

SCAFFOLDING PRODUCT  
TECHNICAL GUIDE

# Acrow **Cuplok** Scaffolding System

General Technical and Application Manual



Genuine **Safety.**  
**Outstanding** Service.



# CUPLOK Scaffolding System

## CUPLOK – Functional design with simplicity of connection

The CUPLOK system has been designed to meet the requirements of the Australian construction and housing industries.

The success of CUPLOK lies in its principal design features:

- Speed of assembly
- Versatility of application
- Simplicity of components and their connection
- Galvanised components improve corrosion resistance
- Elimination of loose wedges
- No special tools required for assembly (hammer and spirit level only)
- Low maintenance.

## CUPLOK – Easy to erect

No wedges – just a simple locking cup at each node point on the Standards enables connection of the ends of up to four members in one locking action. With all four members attaching at the same level the system is ideal for birdcage construction as well as conventional face scaffolding.

## CUPLOK – Versatile in use

It is suitable for access or formwork support with an extensive range of special applications. The horizontal members can be angled to suit many different applications. The system has been used in triangular, trapezium and is ideal for curved surfaces.

## CUPLOK – Proven design with safety accessories

The CUPLOK system has a proven performance history on an extensive number of sites, meeting the requirements of the various statutory bodies. A comprehensive range of accessories is available to cater for safety requirements such as guardrails, mesh panels, ladder access, stair access and components to provide overhead protection.

## Important

The assembly guidelines contained in this booklet are the recommended methods to be used for CUPLOK products and must be accurately followed to achieve the correct function of the product. Seek advice from the Acrow Formwork & Scaffolding Engineering Department should you need to deviate from the recommendations and technical detail given in this manual.

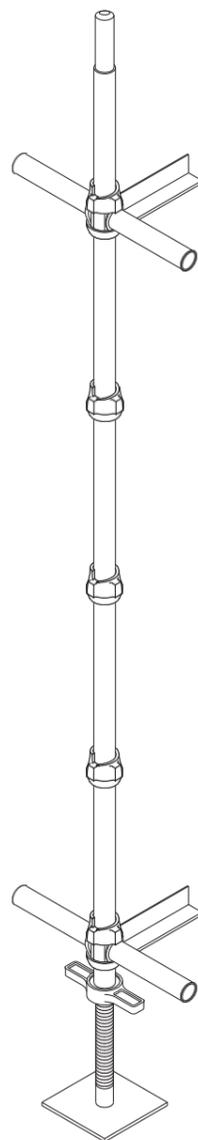
Use and application of the CUPLOK system must be in accordance with AS1576, AS4576, AS3610, Occupational Health & Safety Regulations of the regulatory authorities and approved industry codes of practice. The illustrations in these assembly instructions are recommended guidelines only.

## Product Codes

The product codes are shown on pages 3 to 8.

## Safety Warning

It is recommended that users of the CUPLOK system employ and implement appropriate procedures and control measures to eliminate or control any risk of possible musculoskeletal disorder/injury while manually handling CUPLOK components. Refer to your local regulatory authority for Codes of Practice on manual handling or other approved and recognised guidelines for correct and appropriate manual handling procedures.

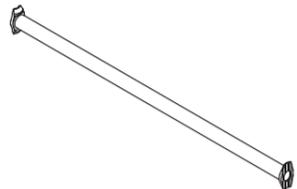
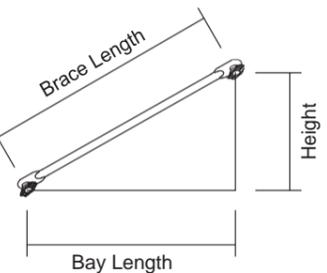
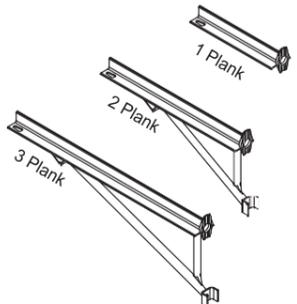


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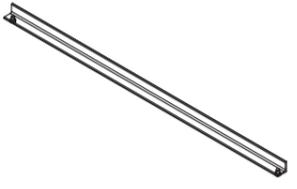
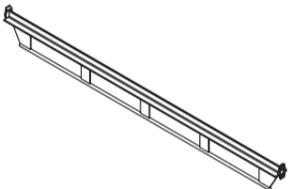
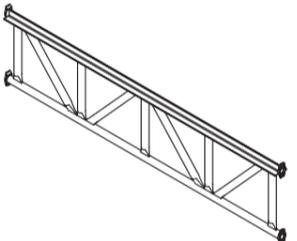
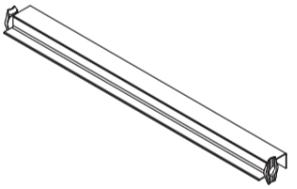
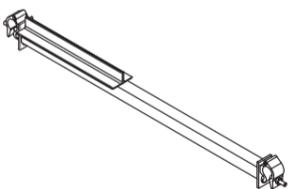
Product	Description	Code No.	Mass kg (nom.)
	<b>CUPLOK Spigotted Standards</b> CUPLOK spigotted Standards are principally used in access scaffolding applications and also as a base structure for formwork support applications. They have cup joints at 500mm intervals. The captive mobile top cups are designed to endure rough site handling and welded bottom cups are made from high-quality steel. Integral spigots, 150 mm long, are provided at the top of each Standard for making vertical connections. The spigots and the base of each Standard incorporate 16mm dia. holes to enable use of locking pins to join Standards where necessary.		
	CUPLOK Standard 0.5m	CS05	3.9
	CUPLOK Standard 1.0m	CS10	6.9
	CUPLOK Standard 1.5m	CS15	9.9
	CUPLOK Standard 2.0m	CS20	13.0
	CUPLOK Standard 2.5m	CS25	16.0
CUPLOK Standard 3.0m	CS30	19.1	
	<b>CUPLOK Open Ended Standards</b> CUPLOK open ended Standards are principally 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. The base of each Standard has a 16mm dia through hole to enable the use of locking pins to join it to a Spigotted Standard when required.		
	CUPLOK open ended Standard 0.8m	C50E08	5.2
	CUPLOK open ended Standard 1.3m	C50E13	8.2
	CUPLOK open ended Standard 1.8m	C50E18	11.3
	CUPLOK open ended Standard 2.3m	C50E23	14.3
	CUPLOK open ended Standard 2.8m	C50E28	17.3
	<b>CUPLOK Transoms</b> 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. The outward standing bottom leg of the angles supports the steel planks in a captive manner. Available in various lengths to suit scaffolding and formwork applications.		
	CUPLOK Transom 0.31m	CT031	2.6
	CUPLOK Transom 0.61m	CT061	5.0
	CUPLOK Transom 0.83m	CT083	6.6
	CUPLOK Transom 1.05m	CT10	7.9
	CUPLOK Transom 1.27m	CT13	9.7
	CUPLOK Transom 1.52m	CT15	11.5
	CUPLOK Transom 1.83m	CT18	13.7
	CUPLOK Transom 2.44m	CT24	22.4

1 The photographs/illustrations shown within this brochure are intended as expressing the diversity and possible applications of the product and as such must not be used as assembly instructions.  
 2 In line with Acrow Formwork & Scaffolding's commitment to continuous product development and improvement, the information contained in this brochure may be changed without notice.  
 3 Every effort has been made to give appropriate guidelines for the use of this product, however, Acrow Formwork & Scaffolding Pty Ltd accepts no responsibility for any loss or damages suffered by any person acting or refraining from action as a result of this information.  
 Should the users require any further information or guidance, they are encouraged to contact their local Acrow Formwork & Scaffolding outlet.

