

SUCOOT



Project Design



RING SYSTEM SCAFFOLD





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1. About Us

SUCCOOT CO., LTD. was set up in 1984 and specializes in Scaffolding Accessories & Formwork Parts. Today, we have customers spreading over 65 countries around the world. Our products are engineered for the specific purpose of safety, strength and flexibility to meet international standards within this industry. We are confident that our quality is on par with other world-leading brands—especially our Ring System Scaffold. This system is widely used in many civil engineering projects worldwide. This includes high speed rail, freeway, elevated railway, subway, high-tech factories, music concert event application and other projects.



With our technical knowledge, ready-to-ship inventory and full-service solution, we are able to serve customers with confidence and quality. If you have any enquiries regarding our products, please feel free to contact us.



2. Key Features

There are 5 key features of SUCOOT's Ring System Scaffold which make us superior to other suppliers.

1. Vertical Connection Allowance $\leq 1.8\text{mm}$

To control the allowance between Verticals and Spigots within 1.8mm, we have developed a device that can remove the hot dip galvanizing residue inside the tube.

* According to the test result, the loading can reach at least 94% when the maximum allowance is 1.8mm; whilst, if the other brand allowance is 3.0mm, the loading only can reach 50%. The higher the scaffold assembled, the less the loading can bear.



2. Vertical Connection is Through "Cross Section", Rather Than "Point"

We use high-precision circular sawing machines to ensure the tubes are cut precisely. This allows for no visible gap between the tube connections, making the cross sections of our tubes are perfectly smooth.



3. Vertical Deviation at 0.3%

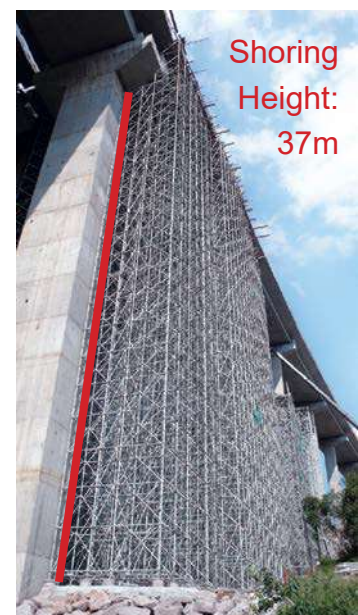
It is on par with ACI 117-06, the permanent concrete structure which below 25.4m height, the vertical deviation need to be controlled within 0.3%. The less vertical deviation, the less influence on eccentric bending moment.

4. Finest Quality & Greatly Improve Construction Efficiency.

The rings are stamped from Q355B high-strength steel, tubes are made of high tensile steel "STK500".

5. 100% Safety

Ring System has been used for 20 years. Safety is always our priority. Our scaffolding has never collapsed caused by overloading or defect.



3. Applications

- *Viaduct, Ramp, Side Traffic Lane, Pier Cap*
- *MRT Station, Railway Underground Station, Cut-and-cover Tunnel, Vehicle Box Culvert, Drainage Box Culvert*
- *Hi-Tech Factory, Gas Turbine Room, Power Plant, Water Tower, Recycling Plant, Refinery, Incinerator*
- *Large-Scale Performance Stage*
- *Suspended Scaffolding for maintenance work in Shopping Mall / Department Store*



- Ring System Scaffold can be flexibly assembled for different kinds of projects. *<Our Engineering team can provide design and calculation as per your project>*



Large Overpass Bridge (Arch)



For steep slopes, our Ring System can replace heavy duty frames in shoring.

Significant Projects

Suspended Scaffolding- Tower and Bridge



Taiwan Railway- Wujih New Station



Suvarnabhumi Airport



Access Scaffolding for
High Level Installation Work



Towers and Bridges can be moved with rollers which saves time and labor costs.

Industrial Park- 3000 tons Water Tower



Industrial Park- 500 tons Water Tower



Pumping Station ►

Water Tower ▼



Suhua Highway Pylon Façade



Taichung Expressway No.2 Shoring



Vietnam Power Plant Foundation Shoring



Taipei MRT- Y- Shaped Pier Cap Shoring



Taipei MRT- Superstructure Formwork and Shoring



China Chongqing Bridge Three-span
Shoring(6-30m height)



New Suhua Highway



Y-Shaped Pier Cap Shoring



Underground, Cut-and-cover Tunnel
Slab Shoring



Tunnel Shoring



Shoring Platform for Roof Forming Machine



Israel Logistic Center-Tableform Application



Indonesia Bridge Pylon Shoring



Chongqing, China H:37m Bridge Shoring



Taiwan Tunnel Arch Form Shoring



Cable-stayed Pylon - Pier Table Shoring



Shoring for Steel Structure Factory Assembly



Taipei Music Center –
Shoring for Steel Structure



Tainan Green Energy Technology
Demonstration Site – Shoring for Steel
Structure Solar Tree



Taoyuan Convention and Exhibition Center –
Shoring for Steel Structure Roof



Thailand MRT Station –
Shoring for Precast Beam



Hi-Tech Factory Slab Shoring



Underground Railway, Cut-and-cover
Tunnel Slab Formwork and Shoring



Central Taiwan Science Park Southbound
Access Road – Pier Table Shoring



Kaohsiung Dragon Bridge Shoring (Arch)



Superstructure Shoring in Slope



Central Taiwan Science Park Southbound
Access Road – Superstructure Formwork and
Shoring



Hualien Jian-ying Bridge Pier Table Shoring



Taipower Tower Base Cross Beam Shoring





Airbus A380 Maintenance



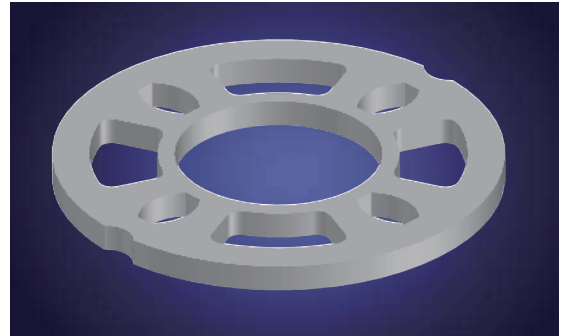
- Ø48.6 mm System (Both metric and inch sizes are available.)

Staging for Music Concert, Sports Meet and Election Campaign.



4. Features

- All components have excellent structural strength. Verticals are assembled with horizontals and diagonals can form excellent combination.
- Simple and rapid assembly can save a lot of time and labor costs.
- With the universal joint and interchangeable components, this system can be used in different kinds of projects.

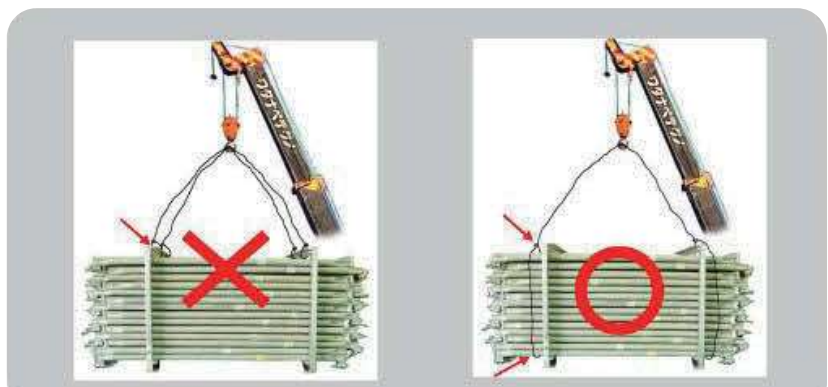


8 holes in one ring:
Big hole: for Diagonal, Level Diagonal
Small hole: for Horizontal

- All components are made of high tensile steel (JIS STK500) with hot dip galvanized finish for long life.



- Individual components can be packed in bundles for easy storage and transportation.





SUCOOT

- *In viaduct construction, complete scaffold towers can be moved horizontally by using special wheels and rails, or simply lifted to the next location by crane. This method has been proven to save considerable time and labor costs.*



