acrow.
ENGINEERING & CONSTRUCTION

TECHNICAL GUIDE
PROPPING

FALSEWORK & SHORING

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 loads featured in this document, related to the parts of the product, are approximate.

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 **PROPPING** 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	04/26	Technical Manual Created
B	06/26	Second Release
C	10/26	Location Page Updated

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1. Technical Specifications

System Description

Acrow **PROPPING** system incorporates a steel-encased concrete block designed to act as a stable anchoring solution for a wide range of raker and propping applications across multiple Acrow systems. For handling and installation, the block includes multiple built-in lifting points, along with dedicated forklift prop provisions to ensure safe and efficient transport on site. The blocks can be positioned side by side or stacked vertically and securely bolted together, providing flexibility to achieve any solution for your project needs. Along with the concrete block, this technical manual showcases Acrow's wide range of propping solutions. Vertical props, bracing and miscellaneous needs.

Purpose of the Document

The purpose of this document is to provide guidelines for design, safe handling, transport and installation of the **PROPPING** 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. Our technical experts can identify the most efficient temporary work 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 draws the user's attention to potential musculoskeletal risks associated with manual handling. It is recommended that appropriate procedures and control measures be implemented during assembly and dismantling of the **PROPPING** system

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.

1. Technical Specifications

Important Information

The erection and application instructions contained in this manual are the recommended methods to be used for **PROPPING** 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 **PROPPING** 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/illustrations shown within this manual are intended as expressing the diversity and possible applications of the product and as such must not be used as assembly instructions.
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 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 Acrow Engineering department.

Applicable Codes and Standards

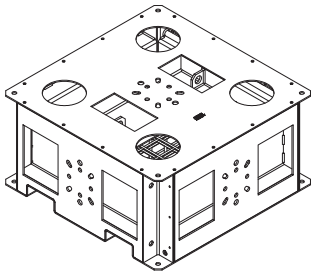
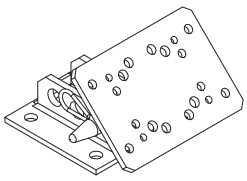
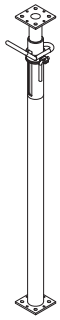
The structural design information and guide provided in this document are limited to the relevant codes nominated below. It does not include certification of any structures or works associated with a project.

ELEMENT	DESCRIPTION	CODE
LOADING	Structural Design Actions – General Principles	AS/NZS 1170.0-2002 (R2016)
	Structural Design Actions – Permanent, Imposed And Other Actions	AS/NZS 1170.1-2002 (R2016)
FORMWORK	Formwork for Concrete	AS 3610-1995
	Formwork for Concrete Part 1- Specifications	AS 3610.1-2018

2. GENERAL PRODUCT INFORMATION

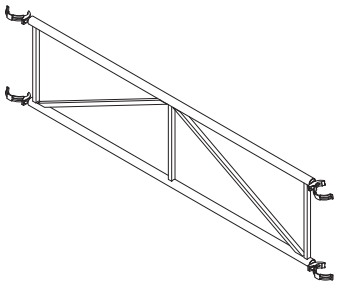
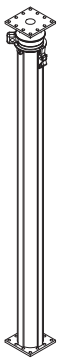
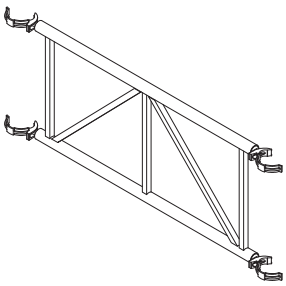
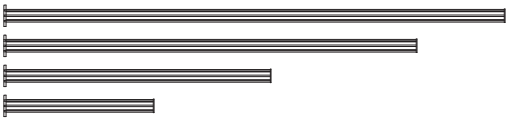
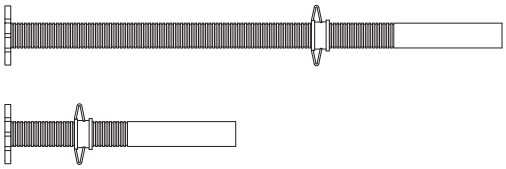
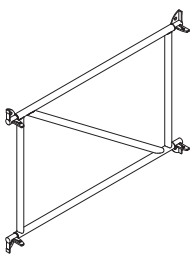
2. General Product Information

Concrete Blocks, Acrow Props, EP Props

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	**Concrete Propping Block** Used as an anchor to connect an assortment of raking and propping items.		
	Concrete Block	SECB	1200.0
	**Universal Raking Brackets** Can be used with multiple props to provide an option for raking applications.		
	Universal Raking Bracket	GHURB	8.0
 Note: Acrow Prop No 4 discontinued*	**Acrow Prop** A range of high tensile props designed to be used for falsework support, temporary support and raking shores. Available in 6 sizes covering a range from 720mm to 4900mm with axial compression working load limits ranging from 7kN to 50kN. **For Acrow Prop typical arrangements and data, see ACROW PROP Technical Manual**		
	Acrow Prop No. 00 (720mm- 1000mm)	AP00	10.0
	Acrow Prop No. 0 (1050mm- 1830mm)	AP0	13.0
	Acrow Prop No. 1 (1600mm- 2800mm)	APF1	17.0
	Acrow Prop No. 2 (1900mm- 3400mm)	APF2	20.0
	Acrow Prop No. 3 (2170mm- 3975mm)	APF3	23.0
	Acrow Prop No 4 (3100mm- 4900mm)	APF4	30.0
	**EP Prop Range**		
	2.5m EP Prop (1800-3000mm) EVO 2	EP25	15.3
	3.5m EP Prop (2000-3500mm) EVO 2	EP35	19.8
	4.0m EP Prop (2300-4000mm) EVO 2	EP40	22.4
	4.5m EP Prop (2700-4500mm) EVO 2	EP45	27.4
	5.5m EP Prop (3100-5500mm) EVO 2	EP55	36.6
	3.5m EP Prop (2000-3500mm) EVO 3	EP35-3T	21.6
	3.5m EP Prop Quick Strike (2000-3500mm)	EP35QS	21.7

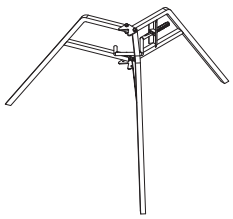
2. General Product Information

Alu Props, GASS Props

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	**EP Prop Bracing Frames**		
	0.75m Brace Frame	ADBF075	9.1
	1.5m Brace Frame	ADBF0150	14.0
	1.57m Brace Frame	ADBF0157	15.3
	2.32m Brace Frame	ADBF232	22.2
	**Alu Prop Range**		
	Alu-Prop (1650-2800mm)	2220010	17.6
	Alu-Prop (2200-3700mm)	2220020	21.6
		ADAP2237	21.6
	Alu-Prop (3300-4800mm)	2220030	24.4
		ADAP48	24.4
	Alu-Prop (4500-6000mm)	2220040	29.6
	**Alu Prop Bracing Frames**		
	0.75m Brace Frame	2220140	9.5
	1.5m Brace Frame	2220125	14.2
	1.57m Brace Frame	2220130	14.7
	2.32m Brace Frame	2220120	18.7
	**Acrow GASS Prop Outer Props**		
	Outer Leg 4670	GHOUT467	22.1
	Outer Leg 3580	GHOUT358	17.4
	Outer Leg 2490	GHOUT249	12.7
	Outer Leg 1400	GHOUT140	8.0
	**Acrow GASS Prop Inner Props (Adjustable Jacks)** For GASS typical arrangements and data, see GASS Technical Manual		
	Inner Leg 1680	GHINL168	10.2
	Inner Leg 780	GHINL078	5.5
	**Acrow GASS Bracing Frames**		
	0.75m Brace Frame	GHGTE075	7.9
	1.5m Brace Frame	GHGTE150	10.4
	1.57m Brace Frame	GHGTE157	10.7
	2.32m Brace Frame	GHGTE232	14.0

2. General Product Information

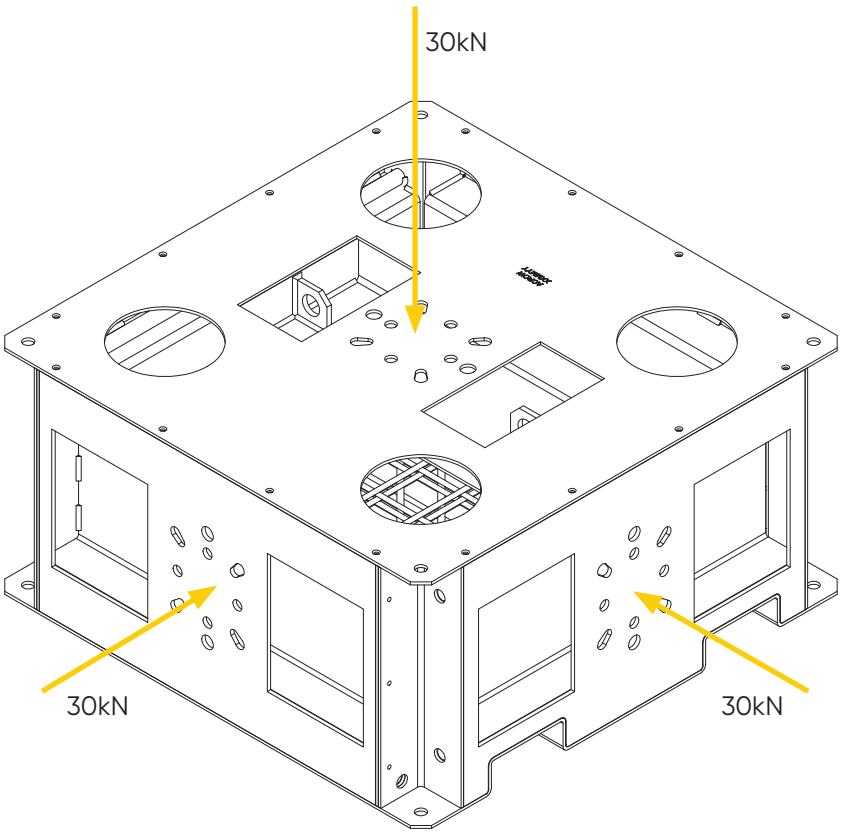
Accessories

PRODUCT	DESCRIPTION	PRODUCT CODE	MASS (KG)
	**Universal Tripod**		
	Universal Tripod	AFDTP	11.0

3. WORKING LOAD LIMITS (WLL)

3. Working Load Limits (WLL)

Concrete Block Face Loads



Each face of the concrete block is rated to 30kN

3. Working Load Limits (WLL)

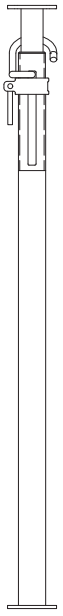
EP Prop WLL

PROP EXTENSION	EP PROP AXIAL COMPRESSION CAPACITY WLL								
	EP25	INNER TUBE				EP40	EP45	EP55	EP35QS
		UP	DOWN	UP	DOWN				
		EP35		EP35					
1.80	37.57								
2.00	37.57	47.00	47.00	37.57	37.58				50.00
2.30	37.57	47.00	47.00	37.57	37.58	37.57			50.00
2.50	37.57	47.00	47.00	37.57	37.58	37.57			50.00
2.70		47.00	47.00	37.57	37.58	37.57	37.58		50.00
3.00		43.51	46.00	35.75	37.58	35.75	37.58		50.00
3.10		41.27	44.27	34.51	37.58	34.51	37.58	39.00	50.00
3.20		38.51	41.76	32.45	37.58	33.04	37.58	39.00	47.95
3.30		35.75	39.27	30.27	36.50	32.27	37.58	39.00	43.75
3.40		33.27	36.27	28.26	33.52	30.70	36.58	39.00	40.45
3.50		30.90	33.25	26.25	30.52	28.75	36.17	39.00	37.25
3.70						25.51	32.51	39.00	
4.00						21.27	28.04	39.00	
4.20							24.27	39.00	
4.40							21.75	36.75	
4.50							20.6	34.75	
5.10								25.75	
5.30								23.27	
5.50								21.27	
	EVO 3			EVO 2					FAST PROP

Notes:

- Eccentricity = 10mm
- Out of plumb = L/200
- LSCF = 1.5

For EP Prop typical arrangements and data, see ACROW DECK Technical Manual



Inner Tube Up

Inner Tube down

3. Working Load Limits (WLL)

GASS Prop WLL

GASS PROP AXIAL COMPRESSION CAPACITY WLL (kN)				
Total Extension (mm)	1.4M Outer Leg + 1.68M Jack	2.49M Outer Leg + 1.68M Jack	3.58M Outer Leg + 1.68M Jack	4.67M Outer Leg + 1.68M Jack
1.60	123			
1.70	122			
1.80	120			
1.90	118		Based on one single leg + 1.68m Jack, top or bottom. Top and bottom plates assumed bearing flat on solid supports **Top and Bottom:** Restrained	
2.00	116			
2.10	114			
2.20	112			
2.30	109			
2.40	105			
2.50	102			
2.60	97			
2.70	92			
2.80		108		
2.90		106		
3.00		103		
3.10		100		
3.20		97		
3.30		94		
3.40		91		
3.50		88		
3.60		85		
3.70		80		
3.80		76		
3.90			87	
4.00			83	
4.10			80	
4.20			77	
4.30			74	
4.40			71	
4.50			68	
4.60			66	
4.70			63	
4.80			61	
4.90			58	
5.00				64
5.10				61
5.20				58
5.30				56
5.40				54
5.50				52
5.60				50
5.70				48
5.80				46
5.90				43
6.00				40

3. Working Load Limits (WLL)

Alu Prop WLL

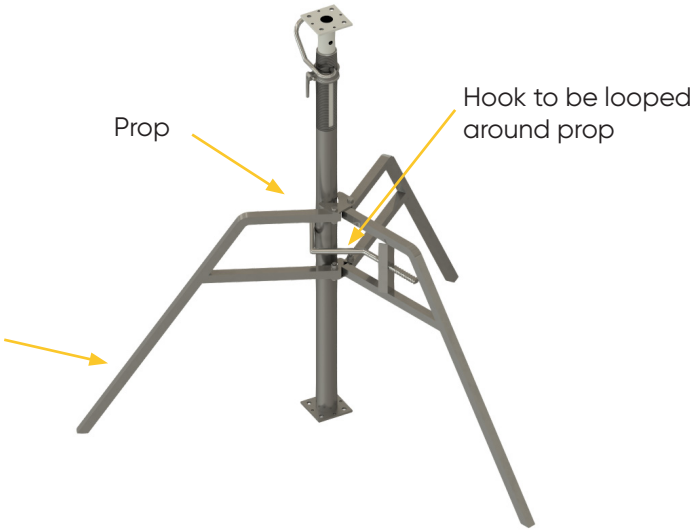
ALU PROP AXIAL COMPRESSION CAPACITY WLL								
Total height (m)	ALUPROP 1.65-2.8 IT above	ALUPROP 1.65-2.8 IT below	ALUPROP 2.2-3.7 IT above	ALUPROP 2.2-3.7 IT below	ALUPROP 3.3-4.8 IT above	ALUPROP 3.3-4.8 IT below	ALUPROP 4.5-6.0 IT above	ALUPROP 4.5-6.0 IT below
	Up	Down	Up	Down	Up	Down	Up	Down
1.60	151.20	106.90						
1.70	148.60	106.90						
1.80	143.40	106.90						
1.90	138.20	106.60						
2.00	132.80	105.70						
2.10	127.30	104.40						
2.20	121.70	102.70	132.40	115.50				
2.30	116.10	100.50	126.70	110.80				
2.40	110.30	97.90	121.00	106.30				
2.50	104.40	94.80	115.50	101.90				
2.60	98.50	91.40	110.10	97.70				
2.70	92.40	87.40	104.70	93.60				
2.80	86.30	83.10	99.40	89.70				
2.90			94.20	86.00				
3.00			89.10	82.40				
3.10			84.10	79.00				
3.20			79.10	75.70				
3.30			74.30	72.60	89.60	75.70		
3.40			69.50	69.70	85.20	73.40		
3.50			64.80	66.90	80.90	71.20		
3.60			60.20	64.30	76.80	68.90		
3.70			55.70	61.80	72.80	66.70		
3.80					69.00	64.40		
3.90					65.30	62.20		
4.00					61.80	59.90		
4.10					58.40	57.60		
4.20					55.20	55.30		
4.30					52.10	53.00		
4.40					49.20	50.70		
4.50					46.40	48.40	51.90	47.10
4.60					43.80	46.10	50.10	45.70
4.70					41.30	43.70	48.40	44.20
4.80					38.90	41.40	46.60	42.80
4.90							44.80	41.40
5.00							42.90	40.00
5.10							41.10	38.60
5.20							39.20	37.20
5.30							37.40	35.80
5.40							35.50	34.40
5.50							33.60	33.00
5.60							31.70	31.60
5.70							29.80	30.20
5.80							27.80	28.80
5.90							25.90	27.50
6.00							23.90	26.10

