

For;

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LIFT STUDY

CBH GROUP

AVON TYPE STORAGE – WALL REPLACEMENT

LIFTING PRECAST PANELS – P11

**CAUTION; ENSURE A SPOTTER IS USED WHENEVER THE CRANE IS MOBILE
ENSURE SITE PERSONNEL ARE MADE AWARE OF THIS REQUIREMENT**

Revisions;

A	Fully revised and issued for review	16.7.25	RP		
Rev	Description	Date	Prepared	Checked	Approved

Name

Signature

Date

For PCS;	Study created by	Russell Parker		16.7.25
For JOYCE;	Chkd / Appr. by			
For Client	Chkd / Appr. by			
3rd Party Reviewer	Chkd / Appr. by			

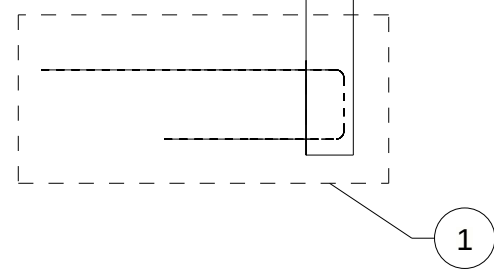
NOTE; Ground bearing pressures, if provided in this lift study, are gained from manufacturers software. They represent the maximum pressures for the crane in a static condition. It is recommended that a minimum dynamic factor of 1.1 to 1.2 is considered when assessing the suitability of any crane supporting surface or structure. This is for lifts carried out at dead slow speeds.

Disclaimer; This lift study is provided at the request of the client named above (second row of signature table) and is based solely on information provided by them or other persons as directed by them. Prime Crane Services does not take any responsibility for the use of this document in relation to any rigging, lifting, crane or transport activities. It is the named client's responsibility to ensure all personnel involved in any activity related to this document are competent, suitably trained and legally certified and/or licensed to perform those activities. It is the named client's responsibility to ensure the activities are carried out in suitable weather conditions, and to verify that any area where related activities are carried out are suitable for the planned activities and can safely withstand any pressures exerted to the ground or supporting surface or structure/s by any equipment described in, or related to, this study.

NOTES:

1. ALL CONCRETE TO BE CLASS S40
2. CONCRETE TO BE VIBRATED IN FORMS TO THOROUGHLY COMPACT WITHOUT SEGREGATION.
3. ALL REINFORCEMENT TO BE GRADE D500N
4. ALL CAST IN FITTINGS TO BE HOT DIPPED GALVANISED UNO
5. MIN CONCRETE COVER TO REINFORCEMENT U.N.O = 40mm
6. MIN CONCRETE STRENGTH FOR STRIPPING & STACKING = 20MPa
7. MIN CONCRETE STRENGTH FOR TRANSPORTATION = 40MPa
8. MINIMUM CONCRETE STRENGTH FOR SITE LIFTING = 40MPa
9. ALL LIFTING AND HANDLING TO BE CARRIED OUT IN ACCORDANCE WITH THE ANCON LIFTING DESIGN
10. ALL LIFTING ANCHOR RECESS VOIDS TO BE COMPLETELY FILLED WITH CEMENTITIOUS GROUT ON SITE. (BY OTHERS)
11. PROVIDE 18x18 CHAMFERS TO ALL EXPOSED EDGES

Technical drawing of a concrete slab cross-section. The drawing shows a vertical section of a slab with a total width of 250 units. The top surface is labeled "TROWELLED FACE" and the bottom surface is labeled "FORM FACE". The slab is divided into two sections: "CLASS 3 FINISH" on the left and "CLASS 2 FINISH" on the right. The left section has a width of 125 units and the right section has a width of 125 units. The drawing includes a dashed line indicating a reinforcement bar (RA20250) and a dimension line showing a distance of 125 units from the centerline to the edge. A callout box labeled "1" points to the bottom edge of the slab.



