



TECHNICAL GUIDE
SLIM-LITE / SLIM-MAX SYSTEM

FORMWORK

Any safety provisions as directed by the appropriate governing agencies must be observed when using our products. The pictures in this document are snapshots of situations at different stages of assembly, and therefore are not complete images. For the purpose of safety, they should not be deemed as definitive.

The company reserves the right to introduce any modifications deemed necessary for the technical development of the product.

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Technical Manual Release Notes

This page is intended to record all changes to the **SLIM-LITE / SLIM MAX SOLDIER SYSTEM** technical manual pages.

Changes or additions to this manual will be itemised with a brief description and date when the amendments were made.

ISSUE	DATE	Amendment Description
A	SEPT 2023	First Release
B	FEB 2024	Second Release

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SLIM-LITE / SLIM-MAX SOLDIER SYSTEM

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1. Technical Specifications

System Description

SLIM-LITE SOLDIER SYSTEM

Multi use capability as a soldier, vertical shore, raking shore or as a beam. **SLIM-LITE SOLDIER** are an economic and effective answer to crane handled formwork requirements. They can be used with a wide range of forming systems such as timber, aluminium and steel. A range of accessories allows the soldiers to be used for single lift, full height or jump form either for single or double faced wall formwork applications. **SLIM-LITE SOLDIERS** are equally useful for construction of circular walls. **SLIM-LITE SOLDIERS** can also be used in construction of heavy duty shoring, overhead protection structures and platforms or simply as beams. They are available in different sizes to suit a variety of applications.

SLIM-MAX SOLDIER SYSTEM

The **SLIM-MAX SOLDIER** is a versatile galvanised steel soldier with the capability of being used as a soldier, vertical shore, raking shore, turnbuckle or as a beam. The high strength of the **SLIM-MAX SOLDIER** makes it ideal for large crane handled formwork shutters with accessories to enable a range of types of walers to be attached to it. The Soldier can be used for single lift, full height or jump forms for single or double face formwork arrangements. **SLIM-MAX SOLDIER** can also be used in the construction of heavy duty shoring, overhead protection structures and platforms or simply as a high strength beam.

Purpose of the Document

The purpose of this document is to provide guidelines for design, safe handling, transport and installation of the **SLIM-LITE / SLIM-MAX SOLDIER** system.

The document also outlines the various components of the system and it features illustrations, working load limits, typical assembly arrangements and safe transport and handling measures.

The information contained in this document is provided as a general guide only and does not replace the need for the design to be reviewed and checked by a qualified person in the field of temporary works design and installation, concrete, steel, building construction and services.

This material has been prepared in the context of relevant Australian Standards and the National Construction Code (NCC). Users should make themselves aware of any recent changes to these documents referred to therein and to local variations or requirements.

This document is NOT a substitute for site-specific Safe Operation Procedures. It is the Installation Contractors responsibility to prepare safe work method statements and observe and comply with site specific health and safety regulations, standards and policies.

Acrow Formwork and Scaffolding has dedicated engineering services available for project assistance. We can provide design support for clients to determine the best way to specify and document **SLIM-LITE / SLIM-MAX SOLDIER**. Our technical experts can identify the most efficient temporary works design meeting project requirements, specifications and installation process.

Should the users require any further information or guidance, they are encouraged to contact their local Acrow branch.

Safety Information

This safety information is to draw the user's attention to possible musculoskeletal disorders as a result of manual handling during assembly and dismantling of the **SLIM-LITE / SLIM-MAX SOLDIER** system.

It is recommended that users of the **SLIM-LITE / SLIM-MAX SOLDIER** system employ and implement appropriate procedures and control measures to eliminate or control any risk of Musculoskeletal disorder/injury while handling.

1. Technical Specifications

Safety Information

Refer to the Code of Practice on manual handling published by local Workcover Authority or other approved and recognised guidelines for correct and appropriate manual handling procedures.

Important Information

The erection and application instructions contained in this manual are the recommended methods to be used for **SLIM-LITE / SLIM-MAX SOLDIER** products.

The technical function related instructions must be accurately followed to obtain the correct performance of the product. Any deviation from the recommended usage will require a separate design and/or verification by Acrow Engineering.

The safe use and application of the system must be in accordance with Australian Standard AS 3610 Formwork for Concrete, Occupational Health & Safety regulations, approved industry codes of practice and relevant regulatory authority requirements.

The illustrations in these assembly configurations are minimum guidelines only.

The combined use of the **SLIM-LITE / SLIM-MAX SOLDIER** system with equipment from other suppliers may entail performance issues and therefore requires a design check and/or verification by Acrow Engineering or a qualified experienced engineer.

Hazard Identification/Risk Assessments for the erection and dismantling of the system are available from Acrow branches. Site specific Hazard and Risk assessments may need to be generated for specific projects.

Disclaimer

1. The photographs and illustrations shown within this manual are intended to be used as a guideline only.
2. In line with Acrow's commitment to continuous product development and improvement, the information contained in this manual may be changed without notice. Please confirm with Acrow Engineering for the latest update.
3. While all reasonable effort has been taken to ensure the accuracy and adequacy of the information contained herein, Acrow accepts no responsibility or liability for any loss or damage suffered by any person acting or refraining from action as a result of this information.

Should users require any expert assistance, they are encouraged to contact the Acrow Engineering department.

Applicable Codes and Standards

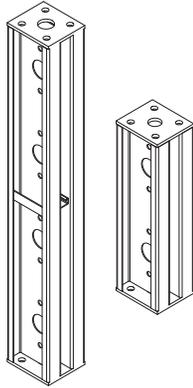
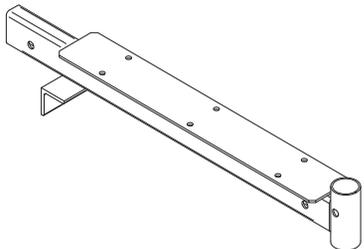
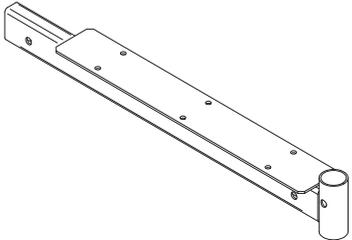
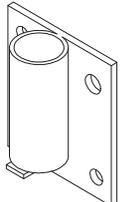
The structural design information and guide provided in this document are limited to the relevant codes nominated below. It does not include certification of any structures or works associated with a project.

ELEMENT	DESCRIPTION	CODE
LOADING	Structural Design Actions – General Principles	AS/NZS 1170.0-2002
	Structural Design Actions – Permanent, Imposed And Other Actions	AS/NZS 1170.1-2002
FORMWORK	Formwork for Concrete	AS 3610-1995
	Formwork for Concrete Part 1- Specifications	AS 3610.1-2018

2. GENERAL PRODUCT INFORMATION

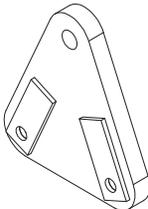
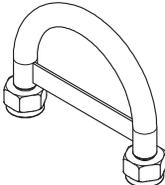
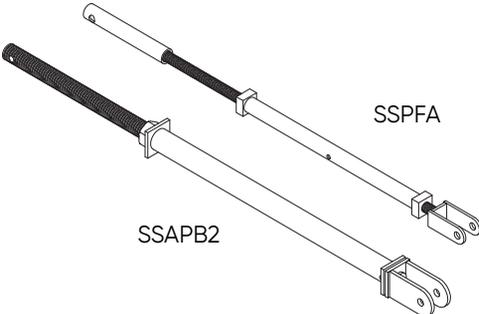
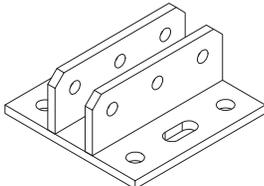
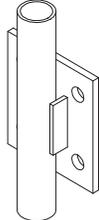
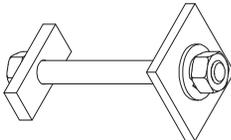
2. General Product Information

Slim-Lite Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Acrow Slim-Lite Soldier Slim-Lite Soldiers are provided in eight basic sizes with centre holes at 300mm intervals. The C shaped side members are spaced at nominally 42mm to accommodate ties and bolts. Holes are provided at the end plates to provide end-to-end connection.		
	Slim-Lite Soldier 3.6m	SS36	58.6
	Slim-Lite Soldier 2.7m	SS27	44.8
	Slim-Lite Soldier 1.8m	SS18	30.8
	Slim-Lite Soldier 1.5m	SS15	26.1
	Slim-Lite Soldier 1.2m	SS12	21.4
	Slim-Lite Soldier 0.9m	SS09	17.0
	Slim-Lite Soldier 0.6m	SS06	11.0
	Slim-Lite Soldier 0.3m	SS03	5.5
	Slim-Lite Fixed Working Platform Bracket		
	Fix. Work Platform Brkt	SSWPBF	10.3
	Slim-Lite Adjustable Working Platform Bracket		
	Adj. work platform brkt	SSWPBA	9.4
	Handrail Post end Bracket		
	Handrail Post End Bracket	SGPEB	2.50

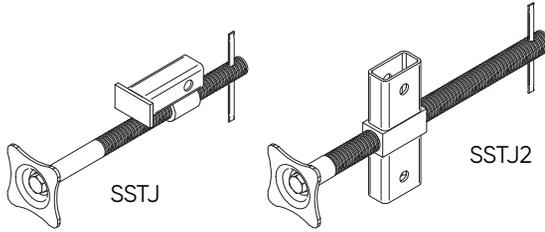
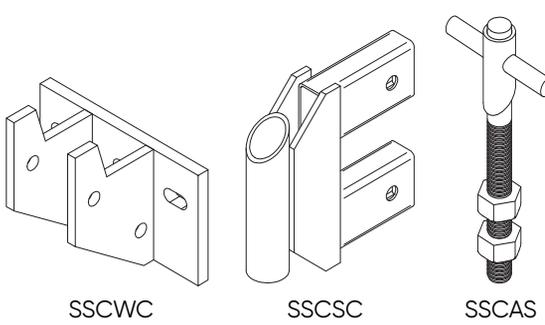
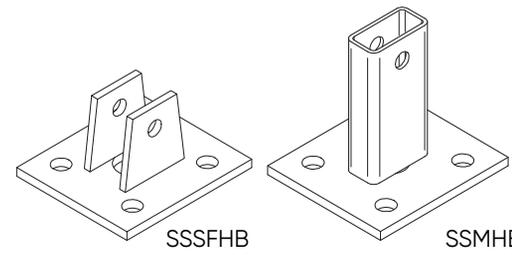
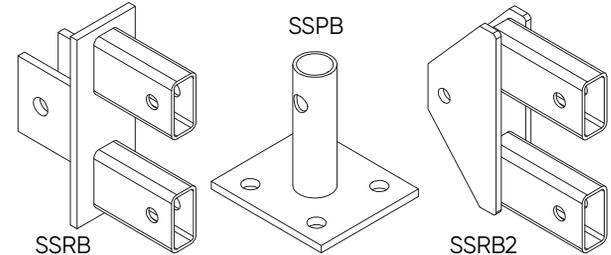
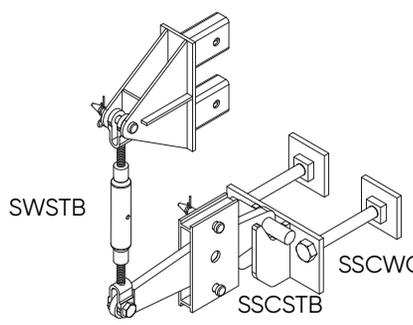
2. General Product Information

Slim-Lite Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Lifting Plate		
	Lifting Plate	SSCSLP	7.60
	Slim-Lite Lifting Loop		
	Lifting Loop	SSLL	1.0
 <p>SSPFA</p> <p>SSAPB2</p>	Slim-Lite Adjustable Plumbing Brace		
	Plumbing Brace Typ 1	SSPFA	4.5
	Plumbing Brace Typ 2	SSAPB2	9.0
	Slim-Lite Raking Shore Base Type 3		
	Raking Shore Base typ 3	SSRSBP-3	7.60
	Levelling Bracket		
	Levelling Bracket	CRFLB	3.3
	Spreader Bolt		
	Spreader Bolt	SSCSCBA	2.7

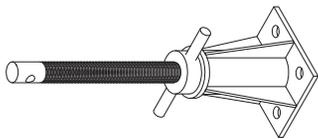
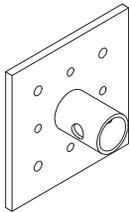
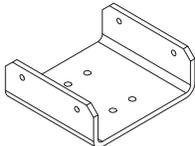
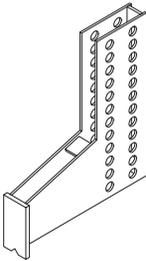
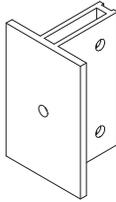
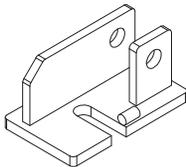
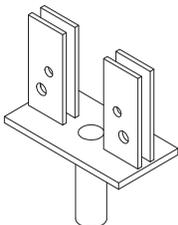
2. General Product Information

Slim-Lite Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Lite Thrust Jack		
	Thrust Jack Type One	SSTJ	3.5
	Thrust Jack Type Two	SSTJ2	3.9
	Slim-Lite Climbing Brackets type 1 When Slim-Lite Soldiers are used in climbing shutters these Climbing Brackets can be used to support shutters and provide vertical adjustment.		
	Climbing Wall Connector	SSCWC	8.0
	Climbing Soldier Connector	SSCSC	4.7
	Climbing Adjusting Screw	SSCAS	5.2
	Slim-Lite Hinge Bracket		
	Male Hinge Bracket typ 1	SSSMHB	2.8
	Male Hinge Bracket typ 2	SSSMHB-2	4.2
	Male Hinge Bracket typ 3	SSSMHB-3	2.3
	Female Hinge Bracket	SSSFHB	4.2
	Slim-Lite Raker Bracket When utilizing Slim-Lite Soldiers as raking shores, these Raking Brackets can be attached to them (in combination with the Pivot Bracket or Shoring Jack). Type 1 and Type 2 are the two varieties that are offered.		
	Raker Bracket Type 1	SSRB	4.7
	Pivot Bracket	SSPB	2.7
	Raker Bracket Type 2	SSRB2	4.3
	Slim-Lite Climbing Brackets type 2 When Slim-Lite Soldiers are used in climbing shutters these Climbing Brackets can be used to support shutters and provide vertical adjustment.		
	Turnbuckle	SWSTB	2.5
	Climbing-Soldier Web Sleeve	SSCSWA	
	Climbing Wall Connector	SSCEC	
	S/Lite Climbing Soldier Turnbuckle Bracket	SSCSTB	11.5

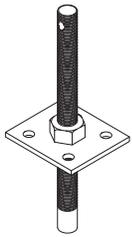
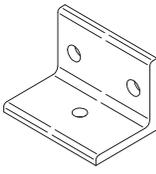
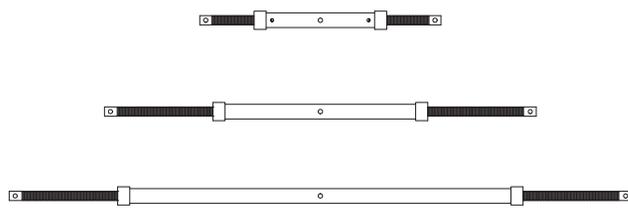
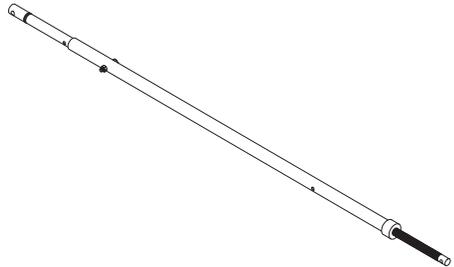
2. General Product Information

Slim-Lite Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Lite Shoring Jack		
	Shoring Jack	SSSJ	10.4
	Slim-Lite Shoring Jack End Plate		
	Shoring Base Plate/Prop Head	SSBPPH	
	Shoring Jack End Plate	SSSJEP	2.8
	Slim-Lite Detachable U-Head		
	Detach u-Head	SSUH	4.5
	Slim-Lite Shear Bracket		
	Shear Bracket	SSSB	10.4
	Slim-Lite Shear Bracket type 2		
	Shear Bracket typ 2	SSSB2	7.0
	Slim-lite Raker Base Plate		
	Raker Base Plate	AWRFB40	2.3
	Soldier Low Soffit Bracket		
	Low Soffit Bracket	SSLSB	9.0

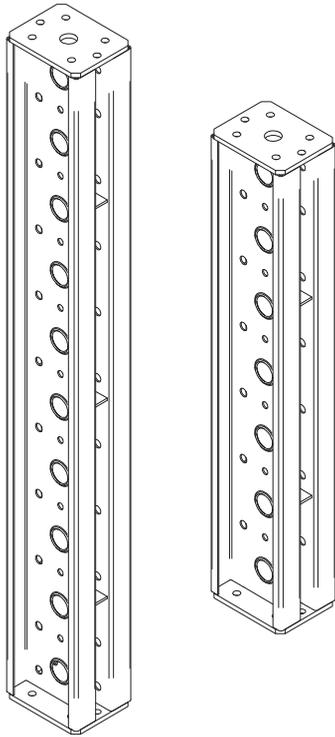
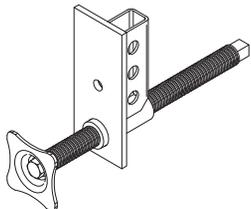
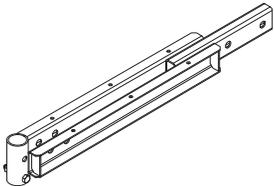
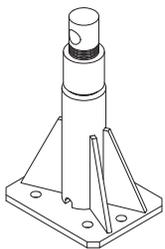
2. General Product Information

Slim-Lite Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Lite Head/Base Jack		
	Head/Base Jack LH	SSHBJLH	5.4
	Head/Base Jack RH	SSHBJRH	5.4
	Slim-Lite Soldier Right Angle Bracket		
	Right angle Bracket	SSRAB	2.50
	Connecting Bolts and Nuts		
	M20 x 50mm bolt	SSHBM50	0.18
	M20 x 100mm bolt	SSHBM20	0.34
	M20 nut	SSNM20	0.06
	Turnbuckle Used as a plumbing brace.		
	600 - 1000mm Typ 0	STB-0	10.0
	1040 - 1790mm Typ 1	STB-1	13.4
	1830 - 2580mm Typ 2	STB-2	17.4
	Shoring Brace		
	2300 - 4100 Shoring Brace	SASB	30.0

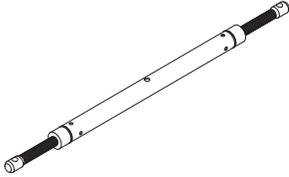
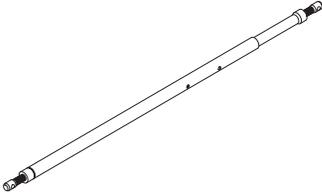
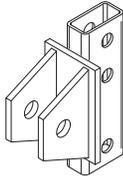
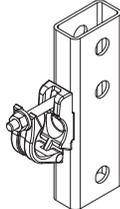
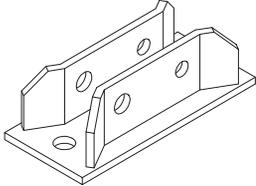
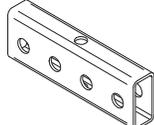
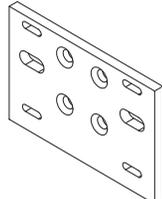
2. General Product Information

Slim-Max Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	<p>Slim-Max Soldiers Can be connected end on end to form the required shutter height. Diameter 17mm and 21mm holes spaced at 180mm centres, are used to connect accessories. The soldiers are hot-dip galvanized.</p>		
	3600mm Soldier	SMS36	84.1
	2700mm Soldier	SMS27	64.5
	2160mm Soldier	SMS216	52.9
	1800mm Soldier	SMS18	45.3
	1260mm Soldier	SMS126	33.7
	900mm Soldier	SMS09	25.8
	720mm Soldier	SMS072	22.0
	540mm Soldier	SMs054	17.8
	360mm Soldier	SMS036	14.1
	180mm Soldier	SMS018	10.5
90mm Soldier	SM009	8.6	
	<p>Slim-Max Soldier Plumbing Thrust Jack Used for vertical plumbing of soldiers when used in a jump wall form arrangement.</p>		
	Plumbing Thrust Jack	SMSPTJ	6.8
	<p>Slim-Max Soldier Platform Bracket When attached to soldiers will provide a continuous working platform. Accepts 3 planks plus a toe board with provision for guardrails. Can be used as a fixed platform or as an adjustable platform when used with the 920-1240mm turnbuckle.</p>		
	Platform Bracket	SMSPB	10.0
	<p>Slim-Max Soldier Right and Left Hand Jacks The right and left hand jacks can be attached to the ends of a Slim-Max Soldier to convert it into a high load capacity turnbuckle. The right hand jack can be used at the top or bottom of a soldier when the soldier is used as a vertical support member</p>		
	Left Hand	SMSLHJ	17.0
	Right Hand	SMSRHJ	17.0

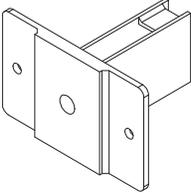
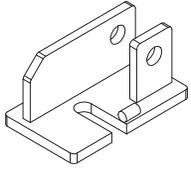
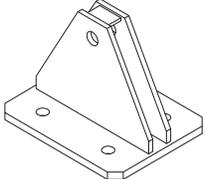
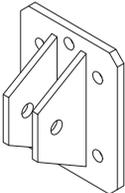
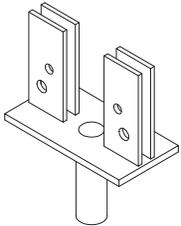
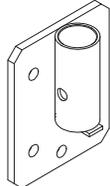
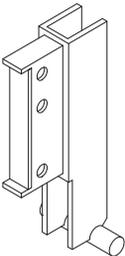
2. General Product Information

Slim-Max Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Max Soldier Turnbuckle Used as a plumbing brace and also used when converting the platform bracket into an adjustable platform when soldiers are used on sloping faces.		
	920-1240mm	SMST124	10.0
	1510-1840mm	SMST184	12.0
	Slim-Max Soldier Push-Pull Prop Used as a plumbing brace or as a load bearing strut for single sided forms.		
	1696-3100mm	SMSPPP	19.3
	Slim-Max Soldier Strut Connector Can be attached to the soldier to provide connection for RH or LH Jacks when the jacks are being used with a soldier to create a turnbuckle.		
	Strut Connector	SMSSC	4.2
	Slim-Max Soldier Brace Connector The brace connector provides positive connection of a horizontal scaffold tube brace to tie soldiers together.		
	Brace Connector	SMSBC	2.3
	Slim-Max Soldier Tilt Base Plate Secured to the base slab to provide attachment for turnbuckle, raking soldier or push-pull prop through the Ø 21mm hole or attachment of the RH/LH jacks through the Ø 26mm hole.		
	Tilt Base Plate	SMSTBP	6.4
	Slim-Max Soldier Shear Bracket		
	Shear Bracket	SMSSB	1.4
	Slim-Max Soldier End Plate Adapter Used where high loads need to be restrained @ base of soldier		
	End Plate Adapter	SMSEPA	27.0

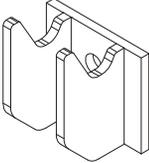
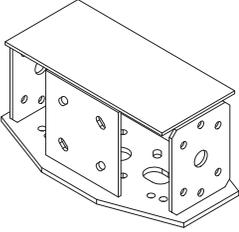
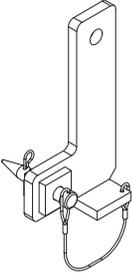
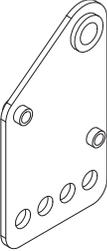
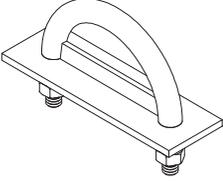
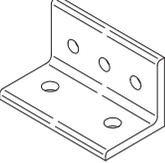
2. General Product Information

Slim-Max Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Max Soldier High Load Washer Specially design for use with the Slim-Max Soldier, this washer features plates that fit into the gap between the channels of the soldier to prevent web buckling enabling a higher tie load to be achieved.		
	High Load Washer	SMSHLW	5.2
	Slim-Max Soldier Raker Foot Bracket Secured to the base slab to provide attachment for turnbuckle or push-pull prop through the Ø 21mm hole.		
	Raker Foot Bracket	SMSRFB	2.5
	Slim-Max Male Hinge Bracket		
	Male Hinge Bracket	SMSMHB	7.0
	Slim-Max Female Hinge Bracket		
	Female Hinge Bracket	SMSFHB	6.0
	Soldier Low Soffit Bracket		
	Low Soffit Bracket	SSLSB	9.0
	Acrow Slim-Max Soldier End Guardrail Post Bracket Bolts to the end of a soldier being used as a horizontal beam to provide fixing for a guardrail post.		
	End Guardrail post bracket	SMSEGPB	4.5
	Slim-Max Climbing Shear Bracket		
	Climbing Shear Bracket	SMSCSB	10.0

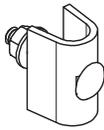
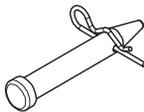
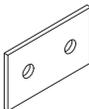
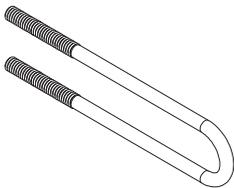
2. General Product Information

Slim-Max Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Max Climbing Wall Cradle		
	Climbing Wall Cradle	SSCWC	8.7
	Slim Soldier Multiway Connector		
	Multiway Connector	MJSMC	15.9
	Acrow Slim-Max Soldier Lifting Bracket Attached to the Slim-Max Soldier at either ends of the formwork shutter.		
	Lifting Bracket	SMSLB	5.0
	Acrow Slim-Max Soldier Lifting Beam Connector Used at each end of a Slim-Max Soldier to convert it into a lifting beam.		
	Lifting Beam Connector	SMSLBC	9.0
	Slim-Max Lifting Loop		
	Lifting Loop	SMSLL	2.4
	Maxi Right Angle Bracket		
	Right hand angle bracket	SMSRAB	3.0

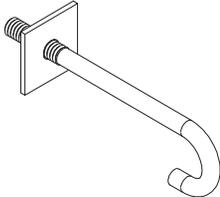
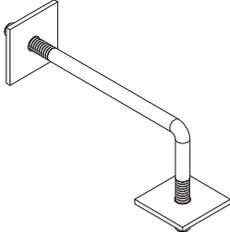
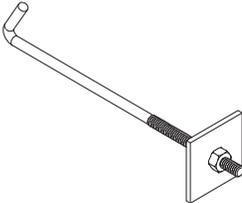
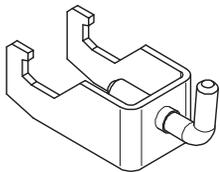
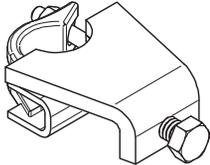
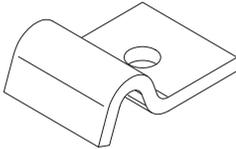
2. General Product Information

Soldier Products

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Slim-Max Soldier Timber Hook Bolt Down turn leg fits into hole in timber waler to secure waler to soldier. Hook Bolt Nuts.		
	Timber Hook Bolt	SMSTHB	0.8
	Slim-Max Soldier HL Washer Clamp and Bolt Assembly The HL Washer Clamp and bolt is used at the ends of the High Load washer to clamp it to the top flange of each channel section of the soldier to prevent movement of the flange and to hold the HL Washer in place.		
	HL Washer Clamp/Bolt	SMSHLWCB	0.4
	Acrow Soldier Podger Pins Ø19mm pin used to attach turnbuckles, push-pull prop and accessory brackets to soldiers or tilt base plate. Ø25mm pin used to attach RH and LH jacks to strut connector.		
	Podger Pin 16mm DIA	SMSCP16	0.19
	Podger Pin 19mm DIA	SMSCP19	0.25
	Podger Pin 25mm DIA	SMSCP25	0.4
	Acrow Slim-Max U-bolt Washer Used to clamp U-bolt against soldier.		
	U-bolt Washer	SMSUBW	1.2
	Acrow Slim-Max U-bolt Used in conjunction with U-bolt washer to secure tubular walers to soldier.		
	U-bolt	SMSUB	0.9

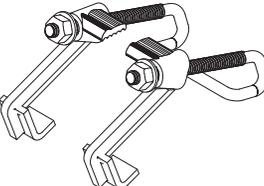
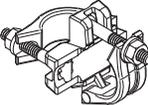
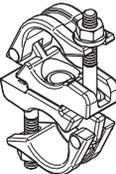
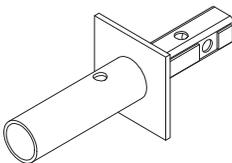
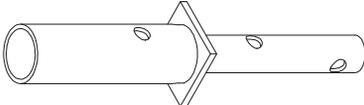
2. General Product Information

Soldier Attachments

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Tube Hook Bolt Used to attach 48mm diameter tubular walers to Slim-Lite Soldiers.		
	Slim-Lite Hook Bolt Tube	SSHBTUB	0.62
	Washer - 75 x 75 x 6 x Ø21	SSWASHM20	0.25
	Timber Hook Bolt Used to fix timber walers to Slim-Lite Soldiers.		
	Slim-Lite Hook Bolt Timber	SSHBTIM	1.10
	Washer - 75 x 75 x 6 x Ø17	SSWASHM16	0.25
	U-Form Hook Bolt Used when U-Form panels need to be attached to Slim-Lite Soldiers.		
	Slim-Lite Hook Bolt U-Form	SSHBUF	0.50
	Washer - 75 x 75 x 6 x Ø13	SSWASHM12	0.25
	U-Form Single Clip Joins scaffold tube to Soldiers.		
	U-Form Single Clip	UFSC	0.62
	Gravlock Girder Clamp Used for connecting scaffold tube to Soldiers.		
	Gravlock Girder Clamp	GGC	1.50
	Timber Waler Clamp Joins timber to Soldier.		
	Timber Waler Clamp	STWC	0.10

2. General Product Information

Soldier Attachments

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	A-Beam Clamp Clamps Acrow Aluminium Beams to Slim-Lite Soldier.		
	Clamp	ABC	0.25
	T Bolt	ABTB	
	M12 nut	ABN	
	P20 Clamp Used to connect P20 beam to soldiers.		
	P20 Clamp	SSPS20CA	2.4
	Double Coupler		
	Double Coupler	DC	1.05
	Swivel Coupler		
	Swivel Coupler	SC	1.18
	Acrow Slim-Lite / Slim-Max Soldier Post Adaptor Inserted and secured between the channel sections of the soldier to provide fixing for a guardrail post.		
	Post Adaptor	SMSSPA	2.8
	Slim-Lite / Slim-Max Soldier Top Handrail Bracket Inserted through end plate of soldier to provide handrail.		
	Top Handrail Bracket	SLSMTHB	2.5

2. General Product Information

Access & Edge Products

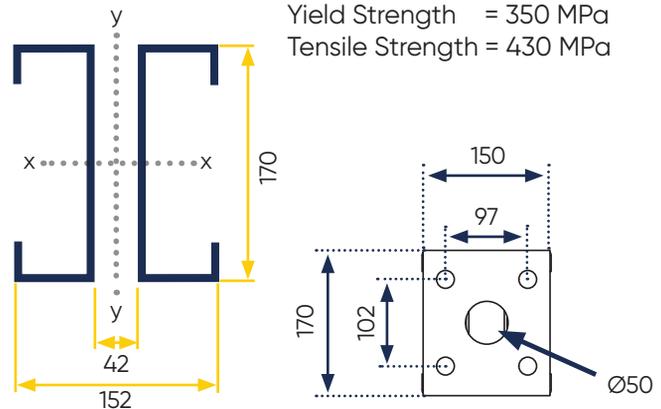
PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (kg)
	Guardrail Post Used in conjunction with Working Platform Bracket, Guardrail Post Bracket, Post Adaptor or Top Handrail Brackets to provide connection for Pin or M16 x 80mm bolt and nut.		
	Guardrail Post 1200mm	SSHS12	5.4
	Guardrail Post 1500mm	SSHS15	6.8
	Guardrail Post 1800mm	SSHS18	8.2
	Guardrail Post 2100mm	SSHS21	9.6
	Scaffold Tube		
	0.3m	ST03	1.4
	0.6m	ST06	2.7
	0.9m	ST09	4.1
	1.2m	ST12	5.4
	1.5m	ST15	6.8
	1.8m	ST18	8.1
	2.1m	ST21	9.5
	2.4m	ST24	10.8
	2.7m	ST27	12.2
	3.0m	ST30	13.5
	3.3m	ST33	14.9
	3.6m	ST36	16.2
	3.9m	ST39	17.6
	4.2m	ST42	18.9
	4.5m	ST45	20.3
	4.8m	ST48	21.6
	5.1m	ST51	23.0
5.4m	ST54	24.3	
5.7m	ST57	25.7	
6.0m	ST60	27.0	
6.3m	ST63	28.4	
6.5m	ST65	29.3	

3. WORKING LOAD LIMITS (WLL)

3. Working Load Limits (WLL)

Slim-Lite Soldier Section Properties

	GROSS SECTION 1*	NET SECTION 2**
t (mm)	3.2	3.2
A (mm ²)	1946	1549
I _{xx} (x10 ⁴ mm ⁴)	8.289	8.162
I _{yy} (x10 ⁴ mm ⁴)	3.779	3.575
Z _{xx} (x10 ³ mm ³)	97.518	96.026
r _{xx} (mm)	64.71	71.79
r _{yy} (mm)	43.69	47.51
I _w (x10 ⁹ mm ⁶)	5.694	-
J (x10 ³ mm ⁴)	6.930	-



Notes:

1* = Section through solid part

2** = Section through DIA62 hole

Refer to page 4.2 for hole details

Slim-Lite Soldier Bending Moment Capacity

Notes:

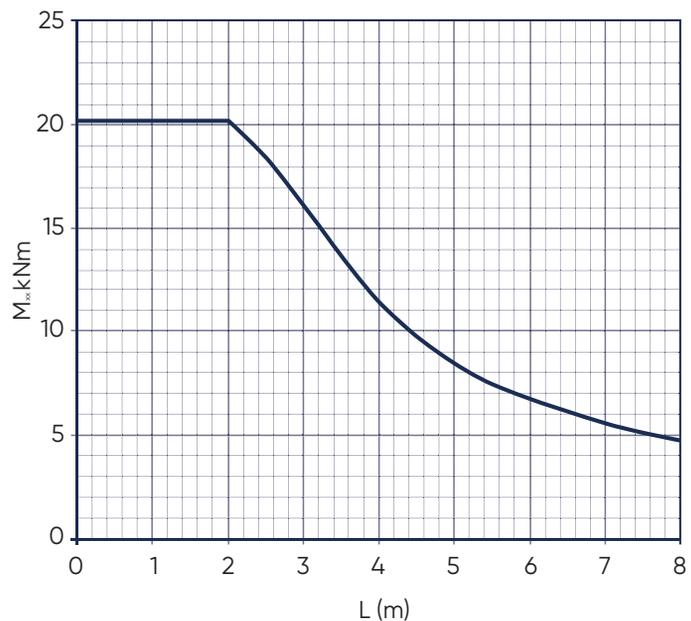
M_{xx} = Maximum Permissible Member Bending Moment about XX axis

L = Effective Length

M_{xx} = 20.2 kNm maximum, Section Capacity

M_{xx} = 8.4 kNm maximum, @ Joint (4 x M20x50mm G.r 4.6 Bolts)

Refer to below for further information.

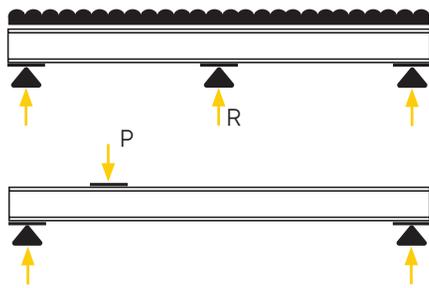


Notes:

1. Working Load Limit, applies to maximum capacity of Slim Lite Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = L/200, where L is overall length.