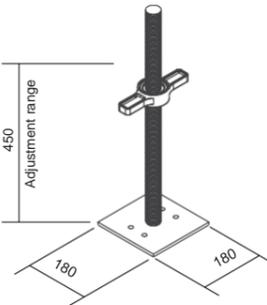
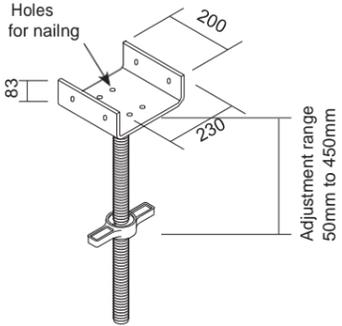
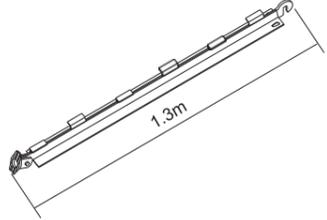
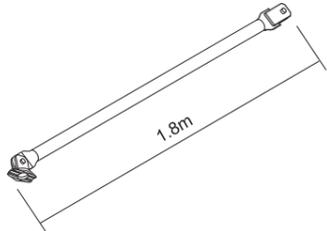
## CUPLOK Scaffolding System

Product	Description	Code No.	Mass kg (nom.)
	<p><b>CUPLOK Ledgers</b></p> <p>The Ledgers are manufactured from 48.3 mm O.D. tube with forged steel blade ends which locate into bottom cups of the Standards and are locked in place by the the corresponding top cups. Ledgers are available in various lengths to provide the desired grid dimension for scaffolding or formwork. Production of the Ledger since 1997 has been from thinner high grade steel tube. This contributes to a lighter Ledger for easier handling. Ledgers manufactured prior to 1997 are made from the thicker wall tube and weigh approx. 20% heavier than the weights stated below.</p>		
	<p>CUPLOK Ledger 0.22m CL022 1.2</p> <p>CUPLOK Ledger 0.34m CL034 1.7</p> <p>CUPLOK Ledger 0.61m CL061 2.6</p> <p>CUPLOK Ledger 0.83m CL083 3.4</p> <p>CUPLOK Ledger 1.05m CL105 4.2</p> <p>CUPLOK Ledger 1.27m CL13 5.0</p> <p>CUPLOK Ledger 1.52m CL15 5.9</p> <p>CUPLOK Ledger 1.83m CL18 7.0</p> <p>CUPLOK Ledger 2.44m CL24 9.2</p> <p>CUPLOK Ledger 3.05m CL30 11.4</p>		
	<p><b>CUPLOK Diagonal Braces</b></p> <p>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.</p> <p>The brace is available in various lengths to suit the combination of bay widths and heights.</p>		
	<p>CUPLOK Brace 1.62m CB16 6.8</p> <p>CUPLOK Brace 1.71m CB17 7.2</p> <p>CUPLOK Brace 1.83m CB18 7.8</p> <p>CUPLOK Brace 1.97m CB20 8.2</p> <p>CUPLOK Brace 2.14m CB21 8.8</p> <p>CUPLOK Brace 2.37m CB24 9.9</p> <p>CUPLOK Brace 2.51m CB25 10.0</p> <p>CUPLOK Brace 2.71m CB27 10.9</p> <p>CUPLOK Brace 2.86m CB30 11.4</p> <p>CUPLOK Brace 3.16m CB32 12.5</p> <p>CUPLOK Brace 3.49m CB35 13.7</p> <p>CUPLOK Brace 3.65m CB37 13.9</p>		
	<p><b>CUPLOK Platform Brackets</b></p> <p>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.</p>		
	<p>CUPLOK Platform Bracket – 1 Plank CHUB1 2.1</p> <p>CUPLOK Platform Bracket – 2 Plank CHUB2 5.8</p> <p>CUPLOK Platform Bracket – 3 Plank CHUB3 7.8</p>		

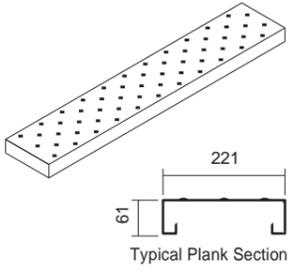
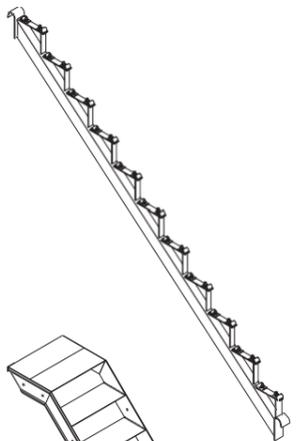
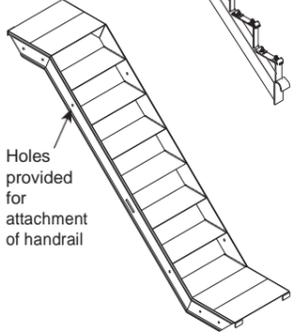
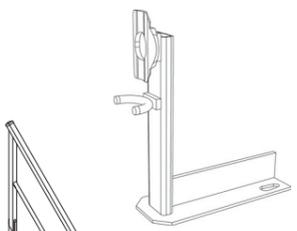
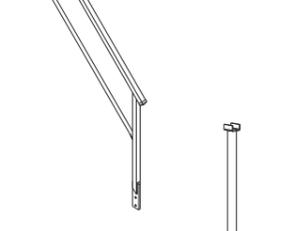
## General Technical and Application Manual

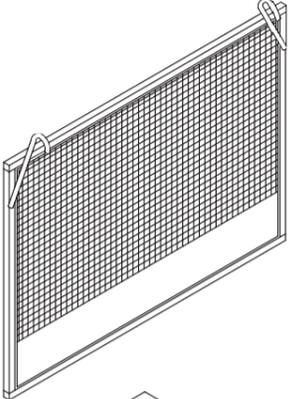
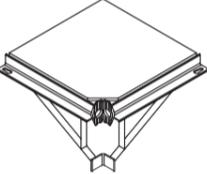
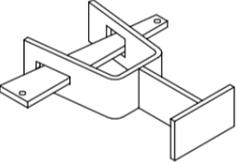
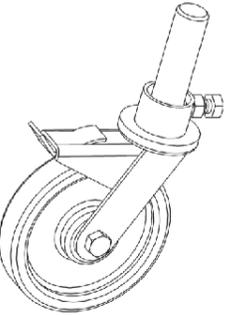
Product	Description	Code No.	Mass kg (nom.)
	<p><b>CUPLOK Tie Bars</b></p> <p>Tie bars are used to interlock the ends of Platform Brackets and to provide a means of preventing the Planks from sliding off the end of the bracket. The studs at the end of the tie locate into slots in the Platform Brackets.</p>		
	<p>CUPLOK Tie Bar 0.61m CTB06 1.8</p> <p>CUPLOK Tie Bar 0.83m CTB08 2.4</p> <p>CUPLOK Tie Bar 1.05m CTB105 3.0</p> <p>CUPLOK Tie Bar 1.27m CTB13 3.7</p> <p>CUPLOK Tie Bar 1.52m CTB15 4.5</p> <p>CUPLOK Tie Bar 1.83m CTB18 5.3</p> <p>CUPLOK Tie Bar 2.44m CTB24 7.0</p> <p>CUPLOK Tie Bar 3.05m CTB30 10.8</p>		
	<p><b>CUPLOK Transom Beam</b></p> <p>Transom Beams are designed for special duty load applications. Allows high deck capacity and large grid patterns.</p>		
	<p>CUPLOK Transom Beam 1.83m CTBEAM18 21.2</p> <p>CUPLOK Transom Beam 2.44m CTBEAM24 27.0</p>		
	<p><b>CUPLOK Transom Truss</b></p> <p>The Transom Truss is designed for high capacity loading platforms and overhead protective structures. Connects at 4 points, enhancing the rigidity of the scaffold.</p>		
	<p>CUPLOK Transom Truss 1.83m CTT18 40.1</p> <p>CUPLOK Transom Truss 2.44m CTT24 52.4</p> <p>CUPLOK Transom Truss 3.05m CTT30 55.7</p>		
	<p><b>CUPLOK Return Transom</b></p> <p>The Return Transom is used at the end of a scaffold run where it meets another scaffold running at right angles to it.</p> <p>The U-shaped return section of the transom hooks over the ledger of the adjacent scaffold, closing off the gap between the the two scaffolds.</p>		
	<p>CUPLOK Return Transom 1.3m CTRET13 10.3</p>		
	<p><b>CUPLOK Ladder Access Transom</b></p> <p>The Ladder Access Transom is used to provide an opening in a bay allowing a ladder to pass through it. The L.A. Transom is attached to and spans between the Ledgers in the bay.</p>		
	<p>CUPLOK Ladder Access Transom 1.05m CTLA105 10.6</p> <p>CUPLOK Ladder Access Transom 1.27m CTLA13 12.6</p> <p>CUPLOK Ladder Access Transom 1.83m CTLA18 15.2</p> <p>CUPLOK Ladder Access Transom 2.44m CTLA24 18.0</p>		