4. SYSTEM DETAILS

4. System Details

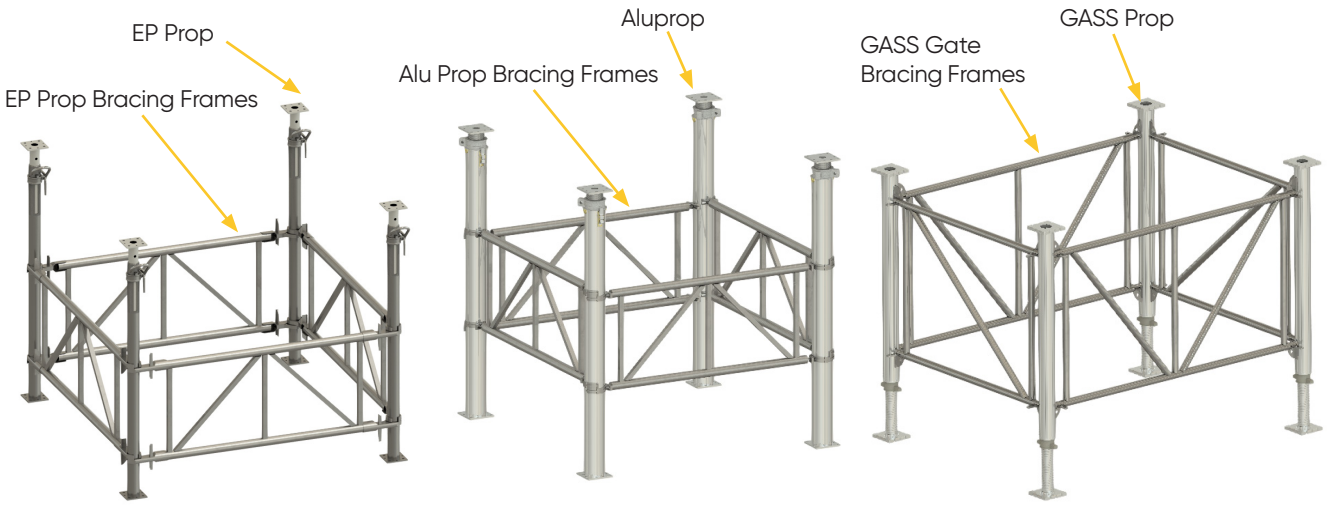
Prop Tripod

Prop Tripods are an erection aid used while assembling formwork. Tripods are compatible with different prop diameters from 48.3mm up to 89mm.



Prop Bracing Frames

Prop Bracing Frames are an erection aid used while assembling and erecting props. Alu-Prop and GASS Prop Bracing Frames are only used with the prop they have been designed for. Do not mix these braces with different props. The EP Props are the only brace frame that are designed to be compatible with different prop diameters from 48.5mm to 89mm.



Bracing and Stability

- It is assumed that all lateral stability for the system is provided by the permanent structure wall and columns.
- Where the permanent works will not provide sufficient restraint to the system, additional bracing shall be introduced by the designer.
- The bracing in the system is only designed to aid in stability while erecting and dismantling the system.
- The stability and load-bearing capacity of all components and units must be ensured during all phases of the construction work.
- Do not step on or apply strain to cantilevers, closures, etc. Until suitable measures to ensure their stability have been correctly implemented (e.g. By tie-backs).
- When stripping out the formwork, do not endanger the stability of any part of the structure, or of any scaffolding, platforms or formwork that is still in place
- Tripods and bracing frames between props are erection and dismantle tools only.

For more arrangement details and data for each Prop type, see their respective Technical Manuals

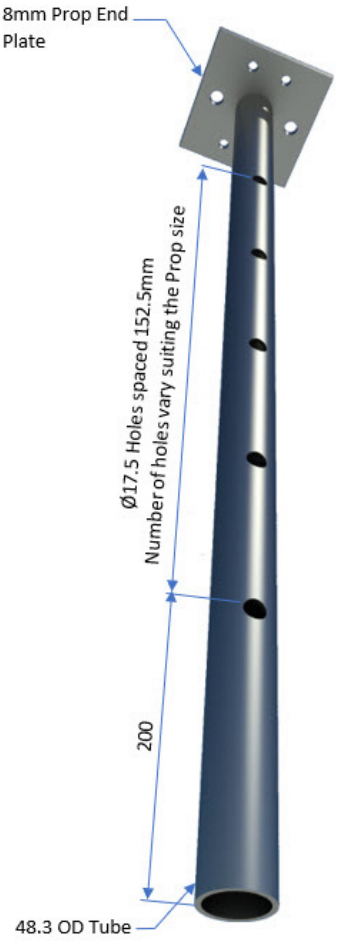
4. System Details

Acrow Prop Specifications

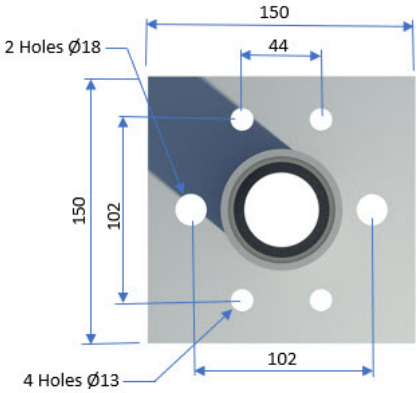
Acrow Prop offer a range of props capable for supporting formwork ranging from 720mm to 4900mm high. Manufactured from high tensile steel, the prop consists of four parts:

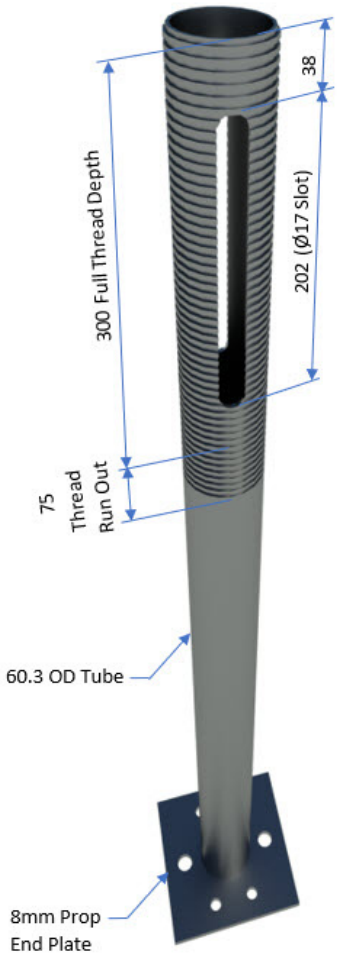
1. The outer tube with welded base-plate
2. The inner tube with welded top-plate
3. The nut and handle
4. The chain less prop pin

The prop outer tube is 60.3 OD tube x 3.6mm thick with a 300mm rolled thread and slot. Within the specified range, each prop can be finely adjusted thanks to the rolling thread and slot. The rolled thread retains the wall thickness of the tube, thus maintaining maximum strength. A reduction coupler enables a standard scaffold tube to be connected to the ACROW PROP outer tube for bracing purposes.
The prop inner tube is 48.3 OD x 3.6mm thick for props No. 00 to No. 03 and 3.9mm thick for prop No. 4.
The inner tube has a series of Ø17.5 holes spaced at 152.5mm increments, which provide the major adjustment for the prop height. Inner tube diameter enables standard scaffold tubes and couplers to be used for bracing purposes.



Inner Tube
48.3 OD x 3.6mm-3.9mm thick. The props inner has a series of Ø17.5 holes spaced at 152.5mm increments to provide height adjustment.

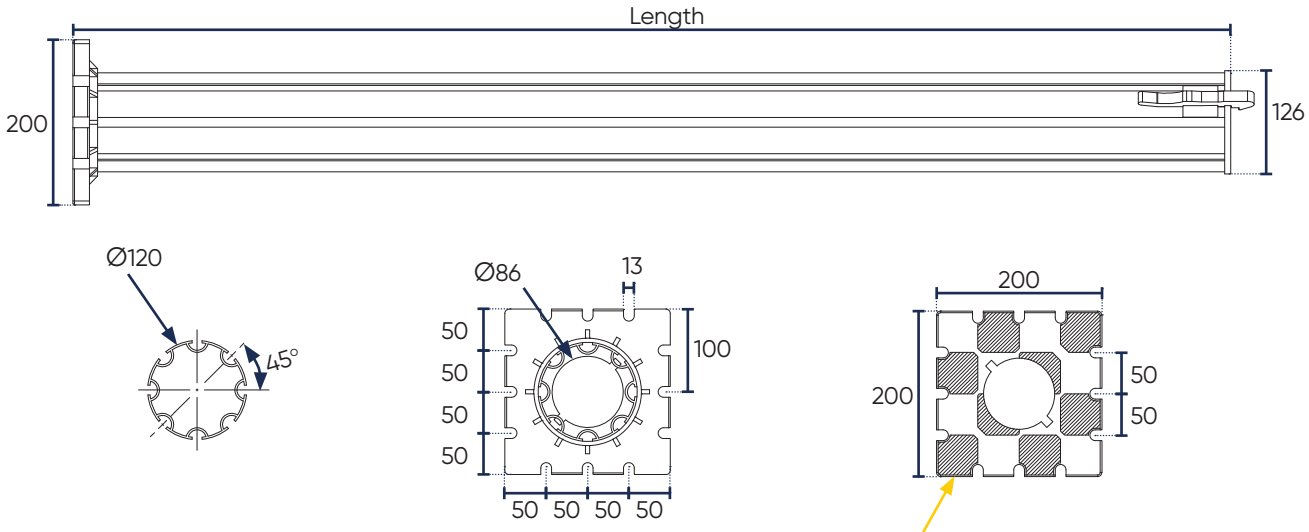




Outer Tube
60.3 OD tube x 3.6mm thick. Having rolled thread measuring 300 mm allows for precise adjustment of each prop within the specified range.

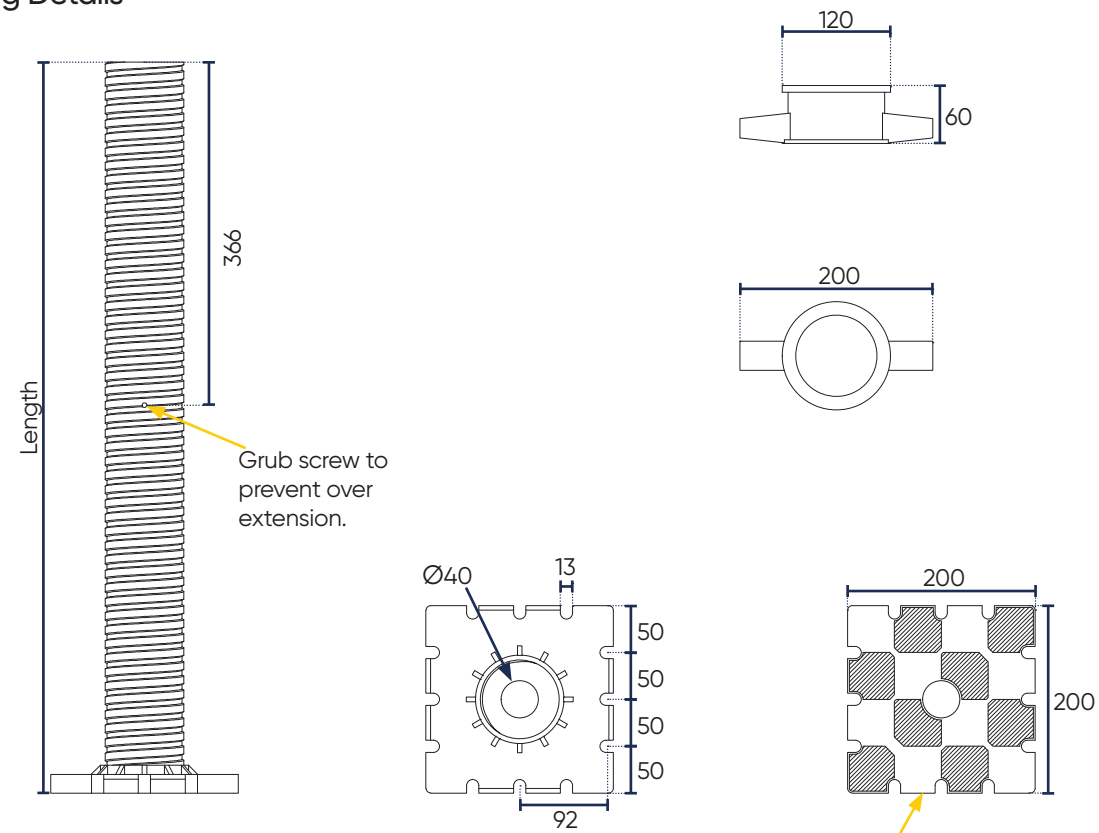
4. System Details

GASS Leg Details



Note:
For the mating pattern on the underside of the square end plate on inner, outer legs and extension legs the serration's on the edges of the plates must match.

