

											
<b>Supplier Name:</b>				<b>PT. Tractus Multi Services</b>							
<b>Purchase Order Title:</b>				<b>Pioneer Camp 400POB</b>							
<b>Equipment Tag Number(s):</b>											
<b>Supplier (Internal) Document No:</b>				<b>TGH-PNR400POB-CON-001A</b>							
<b>Linked to Global Agreement No:</b>				NA							
<b>CSTS Document No:</b>				<b>870310-S-1138366-CIV-F04-0001</b>							
<b>Company Project Document Number</b>											
Project Code		PO Number		SDR Code		Seq. No					
TEP		- 1138366		- S05		- 0002-001					
<b>Work Method of Flat Pack Container</b>											
<b>DOCUMENT REVIEW STATUS</b>											
<b>CODE:</b>		<b>A</b>		<b>B</b>		<b>C</b>		<b>D</b>		<b>E</b>	
<b>NAME:</b>											
<b>SIGNATURE:</b>											
<b>DATE:</b>											
<b>Review Legend</b>											
<b>CODE A</b>		Document is accepted as Final. Supplier shall proceed with manufacture. Any changes to the document shall require resubmission to Company.									
<b>CODE B</b>		Signifies general acceptance of both quality and content of the document but with minor points to be amended by Supplier. Providing that the comments are incorporated, Supplier may continue with manufacture pending full acceptance. A revised copy shall be returned for final acceptance.									
<b>CODE C</b>		The quality and content are considered by Company to be non-compliant and/or unfit for purpose. Such documents shall be reviewed by Supplier to take note of the reasons for rejection and revise them accordingly. The revised document(s) shall then be resubmitted.									
<b>CODE D</b>		Document has been cancelled or voided and does not need to be progressed further. No further action required at time of submission									
<b>Code E</b>		Signifies that prior Company approval is not required and the documents will be incorporated into the EDMS "as is". Individual documents given Code 4 status may be required to be included in a data manual, which will be subject to a collective review and subject at that time to Company approval. No further action required at time of submission.									
<b>Comments Summary</b>											
<b>Issue Record</b>											
01	01	17/11/2016	Issued For Review	Wawan	Sopyan	Sabari					
<b>Company Rev No</b>	<b>Sup Rev</b>	<b>Date</b>	<b>Reason for Issue</b>	<b>Prepared</b>	<b>Checked</b>	<b>Approved</b>					
The document consists of this front sheet plus n pages.											



# PT TRACTUS MULTI SERVICES



ONSHORE LNG ENGINEERING, PROCUREMENT, AND CONSTRUCTION  
FOR TANGGUH EXPANSION PROJECT

## WORK METHOD OF FLAT PACK





## 1. Scope of Work

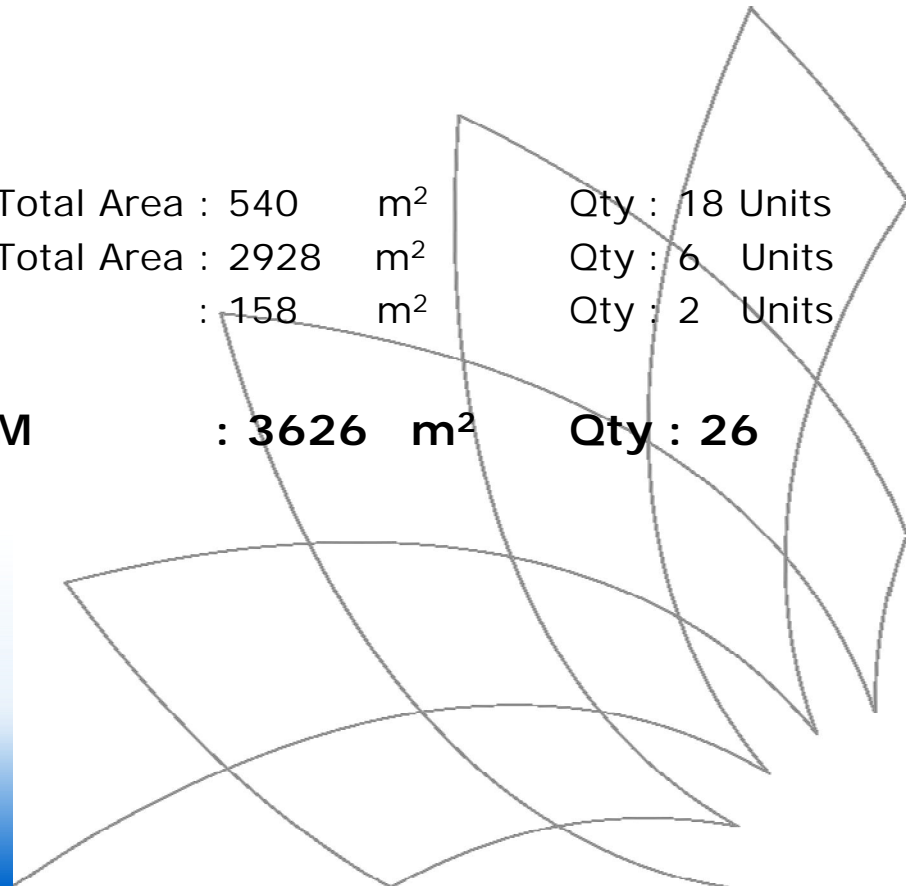
This construction procedure includes general requirements for construction Flat Pack Container Building in Expansion Tangguh Project 400 POB.

### ➤ Area Of Flat Pack Container

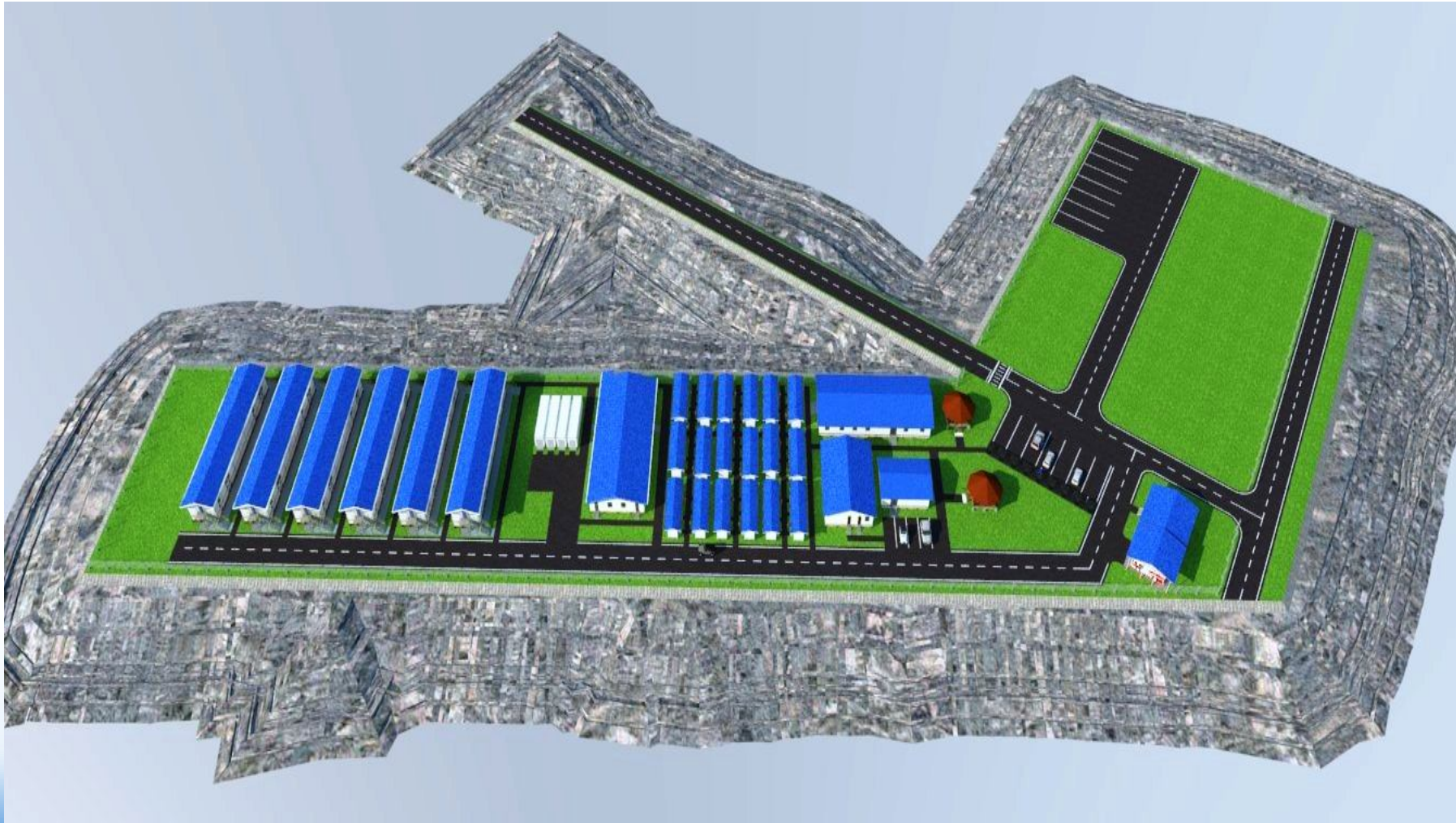
#### ▪ Flat Pack Container Building

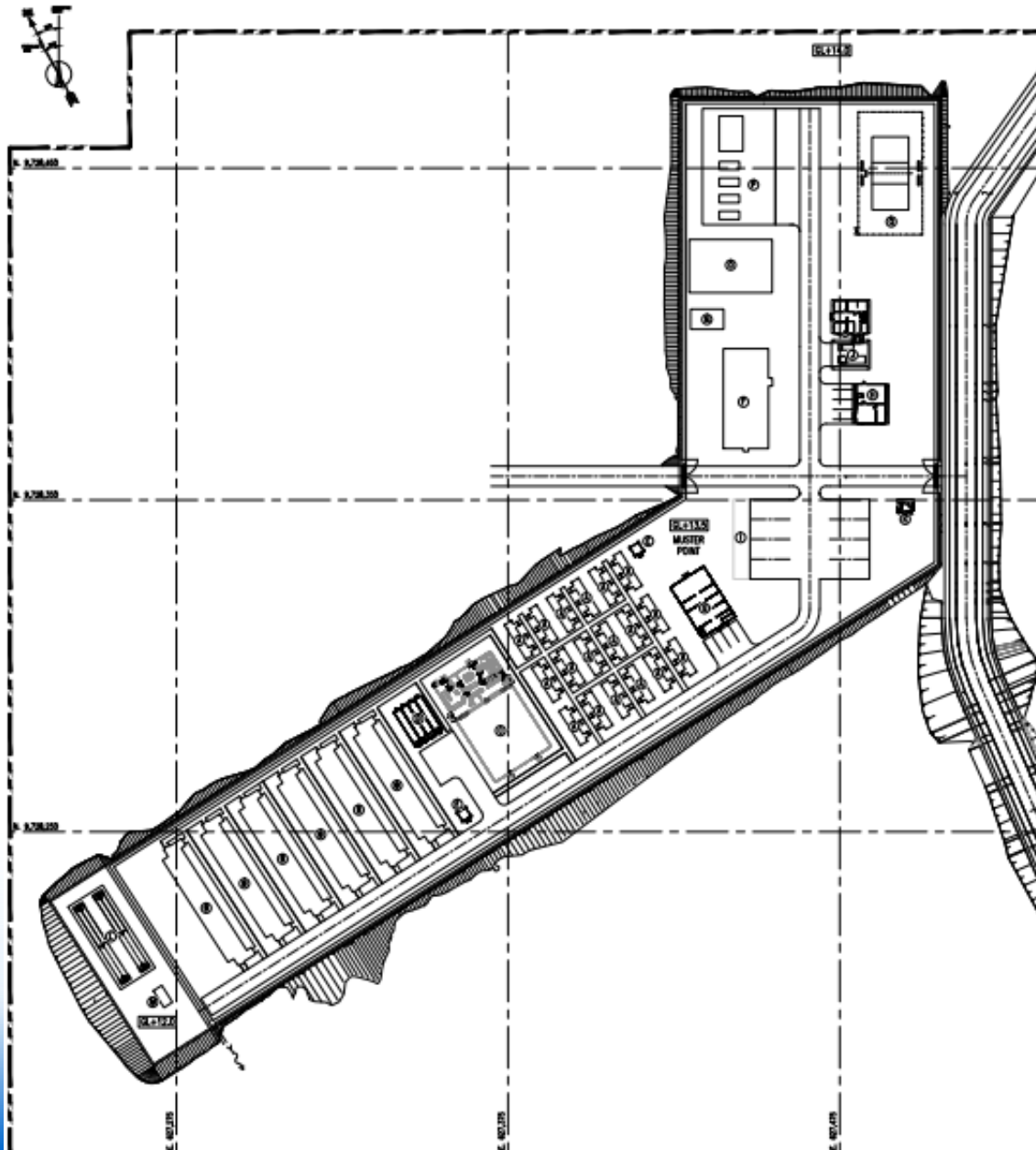
✓ Accommodation Type F	Total Area : 540	m <sup>2</sup>	Qty : 18 Units
✓ Accommodation Type G	Total Area : 2928	m <sup>2</sup>	Qty : 6 Units
✓ Maintenance Shop	Total Area : 158	m <sup>2</sup>	Qty : 2 Units

**TOTAL AREA FLAT PACK SYSTEM : 3626 m<sup>2</sup> Qty : 26 Units**



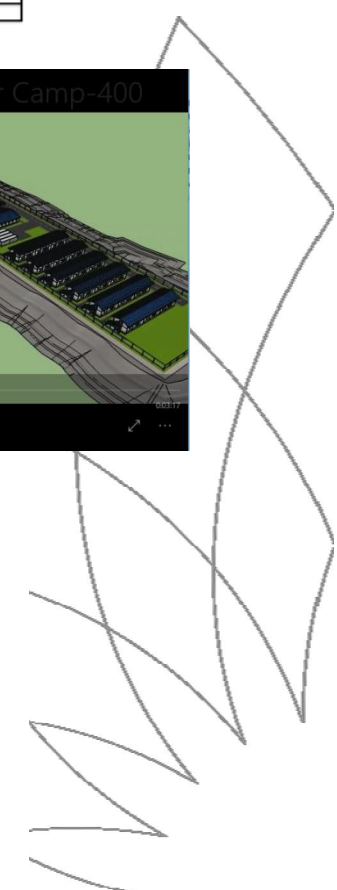
## LAY OUT





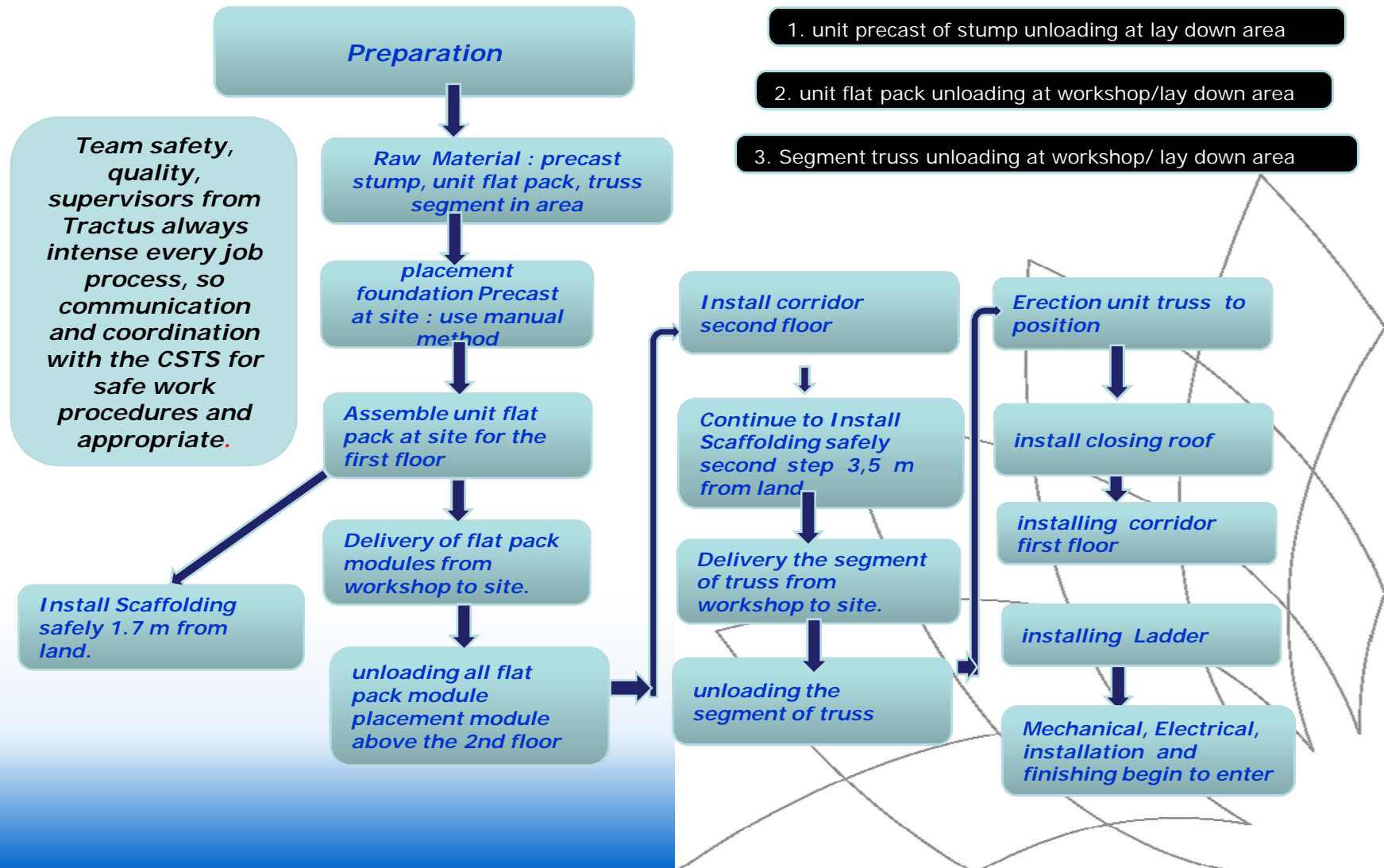
PIONEER CAMP (400 POB)