# CUPLOK Scaffolding System

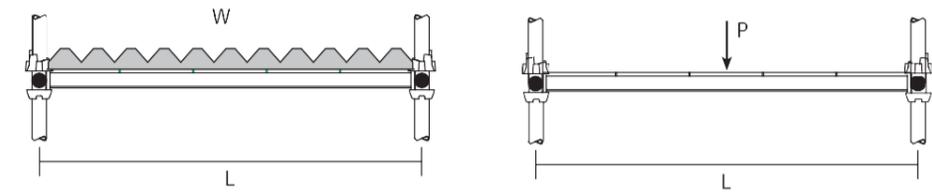
Product	Description	Code No.	Mass kg (nom.)
	<p><b>Adjustable Base</b></p> <p>The Adjustable Base is a generic AF&amp;S product which is used with all scaffold systems and some AF&amp;S formwork systems. It has a solid stem of 36mm nominal diameter which has a nut restraint to ensure the stem always has a minimum engagement of 150mm into the Standard.</p> <p>Adjustable Base (Solid) – Form/Scaf</p>	ABSFS	7.1
	<p><b>Adjustable U-Head</b></p> <p>The Adjustable U-Head is a generic AF&amp;S product which is used with scaffold systems and some AF&amp;S formwork systems. It has a solid stem of 36mm nominal diameter which has a nut restraint to ensure the stem always has a minimum engagement of 150mm. The U-Head is capable of accepting twin 100mm wide bearers.</p> <p>Adjustable U-Head (Solid) – Form/Scaf</p>	AUHSFS	11.1
	<p><b>CUPLOK Fan Guard Bearer</b></p> <p>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&amp;S Engineering Department for load capacity details.</p> <p>CUPLOK FanGuard Bearer</p>	CFGB	10.7
	<p><b>CUPLOK Fan Guard Tie</b></p> <p>Fan Guard Tie is used to support the end of the Fan Guard Bearer. The tie connects to the cup of a Standard and the twin plate end connects over the hook on the Fan Guard Bearer.</p> <p>CUPLOK FanGuard Tie</p>	CFGT	5.9
	<p><b>CUPLOK Deck Adaptor</b></p> <p>The Deck Adaptor is attached to the top Standard in birdcage scaffolds to enable a flush top deck to be assembled. The top cup is screwed down to capture Ledgers and Transoms.</p> <p>CUPLOK Deck Adaptor</p>	CDA	1.7

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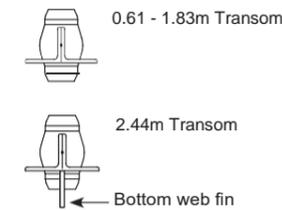
Product	Description	Code No.	Mass kg (nom.)
	<p><b>CUPLOK Steel Planks</b></p> <p>Planks to suit CUPLOK are formed from galvanised steel sheet with a perforated tread to provide a non-skid surface. Perforations are taken close to the ends and edges of the Plank to provide even coverage over the whole assembled deck.</p> <p>Cuplok Steel Planks 0.83m Bay SPC083 5.0            Cuplok Steel Planks 1.05m Bay SPC105 7.2            Cuplok Steel Planks 1.27m Bay SPC13 8.5            Cuplok Steel Planks 1.83m Bay SPC18 11.5            Cuplok Steel Planks 2.44m Bay SPC24 15.5            Cuplok Steel Planks 3.05m Bay SPC30 19.5</p>		
	<p><b>CUPLOK Stair Stringer</b></p> <p>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 Transoms.</p> <p>CUPLOK Stair Stringer 2m rise x 2.4m go CSS 31.5</p>		
	<p><b>CUPLOK Aluminium Stair</b></p> <p>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.</p> <p>CUPLOK Aluminium Stair 1.5m CST15 26.0</p>		
	<p><b>CUPLOK Step Bracket -1 Plank</b></p> <p>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.</p> <p>CUPLOK Step Bracket - 1 Plank CSBMK2 3.6</p>		
	<p><b>CUPLOK Aluminium Stair Handrail</b></p> <p>The Stair Handrail follows the slope of the Aluminium Stair and is bolted to the inside face of the Aluminium Stair side member.</p> <p>CUPLOK Aluminium Stair Handrail CPSTH 15.0</p>		
	<p><b>CUPLOK Stairway Trimming Standard</b></p> <p>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.</p> <p>CUPLOK Stairway Trimming Standard CSST 11.3</p>		

Product	Description	Code No.	Mass kg (nom.)
	<b>Mesh Guards</b> Mesh Panels are hung from the guardrail to provide a full protection screen 1 metre high along the length of the platform. The unit incorporates a built in kick plate and typically a midrail is not used when mesh guards are in place. Available in the nominal bay lengths.		
	Mesh Guard 1.27m	MP12	10.8
	Mesh Guard 1.83m	MP18	14.6
	Mesh Guard 2.44m	MP24	18.4
	Mesh Guard 3.05m	MP30	22.2
	<b>CUPLOK Corner Platforms</b> 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. (See page 23)		
	CUPLOK Corner Platform – 1 x 1	CCB1	5.0
	CUPLOK Corner Platform – 2 x 2	CCB2	11.5
	CUPLOK Corner Platform – 2 x 1	CCP2x1	9.5
	CUPLOK Corner Platform – 1 x 2	CCP1x2	9.5
	<b>Toe Board Clamp</b> Toe boards are secured using the generic Toe Board Clamp which locks around the Standard with its protruding prong holding the toe board Plank or Planks in place.	TBC	0.8
	<b>CUPLOK Return Toeboards</b> CUPLOK Return Toeboards are typically used at the end of a bay or return and installed parallel to the Transom. They are held captive between Standards by means of a set screw at one end and U-bracket arrangement at the other end.		
	CUPLOK Return Toeboard 0.61m	CRTB061	4.2
	CUPLOK Return Toeboard 0.83m	CRTB083	5.2
	CUPLOK Return Toeboard 1.05m	CRTB105	6.3
	CUPLOK Return Toeboard 1.27m	CRTB13	7.3
	CUPLOK Return Toeboard 1.83m	CRTB18	9.9
	CUPLOK Return Toeboard 2.44m	CRTB24	15.0
	<b>CUPLOK Scaffold Castor</b> 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.	CC200	4.5

CUPLOK Transoms



Cross Section of Transoms



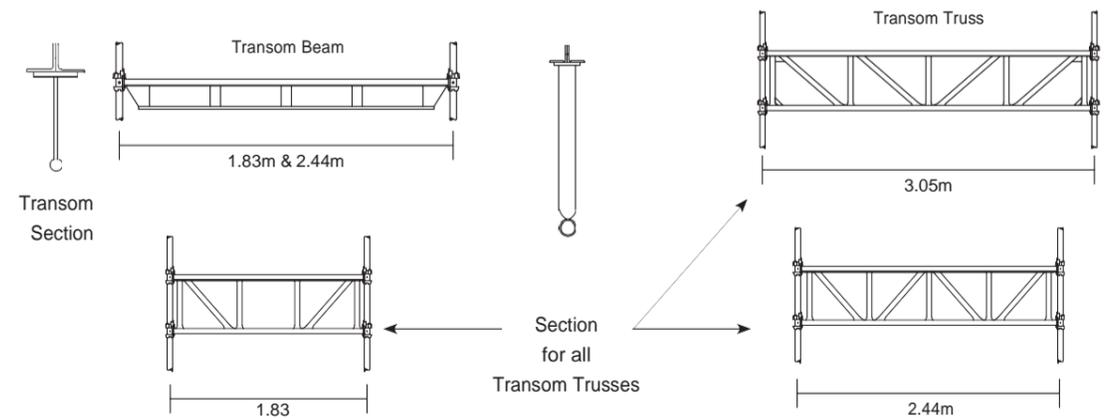
L (m)	Working Load Limits	
	Duty Live Load to AS1576.1	
	W (kN)	P (kN)
0.61	Light (2.2kN UDL)	1.0
0.83	Heavy (6.6kN UDL)	2.0
1.05	Heavy (6.6kN UDL)	2.0
1.27	Heavy (6.6kN UDL)	2.0
1.52	Medium (4.4kN UDL)	1.5
1.83	Medium (4.4kN UDL)	1.5
2.44	Medium (4.4kN UDL)	1.5

Notes:

- P = Working Load Limit for 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
- 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 AF&S Engineering department for design advice.
- Working Load Limits (P & W) may be limited by other components or assemblies.

CUPLOK Transom Beams and Transom Trusses

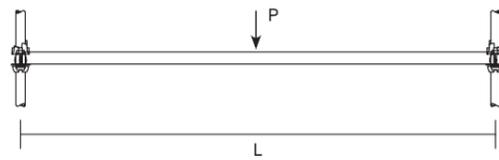
For load ratings and applications contact the AF&S Engineering Department



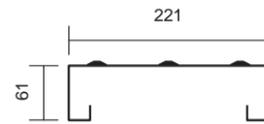
Transom Beams and Transom Trusses impose additional loads on the scaffold structure requiring the overall design of the scaffold to be checked and verified.

