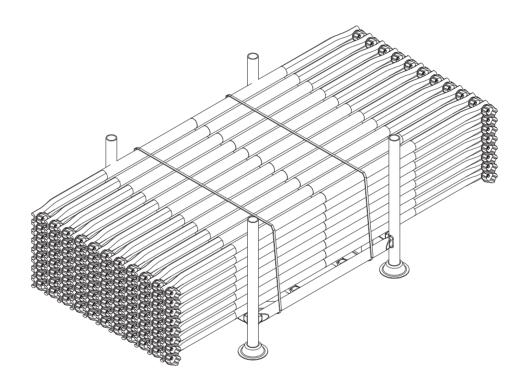


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CCB1	Corner Platform 1x1	5.00	32	160	PALLETS
ССВ	Corner Platform 2x2	11.50	20	230	PALLETS
CCB2X1	Corner Platform 2x1	9.50	20	190	PALLETS
CCB1X2	Corner Platform 1x2	9.50	20	190	PALLETS
CCP2X3	Corner Platform 2x3	12.50	10	125	PALLETS
CCP3X2	Corner Platform 3x2	12.50	10	125	PALLETS
CCB3X3	Corner Platform 3x3	15.00	10	150	PALLETS



### **Diagonal Braces**

- 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.

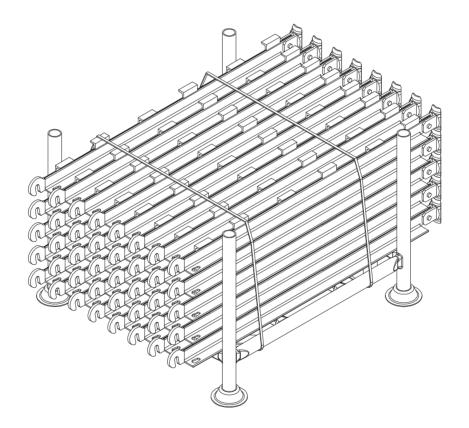


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CB16, CB17, CB18,CB20	1.0m - 2.0m Diagonal Braces	~8.00	100	704	SP
CB21, CB24, CB25, CB27, CB30	2.0m - 3.0m Diagonal Braces	~10.50	100	924	SP
CB,32, CB35, CB37	3.0m - 4.0m Diagonal Braces	~13.00	100	1144	SP



### Fan Guard Bearers

- 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.

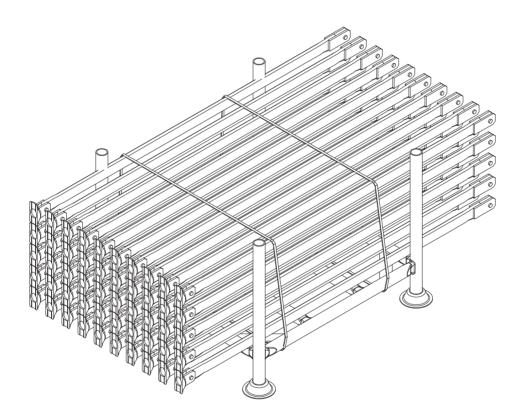


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CFGB	Fan Guard Bearer	10.70	40	428	MP



## Fan Guard Tie

- 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.

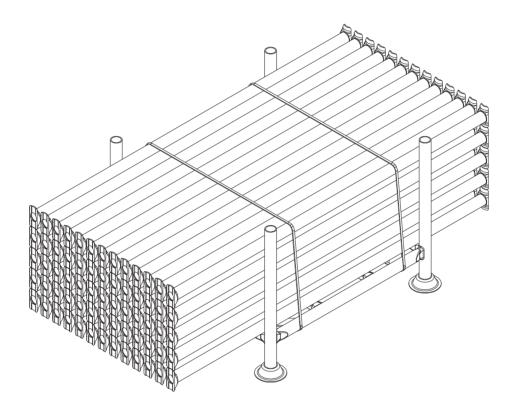


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CFGT	Fan Guard Tie	5.90	50	295	MP



### Ledgers

- 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.

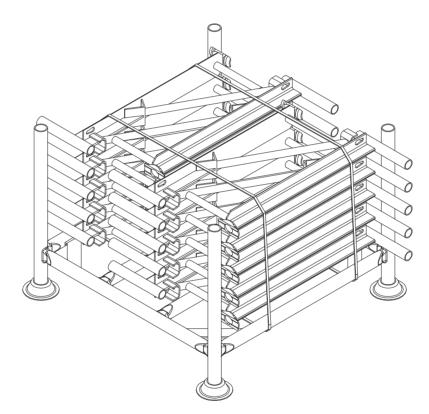


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CL022	0.22m Ledger	1.20	100	120	SP
CL034	0.34m Ledger	1.70	100	170	SP
CL061	0.61m Ledger	2.60	100	260	SP
CL083	0.83m Ledger	3.40	40	238	SP
CL105	1.05m Ledger	4.20	40	294	SP
CL13	1.27m Ledger	5.00	40	350	SP
CL15	1.52m Ledger	5.90	40	413	SP
CL18	1.83m Ledger	7.00	40	490	SP
CL24	2.44m Ledger	9.20	40	644	SP
CL30	3.05m Ledger	11.40	40	198	SP



#### **Platform Brackets**

- 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.

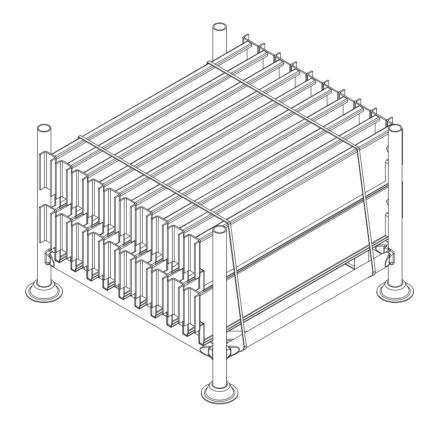


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CHUB1, CHUB1S	Platform Bracket 1 Plank	2.10	60	126	MEP
CHUB2, CHUB2S	Platform Bracket 1 Plank	5.80	30	174	MP
CHUB3, CHUB3S	Platform Bracket 1 Plank	7.80	20	156	MP



### **Return Toe Board**

- 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.

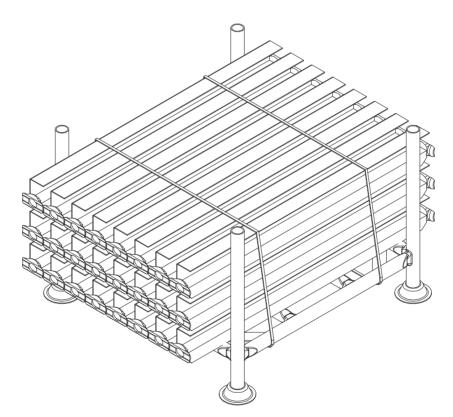


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CRTB061	0.61m Return Toeboard	4.20	30	126	MP
CRTB083	0.83m Return Toeboard	5.20	20	104	MP
CRTB105	1.05m Return Toeboard	6.30	20	126	MP
CRTB13	1.27m Return Toeboard	7.30	20	146	MP
CRTB18	1.83m Return Toeboard	9.90	20	198	SP
CRTB24	2.44m Return Toeboard	15.00	20	300	SP



### **Return Transoms**

- 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.

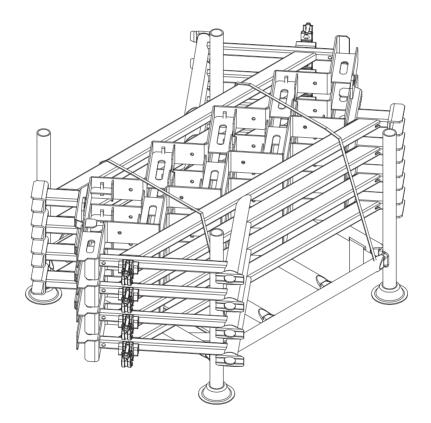


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CTRET13	1.3m Return Transom	10.30	24	247	MP



### **Stair Stringers**

- 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.

