

EN1004-1 Class 3

No: CE/21-22/004



Assembly Manual

Stairway Towers MASY Series

Aluminium Mobile Stairway Towers

MASY

EN1004-1 3 8/12 AXXX

The **AFFIX Tower** is a mobile access tower manufactured in our **ISO 9001** accredited facility.

This user guide provides you with step by step instructions to ensure your system is assembled easily and safely, using the **3T (Through the Trapdoor)** method.



**WARNING**

NEVER FORGET TO LOCK THE
CASTOR WHEELS

DESCRIPTION:

The Affix **MASY** Series Stairway Tower is ideal for safe entrance from inside to access to the top of the Tower. This provides the user more safety & ease to get access to the working platform. The unique features of this tower is the Integral stairway and an easily detachable handrail system which is ideal for frequent ascend and descend even if the user is carrying tools or some lightweight material in his hands. Also, The Walkthrough working platform is larger than the standard trapdoor platform which provides additional head clearance while climbing the tower and ease of access to the working level.

The information and instructions included in this manual are provided to help get the best possible service from your **MASY** Series Aluminium Stairway Tower. This user guide provides you with step by step instructions to ensure your system is assembled easily and safely, using the 3T (Through the Trapdoor) method.

Through The Trapdoor (3T) Method:

The **3T** method of construction is an approved method of assembly and it minimizes the risk of a fall from height. The erector can complete an 'assembly or access' platform level from which the 'next lift' of frames, braces and platform is added, until the final working height of the tower is achieved. By following the **3T** method, the erector sits through the hatch of the platform with their feet resting on the frame rungs. In this position the erector can attach the guardrail braces. Once guard-rails are secured in position the erector can climb onto the platform and continue constructing the next level.

Compliances:

The Affix **MASY** Mobile Tower has been tested and certified to **EN1004-1 : 2020** by **TUV, India**.

Maximum Safe Working Loads

The safe working load of the tower is **750 kgs** including its own weight. The maximum safe working load of any individual platform is **250 kgs** evenly distributed. If the tower is to be used for any specific loading contact your supplier or the manufacturer, Affix Scaffolding WLL.

Tel: +974 5529 9893 or Email: info@affixscaffolding.com.

RECOMMENDATIONS :










- Recommend a minimum of two people to assemble, dismantle and move the platform tower.
- Check that all components are on site and in good working order.
- Ensure that the assembly location is checked to prevent hazards during assembly or moving and while working on the tower. Particular attention should be given to the ground condition, whether level or sloping, obstructions and wind conditions. The ground condition must be capable of supporting the tower structure.
- Towers must always be climbed from the inside of the assembly using the ladder.
- Lifting of components must be done inside the effective base area of the tower.
- Moving the tower must only be done by manual effect from the base of the tower.
- When moving tower be aware of overhead hazards (e.g. electric cables).
- No personnel or material to be on the platform whilst the tower is being moved.
- Beware of horizontal loads which can lead to instability of the tower. The Max. side force is 20kg.
- Outdoor scaffold towers should, wherever possible, be secured to a building or fixed structure. It is good practice to tie scaffold towers of any height, especially when unattended, or exposed to windy conditions.
- Do Not use boxes or steps to gain additional height.
- Do Not lift or suspend an assembled mobile tower.
- Damaged components or components from other tower systems must never be used.
- Stabilizers should always be fitted when specified. Use the stabilizer shown on the component list according to the tower height.

Air speed and resultant action to be taken

Beaufort Scale	Description	Air Speed	Action to be taken
0	Calm, smoke rises easily upwards	1 mph	No action needed
3	Moderate breeze, raises dust	12 mph	No action needed, keep a watch
4	Raises loose papers, leaves and small twigs move	17 mph	Cease work
5	Strong breeze, tree branches bend, unable to use umbrella	25 mph	If expected, tie tower to a rigid structure
6	Gale force, cannot even walk	40 mph	If expected, dismantle the tower

Safety Checklist :

Mobile towers - 3T Method Checklist

- Inspect components prior to use 
- Ensure all brace claws operate and lock correctly prior to erection 
- Tower upright and level 
- Castors locked and legs correctly adjusted 
- Diagonal braces fitted 
- Stabilizers/outriggers fitted as specified 
- Platforms located and wind-locks on 
- Toe boards located 
- Check that the guardrails are fitted correctly 

SAFE WORKING LOADS AND HEIGHTS



- Safe working load on the working platform is **250kgs** evenly distributed.
- The load on the tower should not exceed **750 kgs.**
- The maximum recommended tower height is **13.5M.**

ASSEMBLY PROCESS :

PREPARATION

Locate the tower, ensuring ground is level.

Sort the braces into horizontal and diagonal braces, the diagonals are slightly longer. Also note that the braces are differently color coded.

Check the locking triggers in the bracing hooks such that they are working properly.

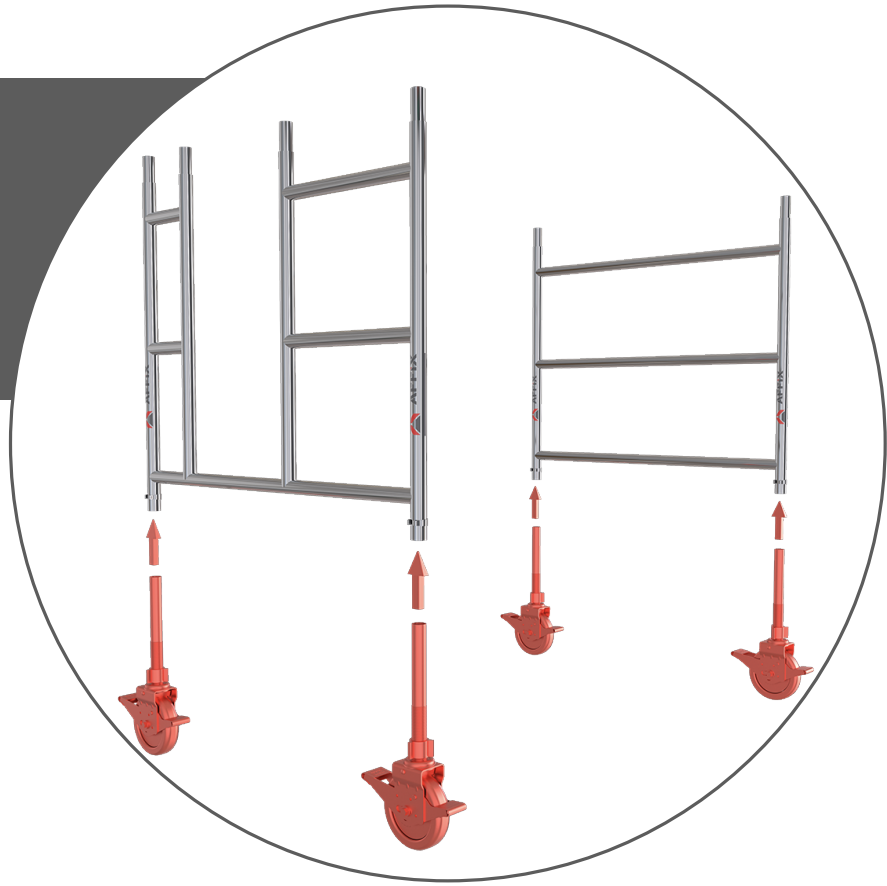
Lock the castor by moving the brake lever fully down.

FIRST LEVEL

Step 1

Insert the **Castor Wheels** with the jack pipe inside the bottom of the tubes of the 1st level **3 Rungs Walkthrough Frame** and **Span Frame**.

DO NOT USE Hammer.