NO.	DESCRIPTION	BLD'G (EA)	POB	ARE (M2) /UNIT	TOTAL
A	ACCOMMODATION TYPE-F	18	54	30	540
B	ACCOMMODATION TYPE-E	8	240	480	2880
C	KITCHEN & DINING	1		430	430
D	FOOD STORAGE	4		26.8	107.2
E	HOMES	2		9	18
F	RECREATION BUILDING	1		400	400
G	LAUNDRY	1		210	210
H	CAMP OFFICE	1		100	100
I	BUS PASSENGER SHELTER	1		120	120
J	FIRST AID ROOM & FIRE STATION	1		240	240
K	GUARD HOUSE	1		18	18
L	WASTE TREATMENT PLANT	1			
M	WASH POND/HELDING TANK	1			
N	WASH TANK (1000m <sup>3</sup> )	1			
O	PUMP HOUSE	1			
P	GENERATOR SET + FUEL STORAGE	1			
Q	HOLLEY COURT	1			

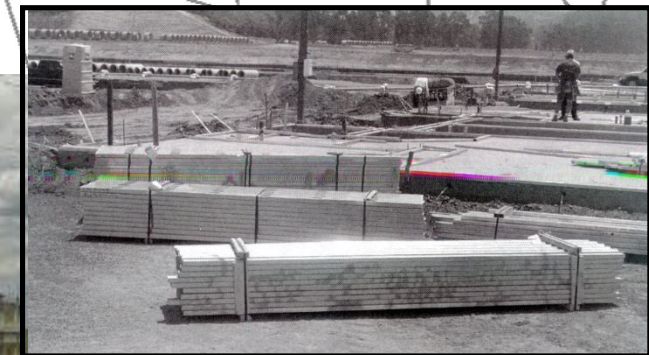
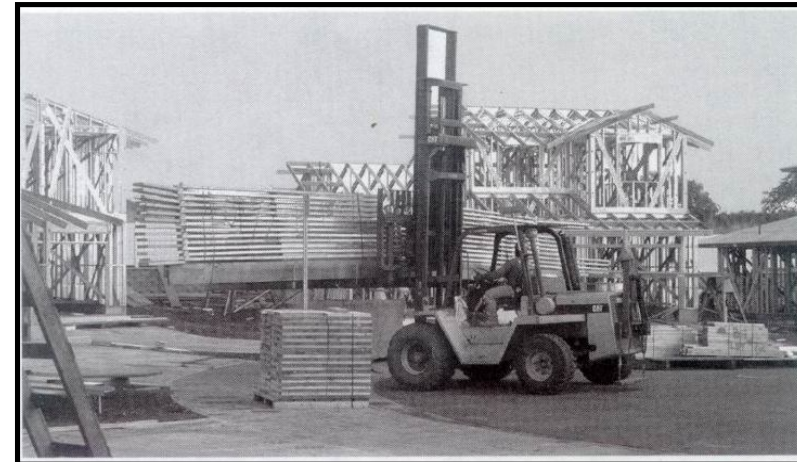




## - Workflow flatpack

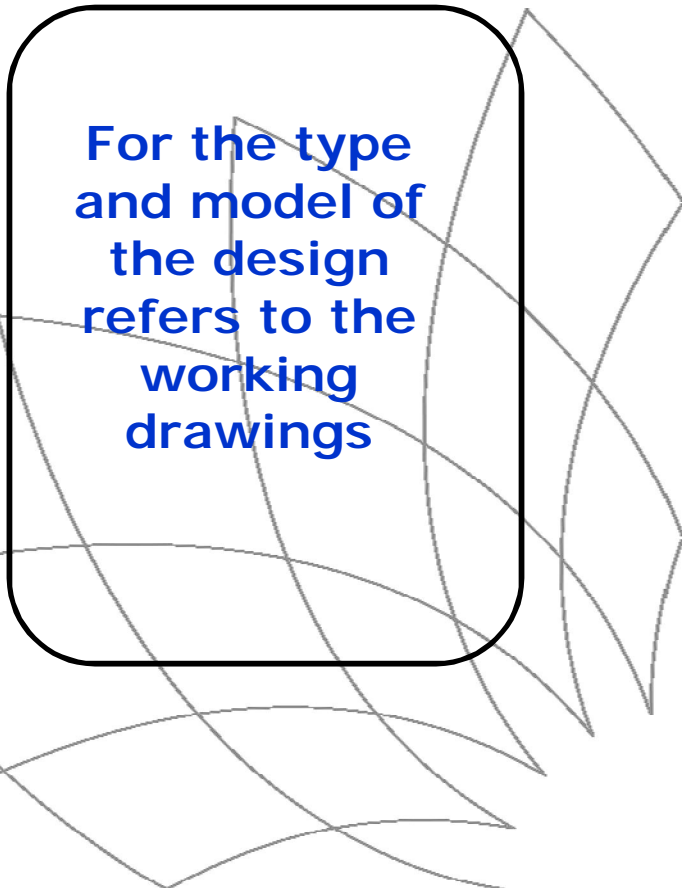
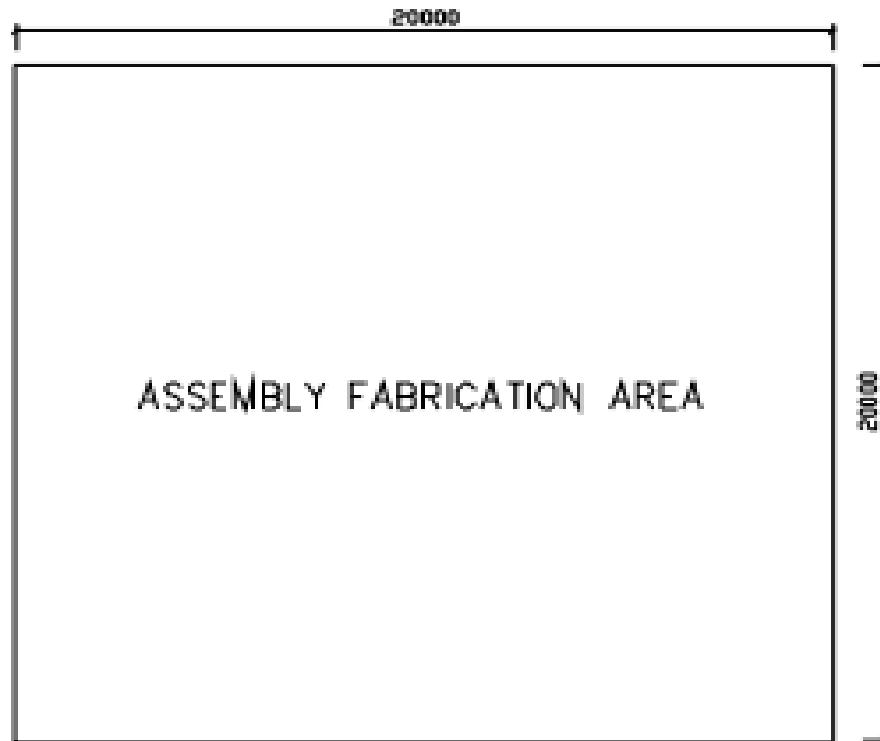


**Lay Down Area** : flat pack material & Truss material is placed in the lay down area before assembled on site



## PROCESS ASSEMBLY AT WHORKSHOP

The place of assembly must be adequately adjusted to the order to be made



For the type and model of the design refers to the working drawings



The use of several safety devices and supporting equipment for the assembly and installation of trusses



Work equipment for assembly truss



## PREPARATION BEFORE TO DELIVERY TO THE LOCATIONS



The measuring process of panel formed



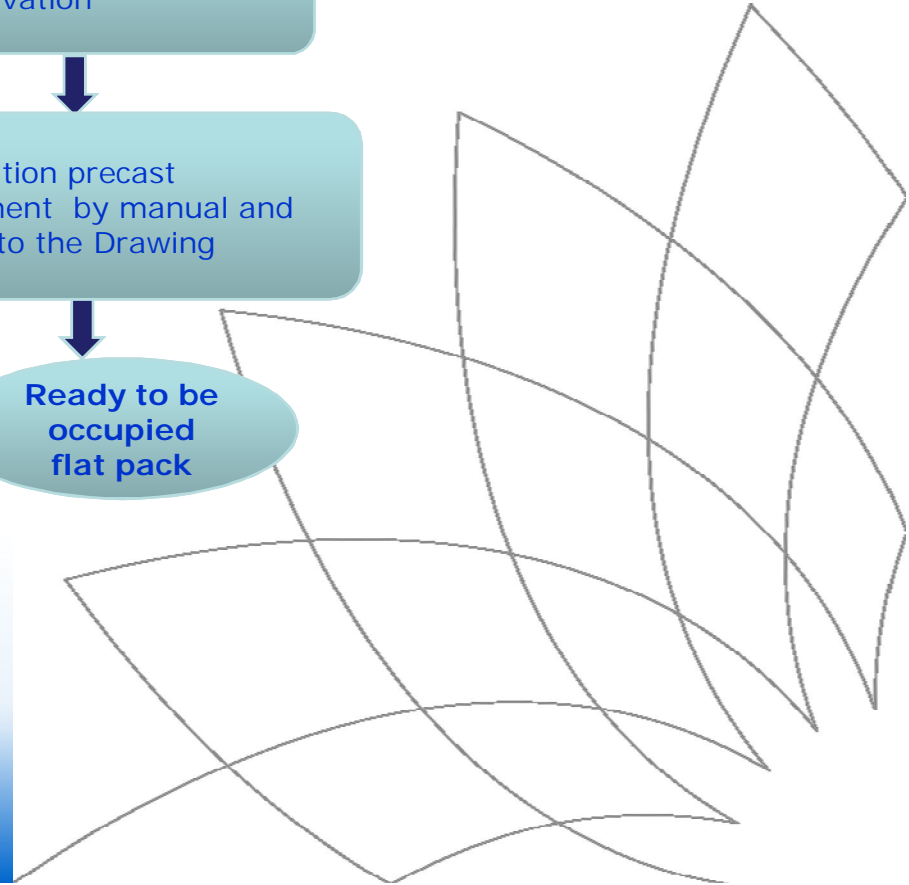
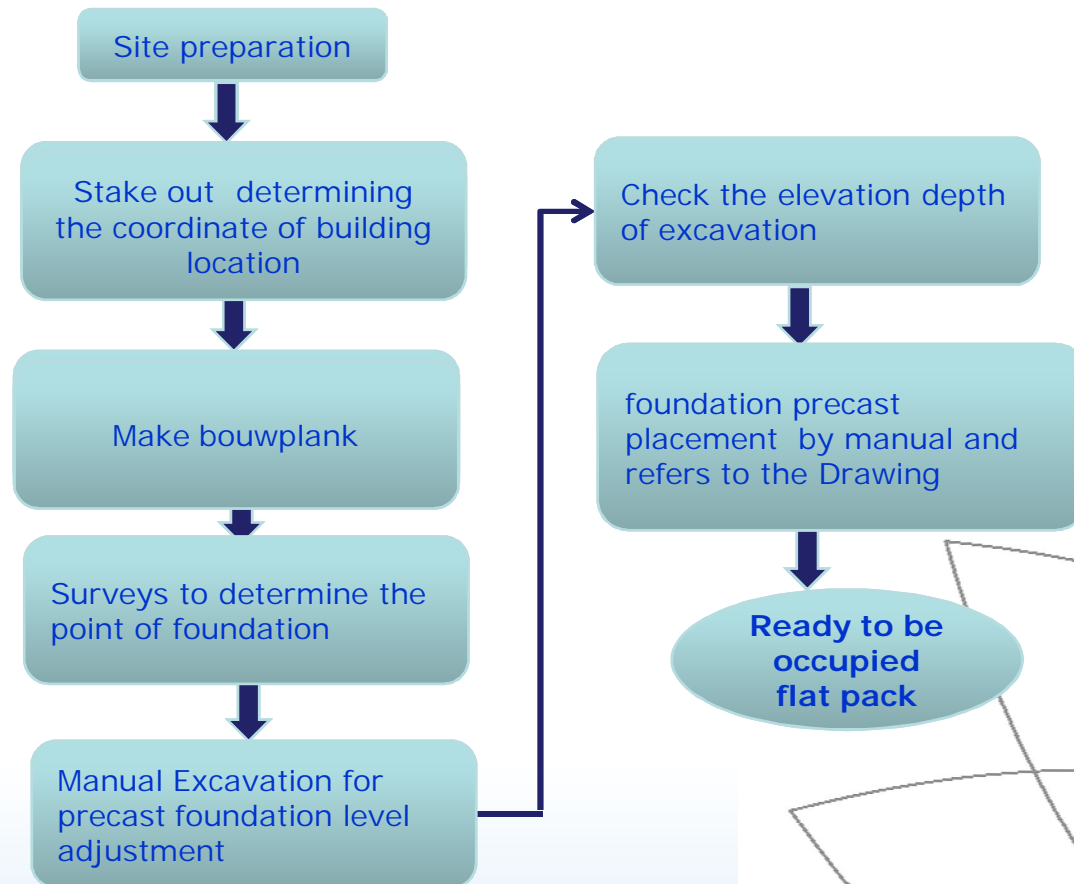
grouping the type of order before being brought to the site





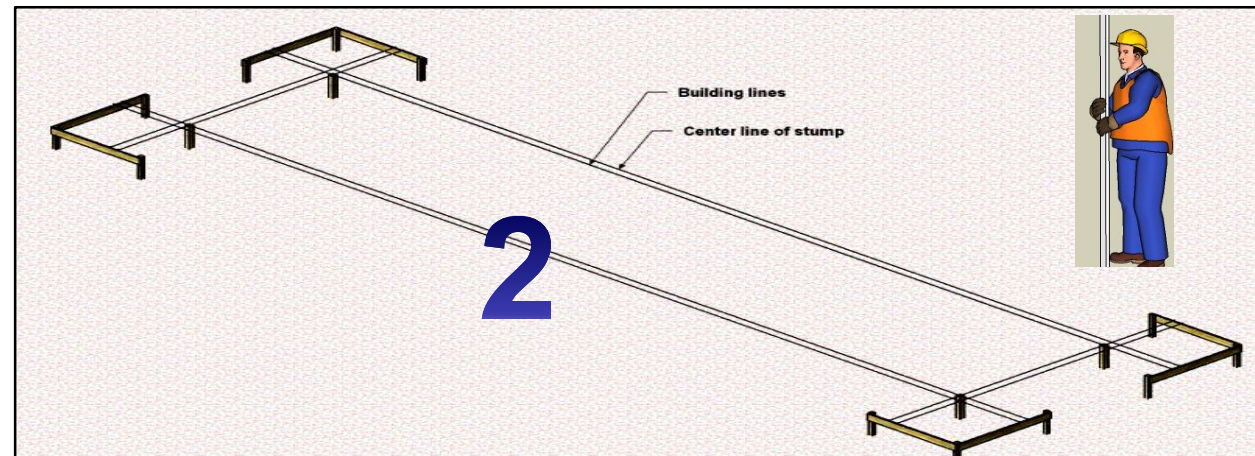
## Fondation Work

### *Work of method placement Foundation Precast.*



## 1. Site Preparation & Manual excavation

- **Stake Out** : the determination of the points of the building, foundation and elevation using a theodolite and water pass