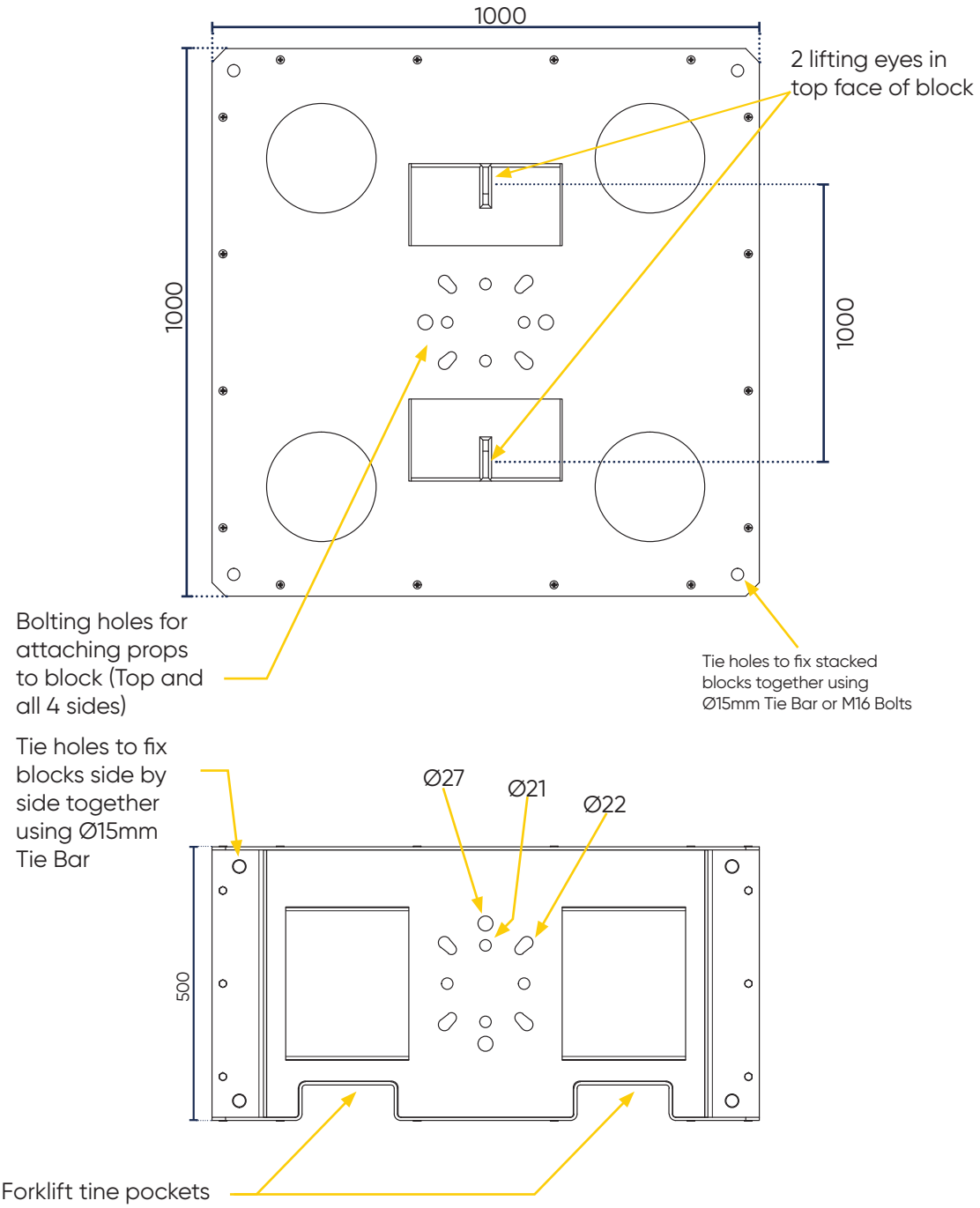
Inner Leg Details



Note:
For the mating pattern on the underside of the square end plate on inner, outer legs and extension legs the serration's on the edges of the plates must match.

4. System Details

Concrete Propping Block



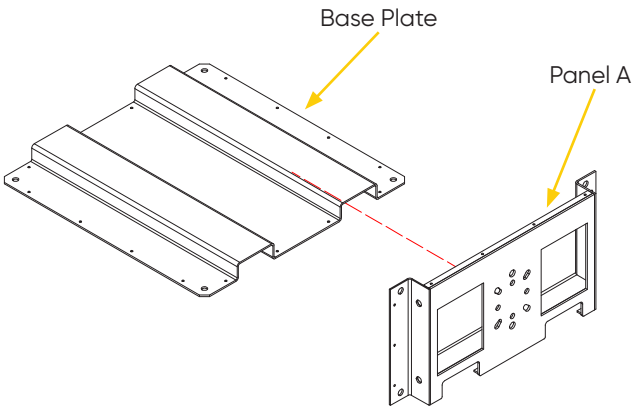
Concrete Block bolting hole compatibility:

Universal Prop Raking Bracket
Shisham Tilt Prop
Push / Pull Raker Bases
Slim Lite Raker Shore Bases
Slim Max Raker Shore Bases
Powershore 60

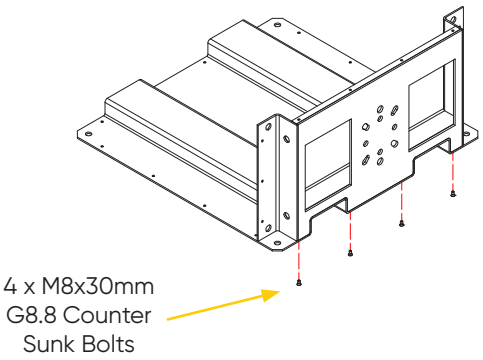
5. ASSEMBLY DETAILS

5. Assembly Details

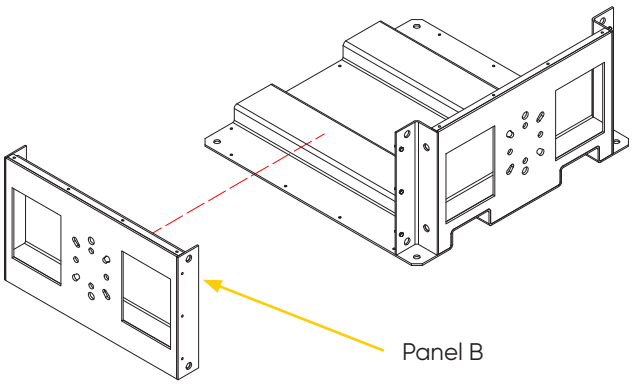
Concrete Block Assembly Steps



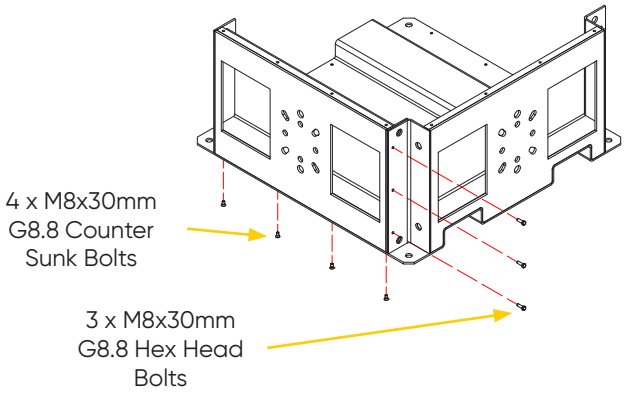
STEP 1
Suspend the base plate roughly 300mm off the ground or enough to fit an electric drill beneath it. Fit Panel A onto the Base Plate.



STEP 2
Once it is completely vertical, secure to the Base Plate using 4 x M8x30mm G8.8 Counter Sunk bolts with nuts to suit. Washers may be used on the internal side of the Panel but never on the external face.



STEP 3
Once Panel A has been secured, Panel B can be installed on either side, ensure weight is roughly even each side to avoid plate from tipping over to one side.

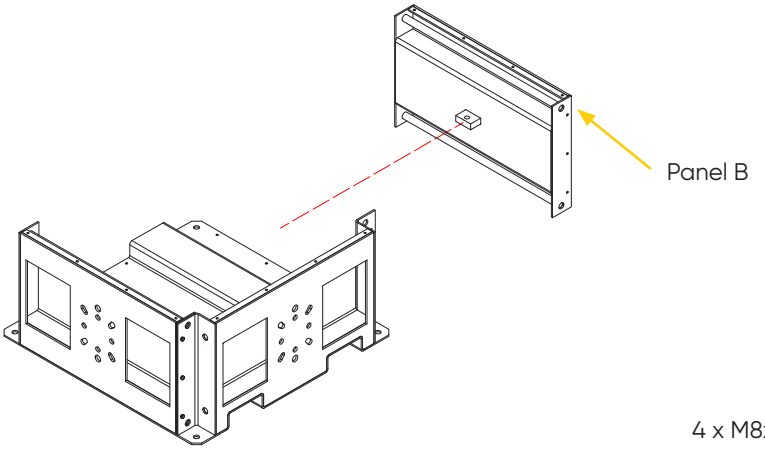


STEP 4
Panel B is to slot onto the inside face of Panel A and is secured to the Base Plate using 4 x M8x30mm G8.8 Counter Sunk Bolts with nuts to suit.

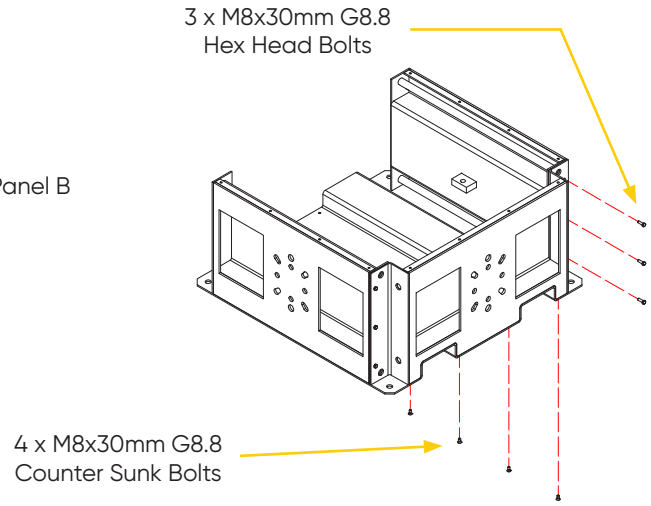
Panel A and Panel B are then connected each side using 3 x M8x30mm G8.8 Hex Head Bolts with nuts and washers to suit. Washers for this connection can be used on both the external and internal face

5. Assembly Details

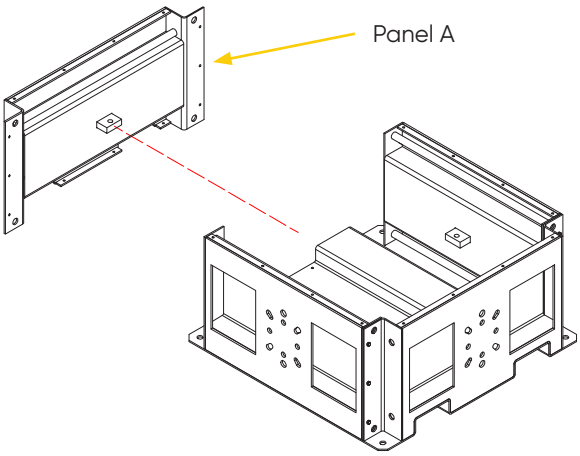
Concrete Block Assembly Steps



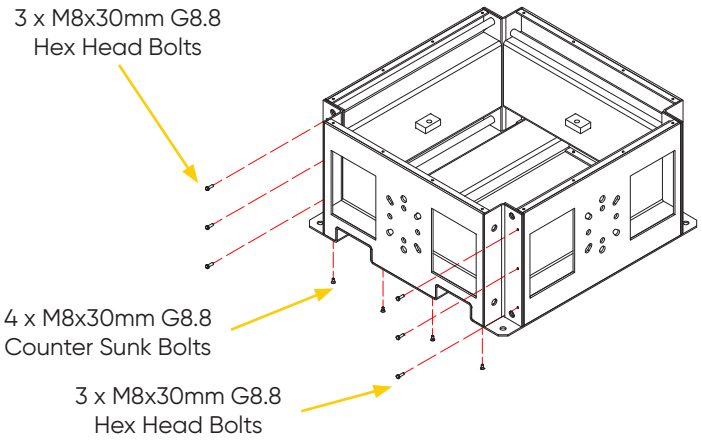
STEP 5
Repeat step 3 on opposite side of block



STEP 6
Repeat step 4 on opposite side of block



STEP 7
Once Panel B's have been bolted together securely, the remaining Panel A can be attached. Panel A will bolt onto the outside of the Panel B side faces.

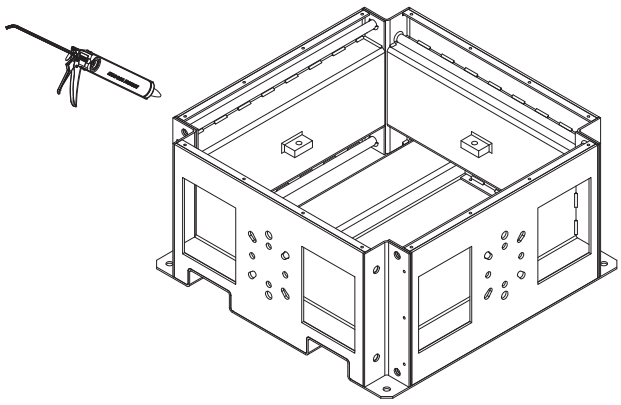


STEP 8
Panel A is secured to the Base Plate using 4 x M8x30mm G8.8 Counter Sunk bolts with nuts to suit.

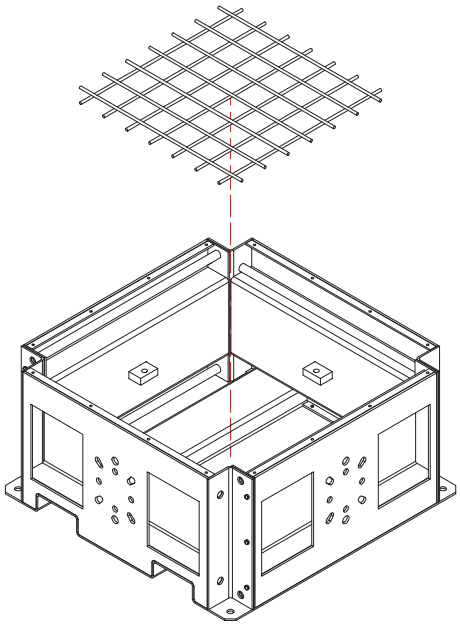
Each side of Panel A will bolt to each side of the Panel B's using 3 x M8x30mm G8.8 Hex Head Bolts with nuts and washers to suit each side.

5. Assembly Details

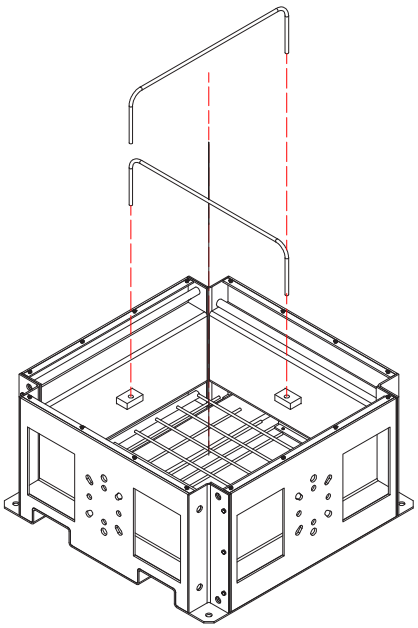
Concrete Block Assembly Steps



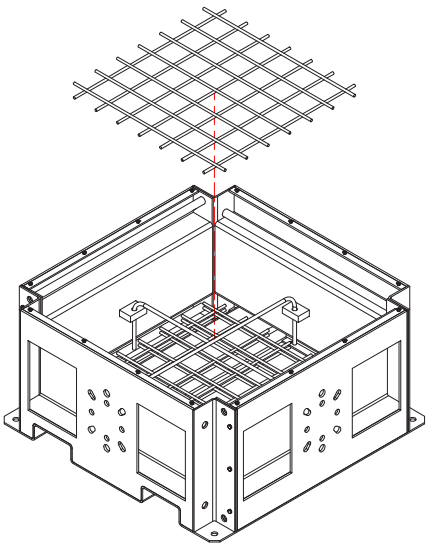
STEP 9
Using silicone sealant, ensure the assembled box section is watertight by applying a bead along joint edges. This will prevent concrete seepage during the pouring process.