Step 2

Step 2.1

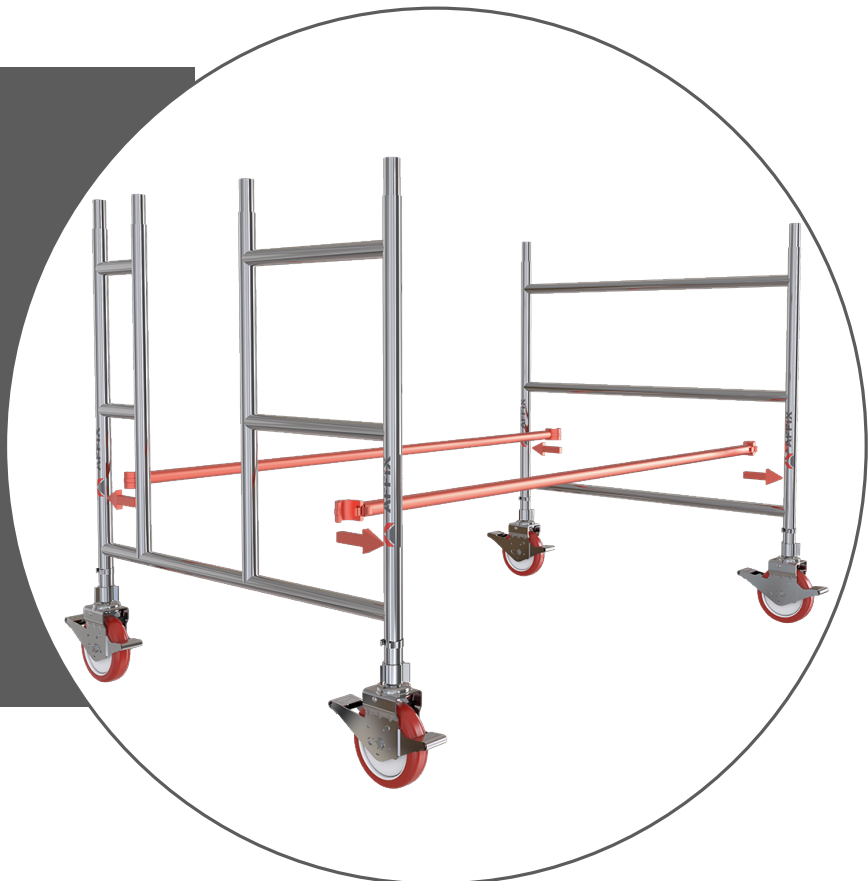
Hook both the bottom 2 Horizontal Braces horizontally to both the Span frame's vertical pipes, just above the 1st rung.

Step 2.2

Lock all the four wheels by pressing the lock gear with foot.

Step 2.3

One person should hold the frame in upright position during this step.



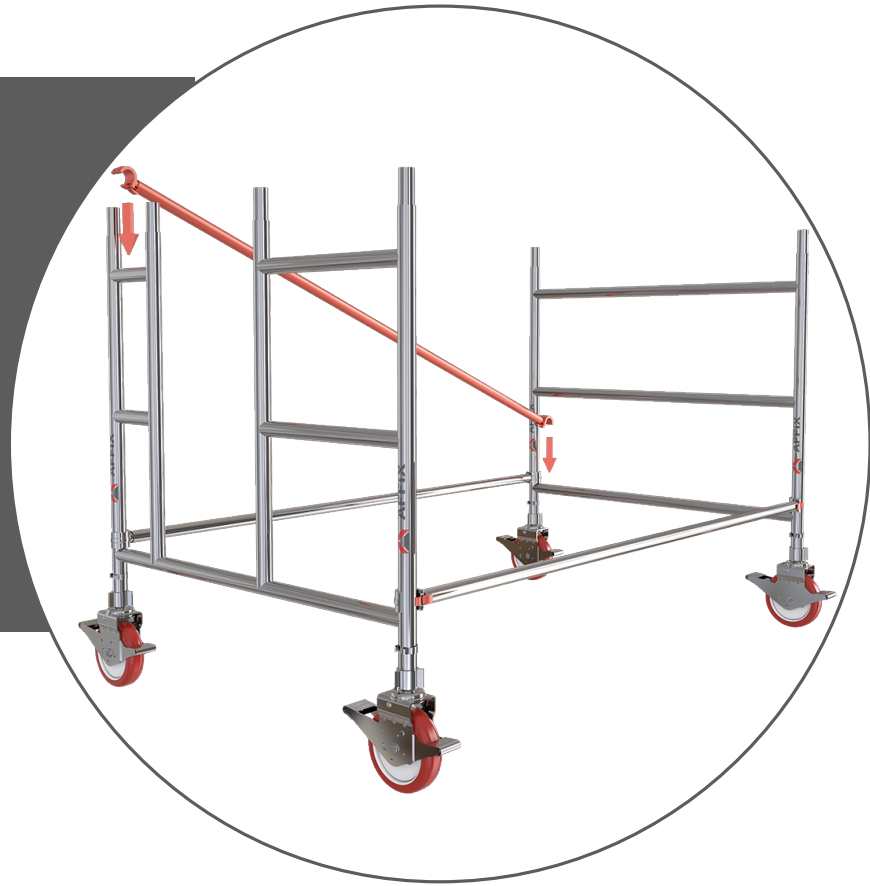
Step 3

Step 3.1

Hook the **Diagonal Brace** to the **1st Rung** of the 1st level **Span Frame** at one end and the other end should be hooked to the **3rd Rung** of the 1st level **Walkthrough Frame** on the other side.

Step 3.2

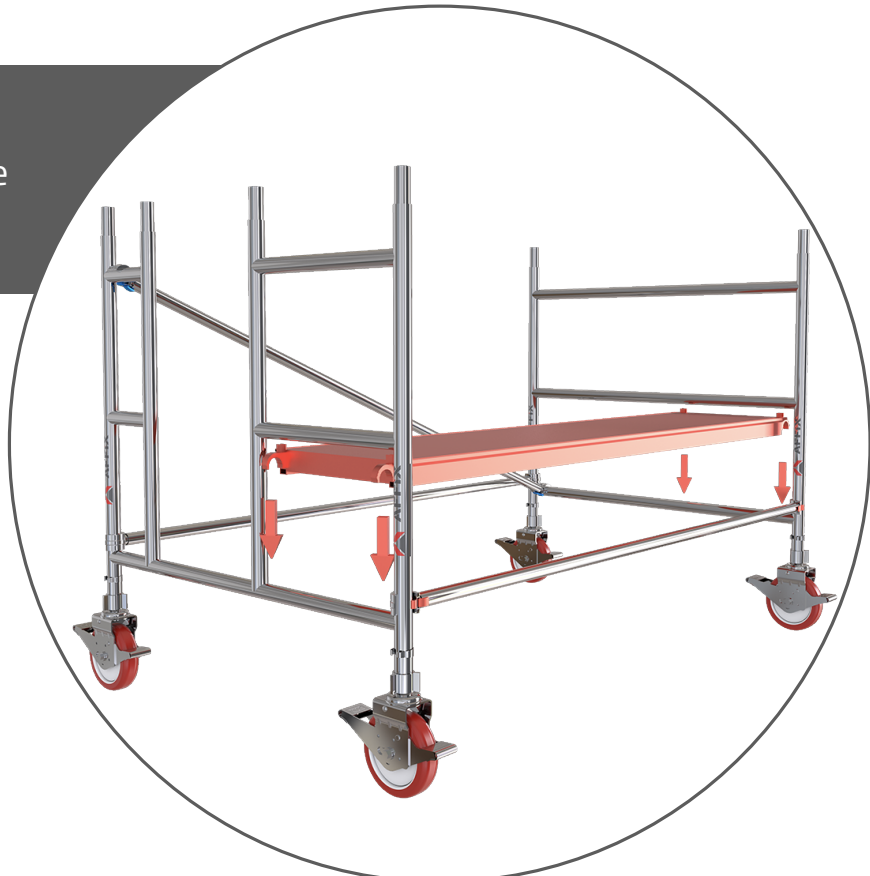
One person should hold the frame in upright position during this step.



