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Formwork & Scaffolding

CUPLOCK SUPPORT & ACCESS SYSTEMS

WE ARE FORMING YOUR IDEAS

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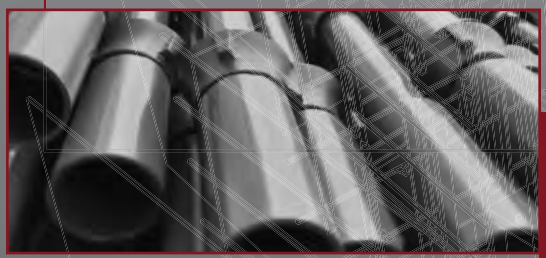
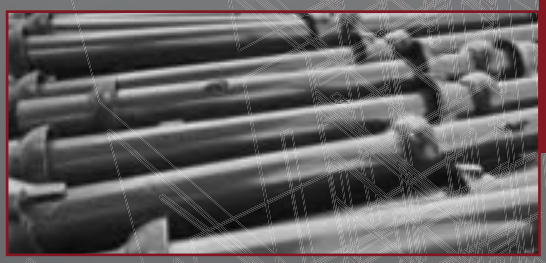
"CUPLOCK (SAFELOK) SYSTEM SCAFFOLDING"

Welcome to Unisteel, where innovation and efficiency meet to transform the way, you approach scaffolding solutions. In our commitment to delivering safe, reliable, and adaptable construction systems, we proudly introduce our Cuplock System versatile and highly efficient scaffolding solution designed to meet the diverse needs of the modern construction industry.

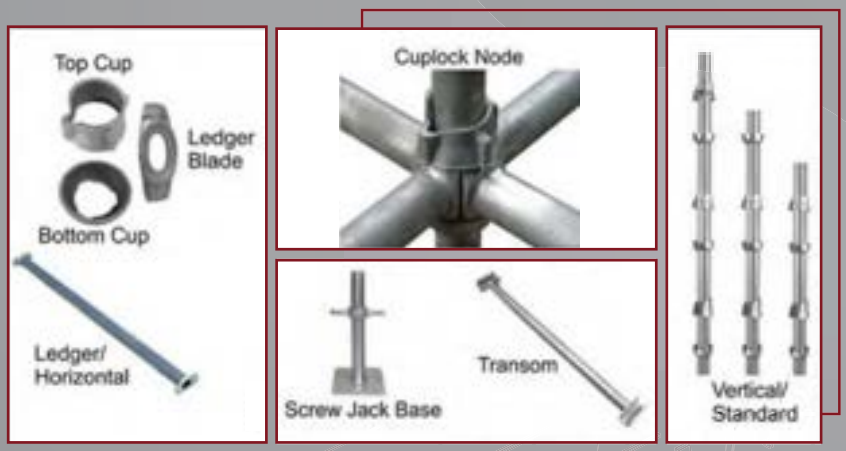
We understand the pivotal role that scaffolding plays in the success of construction projects, be it in building towering structures, infrastructure development, or renovation works. That's why we've invested our expertise in engineering a system that is not just sturdy, but also flexible, easy to assemble, and cost-effective.





INTRODUCTION

The Cuplock System represents a significant leap forward in scaffolding technology. Whether you're a contractor seeking speed and simplicity in assembly, an engineer looking for reliable support, or a project manager focused on cost-effectiveness, our Cuplock System is the ideal choice. This cutting-edge system provides the stability you demand and the versatility you desire, all while adhering to the strictest safety standards.



Explore our catalog to learn more about the remarkable features, components, and accessories that make the Cuplock System an indispensable asset for your construction projects.

CUPLOCK (SAFELOK) APPLICATIONS

1. BUILDING CONSTRUCTION:

The Cuplock System is widely used for building construction, including the construction of high-rise buildings, residential complexes, and commercial structures. Its speed of assembly and load-bearing capacity make it ideal for multi-story projects.

2. INFRASTRUCTURE PROJECTS:

Whether it's bridges, tunnels, or highways, the Cuplock System is well-suited for infrastructure projects. Its adaptability is essential when working on projects with varying geometries and support needs.

3. INDUSTRIAL MAINTENANCE:

For maintenance and repair tasks in industrial facilities, the Cuplock System offers secure access and support for workers. Its stability is crucial in ensuring safe working conditions.

4. EVENT AND STAGING:

The Cuplock System is also used in the event and staging industry to create platforms, stages, and support structures for concerts, exhibitions, and other events.

5. SHORING:

The system's load-bearing capabilities make it suitable for temporary support structures in construction and civil engineering projects.

6. SHIPBUILDING:

In shipyards, the Cuplock System provides efficient access and support for building and maintaining vessels.

1. Locate the blade end of the ledger into the lower cup.

2. Lower the upper cup down the standard and rotate.

3. Tighten with hammer blow.

CUPLOCK (SAFELOK) BENEFITS

1. RAPID ASSEMBLY:

One of the standout advantages of the Cuplock System is its swift and straightforward assembly. The unique node point connection allows for fast and tool-free joining of horizontal and vertical members. With minimal components and quick locking action, your teams can complete scaffolding installations with remarkable speed, saving valuable project time.

2. VERSATILITY:

The Cuplock System is highly adaptable and can be used in various applications, including access scaffolding, shoring, façade retention, circular scaffolding, birdcage scaffolding, and more. Its modular design means you can customize configurations to suit the specific requirements of your project.

3. ROBUST AND STABLE:

Designed with safety in mind, our Cuplock System offers exceptional stability and load-bearing capacity. The node points provide integral strength, making it a reliable choice for even the most demanding construction tasks.

4. COST-EFFECTIVE:

Thanks to its rapid assembly and adaptability, the Cuplock System is a cost-effective choice. Reduced labor costs, faster project completion, and the ability to reuse components across multiple projects make it an economical scaffolding solution.

5. MINIMAL COMPONENTS:

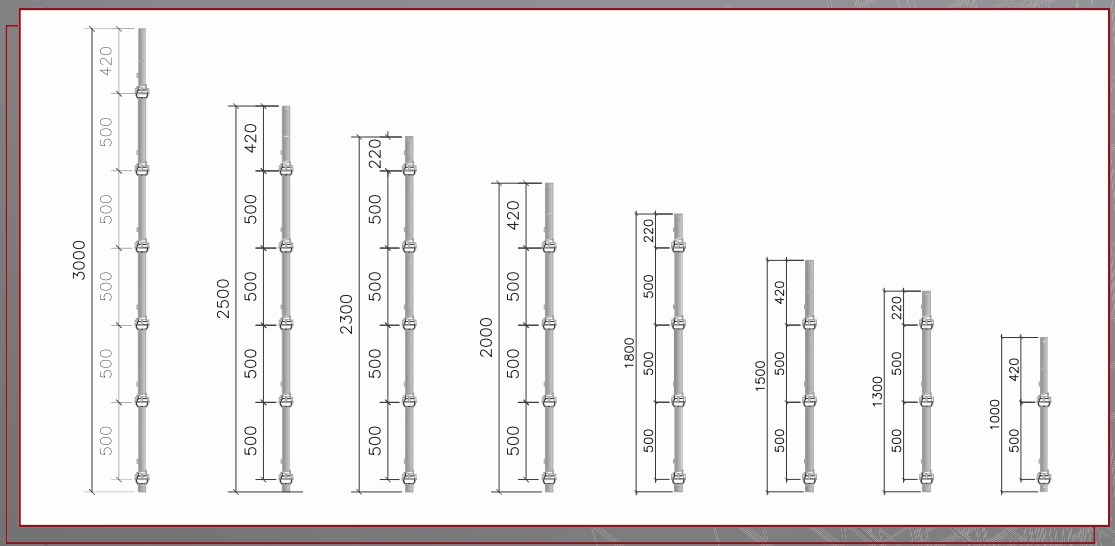
Fewer components mean less inventory management and reduced chances of misplacement. The Cuplock System's simplicity ensures that you have the essential elements at your disposal when you need them.

VERTICAL (STANDARD)

Made from high quality 48.3mm. diameter by 3.2mm. wall thickness steel tube, standards incorporate fixed cups at 500mm. distance. Captive rotating drop forged steel cups secure up to four components at each node point.
The lower bottom cup joint position is 80mm. from the base of the standard providing a low root tie position of 220mm. - 420mm. from the top of the standard. This means when one standard is positioned on top of another the effective distance between adjacent node points (across the standard to standard connection) is maintained at 500mm.