# CUPLOK Scaffolding System

## CUPLOK Planks

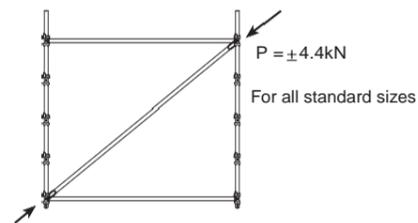


L (m)	P (kN)
1.27	4.1
1.83	2.8
2.44	2.1
3.05	2.0

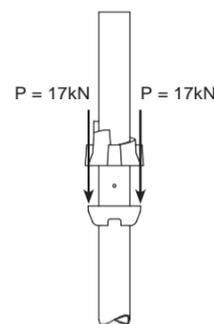


- All Planks meet point load requirement specified for Heavy Duty Loading to AS1576.1
- The sum of individual loads applied to planks must not exceed the Duty Live Load for the platform per bay.

## CUPLOK Diagonal Braces

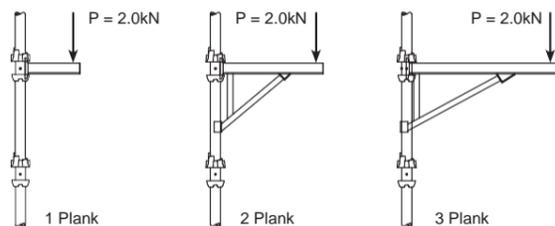


## Shear Capacity of Bottom Cup

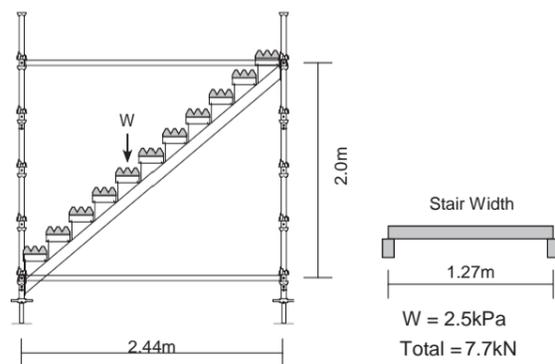


Maximum load per blade must not exceed 17kN and total load applied to a bottom cup must not exceed 34kN. The total load from multiple cups on the Standards load capacity must also be considered.

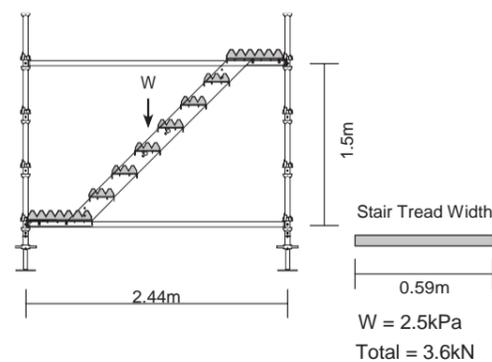
## CUPLOK Platform Brackets



## CUPLOK Stair Stringer (used in pairs)



## CUPLOK Aluminium Stair Unit



### Notes:

- P = Working Load Limit for Point Load      W = Working Load Limit for Uniformly Distributed Load
- Working Load Limits (P & W) may be limited by other components or assemblies.

# General Technical and Application Manual

## Formwork Support (Falsework) Applications

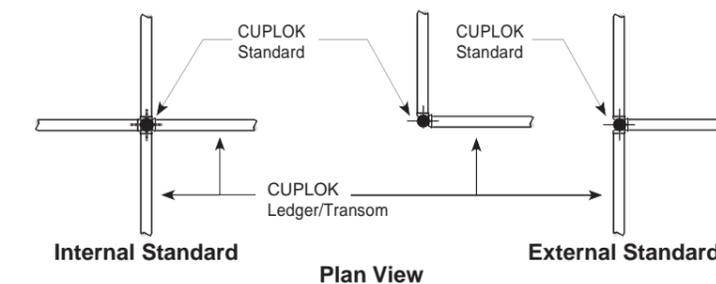
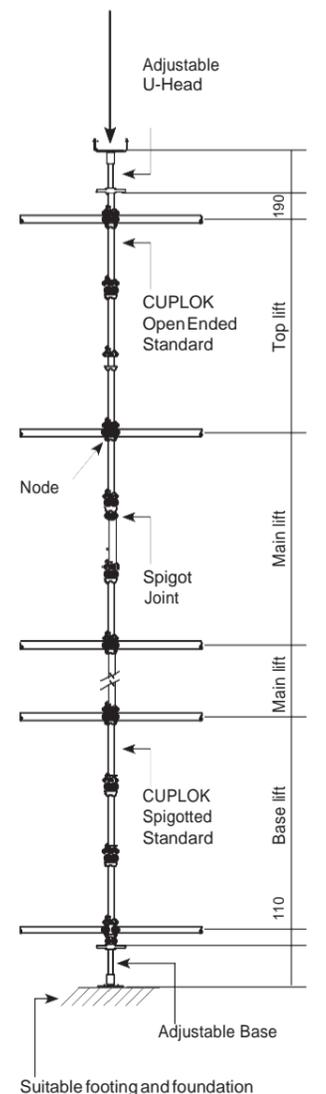
### General

- Footings and/or foundation shall be satisfactory to support the imposed loads and prevent differential settlement.
- All Standards shall be erected plumb.
- After squaring up the initial Standards on the first bay, plan bracing is helpful to maintain squareness.
- Each bay must have Ledgers/Transoms connected at the cup positions nearest the Adjustable Bases or Adjustable U-Head Assemblies, for example at top and bottom of each leg (and at intermediate positions at design lift heights).
- The most recommended type of falsework is built by having continuous lines of Ledgers or transoms in both directions.
- 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.
- No more than one spigot joint per Standard is allowed between vertical lifts of Ledgers/Transoms.
- Spigot Joints must be avoided in Base Lifts.
- Joints in Standards should be staggered if possible.

### Bracing

- Bracing shall satisfy two conditions:
  - Provide nodal restraint.
  - 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.
- All nodal points which are considered in defining lift heights shall be restrained.
- The correct amount of bracing shall be calculated, however a minimum amount must always be used. This requires every row of standards to have a top to bottom bracing system installed at a maximum of 4 bays apart along its length. This applies in both directions.
- Bracing can be provided externally (for example, 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 the bracing system.
- Bracing shall be installed immediately after each lift has been erected, and as close as possible to the node points (not more than 100mm from the node point).
- Transverse loads must act at node points on the Standards where Ledgers/Transoms are fitted (no secondary bending moments are permitted).
- If any brace is not continued to the support and is 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.
- When the formwork deck is not restrained (for example, 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-Heads.
- Individual towers or narrow falsework systems shall be fully and effectively 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.

### Applied Load ≤ WLL

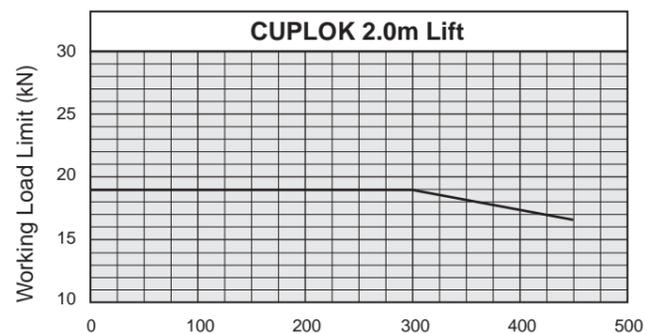


## CUPLOK Standards

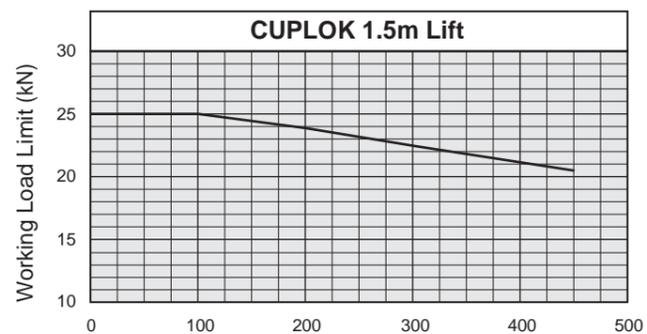
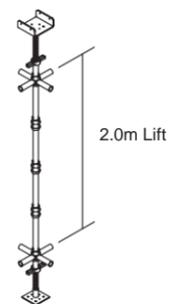
### Formwork Applications

