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.

General Technical and Application Manual

CUPLOK Spigotted Standards

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 kg
- CUPLOK Standard 1.0m: CS10, 6.9 kg
- CUPLOK Standard 1.5m: CS15, 9.9 kg
- CUPLOK Standard 2.0m: CS20, 13.0 kg
- CUPLOK Standard 2.5m: CS25, 16.0 kg
- CUPLOK Standard 3.0m: CS30, 19.1 kg

CUPLOK Open Ended Standards

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 scaffolding. The base of each Standard has a 16mm dia. hole through which holes can be inserted to enable the use of locking pins to join it to a Spigotted Standard when required.

- CUPLOK open ended Standard 0.8m: CSOE08, 5.2 kg
- CUPLOK open ended Standard 1.3m: CSOE13, 8.2 kg
- CUPLOK open ended Standard 1.8m: CSOE18, 11.3 kg
- CUPLOK open ended Standard 2.3m: CSOE23, 14.3 kg
- CUPLOK open ended Standard 2.8m: CSOE28, 17.3 kg

CUPLOK 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. 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 kg
- CUPLOK Transom 0.61m: CT061, 5.0 kg
- CUPLOK Transom 0.83m: CT083, 6.6 kg
- CUPLOK Transom 1.05m: CT10, 7.9 kg
- CUPLOK Transom 1.27m: CT13, 9.7 kg
- CUPLOK Transom 1.52m: CT15, 11.5 kg
- CUPLOK Transom 1.83m: CT18, 13.7 kg
- CUPLOK Transom 2.44m: CT24, 22.4 kg

Product Description

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3OE28</td>
<td>CUPLOK Spigotted Standard 0.8m</td>
<td>5.2 kg</td>
</tr>
<tr>
<td>C3OE18</td>
<td>CUPLOK Spigotted Standard 1.3m</td>
<td>8.2 kg</td>
</tr>
<tr>
<td>C3OE13</td>
<td>CUPLOK Spigotted Standard 1.8m</td>
<td>11.3 kg</td>
</tr>
<tr>
<td>C3OE23</td>
<td>CUPLOK Spigotted Standard 2.3m</td>
<td>14.3 kg</td>
</tr>
<tr>
<td>C3OE28</td>
<td>CUPLOK Spigotted Standard 2.8m</td>
<td>17.3 kg</td>
</tr>
<tr>
<td>C2O83</td>
<td>CUPLOK Open Ended Standard 0.8m</td>
<td>5.2 kg</td>
</tr>
<tr>
<td>C2008</td>
<td>CUPLOK Open Ended Standard 1.3m</td>
<td>8.2 kg</td>
</tr>
<tr>
<td>C2013</td>
<td>CUPLOK Open Ended Standard 1.8m</td>
<td>11.3 kg</td>
</tr>
<tr>
<td>C2023</td>
<td>CUPLOK Open Ended Standard 2.3m</td>
<td>14.3 kg</td>
</tr>
<tr>
<td>C2028</td>
<td>CUPLOK Open Ended Standard 2.8m</td>
<td>17.3 kg</td>
</tr>
<tr>
<td>C7008</td>
<td>CUPLOK Transom 0.31m</td>
<td>2.6 kg</td>
</tr>
<tr>
<td>C7061</td>
<td>CUPLOK Transom 0.61m</td>
<td>5.0 kg</td>
</tr>
<tr>
<td>C7083</td>
<td>CUPLOK Transom 0.83m</td>
<td>6.6 kg</td>
</tr>
<tr>
<td>C710</td>
<td>CUPLOK Transom 1.05m</td>
<td>7.9 kg</td>
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<tr>
<td>C713</td>
<td>CUPLOK Transom 1.27m</td>
<td>9.7 kg</td>
</tr>
<tr>
<td>C715</td>
<td>CUPLOK Transom 1.52m</td>
<td>11.5 kg</td>
</tr>
<tr>
<td>C718</td>
<td>CUPLOK Transom 1.83m</td>
<td>13.7 kg</td>
</tr>
<tr>
<td>C724</td>
<td>CUPLOK Transom 2.44m</td>
<td>22.4 kg</td>
</tr>
</tbody>
</table>

*Disclaimer*

This information is based on the latest documentation available at the time of printing. Acrow Formwork & Scaffolding Pty Ltd reserves the right to make any modifications to the specifications, requirements and recommendations made in this booklet without notice. The user should refer to the latest edition of the relevant Australian or New Zealand Standards and Codes of Practice for the current requirements. The user should ensure that the design, installation, operation and maintenance of any system complies with the relevant Standards, Codes of Practice and statutory regulations.
CUPLOK Scaffolding System

**Product Description**

**Code No.** Mass kg (nom.)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUPLOK Ledgers</strong></td>
<td>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. 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.</td>
<td>CL022</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL034</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL061</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL083</td>
<td>3.4</td>
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<tr>
<td></td>
<td></td>
<td>CL105</td>
<td>4.2</td>
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<td></td>
<td></td>
<td>CL13</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL15</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL18</td>
<td>7.0</td>
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<tr>
<td></td>
<td></td>
<td>CL24</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CL30</td>
<td>11.4</td>
</tr>
</tbody>
</table>

