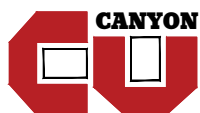


2024/25

PRODUCT CATALOGUE

An extensive range of scaffold systems available
for sale & hire with tailor-made design and
technical services provided



金源通架工程有限公司
CANYON METAL SCAFFOLDING ENGINEERING LTD.

INNOVATIVE
PROFESSIONAL
QUALITY
SAFE
INTEGRITY

COMPANY INTRODUCTION

CANYON DEVELOPMENT LTD was established in 1985.

CANYON METAL SCAFFOLDING ENGINEERING LTD was established in 2005 and has been certified per ISO 9001 from HKQAA.

Our core business provides a wide variety of metal scaffolding equipment, steel falsework and formwork system. We are proud to be one of the pioneers in metal scaffolding in Hong Kong, encompassing the spirit of professionalism and reliability, as well as participation in most of the huge formwork and scaffolding projects in the territory.



Lift Installation



Protection Cover



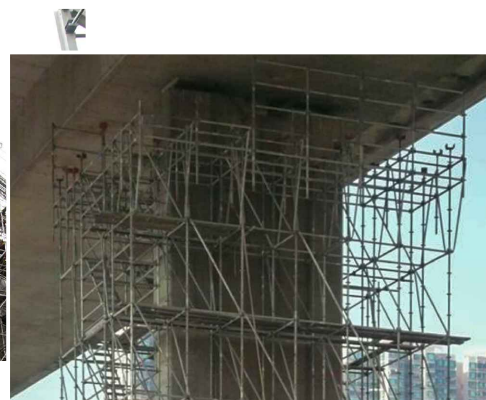
Alterations & Additions Works



Asbestos Removal



Chimney Maintenance



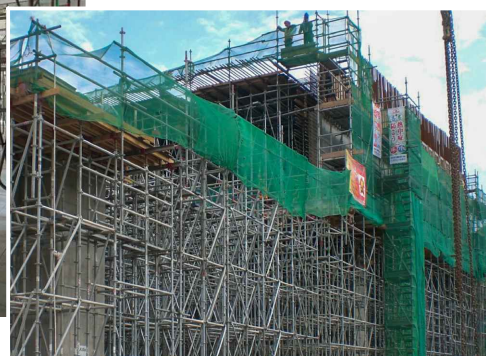
Bridge Column Maintenance



Vehicular Opening



Repropping



Falsework



CONTENTS

RINGLOCK SCAFFOLD

INTRODUCTION	1-1
TECHNICAL DATA	1-3
RULES FOR BRACING	1-4
VERTICAL	1-5
HORIZONTAL	1-6
DIAGONAL BRACE	1-7
COMPONENT 1	1-8
CATWALK	1-9
COMPONENT 2	1-11
U-HEAD JACK & BASE JACK	1-12
STAIRCASE & HANDRAIL	1-13
CATCH FAN & UNIVERSAL TUBE POST	1-14
VERTICAL WITH JACK	1-15
APPLICATION	1-17
JOB REFERENCE	1-20

TOYO SCAFFOLD

INTRODUCTION	2-1
FRAME	2-3
COMPONENT	2-4
CATWALK	2-5
STAIRCASE & HANDRAIL	2-6
STEEL PROP	2-7
JOB REFERENCE	2-8

HEAVY DUTY SUPPORT

INTRODUCTION	3-1
PECCO MAIN BODY	3-2
PECCO MAIN BODY WITH ROSETTE	3-3
PECCO TECHNICAL DATA	3-3

QUADSHORE MAIN BODY	3-4
SUPPORT JACK	3-5
U-HEAD	3-6
BRACING CONFIGURATION	3-6
RINGLOCK GIANTSHORE INTRODUCTION	3-7
COMPONENT	3-8
ASSEMBLY DETAILS	3-9
LOAD CHART	3-10
APPLICATION	3-11
JOB REFERENCE	3-12

SAFETY PRODUCT

ALUMINIUM LORRY ACCESS LADDER	4-1
ADJUSTABLE STAIRCASE	4-3
SHEET PILE EDGE PROTECTION SYSTEM	4-5
I-BEAM CATCH BASE	4-7
H-BEAM GUARD CLAMP	4-8
ROUND PILE CATCH BASE	4-9
ALUMINIUM PLATFORM ACCESS LADDER	4-10
POST STILLAGE	4-11
STEEL PLANK	4-13
SCAFFOLD TUBE	4-15
COUPLER	4-16
ADJUSTABLE STEP	4-17
CUSTOMIZED DESIGN SERVICES	4-18

FORMWORK ACCESSORIES

RECOVERABLE ANCHOR SCREW	5-1
PUSH PULL PROP	5-1
STEEL SOLDIER	5-2





RINGLOCK SCAFFOLD

碟型組合通架

FUNCTIONAL DESIGN WITH SIMPLICITY OF CONNECTION

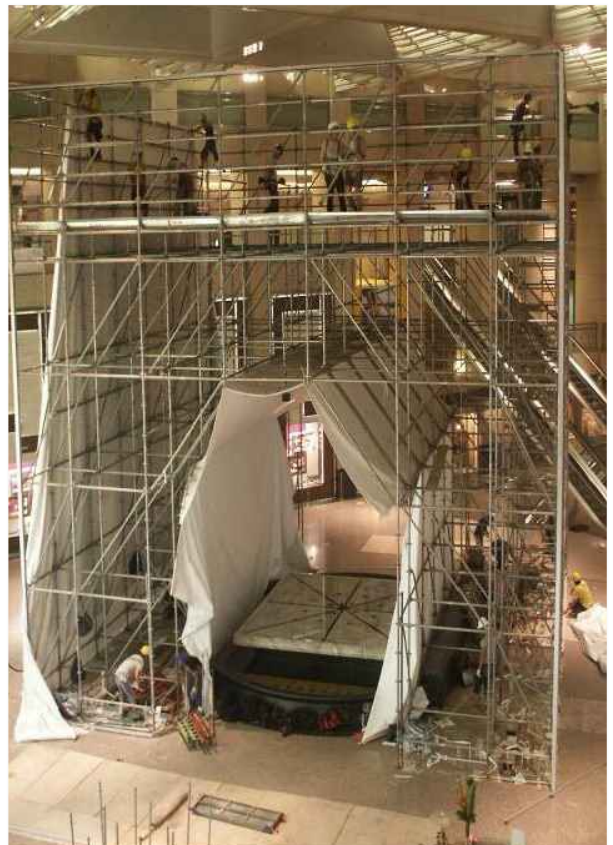
The Ringlock system has been designed and developed to meet the requirements of the Hong Kong construction and housing industries. Ringlock principal design features include:

- Efficiency of assembly
- Low maintenance required to keep in top working condition
- Versatility of application
- Simplicity of components and their connection
- Galvanized components improve corrosion resistance
- No special tools required for assembly (hammer and spirit level only)



VERSATILE IN USE

With the flexibility to connect at eight positions around the rosette on the Vertical post, Ringlock can be used to go around curved or angled structures.



EASY TO ERECT

The Vertical features robust rosettes onto which all horizontal and diagonal components attach. The simple connection between components ensures ease of erection and dismantling. No additional loose parts are required to join components in the system.

PROVEN DESIGN WITH SAFETY ACCESSORIES

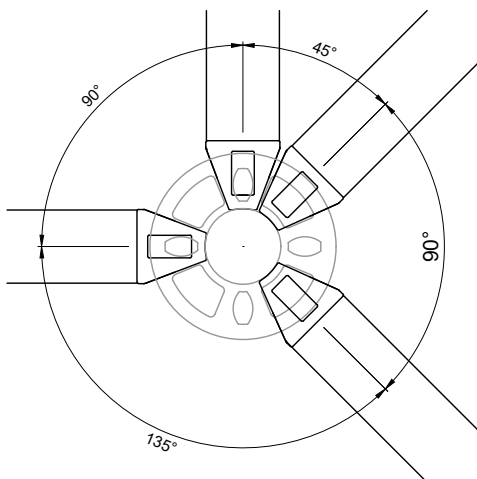
The Ringlock system has a proven performance history on an extensive number of sites, meeting the requirements of the various statutory bodies. A full range of accessories is available to cater for safety requirements such as guardrails, catwalk, ladder access, staircase access and components to provide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



UNIQUE METHOD OF CONNECTION

The principal feature of RINGLOCK is the simplest method of connecting horizontals and diagonals to the vertical in one locking action without the use of any bolts or tools.

The 4 smaller openings in the rosette automatically centre the ledgers in the correct dimensions and at right angles – the 4 wide openings permit alignment of horizontals and diagonal braces at the angles required.



RINGLOCK BENEFITS

- Safety Working Load: 30 to 70 kN per leg
F.O.S. = 1.65 (Refer to Page 1-5, Ringlock Vertical Compressive Capacity)
*Depends on different horizontal member's vertical spacing.
- Assemble efficiently, accurately and reliably.
- Systemized bracing design can reduce labour costs.
- Any special hand tools are not required except hammer during assemble and dismantle.
- All vertical, horizontal & diagonal components are pre-galvanized to increase corrosion resistance and life time of components.

RING-LOCKING PROCEDURE



1. Slide the wedge head over the rosette.

2. Insert the wedge into one of the holes to hold its location.



3. A blow with a hammer on the wedge transforms the connection from structural assembly to force transmitting rigidity.

4. A positive and rigid connection of four units is achieved with one locking action.



Ringlock Junction Point

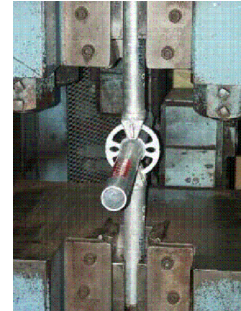
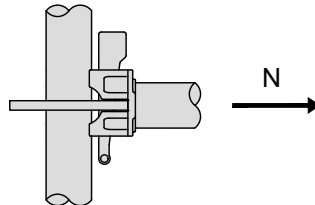
The following values for Ringlock junction specifications are per the HOKLAS testing results.

NORMAL FORCE

Load on the connecting rosette and the wedge lock by tensile and compressive forces (longitudinal forces) along the axis of the horizontal member.

Permissible $N = \pm 31.80$ kN

(Breaking load as 63.60 kN)



VERTICAL SHEAR FORCE

Acting on the horizontal members of the junction and on the connecting rosettes.

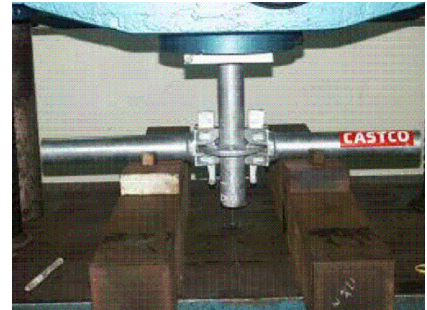
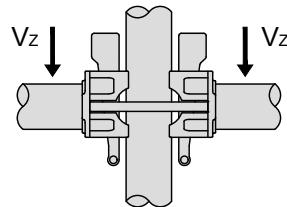
Permissible $Q_v = + 16.92$ kN

(Breaking load as 33.84 kN)

Maximum Total Q_v total junction

$= 4 \times 16.92$ kN

$= 67.68$ kN

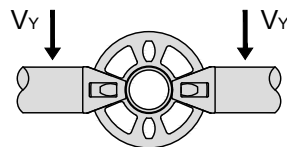


HORIZONTAL SHEAR FORCE

Acting on the junctions together with the connecting rosette and the connecting horizontal member.

Permissible $Q_h = \pm 8.425$ kN

(Breaking load as 16.85 kN)

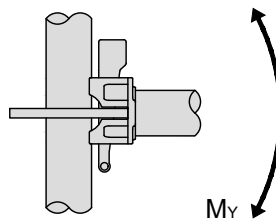


CONNECTION MOMENT

Acting on the Ringlock Junctions

Permissible $M = \pm 0.91$ kNm.

(Max. design testing load 1.82 kNm)

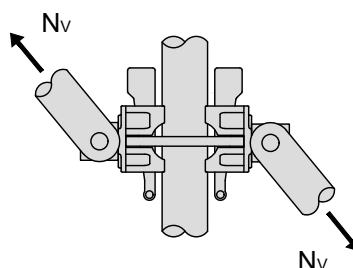


AXIAL FORCE, DIAGONAL BRACE

Acting on the junction connecting rosette/diagonal through tensile and compressive forces.

Permissible $D = \pm 15.75$ kN

(Breaking Load as 31.50 kN)

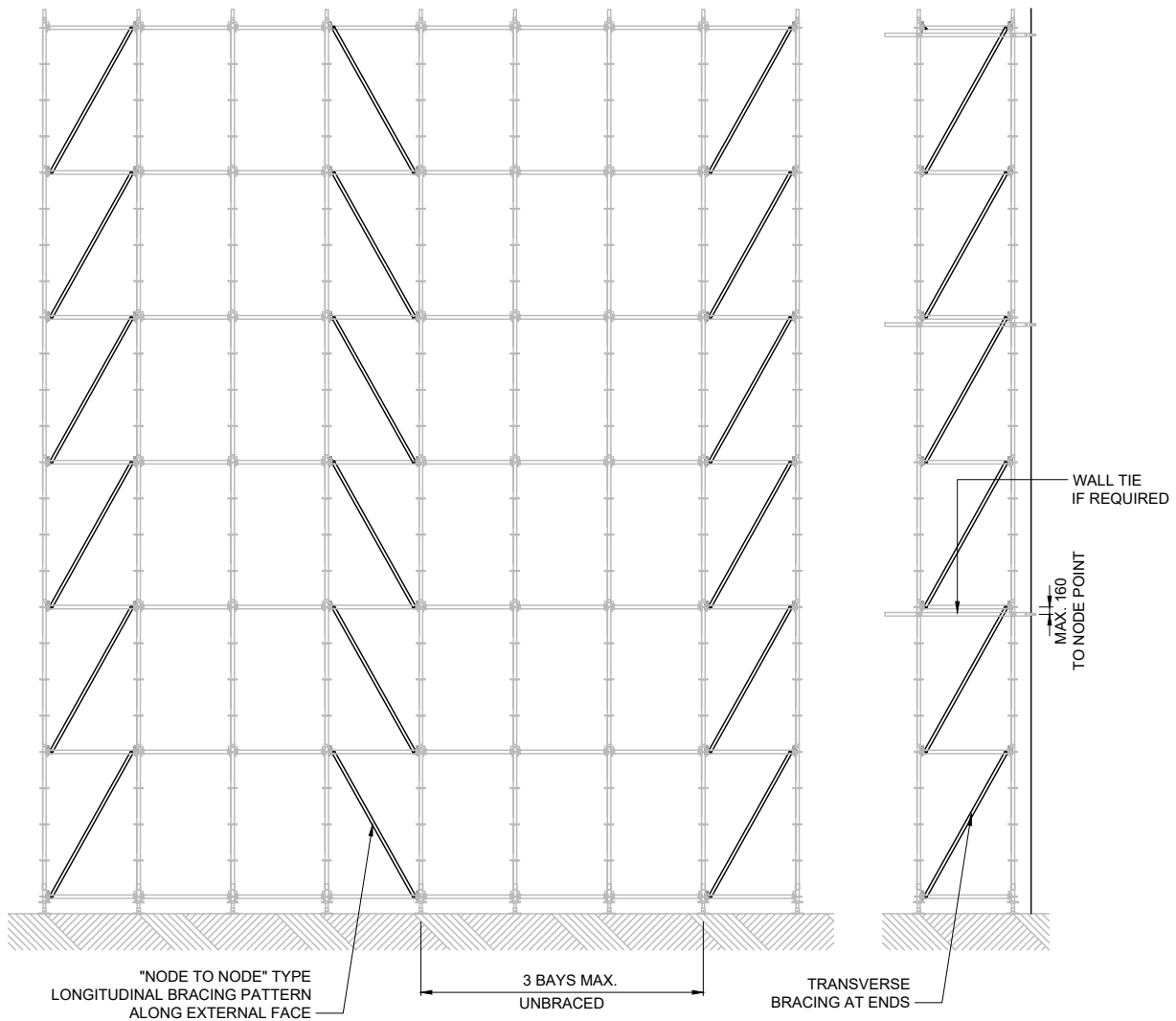


General Rules for Diagonal Bracing

All scaffolds require a certain amount of Diagonal Face Bracing to eliminate any tendency for the scaffold to distort or sway.

Before the scaffold goes beyond the second lift, bracing should be added to the outside face and on the ends. Braces attach to the outward face of the Vertical.

Further bracing must be placed on the scaffold as it progresses in length and height. Braces should span from lift level to lift level and cross over joints in Verticals and be positioned all the way to the top of the scaffold.



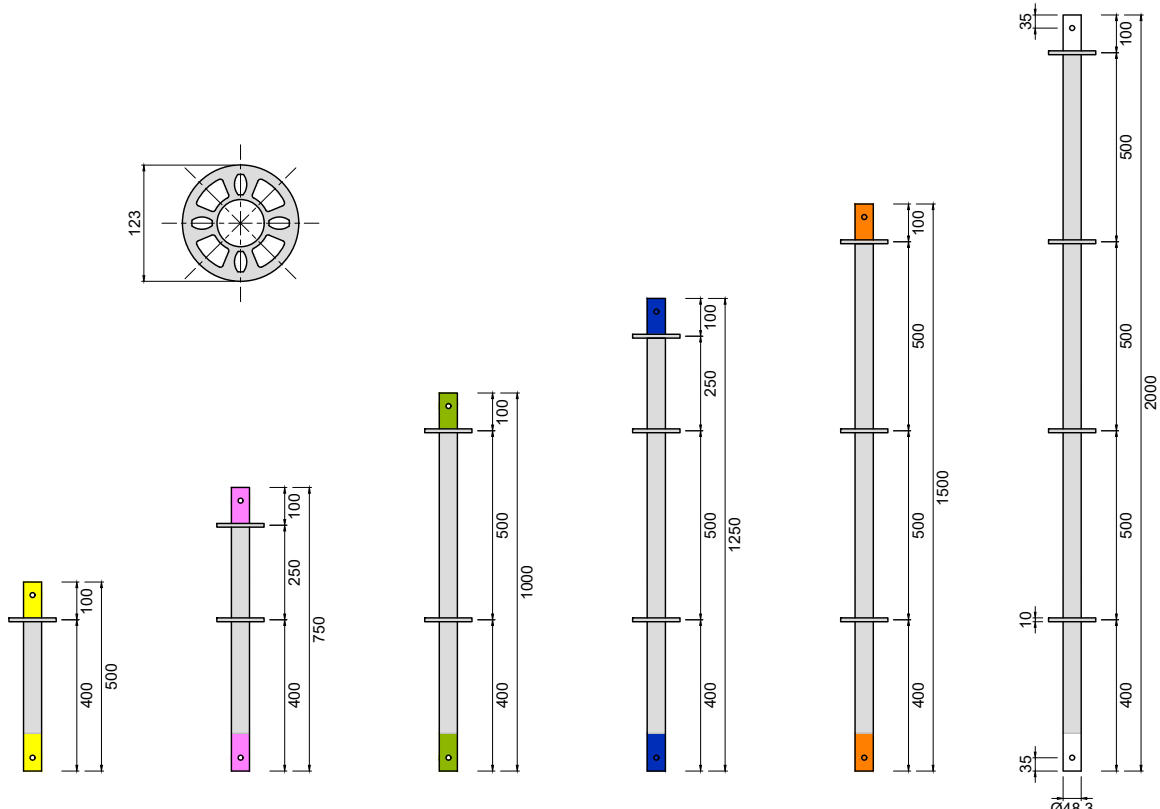
Diagonal Braces provide stability to the scaffold and are used to brace adjacent Verticals longitudinally or transversely.

Face Diagonal Braces are positioned in the end bays of a scaffold run on the external face of the scaffold. They extend from the first cup near ground level to the top working level. They are typically arranged in an alternating (node-node) manner to provide more stability to the scaffold. For long scaffold runs exceeding 5 bays in length, intermediate bracing is required where Diagonal Face Braces are placed every 4 bays maximum. Variations to this spacing must be checked by the appropriate designer and specified in the design layout.

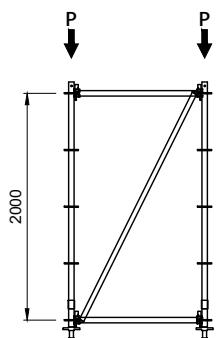
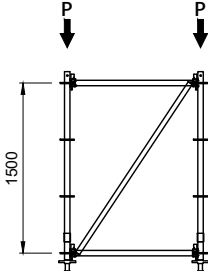
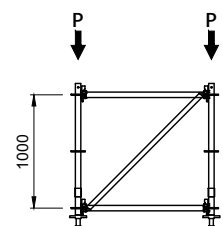
End Diagonal Braces are used between end pair of Verticals in the transverse direction. They extend from the first rosette near ground level to the top working level in an alternating manner.



Vertical 直柱	Weight	Marking
RSP-V05	2.3 kg	Yellow / 黃
RSP-V07.5	2.3 kg	Pink / 粉紅
RSP-V10	4.6 kg	Green / 綠
RSP-V12.5	6.0 kg	Blue / 藍
RSP-V15	6.9 kg	Orange / 橙
RSP-V20	9.1 kg	White / 白

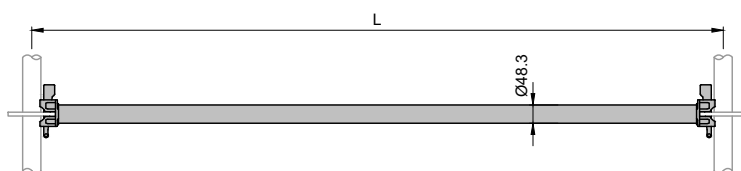


* Ringlock spigot RPN-SPG shall be used for connection points between vertical components.

VERTICAL COMPRESSIVE CAPACITY			
MATERIAL	CHS Ø48.3 X 3.2t Grade Q345		
EFFECTIVE LENGTH			
ULS COMPRESSION RESISTANCE, P_c	51 kN / LEG	81 kN / LEG	117 kN / LEG
SAFETY WORKING LOAD, P	30 kN / LEG	50 kN / LEG	70 kN / LEG
FACTOR OF SAFETY	1.65		

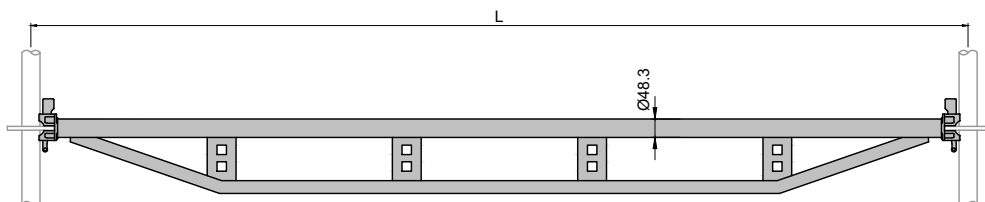


Horizontal 橫桿	Span, L	Weight	Marking
RSP-H165	165	1.1 kg	N/A 不適用
RSP-H250	250	1.5 kg	N/A 不適用
RSP-H325	325	1.7 kg	Pink / 粉紅
RSP-H650	650	2.9 kg	Yellow / 黃
RSP-H950	950	4.0 kg	Green / 綠
RSP-H1175	1175	4.9 kg	Purple / 淺紫
RSP-H1300	1300	5.3 kg	Blue / 藍
RSP-H1600	1600	6.5 kg	Orange / 橙
RSP-H1829	1829	7.3 kg	Red / 紅
RSP-H2479	2479	9.7 kg	Pink / 粉紅
RSP-H2700	2700	10.5 kg	Brown / 淺啡

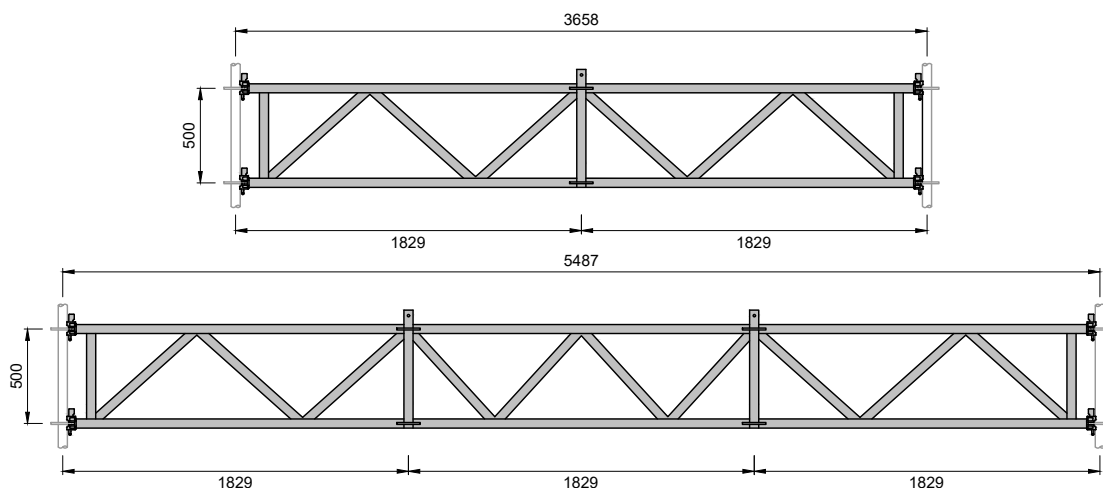


- Material : CHS Ø48.3 x 2.5t Grade Q345

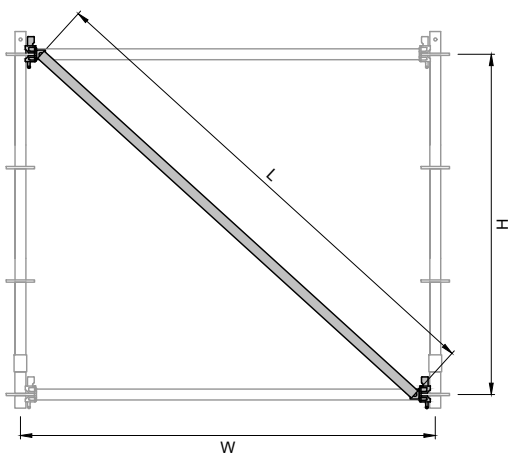
O-Bridging Horizontal 強化橫桿	Span, L	Weight	Safety Working Load
RSP-OBH1829	1829	11.7 kg	10 kN/m
RSP-OBH2479	2479	15.7 kg	5 kN/m



Truss 橫構架	Span, L	Weight	Safety Working Load (Working Platform)	Safety Working Load (Shoring)
RTA-W3605	3658 (1829 X 2)	45.3 kg	5 kN/m	45 kN
RTA-W5405	5487 (1829 X 3)	68.9 kg	4.5 kN/m	15 kN x 2



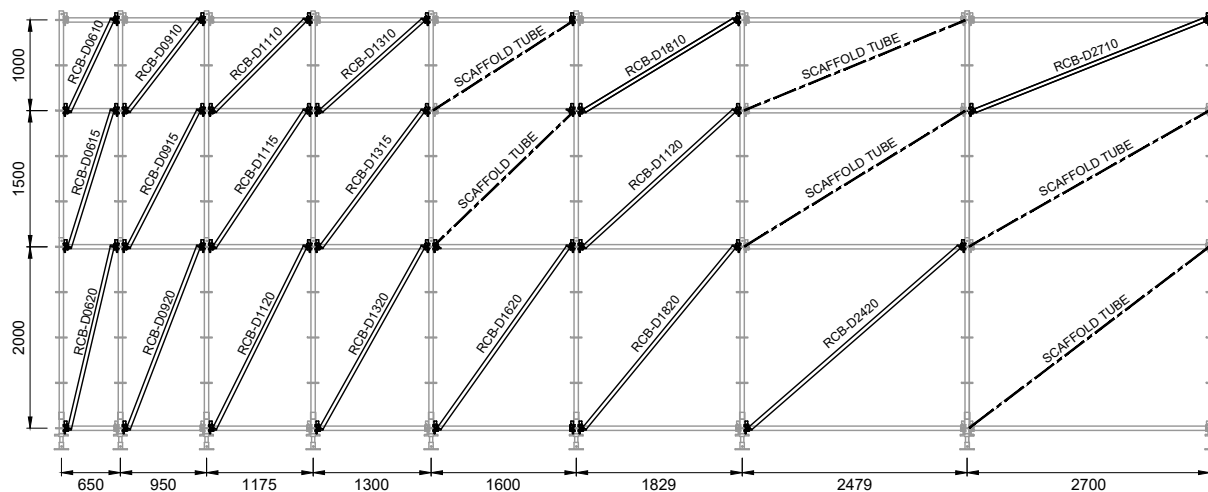
Diagonal Brace 斜桿	W	H	Weight	Color 1	Color 2
RCB-D0607	650	750	4.3 kg	Yellow / 黃	Pink / 粉紅
RCB-D0610		1000	4.9 kg		Green / 綠
RCB-D0615		1500	6.0 kg		Orange / 橙
RCB-D0620		2000	7.2 kg		White / 白
RCB-D0907	950	750	4.8 kg	Green / 綠	Pink / 粉紅
RCB-D0910		1000	5.3 kg		Green / 綠
RCB-D0915		1500	6.3 kg		Orange / 橙
RCB-D0920		2000	7.4 kg		White / 白
RCB-D1107	1175	750	5.2 kg	Purple / 淺紫	Pink / 粉紅
RCB-D1110		1000	5.6 kg		Green / 綠
RCB-D1115		1500	6.6 kg		Orange / 橙
RCB-D1120		2000	7.7 kg		White / 白
RCB-D1310	1300	1000	5.9 kg	Blue / 藍	Green / 綠
RCB-D1315		1500	6.8 kg		Orange / 橙
RCB-D1320		2000	7.8 kg		White / 白
RCB-D1620	1600	2000	8.2 kg	Orange / 橙	White / 白
RCB-D1810	1829	1000	6.9 kg	Red / 紅	Green / 綠
RCB-D1820		2000	8.6 kg		White / 白
RCB-D2420	2479	2000	9.8 kg	Pink / 粉紅	White / 白
RCB-D2710	2700	1000	9.0 kg	Brown / 淺啡	Green / 綠

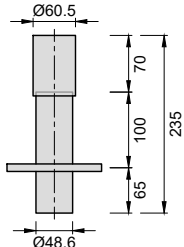


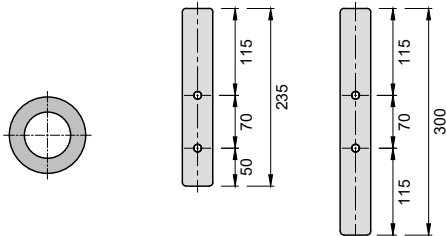
Detail of Diagonal Wedge Head

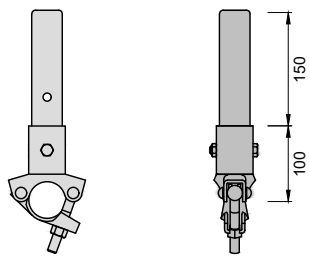
- Material : CHS Ø42.7 x 2.5t Grade Q345

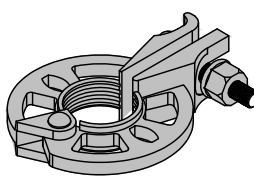
Diagonal Brace Combination Example

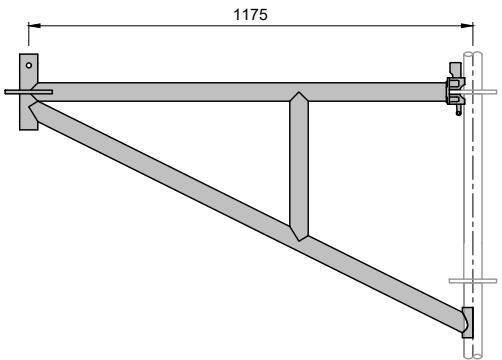


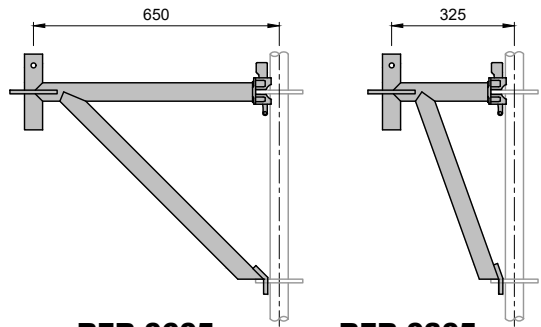
Base Collar 底座	Weight
RSP-BC	1.6 kg
	

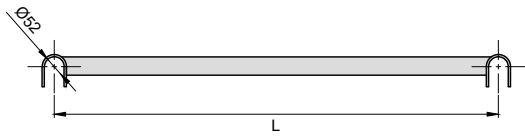
Spigot 駁心	Weight
RPN-SPG	0.7 kg
	

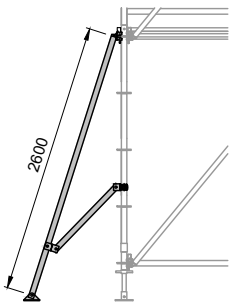
Spigot Single Coupler 駁心碼仔	Weight
RPN-CLP	1.4 kg
 BS or JIS Type Coupler are available upon request.	

