

Alto[®]

SHORING



SAFETY

SLINGING

ADAPTABILITY

A COMPLETE DECK
RANGE

Alphi[®]
Formwork and solutions

Alto | A complete deck range



Alto

Alto decks come in **3 sizes**. All decks are equipped with **safety** features and accessories that facilitate **handling**.

The **AlphiSafe** safety system can be mounted at ground level.

Retractable **hoisting rings** are built into the deck. The slinging procedure is completely safe, from laying on the ground to the definitive positioning of the deck.

Practical uses

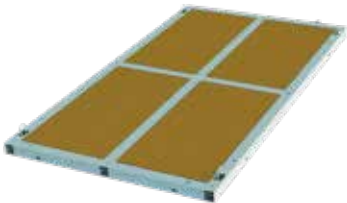
The Alto deck can be used in various configurations and can serve as:

- a work surface for workers,
- a traffic surface for easier access,
- a surface for receiving slab formwork such as TopDalle, MaxiDalle, etc.
- a support zone for form panels and ballasts.

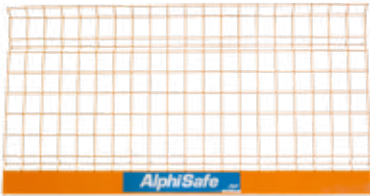




*Site: Comurhex II
conversion plant
Client: GTM Sud,
SM Entreprise
Location: Narbonne*

COMPONENT



Alto		External dimensions (m)	Total surface area (m ²)	Weight of panel (kg)	Plywood type	Maximum allowable load (kN/m ²)
Decks		4.40 x 1.40	6.16	225.00	Multi-ply 27 mm thick	15
		2.40 x 2.26	5.42	235.00		
		4.40 x 2.40	10.56	435.00		



ALTO ACCESSORIES

Grid*		Dimensions (m)	Weight (kg)	Description
		1.25 x 1.30	7.60	<ul style="list-style-type: none"> The wire grid is galvanised, with polyester powder coating
		2.40 x 1.30	13.90	
		2.50 x 1.30	14.50	
Galvanised post*		Cross-section (cm)	Height (m)	Weight (kg)
		3.5 x 3.5	1.34	3.50
Adapter*		Name	Weight (kg)	
		Alto adapter	1.96	

* Compliant with EN 13374 standard

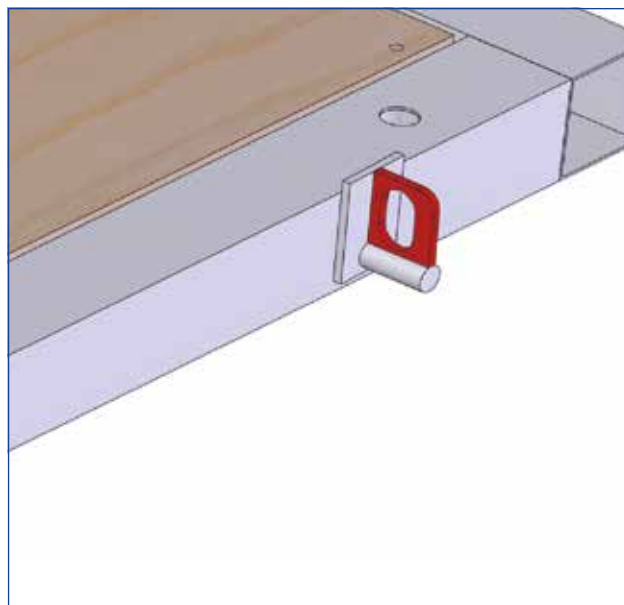
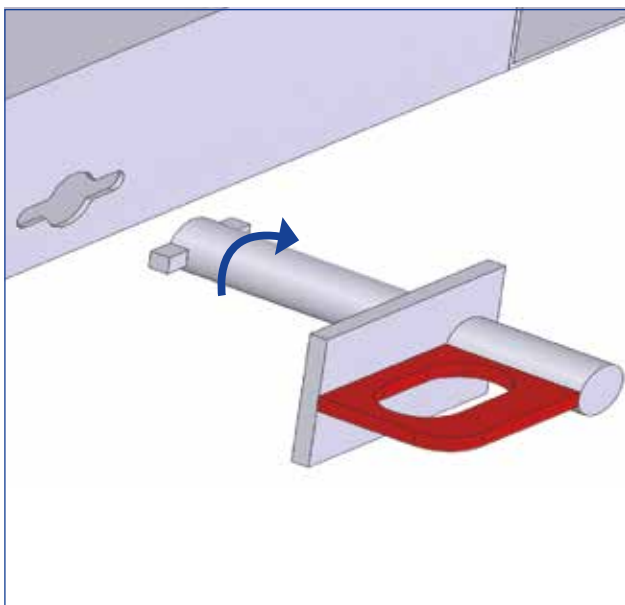
ALTO ACCESSORIES

