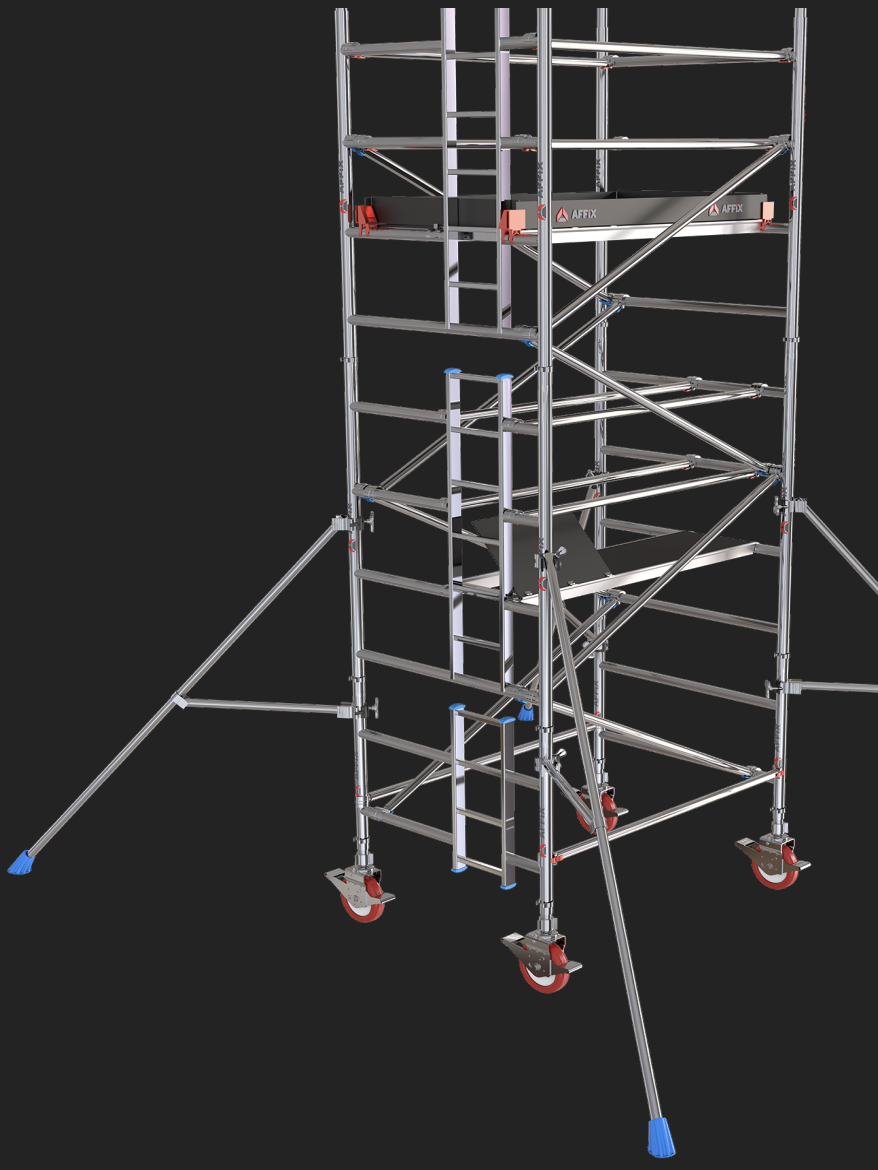


EN1004-1 Class 3

No: CE/21-22/004

TÜV INDIA
TÜV NORD GROUP

Assembly Manual

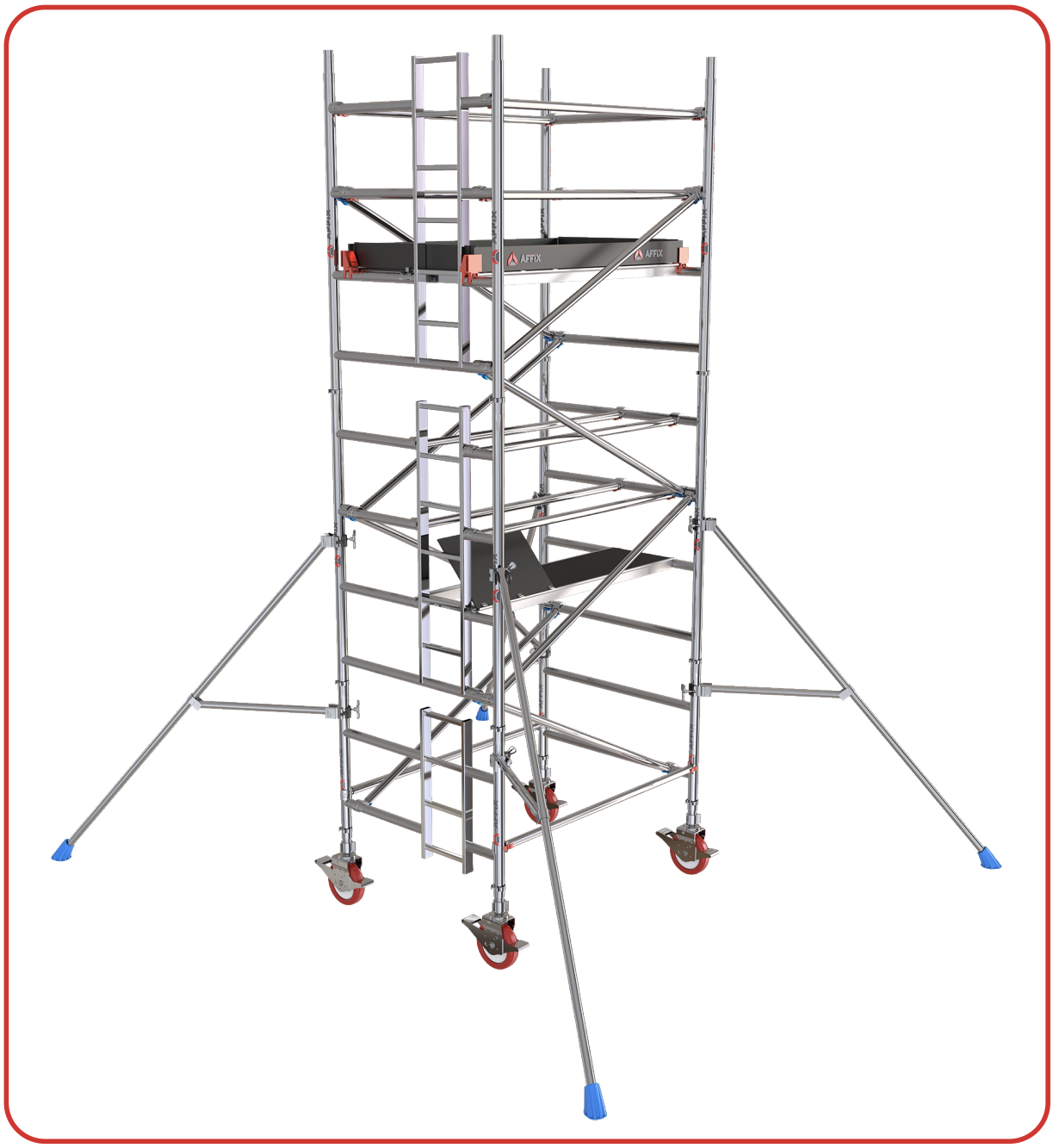
Double Width MADW Series

Aluminium Double Width Mobile Towers

MADW

EN1004-1 3 8/12 XXXD

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 **MADW** Series Mobile Tower are versatile and user-friendly aerial solution for all access needs. It gives a work platform for use by a maximum of two people, with weight evenly distributed across the platform. The tower can be easily erected and with highly customizable assembly it meets almost all the site constraints and provides safe and efficient working platform. The key safety feature is the smart locking claws provided for the horizontal and diagonal bracings. It allows an instant lock-up performed by single hand use, however, with the reverse unlocking plug, two hands are needed to unplug the bracing.
