Scaffolding Master for scaffolding & supplies

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Formwork

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Cuplock

for shoring & scaffolding

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Easy to install

Cuplock

for shoring & scaffolding

Economic

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WELCOME

Safe

saver

System Introduction

Cuplock System is a multipurpose suitable for access and support in all types of construction of building & civil engineering projects; it is fully painted/ galvanized. Cuplock system is suitable for providing general access and supporting vertical loads.

It can be used to create a huge range of access and support structures, staircase towers, circular scaffolds, loading towers and mobile towers.

This manual has been designed to provide comprehensive details of components and guidance on the design and erection of Cuplock systems.

Time Saver Durable Safe Cost Effective

Safety

Cuplock has safety built-in, as it is erected to a recognized configuration in a carefully developed sequence to work at every stage.
Cuplock scaffolds provide clear uninterrupted working platforms without obstructions from diagonal bracing across the deck in the majority of cases.

Handling & Storage

Ease of handling through its light weight.
Minimal space requirements for storage.

working load

Standard safe working load up to 7.50 ton according to standard unbraced length and tube wall thickness.

Durability

Cuplock has a long working life and durability with low maintenance.
Fully painted/galvanized finishing protecting components from corrosion & rust.

Saving time & Cost

Cuplock provides major savings in erection and dismantling durations therefore minimizes project costs.

Cuplock

System Application

Cuplock Falsework Application

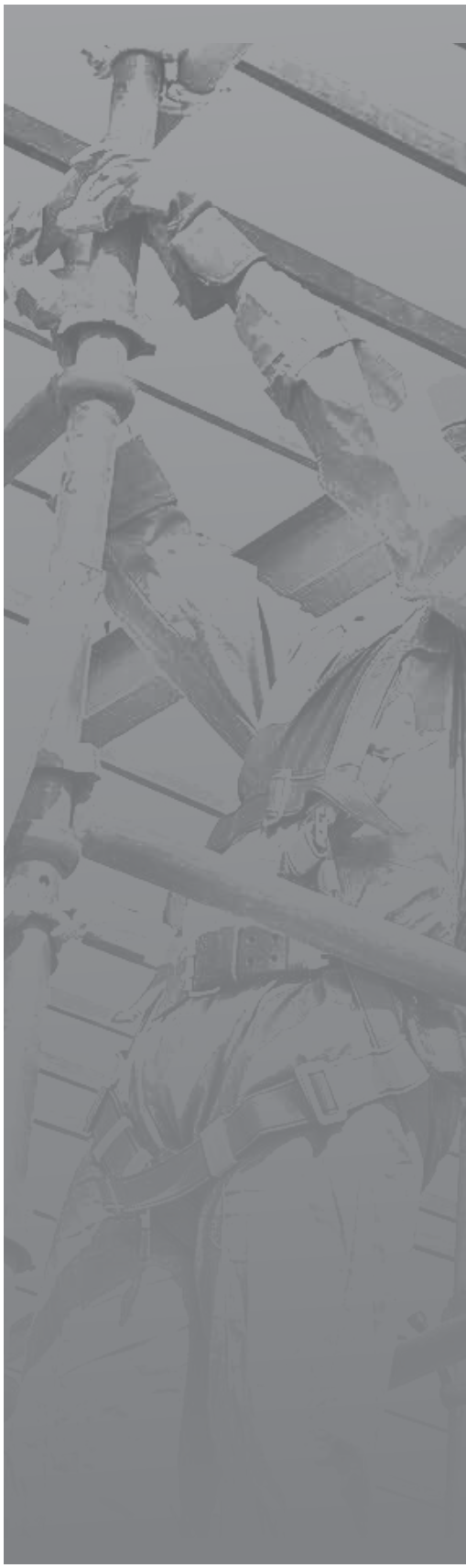
Cuplock Falsework Application
(Support Structures)
Cuplock Falsework system is suitable for support structures applications through the following:
High standard load capacity.
Range of components that gives the system capability to tackle virtually any support application.
Formwork support wide range grid variations that can be created to suit the loading requirements and any structure types and heights.
Ability to use different types of main and secondary beams with Cuplock.
(Timber - Aluminum - Steel)

Early striking application

Cuplock Scaffolding Application
Cuplock scaffolding system is multipurpose steel scaffold for general access and supporting vertical loads through the following:
Safe working loads on platforms will vary between 0.75kN and 3kN per square meter depending on the configuration of the scaffold.
Cuplock scaffolding meet the requirements of the international standard for health and safety.
Cuplock scaffolding is compatible with any scaffolding accessories (stairs, boards, wheels, tie...).
All components are designed to be light weight and easily assembled.
Cuplock constructs and maintains an installation that can seriously affect the life acceptance and efficiency of the finished installation.