Handling	Hoisting eye	Description
		<ul style="list-style-type: none"> Lifting/sliding
	Lifting beam	Description
		<ul style="list-style-type: none"> For lifting and moving Alto deck
Deck clamp	Description	
	<ul style="list-style-type: none"> Securing Alto deck to a skin 	

Extension	Bracket	Description	
		<ul style="list-style-type: none"> To create a plank covering between two decks, extension brackets are installed to hold battens which accommodate 18, 21, or 27 mm plywood 	
	Batten	Compensating plywood thickness (mm)	Batten cross-section (mm)
		18	60 x 89
	21	60 x 86	
	27	60 x 80	

DIFFERENT COUPLING METHODS

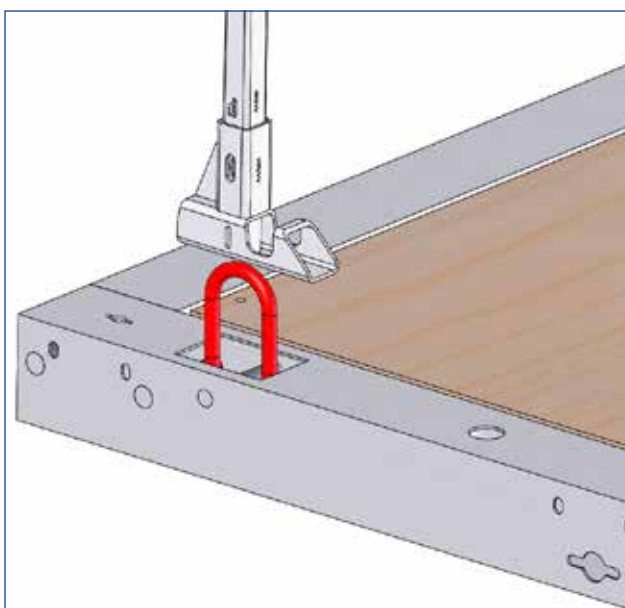
HOISTING EYE



- When slinging the panel, make sure no material or equipment is stored on the Alto deck.
- Eight slots are located all over the Alto panel to insert quarter-turn hoisting eyes.

- Hoisting eye in use.

HOISTING RING



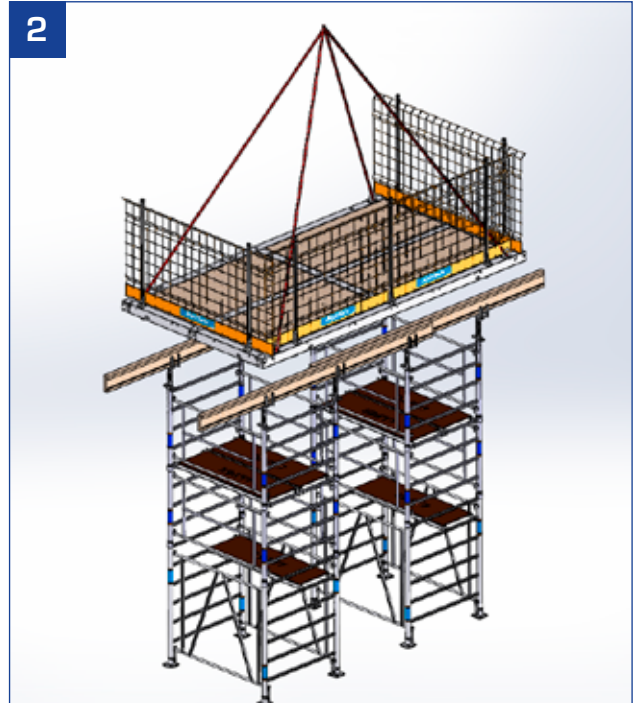
- Built-in retractable hoisting rings.

NB: Regardless of the configuration selected, Alto decks must be handled individually.

