

X-TOWER

Assembly & operating manual for X-TOWER mobile scaffolding:

This manual must ALWAYS be made available to users



Video instructions on-line

X-TOWER

List of contents

Chapter 1:	Scaffolding specifications.....	3
1-1:	Unit description	3
1-2:	Marking.....	3
1-3:	Dimensions	3
1-4:	Views of the 2m X-TOWER scaffolding at its different platform heights	4
1-5:	Views of the 3m X-TOWER scaffolding at its different platform heights	5
1-6:	Assembly precautions.....	7
Chapter 2:	Assembly, platform height 1.3 m.....	7
2-1:	Opening the scaffolding.....	7
2-2:	Installing the platform:	8
2-3:	Adjusting the wheels	10
2-4:	Installing guardrails:.....	10
2-5:	Installing skirting boards:.....	13
2-6:	Installing stabilizers:.....	14
Chapter 3:	Erecting the 2-metre model.....	15
3-1:	Installing diagonals	15
3-2:	Erecting the unit	16
Chapter 4:	Erecting the 3-metre model.....	20
4-1:	Erecting external ladders	20
4-2:	Installing diagonals	20
4-3:	Erecting intermediate ladders	21
4-4:	Locking diagonals in position	23
Chapter 5:	Post-assembly and pre-use operations.....	24
Chapter 6:	Instructions	25
6-1:	Instructions for use	25
6-2:	Instructions for moving the scaffolding.....	26
Chapter 7:	Inspection, servicing and maintenance.....	26
Chapter 8:	Dismantling	27
Chapter 9:	Moving and loading in a vehicle.....	29
9-1:	Fitting the transport kit (optional).....	29
9-2:	Loading scaffolding in a vehicle	30
Chapter 10:	Guarantee	31

X-TOWER

Chapter 1: Scaffolding specifications

1-1 : Unit description

X-Tower scaffolding is designed for being used and handled by a single person.

It has been designed for rapid, safe assembly. As the different scaffolding elements are connected together, there is no risk of forgetting or losing any item.

A transport kit is available on option for easy stowing in vehicles.

1-2 : Marking

EN 1004 3 2.8M / 2.8m XXXD

Reference to the
standard

Load class

Maximum height for
indoor use

Maximum height
for outdoor use

Access by staircase: No
Access by steps: No
Access by inclined ladder: No
Access by vertical ladder: Yes

1-3 : Dimensions

Overall size	X-TOWER 2m	X-TOWER 3m
Size when deployed		
Overall length (m)	2.4	2.3
Overall width (m)	2.1	2.1
Overall height (m)	3.09	3.84
Size when folded		
Overall length (m)	0.98	0.98
Overall width (m)	0.82	0.92
Overall height (m)	1.34	1.41
Weight (kg)	65	75

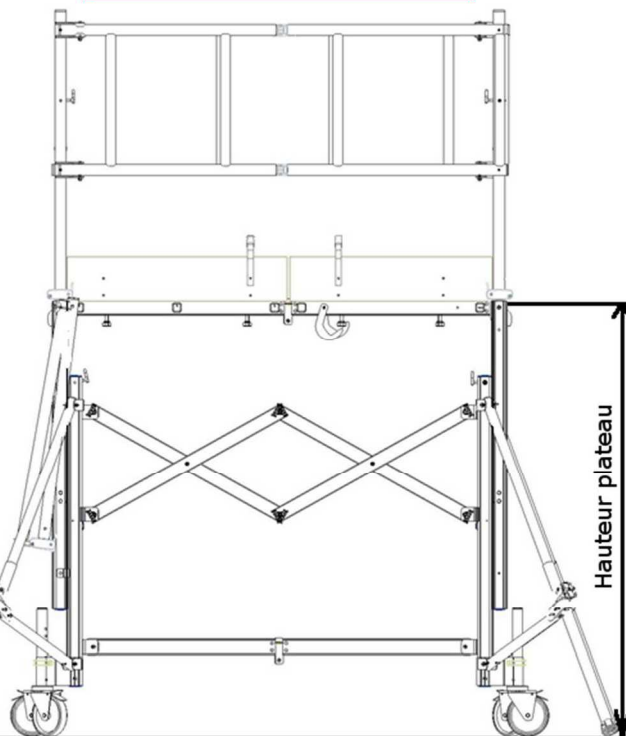
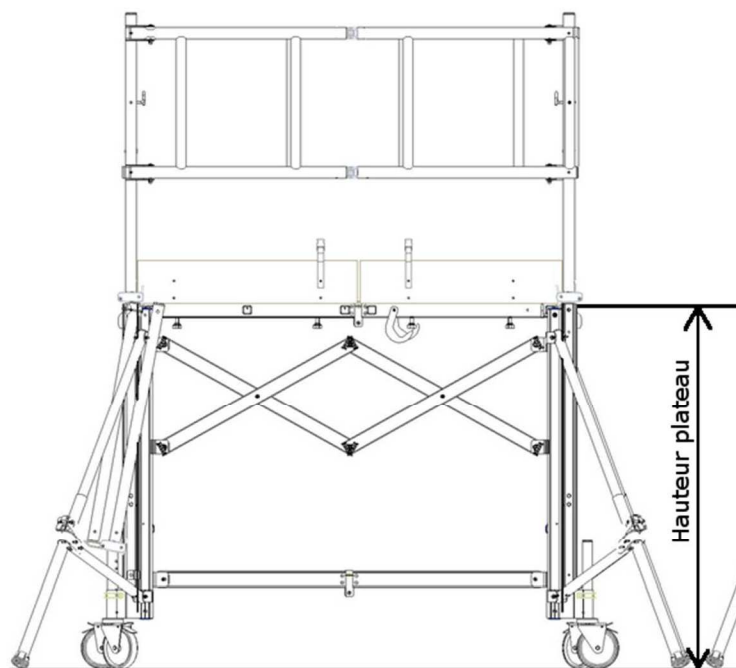
Work surface size	X-TOWER 2m	X-TOWER 3m
Length (m)	1,54	1,54
Width (m)	0,6	0,6
Temporary load (kg)	150	150
Max permissible distributed load (kg)	185	185
Minimum height (m)	0.8	0.8
Maximum height (m)	2.05	2.8

X-TOWER

1-4: Views of the 2m X-TOWER scaffolding at its different platform heights

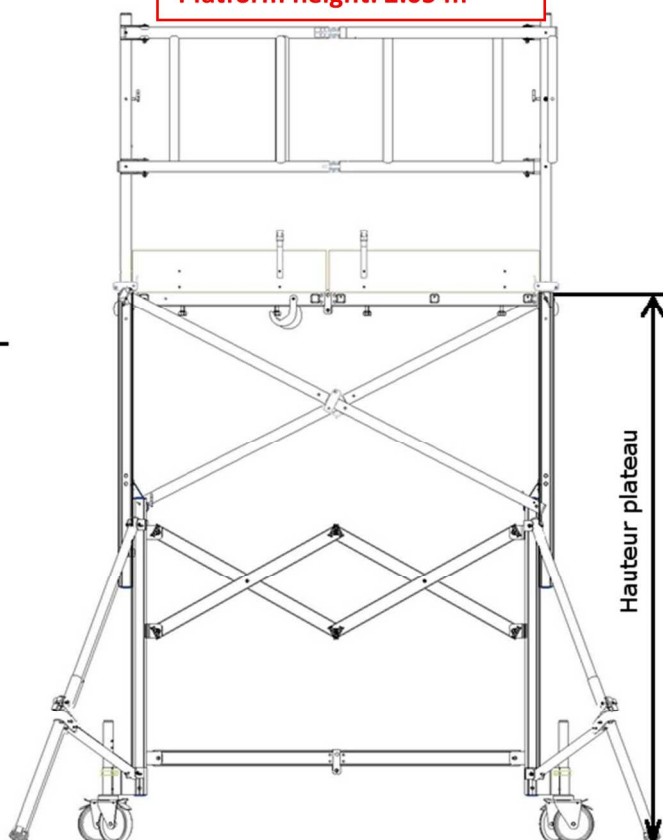
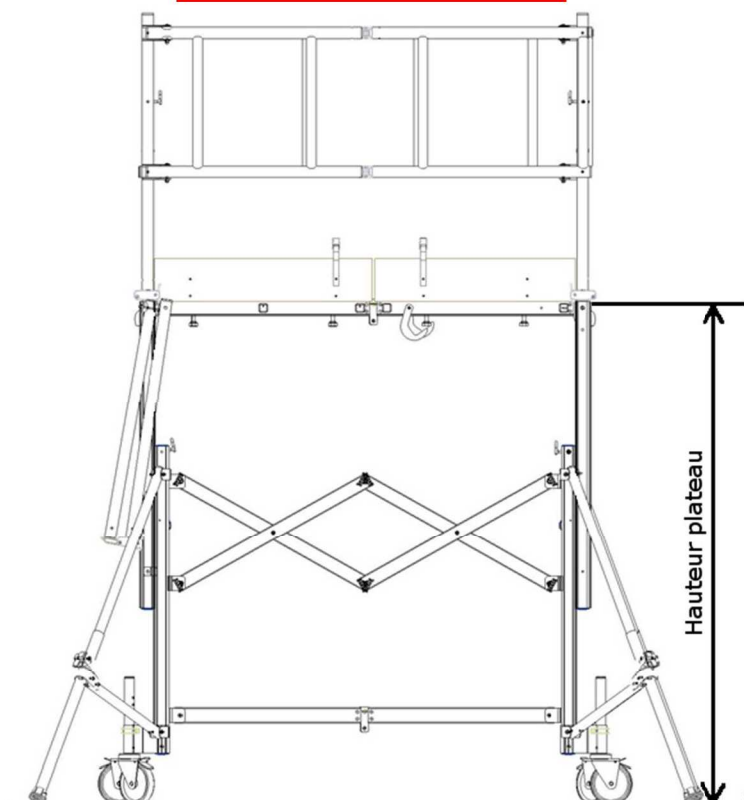
Platform height: 1.3 m