Step 4

Step 4.1

Hook the Intermediate **Fixed Platform** to the **1st Rung** of both the frames.



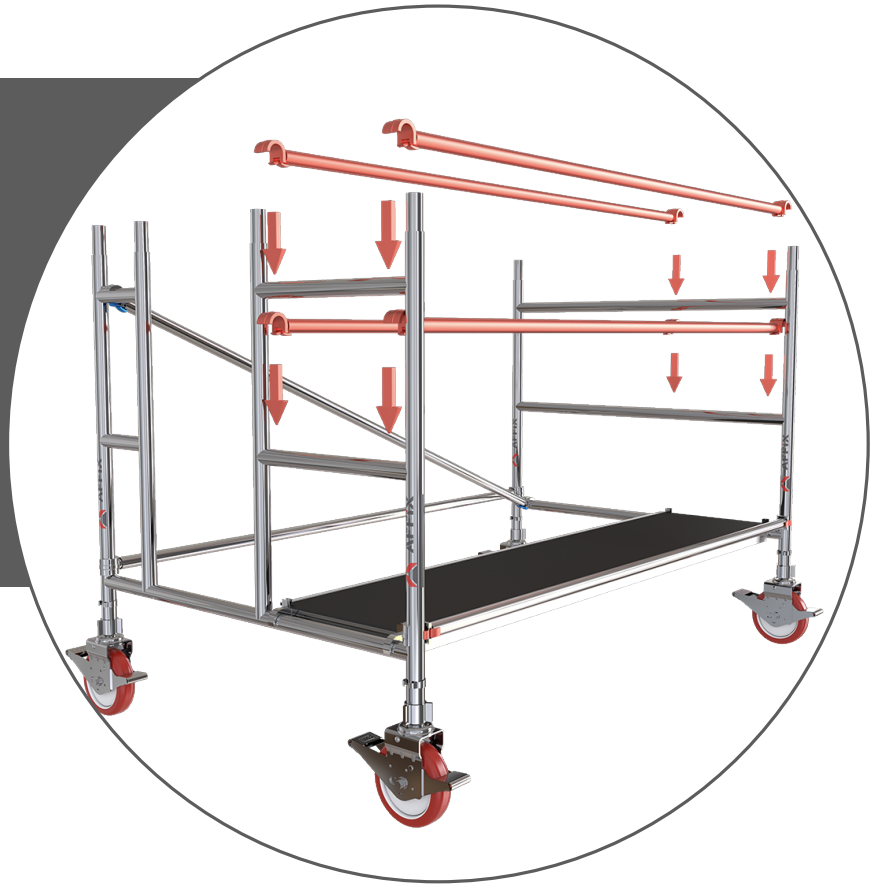
Step 5

Step 5.1

Hook 2 **Horizontal Midrail Braces** to the **2nd Rung** of both the frames for the platform.

Step 5.2

Hook the other 2 **Horizontal Guardrail Braces** to the **3rd Rung** of both the frames for the platform.



SECOND LEVEL

Step 6

Insert the 2nd level **4 Rung Span Frame** and **Walkthrough Frame** into the respective spigots.

For clamping instructions refer to the **Clamping Instructions** section on **Page 20**.



Step 7

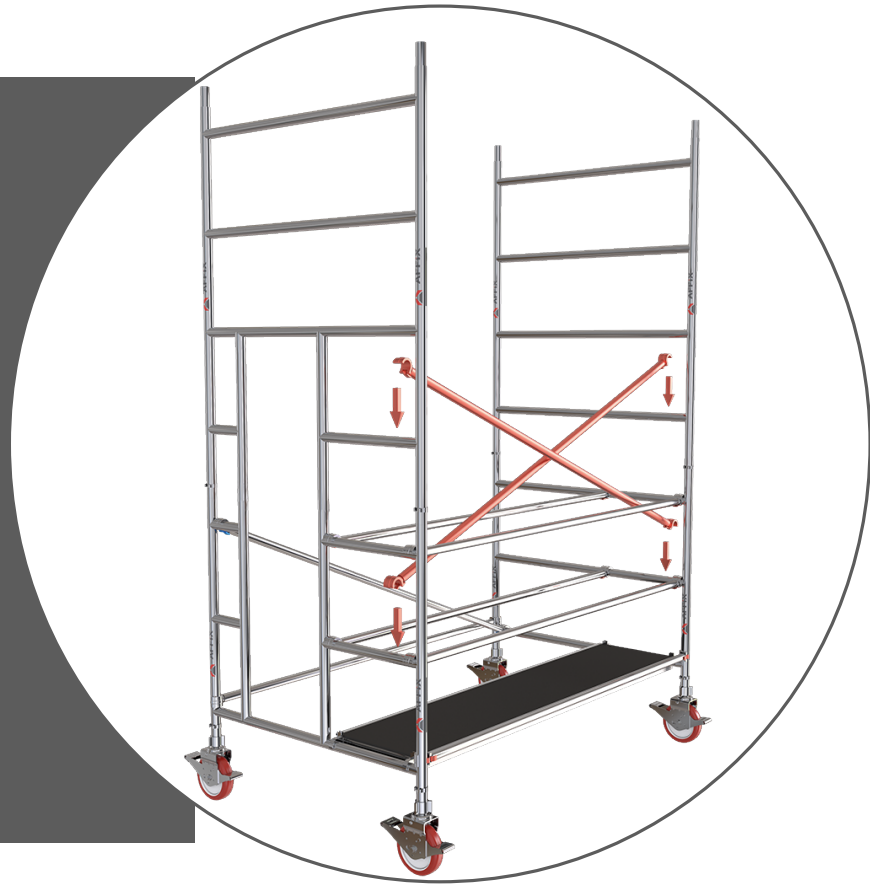
Step 7.1

Hook the **Diagonal Brace** to the **2nd Rung** of the 1st level **Span Frame** at one end and the other end should be hooked to the **1st Rung** of the 2nd level **Walkthrough Frame** on the other side.