**CUPLOK 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.

Bay Length x Height (m) Brace Centres (m)

<table>
<thead>
<tr>
<th>Bay Length x Height (m)</th>
<th>Brace Centres (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.61 x 1.5</td>
<td>1.62</td>
</tr>
<tr>
<td>0.83 x 1.5</td>
<td>1.71</td>
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<tr>
<td>1.05 x 1.5</td>
<td>1.83</td>
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<tr>
<td>1.27 x 1.5</td>
<td>1.97</td>
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<tr>
<td>1.52 x 1.5</td>
<td>2.14</td>
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<tr>
<td>1.92 x 2.0</td>
<td>2.51</td>
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<tr>
<td>2.37 x 2.0</td>
<td>3.05</td>
</tr>
<tr>
<td>2.81 x 2.0</td>
<td>3.48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bay Length x Height (m)</th>
<th>Brace Centres (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.44 x 2.0</td>
<td>3.93</td>
</tr>
<tr>
<td>3.04 x 2.0</td>
<td>4.49</td>
</tr>
</tbody>
</table>

**CUPLOK 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUPLOK Tie Bars</strong></td>
<td>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.</td>
<td>CTB06</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB08</td>
<td>2.4</td>
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<td></td>
<td></td>
<td>CTB105</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB13</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB15</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB18</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB24</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB30</td>
<td>10.8</td>
</tr>
</tbody>
</table>

**CUPLOK Transom Beam**

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

**CUPLOK 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.

**CUPLOK 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.

**CUPLOK 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.
CUPLOK Scaffolding System

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable Base</td>
<td>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.</td>
<td>ABFSFS</td>
<td>7.1</td>
</tr>
<tr>
<td>Adjustable U-Head</td>
<td>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.</td>
<td>AUHSFS</td>
<td>11.1</td>
</tr>
<tr>
<td>CUPLOK Fan Guard Bearer</td>
<td>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.</td>
<td>CFGB</td>
<td>10.7</td>
</tr>
<tr>
<td>CUPLOK Fan Guard Tie</td>
<td>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 and connects over the hook on the Fan Guard Bearer.</td>
<td>CFGT</td>
<td>5.9</td>
</tr>
<tr>
<td>CUPLOK Deck Adaptor</td>
<td>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.</td>
<td>CDA</td>
<td>1.7</td>
</tr>
</tbody>
</table>

CUPLOK Steel Planks
Planks to suit CUPLOK are formed from galvanised steel sheet with a perforated head 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuplok Steel Planks 0.83m Bay</td>
<td></td>
<td>SPC083</td>
<td>5.0</td>
</tr>
<tr>
<td>Cuplok Steel Planks 1.05m Bay</td>
<td></td>
<td>SPC105</td>
<td>7.2</td>
</tr>
<tr>
<td>Cuplok Steel Planks 1.27m Bay</td>
<td></td>
<td>SPC13</td>
<td>8.5</td>
</tr>
<tr>
<td>Cuplok Steel Planks 1.55m Bay</td>
<td></td>
<td>SPC18</td>
<td>11.5</td>
</tr>
<tr>
<td>Cuplok Steel Planks 2.44m Bay</td>
<td></td>
<td>SPC24</td>
<td>15.5</td>
</tr>
<tr>
<td>Cuplok Steel Planks 3.05m Bay</td>
<td></td>
<td>SPC30</td>
<td>19.5</td>
</tr>
</tbody>
</table>

CUPLOK 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 Transoms.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUPLOK Stair Stringer 2m rise x 2.4m go</td>
<td></td>
<td>CSS</td>
<td>31.5</td>
</tr>
</tbody>
</table>

CUPLOK Aluminium Stair
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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUPLOK Aluminium Stair 1.5m</td>
<td></td>
<td>CST15</td>
<td>26.0</td>
</tr>
</tbody>
</table>

CUPLOK Step Bracket - 1 Plank
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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUPLOK Step Bracket - 1 Plank</td>
<td></td>
<td>CSBMK2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

CUPLOK Aluminium Stair Handrail
The Stair Handrail follows the slope of the Aluminium Stair and is bolted to the inside face of the Aluminium Stair side member.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUPLOK Aluminium Stair Handrail</td>
<td></td>
<td>CPSTH</td>
<td>15.0</td>
</tr>
</tbody>
</table>

CUPLOK Stairway 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUPLOK Stairway Trimming Standard</td>
<td></td>
<td>CSST</td>
<td>11.3</td>
</tr>
</tbody>
</table>
CUPLOK Scaffolding System

Mesh Guards
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.