Vertical connections are made by means of a spigot which is welded and fixed to the standard at 1 50mm. beyond the top of the standard to provide a good end to end seating. Alternatively, there are a number of open ended standards which are also available; here the end to end connections is made by using loose spigot with a locking bolt and nut M 10 X 70.

When using standards fixed spigot and uplift is expected at the end to end standard joint connection using bolt and nut M 1 Ox 70 can be used to fix the spigot to the bottom of the upper standard. Similarly , when using standards with loose spigot, M 10 X 70 bolt and nut can be used in pairs to secure joint.



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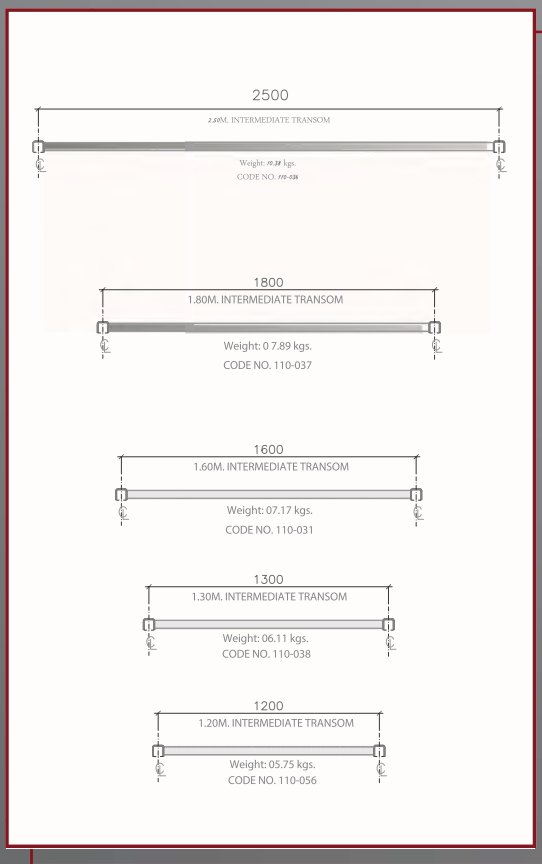
LENGTH	WEIGHT	CODE
3.0m.	14.07 Kg.	110-009
2.50m.	11.77 K.g.	110-015
2.30m.	10.78 Kg.	110-010
2.0m.	9.30 Kg.	110-011
1.80m.	8.44 Kg.	110-012
1.50m.	7.00 Kg.	110-008
1.30m.	6.10 Kg.	110-013
1.0m.	4.80 Kg.	110-014

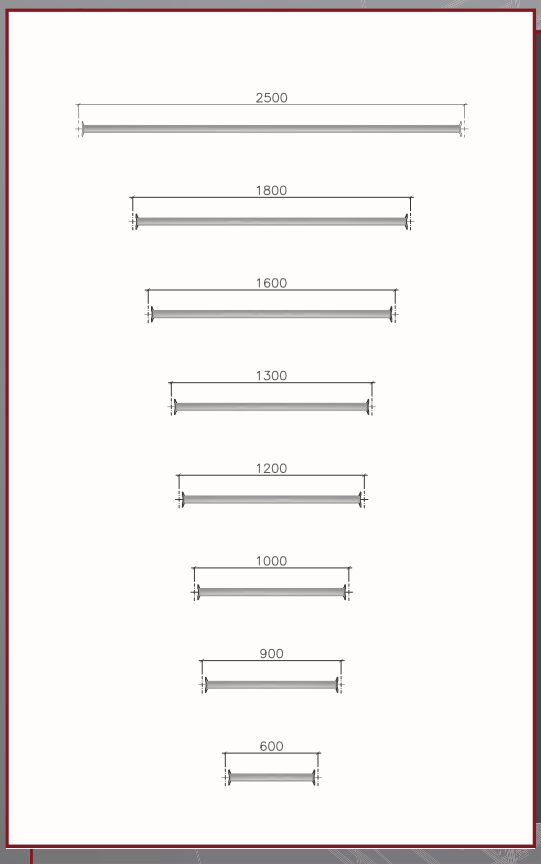
Support standards as the name suggest are used whenthe ·safelok" system scaffold used to **support** reinforced concrete slab or other non-standard load bearing applications. Support standards are generally used directly in conjunction with a universal jack or a combination adjustable jack and forkhead. Again, Spigot Standards and Open End Standards incorporate lower fixed cups at 500mm. centers. However. if the higher top cup joint is only 220mm. from the top of the standard and there are no fixed spigots which not allow to insert other standard but to insert a universal jack or adjacent forkhead.

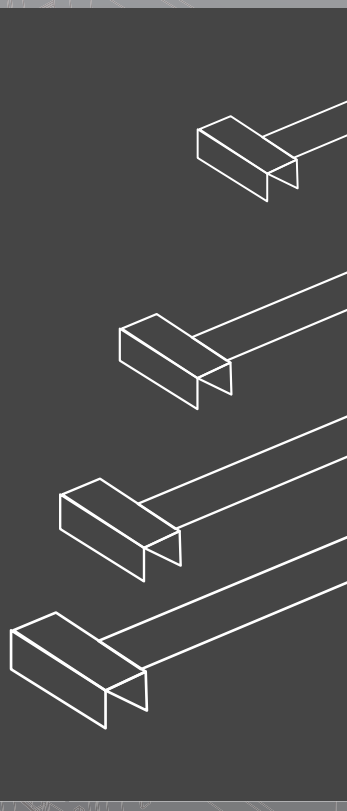
All S.felok Standards are manufactured from BS4360 grade 43 Embossed Tubes. Meet the requirement of EN 10219 of 320 N/mm' yield strength

HORIZONTALS (LEDGERS AND TRANSOMS)

The **Cuplock (Safelok)** ledgers incorporate symmetrical drop forged blade ends for easy and fast erection. All ledgers and transoms are completely interchangeable on both support and access scaffold structures. Ledgers can also be used as handrails and suited in either access or support scaffolding application.
To facilitate a variety of different loading and site conditions a wide range of ledgers are readily available. This means the grid size can be varied to suit most loading conditions.







LENGTH	WEIGHT	CODE
2.50 m	9.05 Kg.	110-021
2.00 m	7.30 Kg.	110-019
1.80m.	6.68Kg.	110-022
1.60m.	6.47 Kg.	110-023
1.30m.	4.77 Kg.	110-024
1.20m.	4.40 Kg.	110-025
1.00m.	3.64 Kg.	110-026
0.90m.	3.42 Kg.	110-027
0.60m.	2.32 Kg	110-028

This component is designed to provide mid bay or end support to the scaffold boards. Steel jaw sections are welded to the transom end to prevent dislocation and horizontal movement, these jaws simply seat on the adjacent ledgers. When using ·safelok· system scaffolding erected to form a facade scaffold or when using a mobile or static towers, intermediate transoms of increase lengths are available.

MATERIAL SPECIFICATION: Embossed Tubes EN 10219: Yield Strenght 320N/mm'

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CUPLOCK SCAFFOLD
SYSTEM COMPONENTS

CUPLOCK (SAFELOK) SCAFFOLD SYSTEM COMPONENTS

SOCKET BASE PLATE/HEAD ADAPTOR

This base or head plate is used in conjunction with a universal jack. The 150 X 1 50 X 6mm. thick plate is pre-drilled to accept securing bolts when used with other ancillary components such as dropheads. Nailing holes also drilled to allow spiking to sole boards etc. Finished: Coated

Socket Base Plate/Adaptor

Weight: 01. 77 Kg.

CODE NO. 110-070

Spigot Base Plate

Weight: 1.2 Kg

CODE NO. 130.015

SPIGOT BASE PLATE

This spigot base plate providing a full bearing surface for load distribution from the scaffold standards post. It has a 100mm. high integral spigot with 025.4mm and drilled holes for spiking to sole boards etc. Plate 150X 150 X 8mm. thickness. Finished: Coated

ADJUSTABLE BASE JACK

This combination of jack and base plate, the height 860 provides max. 660mm.
adjutment. Manufactured from 4mm. Seamless tube, this robust jack overcome
variations in ground levels. The 6mm. plate is pre drilled to accept securring bolts
or nailed when used minimal load carrying of 92.0 kN@ 450mm. adjustment.
Finished: Galvanized

860mm. Adjustable Base Jack

Weight: 04.61 Kg.