Step 7.2

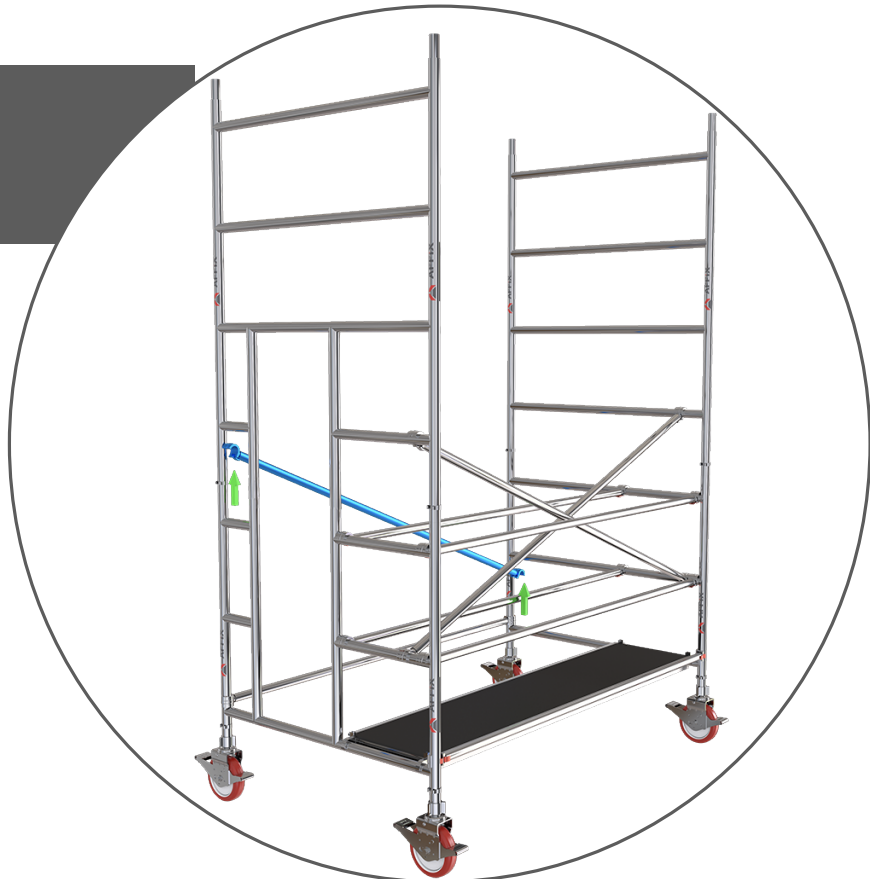
Hook the other **Diagonal Brace** to the **1st Rung** of the 2nd level **Span Frame** at one end and the other end should be hooked to the **2nd Rung** of the 1st level **Walkthrough Frame** on the other side.

The braces are to be hooked beside each other.



Step 8

Remove the **Diagonal Brace** attached in **Step 3**.



Step 9

Hook the **Staircase** as shown in the image here.



Step 10

Remove the inner side **Midrail** and **Guardrail Horizontal Braces** which were attached in **Step 5**.



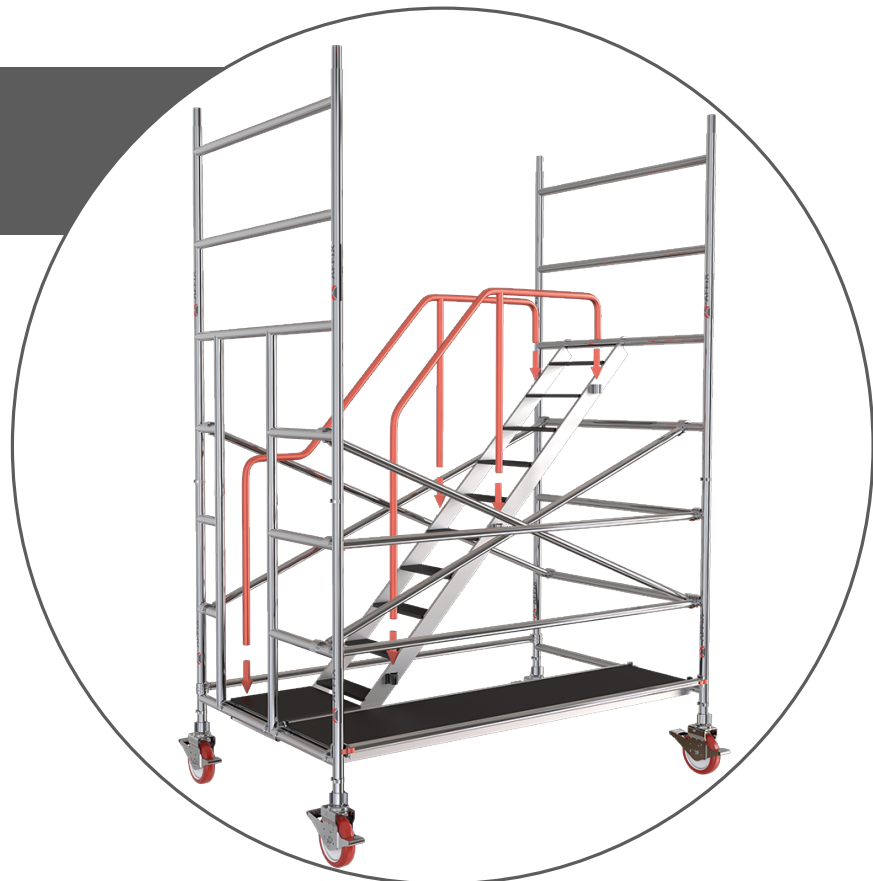
Step 11

Hook another pair of **Diagonal Braces** towards the Staircase side, as instructed in **Step 7**.



Step 12

Insert and bolt the pair of **Handrails** on the Staircase.



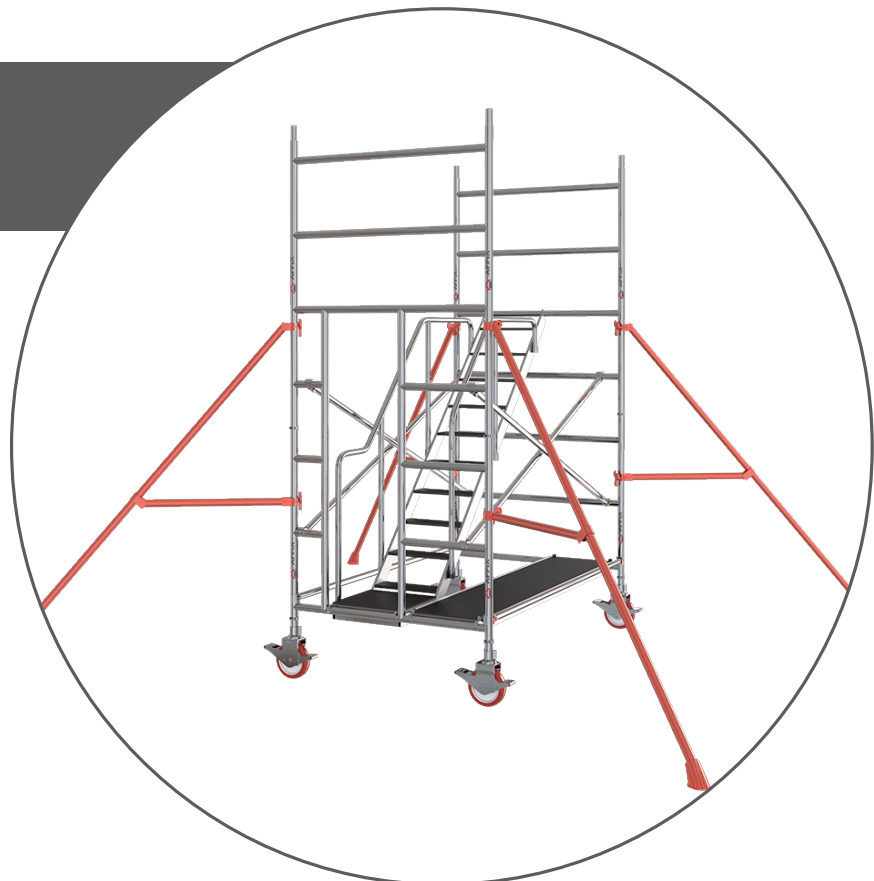
Step 13

Remove the remaining outer **Midrail** and **Guardrail Horizontal Braces** which were attached in **Step 5**.