Rosette Clamp 可拆式圓盤	Weight
RSP-RC	1.3 kg
	

Support Bracket 三角支撐	Weight	S.W.L.
RFR-1106	12.3 kg	6 kN/m
		

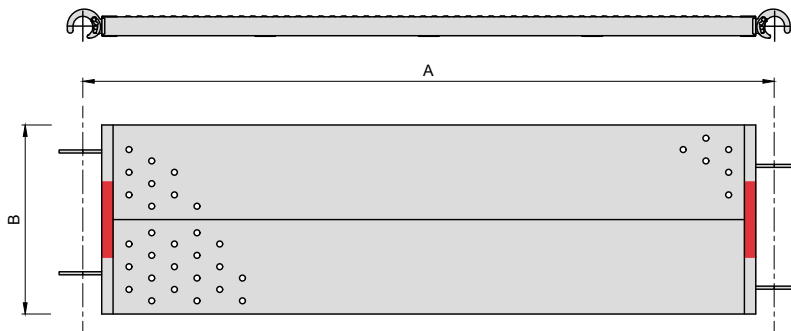
Support Bracket 三角支撐	Weight	S.W.L.
RFR-0305	5.2 kg	75 kN/m
RFR-0605	6.9 kg	20 kN/m
		

Board Bearer 橫擔	Span, L	Weight	Marking
RSP-BB650	650	2.7 kg	Yellow / 黃
RSP-BB950	950	3.5 kg	Green / 綠
RSP-BB1175	1175	4.1 kg	Purple / 淺紫
RSP-BB1300	1300	4.4 kg	Blue / 藍
RSP-BB1600	1600	2.3 kg	Orange / 橙
			

Stabilizer 穩定斜撐	Weight
RSP-S2600	13.2 kg
	

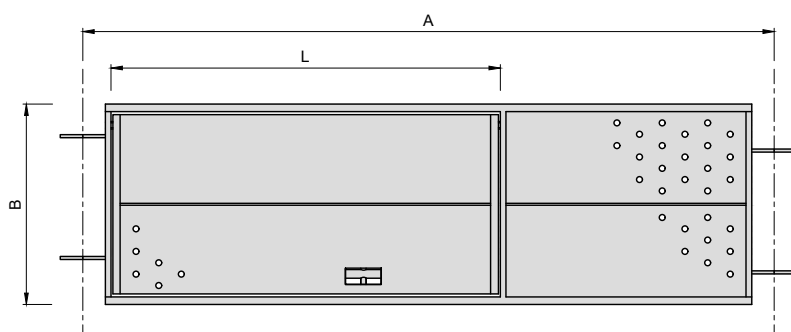


Catwalk 平台板	A	B	Weight	Color 1	Color 2
RCA-0350	325	500	4.8 kg	Pink / 粉紅	-
RCA-0625	650	250	3.0 kg	Yellow / 黃	-
RCA-0630		300	4.6 kg		Red / 紅
RCA-0650		500	7.3 kg		-
RCA-0925	950	250	5.6 kg	Green / 綠	-
RCA-0930		300	6.0 kg		Red / 紅
RCA-0950		500	9.9 kg		-
RCA-1125	1175	250	6.5 kg	Purple / 淺紫	-
RCA-1130		300	7.0 kg		Red / 紅
RCA-1150		500	11.7 kg		-
RCA-1325	1300	250	7.1 kg	Blue / 藍	-
RCA-1330		300	7.5 kg		Red / 紅
RCA-1350		500	13.2 kg		-
RCA-1625	1600	250	8.3 kg	Orange / 橙	-
RCA-1630		300	8.9 kg		Red / 紅
RCA-1650		500	15.5 kg		-
RCA-1815	1829	150	7.2 kg	Red / 紅	-
RCA-1825		250	9.3 kg		Red / 紅
RCA-1830		300	10.0 kg		-
RCA-1850		500	17.5 kg		-
RCA-2425	2479	250	12.0 kg	Pink / 粉紅	-
RCA-2430		300	12.9 kg		Red / 紅



Catwalk Width	Safety Working Moment
150	0.49 kNm
250	0.51 kNm
300	0.52 kNm
500	1.03 kNm

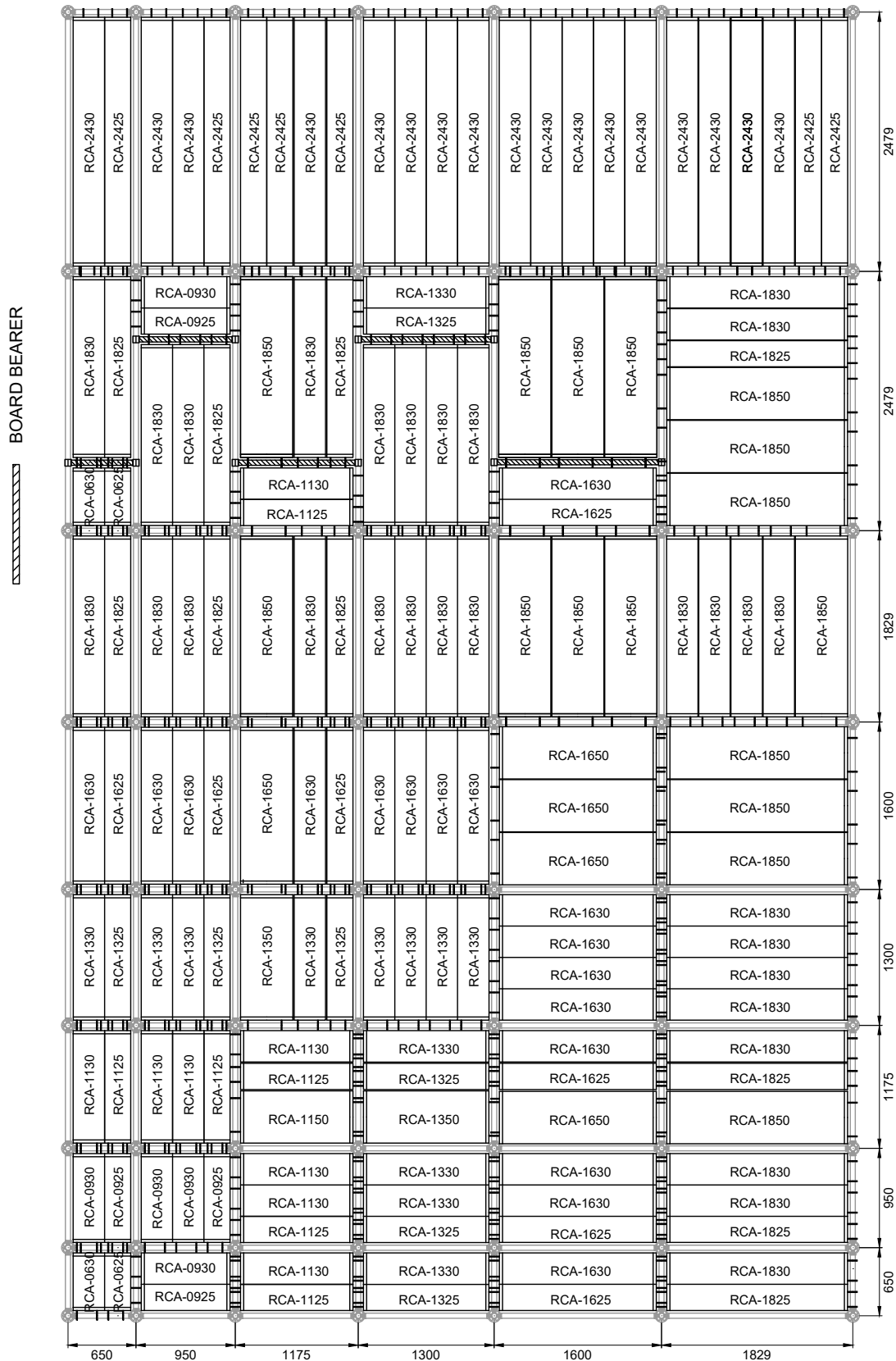
Open-Top Catwalk 揭蓋平台板	A	B	L	Weight	Marking
RCA-40PS	1300	500	600	12.4 kg	Blue / 藍
RCA-50PS	1600	500	600	15.2 kg	Orange / 橙
RCA-60PS	1829	500	600	17.5 kg	Red / 紅
TCA-60PA	1829	530	1170	18.3 kg	Yellow / 黃



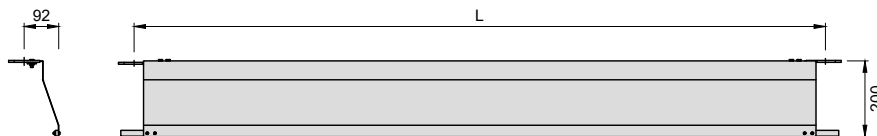
Safety Working Moment
1.03 kNm



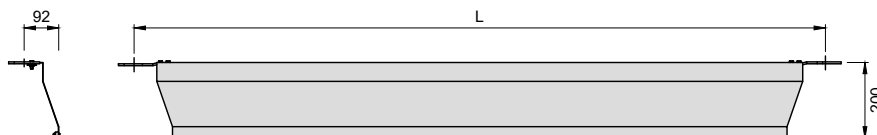
Catwalk Combination Example



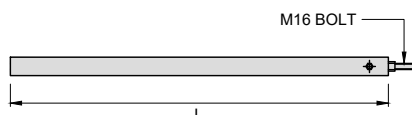
Toeboard 踢腳板	L	Weight	Marking
RTB-0620	650	2.3 kg	Yellow / 黃
RTB-0920	950	3.1 kg	Green / 綠
RTB-1120	1175	3.8 kg	Purple / 淺紫
RTB-1320	1300	4.1 kg	Blue / 藍
RTB-1620	1600	5.0 kg	Orange / 橙
RTB-1820	1829	5.7 kg	Red / 紅
RTB-2420	2479	7.6 kg	Pink / 粉紅



Toeboard (Cutted) 踢腳板 (斜口)	L	Weight	Marking
RTB-0620A	650	1.9 kg	Yellow / 黃
RTB-0920A	950	2.8 kg	Green / 綠
RTB-1120A	1175	3.4 kg	Purple / 淺紫
RTB-1320A	1300	3.8 kg	Blue / 藍
RTB-1620A	1600	4.6 kg	Orange / 橙
RTB-1820A	1829	5.3 kg	Red / 紅
RTB-2420A	2479	7.2 kg	Pink / 粉紅

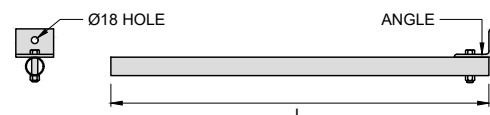


Wall Tie 連牆器	L	Weight
TWT-WA500	500	1.6 kg
TWT-WA1000	1000	2.8 kg
TWT-WA1500	1500	4.0 kg
TWT-WA2000	2000	5.2 kg
TWT-WA2500	2500	6.4 kg
TWT-WA3000	3000	7.6 kg



- Material : CHS Ø48.3 x 2.1t Grade Q235

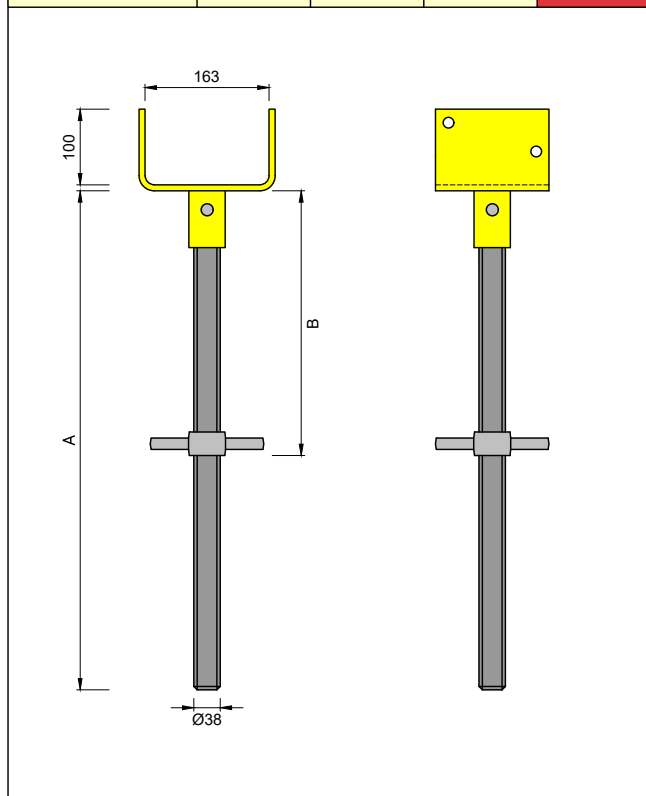
Wall Tie 連牆器	L	Weight
TWT-WA500UA	500	2.5 kg
TWT-WA1000UA	1000	3.7 kg
TWT-WA1500UA	1500	4.9 kg
TWT-WA2000UA	2000	6.1 kg
TWT-WA2500UA	2500	7.3 kg
TWT-WA3000UA	3000	9.5 kg



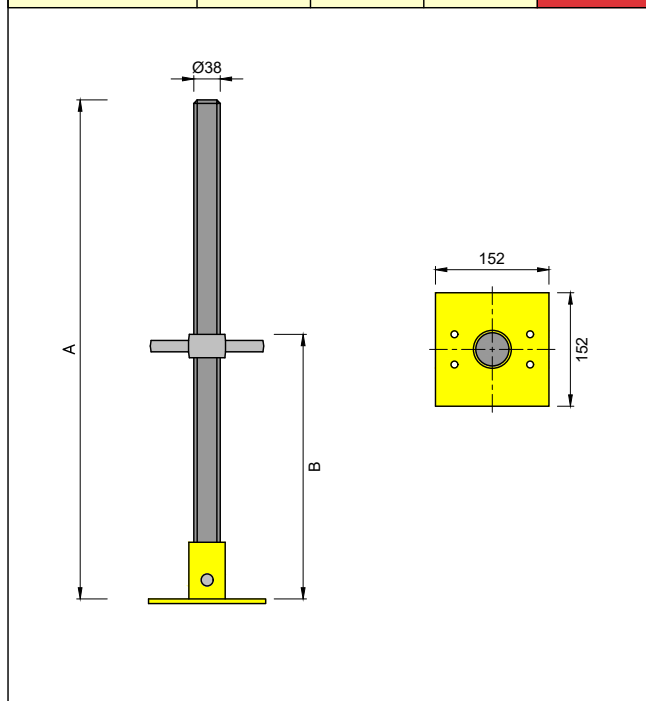
- Material : CHS Ø48.3 x 2.1t Grade Q235



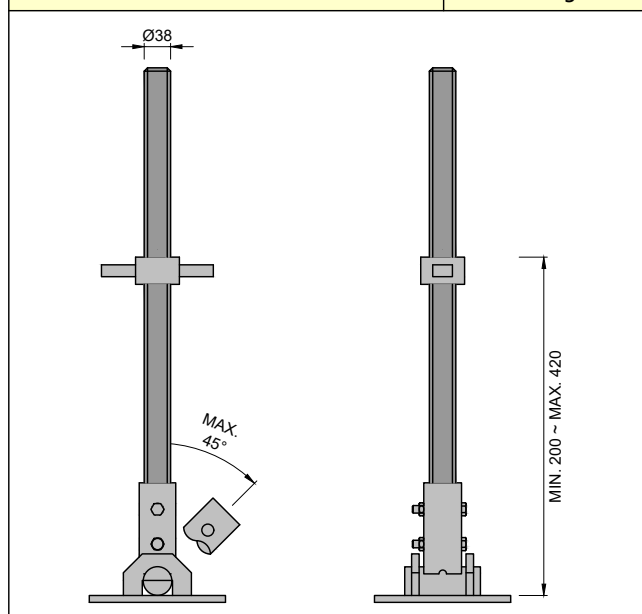
U-Head Jack 頂積	A	B	Weight	Marking
CJK-FHJ43	430	150 ~ 280	6.6 kg	Silver / 銀
CJK-FHJ66	660	150 ~ 420	7.5 kg	Yellow / 黃
CJK-FHJ86	860	150 ~ 620	8.3 kg	Red / 紅



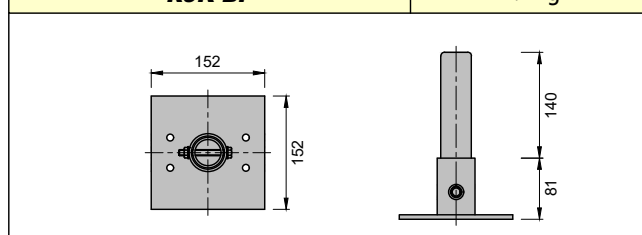
Base Jack 底積	A	B	Weight	Marking
CJK-BPJ43	430	150 ~ 280	4.5 kg	Silver / 銀
CJK-BPJ66	660	150 ~ 420	5.4 kg	Yellow / 黃
CJK-BPJ86	860	150 ~ 620	6.6 kg	Red / 紅



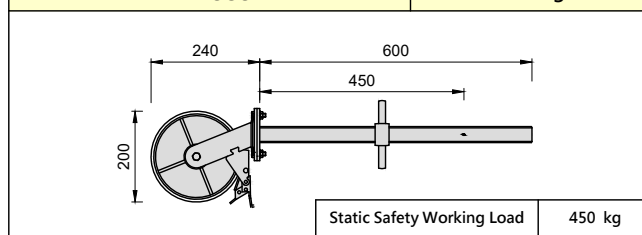
Swivel Base Plate Jack 可調較角度底積	Weight
RJK-SBPJ	6.5 kg



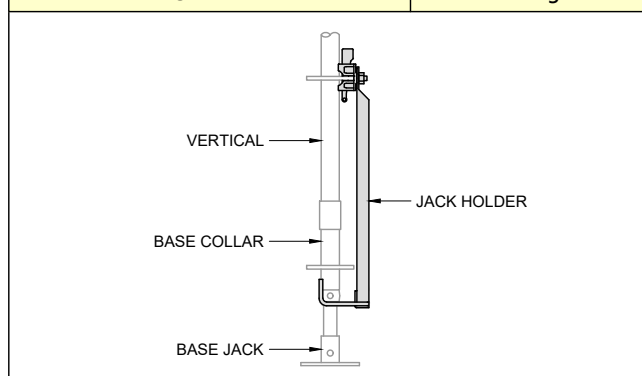
Base Plate 底掌	Weight
RJK-BP	2.2 kg



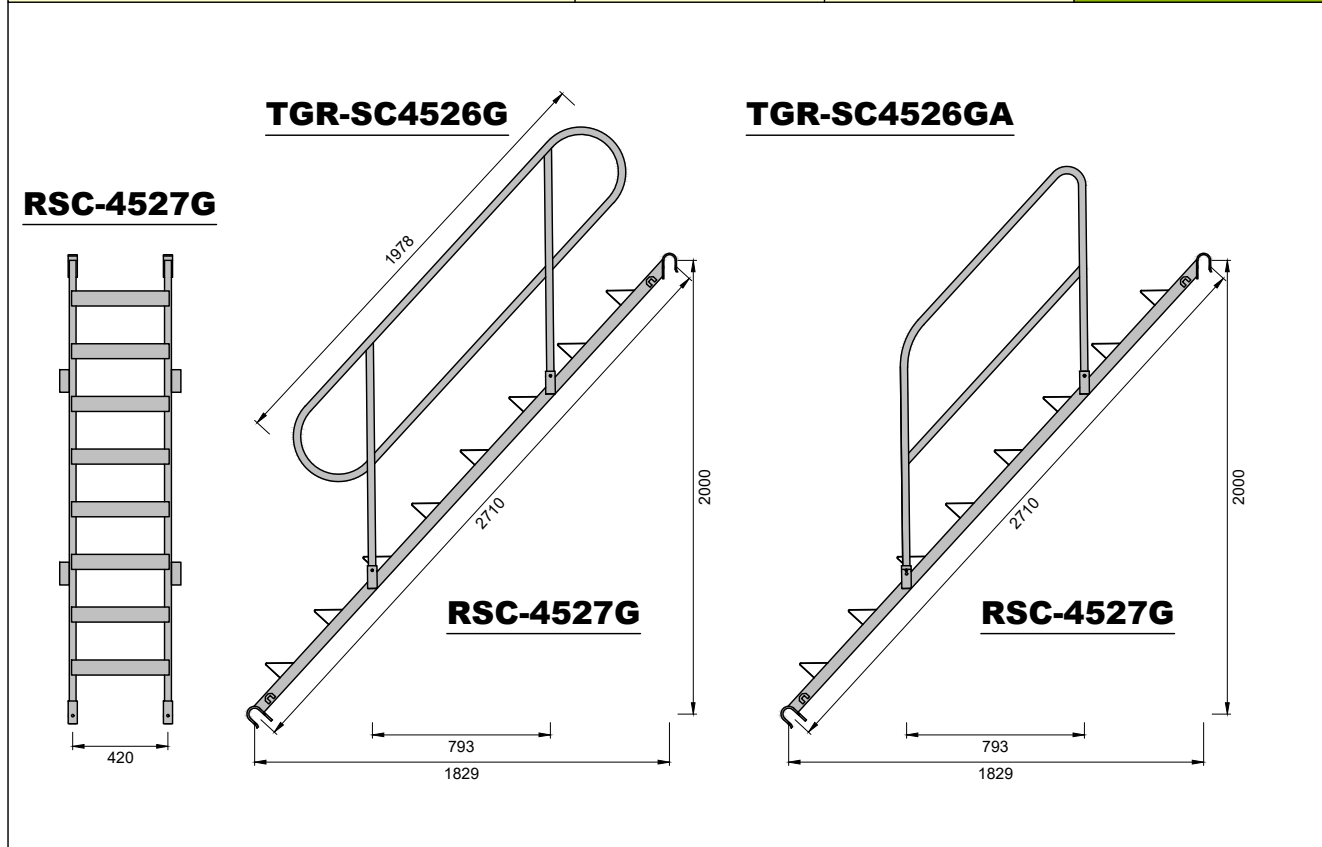
Adjustable Jack Castor 有制轆仔連積芯	Weight
TWH-2060PA	10.3 kg



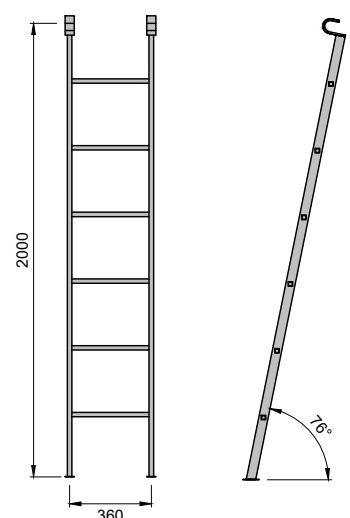
Jack Holder 底積吊勾	Weight
RJK-HLR	2.0 kg



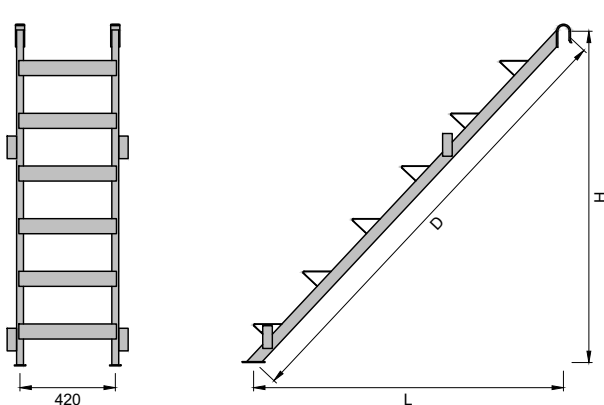
Item Name	Code	Weight	Marking
Staircase 樓梯	RSC-4527G	24.4 kg	Orange / 橙
Staircase Handrail for RSC-4527G 樓梯扶手	TGR-SC4526G	5.0 kg	Orange / 橙
Staircase Handrail for RSC-4527G 樓梯扶手	TGR-SC4526GA	2.9 kg	Green / 綠



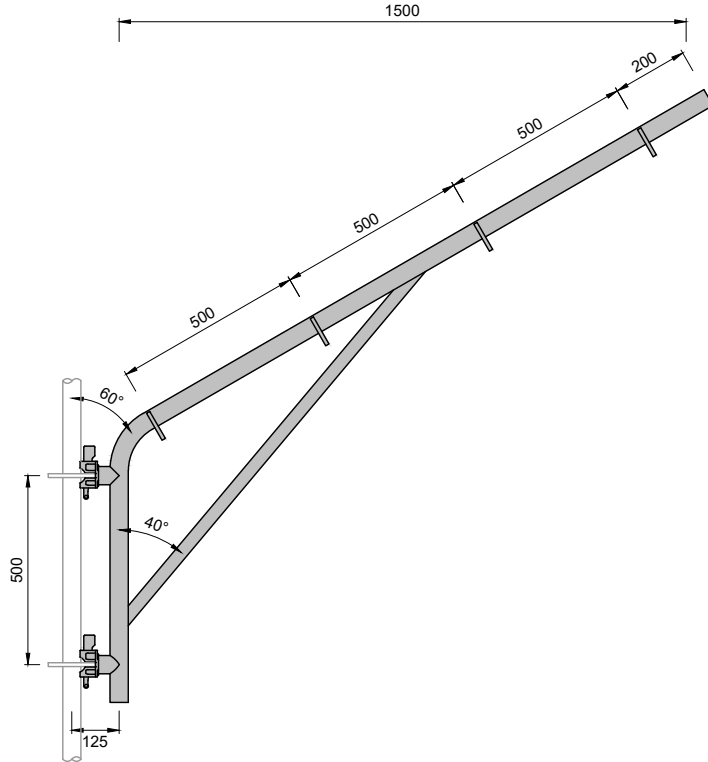
Hanging Ladder 掛梯	Weight
RSC-4020A	9.5 kg



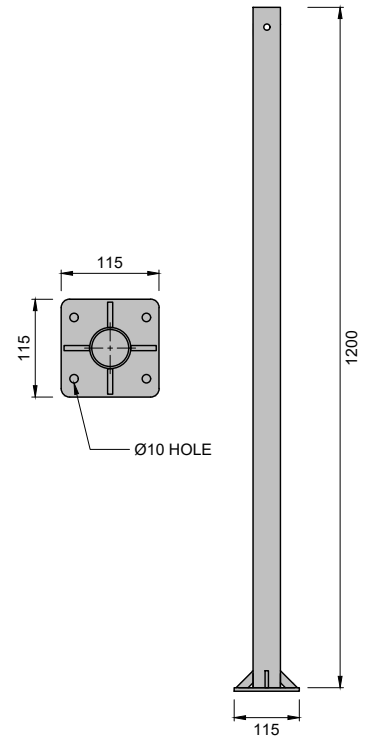
Staircase 樓梯	Steps	L	H	D	Weight	Marking
TSC-4507G	2	455	500	676	7.4 kg	Pink / 粉紅
TSC-4515G	4	915	1000	1355	13.5 kg	Green / 綠
TSC-4520G	6	1370	1500	2031	19.1 kg	Blue / 藍



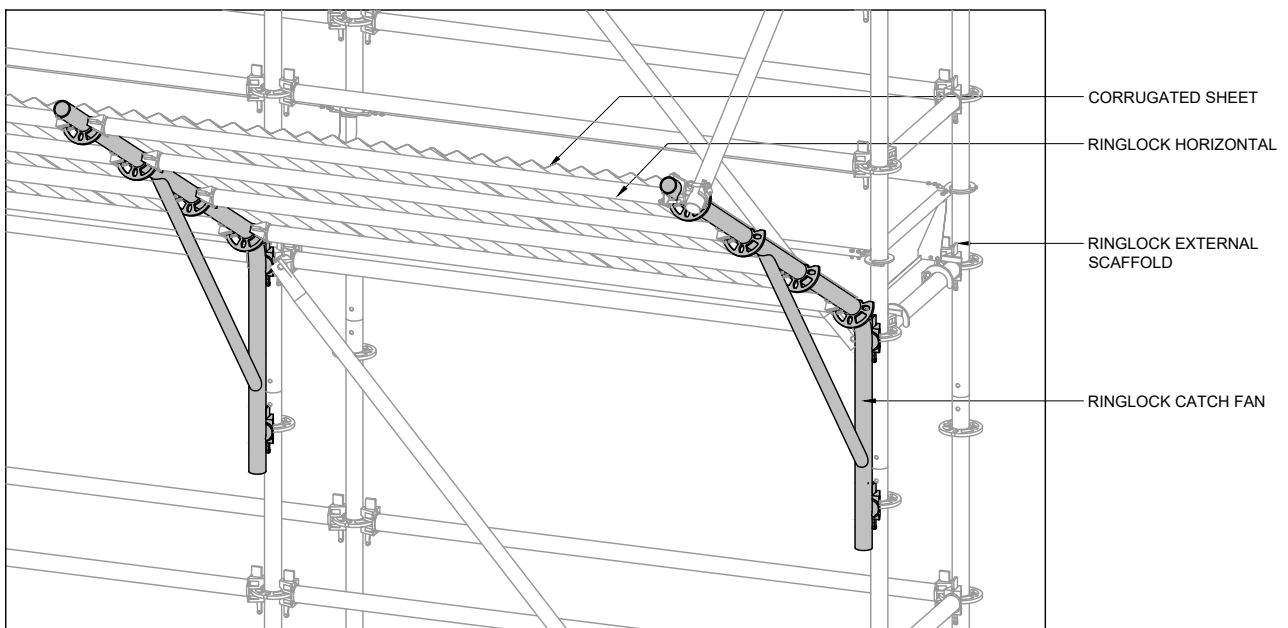

Catch Fan 斜柵	Weight
RFR-CFP	13.2 kg



Universal Tube Post 通用直柱	Weight
TSP-UTP12	3.8 kg



Catch Fan Example

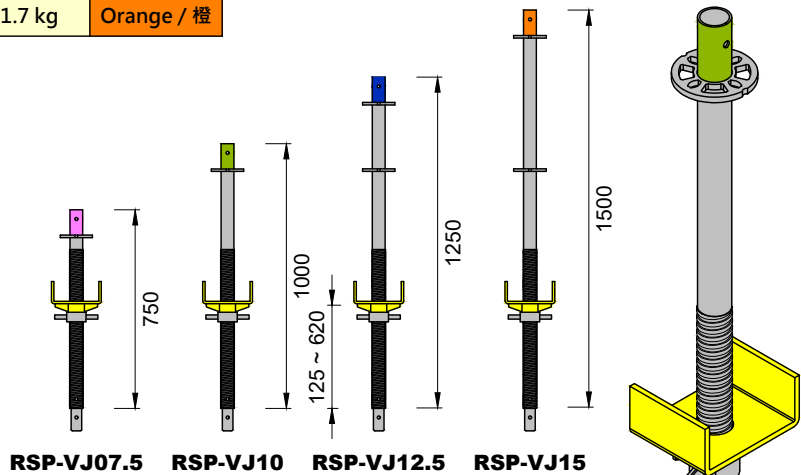


Vertical with Jack 直柱連頂積	L	Weight	Marking
RSP-VJ07.5	750	8.5 kg	Pink / 粉紅
RSP-VJ10	1000	9.3 kg	Green / 綠
RSP-VJ12.5	1250	10.7 kg	Blue / 藍
RSP-VJ15	1500	11.7 kg	Orange / 橙

PATENT NO: HK1251779

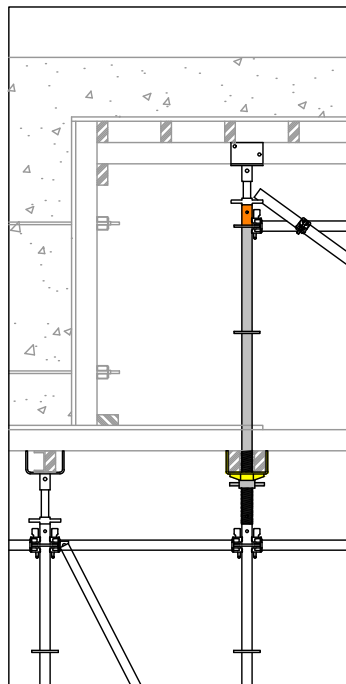
The RINGLOCK VERTICAL WITH JACK is used in conjunction with the RINGLOCK scaffold system, providing a more efficient way to support beam and slab structures on site.