Early striking application

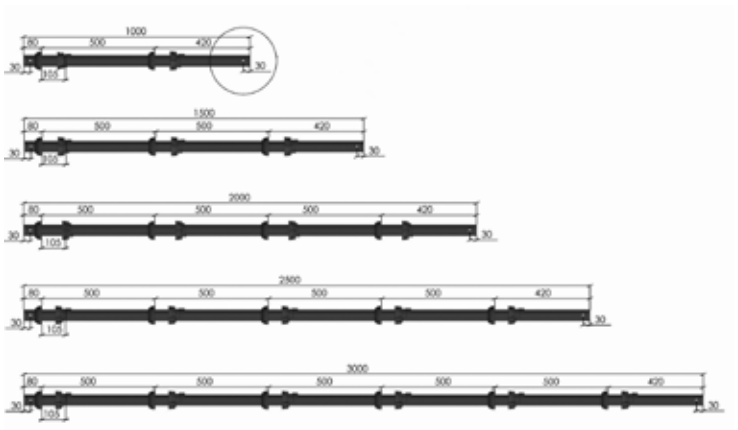
(Supporting Floor Slabs)
Cuplock Early Striking System is suitable for support floor slabs through the following:
High loading capacity for standard, decking beams and infill.
Suitable for any type of floor slabs.
All components are manufactured to a very close tolerance.
All components are engineered to be light weight and easily assembled.
Early Striking save time and cost through a technique where by the formwork is removed 3 to 4 days after pouring a slab.



Standard Components

Cuplock Standard

Cuplock Standards are introduced in five basic sizes (1000 mm, 1500 mm, 3000 mm, 2500 mm, and 3000 mm) lengths.
Cuplock Standards are manufactured from 48.3 mm O.D. Tube with 3mm and 3.2mm thickness.
The lower cups are welded to standard at 500mm intervals.
The upper cups (movable cups) are used to locking up to 4 ledgers at one node.
The lowest bottom cup is welded at 80mm from the bottom end of the standard and the highest bottom cup is welded at 420 from the upper end of the standard.



Cuplock Ledgers

Cuplock Ledgers are used as the main horizontal connecting members for Cuplock system.
Cuplock Ledgers are introduced in large varieties to meet the require-ments.
Cuplock Ledgers are manufactured from 48.3 mm O.D. Tube with 3mm and 3.2mm thickness.
Cuplock Ledger ends are formed with circular profile and welded to ledger tube.
Cuplock Ledger ends meet with the bottom cup of the Standard and locked in place by the upper cup.

Cuplock Transoms

Cuplock Intermediate Transoms are introduced in 7 sizes to fit design and site requirements.
Cuplock Intermediate Transoms are manufactured from 48.3mm O.D. Tube with 3mm thickness.
Cuplock Intermediate Transoms provide intermediate support to scaffold boards.

Standard Components

Adjustable Base Jacks

M-Adjustable Base Jacks are made of steel plate, screw jack and steel handle.
M-Adjustable Base Jacks available in two types (Hollow and solid).
M-Adjustable Base Jacks provide method of adjustment for Cuplock structure. It fits directly into the Cuplock Standard.

Cost Effective

Safe

Durable

M- Adjustable Base Jacks Hollow Type B

M- Adjustable Base Jacks Solid

Adjustable U Head jacks

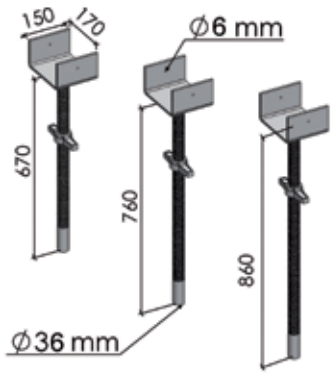
U-Head Jacks are made of a “U” shaped steel plate, screw jack and steel handle.
U-Head Jacks are available in two types (Hollow and solid).
U-Head Jacks are providing support for primary beams (traditional timber, steel, H20 beam and aluminum beam).
U-Head Jacks are inserting into the top of the Cuplock standards.