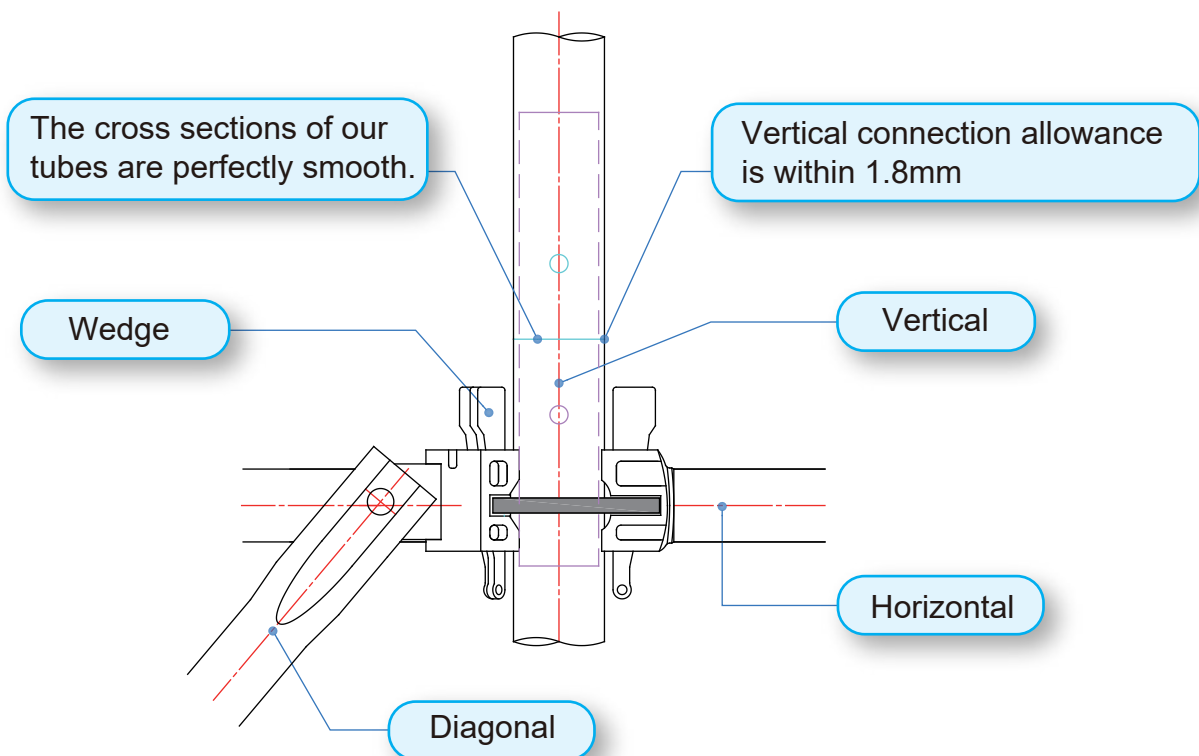
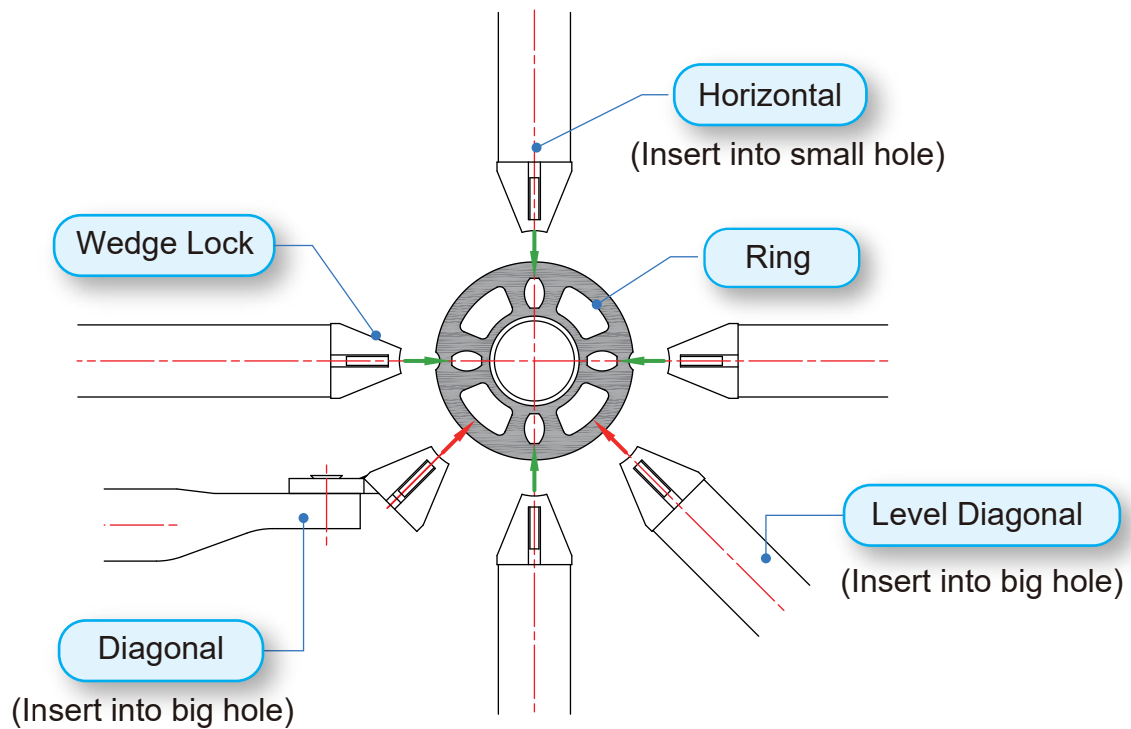
- *Ring System Scaffold can be used in different terrains and buildings.*
- *It is compatible with various formwork types (traditional formwork, formwork system or steel panels) for a consummate design.*
- *Using Sub-Verticals can easily solve the problem of height alterations.*



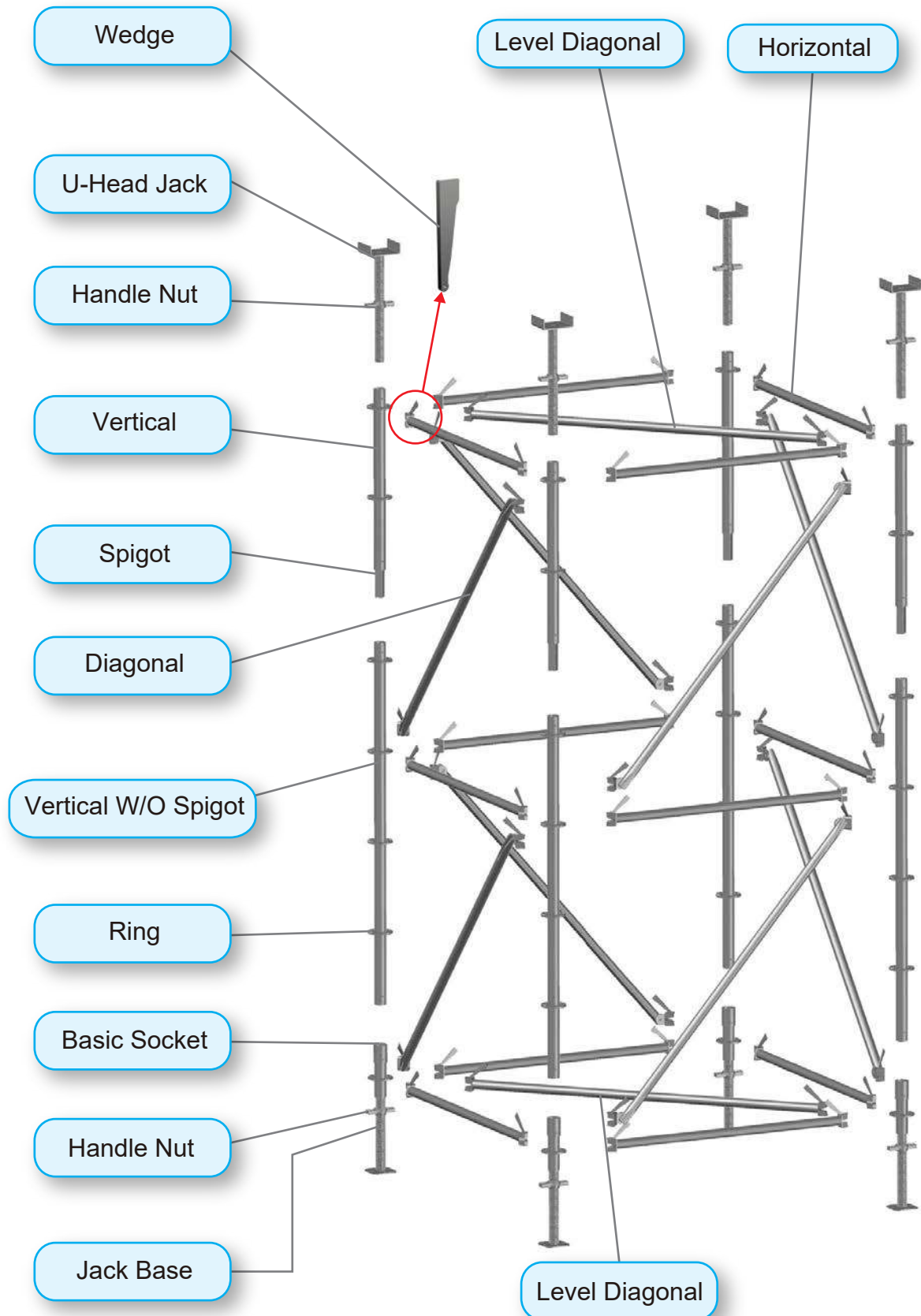


5. Connecting Techniques

- The secure connection between the wedge locks and ring optimizes the load carrying capacity.



6. Component Overview





7. Dimensions and Specifications



Jack Base J48601

U-Head Jack U48601

- To adjust the scaffold height
- Material :
Threaded Tube STK400
Handle Nut FCD450
Base Plate SS400
- Adjustable Range: 80~450mm

- Threaded Tube :
Ø48.2mm×600mm×t:5.0mm
- Base Plate :
140mm×140mm×t:6.0mm
- U-Head :
170mm×150mm×H:50mm
×t:6.0mm



Basic Socket V62020

- Assembled with Jack Base and connected with Horizontal to steady the foundation
- Material : STK500

- Length :
200mm divided by Ring from the middle
- Pipe :
Ø60.2mm x t:3.2mm



Vertical

V61100, V61150, V61200, V61300

- Main support of the entire system connected by Spigot
- Material : STK500

Vertical without Spigot

V60100, V60150, V60200, V60300

- Only assembled with Basic Socket.

- Length :
1.0m ; 1.5m ; 2.0m ; 3.0m
- Pipe :
Ø60.2mm×t:3.2mm
- Distance between Rings :
500mm



Sub-Vertical

V62025, V62050

- To adjust the shoring height, especially in big alterations
- Material : STK500

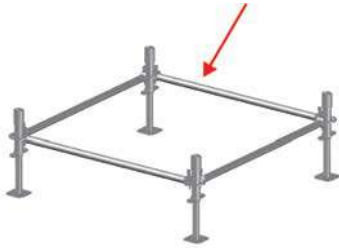
- Length :
0.25m ; 0.5m
- Pipe :
Ø60.2mm×t:3.2mm



Base Vertical

- When the shoring height is very low, Jack Base and U-Head Jack can not be used at the same time. Jack Base can be replaced by Base Vertical of fixed height. To adjust the height by U-Head Jack only.
- Material: STK500

- Length: 0.35m
- Pipe : Ø60.2mm x t:3.2mm
- The minimum height is 65cm when connecting with U-Head Jack only.

