

# Shoring Tower A120

SHORING



SAFETY

| PERFORMANCE

| ADAPTABILITY

| COMPLIANCE

THE SHORING TOWER  
WITH SAFETY FEATURES

## A120 tower | The shoring tower with safety features



# Shoring Tower A120

Alphi shoring towers satisfy the needs of all types of projects: the **A120 tower** is an effective solution for user safety; **low towers** are available for specific requirements.

As recommended in the CRAMIF NT24 guidelines, the A120 tower can be assembled and disassembled **in complete safety**, limiting the risks of falls from height.



*Site:*  
*La Cartoucherie -*  
*Car park*  
*Client: Eiffage*  
*Location: Toulouse*

**COMPLIANT  
WITH THE GUIDELINES  
OF CRAMIF  
TECHNICAL REPORT  
NO. 24**

## SAFETY

- Safe assembly from the lower level.
- Built-in safety features.
- No connectors between ladder frames.

### **Compliant with the guidelines of CRAMIF technical report No. 24**

- This technical report concerns ladder shoring towers and other shoring towers from 2.50 to 6 m tall.
- Its aim is to improve this equipment and therefore also user safety.

### **The guidelines concern limiting:**

- falls from heights,
- repetitive strain injury,
- falls at ground level,
- towers collapsing or tipping,
- handling and manoeuvring.





### ADAPTABILITY

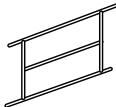
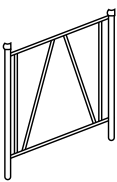
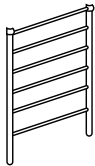
- The A120 tower exists in three sizes: 120x130 - 120x160 - 120x220 cm.
- It can be used with TopDalle formwork, with Alto formwork decks, and with the whole range of Alphi beams (AL200, AL100, H20).

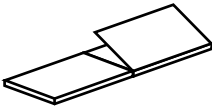

### PERFORMANCE

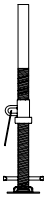
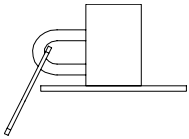
- Allowable load of 30 kN/foot.
- Can be handled with a crane.






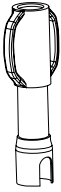

## COMPONENTS

Central structure	Guardrail	Dimensions (m)	Weight (kg)	Description
		0.75 x 1.60	8.36	<ul style="list-style-type: none"> <li>For 1.00 m ladder</li> </ul>
	Access guardrail	Dimensions (m)	Weight (kg)	Description
		1.25 x 1.60	6.40	<ul style="list-style-type: none"> <li>For 1.50 m ladder</li> </ul>
	Ladder	Height (m)	Weight (kg)	Description
		1.00	16.50	<ul style="list-style-type: none"> <li>4 rungs</li> </ul>
1.50		24.30	<ul style="list-style-type: none"> <li>6 rungs</li> </ul>	








Decks	Deck with trapdoor	Dimensions (m)	Weight (kg)	Description
		0.52 x 1.60	14.49	<ul style="list-style-type: none"> <li>Aluminium and timber floor</li> </ul>
	Deck without trapdoor	Dimensions (m)	Weight (kg)	Description
	0.50 x 1.60	13.40	<ul style="list-style-type: none"> <li>Steel floor</li> </ul>	