Stake out And Leveling using Theodolitte & Water Pass

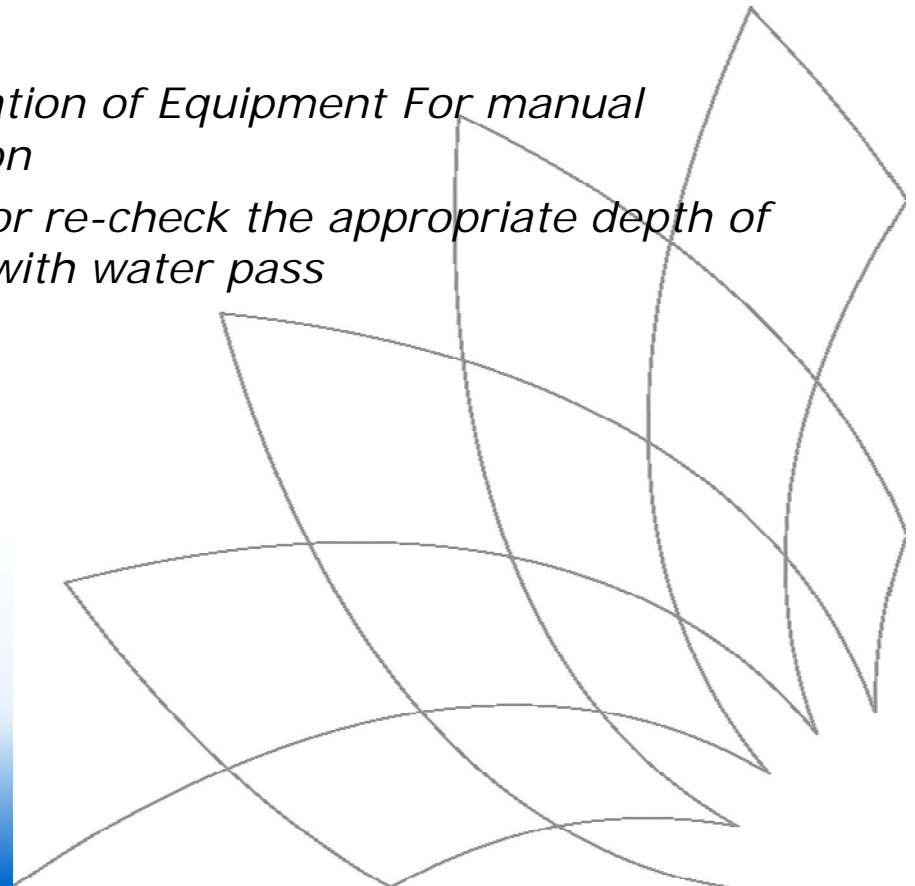
- Work steps:

- Preparation of Equipment For Survey, tool and material for bowplank.
- Survey conducted with reference to the Shop drawing

## 2. Manual excavation depth according to drawing and follow the contour locations

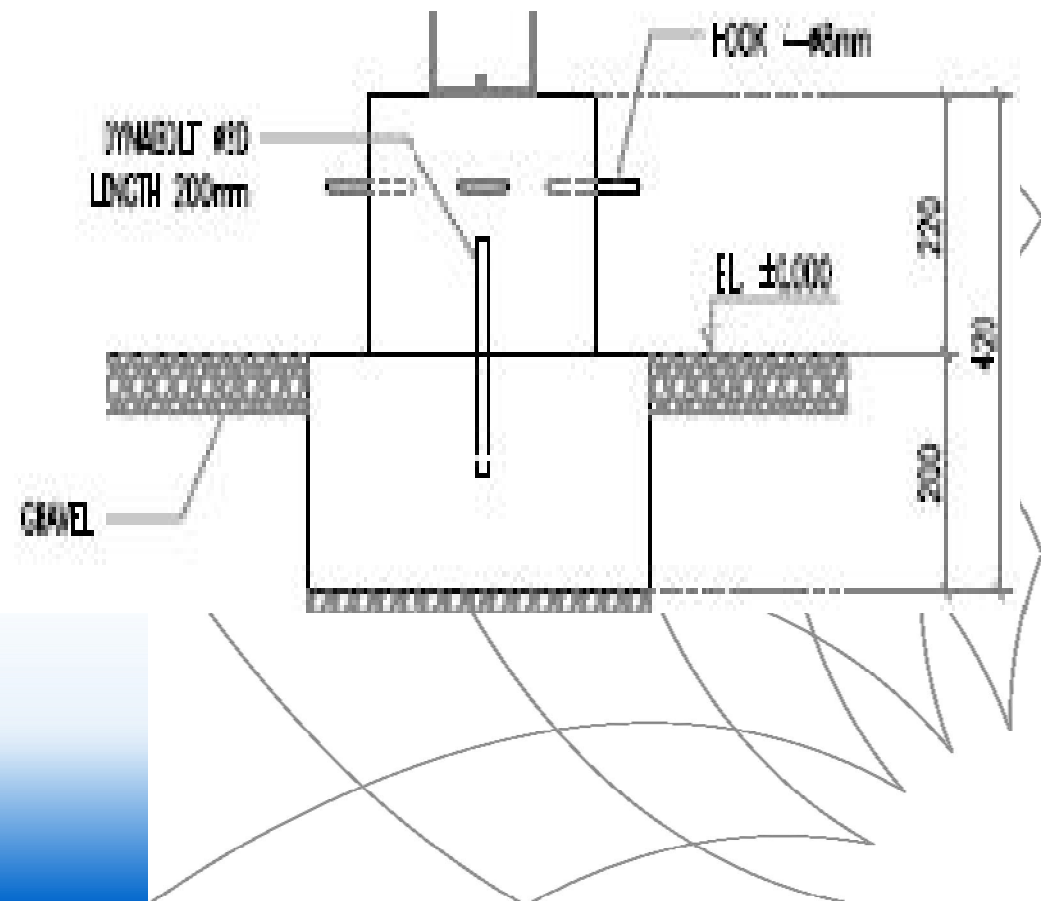
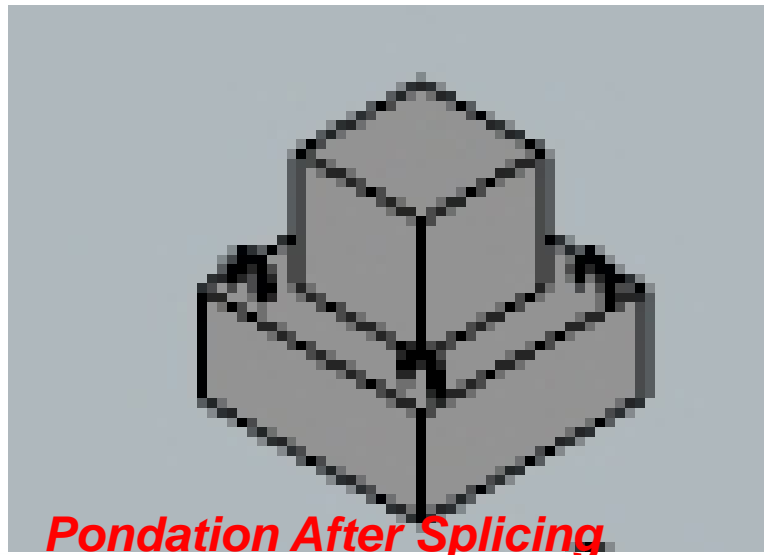


- Preparation of Equipment For manual excavation
- Surveyor re-check the appropriate depth of drawing with water pass



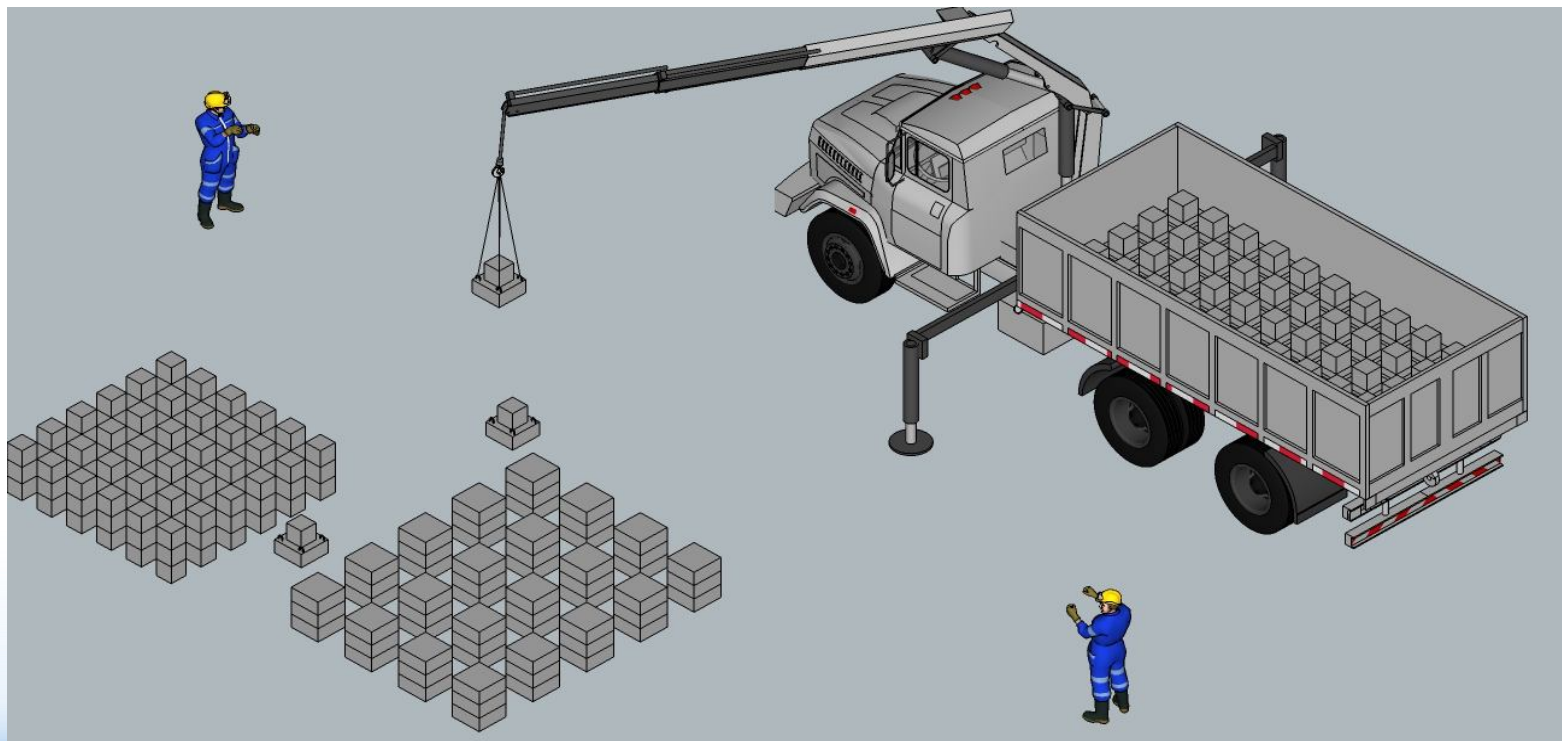
### 3. Splicing foot pedestal foundation by using Dynabolt

- Preparation location for splicing fondation.
- Preparation Equipment medium risk ( cainblock, webbing sling)
- Manual lifting method and lifting with the cainblock.



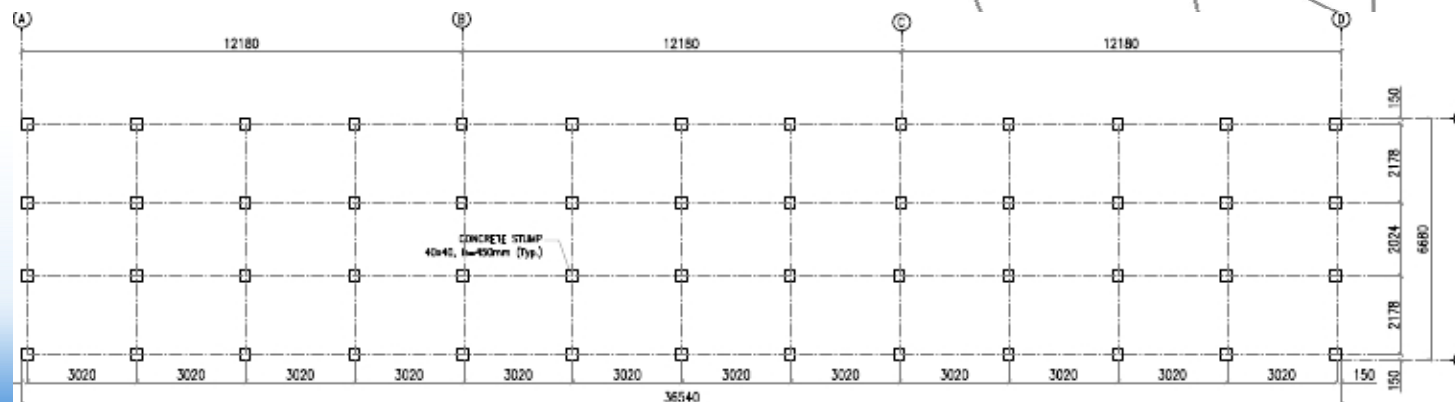
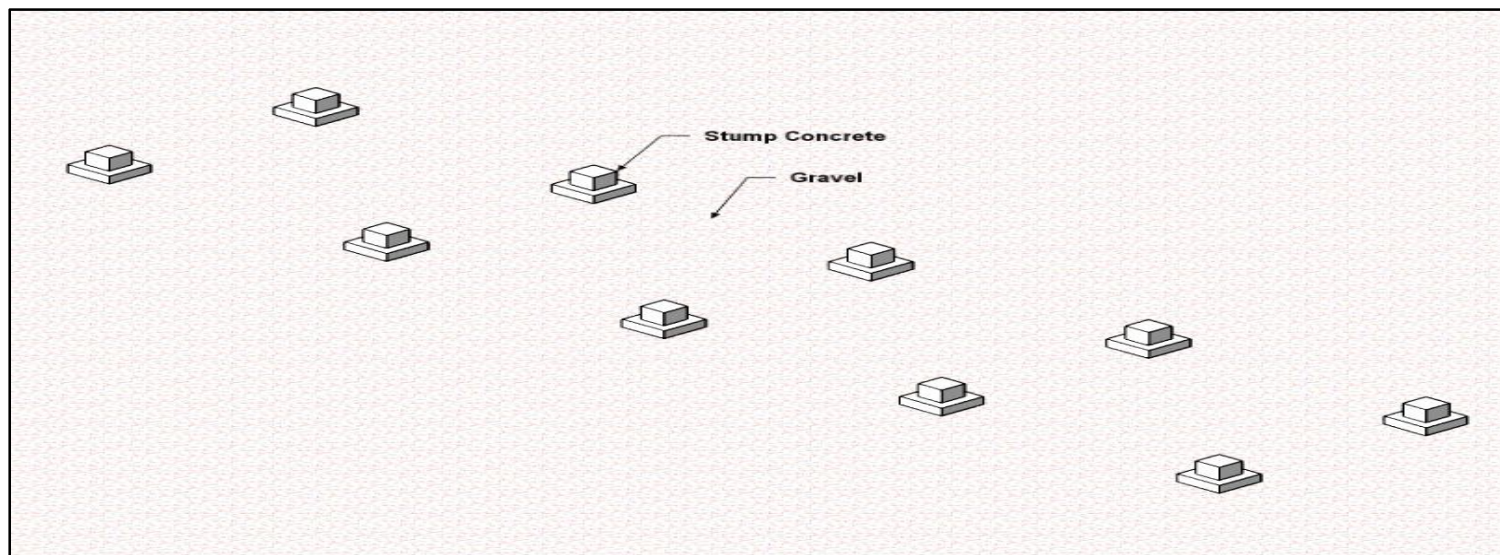
## 4. LOADING / UNLOADING of PRECAST PONDATION TO LOCATIONS

- Preparation location for lifting of precast fondation.
- Preparation Equipment higt risk ( TMC, webbing sling and tool )
- Lifting and Delivery to location use TMC