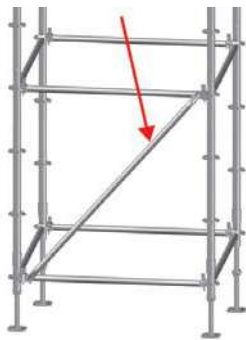


Horizontal

H66060, H66090, H66150, H66180, H66240

- To distribute force evenly between Verticals
- Connecting: Wedge Lock fixed on Ring
- Material : STK500

- Length : 0.6m ; 0.9m ; 1.5m ; 1.8m ; 2.4m ; Special size can be customized
- Pipe : $\varnothing 48.6\text{mm} \times t:2.3\text{mm}$

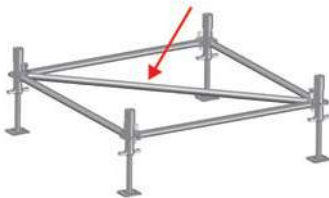


Diagonal

**D60610, D60910, D61510
D61810, D60615, D60915
D61515, D61815, D62415**

- To enhance the load-carrying capacity and keep the entire system from deformation
- Material : STK500

- Length : 0.6m×1.0m ; 0.9m×1.0m ; 1.5m×1.0m ; 1.8m×1.0m ; 0.6m×1.5m ; 0.9m×1.5m ; 1.5m×1.5m ; 1.8m×1.5m ; 2.4m×1.5m
- Pipe : $\varnothing 48.6\text{mm} \times t:2.3\text{mm}$

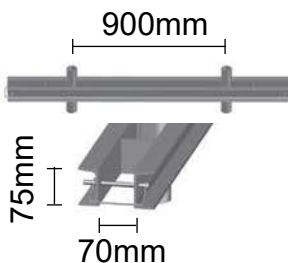


Level Diagonal

L61515, L61815, L61818, L62415

- To restrict the scaffold in a foursquare (90° at each angle), excellent steadiness for high shoring
- Material : STK500

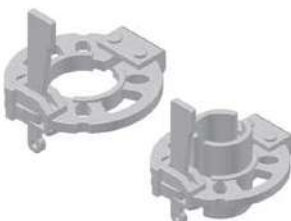
- Length : 1.5m×1.5m ; 1.8m×1.5m ; 1.8m×1.8m ; 2.4m×1.5m ;
- Pipe : $\varnothing 48.6\text{mm} \times t:2.3\text{mm}$



Heavy-Duty Beam Bracket

- Put on the Ring of Vertical, used in beam and slab shoring
- Material : SS400

- Length : 1.65m
- Components: Pipe $\varnothing 60.2 \times t:3.2\text{mm}$
Snap Pin (SL-45A)
Double C Waler 75 x 40 x 5 x 7mm



Movable Ring Coupler

- Applicable to special height spacing (without the welded ring) for connection

$\varnothing 48\text{mm}$ C50500
 $\varnothing 60\text{mm}$ C60500
 $\varnothing 60/48\text{mm}$ C60600

8. ANSI/ASSE A10.8 & EN 12810-1 Certified

The first scaffold manufacturer obtained EN 12810-1. Having the experience of extensive projects and EN certified product, we successfully accomplished many infrastructure projects overseas with our engineering techniques and technical support.

EN 12810-1 (No. TPI.0040 TCF.)

Certificate No.: **TP-0090**

**EURO
CERT**

STATEMENT OF COMPLIANCE

Name	SUCOCO CO., LTD.
Manufacturer	Site 1: 1F, No. 518, Sec. 4, Taiwan Blvd., Xinyi Dist., Taching City 407, Taiwan
Address	Site 2: No. 225, Sec. 2, Zhongxing Rd., Shalu Dist., Taching City, Taiwan
Product Name	SCATFOOT SYSTEM-MAGGI 89 27815
Models	SC40150, EN 12810-30, SW 901/30, HE 100-100 I 08, 09, 12, 15, 18, 21, 24, I 40, 240, II A-A, E-Empty 27
Applicable Standards	EN 12810-1:2013, EN 12810-2:2003 Annex B EN 12811-1:2003, EN 12811-2:2003, EN 12811-3:2003 Load Tests: EN 12810-1/2/3/4/5/6 EN 12816-2:2013 EN 12816-3:2013
Test Reports	Orig. Tests: EN 12810/23/10/01 EN 12810/07/2/15/01/02

This is to attest that, upon the relevant request of SUCOCO CO., LTD., EURO CERT S.A., as Third Party Authority, has received, archived and processed by the submission of the Technical Construction File of the above mentioned product. The Technical Construction File has been archived at EURO CERT's records with code number TP-0090 TCF.

All modifications to the Technical File should be first submitted to the Third Party Inspection Authority to ensure further validity of this statement.

This statement is subject to unsupervised surveillance visits by FORCECET S.A.

This statement is valid until 12/12/2022

The validity of this statement depends on regular surveillance.

To check the validity of the certificate from our website using the password **gubdnc**.

EURO CERT S.A. - 11000, rue de la République - 11000 Brabant - Belgium

Tel: +32 (0)3 726 01 00 - Fax: +32 (0)3 726 01 01 - E: info@eurocert.be - Web: eurocert.be

ANSI/ASSE A10.8 (No. TPI.0015.)

			
		EUROPEAN INSPECTION AND CERTIFICATION COMPANY S.A.	
		CERTIFICATE No. TPL0015	
STATEMENT OF COMPLIANCE			
Manufacturer	Name Address	IPROP CO., LTD. No. 225, Sec. 7, Zhongxing Rd., Shahu Dist., Taichung City, 43308, Taiwan	
Applicant	Name Address	SUOCOOT CO., LTD. No. 183, Sec. 4, Taiwan Blvd., Xintan Dist., Taichung City 40704, Taiwan	
Relevant Equipment as described in the Technical File I.G-20/001-A1	Product Name Models	SCAFFOLD SYSTEMS MADE BY STEEL [M] - [DRI] - [H] x [B] - [V] - [V] M : HSB, LSF, PF I : 60.2, 45.2, 48.6 II, III, IV: 0.4, 0.5, 2.4 V : 1, 2, 3	
Applicable Standards	ANSI/ASSE A10.8 - 2011		
Test Reports	Loading Tests: A10.8LT2003-003, A10.8LT2003-002 A10.8LT2003-007 Connecting Device Tests: ST/2003-001, ST/2003-002, ST/2003-003		
<p>This is to attest that, upon the relevant request of SUOCOOT CO., LTD., EUROCERT S.A. as Third Party Authority, has received, archived and proceed to the examination of the Technical Documentation File of the above mentioned product.</p> <p>The Technical Documentation File has been archived at EUROCERT's records with code number: TPL0015.</p> <p>All modifications to the Technical File should be first submitted to the Third Party Inspection Authority to ensure further validity of this statement.</p> <p>This statement is subject to unexpected surveillance visits by EUROCERT S.A.</p> <p>This statements is valid until 09/04/2023.</p> <p>The validity of this statement subjects to annual surveillances.</p> <p>Please check the validity of the certificate from our website using the password: <i>dinwda06</i></p>			
Third Party Authority Stamp:		 GARIBETO R. SIMPSON DIRECTOR OF SUPERVISION	
			
"EURO CERT IS A MEMBER OF THE ISO INTERNATIONAL NETWORK GROUP" 68-01021023-0003 / 68-01021023-0007 / 68-01021023-0008 www.eurocert.org email: info@eurocert.org			

ISO9001 : 2015 (No. 196TWQS)

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9. Test Report

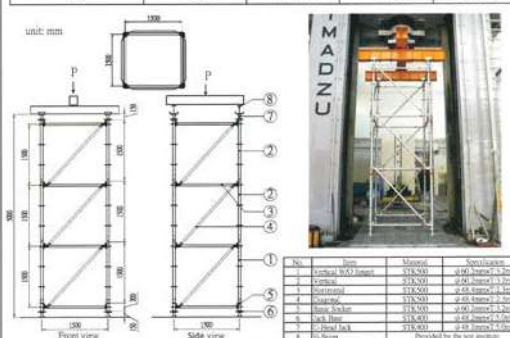
NCKU Research and Development Foundation
Engineering Technology and Material Laboratory
Department of Civil Engineering, NCKU
Testing Report Sheet

Page : 2/3

(107) No. SB0018 Date : April 10, 2018

Project : N/A Manufacturer : SUCCOOT CO., LTD.
Truster : SUCCOOT CO., LTD. Sampler : SUCCOOT CO., LTD.
Sender : SUCCOOT CO., LTD. Date Received : April 10, 2018
Sample : $\phi 60.2\text{mm}$ Ring System Scaffold(1.5m x1.5m Vertical : STR500)

Tube Outer Diameter (mm)	Tube Thickness (mm)	Frame Dimensions (mm)		Max. Load (tf)
		Plan Dimensions	Height	
60.4	3.3	1500/1500	5000	90.35



No.	Item	Material	Specification
1	Vertical RSC Joints	STK500	$\phi 40.2\text{mm} \times 3\text{mm}$
2	Vertical	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
3	Horizontal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
4	Diagonal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
5	Base Joints	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
6	Lock Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$
7	Base Jack	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
8	Pin Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$

TESTING RESULTS ARE VALID ONLY FOR THE SPECIMENS PROVIDED BY THE SAMPLER.

Tester : Yung-Feng Lee

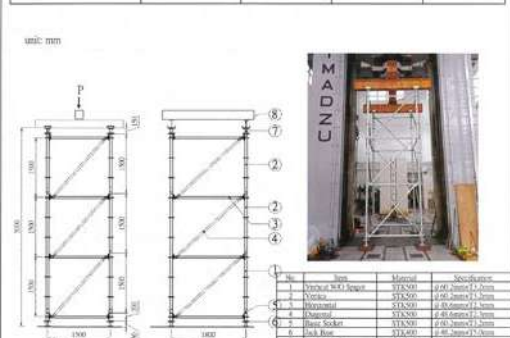
NCKU Research and Development Foundation
Engineering Technology and Material Laboratory
Department of Civil Engineering, NCKU
Testing Report Sheet

Page : 2/2

(108) No. SB0153 Date : August 14, 2019

Project : N/A Manufacturer : LEAD GOOD SCAFFOLD (DALIAN) CO., LTD.
Truster : SUCCOOT CO., LTD. Sampler : SUCCOOT CO., LTD.
Sender : SUCCOOT CO., LTD. Date Received : August 8, 2019
Sample : $\phi 60.2\text{mm}$ Ring System Scaffold (1.8mx1.5mxH5.0m)

Tube Outer Diameter (mm)	Tube Thickness (mm)	Frame Dimensions (mm)		Max. Load (tf)
		Plan Dimensions	Height	
60.3	3.2	1500/1800	5000	85.72



No.	Item	Material	Specification
1	Vertical RSC Joints	STK500	$\phi 40.2\text{mm} \times 3\text{mm}$
2	Vertical	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
3	Horizontal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
4	Diagonal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
5	Base Joints	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
6	Lock Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$
7	Base Jack	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
8	Pin Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$

TESTING RESULTS ARE VALID ONLY FOR THE SPECIMENS PROVIDED BY THE SAMPLER.