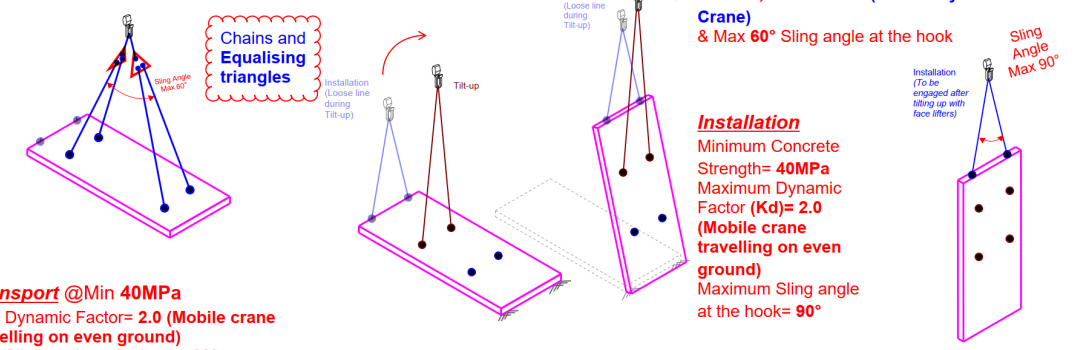
SECTION A - A



SECTION B - B

**REINFORCEMENT OMITTED FROM
DRAWING FOR CLARITY.
FOR REINFORCEMENT DETAILS
REFER TO DRAWING: PR1**

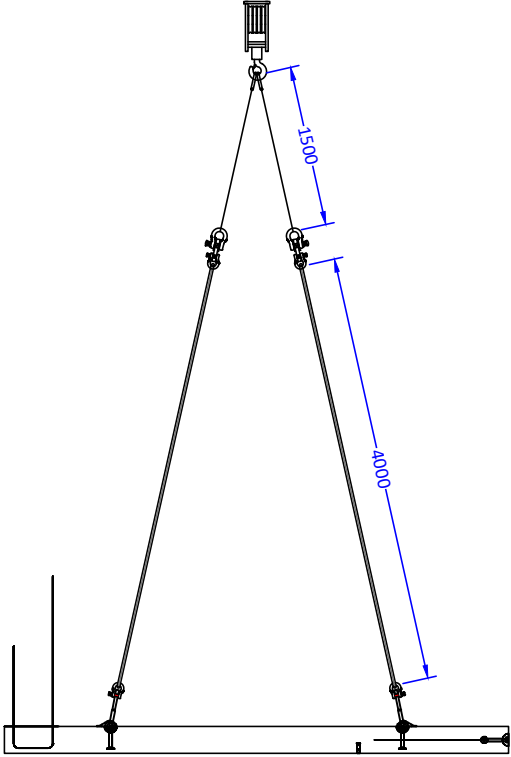
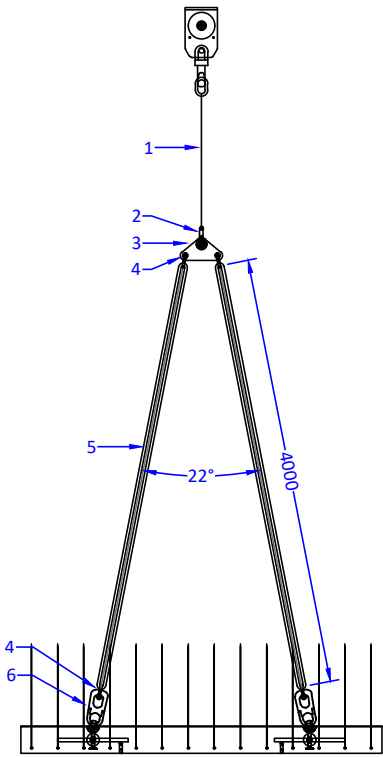
Rigging Diagrams