STEP 10
SL92 Mesh Reinforcement is laid onto the bottom of the block in preparation for concrete being poured in.
Use a concrete packer to raise mesh from the base plate. Ensure components are separated by a minimum of 10mm.



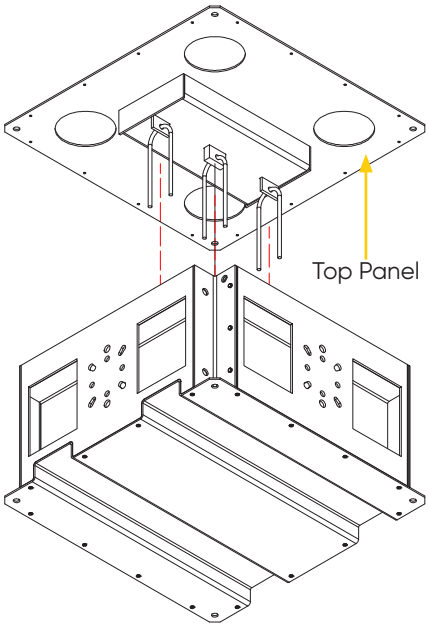
STEP 11
Bent N12 reinforcement is placed inside and is slotted into the internal tabs located halfway up the internal faces of Panels A and B.



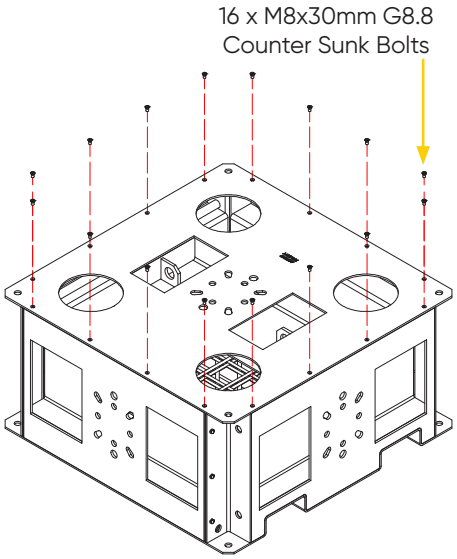
STEP 12
Another layer of SL92 mesh reinforcement is laid onto the top of the hooked in bars and secured to them.

5. Assembly Details

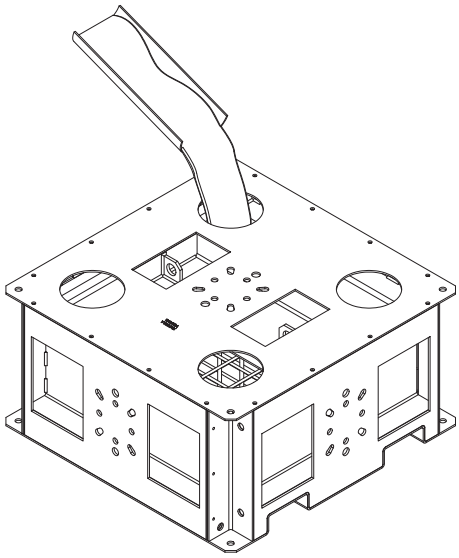
Concrete Block Assembly Steps



STEP 13
3 bent N12 anchor bars are hooked through the tabs on the underside of the Top Panel. The Top Panel is then lowered onto the block to be secured.



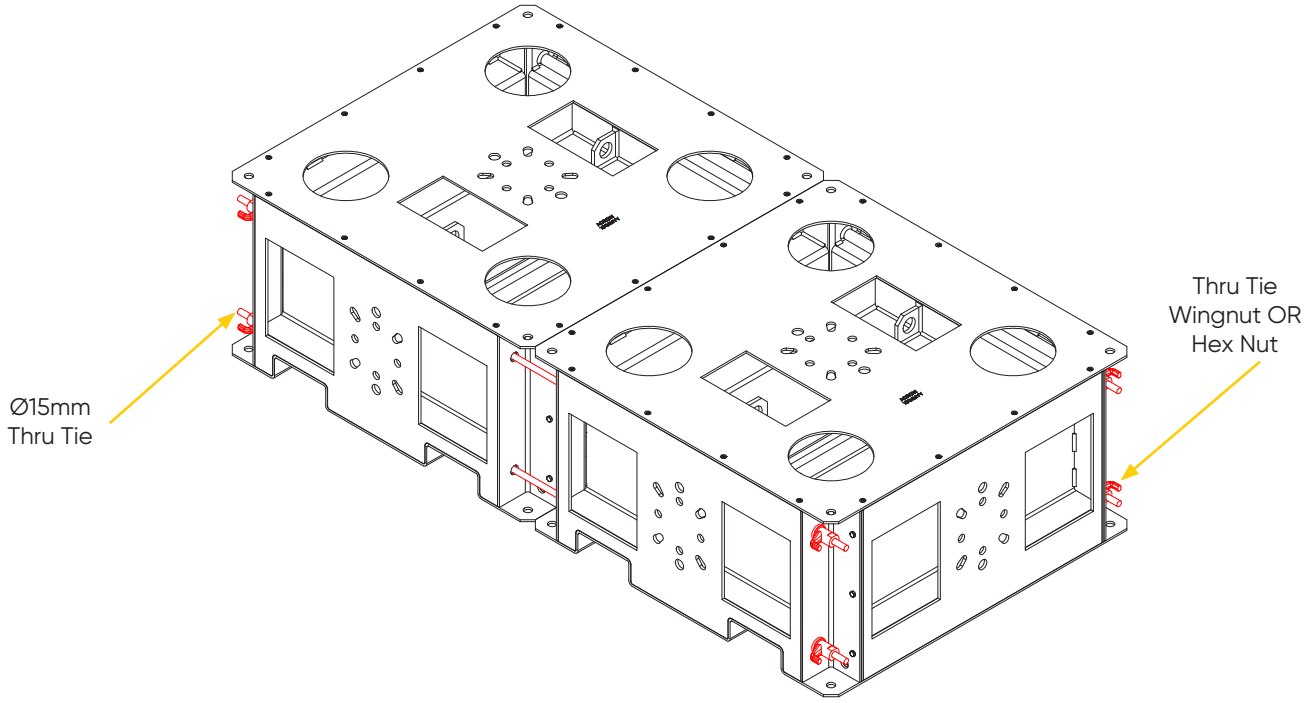
STEP 14
The Top Panel is secured to the tops of both Panels A and B using 16 x M8x30mm G8.8 Counter Sunk Bolts with nuts to suit.



STEP 15
The Concrete Block is now assembled and can be placed back onto the ground. It is ready to have concrete poured into any of the 4 ingress holes on the top panel. The concrete must ideally be filled to be as close to flush with the top external face as possible to reduce the amount of water from potentially sitting inside of the block frame.

5. Assembly Details

Concrete Block to Concrete Block Connections

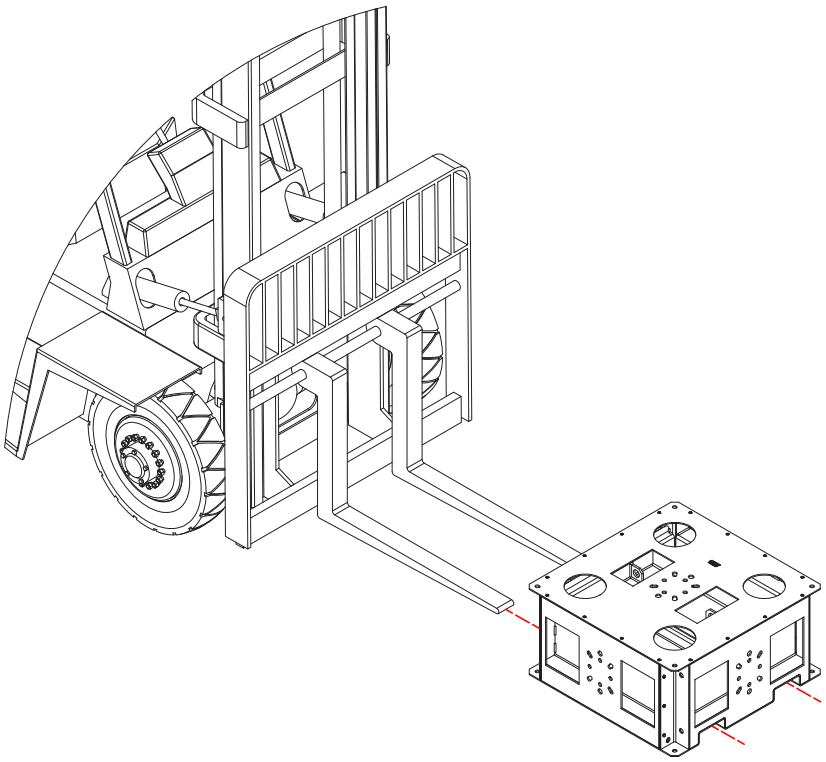


Each Concrete Block can also be tied together using a Ø15mm Thru Tie Bar. The above image shows how 2 blocks would be tied together horizontally, the same method would be used to tie blocks together vertically with the exception of the Thru Tie Bar not protruding out the bottom.

5. Assembly Details

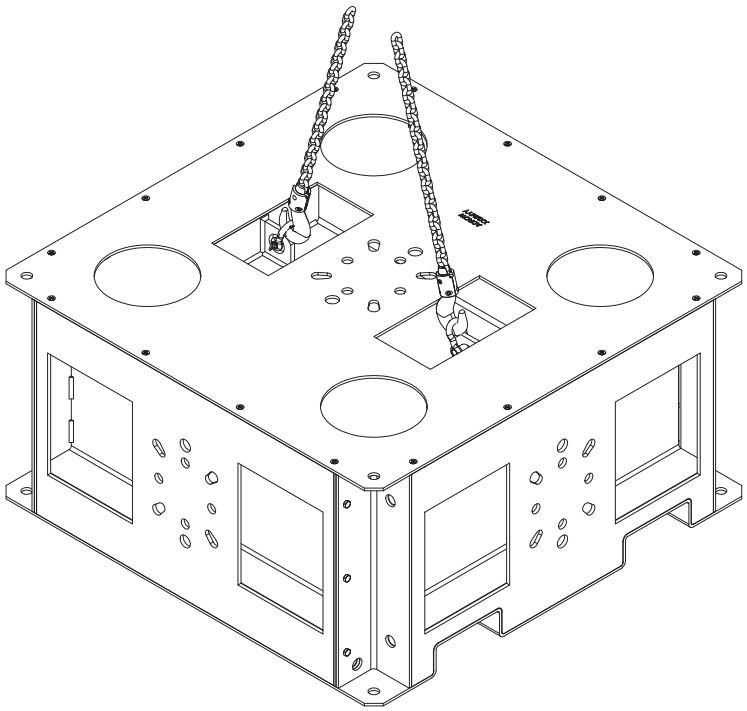
Lifting with Forklift

The concrete block features 2 cut-outs to fit forklift tynes on the bottom of the block, forklift tyne width may need to be adjusted to fit in cut-outs.



Lifting from Inner Pockets

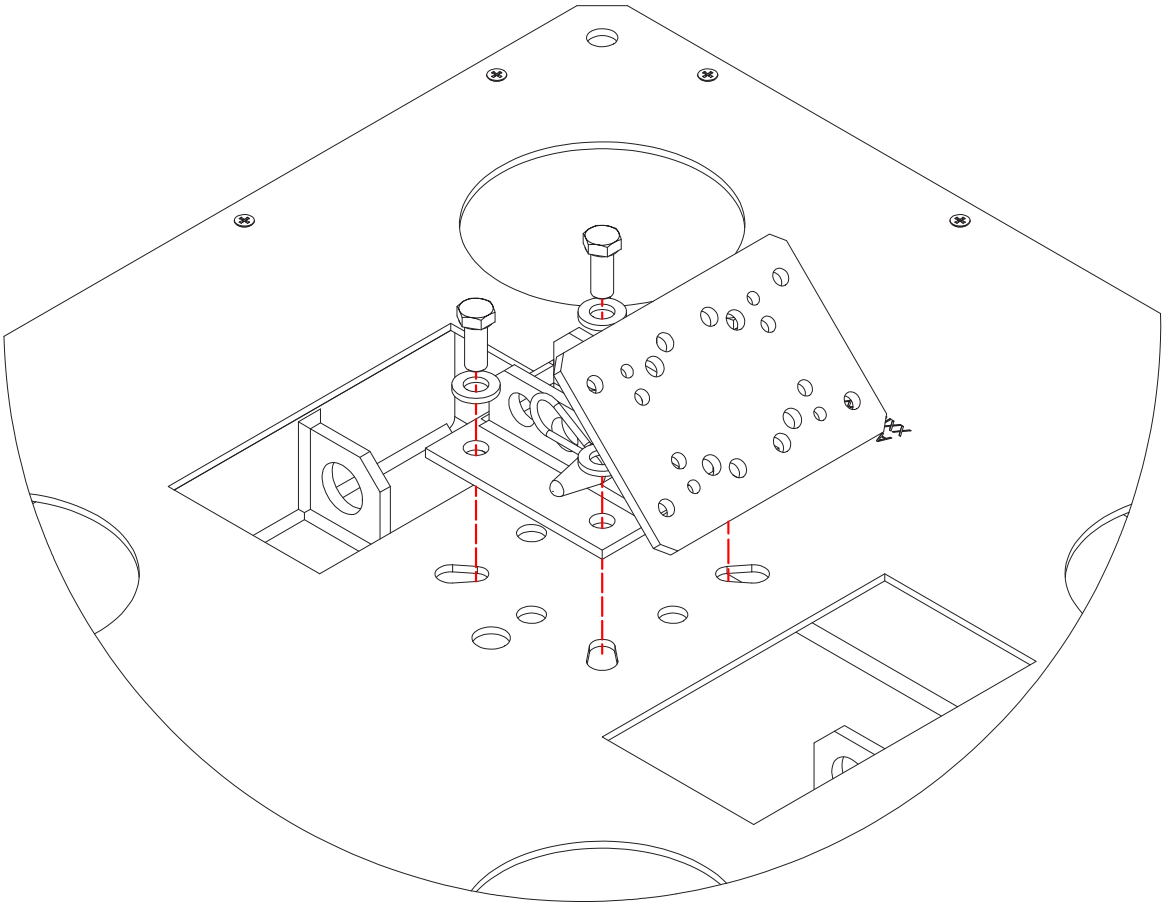
The concrete block has 2 lifting points within the pockets of the top face, bow shackles or similarly rated lifting shackles can be used. The concrete block weighs 1.2T, ensure correctly rated shackles used for lifting.