Maximum Bay Size 1.8 m X 1.3 m

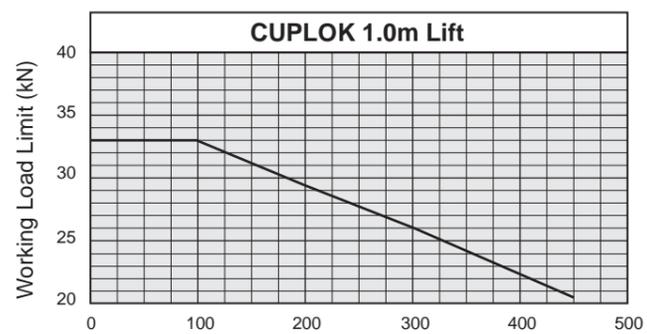
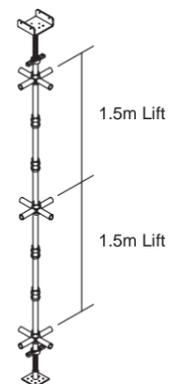
#### Working Load Limits for internal Standards



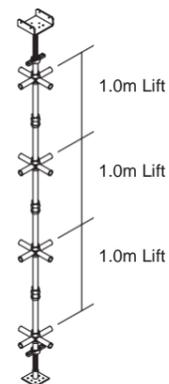
Adjustable Base/Adjustable U-Head Extension (mm)



Adjustable Base/Adjustable U-Head Extension (mm)



Adjustable Base/Adjustable U-Head Extension (mm)



If higher leg loads are required we recommend the use of the AF&S SUPERCUPLOK system

#### Notes:

- These graphs give Working Load Limits for internal Standards which are erected plumb, loaded concentrically and effectively braced in the major directions.
- For external Standards reduce Working Load Limits by 15%.
- These graphs must be read in conjunction with the Guidance Notes on page 11.

## CUPLOK 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 Branch.

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.

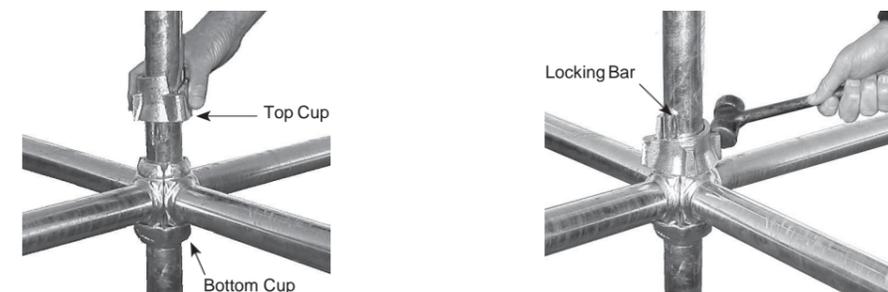
#### Compliance to Statutory Regulations

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.

#### Simple Method of Component Connection



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.

## CUPLOK Assembly Recommendations (cont)

**1** 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. Refer Figure 1.

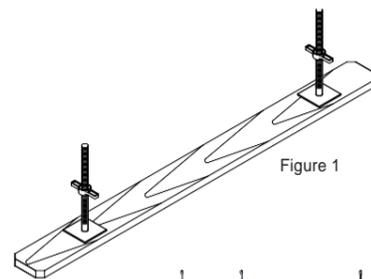


Figure 1

**2** 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.

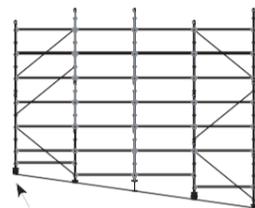


Figure 2

**3** 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. Refer Figure 2

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.

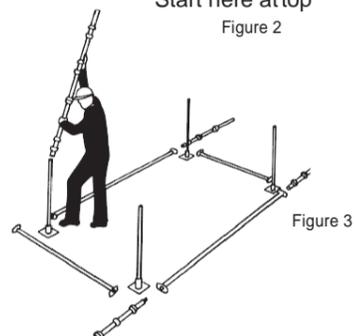


Figure 3

**4** 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. Refer Figure 3

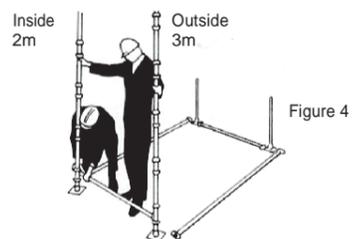


Figure 4

**5** 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. Refer Figure 4.

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

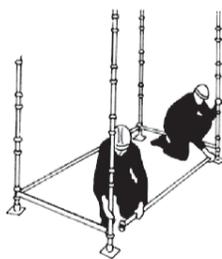


Figure 5

**6** 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. Refer Figure 5.

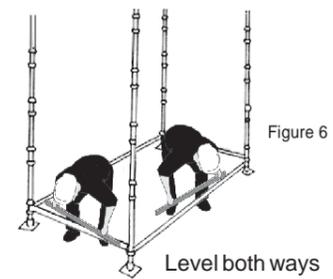


Figure 6

**7** 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. Refer Figure 6.

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

Level both ways

## CUPLOK Assembly Recommendations (cont)

**8** 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. Refer Figure 7.

If the Standards are moved an appreciable distance in the squaring up process, then recheck the levels. Refer Figure 8.

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.**



Figure 7

**9** 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.

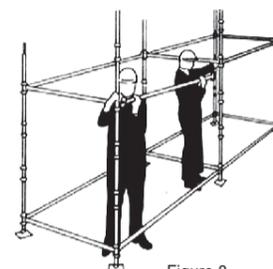


Figure 8

**10** The Working Platform can now be constructed using Scaffold Planks as decking and toeboards. Refer Figure 9.

Planks are supported by the flanges of Transoms and Toeboards are attached to Standards using Toeboard clamps.

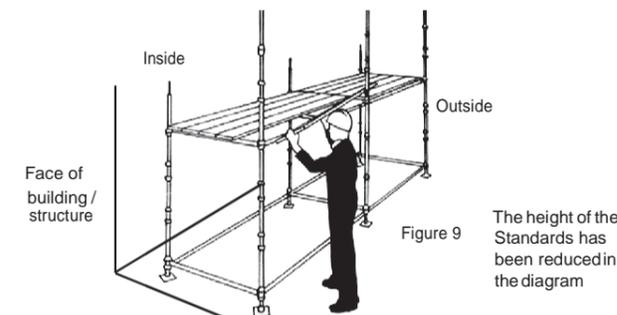


Figure 9

The height of the Standards has been reduced in the diagram

**11** 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. Refer Figure 10.

**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.

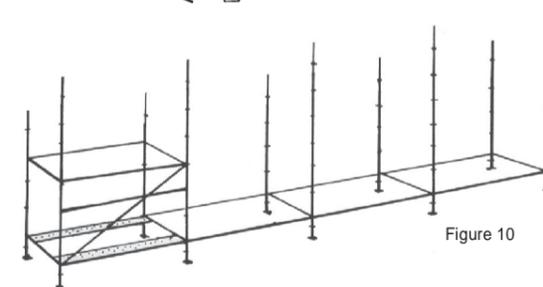


Figure 10

**12** Planks are now moved up to fully deck out the the first lift. Refer Figure 11. 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.

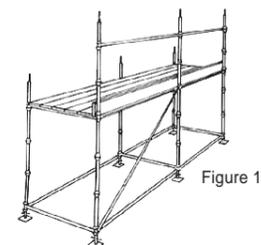


Figure 11

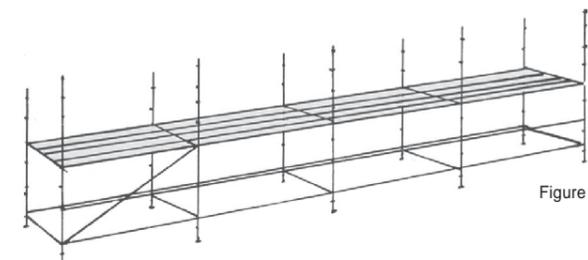


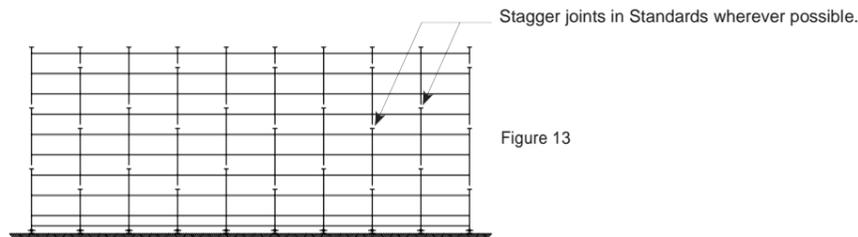
Figure 12

CUPLOK Assembly Recommendations (cont)

13 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. Refer Figure 13.