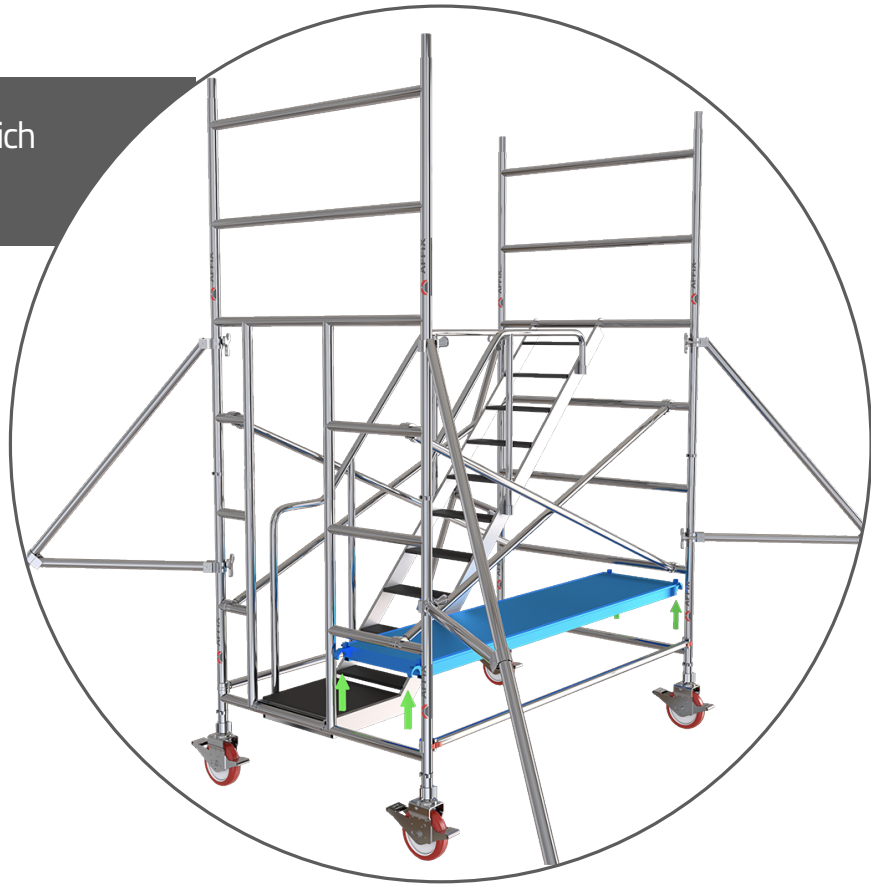
Step 14

Clamp the **4 Stabilizers** on all 4 corner posts as instructed in detail on **Page no.23**.



Step 15

Remove the **Intermediate Fixed Platform** which was attached in **Step 4**.



Step 16

Hook the same **Intermediate Fixed Platform** to the **2nd Rung** of the 2nd level frames.



Step 17

Step 17.1

Hook 2 **Horizontal Midrail Braces** to the **3rd Rung** of both the 2nd level frames for the platform.

Step 17.2

Hook the other 2 **Horizontal Guardrail Braces** to the **4th Rung** of both the 2nd level frames for the platform.



THIRD LEVEL

Step 18

Insert the 3rd level **4 Rung Span Frames** on both the respective sides into the corresponding spigots.

For clamping instructions refer to the **Clamping Instructions** section on **Page 20**.



Step 19

Step 19.1

Hook the **Diagonal Brace** to the **2nd Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **4th Rung** of the 2nd level **Walkthrough Frame** on the other side.

Step 19.2

Hook the other **Diagonal Brace** to the **2nd Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **4th Rung** of the 2nd level **Span Frame** on the other side.

The braces are to be hooked beside each other.



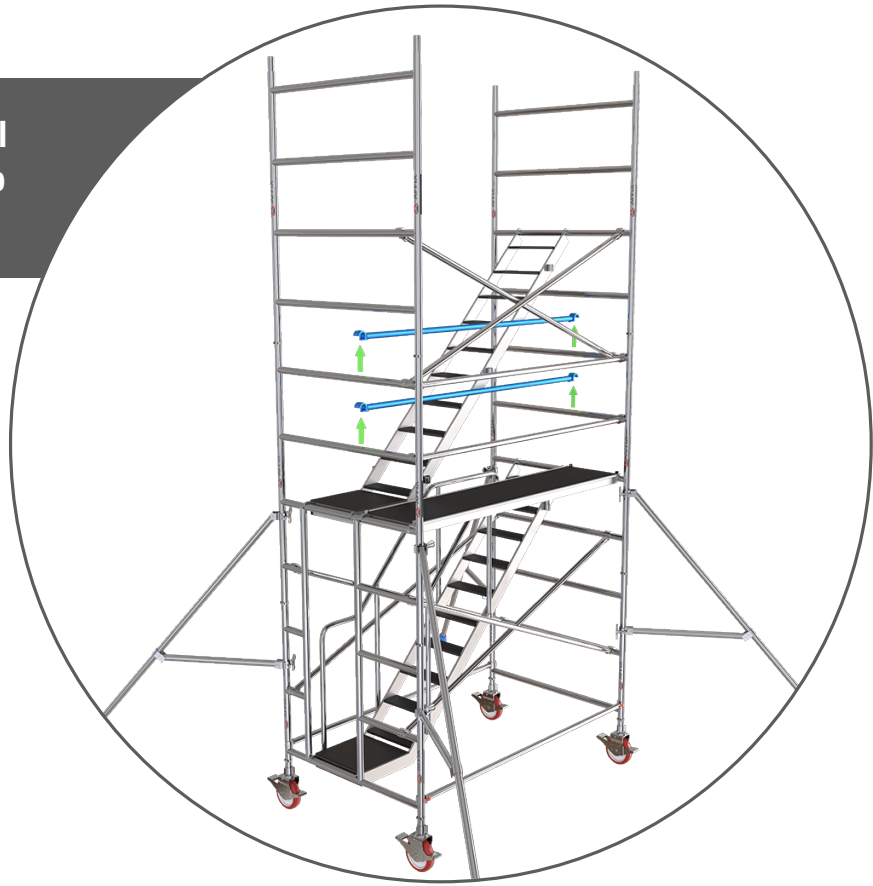
Step 20

Insert and bolt the pair of **Handrails** on the Staircase.



Step 21

Remove the inner side **Midrail** and **Guardrail Horizontal Braces** which were attached in **Step 17**.



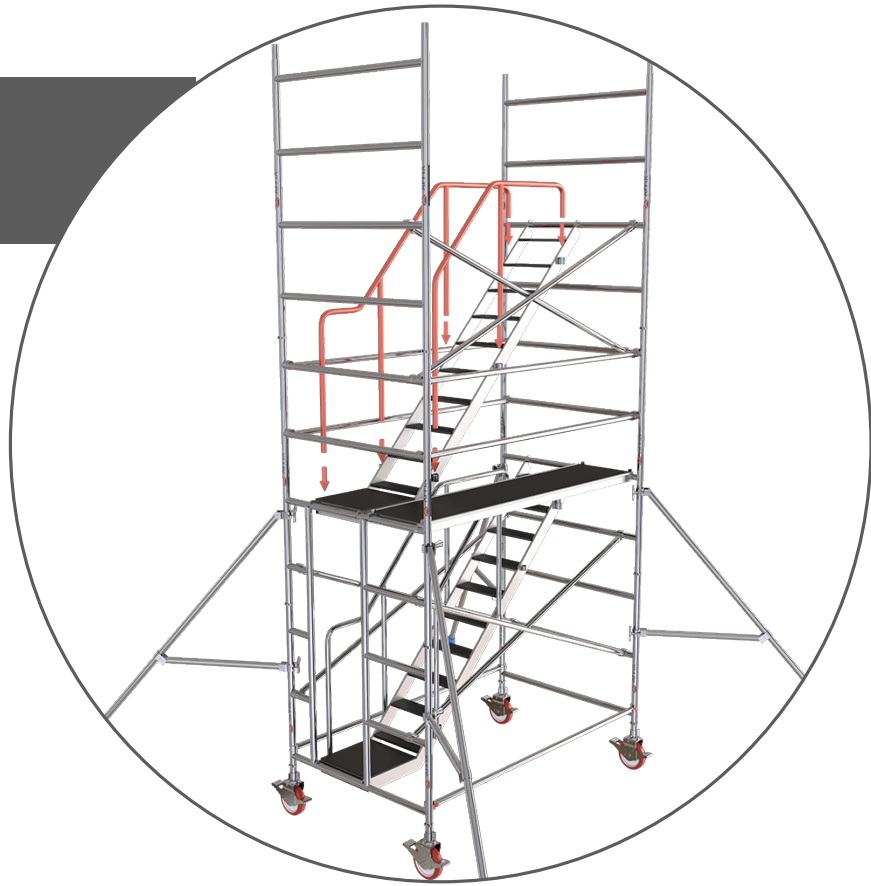
Step 22

Hook the same **Midrail** and **Guardrail Horizontal Braces** to the **3rd and 4th Rung** of 2nd level frames.