Platform height: 1.55 m



Platform height: 1.8 m

Platform height: 2.05 m

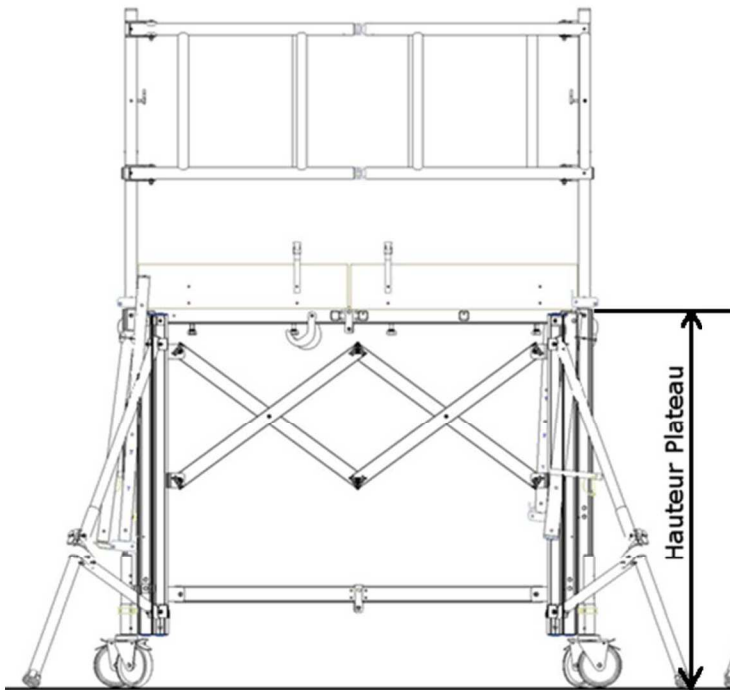


Diagonals are compulsory in this configuration

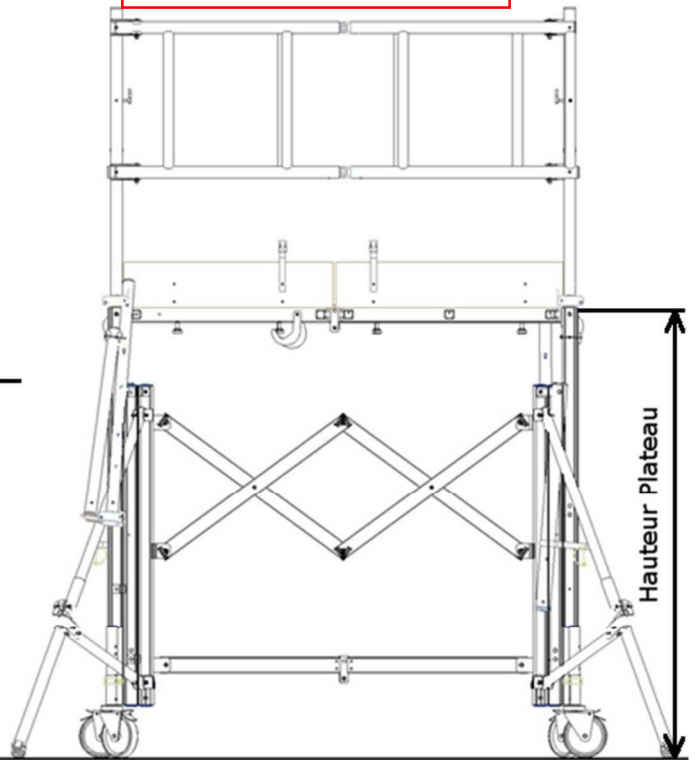
X-TOWER

1-5: Views of the 3m X-TOWER scaffolding at its different platform heights

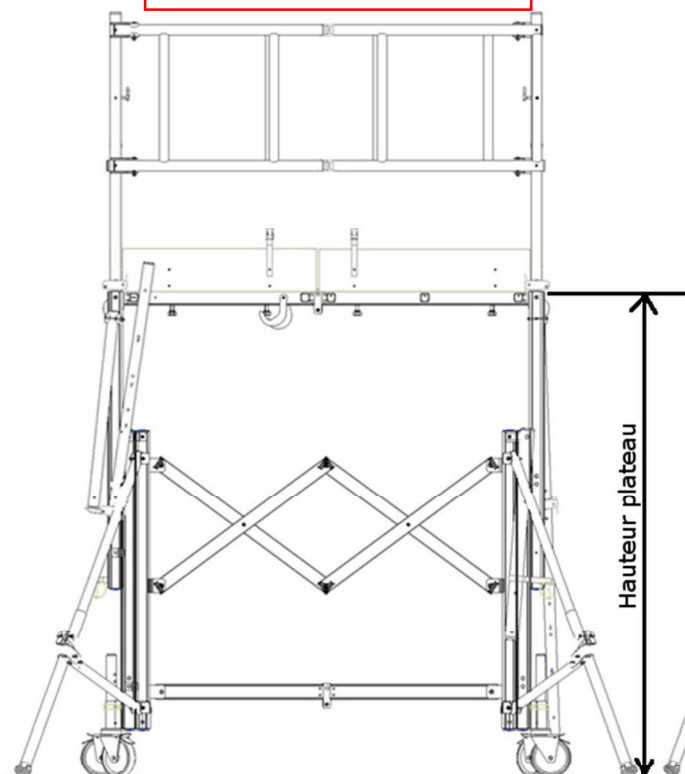
Platform height: 1.3 m



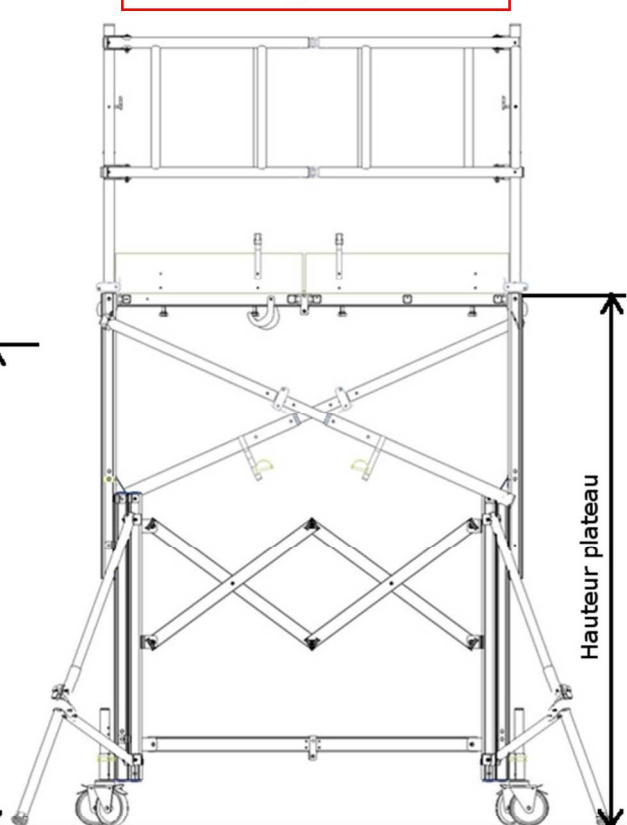
Platform height: 1.55 m



Platform height: 1.8 m

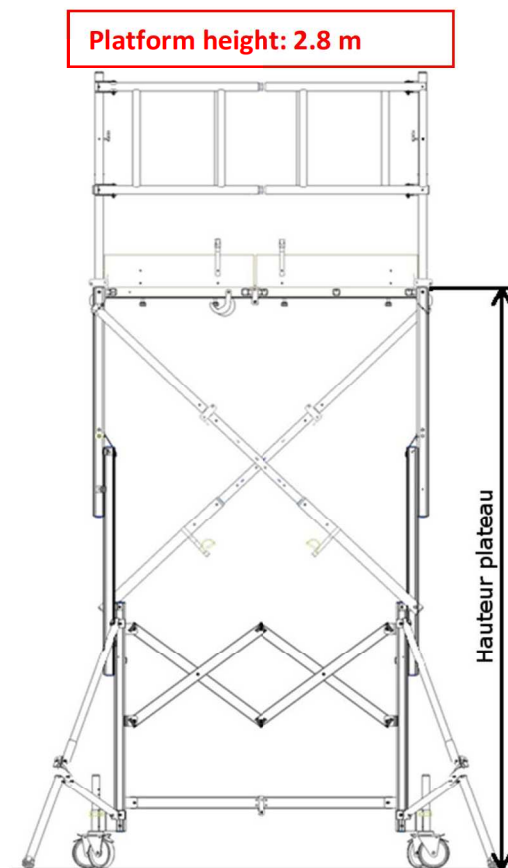
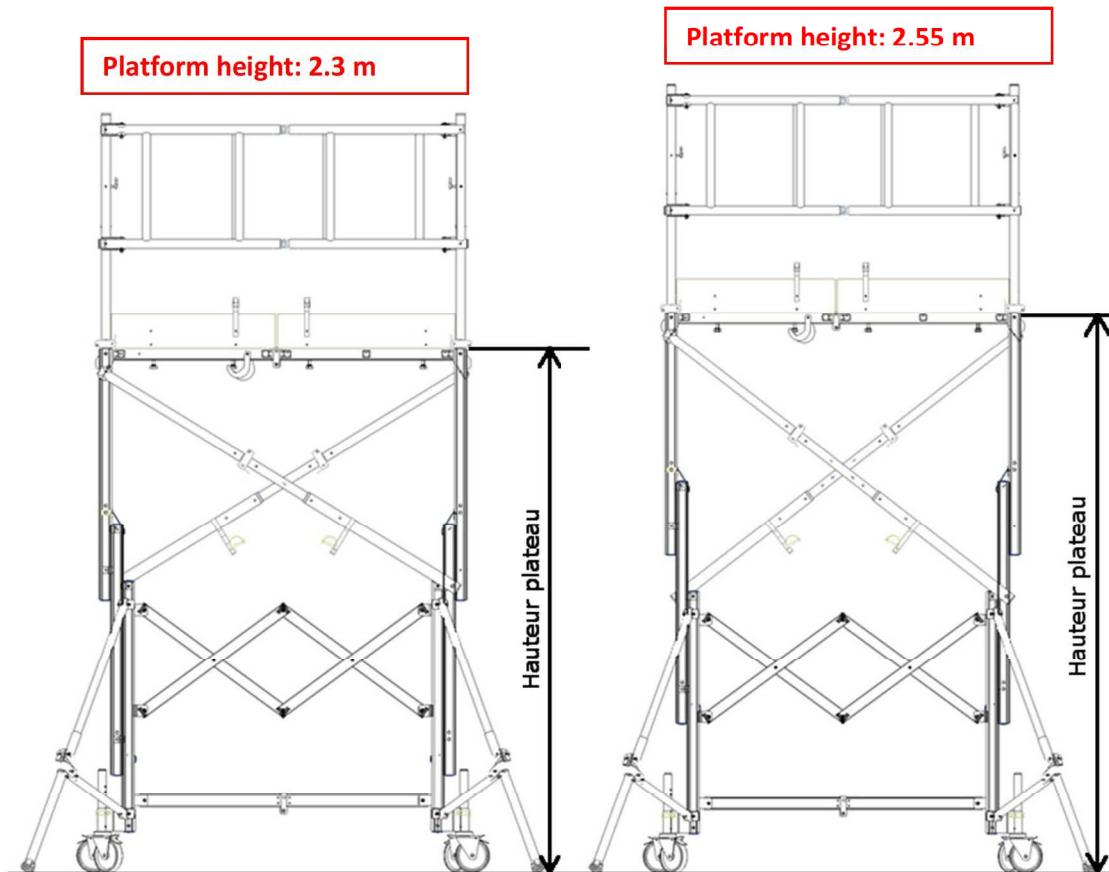


Platform height: 2.05 m



Diagonals are compulsory in this configuration 5

X-TOWER



X-TOWER

1-6: Assembly precautions

- Assemble and use the scaffolding as per the instructions contained in this manual.
- The X-Tower must only be assembled and dismantled by personnel trained for its assembly and use.
- Damaged elements or non-OEM elements must not be used.
- Wearing personal protective equipment is compulsory for assembling and dismantling the scaffolding.
- Comply with the order for assembling and dismantling as given in the instructions.
- Before initial use, remove the plastic collars located on the diagonals and guard-rail catches.

Chapter 2: Assembly, platform height 1.3 m

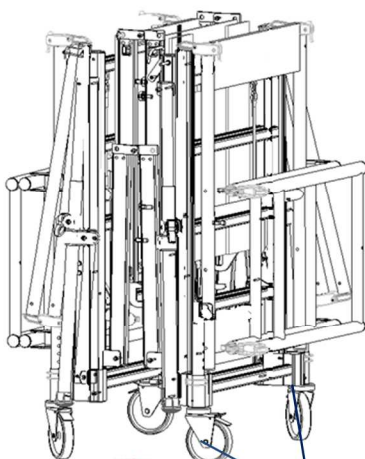
This part is identical for 2 and 3 metre models

2-1: Opening the scaffolding

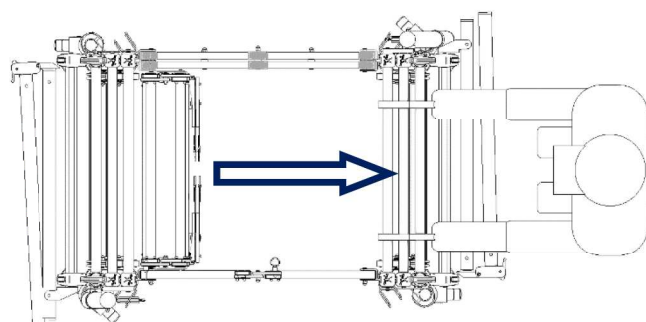
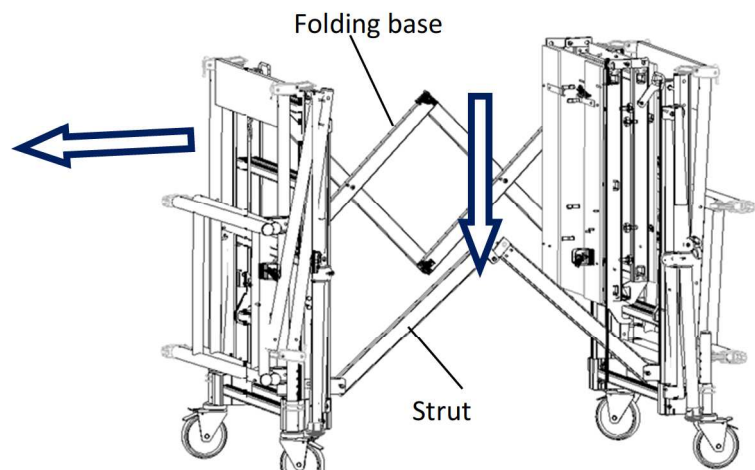
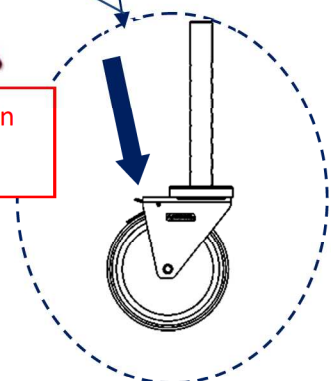
If the unit is equipped with a transport kit, remove the kit (see Chapter 9). Otherwise, only remove the strap holding the unit together.

Use your foot for locking the brakes on the two wheels of the ladder where the platform is attached.

Stand behind the ladder that is not bearing the weight of the platform and pull on it until the strut is horizontal. Make sure that the 2 ladders are as parallel as possible.



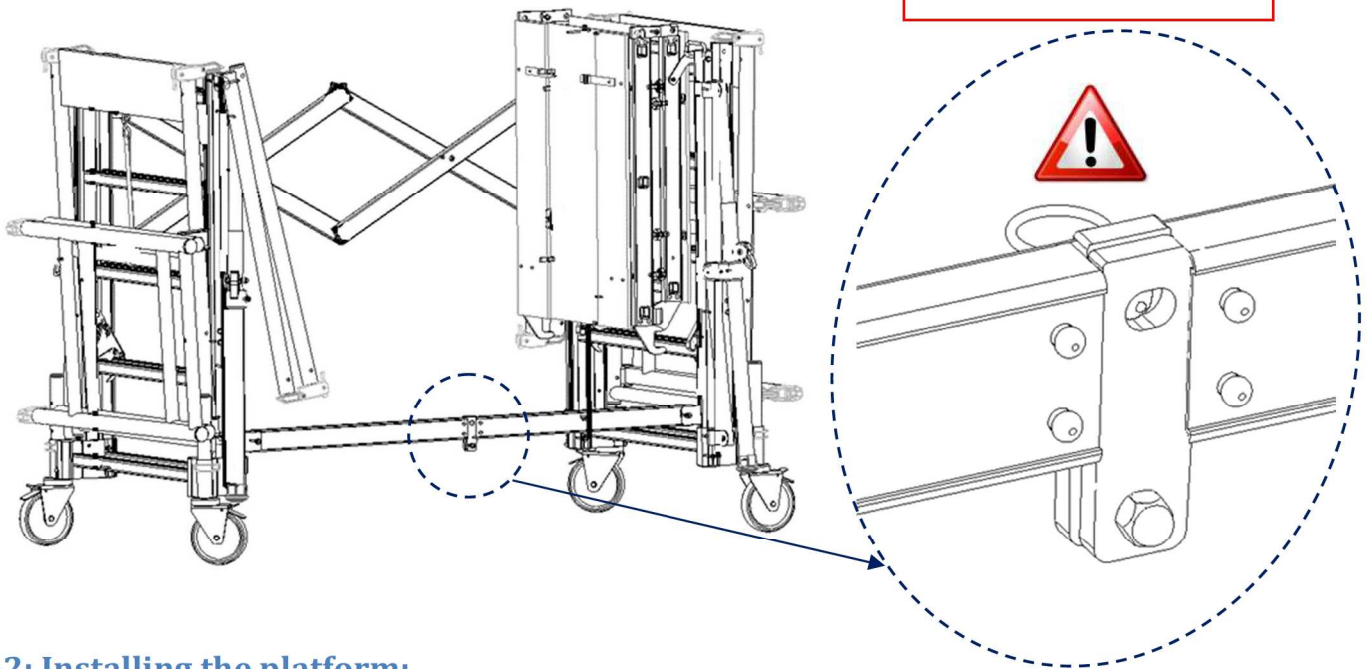
The brake must be in the "ON" position



X-TOWER

Lock the strut in position by pushing on it

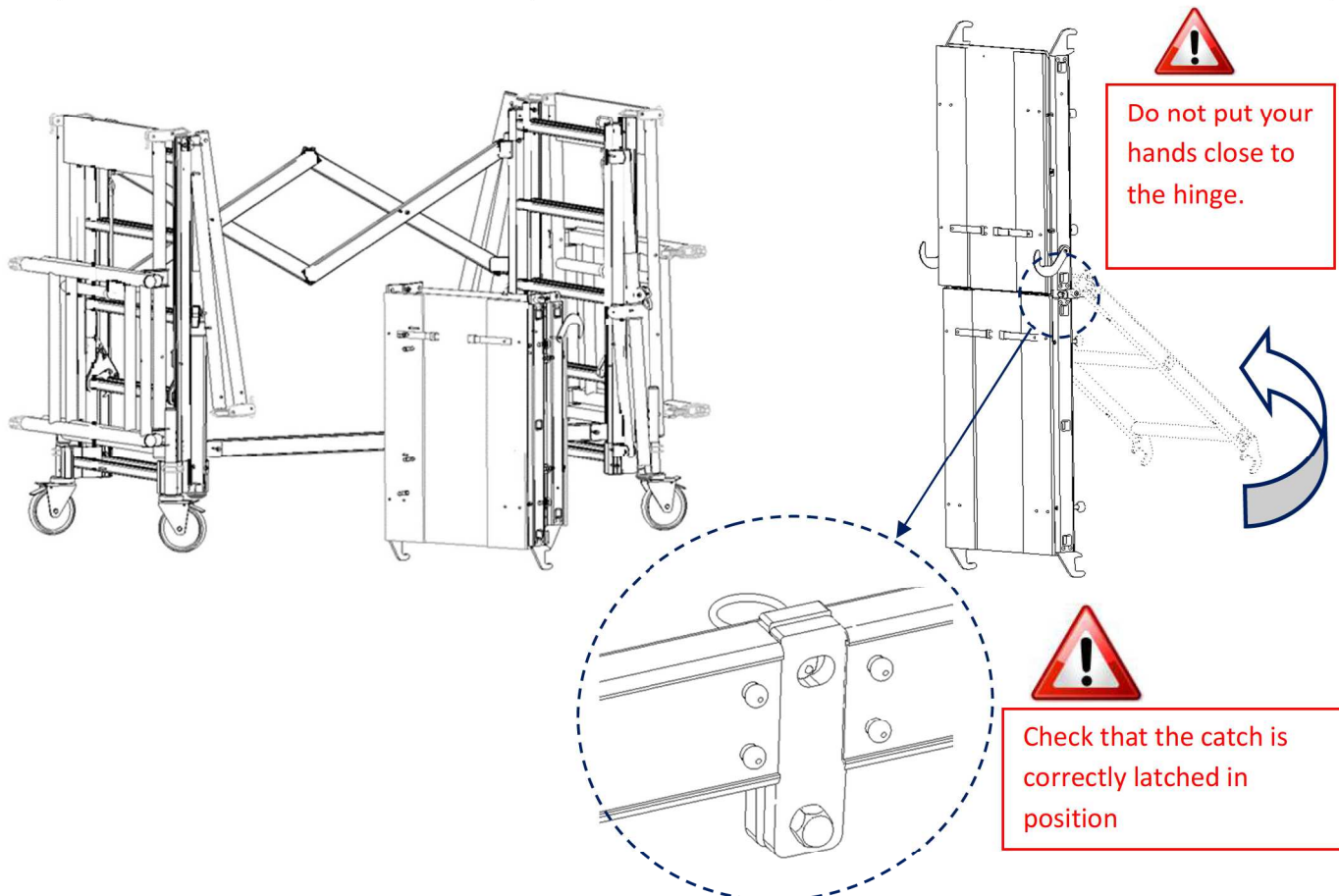
Check that the catch has latched correctly into place