<b>Base</b>	Adjustable base	Weight (kg)
		6.50
	Base plate	Weight (kg)
		1.60

Intermediate base jack	Weight (kg)
	2.84
Slide 1.50 m	Weight (kg)
	6.50

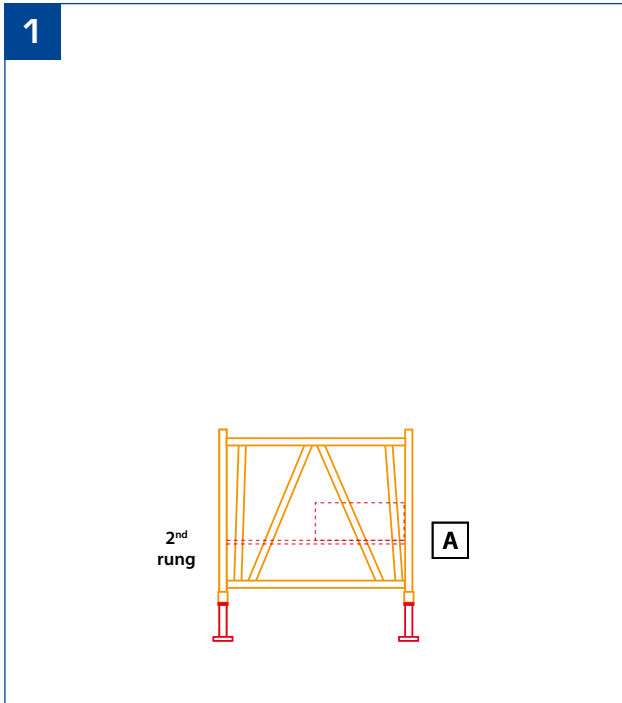
<b>Head</b>	2-inlet adjustable fork	Weight (kg)
		7.56
	Intermediate head jack	Weight (kg)
		2.91
	Slide 1.50 m	Weight (kg)
	6.50	

## A120 TOWER ACCESSORIES

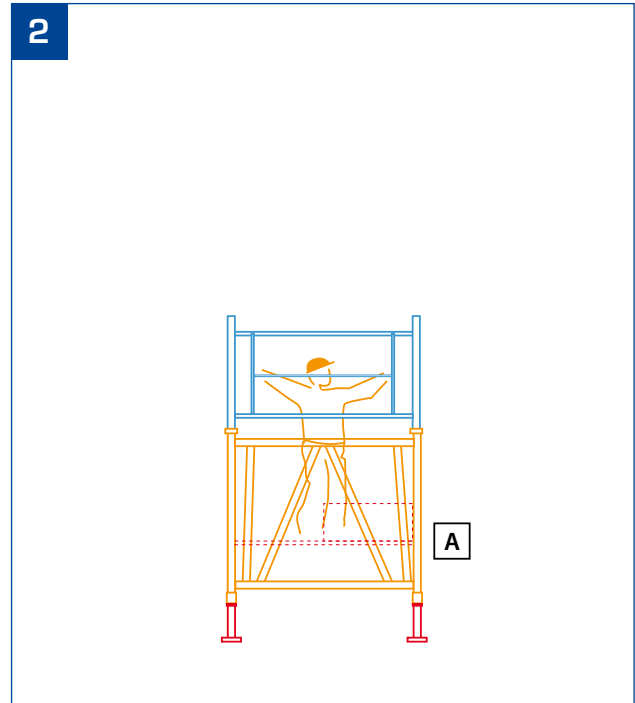
Safety	Clinch-fit beam guardrail	Dimension (m)	Weight (kg)	Description
		1.60	4.00	<ul style="list-style-type: none"> <li>Fixed guardrail</li> </ul>
		1.20	4.00	<ul style="list-style-type: none"> <li>Component with hook</li> </ul>
		1.20	4.00	<ul style="list-style-type: none"> <li>Offset component with hook</li> </ul>
	Skin clamp	Weight (kg)	Description	
		3.00	<ul style="list-style-type: none"> <li>Stabilising clamp for use with 48 mm tube and collars</li> </ul>	
	Tower clamp	Weight (kg)	Description	
		3.50	<ul style="list-style-type: none"> <li>Used to secure the tower to a skin</li> <li>Has a safety hook</li> </ul>	
	Dywidag form panel hole clamp	Weight (kg)	Description	
		3.00	<ul style="list-style-type: none"> <li>The loop is used either to stabilise a riser, or to receive a tube for holding multiple risers</li> </ul>	
Handling	Shifting trolley with rack	Dimensions (m)	Weight (kg)	Description
		1.60 x 0.98 x 1.19	85.40	<ul style="list-style-type: none"> <li>Can be used to move towers without disassembly</li> </ul>