The information and instructions included in this manual are provided to help get the best possible service from your **MADW** Series Mobile 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 **MADW** 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 in an application outside the scope of **EN1004**, contact your supplier or the manufacturer, Affix Scaffolding WLL, for advice on loadings.

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

Beufort 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 **750kgs.**
- The maximum recommended tower height is **8M** for outdoors and **12M** for indoors.

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.

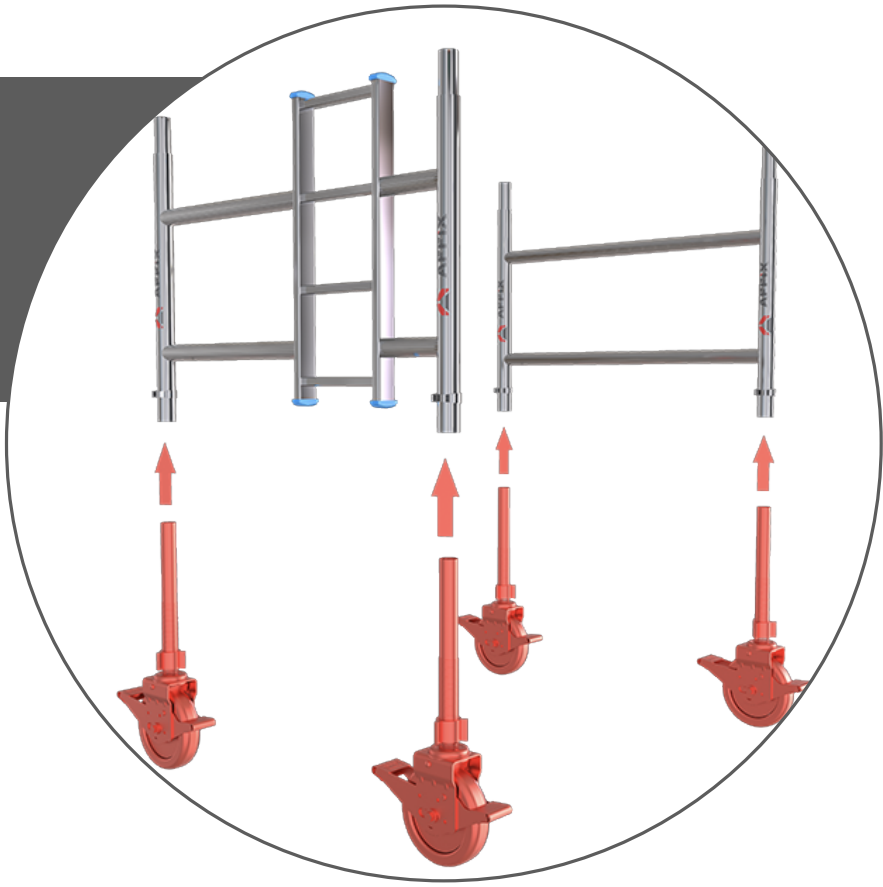
Lock the castor by moving the brake lever fully down.

FIRST LEVEL

Step 1

Insert the **Castor Wheels** with the jack pipe inside the bottom of the tubes of the 1st level **2 Rung Ladder Frame** and **2 Rung Span Frame**.

DO NOT USE Hammer.