<table>
<thead>
<tr>
<th>Mesh Guard</th>
<th>Code No.</th>
<th>Mass kg (nom.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.27m</td>
<td>MP12</td>
<td>10.8</td>
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<tr>
<td>1.83m</td>
<td>MP18</td>
<td>14.6</td>
</tr>
<tr>
<td>2.44m</td>
<td>MP24</td>
<td>18.4</td>
</tr>
<tr>
<td>3.05m</td>
<td>MP30</td>
<td>22.2</td>
</tr>
</tbody>
</table>

CUPLOK Corner Platforms
Corner Platforms are designed to fill the gap left where two runs of Platform Brackets interact 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 | CC1  | 5.0  |
| CUPLOK Corner Platform – 2 x 2 | CC2  | 11.5 |
| CUPLOK Corner Platform – 2 x 1 | CCP1 | 9.5  |
| CUPLOK Corner Platform – 1 x 2 | CCP2 | 9.5  |

Toe Board Clamp
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.

| Toe Board Clamp | TBC | 0.8 |

CUPLOK Return Toeboards
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 | CRBT061 | 4.2  |
| CUPLOK Return Toeboard 0.83m | CRBT083 | 5.2  |
| CUPLOK Return Toeboard 1.05m | CRBT105 | 6.3  |
| CUPLOK Return Toeboard 1.27m | CRBT127 | 7.3  |
| CUPLOK Return Toeboard 1.83m | CRBT183 | 9.9  |
| CUPLOK Return Toeboard 2.44m | CRBT244 | 15.0 |

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.

| CUPLOK Scaffold Castor - 200mm | CC200 | 4.5  |

General Technical and Application Manual

CUPLOK Transoms

Cross Section of Transoms

<table>
<thead>
<tr>
<th>Working Load Limits to AS1576.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty Live Load</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>0.61 - 1.83m Transom</td>
</tr>
<tr>
<td>0.83 - 1.83m Transom</td>
</tr>
<tr>
<td>1.05 - 1.83m Transom</td>
</tr>
<tr>
<td>1.27 - 1.83m Transom</td>
</tr>
<tr>
<td>1.52 - 2.44m Transom</td>
</tr>
<tr>
<td>1.83 - 2.44m Transom</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>L (m)</th>
<th>P (kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.27</td>
<td>4.1</td>
</tr>
<tr>
<td>1.83</td>
<td>2.8</td>
</tr>
<tr>
<td>2.44</td>
<td>2.1</td>
</tr>
<tr>
<td>3.05</td>
<td>2.0</td>
</tr>
</tbody>
</table>

- All Planks must meet 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**

- Spigot Joint
- Adjustable Base
- Suitable footing and foundation

**CUPLOK Platform Brackets**

- 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 Stair Stringer (used in pairs)**

- CUPLOK aluminium stair unit

**CUPLOK Aluminium Stair Unit**

- Stair width: 1.27m
- Step width: 0.59m
- Total: 7.7kN

**CUPLOK Step Joint**

- Spigot Joint
- Adjustable U-Head

**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 settlements.
- 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:
  1. Provide nodal restraint.
  2. 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 or 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.

**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.
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.

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.
- If 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/NZS4676 ‘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.

Adjustable Base/Adjustable U-Head Extension (mm)

CUPLOK Standards

Formwork Applications

Maximum Bay Size 1.8 m X 1.3 m

Working Load Limits for internal Standards

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 Scaffolding System**

**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.

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.

3. Commence erection - where possible - on the highest point of the ground and work down the incline - this will make levelling easier. Refer Figure 2.

4. Lay out the Adjustable Bases, Ledgers and Transoms for the first bay in 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.

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.

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 bay levelled. Refer Figure 5.

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.

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.

9. 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.

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

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.

12. Planks are now moved up to fully deck out 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 plank 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.

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**General Technical and Application Manual**

**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.

9. 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.

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

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.

12. Planks are now moved up to fully deck out 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 plank 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 (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 and 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.

15 TIES

It is essential that scaffolds be tied to the building or suitable structure to resist a minimum design force of 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.

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.
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:

- **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 1:4 or more than 1:6.

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**

![Ladder Access Bay Plan View](image_url)

**Plan View**

- **Ladder Access Bay**
  - Ladder secured to alternate eves of Bay
  - Install guarding & edge protection around opening
  - 1.27m Transoms & ledger

**End View Elevation**

- **Tie Ladder Access Bay at Standards every 4.0m max**

**Figure 22**

- **2.44m**
- **2.4m Planks x 3**
- **1.27m**
- **Ladders inclined at angle of between 1:4 and 1:6**
- **4.0m max**
- **0.9m min**
- **1.27m**
- **2.44m**

**Notes:**
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 (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 1.5m 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 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 that 4.0m vertical intervals.

(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 Star 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 that 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.
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

10 planks plus toeboard
2.44m Bay

2 planks plus
platform bracket
1 plank
platform bracket
0.61m Bay

3 planks
plus toeboard
0.83m Bay

5 planks plus toeboard
2 plank
platform bracket

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.
CUPLOK Scaffolding System

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 (bouncing) 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.
• Ledges 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 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 dependant 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 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 space 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, shadecloth 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 be undertaken during the 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.

General Technical and Application Manual

CUPLOK Assembly Recommendations (cont)

28 Scaffolding 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 ground conditions.
• When scaffolding are to be partially or fully encased, 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 guard) 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 pullouts are attached to CUPLOK Ladders 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.

Notes:
• 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.
Contact

Phone: 1300 138 362
or contact your business development manager.
www.acrow.com.au