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.



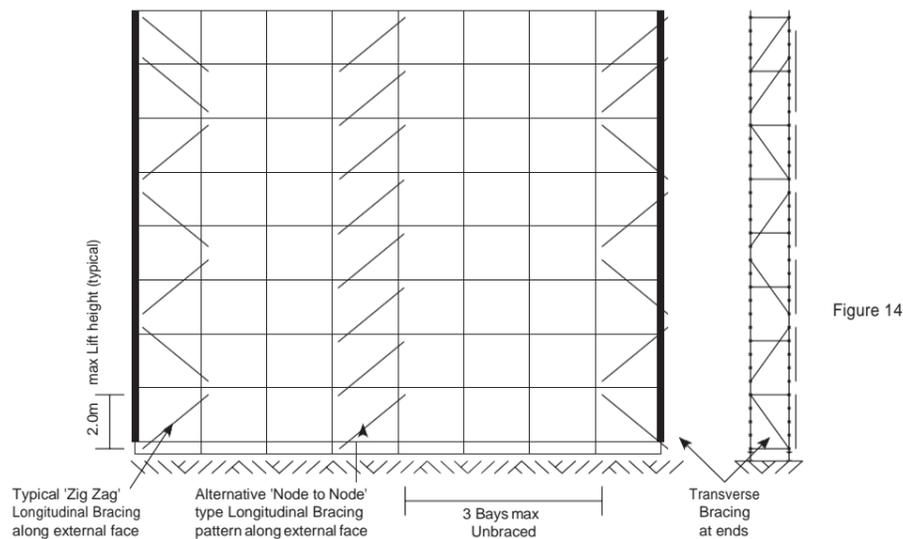
14 Face Bracing

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.

Refer Figure 14.



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.

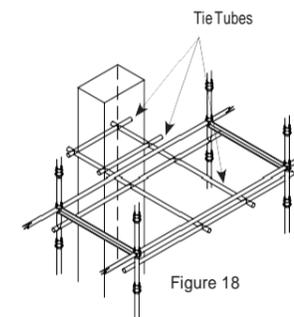
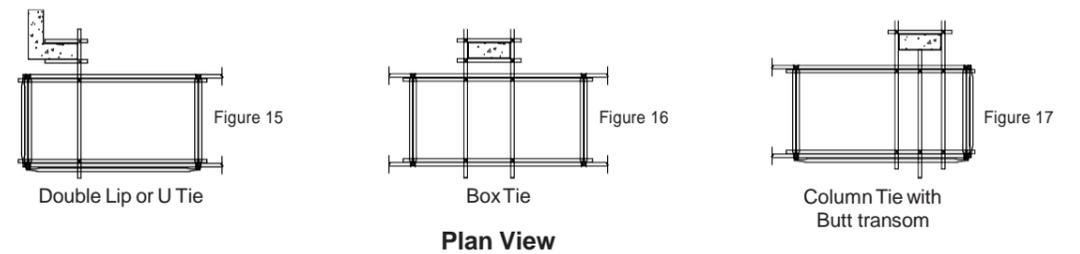
CUPLOK Assembly Recommendations (cont)

15 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 tube and right angle 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.

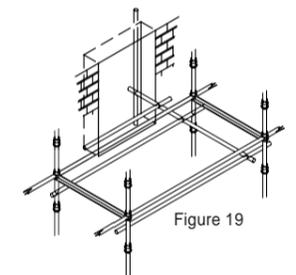
The scaffold must not be built to allow it to cantilever more than 4m without cladding beyond the last level of ties (refer Figure 20). If cantilevered section is clad, then consult AF&S Engineering for limits on cantilever height. The following examples show tie configurations for assembling around columns and through openings.

Note: In the examples shown, tie tubes are not connected direct to Standards but to horizontal tubes spanning between Standards, as shown in Figure 18.



**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.

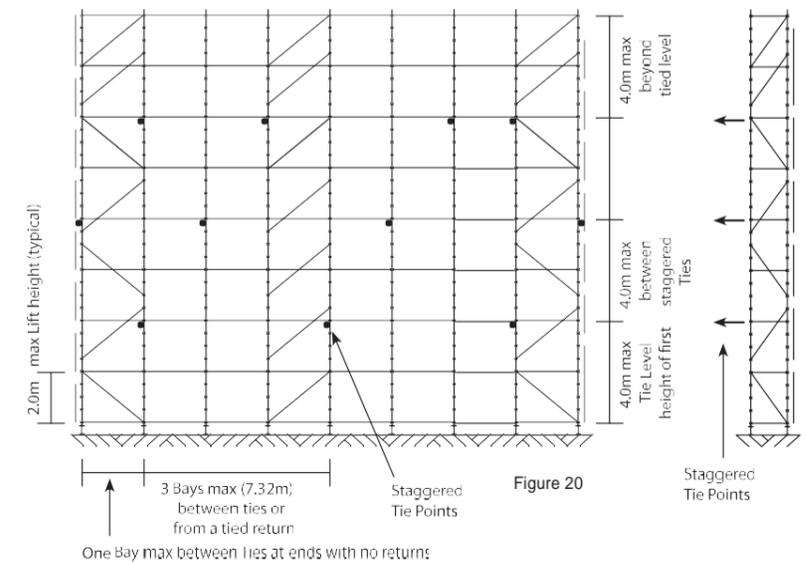
**Warning:** Tie tubes must not be attached to Ledgers. Tie tubes must be attached directly to Standards, if this is not possible then scaffold tube must be fixed between Standards with right angled couplers and the tie tube is attached to this scaffold tube.



Through Ties should be placed as close as possible to the window reveal and secured with right angle couplers.

Tie Configuration

Figure 20 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 (cont)

15 TIES (cont)

Tying to Standards

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:

- (a) Within 300mm from the underside of the cup at the junction - connected to the front Standard with addition of a Check Coupler.
- (b) Further than 300mm from underside of the cup at the junction - Tie connected to both front and rear Standards.
- (c) 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.
- (d) If tying is to a Standard with a spigot within the lift then the Standard needs to be reinforced using a verticle tube or alternatively, if space permits, by installing an extra transom adjacent to the joint.

Note:

The 300mm distance given in (a), (b) and (c) may need to be reduced, subject to the amount of tie force.

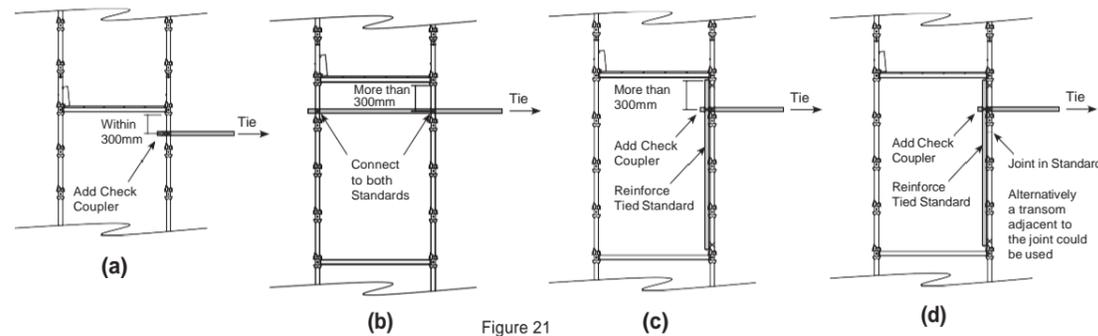


Figure 21

Increased distance between tie points

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, shade cloth 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 (cont)

16 Access and Egress Methods

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:

(i) 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 than 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.