PROCEDURE WITH SLING



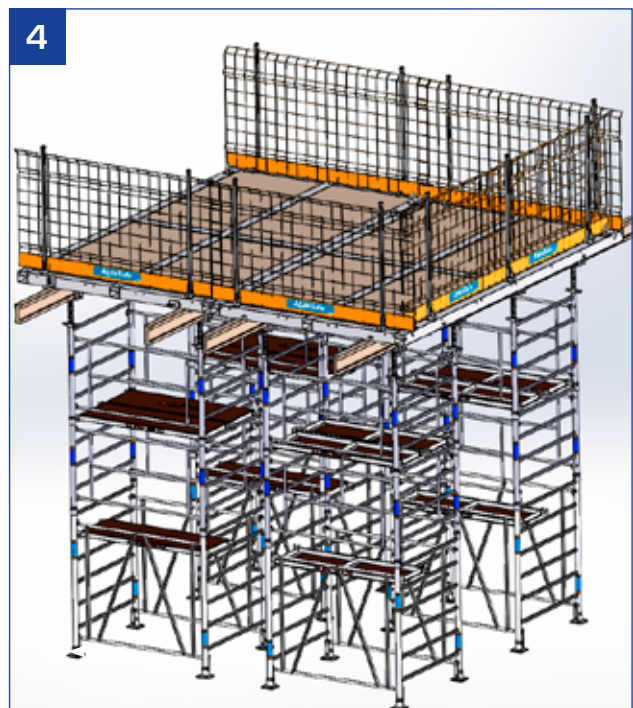
- Use of a sling with four 4-m long strands.
- Each strand and its hook should have a minimum MWL of 1 tonne.
- Sling the Alto deck, with safety system mounted on the ground.



- Set up towers according to the plan provided and position the Alto decks on the primaries.



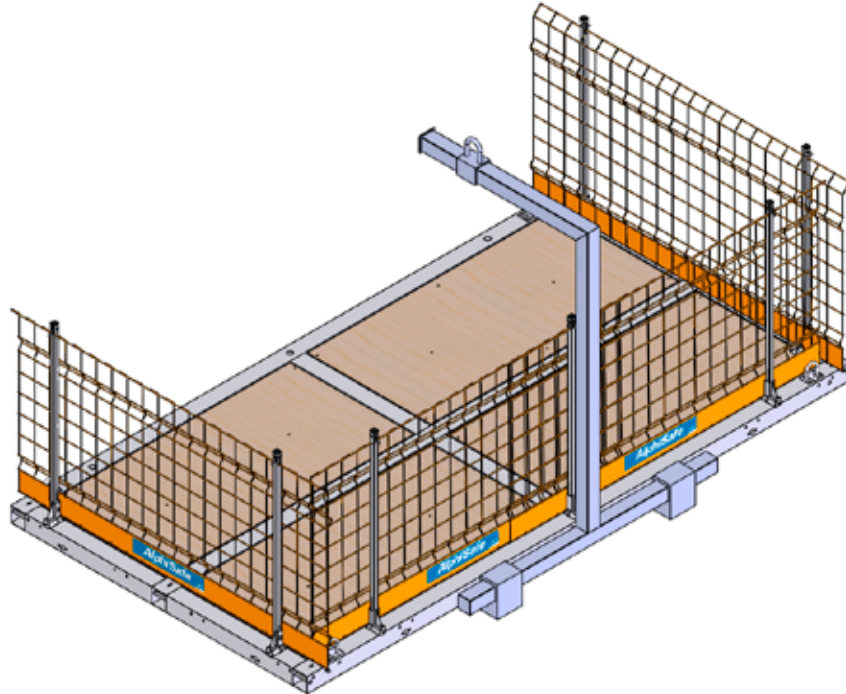
- Check that the deck is correctly positioned on the towers (distance from base to edge of deck < 60 cm).



- Install the other decks.
- **Warning (stability):** comply with the layout plan and Alphi recommendations.