2-2: Installing the platform:

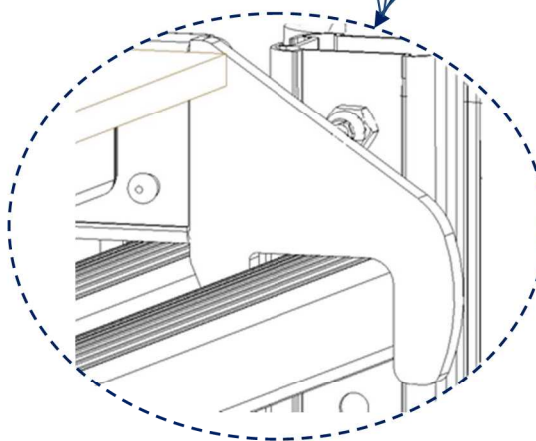
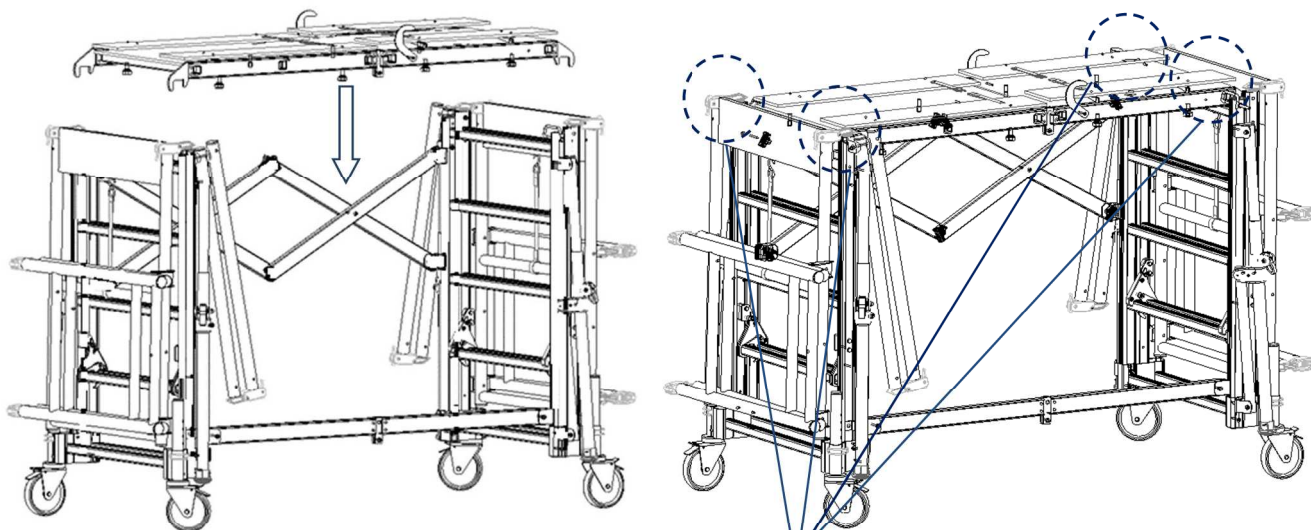
Pull the platform out of the unit and position it vertically on the floor

Raise the trap section upwards for opening the platform completely



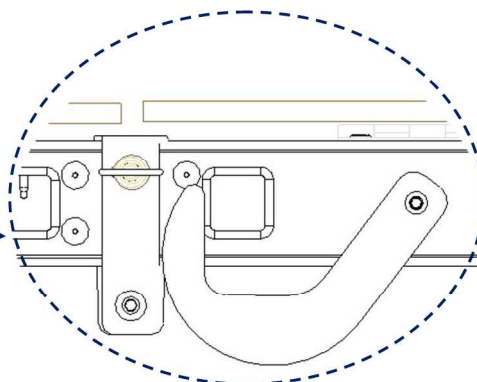
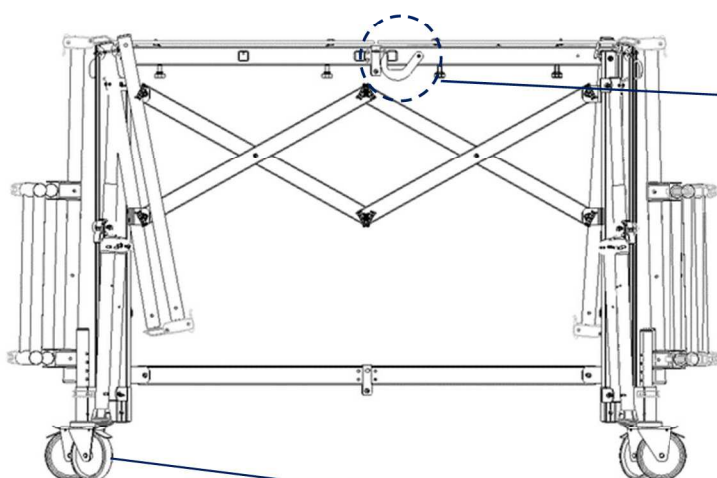
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Place the platform in position so that the hooks bear on the outermost ladders.

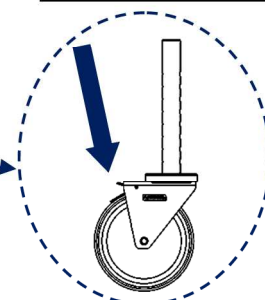


Check that the 4 platform hooks are correctly in position on the rungs.

Push the 2 support hooks downwards



Lock the other two scaffolding wheels in position.



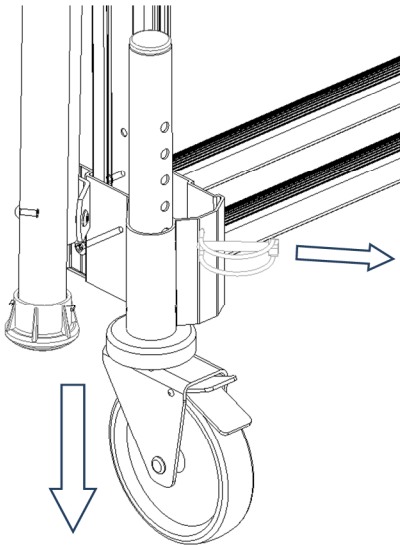
The brakes must be "ON"

X-TOWER

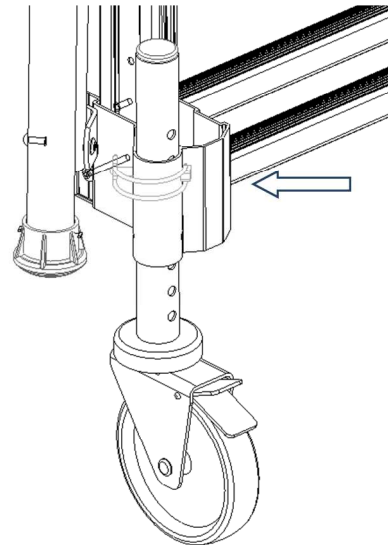
2-3: Adjusting the wheels

Check that the floor is horizontal both lengthwise and crosswise. If the scaffolding is placed on a non-flat floor, the wheels can be adjusted for putting the unit level.

Remove the pin that holds the wheel, and adjust wheel height



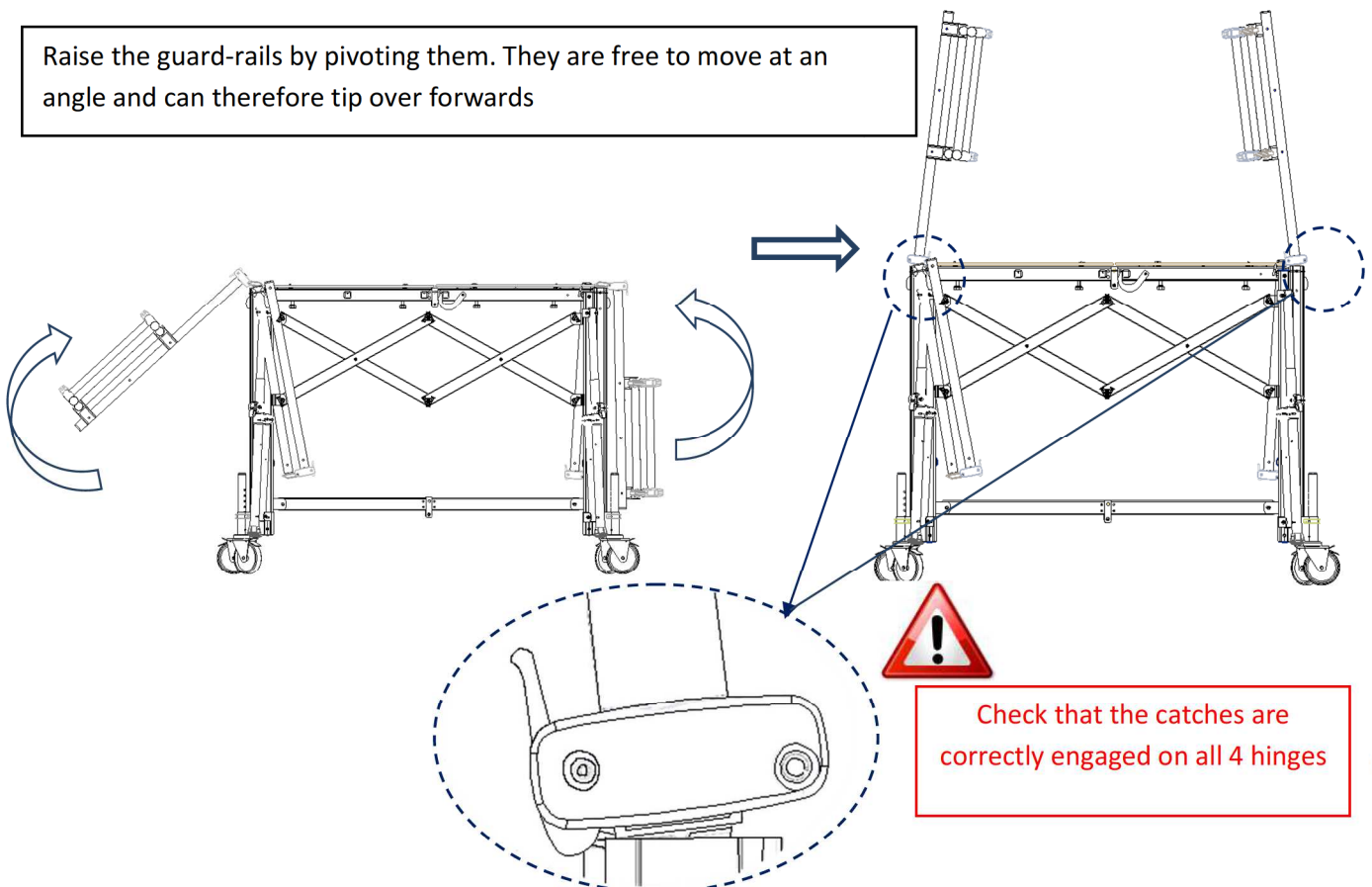
Align the hole on the wheel closest to the hole on the wheel-holder and re-insert the pin



Carry out this operation on all the wheels that need to be adjusted for the scaffolding to be level. Make sure that the scaffolding is level before continuing to erect it.