Ladder Access

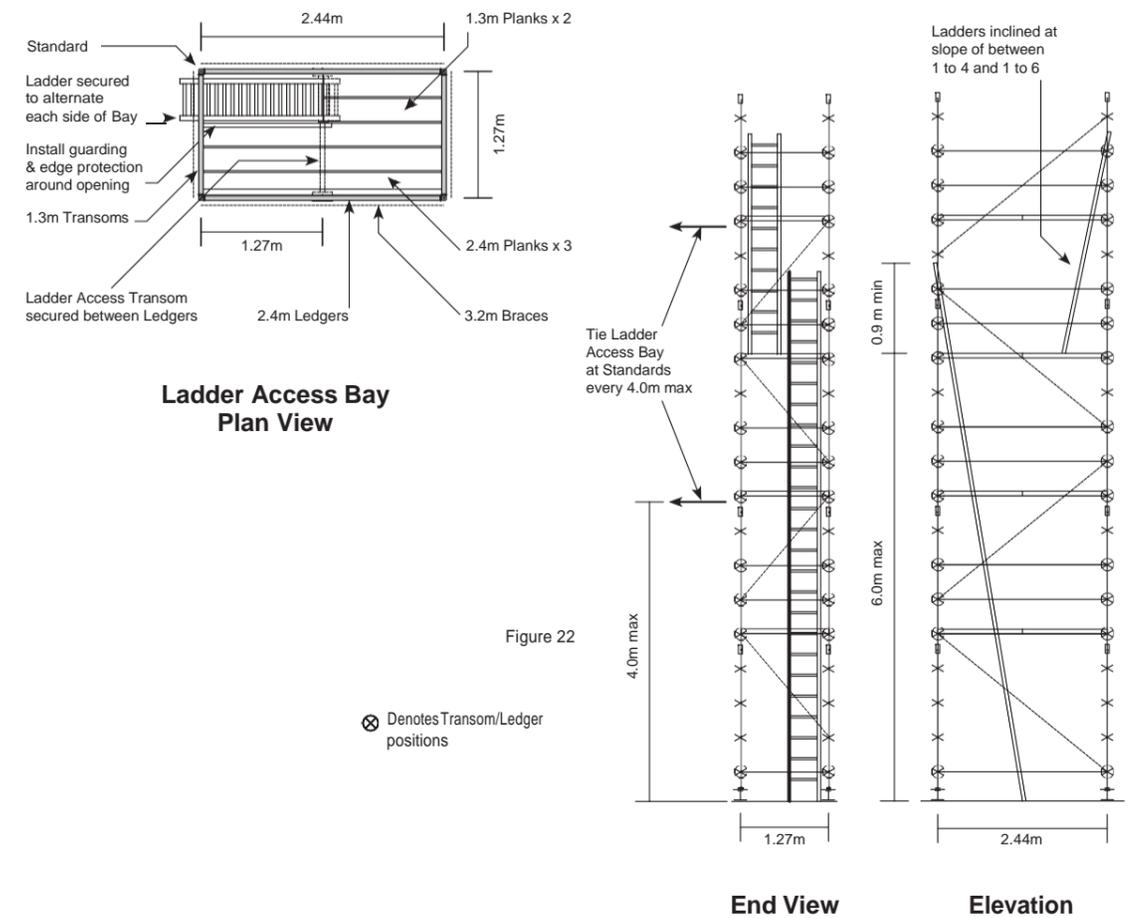


Figure 22

CUPLOK Assembly Recommendations (cont)

16 Access and Egress Methods (cont)

(ii) CUPLOK Stair Access Systems

Two types of stair access systems are available with CUPLOK:

- CUPLOK Aluminium Stairs
- CUPLOK Stair Stringer System

(a) CUPLOK Aluminium 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.

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.

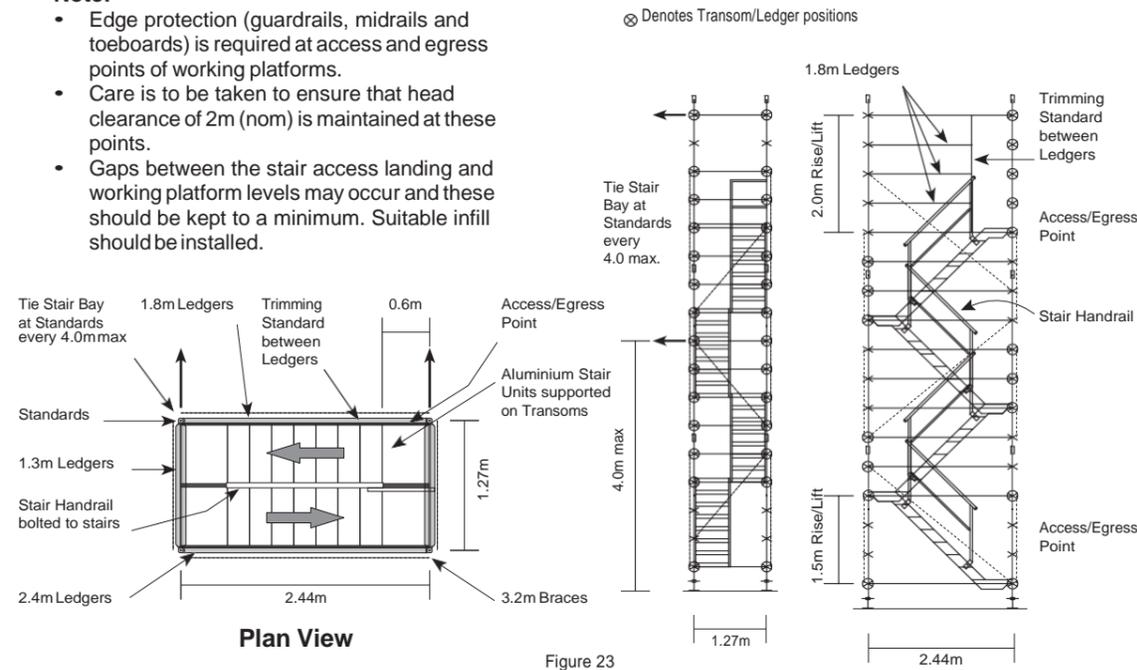


Figure 23

CUPLOK Assembly Recommendations (cont)

16 Access and Egress Methods (cont)

(b) CUPLOK Stair Stringers

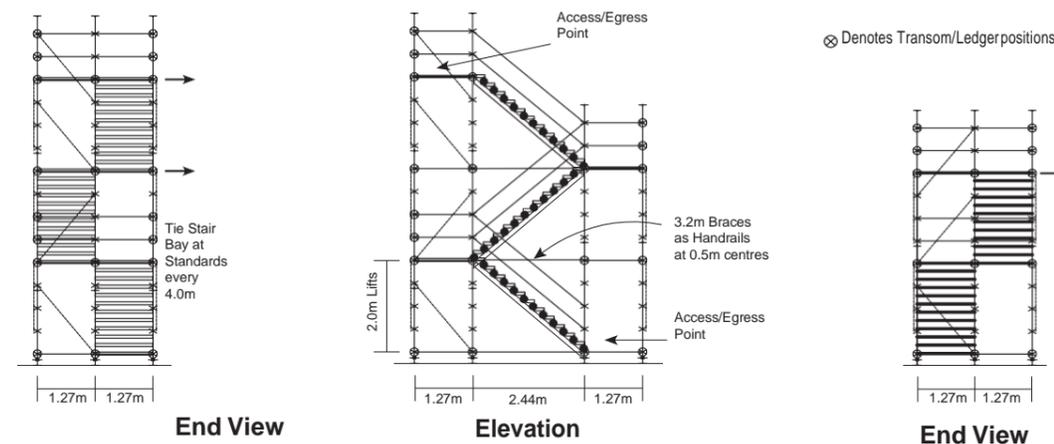
Typically, a 12 Standard configuration is used to assemble the stairway giving overall plan dimensions of 2.54m x 4.98m. This bay can either be incorporated within the main run of scaffold or adjacent to the run. Where the stair access bay shares common Standards with the main run, the loading on the 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.

CUPLOK Stair Stringers are designed to fit within the Standard 1.27m x 2.44m bay and are often used as a stretcher stair access bay. Each Stair Stringer assembly is nominally 1.27m 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 Stair Stringers 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 Stair Stringer is hooked over 1.3m Ledgers positioned at the top of each 2m lift. Once hooked over the Ledgers, Stair Stringers are then moved to within 0.15m of the Standard so that they are approximately 1.0m apart. Using the clamps incorporated in the Stair Stringer, CUPLOK Planks are clamped between the two Stair Stringers thus forming the stair treads.

Once the Stair Stringers are installed, Landings for the stair access are assembled within the 1.27m square bays at each end of the Stair Stringer bays using CUPLOK 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 Stair Stringer. 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.

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.