Step 2

Step 2.1

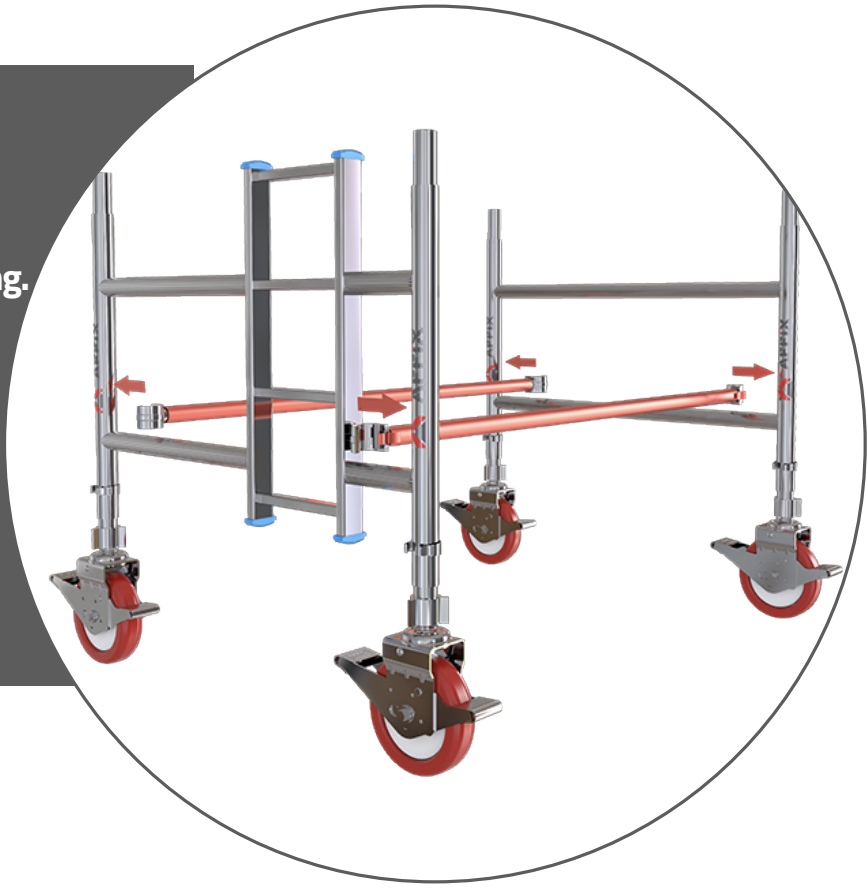
Hook both the bottom **2 Horizontal Braces** horizontally to the Span frame and the Ladder Frame's vertical pipes, just above the **1st rung.**

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.



SECOND LEVEL

Step 3

Step 3.1

Insert both the **2nd level 4 Rung Span Frame and the 4 Rung Ladder Frame** on the respective sides into the corresponding spigots. For clamping instructions refer to the **Clamping Instructions section on Page 13.**

Step 3.2

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

Step 4

Step 4.1

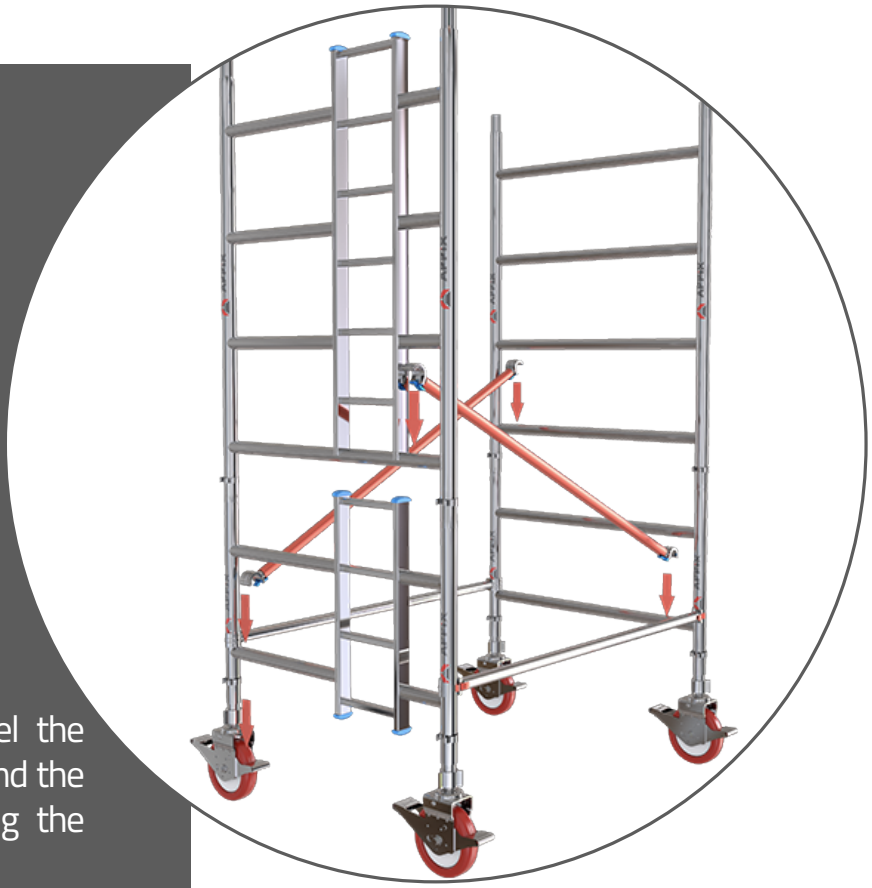
Hook the Diagonal Brace to the **1st Rung** of the 1st level **Span frame** at one end and the other end should be hooked to the 1**st Rung** of the 2nd level **Ladder frame** on the other side.