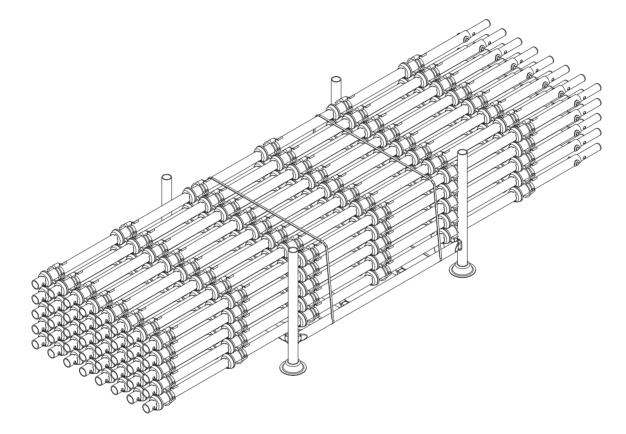


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CSS	Stair Stringer	31.50	10	315	SP



### Spigotted Standards

- 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.

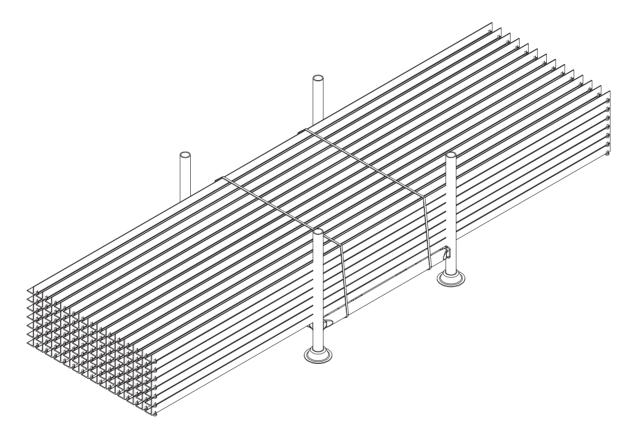


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CS05	0.5m Spigot Standard	3.90	120	156	SP
CS10	1.0m Spigot Standard	6.90	70	276	SP
CS15	1.5m Spigot Standard	9.90	70	396	SP
CS20	2.0m Spigot Standard	13.00	70	520	SP
CS25	2.5m Spigot Standard	16.00	70	640	SP
CS30	3.0m Spigot Standard	19.10	70	760	SP



### Tie Bars

- 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.

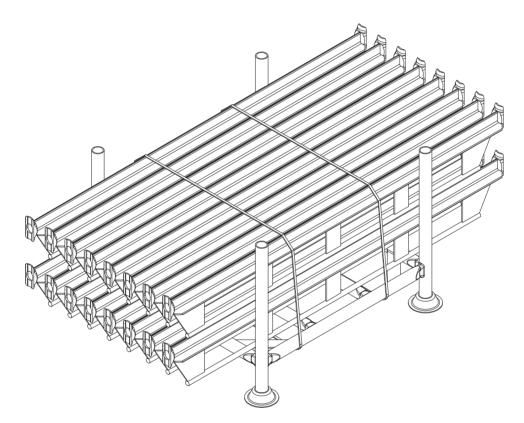


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CTB06	0.61m Tie Bar	1.80	120	216	MP
CTB08	0.83m Tie Bar	2.40	120	288	MP
CTB105	1.05m Tie Bar	3.00	120	360	MP
CTB13	1.27m Tie Bar	3.70	120	444	MP
CTB15	1.52m Tie Bar	4.50	120	540	MP
CTB18	1.83m Tie Bar	5.30	120	639	SP
CTB24	2.44m Tie Bar	7.00	120	840	SP
VTB30	3.05m Tie Bar	10.80	120	1296	SP



### **Transom Beams**

- 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.

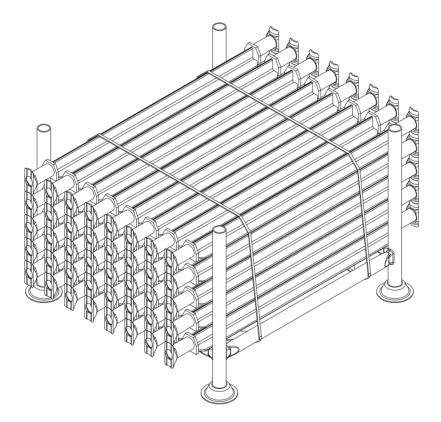


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CTBEAM18	1.83m Transom Beam	21.20	16	339	SP
CTBEAM24	2.44m Transom Beam	27.00	16	432	SP



### **Bracing Bay Transoms**

- 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.



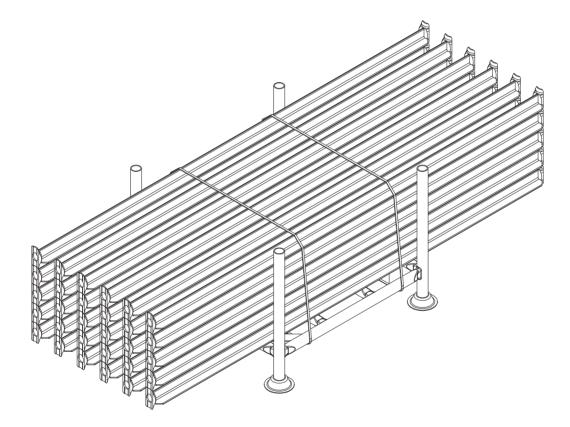
Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
SCBBT061	0.61m Bracing Bay Transom	4.70	50	235	SP
SCBBT083	0.83m Bracing Bay Transom	6.20	40	248	SP
SCBBT105	1.05m Bracing Bay Transom	7.90	40	316	SP
SCBBT13	1.27m Bracing Bay Transom	9.50	40	380	SP
SCBBT15	1.52m Bracing Bay Transom	11.40	40	456	SP
SCBBT18	1.83m Bracing Bay Transom	13.60	40	544	SP
SCBBT24	2.44m Bracing Bay Transom	22.40	40	896	SP



### Transoms

The CUPLOK Transoms are used to provide horizontal support between 2 Standards when placed between cups and allows for planks for platforms to be placed on the blades. Only stack the same sizes of Transoms onto the same size stillages. The recommended method for stacking and transporting these Transoms are:

- Stack the Transoms horizontally in the same direction to maximise space on the stillage. Smaller sizes can alternate the direction they get packed at each layer by rotating 90°.
- Only pack the same sizes of Transoms into the same stillage.
- Ensure the set does not exceed the limit for each item as shown in the table below.
- At least 2 straps are needed to secure the load to the stillage but longer Transoms may require extra straps at each end.

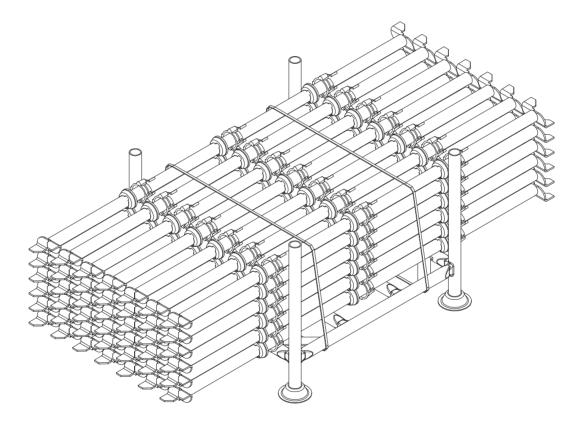


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CT031	0.31m Transom	2.6	60	156	SP
CT061	0.61m Transom	5.0	60	300	SP
CT083	0.83m Transom	6.6	60	396	SP
CT105	1.05m Transom	7.9	40	316	SP
CT13	1.27m Transom	9.7	40	388	SP
CT15	1.52m Transom	11.5	40	460	SP
CT18	1.83m Transom	13.7	40	548	SP
CT24	2.44m Transom	22.4	40	896	SP



### **Trimming Standards**

- 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.



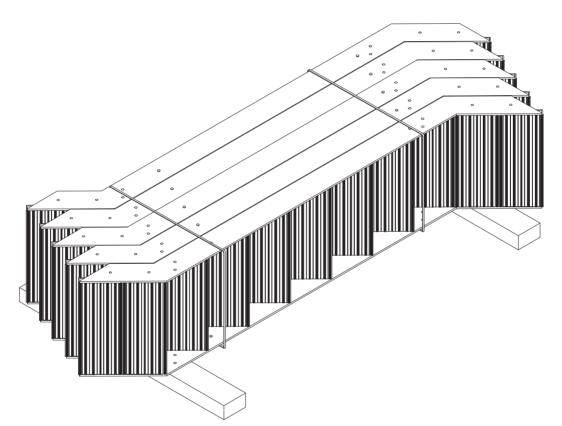
Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CSST	Stairway Trimming Standard	11.30	45	508	MP



### **Construction Stairs**

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.