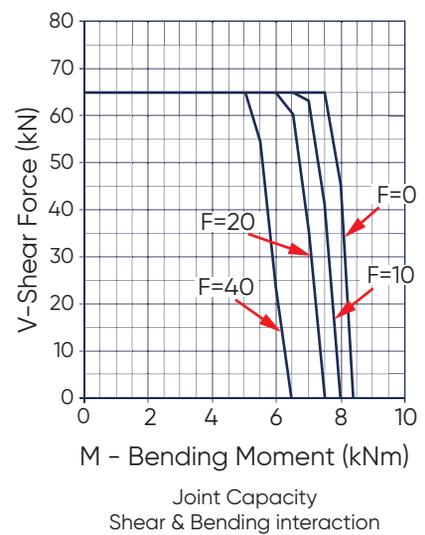
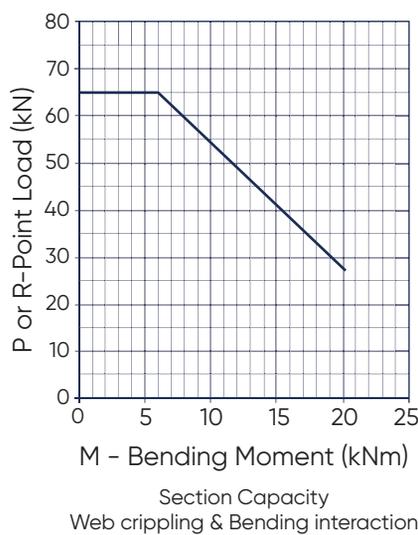
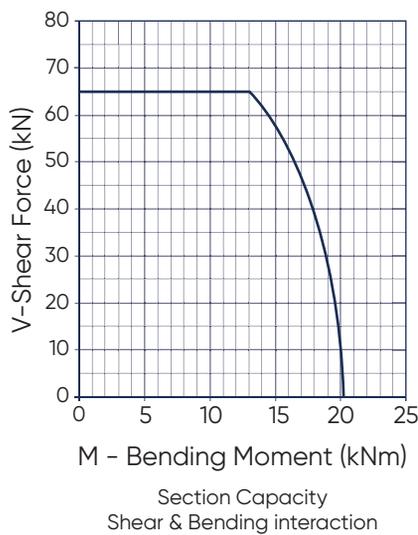
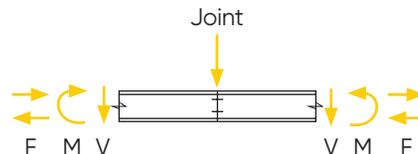
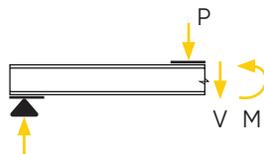
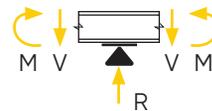
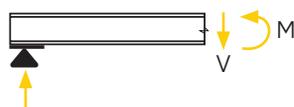
3. Working Load Limits (WLL)

Slim-Lite Soldier Maximum Reaction, Point Load and Shear



R = 65kN maximum (bearing Length = 100mm minimum)
 V-M interaction and R-M interaction must also be checked, see graph below. For member bending capacity see graph above.

P = 65kN maximum (bearing Length = 100mm minimum)
 V-M interaction and R-M interaction must also be checked, see graph below. For member bending capacity see graph above.



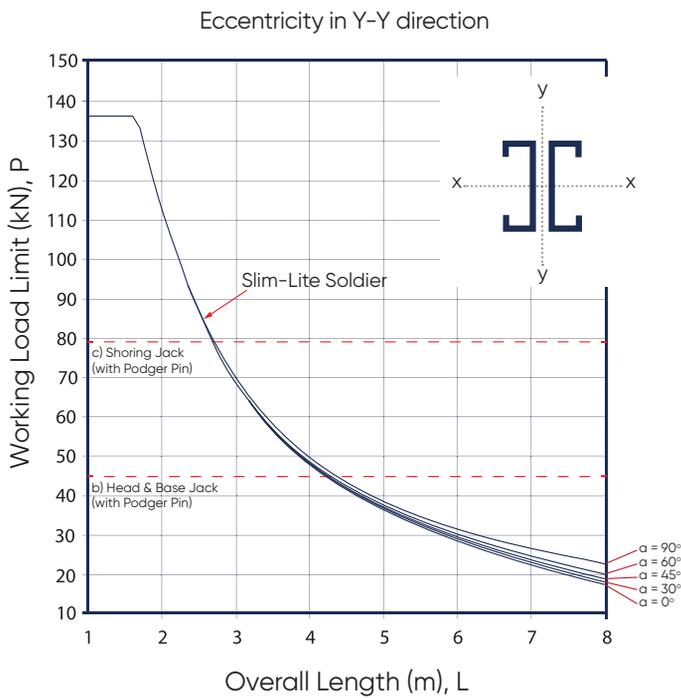
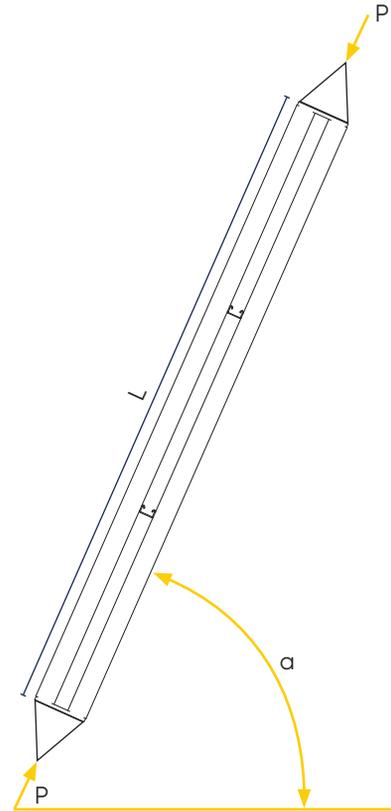
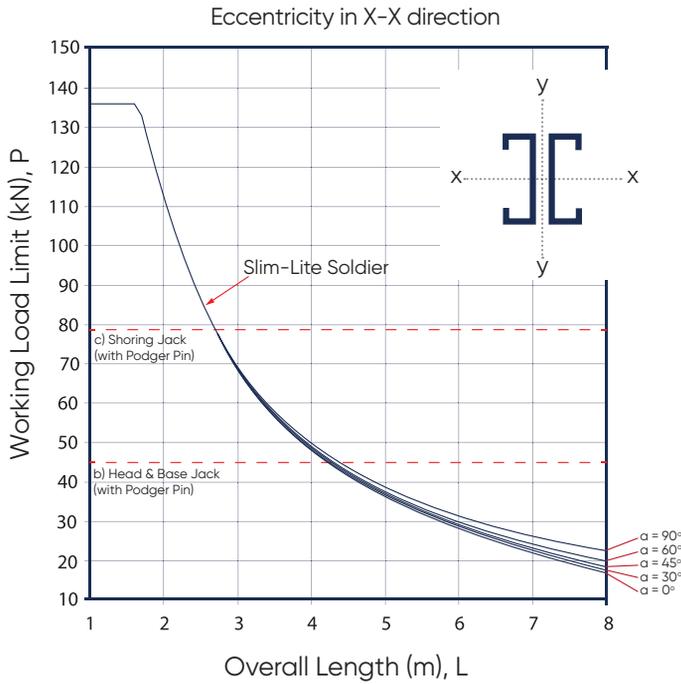
Notes:

1. Working Load Limit, applies to maximum capacity of Slim Lite Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = $L/200$, where L is overall length.

3. Working Load Limits (WLL)

Slim-Lite Soldier Raking Shore

Where soldier is restrained in both direction at top and bottom.



Working Load Limit shall not exceed the appropriate limit when used with the following components:

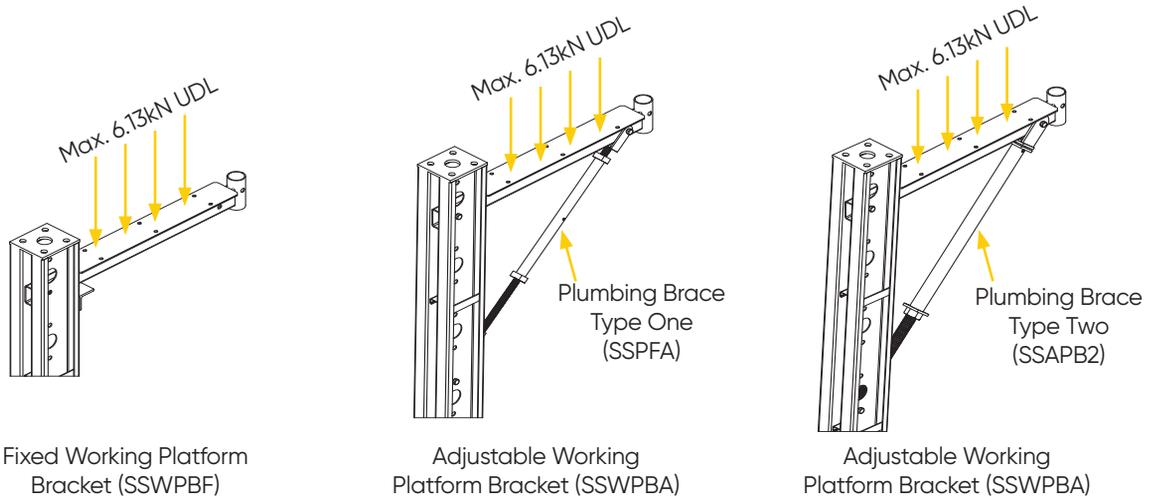
b) Head & Base Jack (SSHBJ) (with Podger Pin)	45kN
c) Shoring Jack (SSSJ) (with Podger Pin)	79kN

Notes:

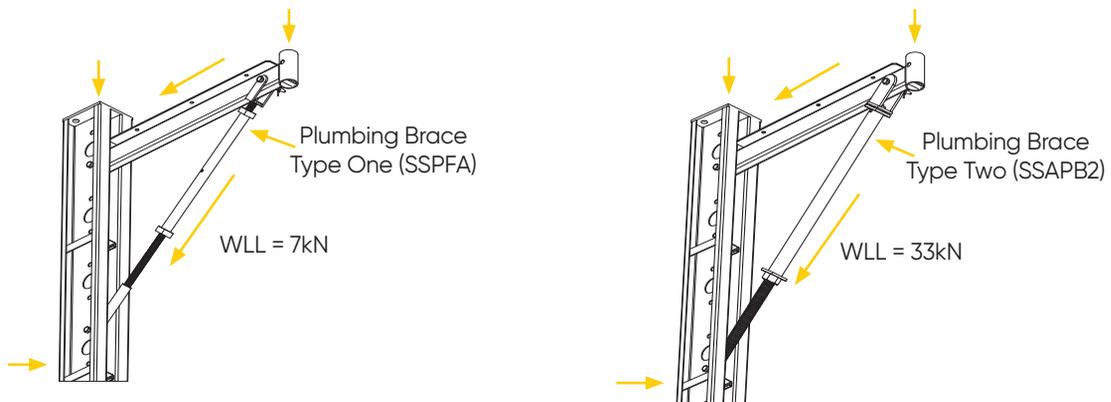
1. Working Load Limit, applies to maximum capacity of Slim Lite Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = $L/200$, where L is overall length.

3. Working Load Limits (WLL)

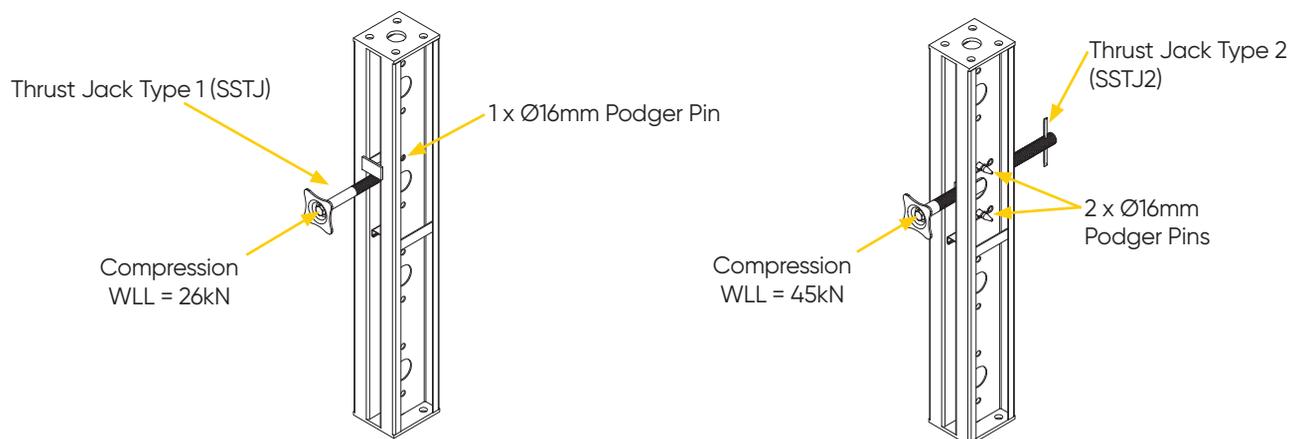
Slim-Lite Working Platforms



Slim-Lite Adjustable Plumbing Braces



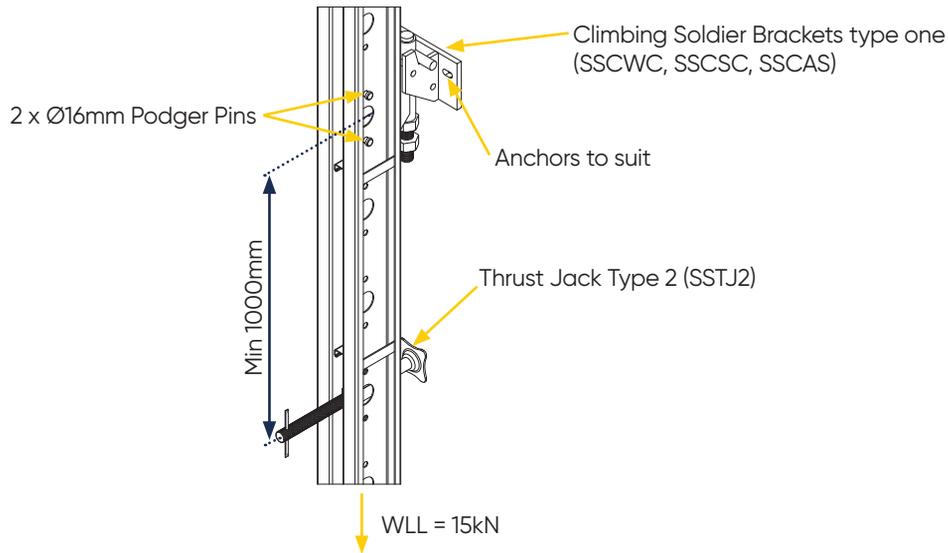
Slim-Lite Thrust Jacks



Important Notes: Refer to connection detail pages for correct assembly details if not listed above

3. Working Load Limits (WLL)

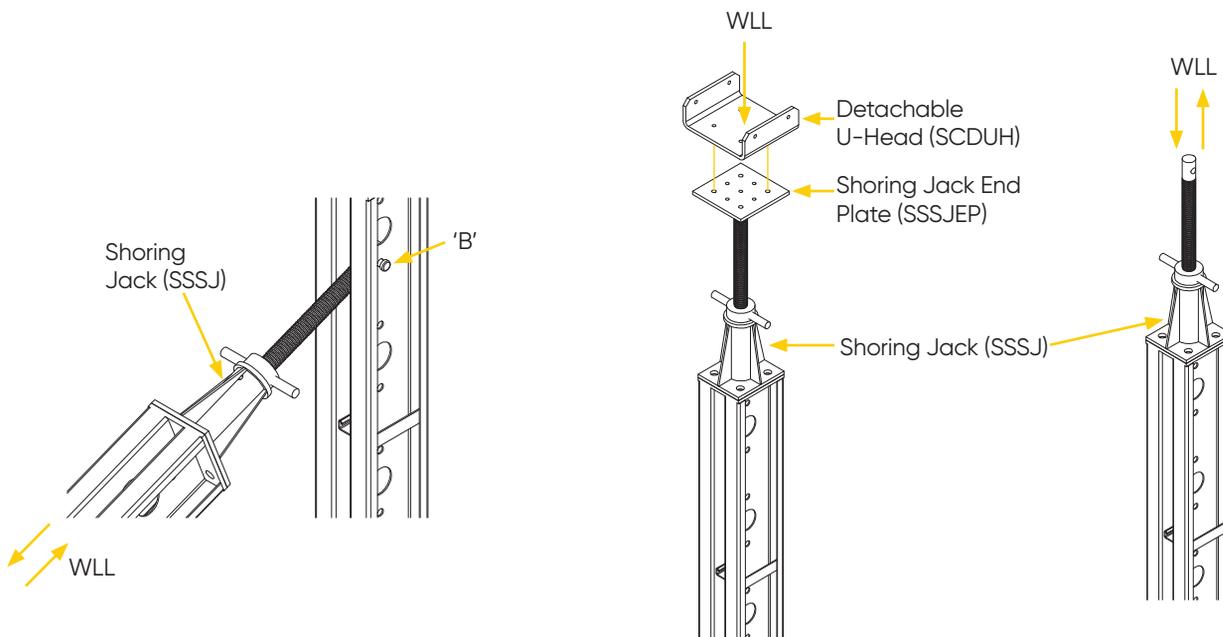
Slim-Lite Climbing Bracket



Slim-Lite Shoring Jack

B - Connecting Component	WLL kN
M16 x 80mm Long Grade 8.8 bolt & Nut	45
Ø 16mm Podger Pin	45

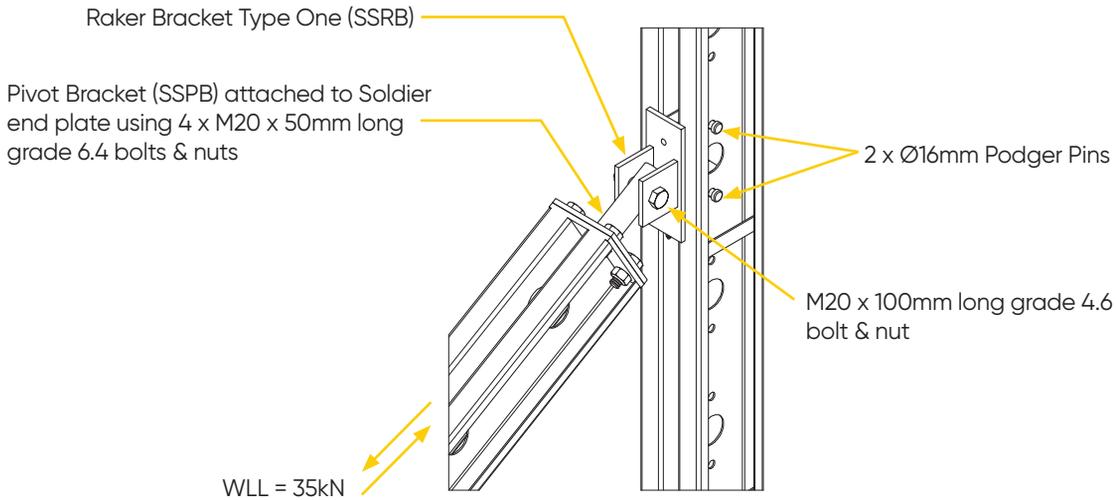
Shoring Jack	
Eccentricity	WLL kN
0	79
25	53



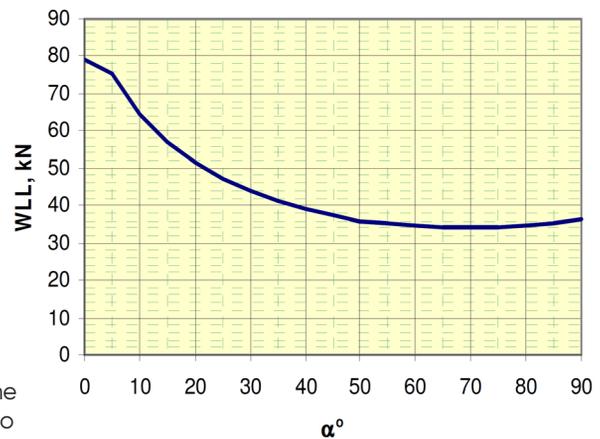
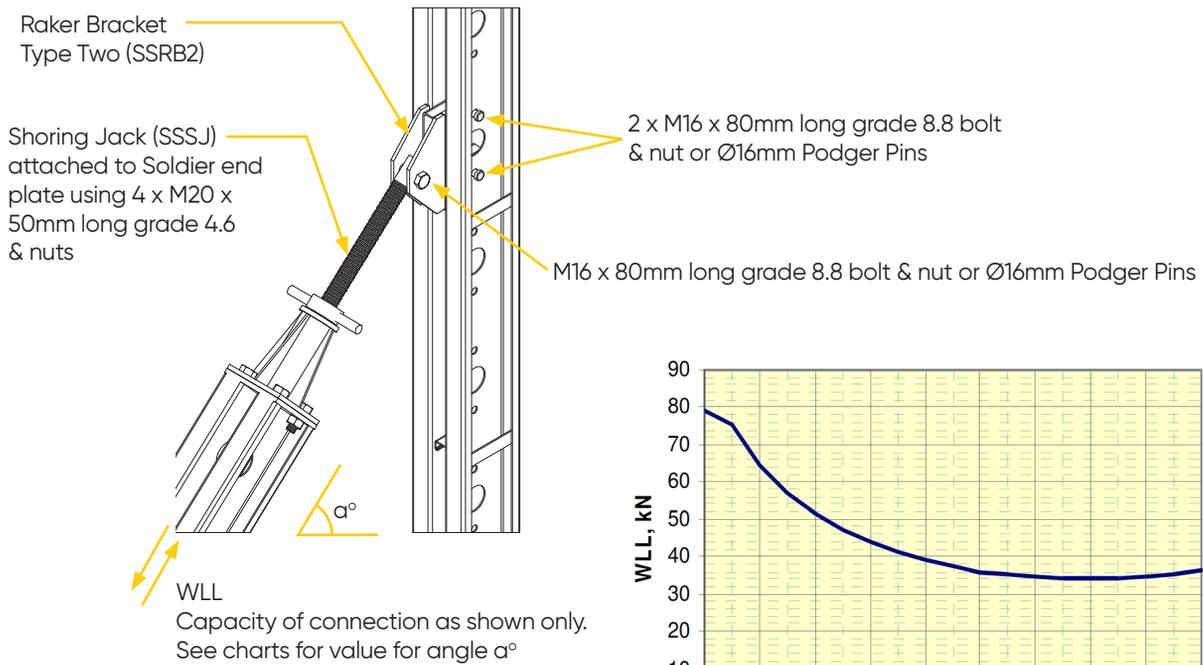
Important Notes: Refer to connection detail pages for correct assembly details if not listed above

3. Working Load Limits (WLL)

Slim-Lite Raker Brackets



NOTE: Capacity of connection as shown only

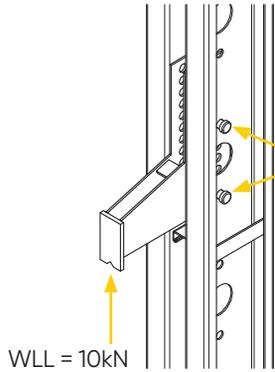


NOTE: If Head/Base jack is used instead of shoring jack the charts may be used but the maximum capacity is limited to 45kN.

Important Notes: Refer to connection detail pages for correct assembly details if not listed above

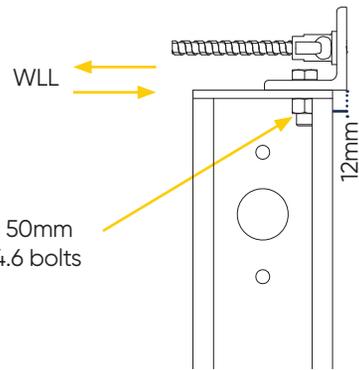
3. Working Load Limits (WLL)

Slim-Lite Shear Bracket & Slim-Lite Solider Right Angle Bracket



Shear Bracket (SSSB)

Shear Bracket is connected to Soldier with 2 x Ø16mm Podger Pins

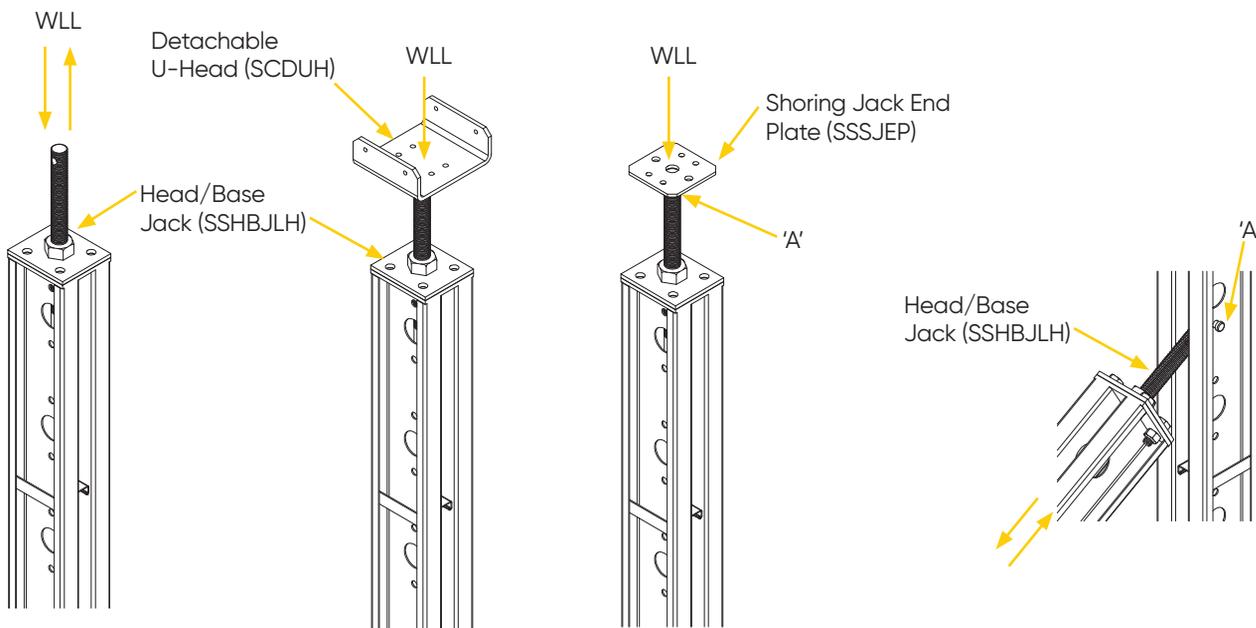


Right Angle Bracket (SSRAB)

Slim-Lite Head / Base Jack, U-Head and Base Plate

A - Connecting Component	WLL kN
Ø16mm Podger Pin	45
M16 x 80mm Long Grade 8.8 bolt & Nut	45

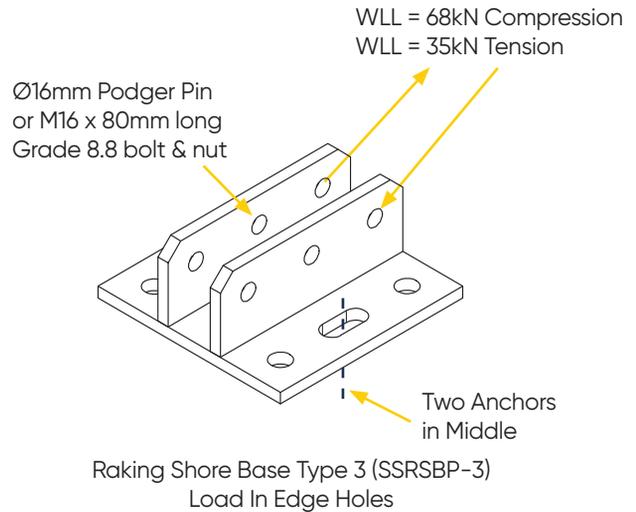
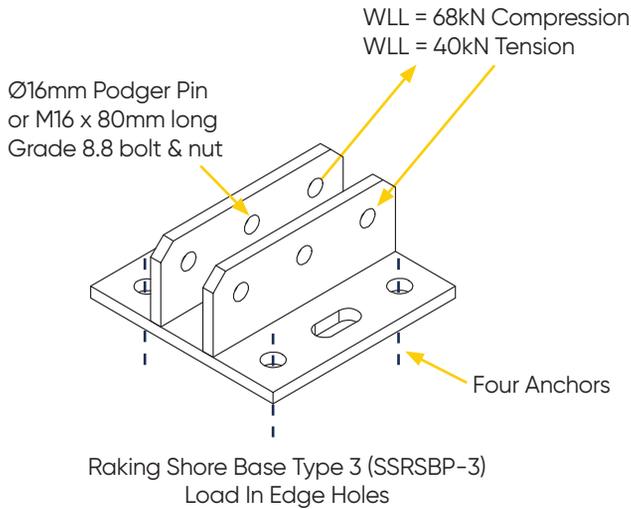
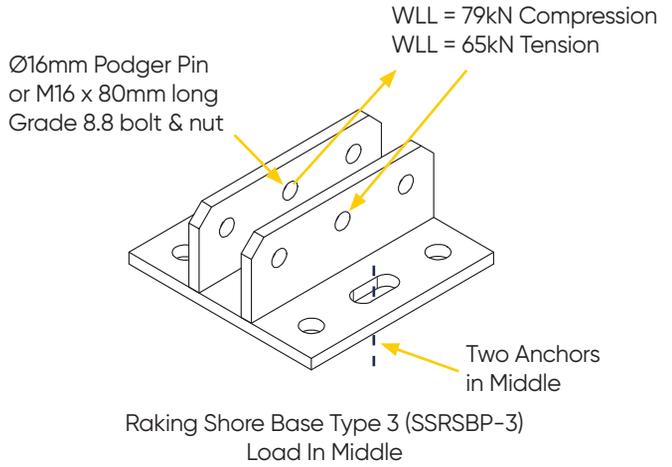
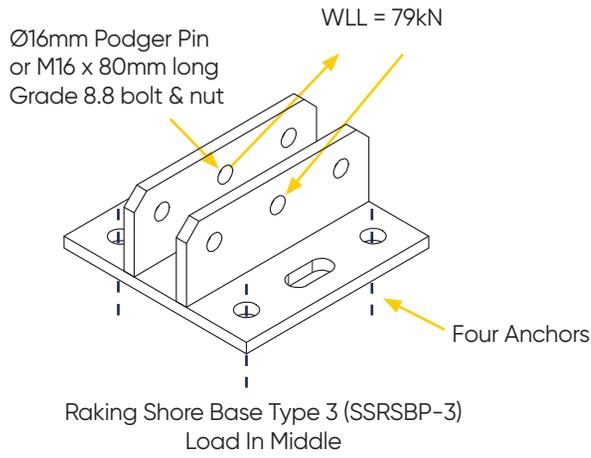
NOTE:
WLL refers to the capacity of the connection as shown only. For Soldier capacity refer to page 3.3



Important Note: Refer to connection detail pages for correct assembly details if not listed above

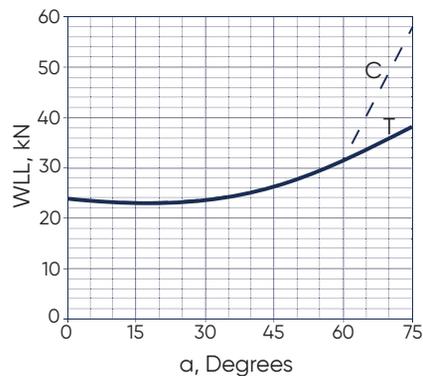
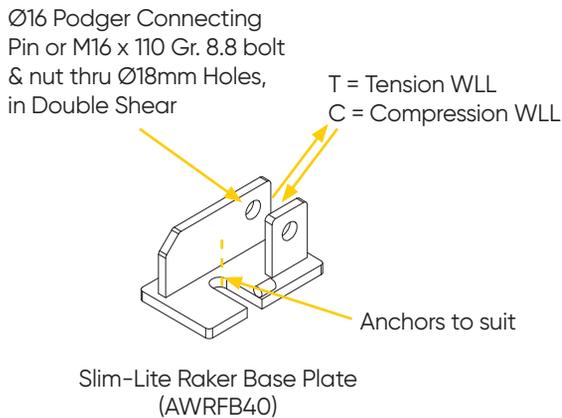
3. Working Load Limits (WLL)

Slim-Lite Raking Shore Base & Raker Base Plate



Note: Capacity May Be Limited By Anchor Design

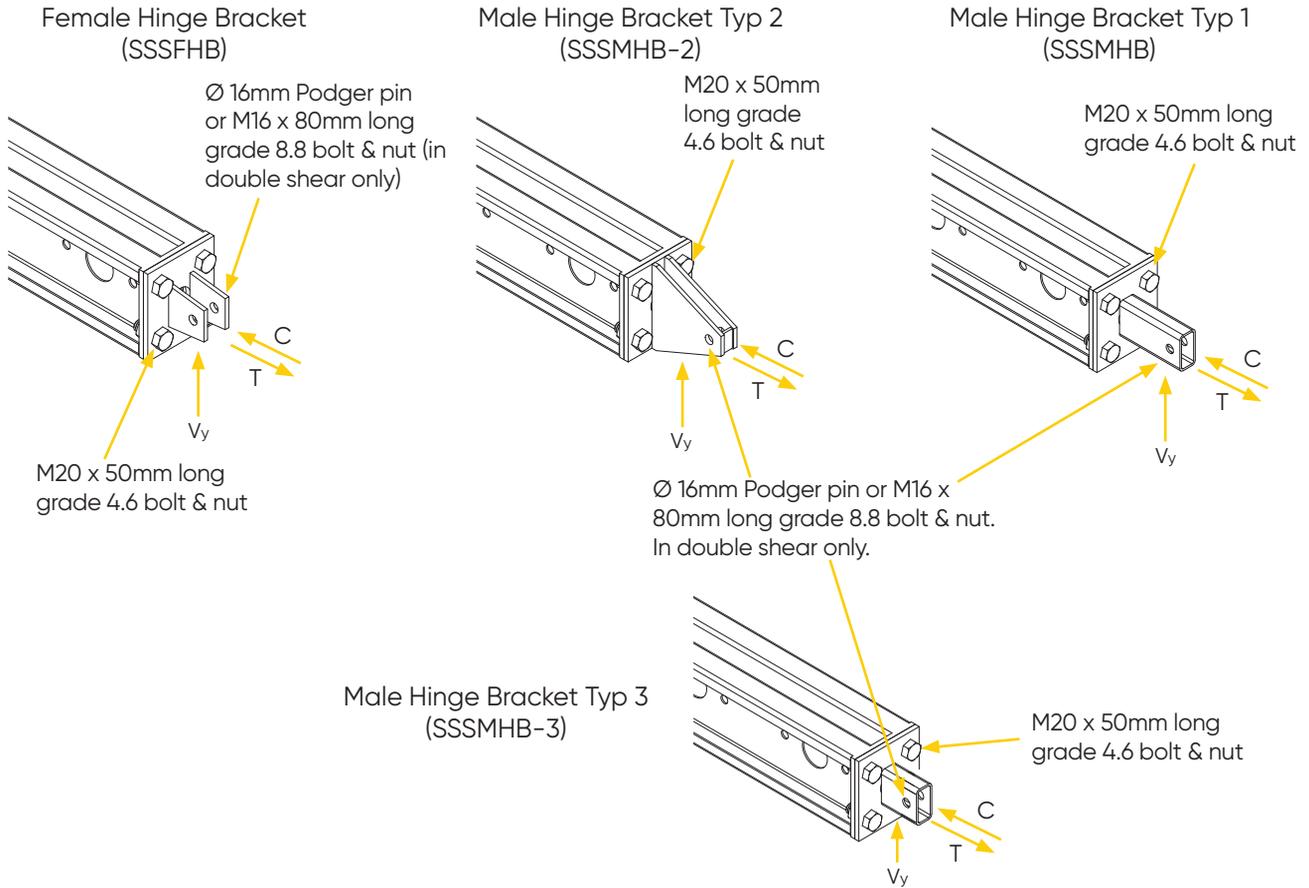
Slim-Lite Raker Foot Bracket



Important Note: Refer to connection detail pages for correct assembly details if not listed above

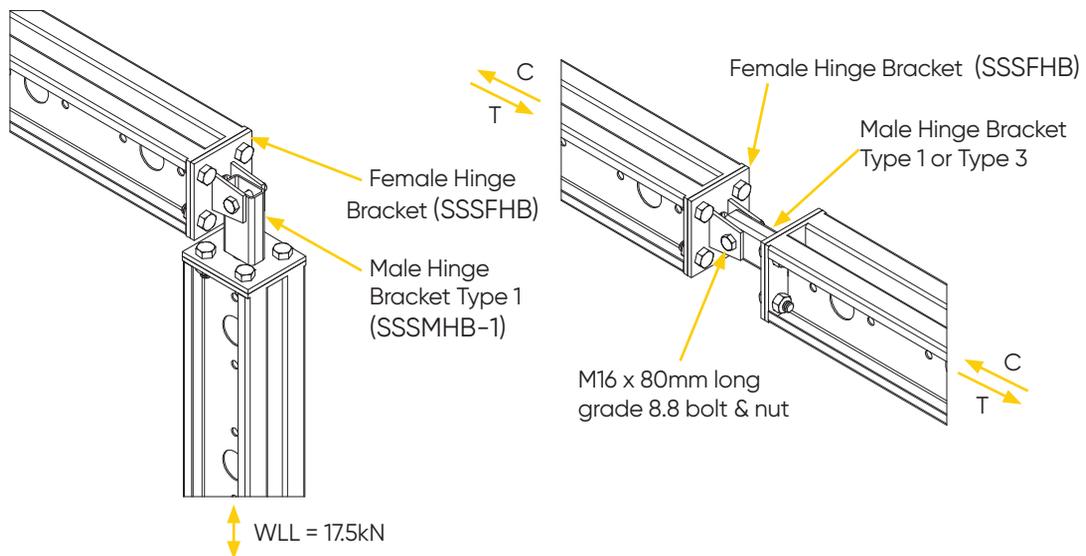
3. Working Load Limits (WLL)