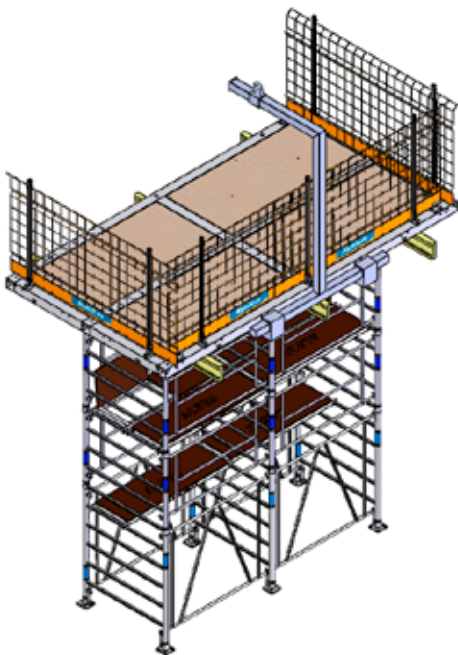
PROCEDURE WITH LIFTING BEAM

1



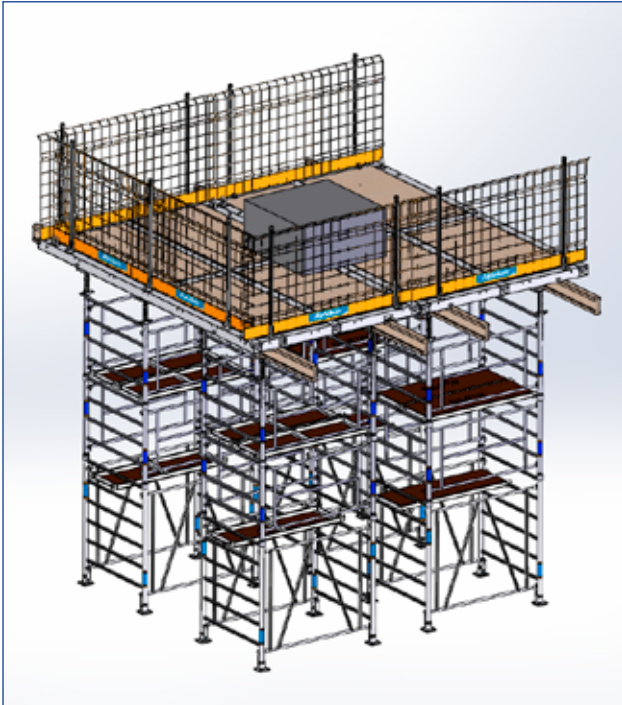
- A lifting beam should be used when the use of slings is not authorised (areas with no crane access).
- However, installation with slings is the preferred method.
- The position of the Alto deck should be centred on the lifting beam forks so as to balance the loads.

2

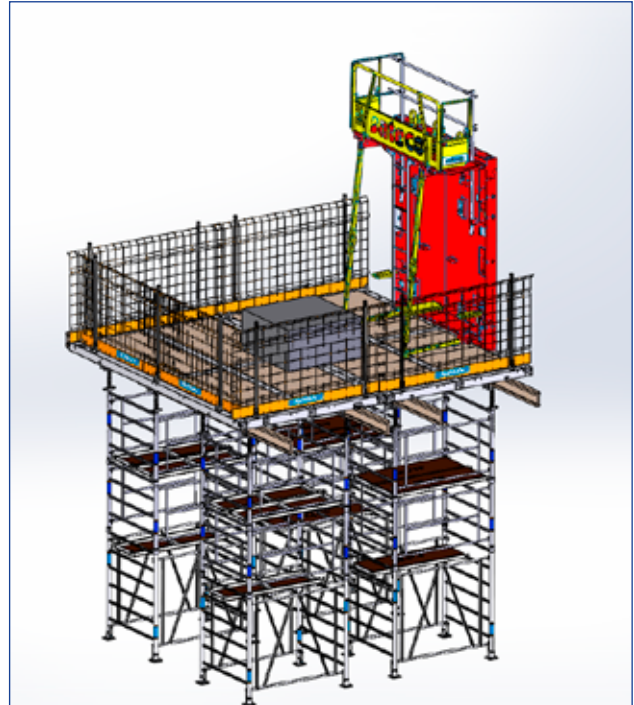


- Warning (stability): limit overhangs to prevent the risk of tipping.