The VERTICAL WITH JACK is composed of two main components: an adjustable screw jack on one end and a RINGLOCK vertical member on the other. While the jack screw length remains the same, the vertical comes in 3 different sizes to suit its application. The vertical component adds flexibility by allowing the extension of the standard RINGLOCK modular system, as well as inserting another jack component into the vertical to create a "double head" jack. For typical framing plans, the VERTICAL WITH JACK significantly enhances the formworks process by helping increase the working space on the ground and decrease the amount of modular scaffold components required for the falsework structure, which in turn minimizes the total labour and time.

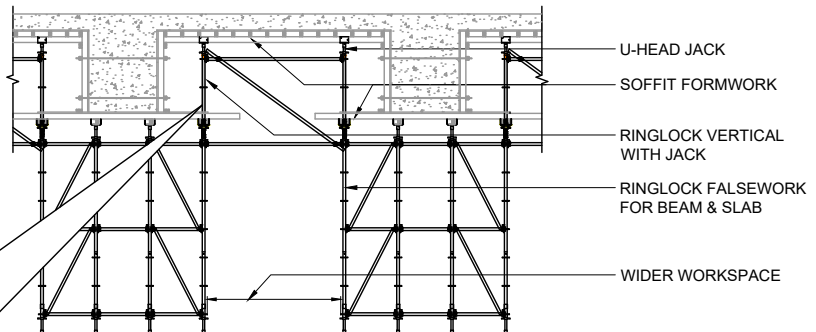


- Material : Screwed CHS Ø48.3 x 3.2t Grade Q345
- Vertical's Compressive S.W.L. (F.O.S. = 1.65)

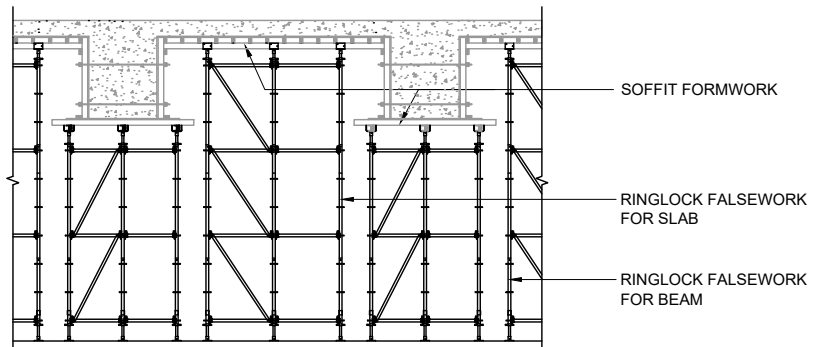
Effective Length	Compressive S.W.L.
750 mm	42 kN
1000 mm	40 kN
1250 mm	34 kN
1500 mm	27 kN



ASSEMBLY DETAIL



NEW FALSEWORK DESIGN USING RINGLOCK VERTICAL WITH JACK

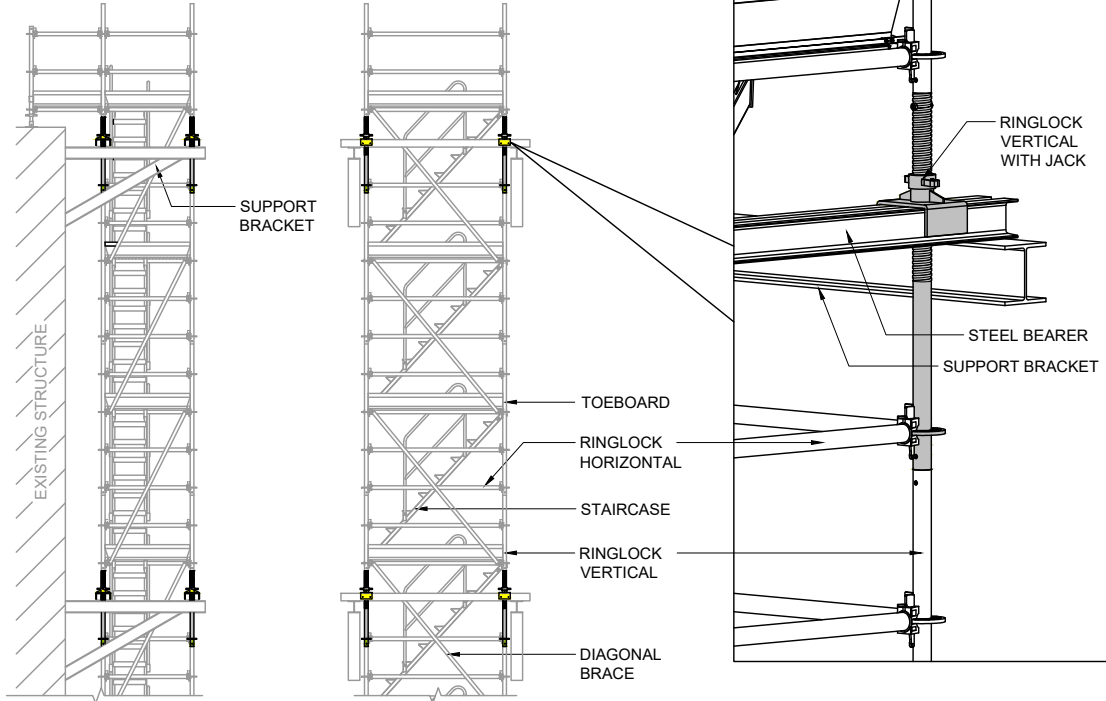


TRADITIONAL FALSEWORK DESIGN



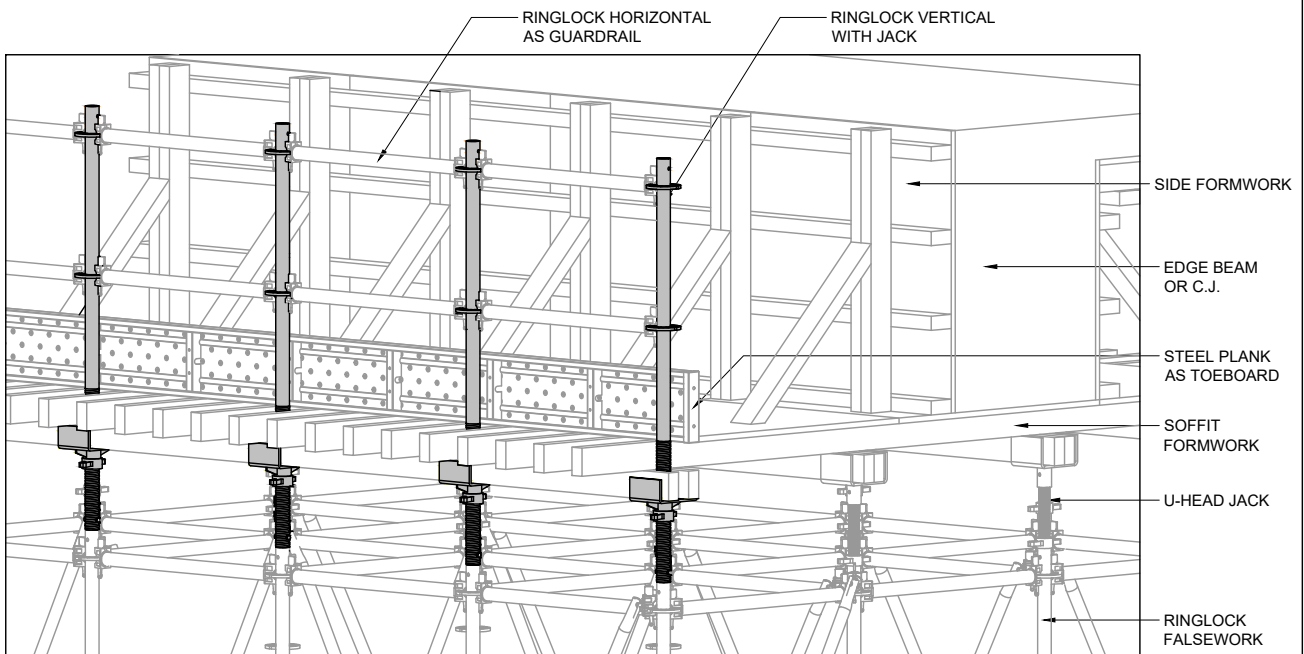
Hanging Access Tower Example

An option for extension of the VERTICAL WITH JACK is utilizing the screw jack to "hang" on steel bearers and support brackets to efficiently erect a hanging access ladder.

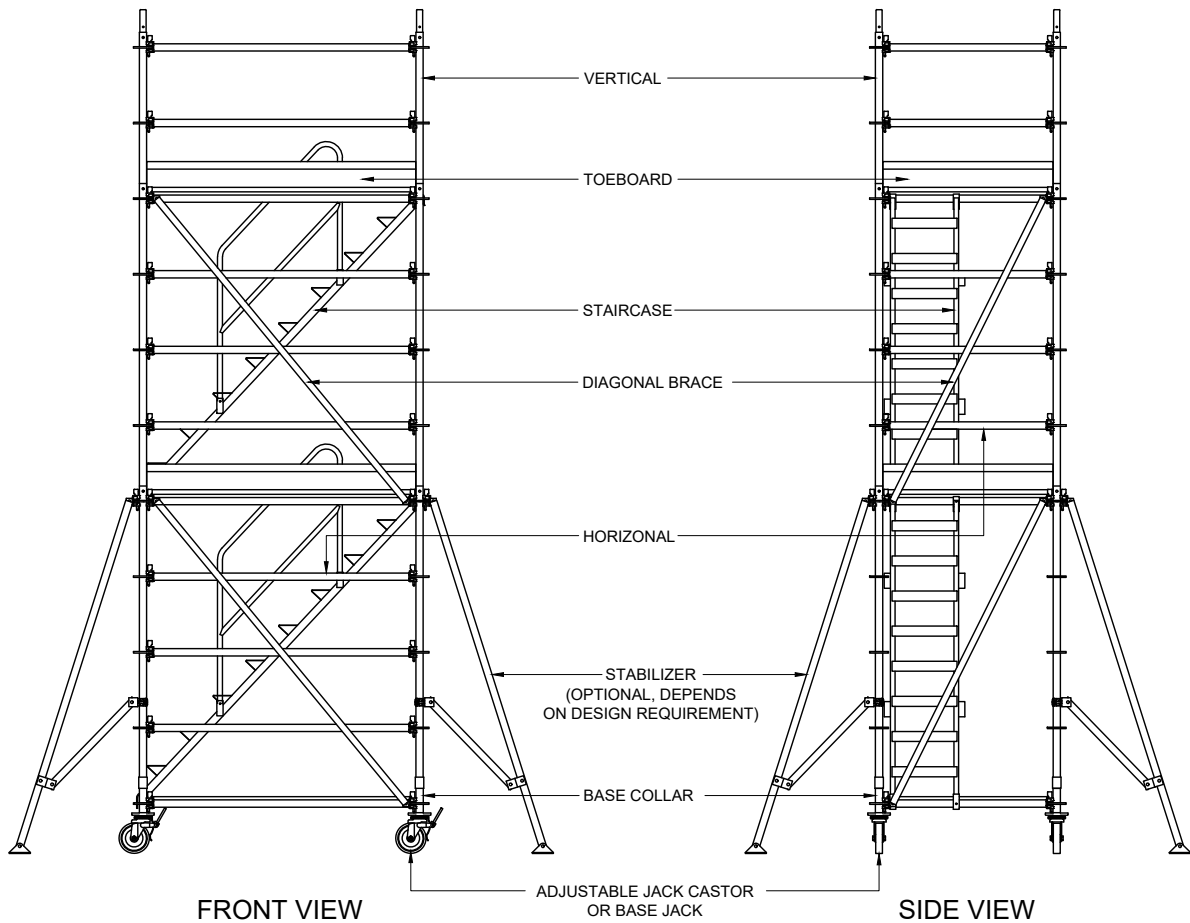
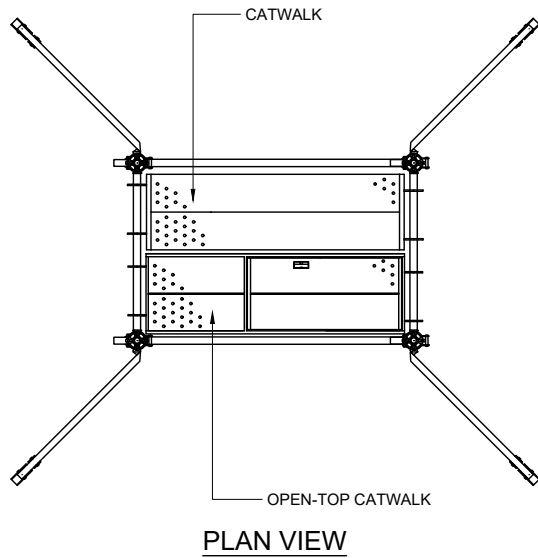


Falsework Temporary Edge Protection Example

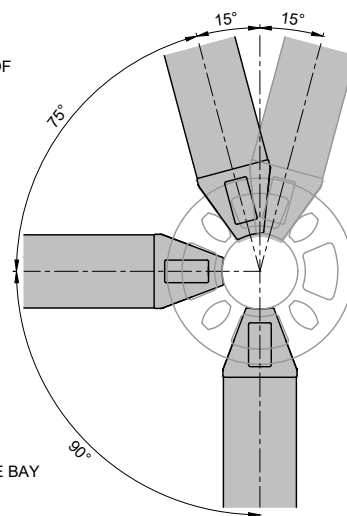
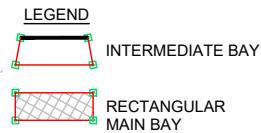
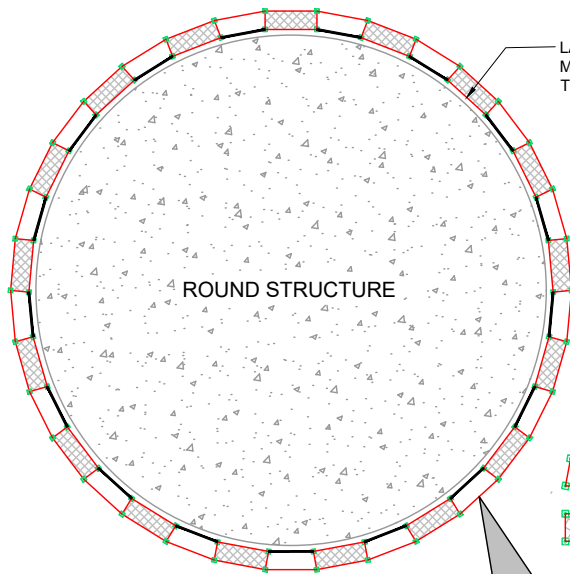
Maximizing both ends of the VERTICAL WITH JACK by connecting the screw jack to the existing falsework with a spigot and allowing the vertical end to extend above the formwork to be used in conjunction with respective horizontal components as the guardrail.



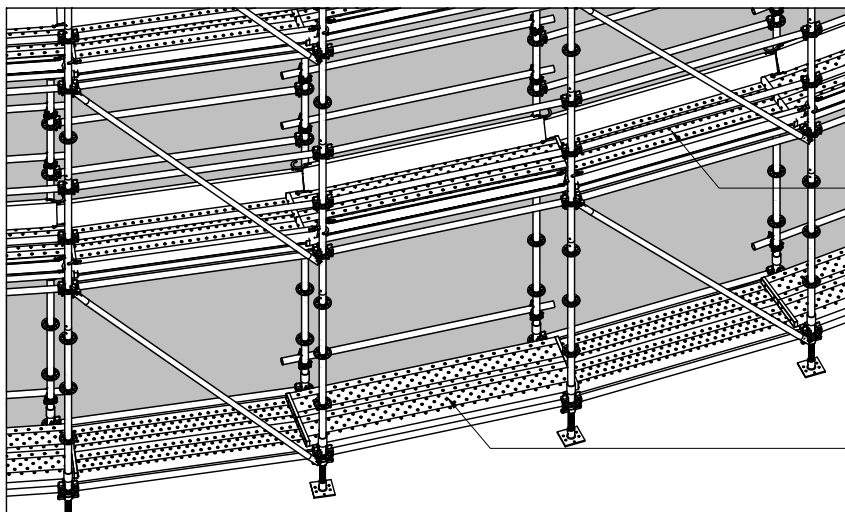
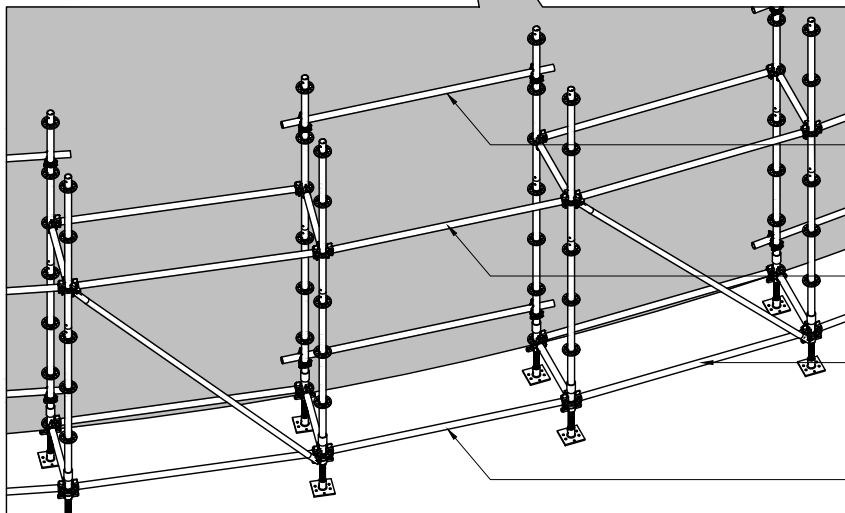
Working Platform Example



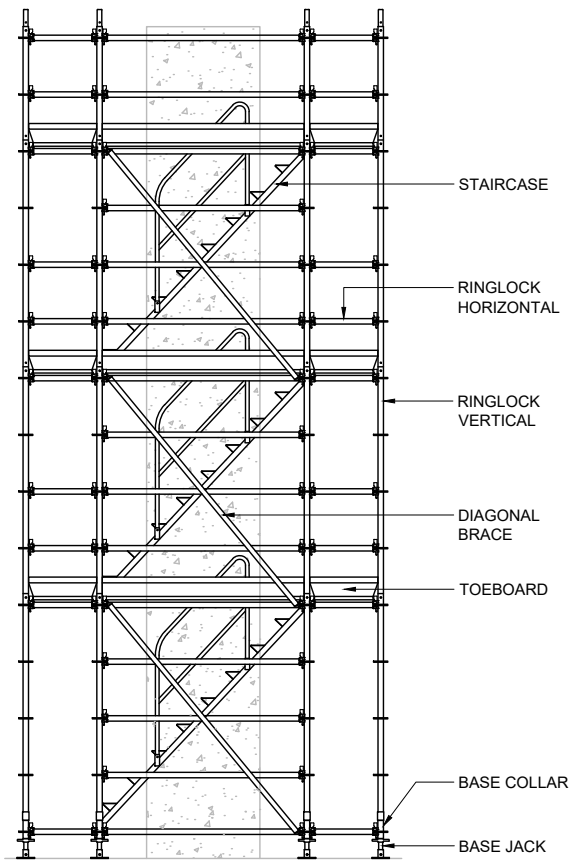
Circular Working Platform Example



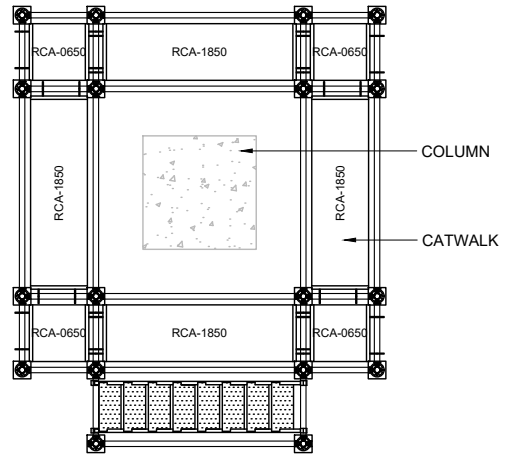
Depending on the radius, it is advantageous to use the large holes with the horizontals to obtain a more flexible curvature.



Column Working Platform Example



ELEVATION

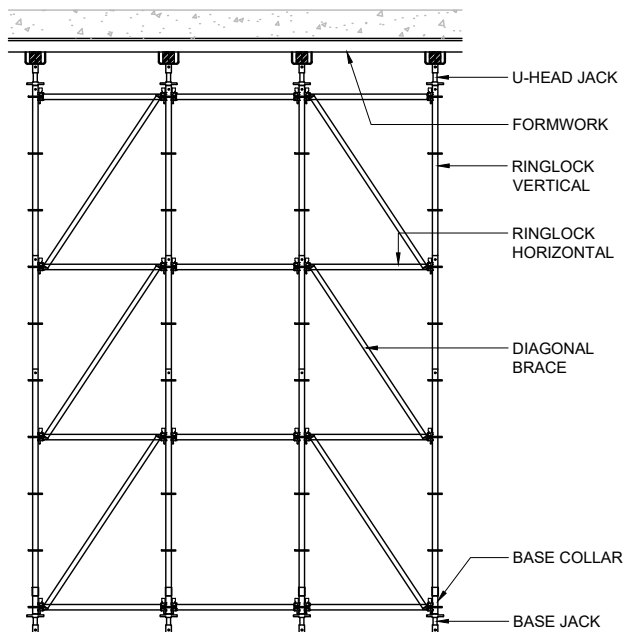


PLAN VIEW

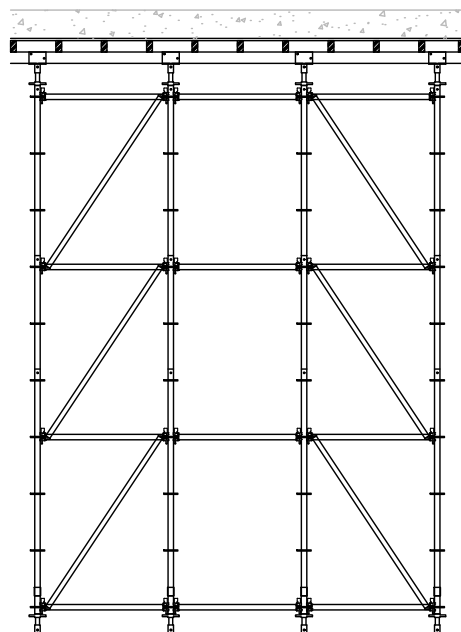
- Lifiable feature is available upon request.

Falsework Shoring Example

Remark: Variations to diagonal brace spacing must be checked by the appropriate designer and specified in the design layout.
Please see "General Rules for Diagonal Bracing" at Page 1-4.



ELEVATION

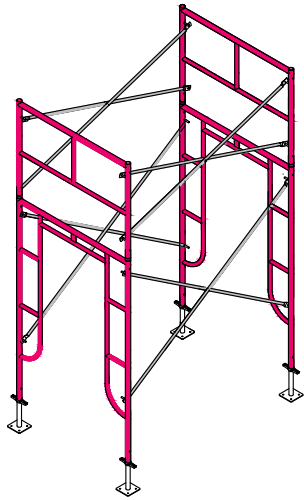


ELEVATION



Main Contractor	Contract / Project Site
Gammon Construction Limited	Foundation Works for Proposed Property Development of West Rail Tsuen Wan West Station TW5
Dragages - China Harbour - VSL Joint Venture	Contract No. HY/2011/09 Hong Kong – Zhuhai – Macao Bridge Hong Kong Link Road
Bachy Soletanche - Laing O'Rourke Joint Venture	Contract 811A West Kowloon Terminus Approach Tunnel (North)
Gammon - Leighton Joint Venture	Contract 811B West Kowloon Terminus Approach Tunnel (South)
Leighton Contractors (Asia) Ltd	Contract 1112 Hung Hom Station and Stabling Sidings
Penta-Ocean Construction Co Ltd	Redevelopment of Queen Mary Hospital Phase 1 – Conversion of SSQ
Penta-Ocean Construction Co Ltd	Contract 1102 Hin Keng Station and Approach Structures
Kaden - Chun Wo Joint Venture	Contract 1108 Kai Tak Station and Associated Tunnels
Shui Wing Engineering Company Limited	Central Police Station Conservation and Revitalisation Project
Chun Wo - CRGL Joint Venture	Contract No. HK/2009/02 Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East
Chun Wo - Leader Joint Venture	Contract No. HK/2009/01 Wan Chai Development Phase II - Central - Wan Chai Bypass at Hong Kong Convention and Exhibition Centre
Kier - Laing O'Rourke - Kaden Joint Venture	Contract 901 Admiralty Integrated Station and SCL Enabling Works
Nishimatsu Construction Co Ltd	Contract 902 Nam Fung Tunnel and Ventilation Buildings
Leighton - Gammon Joint Venture	Contract 810A West Kowloon Terminus Station North
Gammon Building Construction Limited	Proposed Residential Tower At 25-35 Seymour Road Hong Kong
Leader Joint Venture	Contract 1106 Diamond Hill Station Extension
Vinci Construction Grands Projets	Contract 1103 Hin Keng to Diamond Hill tunnels and Fung Tak Public Transport Interchange
Kier-Kaden-OSSA Joint Venture	Contract 824 Ngau Tam Mei to Tai Kong Po Tunnels
Sun Fook Kong (Civil) Limited	Contract No. HY/2012/11 Provision of Barrier-free Access Facilities for Highway Structures – Phase 3 Contract 1
Kone Elevator (HK) Ltd	Contract 847 Lifts
Otis Elevator Company (H.K.) Ltd	Two International Finance Centre
Leighton Contractors (Asia) Ltd	H2634 - Contract No. SS C505 - Construction of Liantang / Heung Yuen Wai Boundary Control Point
Hip Hing Joint Venture (VEC)	Tsing Yi Vehicle Examination Centre





TOYO SCAFFOLD

輕型通架

The most widely used falsework system for its simplicity to assemble, comparatively light in weight, and providing high strength & safety.

APPLICATION

Toyo Scaffolding can be applied to various outdoor and indoor uses; such as scaffolding for outdoor building works, the shorings, supports, shatterings, towers and bleachers. The basic unit is the frame, with the combination of base jack, cross brace, joint pins, steel tube and couplers; Toyo scaffolding can formulate a comprehensive falsework system as well as a simple access and rolling tower.

Various sizes of the Toyo's Steel Prop are also available for speedy propping work.



Rolling Tower



Toyo Scaffold System for Falsework



Access Tower



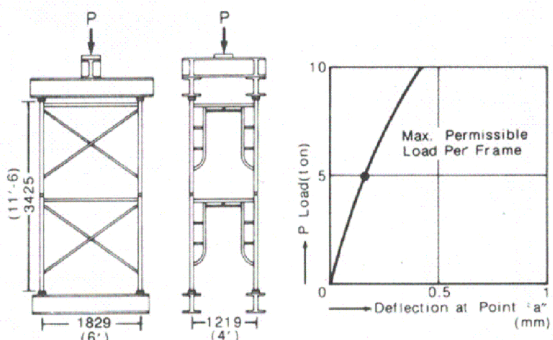
External Scaffolding



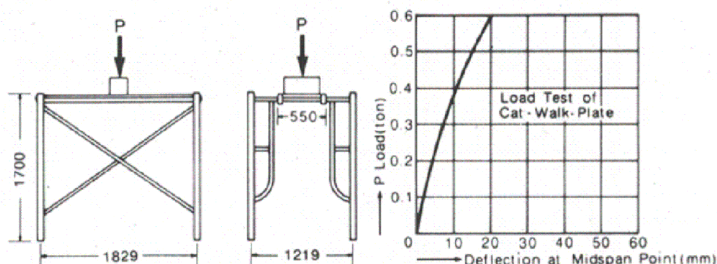
Toyo frames are manufactured from structural carbon steel with main load-bearing members having an outside diameter of 43 mm.