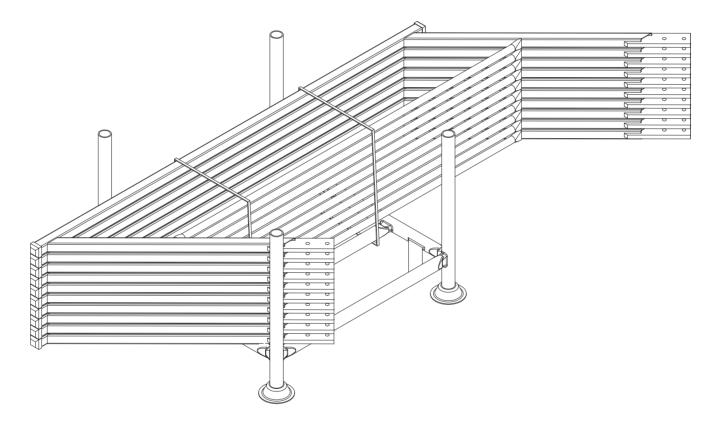


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CST15, MAS15B	Construction Stairs 1.5m Rise	113	5	565	BUNDLE
MAS20B	Construction Stairs 2.0m Rise	140	5	700	BUNDLE
CST1024L, SCT1024R	Stretcher Stairs 1.0m Rise	105	5	525	BUNDLE
CST2024L. CST2024R	Stretcher Stairs 2.0m Rise	130	5	650	BUNDLE



### Stair Handrail

- 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.



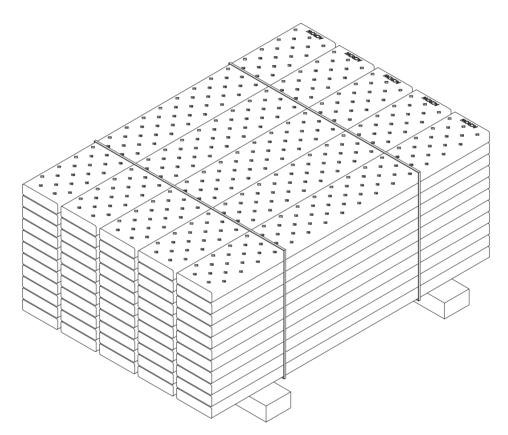
Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CST15, M15HRB	1.5m Handrail	17.40	10	174	SP
M20HRB	2.0m Handrail	22.00	10	220	SP



### **Steel Plank**

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.

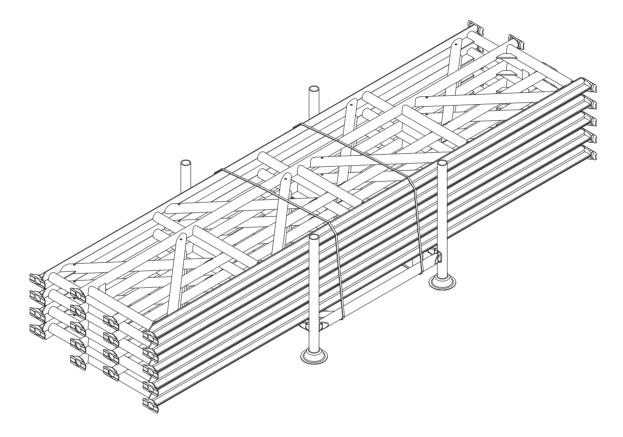


Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
SPC083	0.83m Steel Plank	5.00	50	275	BUNDLE
SPC105	1.05m Steel Plank	7.20	50	396	BUNDLE
SPC13	1.27m Steel Plank	8.50	50	467	BUNDLE
SPC18	1.83m Steel Plank	11.50	50	605	BUNDLE
SPC24	2.44m Steel Plank	15.50	50	852	BUNDLE
SPC30	3.05m Steel Plank	19.50	50	1072	BUNDLE



### **Transom Truss**

- 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.



Code	COMPONENT DESCRIPTION	UNIT MASS (KG)	QUANTITY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	STILLAGE TYPE
CTT18	1.83m Transom Truss	40.10	9	360	SP
CTT24	2.44m Transom Truss	52.40	9	471	SP
CTT30	3.05m Transom Truss	55.70	9	501	SP

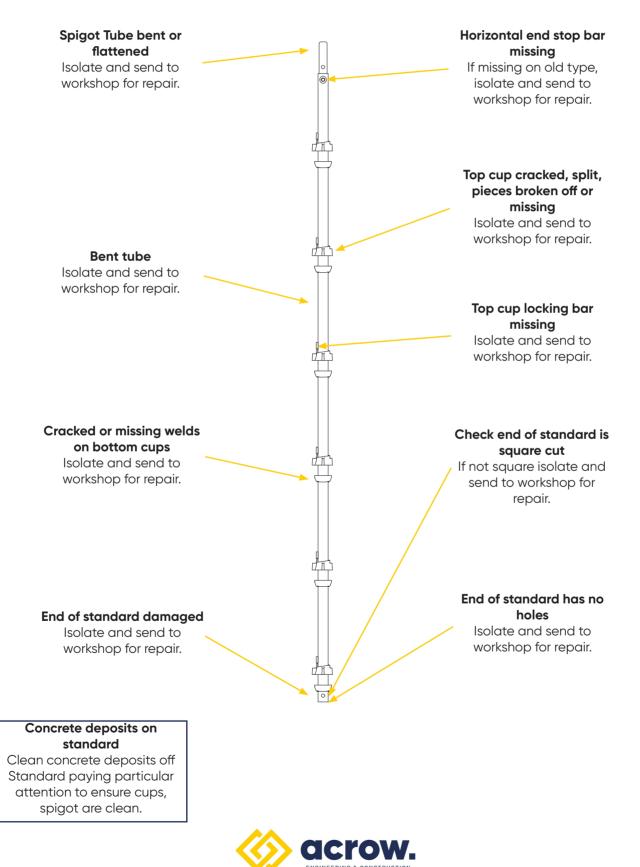


# 7. MAINTENANCE & INSPECTION



### Cuplok/ Supercuplok Standards

The Standard is a principle load carrying member in the scaffold framework It incorporates cup type connections for ledgers, transoms and platform brackets. It has a spigot at one end to allow end to end connection Standards. It must be straight, cups must be functional and ends must not be deformed.



## Product Description

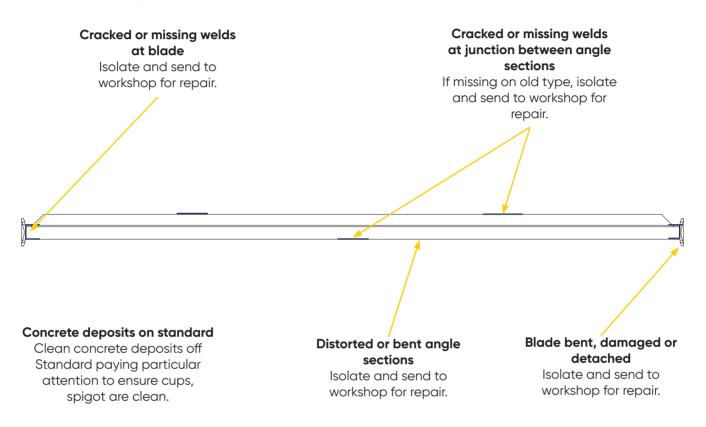
## Inspection

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. The bore at bottom of standard must be clear by 600mm to enable an adjustable base to fit inside	Clear bore with drift or similar tool otherwise cut back or scrap
Bent tube	Any bent in excess of L/500 is not permitted and must be straightened See chart page 1 for allowable offset dimensions. See Recommended Action for other restrictions	If bend is less than L/300 then straighten on Flypress If tube is bent more than L/300 or the tube surface has been kinked at the bend then the standard must be scrapped or the defective section removed by cutting down to next useable size
Surface deformation in tube	Surface deformation exceeding 4mm in depth or a cross-section distortion exceeding 1.03 times the diameter is not permitted	Cut back to next size down
End of standard damaged (flame cut)	Such damage not permitted	Cut back to next size down
End of standard has no 17mm hole	Standards must have 17mm dia holes in end	Drill 17mm dia holes to dimensions shown on production drawing
Spigot tube bent,flattened or missing	Bends, flattening or not permitted	Remove and replace with new spigot Replace missing spigot
Top cup cracked, split, pieces broken off or missing	Cracked, split, broken or missing not permitted	Cut back to shorter size of standard
Locking bar missing above top cup	Locking bar must be in place	Replace. Ensure new locking bar is at correct position
Cracked welds on bottom cups	Cracked welds not permitted	Grind cracked weld and reweld
End of tube not cut square	End of tube must be square	cut back to shorter size of standard
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Transoms

The Cuplok Transom is a load bearing member and incorporates a blade connection each end and range in length from 1.2m to 2.4m. Transoms support the planks and together with the Ledger, it connects to the Standard by means of the blade to form the basic scaffold structure. They must be straight and blade ends must not be damaged.