Cost Effective

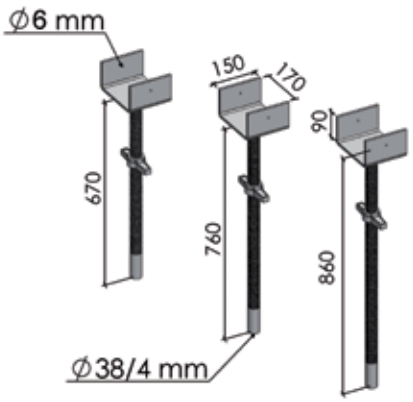
Safe

Durable

Adjustable U-head Jacks Solid



Adjustable U-head Jacks Hollow



Standard Components

Base plate

Base Plate provides a flat support for Cuplock structure.
Base Plate uses as simple support for Cuplock structure in case of no need adjusting level.

Double Cantilevers

To provide vertical support for edge beams of slab and transfer the applied load to Cuplock Standard.
M-Double Cantilever have two blade ends connected to standard to ensure the fixed connection with Cuplock vertical strandard.

Beam bracket

To provide vertical support for internal beams of slab and transfer the applied load to Cuplock Standard.
M-Beam Bracket have two blade ends connected to standard.

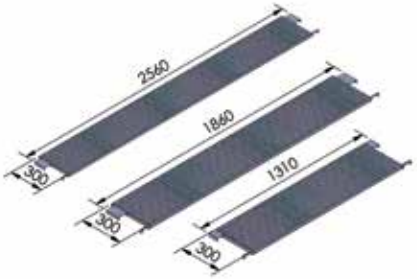
Cantilever frame

Used to provide vertical support for decking beams or formwork at edge of slab.
Cantilever Frames have two blade ends connected to standard
Cantilever Frame accept Jacks in three positions, suitable for dimensions of 1200 mm, 1250 mm and 1300 mm.

Steel planks

Steel platform for scaffolding.
Steel Plank lengths are available in 3 lengths suitable for Cuplcok Ledger.

Description	Weight Kg
Steel Plank 2500mm	27.50
Steel Plank 1800mm	23.20
Steel Plank 1250mm	14.70



Standard Components

H20 Beams

H20 Formwrok Timber Beam is a solid I-beam used for concrete formwork construction.
height of beam is 200mm and available in different standard lengths.
webs made of 3 ply laminated solid wood panels ensuring use in all climate zone.
chords are made of superior quality smoothly surfaced and slightly chamfered.
H20 Beams are used as primary and secondary beams for Cuplock FalseWork applications.

Aluminum Beam

Aluminum Beams combine the benefits of strength, lightness and easy handling with consistency ,versatility and exceptional durabilty .

Aluminum Beams manufactured from high grade alloy (ALLOY 6082) . Available in two standard section .

Scaffolding FIttings

Scaffold couplers are essentially the fundamental component that is used to assemble tube-and-coupler scaffolding. This basic fitting is designed to join two scaffold tubes that can be used to create a diverse range of scaffolding structures.

External Sleeve Coupler

Description	Weight Kg
External sleeve coupler	0.90

Forged Double Coupler

Description	Weight Kg
Ø 48.3 x Ø 48.3	0.98
Ø 48.3 x Ø 60.2	0.92

Forged Swive Coupler

Description	Weight Kg
Ø 48.3 x Ø 48.3	1.12
Ø 48.3 x Ø 60.2	1.17
Ø 60.2 x Ø 60.2	1.60

Expanding Joint Pin

Description	Weight Kg
Expanding Joint Pin	1.10

Gravlock Girder Clamp

Description	Weight Kg
Gravlock Girder	1.50

Forged Putlog Coupler

Description	Weight Kg
Putlog Coupler	0.640

Sketch Applications

Cuplock FalseWork

is a new way of shoring and support the concrete slabs in record time with less labor required rather than the traditional method of shoaring and support.
Cuplock Falsework use different types of primary and secondary beams as needed allowing the possibility of using existing material in the sets.

Another application of Cuplock Falsework used to support and shuttering the concrete slabs with different heights and levels according to requires.