LOAD TESTS

Frame TFR-A1217B



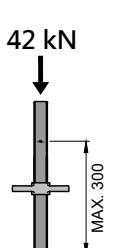
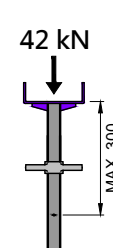
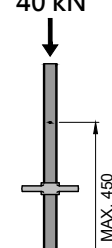
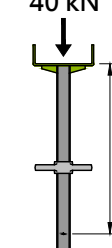
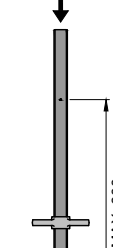
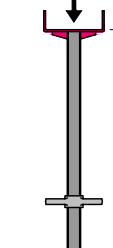
Catwalk TCA-TK6CG



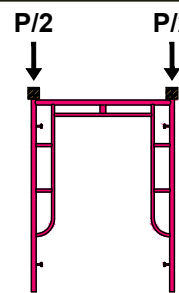
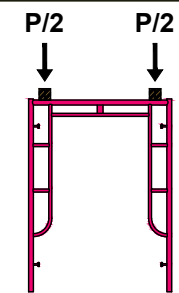
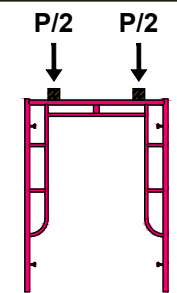
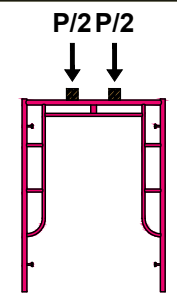
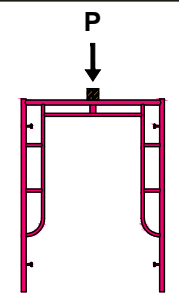
Safety Working Loads on Frame (Factor of Safety: 2)

Loading	Item Code
25 kN (2.5 t) per leg	TFR-A1217B, TFR-A1217BG, TFR-A1215, TFR-A1215G, TFR-A1212L, TFR-A1212LG, TFR-A1209L, TFR-A1209LG, TFR-A1204L
22.5 kN (2.25 t) per leg	TFR-A1219, TFR-A1219G

Safety Working Loads on Jack Components (Factor of Safety: 3.5)

TJK-40B	TJK-40H	TJK-60B	TJK-60H	TJK-78B	TJK-78H
					

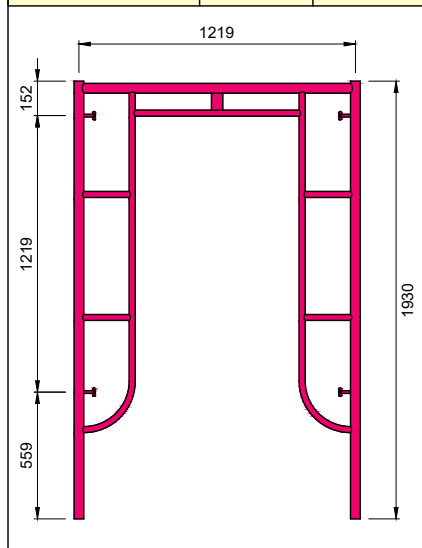
Reduction in strength, depending upon positions where frame load is applied

Point of load					
Max load per frame p max	10.0 Ton	9.1 Ton	7.5 Ton	5.0 Ton	3.0 Ton
Allowable load	5.0 Ton	3.5 Ton	3.0 Ton	2.0 Ton	1.2 Ton

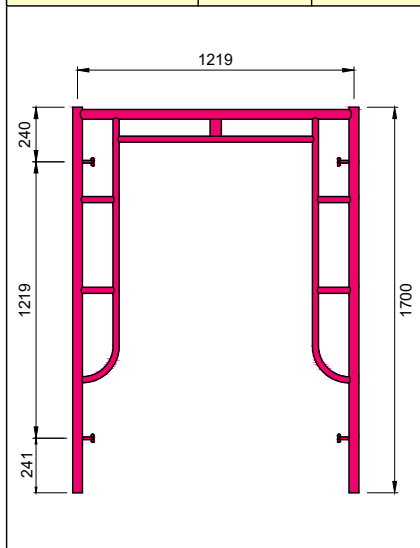
Note: For load point, square pipe material 100 x 100 mm is recommended to use



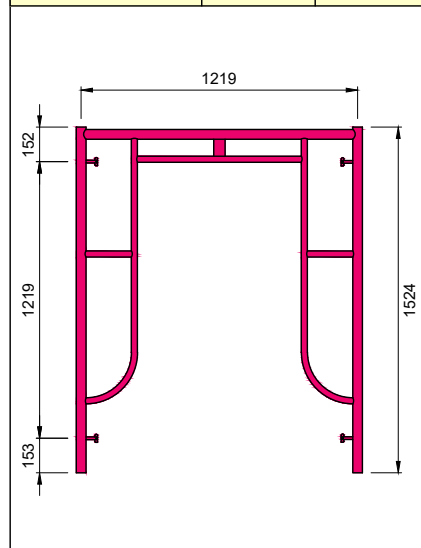
Frame 輕架	Coating	Weight
TFR-A1219	Painted	19.7 kg
TFR-A1219G	Galv.	19.7 kg



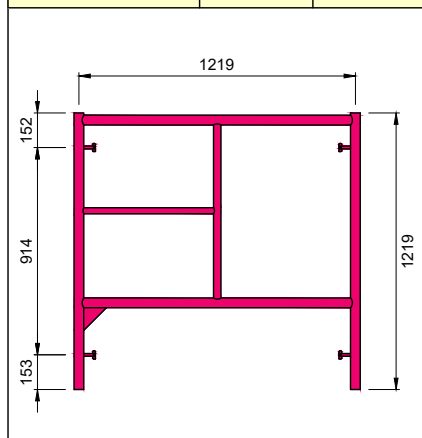
Frame 輕架	Coating	Weight
TFR-A1217B	Painted	15.9 kg
TFR-A1217BG	Galv.	15.9 kg



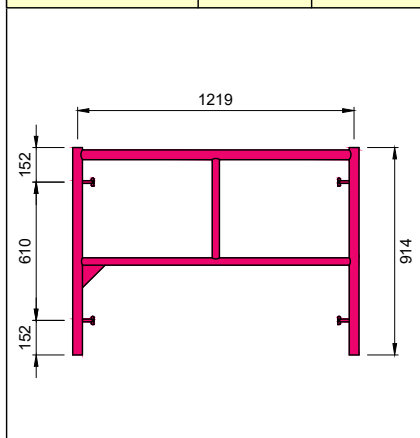
Frame 輕架	Coating	Weight
TFR-A1215	Painted	16.8 kg
TFR-A1215G	Galv.	16.8 kg



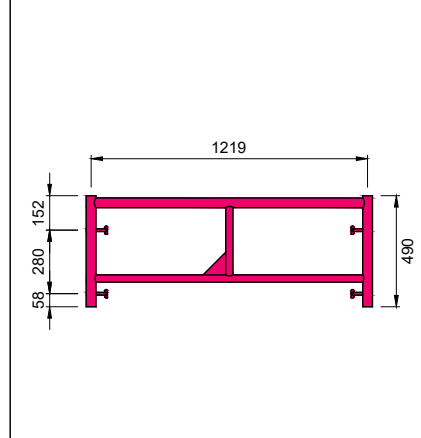
Frame 輕架	Coating	Weight
TFR-A1212L	Painted	13.8 kg
TFR-A1212LG	Galv.	13.8 kg



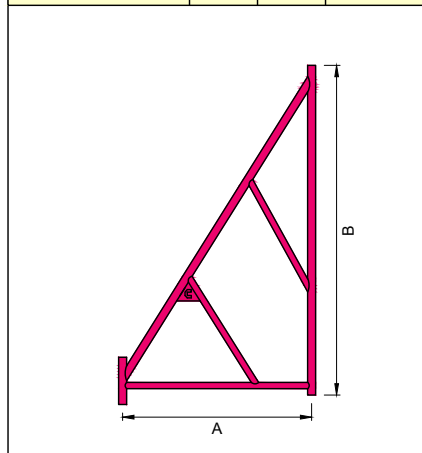
Frame 輕架	Coating	Weight
TFR-A1209L	Painted	10.1 kg
TFR-A1209LG	Galv.	10.1 kg



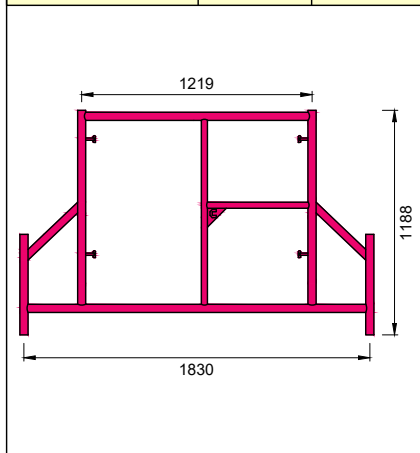
Frame 輕架	Coating	Weight
TFR-A1204L	Painted	7.9 kg



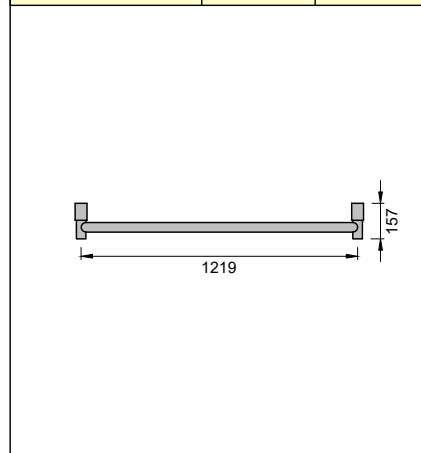
Outrigger Frame 斜腳底架	A	B	Weight
TSP-OR1017	1000	1745	13.5 kg



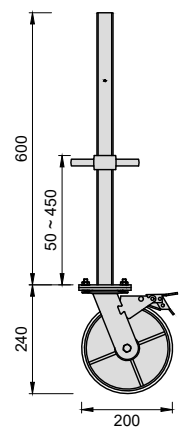
Outrigger Frame 斜腳底架	Coating	Weight
TFR-1811BL	Painted	18.6 kg



Base Bar 底座	Coating	Weight
TPT-BB1219	Painted	3.2 kg

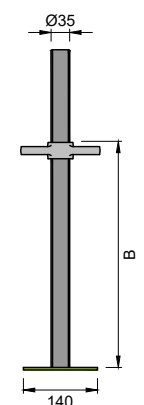


Adj. Jack Castor 有制轉仔連積芯	Weight
TWH-2060PA	10.3 kg

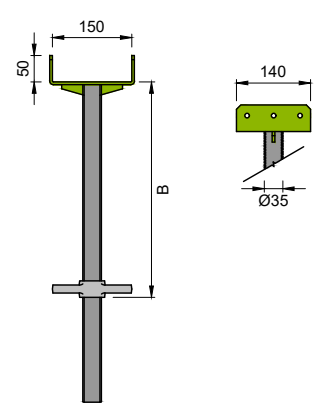


Static Safety Working Load	450 kg
----------------------------	--------

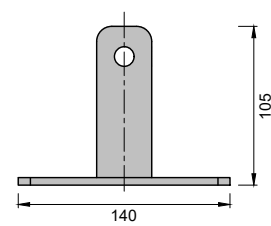
Base Jack 底積	B	Weight	Marking
TJK-40B	100 ~ 300	3.7 kg	Purple / 淺紫
TJK-60B	100 ~ 450	4.9 kg	Green / 綠
TJK-78B	100 ~ 600	5.9 kg	Magenta / 洋紅



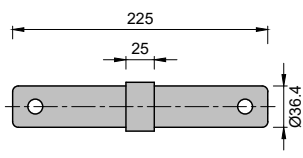
U-Head Jack 頂積	B	Weight	Marking
TJK-40H	100 ~ 300	4.2 kg	Purple / 淺紫
TJK-60H	100 ~ 450	5.5 kg	Green / 綠
TJK-78H	100 ~ 600	6.7 kg	Magenta / 洋紅



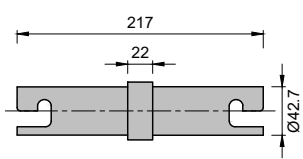
Base Plate 底座	Weight
TJK-A15BP	0.9 kg



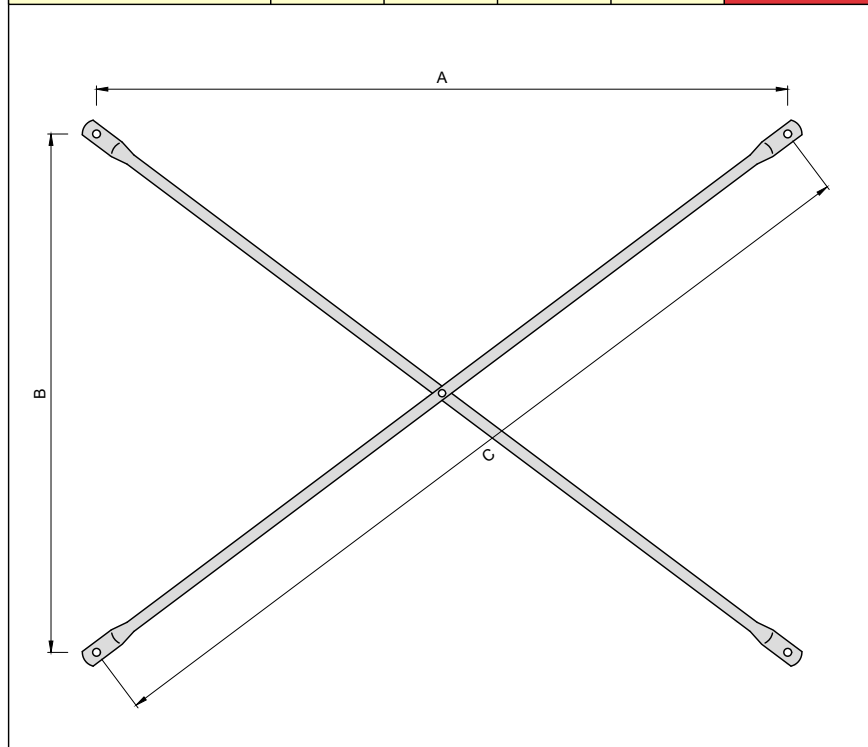
Joint Pin 駁心	Weight
TPN-A20J	0.4 kg



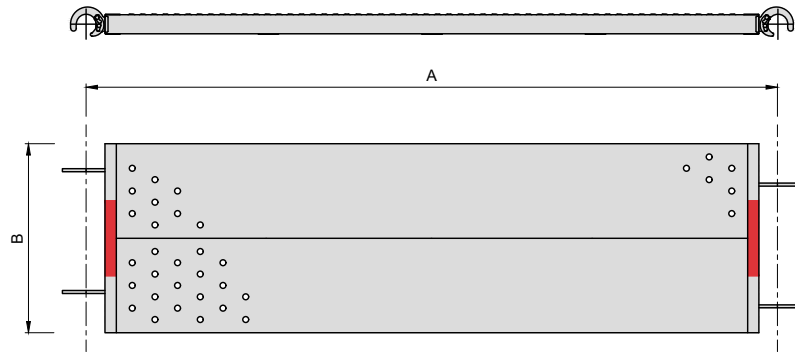
Coupling Pin 喉通駁心	Weight
TPN-B20C	0.6 kg



Cross Brace (Galv.) 較剪	A	B	C	Weight	Marking
TCB-X0606	610	610	863	1.6 kg	White / 白
TCB-X0906	914	610	1099	2.2 kg	Purple / 淺紫
TCB-X0909		914	1293	2.5 kg	Brown / 啡
TCB-X1206	1219	610	1363	2.6 kg	Sky Blue / 天藍
TCB-X1209		914	1524	2.9 kg	Green / 綠
TCB-X1212	1524	1219	1724	3.3 kg	Blue / 藍
TCB-X1506		610	1642	3.2 kg	Yellow / 黃
TCB-X1512	1829	1219	1952	3.7 kg	Orange / 橙
TCB-X1806		610	1928	3.7 kg	Pink / 粉紅
TCB-X1809		914	2045	4.0 kg	Blue / 藍
TCB-X1812		1219	2198	4.2 kg	Red / 紅

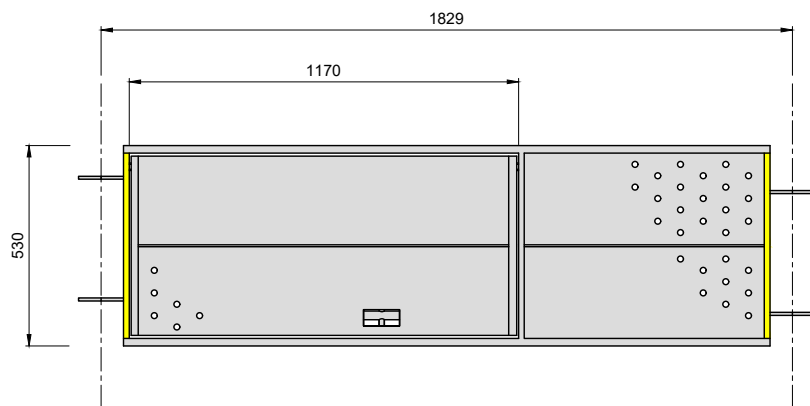


Catwalk 平台板	A	B	Weight	Marking
RCA-1825	1829	250	9.1 kg	Red / 紅
RCA-1850		500	17.4 kg	

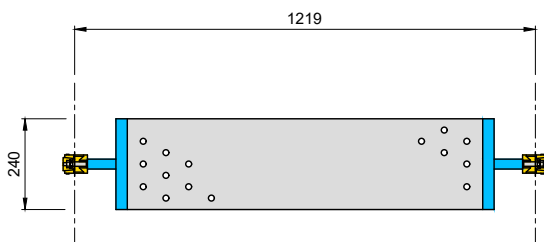


Catwalk Width	Safety Working Moment
250	0.51 kNm
500	1.03 kNm

Catwalk 揭蓋平台板	Weight	Marking
TCA-60PA	18.3 kg	Yellow / 黃



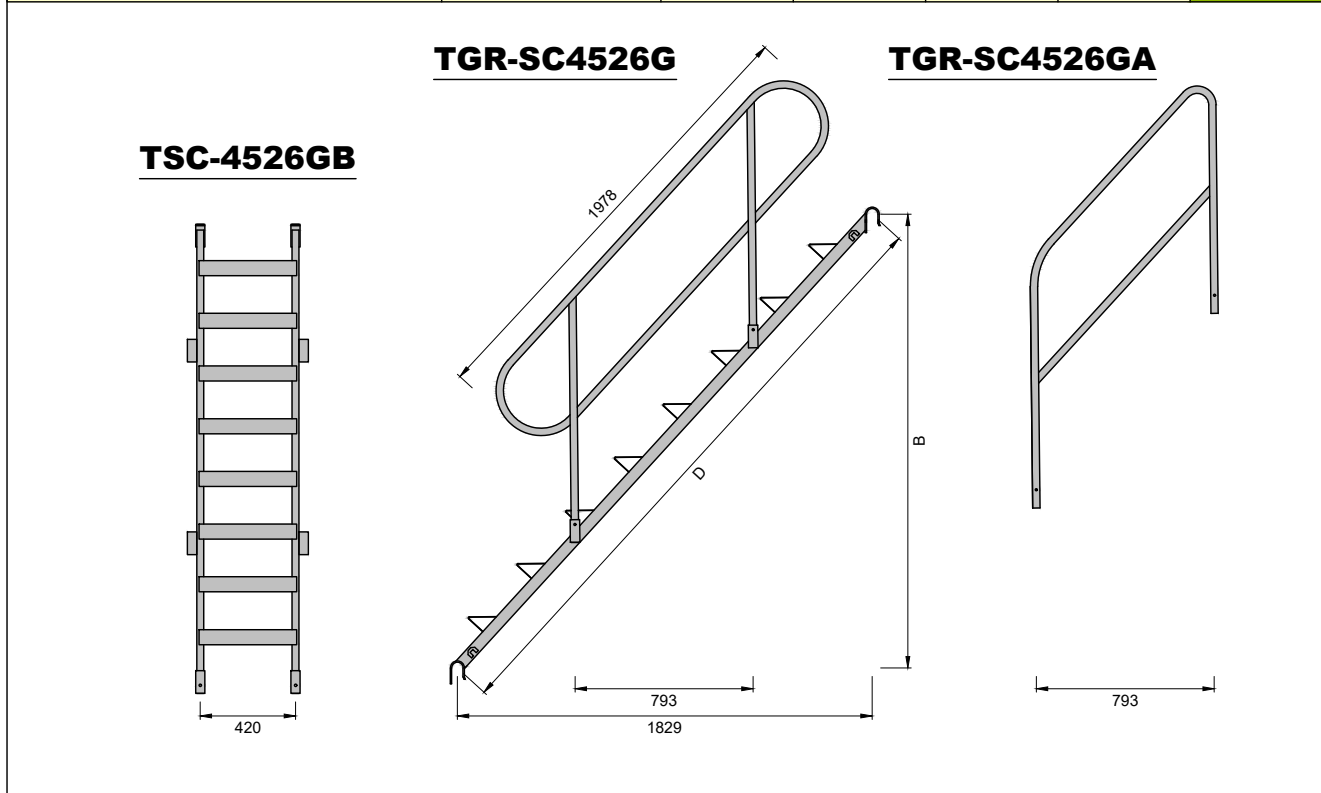
Toeboard 踢腳板	Weight	Marking
TTB-TK4FG	4.7 kg	Blue / 藍



Guardrail 護欄桿	A	Weight	Marking
TGR-1219	1219	2.2 kg	Blue / 藍
TGR-1829	1829	2.9 kg	Red / 紅
Handrail 扶手	A	Weight	Marking
TGR-2677	2677	4.7 kg	Yellow / 黃



Item Name	Code	A	B	D	Weight	Marking
Staircase 樓梯	TSC-4525GB	1829	1725	2514	22.3 kg	Yellow / 黃
Staircase 樓梯	TSC-4526GB	1829	1955	2693	24.0 kg	Green / 綠
Staircase Handrail for TSC-4526GB 樓梯扶手	TGR-SC4526G	-	-	-	5.0 kg	Orange / 橙
	TGR-SC4526GA	-	-	-	2.9 kg	Green / 綠



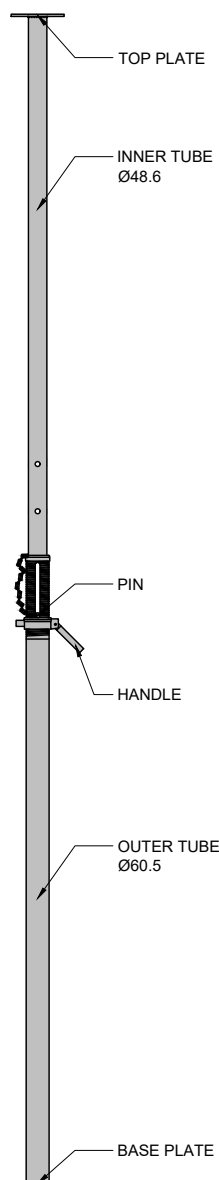
Toyo Scaffold Support for Concrete Slab

Location: Kowloon Station Development

Toyo Scaffold Support for Flyover

Location: Wing Tai Road Flyover and Improvements to Associated Road Junctions, Chai Wan





STEEL PROP

輕型單頂

STEEL PROP (Galvanized) enhances the speed and economy of your construction.

HOW TO USE

- Set the pin into the hole of inner tube.
- Adjust the height by sliding the screw position.
- Props must be absolutely vertical or they lose their load-bearing characteristics.

ADVANTAGES

- Easy to erect and dismantle.
- Easy to relocate the location and fixed.
- Less storage area required.



Steel Prop 輕型單頂	Min. Height	Max. Height	Safety Working Load	Factor of Safety	Weight	Marking
TSP-TS60G	1,850 mm	3,050 mm	25 kN	1.65	12.6 kg	Green / 綠
TSP-TS70G	2,150 mm	3,350 mm			13.8 kg	Pink / 粉紅
TSP-TS75G	2,290 mm	3,600 mm			13.8 kg	Blue / 藍
TSP-TS90G	2,700 mm	3,900 mm			16.0 kg	Red / 紅
TSP-MB85G	2,580 mm	3,940 mm			15.3 kg	White / 白

APPLICATION

STEEL PROP can be applied in any situation where a low support load is required and the area is too small to use the Frame Type Supports. It's also commonly used for reproping during construction and demolition projects.



As pictured, the Housing Society "SoUk" Estate Renovation Program used our galvanized Steel Prop for their temporary support.



Main Contractor	Contract / Project Site
China State Construction Engineering (Hong Kong) Limited	Contract No. SSA503 Design and Construction of Fire Services Training School cum Driving Taining School at Pak Shing Kok, Area 78, Tseung Kwan O
Kaden - Leader Joint Venture	Contract No. 1113 Reprovisioning of NTS Animal Management Centre and Shatin Plant Quarantine Station
Yau Lee Construction Co Ltd	Construction of Subsidised Sale Flats Development at Queen's Hill Site 1 Phase 3 and Portion of Phase 6
Penta Ocean Construction Ltd	Construction of An Integrated Rehabilitation Services Complex at Ex-Siu Lam Hospital Site, Tuen Mun
Build King - SKEC Joint Venture	Contract No. HY/2014/08 Construction of Tunnel at Yau Ma Tei, Reconstruction of a Section of The Gascoigne Road Flyover and Reprovisioning of Affected Public Facilities at Yau Ma Tei
China State - Shui On Joint Venture	Design and Constuction of Hong Kong Children's Hospital
Wing Hing Construction Co Ltd	Proposed Commerical Development at Junction of Cheung Yip Street, Sheung Yee Road and Wai Yip Street, Kowloon Bay, Kowloon - NKIL 6313
Gammon Construction Ltd	Construction of M+ Museum for the West Kowloon Cultural District Authority
Sanfield Engineering Construction Ltd	Proposed Residential Development at Hoi Fai Road, K.I.L. No. 11146
Penta Ocean Construction Ltd	New Campus for The Hong Kong Design Institute and The Reprovisioning of HK IVE Lee Wai Lee Campus
Woon Lee Construction Co Ltd	Redevelopment of St. Paul's Co-Educational Primary School Nam Fung Road, H.K.
Kaden - Leader Joint Venture	Contract No. 1126 Reprovisioning of Harbour Road Sports Centre and Wan Chai Swimming Pool
Leighton Contractors (Asia) Ltd	H2634 - Contract No. SS C505 - Construction of Liantang / Heung Yuen Wai Boundary Control Point
Paul Y. Engineering Group Limited	University of Chicago Center in Hong Kong
Wing Hing Construction Co Ltd	Proposed Redevelopment at No.2 Ng Fong Street, Sanpokong, Kowloon
Penta Ocean Construction Ltd	Proposed Grade A Office Development at No. 348 Kwun Tong Road, Kwun Tong Inland Lot No. 761, Kowloon East, Hong Kong



PECCO SUPPORT 四柱頂 QUADSHORE SUPPORT 豬籠架

ECONOMIC EFFICIENCY

1. Reduce construction cost per unit area.

FUNCTIONALITY

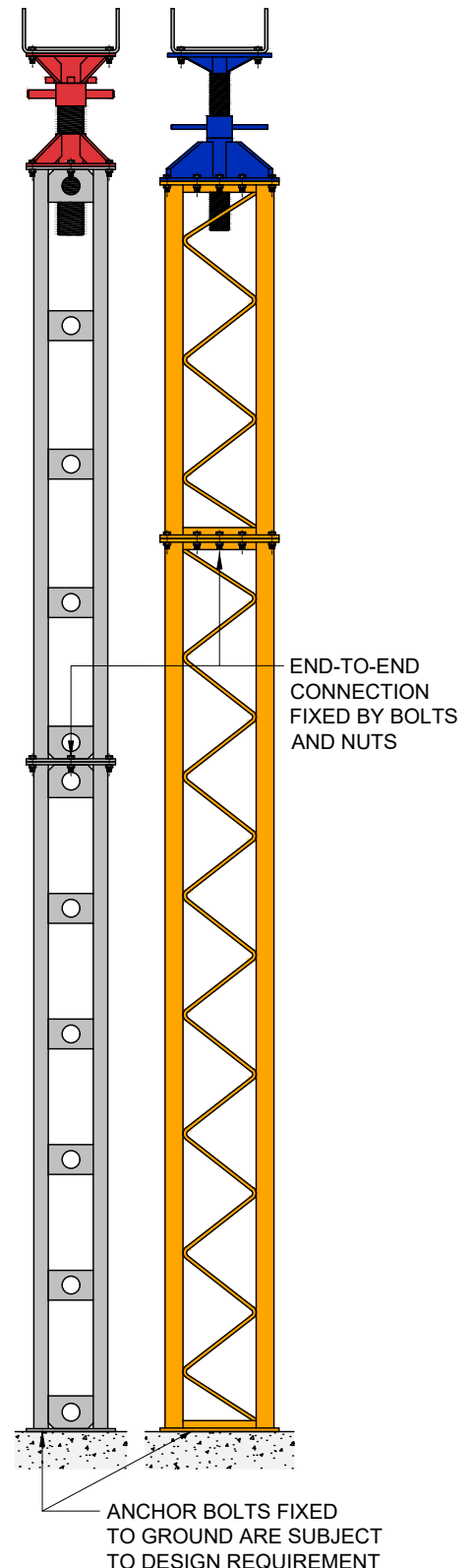
1. Designed in a perfect symmetric figure.
2. Can be easily braced by single scaffold tube and coupler.
3. A jack is commonly used on the upper and lower ends, allowing for an adjustable range from 280 mm to 580 mm (Pecco) or 298 mm to 512 mm (Quadshore).
4. Main body has various sizes depending on the required height at site - additional height can be adjusted with the combination of support jack(s) on both ends.