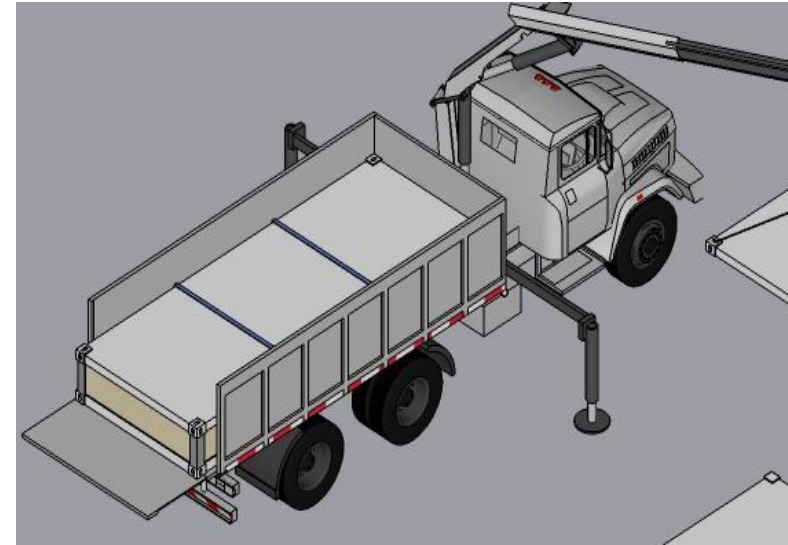




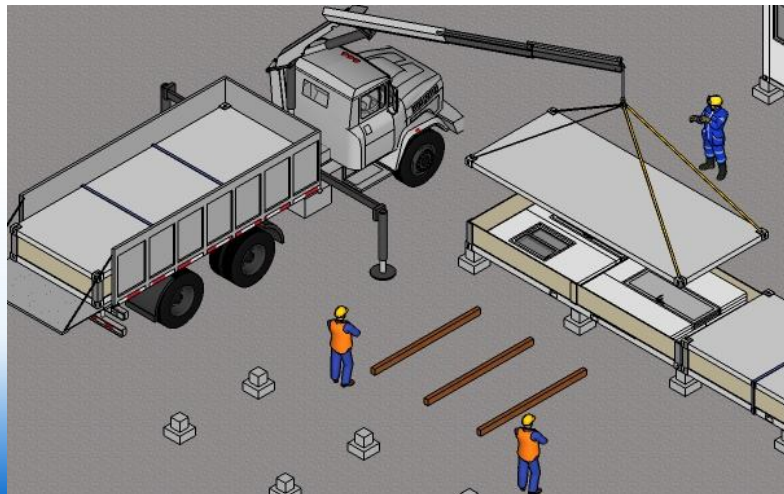
**FOUNDATIONS PRECAST FINISHED AND UNIT FLATPACK READY TO PLACED ACCORDING STANDART LAYOUT AND SHOP DRAWING.**



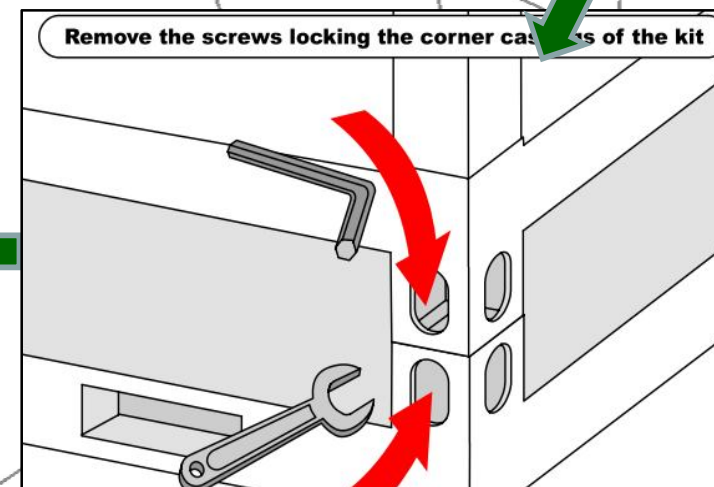
## 5. MATERIAL FROM THE LAYDOWN TO BRING TO LOCATIONS FOR ASSEMBLED



- Loading unloading Unit Flat pack by TMC

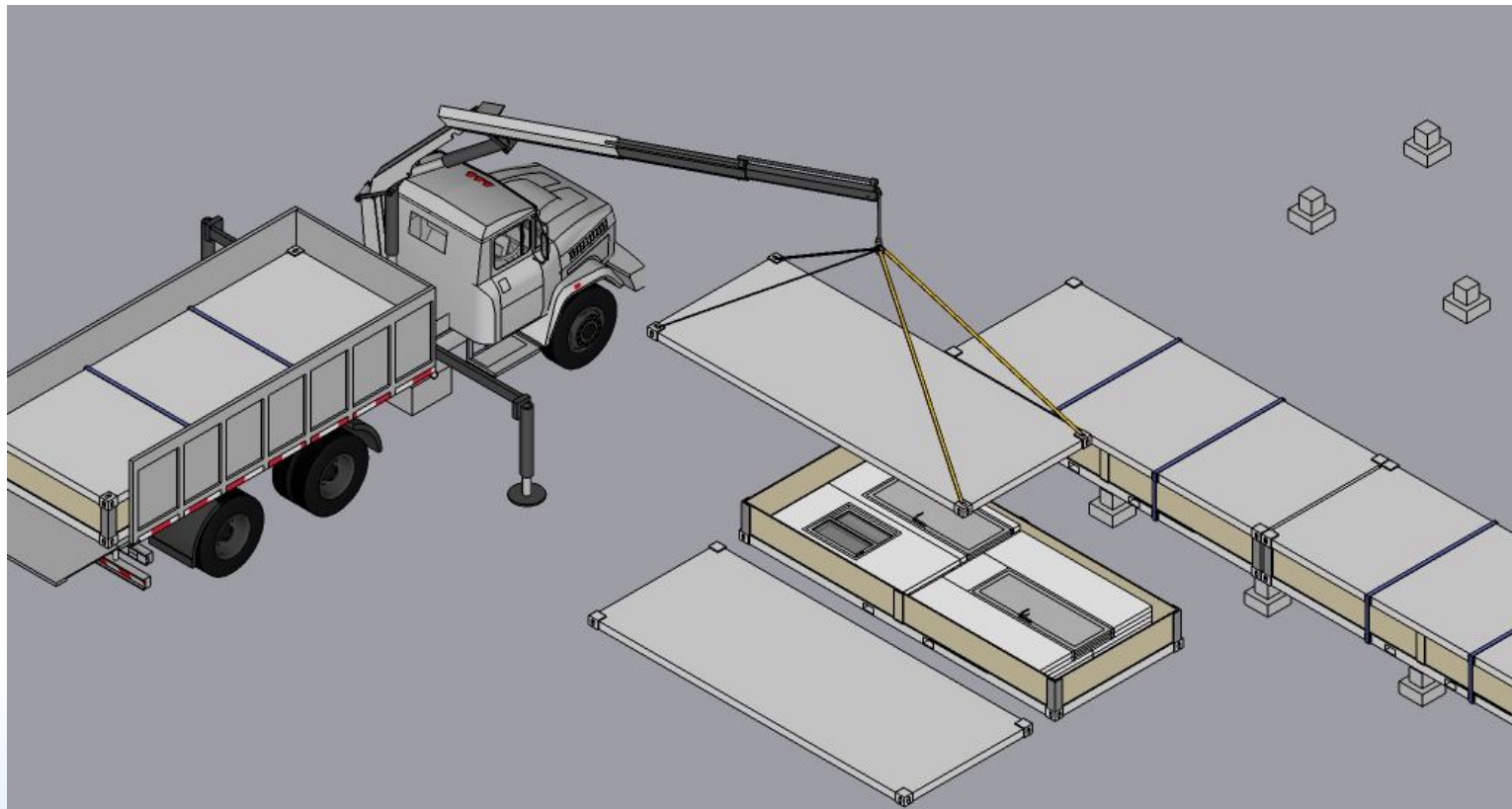


- Delivery to the site using TMC



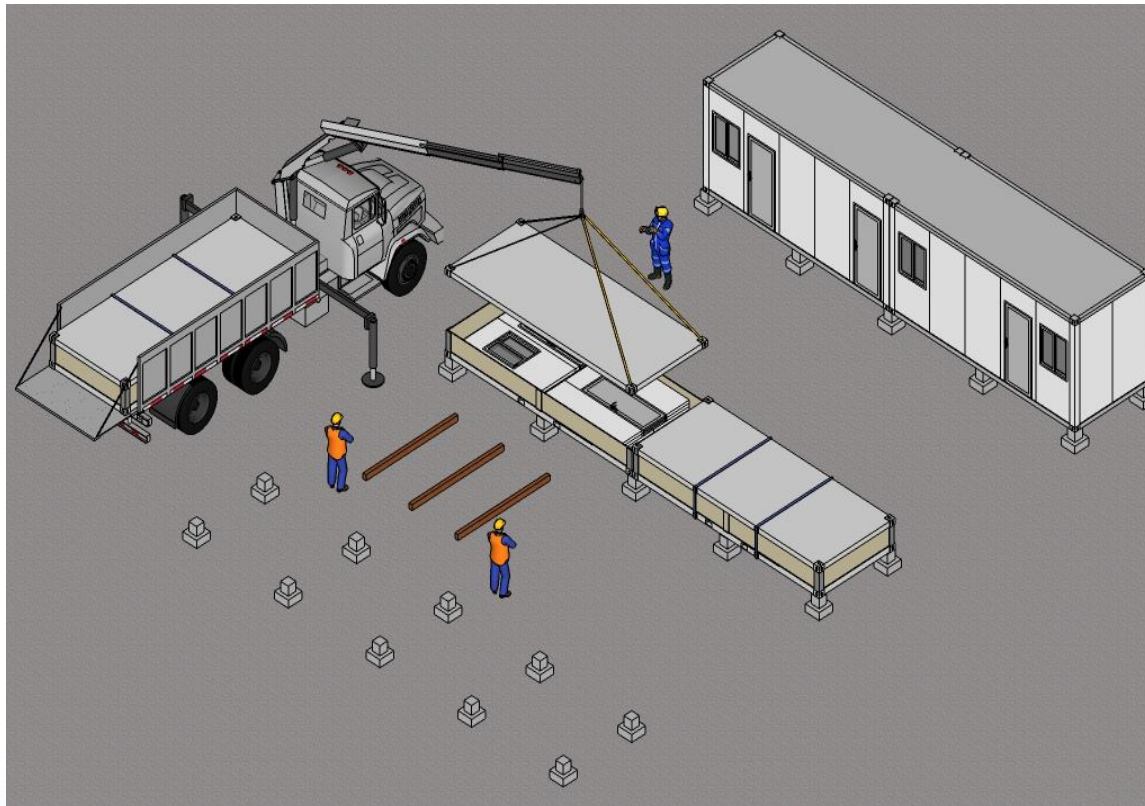
## 6. ASSEMBLE FLATPACK

Assembling at site

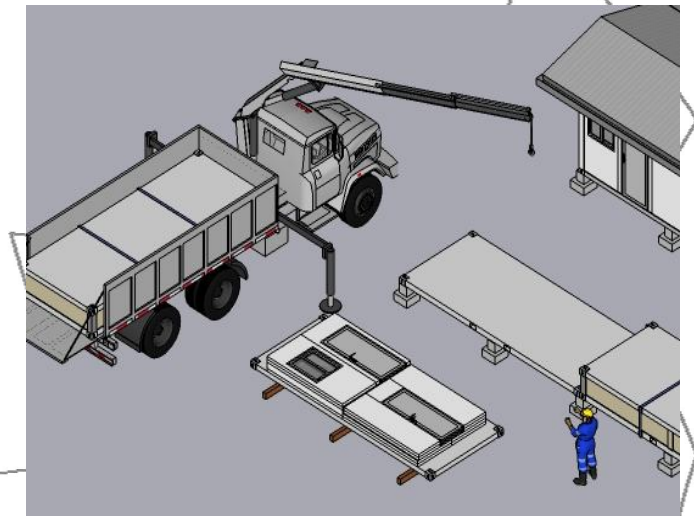




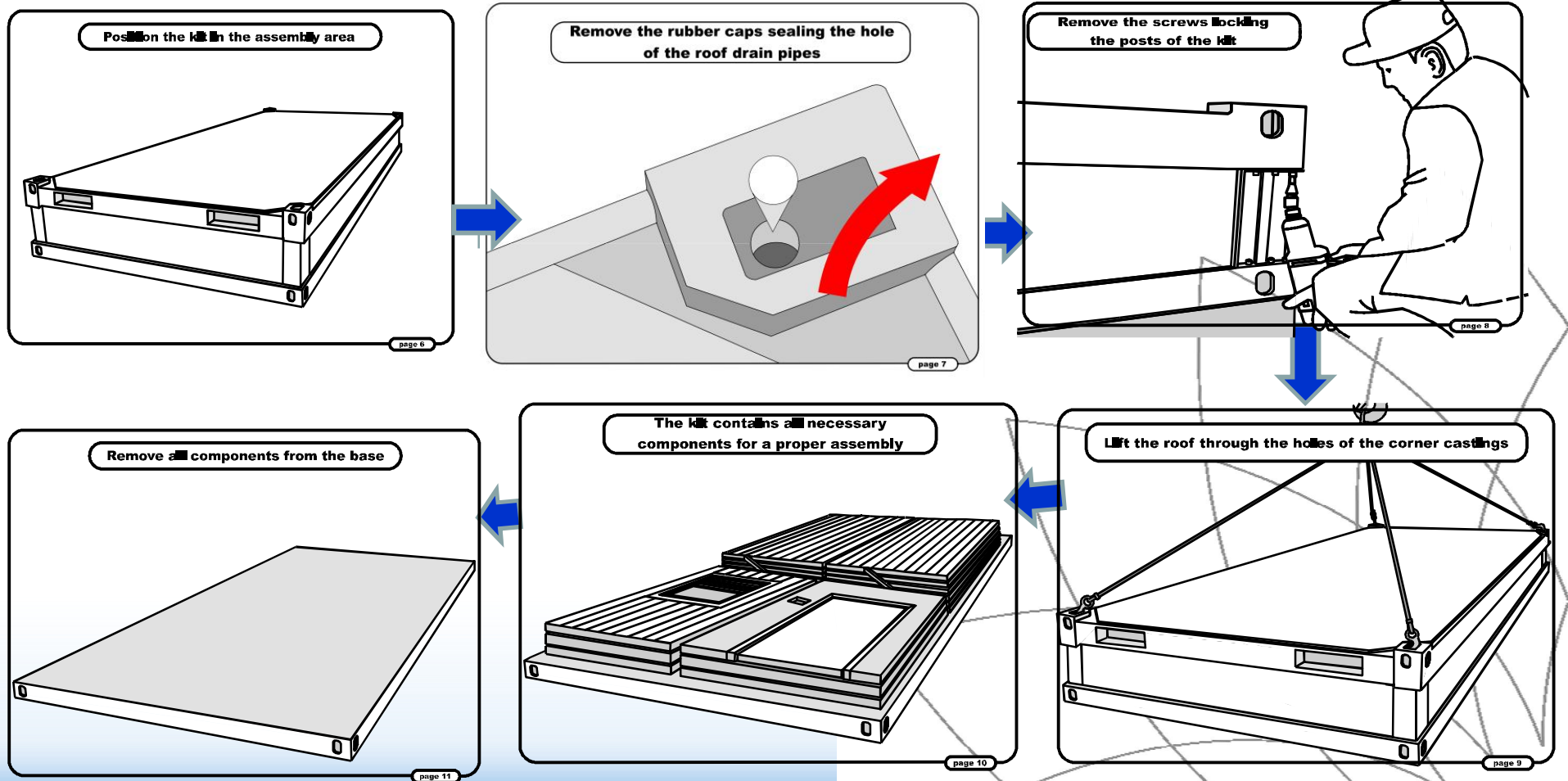
## Removal the cover of Flact Pack using Truck Mini Crane