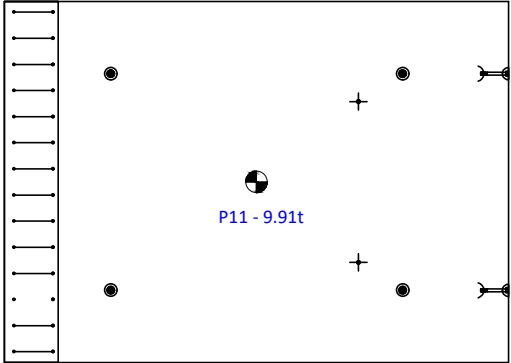
TOTAL WEIGHT OF PANEL = 9.91 t		VOLUME (m³) = 3.96	AREA (m²) = 15.82		NUMBER REQUIRED = 1
MANUFACTURED BY Geoquest Australia Pty. Ltd. A.B.N 53 001 215 327 Level 5, 13-15 Lyonpark Road Macquarie Park, NSW 2113 Tel: (02)9910-9970 Web: www.geoquest-group.com.au Email: info@geoquest-group.com.au		PROJECT CBH GROUP AVON TYPE 'E' STORAGE WALL REPLACEMENT NORTHAM-TOODYA ROAD, NORTHAM		SHEET TITLE WALL DETAILS	
GEOQUEST AUSTRALIA PTY LIMITED IS THE EXCLUSIVE LICENSEE IN RESPECT OF THE PATENTS AND TRADEMARKS COVERING THE GEOQUEST AUSTRALIA PROCESS REGISTERED IN AUSTRALIA IN THE NAME OF REPL AND TERRE ARMEE INTERNATIONALE. ® SIGNIFY A REGISTERED TRADEMARK OF GEOQUEST AUSTRALIA PTY LIMITED.		PROJECT No.		SHEET NUMBER	ISSUE
				P11	A

TOTAL LIFTED WEIGHT CALCULATIONS (ALL WEIGHTS IN KILOGRAMS)				
CRANE COMPONENTS - FRANNA AT40				
MAIN HOOK	4 SHEAVE SWL 32t			280
AUX. HOOK	SWL 25t			26
AUX. JIB	RUNNER SWL 18t			110
SUB TOTAL - CRANE COMPONENTS				416
RIGGING COMPONENTS				
ITEM	DESCRIPTION	WEIGHT	QTY	MASS
1	16mm G100 SINGLE LEG CHAINS SWL 17.3t AS A PAIR	15	2	30
2	SHACKLES - 12t (STD)	5	2	10
3	EQUALISING PLATES SWL 10t	15	2	30
4	SHACKLES - 6.5t	2	8	16
5	4m 5t SYNTHETIC SLINGS	5	4	20
6	ANCON LIFTERS	5	4	20
SUB TOTAL - RIGGING COMPONENTS				126
LOAD - P8				9910
TOTAL LIFTED WEIGHT				10452

- RIGGING NOTES;
- THE SWL GIVEN FOR EACH ITEM IN THE DESCRIPTION COLUMN ABOVE IS FOR THE RIGGING CONFIGURATION SHOWN IN THIS DRAWING
 - "G80" DENOTES GRADE 80 CHAINS
 - "G100" DENOTES GRADE 100 CHAINS
 - FSWR SLINGS - (E) DENOTES ENDLESS GROMMET TYPE
 - FSWR SLINGS - (S) DENOTES SINGLE PART SOFT EYE TYPE
 - SHACKLES - (WB) DENOTES WIDE BODY SLING SAVER TYPE
 - SHACKLES - (STD) DENOTES STANDARD SAFETY PIN BOW TYPE
 - SLING LENGTHS SHOWN ARE THE MINIMUM REQUIRED. LONGER IS OK EXCEPT IF SPECIFICALLY NOTED.
 - SLINGS MUST ALWAYS BE AT LEAST 60° FROM THE HORIZONTAL