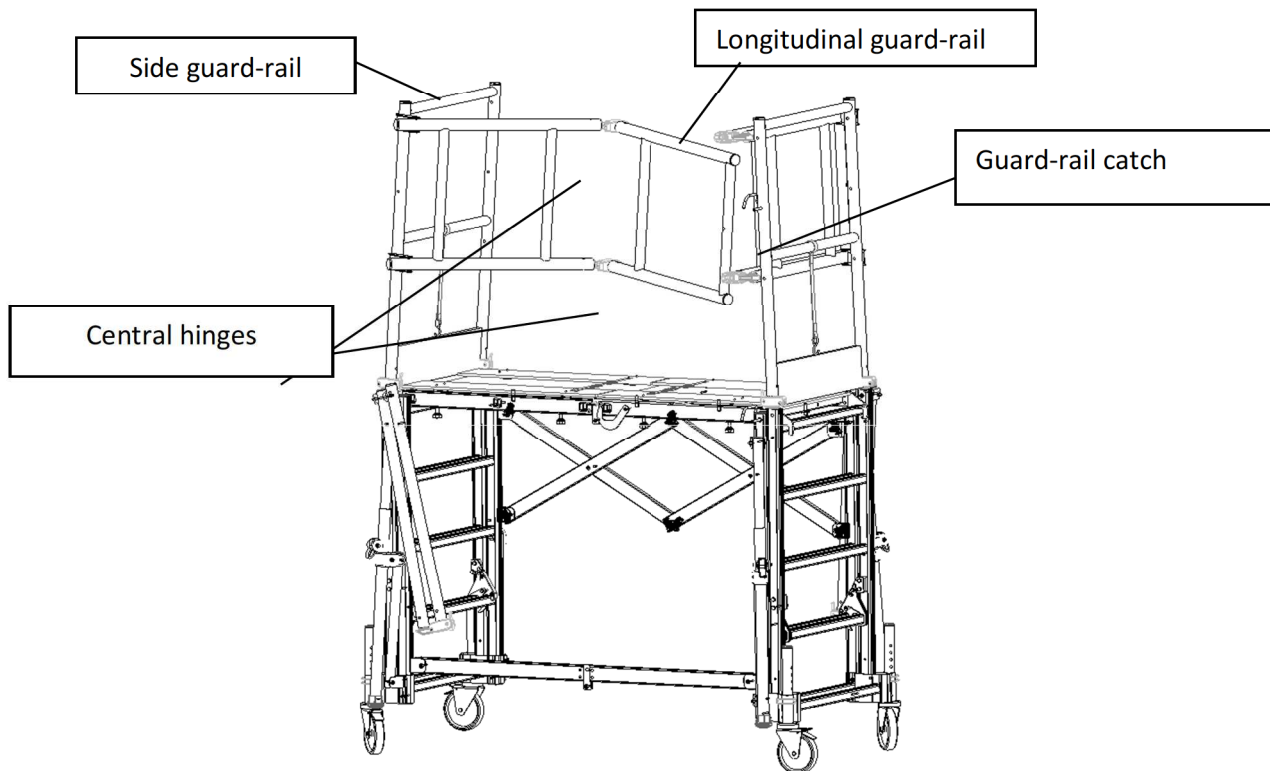
2-4: Installing guardrails:

Raise the guard-rails by pivoting them. They are free to move at an angle and can therefore tip over forwards



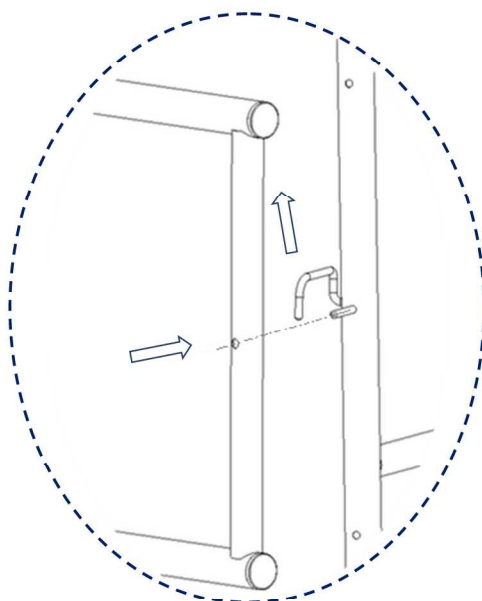
X-TOWER

Undo the strap on one of the guard-rails and unfold the longitudinal part until it contacts the catch on the opposite guard-rail. Do not engage the central hinge catch

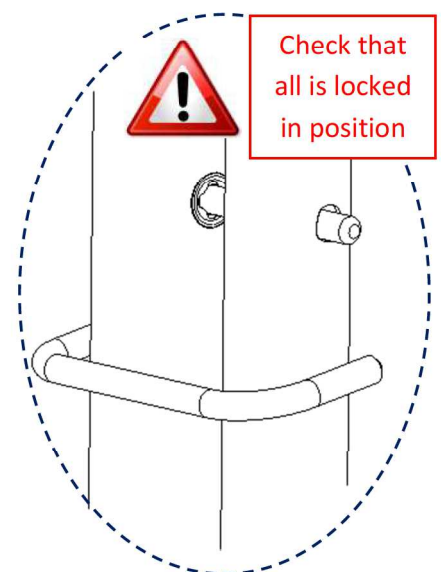
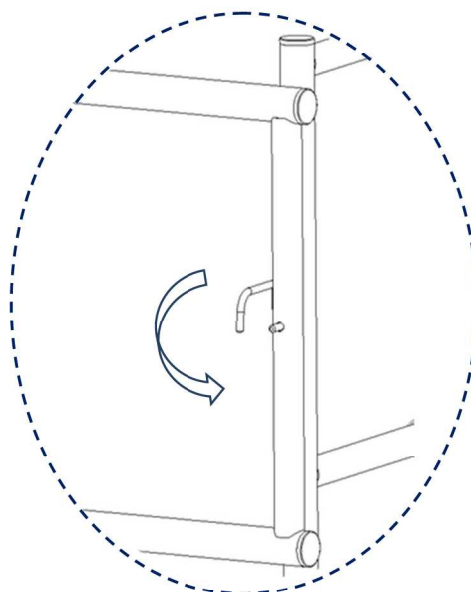


Lock the guard-rail in place

Lift up the catch and insert it into the hole on the guard-rail

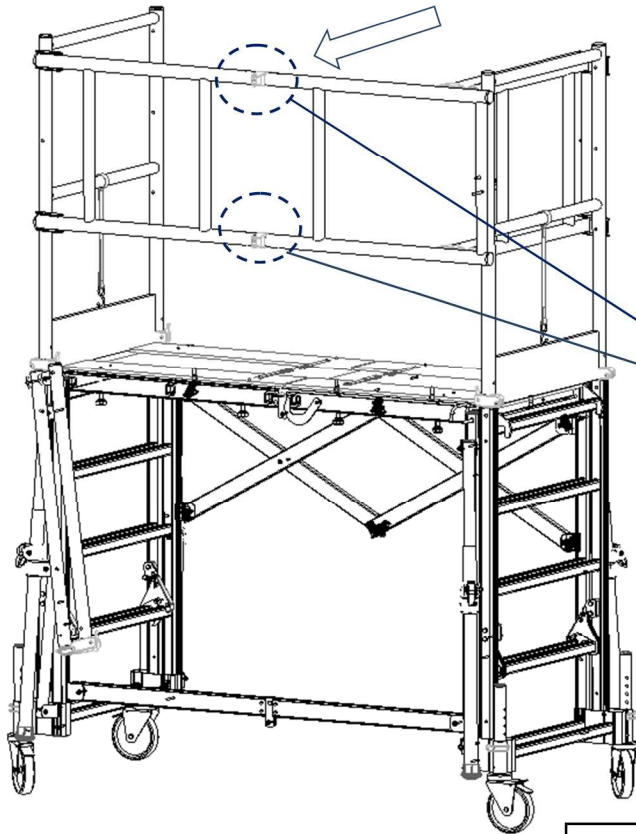


Push the catch down for locking the guard-rail

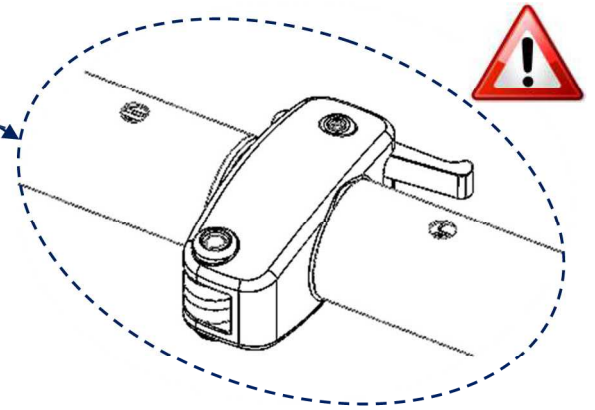


X-TOWER

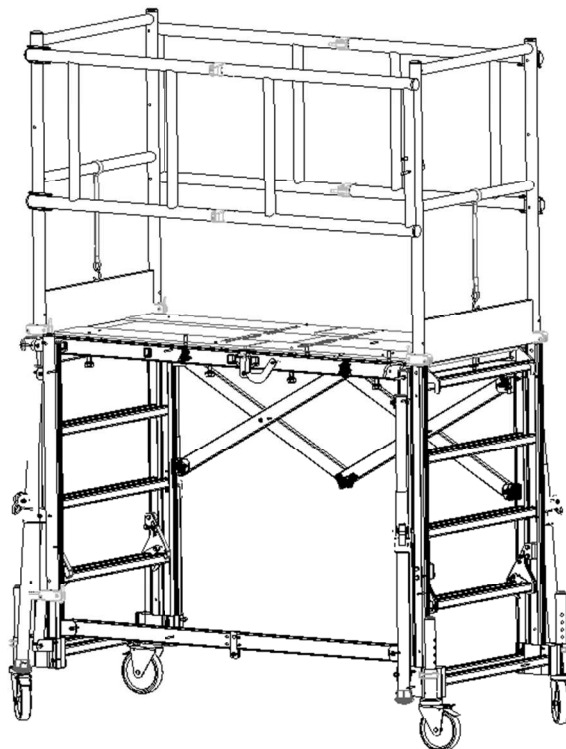
Pull on the guard-rail for locking
the central hinge in position



Check that the catches are
correctly engaged on the 2
hinges



Repeat the operation for the
second guard-rail

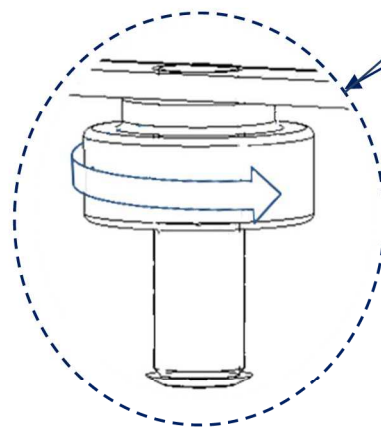
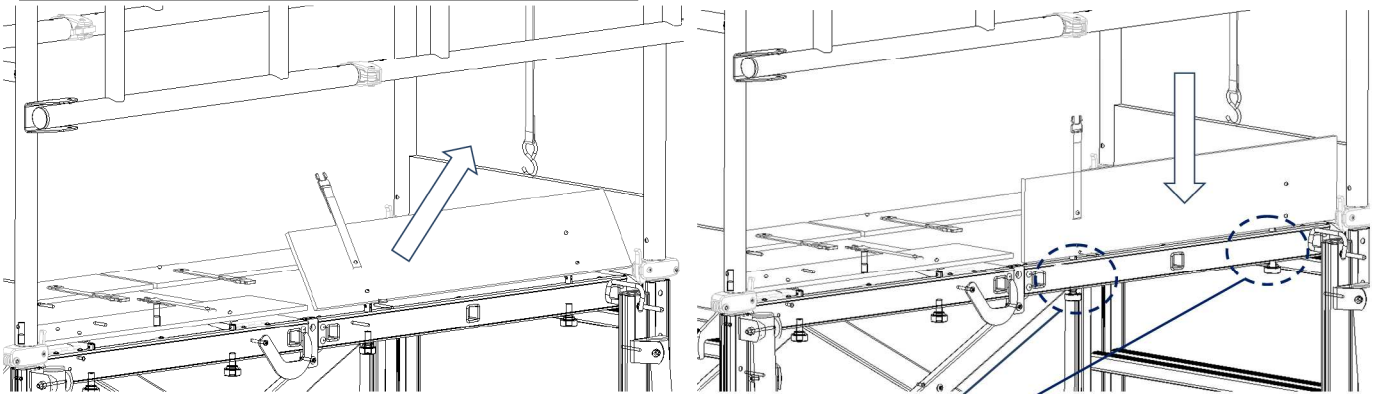


X-TOWER

2-5: Installing skirting boards:

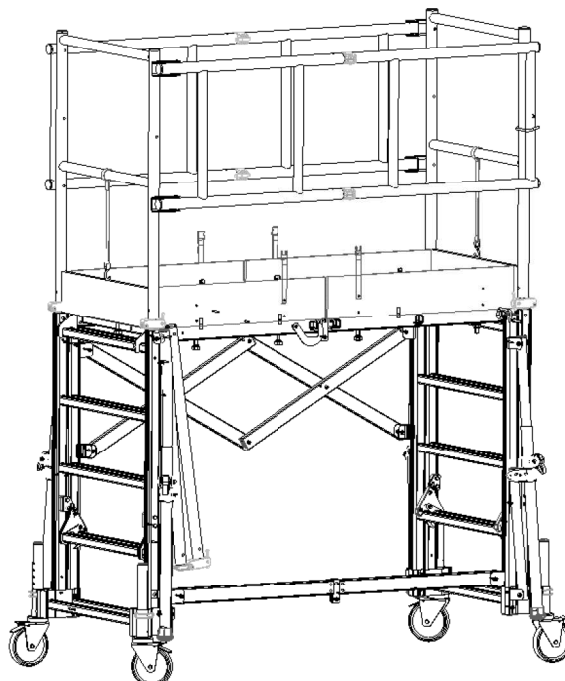
Remove the straps holding the skirting boards together and then lift up the first skirting board

Lower the skirting board vertically and then lock it in place with the knurled wheels under the upright



Tighten the 2 wheels so that the board is correctly in place and cannot move.

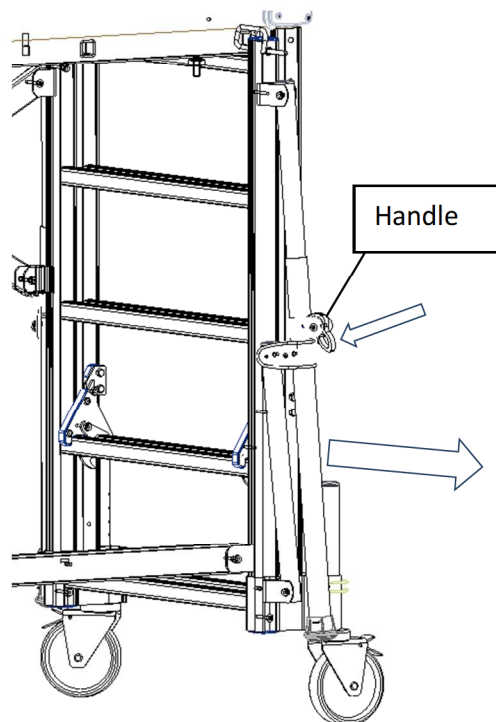
Carry out the same operation for the 3 other boards



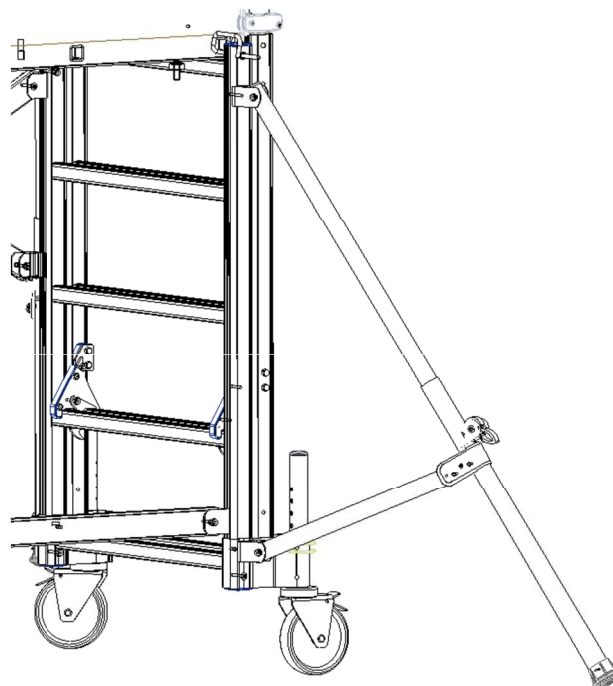
X-TOWER

2-6: Installing stabilizers:

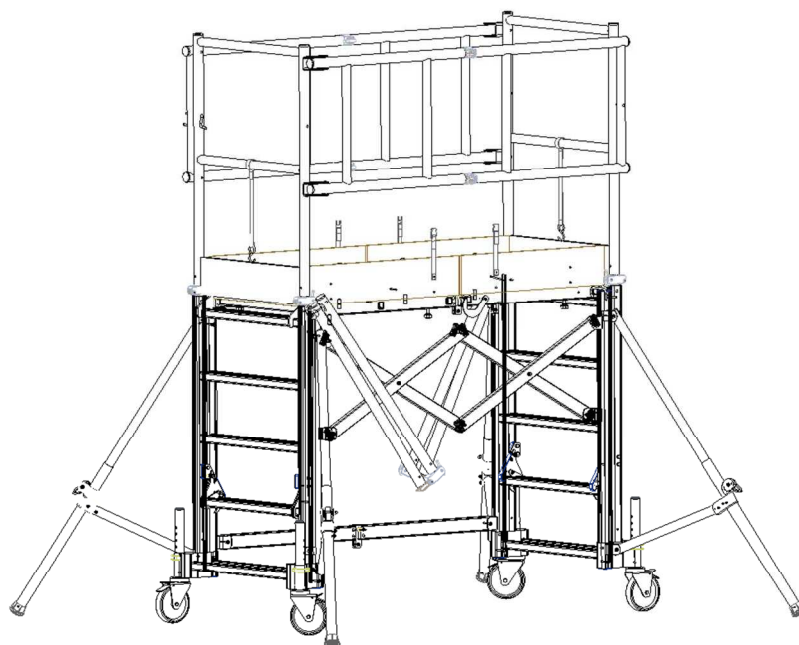
Hold the catch down and pull the stabilizers backwards.