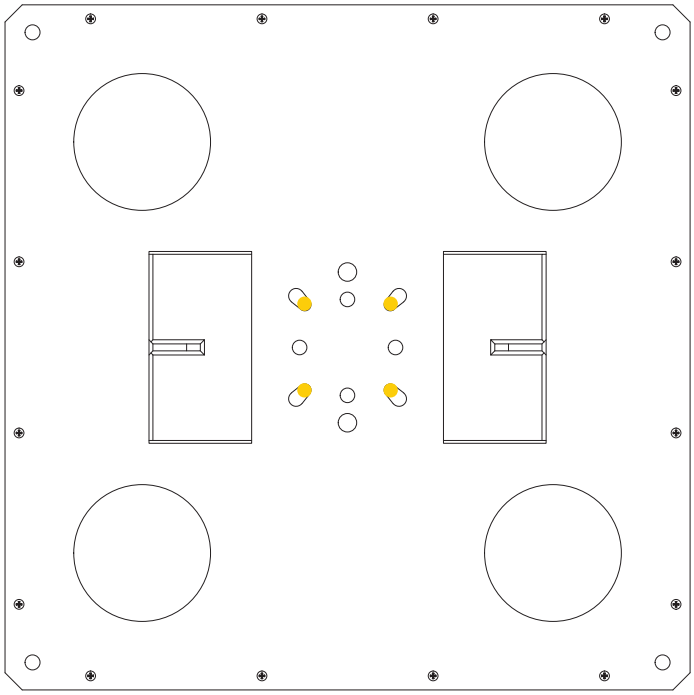


5. Assembly Details

Universal Raking Bracket

Below shows the bolted connection when using the Universal Raking Bracket. This connection uses 4 x Grade 8.8 M16x50mm bolts and nuts with washer to suit. This connection is the same on all four sides and the top of the concrete block.

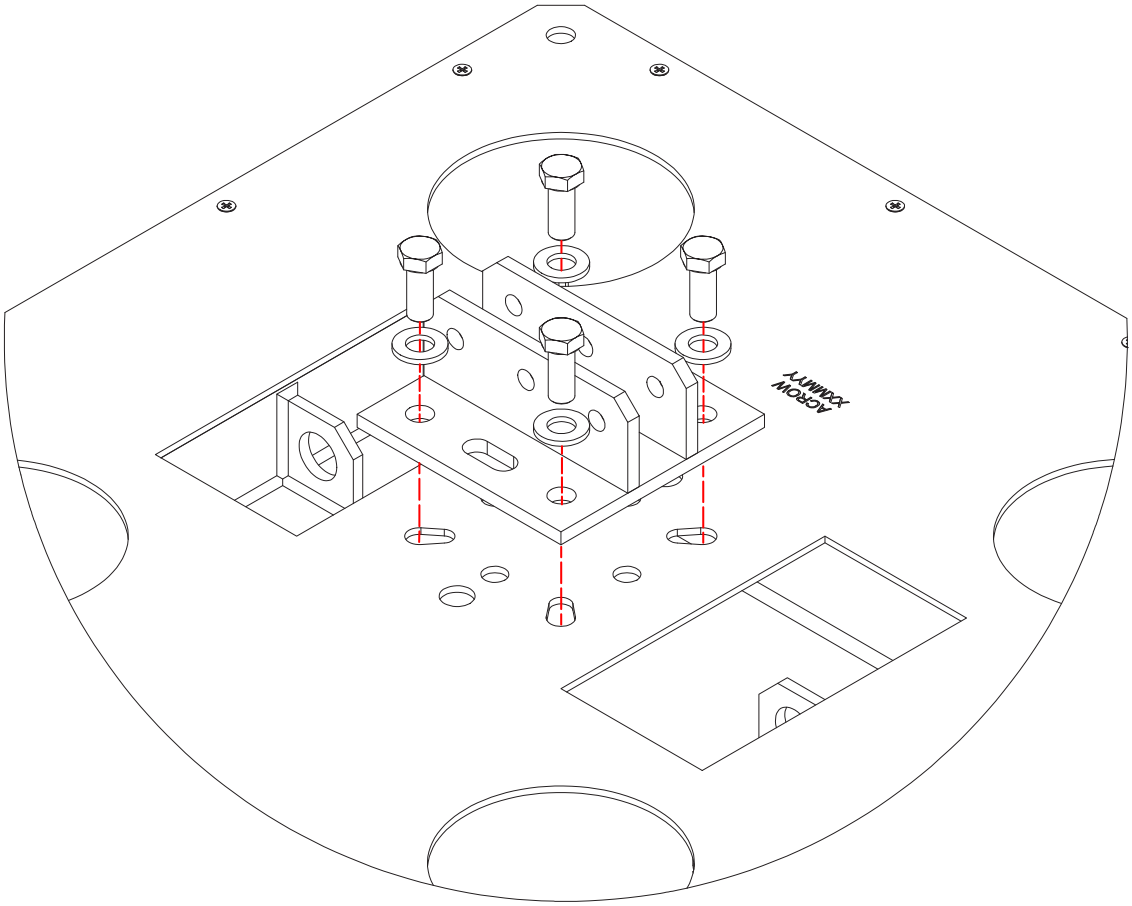


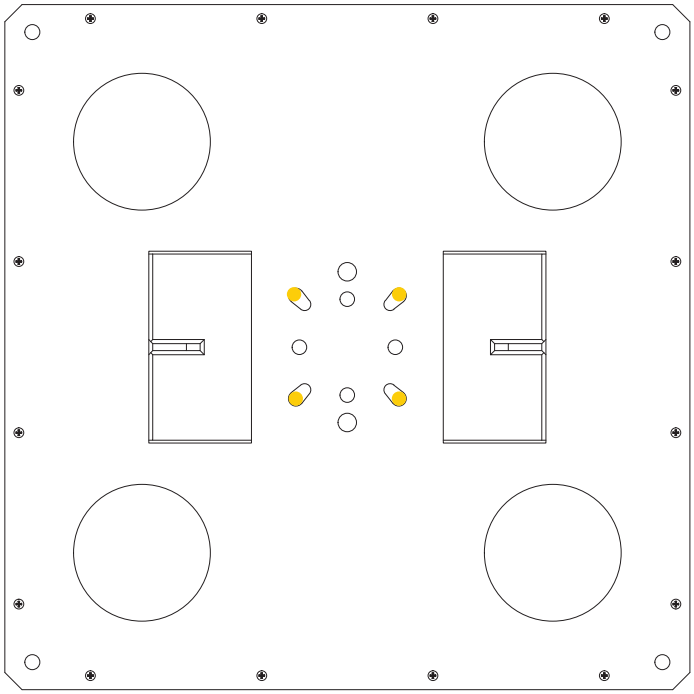


5. Assembly Details

Slim-Lite Raking Shore Base Type 3

Below shows the bolted connection when using the Slim-Lite Raking Shore Base Type 3. This connection uses 4 x Grade 8.8 M20x50mm bolts and nuts with washer to suit. This connection is the same on all four sides and the top of the concrete block.

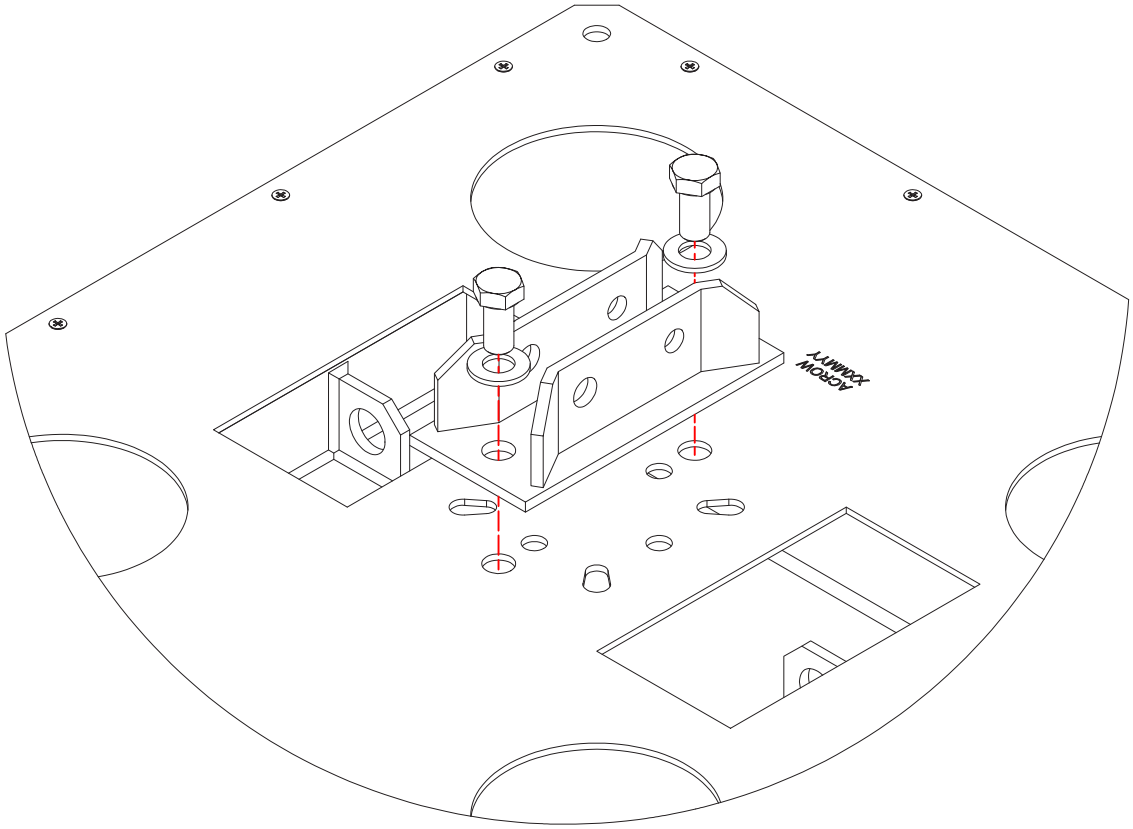


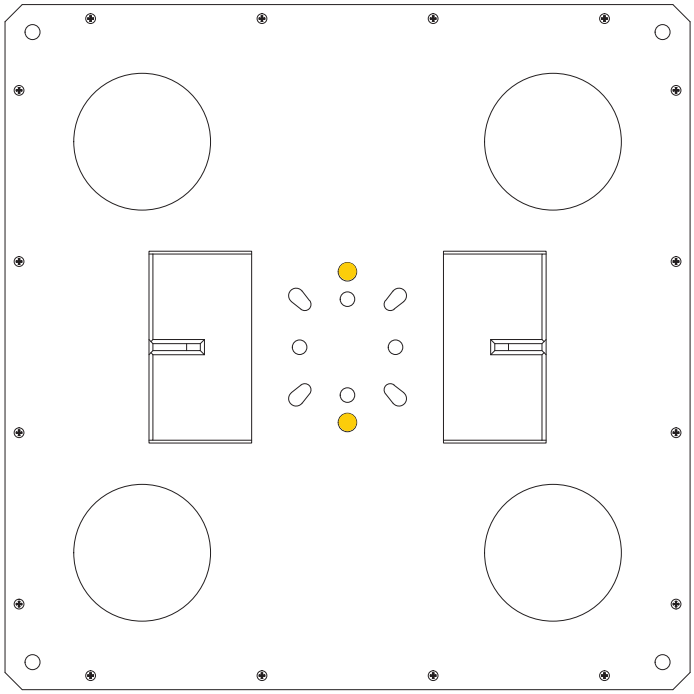


5. Assembly Details

Slim-Lite/Max Tilt Base Plate

Below shows the bolted connection when using the Slim-Lite/Max Tilt Base Plate. This connection uses 2 x Grade 8.8 M24x50mm bolts and nuts with washer to suit. This connection is the same on all four sides and the top of the concrete block.

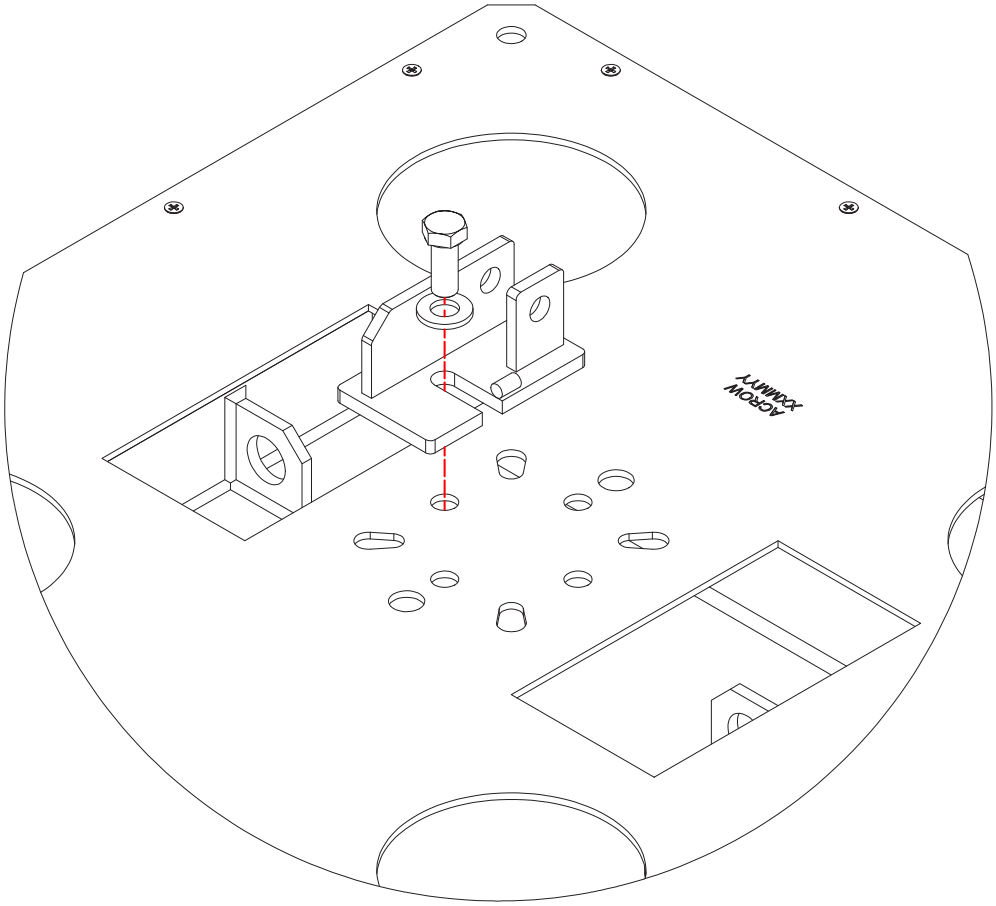


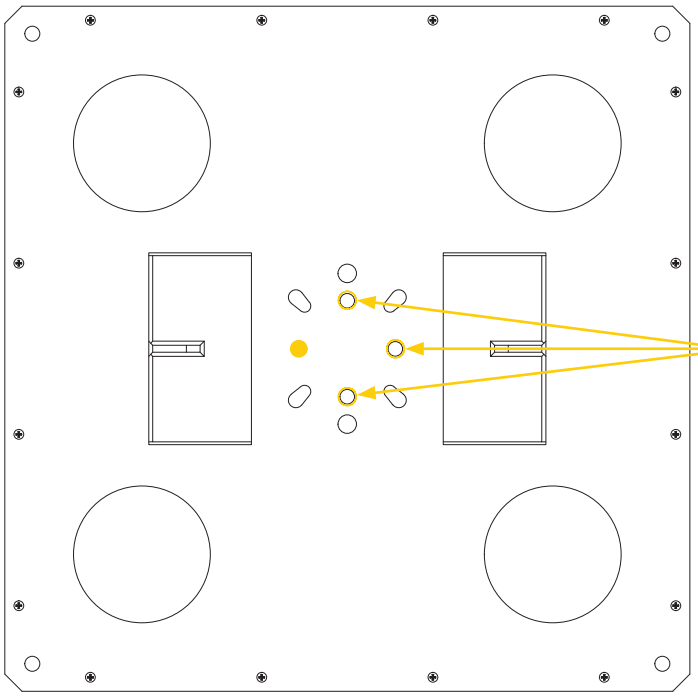


5. Assembly Details

Slim-Max Raker Base Plate

Below shows the bolted connection when using the Slim-Max Raker Base Plate. This connection uses 1 x Grade 8.8 M20x50mm bolts and nuts with washer to suit. This connection is the same on all four sides and the top of the concrete block.