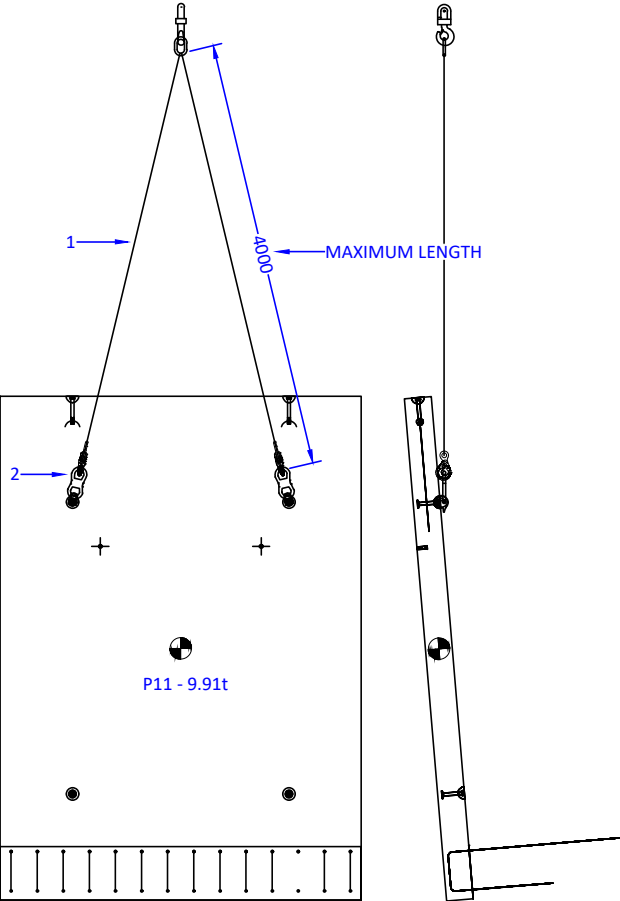
THIS RIGGING IS FOR UNLOADING ONLY



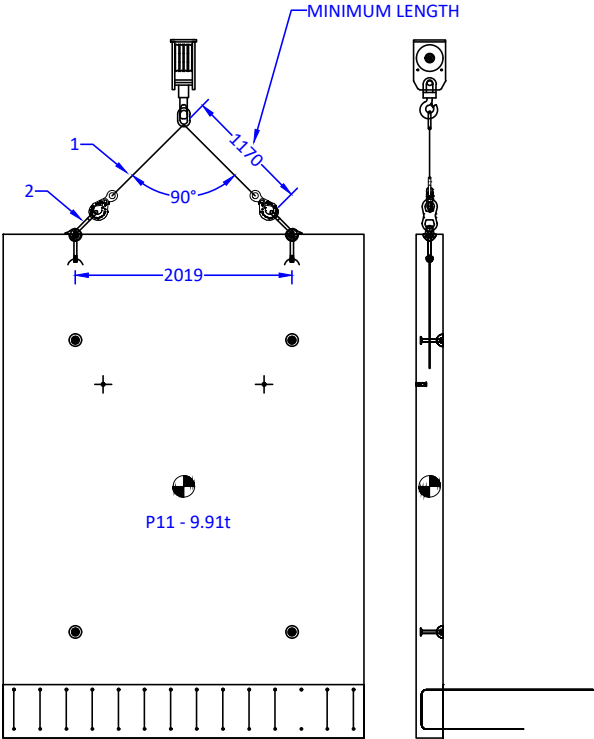
TOTAL LIFTED WEIGHT CALCULATIONS (ALL WEIGHTS IN KILOGRAMS)				
CRANE COMPONENTS - FRANNA AT40				
MAIN HOOK	4 SHEAVE SWL 32t			280
AUX. HOOK	SWL 25t			26
AUX. JIB	RUNNER SWL 18t			110
SUB TOTAL - CRANE COMPONENTS				416
RIGGING COMPONENTS				
ITEM	DESCRIPTION	WEIGHT	QTY	MASS
1	16mm G100 TWO LEG CHAINS SWL 17.3t	97	2	194
2	ANCON LIFTERS	10	4	40
SUB TOTAL - RIGGING COMPONENTS				234
LOAD - P11				9910
TOTAL LIFTED WEIGHT				10560

RIGGING NOTES;