Extend the stabilizer until it is firmly in contact with the ground and release the catch.



Carry out the same operation on the other 3 stabilizers



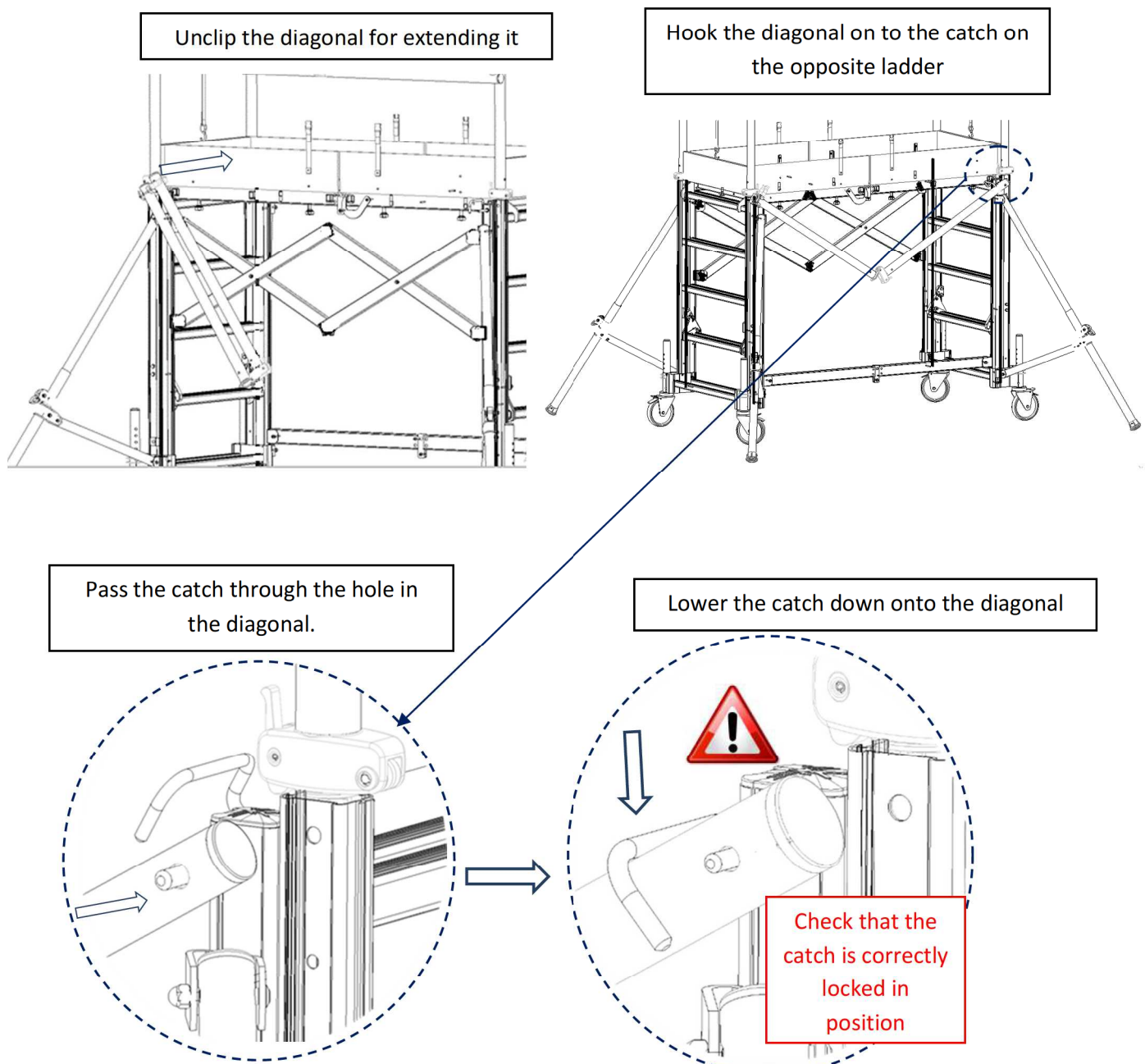
The scaffolding is now ready for use with a platform 1.3m high.
See Chapter 3 for erecting the scaffolding at 2 metres and Chapter 4 when a height of 3 metres is required.

X-TOWER

Chapter 3: Erecting the 2-metre model

3-1: Installing diagonals

Diagonals must only be fitted when the unit has been erected at its maximum height.

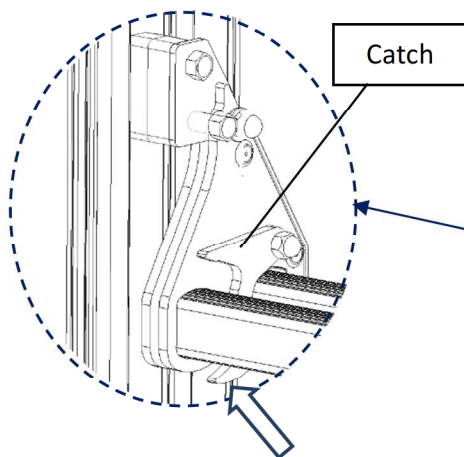


Carry out the same operation for the second diagonal.

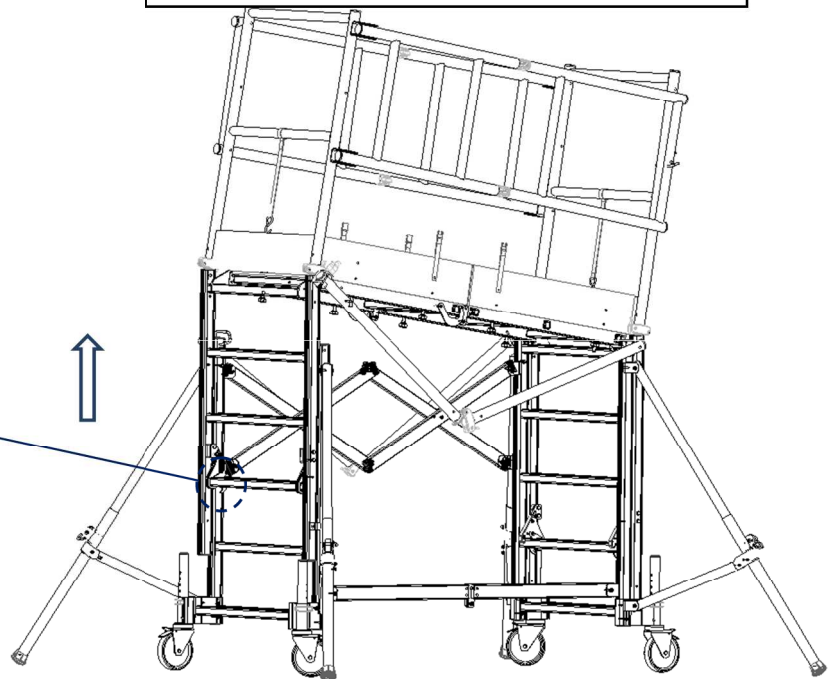
X-TOWER

3-2: Erecting the unit

Release the 2 catches on the locking pivot by pushing on them from under the rung

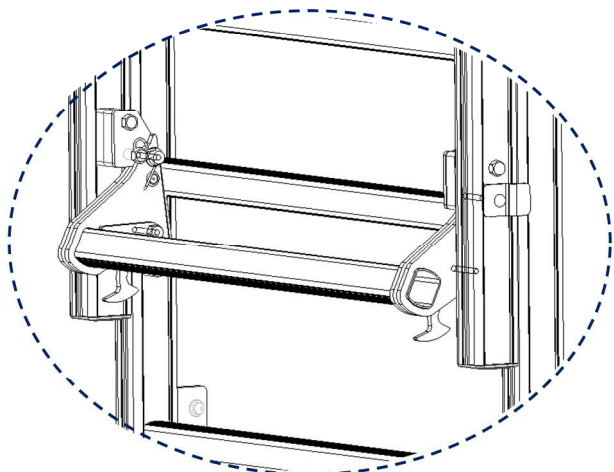
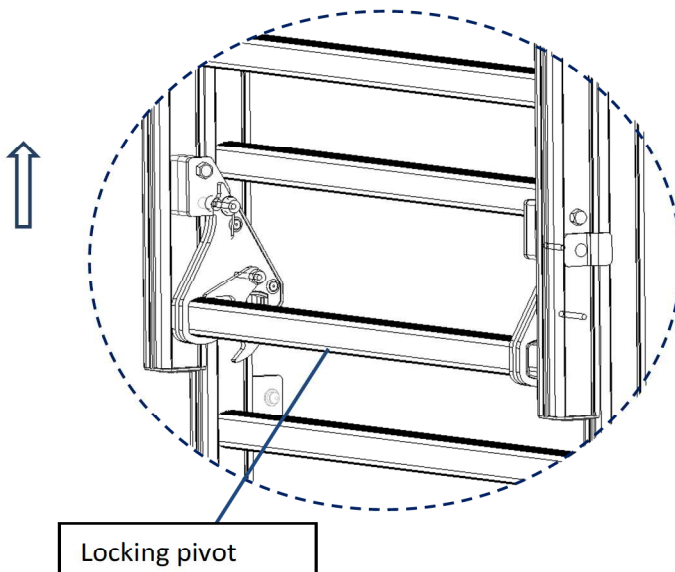


Raise the ladder to the top of a rung as shown below



Raise the ladder **without holding the locking pivot**. It will move away automatically.

The locking pivot moves away when it reaches the next rung.

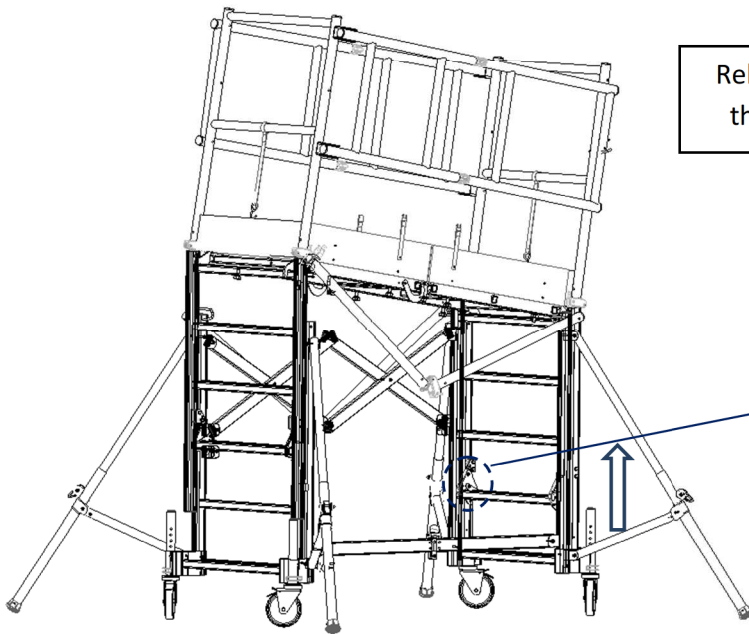
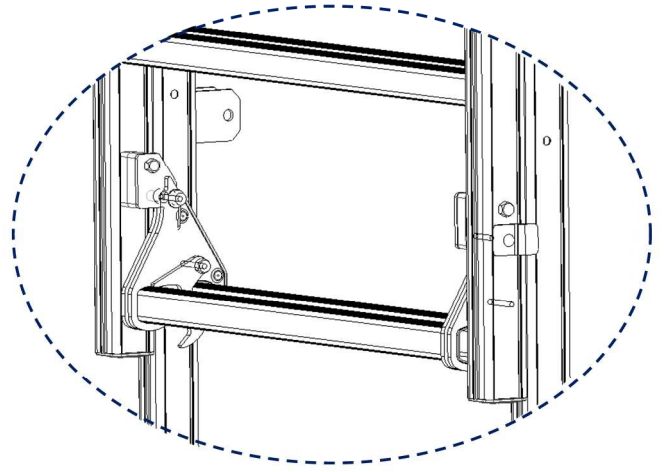
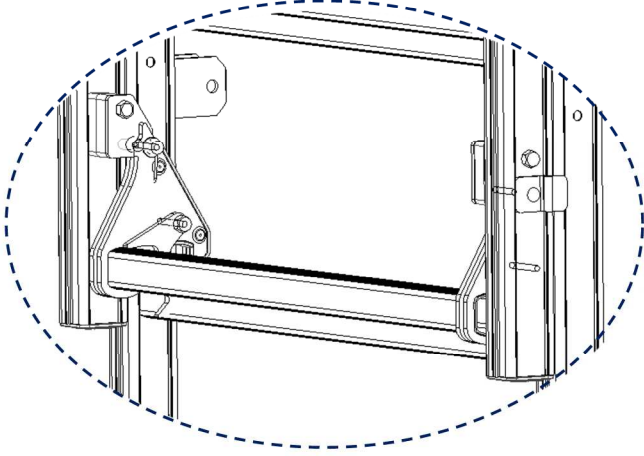


Do not put your fingers between the two ladders. Hold the rung from underneath.

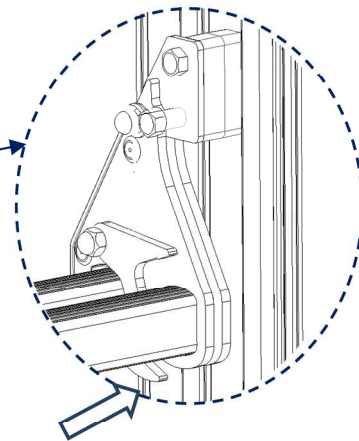
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The locking pivot will come back into position once it is above the rung

Lower the ladder until the locking pivot bears on the rung



Release the 2 catches on the locking pivot on the opposite ladder. Then raise the ladder.