CODE NO. 110-072

760mm. Adjustable Base Jack

Weight: 04.28 Kg.

CODE NO. 110-096

660mm. Adjustable Base Jack

Weight: 3.57 Kg

CODE NO. 110-074

460mm. Adjustable Base Jack

Weight: 3.57 Kg

CODE NO. 110-083

860mm. Universal Jack

Weight: 03.92 Kg.

CODE NO. 110-092

760mm. Universal Jack

Weight: 03.05 Kg.

CODE NO. 110-127

660mm. Universal Jack

Weight: 2.58 Kg

CODE NO. 110-073

460mm. Universal Jack

Weight: 01.93 Kg.

CODE NO. 110-084

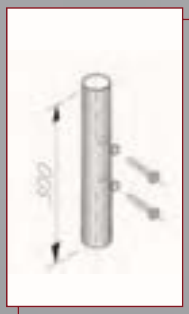
UNIVERSAL JACK

The universal jack is available in sizes 860mm .. 760mm, 660mm. & 460mm.
providing adjustment of 710,510,410 & 310mm. Respectively. Used in conjuction with the socket base plate or head adaptor or fixed forkhead to overcome variations in ground and soffit levels.
Manufactured from 4mm. seamless tube.
Finished: Galvanized

CUPLOCK (SAFELOK) SCAFFOLD SYSTEM COMPONENTS

LOOSE SPIGOT / SPIGOT PIN

Designed for providing a positive connection between two standards when placed end to end. The loose spigot pin is 300mm. long and project 150mm. Beyond the end of standard. The spigot pin or loose spigot is used in conjuction with M 1 Ox70 bolt and nut.
Finished : Coated



loose Spigot Connector Tube 38.1

Weight: 0.70 Kg

CODE NO. 110-032

Fixed Forkhead 150 X 200mm.

Weight: 04.04 Kg.

CODE NO. 110-069

SPIGOT BASE PLATE

For use of traditional loading applications. This components accept the primary bearer in all light or heavily loaded shoring applications. The 1 50 X 200 is wide enough to accept a steel soldier. Typical bearer
could include traditional bearer or standard to insert universal jack to give height adjustment.
Finished: Coated

Fixed Forkhead 150 X 170mm.

Weight: 03.85 Kg.

CODE NO. 110-068

Fixed Forkhead 150 X 85mm.

Weight: 03.05 Kg.

CODE NO. 110-067

SPIGOT FORKHEAD

The 1 50/85 spigot forkheads designed for single beam and 1 50/170 spigot forkheads designed for use single and double beams. It is directly fixed into the top of standards or adjustable props which no adjustment at the top of the support structure.
Finished: Coated

Spigot Forkhead 150 X 170mm

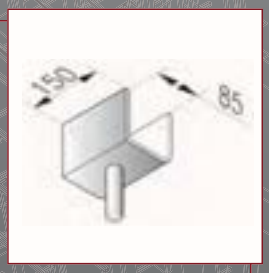
Weight: 03.72 Kg.

CODE NO. 110-088

Spigot Forkhead 1 SO X 85mm

Weight: 02.92 Kg.

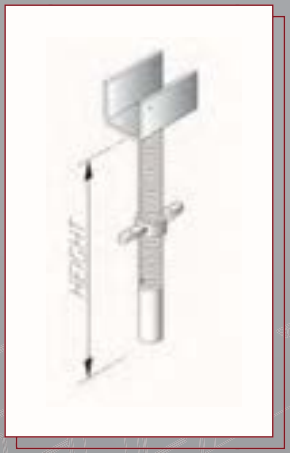
CODE NO. 110-089



CUPLOCK (SAFELOK) SCAFFOLD SYSTEM COMPONENTS

150/85 ADJUSTABLE FORKHEADS

This forkhead provides 71 0, 510 & 31 0mm. of adjustment at the soffit level. It has been specifically designed to accept one beam. the twin web or the single web with a plate of 8mm. thick. It is directly seated into the top of standard.
Finished: Galvanized



150/85 Adjustable Forkhead 860mm.	150/85 Adjustable Forkhead 660mm.	150/85 Adjustable Forkhead 460mm.
Weight: 05.98 Kg.	Weight: 05.33 Kg.	Weight: 04.71 Kg.
CODE NO. 110-129	CODE NO. 110-075	CODE NO. 110-086

150/170 ADJUSTABLE FORKHEADS

Designed to accept overlap of aluminium beams the TW-150 (Twin Web),
S W -1 SO (Single Web) or timber. Provides 3 different height of adjustment. The stem jack manufactured diameter of 38.1mm. X 4mm. wall thickness and 8mm.plate.

150/170 Adjustable Forkhead 860mm.	150/170 Adjustable Forkhead 660mm.	150/170 Adjustable Forkhead 460mm.
Weight: 06. 78 Kg.	Weight: 5.23 Kg.	Weight: 05.51 Kg.
CODE NO. 110-091	CODE NO. 110-08 7	CODE NO. 110-085

CASTOR WHEEL SPIGOT/ STEEL OR RUBBER

For use with "Safelok ScaffoldingSystem· as a mobile tower. The spigot castor wheel fits inside the standard or tube of 48.3 dia. with either steel or rubber. A sleeve arrangement designed to suit the 80mm. clearance to the bottom cup complete with locking nut, provides safe and secure fixing.

Castor Wheel Rubber / Spigot Type
Weight: 06.20 Kg.
CODE NO. 110-076
Castor Wheel Steel / Spigot Type
Weight: 07.00 Kg.
CODE NO. 110-077

Castor Wheel Rubber / Socket Type
Weight: 06.70 Kg.
CODE NO. 140-007
Castor Wheel Steel / Socket Type
Weight: 07.20 Kg.
CODE NO. 140-008

CASTOR WHEEL SOCKET / STEEL OR RUBBER

For castor socket type it can be use only on pipe at 48.3mm. diameter either steel or rubber. With locking nut to provide safe and secure fixing.

CUPLOCK (SAFELOK) SCAFFOLD SYSTEM COMPONENTS

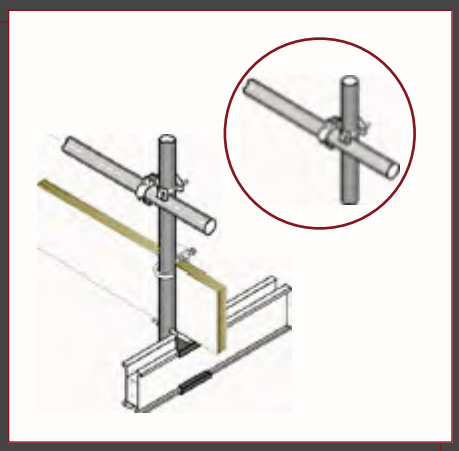
GUARDPOST STAIRCASE

It is usually located at each platform level to support the centre stairway guardrails. The coupler connects to the scaffold structure. In conjuction of self closing bar "SeeScaffolding Equipment Brochure".

Guardpost Staircase

Weight: 06.23 Kg.

CODE NO. 110-079



POST CLAMP ASSEMBLY

This Component it provides a post to which a guardrail of aluminium. It is easily fixed to all sizes of aluminum without the need to drill holes. Toe board can also be fitted using toe clamp. In this assembly does not includes right angle coupler , handrail tube & toe board clamp. See "Scaffolding Equiptment Brochure"

Post Clamp Assembly

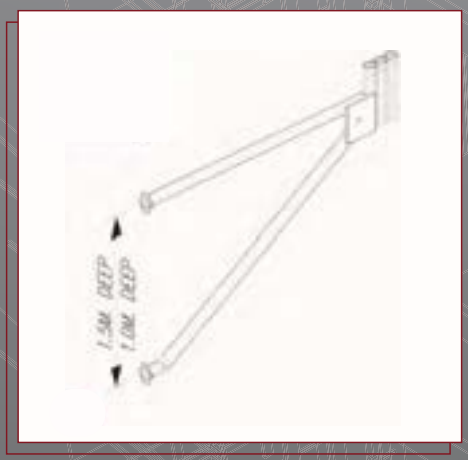
Weight: 06.55 Kg.