Step 4.2

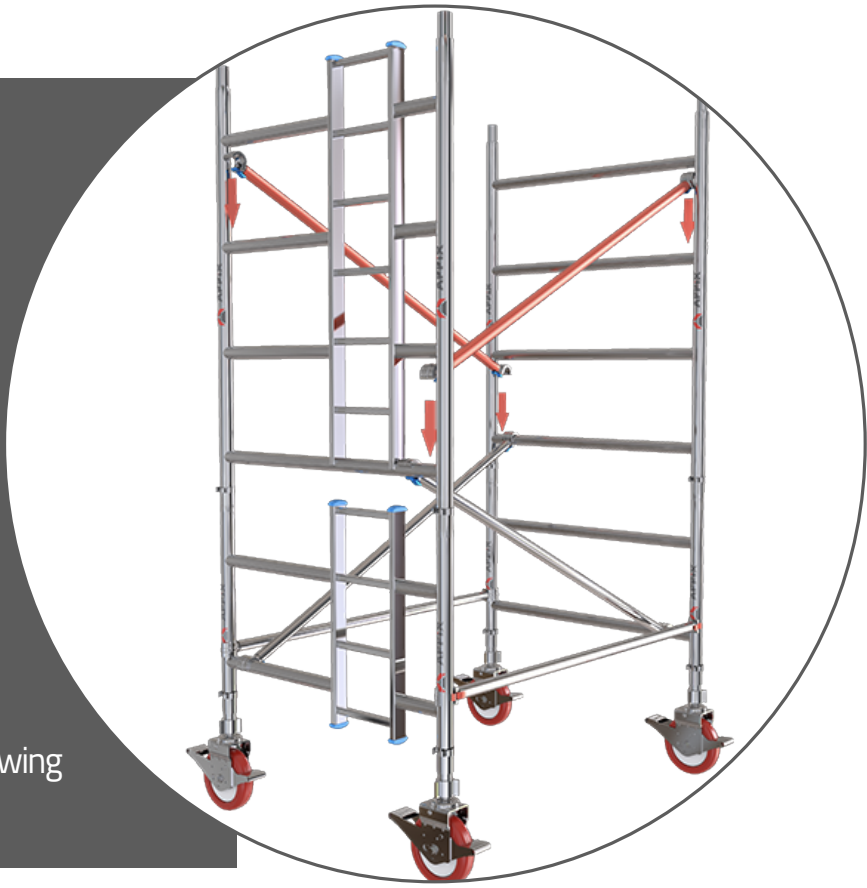
Hook the **2nd** Diagonal Brace to the **1st Rung** of the 2nd level **Ladder frame** at one end and the other end should be hooked to the **1st Rung** of the 1st level **Span frame** on the other side.

Step 4.3

After fixing both the Diagonal Braces, level the structure using a Spirit Level on the Rungs and the braces. If adjustment required, adjust using the adjustable jack.



Step 5



Step 5.1

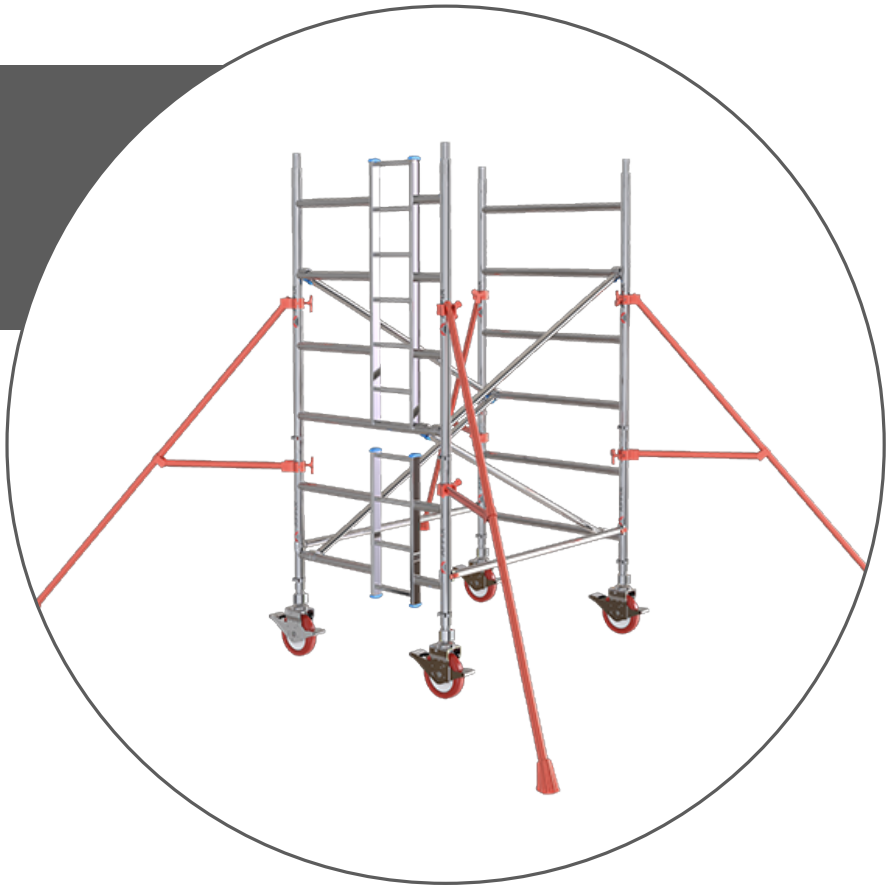
Hook the Diagonal Brace to the **3rd Rung** of the 2nd level **Span Frame** at one end and the other end should be hooked to the **1st Rung** of the 2nd level **Ladder Frame** on the other side.

Step 5.2

Hook the **2nd** Diagonal Brace to the **1st Rung** of the 2nd level **Span Frame** at one end and the other end should be hooked to the **3rd Rung** of the 2nd level **Ladder Frame** on the other side.

Both the bracings should be in X shape while viewing from the side.