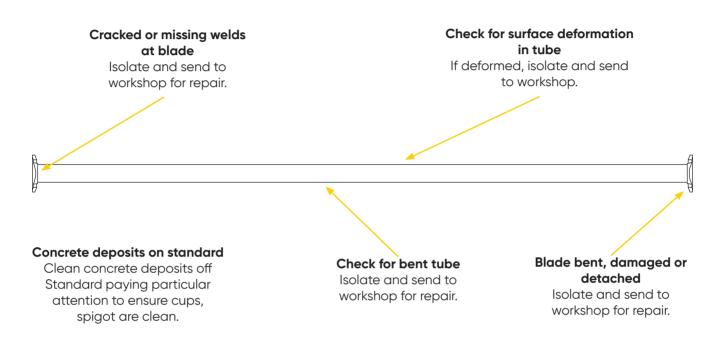
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up pemrmitted	Remove build up with wire brush or chiping hammer
Cracked or missing welds at blades	Cracked or missing welds not permitted	Grind back cracked weld then re wel or add missing weld
Cracked welds or missing welds between angle sections	Cracked welds not permitted.	If cracked the grind back cracked weld and re-weld
Distorted or bent angle sections	Any bend more than L/200 must be straightened ie: 1270 (6mm) * 1800 (9mm) *2400 (12mm)	Straighten. If not practical or possible, then cut down to next useable size
Blade end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Ensure blade is welded square and Transom is correct overall length.
Surface rust or pitting	Visual assessment.	Remove and replace with new spigot Replace missing spigot
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Ledgers

The Cuplok Ledger is a tubular component and incorporates a drop forged ledger blade at each end. They range in length from 1.2m to 3.0m. Together with the Transom, it connects to the Standard by means of the ledger blade assembly. It must be straight and the ledger blades must not be damaged or deformed.



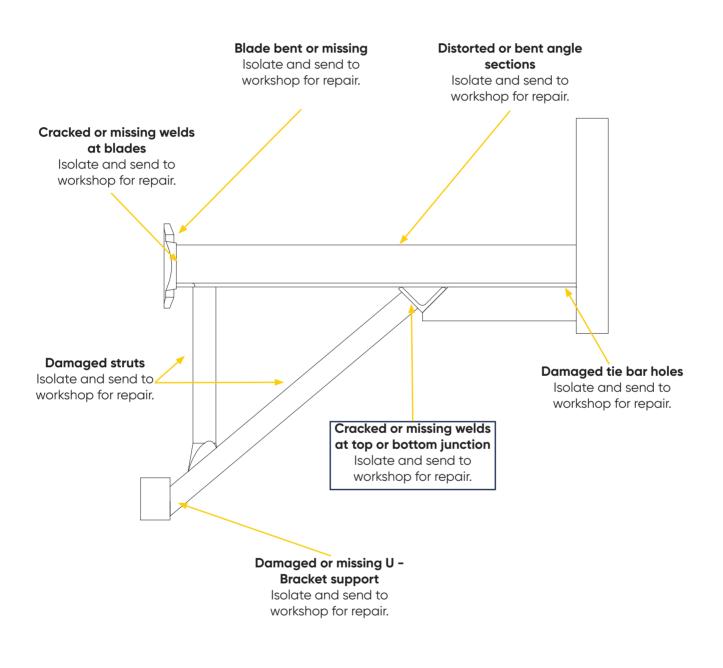
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permritted	Remove build up with wire brush or chipping hammer
Cracked or missing welds at blades	Cracked or missing welds not permitted	Grind back cracked weld then re wel or add missing weld
Bent tube	Any bent in excess of L/300 is not permitted and must be straightened	If bend is less than L/150 then straighten on Fly Press. If tube is bent more than L/150 or the tube surface has been kinked at the bend then the ledger must be scrapped or the defective section removed by cutting down to next useable size
Surface deformation in tube	Surface deformation exceeding 4mm in depth or a cross-section distortion exceeding 1.03 times the diameter is not permitted	If more than 4mm then cut down to next undamaged size
Blade, damaged or missing	Damage or missing blades not permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Ledger blades must be used, do not use a Transom blade
Surface rust or pitting	Visual assessment.	Remove and replace with new spigot Replace missing spigot
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Plaform Brackets

The Cuplok Platform Bracket (also known as a "Hop Up Bracket") is load bearing member and incorporates a blade connection at one end. Platform Brackets range in size to support either 1, 2 or 3 Cuplok Planks and connect to the Standard by means of the blade connection. 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 blade connection must not be damaged or deformed.



Concrete deposits on standard Clean concrete deposits off Standard paying particular attention to ensure cups,

spigot are clean.



## Cuplok/ Supercuplok Platform Brackets

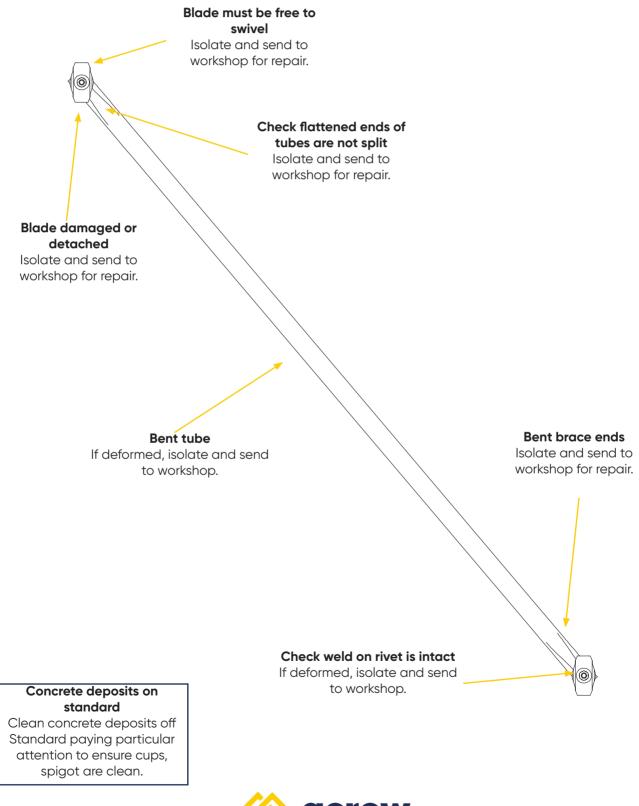
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted	Remove build up with wire brush or chipping hammer
Cracked welds	Not permitted - all welds must be intact	Grind back cracked weld then re- weld as per Work Instruction
Distorted or bent angle sections	More than 4mm depth	Straighten or replace section
Cracked or missing welds at blades or between angle sections	Not permitted - all welds must be place & intact	Grind back cracked weld then re- weld or replace missing weld as appropriate.
Blade end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade. Ensure blade is welded square and bracket is correct overall length.
Damaged Struts	Damaged struts not permitted	Grind and re-weld. Refer Work Instruction
Damaged tie bar holes	Holes must be in original shape	Weld repair of holes followed by reshaping to correct shape
Damaged or missing U-Bracket support	Not permitted	Replace U-Bracket 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		



### Cuplok/ Supercuplok Diagonal Braces

The Cuplok Brace is a tubular component with flattened ends and incorporates a swivilling blade assembly at each end and are used to assist scaffold stability. They connect to the Standard by means of the blade assembly and range in length from 1.6m to 3.6m. Braces must be straight and the blade assembly must be free to rotate and not be damaged or deformed.