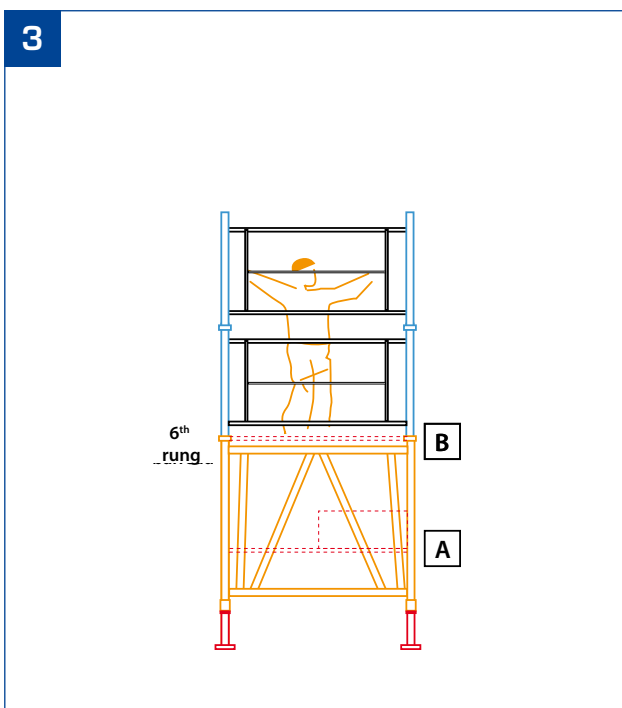
## SAFE ASSEMBLY AND LINKING



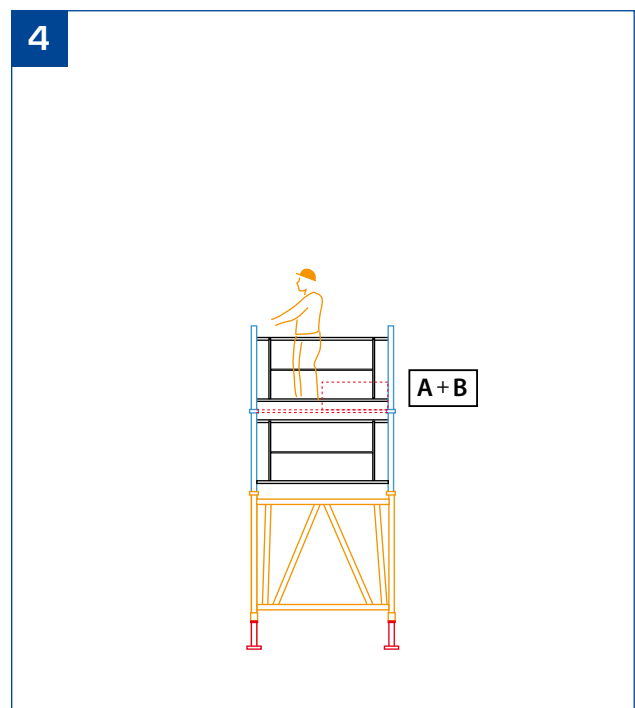
- Adjust the adjustable bases to the desired height.
- Join the adjustable bases to the 1.50 m ladder.
- Link the 1.50 m ladders to the access guardrail or cross-members.
- Position a deck with trapdoor on the 2<sup>nd</sup> rung of the 1.50 m ladder.



- Climb onto the deck and position two 1 m ladders.
- Fit the two guardrails.