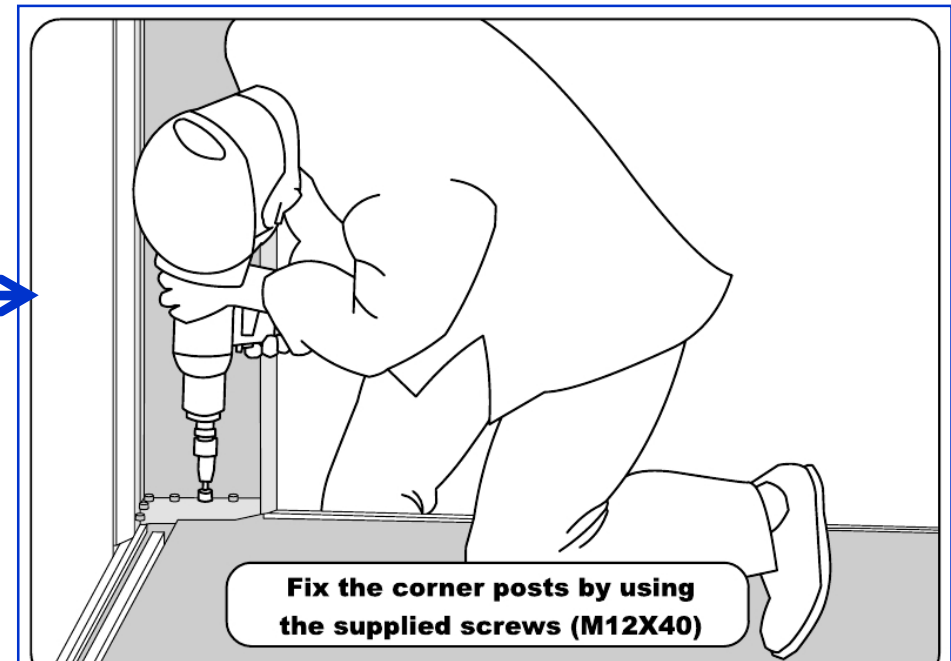
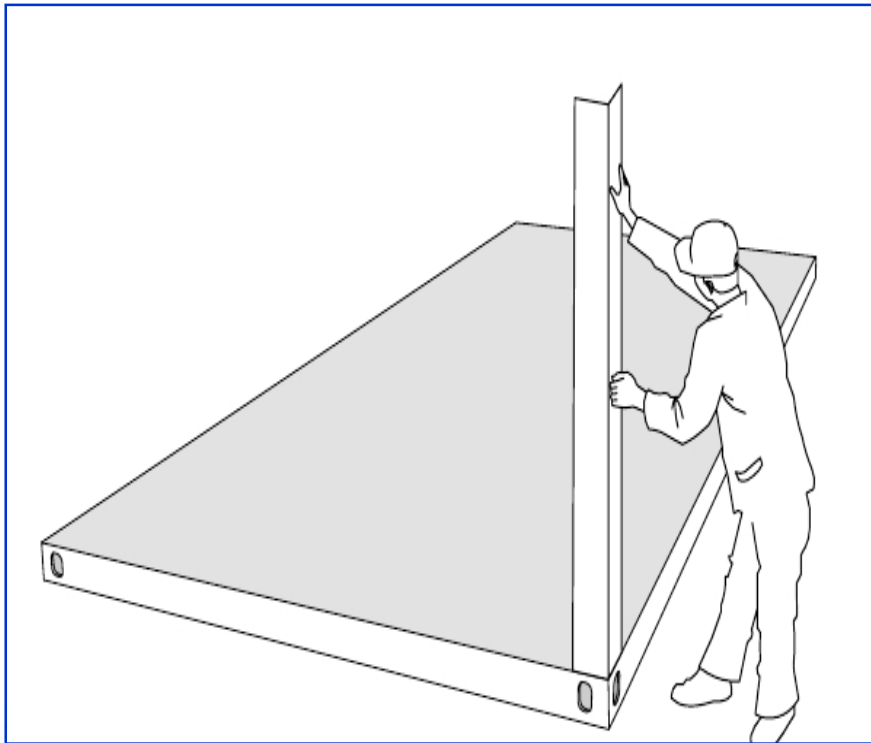
Removal the Material of Flact Pack to out side



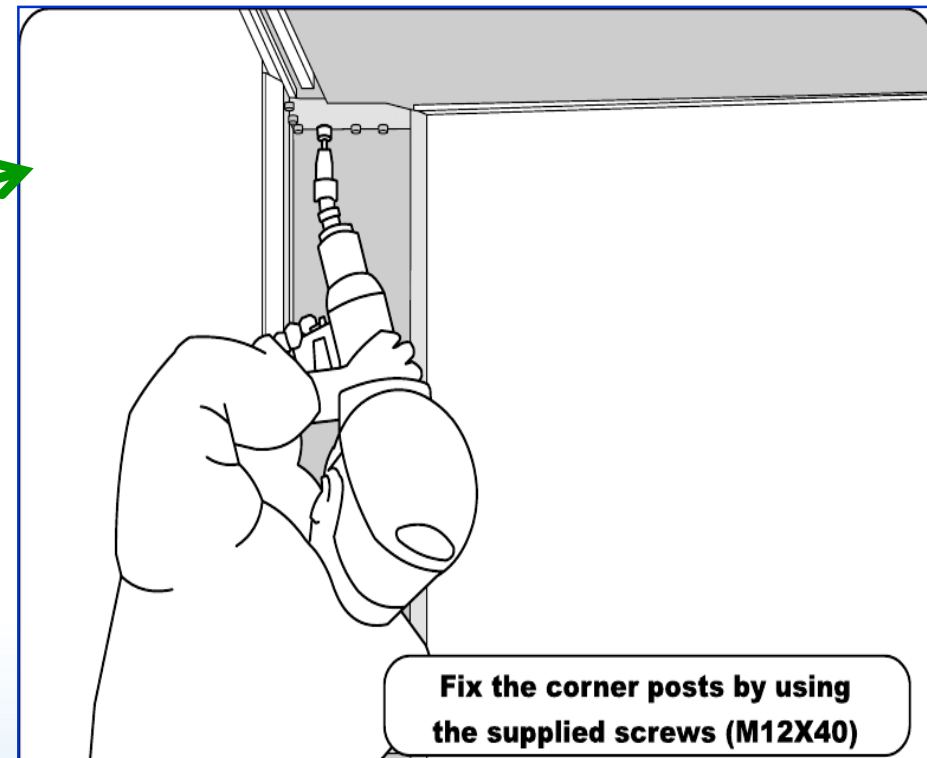
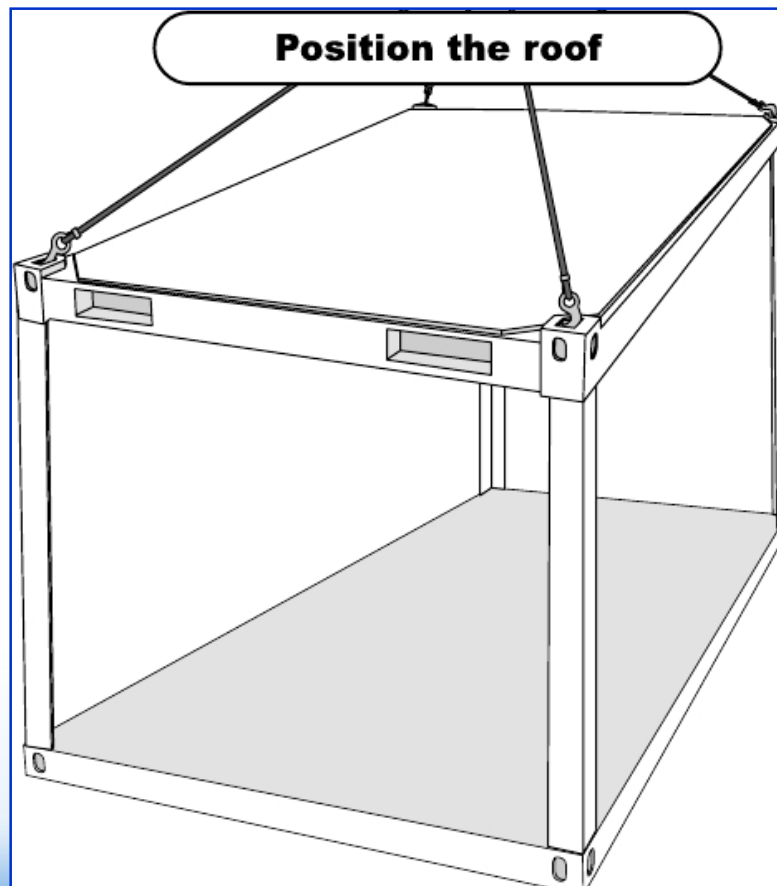
## Flat pack assembly process



- Install the column (corner post ) and fix the corner post by using the supplied screw (m12x40)

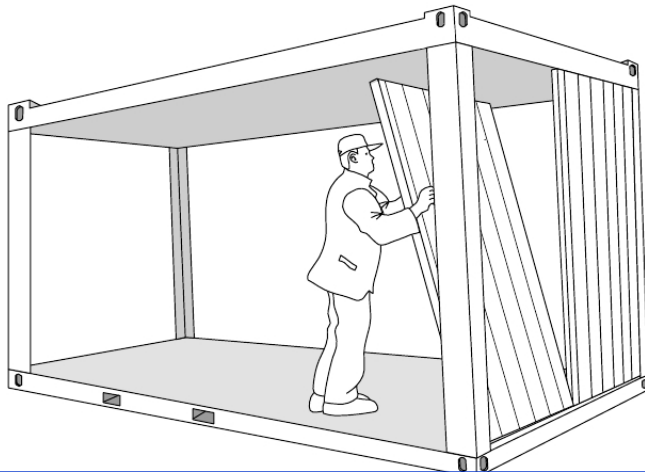


- Lift the cover ( the roof ) Using TMC and fixed corner post by using the supplied screws ( m12 x 40 ).

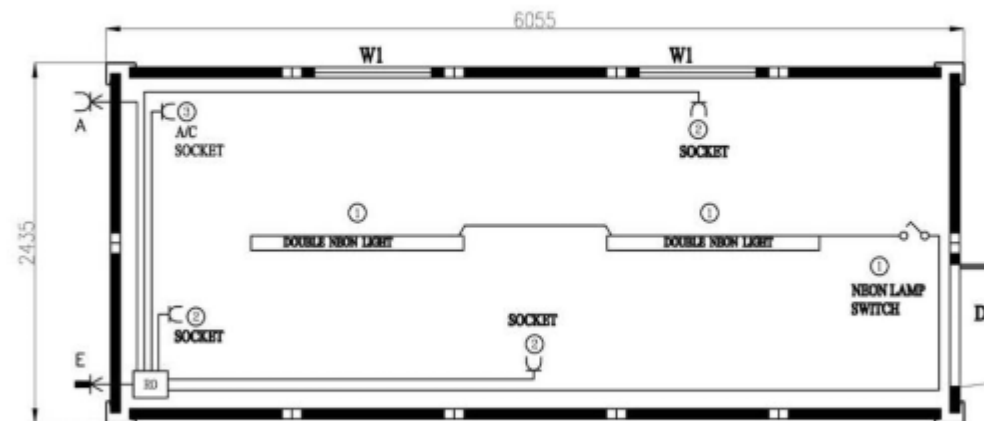


- Place panels according to the standard layout.

Place panels according to the standard layout  
(drawing supplied) or according to your own requirement

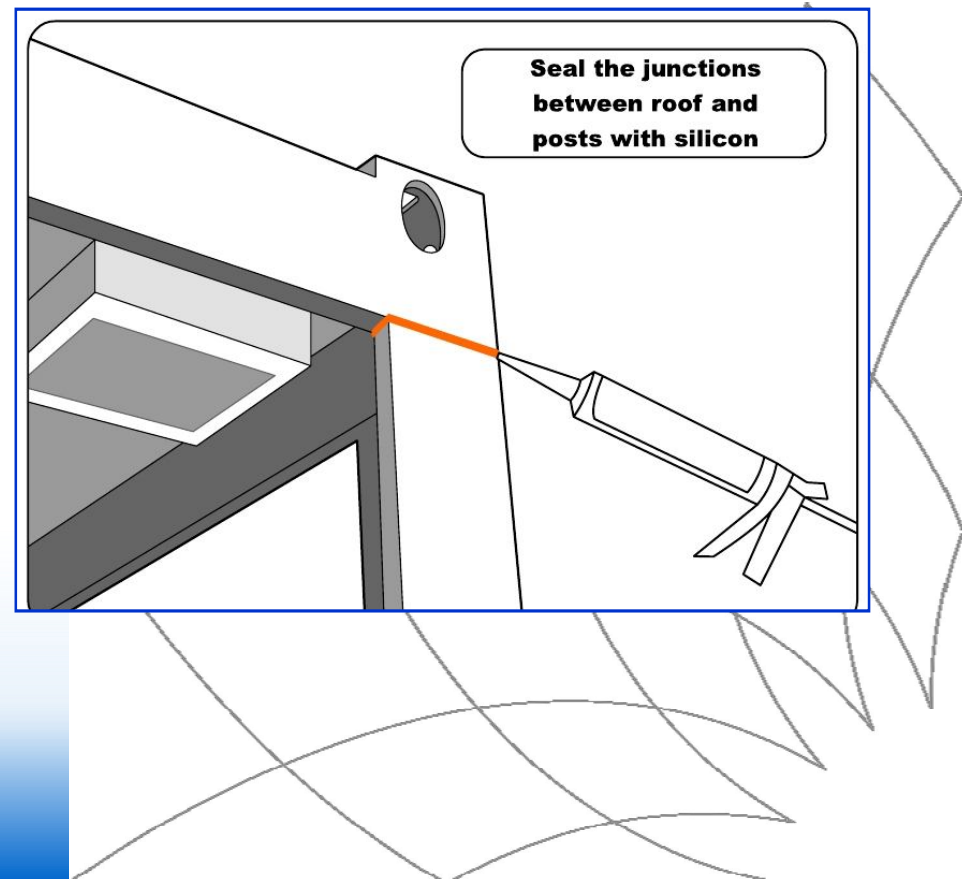
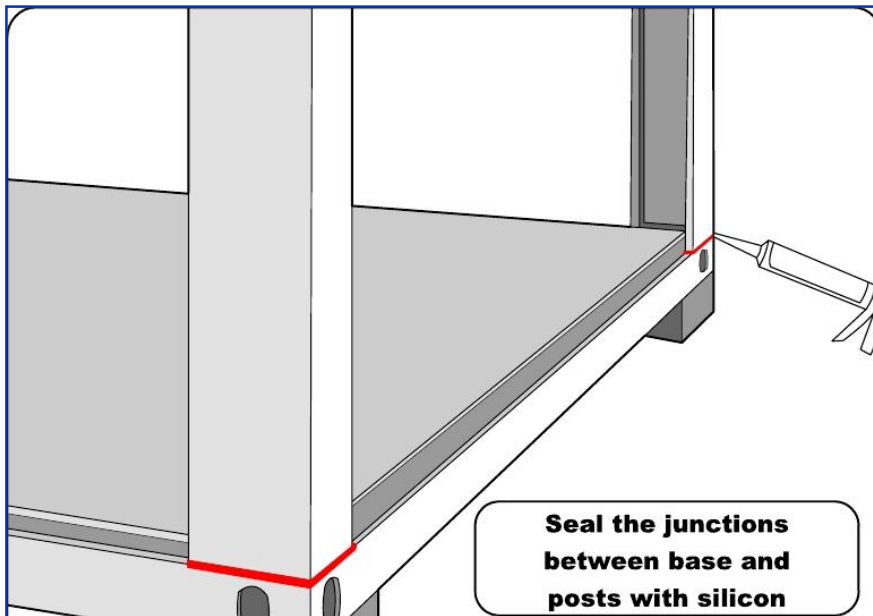