Slim-Lite Hinge Bracket



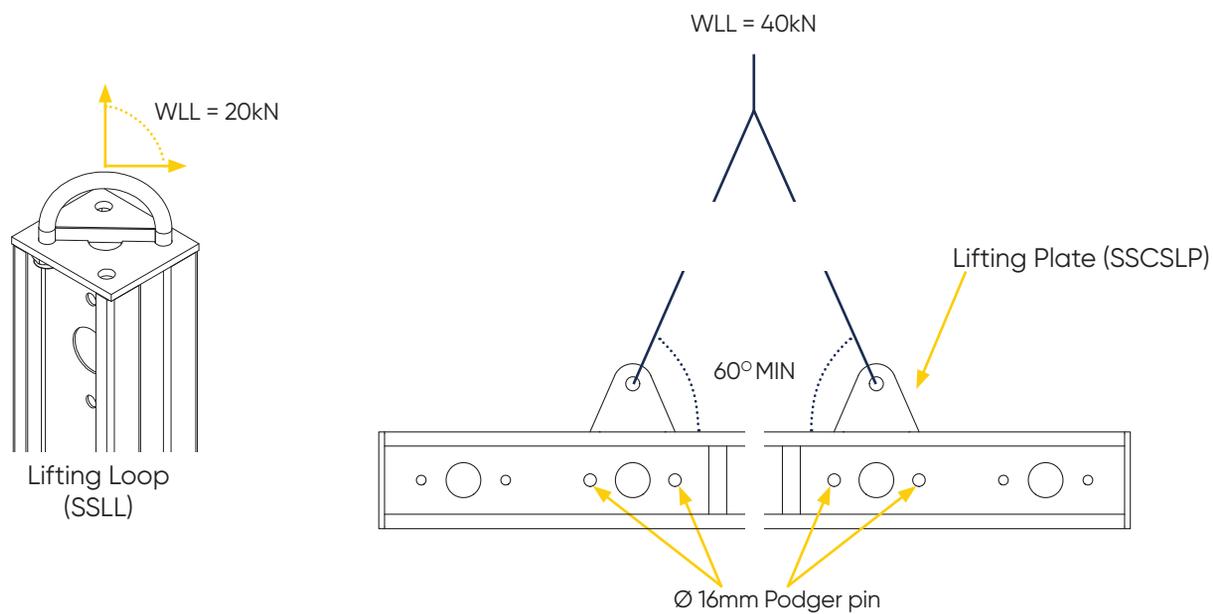
Force	Male Hinge Bracket			Female Hinge Bracket
	Type One	Type Two	Type Three	
Axial Tension T*, kN	45	65	45	79
Axial Compression C*, kN	63	79	63	79
Shear Vy*, kN	17.5	30	35	35

Note: Linear Interaction Shall Be Adopted for Combined Actions

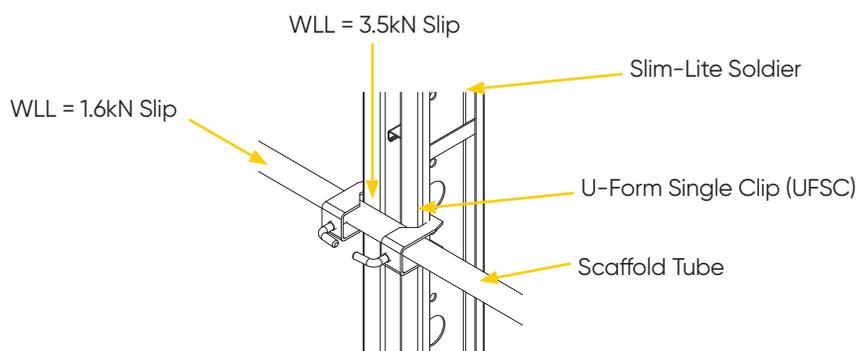


3. Working Load Limits (WLL)

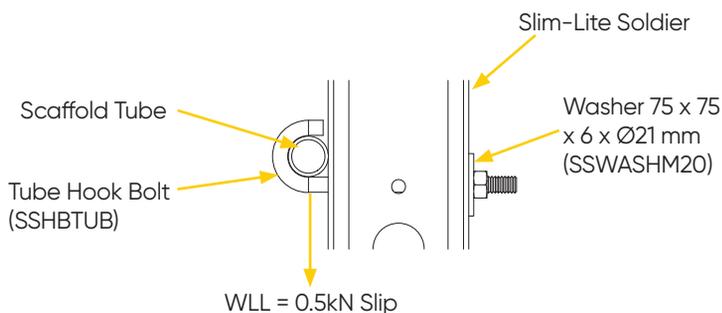
Slim-Lite Lifting Plate & Lifting Loop



Slim-Lite U-Form Clip

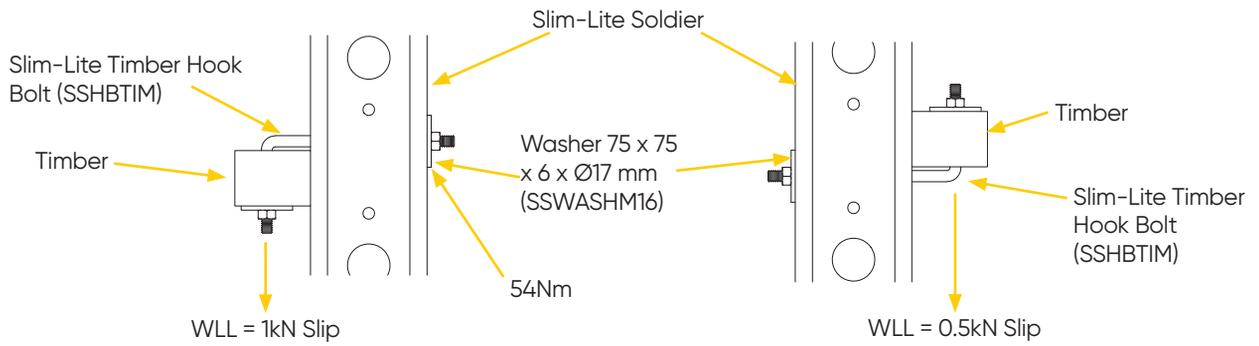


Slim-Lite Hook Bolt For tube

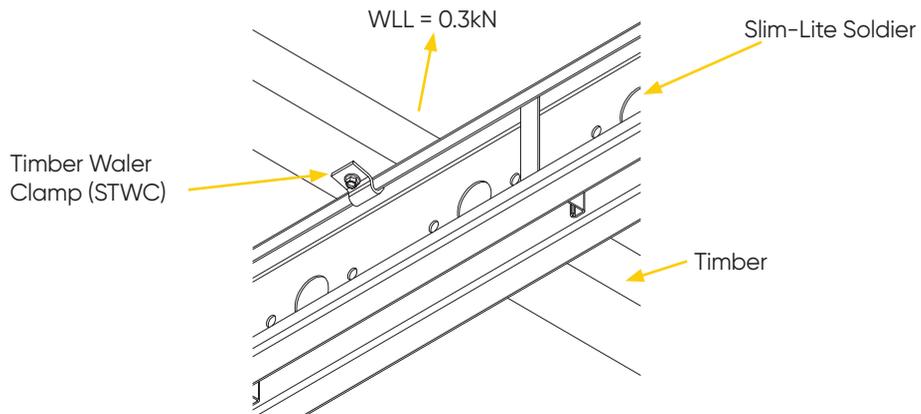


3. Working Load Limits (WLL)

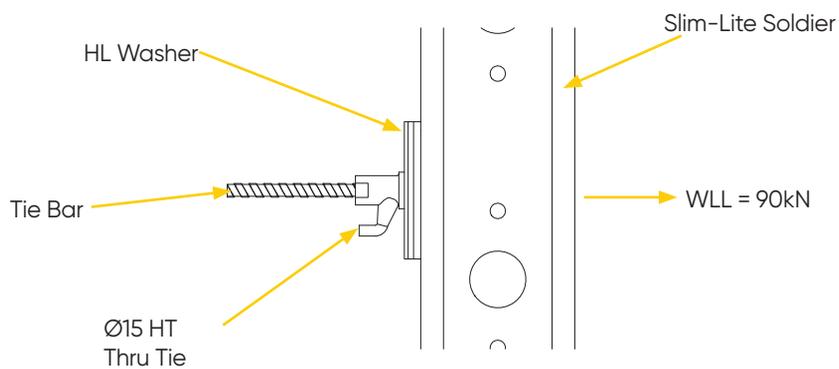
Slim-Lite Hook Bolt for Timber



Timber Water Clamp

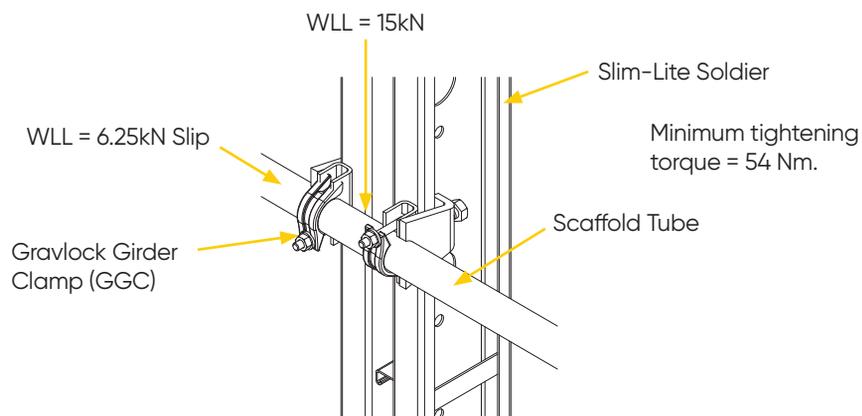


Slim-Lite HL Washer

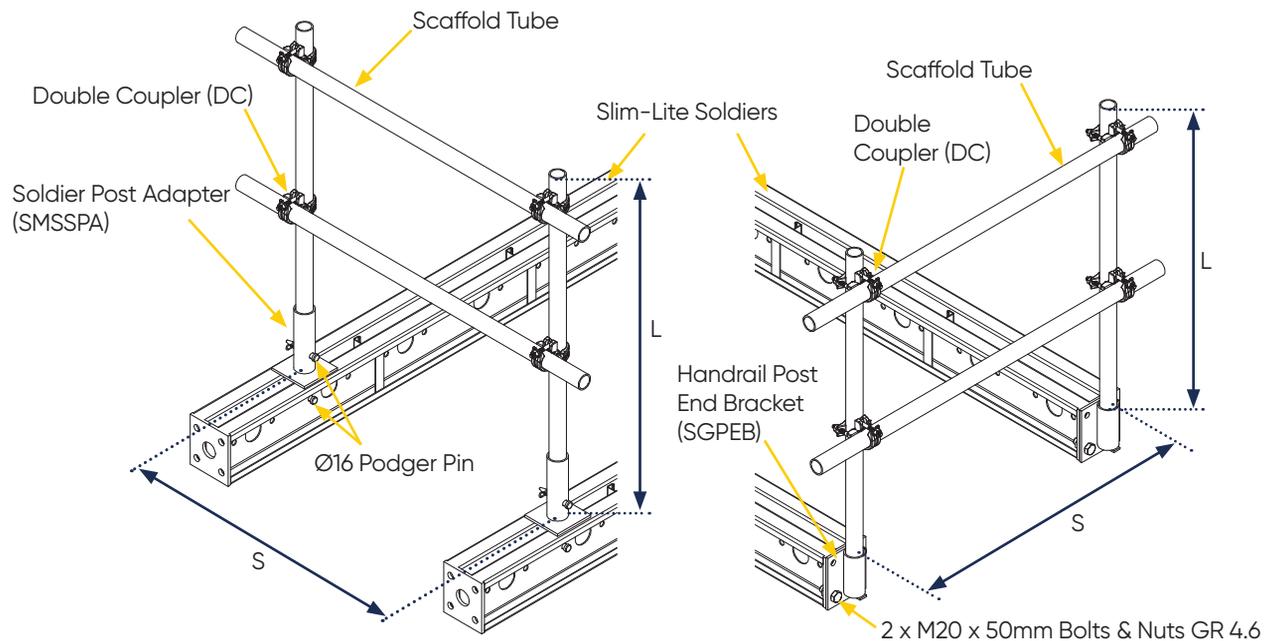


3. Working Load Limits (WLL)

Slim-Lite Gravlock Girder Clamp



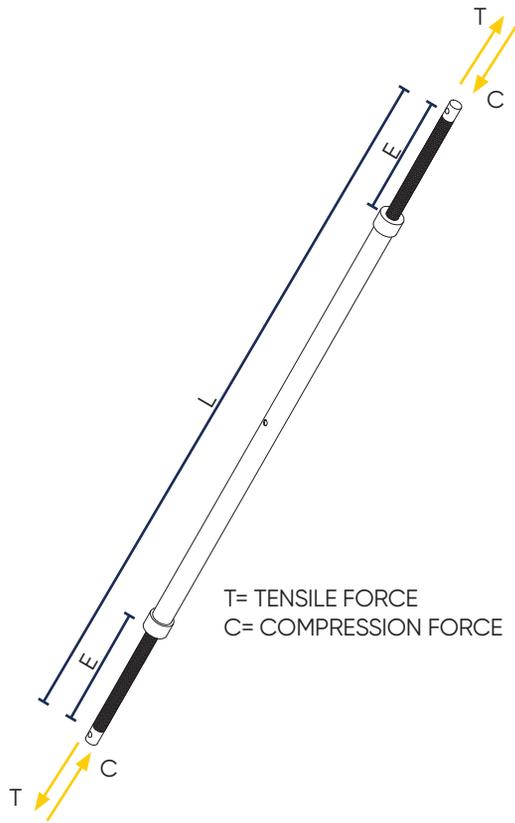
Slim-Lite Handrail Brackets



Guardrail Height L (m)	Maximum Spacing between Guardrail Post S (m)
1.0	3.0
1.5	2.4

3. Working Load Limits (WLL)

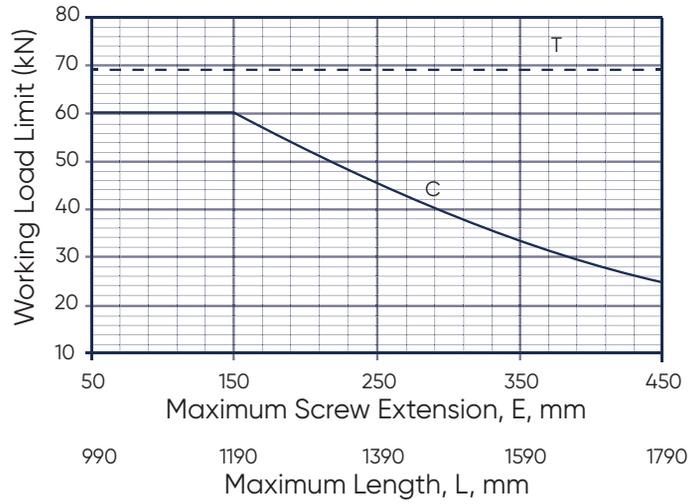
Slim-Lite Turnbuckles



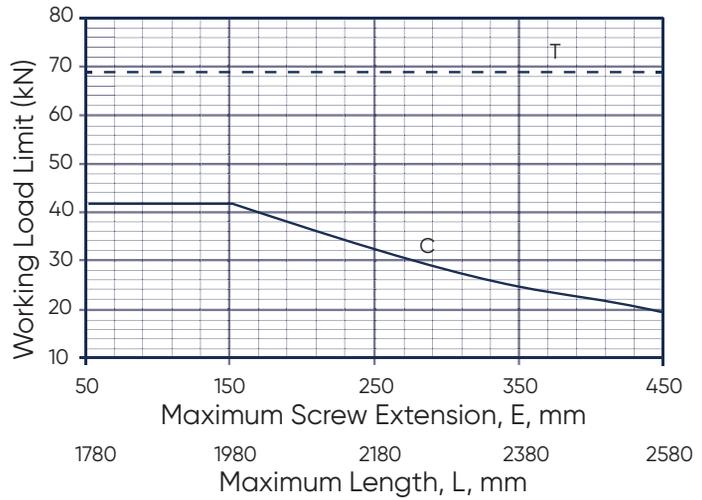
No. 0 (STB-0)

T = 69kN
C = 60kN

No. 1 (STB-1)



No. 2 (STB-2)

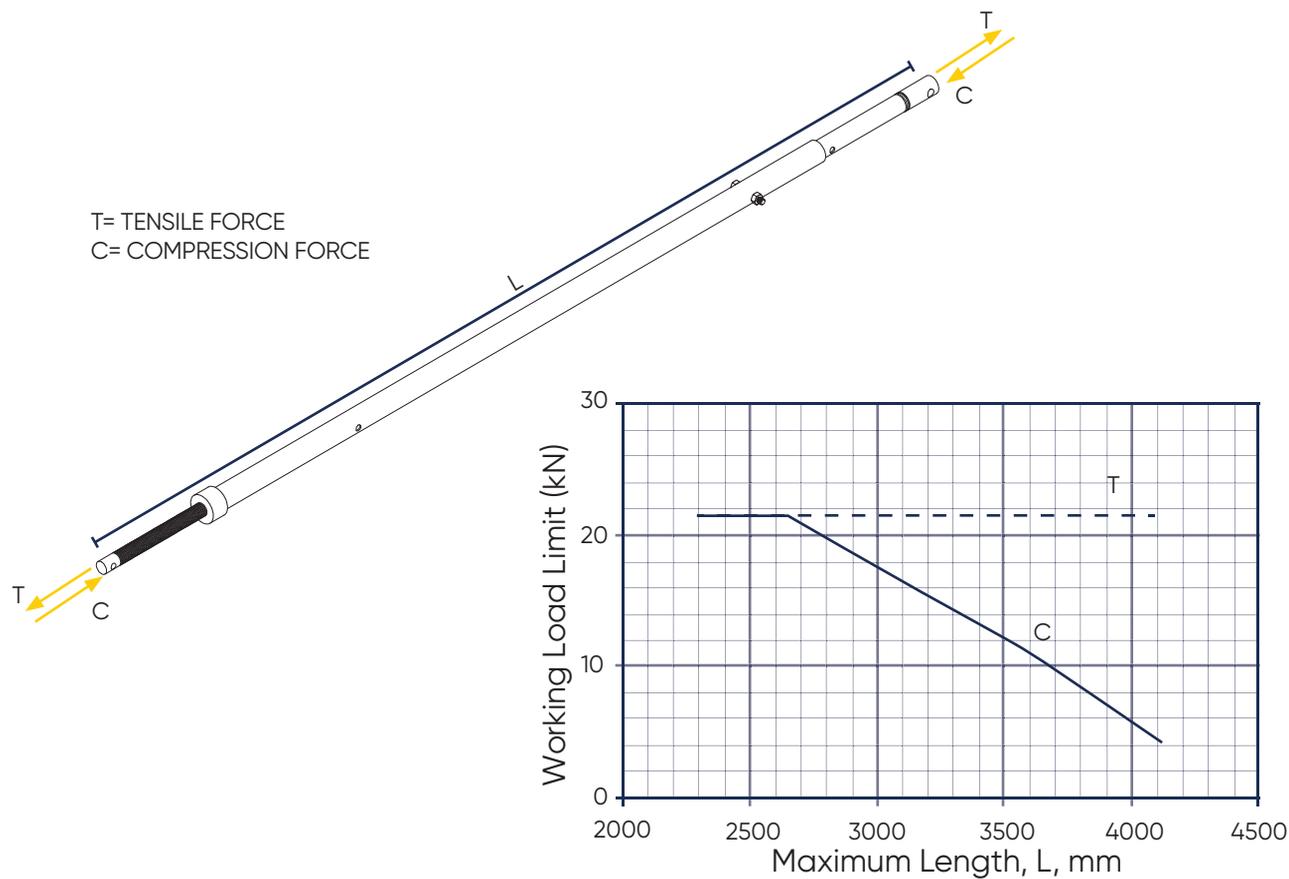


Notes:

1. Working Load Limit, applies to maximum capacity of Slim Lite Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Limit State Conversion Factor = 1.5

3. Working Load Limits (WLL)

Slim-Lite Shoring Brace (SASB)

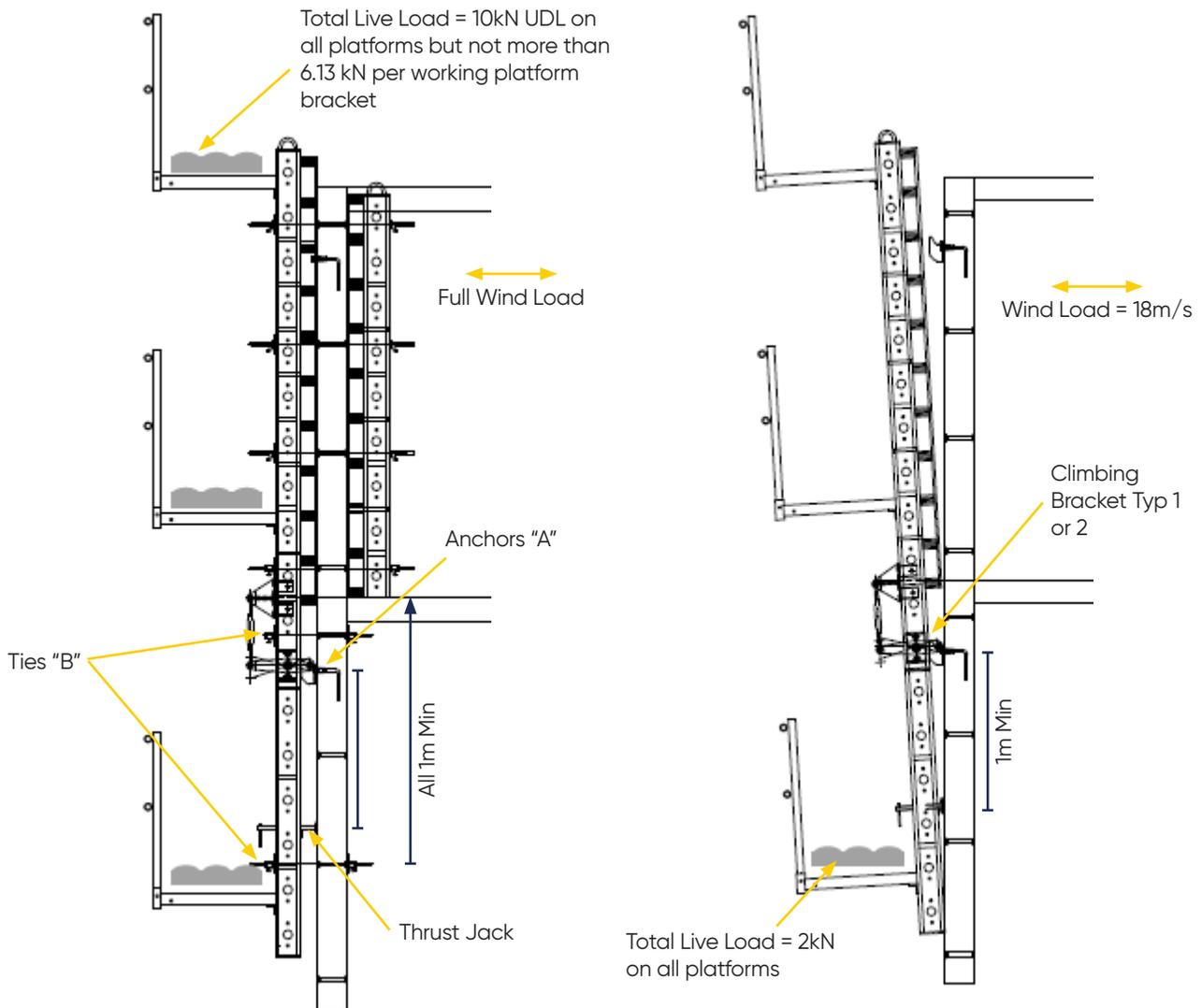


Notes:

1. Working Load Limit, applies to maximum capacity of Slim Lite Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Limit State Conversion Factor = 1.5

3. Working Load Limits (WLL)

Slim-Lite Climbing Bracket



Design criteria:

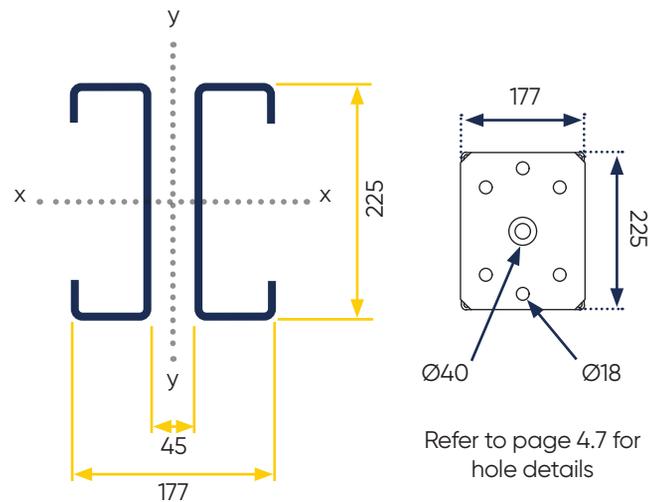
- Maximum shutter height = 3m
- Maximum shutter tributary area per Wall Bracket = 8m²
- Maximum Dead Load per Wall Bracket = 20kN
- Maximum Live Load per working platform = 6.13kN UDL (where shutter is in vertical position and operational)
- Maximum total Live Load per Wall Bracket on all platforms = 10kN (where shutter is in vertical position and operational)
- Maximum total Live Load per Wall Bracket on all platforms = 2kN (where shutter is in inclined position)
- Maximum wind speed for shutter in inclined position = 18m/s
- Maximum design wind speed for shutter in vertical position = 41m/s
- Anchors "A" to resist Vertical = 12kN & Horizontal = 10kN each
- Ties "B" and Trust Jack to resist full wind load T = 40kN, C = 30kN

For all other cases please refer to Acrow Engineering.

3. Working Load Limits (WLL)

Slim-Max Soldier Section Properties

	GROSS SECTION 1*	NET SECTION 2**
t (mm)	3.5	3.5
A (mm ²)	2681	2268
I _{xx} (x10 ⁶ mm ⁴)	19.506	18.113
I _{yy} (x10 ⁶ mm ⁴)	6.086	5.842
r _{xx} (mm)	85.30	
r _{yy} (mm)	47.65	
I _w (x10 ⁹ mm ⁴)	16.81	
J (x10 ³ mm ⁴)	11.23	



Yield Strength = 450 MPa
Tensile Strength = 590 MPa

Notes:

1* = Section through solid part
2** = Section through small hole

Slim-Max Soldier Bending Moment Capacity

Notes:

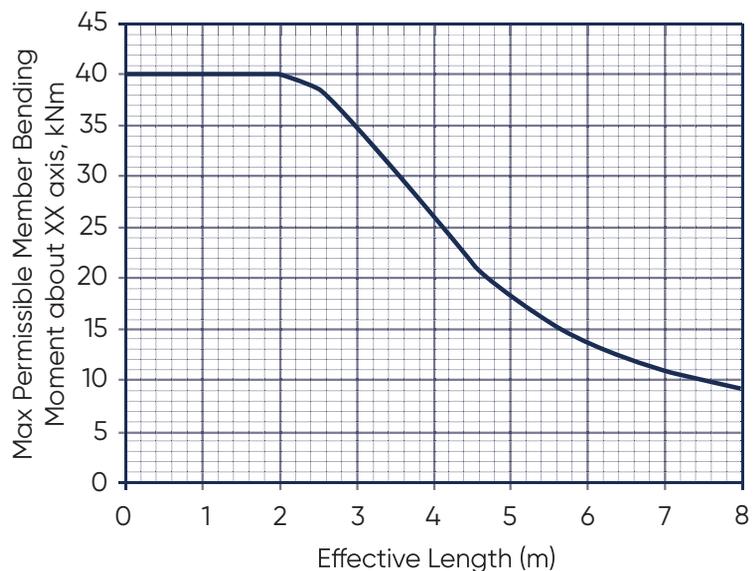
M_{xx} = Maximum Permissible Member Bending Moment about XX axis

L = Effective Length

M_{xx} = 40.0 kNm maximum, Section Capacity

M_{xx} = 15.5 kNm maximum, @ Joint (M16 x 55mm GR 8.8 Bolts)

Refer to below for further information.

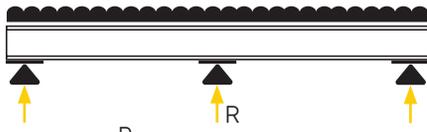


Notes:

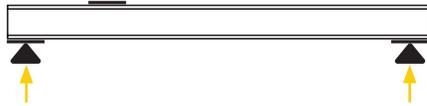
1. Working Load Limit, applies to maximum capacity of Slim Max Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = L/200, where L is overall length.

3. Working Load Limits (WLL)

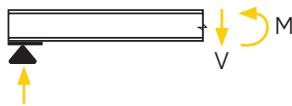
Slim-Max Soldier Maximum Reaction, Point Load and Shear



R = 76 kN maximum (bearing Length = 100mm minimum)
 R = 80 kN maximum (bearing Length = 130mm minimum)
 V-M interaction and R-M interaction must also be checked, see graph below. For member bending capacity see graph on page 3.17.

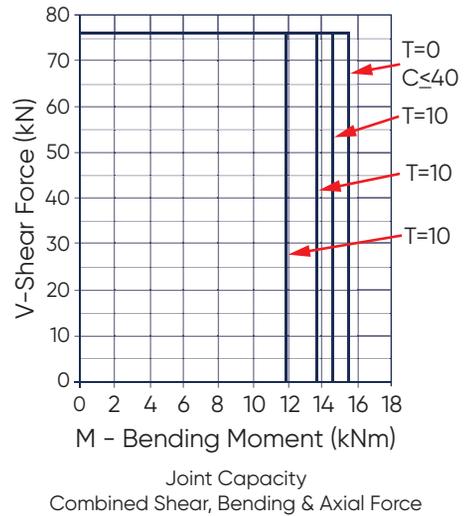
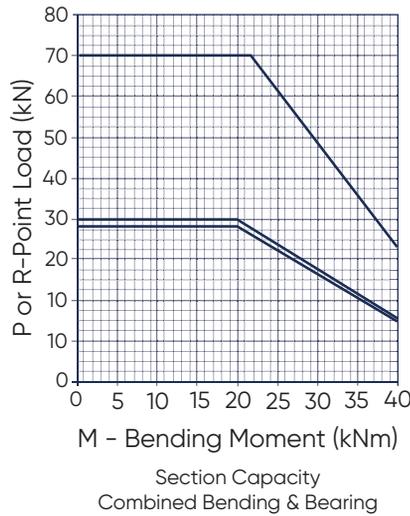
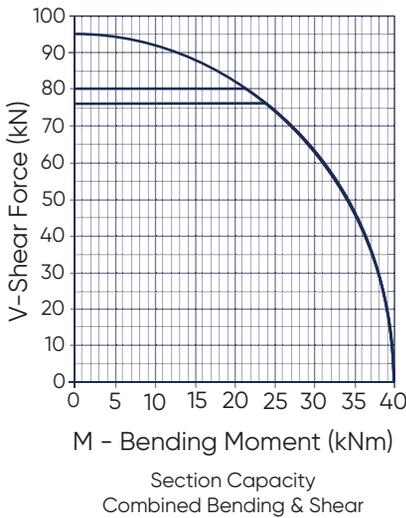
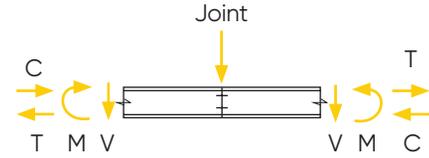
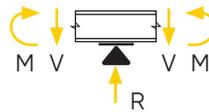
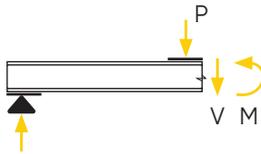


P = 76 kN maximum (bearing Length = 100mm minimum)
 P = 80 kN maximum (bearing Length = 130mm minimum)
 P = 160 kN maximum (HL Washer Only)



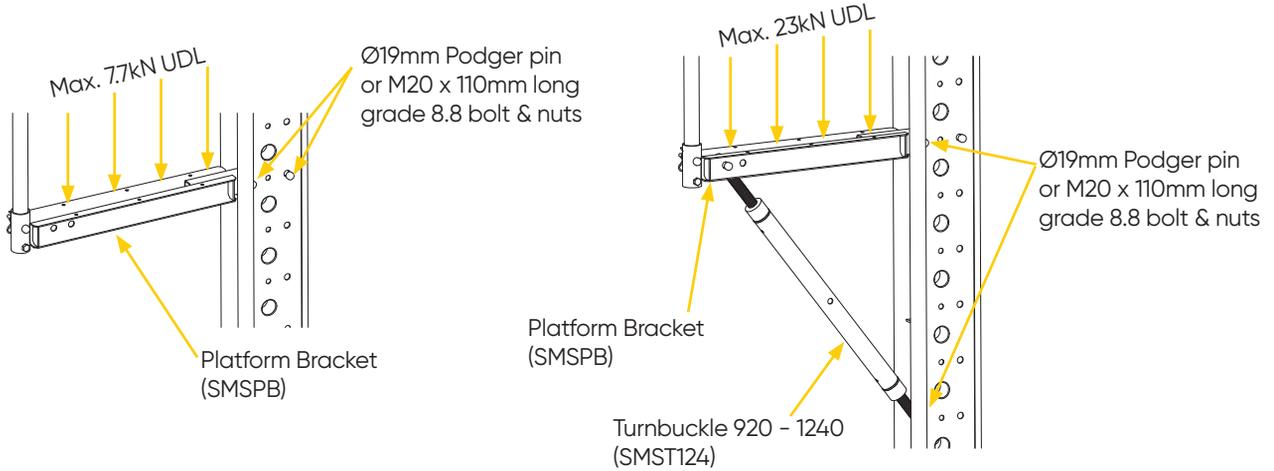
V-M interaction and P-M interaction must also be checked, see graph below. For member bending capacity see graph on page 3.17.