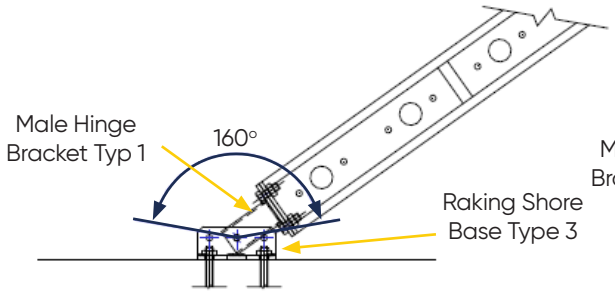


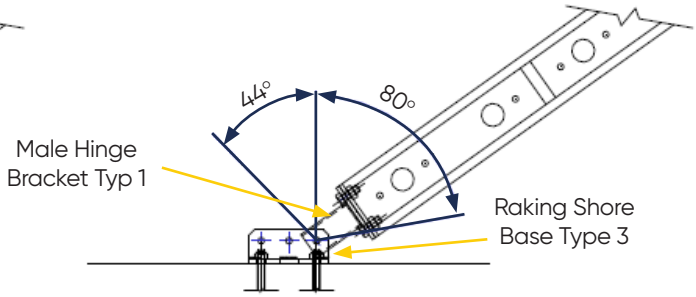
The Raker Base Plate can be connected to any of the four Ø21mm holes, provided no part of the Raker Base Plate overhangs a pocket edge.

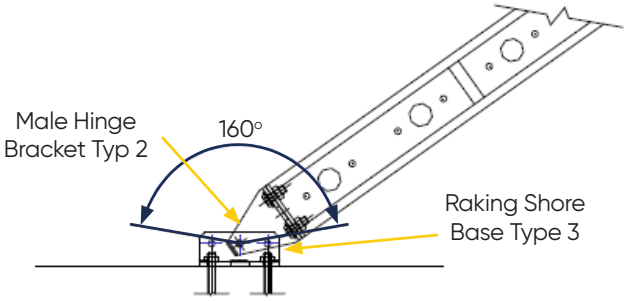
Alternative bolt locations.

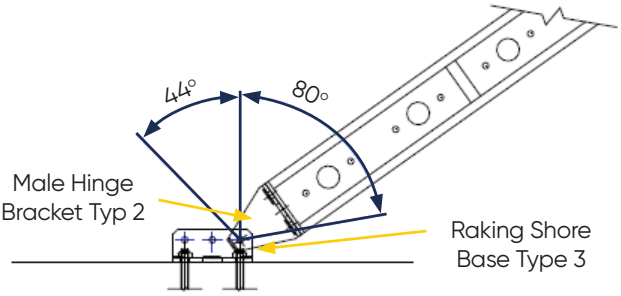
5. Assembly Details

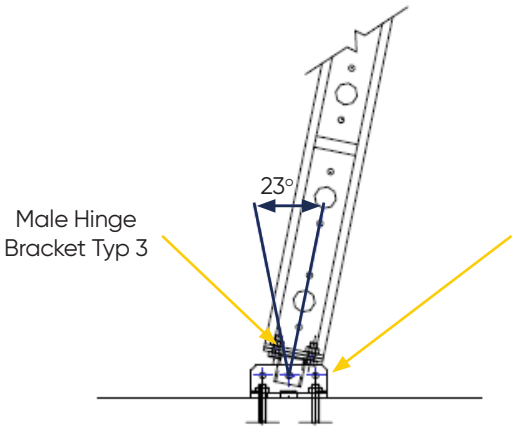
Slim-Lite - Maximum Rotational Angle Between Soldiers & Raking Shore Base

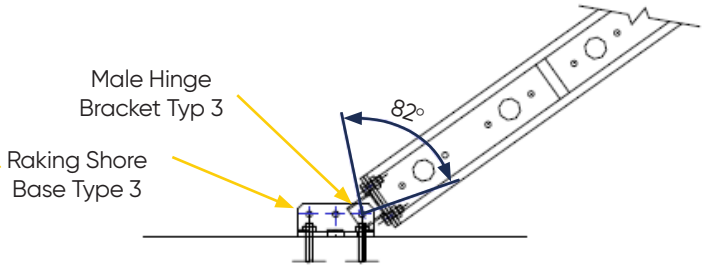






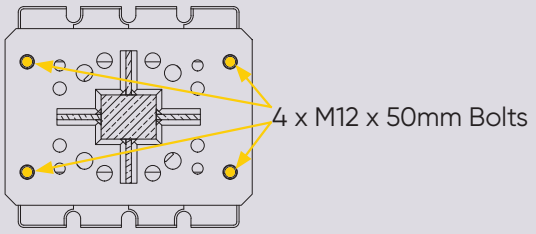




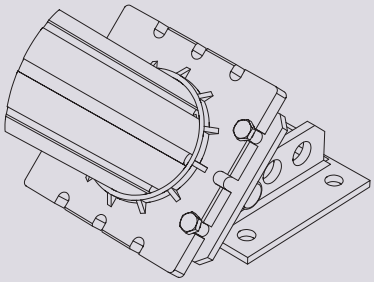


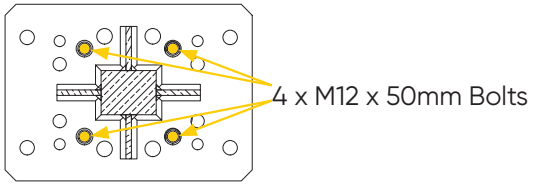
5. Assembly Details

Universal Raking Bracket Configurations

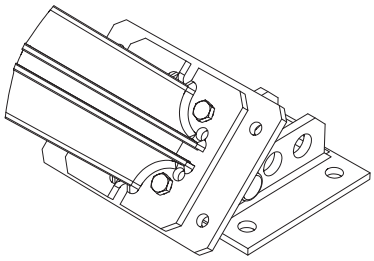


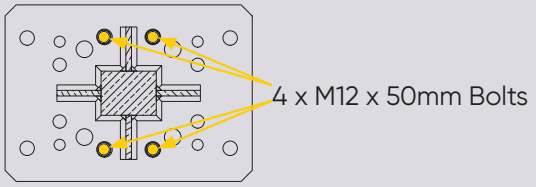
GASS Prop to URB connection



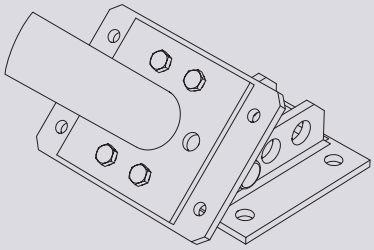


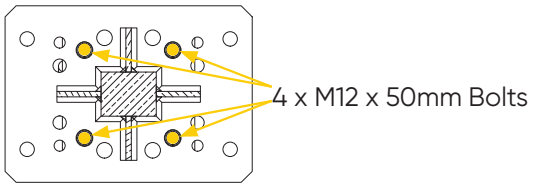
HV Prop to URB connection



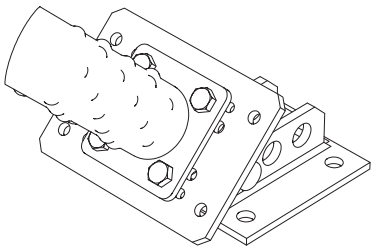


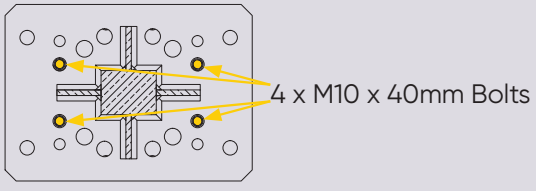
Acrow Prop to URB connection



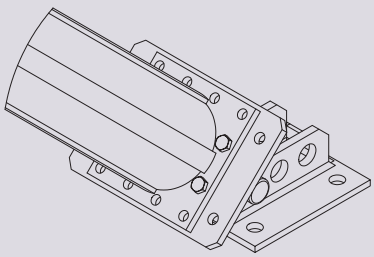


EP Prop to URB connection





AluProp to URB connection



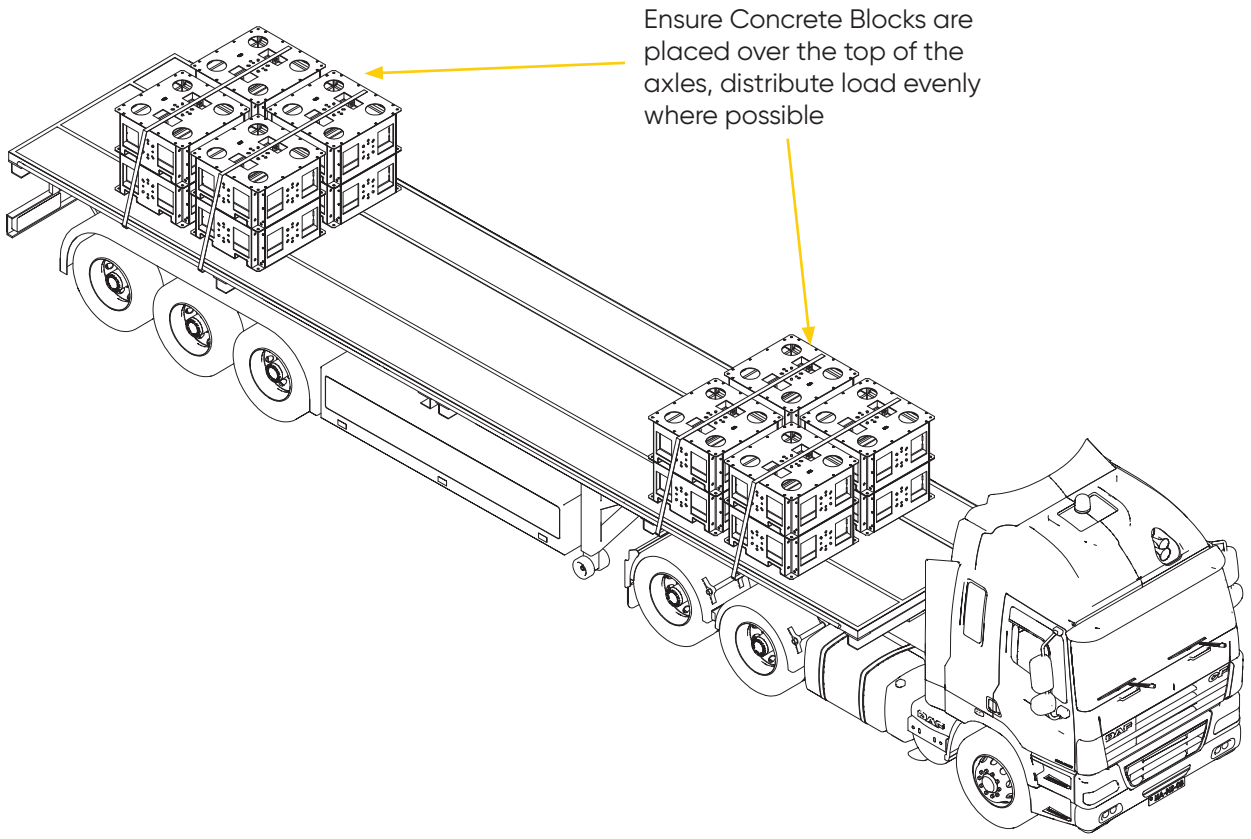
6. TRANSPORT & HANDLING

6. Transport & Handling

Concrete Block

The Concrete Block is to be loaded directly onto the back of the transport vehicle, it must be placed on top of non-slip rubber. Tie downs and strapping to be assessed by driver or transport company.

Concrete Blocks can be stacked two high ONLY if they have been secured together using the 4 x M16 bolted connections in each corner of the block. QTY of Concrete Blocks to be transported at once is determined by the truck weight limit.



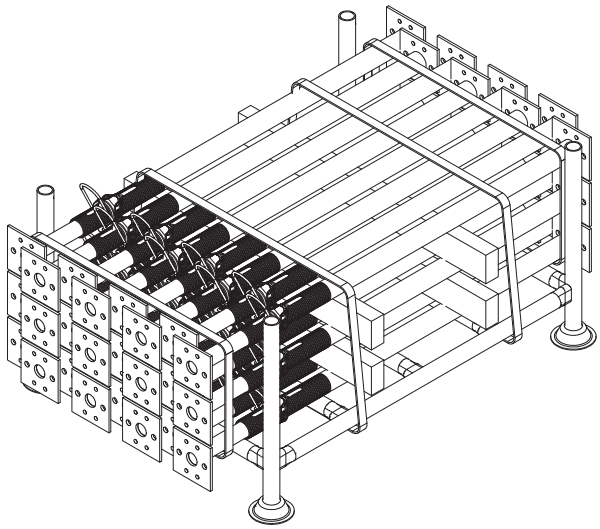
DESCRIPTION	UNIT MASS (KG)	MAX STACK	MASS PER STACK	ACROW STILLAGE TYPE
Concrete Block	1200	2	2400	NA

6. Transport & Handling

EP Prop / Alu-Prop / GASS Prop Transport

The Acrow stillage is used to store a set number of items per 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 of 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.