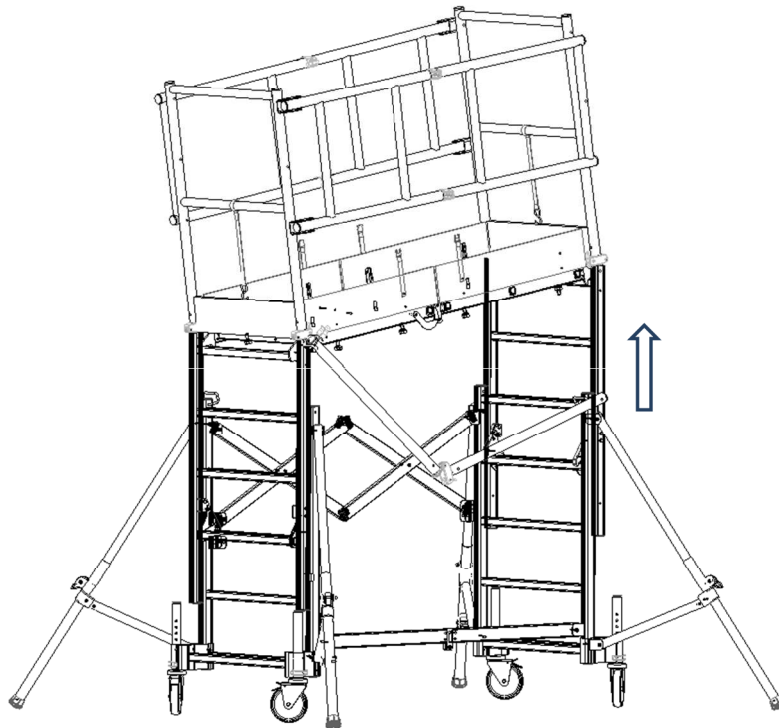
To put the platform at a height of 1.55m, place the locking pivot on the rung directly above it and re-engage the catches on the locking pivot.
For positioning the platform higher, place the locking pivot two rungs higher.

X-TOWER

Raise the first ladder once again.

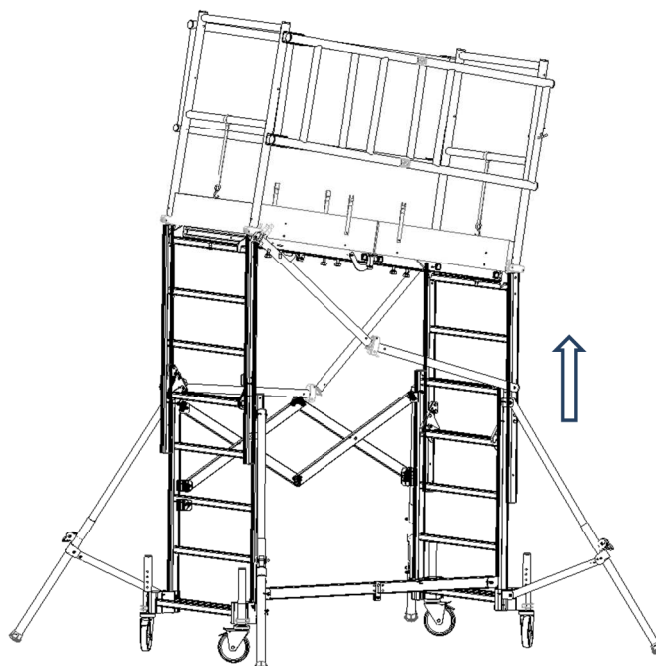
To put the platform at a height of 1.8m, place the locking pivot on the rung directly above it and re-engage the catches on the locking pivot.

For positioning the platform higher, place the locking pivot two rungs higher.

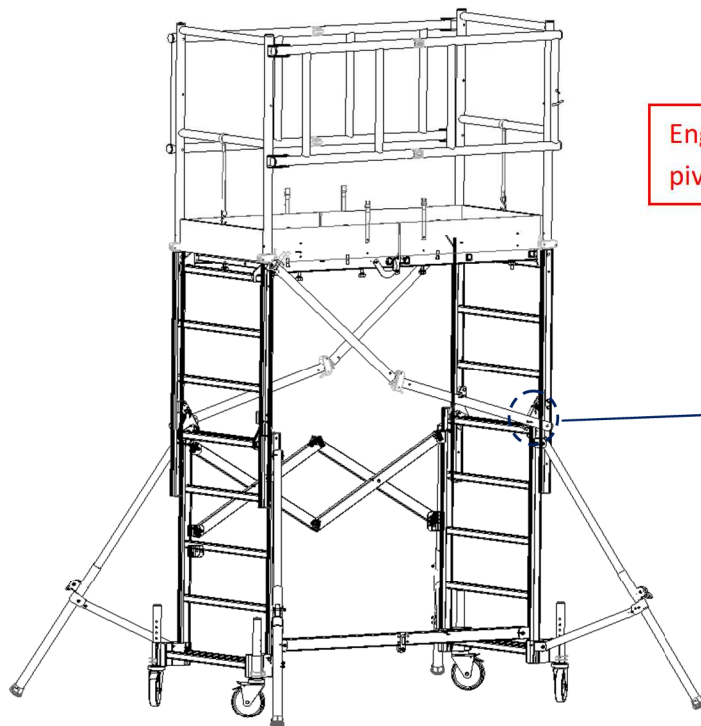


Raise the second ladder by a rung until you reach the maximum working height of 2.05m.

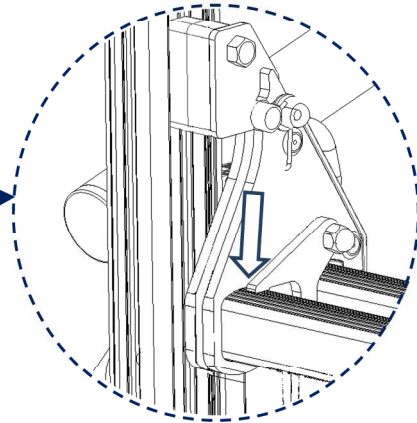
The "STOP" labels on the locking pivot and the ladder will then be in line.



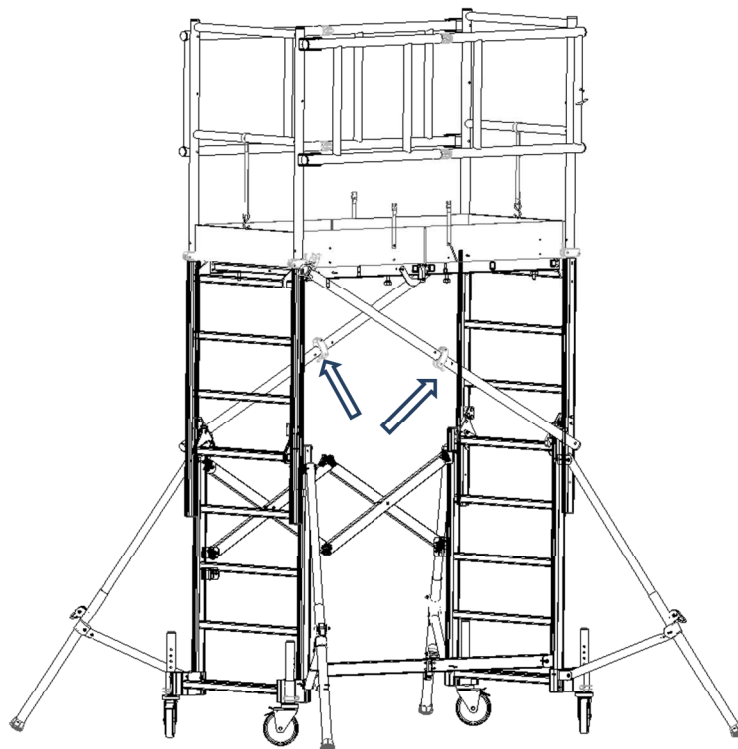
X-TOWER



Engage the 4 catches on the locking pivots by pushing on them.



Push on the hinges on the diagonals for locking them in position. (Only when the platform is 2.05m high)



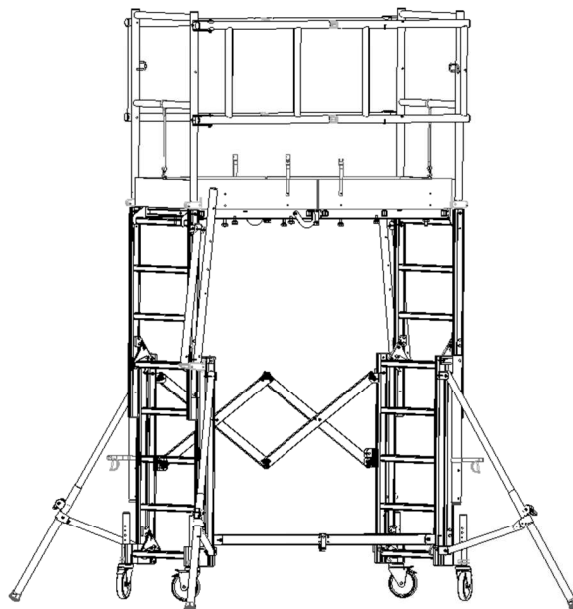
The scaffolding is now ready for use with a platform 2.05m high.

X-TOWER

Chapter 4: Erecting the 3-metre model

4-1: Erecting external ladders

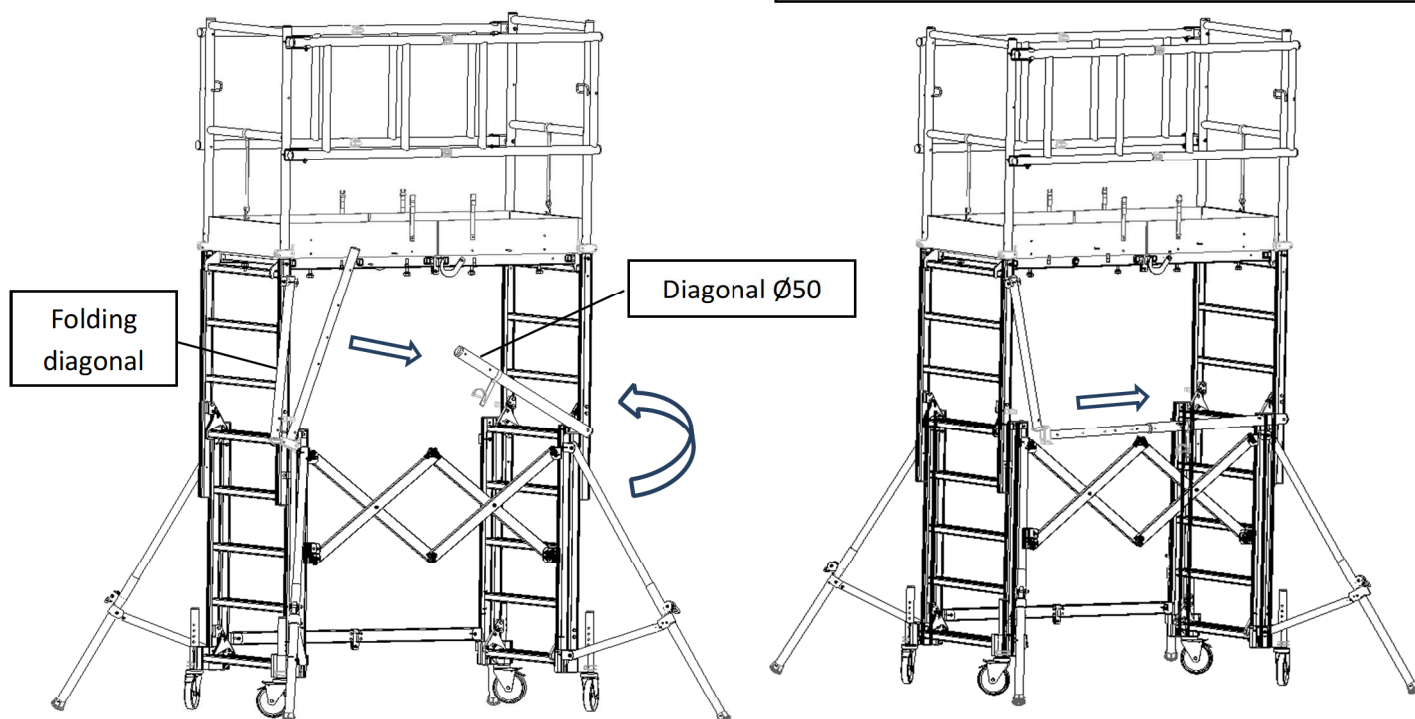
Proceed in the same way as for the 2-metre model for mounting external ladders but without fitting the diagonals.



4-2: Installing diagonals

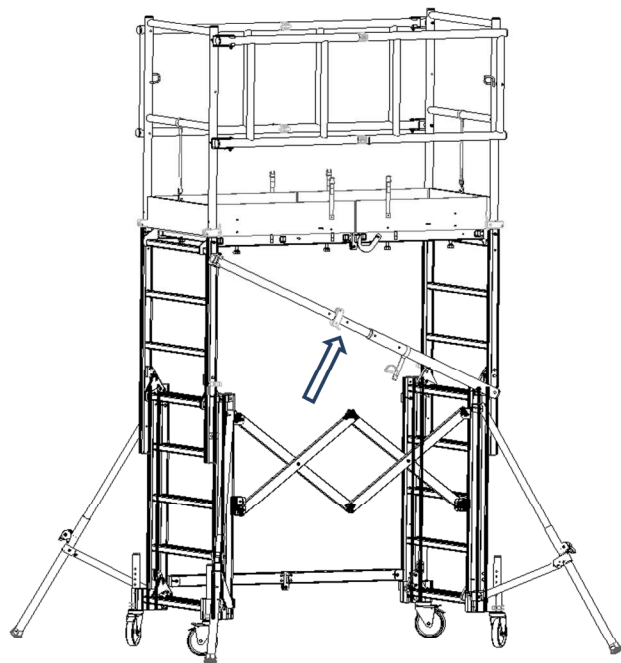
Pivot the Ø50 part of the diagonal inwards and then unclip the folding part

Insert the folding part into the Ø50 part, without holding it with the pin if you wish to raise the scaffolding to a higher level.