T= TENSILE FORCE
 C= COMPRESSION FORCE

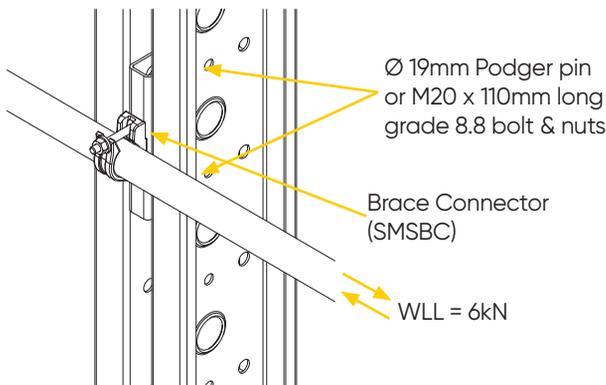


3. Working Load Limits (WLL)

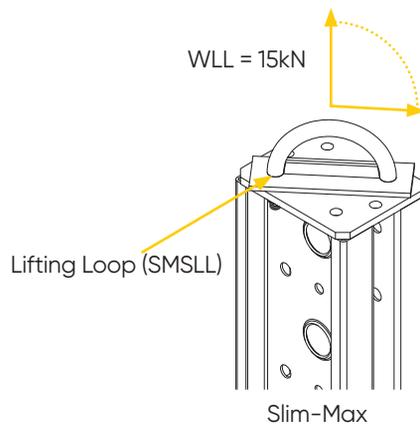
Slim-Max Platform Bracket



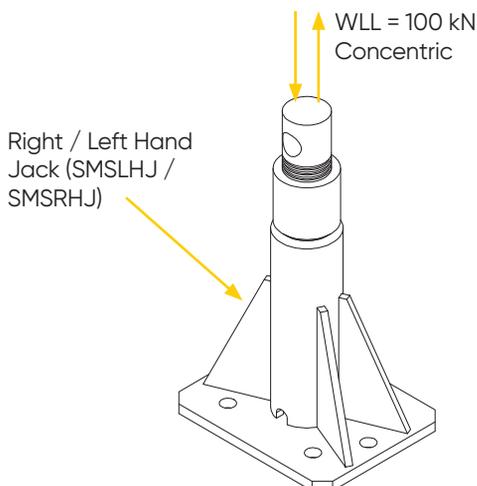
Slim-Max Brace Connector



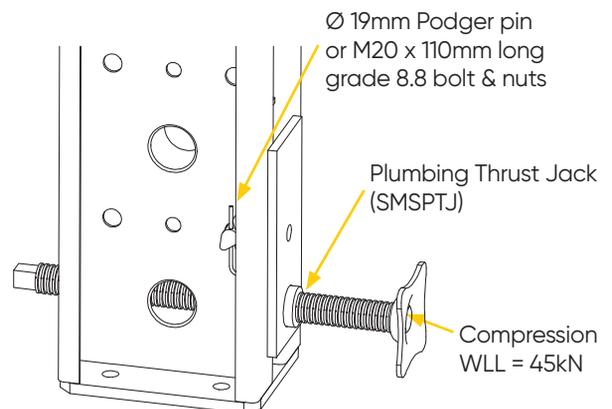
Slim-Max Lifting Loop



Slim-Max Right / Left Hand Jack

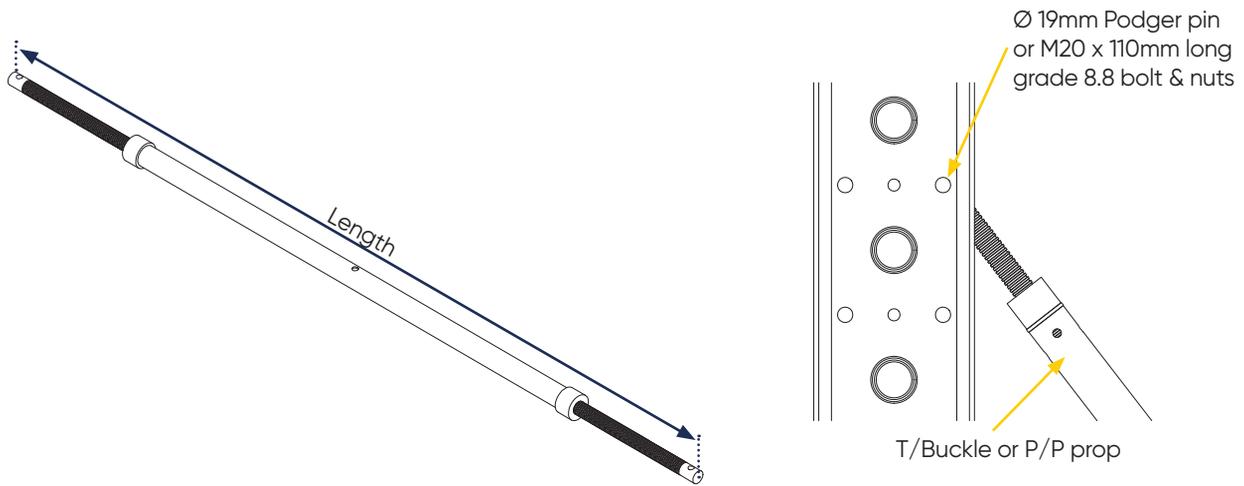


Slim-Max Plumbing Thrust Jack

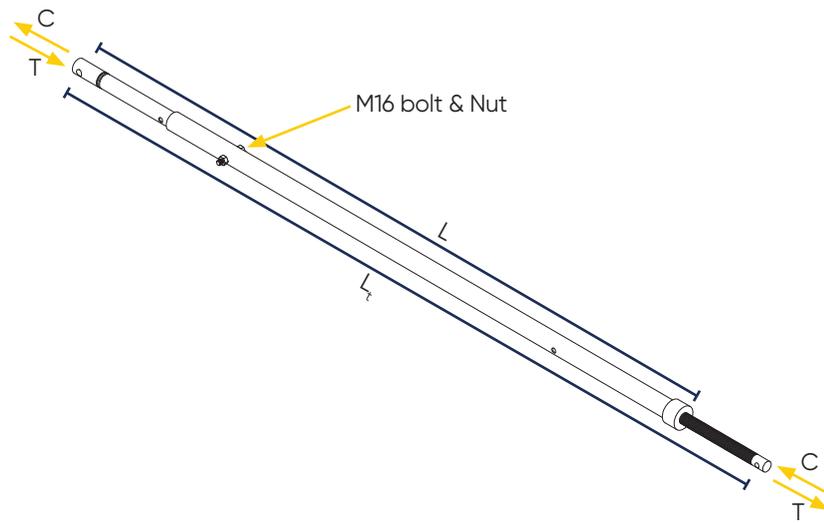


3. Working Load Limits (WLL)

Slim-Max Turnbuckle and Push - Pull Prop



Turnbuckle Type	Compression Min	Compression Max	Tension
Turnbuckle 920 - 1240 (SMST124)	53 kN (920mm Length)	43 kN (1240mm Length)	53 kN
Turnbuckle 1510 - 1840 (SMST184)	52 kN (1510mm Length)	39 kN (1840mm Length)	55 kN

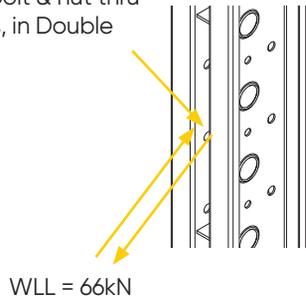


Push - Pull Prop (SMSPPP)									
L (m)		1.64	1.85	1.92	2.13	2.20	2.41	2.48	2.69
L _t (m) - Range	min	1.70	1.91	1.98	2.19	2.26	2.47	2.54	2.75
	max	2.04	2.25	2.32	2.53	2.60	2.81	2.88	3.06
C (kN)		33	31.3	29.3	22.7	21	17	15.7	12
T (kN)		33	33	33	33	33	33	33	33

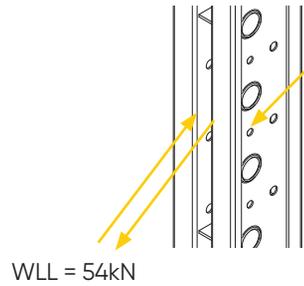
3. Working Load Limits (WLL)

Slim-Max Soldier Pin Holes

Ø 19 Podger Pin or M20 x 110 Gr. 8.8 bolt & nut thru DIA21 Holes, in Double Shear

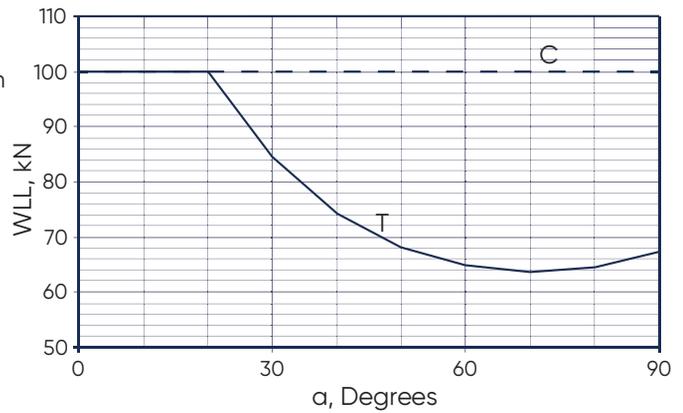
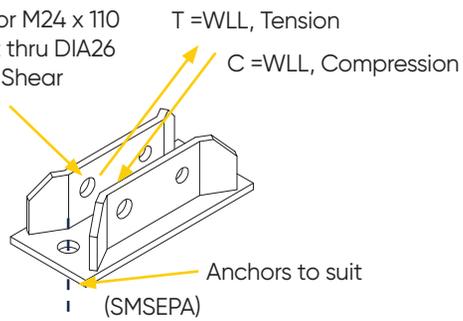


Ø 16 Podger Connecting Pin or M20 x 110 Gr. 8.8 bolt & nut thru DIA17 Holes, in Double Shear



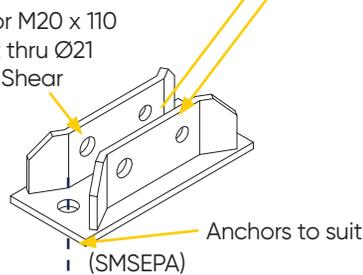
Slim-Max Tilt Base

Ø25 Podger Pin or M24 x 110 Gr. 8.8 bolt & nut thru DIA26 Holes, in Double Shear



WLL = 46, Tension or Compression

Ø19 Podger Pin or M20 x 110 Gr. 8.8 bolt & nut thru Ø21 Holes, in Double Shear

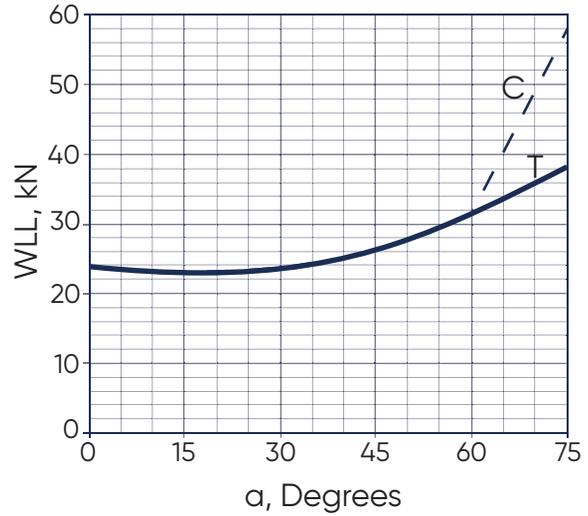
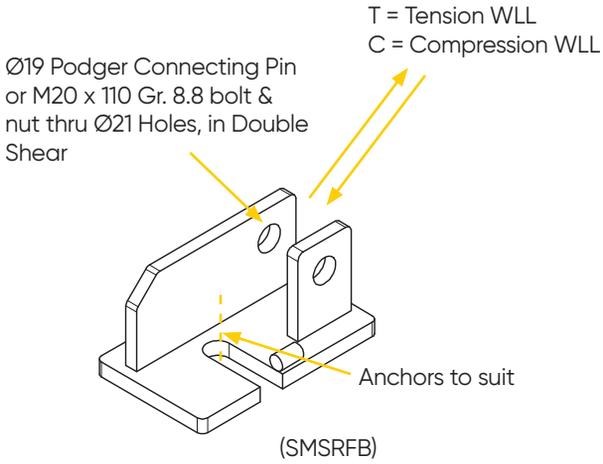


Note:

- Anchors must be designed to resist the applied forces considering prying action if any.
- Capacity may be limited by anchor design

3. Working Load Limits (WLL)

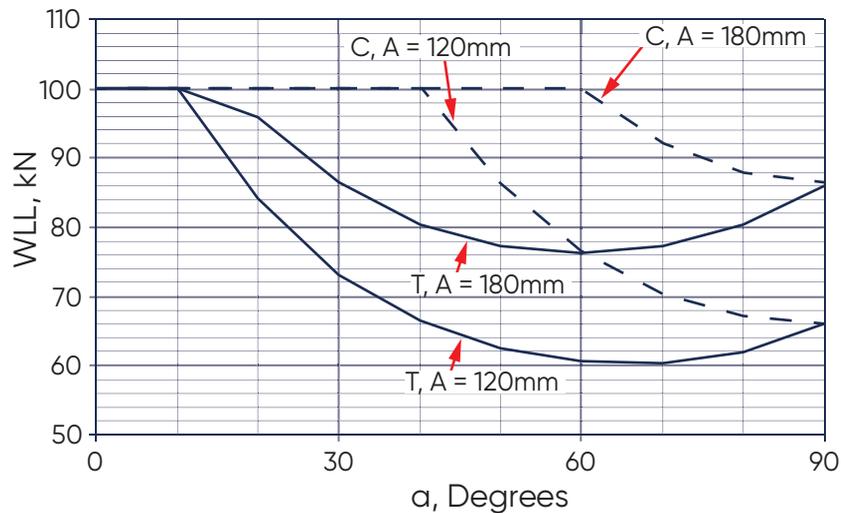
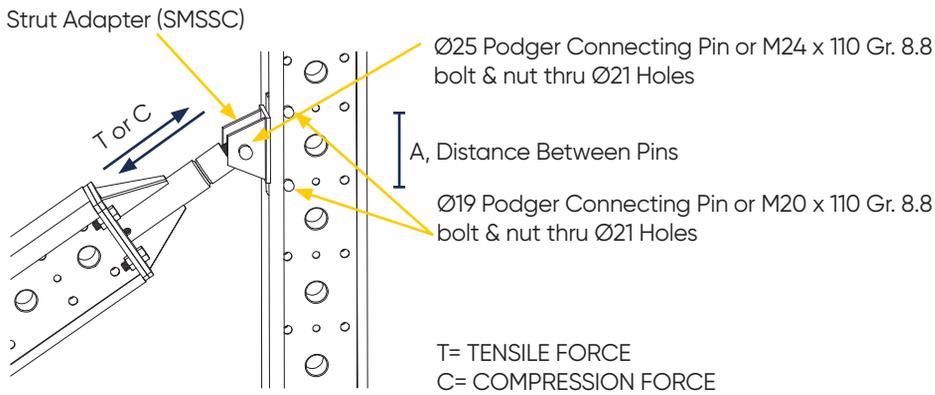
Slim-Max Raker Foot Bracket



Note:

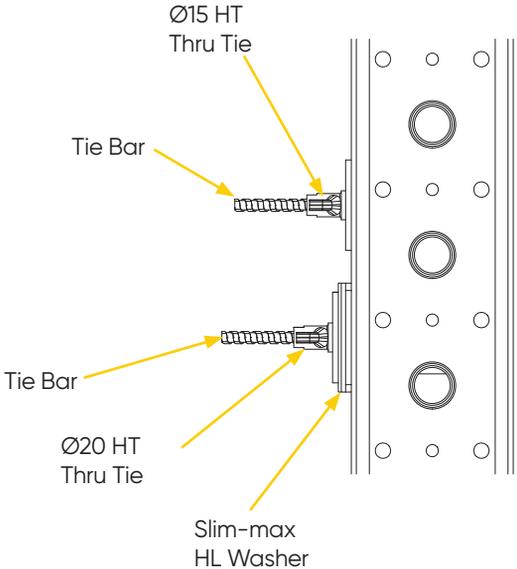
- Capacity may be limited by anchor design

Slim-Max Strut Adapter



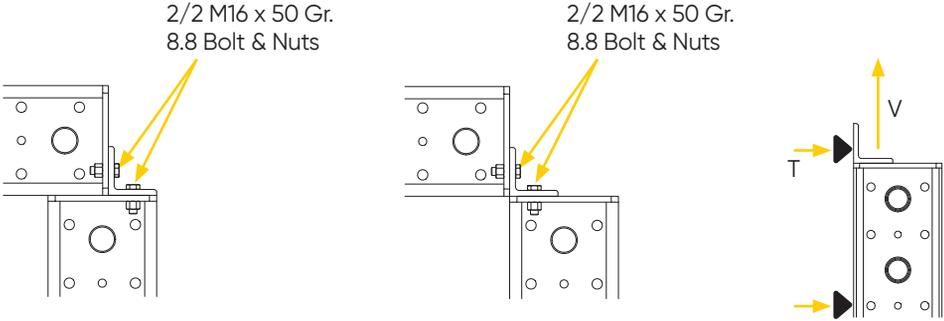
3. Working Load Limits (WLL)

Slim-Max Tie Washers



Washer	WLL (kN)
Single 125x100x8mm with Ø 18mm hole	50
Twin 125x100x8mm with Ø 18mm hole	76
Single 130x130x8mm with Ø 18mm hole	80
HL Washer	160
120x120 Swivel Nut Washer	78

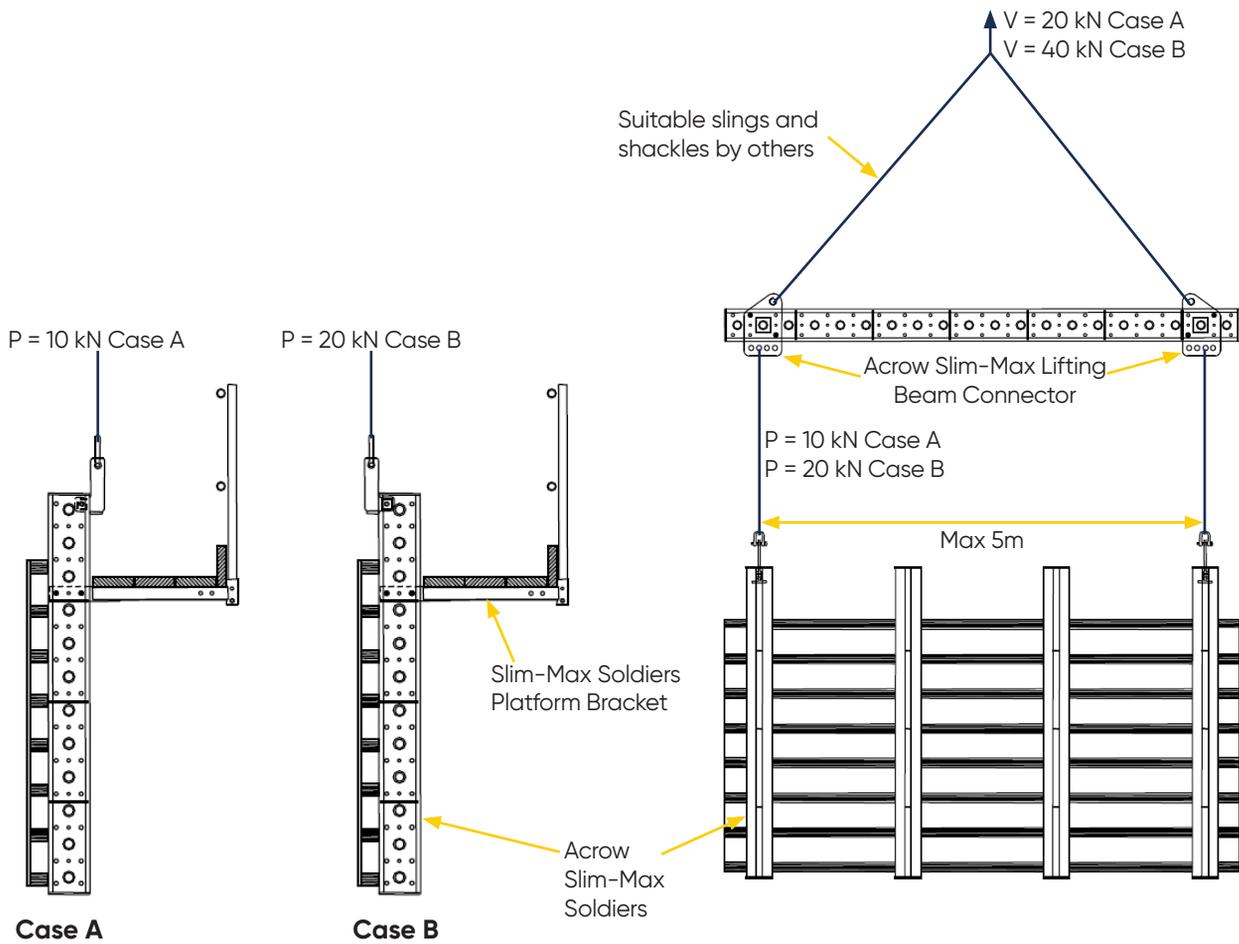
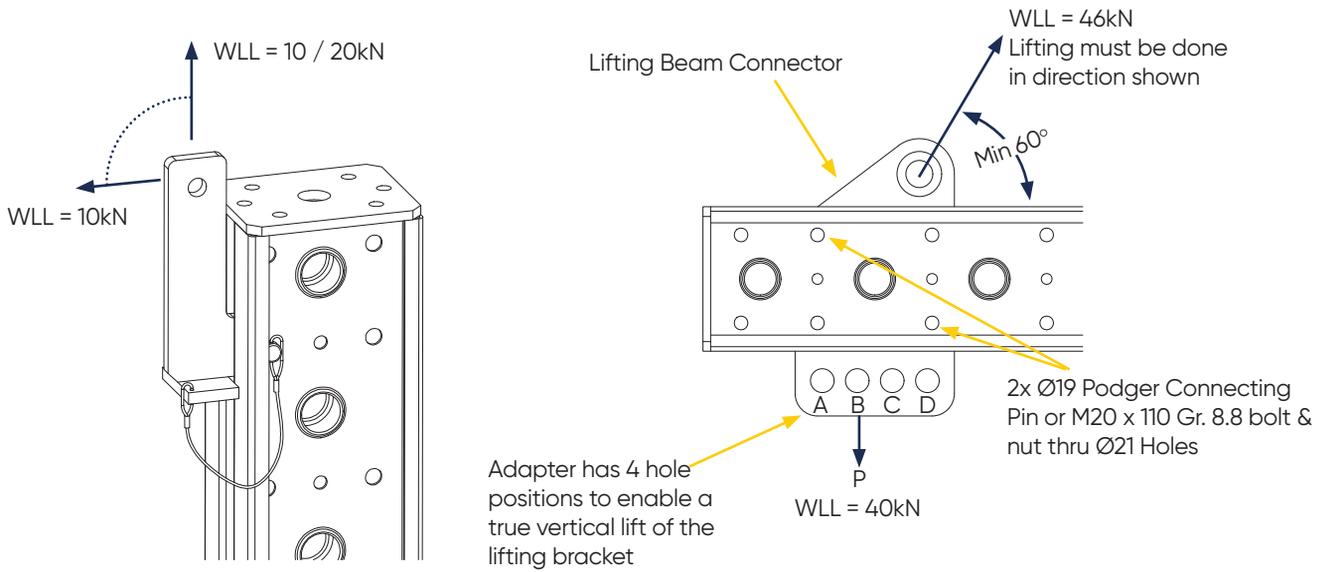
Slim-Max Angle Bracket



WLL =
 T= 15kN max, Tension
 V= 15kN Max Shear

3. Working Load Limits (WLL)

Slim-Max Lifting Assembly



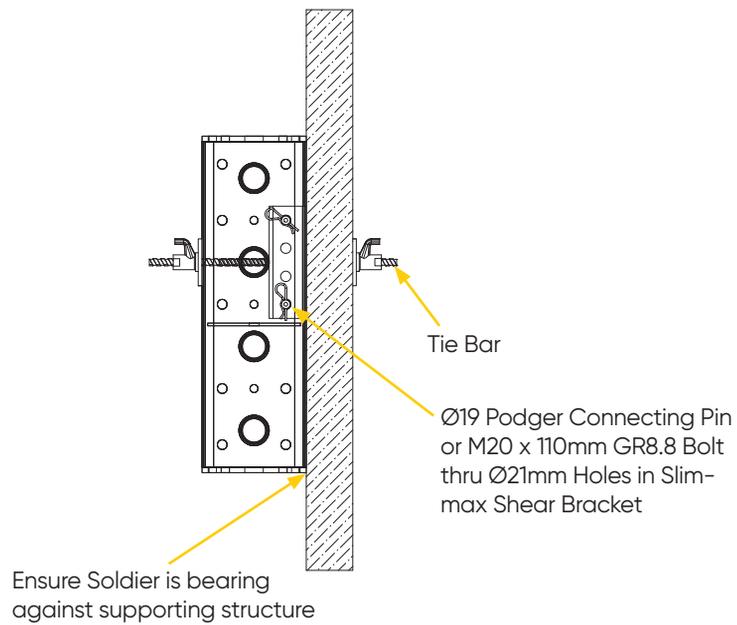
Vertical Lifting Only

Note:
Shutter must be checked to ensure it is strong enough to resist lifting forces and that all timber water clamps and hook bolts are tightened

3. Working Load Limits (WLL)

Slim-Max Shear Bracket

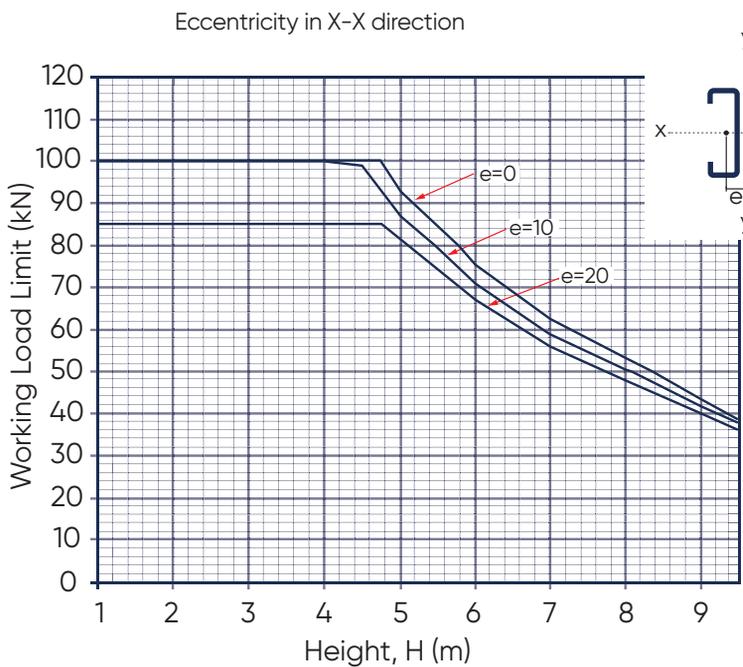
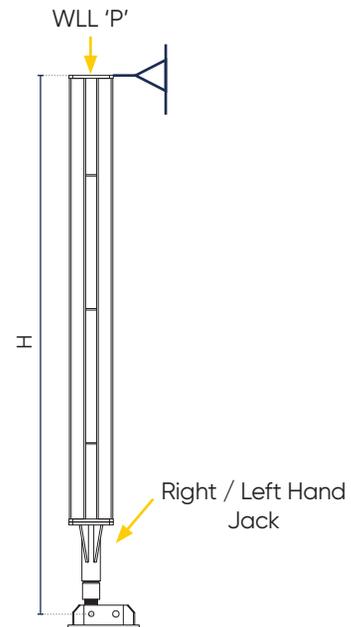
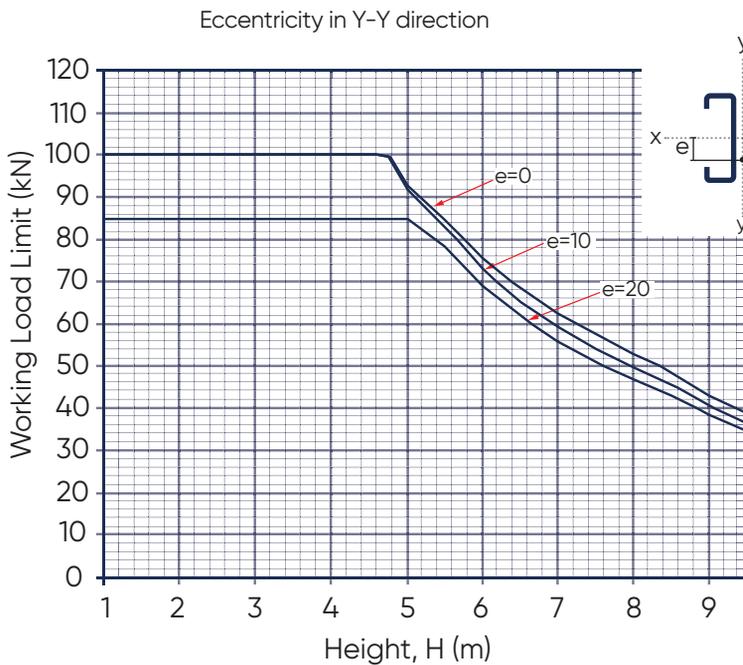
The Working Load Limit in Shear = 30 kN. Designer to confirm Tie Bar shear and tension interaction.



3. Working Load Limits (WLL)

Slim-Max Soldier Vertical Shore

Where soldier is restrained in both direction at top and bottom.



Allowance shall be considered for self weight of shore and attachment to calculate P. Example: $P = (\text{working Load Limit from graph}) - (\text{Self weight of shore \& attachment})$

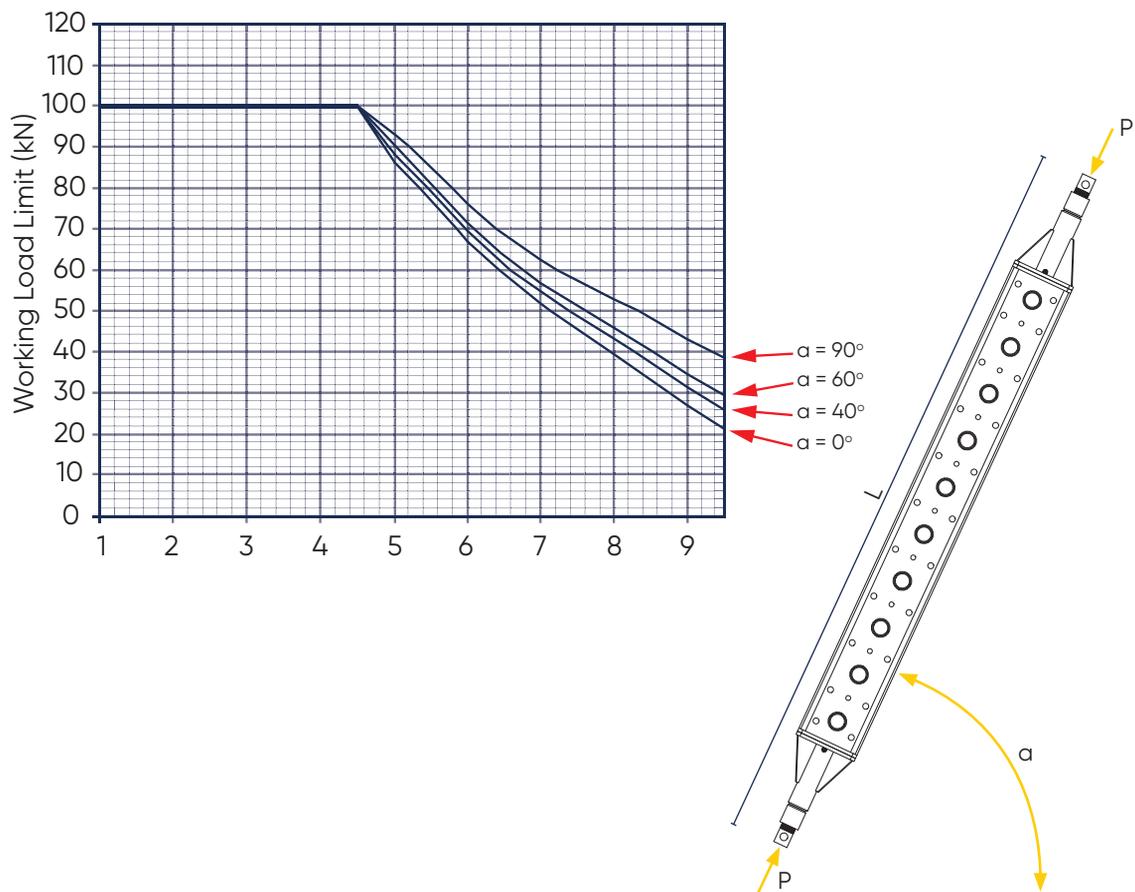
Notes:

1. Working Load Limit, applies to maximum capacity of Slim Max Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = $L/200$, where L is overall length.

3. Working Load Limits (WLL)

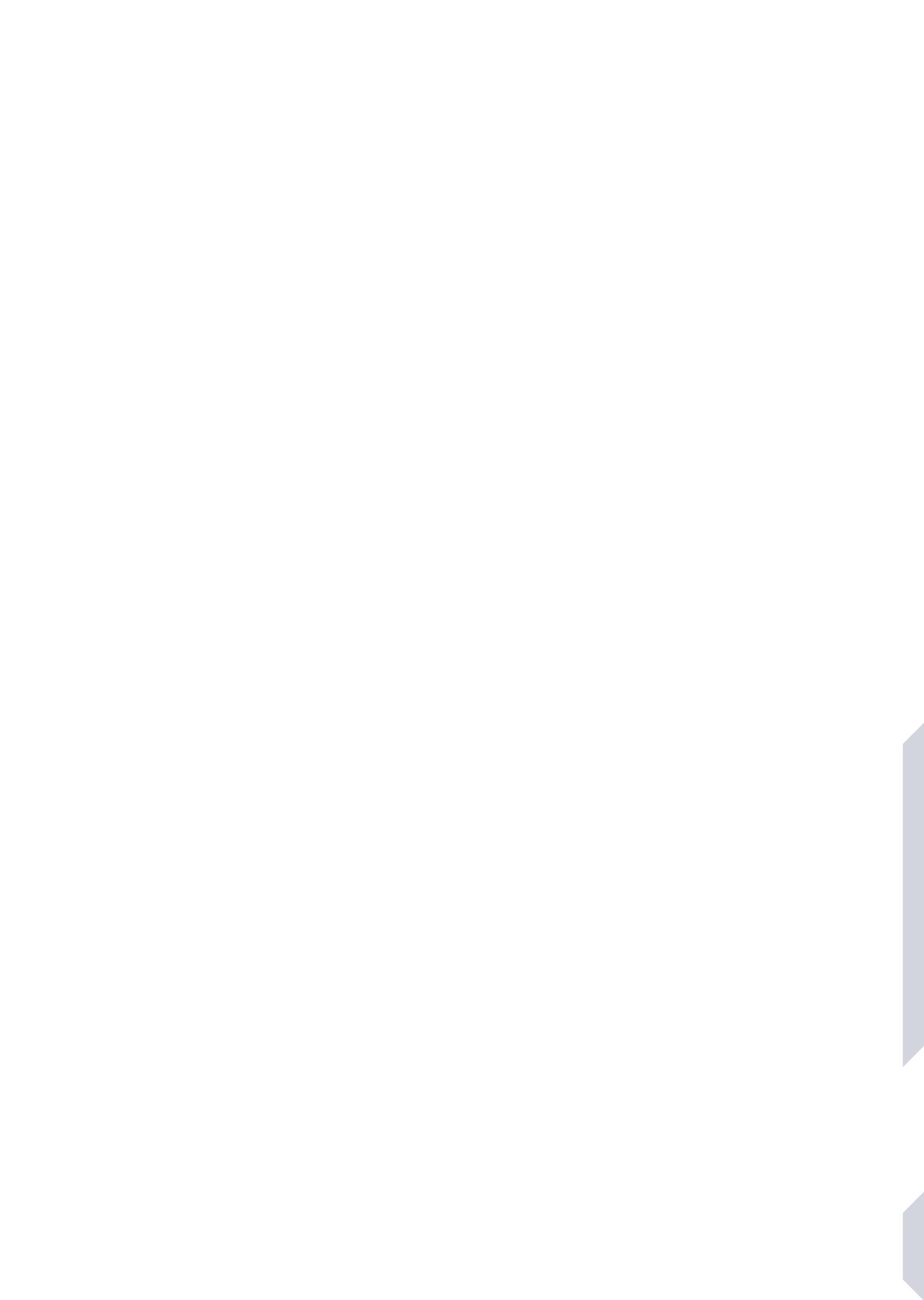
Slim-Max Soldier Raking Shore

Where soldier is restrained in both direction at top and bottom.



Notes:

1. Working Load Limit, applies to maximum capacity of Slim Max Soldier in application as shown and not assembly as a whole. If in doubt please ask.
2. Maximum capacities may be limited by other components or assembly. See relevant data or consult with a suitably qualified and experienced engineer.
3. Maximum deviation from straightness = $L/200$, where L is overall length.

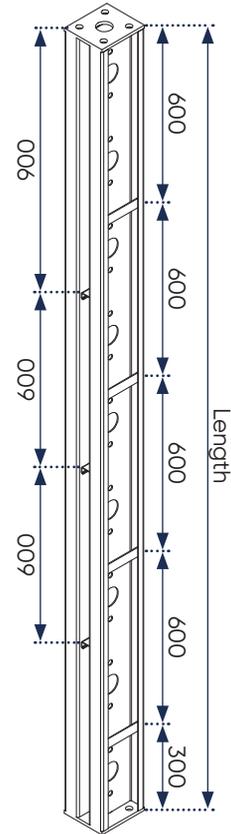
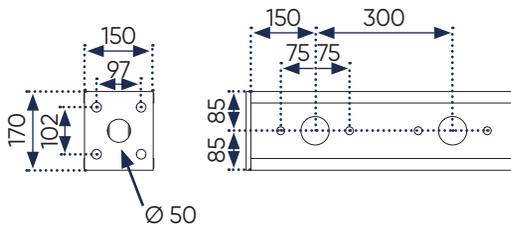


4. SYSTEM DETAILS

4. System Details

Slim-lite Soldier

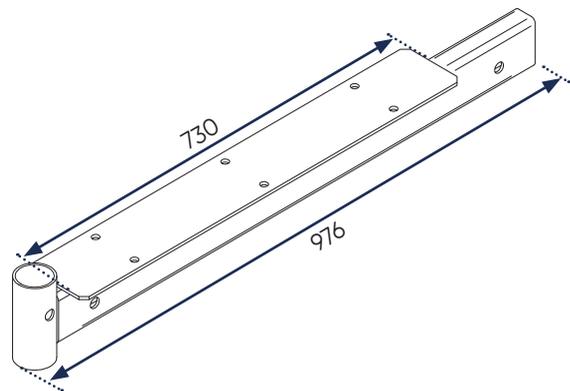
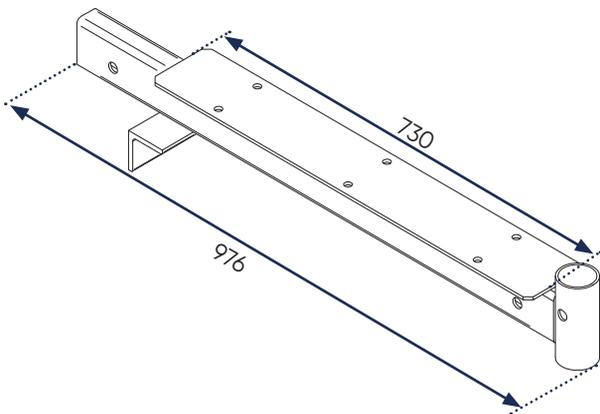
Slim-Lite Soldiers are provided in seven basic sizes with centre holes at 300mm intervals. The C shaped side members are spaced at nominally 42mm to accommodate ties and bolts. Holes are provided at the end plates to provide end-to-end connection.



Slim-lite Fixed / Adjustable Working Platform Bracket

The Fixed bracket is attached to the Slim-Lite Soldier, using a 16mm Podger Pin, to allow for a working deck complete with guard rail posts and guard rails. It accepts three planks plus toe board. Securing holes are provided in the flange.