CODE NO. 110-126

CANTILLEVER 'A' FRAME

This bracket is designed for providing support beyond the edge of the slab. It also provides an access to support shutter external to perimeter drop beams. The frames locates to the adjacent standards via blade ends welded to the arm of the frame, which lock on to the standard in the usual way. Allowing jacks in 3 positions. S.W.L. 15 kN.

Cantilever (A) Frame 1.5m.	Cantilever (A) Frame 1.0m.
Weight: 17.85 Kg	Weight: 16.22 Kg
CODE NO: 110-034	CODE NO: 110-030



CUPLOCK (SAFELOK) SCAFFOLD SYSTEM COMPONENTS

BOARDS SUPPORT BRACKET

It is usually located at each platform level to support the centre stairway guardrails. The coupler connects to the scaffold structure. In conjuction of self closing bar "SeeScaffolding Equipment Brochure".

1 Board Support Bracket

Weight: 01.52 Kg.

CODE NO. 110-044

2 Board Support Bracket

Weight: 05.65 Kg.

CODE NO. 110-043

3 Board Support Bracket

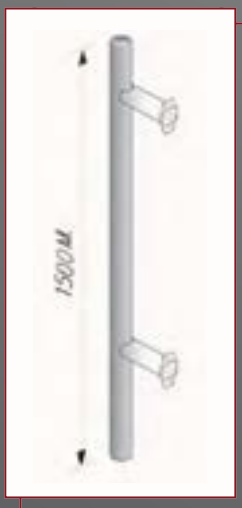
Weight: 06.97 Kg.

CODE NO. 110-042

INSIDE BOARD TRANSOM

This provide safe midway support for 225mm. Scaffold boards. It is conjunction when 1-3 boards support bracket are used.

Inside 1 Board Transom	Inside 2 Board Transom	Inside 3 Board Transom
Weight: 07.69 Kg.	Weight: 08.58 Kg.	Weight: 09.29 Kg.
CODE NO. 11 0-041	CODE NO. 11 0-040	CODE NO. 11 0-039



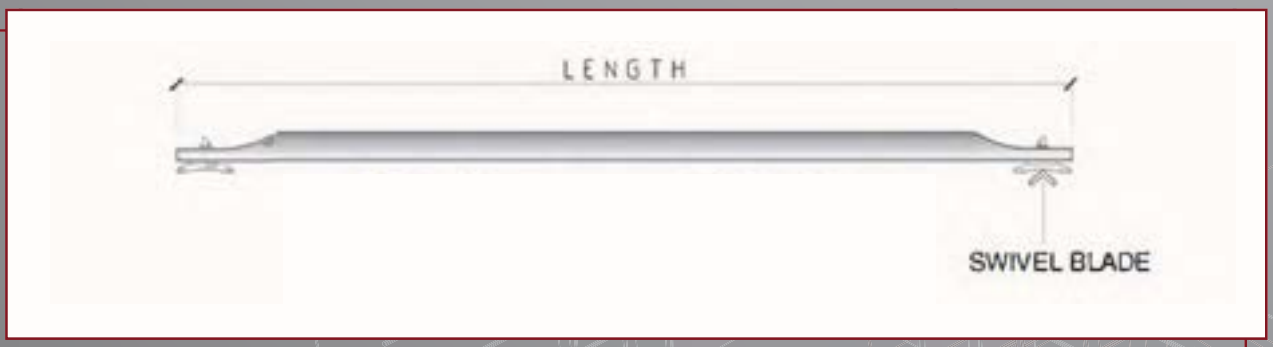
DROP BEAM BRACKET

The beam bracket is specially used to eliminate the need for full height propping under internal drop beams. This bracket can be use either way up to provide addition flexibility in adjustment to propping height. SWL: 1 SkN

Drop Beam Bracket 1.00m	Drop Beam Bracket 1.50m
Weight: 6.61 Kg	Weight: 9.19 Kg
CODE NO: 110-035	CODE NO: 110-090

FIXED LENGTH BRACE

To compliment the Safelok Scaffold System, there are numbers of purpose made modular fixed length braces which are available. These types of braces increase the productivity of the scaffold two fold when compared to tradition tube and fitting bracing. Face brace S.W.L. - 6.0 kN Compression or Tension, for the Half coupler brace S.W.L. • 10.5 kN Tension or Compression.



FACE BRACE 3.25M. 2.50M. SPAN X 2.0M. LIFT	FACE BRACE 2.95M. 2.50M. SPAN X 1 .50M. LIFT	FACE BRACE 2.75M. 1.80M. SPAN X 2.0M. LIFT	FACE BRACE 2.40M. 1.80M. SPAN X 1.50M. LIFT
Weight: 11.50 Kg.	Weight: 10.70 Kg.	Weight: 9.80 Kg.	Weight: 8.70 Kg.
CODE NO. 110-045	CODE NO. 110-046	CODE NO. 110-047	CODE NO. 110-048

HALF COUPLER BRACE 2.75M. 1.80M. SPAN X 2.0M. LIFT	HALF COUPLER BRACE 2.60M. 1.60M. SPAN X 2.0M. LIFT	HALF COUPLER BRACE 2.44M. 1.30M. SPAN X 2.0M. LIFT
Weight: 11.0 Kg.	Weight: 10.30 Kg.	Weight: 9.90 Kg.
CODE NO. 110-049	CODE NO. 110-050	CODE NO. 110-051

HALF COUPLER BRACE 2.30M. 1.80M. SPAN X 1.50M. LIFT	HALF COUPLER BRACE 2.25M. 1.60M. SPAN X 1.50M. LIFT	HALF COUPLER BRACE 2.0M. 1.30M. SPAN X 1.50M. LIFT
Weight: 9.80 Kg.	Weight: 8.80 Kg.	Weight: 8.50 Kg.
CODE NO. 110-052	CODE NO. 110-053	CODE NO. 110-054

SLAB FORMWORKS - ALUMINIUM BEAMS

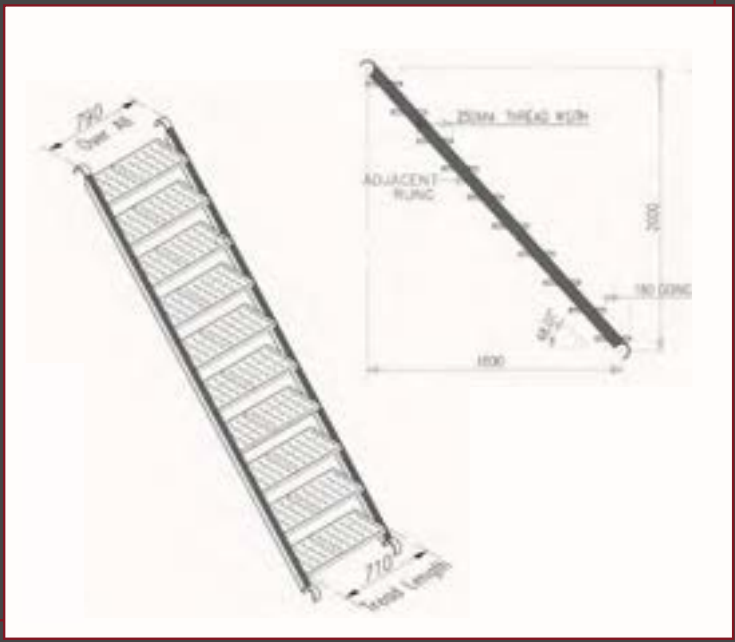
The Stronger Primary Beam are the Twin Web 'T150' with the SWL bending **9.11kNm**. The 'S1 50' are the secondary beam with SWL bending **6.63kNm**. Both beams are supplied with the timber insertion of 2· X 2· suitable for nailing of plywood. The beams are fixed with the plastic end cup at both ends, to at least reduce edges from being bent.

The aluminium beams are far lighter and easier to handle than timber. The beams are greatly increased bending and shear resistance, allowing more weight to be supported across increased spans which in turn reduces the labour cost fixing and erecting.

For more use, application, details & properties of TW-150 & SW-150 see ALUMINIUM MODULAR FORM-WORKS BEAMS Brochure.

CUPLOCK STAIRCASE UNITS

CUPLOCK STAIRCASE UNIT 1.50 & 2.0M. LIFT



STAIRCASE UNIT 2M. LIFT (ALL STEEL)

The Safelok Staircase Tower is mainly built up of Standard (Post) items. With the additional required for the 2.0m. Lift Tower are the 2.0m Staircase Unit and the Guardrail Post on the 8 Leg Tower.