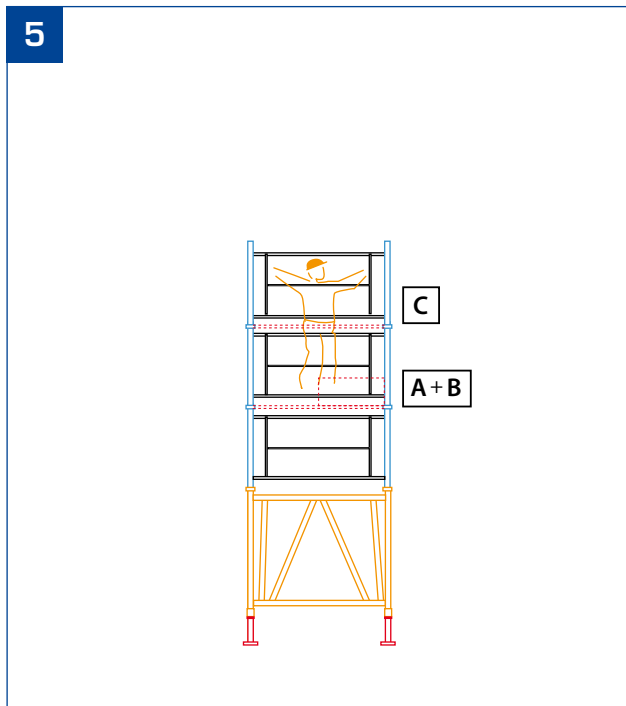


- Position a deck without trapdoor on the 6<sup>th</sup> rung of the 1.50 m ladder.
- Assemble the lower deck at the same level as the deck without trapdoor to create a work surface.
- Position the two 1 m ladders and fit the two guardrails.

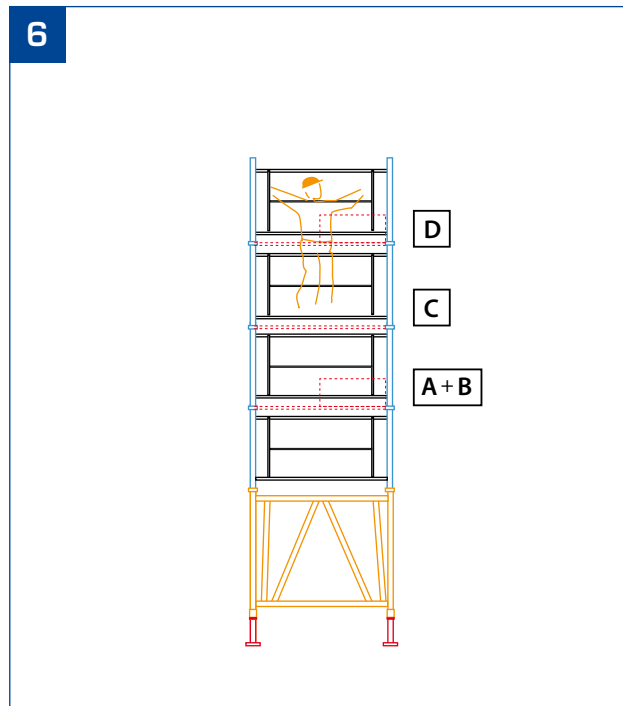


- Assemble the two decks A and B on the final rung of the 2<sup>nd</sup> ladder, i.e. 1 m higher.

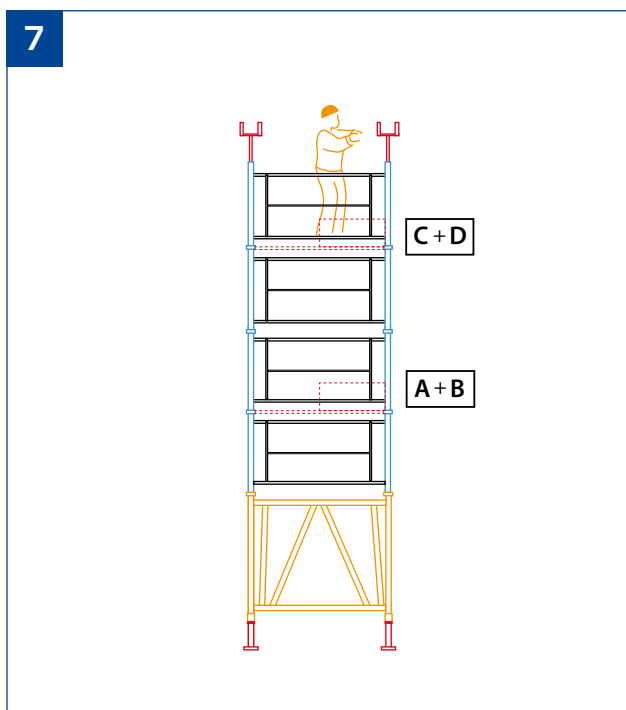
## SAFE ASSEMBLY AND LINKING



- Assemble the two 1 m ladders and the two guardrails.
- Assemble the deck without trapdoor C on the final rung of the 3<sup>rd</sup> ladder.