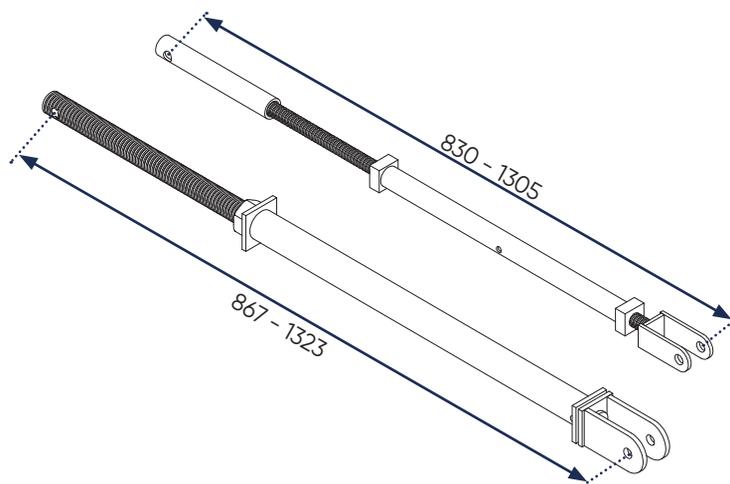
For sloping wall, the Adjustable bracket is secured to the Slim-Lite Soldier (in conjunction with Adjustable Plumbing Brace) with 16mm Podger Pin to allow for a working deck complete with guard rail posts and guard rails. It accepts three planks plus toe board. Securing holes are provided in the flange.



4. System Details

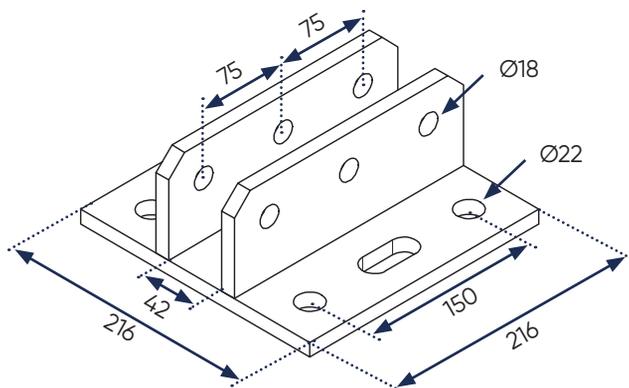
Slim-lite Adjustable Plumbing Brace

To provide a functional deck with guard rail posts and guard rails, the Adjustable bracket is fastened to the Slim-Lite Soldier (together with the Adjustable Plumbing Brace) using 16mm Podger Pin. Three planks plus a toe board are used. The flange has holes for fastening.



Slim-lite Raking Shore Base Type Three

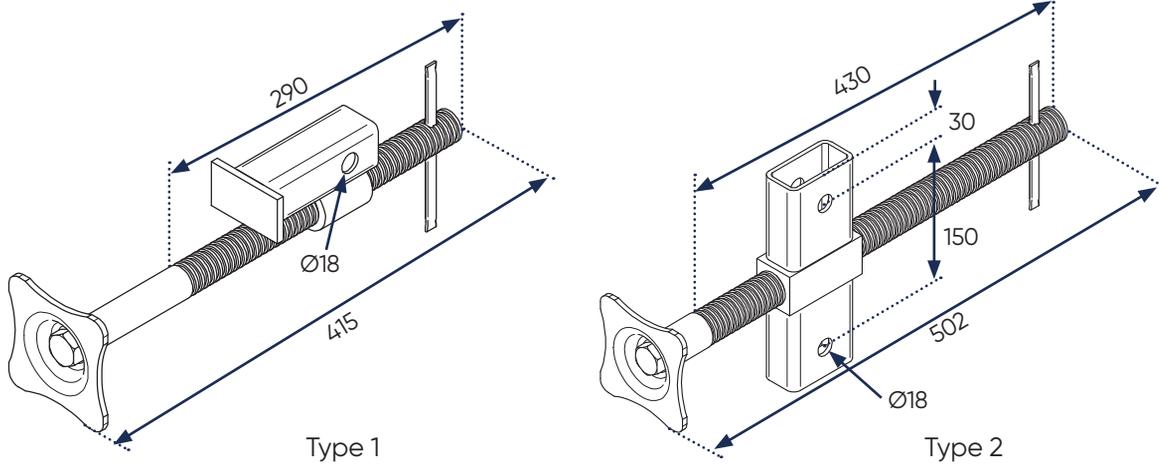
Used with Slim-Lite Soldiers as raking shores in conjunction with Head/Base Jacks or Shoring Jacks or turnbuckles. Raking shore base must be anchored to suitable footings.



4. System Details

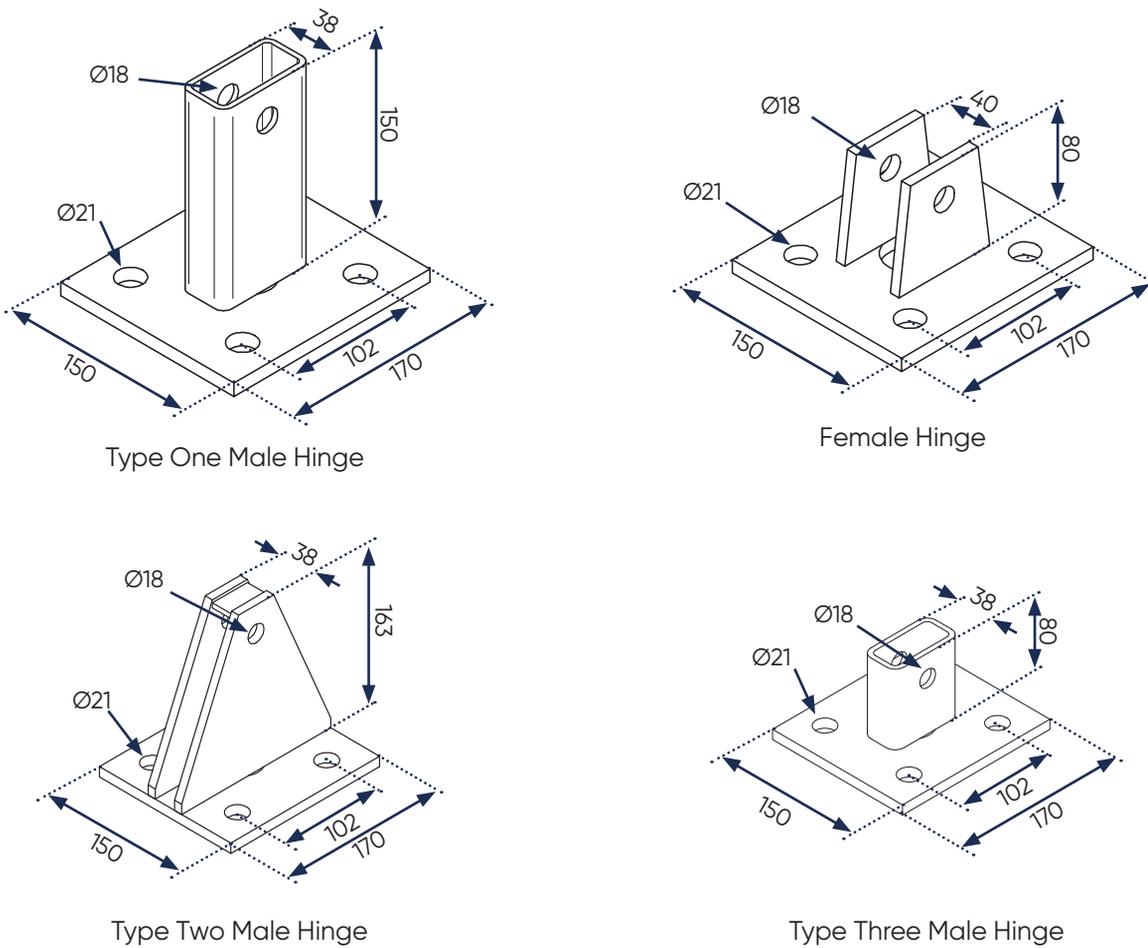
Slim-lite Thrust Jack

Used for vertical plumbing of Slim-Lite Soldier formwork shutters. They are available in two types, Type 1 and Type 2.



Slim-lite Hinge Brackets

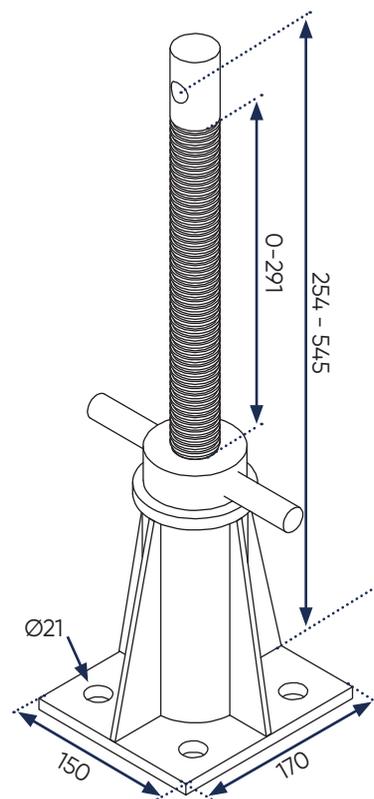
The Hinged Bracket comprises two separate components (male and female brackets) joined together by a M16 x 80mm long Grade 8.8 bolt and nut. Each component features an end plate which bolts to the end of a Slim-Lite Soldier using M20 x 50mm GR4.6 Bolts.



4. System Details

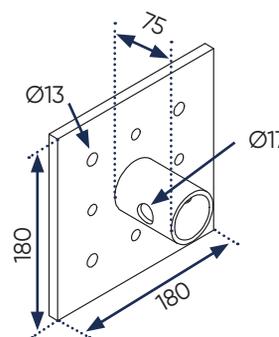
Slim-lite Shoring Jack

Bolted to the end of a Soldier using 4 x M20 x 50mm bolts and nuts. This attachment provides an adjustment range of 254 to 545 mm.



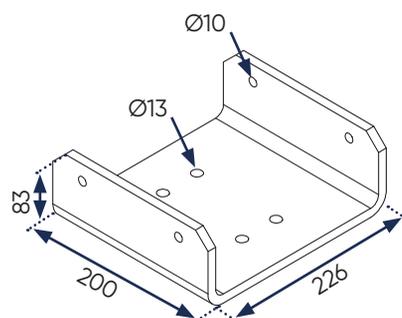
Slim-lite Base Plate

Used in conjunction with Slim-Lite Shoring Jack. Pins to end of Shoring Jack using 16mm Podger Pin to provide a Base Plate.



Slim-lite U-Head

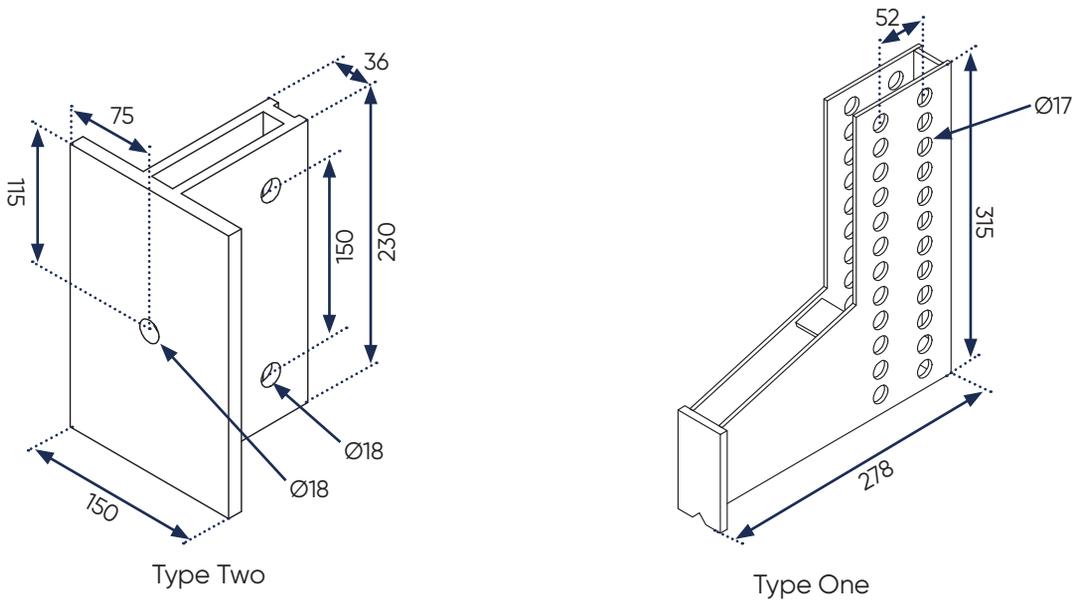
Used in conjunction with Slim-Lite Shoring Jack. Pins to end of Shoring Jack using 16mm Podger Pin to provide a U-Head.



4. System Details

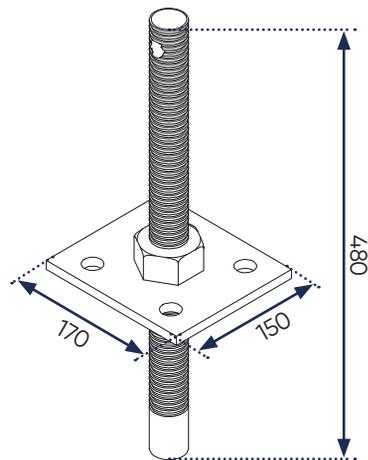
Slim-lite Shear Bracket

Used for supporting the Slim-Lite Soldier formwork shutter off suitable ties or She Bolts. Allows vertical adjustment in 25mm increments in two positions (type one only).



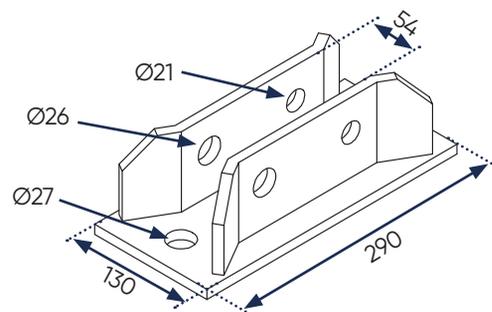
Slim-lite Head / Base Jack

When Slim-Lite Soldiers are used as shoring or raking shores these left hand and right hand threaded jacks can be used for adjustment. Bolted to the end of a Soldier using 4 x M20 x 50mm GR 4.6 long bolts and nuts.



Slim-Max Soldier Tilt Base Plate

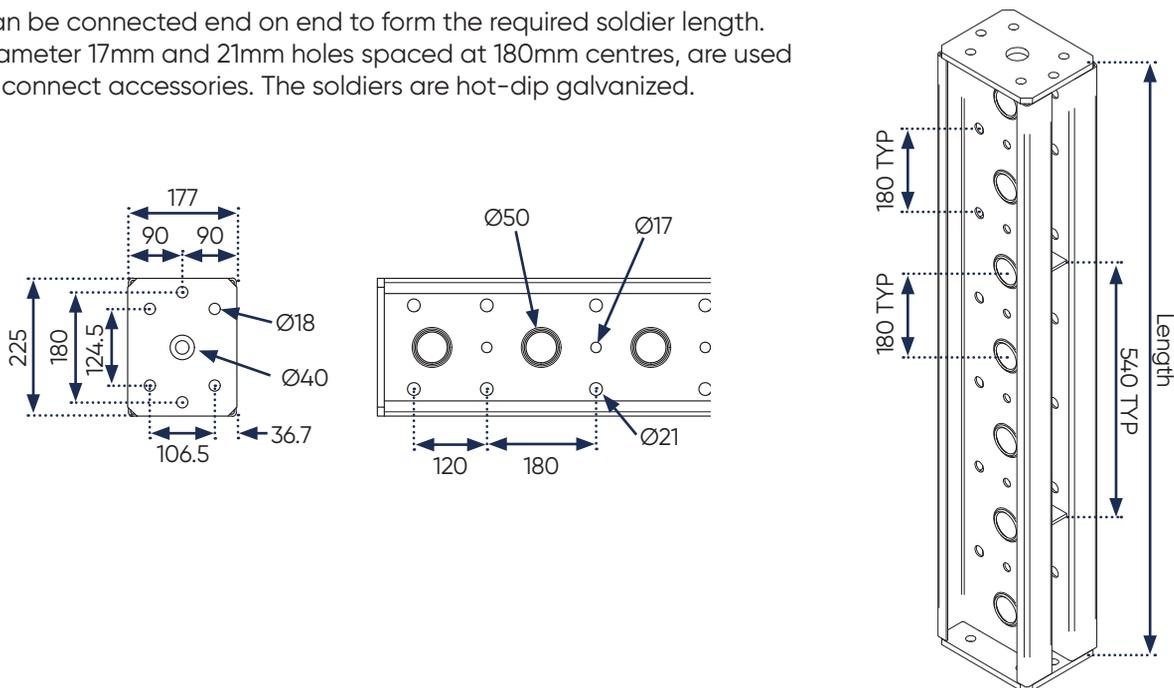
Secured to the base slab to provide attachment for turnbuckle, raking soldier or push-pull prop through the $\varnothing 21$ mm hole or attachment of the RH/LH jacks through the $\varnothing 26$ mm hole.



4. System Details

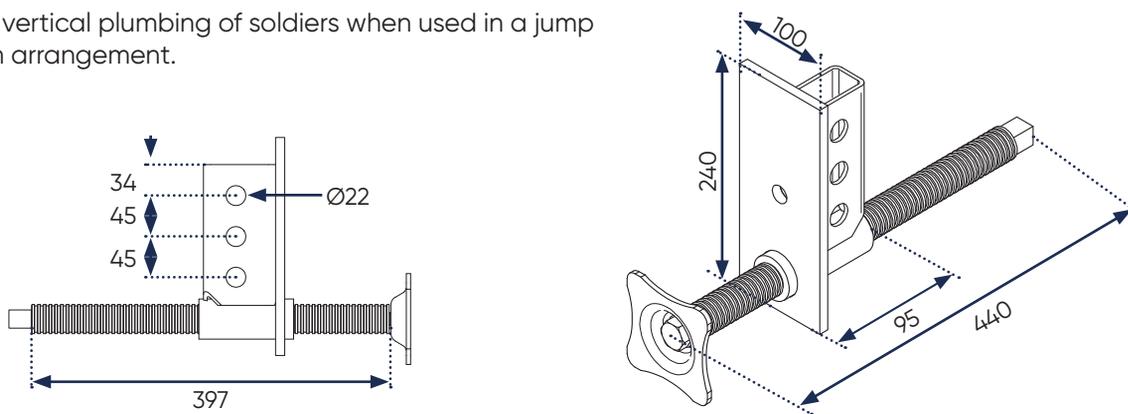
Slim-Max Soldiers

Can be connected end on end to form the required soldier length. Diameter 17mm and 21mm holes spaced at 180mm centres, are used to connect accessories. The soldiers are hot-dip galvanized.



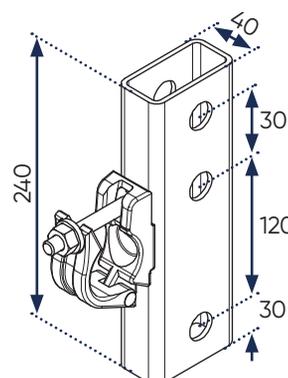
Slim-Max Soldiers Plumbing Thrust Jack

Used for vertical plumbing of soldiers when used in a jump wall form arrangement.



Slim-Max Soldier Brace Connector

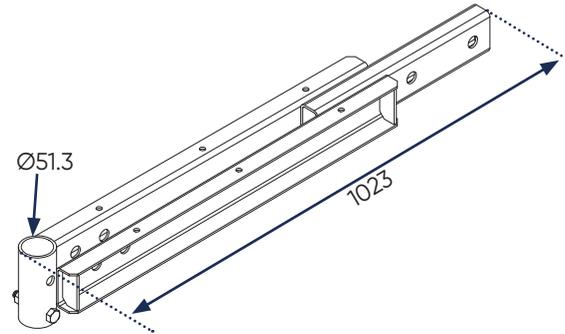
The brace connector provides positive connection of a horizontal scaffold tube brace to tie soldiers together.



4. System Details

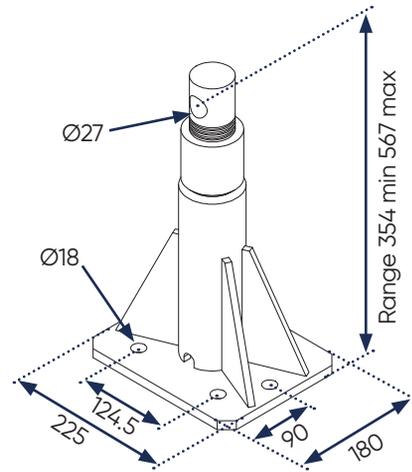
Slim-Max Soldier Platform Bracket

When attached to soldiers will provide a continuous working platform. Accepts 3 planks plus a toe board with provision for guardrails. Can be used as a fixed platform or as an adjustable platform when used with the 920-1240mm turnbuckle.



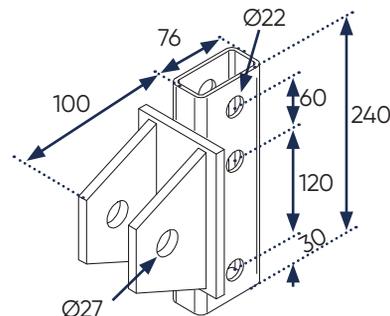
Slim-Max Soldier Right/Left Hand Jacks

The right and left hand jacks can be attached to the ends of a Slim-Max Soldier to convert it into a high load capacity turnbuckle. Jacks can be used at the top or bottom of a soldier when the soldier is used as a vertical support member.



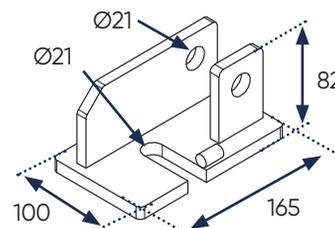
Slim-Max Soldier Strut Connector

Can be attached to the soldier to provide connection for RH or LH Jacks when the jacks are being used with a soldier to create a turnbuckle.



Slim-Max Soldier Raker Foot Bracket

Secured to the base slab to provide attachment for turnbuckle or push-pull prop through the Ø 21mm hole.

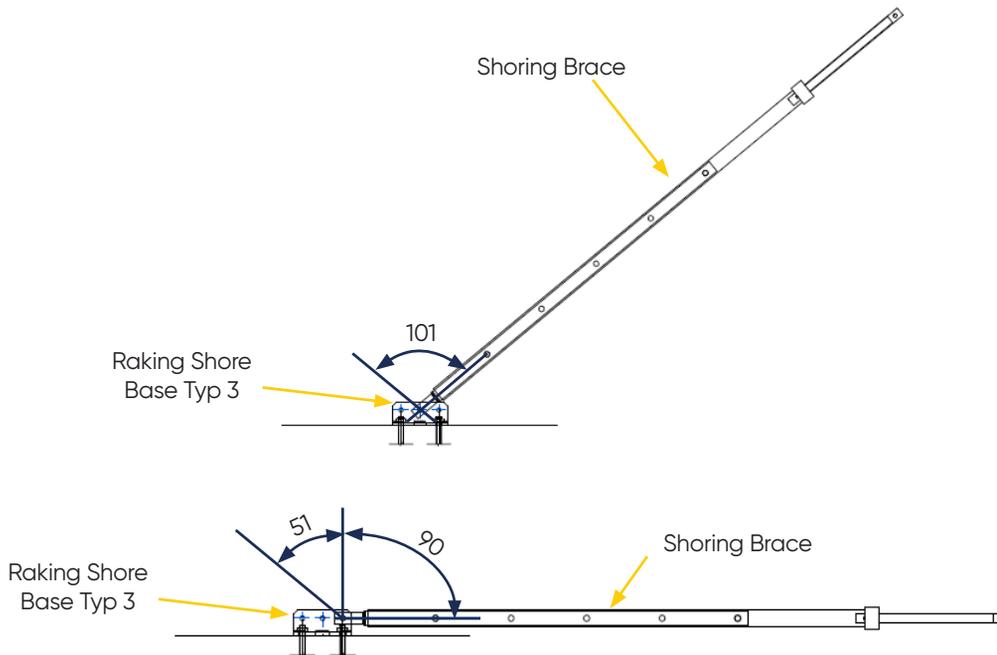
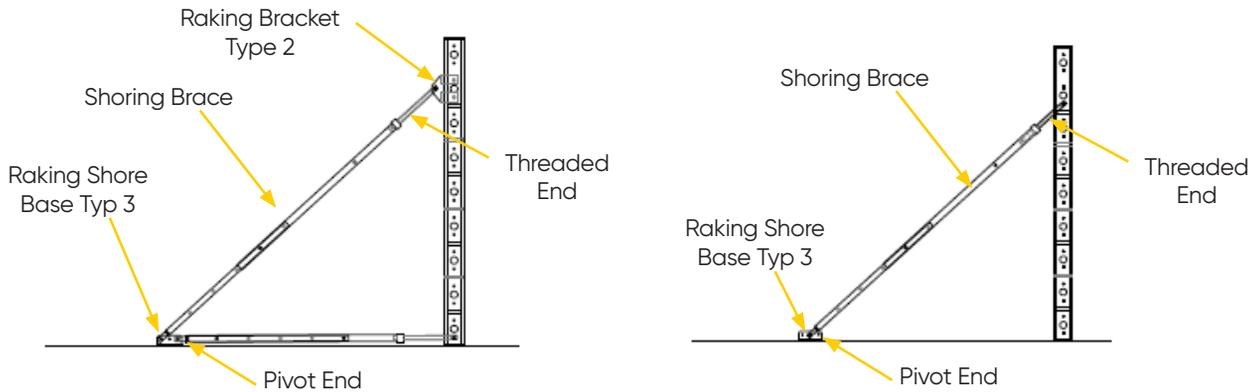


5. ASSEMBLY DETAILS

5. Assembly Details

Slim-Lite - Shoring Brace

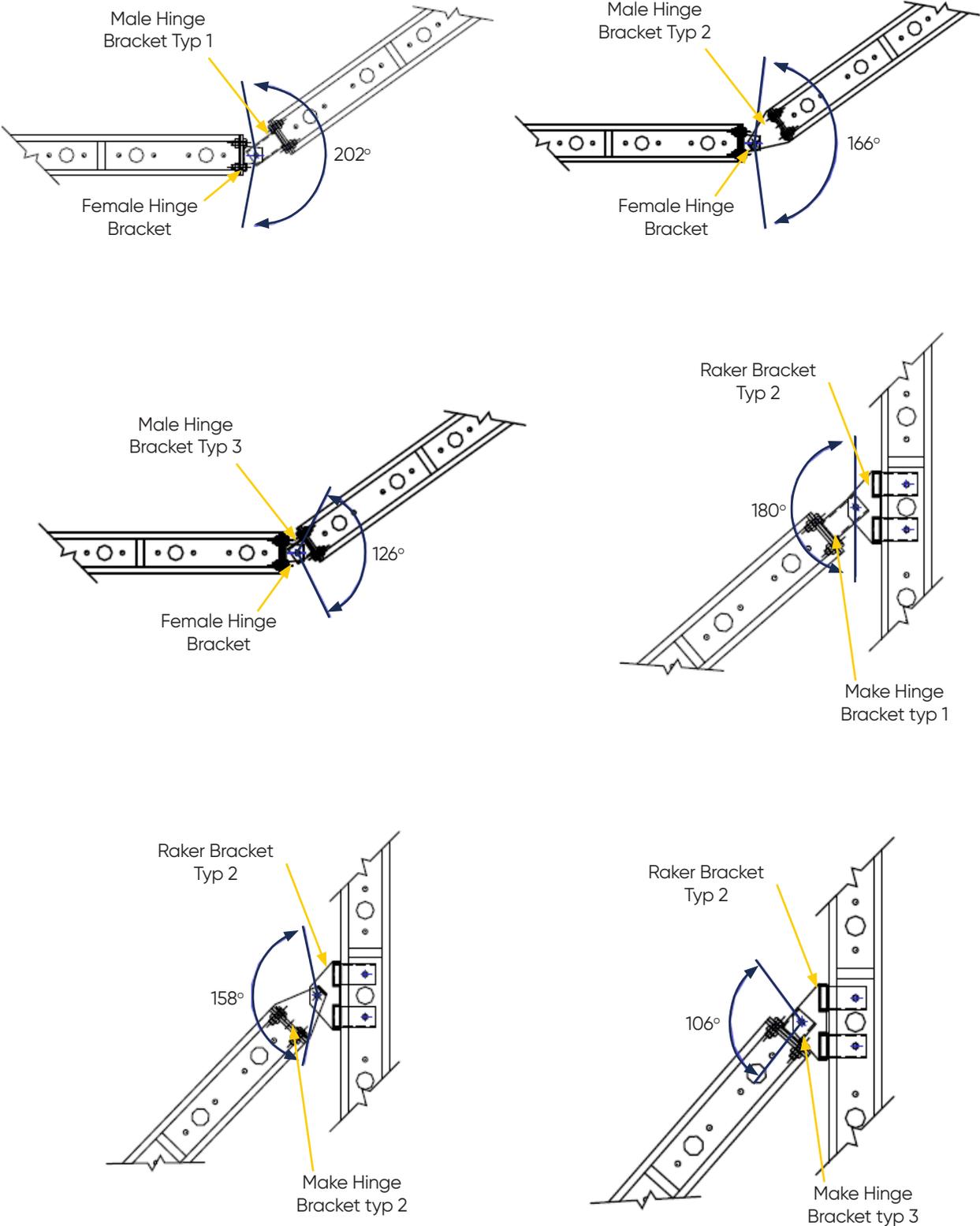
Shoring Brace may be connected to Slim Lite Soldier directly or via Raker Bracket Type 2. The threaded end is used for these connections. The pivot end of Shoring Brace is 40mm diameter and can be connected to Raking Shore Base Type 3 which has 42mm distance between the connecting plates (Raking Shore Bases Type 1 & 2 are not suitable to receive the pivot end as the gap between the connecting plates is 40mm).



Maximum Rotational Angles @ pivot end connected to Raking Shore Base Type Three

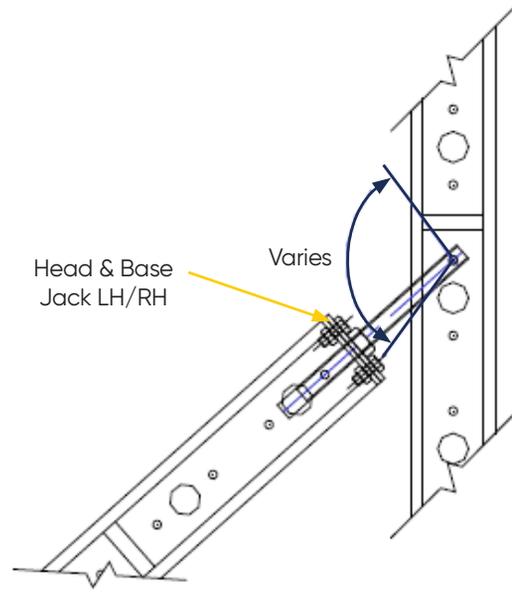
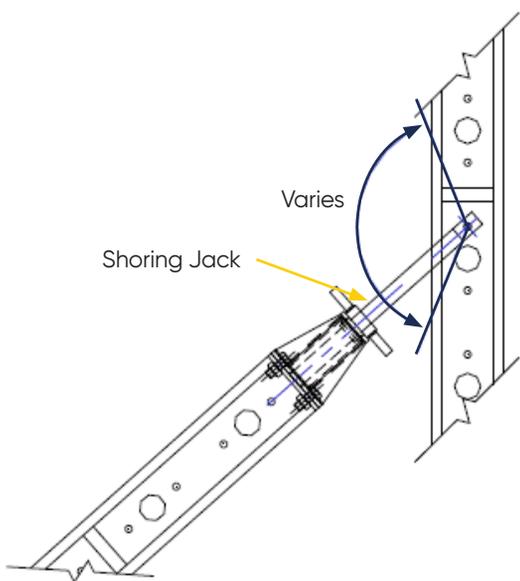
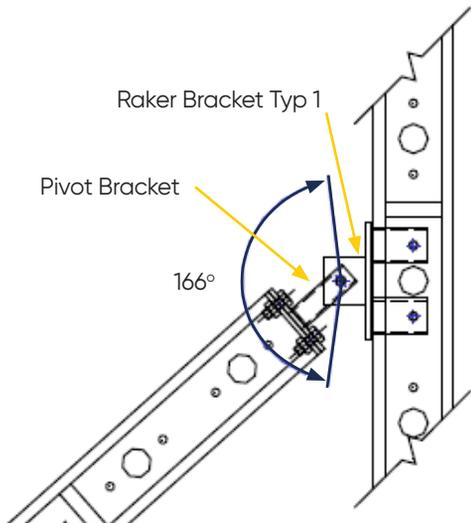
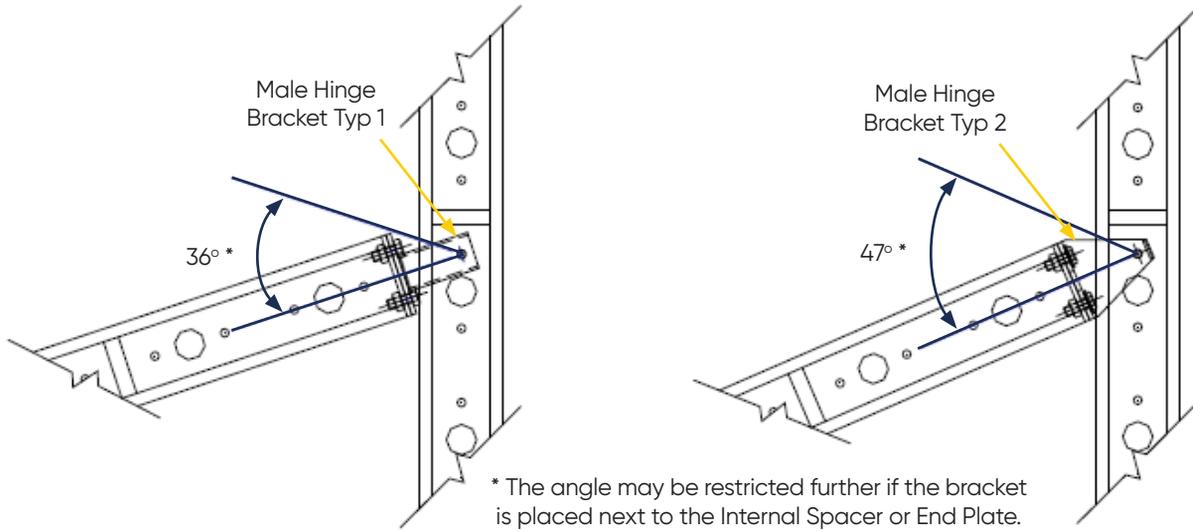
5. Assembly Details