Steel Staircase Unit 1.80/2.0m. 710R

Weight: 74.51 Kg.

CODE NO. 110-065

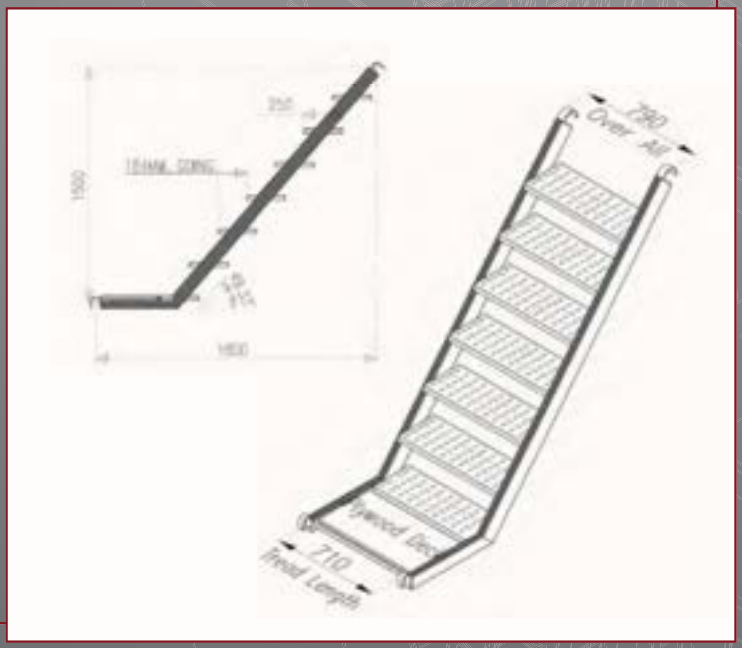
STAIRCASE UNIT 1.5M. LIFT

The first lift is 1.5Om., then the additional items required are the 1.80/1.5Om. Staircase Unit 71 OR, and the Guardrail Post on the 8 leg Tower.

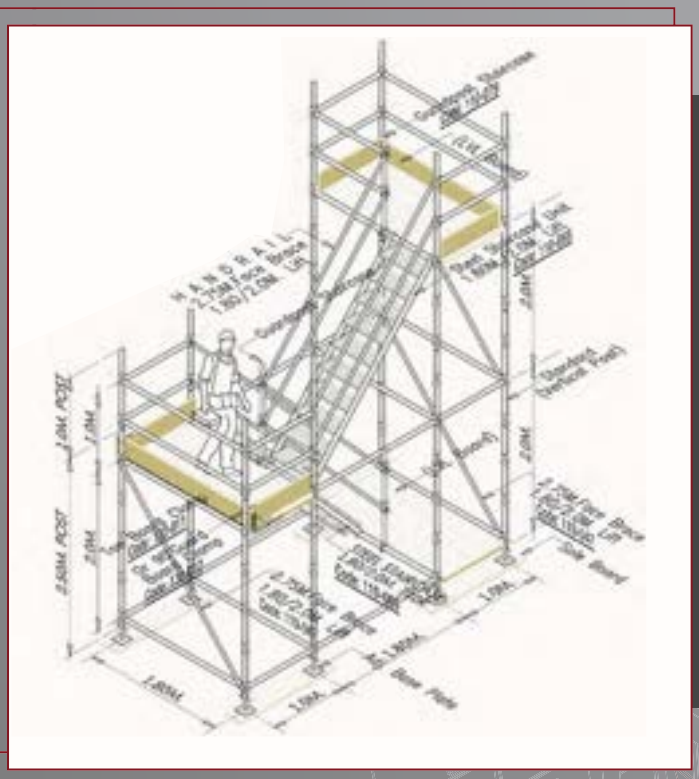
Steel Staircase Unit 1.80/1.50m. 710R

Weight: 74.51 Kg.

CODE NO. 110·063



CUPLOCK STAIRCASE UNIT 1.50 & 2.0M. LIFT



SAFELOK STAIRCASE UNIT 2.0M. BASE LIFT

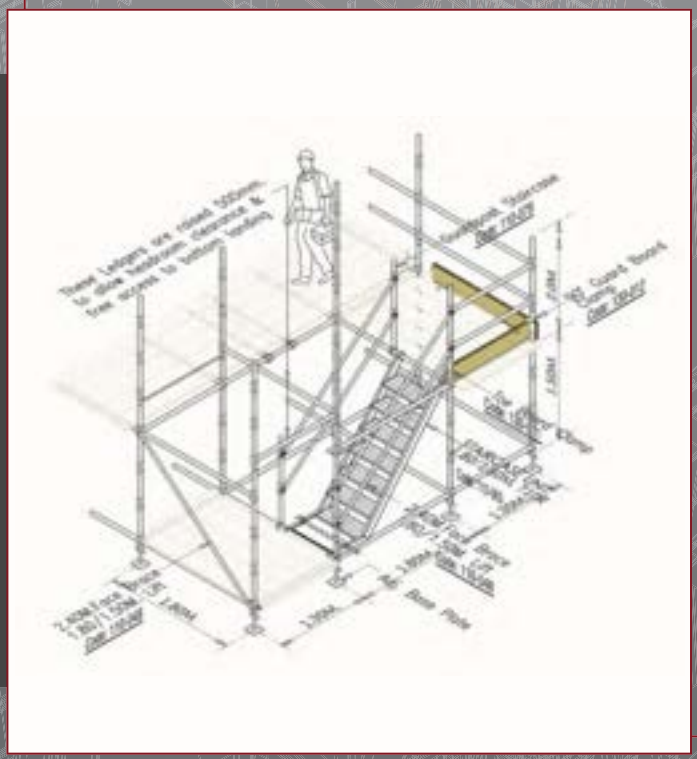
IMPORTANT NOTE:

The Safelok Staircase Tower is available in two versions either 8 legs or 10 legs. Plan dimension of both legs are 3.80 x 1.80m. with landing platform of 1.30m. wide and staircase of 0.80m. wide, each Staircase
Unit is 2.0m. lift.

SAFELOK STAIRCASE UNIT 1.50M. BASE LIFT

IMPORTANT NOTE:

When a Staircase Tower is built to give access to a Safelock Scaffold having a base lift of 1.50m. and the higher lifts of 2.0m. then the 1.50m. Staircase Unit should be used starting at the base of the Tower.
(Shown Above)
It is also possible to use a 1.50 Staircase Unit at the very top of the Tower, plus a full guardrails to the landing platform.



SCAFFOLDING EQUIPMENT

EMBOSSED SCAFFOLD TUBES

SCAFFOLD TUBE

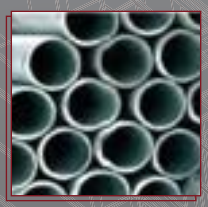
United Steel Industries Company Limited (UNISTEEL) stocks and supplies galvanized scaffolding tube on which strickly conforms to BS 1139: Part 1: Section 1: 1 and latest ARAMCO general instruction on safety requirements for scaffolds GI 8.001.

PROPERTIES OF SCAFFOLDING TUBE

Nominal Outside Diameter	48.3 mm
Nominal Wall Thickness	3.2 mm
Sectional Area	5.57cm2
Moment of Inertia	13.8 cm4
Elastic modules	5.57 cm3
Minimum Yield Stress	240N/mm2

AVAILABLE LENGTHS

Tube Size	Product Code	Weight
1.0m	130-084-01	3.44 kg
1.5m	130-084-06	5.23 kg
2.0m	130-084-02	6.97 kg
2.5m	130-084-03	8.71 kg
3.0m	130-084-04	10.45 kg
3.5m	130-084-08	12.19 kg
4.0m	130-084-05	13.93 kg
4.5m	130-084-09	15.68 kg
5.0m	130-084-11	17.42 kg
5.5m	130-193	19.16 kg
6.0m	130-184	20.9 kg



PRESSED STEEL SCAFFOLD FITTINGS

United Steel Industries Company Limited (UNISTEEL) stocks and supplies pressed steel scaffolding fittings and couplers of superior design and of the highest quality. All UNISTEEL fittings are manufactured from alloy steel conforming to B51449. This ensures the highest levels of durability plus the economies of long term safety and effecient performance. All UNISTEEL fittings are tested and conform to the requirements of 8S1139 (section 2:1) and EN7 4 class A and B and comply with the latest ARAMCO general instruction on safety requirements of scaffolds GI 8.001. The fittings are treated to resist corrosion having a complete zinc coating with chromate resistance to 8S1706.