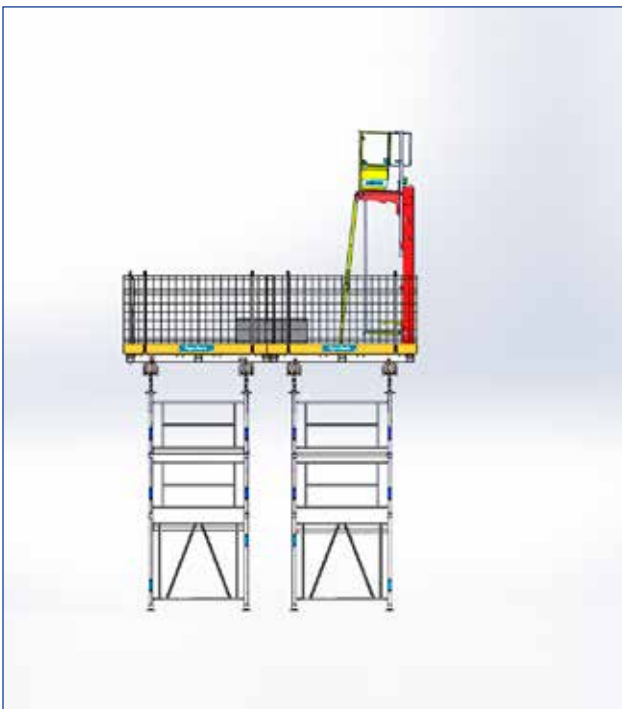
USE FOR FORM PANEL SUPPORT



- Installation of the form panel ballast.



- Form panel installation



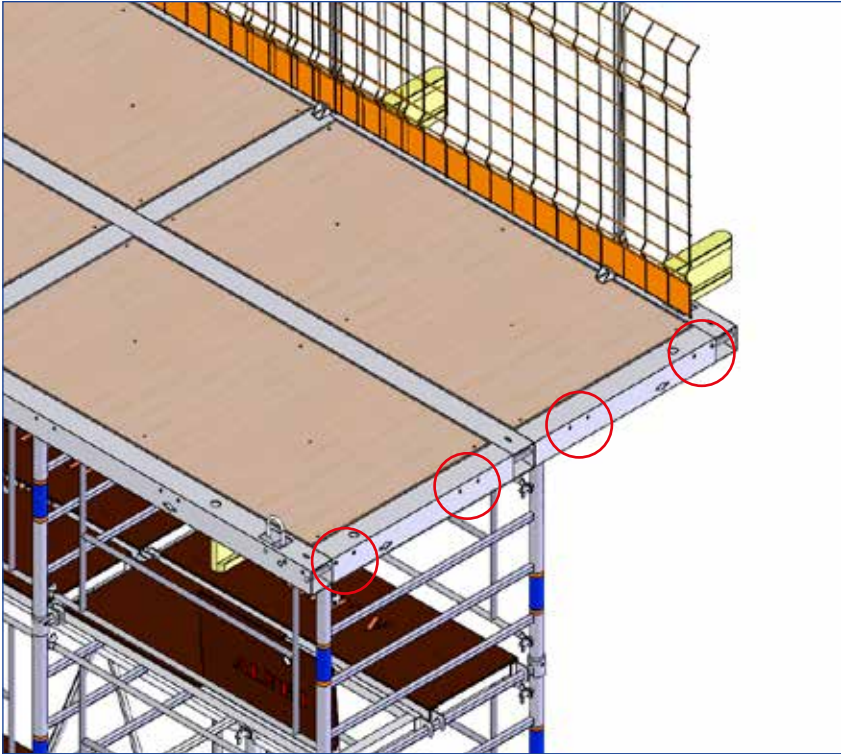
- **WARNING (stability):** in the context of a point load such as form panel ballast, comply with the plans provided and the specific procedures.

NB:

- Use form panel ballast of weight not exceeding 2t (120 x 120 x 60 cm).
- Use form panel of weight not exceeding 1t/m.