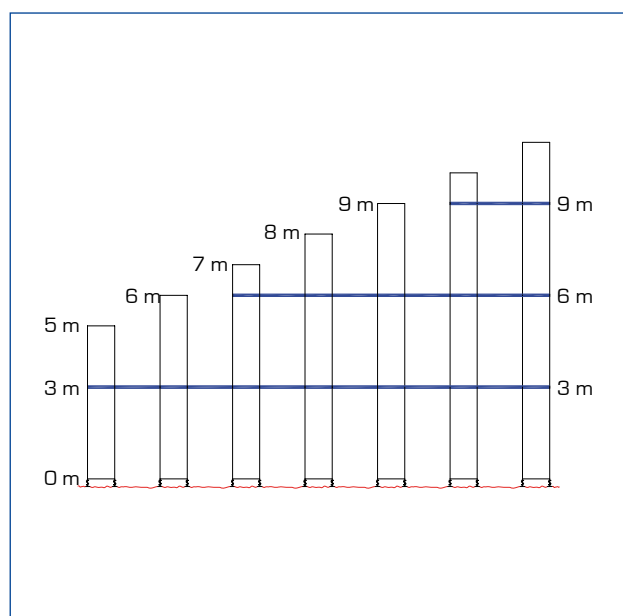


- Climb onto the deck C and position the next ladders and guardrails.
- Assemble the deck with trapdoor D on the final rung of the 4<sup>th</sup> ladder.



- Reassemble the deck C at the same level as the deck D to create a work surface.
- Assemble the 2-inlet adjustable forks and the beams to finalise the tower assembly.

## LINKING



- From 5 metres and above, towers must be cross-braced by a planar linkage every 3 metres in height, with  $\varnothing 48.3$  tubes and fixed  $\varnothing 49/60$  scaffolding collars.