DOUBLE COUPLER (PRESSED)

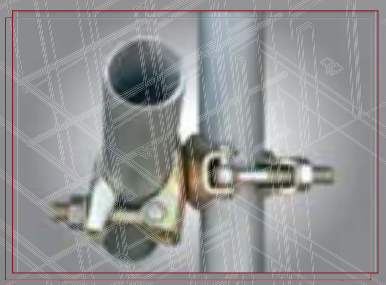
This scaffold fitting connects two scaffolds tubes at right angles. This is a load bearing fitting and enable to resist both slip distortion. Precision made centers or fitting bodies ensure a 90 degree connection.

Product code	Weight	S.W.L.
130-500	0.87 KG	6.25 KN

SWIVEL COUPLER (PRESSED)

Ttis scaffold fttting connects two scaffolds tubes at any angle to provide a ledger brace, facade or simlar bracing to a scaffold structure. Again this is a load beamg fitting. The two half-bodies are firmly riveted together to permit rotation.

Product code	Weight	S.W.L.
130- 006	1.04KG	6.25 KN



SLEEVE COUPLER

This scaffold fttting coonects twoscaffolds tubes end to end externally. A central steel divider ensures an equal insertion of each tooe. These fitting can be used where tension joints are required particularly usefull for long bracing tubes.

Product code	Weight	S.W.L.
130-008	1.05 KG	3.0KN (tension)

SINGLE COUPLER (PRESSED)

This scaffold fitting connects two scaffolds tubes at right angles. Commonly, this fitting is used to connect transom tubes to ledger rubes for the support of the scaffuld boards. This fitting is considered to be non load beamg.

Product code	Weight	S.W.L.
130-007	0.55 KG	N.L.B

JOINT PIN (PRESSED)

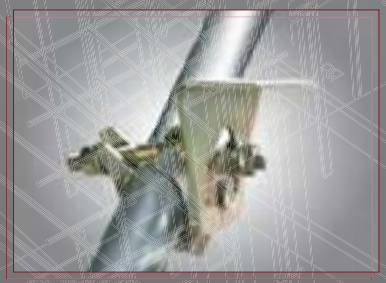
affold tubes. Operates by being inserted internally and expands to apply grip to the internal walls of scaffold tube.
This fitting is designed for compression joints and should not be used where tension loads are expected in a scaffold structure.

Product code	Weight	S.W.L.
130-009	0.79 KG	N.L.B

STAIR TREAD COUPLER (PRESSED)

This scaffold fitting is used for the construction of temporary stasways. The fitting connects the raking tube to the timber batten. The fttting can be used at either end of the thread and adjusts to angles from 28 degrees to 90 degrees.

Product code	Weight	S.W.L.
130-016	1.57 KG	N.L.B



HEAVY DUTY SCAFFOLD FITTINGS

DROP FORGE SCAFFOLD FITTINGS

United Steel Industries Company (UNISTEEL) stocks and supplies drop forged scaffold fittings with superior design and of the highest quality. All UNISTEEL drop forged fittings provide the important combination of strength and robustness. This type of products is often specified for the most enormous applications. All UNISTEEL fittings are tested and comforms to the require-ments of EN74 or BS 1139 Class A and B, comply with the latest ARAMCO general instruction on safety requirements of (GI) 8:001. The fittings are treated to corrosion with hot deep galvanized in accordance with ASTM A123 or EN10240. The range of UNISTEEL drop forged couplers is a result of meticulous research into the distortion points and areas of strain under stress. All products have grain flow which is controlled to put strength directly where it is needed to provide resistance to distortion and enhance durability.

DOUBLE COUPLER (DROP FORGED)

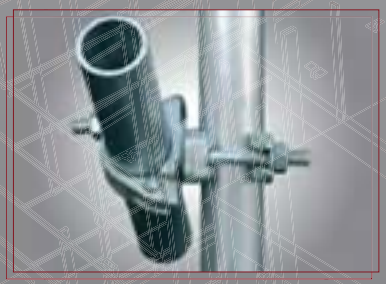
This scaffold fitting connects two scaffold tubes at right angles. This is a load bearing fitting enable to resists both slip and distortion. Precision made centers or fitting bodies ensure a 90 degree connection.

Product code	Weight	S.W.L.
130-001	0.96 KG	6.25 KN

SWIVEL COUPLER (DROP FORGED)

This scaffold fitting connects two scaffold tubes at any angle to povide a ledger brace, facade or similar bracing to a scaffold structure. Again this is a load bearing htting.

Product code	Weight	S.W.L.
130-002	1.02 KG	6.25 KN



SINGLE COUPLER (DROP FORGED)

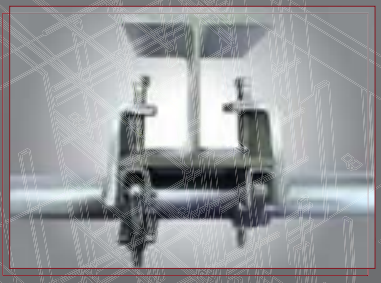
This scaffold fitting connects two scaffold tubes at right angles . It is used 10 connect transom tubes for the support of the scaffold boards. This fitting is considered to be non load bearing.

Product code	Weight	S.W.L.
130-003	0.6 KG	N.L.B

GRAV-COUPLER / GIRDERCOUPLER (DROP FORGED)

This scaffold fitting connects a single scaffold tube at right angles to most steel sections. This fitting can accomodate steel flanges up to 42mm. thick Grav-Couplers should always be used in pairs.

Product code	Weight	S.W.L.
130-004	1.4 KG	30 KN (per pair)



LVL SCAFFOLD BOARDS (OSHA TESTED)

SCAFFOLD BOARDS

United Steel Industries Company Limited (UNISTEEL) stocks and supplies lightweight laminated veneer lumber (LVL) scaffold boards. UNISTEEL (LVL) scaffold boards strictly conforms to BS 5973 (the 1993 code of practice for access, working scaffolds and special scaffold structures in see!) and the latest ARAMCO general instruction on safety requirements of scaffolding GI 8.001. All UNISTEEL (LVL) scaffold boards are individually proof loaded and its rigidity measured for verification. Maximum spans are determined for standardized live load applications in accordance with OSHA (STANDARDS 29 CFR 1926.451 and subpart l appendix A). The LVL scaffold boards are supplied with a nominal board width of 225mm or 9inch and nominal board thickness of 39mm or 1 ½ inch in a variety of lengths as detailed in the table below. The LVL scaffold board provides a safe and long lasting durable solution to suit any access requirement.

Properties of Scaffolding Tube

Nominal Thickness	38mm or 11 /2 inch
Nominal Width	225mm or 9 inch
Veneer Thickness	3.2mm
Veneer Species	Radiata Pine
Moisture Content	6% to 18%
Section Modulus Y-Y (cm3)	57
Second Moment of Area Y-Y	111
Maximun Bending Stress N/mm2	19.5
Modulus of Elasticity N/mm2	15100

Laminated Vanever Lumber (LVL) Boards 12100 Osha:

Average Load carrying Capacity of 4.5 KN (458. 7 Kg.) which is four times the most critical maximum intended carrying load capacity base on mid-point load@ 4.0 meter & in accordance with Saudi Aramco Scaffold Safety Handbook on section 9.8.1.

Tube Size	Product Code	Weight
1.0m	130-120	4.5 kg
1.5m	130-124	6.75 kg
2.0m	130-121	9 kg
2.5m	130-123	11.25 kg
3.0m	130-122	13.50 kg
4.0m	130-083	18.00 kg

SPECIALIZED SCAFFOLD FITTINGS

SPECIALIZED SCAFFOLD FITTINGS AND ANCILLARY COMPONENTS

United Steel Industries Company Limited (UNISTEEL) stocks and supplies an extensive range of specialized scaffold fittings to ensure that all the particular and detailed requirements of any scaffolding application are met. All products detailed in this section fully comply with the latest industry standards.