Stair Stringer Bay 12 Standard configuration Plan View

Figure 24

CUPLOK Assembly Recommendations (cont)

17 Platform ('Hop Up') 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.

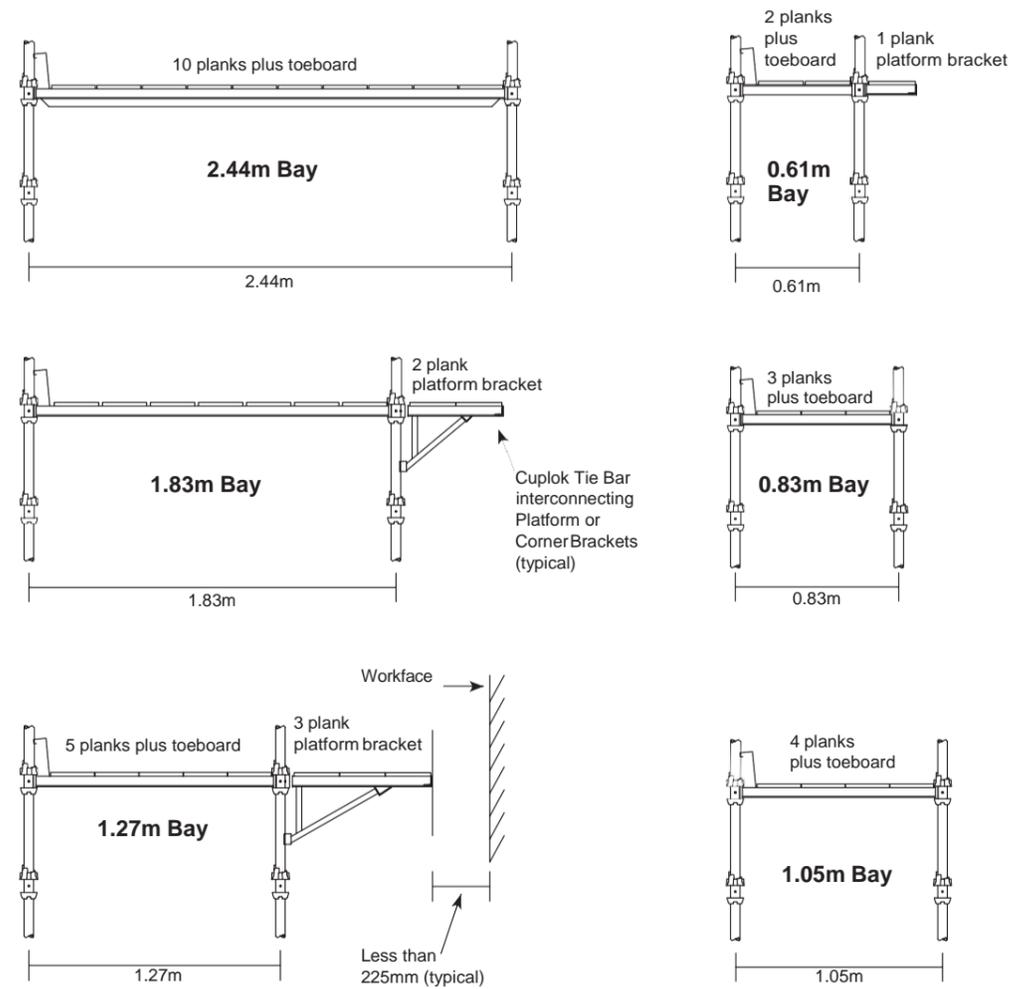


Figure 25

CUPLOK Assembly Recommendations (cont)

18 Configurations of Corner Platforms

Figure 26 below shows 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.

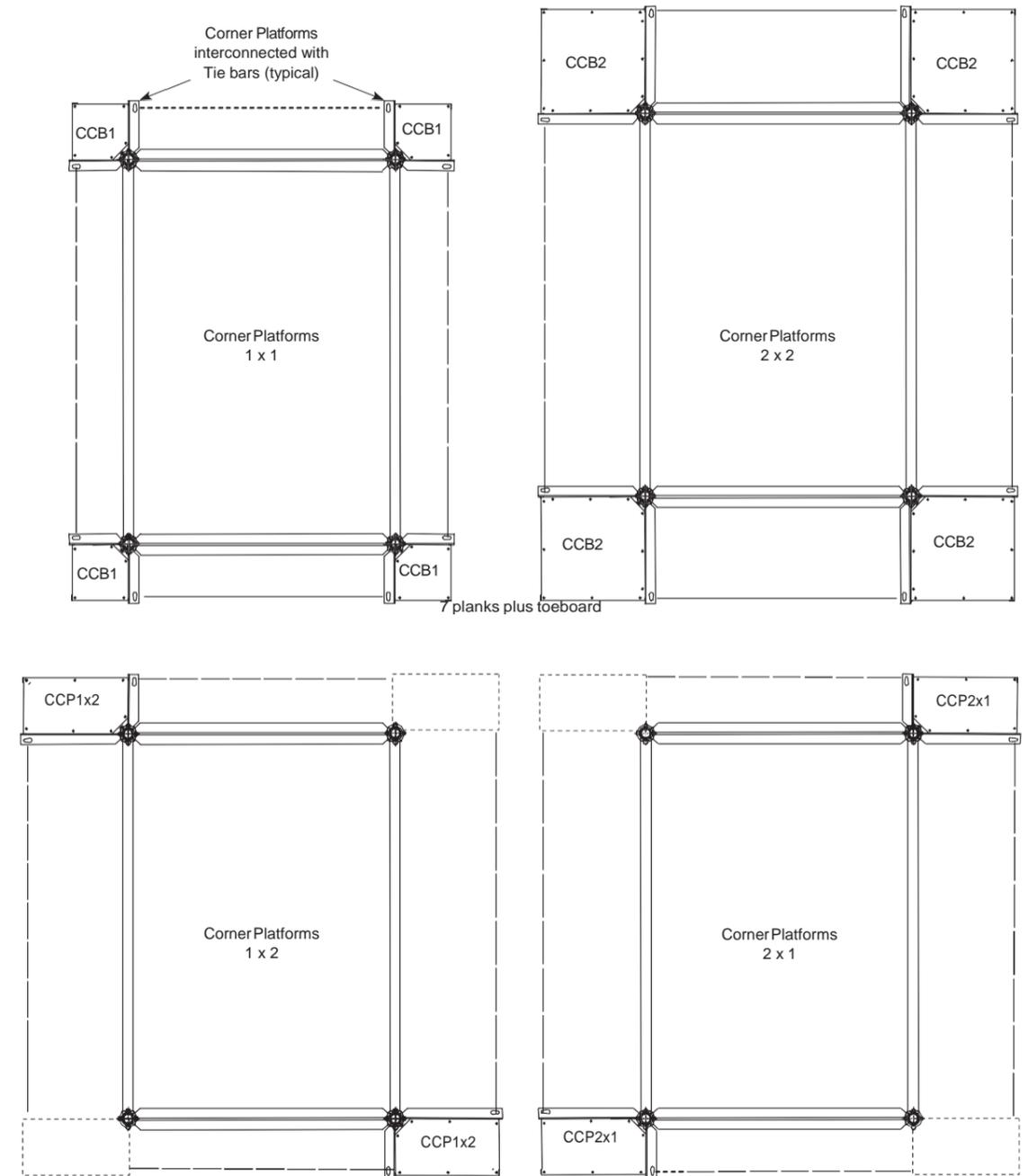


Figure 26

## CUPLOK Assembly Recommendations (cont)

### 19 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.

### 20 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.

### 21 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.

### 22 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.

### 23 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.

### 24 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.

### 25 Maximum Height

- Whilst Cuplok has been previously approved for a maximum height of 45m, where the scaffold exceeds 30m height from ground or base support to top of scaffold, consult AF&S Engineering for design advice.
- Maximum height applies to scaffold without cladding (sheeting, shade cloth and the like). Where such cladding is required to be attached to the scaffold then consult with AF&S Engineering for design guidance.

**Consultation with AF&S Engineering should done during design of the scaffold, prior to erecting the scaffold.**

**Do not hesitate to contact our Branch outlets for assistance with supply of scaffolding equipment and associated services.**

## CUPLOK Assembly Recommendations (cont)

### 26 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
  - (a) Use CUPLOK Steel Planks wherever possible.
  - (b) 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.
- 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.

**Alteration of an Existing Scaffold by Unqualified Personnel is a Safety Hazard and must not be undertaken.**

- ▲ Formwork
- ▲ Scaffolding
- ▲ Industrial & Mining Scaffolding



## Contact

Phone: 1300 138 362  
or contact your business  
development manager.  
[www.acrow.com.au](http://www.acrow.com.au)