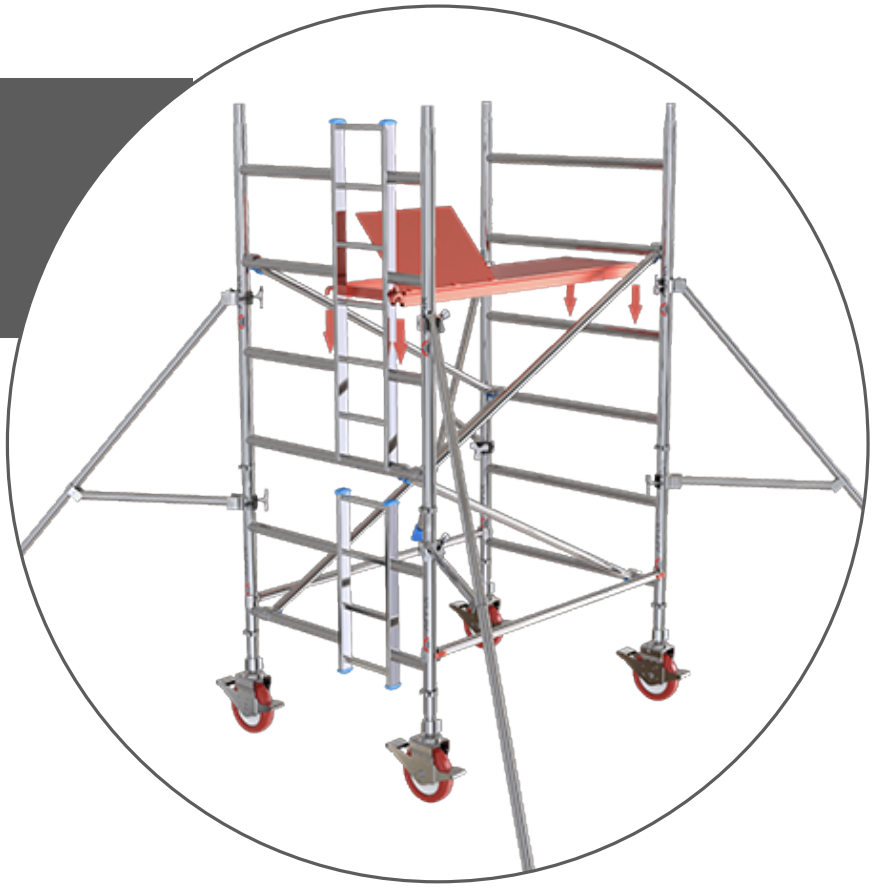
Step 6



Clamp the 4 Stabilizers on all 4 corners as per the **Components Table on Page no. 17.** For detailed instructions on installation refer to **Page no.15.**

Step 7

Hook the Intermediate trapdoor platform on the **2nd Rung** of the 2nd level frames. Make sure the trapdoor is towards the ladder side.



Step 8

Using the **3T** method, standing on the ladder and leaning back against the edge of the trapdoor aperture, fit the horizontal braces as mid rails and guardrails.

Step 8.1

Hook the lower pair of **Horizontal Braces** to the **3rd Rung** of both the 2nd level frames.

Step 8.2

Hook the upper pair of **Horizontal Braces** to the **4th Rung** of both the 2nd level frames.

THIRD LEVEL

Step 9

Insert the 3rd level **Span Frame** and **Ladder Frame** into the corresponding spigots of 2nd level **Span Frame and Ladder Frame.** For clamping instructions refer to the **Clamping Instructions section on Page 13.**

Step 10

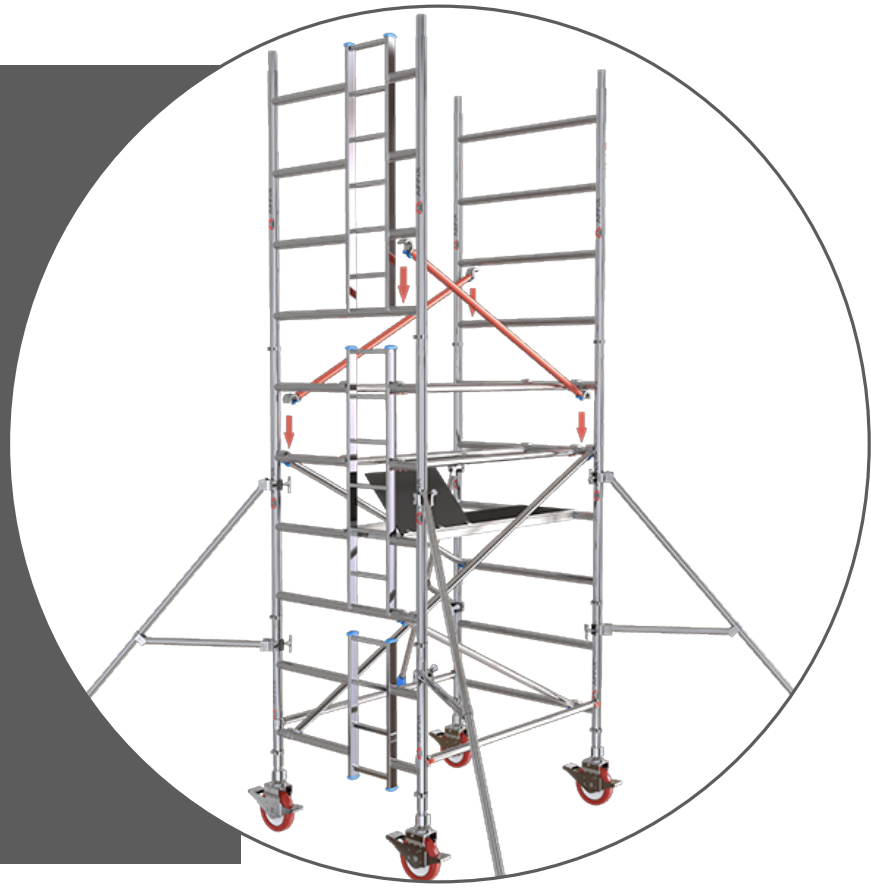
Step 10.1

Hook the Diagonal Brace to the **3rd Rung** of the 2nd level **Span Frame** at one end and the other end should be hooked to the **1st Rung** of the 3rd level **Ladder Frame** on the other side.