## Cuplok/ Supercuplok Diagonal Braces

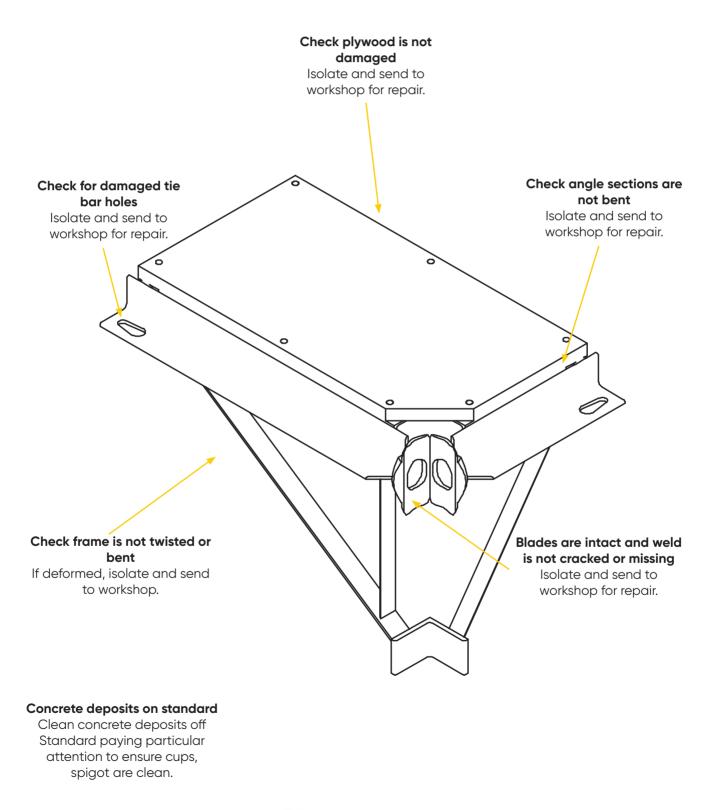
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted	Remove build up with wire brush or chipping hammer
Brace blades not free to swivel	Ends must be free to swivel	Check and remove obstructions, if necessary replace blade and rivet
Bent tube	Any bent in excess of L/500 is not permitted and must be straightened	If bend is less than L/300 then straighten on Flypress. If tube is bent more than L/300 or the tube surface has been kinked at the bend then the brace must be scrapped
Splits in brace flattened end (face or edge)	Flattened end must be free of any splits	Weld up split, if weld will interfere with rotation of blade then grind flush to allow clearance
Rivet head corroded blade is too floppy and gap between blade and tube is more than 3mm	Rivet head must not be corroded and the blade must not be too floppy. Corrosion would indicate there would be also be a reduction in the rivet stem	Remove blade and rivet by grinding out weld. Replace with new BFS rivet ensuring the blade can swivel freely and the gap between the blade and the tube face is 1mm
Weld on rivet cracked or broken	Rivet must be securely welded to flattened end	Grind back and reweld making sure rivet is pushed home so that shoulder of rivet bears hard against tube
Bent brace ends	No more than 3mm	Straighten on Flypress. Ensure ends are parallel to tube centreline
Dents in tube	Damage or missing blades not permitted	If more than 3mm then scrap
Blade, damaged or missing	Visual assessment.	Re-weld new blade if damaged or detached. Ensure brace blade rivet is welded square and centres are correct overall length.
Surface rust or pitting	Visual assessment	For surface rust, repaint Replace component if excessively pitted
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Diagonal Braces

The Cuplok Corner Bracket is a load bearing member and incorporates a blade connection at one end. It is used at the corner junction of a run of platform brackets at internal corners of buildings. Corner Brackets are interconnected to Platform Brackets with a Tie Bar to form the basic structure which supports the planks. They must be straight and the blade connection must not be damaged or deformed.





## Cuplok/ Supercuplok Diagonal Braces

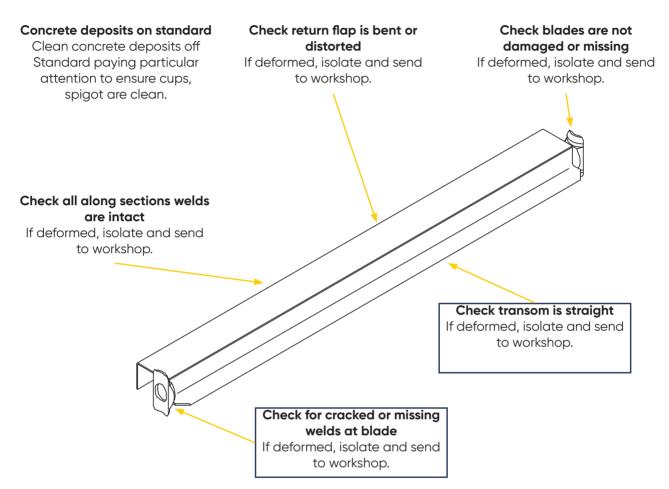
### Inspection

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 unit must be scrapped
Cracked or missing welds at blades	Not permitted - all welds must be intact	Grind back and re-weld or replace weld as appropriate
Plywood is damaged	Plywood must be not be cracked or damaged	Replace plywood
Damaged tie bar holes	Holes must be in original shape	Weld repair of holes followed by reshaping
Blades,missing damaged or not square	Blades must be intact and square	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade Ensure blade is welded square and corner bracket is correct overall length
Concrete deposits on frame or ply	Frame & ply must be free of concrete deposits	Remove concrete deposits particularly around blades
Bottom bracket bent	Bottom bracket must be straight	Straighten if possible otherwise replace
Plank support angle sections bent	Angle sections must be straight and square	Straighten
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Return Transom

The Return Transom is used at the junction of two runs of scaffold which are at right angles to each other. The channel section or return lip hooks over the ledger of the adjoining scaffold return.



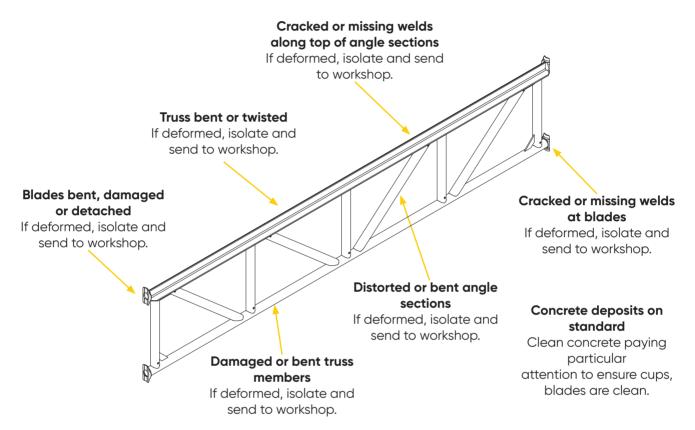
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Distorted or bent angle sections	Any bend more than L/200 must be straightened	Straighten If not possible then scrap
Welds cracked or broken	All welds must be intact	Grind back and re-weld
Blade end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade Ensure blade is welded square and Transom is correct overall length
Cracked or missing welds between blades and angle sections	Cracked or missing welds not permitted	Grind back cracked weld then re- weld or replace weld
Return flap damaged or distorted	The return flap must be straight and its profile true	Straighten if possible otherwise replace with new section
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		



### Cuplok/ Supercuplok Transom Truss

The Cuplok Transom Truss is a load bearing member and incorporates a blade assembly at each end. The Transom Truss is used in situations where high loading is required. They must be straight and free of twist and the blade ends must not be damaged or deformed.



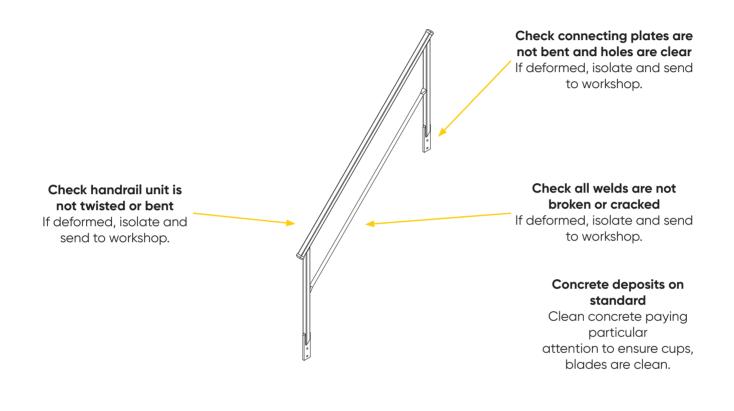
### Inspection

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
Cracked or missing welds between blades and angle or tube sections	Cracked or missing welds not permitted	Grind back cracked weld then re- weld or replace missing weld
Cracked welds on truss members	Cracked welds not permitted	Grind back cracked weld then re- weld
Cracked or missing welds between angle sections	Cracked or missing welds not permitted	Grind back cracked weld then re- weld- Weld positions to drawing
Blade end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade Ensure blade is welded square and transom is correct overall length.
Truss members damaged or bent	Truss members must be straight and undamaged	Straighten members or replace
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Stairway Handrail

The Cuplok Stairway Handrail is used with the Cuplok Aluminium Stairway. It attaches to the stairs by bolts.