Product include :

- Scaffold Board Clamps
- Finial Couplers
- Self Closing Handrail Couplers
- Ladder Clamps
- Prop Couplers

SCAFFOLD TOE BOARD CLAMP (CLAMP)

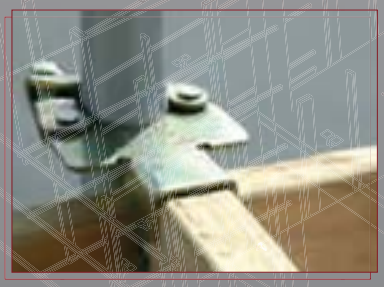
A specially design fitting for securely fixing and retaining the toe board in position. A hook simply locates into the scaffold standard and when tightened, the plate grips the tube and tighten-up p,essure on the board, resisting lateral and upward movement.

Product code	Weight	S.W.L.
130-011	0.4 KG	N.L.B

90 DEGREE GUARD BOARD CLAMP (PRESSED)

This 90 degree boa<d clamp has been designed for the specific purpose of correctly securing guard board safely and ecooomically. These fittings have a standard p,essed steel cover.

Product code	Weight	S.W.L.
130-012	0.6 KG	N.L.B



BOARD RETAINING CLAMP (PRESSED)

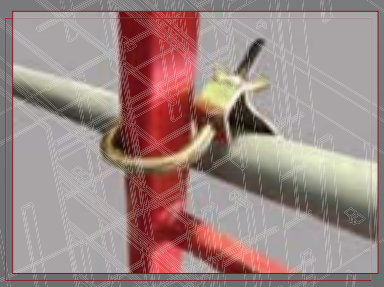
caffold boards are locked incorrect position. providing high resistance to both lateral and upward movement. This fitting shoull be used on scaffolds in exposed positions whe re uplift may be expected on boarded platforms.

Product code	Weight	S.W.L.
130-013	0.6 KG	N.L.B

LADDER CLAMP COUPLER (PRESSED)

This ladder clamp fitting connect into tube at right angle. Ladder clamp should always be used in pairs.

Product code	Weight	S.W.L.
130-010	0.45 KG	N.L.B



FIXED FINIAL COUPLER (PRESSED)

Connects a scaffold tube and right angles directly to the end of another tube with no projection. This fitting is ideal for guardrails, crowd restraint barriers etc.

Product code	Weight	S.W.L.
140-017	0.7 KG	N.L.B

SWIVEL FINIAL COUPLER (PRESSED)

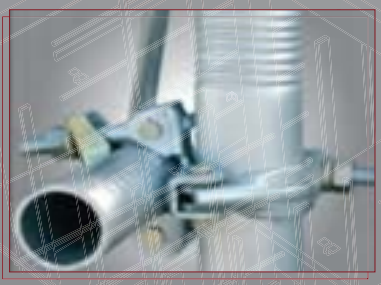
Connects a scaffold tube at any angle between 15 to 90 degrees. Again the fixing point is directly at the end of a tube with no projection is ideal for handrails on staircases.

Product code	Weight	S.W.L.
140-018	0.8 KG	N.L.B

PROP DOUBLE COUPLER (PRESSED)

Connects a scaffolds tube at right angles to a prop outer (60.3mm. outside diameter). Used when lacing a line of support props together.

Product code	Weight	S.W.L.
140-009	1.0 KG	6.25 KN



PROP SWIVEL COUPLER (PRESSED)

Connects a scaffold tube at any angle to a prop outer (60.3mm. outside diameter). Used when bracing a line of support props together.

Product code	Weight	S.W.L.
140-010	1.1 KG	6.25 KN

SELF-CLOSING HANDRAIL COUPLER (PRESSED)

Specially designed scaffolding fitting to prevent accidents at ladder entry and exit points. This coupler comects to the scaffold structure using a standard double coupler

Product code	Weight	S.W.L.
120-014	1.4 KG	N.L.B

SCAFFOLDING ANCILLARY EQUIPMENT

ANCILLARY EQUIPMENT

United Steel Industries Company Limited (UNISTEEL) stocks and supplies a variety of different ancillary components which compliments traditional scaffold equipment. All such equipment is manu-factured to the highest industry standards.

Product include :

- Scaffold Wheels
- Scaffold Palletes
- Gin Wheels

CASTOR WHEEL SPIGOT / STEEL OR RUBBER

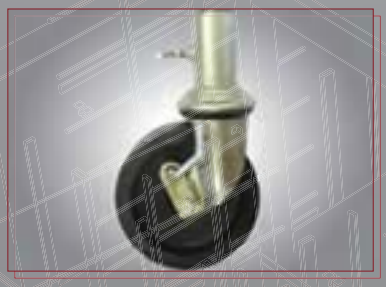
Spigot Castor Wheel fits inside the standard with diameter of 48.3mm. Wheel can be firmly secured to the outside of the tube to prevent displacement.

Product code	Weight	S.W.L.
Rubber : 110 - 076	6.2 KG	270 KG
Steel : 110 - 077	7.0 KG	370 KG

CASTOR WHEEL SOCKET / STEEL OR RUBBER

Socket Castor Wheel in can use only on pipe at 48.3mm. Diameter either steel or rubber, with locking nut to provide safe and secure fixing.

Product code	Weight	S.W.L.
Rubber : 140 · 007	6.7 KG	270 KG
Steel : 140 · 008	7.2 KG	370 KG



GIN WHEEL

A stutdy free running gin wheel incorporating a 51 mm. diameter drop forged swivel ring which completely encircles the tube ensuring maximum safety. The 10 inch pressed steel wheels has a self-lulxicating bearing and is suitable for rope of up to 19mm. in diameter.

Product code	Weight	S.W.L.
140-006	4.88 KG	50 KN

CLOSED MESH SIDED SCAFFOLD PALLETS

Built from strong 40mm / 40mm box steel tube these closed sided stilages are clesiqned for storage and transportation of scaffold fittings and other smaller ancillary components.

Product code	Size (M)
140 - 021	1.0/1.0/0.9

OPEN SIDED SCAFFOLD PALLETS

Built from strong 40mm / 40mm box steel tube these open sided stillages are designed for storage and transportation of scaffold tubes and system scaffolds elements.

Product code	Size (M)
140 - 020	1.0/1.0/0.9

SCAFFOLD SAFETY EQUIPMENT AND SCAFFOLDING TOOLS

United Steel Industries Company Limited (UNISTEEL) is committed to safety in line with the company safety policy document. Accordingly we stock a number of safety items to facilitate safe erection of scaffolds and to provide fall protection for scaffolding workers in line with both British Standards and the latest ARAMCO general Instruction on safety requirements of Scaffoldings GI 8.001.
Product include :

- Full Body Harnesses
- Snap-on Lanyards
- Scaffold Tags
- Scaffold Tools
- Scaffold Ladders

SCAFFOLD HARNESSES AND LANYARDS

Fall protection full body harness complete with single point rear anchorage. Lanyards are fitted with a shock absorber and a .snap-on. scaffold hook with a large diameter to fit easily and lock-over scaffold tube.

Product code	Description
140 - 003	Full Body Harness
140 - 004	Lanyard

SCAFFOLD TAGS AND INSERTS

Recognized as the leading safety system to assist with the control of scaffolding from first build to dismantling. Used in verification and tracking for the safety of working scaffolds by a scaffold supervis01s and inspectors.

Product code	Description
140 - 001	Tag Holder
140 - 002	Tag inserts

SCAFFOLD TOOL BELTS

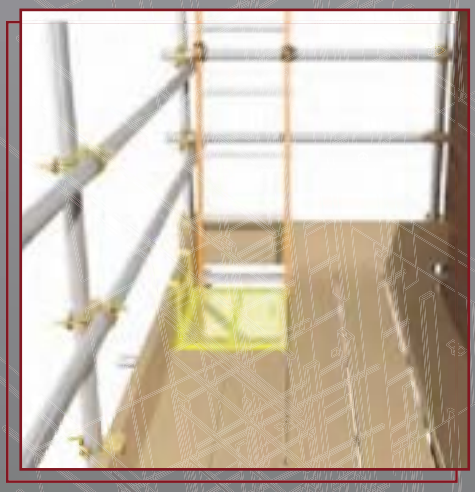
The scaffolder's tool kits consist of a scaffold belt with double frog and level holder. a 7 /16" podger and magnetic plumb. (British Manufactured)

Product code	Description
140 - 005	Full Set

SCAFFOLD LADDERS

These are purpose made steel stile & rungs designed particularly for use with scaffolds in industrial job site applications. Ladders conform to BS 2037 & EN 131 standards of safe working practice. The epoxy coated steel uprights are 430mm. apart with rungs at 2BOmm. centers. Rungs are 21 mm. 0 manufactured from galvanised steel with non-slip treads which are connected to the uprights using a shrink fitting & crimped steel fabrication process to ensure ladder safety.