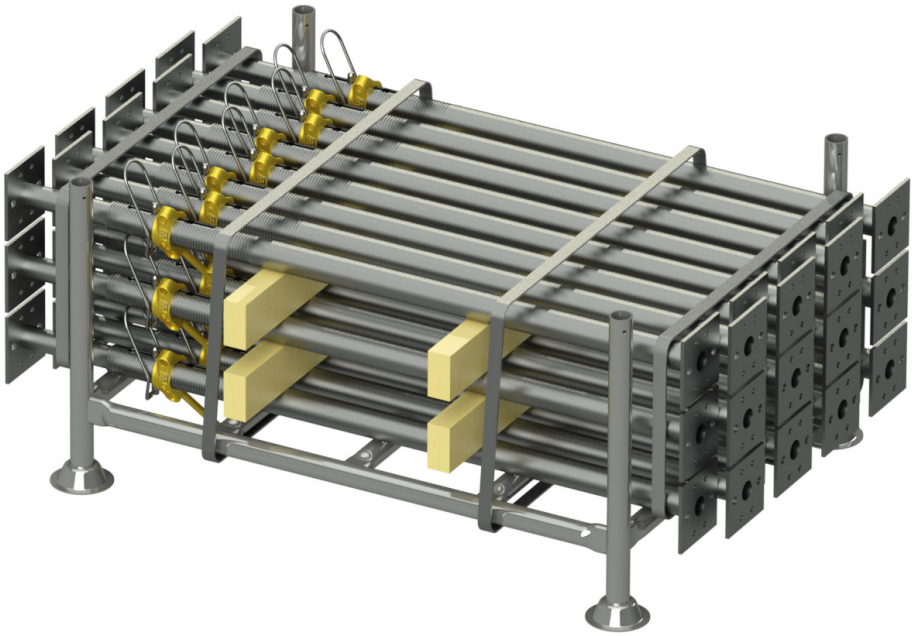
DESCRIPTION	UNIT MASS (KG)	QTY / STILLAGE	TOTAL MASS / STILLAGE (KG)	ACROW STILLAGE TYPE
2.5m EP Prop	15.3	40	612	SP
3.5m EP Prop	19.8	40	792	SP
4.0m EP Prop	22.4	35	784	SP
4.5m EP Prop	27.4	35	959	SP
5.5m EP Prop	36.6	30	1281	SP
3.5m EP Prop quick strike	21.7	40	868	SP
Alu-Prop (1650-2800mm)	17.6	40	704	SP
Alu-Prop (2200-3700mm)	21.6	35	756	SP
Alu-Prop (3300-4800mm)	24.4	35	854	SP
Alu-Prop (4500-6000mm)	29.6	35	1036	SP
Outer Leg 4670	22.1	35	773.5	SP
Outer Leg 3580	17.4	40	696	SP
Outer Leg 2490	12.7	40	508	SP
Outer Leg 1400	8.0	40	320	SP
Inner Leg 1680	10.2	40	408	SP
Inner Leg 780	5.5	40	220	MP

6. Transport & Handling

Acrow Prop Transport

The Acrow stillage is used to store a set number of items per 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 of 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.



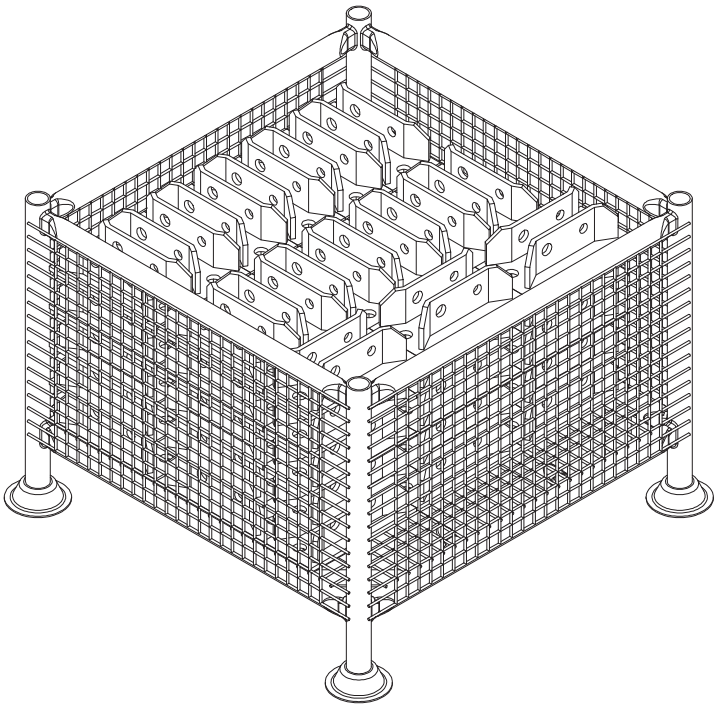
DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Acrow Prop - No. 00	10	40	400	MP
Acrow Prop - No. 0	13	40	520	MP
Acrow Prop - No. 1	17	40	680	SP or MP
Acrow Prop - No. 2	20	35	700	SP or MP
Acrow Prop - No. 3	23	35	805	SP or MP
Acrow Prop - No. 4	30	35	1050	SP or MP

6. Transport & Handling

Slim-Max Miscellaneous Brackets / 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.



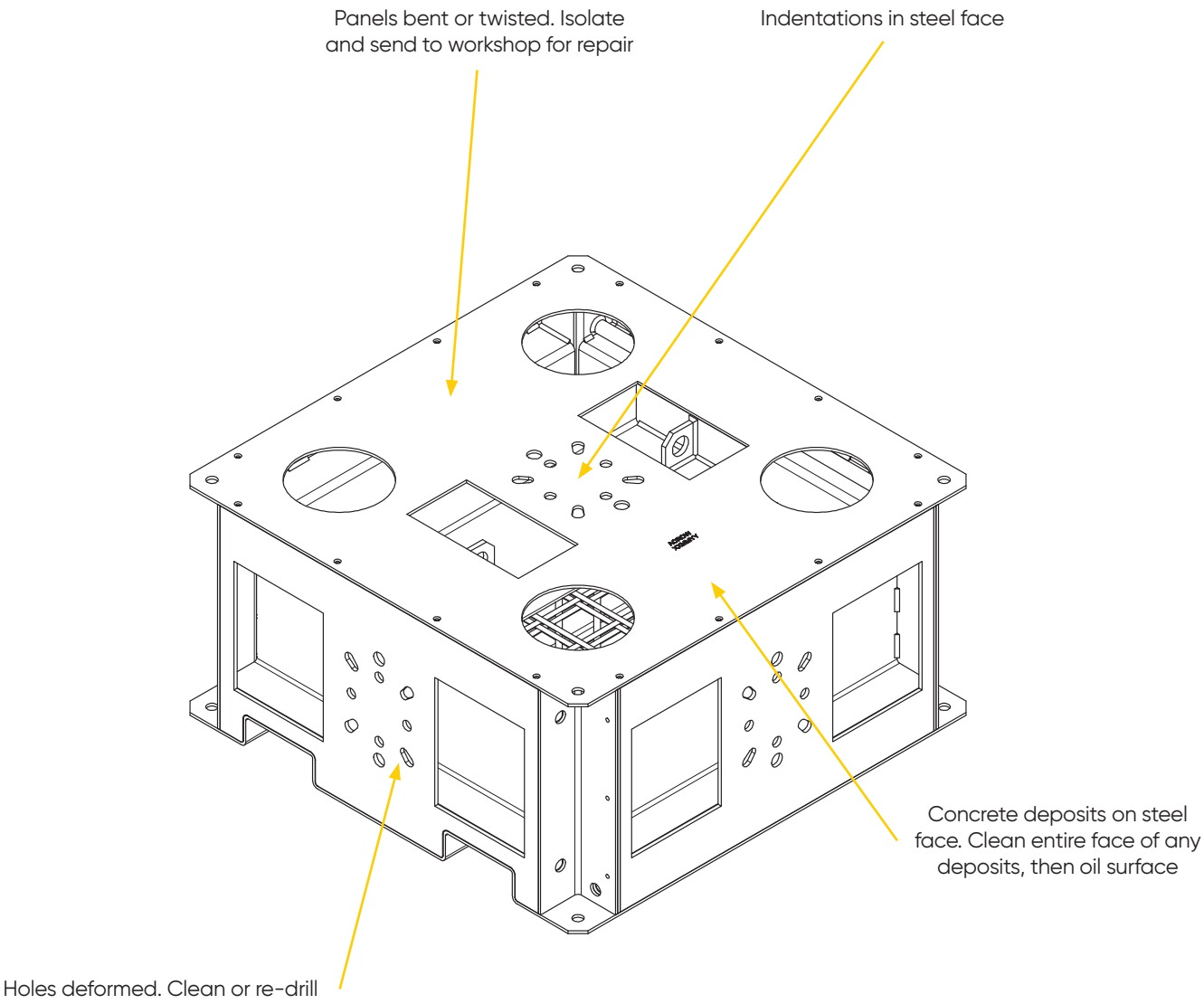
DESCRIPTION	UNIT MASS (KG)	QTY PER STILLAGE	TOTAL MASS PER STILLAGE (KG)	ACROW STILLAGE TYPE
Tilt Base Plate	6.4	60	384	MEP
Raker Foot Bracket	2.5	60	150	MEP
Shore Base Typ3	7.6	60	456	MEP
Male Hinge Bracket	7.0	50	350	MEP

7. MAINTENANCE & INSPECTION

7. Maintenance & Inspection

Concrete Block

The Concrete Block provides a stable and easily modified base for a variety of raker props to be attached, featuring fixing points on each face for props or raker adapter plates to be used. Blocks can be tied together in both horizontal and vertical directions depending on the job specifics.



7. Maintenance & Inspection

Part Inspection

NAME: ..... CHECKED DATE: .....

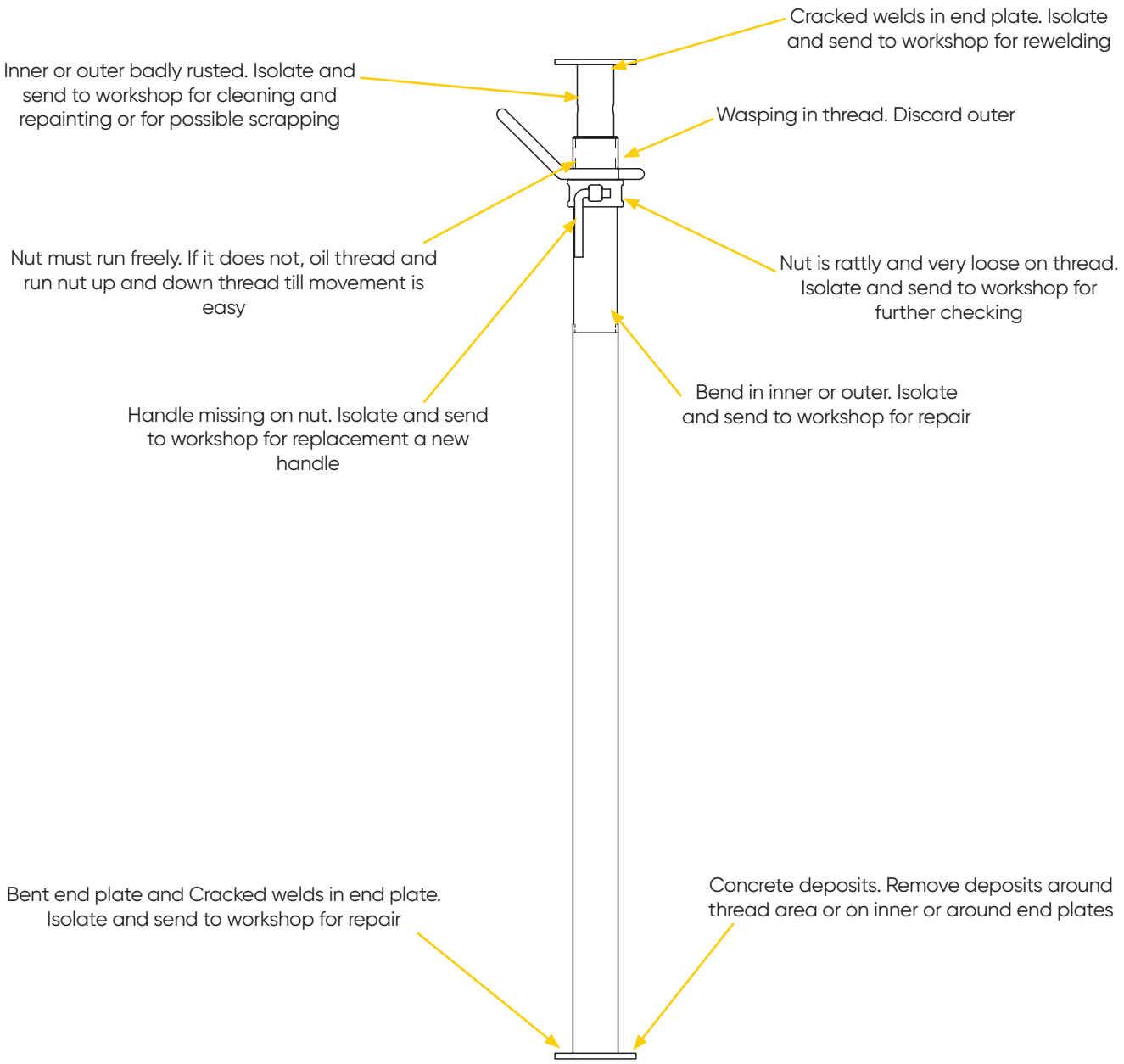
Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
Panel bent or twisted	Panel must be straight	Straighten if possible, otherwise scrap* (* See WI-GE-103)	
Holes deformed	Holes must suit intended bolts	Re-weld and drill out holes again if necessary	
Concrete deposits on panel face	Panel face must be free of concrete	Clean concrete deposits from panel face	
Indentations in steel face	Steel face should be dent free	Panel beat out any indentations	

Issues / Notes:

7. Maintenance & Inspection

EP Prop Maintenance



7. Maintenance & Inspection

EP Prop Inspection

NAME: ..... CHECKED DATE: .....

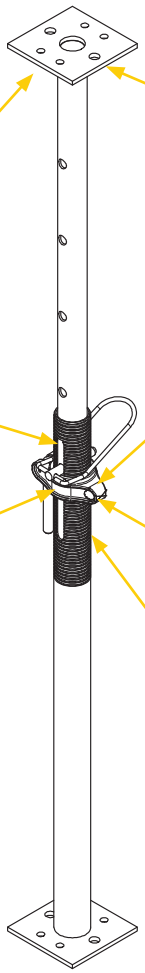
Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
Pin bent	Prop Pin must be straight	Replace with new Pin & Loop	
Bent inner or outer	Bend in prop fully opened must not exceed L/200	Straighten on flypress otherwise scrap	
Bent end plate	None, plates must be straight and square	Straighten	
Indentations of tube	Less than 3.5mm	Move with insert dolly, if unsuccessful scrap	
Wasping in thread	Pin must be able to slide freely in slot	If wasping prevents pin sliding freely scrap outer	
Cracked welds on end plates	Any cracked or broken welds unacceptable	Grind back reweld (See WI-GE-100)	
Inner does not slide freely	Inner must slide freely	Seek cause (bend, indentation etc) and rectify	
Nut difficult to turn	Nut must turn Freely	Ensure thread is clear, oil thread and run nut up & down until movement is easy, otherwise replace nut	
Concrete deposits	Light deposits on un-threaded outer tube only	Remove any deposits from inner, thread area or end plates	
Rusty appearance	Visual assessment	Paint/touch-up paint	
Nut rattly and generally loose on thread	Nut must run freely but not excessively loose	Try new nut, if still excessively loose scrap outer	

Issues / Notes:

7. Maintenance & Inspection

Acrow Prop



Concrete deposits. Remove deposits around thread area or on inner or around end plates

Bent end plate. Isolate and send to workshop for straightening

Cracked welds in end plate. Isolate and send to workshop for rewelding

Wasting in of slot. Discard outer

Handle missing on nut. Isolate and send to workshop for replacement a new handle

Broken or bent Prop pin. Replace with new pin & loop or isolate and send to Workshop for replacement

Nut is rattly and very loose on thread. Isolate and send to workshop for further checking

Inner or outer badly rusted. Isolate and send to workshop for cleaning and repainting or for possible scrapping

Nut must run freely. If it does not, oil thread and run nut up and down thread till movement is easy

Bend in inner or outer. Isolate and send to Workshop for repair

Inner must slide freely in outer. If not isolate and send to workshop for rectification

Indentations in tube greater than 4mm. Isolate and send to workshop for removal of dint

Pin & Loop MUST be assembled as shown. This is extremely important as the crank in the loop facing upwards is a safety feature of the prop.