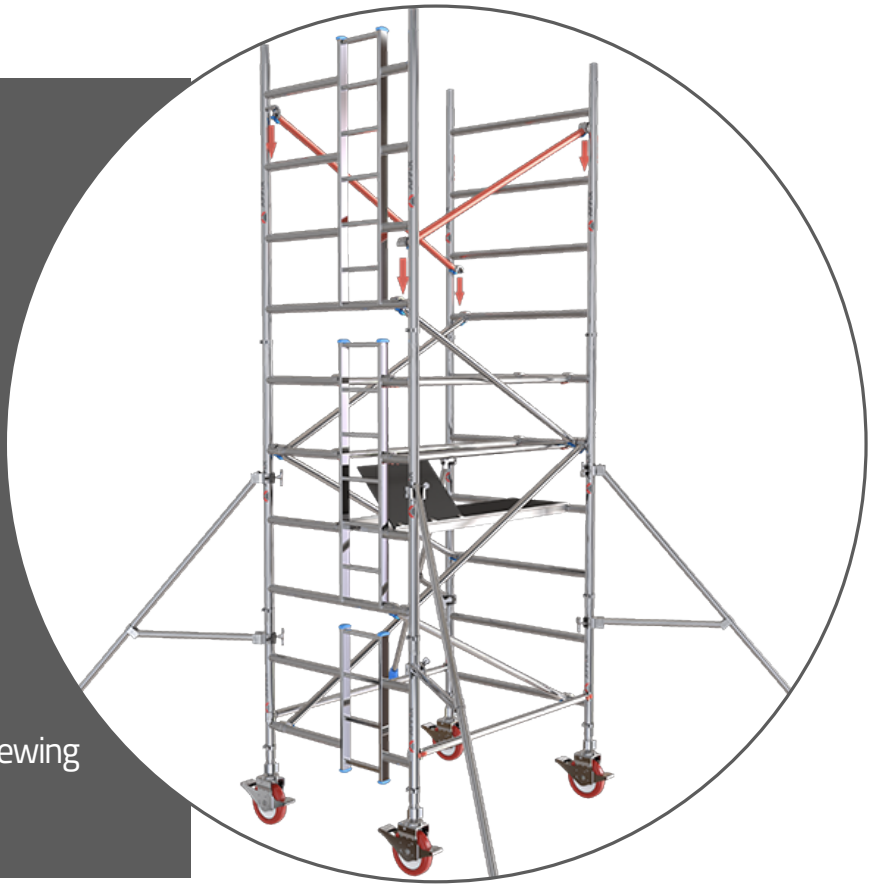
Step 10.2

Hook the **2nd** Diagonal Brace to the **1st Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **3rd Rung** of the 2nd level **Ladder Frame** on the other side.

Both the bracings should be in X shape while viewing from the side.



Step 11



Step 11.1

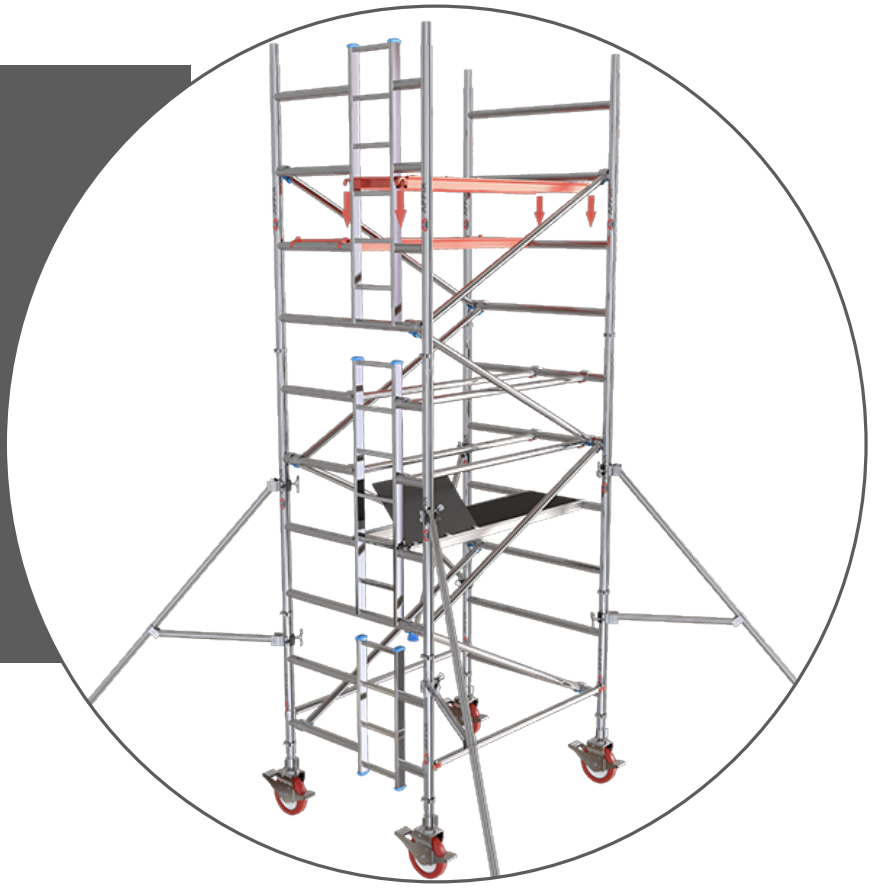
Hook the Diagonal Brace to the **3rd Rung** of the 3rd level **Span Frame** at one end and the other end should be hooked to the **1st Rung** of the 3rd level **Ladder Frame** on the other side.