Slim-Lite - Maximum Rotational Angle Between Soldiers



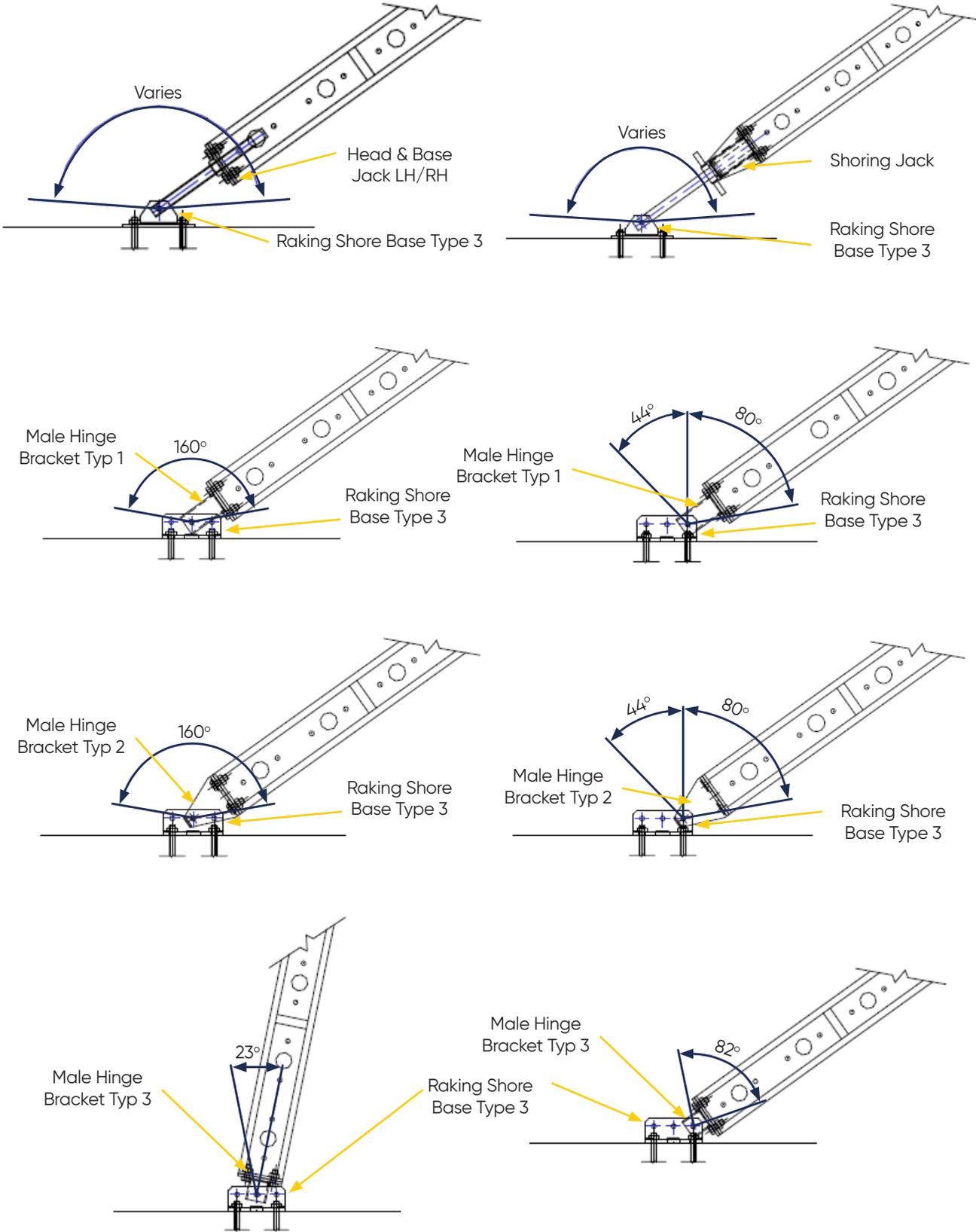
5. Assembly Details

Slim-Lite - Maximum Rotational Angle Between Soldiers



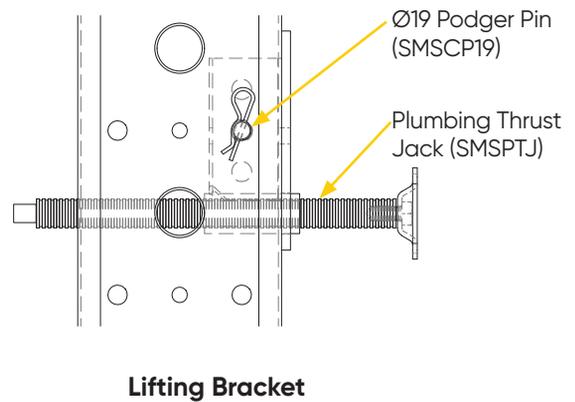
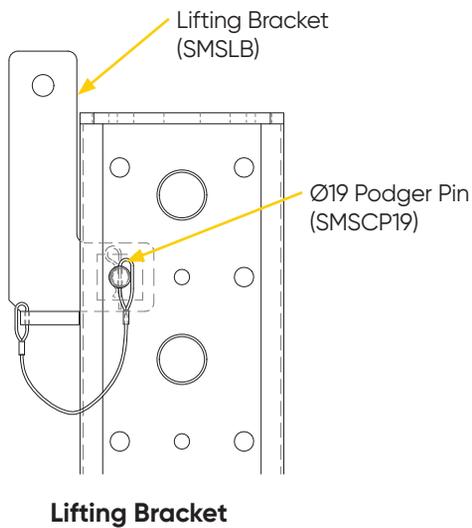
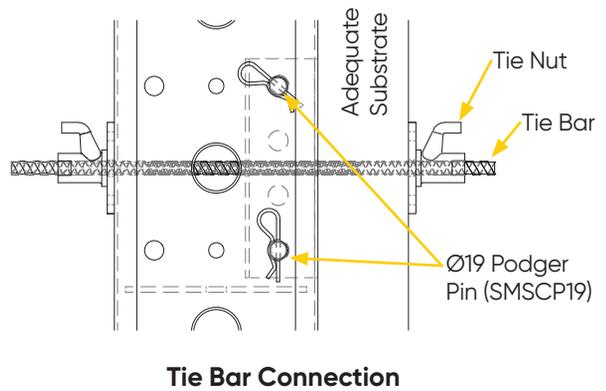
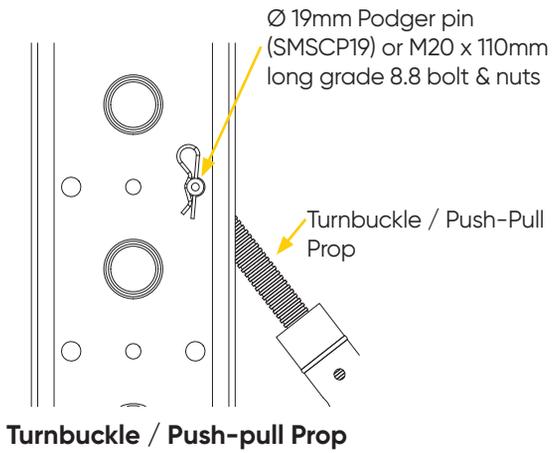
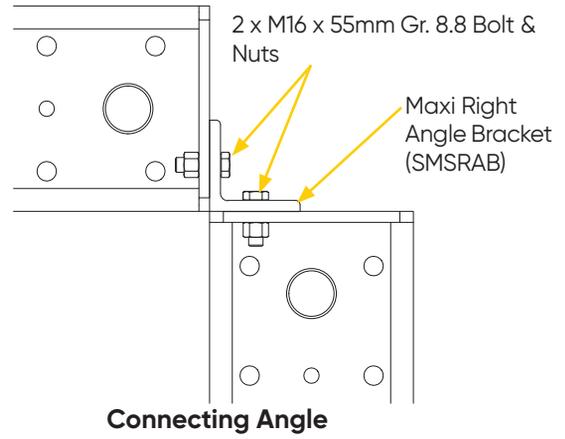
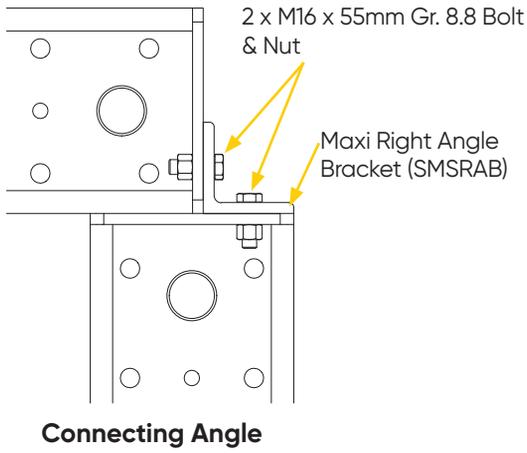
5. Assembly Details

Slim-Lite - Maximum Rotational Angle Between Soldiers & Raking Shore Base



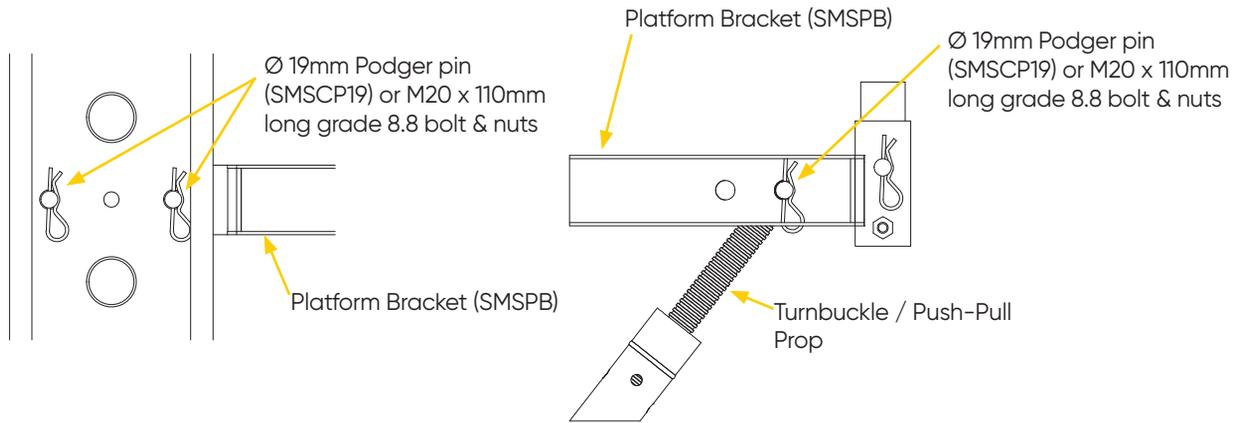
5. Assembly Details

Connection Details - Slim Max

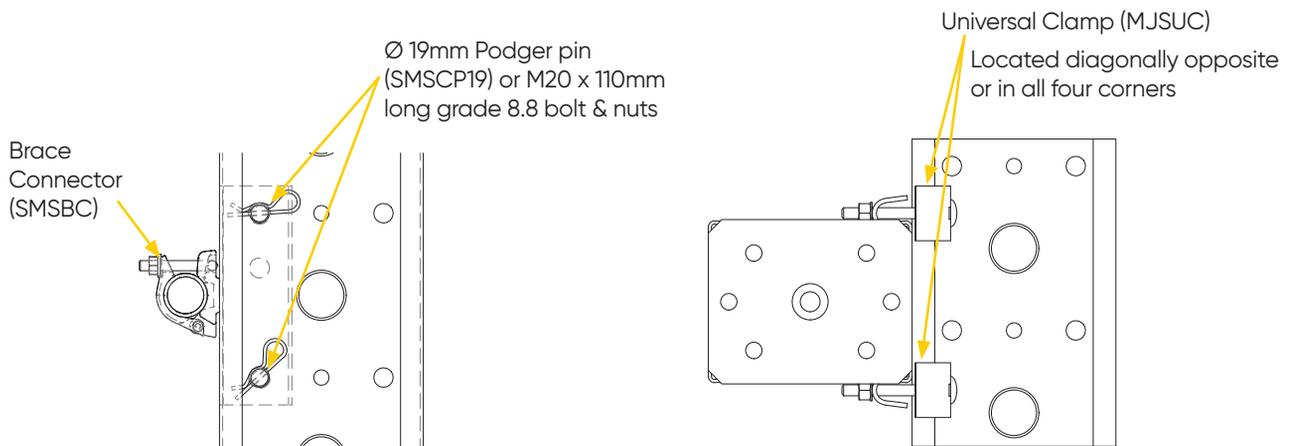


5. Assembly Details

Connection Details - Slim Max

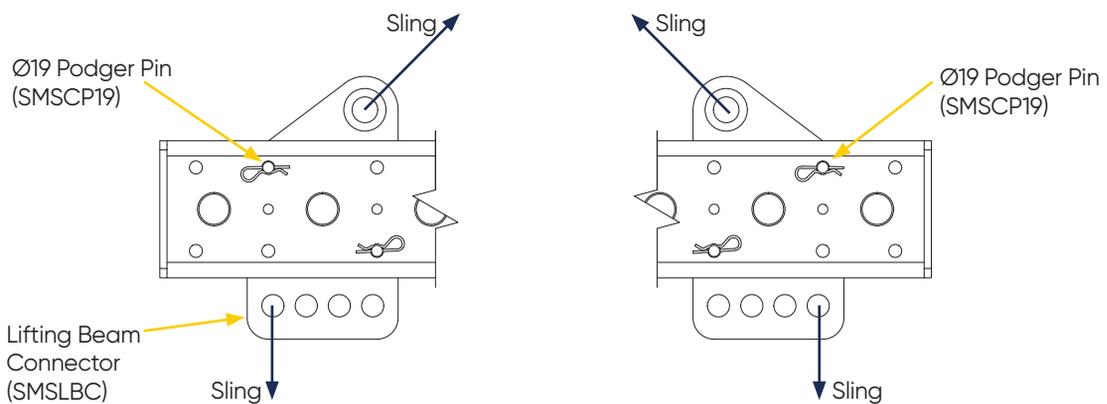


Turnbuckle / Platform Bracket



Brace Connector

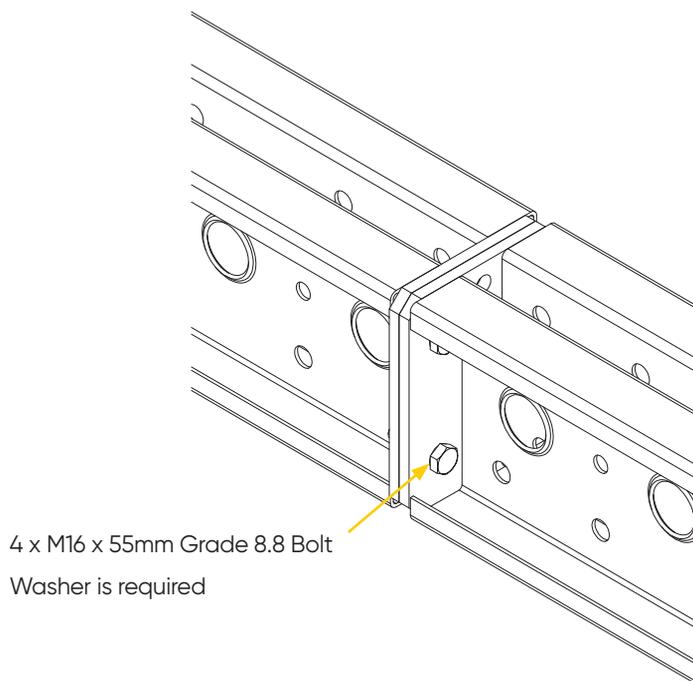
Soldier to Soldier



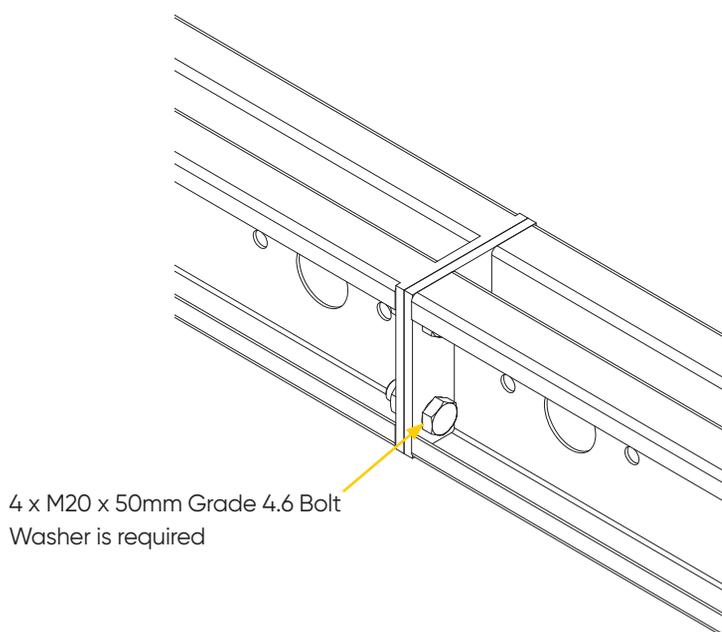
Lifting Beam Connector

5. Assembly Details

Connection Details - Slim Max / Slim Lite End Plate Connection



Slim-Max End Plate Connection



Slim-Lite End Plate Connection

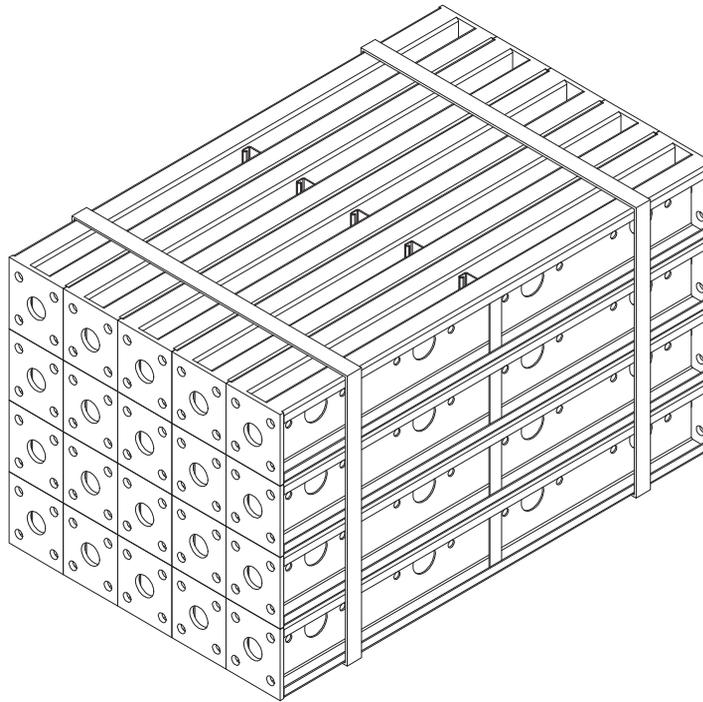
6. TRANSPORT & HANDLING

6. Transport & Handling

Slim-Lite Soldier Transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage/bundle. Do not mix different sizes or types in one stillage/bundle.
- Ensure every stillage/bundle load does not exceed the advised table below.
- Secure assembled items onto stillage/bundle by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



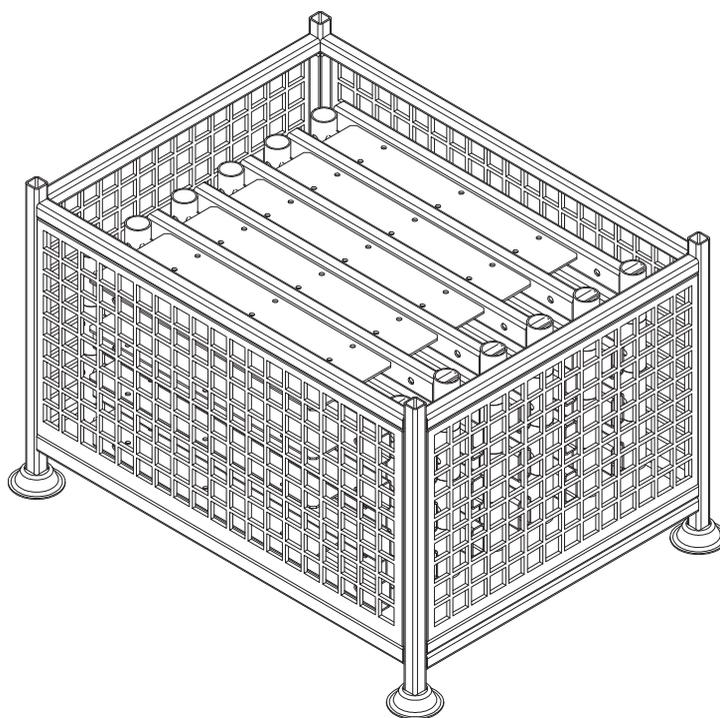
DESCRIPTION	UNIT MASS (KG)	QTY PER BUNDLE	TOTAL MASS PER BUNDLE (KG)	ACROW STILLAGE TYPE
300mm Soldier	6.0	20	120	Bundle
600mm Soldier	12.0	20	240	Bundle
900mm Soldier	15.0	20	300	Bundle
1200mm Soldier	19.0	20	380	Bundle
1500mm Soldier	31.0	20	620	Bundle
1800mm Soldier	37.0	20	740	Bundle
2700mm Soldier	45.0	20	900	Bundle
3600mm Soldier	62.0	20	1240	Bundle

6. Transport & Handling

Slim-Lite Platform Brackets

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage/bundle. Do not mix different sizes or types in one stillage/bundle.
- Ensure every stillage/bundle load does not exceed the advised table below.
- Secure assembled items onto stillage/bundle by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Fixed Working Platform Bracket	10.3	44	453.2	MEP
Adjustable Working Platform Bracket	9.4	44	413.6	MEP

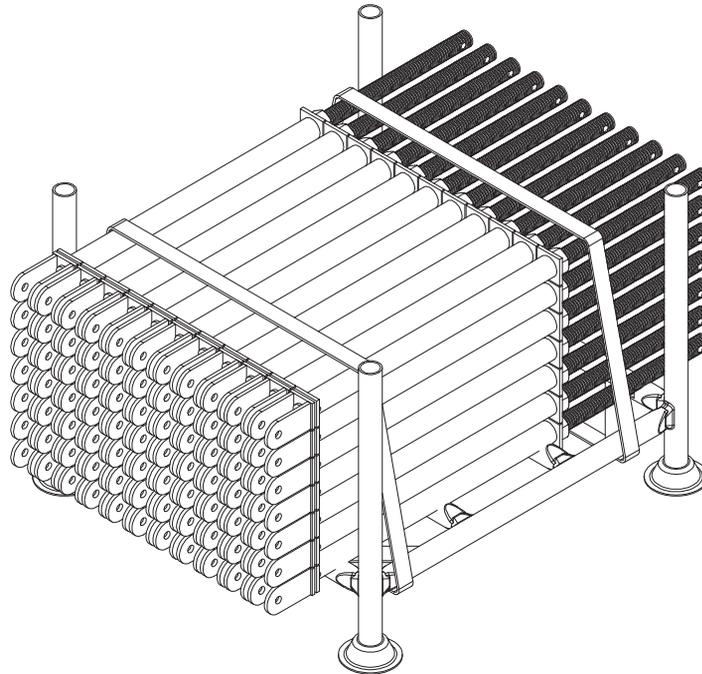
6. Transport & Handling

Slim-Lite Plumbing Brace transport

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Plumbing Brace Type One	4.5	77	346.5	SP
Plumbing Brace Type Two	9.0	77	693	SP

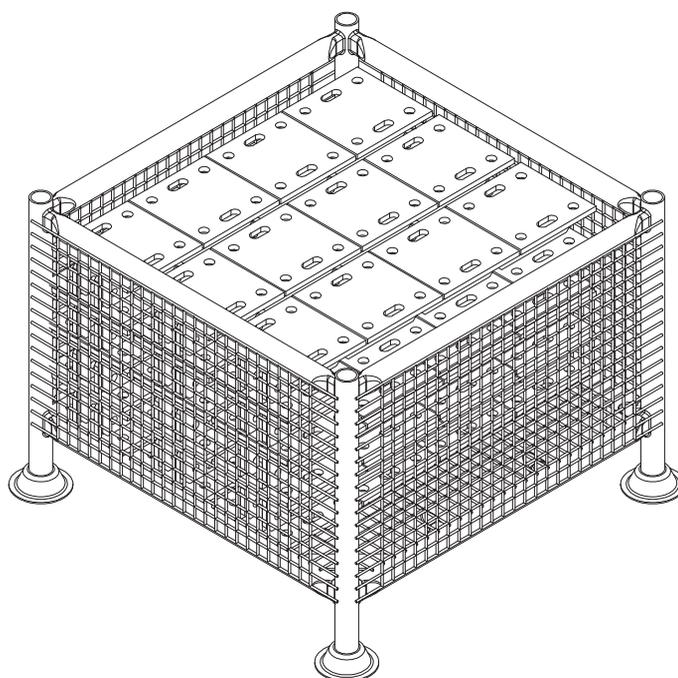
6. Transport & Handling

Slim-Lite Brackets

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Handrail Post Bracket	2.5	60	150	MEP
Shore Base Typ3	7.6	60	456	MEP
Leveling Bracket	5.2	50	260	MEP
Male Hinge Bracket	4.2	50	210	MEP
Female Hinge Bracket	4.2	50	210	MEP
Shoring Jack End Plate	2.8	60	168	MEP
Detachable U-Head	4.5	60	270	MEP
Raker Base Plate	4.5	60	270	MEP
Soldier Right Angle Bracket	1.0	200	200	MEP

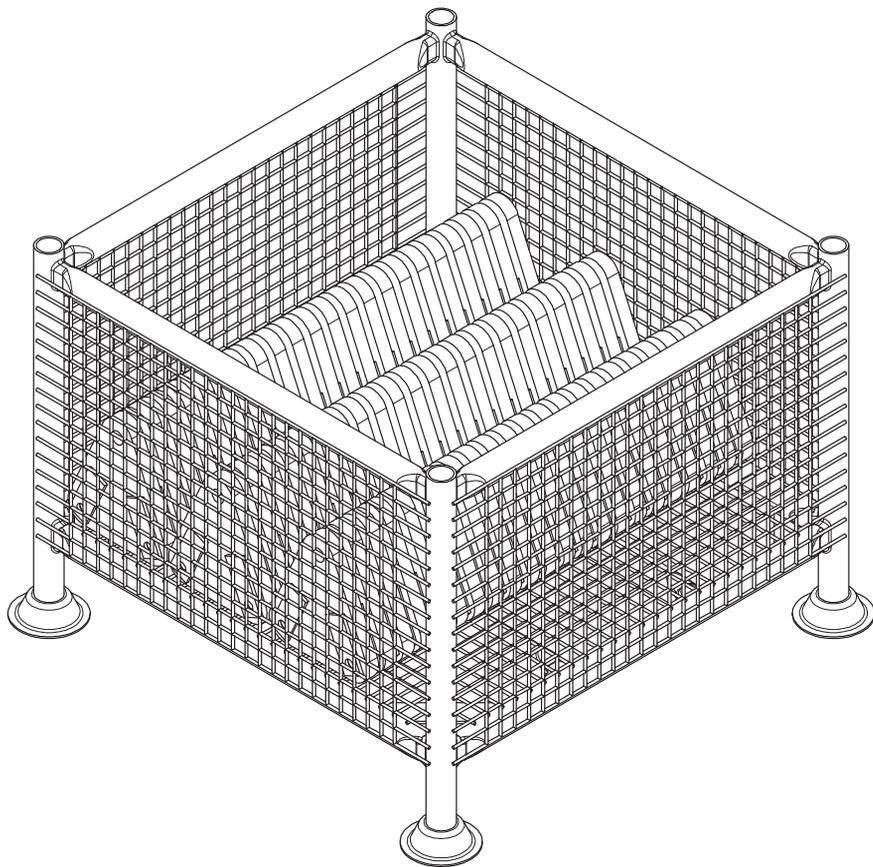
6. Transport & Handling

Slim-Lite Lifting Accessories

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Lifting Plate	7.6	66	501.6	MEP
Lifting Loop	1.0	66	66	MEP

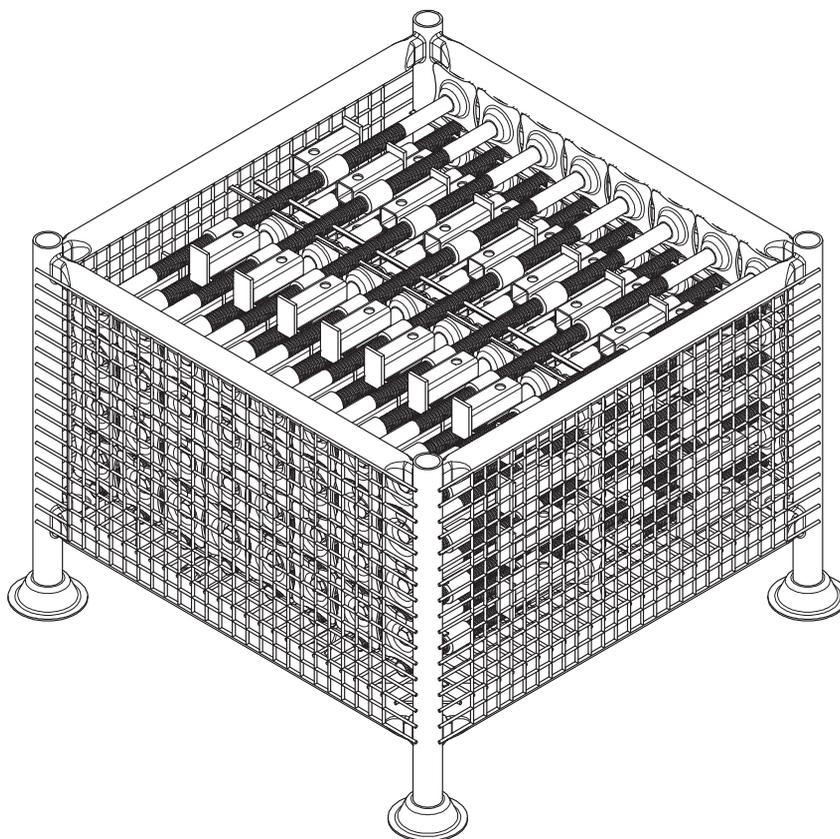
6. Transport & Handling

Slim-Lite Thrust Jack

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Thrust Jack TYP 1	3.5	64	224	MEP
Thrust Jack TYP 2	3.9	64	249.5	MEP

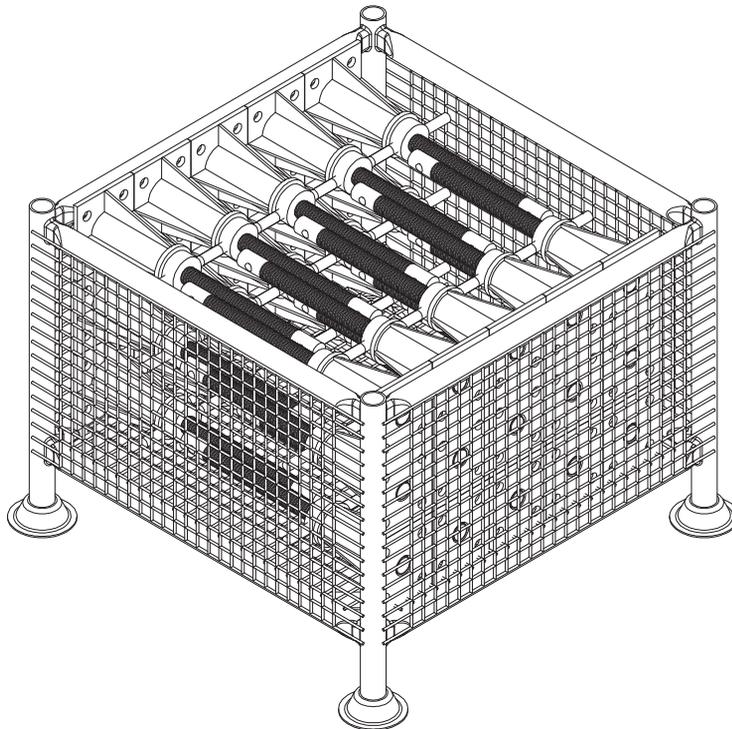
6. Transport & Handling

Slim-Lite Shoring Jack

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Shoring Jack	10.4	312	30	MEP

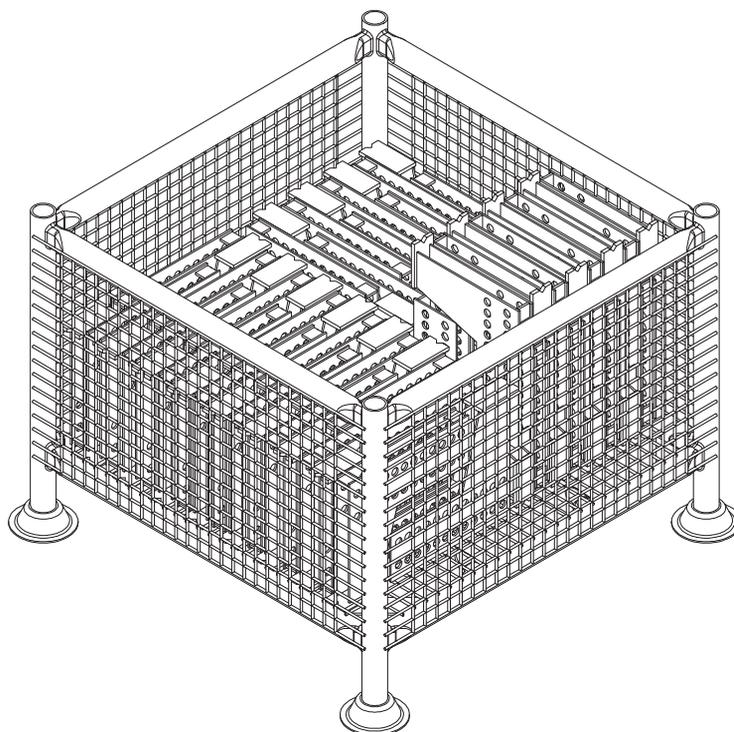
6. Transport & Handling

Slim-lite Shear Bracket

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Shear Bracket	3.0	64	192	MEP
Shear Bracket Type 2	7.0	64	448	MEP

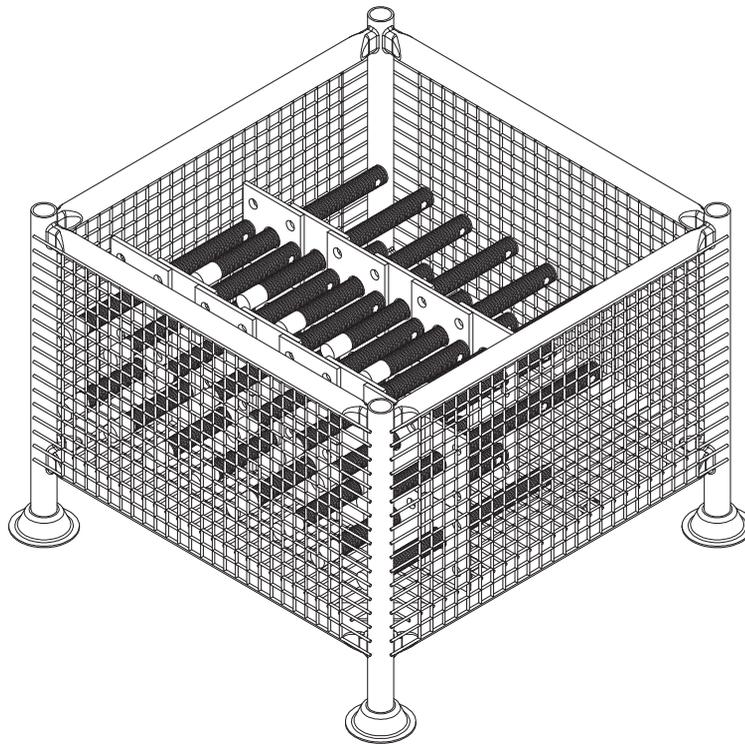
6. Transport & Handling

Slim-Lite Head / Base Jack

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Head / Base Jack LH	5.4	24	64.8	MEP
Head / Base Jack RH	5.4	24	64.8	MEP

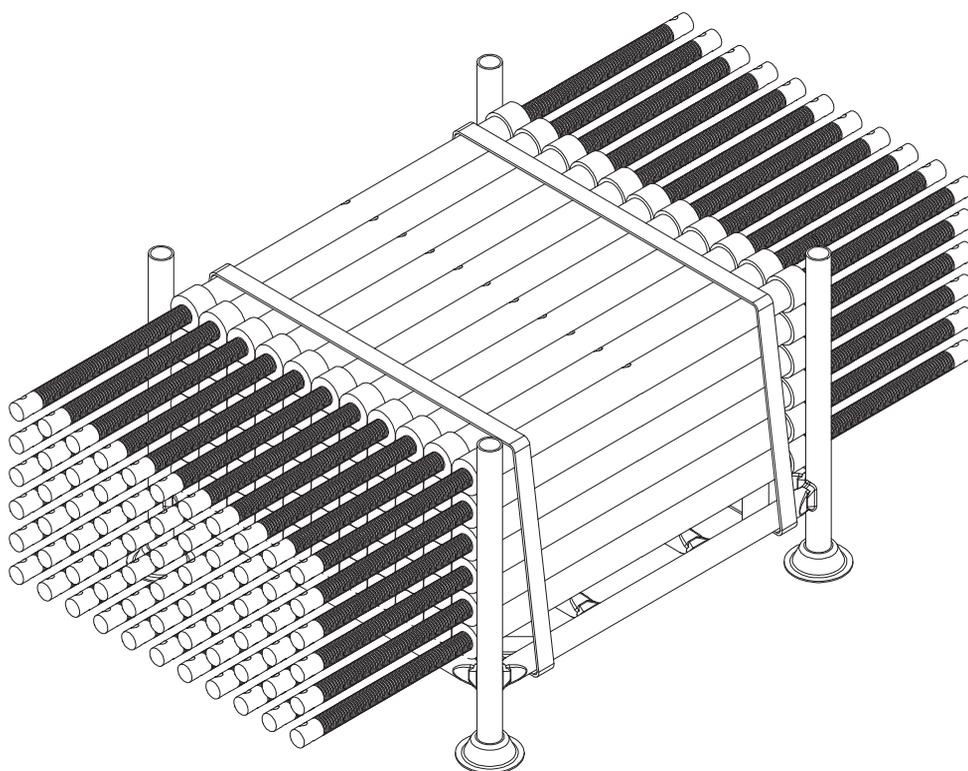
6. Transport & Handling

Turnbuckle / Shoring Brace / Push Pull Prop

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



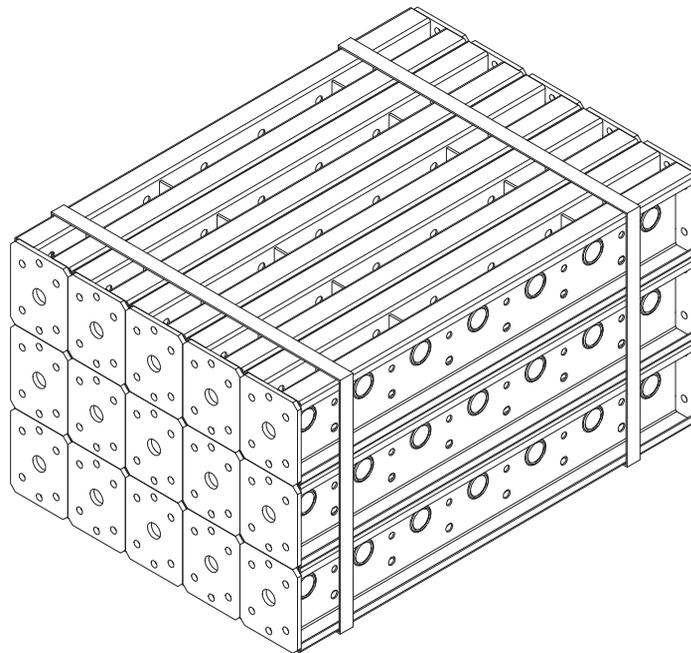
SYSTEM	DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
SLIM-LITE	600 - 1000mm TYP 0 Turnbuckle	10.0	66	660	MP
	1040 - 1790mm TYP 1 Turnbuckle	13.4	60	804	SP
	1830 - 2580mm TYP 2 Turnbuckle	17.4	55	957	SP
	2300 - 4100mm Shoring Brace	30.0	30	900	SP
SLIM-MAX	920 - 1240mm Turnbuckle	10.0	66	660	MP
	1510 - 1840mm Turnbuckle	12.0	60	720	SP
	1696 - 3100mm Push/Pull Prop	19.3	50	965	SP