Tester : Yung-Feng Lee

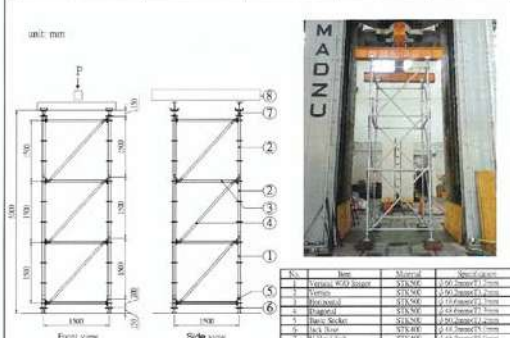
NCKU Research and Development Foundation
Engineering Technology and Material Laboratory
Department of Civil Engineering, NCKU
Testing Report Sheet

Page : 2/3

(110) No. SB0119 Date : May 26, 2021

Project : N/A Manufacturer : SUCCOOT CO., LTD.
Truster : SUCCOOT CO., LTD. Sampler : SUCCOOT CO., LTD.
Sender : SUCCOOT CO., LTD. Date Received : May 20, 2021
Sample : $\phi 60.2\text{mm}$ Ring System Scaffold(1.5mx1.5m Vertical : STR500)

Tube Outer Diameter (mm)	Tube Thickness (mm)	Frame Dimensions (mm)		Max. Load (tf)
		Plan Dimensions	Height	
60.4	3.2	1500/1500	5000	81.04



No.	Item	Material	Specification
1	Vertical RSC Joints	STK500	$\phi 40.2\text{mm} \times 3\text{mm}$
2	Vertical	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
3	Horizontal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
4	Diagonal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
5	Base Joints	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
6	Lock Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$
7	Base Jack	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
8	Pin Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$

TESTING RESULTS ARE VALID ONLY FOR THE SPECIMENS PROVIDED BY THE SAMPLER.

Tester : Yung-Feng Lee

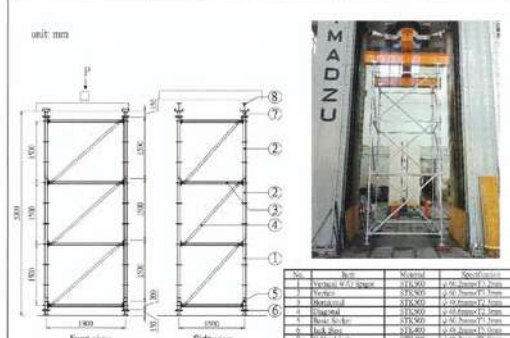
NCKU Research and Development Foundation
Engineering Technology and Material Laboratory
Department of Civil Engineering, NCKU
Testing Report Sheet

Page : 3/3

(110) No. SB0119 Date : May 26, 2021

Project : N/A Manufacturer : SUCCOOT CO., LTD.
Truster : SUCCOOT CO., LTD. Sampler : SUCCOOT CO., LTD.
Sender : SUCCOOT CO., LTD. Date Received : May 20, 2021
Sample : $\phi 60.2\text{mm}$ Ring System Scaffold(1.8mx1.5m Vertical : STR500)

Tube Outer Diameter (mm)	Tube Thickness (mm)	Frame Dimensions (mm)		Max. Load (tf)
		Plan Dimensions	Height	
60.4	3.2	1800/1500	5000	86.04



No.	Item	Material	Specification
1	Vertical RSC Joints	STK500	$\phi 40.2\text{mm} \times 3\text{mm}$
2	Vertical	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
3	Horizontal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
4	Diagonal	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
5	Base Joints	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
6	Lock Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$
7	Base Jack	STK500	$\phi 20.2\text{mm} \times 3\text{mm}$
8	Pin Bolt	STK500	$\phi 10.2\text{mm} \times 5\text{mm}$

TESTING RESULTS ARE VALID ONLY FOR THE SPECIMENS PROVIDED BY THE SAMPLER.

Tester : Yung-Feng Lee



The test result is for reference only, the design is subject to the shoring structure per each project.

10. Quality Control

In addition to QC checks during manufacturing and inventory management, Sucoot implements regular load tests on random samples to ensure strength and integrity of materials.

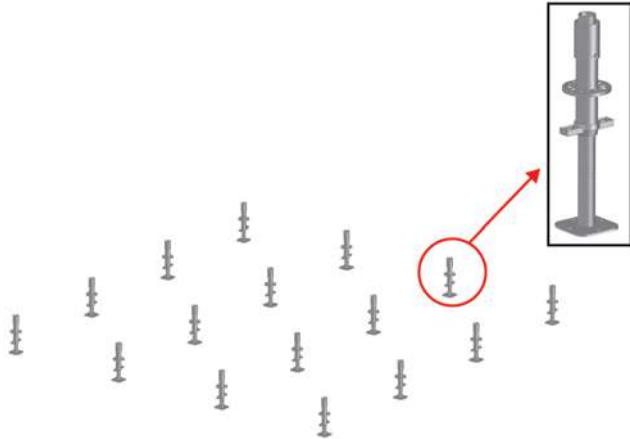


The result data is considered in our structural designs.

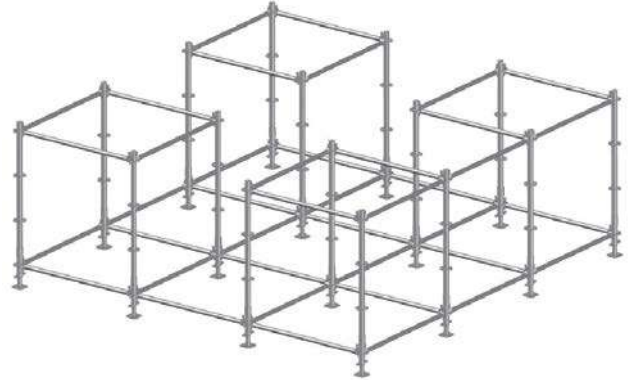


11 . Assembly Procedures

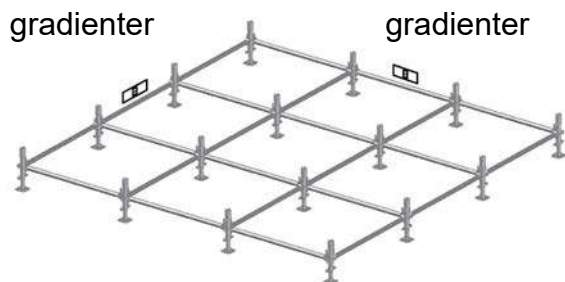
- 1 Basic Sockets are put on Jack Base



- 4 The second layer of Horizontals.

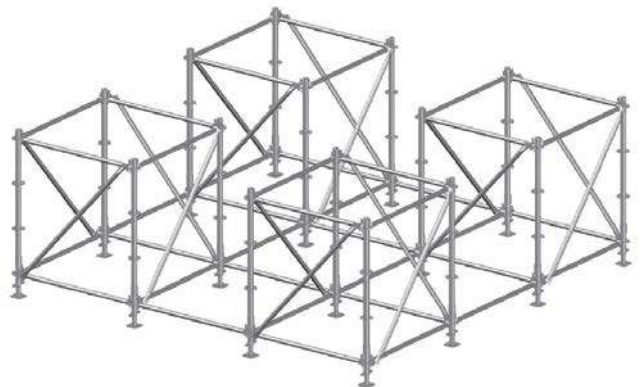


- 2 The connection of Horizontals.

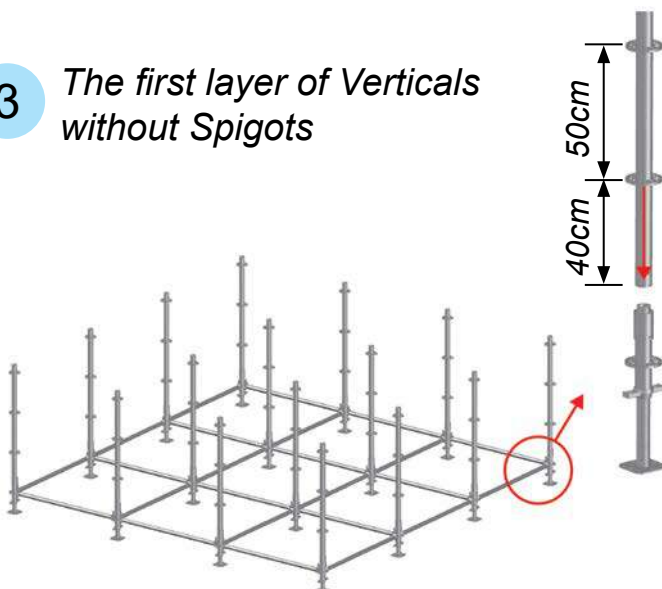


Make sure they are horizontal to the ground

- 5 Diagonals are fixed in the same direction.