Primary : Aluminum Beam
Secondary : Aluminum Beam

Primary : H20 Beam
Secondary: H20 beam

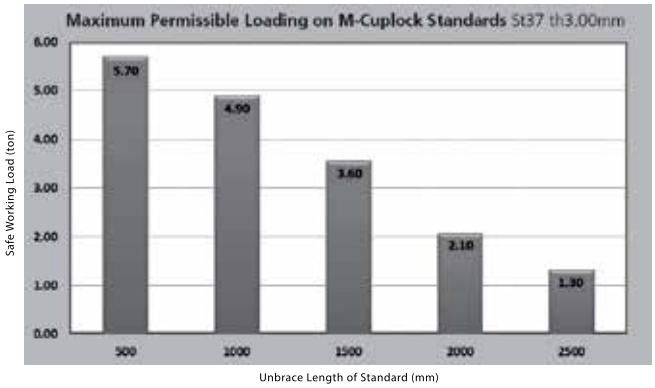
Cuplock Scaffold Is Defined As Any Temporary Elevated Work Platform And Its Supporting Structure (Including Points Of Anchorage) Used For Supporting Employees Or Materials Or Both.
Note That There Are Three Main Points To The Definition: It Is Elevated, It Is Temporary, And It Supports Either Personnel Or Materials Or Both.

Technical Data

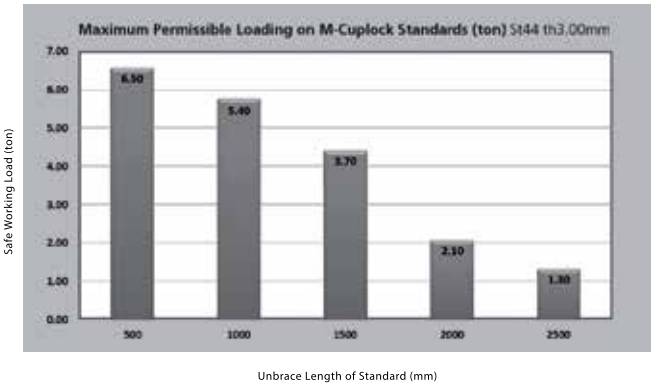
Cuplock Standard safe working load

Maximum permissible loading on Cuplock Standard depends on the unbraced of standard (Lift distance) and the maximum bay size. The following graphs shown the Maximum permissible load on the Cuplock Standard with different steel grades and wall thickness of tubes.

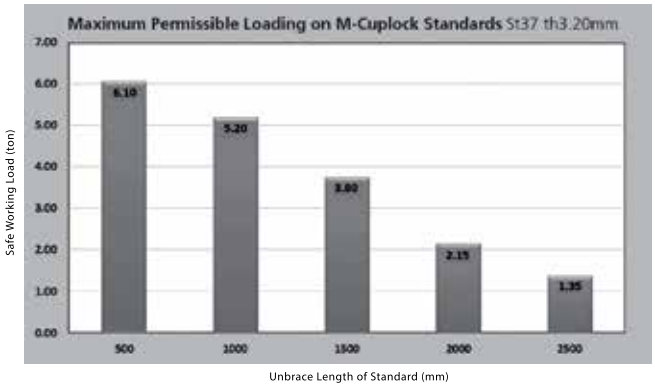
A- For tubes 48.3mm dia, Thk 3mm and steel 37



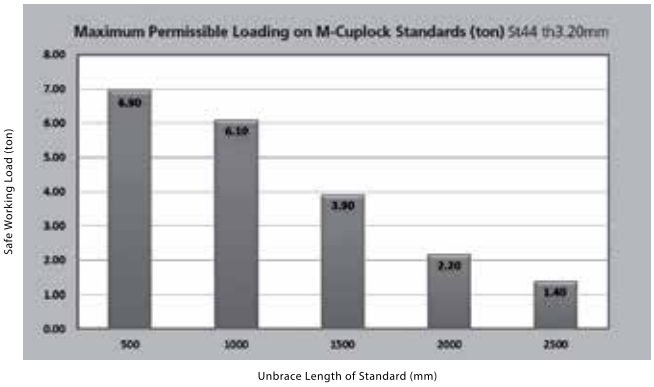
C- For tubes 48.3mm dia, Thk 3mm and steel 44