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RIGGING FOR ROTATING TO VERTICAL - AUXILLIARY HOOK

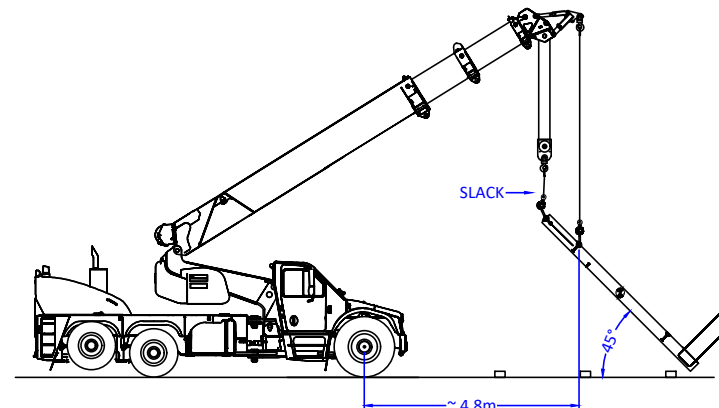
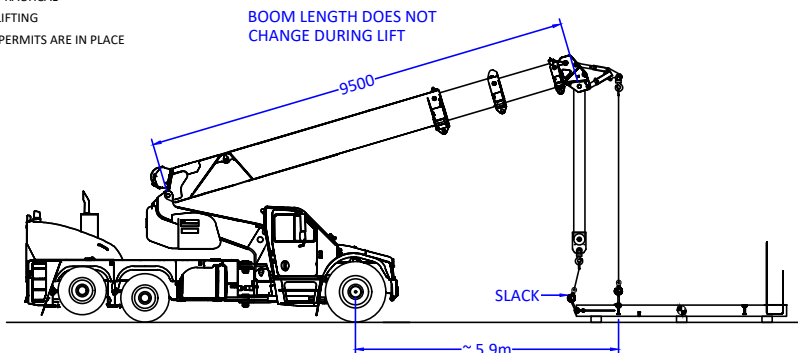


RIGGING FOR PLACING IN RACK - MAIN HOOK

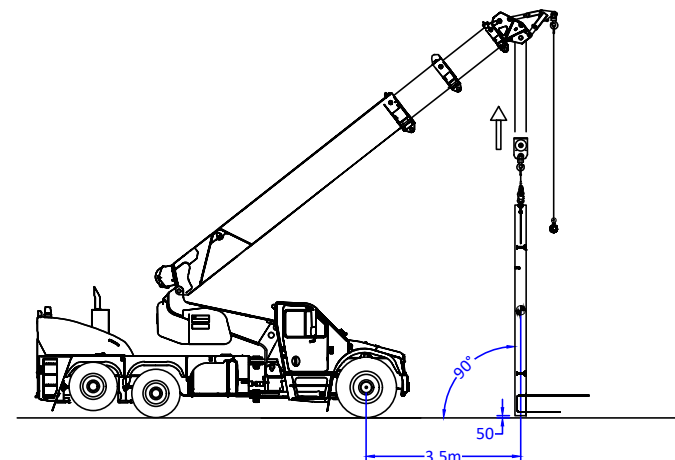
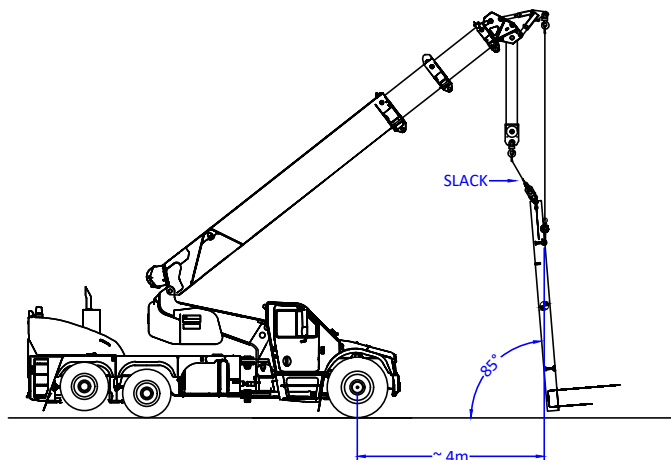
THIS RIGGING IS ALSO USED ON THE AUXILLIARY HOOK WHEN INSTALLING THE PANEL