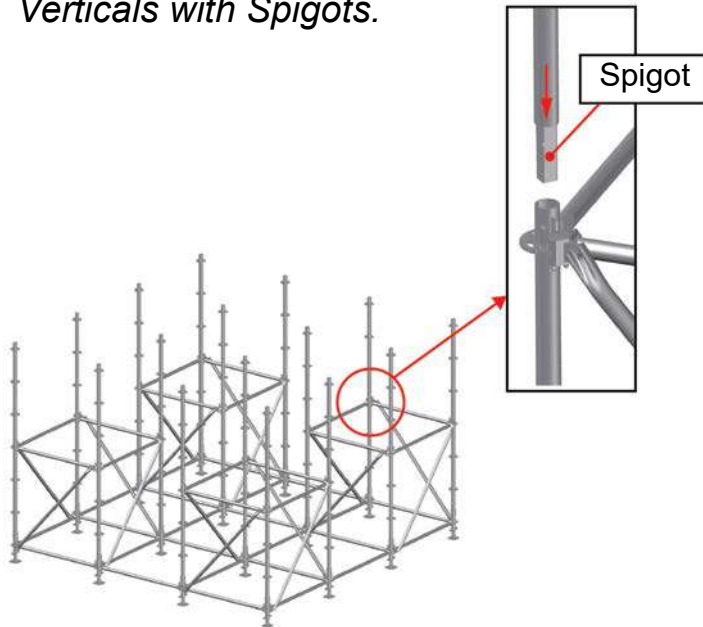


- 3 The first layer of Verticals without Spigots

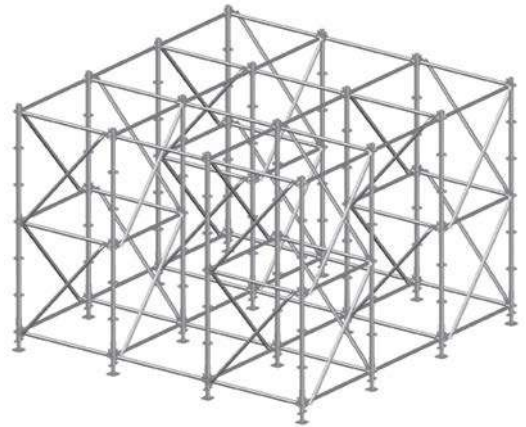




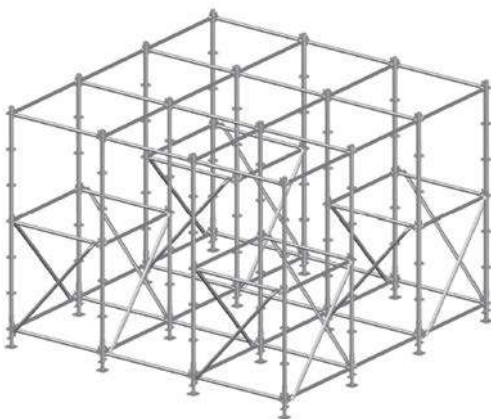
- 6 *The second layer of Verticals with Spigots.*



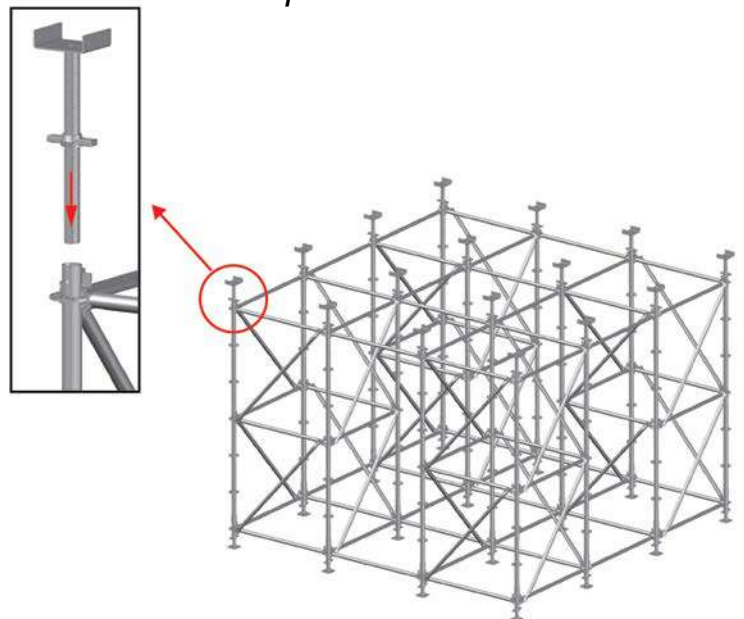
- 8 *The second layer of Diagonals.*



- 7 *The third layer of Horizontals.*



- 9 *U-Head Jacks are placed on the top.*



NB-Level Diagonal required only in specific situations
(i.e. high loading, crane lifted towers - to be advised by our engineers.)

12. Access Tower/Staircase

The Ring System Access Tower complies with EN 12810-1, providing a safe and convenient access staircase at construction sites.

Stair units completed with stair treads and top/bottom platforms (conversion platforms) are designed to fit with 1.5m vertical spacing on the Ring System.

The staircase is securely locked with Sucoot's special hook and wedge couplers. Internal handrails are attached to the staircase and Ring System Diagonals are used as external handrails. Each staircase weighs only 50kgs for easy erection.



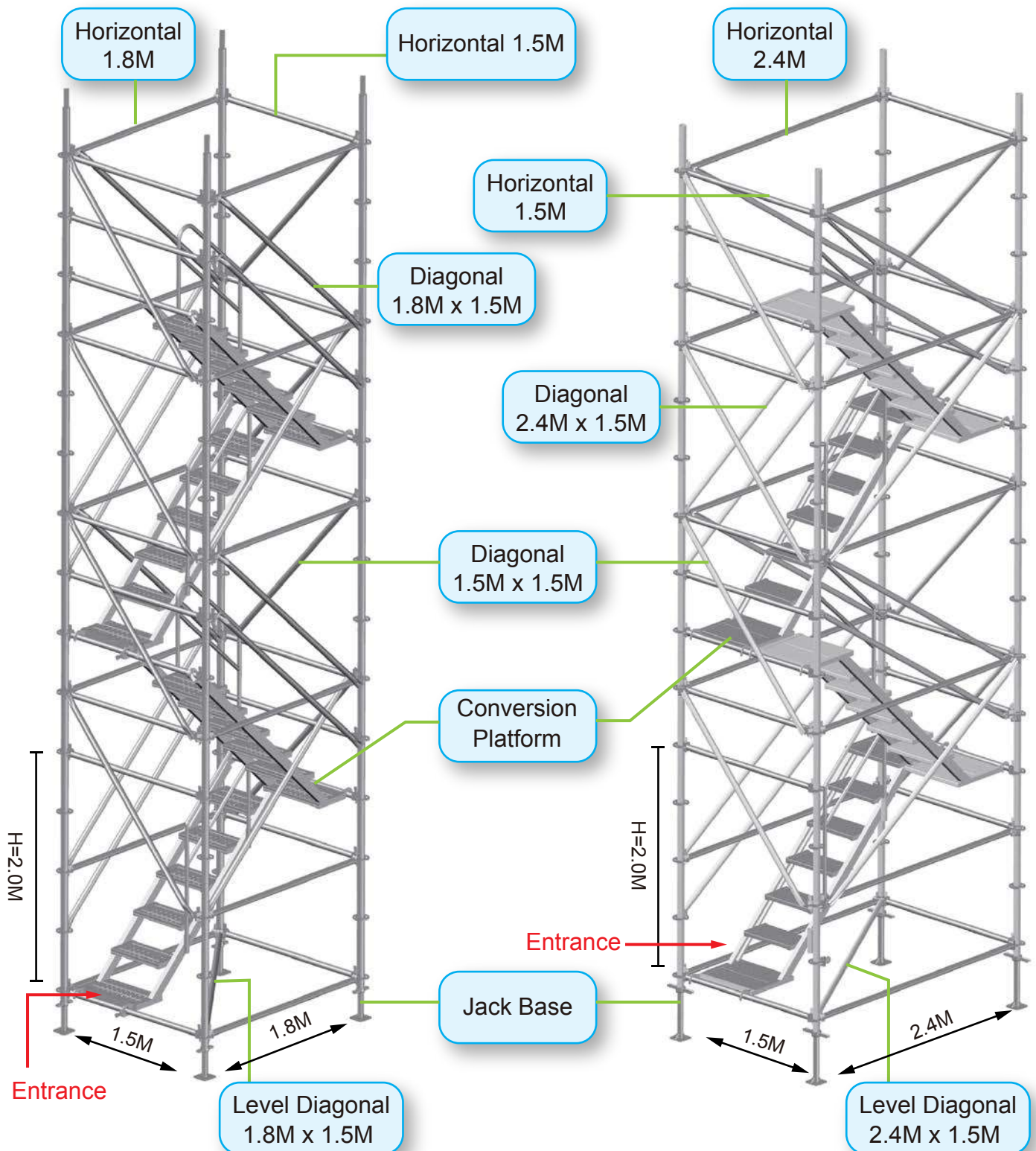
Just set the hook fixed on Horizontal and hammer the wedge tightly for a secure connection.





Not only does the Access Tower comply with the international standard, but also it is conveniently accessible and practical to maximize efficiency at site.

Staircase: L1.8M x W1.5M / L2.4M x W1.5M



13. Movable Ring Coupler

Invented and developed by Sucoot for use in areas of limited height. The Movable Ring Coupler can be fixed in any position of a standard scaffold tube.