6. Transport & Handling

Slim-Max Soldiers

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage/bundle. Do not mix different sizes or types in one stillage/bundle.
- Ensure every stillage/bundle load does not exceed the advised table below.
- Secure assembled items onto stillage/bundle by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER BUNDLE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
90mm Soldier	8.6	20	172	Bundle
180mm Soldier	10.5	20	210	Bundle
360mm Soldier	14.1	20	282	Bundle
540mm Soldier	17.8	20	356	Bundle
720mm Soldier	22.0	20	440	Bundle
900mm Soldier	25.8	20	516	Bundle
1260mm Soldier	33.7	15	505.5	Bundle
1800mm Soldier	45.3	15	679.5	Bundle
2160mm Soldier	52.9	15	793.5	Bundle
2700mm Soldier	64.5	10	645	Bundle
3600mm Soldier	84.1	10	841	Bundle

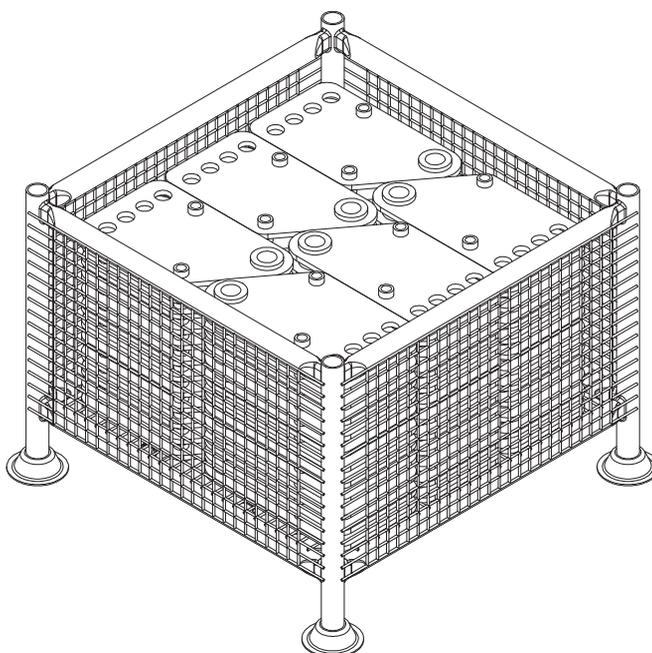
6. Transport & Handling

Slim-Max Lifting Accessories

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Lifting Bracket	9.0	70	630	MEP
Lifting Beam Connector	9.0	66	594	MEP

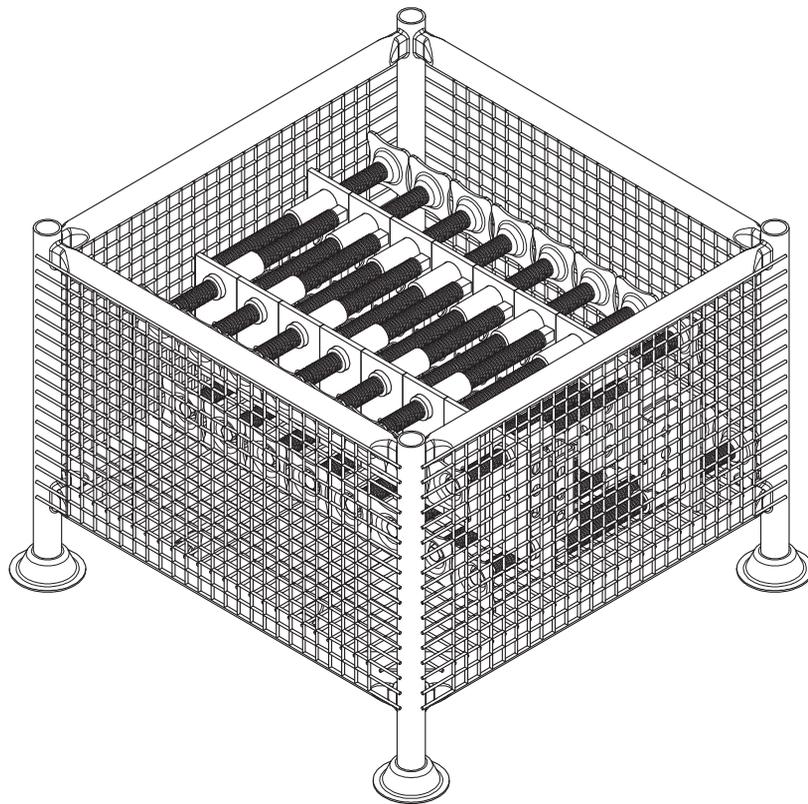
6. Transport & Handling

Slim-Max Plumbing Thrust Jack

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Plumbing Thrust Jack	6.8	40	272	MEP

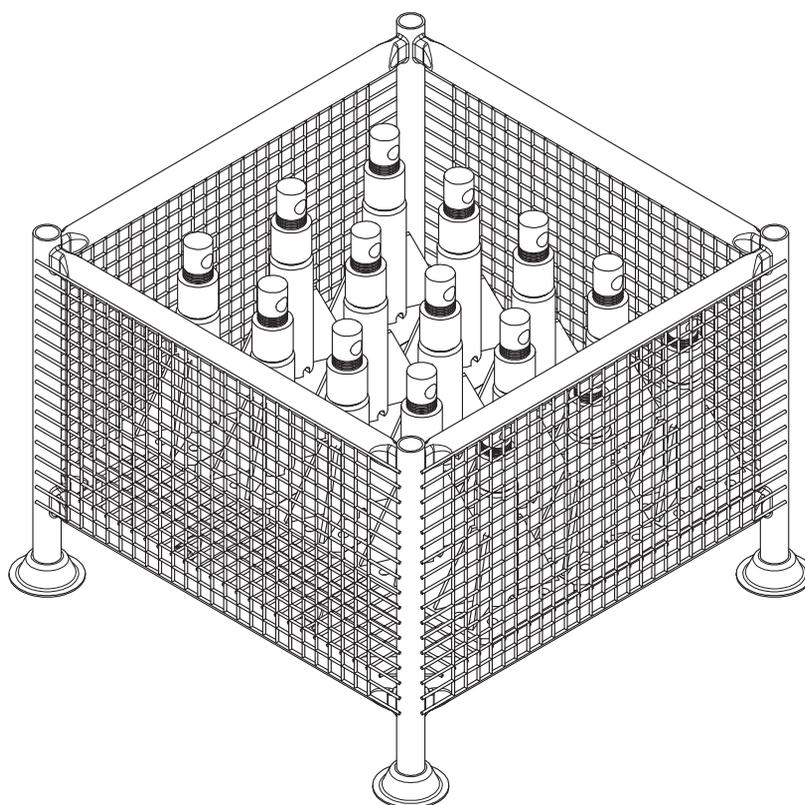
6. Transport & Handling

Slim-Max Right / Left Hand Jack

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



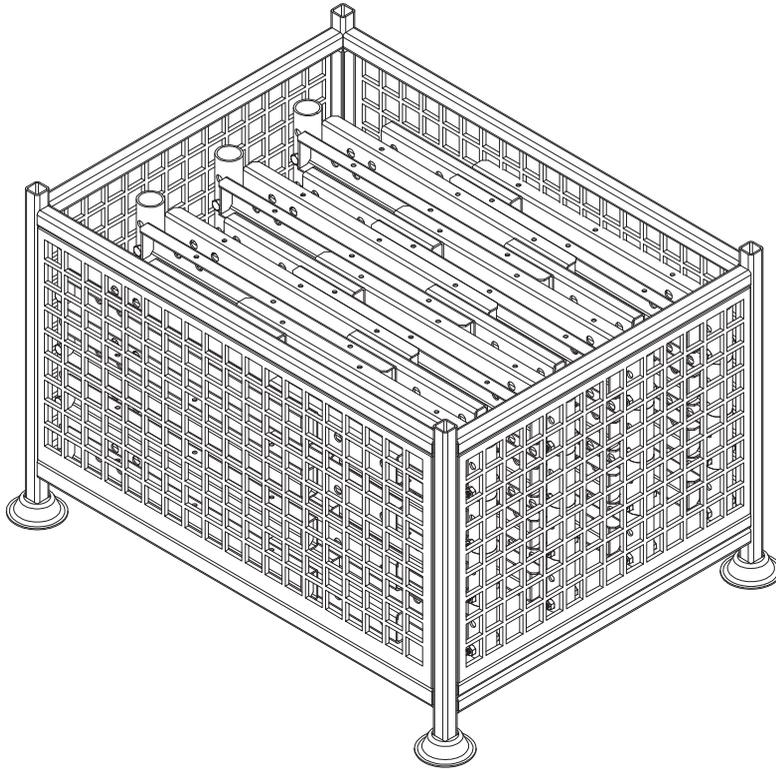
DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Right Hand Jack	17.0	20	340	MEP
Left Hand Jack	17.0	20	340	MEP

6. Transport & Handling

Slim-Max Platform Bracket

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage. When a stillage is not used ensure items are bundled and placed on suitable dunnage. The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage/bundle. Do not mix different sizes or types in one stillage/bundle.
- Ensure every stillage/bundle load does not exceed the advised table below.
- Secure assembled items onto stillage/bundle by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Platform Bracket	10.0	40	400	MEP

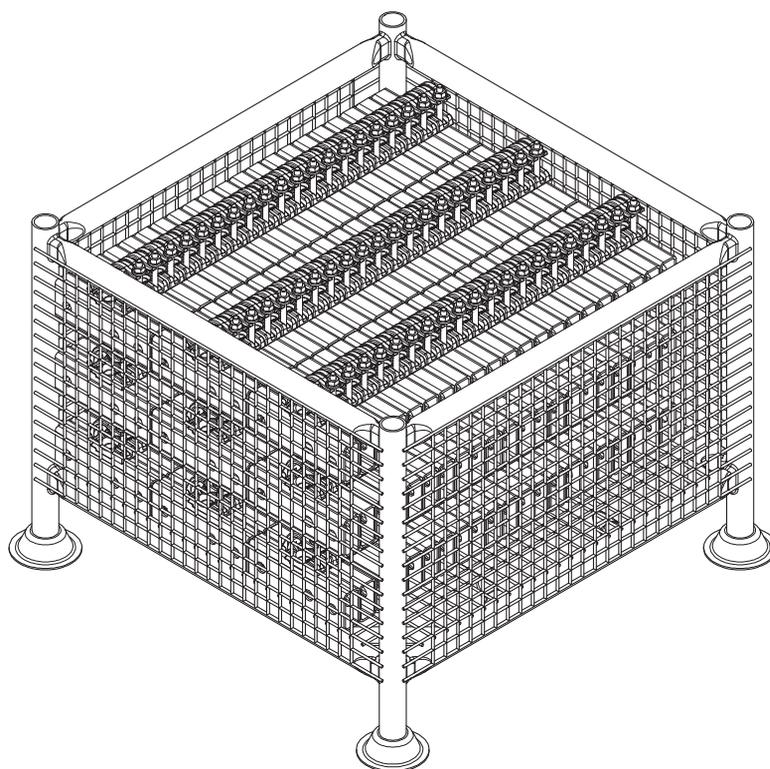
6. Transport & Handling

Slim-Max Brace Connector / Shear Bracket / Strut Connector

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Brace Connector	2.3	180	414	MEP
Strut Connector	4.2	150	630	MEP
Shear Bracket	9.0	100	900	MEP

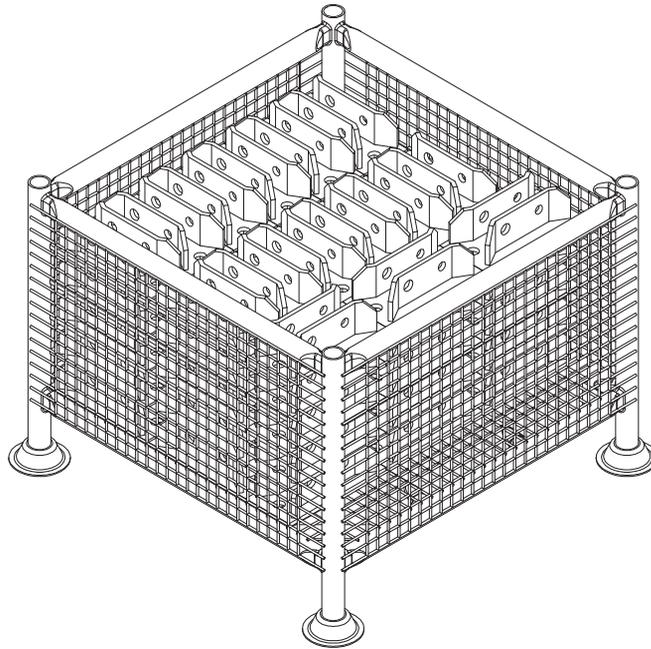
6. Transport & Handling

Slim-Max Miscellaneous Brackets / High Load Washer / Tilt Base Plate

The Acrow stillage is used to store a set number of items per a stillage. Items should be stored in a particular way to prevent them from falling off the stillage.

The recommended method and process is:

- Stack items next to and on top to each other.
- Only pack and stack similar matching lengths per stillage. Do not mix different sizes or types in one stillage.
- Ensure every stillage load does not exceed the advised table below.
- Secure assembled items onto stillage by using at least two straps or plastic wrapped for enclosed stillages (two straps for enclosed stillage not applicable).
- Refer to Acrow Scaffold Stillage Transport and Manual Handling Document for further stacking and transport recommendations.



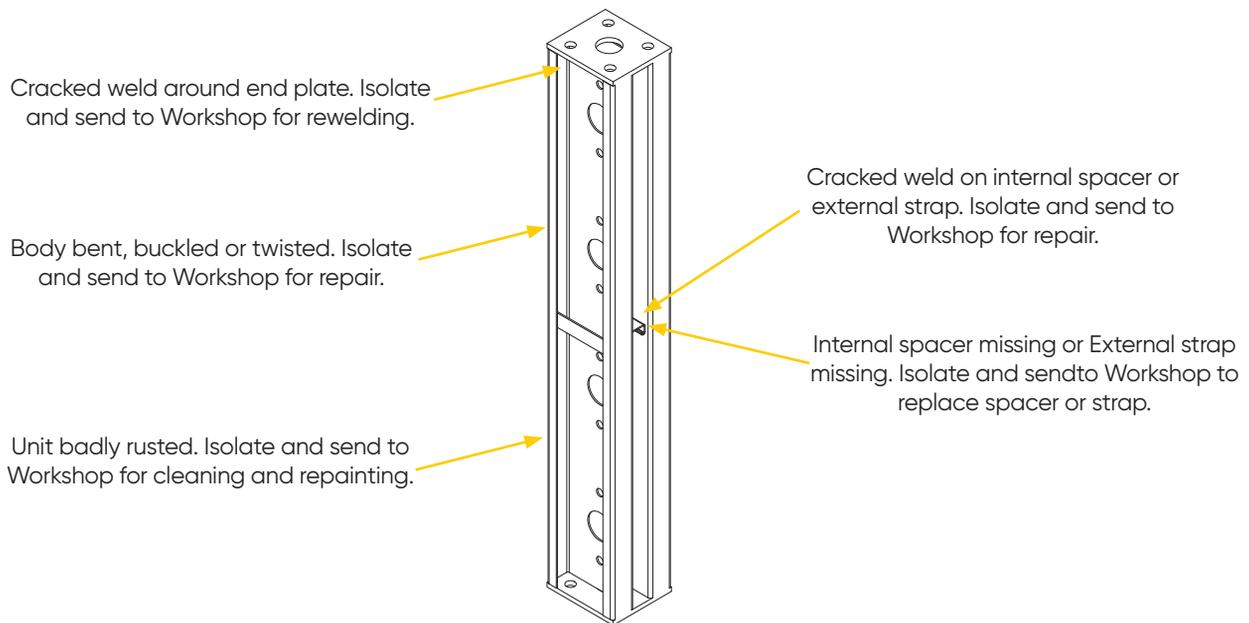
DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Tilt Base Plate	6.4	60	384	MEP
High Load Washer	5.2	40	208	MEP
End Guardrail Post Bracket	4.5	50	225	MEP
Raker Foot Bracket	2.5	60	150	MEP
Male Hinge Bracket	7.0	50	350	MEP
Female Hinge Bracket	6.0	50	300	MEP
Low Soffit Bracket	7.0	40	280	MEP
Maxi Right Angle Bracket	3.0	200	600	MEP

7. MAINTENANCE & INSPECTION

7. Maintenance & Inspection

Slim-Lite Solider

The Slimlite Soldier is the final load carrying member in the formwork for pouring a concrete wall. It transfers the concrete pressure from the ply and walers to the ties, at the same time keeping the wall straight vertically. To perform to its function correctly it must be straight with no twists, buckles or bends, it must also have all its spacers and straps in place with all its welds intact.



Inspection

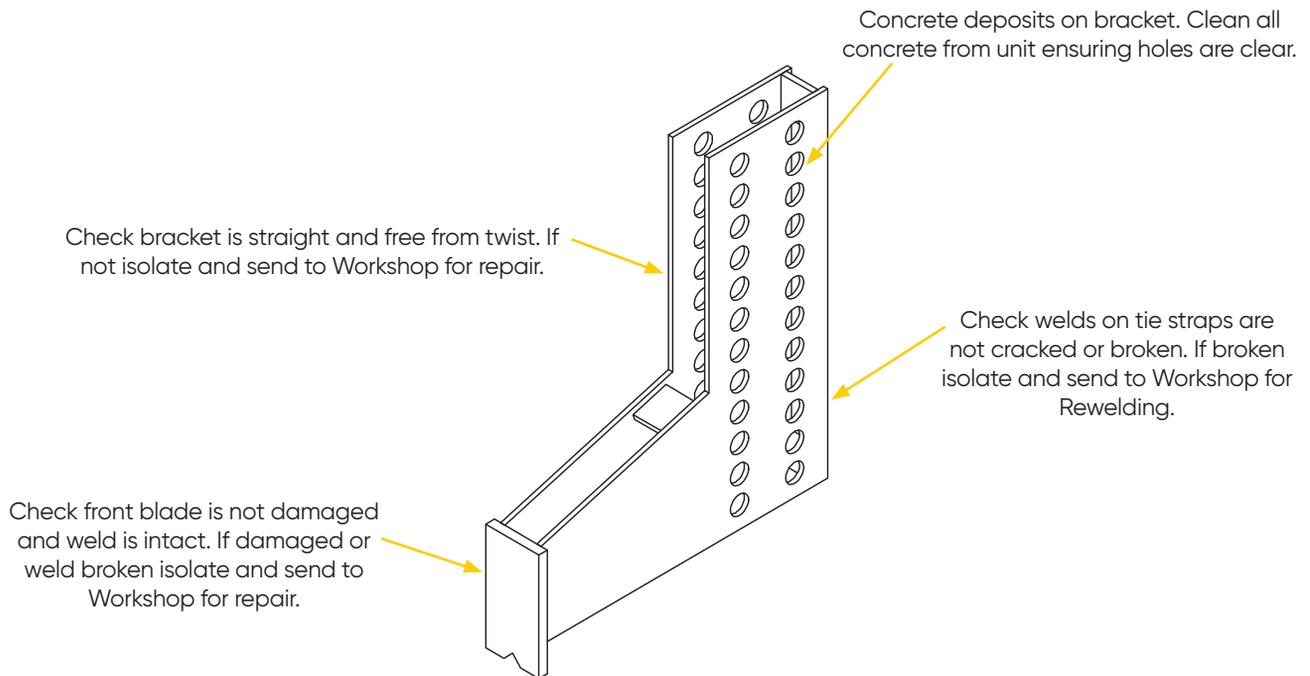
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Body bent, buckled or twisted	Soldier must be straight with no twists or buckles	Straighten on flypress and/or panel beat to remove buckle. If twisted unit must be scrapped. Units with a damaged end may be cut back to smaller size. See Work Instruction "Converting to smaller size"
Internal spacer or external strap missing	All spacers and straps must be in place	Replace by welding on new spacer or strap
Cracked or broken weld on spacer or strap	No broken or cracked welds permitted	Grind back and reweld* (* See WI – GE-103)
Cracked or broken weld around end plate	No broken or cracked welds permitted	Grind back and reweld* (* See WI – GE-103)
Unit badly rusted	Rusty appearance gives customer impression of unit being not up to strength.	Clean and repaint
Concrete deposits	Edges of soldier must be free of concrete deposits. End plates must also be free of concrete	Remove any deposits from edges and end plates and any deposits which will cause other problems
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Soldier Shear Bracket

The shear bracket when attached to a soldier is used to support the soldier on a shee bolt or anchor.



Inspection

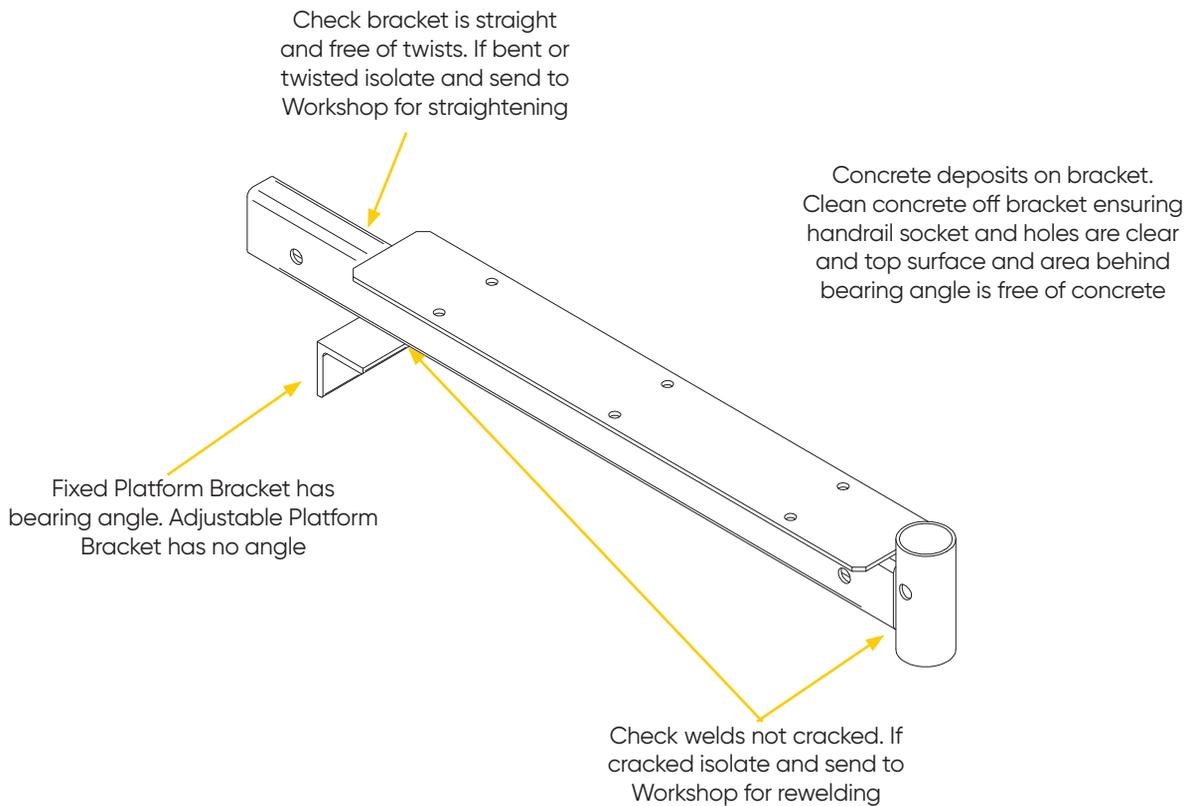
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Bracket is bent or twisted	Bracket must be straight	Straighten if possible, otherwise scrap* (* See WI –GE-103)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Concrete deposits on bracket	Bracket must be free of concrete deposits	Clean concrete off bracket ensuring holes are clear
Front blade damaged	Front blade must be straight	Straighten if possible, if not replace with new blade
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Soldier Working Platform Bracket

The Slimlite Soldier Platform Bracket fits between the chords of the soldier to provide a working platform . It is available in two types, i) Fixed type with bearing angle and ii) Adjustable without the bearing angle, this type must be used in conjunction with an Adjustable Plumbing Brace.



Inspection

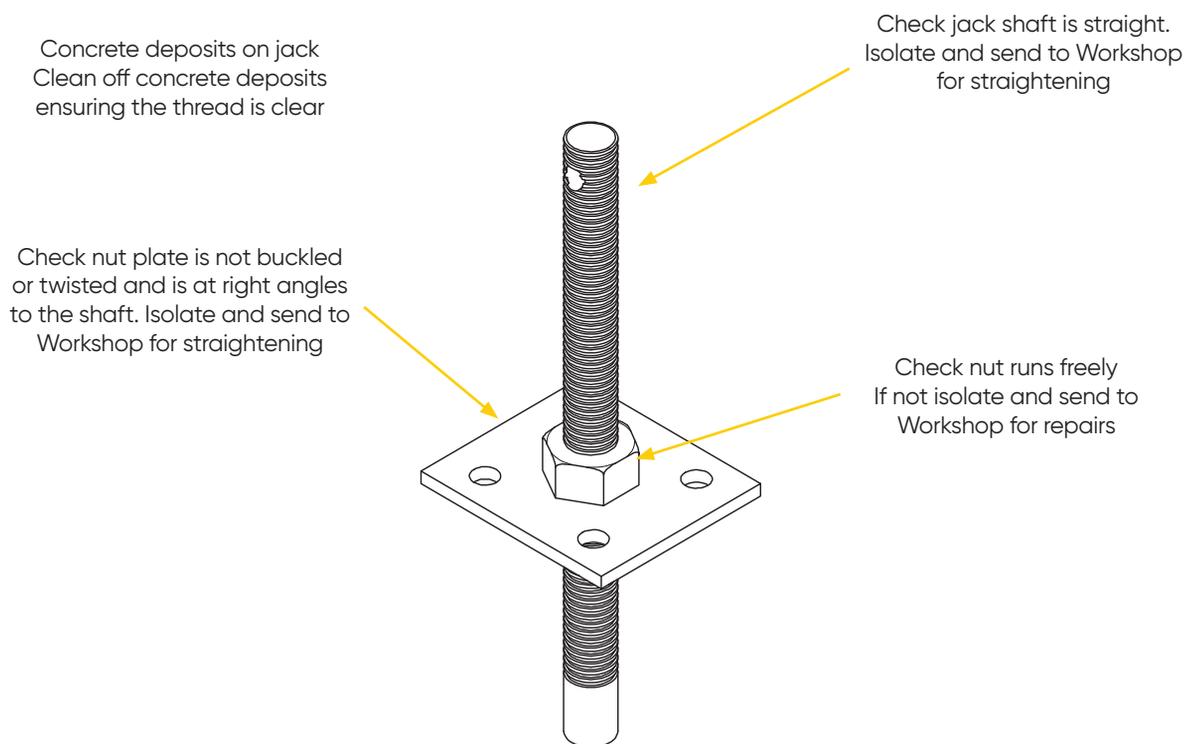
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Bracket is bent or twisted	Bracket must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Concrete deposits on bracket	Bracket must be free of concrete deposits	Clean concrete off bracket particularly inside the handrail socket
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Soldier Head / Base Jack

Used in conjunction with Slimlite Soldier to provide adjustment when soldier is used as a raking member or can be used with a U-head and a soldier to provide an adjustable vertical support.



Inspection

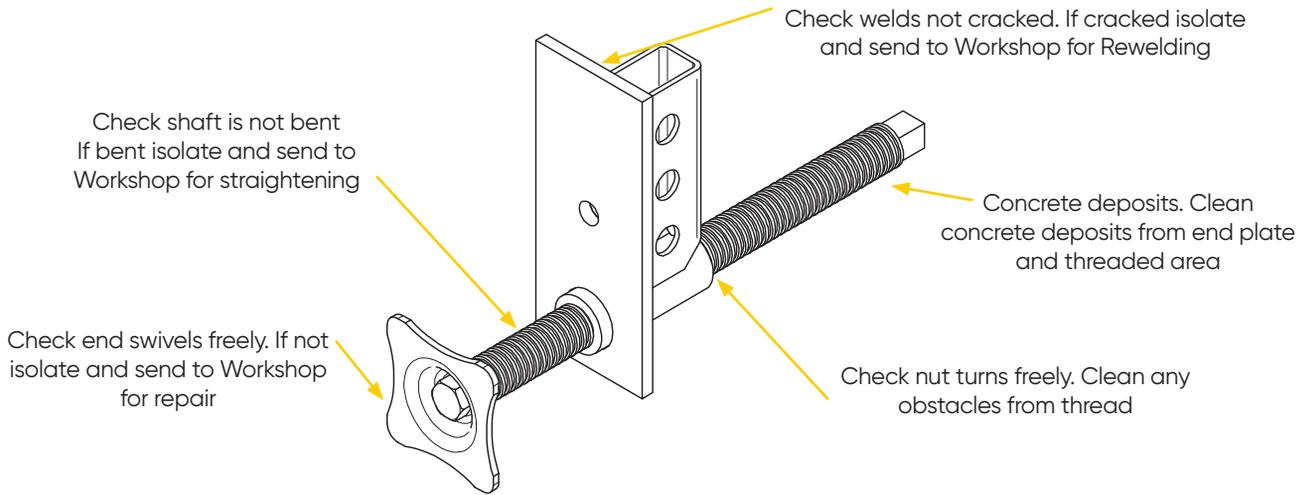
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Shaft bent	Shaft must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Nut plate Buckled or twisted	Plate must be at right angles to shaft	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Nut does not run freely	Nut must run freely	Oil thread and run nut up and down till movement is easy. If unable to free Scrap* (* See WI-GE-103)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI - GE-100)
Concrete deposits on Jack	Jack must be free of concrete deposits	Clean off concrete particularly around nut and threads
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Thrust Jack

Slimlite Thrust Jack is used to control the vertical alignment of a soldier by thrusting against the previous pour in a climbing form arrangement



Inspection

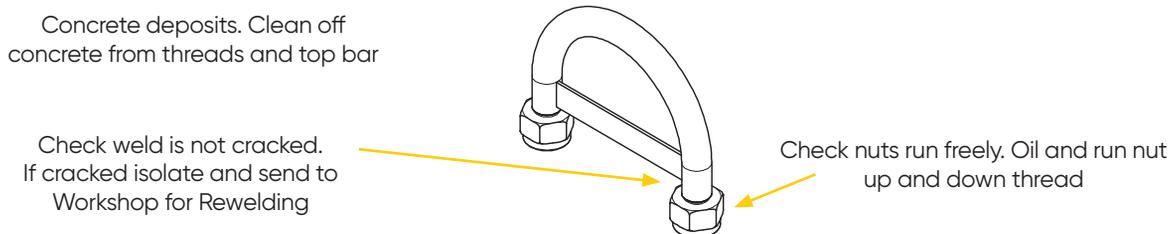
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
End does not swivel freely	End plate must swivel for unit to function correctly	Oil shaft and tap with hammer to free, if still tight the remove set screw and clean mating surfaces then reassemble.
Shaft bent	Shaft must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Nut does not turn freely	Nut must turn freely	Oil shaft and remove any obstructions on thread and force turn shaft until nut turns freely, if not possible scrap* (*See WI 145)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Concrete deposits on jack	Jack must be free of concrete deposits	Clean concrete off jack particularly around thread and hollow section of nut assembly
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Soldier Lifting Loop

The lifting loop is attached to the end plate of certain soldiers in a wall assembly to enable the assembly to be picked up by a crane



Inspection

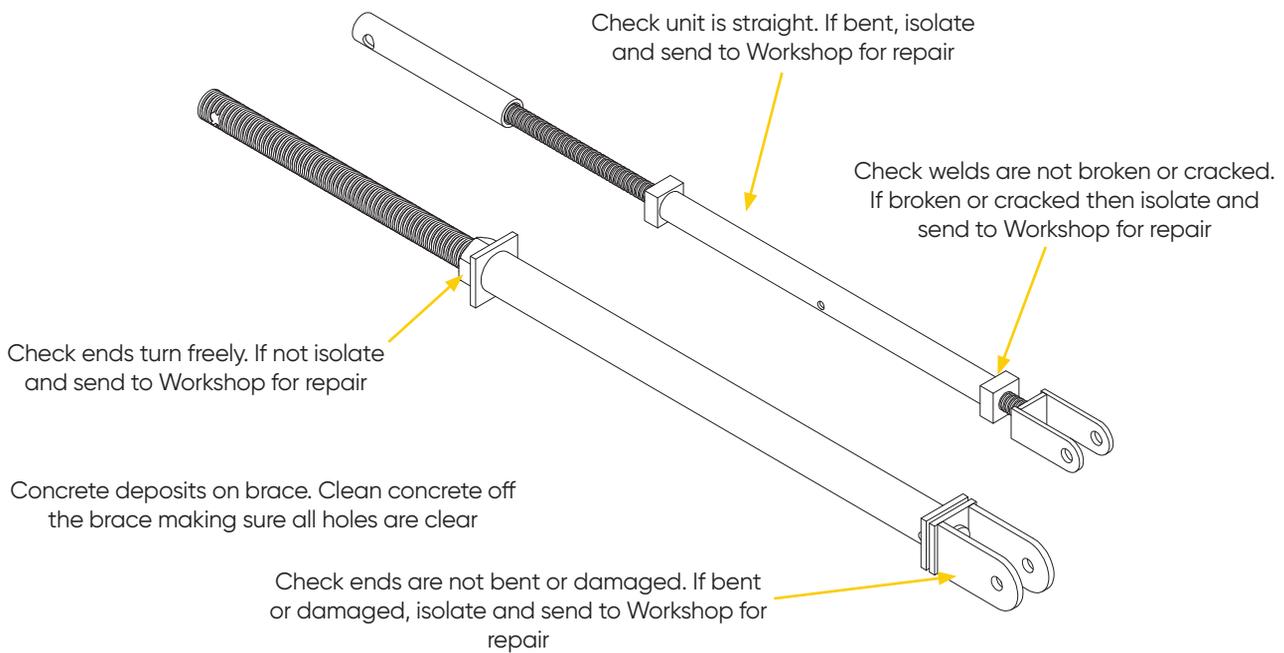
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Nuts do not run freely	Nuts must run freely	Oil thread and run nut up & down to free nut, if not successful then scrap* (*see WI-GE-103)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Concrete deposits on loop	Lifting loop must be clear of any concrete	Clean off concrete from threads and top bar
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Adjustable Plumbing Brace

Used to plumb soldiers, also used to support and adjust the Adjustable working Platform Bracket.