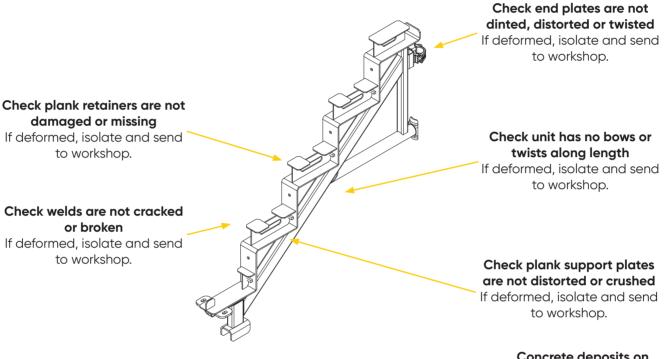
### Inspection

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
Unit bent or twisted	Unit must be straight	Straighten on Flypress
Connecting plates bent	Ends plates must be straight	Straighten if possible otherwise weld on new plate
Welds cracked or broken	Cracked or broken welds not permitted	Grind weld and replace welds as per 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		



### Cuplok/ Supercuplok Stair Stringer

The Cuplok Stair Stringer is a fabricated component which fits within the Cuplok scaffold bay. It utilizes steel planks as treads and clamps over the ledger at top end and is supported by the ledger at the other end. They must be undamaged, straight, free from twist and bow.



# Concrete deposits on standard

Clean concrete paying particular attention to ensure cups, blades are clean.

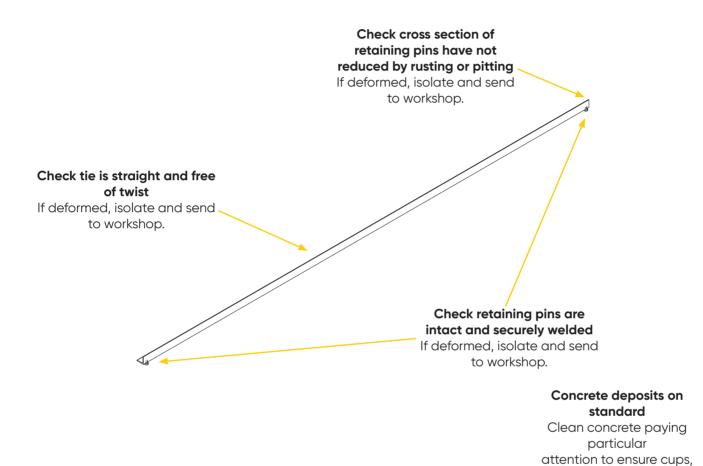
### Inspection

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
Damaged or distorted plank retainers	No more than 3mm depth	Panel beat to achieve original profile or replace
Damaged or missing latch pin assembly	Cracked welds not permitted	Re-weld areas
Distorted or bent	No more than 5mm distortion	Straighten or replace
Missing R-Clips	Missing clips not permitted	Replace
Bow or Twist along length	No more than 12mm on the overall length	Straighten with Fly Press
Surface rust or pitting	Visual assessment	Repaint or replace component if excessive
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Tie Bar

The Cuplok Tie Bar is attached at the ends of the platform bracket to control their movement. The retaining pin fits into the teardrop hole and locks into position.



## Inspection

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

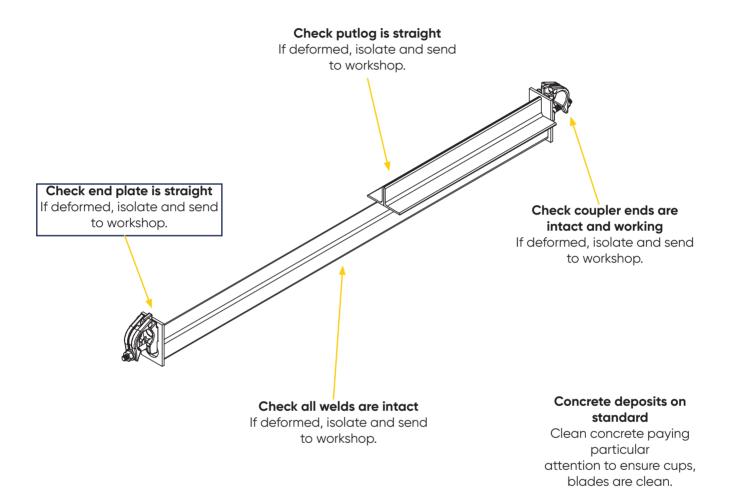
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on tube, angle or at connections	Remove build up with wire brush and/ or chipping hammer
Cracked or broken welds on retaining pins	Cracked or broken welds not permitted	Grind weld and replace welds as per Work Instruction
Distorted or bent angle	No more than 4mm depth	Straighten if possible otherwise scrap
Retaining pins missing or damaged	Retaining pins must be intact	Replace (Re-weld) new pin if damaged or detached
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		

blades are clean.



### Cuplok/ Supercuplok Ladder Access Transom

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



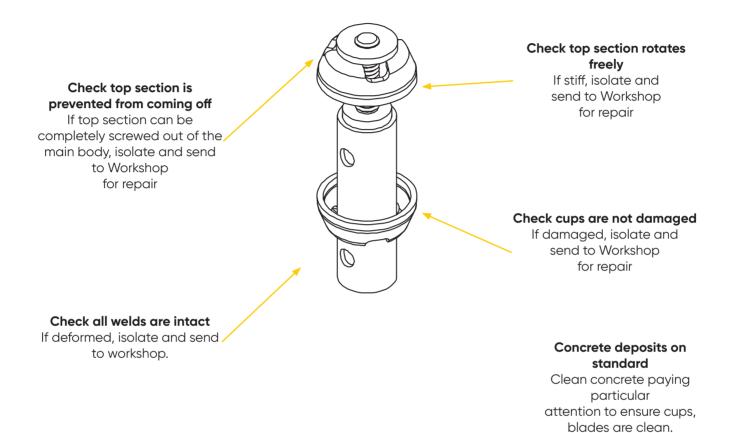
### Inspection

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
Welds cracked or broken	All welds must be intact	Grind back and reweld
End plate bent	End plate must be square (90 degrees)	Straighten
Coupler ends damaged or not functioning correctly	Coupler must be intact and functioning correctly, nut must turn freely	If problem is the nut ,oil and try to free otherwise replace T bolt assembly. If coupler body or cap damaged the grind off coupler and weld on new coupler
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		



### Cuplok/ Supercuplok Deck Adapter

Used in birdcage scaffolds to provide a plush top deck.



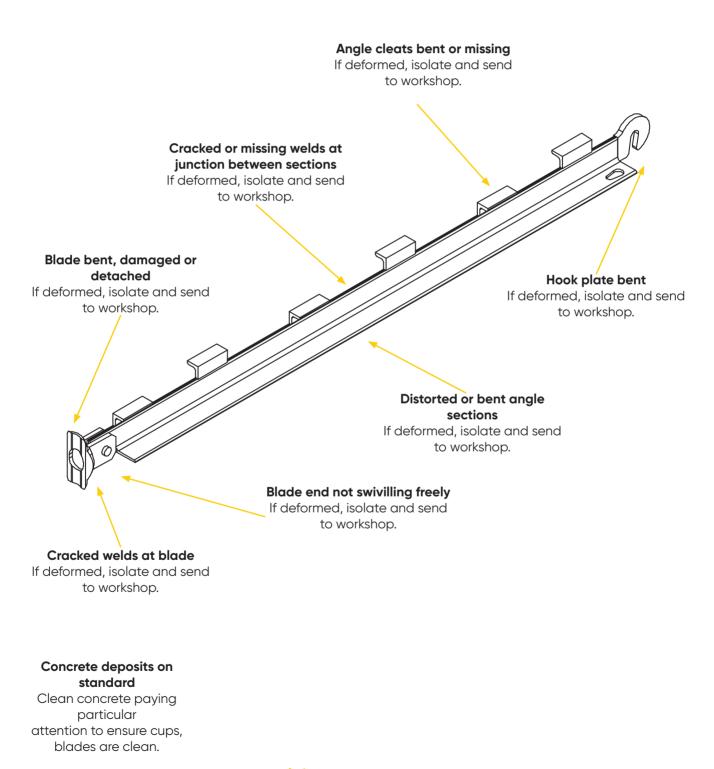
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Top section does not rotate freely	Top section must rotate freely	Lubricate thread and force rotate top section until free. If unable to free then the adaptor must be scrapped
Build up of concrete or other matter	Deck Adaptor should be clear of concrete deposits	Remove concrete build up with wire brush and/or chipping hammer Retaining pins must be clear of any concrete
Cracked or broken welds	Cracked or broken welds not permitted	Grind weld and replace welds as per Work Instruction
Cups are damaged	Cups must be undamaged and true to shape	Replace by grinding back weld and welding on a new cup
Top section can be screwed off	Top section must have a thread restriction preventing it from screwing completely off from the main body	Weld new blob on thread through hole in main body if possible otherwise scrap. Note Follow instructions on drawing when welding new blob
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Fan Guard Bearer