Ø48mm C50500
Ø60mm C60500



Ø60/48mm C60600

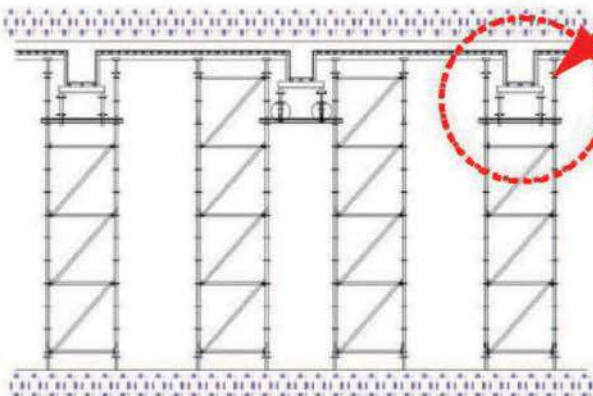
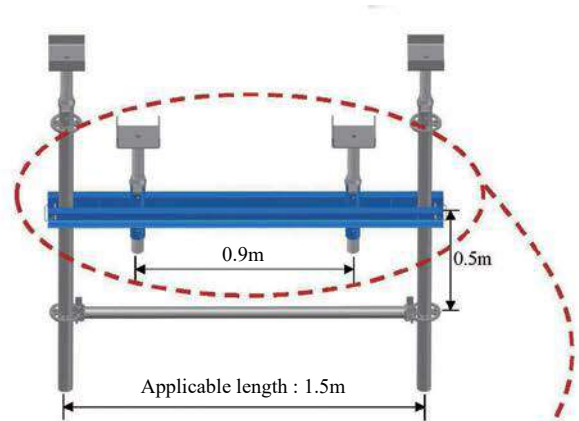




14. Heavy-Duty Beam Bracket

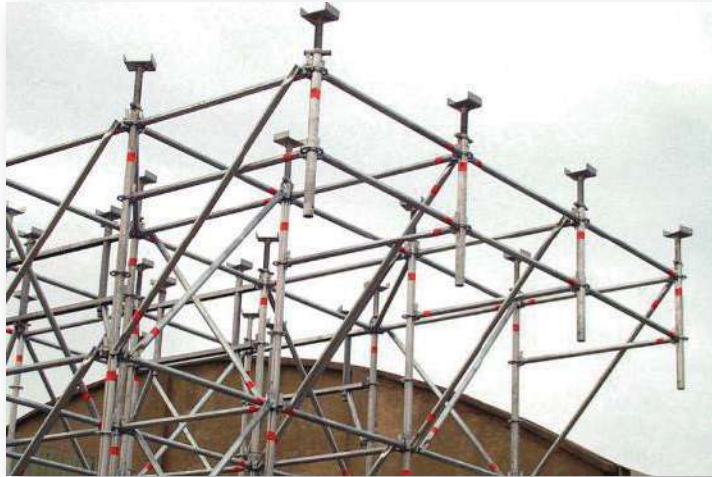
Apply to shore the roof beam formwork

- Scaffolding with the Bracket is able to shore the beam and the slab at the same time.
- The spacing between the Brackets is 1.5m and they can bear up to 90 x 120cm beam.
- Save material, time and labor cost.



15. Bracket-Cantilever/Access

- In difficult ground conditions (without supporting verticals from the ground).
- To provide access around the edges of falsework scaffolding.
- Special concert stages-various configurations.





16. Scaffolding Drop Device

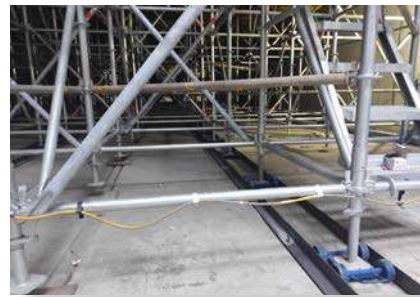
- Auxiliary device for lowering scaffolding.
- Fix the drop device to the leg of Vertical (wedge locks respectively and tightly assembled to the first and the second ring disc at the bottom) and then cooperated with the jack for lifting operation.
- Place the jack on a flat ground, lift its main shaft to touch the pressure-bearing plate of the Drop Device, and lift it with appropriate force, to share and reduce the bearing load on handle nut. Then the handle nut can be easily loosened by hammer and further lower Jack Base.
- For safety purpose, to unrestricted lift the jack is strictly prohibited.



17. Wheel

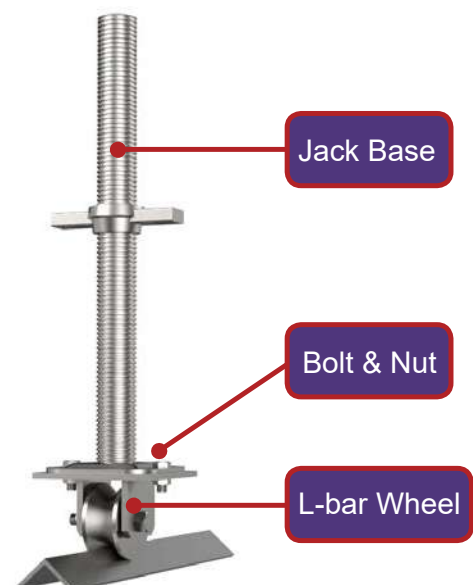
(A) Solid Wheel

- It is placed under Jack Base and used to move the complete scaffolding towers.
- In use, it is necessary to lift Jack Base first at least 75mm from the ground, and then placing the Wheel.
- After the Wheel is exactly placed under the Jack Base, to adjust the height of Jack Base according to the ground elevation and make sure that Jack Base and Wheel are tightly fitted and locked.
- Before moving, the ground should be provided with rails or appropriate limiting measures to prevent the Wheels from shifting and turning on their own.



(B) L-bar Wheel

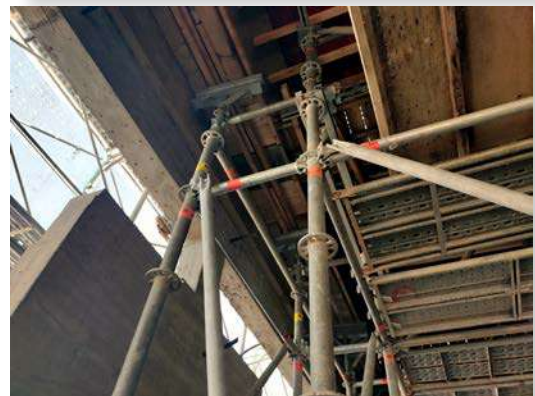
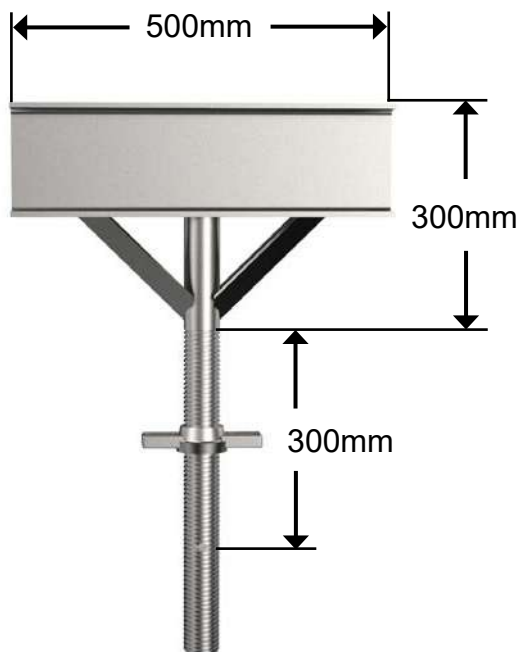
- It is placed and fixed under Jack Base.
- It is necessary to lift Jack Base first at least 160mm from the ground, and then place the Wheel.
- To lock L-bar Wheel and Jack Base by Bolt & Nut.
- It is required to lay the angle iron track to facilitate the movement of L-bar Wheel.



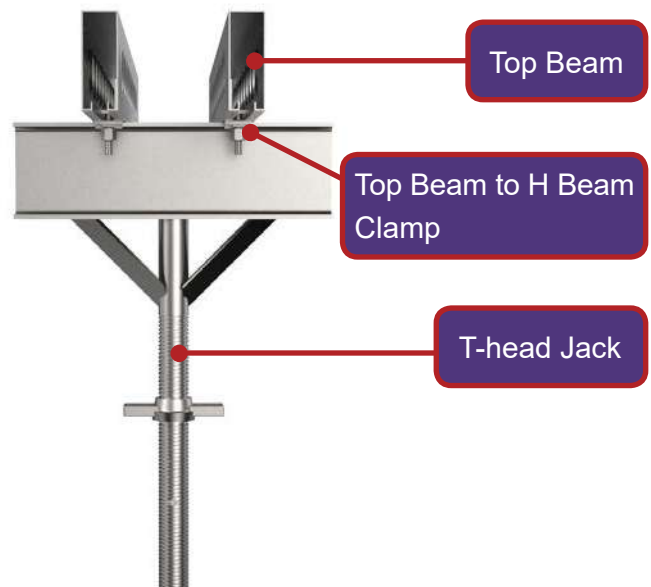
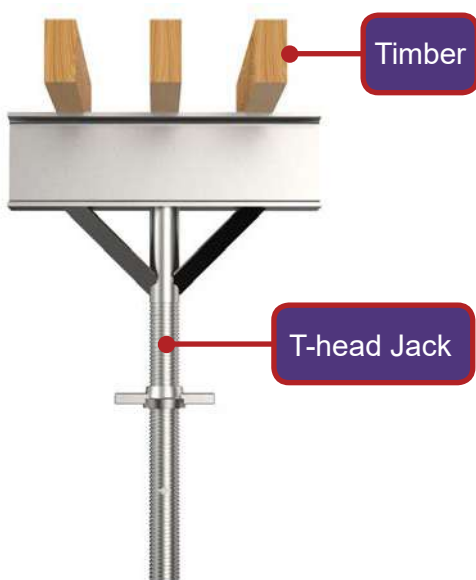


18. T-head Jack

- Used for the outermost layer of shoring scaffolding, when there is a need for support above.
- The support length is 250mm from the center of the outermost shoring system to the left and right.
- The size of H Beam is $150 \times 75 \times 5 \times 7 \text{ mm} \times L: 500 \text{ mm}$.
- Adjustable height 300mm.