Step 11.2

Hook the **2nd** Diagonal Brace to the **1st Rung** of the 3rd level **Ladder Frame** at one end and the other end should be hooked to the **3rd Rung** of the 3rd level **Span Frame** on the other side.

Both the bracings should be in X shape while viewing from the side

Step 12



Step 12.1

Hook the working fixed platform on the **2nd Rung** of the 3rd level frames. Make sure the platform is not on the ladder side.

Step 12.2

Hook the working trapdoor platform on the **2nd Rung** of the 3rd level frames. Make sure the trapdoor is towards the ladder side.

Step 13

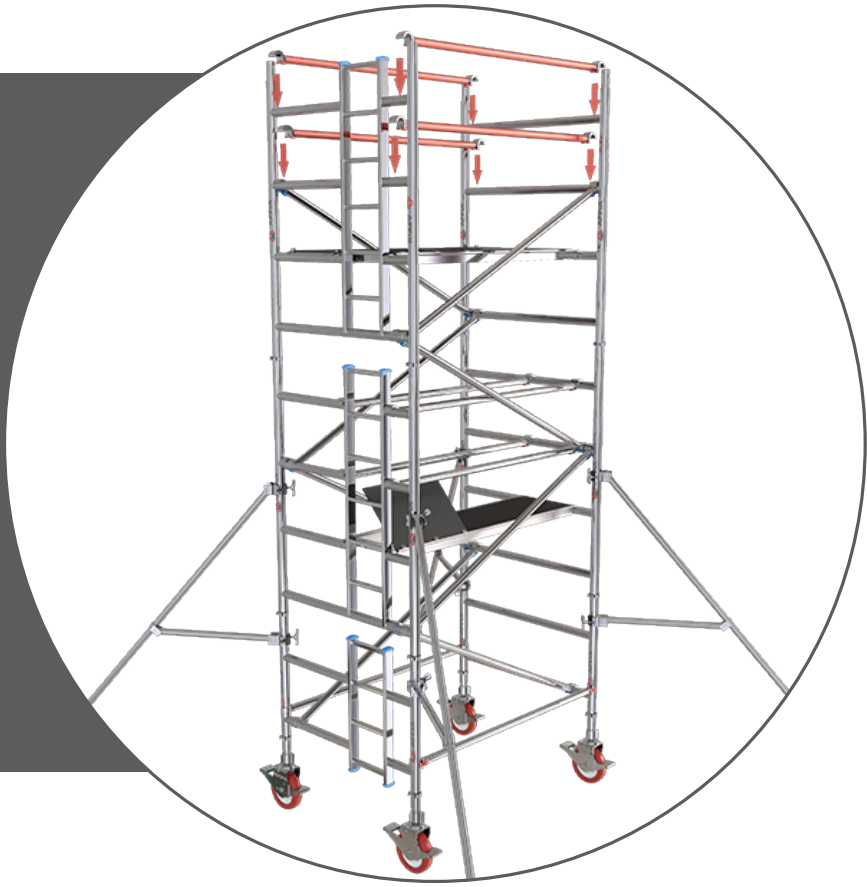
Using the **3T** method, standing on the ladder and leaning back against the edge of the trapdoor aperture, fit the horizontal braces as mid rails and guardrails.

Step 13.1

Hook the lower pair of **Horizontal Braces** to the **3rd Rung** of both the frames of 3rd level on both the sides.

Step 13.2

Hook upper pair of **Horizontal Braces** to the **4th Rung** of both the frames of 3rd level on both the sides.