The Fan Guard Bearer used in conjunction with the Fan Guard Tie provides an external platform to catch falling debris





## Cuplok/ Supercuplok Fan Guard Bearer

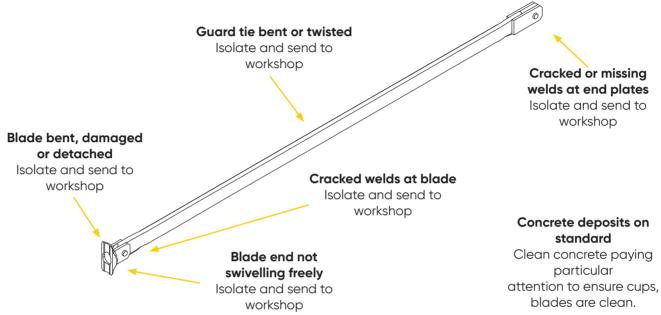
### Inspection

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 at blades	Cracked welds not permitted	Grind back cracked weld then reweld
Cracked welds between angle sections	Cracked welds not permitted	Grind weld and replace welds as per drawing
Blade end connection bent, damaged or missing	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade. Ensure blade is welded square and bearer is correct overall length
Distorted or bent angle sections	No more than 4mm depth	Straighten or replace section
Blade end not swivelling freely	Blade end must swivel freely	Find source of problem & rectify if possible otherwise replace blade end
Surface rust or pitting	Visual assessment	For surface rust, repaint or touch up as applicable. Replace component if excessively pitted.
Angle cleats bent or missing	Angle cleats must be intact (6 cleats per unit)	If bent straighten, if missing replace
Hook plate bent	Hook plate must be straight	Straighten then check welds are not cracked
Transom not tested in accordance with WI-CL-107	Transom must be tested to WI 186	Test transom blades in accordance with WI –CL-107. Mark with white flashes on completion
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Cuplok/ Supercuplok Fan Guard Tie

The Fan Guard Bearer used in conjunction with the Fan Guard Tie provides an external platform to catch falling debris



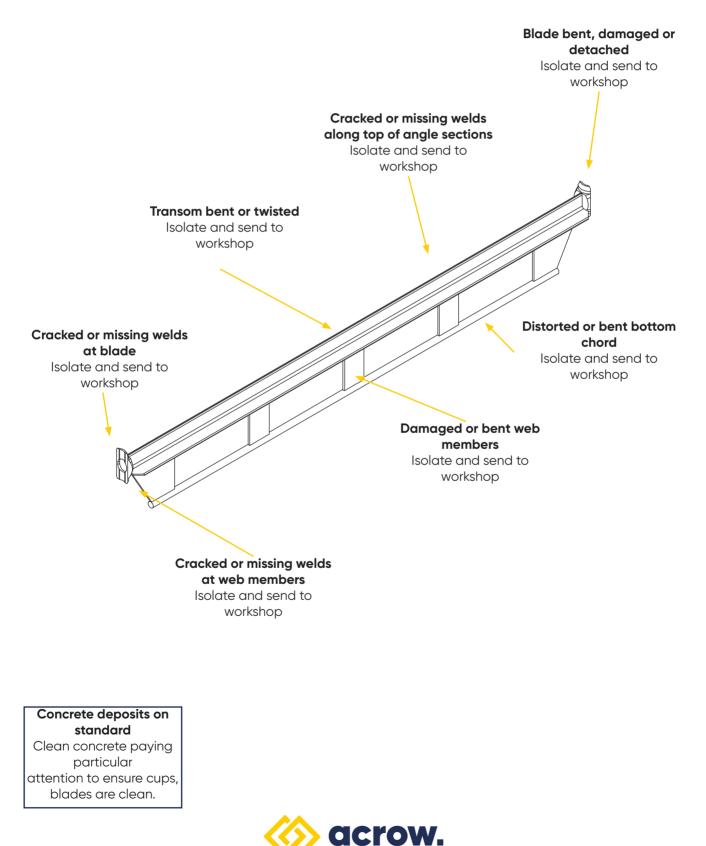
### Inspection

DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Cracked welds not permitted	Grind back cracked weld then reweld. After welding, allow to cool then test to WI-CL-107
No build up permitted on tube or at connections	Straighten using fly press
Unit must be straight	Grind weld and replace welds as per drawing
Blade end must swivel freely	Find source of problem & rectify if possible otherwise replace blade end
Blade end must be intact	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade Ensure blade is welded square and tie is correct overall length.
End plates must be straight	Straighten if possible, otherwise replace
Transom must be tested to WI 186	Test transom blades in accordance with WI –CL-107 Mark with white flashes on completion
	Cracked welds not permitted No build up permitted on tube or at connections Unit must be straight Blade end must swivel freely Blade end must be intact End plates must be straight



### Cuplok/ Supercuplok Transom Beam

The Cuplok Transom Beam is a load bearing member and incorporates a blade assembly at each end. The Beam is used in situations where a higher loading is required. They must be straight and free of twist and the blade ends must not be damaged or deformed.



GINEERING & CONSTRUCTION

7.22

## Cuplok/ Supercuplok Transom Beam

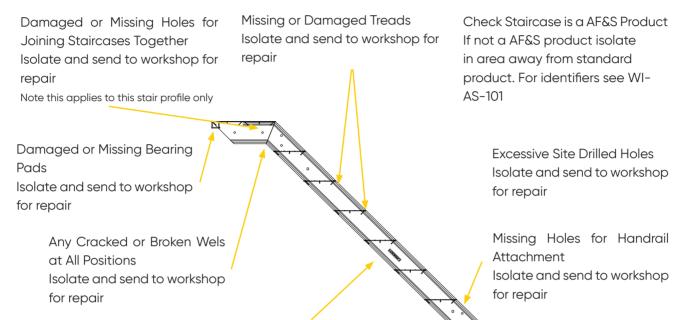
## Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Build up of concrete or other matter	No build up permitted on transom angle or at blade connections	Remove build up with wire brush and/ or chipping hammer
Beam bent or twisted	Beam must be straight and free of twist	Straighten if possible otherwise scrap
Cracked or missing welds between blades and angle sections	Cracked or missing welds not permitted	Grind back cracked weld then re- weld or replace missing weld
Cracked welds between angle sections	Cracked welds not permitted	Grind weld and replace welds as per drawing
Distorted or bent bottom chord	Bottom chord must be straight	Straighten or replace section
Transom not tested in accordance with WI 186	No damage permitted	Replace (Re-weld) new blade if damaged or detached. Note Only Transom blades must be used, do not use a Ledger blade. Ensure blade is welded square and transom beam is correct overall length
Blade end connection bent, damaged or missing	Transom must be tested to WI 186	Test transom blades in accordance with WI –CL-107 Mark with white flashes on completion
Cracked welds on web members	Cracked welds not permitted	Grind back weld and replace welds
Damaged or bent web members	Web members must be straight	Straighten or replace
Surface rust or pitting	Visual assessment	For surface rust, repaint or touch up as applicable. Replace Visual assessment. component if excessively pitted.



### Cuplok/ Supercuplok Construction Stairs

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



Bow or Twist or Dents Along Length Isolate and send to workshop for repair

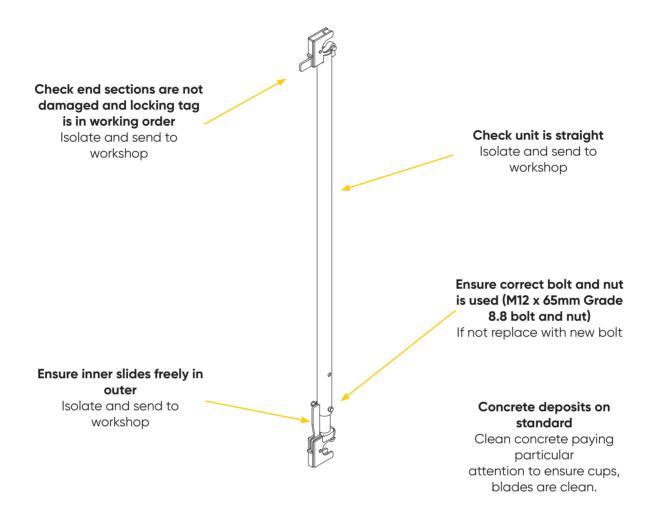
### Inspection

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		



### Supercuplok Adjustable Braces

Attaches to Cuplok ledgers to provide diagonal brace to the node points in a Supercuplok shoring application.