Standard layout

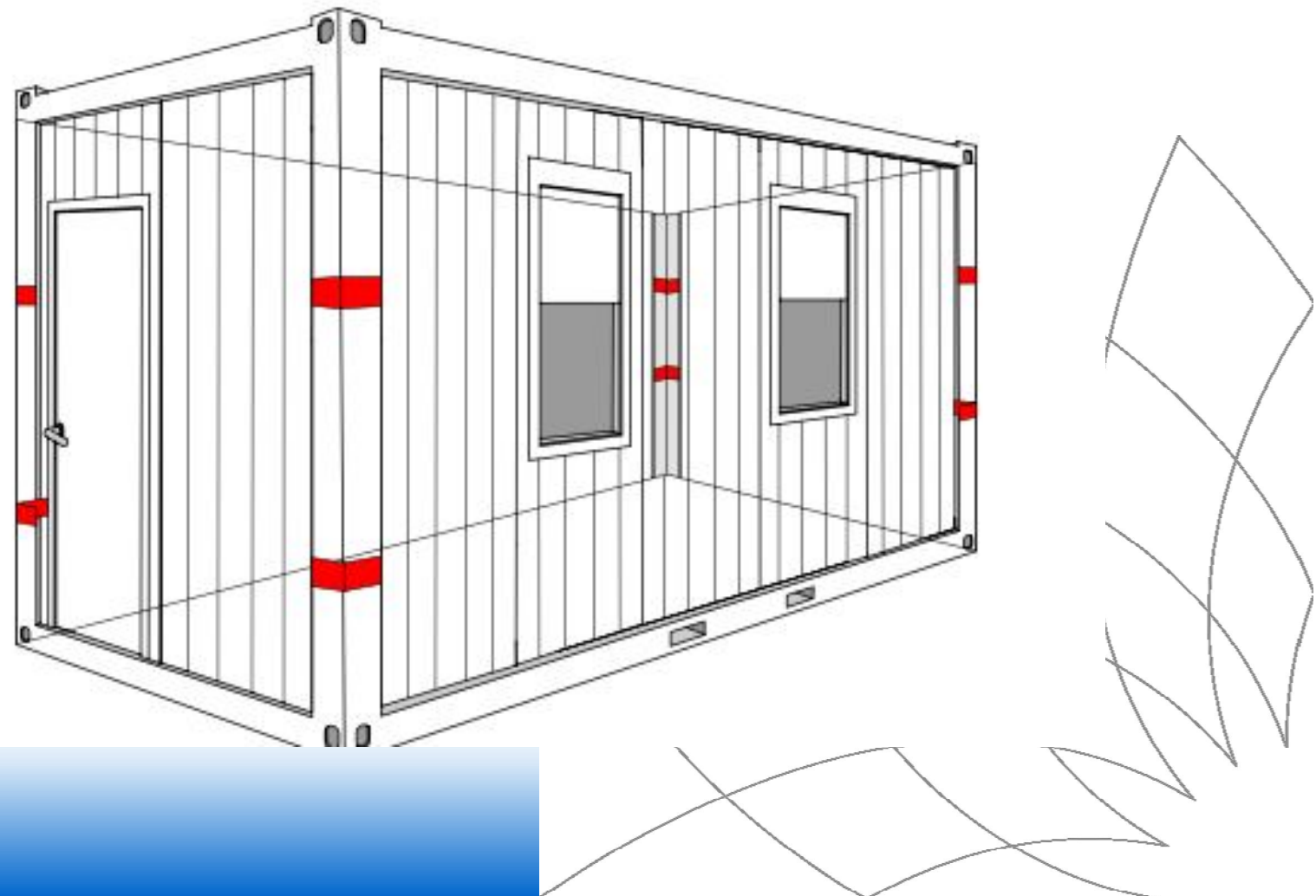




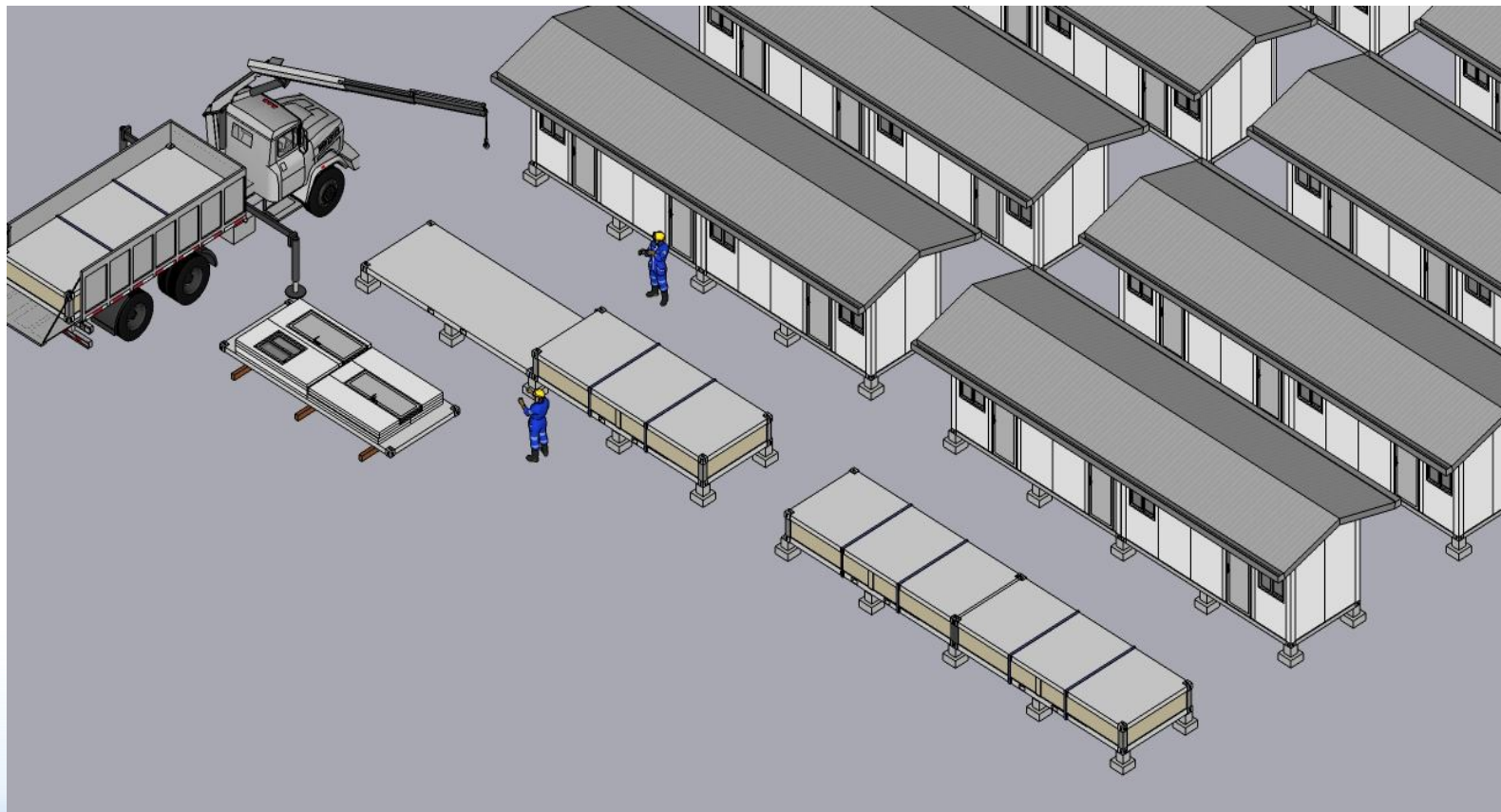
- Seal the junctions between base and post, roof and post with silicon.



**Detail of the position of corner posts reinforcements**



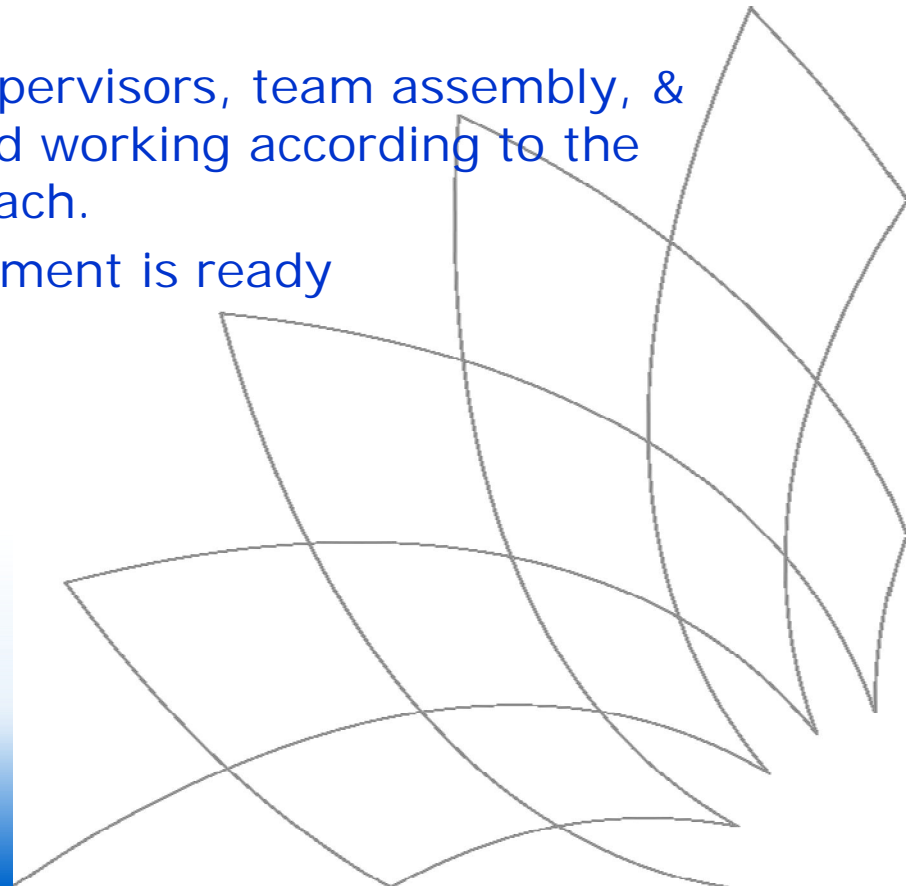
Some units flat pack have been attached appropriate lay out and shop drawing



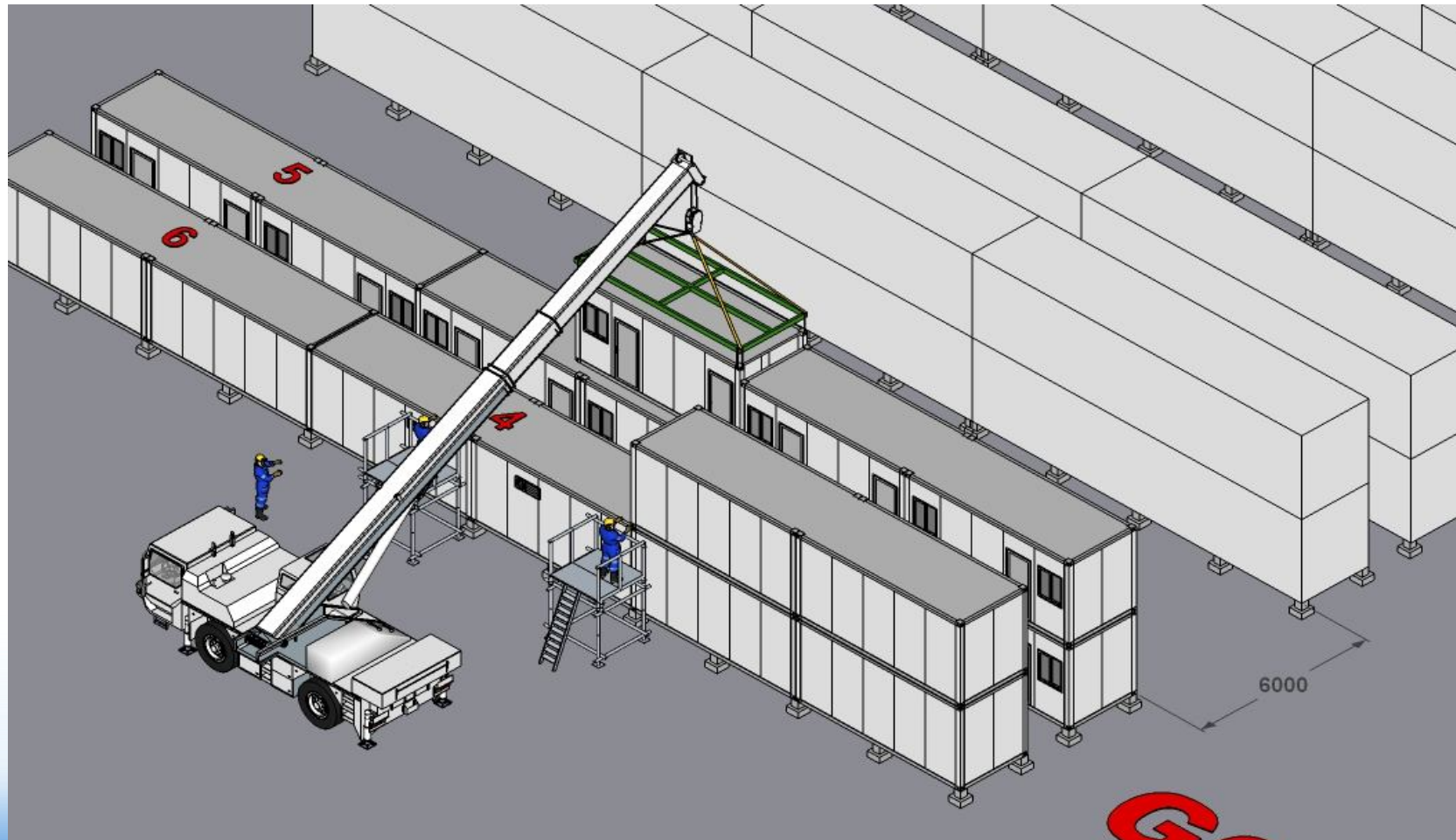


## 7. Lifting unit of flat pack for second floor

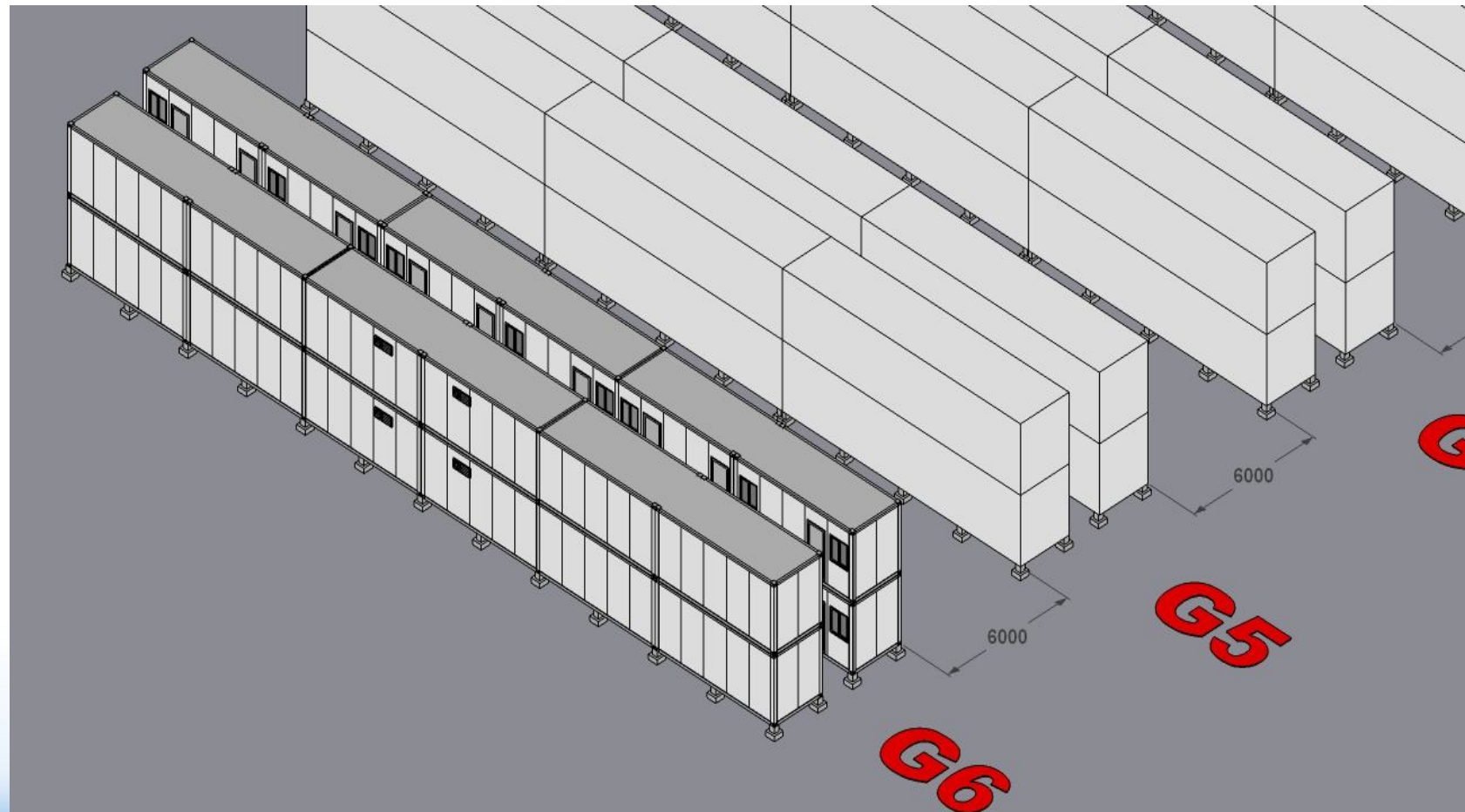
- Manufacture scaffolding safely on four corner units flat pack
- Team lifting workers, supervisors, team assembly, & Team safety is ready and working according to the standard procedure of each.
- all the lifting work equipment is ready on site.