CRANE DETAILS - SINGLE CRANE LIFT		
MAKE	FRANNA	
MODEL	AT 40	
CRANE MRC	40	t
LMI CODE	129	
CONFIGURATION	BOOM + RUNNER	
COUNTERWEIGHT	FIXED	t
MAIN BOOM LENGTH	9.5	m
JIB TYPE / OFFSET	RUNNER / -30	°
JIB LENGTH	1	m
MAIN / AUX. HOOK?	BOTH	
MAX SWL THIS CONFIG.	18	t
OEM CHART WIND SPEED	10	m/sec
LOAD DETAILS		
LOAD	9910	kgs
CRANE COMPONENTS	416	kgs
RIGGING	234	kgs
TOTAL LIFT WEIGHT	10560	kgs
LIFT DETAILS		
MAXIMUM LIFT RADIUS	4	m
SWL AT MAX. RADIUS	18000	kgs
UTILISATION	58.7	%
SPARE CAPACITY	7440	kgs
REEVING CHECK		
LINE PULL	4350	kgs
No. OF PARTS	6	
FACTORED LINE PULL	26200	kgs
LOAD TO HOOK	10560	kgs
REEVING UTILISATION	40.3	%
GROUND BEARING PRESSURES		
FRONT AXLE LOAD	25649	kg

- LIFTING NOTES - GENERAL;
1. BOOM CONFIGURATION SHOWN IN DRAWING IS GENERIC ONLY
 2. CHECK OEM CHARTS FOR CORRECT BOOM CONFIGURATION
 3. THE AREA WHERE THE CRANE IS POSITIONED MUST BE CAPABLE OF SUPPORTING THE LOADS IMPOSED BY THE CRANE AT ANY POINT OF THE LIFTING OPERATION
 4. CHECK FOR UNDERGROUND OR OVERHEAD HAZARDS
 5. EXCLUSION ZONE TO BE ESTABLISHED
 6. TAG LINES MUST BE USED WHERE PRACTICAL
 7. PERFORM RADIO CHECKS BEFORE LIFTING
 8. DO NOT LIFT UNTIL ALL REQUIRED PERMITS ARE IN PLACE



- ←LOAD ON RUNNER
←STATIC CHART CAPACITY USED ONCE PANEL IS FULLY ROTATED
←LOAD ON RUNNER



LOAD TRANSFERRED TO MAIN HOOK - PLACE PANEL INTO RACK
MAXIMUM RADIUS - 3.5m
SWL - 18795 kg @ 2° ROLL
TOTAL LIFT WEIGHT - 10560
UTILISATION - 56.2%

FOR;

AGE
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TO VERTICAL AND STORE

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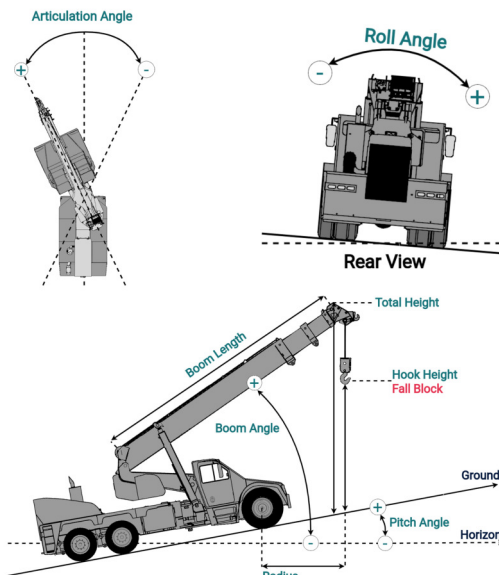
DRAWN	RP	16.7.25			DRAWING No.	REV
CHECKED						
APPR. CLIENT						
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			REVISIONS			
			A	16.7.25	ISSUED FOR REVIEW	
			REV	DATE	DESCRIPTION	CHKD
						APPR.
					PCS-JK25-0128	A