7. Maintenance & Inspection

Acrow Prop Inspection

NAME: ..... CHECKED DATE: .....

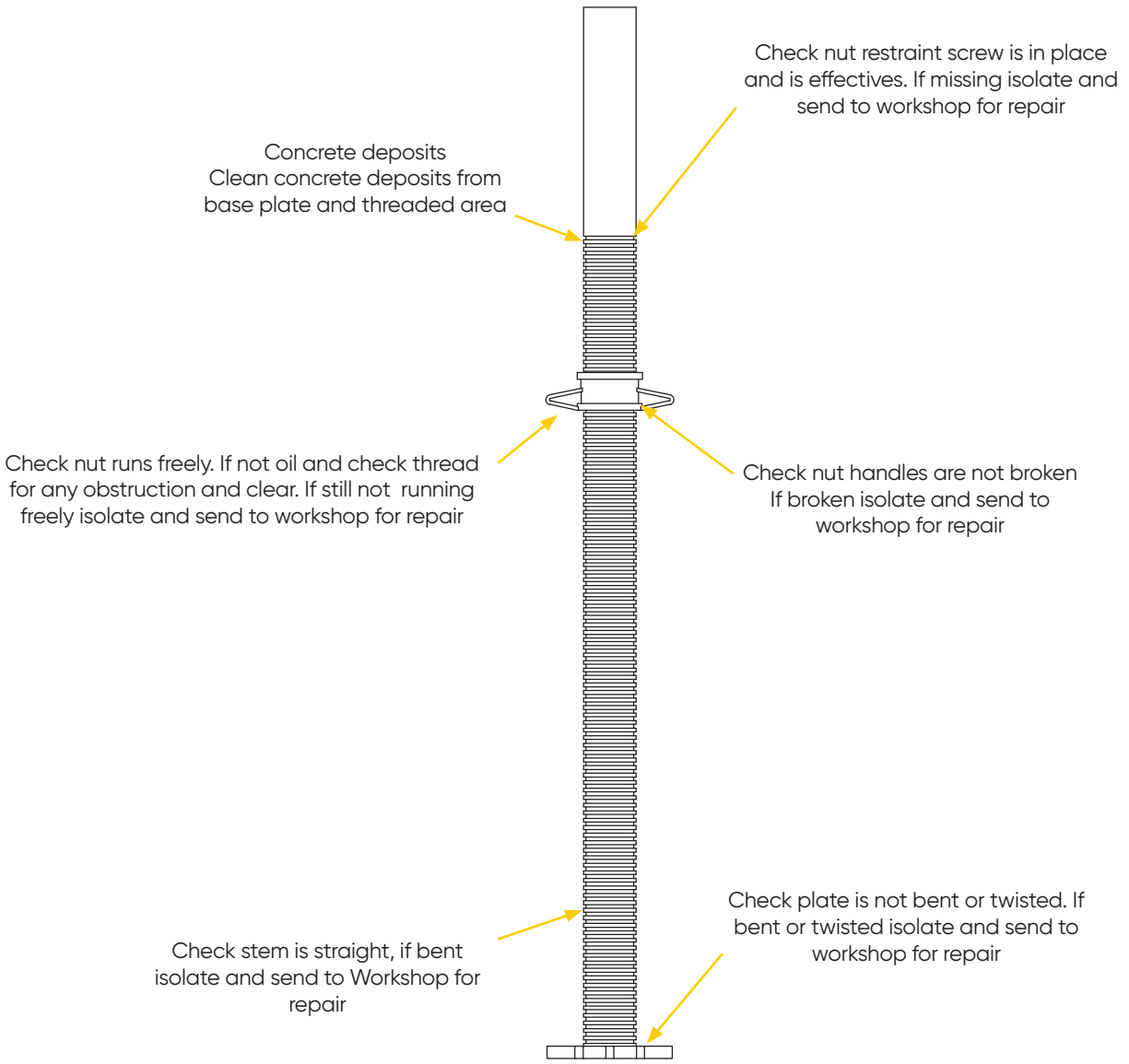
Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
Pin bent	Prop Pin must be straight	Replace with new Pin & Loop	
Loop damaged ie: no longer has a defined crank	Loop must have a defined crank	Replace with new Pin & Loop	
Bent inner or outer	Bend in prop fully opened must not exceed L/	Straighten on flypress otherwise scrap	
Bent end plate	None, plates must be straight and square	Straighten	
Indentations of tube	Less than 3.5mm	Remove with insert dolly, if unsuccessful scrap	
Wasping in of thread slot	Pin must be able to slide freely in slot	If wasping prevents pin sliding freely scrap outer	
Cracked welds on end plates	Any cracked or broken welds unacceptable	Grind back & reweld (See WI-GE-100)	
Broken, bent or non BBS pin	Any broken, bent or non BBS pin unacceptable	Replace with pin & loop	
Inner does not slide freely	Inner must slide freely	Seek cause (bend, indentation etc) and rectify	
Nut difficult to turn	Nut must turn Freely	Ensure thread is clear, oil thread and run nut up & down until Movement is easy Otherwise replace nut	
Concrete deposits	Light deposits on unthreaded outer tube only	Remove any deposits from inner, thread area or end plates	
Rusty appearance	Visual assessment	Repaint/touch up paint	
Nut rattly and generally loose on thread	Nut must run freely but not excessively loose	Problem could be wrong nut ie: SGB nut on Acrow prop or vice versa. Try new nut, if still excessively loose scrap outer* (* See WI-GE-103)	

Issues / Notes:

7. Maintenance & Inspection

GASS Prop Inner



7. Maintenance & Inspection

GASS Prop Inner Inspection

NAME: ..... CHECKED DATE: .....

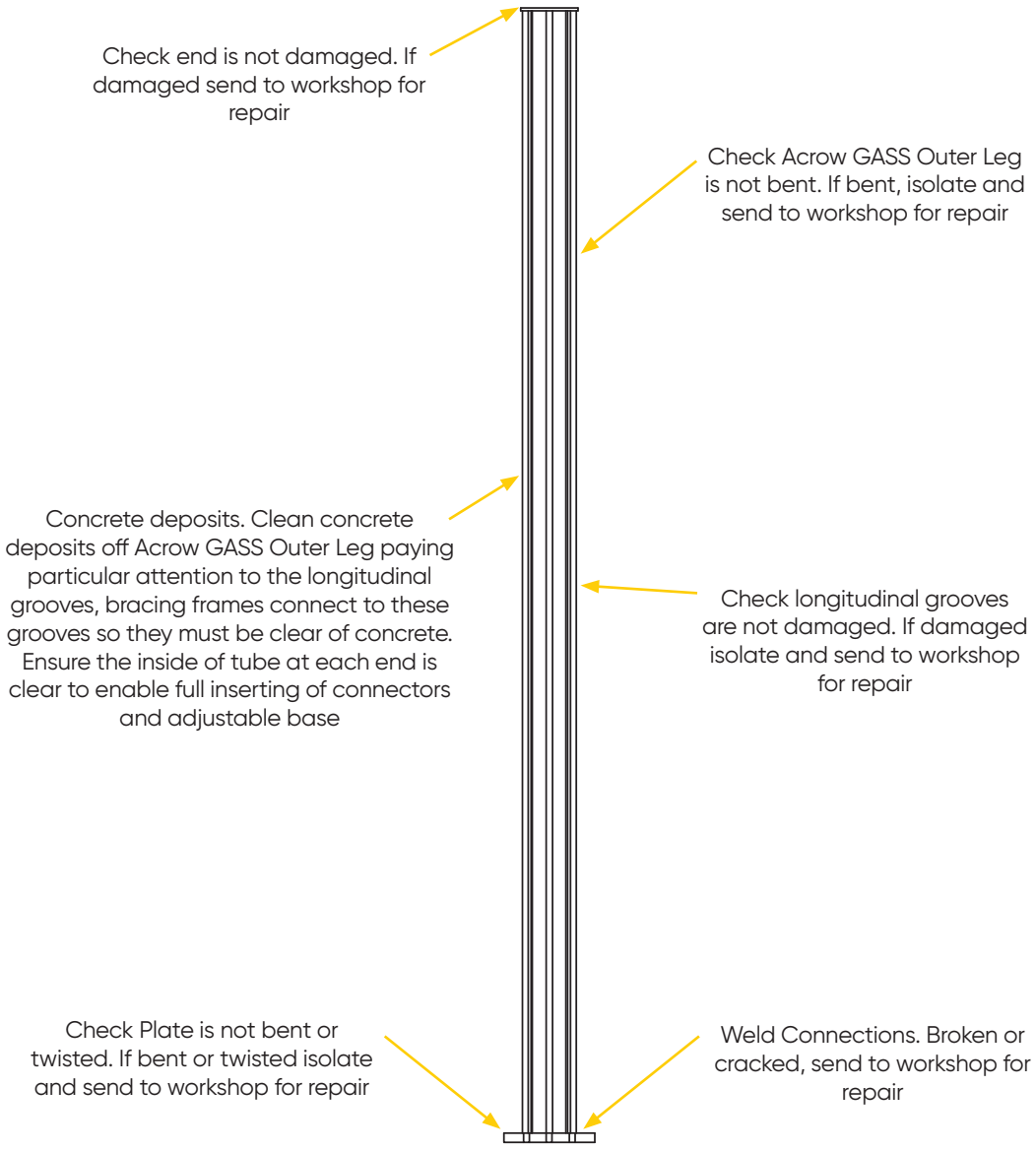
Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
Build up of concrete or other matter	No build up permitted on base plate or stem particularly on thread	Remove build up with wire brush and scraper, clean threads and oil	
Cracked welds on base plate	Cracked welds are not permitted	Grind off welds and re-weld. Refer Work Instruction	
Nut not running freely	Nut must run freely along full length of the shaft thread	Remove any obstruction in thread, oil and free up, if not possible then replace nut	
Nut with broken or cracked handles	Handles must be intact	Replace nut	
Shaft is bent	Shaft must be straight	Straighten if possible ensure nut runs freely up and down full length of shaft after straightening. If not possible to straighten or nut does not run freely even after replacement then scrap.	
Base plate is bent	Base plate must be straight and at right angles to shaft	Repair, if not possible then remove and weld on a new base plate ensuring it is concentric and square to the stem in both plains	
Nut restraint screw missing or not effective	Nut restraint screw must be in place and work effectively to stop nut from winding past it	Replace screw and test to ensure it stops nut from going past it	

Issues / Notes:

7. Maintenance & Inspection

GASS Prop Outer



7. Maintenance & Inspection

GASS Prop Outer Inspection

NAME: ..... CHECKED DATE: .....

Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

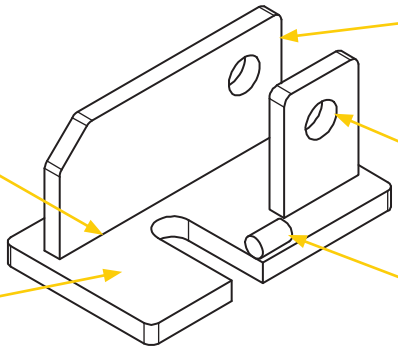
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
GASS Outer Leg bent or damaged	GASS Outer Leg must be straight and square to base plate	Straighten or cut back to smaller size using Acrow Manufacturing drawing as reference	
Cracked welds at end plate	Cracked welds not permitted	Grind and re-weld. Refer Work Instruction	
End plate is bent or twisted	End plate must be straight and at right angles to stem	Straighten if possible otherwise replace using Acrow Manufacturing drawing as reference	
Longitudinal grooves are damaged	Longitudinal grooves must be damaged and true to profile	Repair if possible, if not cut back to smaller size using Acrow Manufacturing drawing as reference	
Tube internal bore at ends clogged with concrete or dirt	No concrete build up is permitted internally at Outer Leg ends The bore at each end of the Outer Leg must be clear by 600mm to enable an adjustable base to fit inside	Clear bore with drift or similar tool otherwise cut back or scrap	
End of Acrow GASS Outer Leg damaged (flame cut or not cut square)	End of tube must be square. If frame cut or not cut square indicates it has been site cut and the length will be incorrect.	Cut back to next size down using manufacturing drawing as reference	
Build up of concrete or other matter	Outer surfaces and longitudinal grooves must be clear of concrete	Remove all concrete build up with scraper and wire brush	

Issues / Notes:

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



Slim-Max Solider Raker Foot Bracket Inspection

NAME: ..... CHECKED DATE: .....

Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

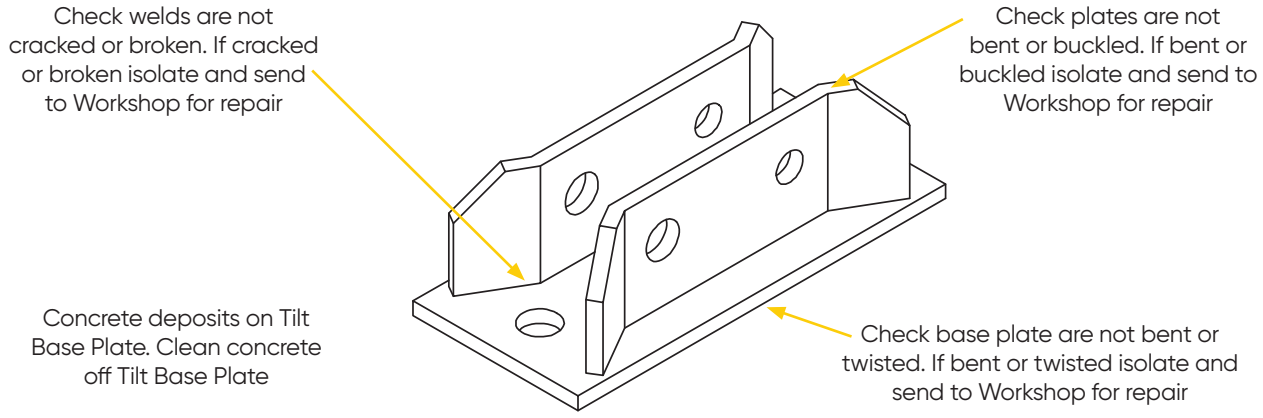
POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
Cheek plates bent or buckled	Cheek plate must be straight and parallel	Straighten, if not possible then scrap	
Welds broken or cracked	All welds must be intact	Grind back & reweld* (* See W.I. 146)	
Base plates bent or buckled	Bass plate 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			

Issues / Notes:

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.



Slim-Max Solider Tilt Base Plate Inspection

NAME: ..... CHECKED DATE: .....

Generally, visual inspection checking for the possible faults listed below. Please tick or cross the checked box.

POSSIBLE FAULTS	DAMAGE LIMITS FOR REPAIR	RECOMMENDED ACTION	CHECKED
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			

Issues / Notes:

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P: 02 9219 1566

Sydney
Above Scaffolding NSW
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Lindfield NSW 2070
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Regional NSW
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Muswellbrook NSW 2333
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F: 03 6324 8250

acrow.

ENGINEERING & CONSTRUCTION

Contact

Phone: 1300 138 362

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