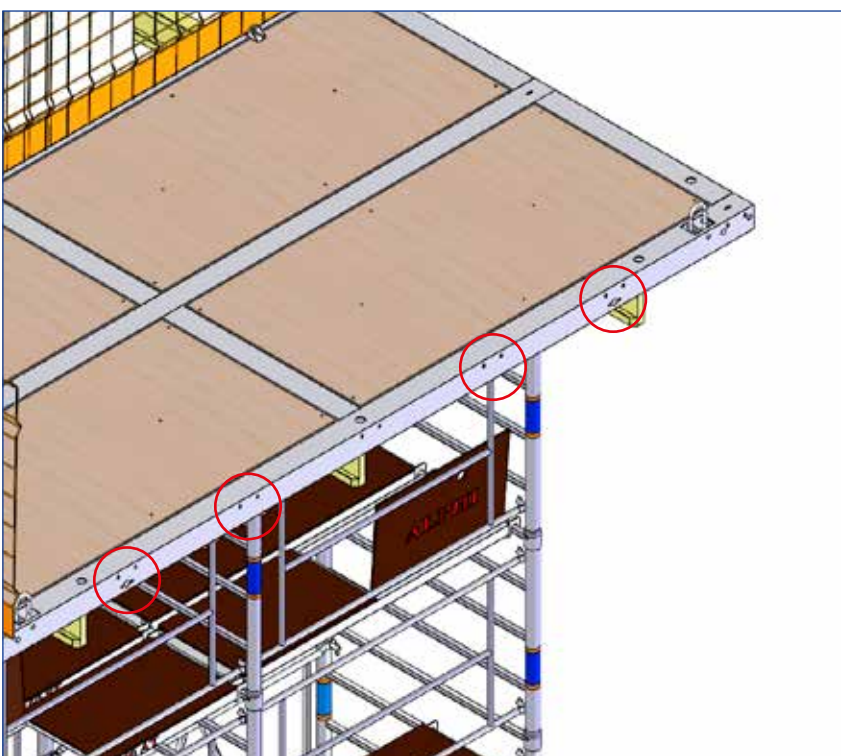
EXTENSION

LATERAL EXTENSION

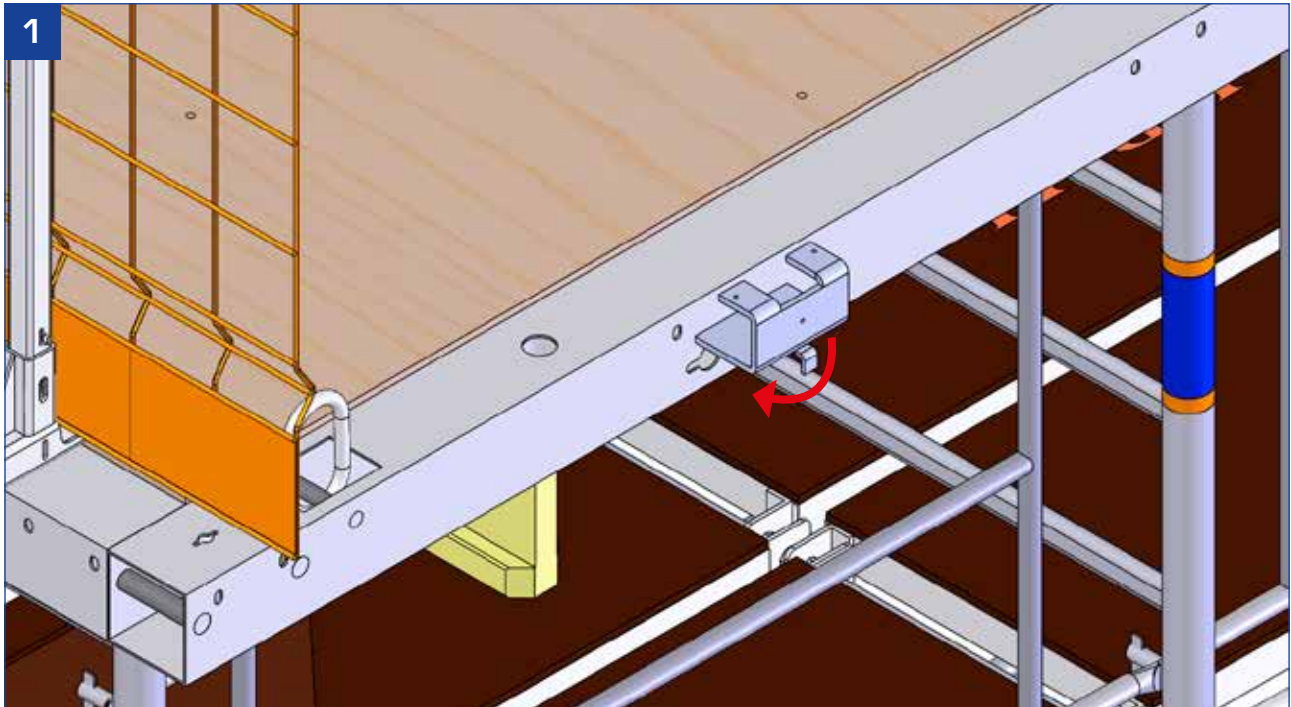


- There are openings on either side of the Alto deck to receive extension brackets.
- The centre-to-centre distances have been determined so that the extension can withstand a maximum load of 200 kg/m².