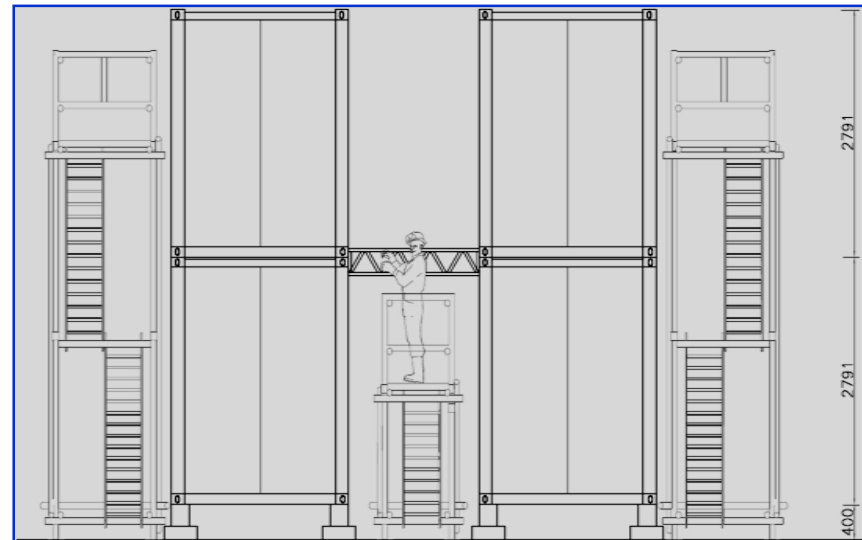
- Erection to scnd Floor Using Crane 35 Ton



## Installation Flat Pack for Type G was Finished



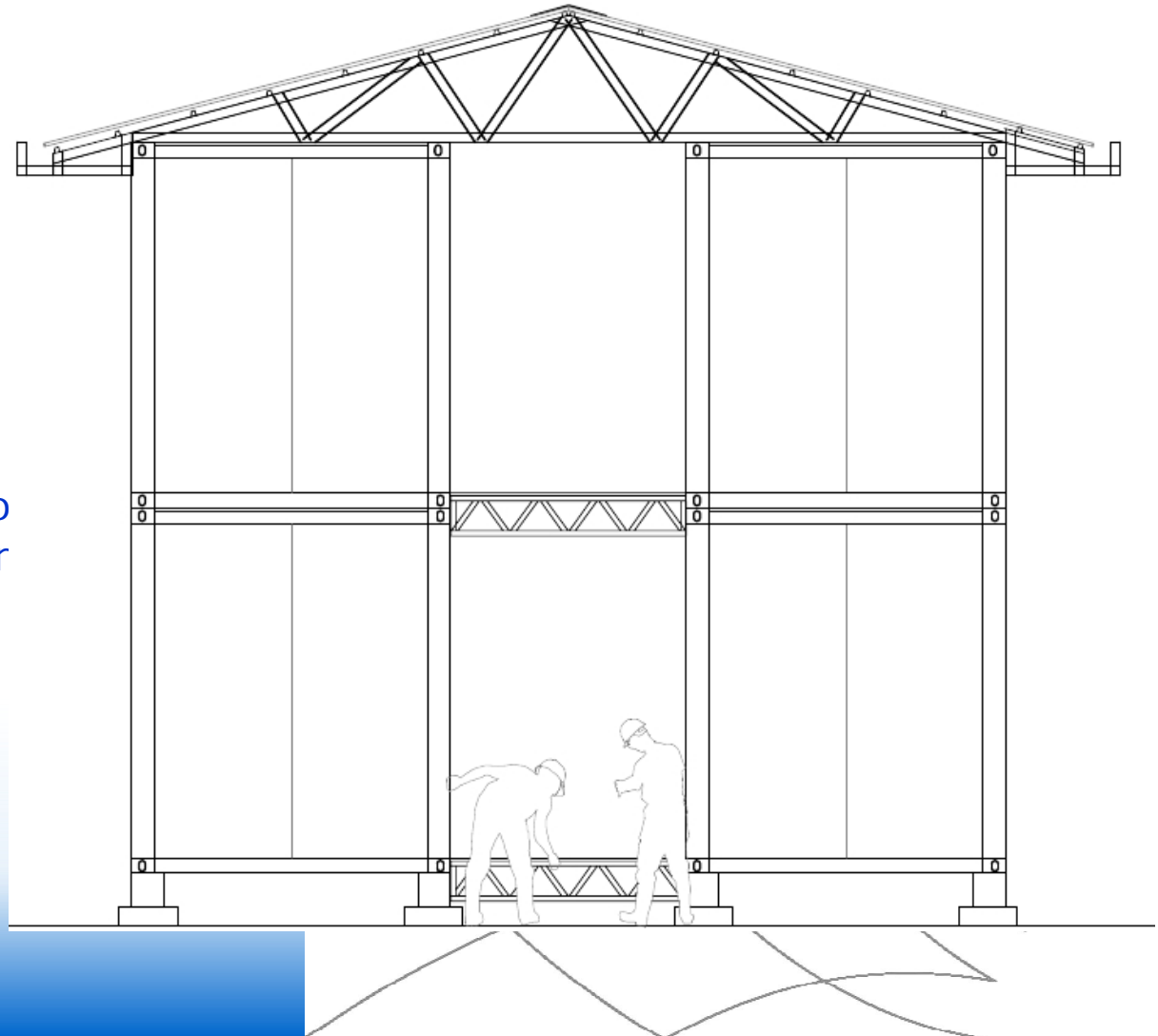
## 8. Install the corridor for second floor



- corridor segments all assembled in the workshop
- corridor segments grouped and numbered before being brought to locations
- ascertained the location is ready and scaffolding safety has been installed
- corridor segments sent to the site by truck, loading and unloading using TMC and installation work begins with a segment-by-segment manually.

## 9. INSTALLING THE FIRST FLOOR CORRIDOR

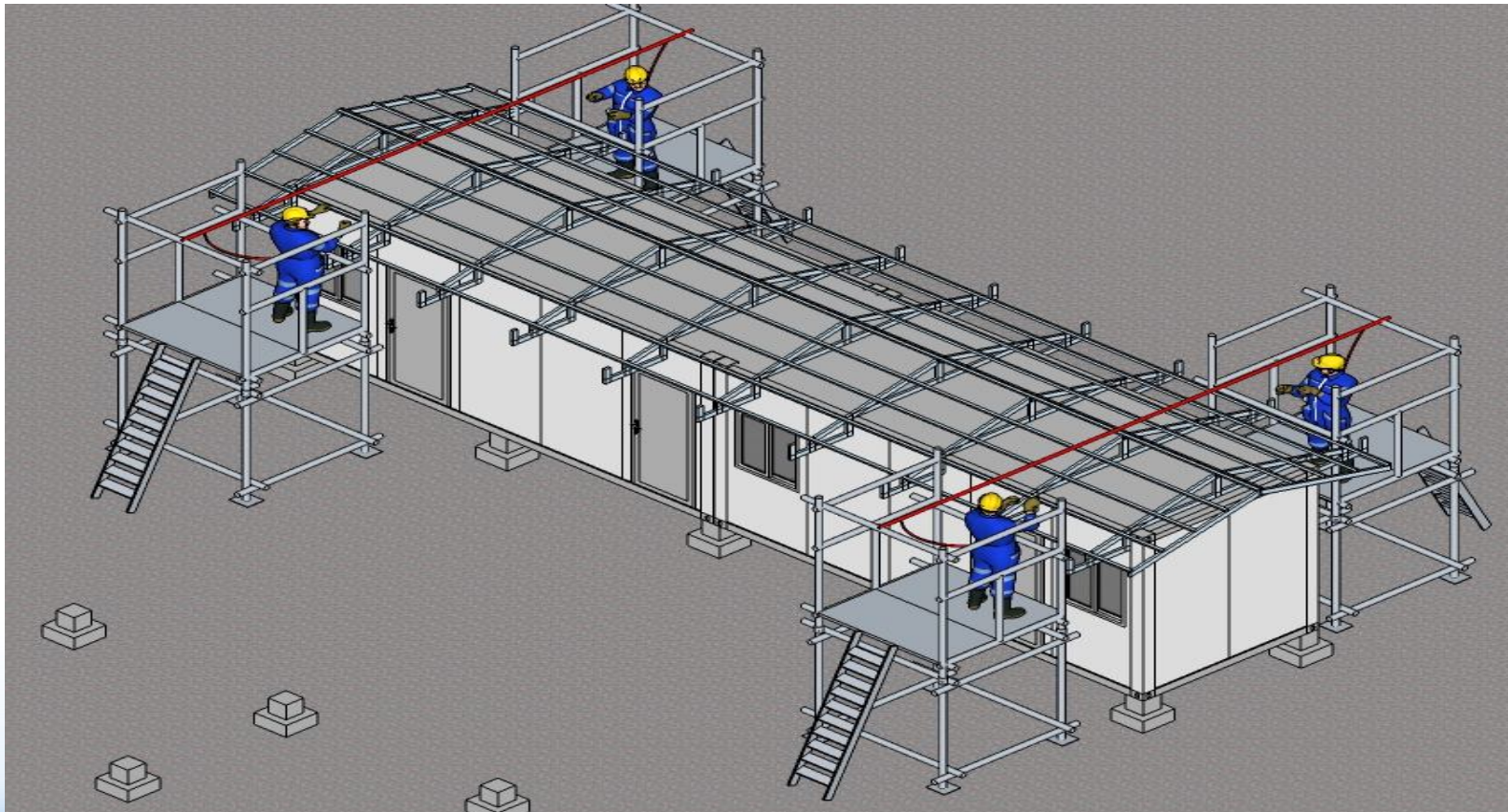
- Dismantling of scaffolding which was in the hallway corridor
- The method used is equal to the second floor corridor mounting method





## 10. Erection the roof truss

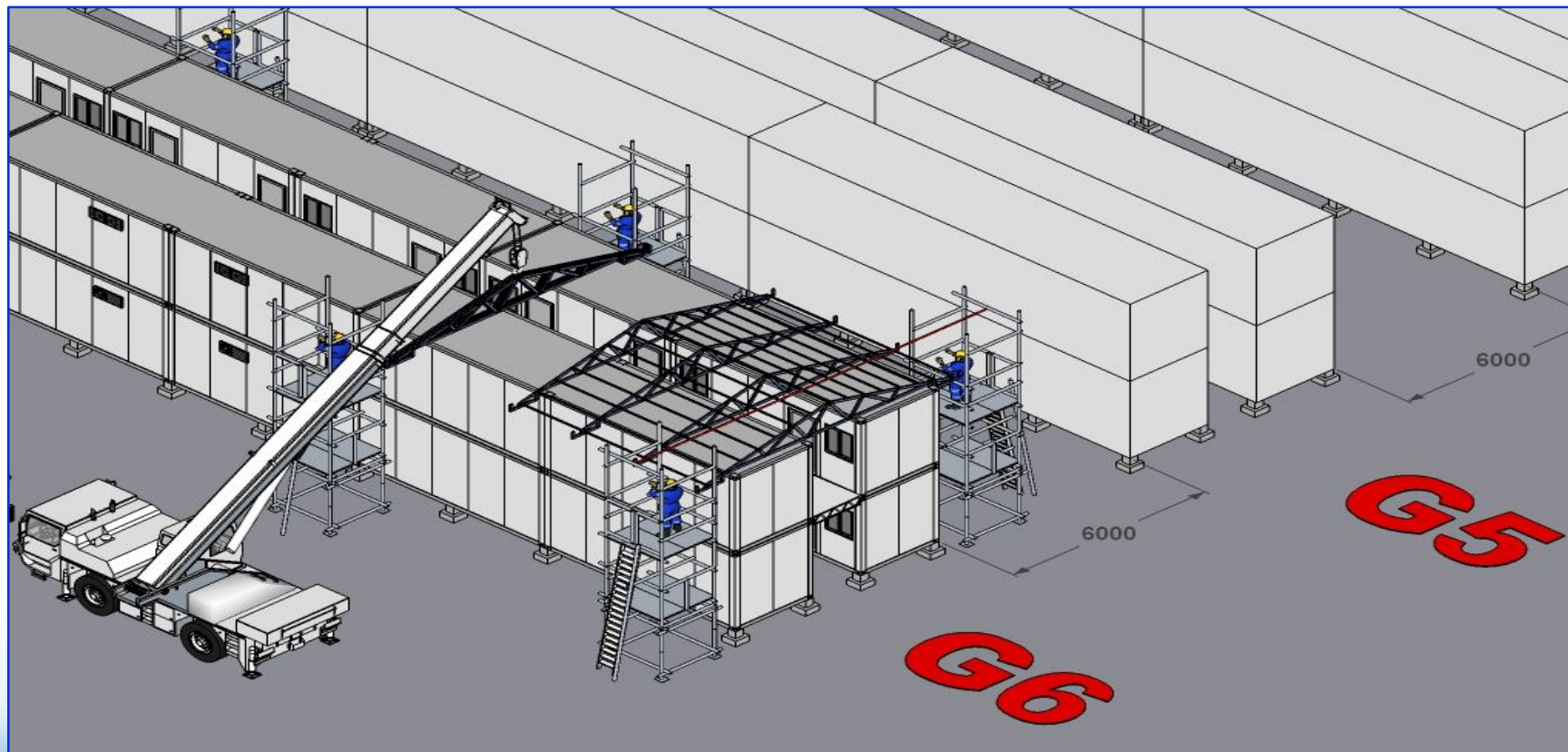
For type F, erection by manual



## Erection the roof truss for type G

### Lifting by Crane

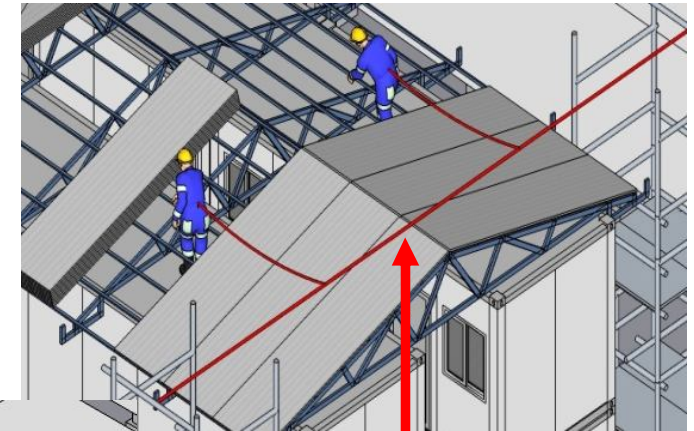
in this work we use the scaffolding safety and life line in fulfilment of the standard procedure of working at height



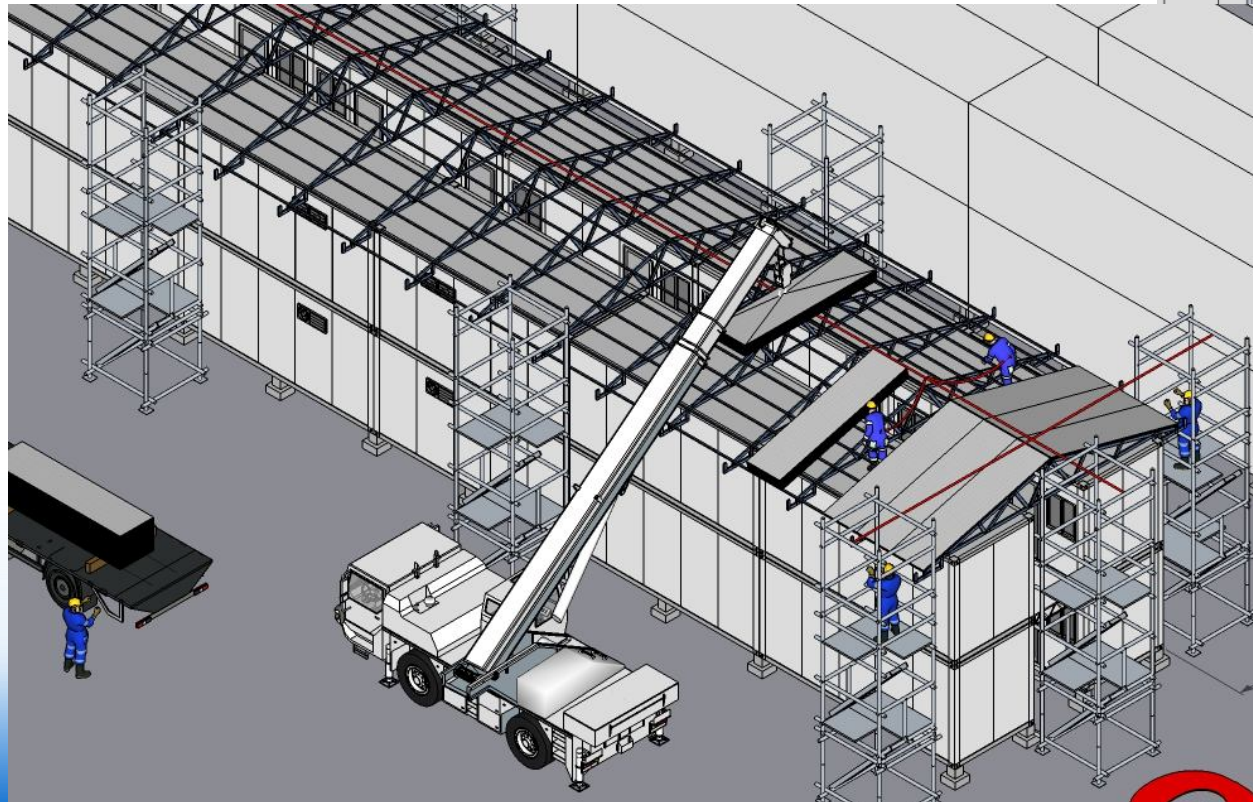


## 11. Installing roof closing

Guidelines for installation In order to lift watertight longitudinal ribs are advised to use the lift screw mounted in the middle distance ride on the roof with a pedestal spacing > 950 mm. There are side cover roof tops in standard form corresponding images.