Franna Lift Planner



1	Country	Australia
2	Model	AT40, AT40 - 2
3	LMI	IC-1
4	Configuration	FB
5	Types	PNC

Calculator



Radius (m)	Boom Length (m)
4	10
Chassis Pitch (deg)	Chassis Roll (deg)
0	2
Articulation Angle (deg)	Load (kg)
10	10452

Result

UNLOAD P11

Boom Angle (deg)	Rated Capacity (kg)	Hook Height (m)	Front Axle Load (kg)	Total Height (m)
36.4	16209	7.5	26786	9.4

Utilisation (%)

64.5%

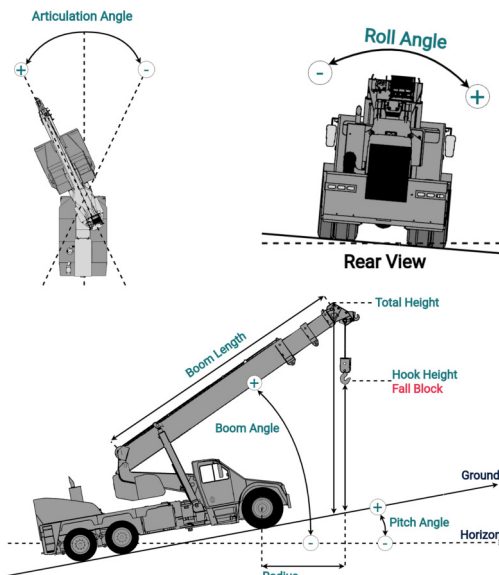
Disclaimer: The data provided is representative only. Users should exercise caution during lift planning and lifting operations, to ensure adequate margin of safety is given with respect to the load bearing capacity of the crane supporting surface.

Franna Lift Planner



1	Country	Australia
2	Model	AT40, AT40 - 2
3	LMI	IC-1
4	Configuration	FB
5	Types	PNC

Calculator



Radius (m)	Boom Length (m)
3.5	9.5
Chassis Pitch (deg)	Chassis Roll (deg)
0	2
Articulation Angle (deg)	Load (kg)
10	10560

Result

ROTATE P11

Boom Angle (deg)	Rated Capacity (kg)	Hook Height (m)	Front Axle Load (kg)	Total Height (m)
37.3	18795	7.3	25649	9.2

Utilisation (%)

56.2%

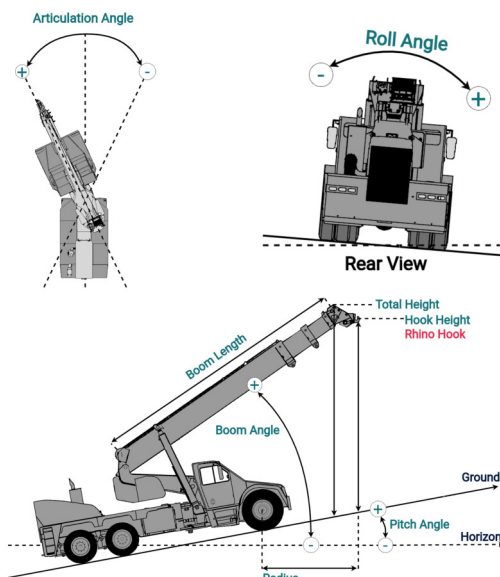
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Franna Lift Planner



1	Country	Australia
2	Model	AT40, AT40 - 2
3	LMI	IC-1
4	Configuration	RR3H
5	Types	PNC

Calculator



Radius (m)	Boom Length (m)
3.5	8
Chassis Pitch (deg)	Chassis Roll (deg)
0	2
Articulation Angle (deg)	Load (kg)
10	10443

Result

INSTALL P11

Boom Angle (deg)	Rated Capacity (kg)	Hook Height (m)	Front Axle Load (kg)	Total Height (m)
17.5	18000	4.9	25548	5.6

Utilisation (%)

58%

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