DESIGN NOTES

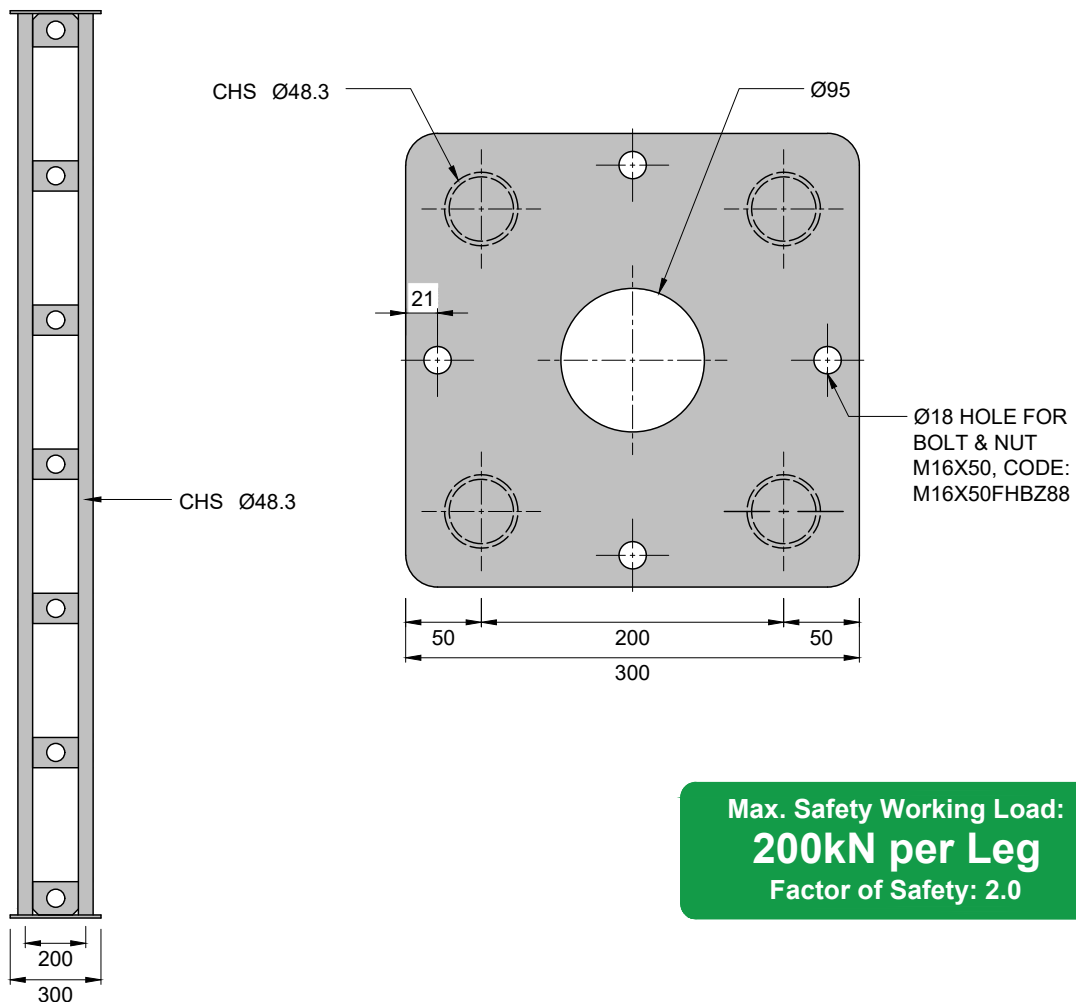
1. Pecco Support: Safety Working Load 200 kN (20 tonne)
Quadshore Support: Safety Working Load 365 kN (36.5 tonne)
2. To secure end-to-end connections, bolts and nuts should be used.
Pecco Support: 4 nos. M16 x 50 HT
Quadshore Support: 12 nos. M16 x 50 HT
3. If maximum load is applied, the following should not be allowed:
 - a. apply on eccentric load to either the square support body or jack;
 - b. having a connection between two bodies that's not perfectly flush against each other.
 - c. erecting on uneven settlement or foundation that is unable to sustain the required load.
4. Square support jack should be greased every time before used.
5. Try to prevent applying eccentric or horizontal force on and deformed or damaged square support body shall not be allowed for use.
6. Special attention should be made when the height of the erected support bodies are to increase in order to maintain overall stability of the support.
7. Bolts used to connect the square support bodies and/or jack must be tightened before continuing erection or use.

PECCO QUADSHORE



Main Body 四柱頂	Height, H	Weight	Marking
PSP-SSH025	250*	18.4 kg	Pink / 粉紅
PSP-SSH050	500*	20.0 kg	Yellow / 黃
PSP-SSH065	650	23.2 kg	Sky-Blue / 天藍
PSP-SSH075	750	24.3 kg	Purple / 淺紫
PSP-SSH100	1000*	26.7 kg	Orange / 橙
PSP-SSH125	1250	31.3 kg	Green / 綠
PSP-SSH150	1500*	34.0 kg	Blue / 藍
PSP-SSH200	2000*	41.0 kg	White / 白
PSP-SSH225	2250	45.2 kg	Brown / 啡
PSP-SSH250	2500	48.0 kg	Pink / 粉紅
PSP-SSH300	3000	55.0 kg	Red / 紅

* Common Body Length



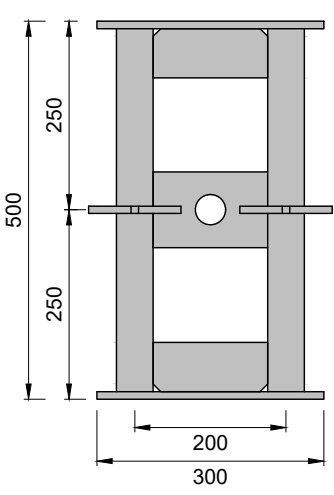
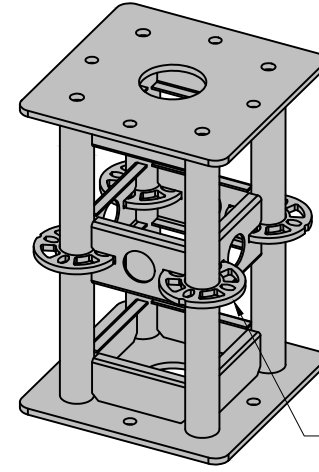
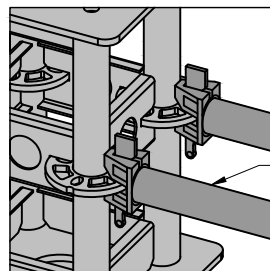
Max. Safety Working Load:
200kN per Leg
Factor of Safety: 2.0

PECCO Support Body Section Properties

Cross Section Area, A	Radius of Gyration, i	Elastic Section Modulus, Z	Second Moment of Area, I
13.932cm ²	10.13cm	141.21cm ³	1,430.5cm ⁴



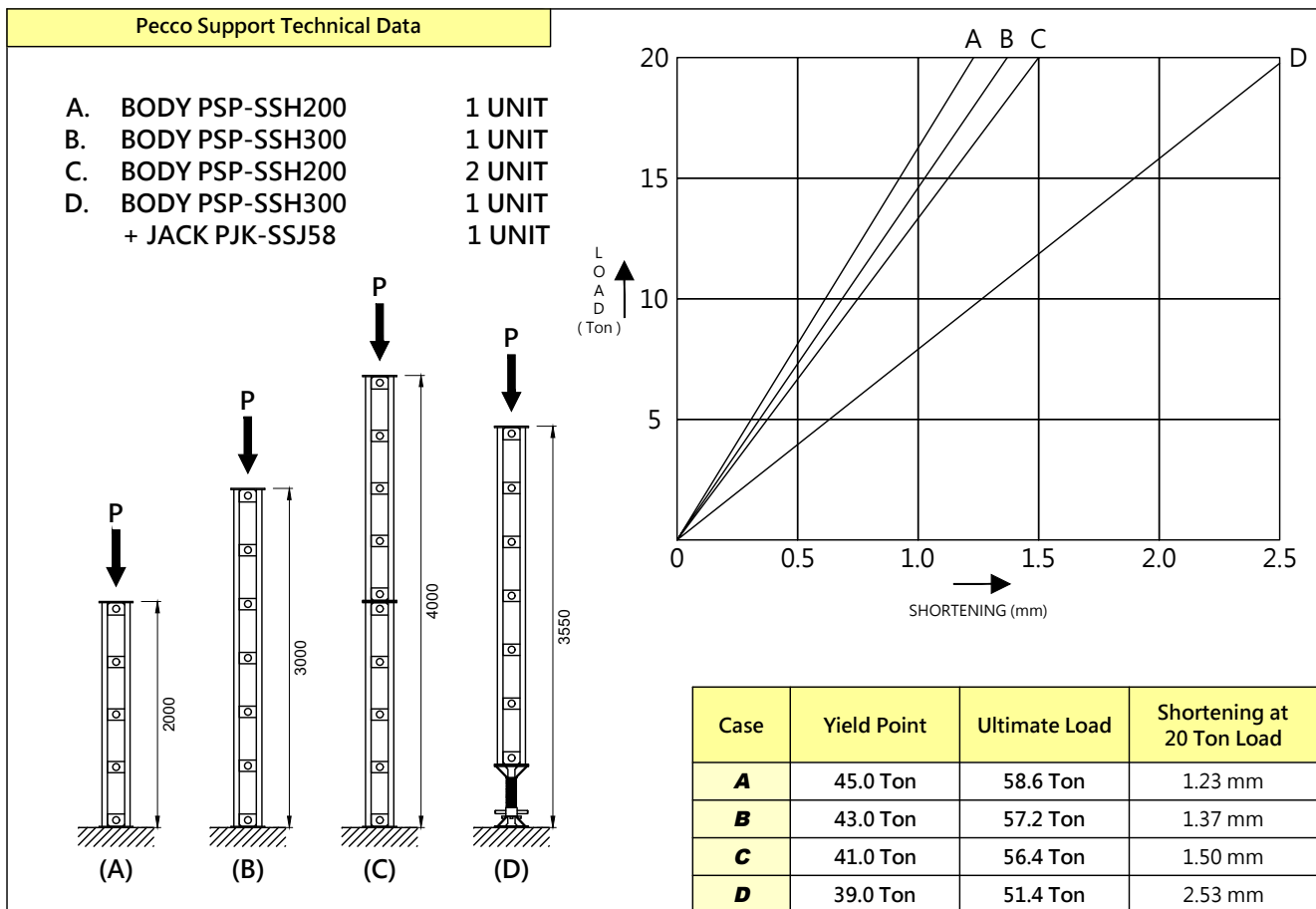
Body with Rosette 四柱頂連碟架圓盤	Height, H	Weight	Marking
PSP-SSH050R	500	27.2 kg	Yellow / 黃

Connection Detail

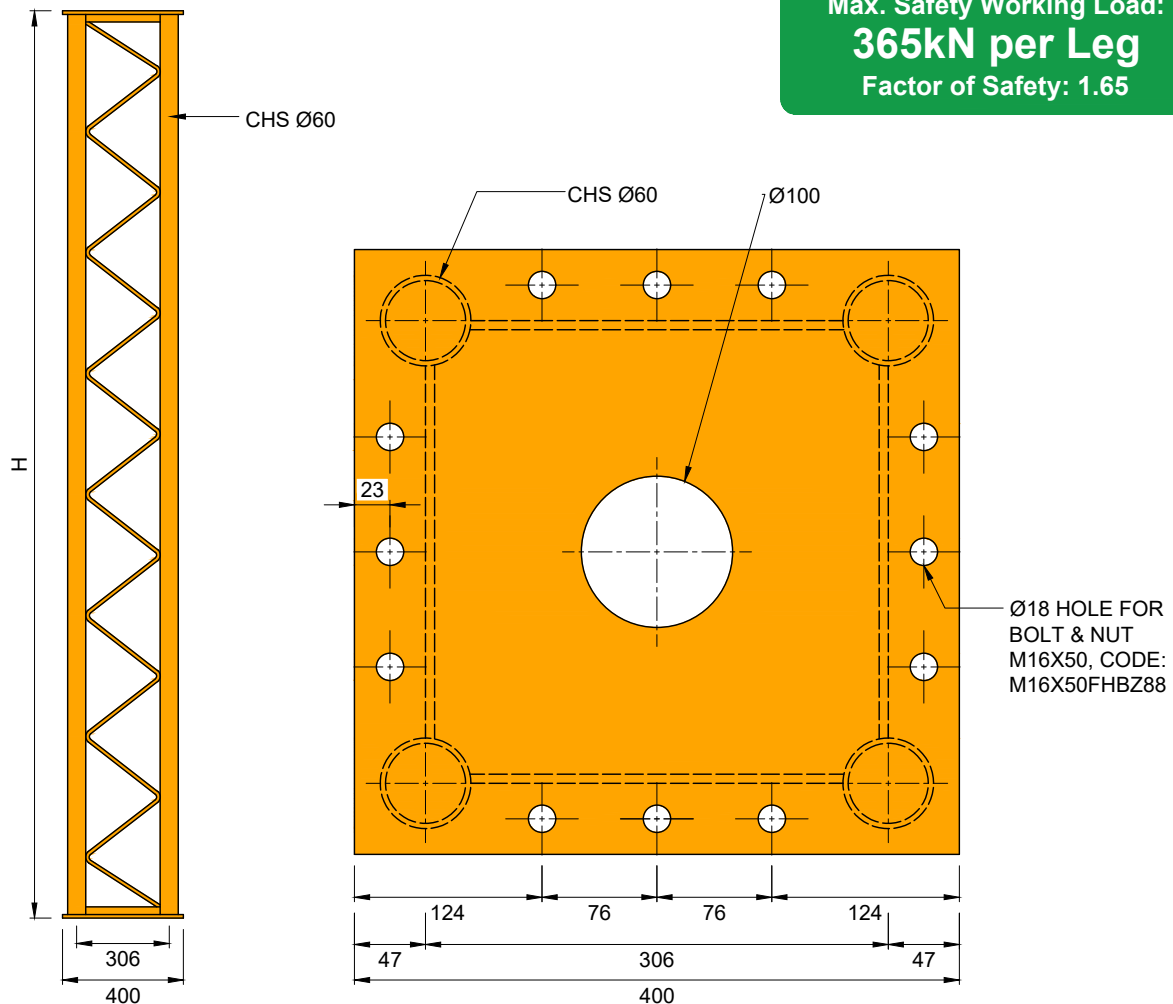
RINGLOCK ROSETTE

RINGLOCK COMPONENT AS BRACING



Main Body 豬籠架	Height, H	Weight	Marking
QSP-025	250*	42.5 kg	Pink / 粉紅
QSP-050	500*	44.4 kg	Red / 紅
QSP-060	600	47.1 kg	Sky-Blue / 天藍
QSP-080	800	52.4 kg	Purple / 淺紫
QSP-085	850	53.5 kg	Yellow / 黃
QSP-100	1000*	57.4 kg	Orange / 橙
QSP-120	1200	62.5 kg	Green / 綠
QSP-150	1500*	70.5 kg	Blue / 藍
QSP-200	2000*	82.8 kg	White / 白
QSP-300	3000	108.4 kg	Red / 紅

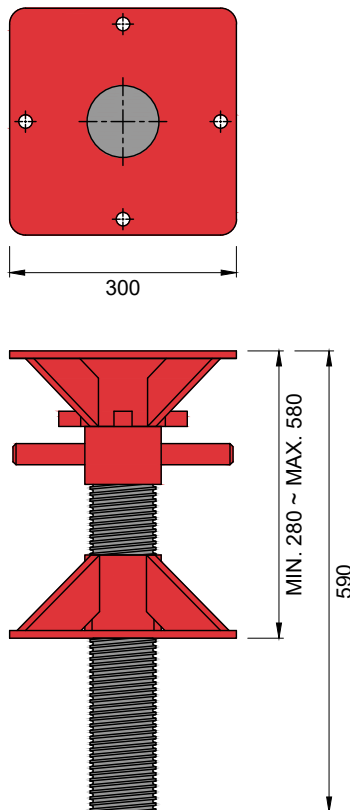
* Common Body Length

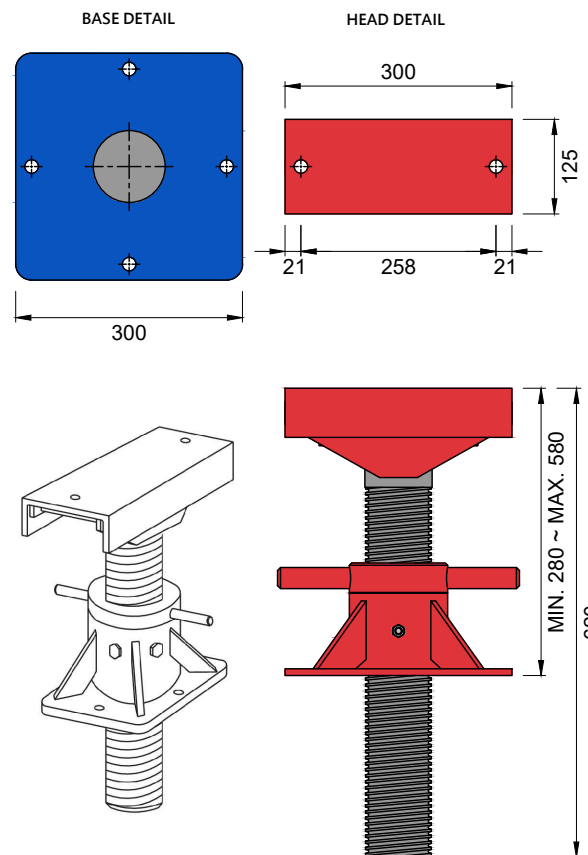


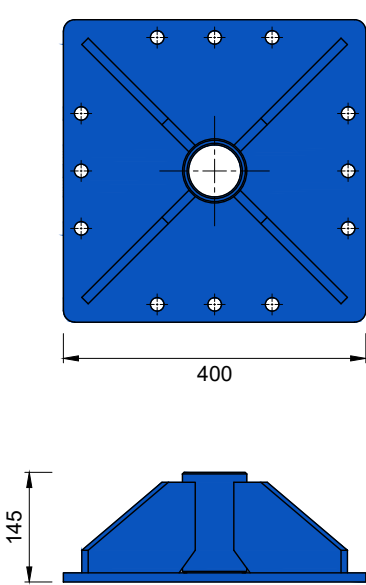
QUADSHORE Support Body Section Properties

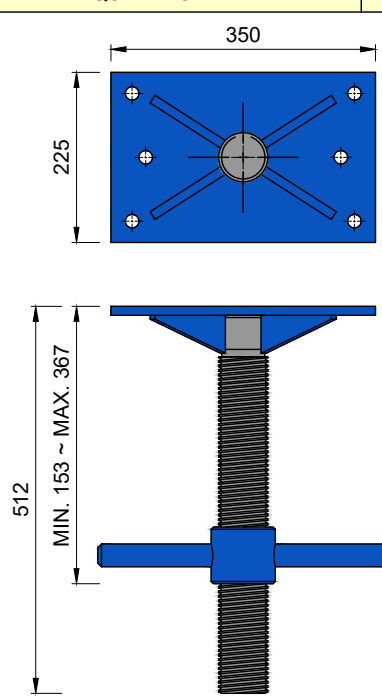
Cross Section Area, A	Radius of Gyration, i	Elastic Section Modulus, Z	Second Moment of Area, I
24.84cm ²	15.13cm	379.23cm ³	5688.52cm ⁴



PECCO Support Jack 四柱頂重積	Weight
PJK-SSJ58	30.5 kg
	

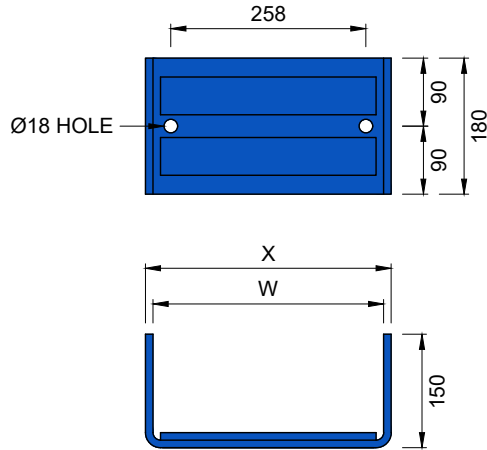
PECCO Support Head Jack 四柱頂頂積	Weight
PJK-NSJ30	37.9 kg
	

QUADSHORE Jack Adaptor 豬籠架底座	Weight
QJK-JAD	23.0 kg
	

QUADSHORE Flat Head Jack 豬籠架平頂積	Weight
QJK-FHJ	23.3 kg
	

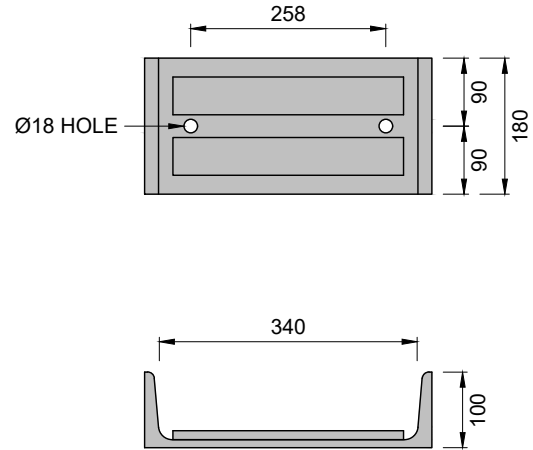


U-Head U形頭	W	X	Weight
PJK-SSU31	305	325	11.3 kg
PJK-SSU35	325	345	11.8 kg



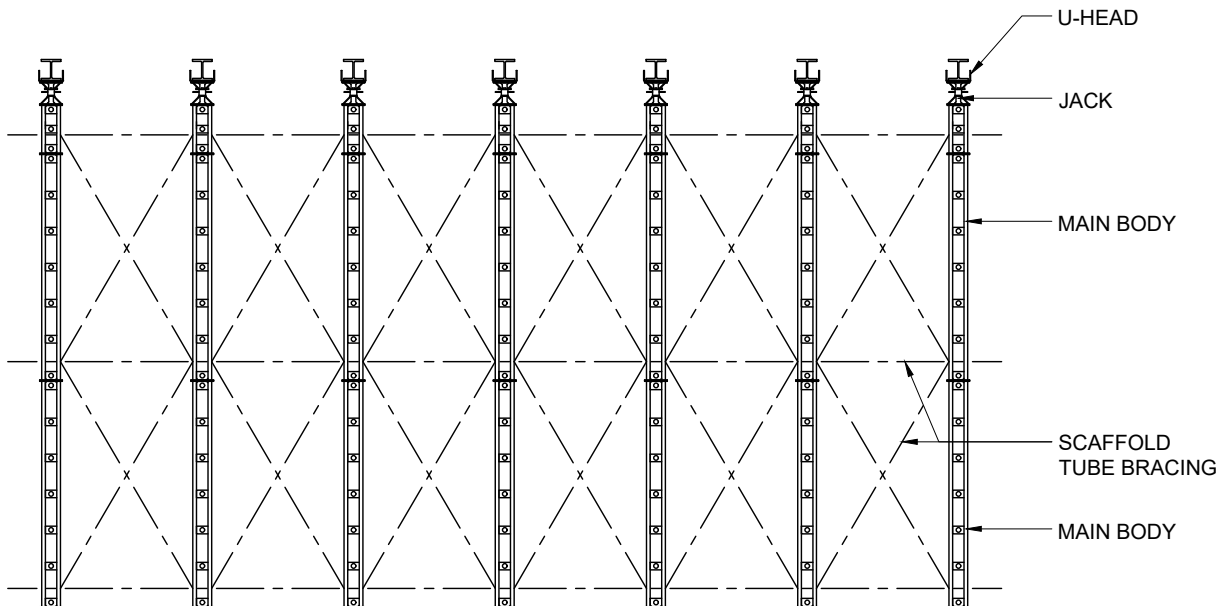
- Suitable for both PECCO or QUADSHORE support system

U-Head U形頭	Weight
PJK-SSU38	13.1 kg



- Suitable for both PECCO or QUADSHORE support system

General Bracing Configuration 一般支撐組合示例



GENERAL RULES FOR BRACING

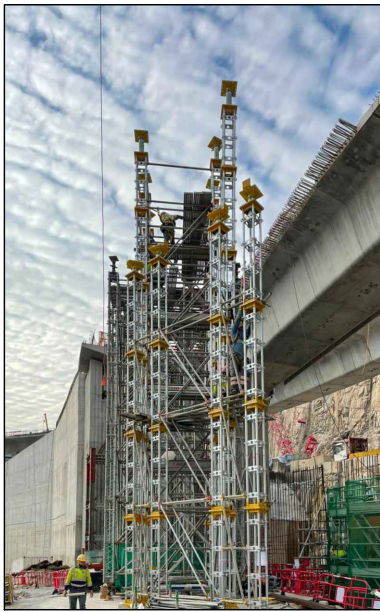


RINGLOCK GIANTSHORE

碟型組合大力頂

PATENT NO: HK30052164

Introducing Canyon's latest heavy duty supports, designed to optimize overall construction cost per unit area while withstanding a max. S.W.L. of 580 kN. The specialty of the Giantshore's design is it provides built-in standard Ringlock rosettes on the vertical tubes so that standard Ringlock horizontal and diagonal components can be conveniently used



as connecting members (scaffold tubes and couplers may still be used for non-standard lengths). The Ringlock rosette component on the Giantshore allows for members to be connected on all four sides, which can efficiently form a self-standing tower support.



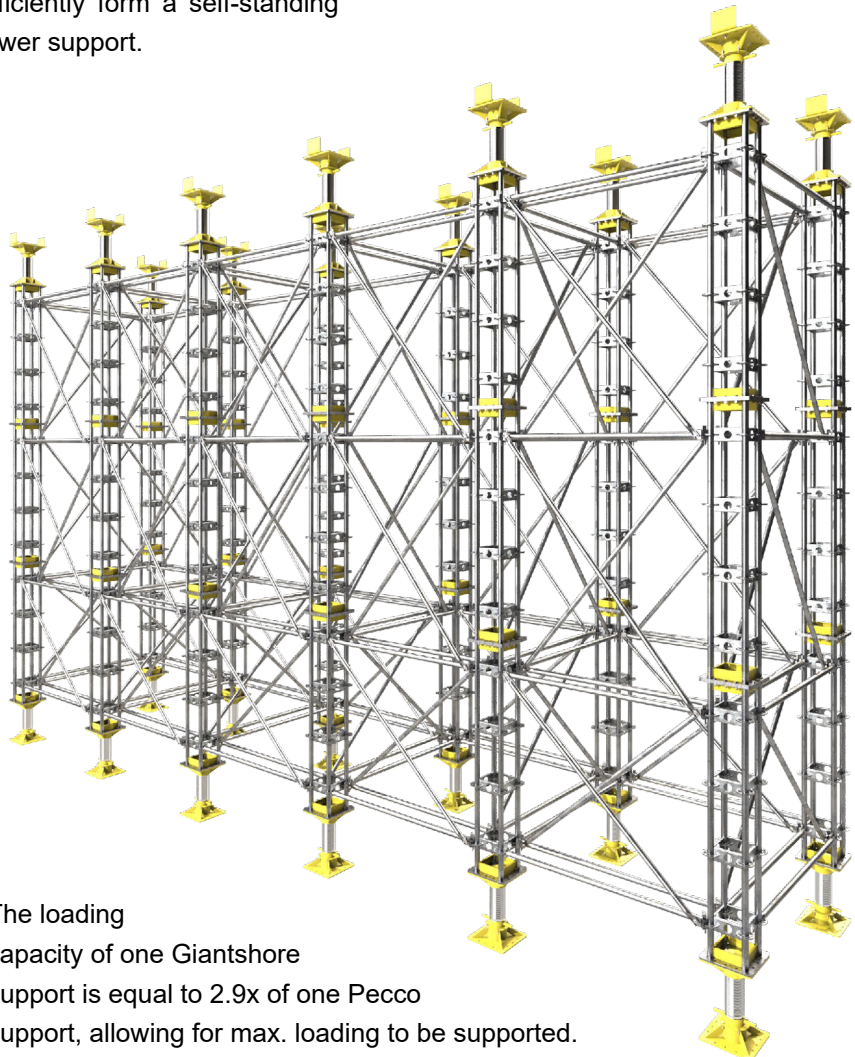
Once the Ringlock Giantshore tower is completely erected, fine tune adjustments may be made in preparation for the bridge construction.

The versatility of the Ringlock Giantshore allows for standard working platform to be erected upon completion of the tower.



Project: Contract No. NE/2015/01 – Tseung Kwan O to Lam Tin Tunnel – Main Tunnel and Associated Works
Client: Leighton-China State Joint Venture

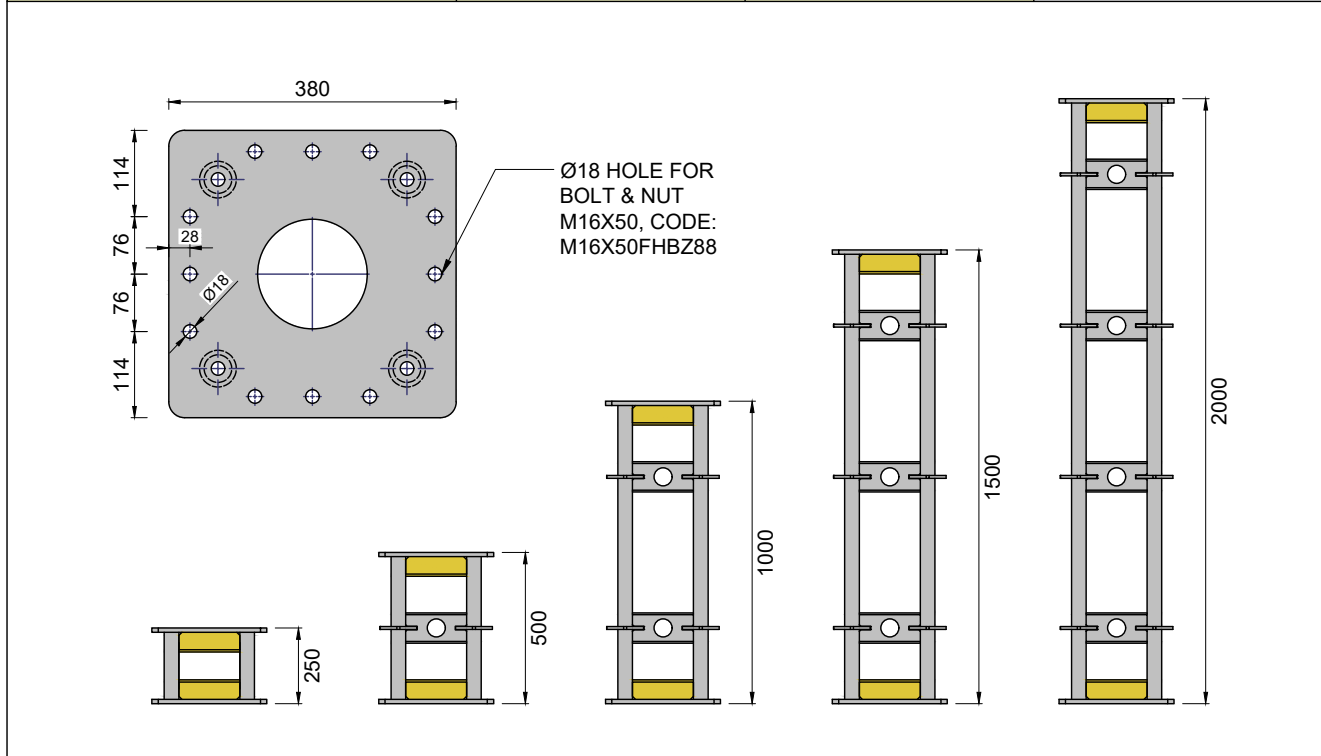
Max. Safety Working Load:
580kN per Leg
Factor of Safety: 1.65



The loading capacity of one Giantshore support is equal to 2.9x of one Pecco support, allowing for max. loading to be supported.