B- For tubes 48.3mm dia, Thk 3.2mm and steel 37



D- For tubes 48.3mm dia, Thk 3.2mm and steel 44

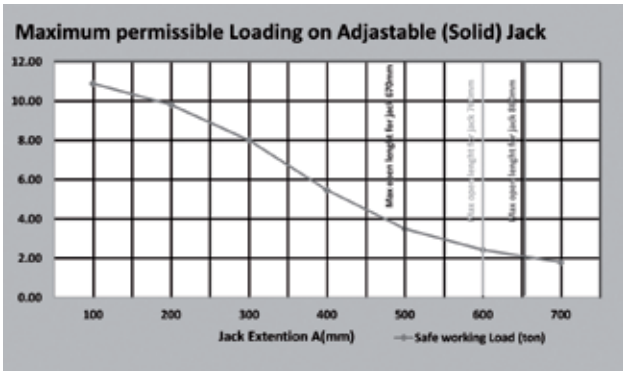


Technical Data

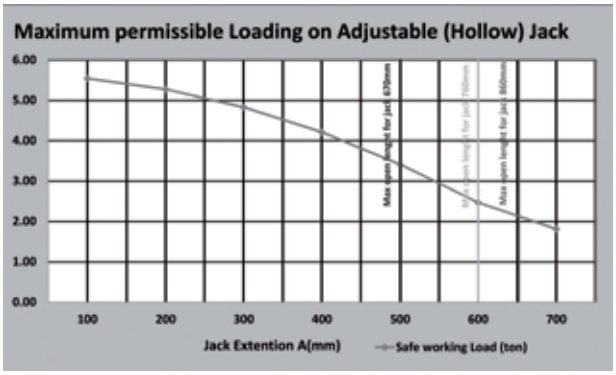
Adjustable Jacks Safe Working Load

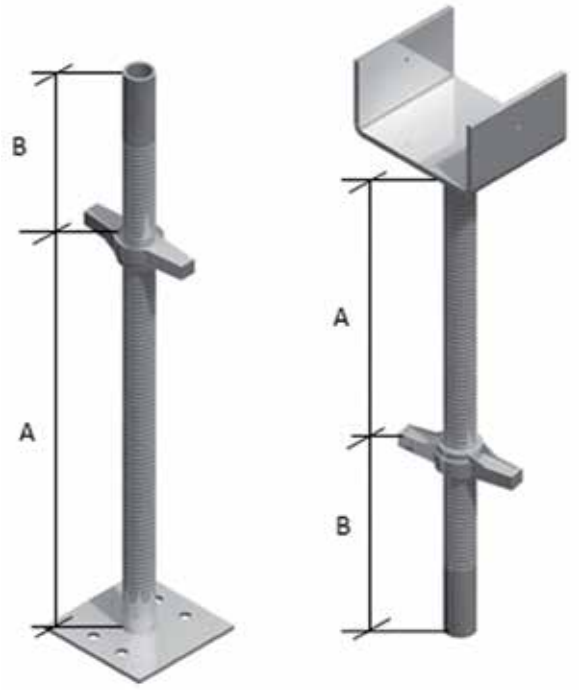
Maximum permissible loading on adjustable jack depends on Jack extension (A)
The following graphs showing the maximum permissible load on Adjustable Jack Solid and Adjustable Jack Hollow.

A - Maximum permissible loading on Adjustable Solid Jack



B- Maximum permissible loading on Adjustable Hollow Jack





The distance (B) at least 1/3 (A) B ≥ 1/3 A

Max open length for jack 760mm

Max open length for jack 860mm

Max open length for jack 860mm

These graphs give maximum permissible load for the Adjustable Jack which are erected plumb and loaded concentrically by main beam.

These graphs shown the max extension length of Adjustable Jacks as following.

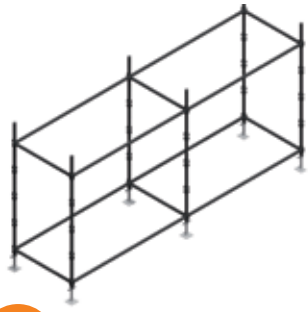
Scaffolding Assembly

Step 1

The first four Adjustable Bases are placed in position, then two Standards are placed over two of the bases.
A Ledger is then connected to the lowest bottom cup on the Standards joining the two Standards together.

Step 2

Add third and fourth standards and ledgers .

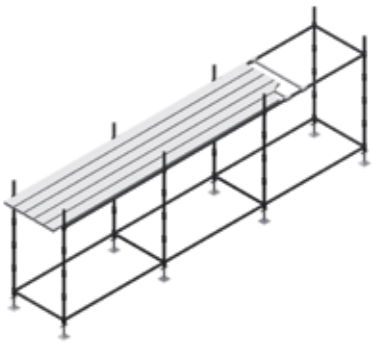


Step 3

After adding the last Standard insert the Adjustable Jack with Drop Head into the Standard.