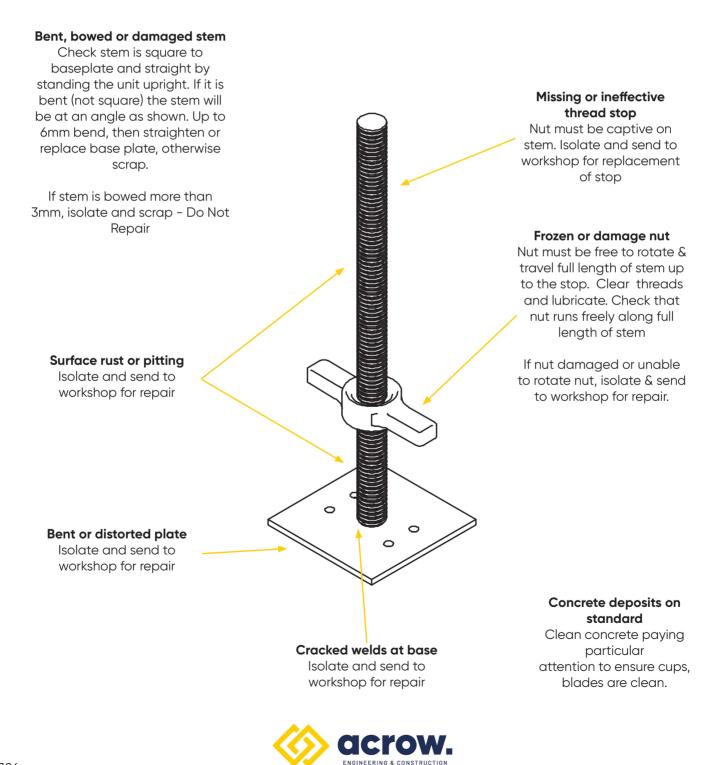
### Inspection

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Inner does not slide freely in outer	Inner does not slide freely in outer	Find source of problem and rectify, if unable to rectify then scrap the problem component
Correct pin & R clip not fitted	Correct pin must be fitted	Fit new pin and R clip
Unit is bent	Unit must be straight	Straighten with flypress, if unable to straighten then the unit must be scrapped
Concrete deposit on brace	Brace must be free of concrete	Clean concrete deposits from brace paying particular attention to adjustment holes
End section damaged	End section must be intact with locking tag working properly	Repair if possible if not the replace with a new end section
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Supercuplok Adjustable Base

The SuperCuplok Adjustable Baseplate is a key load carrying component for SuperCuplok Formwork Support systems, however, can be used with Cuplok or other similar scaffolding and formwork systems. It fits directly into the base of a spigotted standard or into top of an open ended standard. The wing nut is a cast item and incorporates a self-cleaning thread. The threaded stem includes a safety stop to capture the nut and ensure that the required minimum engagement into the standard is achieved. The stem must be straight and the nut must be free to travel the length of the stem from the base collar to the stop.



## Supercuplok Adjustable Base

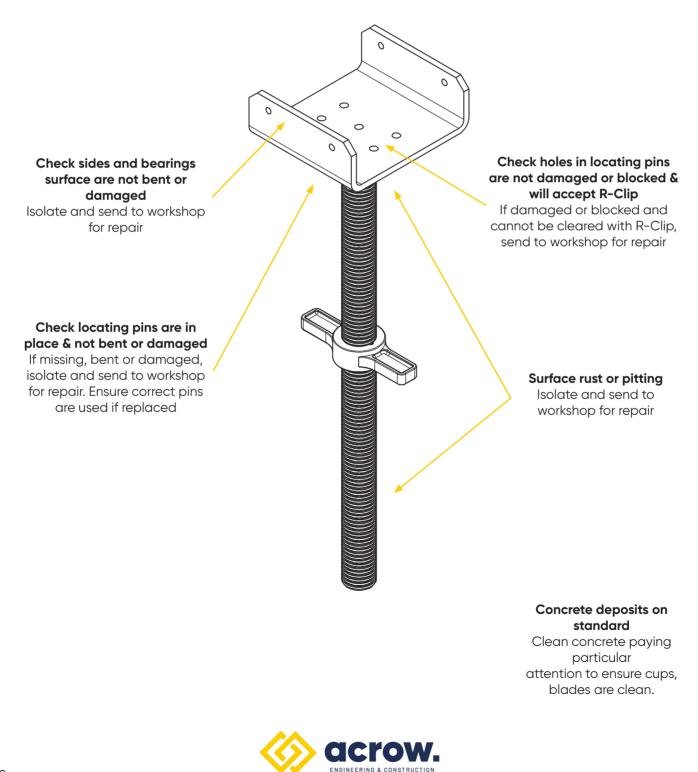
## Inspection

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 clean threads and lubricate
Bowed, bent or damaged Stem	Not permitted. Stem must be straight and not bent or bowed	Straighten or replace base plate for bends up to 6mm. Scrap if greater than 6mm. Straighten for bows up to 3mm. Scrap if greater than 3mm.
Missing thread stop dimple or weld bead	Thread stop must be in place to capture nut	Replace with small weld bead. Ensure weld bead does not prevent fit into Standard
Baseplate bent, damaged or missing	Baseplate must be straight and true to shape	Straighten if bent less than 6mm. Re-weld new baseplate if damaged, detached or bend exceeds 6mm.
Cracked welds at base of stem	Cracked welds not permitted	Grind and re-weld. Refer Work Instruction
Frozen or damaged nut	Nut must be free to rotate, not damaged especially handles	Replace with correct size and style of Nut. Refer Work Instruction
Surface rust or pitting	Visual assessment	For surface rust, lubricate as applicable. Replace component if excessively pitted
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



### Supercuplok Detachable U - Head

The SuperCuplok Detachable U-Head attaches to the SuperCuplok Adjustable Base to form an adjustable U-Head assembly and is typically used in formwork applications where Cuplok and SuperCuplok systems are used as formwork support.



## Supercuplok Detachable U - Head

## Inspection

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 clean threads and lubricate
Base & sides of U-Head bent or twisted	Base & sides must be straight & not twisted	Straighten with flypress, if unable to straighten then the unit must be scrapped
Locating Pins bent or damaged or missing	Pins must not be damaged or missing	Replace with new pins
R-Clips missing or damaged	R-Clips must be in place and not missing or damaged	Replace R-Clips of correct size
Cracked welds at base of stem	Cracked welds not permitted	Grind and re-weld. Refer Work Instruction
Frozen or damaged nut	Nut must be free to rotate, not damaged especially handles	Replace with correct size and style of Nut. Refer Work Instruction
Holes for R-Clips blocked or damaged	Holes must be clear. Damage to holes preventing security of R-Clips not permitted	Clean out holes. If hole damaged, to prevent correct location of R-Clip then replace locating pin
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		



# LOCATIONS

### NEW SOUTH WALES

#### National Head Office

 Formwork & Scaffold

 2a Mavis Street

 Revesby NSW 2212

 P:
 02 9780 6500

 F:
 02 9780 6499

 E:
 info@acrow.com.au

#### Screens Head Office

13-15 Vallance Street St Marys NSW 2760 P: 02 9219 1566

### QUEENSLAND

Formwork & Scaffold 280 Bilsen Road Geebung QLD 4034 P: 07 3265 2266 F: 07 3865 0277

Screens & Formwork 2 Morrison Lane Beenleigh QLD 4207 P: 07 3807 9800

Industrial Scaffold 22a Spanns Road Beenleigh QLD 4207 P: 07 3442 4000

### TASMANIA

Formwork & Scaffold 93 Lampton Avenue Moonah TAS 7009 P: 03 6277 1212 F: 03 6277 1290

Formwork & Scaffold 65 Boland Street Launceston TAS 7250 P: 03 6324 8282

F: 03 6324 8250

### WESTERN AUSTRALIA

### Formwork & Scaffold

11 Jackson Street Bassendean WA 6054 P: 08 9373 7200 F: 08 9379 3488

#### SOUTH AUSTRALIA

## Formwork & Scaffold

26 Circuit Drive Hendon SA 5014 P: 08 8359 9700 F: 08 8359 1366

### VICTORIA

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 159 Wellington Road

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