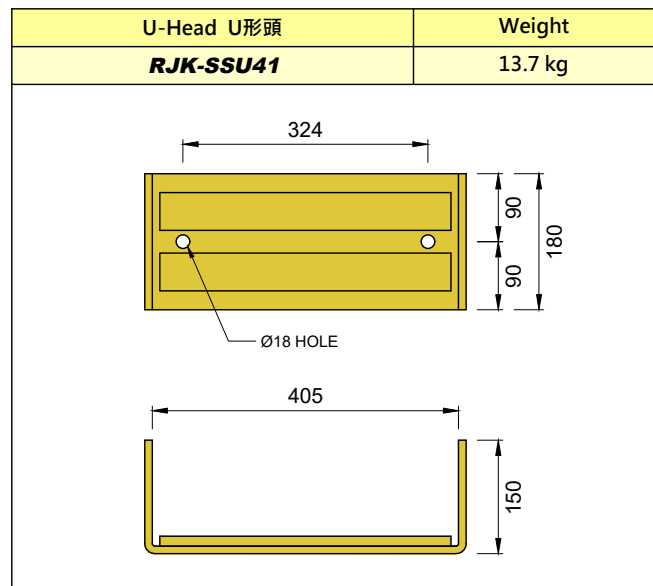
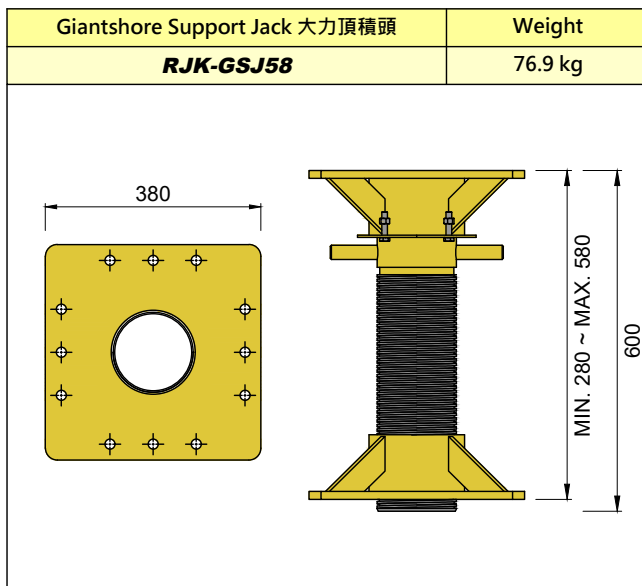


Main Body 大力頂	Height, H	Weight	Marking
RSP-GS025	250	38.7 kg	Pink / 粉紅
RSP-GS050	500	54.6 kg	Yellow / 黃
RSP-GS100	1000	71.7 kg	Green / 綠
RSP-GS150	1500	88.8 kg	Orange / 橙
RSP-GS200	2000	105.9 kg	White / 白



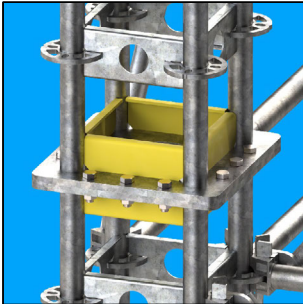
RINGLOCK Giantshore Body Section Properties

Cross Section Area, A	Radius of Gyration, i	Elastic Section Modulus, Z	Second Moment of Area, I
31.893cm ²	12.59cm	404.49cm ³	5,056.12cm ⁴

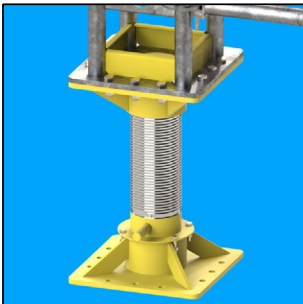




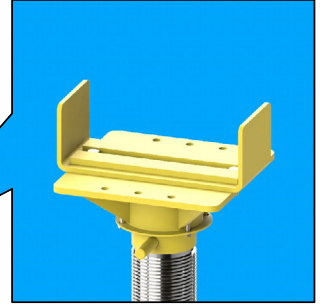
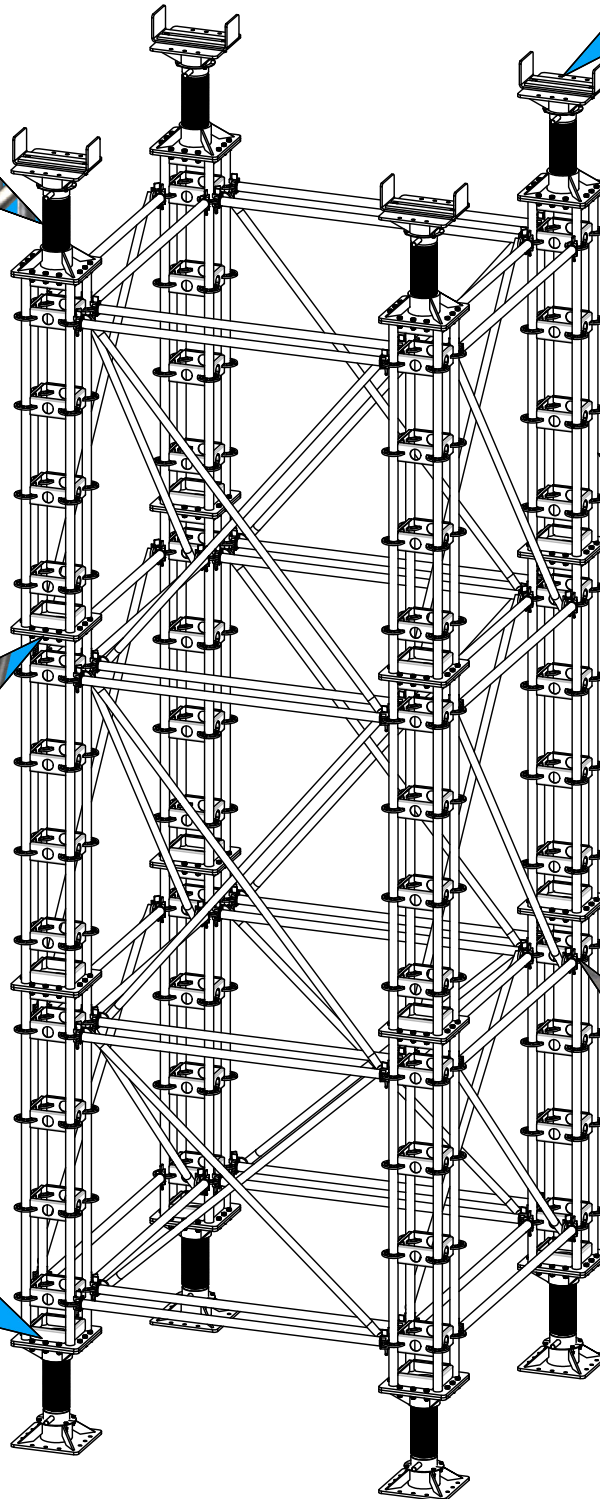
The Giantshore Jack is designed to allow for 280 ~ 580mm adjustable extension to suit the construction site's requirement; jacks should be greased before every use.



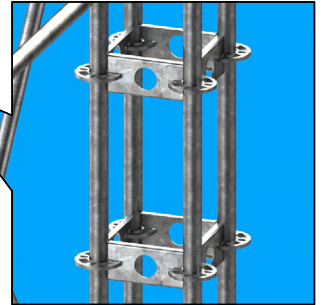
To secure end-to-end connections, 12 nos. of M16 (HT) bolts and nuts should be used; be sure to tighten before continuing erection or use.



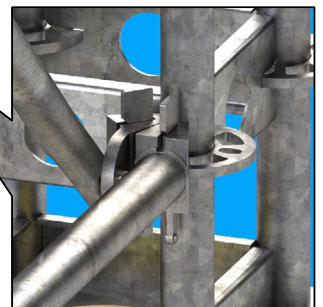
Bottom jack optional subject to site requirements. Anchor bolts fixed to ground are subject to design requirement.



The U-head shall be secured to the support jack by 2 nos. of M16 bolts and nuts, and provides clear width of 405mm for I-beam or steel bearer.



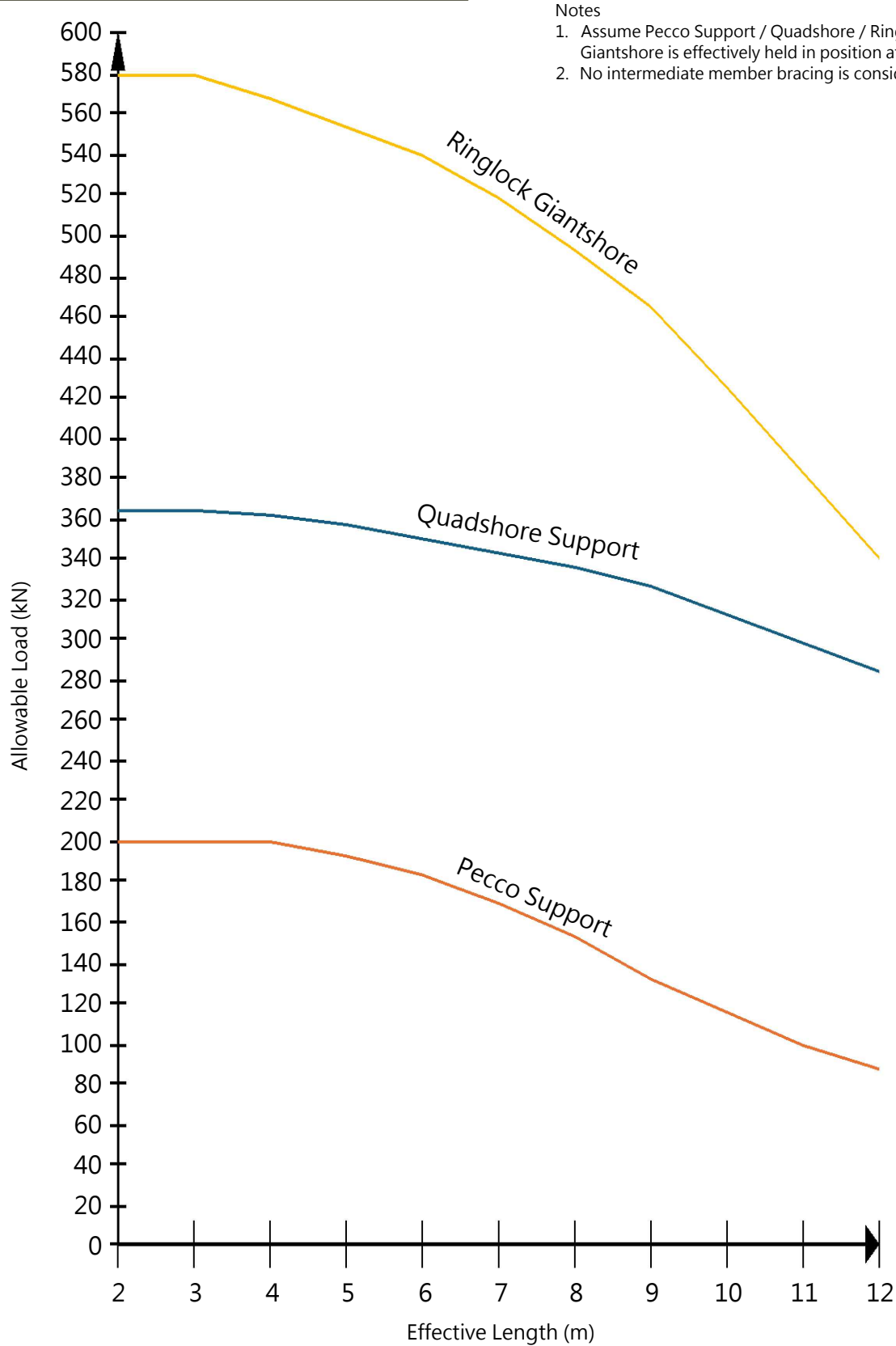
Standard Ringlock rosette spacing at 500mm provided on vertical tubes.



The Ringlock rosette design allows for both horizontal and diagonal bracing to be efficiently connected.



Pecco Support / Quadshore / Ringlock Giantsshore Load Chart

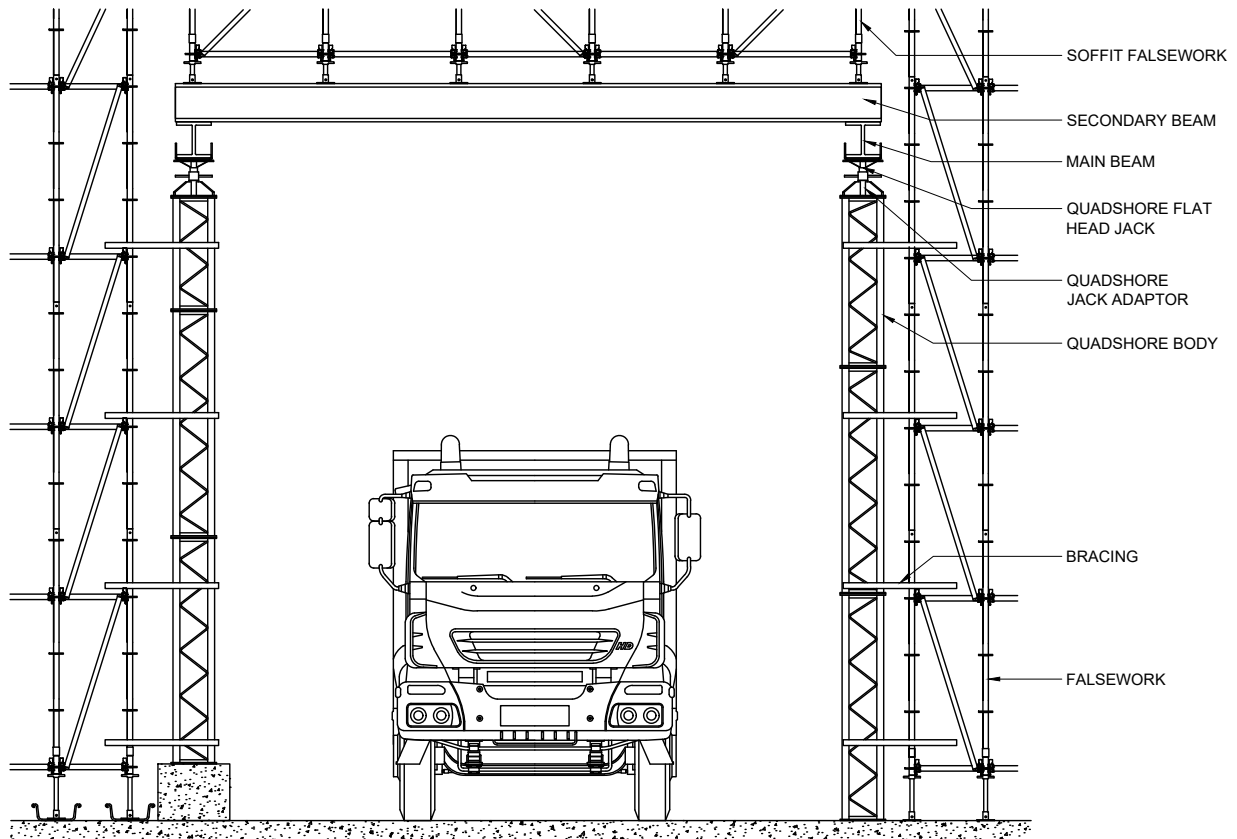


Notes

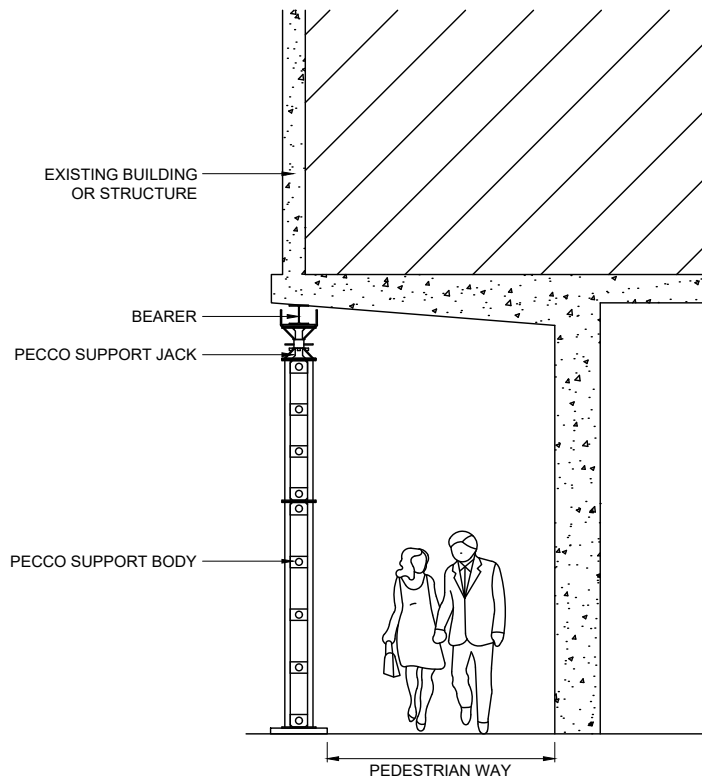
1. Assume Pecco Support / Quadshore / Ringlock Giantsshore is effectively held in position at both ends.
2. No intermediate member bracing is considered.



Temporary Vehicular Opening



Backpropping



Main Contractor	Contract / Project Site
Able Contractors Limited	Contract No. SS F501 Design and Construction of Redevelopment of Queen Mary Hospital at Pok Fu Lam Road, Hong Kong, Phase 1 - Main Works
China State Construction Engineering (Hong Kong) Ltd	Construction of Public Rental Housing Development at Shatin Area 52 Phases 3 & 4
Gammon Construction Ltd	TKW/1/002 - Redevelopment at Ma Tau Wai Road / Chun Tin Street Project
Gammon Engineering & Construction Co Ltd	Residential Development at KIL 11257, Sheung Shing Street, Ho Man Tin
Gammon Engineering & Construction Co Ltd	Residential Development at TPTL No. 214, Fo Yin Road, Pak Shek Kok, Tai Po
Leighton Contractors (Asia) Ltd	H2634 - Contract No. SS C505 - Construction of Liantang / Heung Yuen Wai Boundary Control Point
New World Construction Company Limited	New World Centre Remodeling
Nishimatsu Construction Co Ltd	Contract 902 Nam Fung Tunnel and Ventilation Buildings
Hip Hing Construction Co Ltd	Proposed Residential Development at Lohas Park Package 5, Tseung Kwan O
Chun Wo Construction Co Ltd	Design and Construction of Redevelopment of Kwai Chung Hospital (Phase 1)
Shui On Building Contractors Ltd	Construction of Public Rental Housing Development at Shek Kip Mei Estate Phase 3, 6 & 7
Yau Lee Construction Co Ltd	Contract No. SSD502 Design and Construction of Kwun Tong Staff Quarters at 4 Tseung Kwan O Road, Kowloon
CR Construction Company Limited	Building Construction - Composite Development Project in Kwun Tong
China Overseas Building Construction Ltd	Proposed Residential Development at S.T.T.L. 605, Lok Wo Sha Lane, Ma On Shan
Unistress Building Construction Ltd	Carcass Works Contract for URA Hai Tan Street / Kweilin Street and Pei Ho Street Development at NKIL 6506, Sham Shui Po, Kowloon
Dragages Hong Kong Limited	Contract no. CV/2012/08 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works
Leader Joint Venture	Contract 1106 Diamond Hill Station Extension



ALUMINIUM LORRY ACCESS LADDER

貨車上落鋁梯

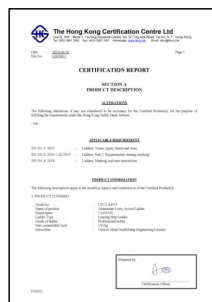
PATENT NO: HK1238865

CERTIFIED TO BS EN 131

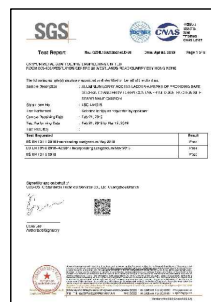
Providing a reliable & lightweight solution to all your lorry access needs. The ladder is designed for safety & convenience so that workers can easily access the lorry container by installing it on any standard lorry sideboard.



Item Code	Steps	H	D	L	Weight
LSC-LA4513	5	1250	1325	1533 ~ 1908	9.2 kg
LSC-LA4515	6	1500	1575	1783 ~ 2158	9.9 kg



Canyon's ladder has been tested per BS EN 131 and obtained the Hong Kong Safety Mark certification.



ADVANTAGES 優點

SAFETY 安全:

Ladder's built-in handrail protects workers from stumbling or falling off during use. 貨車上落鋁梯已內置扶手可防止工人在上落貨車的過程中絆倒或掉落。

FLEXIBILITY 靈活:

Designed with an adjustable lock, the ladder can be fitted and installed on a range of lorry containers (up to 670 mm). 梯子設計有可調節的鎖，可以安裝在各類貨車車斗上(最大 670 毫米)。

DURABILITY 耐用:

Assured strength & sturdiness with its aluminium alloy. 鋁合金擁有高強度和耐用性。

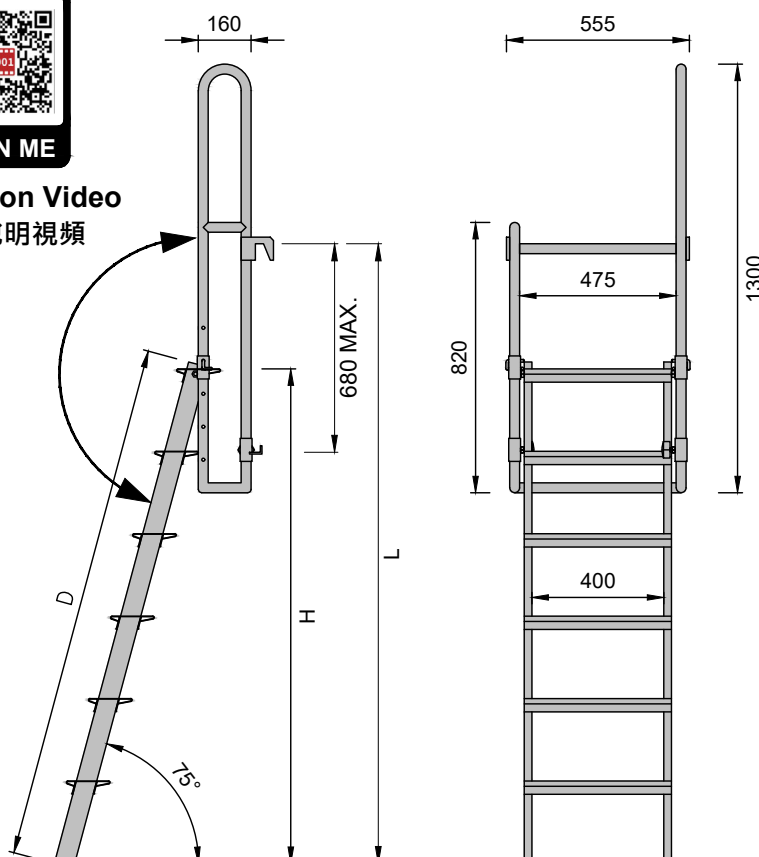
LIGHTWEIGHT 輕量:

Weighing under 10 kg, the ladder provides convenient and efficient handling while ensuring safety for workers during transport and installation. 重量在 10 公斤以下，梯子搬運便捷及高效，同時確保了運送和安裝過程中工人的安全。



SCAN ME

Instruction Video
使用說明視頻



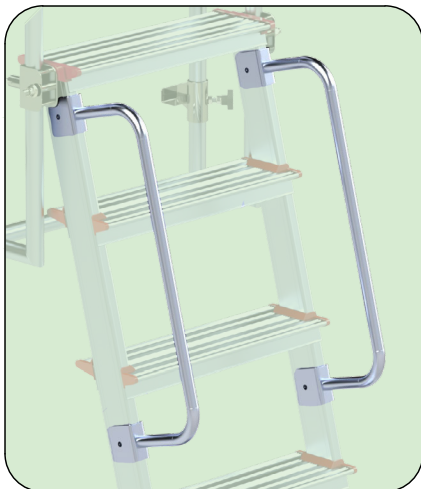
With the growing popularity and necessity for the Aluminium Lorry Access Ladder on construction sites, many clients advised Canyon of additional safety requirements they encountered. Given Canyon's existing customized design service, it would only be fitting to provide further safety design enhancements for the Aluminium Lorry Access Ladder. Please note that lead time for these special customized parts take up to 4-6 weeks.

DOUBLE HANDRAIL POST



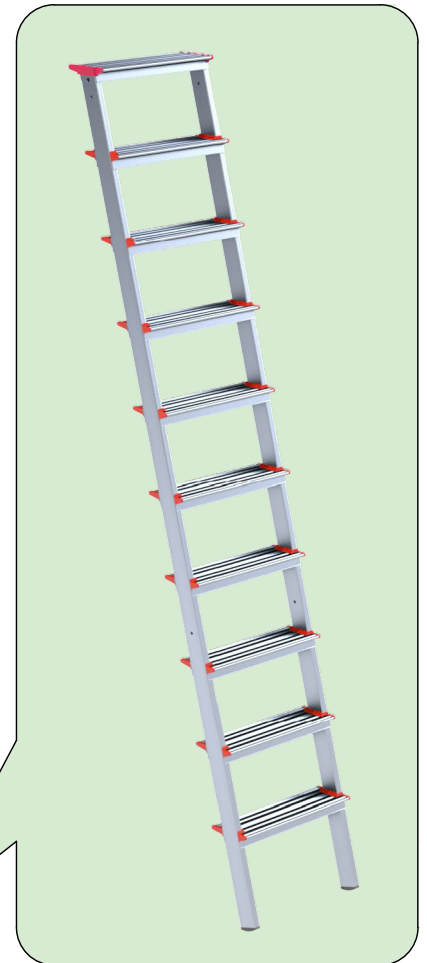
Insisted by some site requirements, double handrails can be customized to provide extra safety when climbing in/out between the lorry and step ladder.

HANDRAIL FOR LADDER

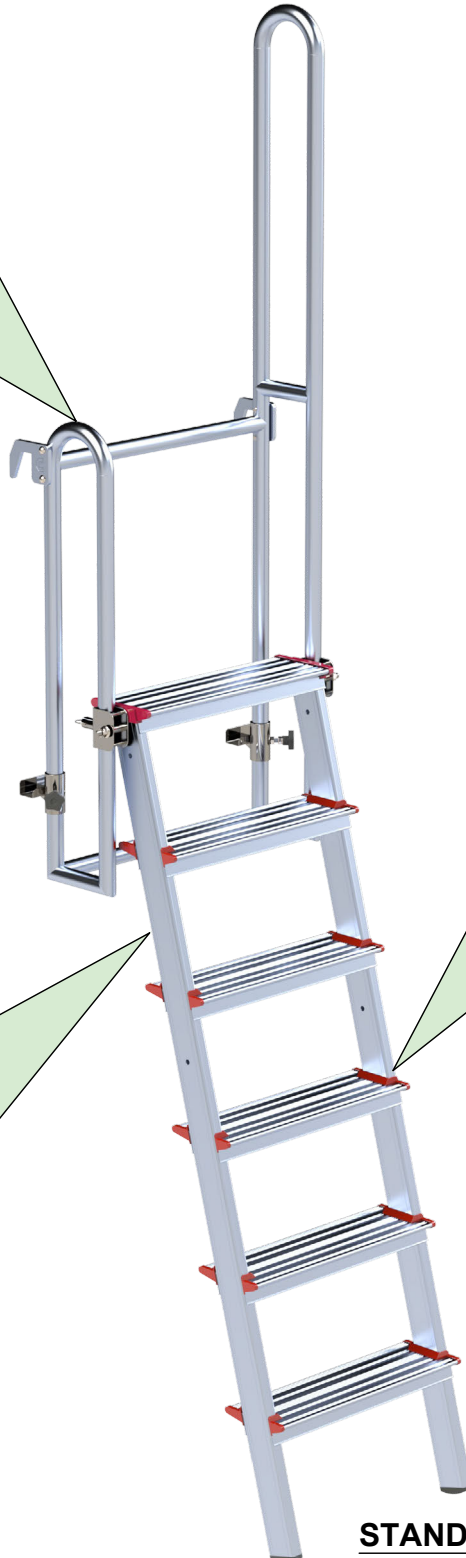


Providing extra safety for workers when climbing the stepladder, handrails (1 or 2) can be customized on the sides of the stepladder.

2-10 STEPS LADDER

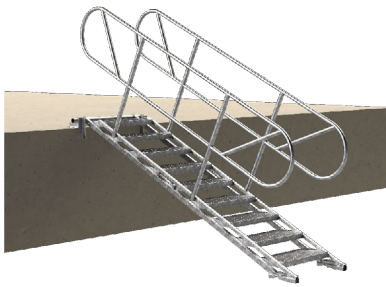


Depending on the height requirement at site, the number of steps on the stepladder can be modified between 2 to 10 steps.