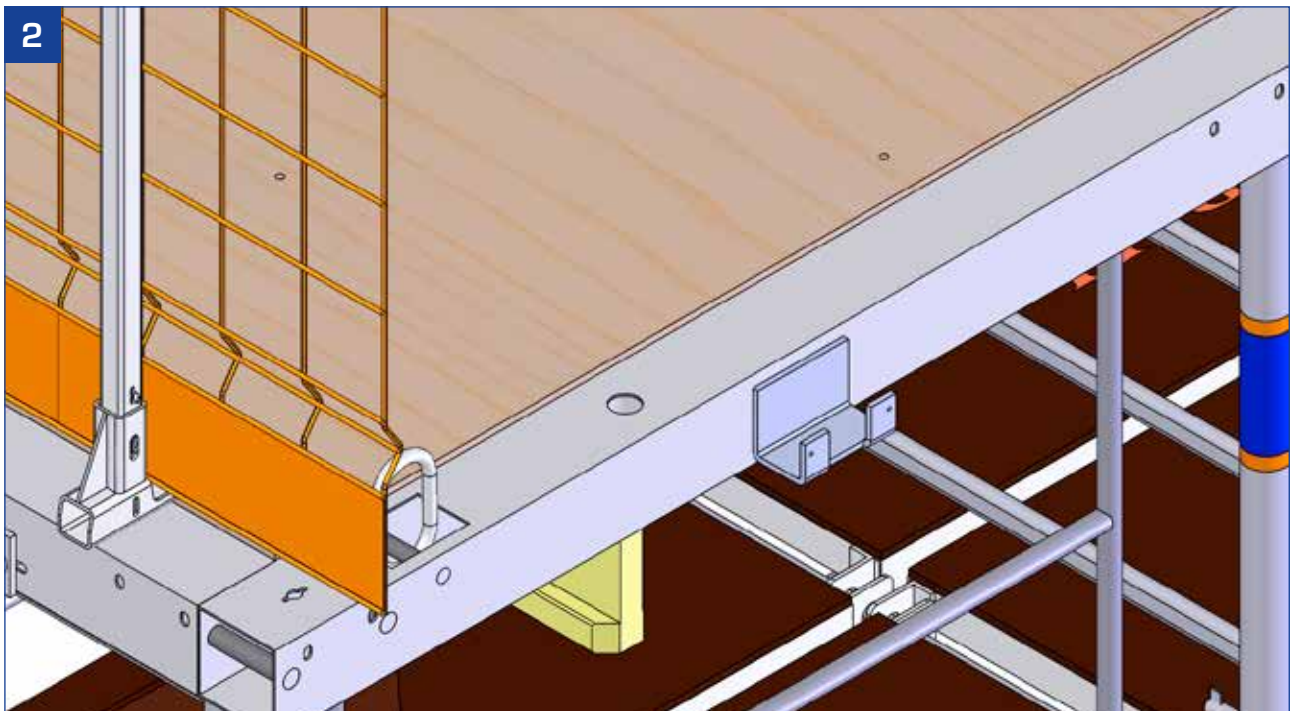
LONGITUDINAL EXTENSION



PROCEDURE WITH EXTENSION

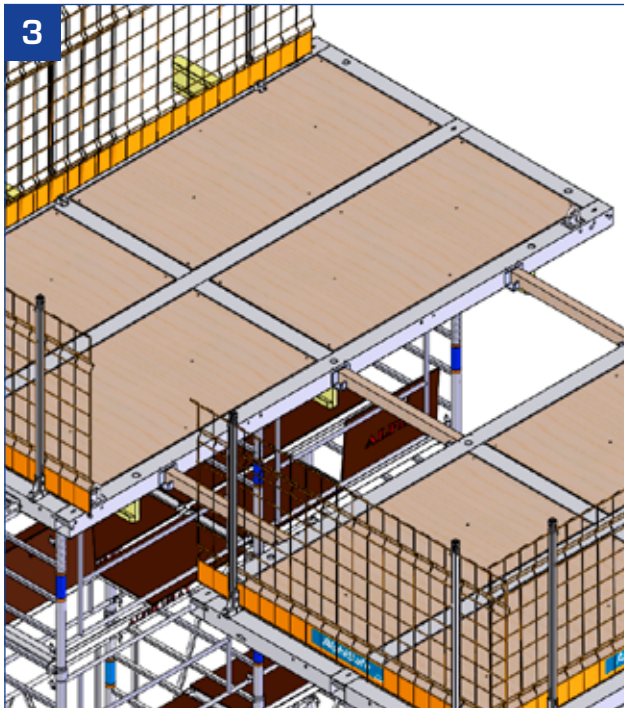


- Lock the brackets

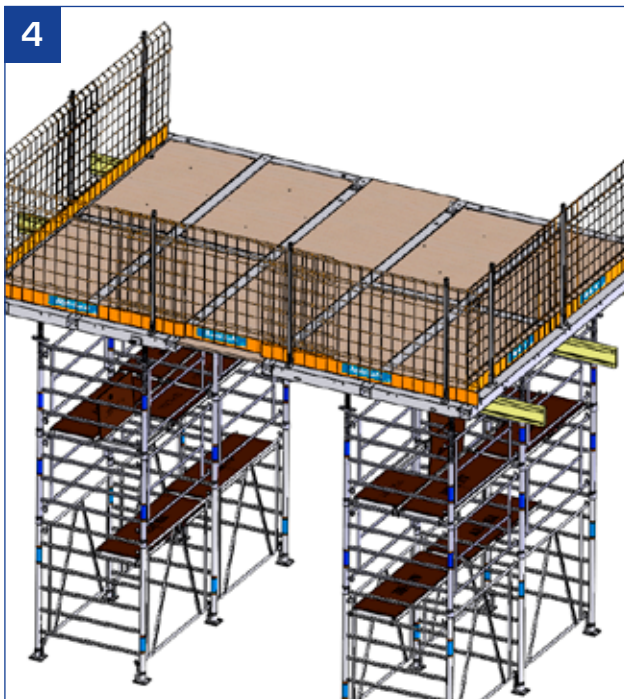
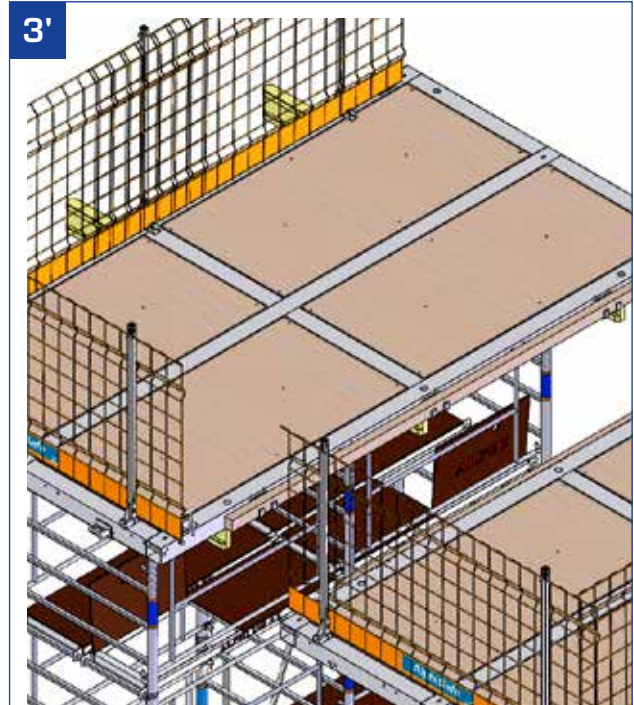


- Once in position, the extension bracket cannot be raised or tilted.

PROCEDURE WITH EXTENSION



- Batten installation.
- 2 positioning options: perpendicular or parallel.
- Positioning holes are provided, to connect the battens to the extension brackets.



- Complete the extension surface with a compensating panel and finish setting up AlphaSafe.

MANDATORY RULES :

- Mandatory observance of deck installation plan.
- Do not place form panel ballasts on extensions.

ALPHI, FRANCE'S LEADING SLAB FORMWORK MANUFACTURER



Alto decks can be used to create platforms on shoring towers and work surfaces for form panels, material stockpiles, prefabricated components and front face overhangs.

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