Inspection

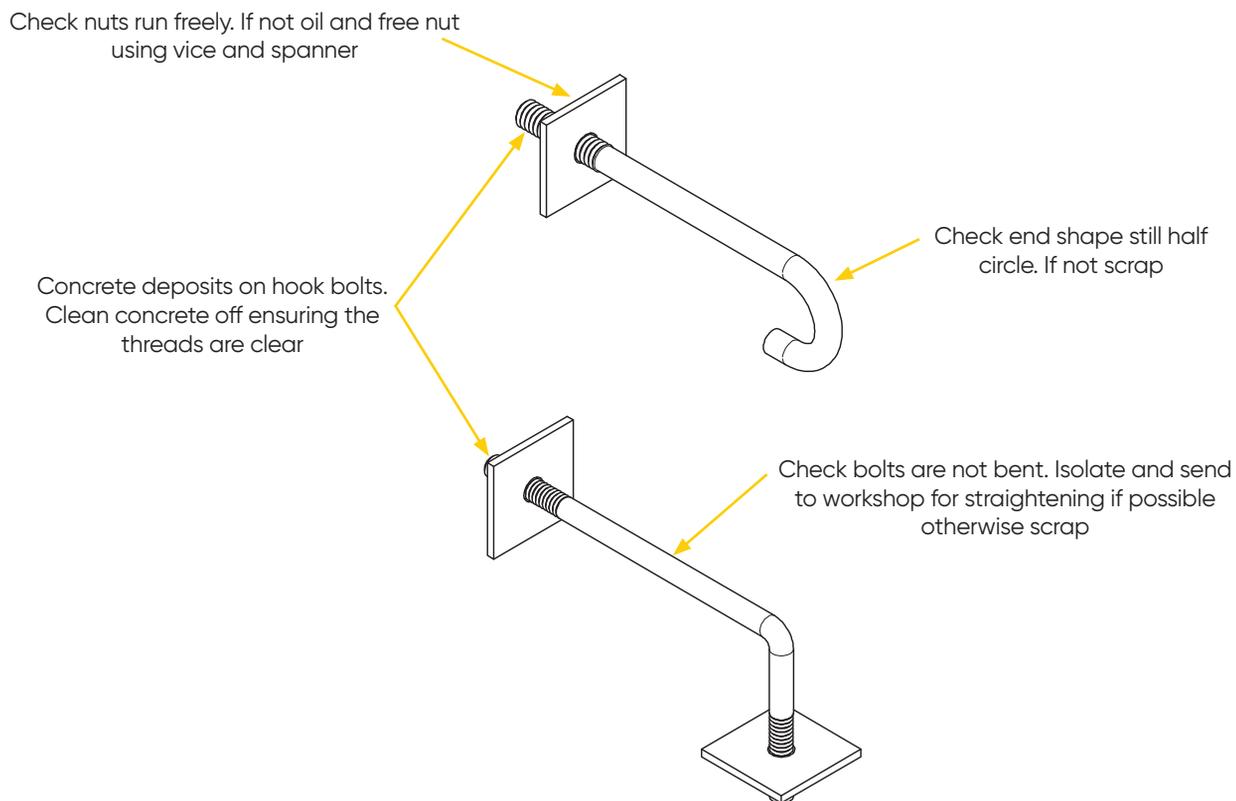
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Brace bent	Brace must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Ends do not turn freely	Ends must turn freely	Oil shaft and remove any obstructions on thread and force turn ends until they turn freely, if not possible scrap* (*See WI 145)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Ends damaged	ends must be undamaged	Repair and straighten if possible, otherwise scrap* (* See WI-GE-103)
Concrete deposits on brace	Brace must be free of concrete deposits	Clean concrete off brace particularly around thread and U head end
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Lite Soldier Hook Bolts

Hook bolts are used to connect walers to Slimlite Soldiers



Inspection

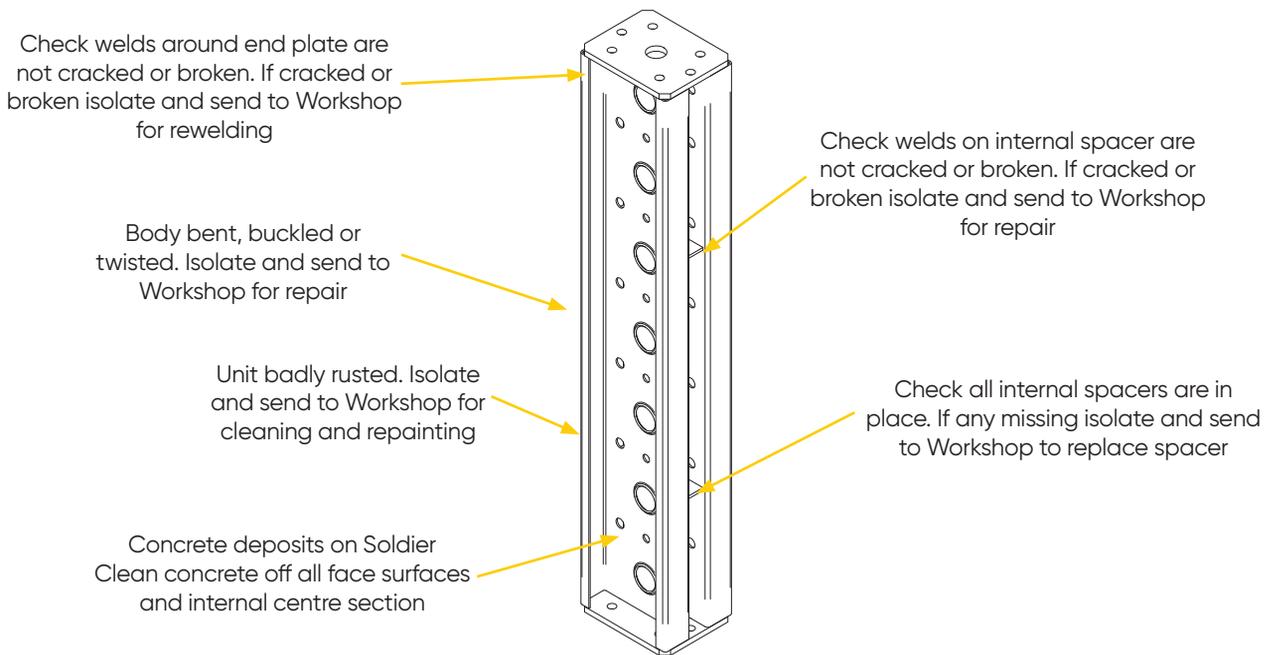
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Bolt legs not straight	Bolts must straight to original profile	Straighten if possible, otherwise scrap* (* See WI -GE-103)
Nuts will not run freely	Nuts must run freely	Oil and free nut using spanner and vice, if unable then scrap* (*See WI -GE-103)
Concrete deposits on bolts	Bolts must be free of concrete	Clean concrete off bolts particularly the threaded section
Curved end of Tube Hook bolt not full half circle	Shape must be full half circle	If end of bolt is not a full half circle it means the bolt has been overstressed and must be scrapped* (*See WI-GE-103)
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider

The Slim-Max Soldier is the final load carrying member in the formwork arrangement for pouring a concrete wall. It transfers the concrete pressure from the ply and walers to the ties, at the same time keeping the wall straight vertically. To perform to its function correctly it must be straight with no twists, buckles or bends, it must also have all its spacers in place all its welds must be intact.



Inspection

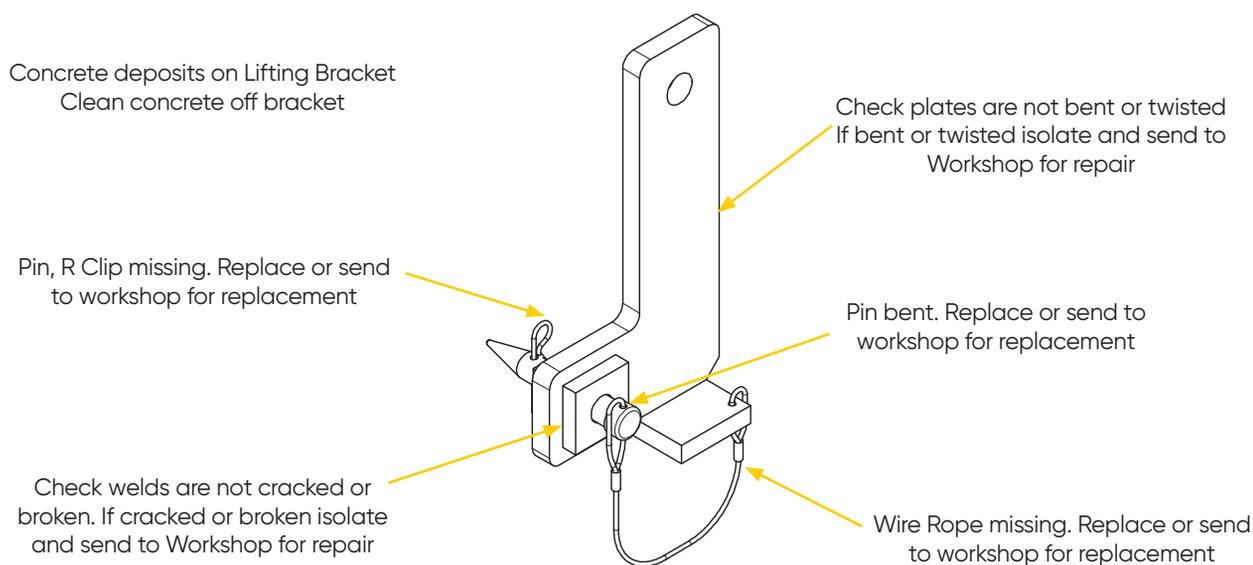
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Body bent, buckled or twisted	Soldier must be straight with no twists or buckles	Straighten on flypress and/or panel beat to remove buckle. If twisted unit must be scrapped. Units with a damaged end may be cut back to smaller size. See Work Instruction "Converting to smaller size"
Internal spacer missing	All spacers must be in place	Replace by welding on new spacer
Cracked or broken weld on spacer	No broken or cracked welds permitted	Grind back and reweld* (* See WI – GE-103)
Cracked or broken weld around end plate	No broken or cracked welds permitted	Grind back and reweld* (* See WI – GE-103)
Unit badly rusted	Rusty appearance gives customer impression of unit being not up to strength.	Clean and repaint
Concrete deposits	Edges of soldier must be free of concrete deposits. End plates must also be free of concrete	Remove any deposits from edges and end plates and any deposits which will cause other problems
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Soldier Lifting Bracket

The Lifting Bracket bolts to the end of a soldier to allow it to be lifted by the crane.



Inspection

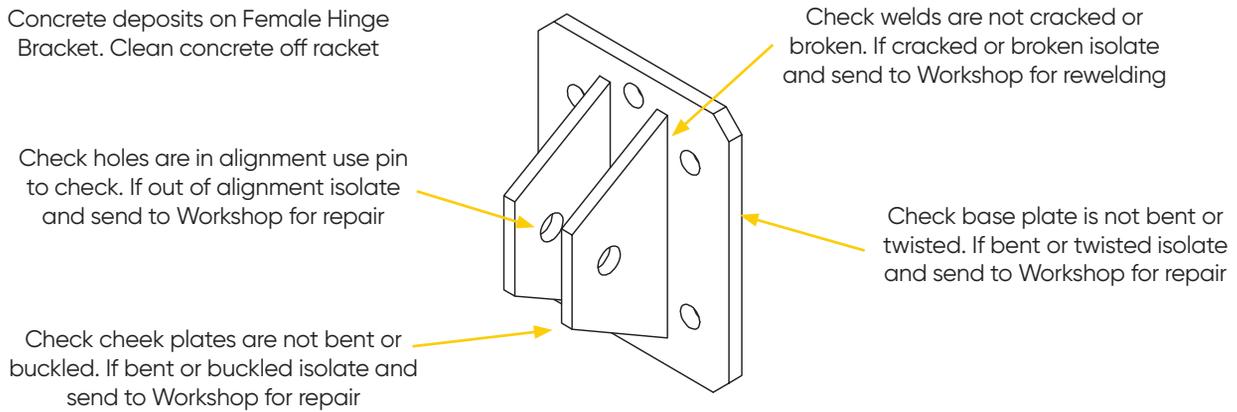
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Plates bent or twisted	Plates must be straight	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I.146)
Base plate bent or buckled	Base plate must be straight	Straighten, if not possible then scrap
Pin, R clip or Wire rope missing	Pin, R clip or Wire rope must be in place	Attach a new one
Pin bent	Pin must be straight	Attach a new pin
Concrete deposits on Lifting Bracket	Lifting Bracket must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Female Hinge Bracket

The Female Hinge Bracket is bolted to the end of a soldier and used in conjunction with a Male Hinge Bracket to enable soldiers to be joined at an angle



Inspection

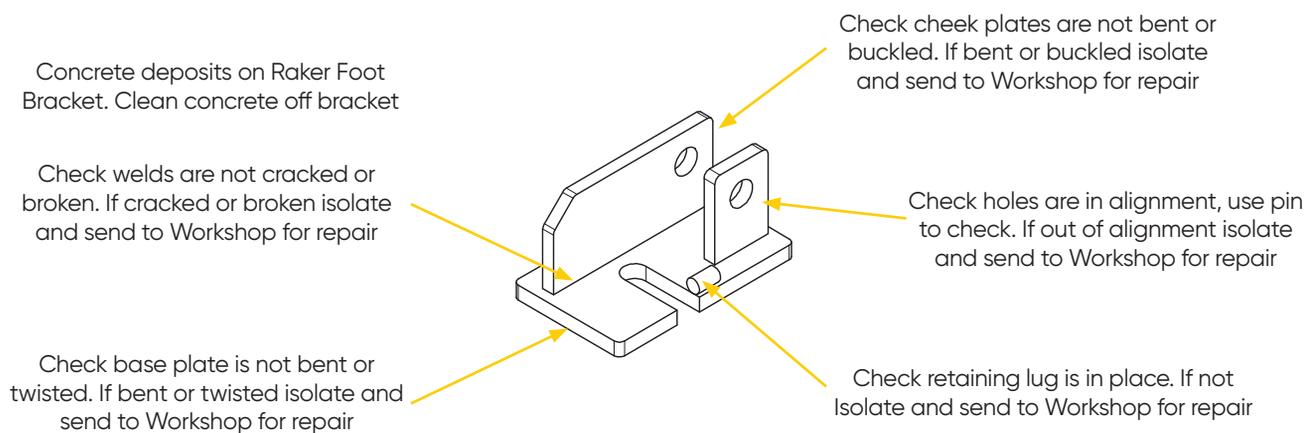
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Cheek plates bent or buckled	Cheek plate must be straight and parallel	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Base plate bent or buckled	Bass plate must be straight	Straighten, if not possible then scrap
Concrete deposits on Female Hinge Bracket	Female Lifting Bracket must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Holes are out of alignment	Holes must be in alignment	Find source of problem and rectify or redrill
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Raker Foot Bracket

The Acrow Slim-Max Soldier Raker Foot Bracket is used to attach the turn buckle to the concrete slab



Inspection

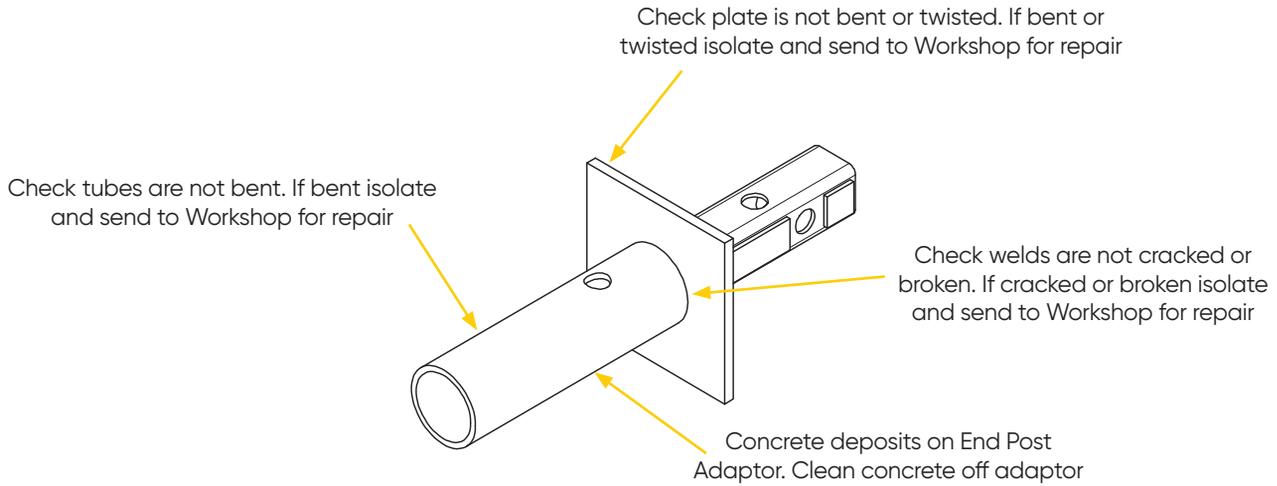
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Cheek plates bent or buckled	Cheek plate must be straight and parallel	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Base plates bent or buckled	Bass plate must be straight	Straighten, if not possible then scrap
Concrete deposits on Raker Foot Bracket	Raker Foot Bracket must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Holes are out of alignment	Holes must be in alignment	Find source of problem and rectify or redrill
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider End Post Adapter

The Acrow Slim-Max Soldier End Plate Adapter is used to attach a end post to a Slim-Max soldier



Inspection

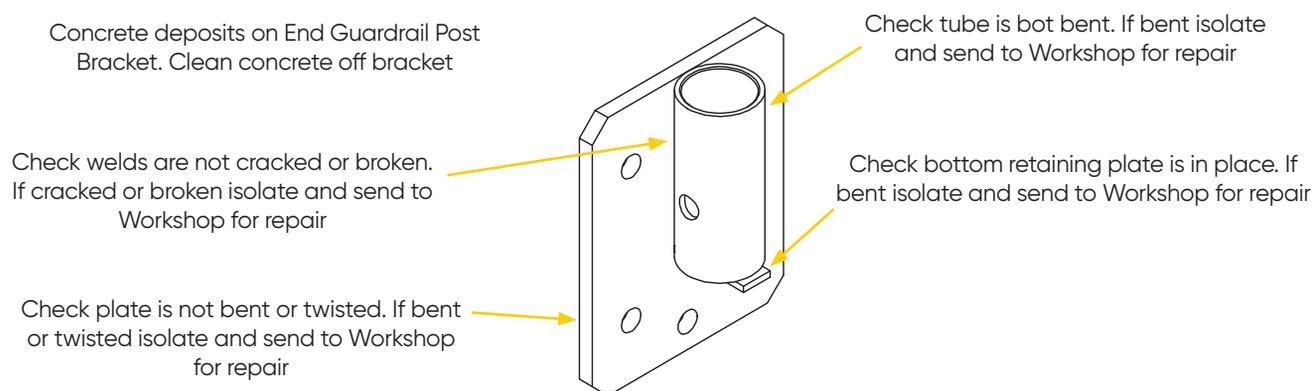
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Plate bent or buckled	Plate must be straight and at 90° to tubes	raighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Tubes bent	Tubes must be straight	Straighten, if not possible then scrap
Concrete deposits on End Post Adaptor	End Post Adaptor must be free of all concrete	Clean off all concrete with scraper, or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Soldier End Guardrail Post Bracket

The Acrow Slim-Max Soldier End Guardrail Post Bracket is attached to the end plate of a soldier when the soldier is used in a horizontal position to provide for the attachment of the hand rail post.



Inspection

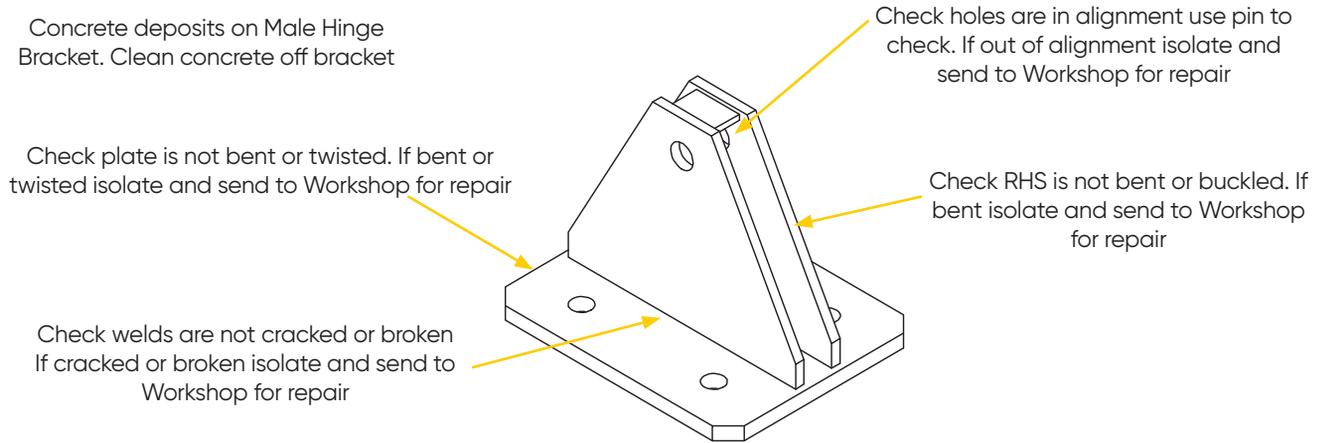
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Welds broken or cracked	All welds must be intact	ind back & reweld* (* See W.I. 146)
Plates bent or buckled	Plate must be straight	Straighten, if not possible then scrap
Concrete deposits on End Guardrail Post Bracket	End Guardrail Post Bracket must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Tube bent or buckled	Tube must be straight	Straighten, if not possible then replace or scrap
Retaining plate missing	Retaining plate must be in place	Weld on new retaining plate
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Male Hinge Bracket

The Male Hinge Bracket is bolted to the end of a soldier and used in conjunction with a Female Hinge Bracket to enable soldiers to be joined at an angle.



Inspection

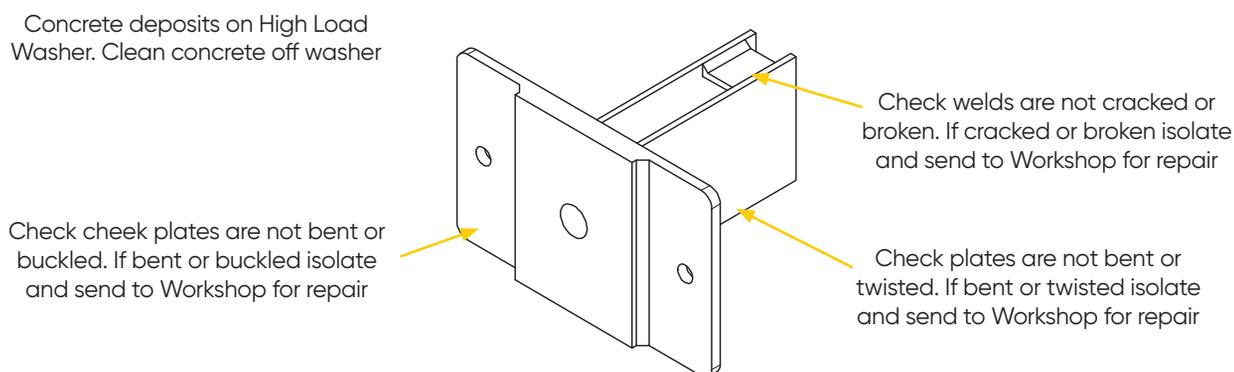
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
RHS bent or buckled	RHS must be straight and parallel	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Base plates bent or buckled	Base plate must be straight	Straighten, if not possible then scrap
Concrete deposits on Male Hinge Bracket	Male Lifting Bracket must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider High Load Washer

The Acrow Slim-Max Soldier High Load Washer is used with the ZX diameter thru tie bar to strengthen the soldier at the tie position.



Inspection

Generally, visual inspection checking for the possible faults listed below.

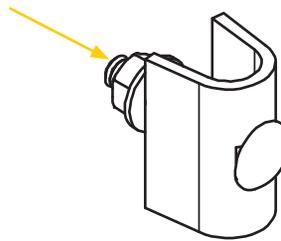
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Cheek plates bent or buckled	Cheek plate must be straight and parallel	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Plates bent or buckled	Plate must be straight	Straighten, if not possible then scrap
Concrete deposits on High Load Washer	High Load Washer must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Soldier HL Washer Clamp & Bolt Assembly

The Acrow Slim-Max Soldier HL Washer Clamp & Bolt assembly are used in pairs with the High Load Washer to strengthen the flanges of the soldier when using ZX diameter thru tie bars.

Check Nut and bolt are in place and nut runs freely on bolt. If missing or nut does not run freely on bolt isolate and send to Workshop for repair



Check clamp is not distorted out of shape. If distorted isolate and send to Workshop for repair

Concrete deposits on HL Washer Clamp & Bolt Assembly. Clean concrete off assembly

Inspection

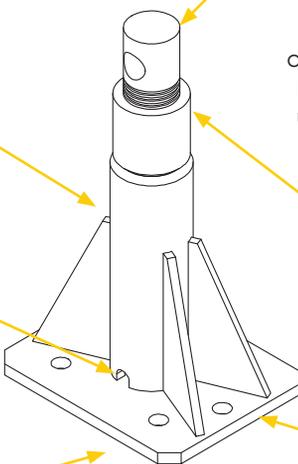
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Clamp is distorted out of shape	Clamp must be in correct shape	Straighten, if not possible then scrap
Bolt & nut missing or bent or nut does not run freely on bolt	Bolt & nut must be in place and must be straight and the nut must run freely on the bolt	Replace bolt and nut
Concrete deposits on HL Washer Clamp & Bolt Assembly	HL Washer Clamp & Bolt assembly must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Right and Left Hand Jacks

The Acrow Slim-Max Soldier Right or Left Hand Jack is used to give adjustment when the soldier is used as a vertical or raking support member.



Concrete deposits on Right or Left Hand Jack. Clean concrete off jacks

Check welds are not cracked or broken. If cracked or broken isolate and send to Workshop for repair

Check thread stop is effective. When stem is fully extended apply full effort to further extend the stem. If the stem continues to extend or can be separated from the body send to workshop for repair.

Check correct colour coding
Ensure colour is clearly visible & is correct colour.
Base plate of Left Hand jacks must be painted YELLOW.
Base plate of Right Hand jack must be painted GREEN. If incorrect colour or is unclear, re-paint as necessary.

Check markings exist, are readable & are correct
Turn the jack stem clockwise. If the stem extends it is a Right Hand jack. The letters "R" or "RH" must be clearly stamped on the top of the stem. Conversely, if the stem shortens the jack is a Left Hand jack. The letters "L" or "LH" must clearly be stamped on the top of the stem. If the identification stamp is incorrect or is missing or unreadable, send to workshop for rectification.

Check threaded shaft runs freely in base unit. If shaft does not run freely isolate and send to Workshop for repair

Check base plate is not bent or twisted. If bent or twisted isolate and send to Workshop for repair

Inspection

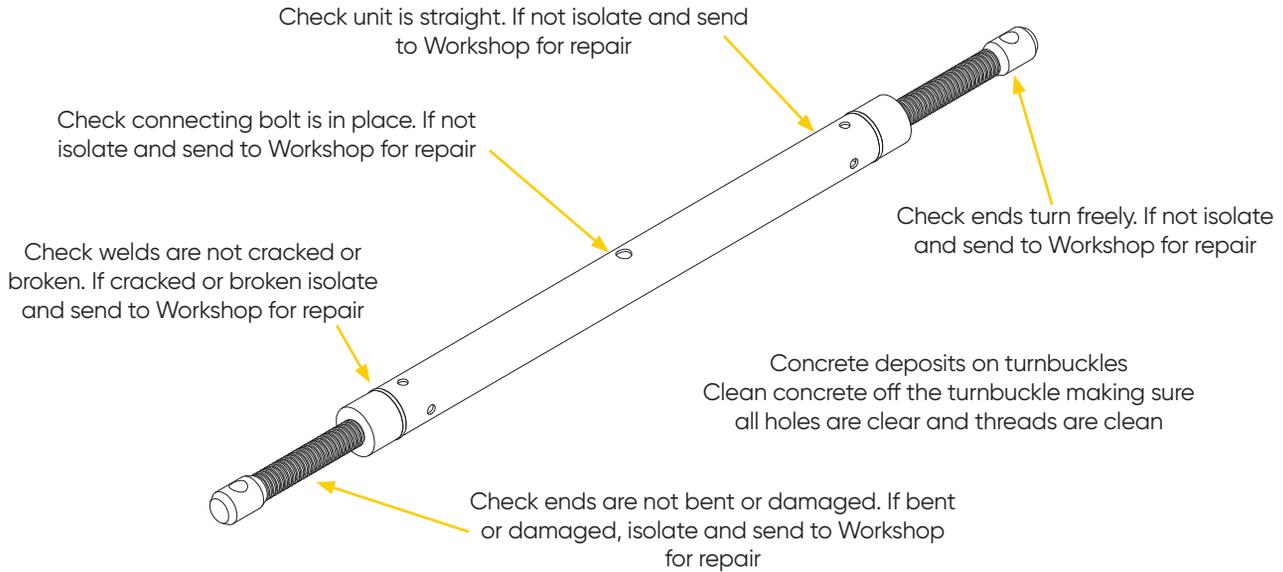
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Base plate bent or twisted	Base plate must be straight and free of twist	Straighten if possible otherwise scrap* (*See WI-GE-103)
Welds broken or cracked	All welds must be intact	Grind back & re-weld* (* See WI-GE-100)
Shaft does not run freely in base unit	Shaft must run freely in base unit	Find problem and rectify oil thread
Concrete deposits on jack	Jack must be free of all concrete	Clean off all concrete with scraper or wire brush
Left hand or Right hand Stamp is Missing or unclear.	Not acceptable	Stamp using correct identification letter, i.e, " L" or " R "
Stamping incorrect or unreadable	Not acceptable	Gently remove existing stamped letter & re-stamp using correct identification letter. L=left hand, R= right hand
Thread-stop tack weld missing or ineffective	Not acceptable	Deposit tack weld in the recessed part of the threaded stem & check effectiveness when weld has cooled down.
Colour coding is incorrect	Unacceptable	Colour code with correct paint colour. Green for Right hand thread and Yellow for Left hand thread.
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Turnbuckles

The Acrow Slim-Max soldier Turnbuckles are used to stabilise the soldier when it is used in a vertical form assembly.



Inspection

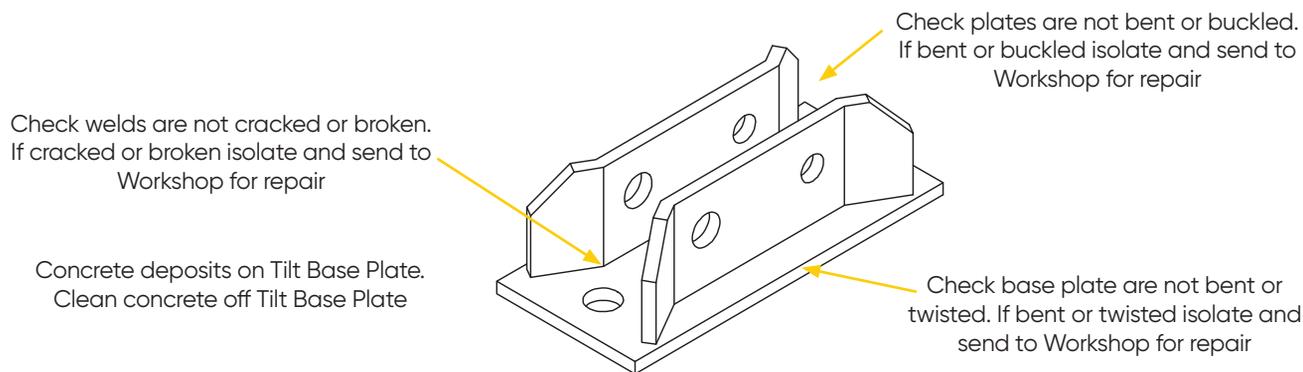
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Turnbuckle bent	Turnbuckle must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)
Ends do not turn freely	Ends must turn freely	Oil shaft and remove any obstructions on thread and force turn ends until they turn freely, if not possible scrap* (*See WI 145)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Ends damaged	Ends must be undamaged	Repair and straighten if possible, otherwise scrap* (* See WI-GE-103)
Concrete deposits on turnbuckle	Turnbuckle must be free of concrete deposits	Clean concrete off turn buckle particularly around thread and U head end
Retaining bolt missing	Retaining bolt must be in place	Replace retaining bolt
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Tilt Base Plate

The Acrow Slim-Max soldier Tilt Base Plate is used when connecting a horizontal turn buckle and a raking turnbuckle to a vertical soldier.



Inspection

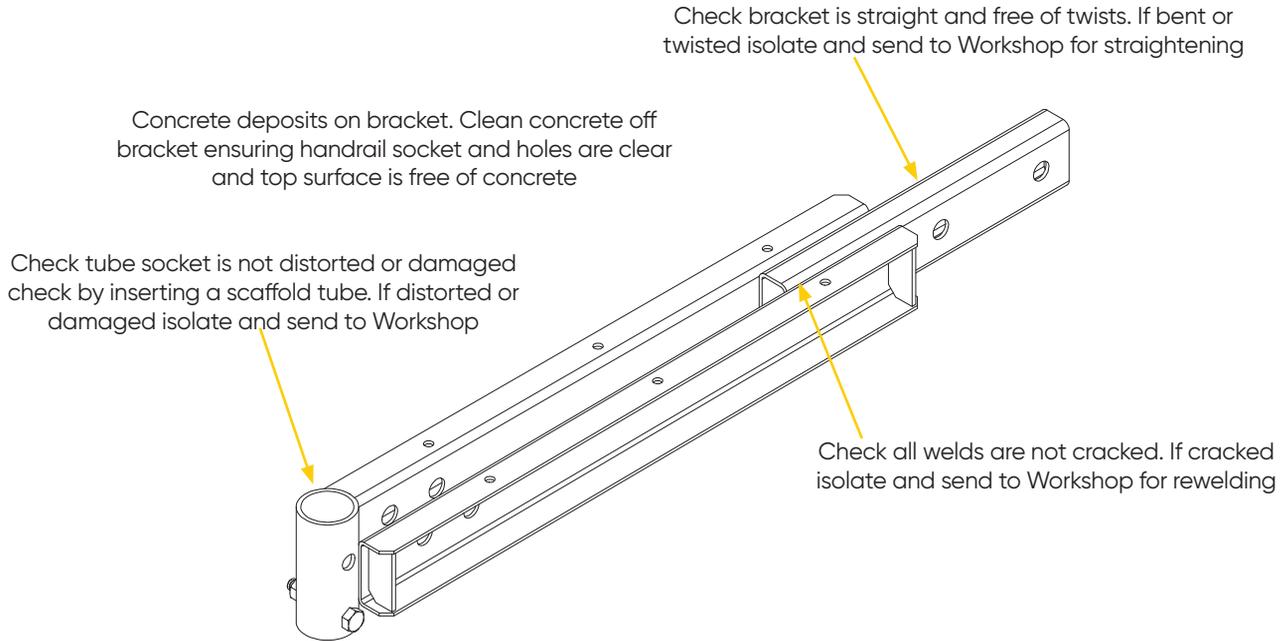
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Cheek plates bent or buckled	Cheek plate must be straight and parallel	Straighten, if not possible then scrap
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)
Base plate bent or buckled	Bass plate must be straight	Straighten, if not possible then scrap
Concrete deposits on Tilt Base Plate	Tilt Base Plate must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Soldier Platform Bracket

The Acrow Slim-Max Soldier Platform Bracket fits between the chords of the soldier to provide a working platform and is used in conjunction with a turnbuckle



Inspection

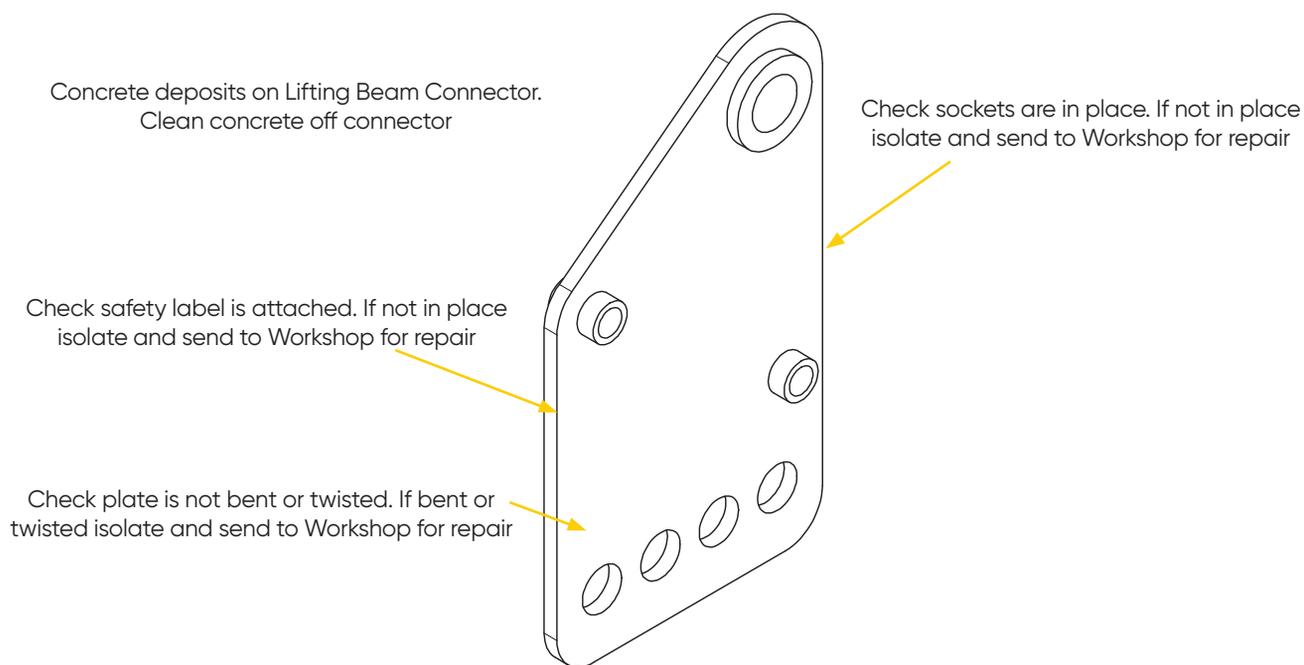
Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Bracket is bent or twisted	Bracket must be straight	Straighten if possible, otherwise scrap* (* See WI -GE-103)
Welds broken or cracked	Welds must be intact	Grind back and reweld* (* See WI-GE-100)
Concrete deposits on Platform Bracket	Platform Bracket must be free of concrete deposits	Clean concrete off bracket particularly inside the handrail socket
Tube socket distorted or damaged	Tube socket must be straight and able to accept a scaffold tube	Straighten if possible, otherwise replace
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

7. Maintenance & Inspection

Slim-Max Solider Lifting Beam Connector

The Acrow Slim-Max Soldier Lifting Beam Connector



Inspection

Generally, visual inspection checking for the possible faults listed below.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION
Plate bent or buckled	Plate must be straight and parallel	Straighten, if not possible then scrap
Hole sockets missing	Hole sockets must be in place	Replace any missing hole sockets
Concrete deposits on Lifting Beam Connector	Lifting Beam Connector must be free of all concrete	Clean off all concrete with scraper, chisel or wire brush
Note: When re-welding cracked welds Work Instruction WI-GE-100 details must be followed		

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