Step 23

Insert and bolt the pair of **Handrails** on the Staircase.



Step 24

Step 24.1

Hook the **Diagonal Brace** to the **2nd Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **4th Rung** of the 2nd level **Walkthrough Frame** on the other side.

Step 24.2

Hook the other **Diagonal Brace** to the **2nd Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **4th Rung** of the 2nd level **Span Frame** on the other side.

The braces are to be hooked beside each other.



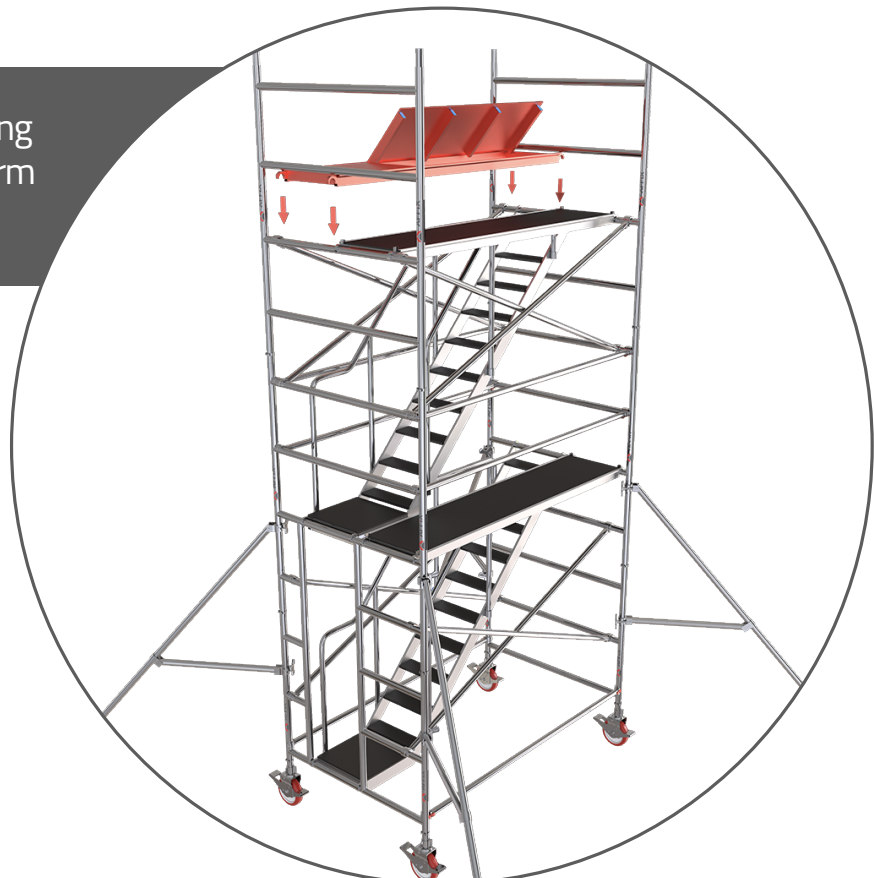
Step 25

Hook the **Fixed Platform** to the **2nd Rung** of the 3rd level frames. Make sure the platform is not towards the staircase side.



Step 26

Hook the **Trapdoor Platform** to the 2nd Rung of the 3rd level frames. Make sure the platform is towards the staircase side.



Step 27

Step 27.1

Hook **2 Horizontal Midrail Braces** to the **3rd Rung** of both the 3rd level frames for the platform.

Step 27.2

Hook the other **2 Horizontal Guardrail Braces** to the **4th Rung** of both the 3rd level frames for the platform.



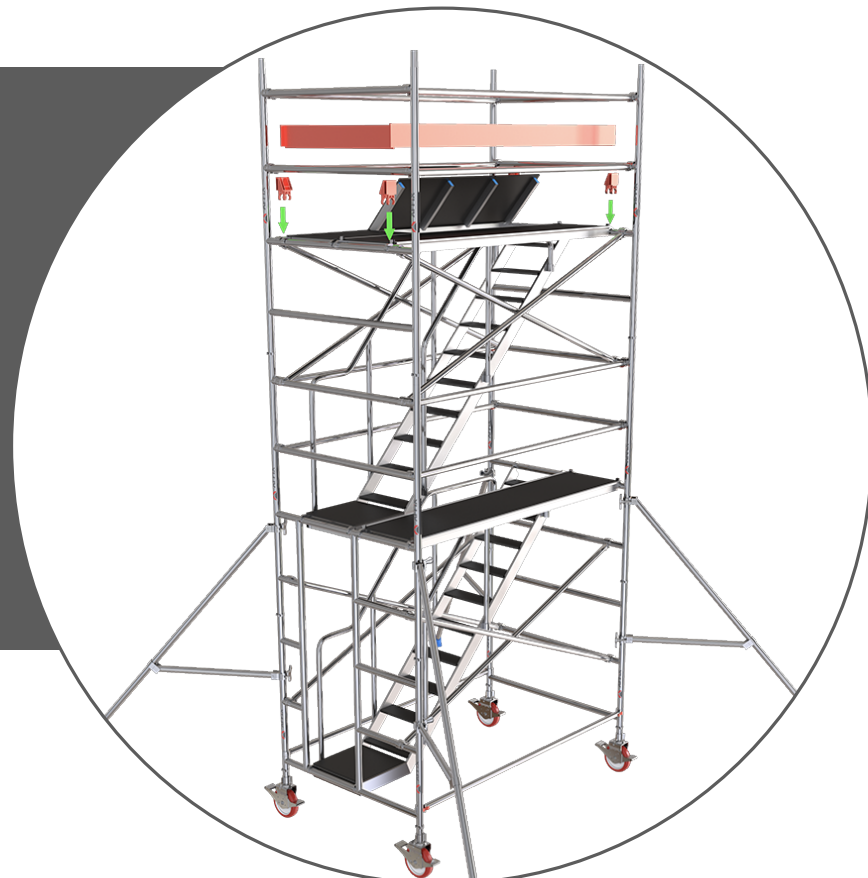
Step 28

Step 28.1

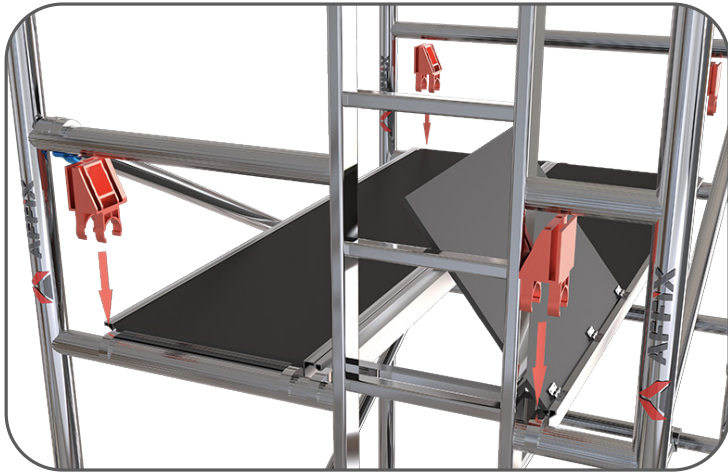
Clamp the 4 plastic **toe-board holders** on all the 4 corners of the Stairway working platform level, around the working platform. For more details, refer to **Toe-board Assembly Details on Page 20**.