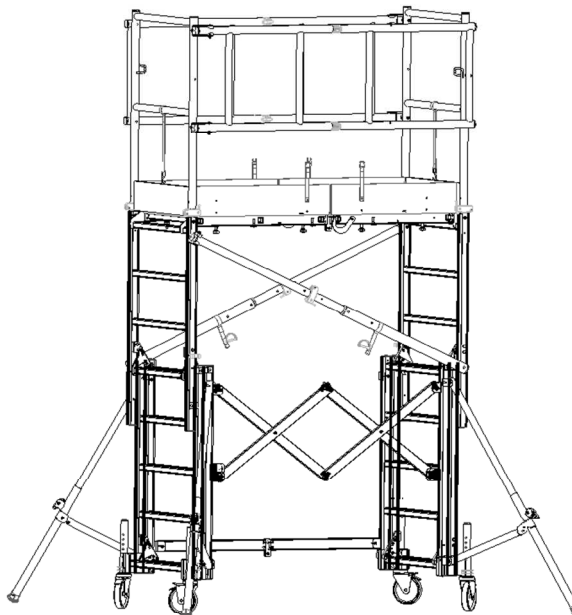


X-TOWER

Engage the hinge catch by pushing on it



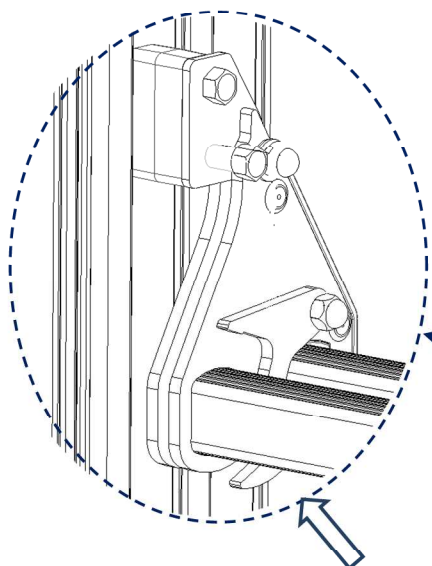
Carry out the same operation on the second diagonal



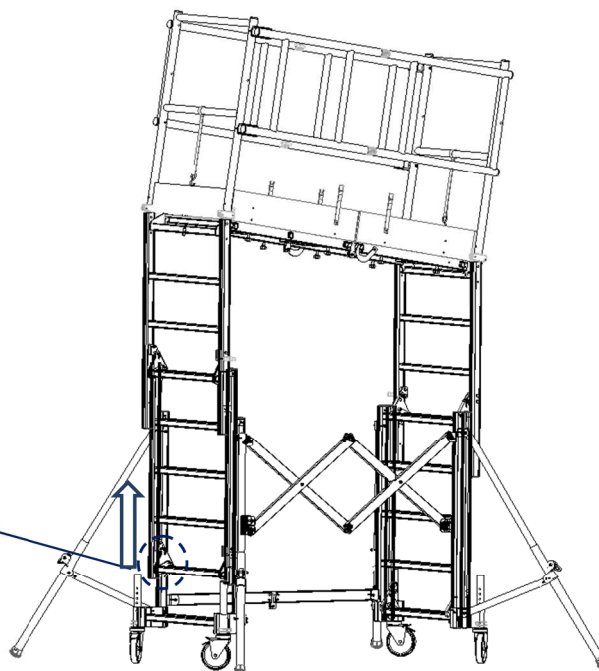
The platform fitted in this way is at a height of 2.05m. See paragraph 4.4 for locking the diagonal in position.

4-3: Erecting intermediate ladders

Disengage the two locking pivot catches on one of the two intermediate ladders.



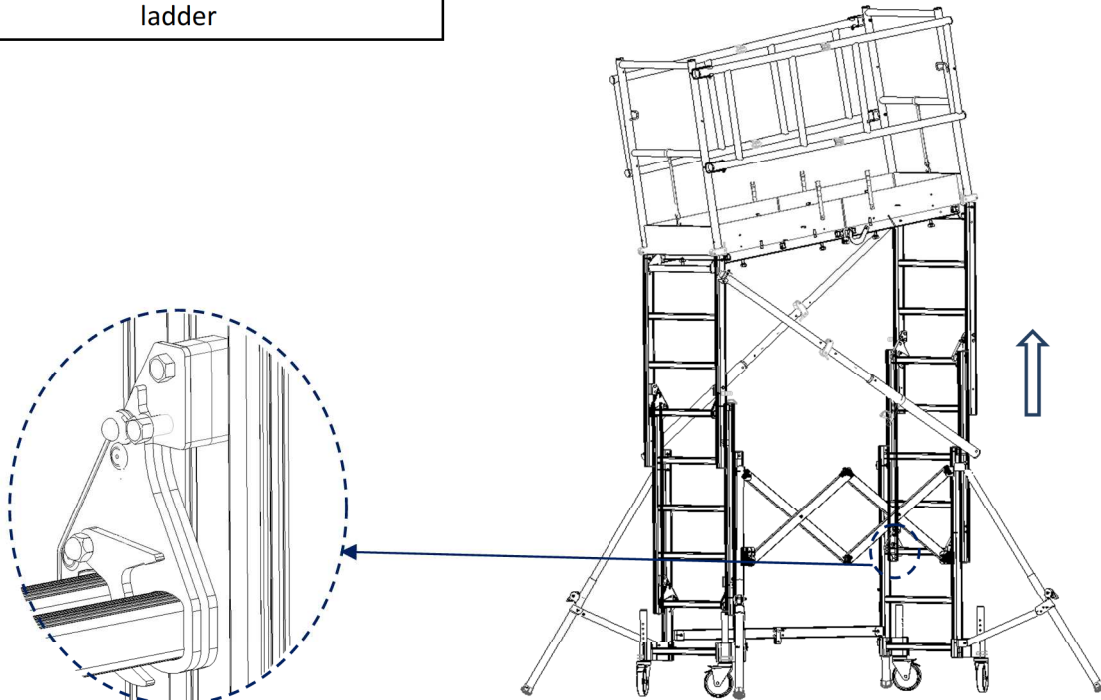
Lift the ladder upwards until the locking pivot bears on the next rung.



X-TOWER

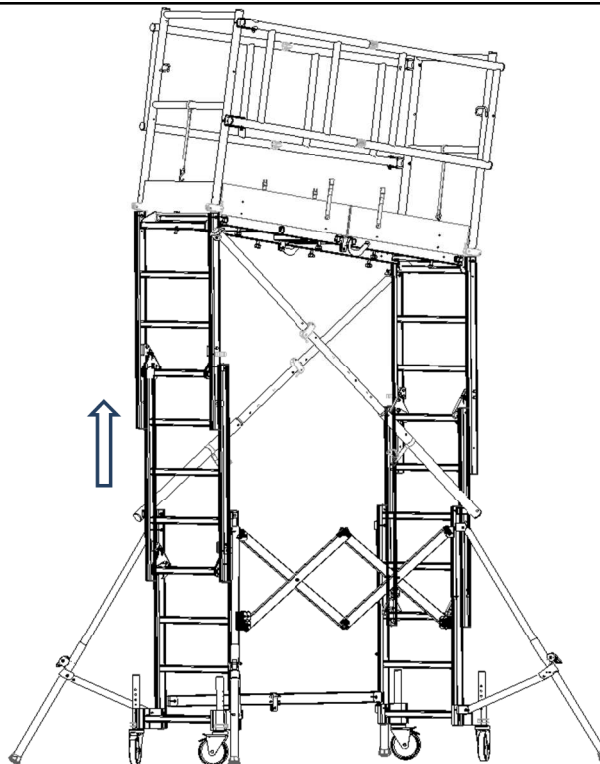
Disengage the 2 catches on the locking pivot on the other ladder. Then raise the ladder

To have a platform height of 2.3m, put the locking pivot on the rung directly above and re-engage the locking pivot catches. For positioning the platform higher, place the locking pivot two rungs higher.



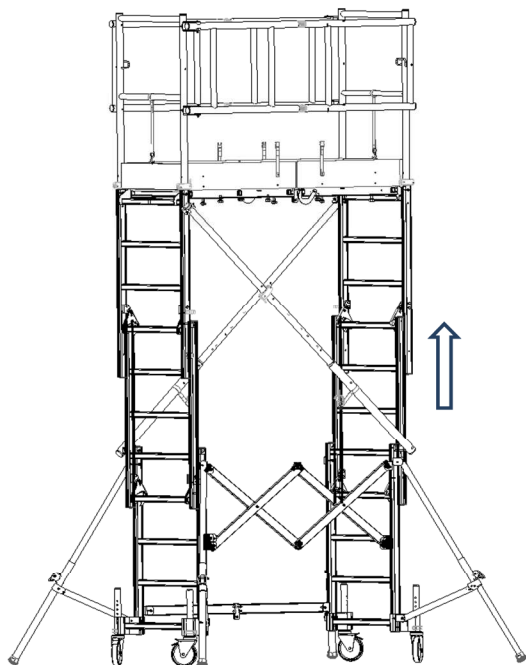
Raise the first ladder once again.

To have a platform height of 2.55m, put the locking pivot on the rung directly above and re-engage the locking pivot catches. For positioning the platform higher, place the locking pivot two rungs higher.

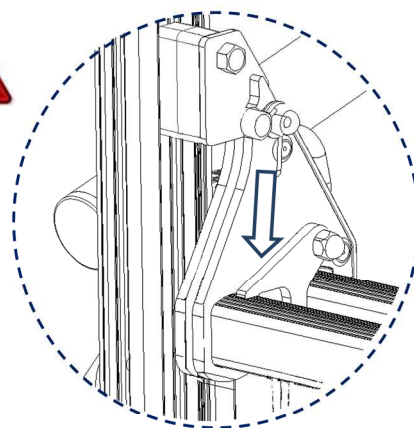


X-TOWER

Raise the second ladder by one rung for attaining the maximum working height of 2.8m.



Engage the 4 catches on the locking pivots by pushing on them.

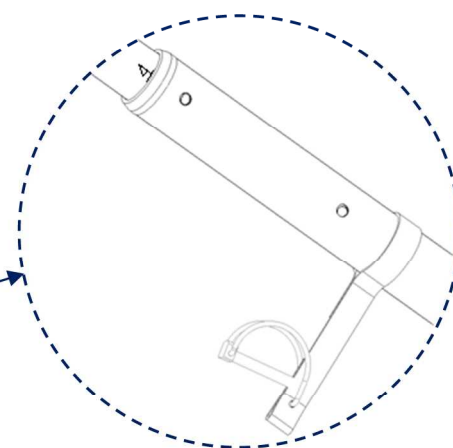
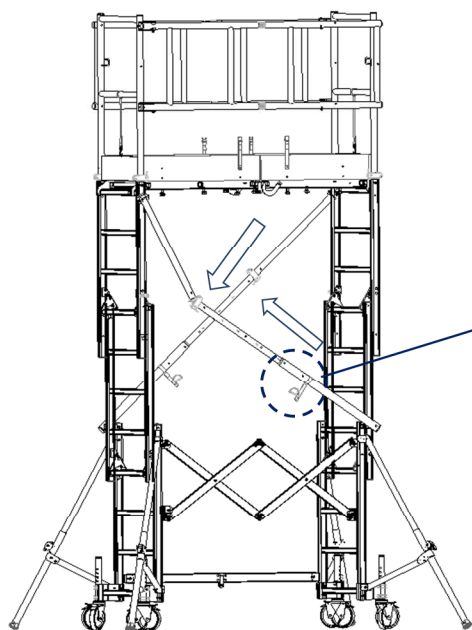


4-4 Locking the diagonals in position

Operation to be carried out when the platform is at the required height.

Unlock the folding part by pushing on the hinge catch

Extract the folding part from $\varnothing 50$ part until you can see the figure corresponding to the platform height. (See table).

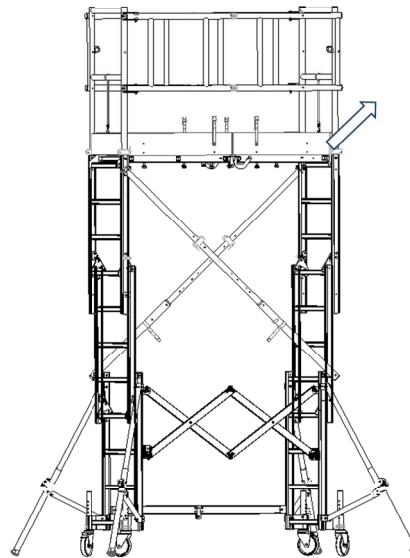
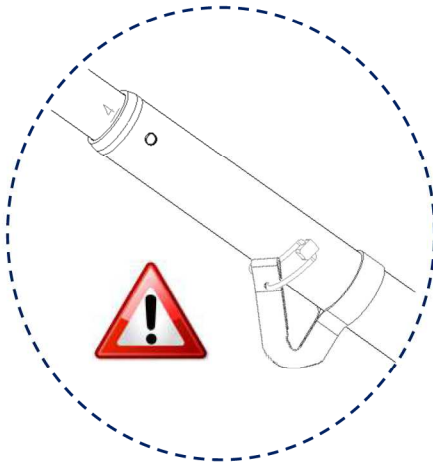


Platform height	Position of diagonal
2.05m	1
2.3m	2
2.55m	3
2.8m	4

X-TOWER

Insert the pin for connecting the two diagonal sections together.

Push on the hinge to lock it in position and then carry out the same operation on the second diagonal.



The scaffolding is now ready for use.

Chapter 5: Post-assembly and pre-use operations

The person appointed by the company manager as being in charge of safety on the site must check that assembly-work on the scaffolding is in order and compliant.

These checks concern:

- Stabilizer ground support.
- Correct assembly of the different elements.
- Environment.
- Correctly latching wheel brakes
- Scaffolding level check
- Correct locking on each locking pivot.
- Correct locking of diagonals at locking points and hinges.
- Correct locking of guardrails at locking points and hinges.



The instructions contained on the label glued under the flooring **MUST BE FOLLOWED**.

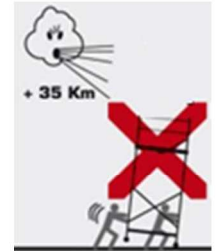
X-TOWER

Chapter 6: Instructions

6-1: Instructions for use

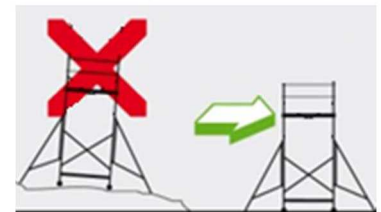
These instructions do not replace regulations in force, which must also be followed.

- Comply with permissible loads on the flooring and the structure.
- Horizontal forces must not be over 30Kg.
- Maximum wind allowed with stabilizers = 35Km/H
- Anchor the scaffolding where winds are over 35 Km/h



Work area:

- Do not install the unit close to any bare conductors under power.
- Prohibit all access to scaffolding in zones accessible to the public.
- Mark out the area of use if machinery or vehicles are liable to pass close by...
- Check that there are no overhead obstacles in the area of movement
- Provide for tracks when on soft ground.



The following is not allowed:

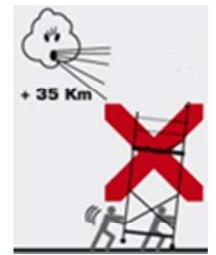
- Using a jib, even a manual jib, placed on the outside of the scaffolding.
- Covering mobile scaffolding, even partially.
- Increasing heights more than allowed.
- Using components other than those supplied by the manufacturer.
- Using scaffolding that has not been assembled vertically (tolerance: 1%).
- Using scaffolding that has not been assembled as per the instructions contained in this manual.
- Making a bridge between the scaffolding and a building or between two scaffolding units.
- Leaning an access ladder against the scaffolding.
- Jumping on floors.
- Using planks for flooring.
- Accessing the work floor from outside.
- Adjusting wheels for increasing platform height. (At least one wheel must be fully withdrawn.)