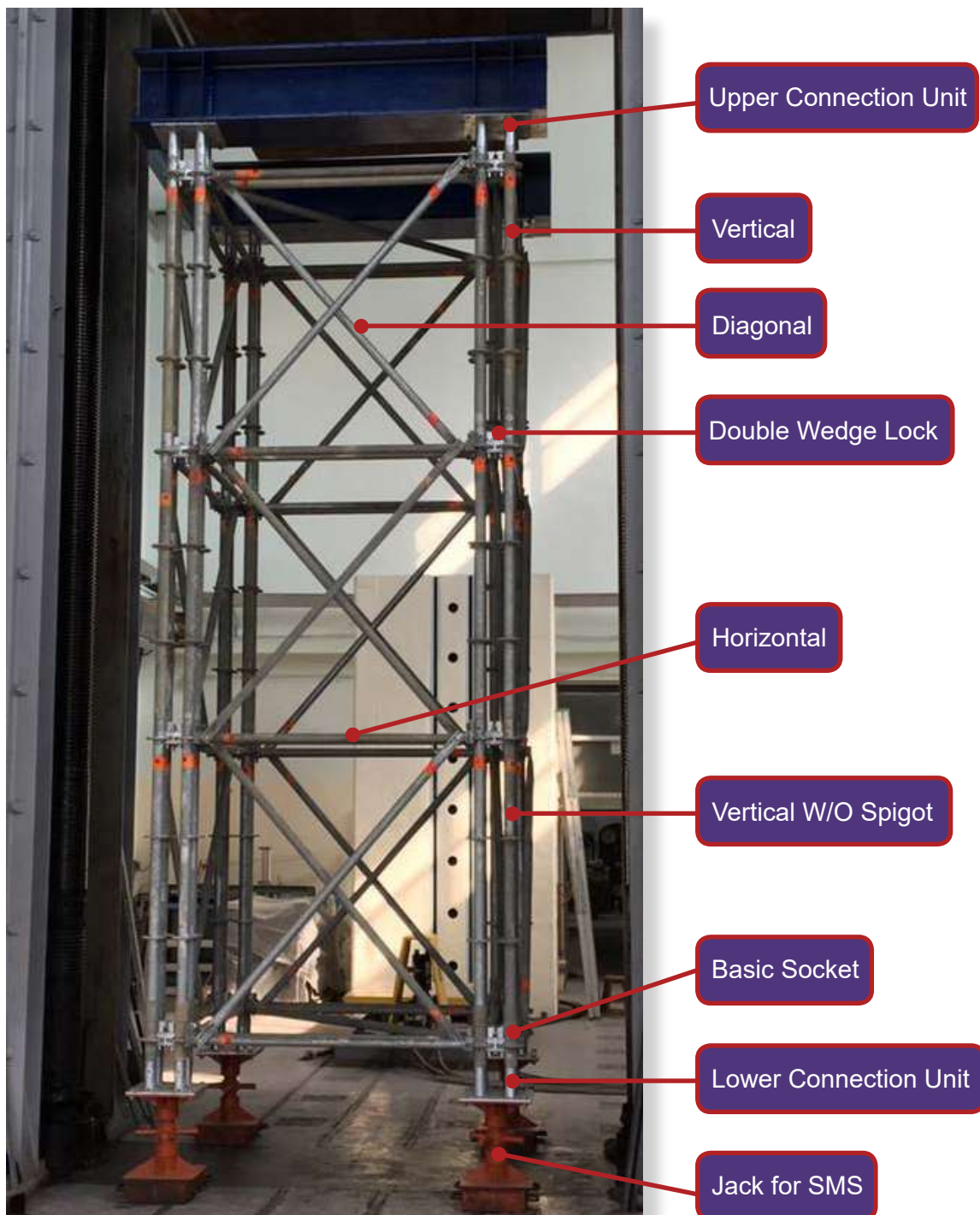


● Application



19. Super Modular Shore (SMS)

- This is a variation of Ring System, and the main body is assembled with the standard components of shoring system.
- To assemble 4 Verticals forming a strong prop by Double Wedge Lock, which increases the supporting strength of the single prop by nearly 4 times, and can be used to replace the steel frame.
- The frame body can be extended horizontally and vertically by using the standard Horizontal and Vertical to increase its stability.





● Dimensions and Specifications

Upper Connection Unit



- Connection : Put the pipe on the Spigot and fix by snap lock. Connect with main bearer or next SMS by bolt & nut.
- Material : Pipe STK500

Length : 140mm
Pipe : Ø60.2 x T:3.2mm
Plate : 220 x 220mm :
Ø18mm x4 holes



Spigot for Upper Connection Unit

- Main Purpose : To put into the top Vertical with spring pin and then assemble with Upper Connection Unit.

Length : 240mm
Square Tube 52.5 x T:3.0mm

Lower Connection Unit



- Connection : To fix with Jack by bolt & nut and then put Basic Socket on the Spigot for connecting with Vertical W/O Spigot.
- Material : Pipe STK500

Length : 140mm
Pipe : Ø60.2 x T:3.2mm
Plate : 220 x 220mm :
Ø18mm x4 holes

Double Wedge Lock



- Main Purpose : Used to connect Verticals to increase the structural strength of frame body.
- Connection : Put Double Wedge Lock into the small holes of ring disc of the two adjacent Vertical, and fix by wedge
- Material : FCD450

Length : 90mm
(Distance between the Vertical center 150mm)

Jack for Super Modular Shore

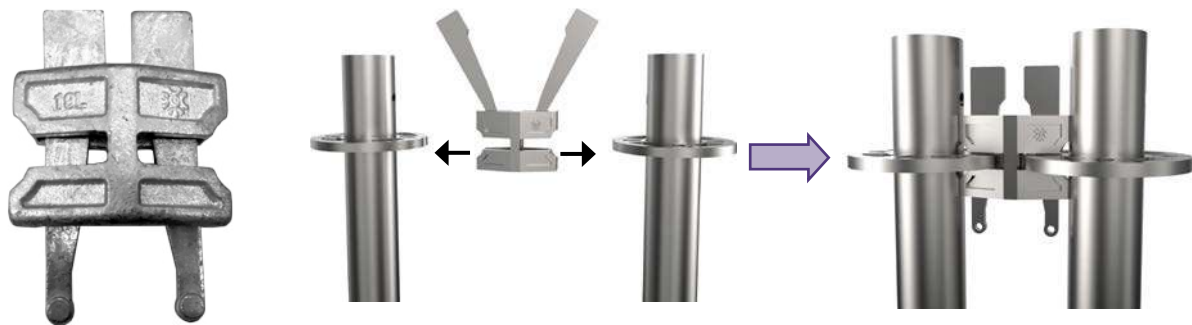


- Main Purpose : To adjust the SMS height.
- Connection : To connect Upper/Lower Connection Unit by bolt & nut.
- Material : Threaded Tube STKM 13A
Handle Nut SS400
Base Plate SS400

Base Plate : 220 x 220mm
Threaded Tube :
Ø78 x T:12mm
Handle : Ø32 x 100mm
Adjustable : 390~520mm

● **Double Wedge Lock**

- *Used to connect 2~4 Verticals forming a strong prop to enhance the bearing capacity.*
- *It is often used for the scaffolding body that needs high bearing capacity design such as limited space, suspended scaffolding or temporary passage, and the addition of guardrail posts around the working platform.*
- *Applied to $\varnothing 48.6\text{mm}$ and $\varnothing 60.2\text{mm}$ Vertical.*



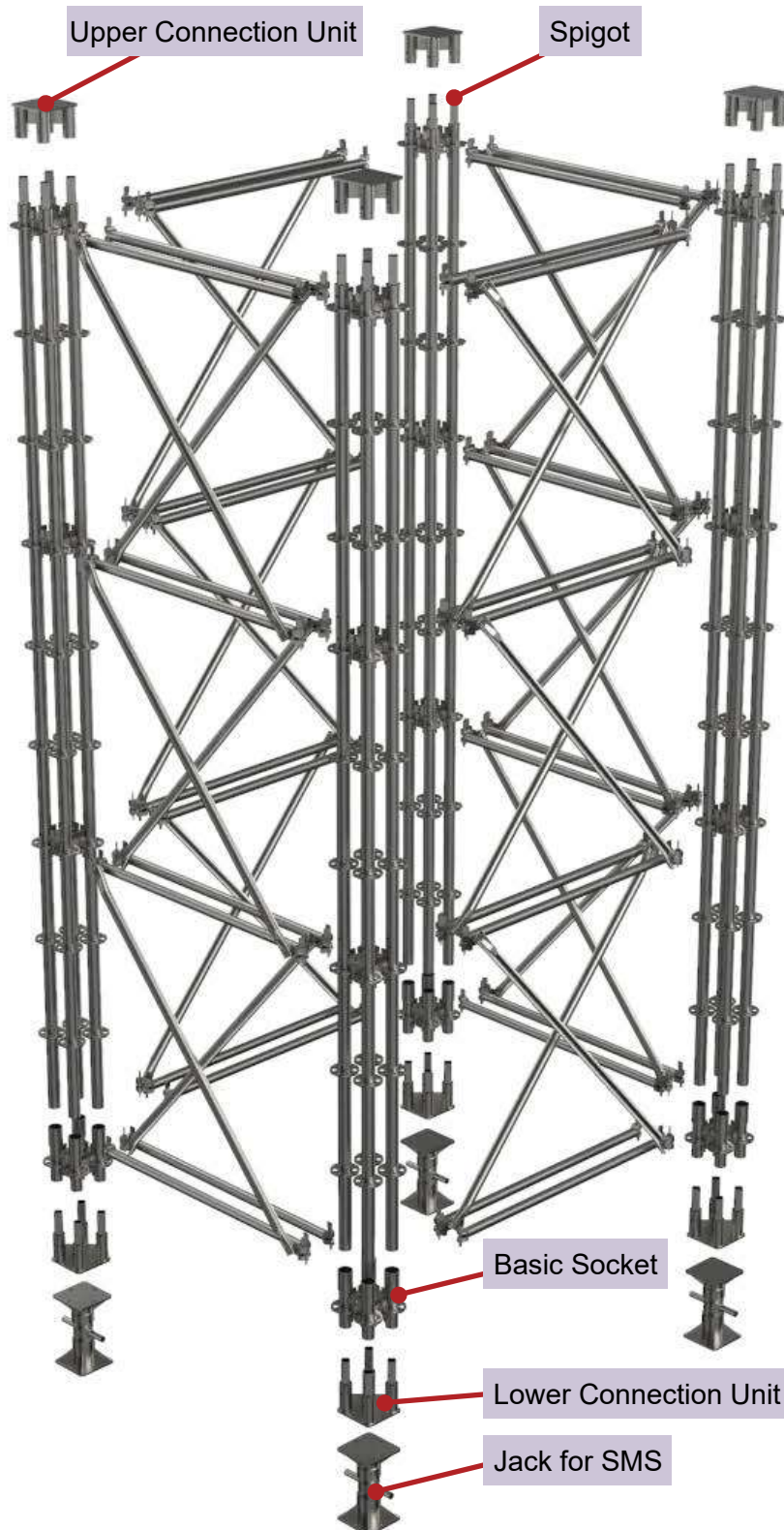
● **Application**

Super Modular Shore

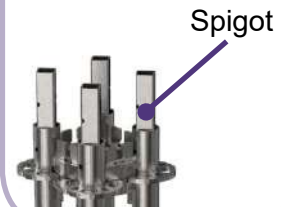




● Component Overview



Fixed by SL-36



Spigot

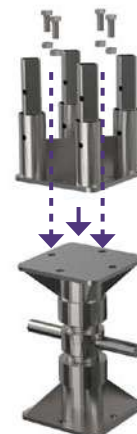


Vertical
W/O Spigot



Basic Socket

Fixed by A325 Ø5/8"
Bolt & Nut



● Test Report

NCKU Research and Development Foundation
Engineering Technology and Material Laboratory
Department of Civil Engineering, NCKU
Testing Report Sheet

Page : 2/2

(107) No. SB0103

Date : December 20, 2018

Project : N/A

Manufacturer : SUCCOOT CO., LTD.