Step 28.2

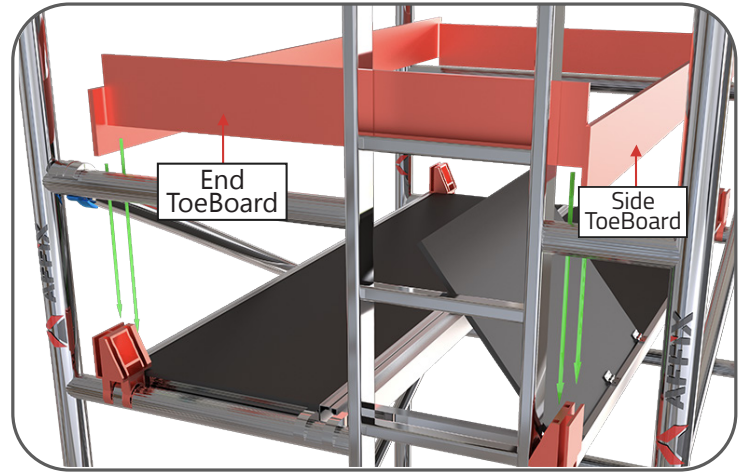
Insert the wooden **toe-boards** in the toe-board holder slot, on all the 4 sides.



Toeboard Assembly Details



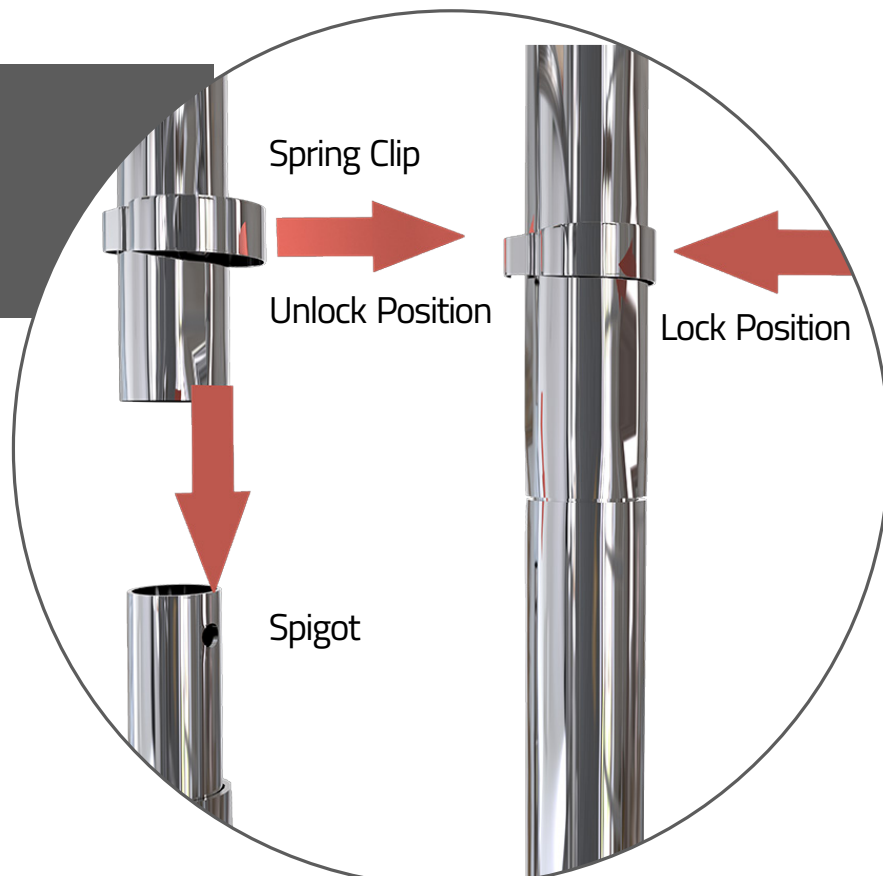
Fix the claw of the Toeboard **TB** on the **Rungs** facing each other as shown in the figure.

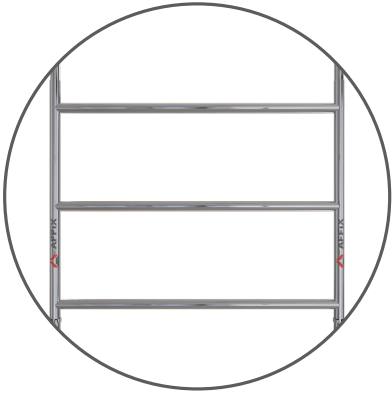


Then insert the **Side Toeboard** and the **End Toeboard** in the respective toeboard slots as shown in the figure.

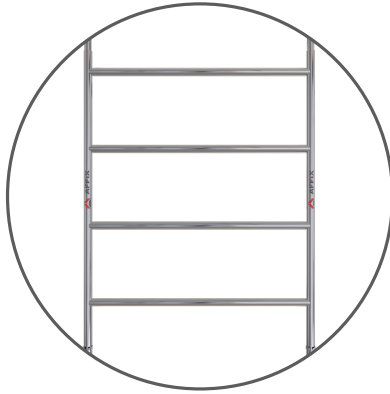
Clamping Instructions

Always ensure the **Spring Clips** are in the lock position after inserting the upper frame in the **Spigot**. To insert, unlock the **Spring Clip**.

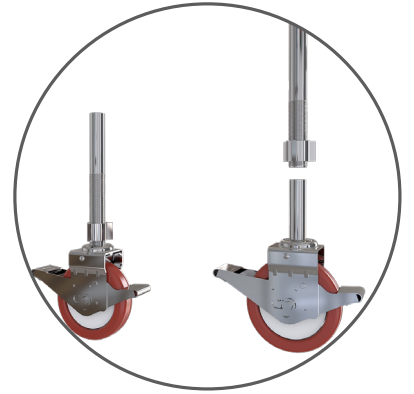




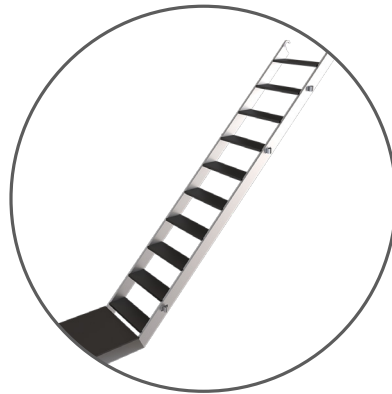
FS13150



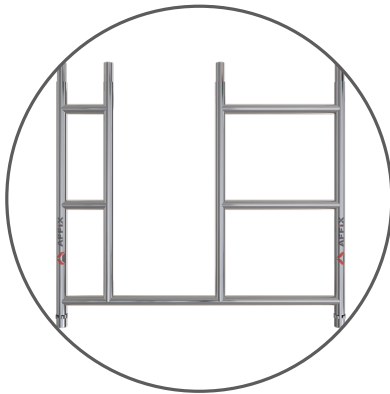
FS20150



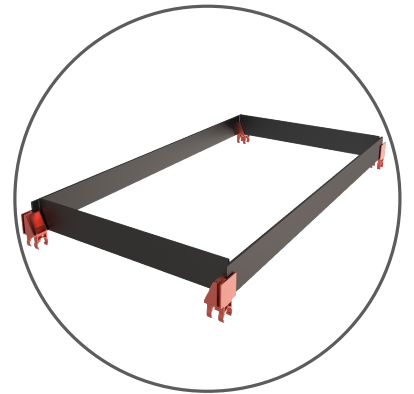
CW150/200, JA500



SC2025



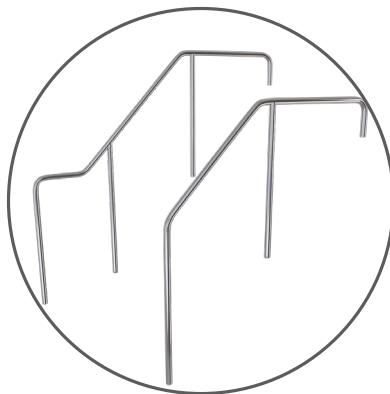
FW13150



**BT200/250
ToeBoard Set**



FW20150



SH2025



ST200/300/450/600



PF250



BD270, BH250

Stabilizers are to be used, when specified, to guarantee the structural stability of the tower.