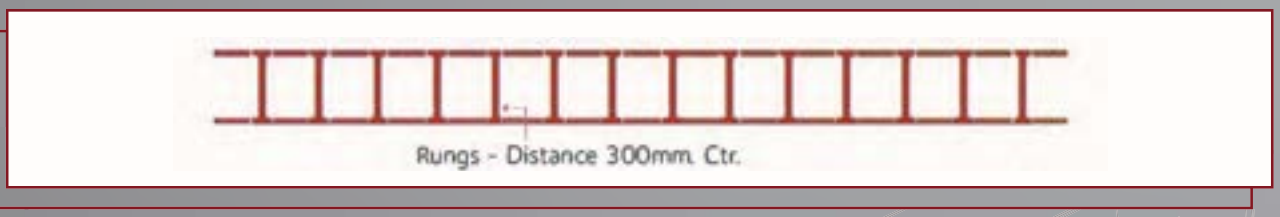
The epoxy coated steel uprights steel protected against corrosion caused by chemical products and cement. Rungs are galvanised steel shrink htted to the uprights.



Product code	Number of Rungs	Size Nominal
130 -036	24	7.0m
130 -038	17	5.0m
130 -040	10	3.0m

SCAFFOLD TOOLS, SCAFFOLD LADDERS AND BEAMS

STEEL LADDERS

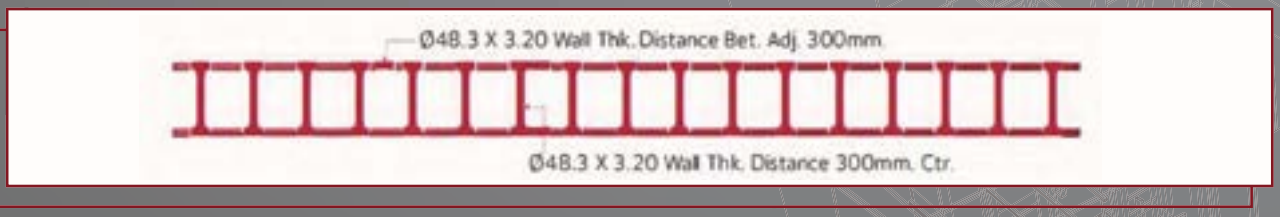


The epoxy coated steel uprights steel protected against corrosion caused by chemical products and cement. Rungs are galvanised steel shrink htted to the uprights.

Product code	Size	Weight KG
130 -171	7.0m.	41.09
130 -051	6.0m.	35.39
130 -070	5.0m.	29.69
130 -052	4.0m.	23.58
130 -053	3.0m.	17.88
130 -054	2.0m.	12.18

LADDER BEAM

United Steel Industries Company Limited (UNISTEEL) manufactures, stocks and supplies purpose made ladder beams. These ladder beams are particularly used when large bridging span are required. The beams are fully compatible with standard 'post' and fittings components. Ladder Beam is extensively used when suspending scaffolds say on pipe racks.



The 6.0m. Ladder Beam with vertical round bracings can carry the max. of 43.25 KN on two point loading on 2.0m. from each end of loading. Material used meets the requirement of 320 N/mm' yield strength & 3.2 nominal wall thk. for the EN 10219 scaffold tubing.

Product code	Standard Size
130-056	6.0m

GENERAL
TECHNICAL DATA

GENERAL TECHNICAL DATA

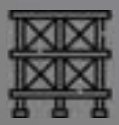
The following technical information is intended to provide a broad outline in terms of the basic loading criteria of the ·safelok" Scaffold System. For detailed informatiOI\ contact your nearest UNISTEEL Design

SAFE WORKING LOADS

The load carrying capacity of any support or access scaffold structure depends upon a number of key influencing factors. These must be carefully considered when designing any scaffold structure, ensuring that a safe scaffold is built and that the scaffold operates within its designed capabilities and to suit the prevailing site conditions.

SUPPORT SCAFFOLDS

- Slab weight and live loads (wind and other imposed loads
- Spacing between each standard (the grid size)
- Height or elevation from ground to soffit level
- Base and soffit jack extensions.
- Ground conditions.
- The lift height. (the horizontal distance between one level of ledgers to the next)



ACCESS SCAFFOLDS

- Loading conditions
- Wind load using a wind speed of 65 kph (40 mph)
- Maximum wind using the 3-seconds gust wind speed for the location
- Working loads. self weight etc.
- Number of working lifts.
- Spacing between each standard (the grid size)
- The working height.
- Ground conditions.
- Bracing and tie position requirements.

LOADING CRITERIA SAFELOK STANDARD

The loading capacities shown opposite are based on internal standards restrainedin all four directions. External standards are defined as standards which are only restrained in either two or three directions. Safe working loads are based on eccentric loads up to 25mm. and fully extended base and forkhead in a worst case situation.

Lift Height (Meter)	Safe Working Load Internal (KN)	Safe Working Load External (KN)
1.0	57.0	45.8
1.5	45.0	36.0
2.0	33.0	26.4

STRENGTH OF LEDGER

The following information has been determined by tests.

Test Location	Lift Height (Meter)	Maximum Load Internal (KN)	Maximum load External (KN)
Mid-ooint load @ 1.50m. heiaht 1.0	1.0	45.0	45.8
Mid-ooint Load@ 2.0m. heiaht	2.0	33.0	26.4

SCAFFOLDING SAFETY

SCAFFOLDING ACCIDENTS
Safety is everybody's duty. Scaffold accidents may results from construction deficiencies or from falling objects from exposed or open sides of platforms and mainly from not doing ones duty.

SCAFFOLD ERECTION
Scaffolding formworks shall only be erected, moved altered or dismantled under the supervision of competent and highly-trained personnel.

GEAR UP
Always wear safety glasses and hard hats when erecting and dismantling scaffold formworks.

CHECK SCAFFOLD EQUIPMENT
Inspect. maintain and replace all parts of the scaffolds and accessories that are in poor condition. Do not use rusty or corroded scaffold equipment.

SURVEY THE JOB SITE
A survey shall be made of the job site for hazards. such as open trenches. debris. high tension wires. unguarded openings and other hazardous conditions created by other trades.

BEGIN WITH GOOD FOOTING
A firm and level foundation is required for all supported scaffolds. Use base plates. sill boards on solid ground. make sure scaffolds is leveled or plumbed. Tower with castor must be secured or pinned to the frame at all times.

PLUMB AND LEVEL ALL SCAFFOLDS
Universal jacks (Adj. Base Jacks) are designed for leveling the scaffold. Do not use unstable objects such as blocks when leveling. Do not force braces to fit level the scaffolds until proper fit can be made easily. Ensure that all erected scaffolding remains plumbed at all times.

SCAFFOLD BRACING
Use bracing at all points provided, add extra braces if needed to insure stability.

SCAFFOLD ACCESS
Do not climb on cross braces. Use only access ladders, access steps or equivalent safe access scaffold.

SCAFFOLDING SAFETY

DON'T OVERLOAD SCAFFOLDING

Safe loading capacities are available, you may contact our nearest design office. There's a limit even to what steel can support. A 4:1 safety factor must be figured on scaffolding.

WORKING PLATFORMS

All platforms must be fully Aanked. All protection is required on all scaffolds where the working height is above 1 O'Guardrails and toeboards should be installed along all sides and end of platforms. Guardrails must be able to withstand 90Kgs at force. Toe boards should be used to protect workers from tools and equipment falling from platform. Do not use scaffold if planks are not scaffold grade and if the planks are painted, cut or split.

INSPECT DAILY

At the beginning of every shift, ensure that the scaffolds are maintained in safe condition. Keep scaffolds platforms. runways and Acor free of grease, mud or any other materials that could cause slipping.

USE EQUIPMENT FOR THEIR INTENDED PURPOSE ONLY

All scaffold accessories shall be used and installed in accordance with manufacturer's recommended procedure. Accessories shall not be altered in the field. Various manufacturer shall not be mixed or used alternately.

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UNISTEEL
Formwork & Scaffolding

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