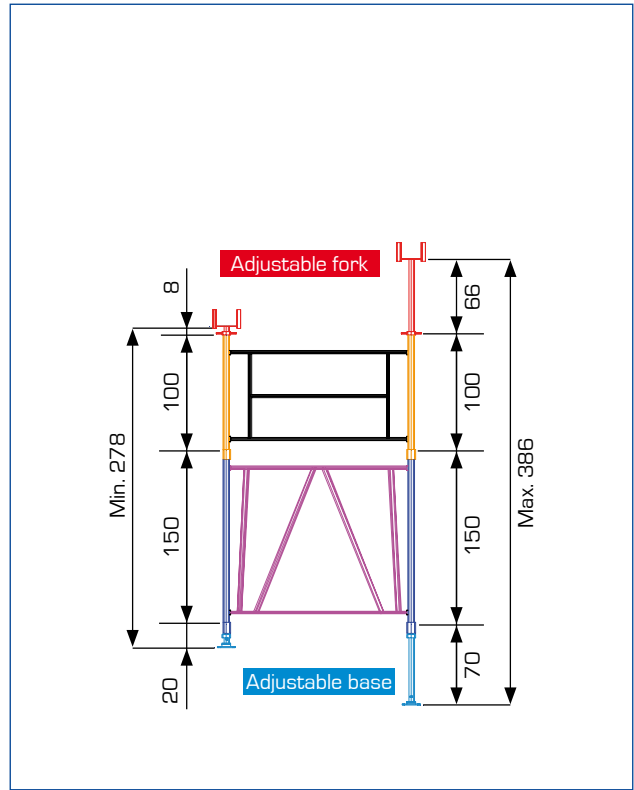
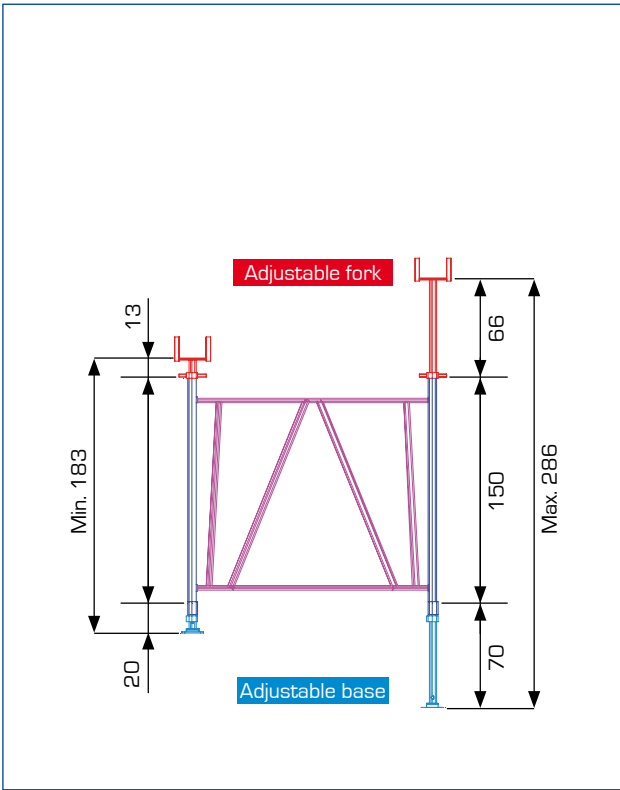
## COMPOSITION CHARTS

Towers with adjustable bases at the bottom and adjustable forks at the top	Height at bottom of fork min. - max. (cm)	183 - 286	278 - 386	378 - 486	478 - 586	578 - 686
	Component	Quantity				
	Adjustable base	4	4	4	4	4
	Ladder 1.50 m	2	2	2	2	2
	Ladder 1.00 m	0	2	4	6	8
	Access guardrail 1.60 x 1.25 m	2	2	2	2	2
	Guardrail 1.60 m	0	2	4	6	8
	Spin	0	4	8	12	16
	Adjustable fork	4	4	4	4	4
	½ single plank	1	1	1	2	2
	½ plank with trapdoor	0	0	1	1	2
Weight (kg)						
Weight of a basic steel tower measuring 1.20 x 1.60 m	129.00	180.00	231.00	281.00	332.00	