Fig. 01

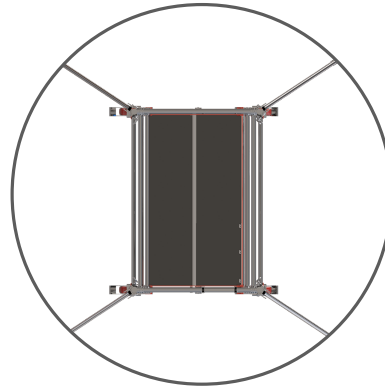


Fig. 02

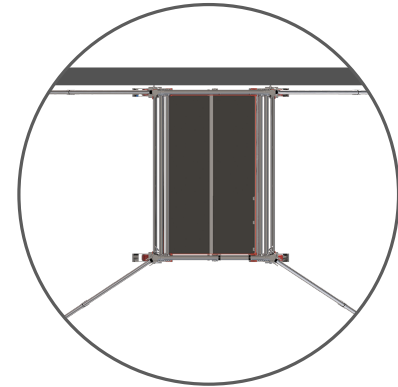


Fig. 03

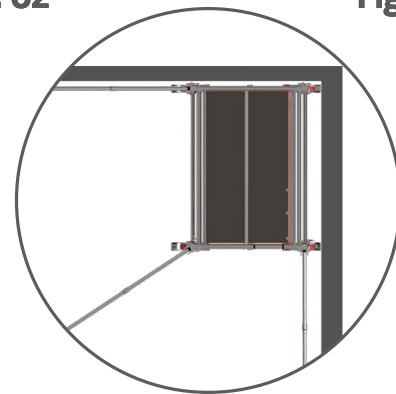


Fig. 04

Fig. 01

Lightly tighten the upper clamp of the stabilizer on each corner vertical posts at a height where the foot is touching the ground. Position the clamp of the lower arm such that the lower arm is as horizontal as possible.

Fig. 02

Position the stabilizers so that the footpads are approximately equidistant from each other.

Adjust the stabilizers and reposition the clamps as required to make firm contact with the ground. When in correct position, tighten all the clamps firmly.

Fig. 03

To position a tower against a wall, do not remove the stabilizer, move parallel to the wall.

Fig. 04

To position a tower in the corner of walls, remove the corner stabilizer and place the two towards the wall, parallel to the wall. The middle one should be placed as shown in the graphic Fig.04

Moving the Tower

To move the tower to a new position, first prepare the tower.

- Check that the wind speed does not exceed **17 mph**.
- Ensure the tower is empty (material and personnel).
- Check the overhead obstructions including electrical cables.
- Raise the stabilizer feet (only enough to clear obstructions, maximum 25mm).
- Taking care to ensure tower stability is maintained, release the castor brakes.
- Carefully move the tower by manually applying force at the base. Do Not Use mechanical means to move the tower.
- Once positioned, prepare the tower for use.
- Check and adjust as necessary to ensure all castors and stabilizers are in firm contact with the ground.
- Check that the tower is vertical.
- Reapply the castor brakes.

Comply To

- Certified and independently tested for use.
- Compliant to 3T Assembly process.
- Safe working load on the platform is 250kgs/Sq Mtr, evenly distributed.
- Maximum permissible distributed load on the tower 750 Kgs.

Type Approval

The scaffold towers referred to herein have been tested by



MASY SERIES TABLE confirming to EN1004

ALUMINIUM STAIRWAY TOWER

	MASY	325	525	725	925	1125	1325
Tower Height	in Mtrs	3.6	5.6	7.6	9.6	11.6	13.6
Working Height	in Mtrs	4.6	6.6	8.6	10.6	12.6	14.6
Platform Height	in Mtrs	2.6	4.6	6.6	8.6	10.6	12.6
Weight	in Kgs	139	210	284	359	427	496
Components							
Components	Code	Specs					
Walkthrough Frame	FW20150	2.0 Mtrs	1	1	1	1	1
Walkthrough Frame	FW13150	1.3 Mtrs	1	1	1	1	1
Span Frame	FS20150	2.0 Mtrs	1	3	5	7	9
Span Frame	FS13150	1.3 Mtr	1	1	1	1	1
Staircase with Handrail Set	SC2025		1	2	3	4	5
Caster Wheel	CW200	8 Inches	4	4	4	4	4
Adjustable Jack	JA500	0.5 Mtr	4	4	4	4	4
Horizontal Braces	BH250	2.5 Mtrs	6	10	14	18	22
Diagonal Braces	BD270	2.7 Mtrs	4	8	12	16	20
Stabilizer	ST200	2.0 Mtrs	4	0	0	0	0
Stabilizer	ST300	3.0 Mtrs	0	4	0	0	0
Stabilizer	ST450	4.5 Mtrs	0	0	4	0	0
Stabilizer	ST600	6.0 Mtrs	0	0	0	4	4
Platform Trapdoor	PT250	2.5 Mtrs	1	1	1	1	1
Platform Fixed	PF250	2.5 Mtrs	1	2	3	4	5
Toe Board	BT250	Set	1	1	1	1	1

EN1004-1 Certification by TUV India



Statement of Confirmation

No.: CE/21-22/004

Client's Reference – TUV-EN-AL-MobileScaffoldings-001

Name & Address of the Manufacturer:

AFFIX SCAFFOLDING.

Hugo Building, Office No.13
Opp Old Fatihima Shopping Centre
Umm Dom Street, Muaither, Doha , Qatar

Product Type:

Aluminium Mobile Scaffoldings Single width, Double width and Mobile Tower

- Aluminium Scaffolding Single width length 2.0mtr
- Aluminium Scaffolding Single width length 2.5mtr
- Aluminium Scaffolding Double width length 2.0mtr
- Aluminium Scaffolding Double width length 2.5mtr
- Solo Tower
- Stairway Tower

Review Results/Observations:

Based on the tests carried out, review of the test reports submitted –
the above product/s, generally comply with the Safety requirements of the European Standard:

EN-1004-1:2020

Validity: 22 October 2024 (Subject to annual factory production control audits)



Mahesh Gaur

General Manager - Product Certification and Product Testing

(This Statement of Confirmation is valid under the conditions stated overleaf)



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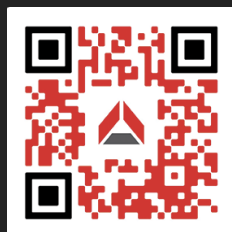
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EEmail : info@affixscaffolding.com

Website: www.affixscaffolding.com

Website

SCAN ME



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 <https://www.linkedin.com/company/affix-scaffolding-llc/>