**STANDARD ALUMINIUM
LORRY ACCESS LADDER**





ADJUSTABLE STAIRCASE 可調較金屬樓梯

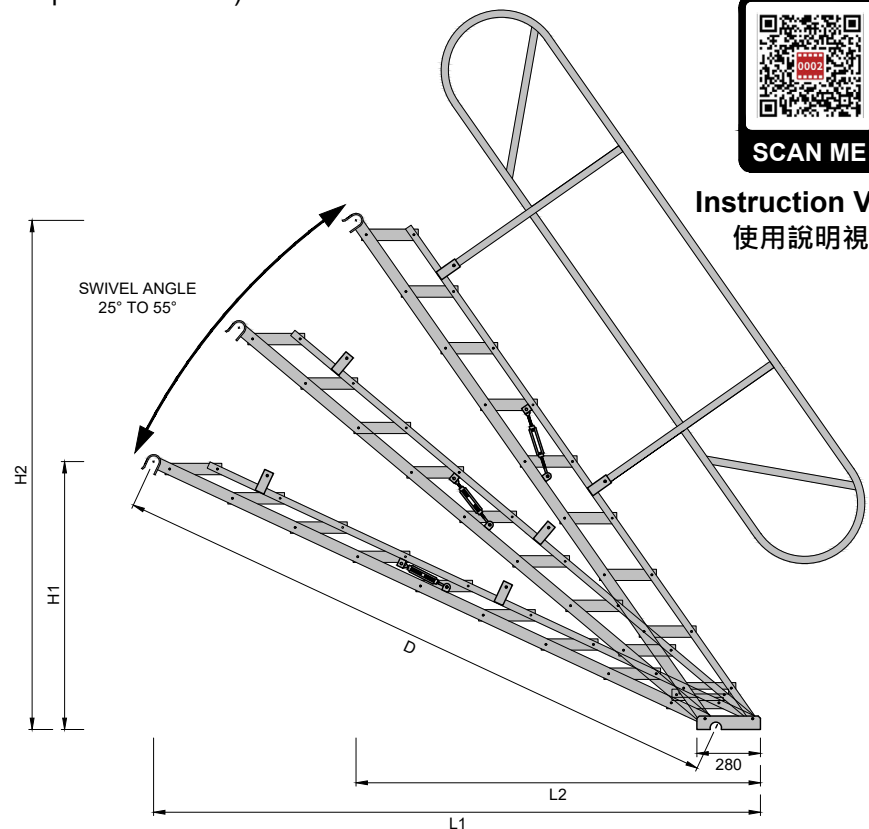
PATENT NO: HK30000557

Meticulously designed by CMS Engineering, this adjustable staircase allows for a quick and automatic set up for a horizontal step staircase with any existing fixed scaffold structure or materials. Its lightweight design only requires two people to handle the staircase's installation and dismantle at the construction site. These staircases are available in 6-step and 9-step configurations, but custom lengths ranging from 2-step (915 mm) to 10-step (3045 mm) are available upon request. For safety provisions, compatible handrails are also designed to pair with the staircases (except custom sizes).



SCAN ME

Instruction Video
使用說明視頻



Adjustable Staircase 可調較金屬樓梯								Handrail 樓梯扶手		
Angle Item code	25°		55°		D	Nos. of Steps	Step Width	Weight	Item Code	Weight
	L1	H1	L2	H2						
RSC-AS6018G	1846	794	1259	1495	1828	6	600	41.4 kg	RGR-AS6018S	13.2 kg
RSC-AS6027G	2676	1181	1783	2244	2743	9		56.5 kg	RGR-AS6027S	16.4 kg
Adjustable Staircase 可調較金屬樓梯 (Customized Model, 可訂製之款式)								Handrail 樓梯扶手		
RSC-AS6006G #	741	279	559	496	608	2	600	21.2 kg	-	-
RSC-AS6009G #	1017	408	734	745	913	3		26.3 kg	-	-
RSC-AS6012G #	1294	536	909	995	1218	4		31.3 kg	-	-
RSC-AS6015G #	1570	665	1084	1245	1523	5		36.4 kg	RGR-AS6015S #	10.0 kg
RSC-AS6021G #	2123	923	1433	1745	2133	7		46.4 kg	RGR-AS6018S	13.2 kg
RSC-AS6024G #	2399	1052	1608	1995	2438	8		51.5 kg	RGR-AS6027S	16.4 kg

No existing stock available, lead time for MADE-TO-ORDER items is 6-8 weeks.



An innovative interlocking bar-ring mechanism allows the staircases to be continuously stacked while remaining safe and stable for the operator.



Folded flat for ease of transport.



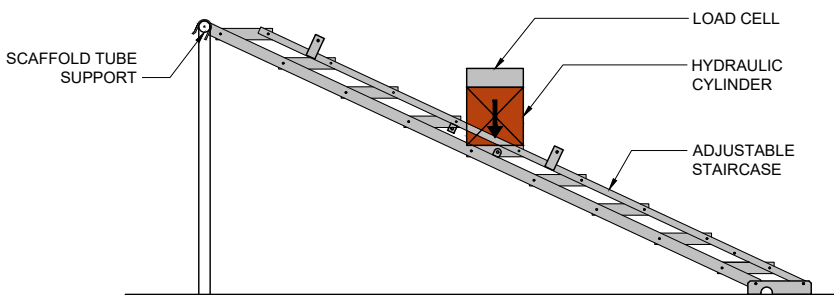
Bar-ring mechanism for installation of continuous staircases.

ADVANTAGES 優點

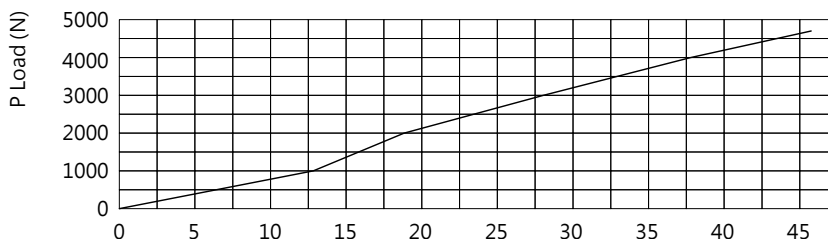
- Double Handrails are available on both sides
兩側均可安裝扶手
- Whatever the angle of the staircase, the steps will remain horizontal
踏級可以根據樓梯的角度保持水平
- A manual locking mechanism is designed to engage once the staircase is at the correct angle
手動鎖設計可保證樓梯處於正確的角度
- Made of steel with a standard galvanized finish for durability
由標準的鍍鋅鋼製成，具有耐用性
- The staircase can be folded flat for ease of transport
樓梯可以折疊平放，便於運輸
- Staircase can be quickly and easily erected on site by two operators
只需要兩名工人便可以在現場快速地搭建樓梯

SAFETY NOTE

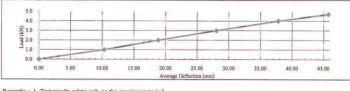
An important safety feature of this adjustable staircase is that the bottom rung governs the angle adjustment. Once the desired angle is determined, the two safety locks on both sides of the staircase need to be tightened to ensure stability.



Load Testing Setup



Load-deflection curve

CASTCO		佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.	
Date of issue: 25-12-2013		Client Ref. No.: 97011127-005	
Page: 1 of 4 pages		Client's Ref. No.: ---	
Details as specified by client: ---		Contract No.: ---	
Job title: ---		Contract No.: ---	
Sample Description: Adjustable Staircase RSC-AS0202		Type: ---	
Sample ID: 97011127-005-1		No. of tests: 9	
Nominal Size: Size 2'x4ft x width 400mm		No. of steps: 9	
Manufacturer: Canyon Metal Scaffolding Engineering Ltd.			
Laboratory Ref. No.: ---		Date of test: 27-11-2013	
Date of sample received: 27-11-2013			
Specimen no.	Load (kN)	Average deflection from dial gauge (mm)	
ST0131127-005-1	1.0	10.33	
	2.0	20.66	
	3.0	30.99	
	4.0	41.32	
	5.0	51.65	
	6.0	61.98	
Ultimate load (kN): 6.0		Failure mode: Buckling of adjustable staircase	
			
Remarks: 1. Test results relate only to the specimens tested. 2. Sketch of the testing set-up attached with this report. 3. Before and after test photos attached with this report. 4. The sample gave good results as required by the client.			
Checked by: YUNG YAI		Certified by: ---	
Address: 111, LAMARCA ROAD, HONG KONG 香港新界安泰路111號 80, On Chun Street, Tseung Kwan O, New Territories, HONG KONG 新界將軍澳新翠街80號 Tel: (852) 2567 1611 Fax: (852) 2567 1611 Email: general@castco.com.hk Website: www.castco.com.hk			

Test report of adjustable staircase is available.



SHEET PILE GUARD POST

臨時圍板護欄

PATENT NO: HK30036221

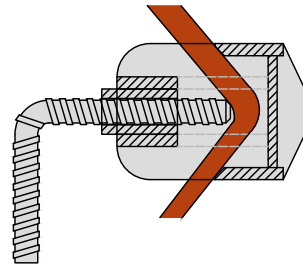
Innovative design developed by CMS Engineering, this guard post is suitable for assisting all your construction needs.



It is recommended to install the clamp on corner of sheet pile to increase rigidity for the guard post. 建議將夾具安裝在圍板的拐角處，可以增加圍板護欄的剛度。

Sheet Pile Guard Post 臨時圍板護欄			
Item Code	Length	Claw Thk.	Weight
TGR-SPGP	1200 mm	Max. 25 mm	6.4 kg
Sheet Pile Guard Post 臨時圍板護欄 (Customized Model , 可訂製之款式)			
TGR-SPGP50A #	1200 mm	Max. 50 mm	6.6 kg
TGR-SPGP80A #	1200 mm	Max. 80 mm	6.8 kg

No existing stock available, lead time for MADE-TO-ORDER items is 6-8 weeks.



View from top of guard post, dotted lines represent stand that clamp securely grips on; cross section of guard clamp are indicated in drawings.



ADVANTAGES 優點

- Strong and durable design
堅固耐用
- Clamp design ensures safety to hold up guard post
設計安全
- Does not require additional accessories
無小配件，方便搬運
- Can be combined with scaffold tube and coupler to construct guardrails
配合喉通及手扣可作護欄使用



Instruction Video
使用說明視頻

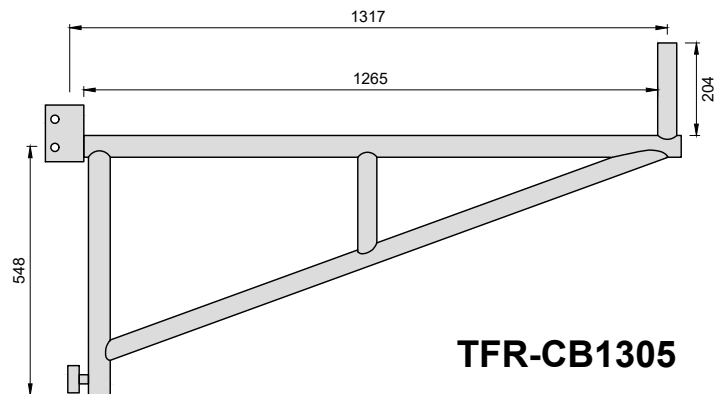
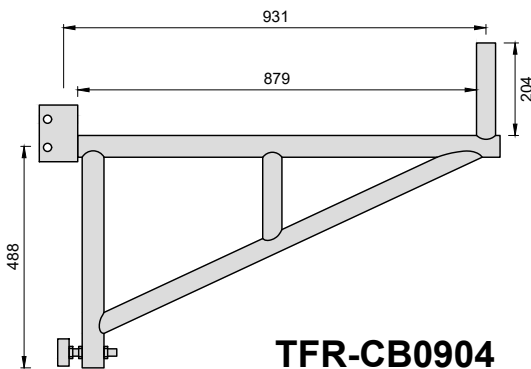
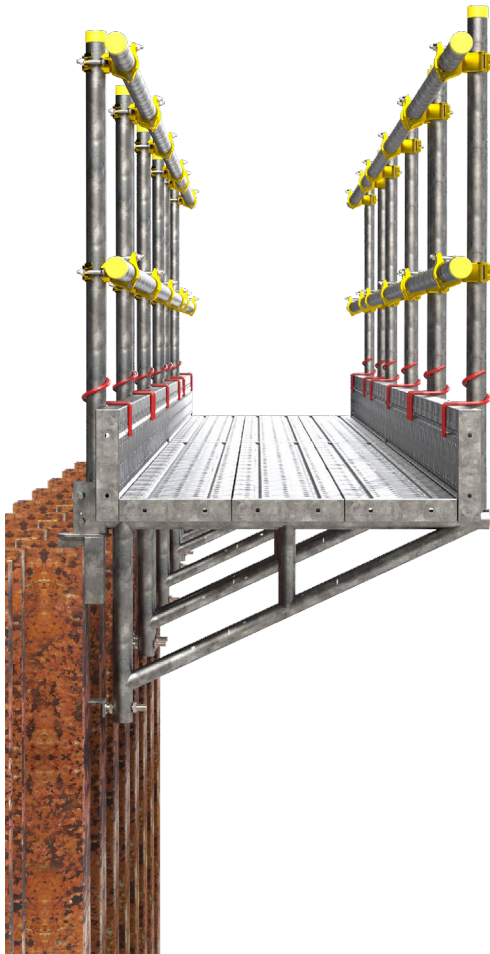


CANTILEVER SUPPORT BRACKET

懸臂架

ADVANTAGES 優點

- Cantilever support bracket designed to hold up steel plank for walking in construction zones
懸臂架配合橋板可作通道用
- Strong and sturdy design
堅固耐用
- Scaffold tube joint pin embedded at the end of support bracket to install scaffold tubes as temporary guardrail
預設駁心可安裝喉通作通道護欄
- Easy installation, no hand tools are required
設計簡便·無須任何工具安裝
- Design of cantilever bracket allows for loading capacity of 1.5 kN/m² on the extended platform
擴展平台在懸臂架上的設計承載能力為 1.5 kN/m²



Description	Cantilever Support Bracket 三角支撐	
Item Code	TFR-CB0904	TFR-CB1305
Length	931 mm	1317 mm
Height	488 mm	548 mm
Weight	7.6 kg	9.6 kg
Safety Working Load	5 kN/m	2.5 kN/m



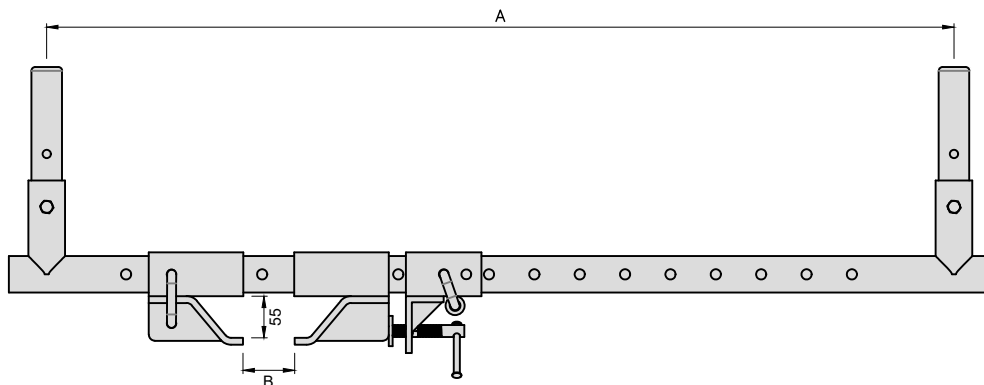
I-BEAM CATCH BASE 工字通道底桿

Item Code	A	B	Weight
TSP-IBCB4	1200	100 - 680	10.6 kg
TSP-IBCB5	1450	190 - 920	11.3 kg
TSP-IBCB6	1700	430 - 1190	12.0 kg

- Safety Working Load: 200 kg (Cantilever Span)
- Max. Cantilever Span: 500 mm
- Max. I-Beam Flange Thickness: 55mm

ADVANTAGES

- Developed for support of temporary walkway on steel I-beam
為在鋼工字鋼上支撐臨時行人通道而開發的底桿
- Excellent stability and strength
優良的穩定性和強度
- Simple installation and dismantle process
簡單的安裝和拆卸程序



Temporary Access on I-Beam Example



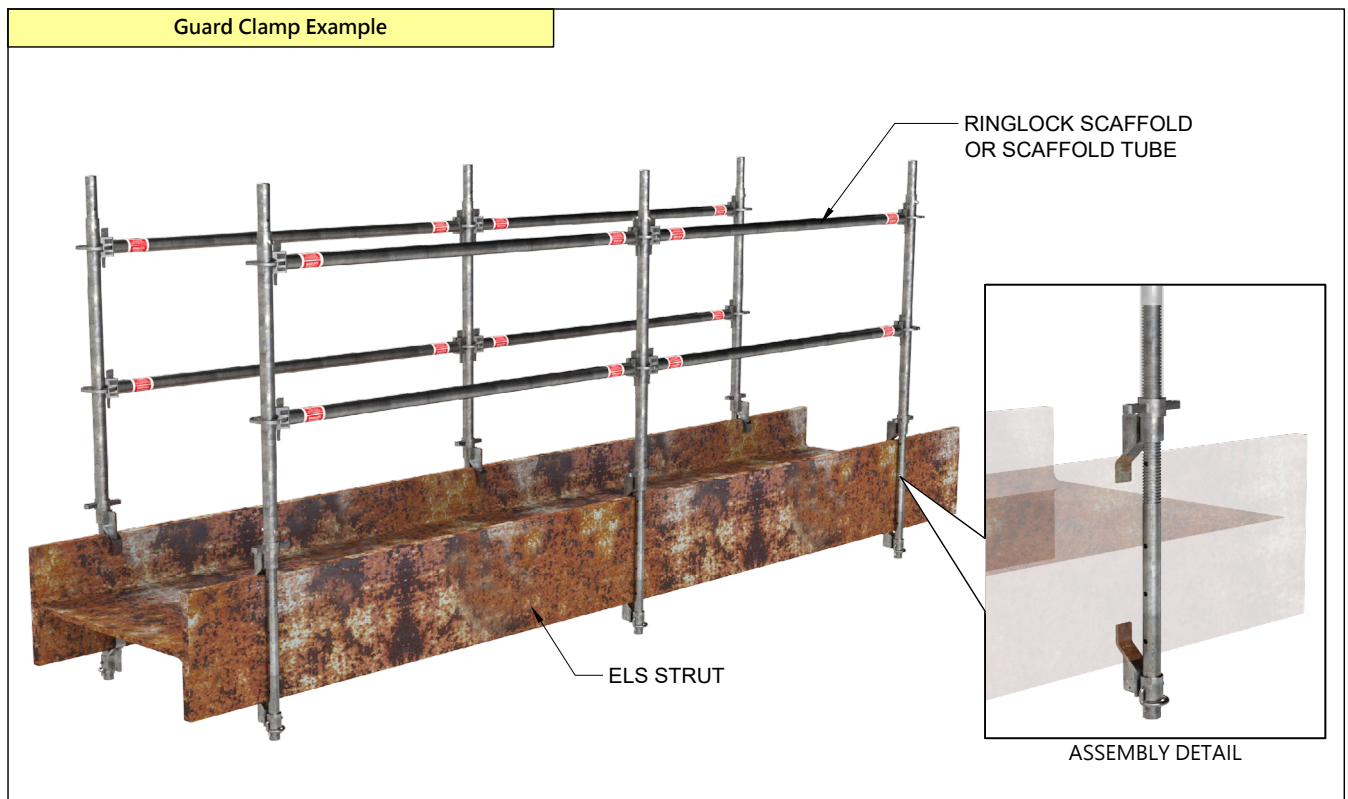
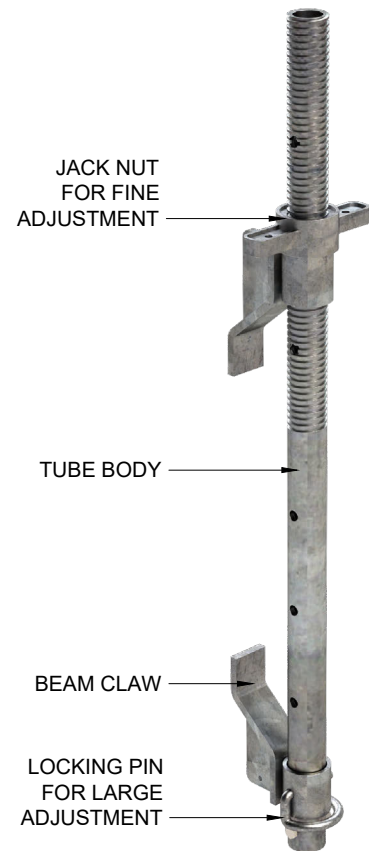
H-BEAM GUARD CLAMP

工字護欄扣

Upon gathering construction site feedback, the original I-Beam Catch Base was modified to be compatible for a steel strut where the flanges stand vertically on both sides to form an "H" cross-section. The H-Beam Guard Clamp is designed for seamless compatibility with existing Ringlock system, as well as scaffold tubes and couplers. The locking pin on one end of the clamp serves as the bottom and used for the larger adjustment, while the jack nut on the top end is used for fine tuning the smaller adjustment.

Since the jack nut can be adjusted flexibly, it is important to maintain a 150mm min. above the jack nut to ensure sufficient overlap length for the installation of side protection so that rigidity can be ensured. The installation of the H-Beam Guard Clamp does not require any tools and can be easily adjusted for construction safety and efficiency.

Item Code	Compatible Flange Size		Weight
	Thickness	Width	
TGR-HBGC	55	500	5.5 kg



ROUND PILE CATCH BASE

圓樁通道底樑

PATENT NO: HK30036221

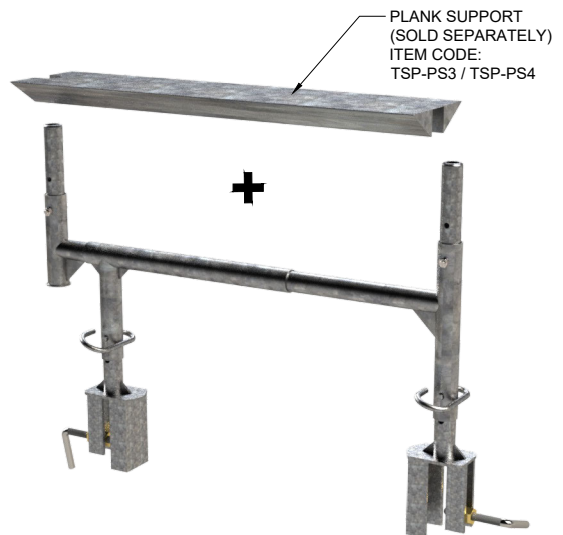
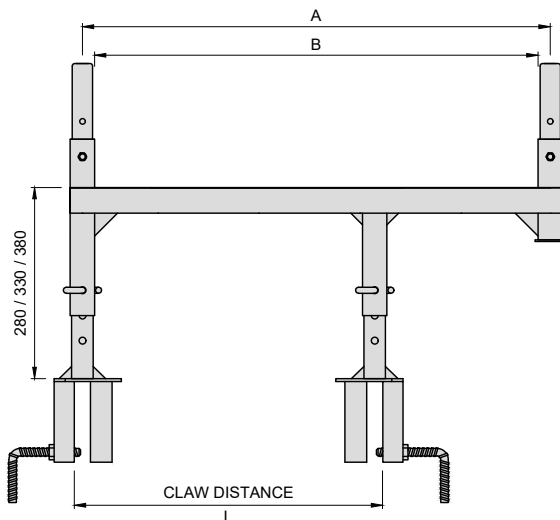
Item Code	A	B	L	Weight
TSP-RPCB3	918	870	505 - 820	13.0 kg
TSP-RPCB4	1170	1122	755 - 1070	13.7 kg

ADVANTAGES

- Developed for support of temporary walkway on round pile
為在圓樁上支撐臨時人行道而開發的底樑
- Designed for project sites with constraints
專為受約束的地盤環境而設計
- Adjustable platform height and claw distance
可調節平台高度和爪距



- Safety Working Load: 350 kg
- Max. Claw Thickness: 25 mm

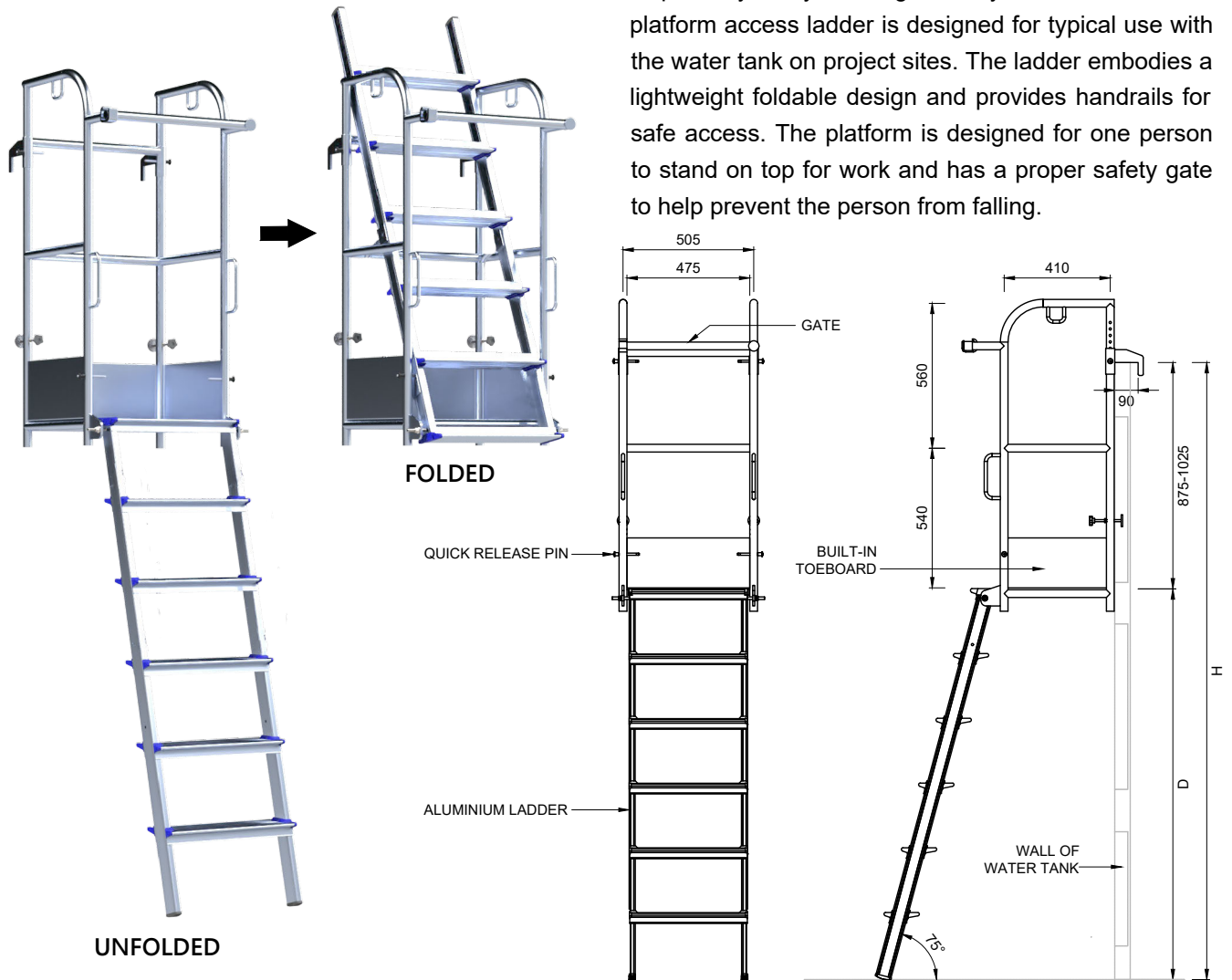


Temporary Access on Round Pile Example



ALUMINIUM PLATFORM ACCESS LADDER

鋁平台連上落梯



- Safety Working Load: 150 kg for 1 Person

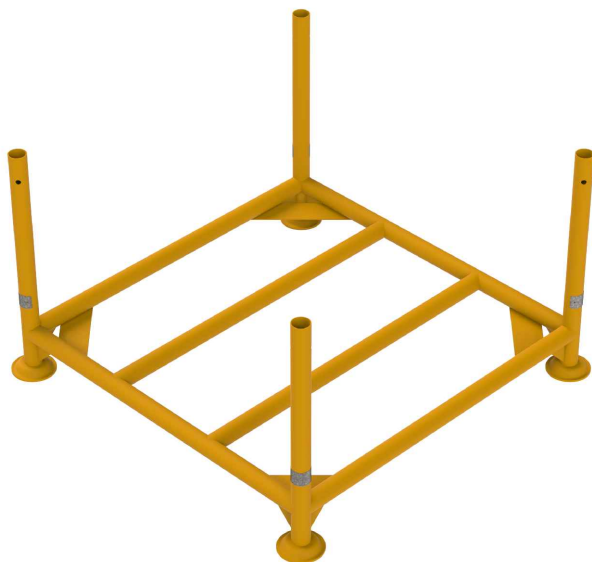
⚠ Safety gate must be folded down after worker steps on to platform.

Aluminium Platform Access Ladder 鋁平台連上落梯				
Item Code	Nos. of Steps	D	H	Weight
LSC-WTAL5	5	1260	2135 - 2285	15.1 kg
LSC-WTAL6	6	1510	2385 - 2535	16.7 kg
Aluminium Platform Access Ladder 鋁平台連上落梯 (Customized Model, 可訂製之款式)				
Item Code	Nos. of Steps	D	H	Weight
LSC-WTAL2 #	2	510	1385 - 1535	12.4 kg
LSC-WTAL3 #	3	760	1635 - 1785	13.3 kg
LSC-WTAL4 #	4	1010	1885 - 2035	14.2 kg

No existing stock available, lead time for MADE-TO-ORDER items is 6-8 weeks. 7 steps to 10 steps are available upon request.



POST STILLAGE 包裝架



To enhance safety and provide a means of staying organized at both the site and storage yard, Canyon designed a standard sized post stillage, also known as packing pallet, for the construction industry.

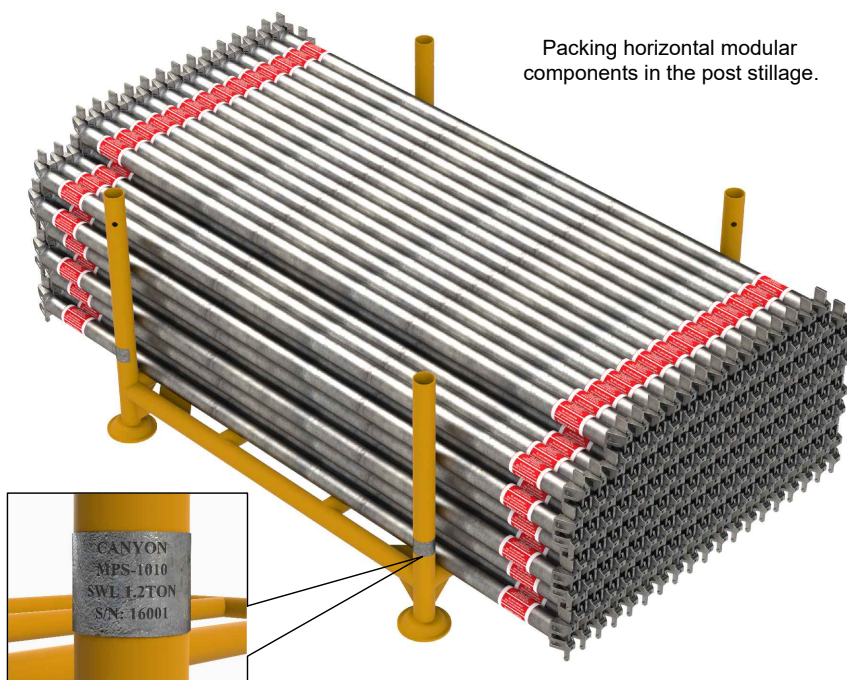
ADVANTAGES 優點

- High-grade Q345 steel and symmetrical size
由 Q345 鋼製成及對稱尺寸
- Built-in round base plates for safe & efficient stacking
內置圓形底盤 · 可安全有效地堆疊
- Strengthened rigidity
增強剛性
- Loading capacity up to 1,200 kg per post stillage
每個包裝架的負載能力高達 1,200 公斤
- Customizable metal tag for identification purposes
可定制金屬標籤用於識別
- Recommend stacking of 6 post stillages maximum
建議最多堆疊 6 個包裝架



Sample stacking of various types of post stillages storing scaffold components of different types and sizes.