Truster : SUCCOOT CO., LTD.

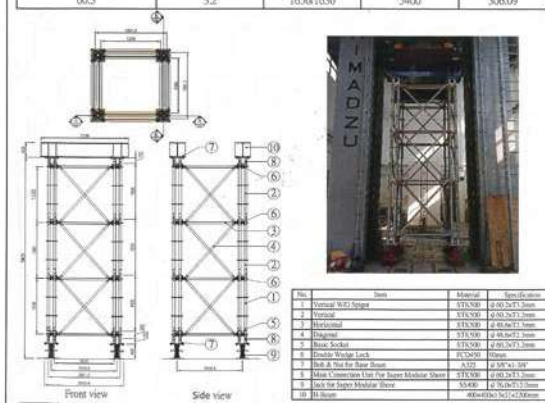
Sampler : SUCCOOT CO., LTD.

Sender : SUCCOOT CO., LTD.

Date Received : December 18, 2018

Sample : Super Modular Shere(SMS)(W : 1.5m*H : 5.4m)

Tube Outer Diameter (mm)	Tube Thickness (mm)	Frame Dimensions (mm)		Max. Load (t)
		Plan Dimensions	Height	
60.3	3.2	1650/1650	5400	306.09



No.	Item	Material	Specification
1	Vertical W-47 Upright	STS50B	40.00 2x7.5 1mm
2	Horizontal	STS50B	40.00 2x7.5 1mm
3	Horizontal	STS50B	40.00 2x7.5 1mm
4	Horizontal	STS50B	40.00 2x7.5 1mm
5	Horizontal	STS50B	40.00 2x7.5 1mm
6	Horizontal	STS50B	40.00 2x7.5 1mm
7	Horizontal	STS50B	40.00 2x7.5 1mm
8	Horizontal	STS50B	40.00 2x7.5 1mm
9	Horizontal	STS50B	40.00 2x7.5 1mm
10	Horizontal	STS50B	40.00 2x7.5 1mm

TESTING RESULTS ARE VALID ONLY FOR THE SPECIMENS PROVIDED BY THE SAMPLER *

Tester : Yung-Feng Lee

Loading Test (Before)



Loading Test (After)

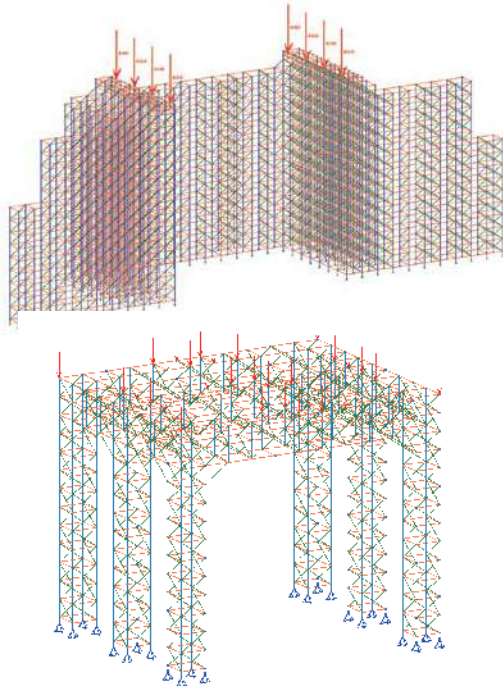




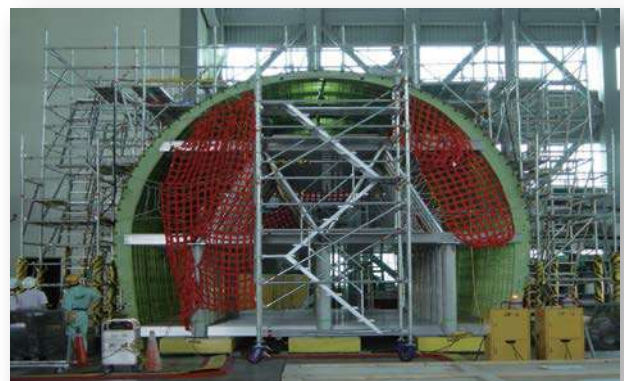
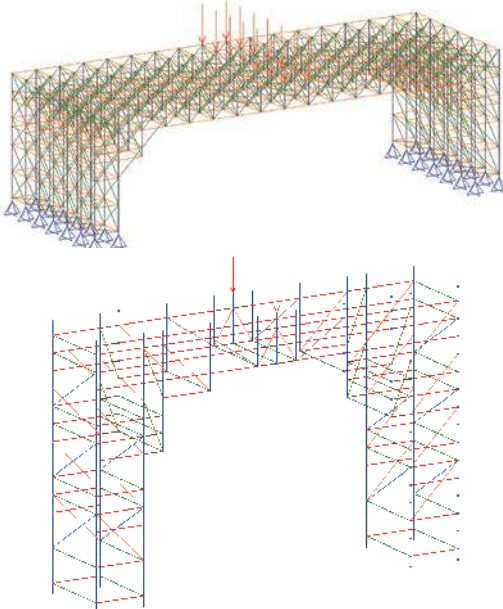
20. Design

With the extensive work experience, our engineering team can provide the effective and efficient design, including full site assembly details and load calculation.

1. Staging for Music Concert, Sports Meet and Election Campaign



2. Suspended Scaffolding – Towers and Bridge



21. Conclusion

The optimum structure design, advanced construction methods are the essential factor to a project. Following are the advantages of our Ring System Scaffold :

- It can be applied in extensive range of projects.
- Applied with the advanced construction methods can save time and labor cost.
- High quality and precision scaffolding enable us to deliver an excellent performance on load-carrying capacity.

Significant projects where our Ring System Scaffold has been used:

Taiwan :

- National Freeway NO.3 – C305,C318.
- Taiwan High Speed Rail – CIP
C210,C215,C220,C280,C295, Access Tower
T210, T220, Station S220, S280, S290.
- Taipei Rapid Transit – Neihs Line, Nankung Line
CE-730A.
- Kaohsiung Rapid Transit – CR5, CR6.
- Taipei – Ilan Expressway.
- Taiwan Railway – Elevated Project (Wutu-Hsichih),
Wujih New Station.
- Hi – Tech Factory – Hsinchu, Central Taiwan &
Southern Taiwan Science Park.
- Bali-Shin Dien Expressway C801.
- Dragon Steel Corporation – Phase 2 Expansion
Project.
- Taichung Metropolis Road No. 4 – C704A, C706,
C707, C708, C709B and No. 2.
- National Freeway No.6 – C602, C604, C608,
C609.
- Taoyuan Airport Access MRT – CE02,CE03B.
- Yuanlin Township Area Elevated Railway Project –
YCL121,YCL321.
- Hualian – Taitung Electrification Project – CL312,
CL314.
- Kaohsiung Metropolitan Railway Underground
Project – CL112, CL113, CL311.
- Elevated Railway System of MRT Development in
Taichung – CCL431.
- Beimen – Yujing East – West Expressway Project
– E707-3.
- Taichung MRT - CJ910, CJ920
- Taichung High-Tech Industrial Southward Road&
Dajia River Across Bridge
- Taipei MRT - Wanda Line CQ860, CQ870, CQ840,
CQ842, CQ850A
- Taoyuan MRT - Green Line GC01, GC02, GC03
- Tainan Metropolitan Railway Underground Project
– C211, C214

Other Countries :

- Thailand – Suvarnabhumi Airport, Airbus A380
Maintenance, Bridge
- Malaysia – Box Girder, Pier Cap.
- Dubai, U.A.E. – Canal Bridge.
- South Africa – Koega Bridge.
- Spain – Bridge.
- Vietnam – Mong Duong II Coal Fired Power Plant,
Pump Station.
- Congo – Building Shoring, Wall Construction.
- Colombia – Bridge.
- Philippines – Shopping Mall Project.
- Singapore – Plant Project.
- Indonesia – Melak Bridge at East Kalimantan,
Shoring and Formwork of Cooling Tower.
- China – Chongqing Bridge, Haikou Underground
Box Culvert
- Israel – Logistic Center with Galleries, Factory,
Bridge.
- New Zealand – Factory.
- Mexico - Access Tower for Commercial Building
- Panama - Working Platform for Containers at
Terminal



SUCCOOT
Superior COmpany Of Taiwan

SUCCOOT CO., LTD.

NO.1836, SEC. 4. TAIWAN BLVD.,TAICHUNG 40764, TAIWAN

TEL : +886-4-2359 8338 FAX : +886-4-2359 8480

E-mail: info.ws@succoot.com

<http://www.succoot.com>



2022/10