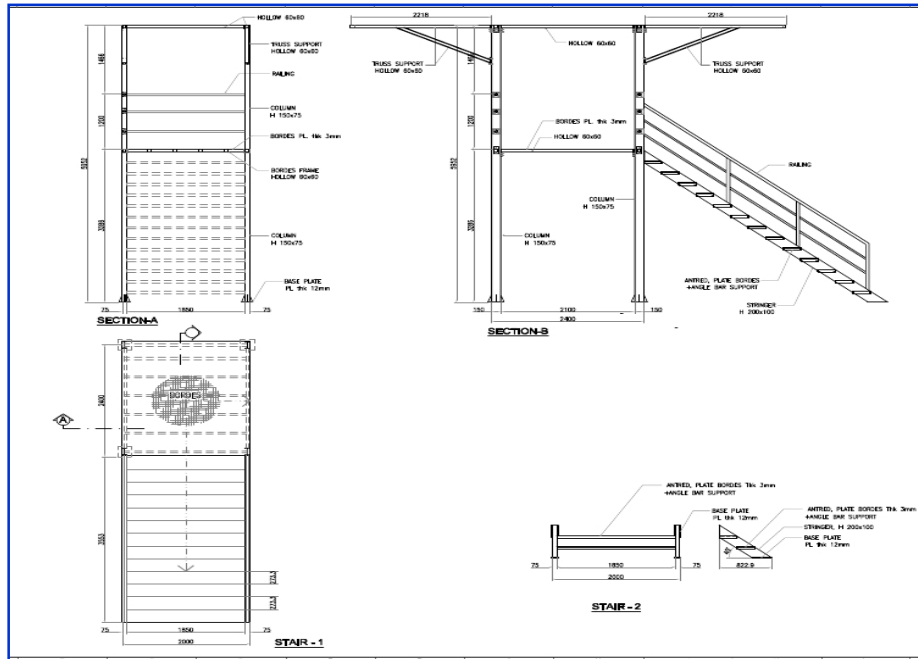


**Life Line**





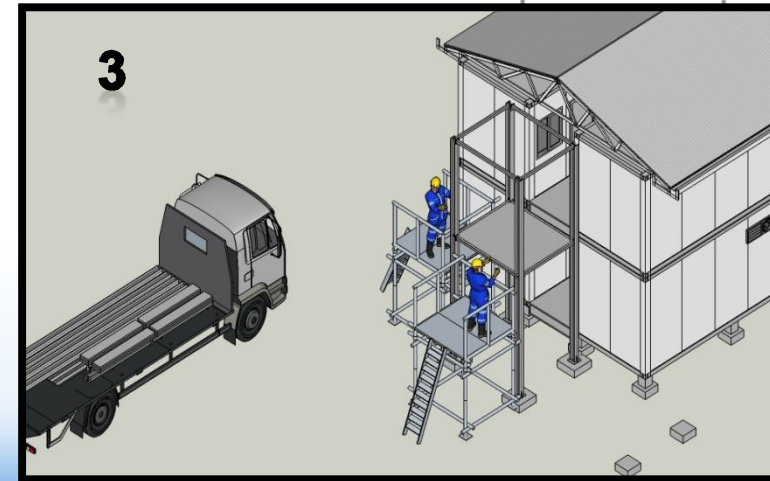
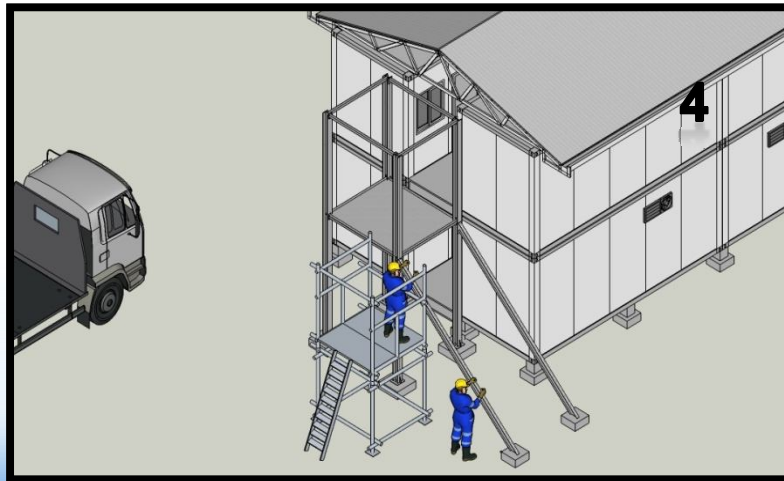
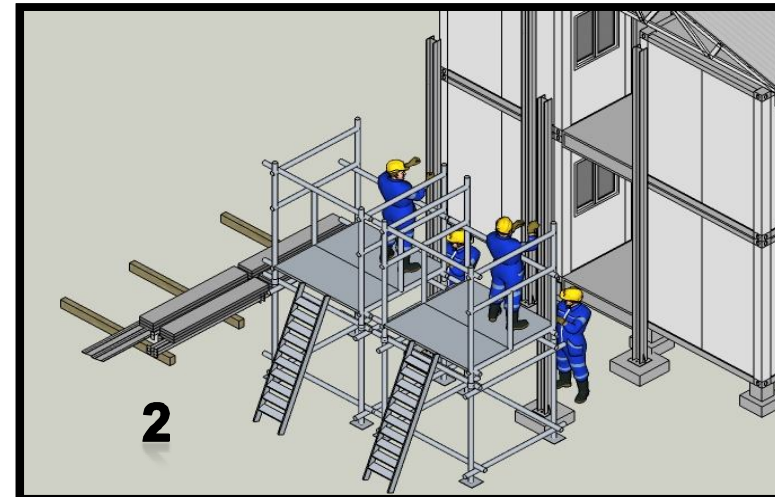
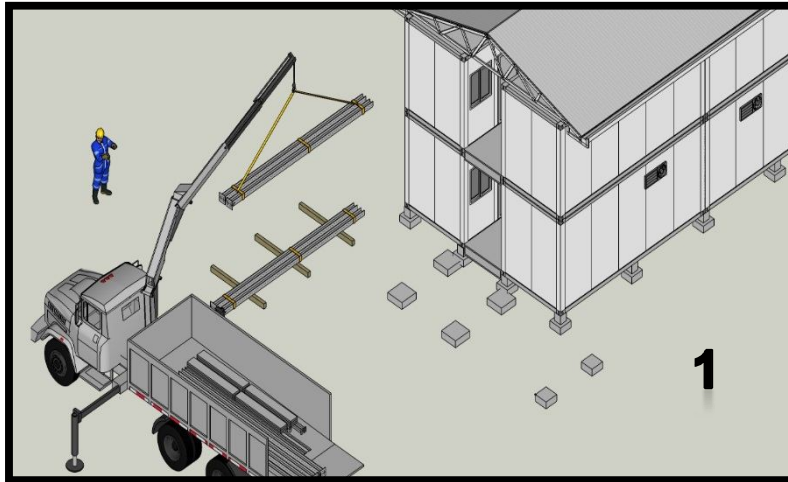
## 12. INSTALLING THE LADDER

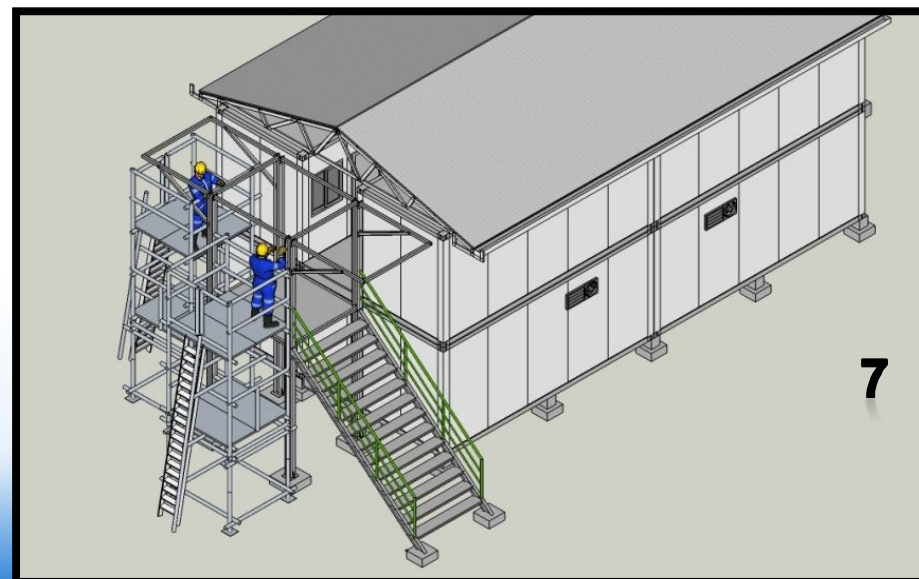
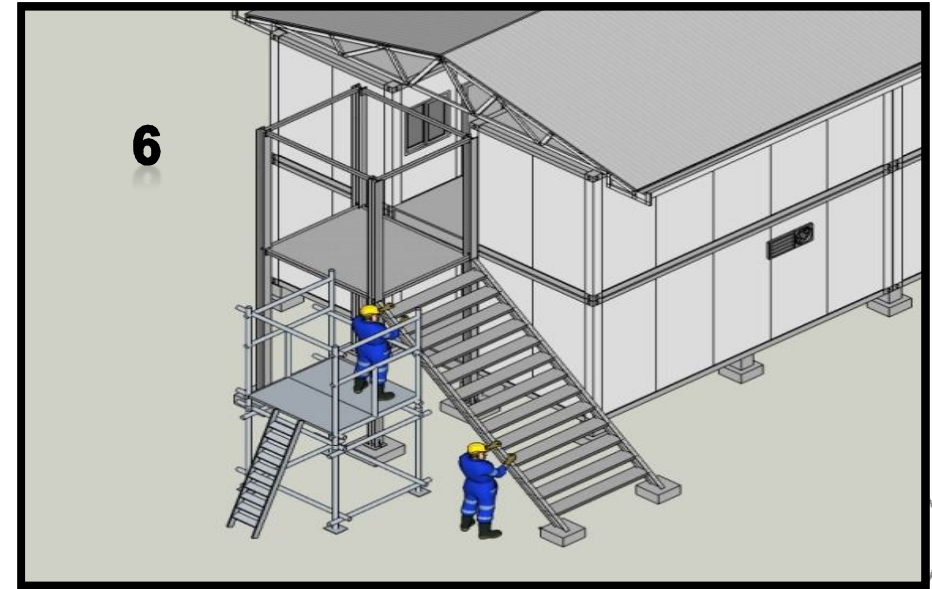
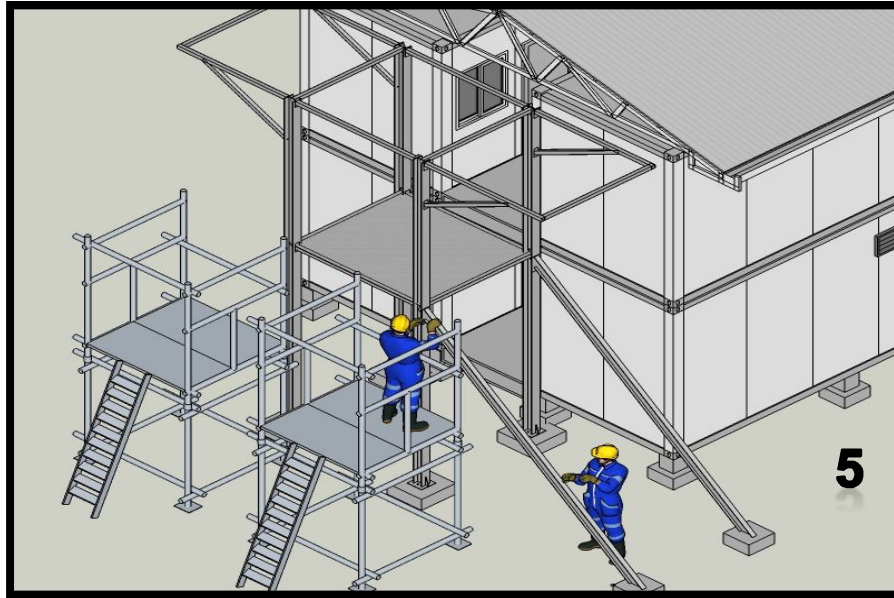


Ladders all assembled in the workshop

- Installation of foundations stump stairs at position
- Ascertained the location is ready and scaffolding safety has been installed
- Lifting column on the foundation
- Lifting installation borders
- Lifting installation of a series of stairs and handrail

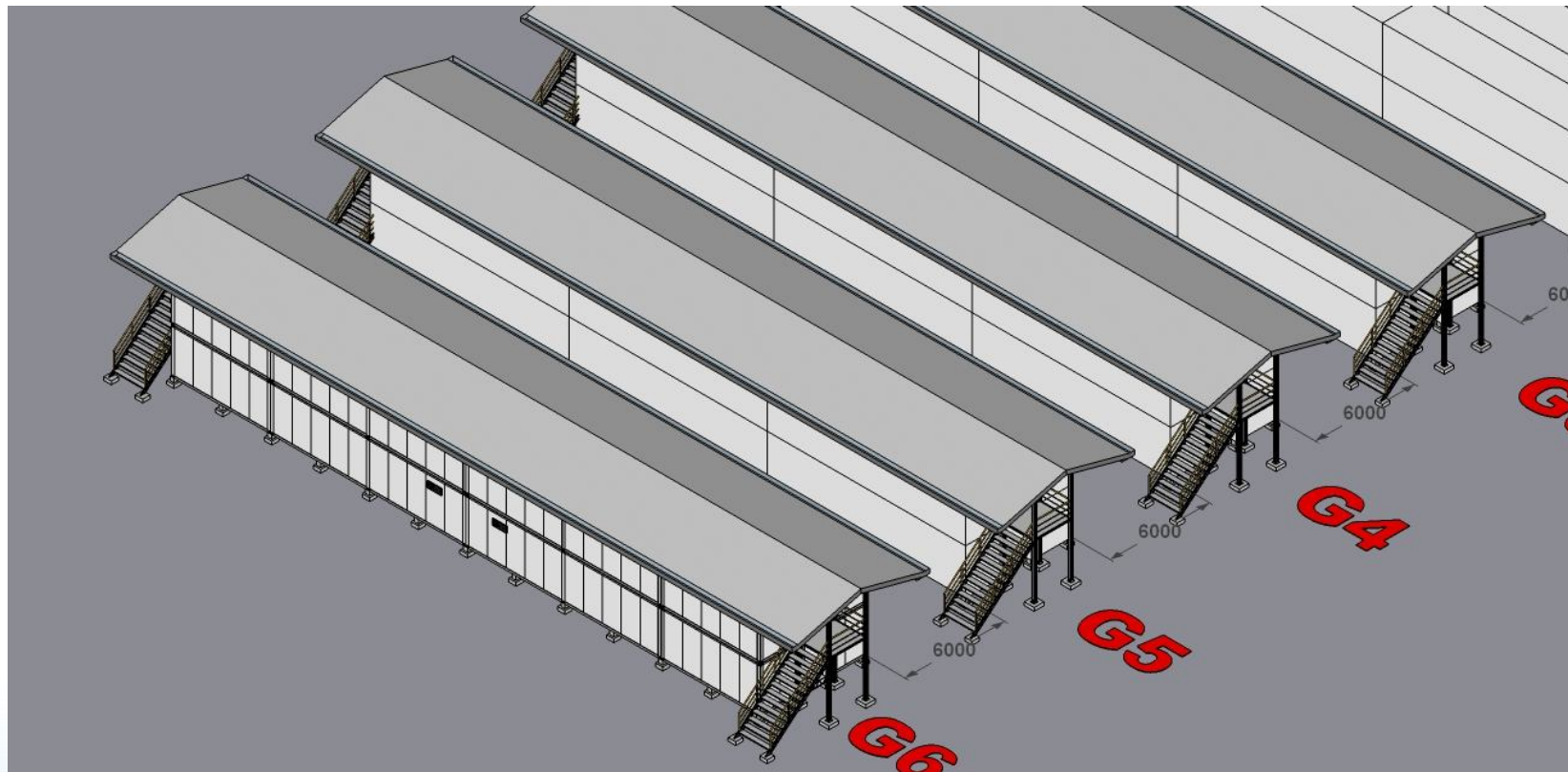
## The Process lifting Components of Ladder







## FLAT PACK BUILDING TYPE G.





## FLAT PACK BUILDING TYPE F



- It is within the procedure of PT. Tractus Multi Services to maintain a security management system to minimize and prevent risk to our business and our customers from the impact of security related incidents.
- No activities shall compromise the security of people. We will diligently protect our property and information and that of our employees and customers.
- We will foster openness and dialogue with employees, customers, suppliers and subcontractors on security matters.



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**THANK YOU**

**PT TRACTUS MULTI SERVICES**