X-TOWER

6-2 Instructions for moving the scaffolding

- Mobile scaffolding can only be moved manually on solid level ground where there are no obstacles either on the ground or overhead. Normal walking speed should be considered the maximum speed for moving scaffolding.
- Only move the scaffolding over ground with a maximum slope of 3%.
- Never tow mobile scaffolding with a motor vehicle.
- Never move scaffolding when the wind is higher than 35Km/H.
- The ground on which the mobile scaffolding is to be moved must be capable of bearing load paths.
Provide for tracks when on soft ground.
- Scaffolding **MUST NEVER BE MOVED** with any persons or equipment on it.
- Do not lift up scaffolding with a crane or a gantry.
- The X-Tower can be moved by one person. It must always be “pushed”. but never “pulled”.



Chapter 7: Inspection, servicing and maintenance

Systematically inspect parts before assembly, especially:

- Wheel treads and brakes.
- Safety devices.
- Hooks for work floors and their fixtures.
- Work-floor and skirting board plywood.

Any part that has been:

- Permanently distorted
- Drilled.
- Notched (by grinding for example...)
- Subject to serious rusting

... must be discarded!

Replace the component whenever you are in doubt.

When replacing a component, it **MUST be replaced by a part that is similar to the original.**

Keep parts clean and safety devices in good running order.

X-TOWER

Replace or clean any plates or stickers that provide information on how to use the unit or on safety.

Check:

Statutory checks (stipulated in the order of December 21, 2004) are as follows:

A check must be made on every worksite before the unit is put into use:

- For the first time,
- After the scaffolding has been dismantled and re-assembled.
- After any modifications in the scaffolding's conditions of use, or in weather or environmental conditions that are liable to affect its safety when used.
- Whenever the scaffolding has not been used for at least one month.

This check must include appropriateness testing, an assembly and installation check and a working condition check. Traceability of this check will be confirmed formally on the establishment's safety register.

Daily checks

This includes a check on good running order.

Traceability of this check is formalized by a sheet attached to the access hatch.

Quarterly checks

In the case of mobile scaffolding, this check covers the same points as the daily check. The check is to be made at least once every three months and must be confirmed formally on the establishment's safety register.

N.B.: These checks may only be carried out by personnel holding a qualification certificate issued by the head of the establishment bearing the words "Controller and user".

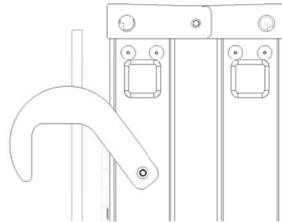
For more information and details concerning control checklists, see RECO R.457, appendix 3, 3bis, 4, 5 and 6.

Chapter 8: Dismantling

- Before dismantling:
 - Make sure that the scaffolding is stable:
 - With wheel brakes on
 - Stabilizers correctly positioned. etc.
- During dismantling:
 - Use the same procedure as for assembly but in the reverse order. Re-engage the locking pivots in position when the ladders are in the "down" position (the "STOP" sticker at the bottom of the ladders must be in line with the sticker on the locking pivot). Take care when folding guard-rails. Move to one side before tipping them over for preventing them from hitting you on the head.

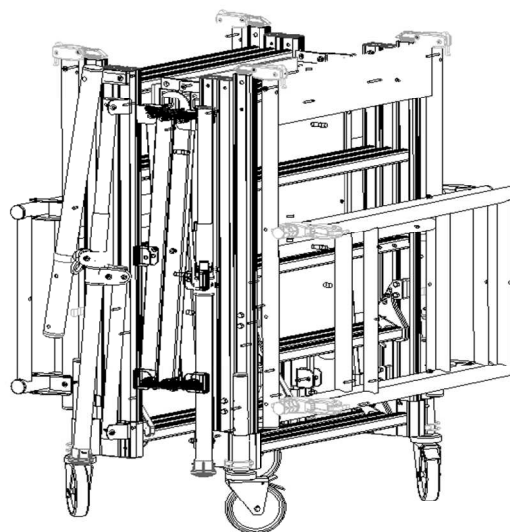
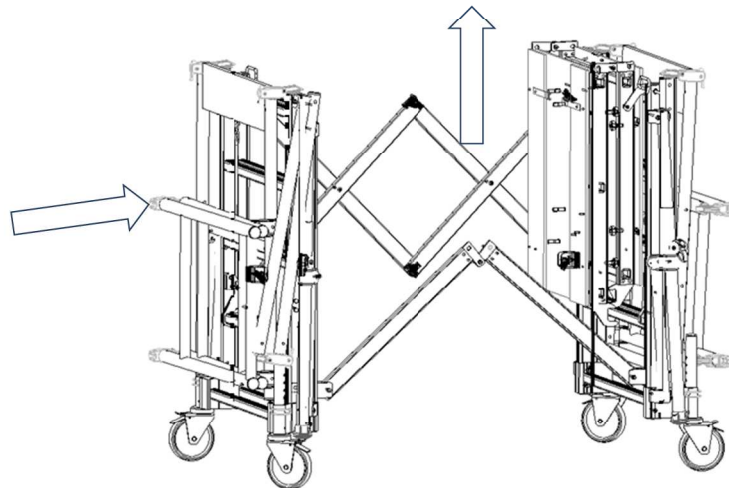
X-TOWER

- For folding the platform, pull on the ring on the lock for releasing it. When the platform has been reclosed, put the support hooks in position so that they are parallel to the platform.



View of the platform hook when in storage position

- For reclosing the unit, pull on the strut locking ring. Once the catch has been released, pull the ring upwards for folding the strut. Then push it sideways for bringing the ladders together.



View of unit when folded up.

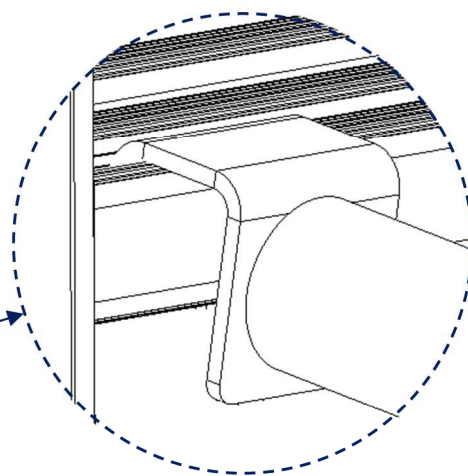
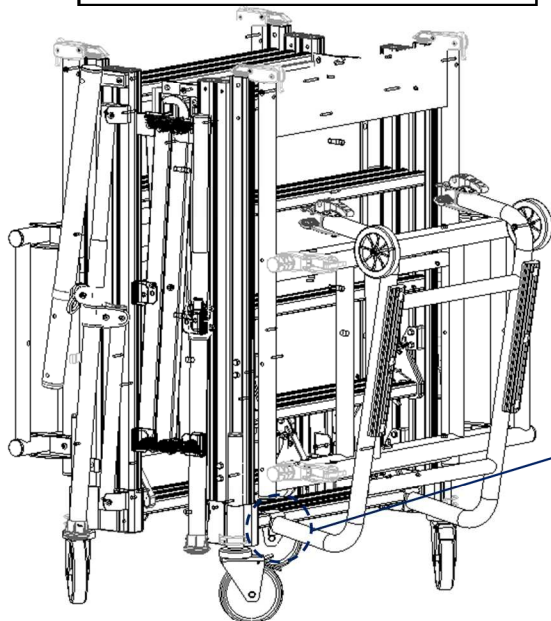
X-TOWER

Chapter 9: Moving and loading the unit onto a vehicle

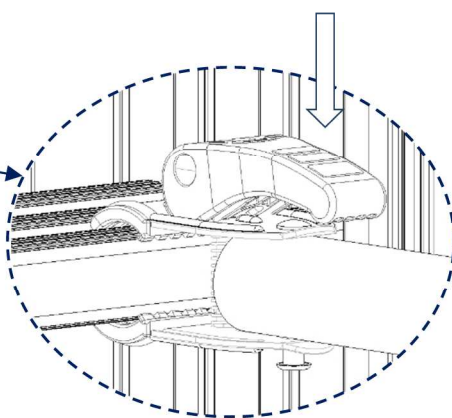
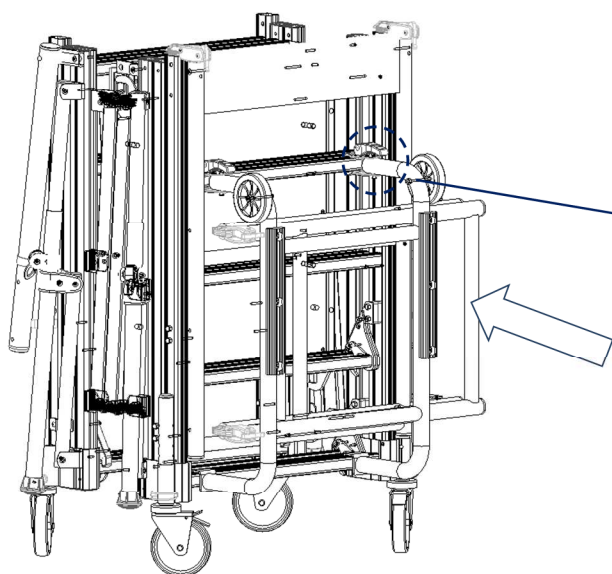
9-1 Fitting the transport kit (optional)

The transport kit can be installed on either side of the scaffolding after it has been folded up.

Place the hooks on the rung on the wheel holder.



Lift up the transport kit until the blue clips are at the level of the ladder rung. Then lock them in place by pushing on the cam.

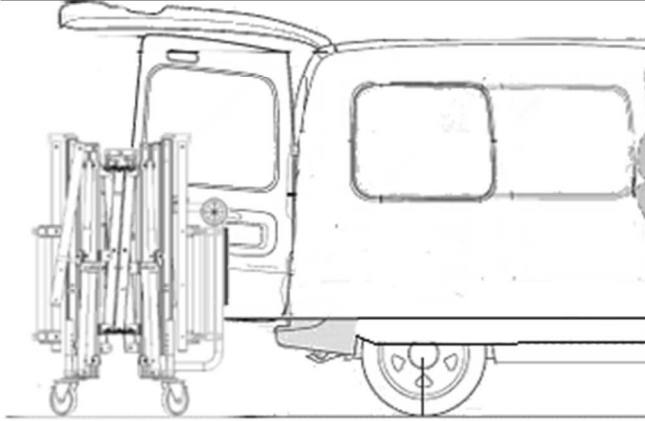


Proceed exactly in reverse order for removing the transport kit. The kit must be removed before unfolding the scaffolding.

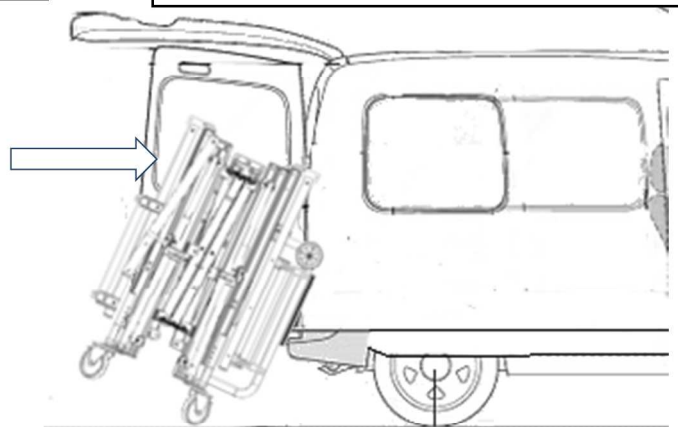
X-TOWER

9-2 Loading the scaffolding onto a vehicle

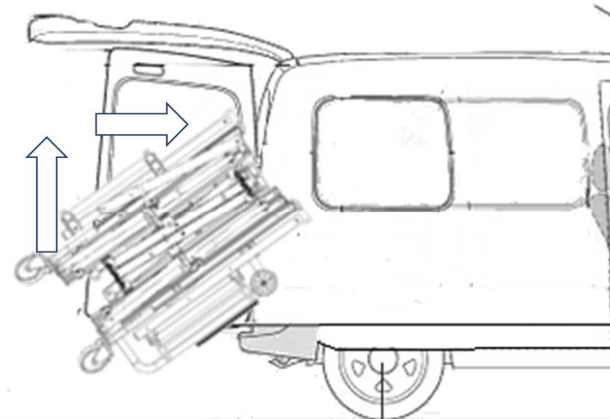
Push the scaffolding to the back of the vehicle leaving a gap behind the rear bumper. Put the 4 wheel-brakes on.



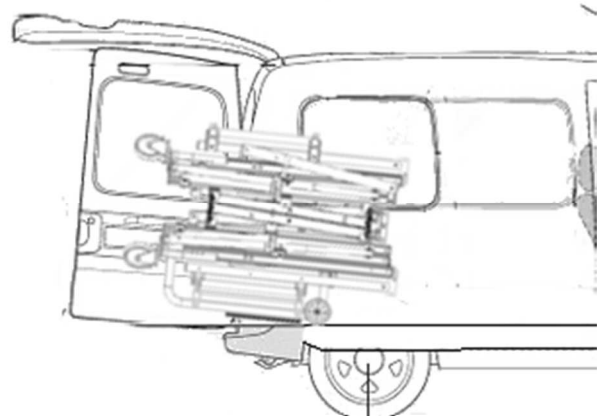
Tilt the unit forward onto the pad bears on the vehicle.



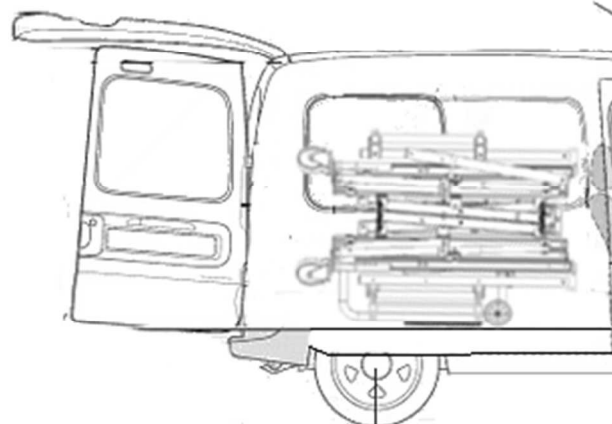
Lift the scaffolding unit using the wheel support and push it upwards.



Once it has been loaded, raise the unit a little for rolling it to its final transporting point.



Release the scaffolding. It will stand on its support pads



Proceed in exactly the reverse order for unloading the scaffolding.

X-TOWER

Chapter 10: Guarantee

X-Tower scaffolding unit are guaranteed for 2 years against defects in parts and workmanship.

The guarantee comes into force as of the date of invoice.

Our guarantee will only be valid on condition that the purchaser fulfils his contractual obligations, especially concerning payment for the equipment.

The guarantee is limited to replacement or repair in our works of the original parts recognized as being faulty after inspection by our services.

All other rights are excluded. More particularly, any application of the guarantee shall not give rise to payment of damages under any circumstances whatsoever.

This guarantee applies exclusively to units installed and used as per the instructions contained in technical assembly and utilisation documents.

IMPORTANT: Keep your proof of purchase (invoice or delivery slip) as it will be requested from you should the guarantee need to be applied.

For any further details, please connect to our internet site:

www.tubesca-comabi.com



Video instructions on-line