Post Stillage 包裝架	Length	Width	Height	Safety Working Load	Weight
MPS-1010	1000	1000	650	1200 kg	28.2 kg



Packing horizontal modular components in the post stillage.



Metal tag on post stillage's leg

⚠ For safety precautions, it is recommended to consider securely strapping all items stored in the Post Stillage before any means of transport (i.e. Rigging). Any stacking of post stillage combinations must be done on flat and level ground.

* All weights stated in catalog are for reference only.
Email : general@canyonhk.com



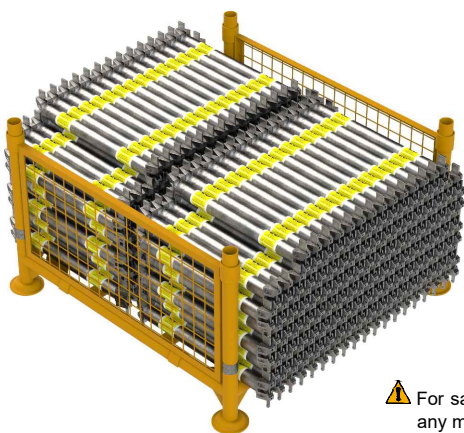
SIDE MESH STILLAGE 側網包裝架



Exploded View of Side Mesh Stillage.

To effectively store smaller or shorter scaffold components, the Side Mesh Stillage was designed by incorporating the Post Stillage with side panels to serve as wall supports.

The Side Mesh Panel comes in one size, but in two slightly different design configurations, so that they could make different variations of a side mesh stillage.



Side Mesh Stillage Component List 側網包裝架配件清單			
Component	Item Code	Quantity	Unit Weight
Side Mesh Panel 包裝架側網	MPS-SMP1004T	2	5.8 kg
	MPS-SMP1004B		5.8 kg
Post Stillage 包裝架	MPS-1010	1	28.2 kg

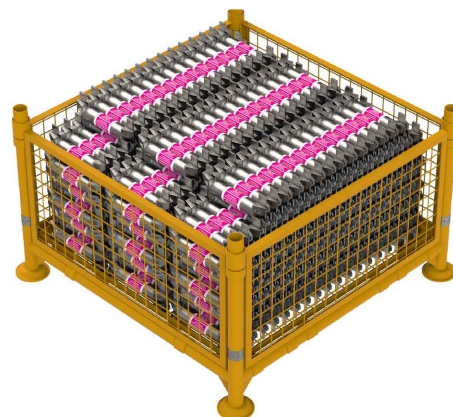
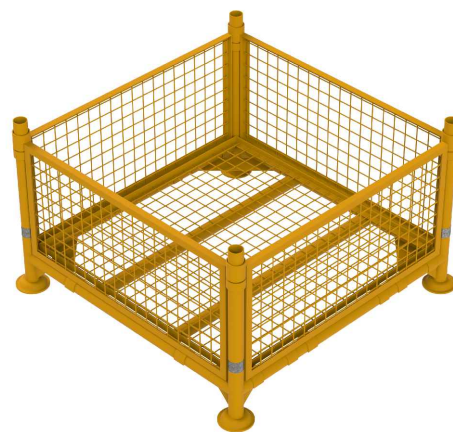
⚠ For safety precautions, all smaller items stored in the Side Mesh Stillage must be securely strapped before any means of transport. Any stacking of post stillage combinations must be done on flat and level ground.

MESH BOX STILLAGE 網型包裝箱



For storing even smaller items, the Mesh Box Stillage was designed by combining all the post stillage components and adding a Bottom Mesh Panel to fit on the bottom of the post stillage for effective storage means. The Mesh Box Stillage can be used in conjunction of all the components together or however the items being stored require.

Exploded View of Mesh Box Stillage.

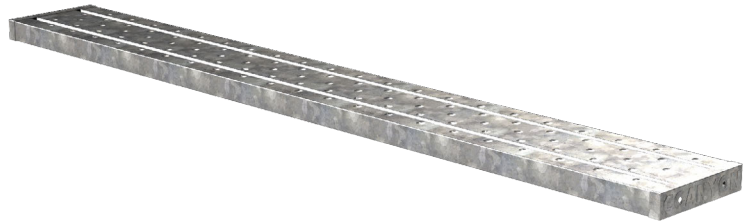


Mesh Box Stillage Component List 網型包裝架配件清單			
Component	Item Code	Quantity	Unit Weight
Side Mesh Panel 包裝架側網	MPS-SMP1004T	2	5.8 kg
	MPS-SMP1004B	2	5.8 kg
Bottom Mesh Panel 包裝架底網	MPS-BMP1010	1	9.3 kg
Post Stillage 包裝架	MPS-1010	1	28.2 kg

⚠ For safety precautions, items stored in the Mesh Box Stillage must not be stacked higher than the Side Mesh Panel's height. Any stacking of post stillage combinations must be done on flat and level ground.



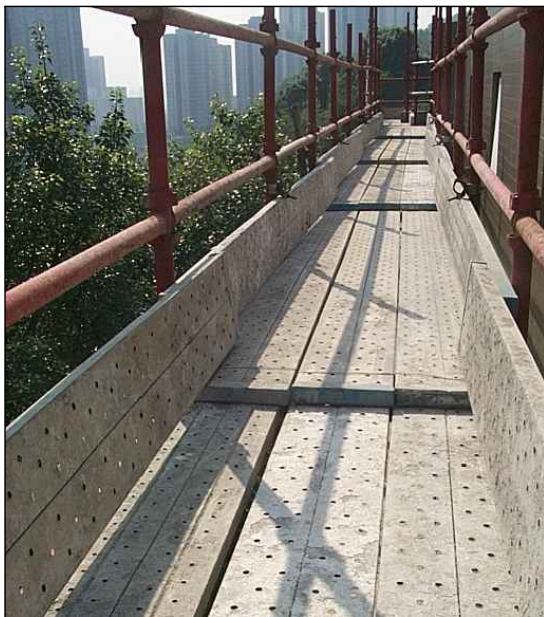
STEEL PLANK 金屬橋板



ADVANTAGES 優點

- Strong & durable design
堅固耐用
- Non-flammable & fire resistant to ensure safety
不易燃燒、更安全
- Lighter than conventional wood planks
比傳統木板更輕便
- Non-slip & allows water to drain through
防滑並設疏水孔

Code	Length	Width	Thickness	Sheet Thk.	Condition	Coating	Weight
TSK-2000	2000 mm	250 mm	50 mm	1.2 mm	New / Used	Galv.	8.8 kg
TSK-3000	3000 mm						13.1 kg
TSK-4000	4000 mm						17.4 kg

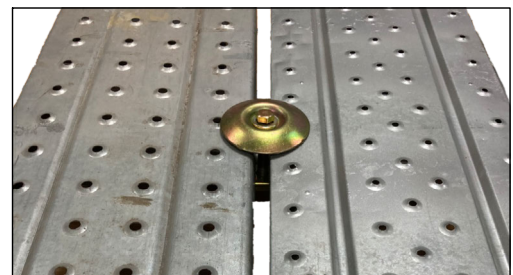


TECHNICAL SPECIFICATIONS OF STEEL PLANK

Permissible UDL at 1829 mm span	Permissible Point Load at 1829 mm span	Deflection at 150 kg
300 kg	150 kg	13.5 mm or less

Steel Plank can be used on both the Steel and Bamboo Scaffold (適合於金屬棚及竹棚使用)

Limpet Plank Coupler 丁字橋板碼仔	
Code	TCP-LPC
Type	JIS
Weight	0.4 kg
Compatible Tube Dia.	Ø48.3
Compatible Plank Thk.	50 mm



The STEEL PLANK is designed to be lightweight, safe, and durable in direct response to user needs. The design of the plank is best suited for working on high-level platforms. Since it is 13% lighter than a conventional plywood board, this product is highly recommended for all construction sites.

1. HIGH SAFETY:

To prevent slippage, the tread surface has many holes that provide traction and allow water to drain through.

2. HIGH DURABILITY:

This product assures high durability through the designs of reinforced cross section and convex tread surface, pre-galvanized steel.

3. WIDE RANGE OF APPLICATIONS:

Walking passages for steel structure buildings, suspended scaffolding, toe boards, underground shield floor, working platform for scaffolding, etc.

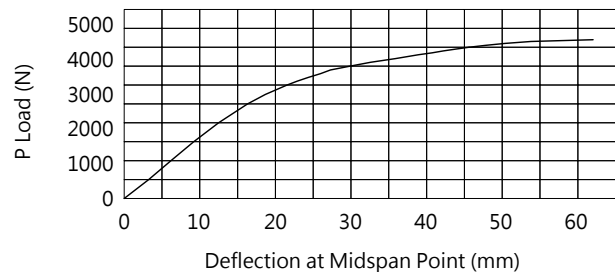


Testing of Planks at Support Interval 1,829 mm,
Maximum Load P: 419 kg at deflection 62.02 mm



Stronger Stiffener Design

Load-deflection curve



SPIRAL PLANK CLIP 橋板定位梢

ADVANTAGES 優點:

- Bolt-less Installation 免螺絲安裝
- Tool-less Usage 不需要使用工具
- Cost & Time Efficient 節省成本和時間
- Available in Different Sizes 提供不同尺寸選擇
- Used in Conjunction with Plank & Tube 可配合橋板和圓管使用

Code	Tube Diameter	Plank Thickness	Weight
TPN-SPPCLIP48	Ø48.6	50 mm	0.3 kg



SCAFFOLD TUBE & COUPLER

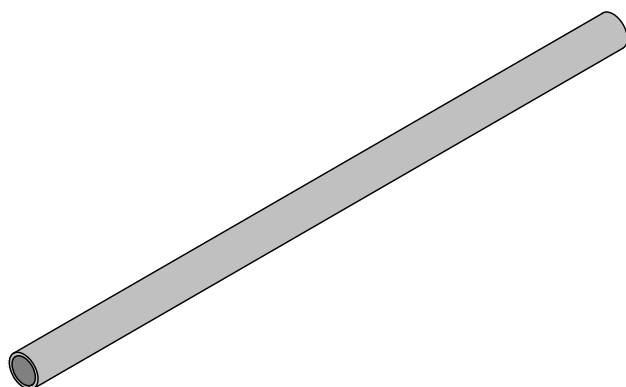
喉通及手扣



Scaffold Tube Section Properties

Scaffold Tube Size	Cross Section Area, A	Radius of Gyration, i	Elastic Section Modulus, Z	Second Moment of Area, I
Ø48.3x2.1t	3.048 cm ²	1.635 cm	3.374 cm ³	8.149 cm ⁴
Ø48.3x2.3t	3.324 cm ²	1.628 cm	3.649 cm ³	8.813 cm ⁴
Ø48.6x4.0t	5.605 cm ²	1.583 cm	5.781 cm ³	14.048 cm ⁴

Code	Diameter	Length	Coating	Weight
TST-1M	Ø48.3 x 2.1t	1.0 m	Galv.	2.4 kg
TST-2M		2.0 m		4.8 kg
TST-3M		3.0 m		7.2 kg
TST-4M		4.0 m		9.6 kg
TST-5M		5.0 m		12.0 kg
TST-6M		6.0 m		14.4 kg
TST-1M2.3	Ø48.3 x 2.3t	1.0 m	Galv.	2.7 kg
TST-2M2.3		2.0 m		5.3 kg
TST-3M2.3		3.0 m		7.9 kg
TST-4M2.3		4.0 m		10.5 kg
TST-5M2.3		5.0 m		13.1 kg
TST-6M2.3		6.0 m		15.7 kg
TST-1M4.0	Ø48.6 x 4.0t	1.0 m	Galv.	4.4 kg
TST-2M4.0		2.0 m		8.8 kg
TST-3M4.0		3.0 m		13.2 kg
TST-4M4.0		4.0 m		17.6 kg
TST-5M4.0		5.0 m		22.0 kg
TST-6M4.0		6.0 m		26.4 kg



Scaffold Tube End Cap
喉通保護套

Code **TPL-ST**



Coupler Cover
碼仔保護套

Code **TPL-CP**



Coupler Fitting End Cap
碼仔螺絲保護套

Code **TPL-BN**



Base Pad 底掌膠墊板

Code **TPL-BP**



Pressed Sleeve Coupler 外連接扣	
Code	ACP-PSC
Type	BS
Weight	1.0 kg
Ø48.3 Type	
	

Pressed Double Coupler 沖壓雙扣碼仔	
Code	ACP-PC1
Type	BS
Weight	0.9 kg
Ø48.3 Type	
	

Pressed Swivel Coupler 沖壓活扣碼仔	
Code	ACP-PC3
Type	BS
Weight	1.1 kg
Ø48.3 Type	
	

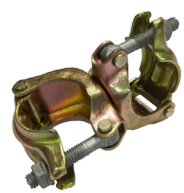
Pressed Putlog Coupler 沖壓豬耳碼仔	
Code	ACP-PPC
Type	BS
Weight	0.7 kg
Ø48.3 Type	
	

Forged Double Coupler 鍛造雙扣碼仔	
Code	ACP-FC1
Type	BS
Weight	1.1 kg
Ø48.3 Type	
	

Forged Swivel Coupler 鍛造活扣碼仔	
Code	ACP-FC3
Type	BS
Weight	1.3 kg
Ø48.3 Type	
	

Double Beam Clamp 梗扣工字扣	
Code	ACP-BC1
Type	BS
Weight	1.6 kg
Ø48.3 Type, Claw THK. 35 mm	
	

Swivel Beam Clamp 活動工字扣	
Code	ACP-BC3
Type	BS
Weight	1.6 kg
Ø48.3 Type, Claw THK. 35 mm	
	

Double Coupler 梗扣碼仔	
Code	TCP-K1
Type	JIS
Weight	0.7 kg
Ø42.7~48.3 Type	
	

Double Coupler 梗扣碼仔	
Code	TCP-R1
Type	JIS
Weight	0.8 kg
Ø60.5 x Ø42.7~48.3 Type	
	

Fixed Beam Coupler 梗扣工字扣	
Code	TCP-BC1
Type	JIS
Weight	1.1 kg
Ø48.3 Type, Claw THK. 30 mm	
	

Tube Inner Joint Pin 喉通沖壓內接管	
Code	APN-TIJP
Type	JIS
Weight	0.9 kg
Ø48.3 Type	
	

Swivel Coupler 活扣碼仔	
Code	TCP-K3
Type	JIS
Weight	0.7 kg
Ø42.7~48.3 Type	
	

Swivel Coupler 活扣碼仔	
Code	TCP-R3
Type	JIS
Weight	0.8 kg
Ø60.5 x Ø42.7~48.3 Type	
	

Swivel Beam Coupler 活動工字扣	
Code	TCP-BC3
Type	JIS
Weight	1.1 kg
Ø48.3 Type, Claw Thk. 30 mm	
	

Limpet Plank Coupler 丁字橋板碼仔	
Code	TCP-LPC
Type	JIS
Weight	0.4 kg
Ø48.3 Type, Plank THK. 50 mm	
	



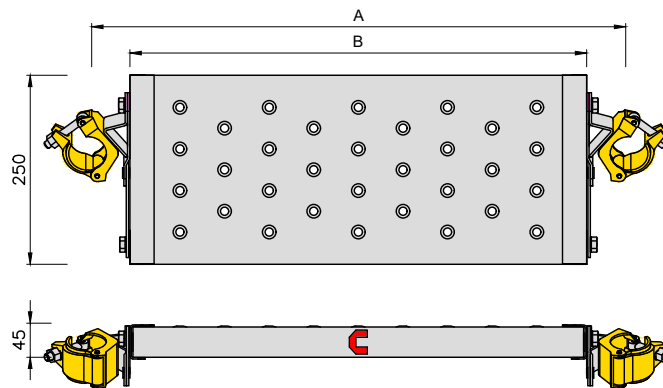


ADJUSTABLE STEP 可調較金屬踏腳板

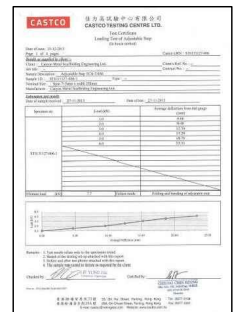
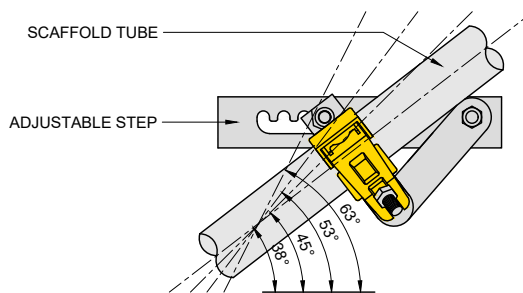
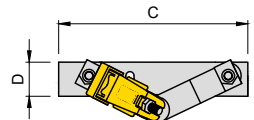
ADVANTAGES 優點

- Strong & durable design
堅固耐用
- Light and conventional
身輕及方便使用
- Four fixed adjustable angle
可調校四種角度
- Stable and safe
穩定和安全
- Non-slip & allows water to drain through
防滑並設疏水孔
- Quick angle adjustment
快速調校角度

Adjustable Step 可調較金屬踏腳板	Width, A	Step Width, B	Weight	Adjustable Angle	Safety Working Load	Factor of Safety
TCA-TAS6	715	600	4.4 kg	63° / 53° / 45° / 38°	200 kg	2.0
TCA-TAS8	915	800	5.1 kg			



Instruction Video
使用說明視頻



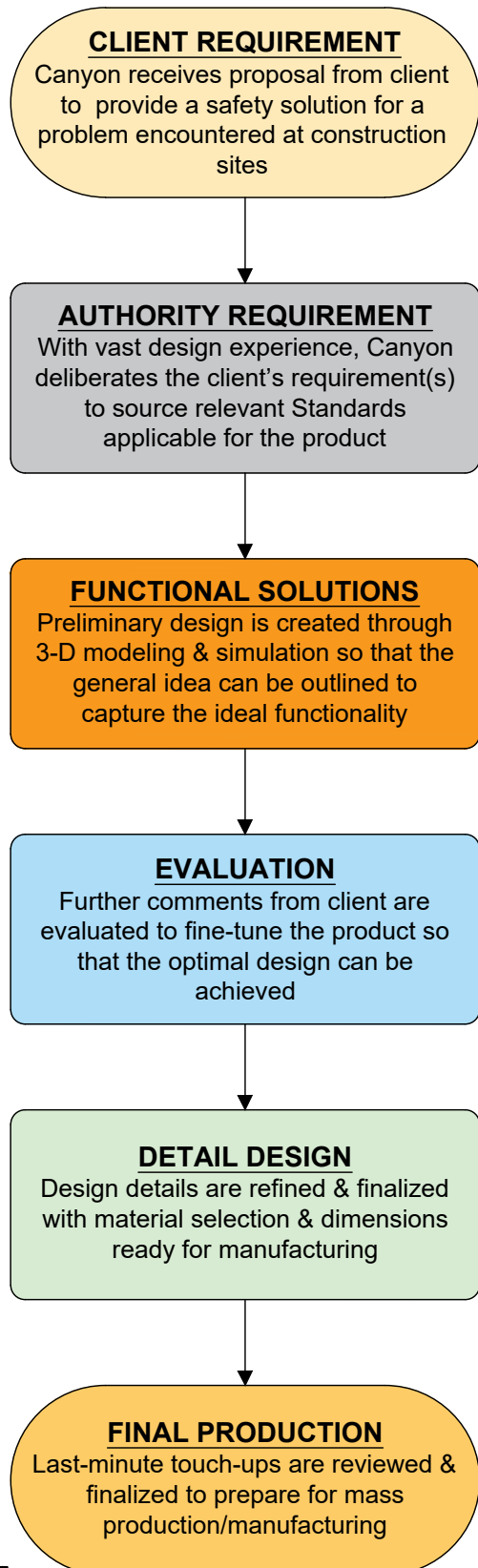
APPLICATION:

- Use for any slope works & external surface of terrain, and landscape slope.
- Convenient for erection of ladder / staircase for different lengths to accommodate various environment and locations.

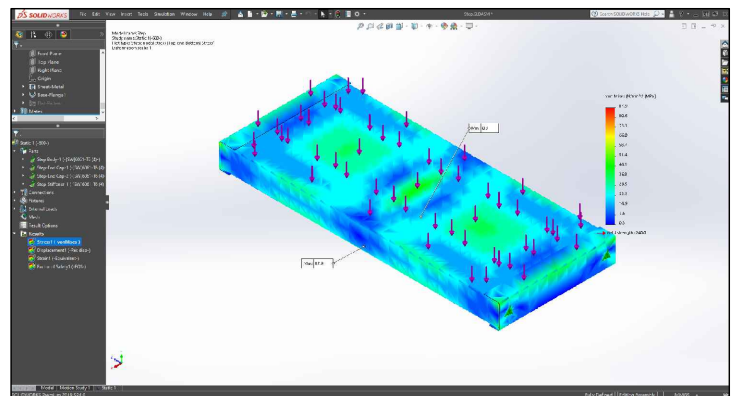


CUSTOMIZED DESIGN SERVICES

各類建築用通架, 臨時護欄及金屬樓梯訂制服務



Canyon never turns down a challenge to design a better solution to improve the construction industry. With the focus on safety & efficiency, Canyon's design team utilizes top-of-the-line software to create a 3-D model so that the design process can be streamlined. Designs can be quickly generated / modified so that real-life simulations can be implemented using the software; as a result, the overall process time is reduced. The key is to successfully deliver a better innovation to enhance safety & convenience for workers on the construction site.



Static Stress Analysis Simulation



3D Model



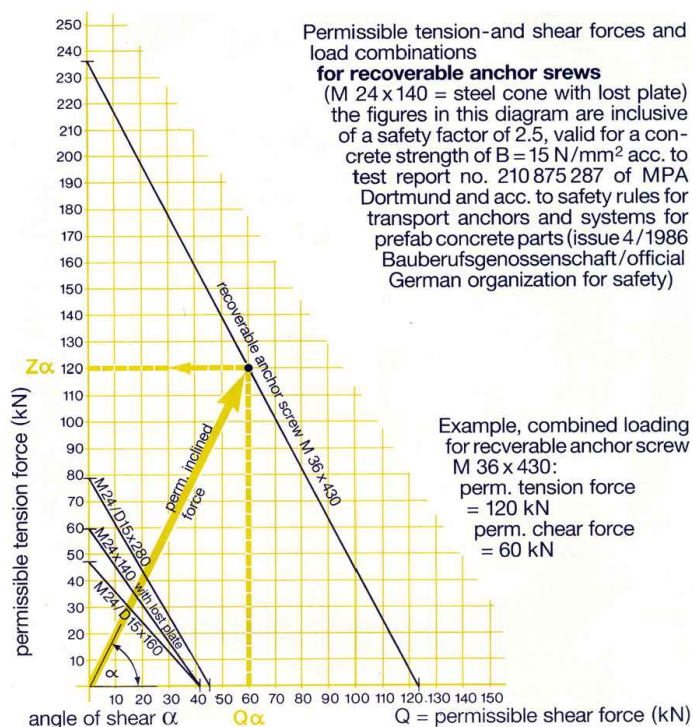
Actual Product





RECOVERABLE ANCHOR SCREW

可再用固定螺絲



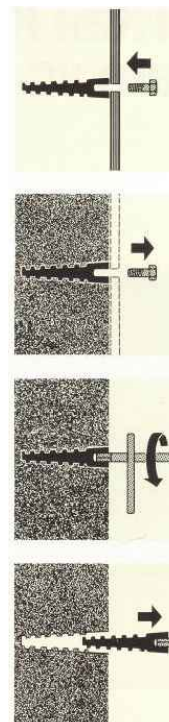
For your temporary fixing points, lifting points for climbing forms, clam forms, tunnel forms & single face formwork.

This advanced design lets us guarantee for at least 50 reuses, allowing:

- no more wasting money on expensive stainless inserts
- no more wire strand or rebar loops to cut off
- no more parts left in the concrete

Item Code	Size
DAS-160RASA	M24 x 160
DAS-280RASA	M24 x 280

Item Code	Description
DBA-M24RK	M24 Release Key

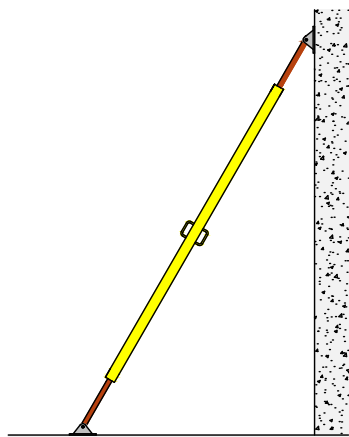


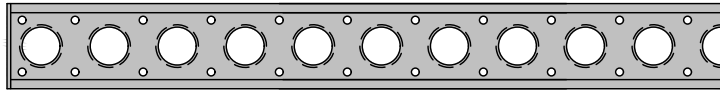
PUSH PULL PROP 伸縮支撐

- For faster plumbing and safe positioning of precast units
- A versatile, well-engineered and complete system flexible and economic
- Takes tension and compression forces
- Handles are always in workmen's reach
- 3-dimensional operating swivel end for any slope or angle by using one bolt only
- Positively safe with permissible load up to 40kN on compression & tension



Item Code	DPP-0900	DPP-1800	DPP-2600
Adjustment	900 ~ 1500 mm	1800 ~ 3200 mm	2600 ~ 4000 mm
Permissible Load at 45°	43 kN (Compression)	43 ~ 14 kN (Compression)	43 ~ 10.9 kN (Compression)
	48.5 kN (Tension)	48.5 kN (Tension)	48.5 kN (Tension)
Weight	19.0 kg	28.0 kg	40.0 kg
Outer Tube	Ø76 mm	Ø76 mm	Ø76 mm





STEEL SOLDIER

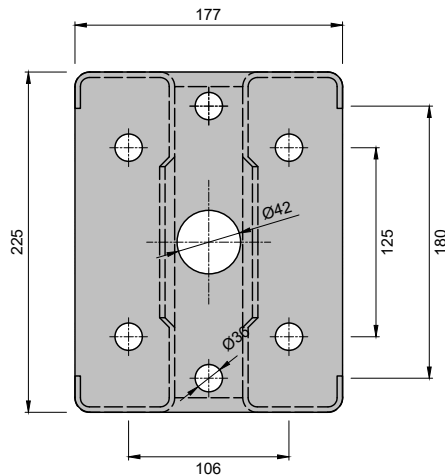
油炸鬼

STEEL SOLDIER SYSTEM

- Highly flexible with range of beam lengths and components
- Suitable for wall and slab support

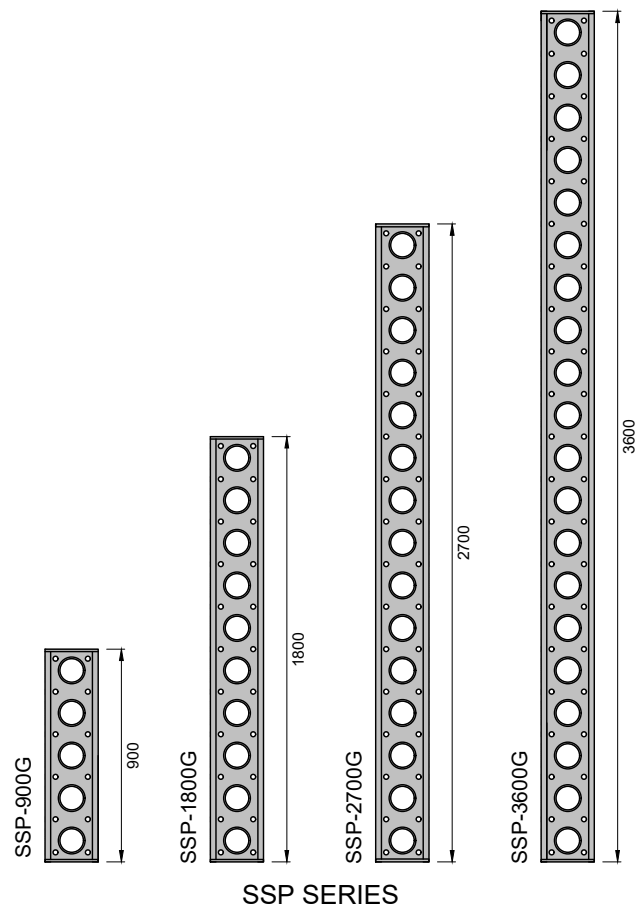
The Steel Soldier is a heavy duty structural section that can be both used as beam and column. It is designed to bring exceptional strength and versatility, making it a popular choice for wall, slab support, temporary access and platforms as well as shoring applications. Steel soldiers can be bolted end to end offering flexible lengths suited for specific uses.

* Notes: To fix steel soldier end-to-end 4 nos. M16 x 35 HT (Grade 8.8) set bolt and nuts are recommended.



Item Code	Length	Coating	Weight
SSP-900G	900	Galv.	24.1 kg
SSP-1800G	1800	Galv.	42.0 kg
SSP-2700G	2700	Galv.	59.7 kg
SSP-3600G	3600	Galv.	77.6 kg

Steel Soldier Section Properties		
	SSP Series	
Cross Sectional Area (Gross)	27.15	cm ²
Cross Sectional Area (Nett)	19.04	cm ²
Young's Modulus	205000	N/mm ²
Inertia xx	1950	cm ⁴
Inertia yy	605	cm ⁴
r xx	10.12	cm
r yy	5.64	cm
Minimum F.O.S.	1.6	
Axial Comp (Facade) ≤	300	kN
Axial Comp (Shore) ≤	100	kN
Axial Tension	120	kN
Moment of resistance	38	kNm
Moment of resistance (Joint)	10	kNm
Moment of resistance (Reinf. joint)	15	kNm
Shear (not less than)	75	kN
Shear at joint (not less than)	75	kN
Self weight	21.6	kg/m



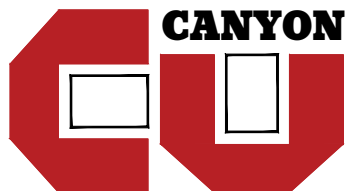
SSP SERIES



For further information, please contact: **general@canyonhk.com**

BUSINESS DEPT.: **d-b@canyonhk.com**
ENGINEERING DEPT.: **d-e@canyonhk.com**

Or visit our website: **www.canyonhk.com**



**ROOM 605-606, 6/F, WESTLANDS CENTRE
20 WESTLANDS ROAD, QUARRY BAY, H.K.**

TEL: (852) 2885 9633 FAX: (852) 2567 1611