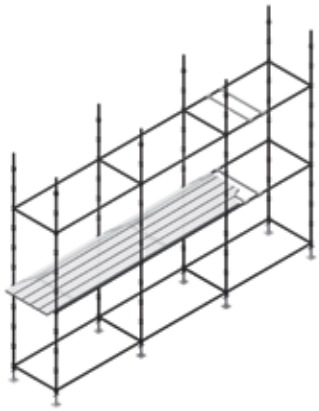
Step 4

Finally, add planks in longitudinal direction.



Step 5

Repeat the second step with longitudinal direction and add a transom to support planks if needed.



Step 6

Repeat the previous steps in longitudinal and vertical directions and adding tie points to fixing scaffold structure.

Falsework Assembly

Step 1

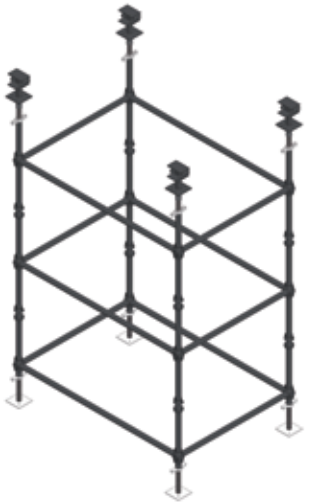
The first four Adjustable Bases are placed in position, then two Standards are placed over two of the bases. A Ledger is then connected to the lowest bottom cup on the Standards joining the two Standards together.

Step 2

Add third and fourth standards and ledgers .

Step 3

After adding the last Standard insert the Adjustable Jack with Drop Head into the Standard.



Step 4

Add the Decking Beams on Drop Heads and make sure that the Drop Head at it's up position.

Falsework Assembly

Step 5

Arrange Infill Beams between the Decking Beams in Decking Beam direction.

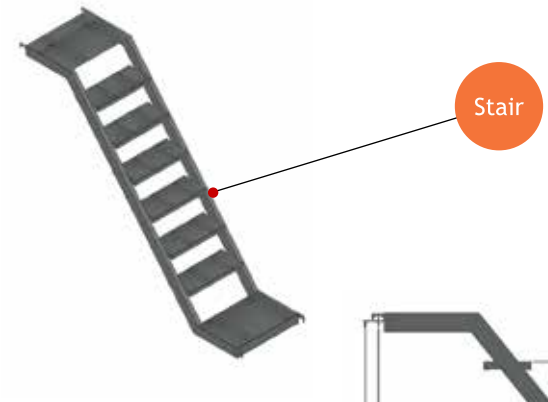
Step 6

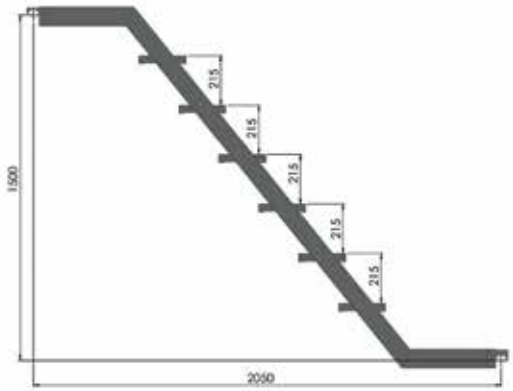
Arrange Infill Beams between the Decking Beams in Decking Beam direction.

Cuplock stair case

Stair case overview

Cuplock Staircase Tower is mainly built up of standard Cuplock components to improve site access and more effective movement of persons and rapid erection due to a small number of components.





Cuplock Projects

Project Name : Polivardo Building

Contractor : Atrium Quality Contractors
Consultant : Shaker Consltancy Group
Year : 2021
System Used : Cuplock system for scaffolding

Time Saver Durable Safe Cost Effective

Cuplock Projects

Project Name : CBD in new Administrative capital in Egypt

Contractor	:	China State construction Engrg. Corp.LTD
Consultant	:	DAR Al.Handasa Consultant
Year	:	2020
System Used	:	Cuplock system for scaffolding & slabs

Time Saver Durable Safe Cost Effective

Cuplock system

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