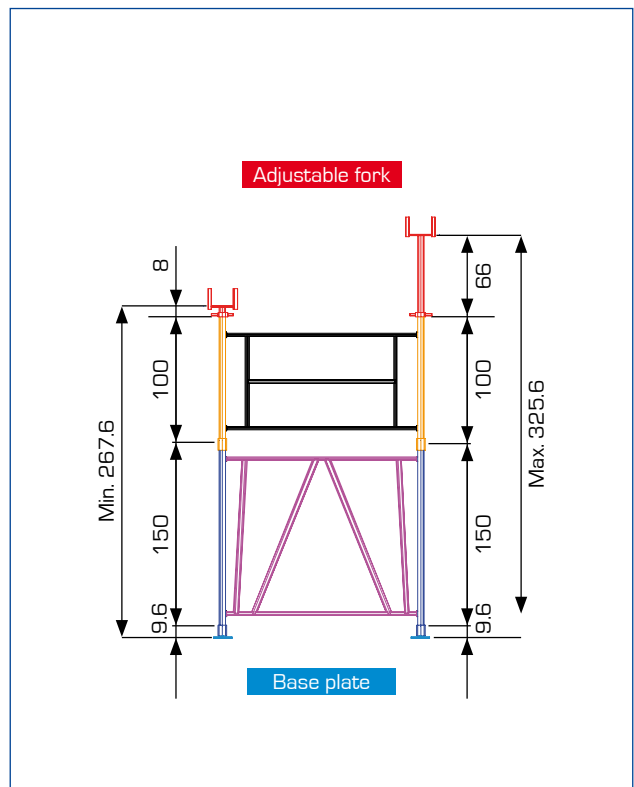
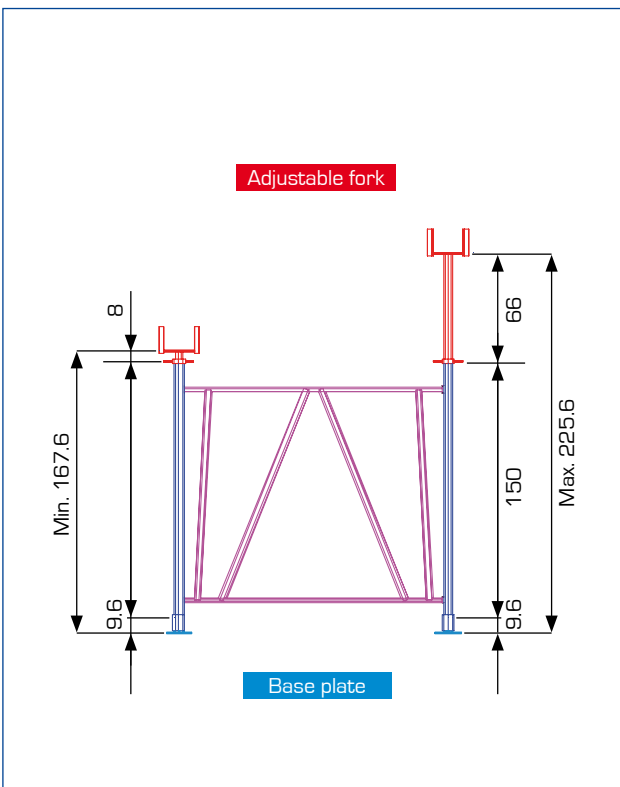
Towers with base plates at the bottom and adjustable forks at the top	Height at bottom of fork min. - max. (cm)	168 - 226	268 - 326	468 - 526	468 - 526	568 - 626
	Component	Quantity				
	Adjustable base	4	4	4	4	4
	Ladder 1.50 m	2	2	2	2	2
	Ladder 1.00 m	0	2	4	6	8
	Access guardrail 1.60 x 1.25 m	2	2	2	2	2
	Guardrail 1.60 m	0	2	4	6	8
	Spin	0	4	8	12	16
	Adjustable fork	4	4	4	4	4
	½ single plank	1	1	1	2	2
	½ plank with trapdoor	0	0	1	1	2
Weight (kg)						
Weight of a basic steel tower measuring 1.20 x 1.60 m	109.00	159.00	210.00	261.00	312.00	

## EFFECTIVE DIMENSIONS: EXAMPLES OF CONFIGURATION

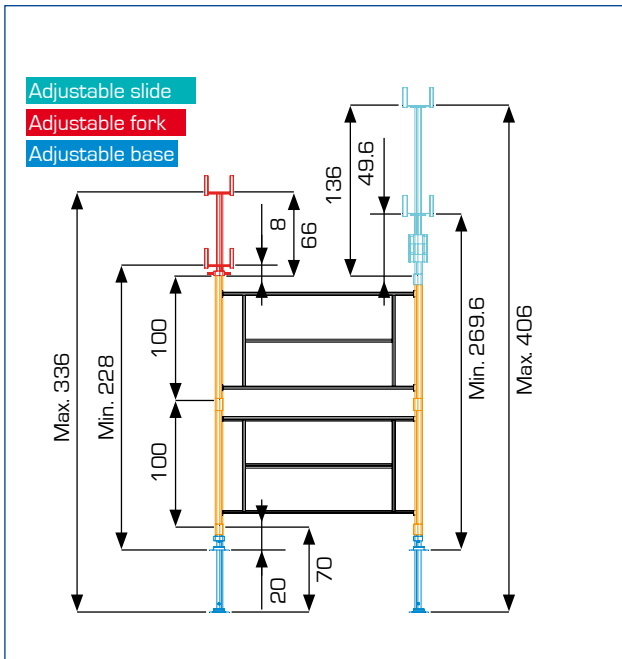
### TOWERS WITH ADJUSTABLE BASES AT THE BOTTOM AND ADJUSTABLE FORKS AT THE TOP



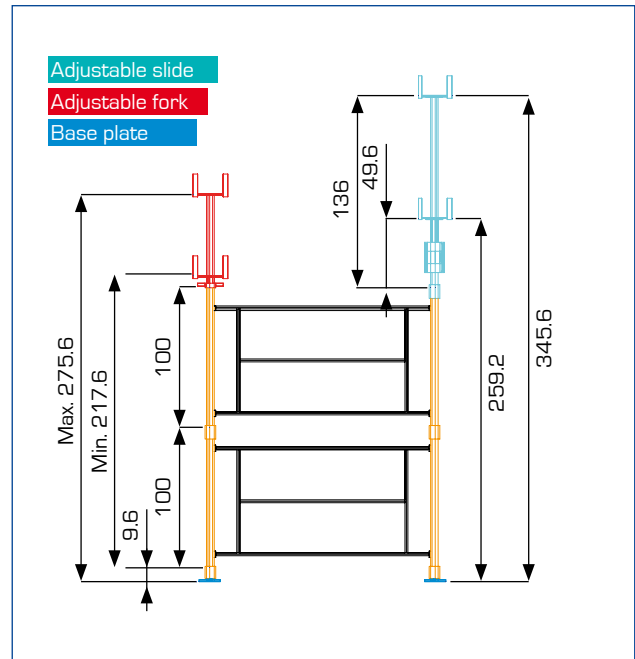
### TOWERS WITH BASE PLATES AT THE BOTTOM AND ADJUSTABLE FORKS AT THE TOP



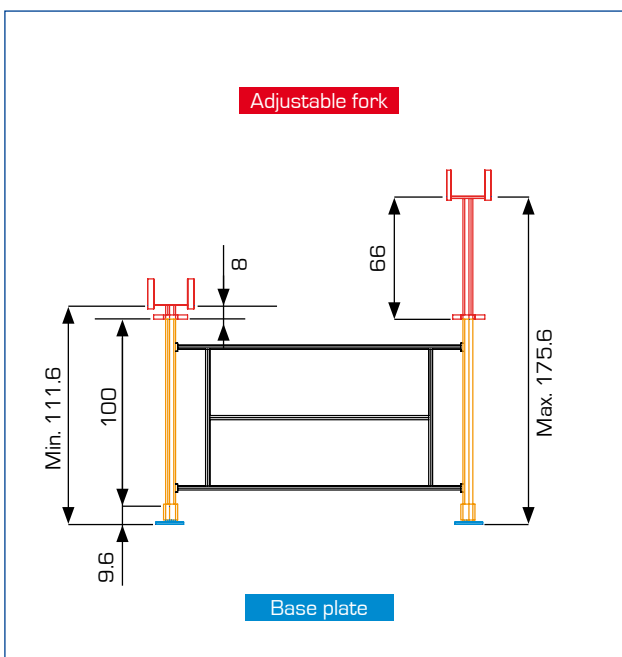
LOW TOWERS WITH ADJUSTABLE BASES AT THE BOTTOM AND ADJUSTABLE FORKS AND SLIDES AT THE TOP



LOW TOWERS WITH BASE PLATES AT THE BOTTOM AND ADJUSTABLE FORKS AND SLIDES AT THE TOP



LOW TOWERS WITH BASE PLATES AT THE BOTTOM AND ADJUSTABLE FORKS AT THE TOP



**NB:**

- If access to the inside of the tower is necessary, the lower part can be equipped with access points.
- Dimension [cm]

## ALPHI, THE FRENCH SHORING SPECIALIST



The A120 tower is a shoring tower that can be assembled and disassembled in complete safety. High-performance, it allows a load of 3 tonnes/foot.

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