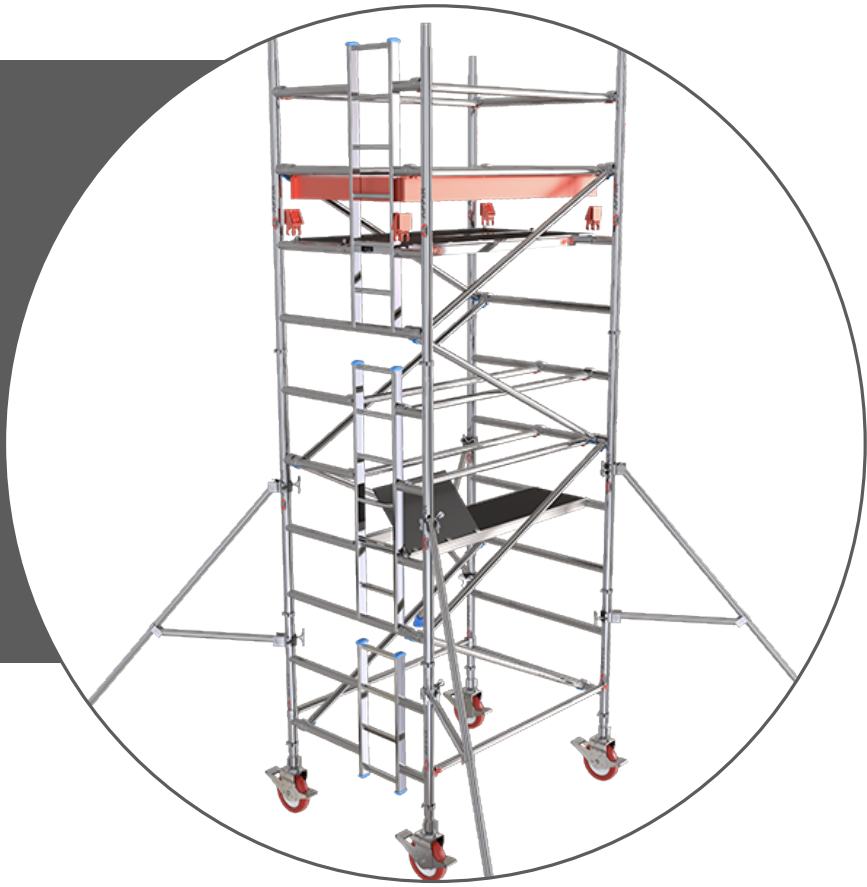
Step 14

Step 14.1

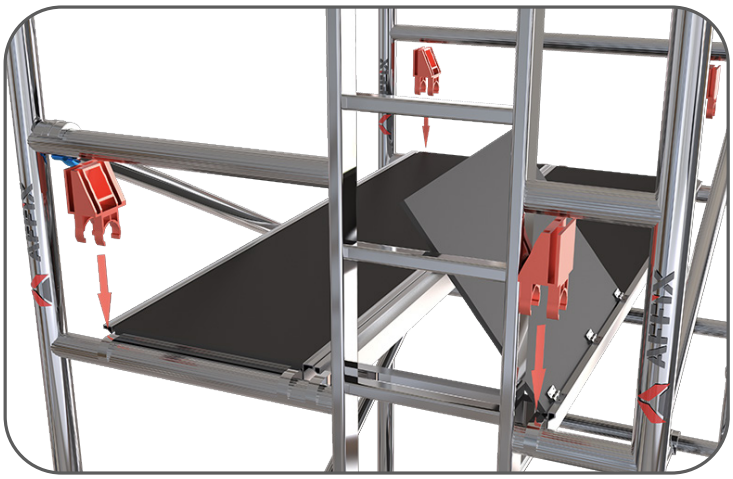
Clamp the 4 plastic toe-board holders on all the 4 corners of the working platform level, around the working platform.
For more details, refer to **Toe-board Assembly Details** on **Page 13.**

Step 14.2

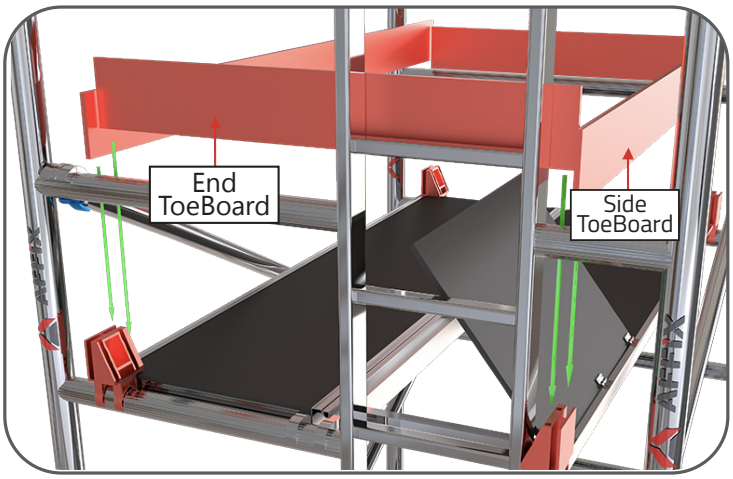
Insert the wooden toe-boards in the toe-board holder on all the 4 sides.



Toeboard Assembly Details



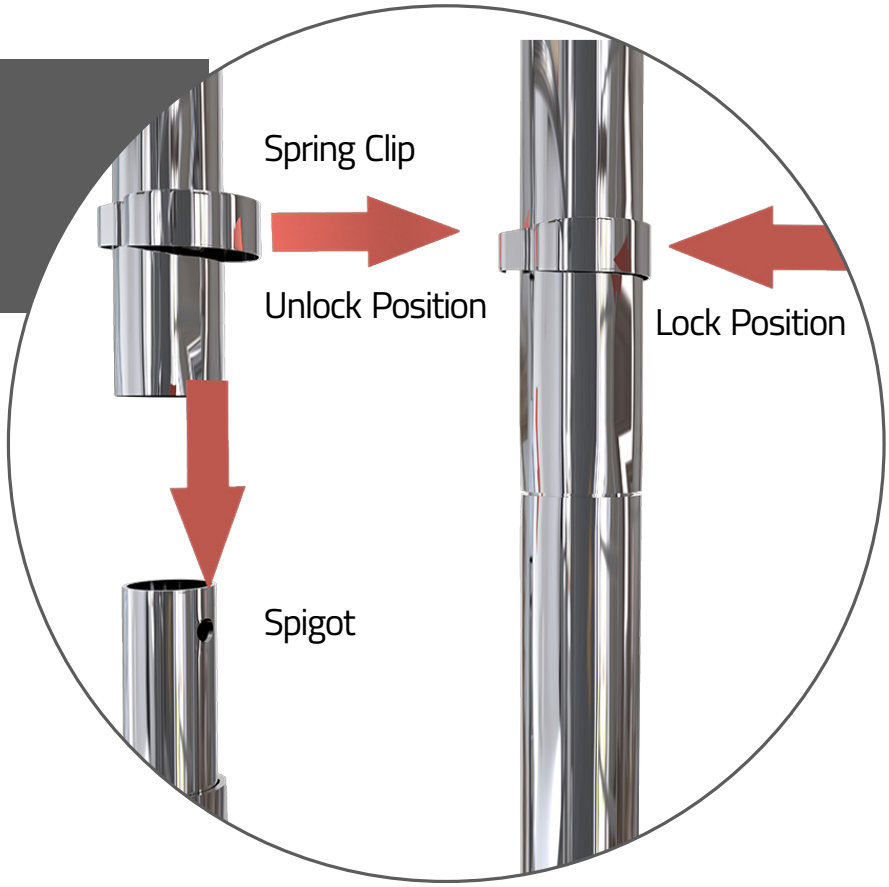
Fix the claw of the Toeboard **TB** on the **Rungs** facing each other as shown in the figure.



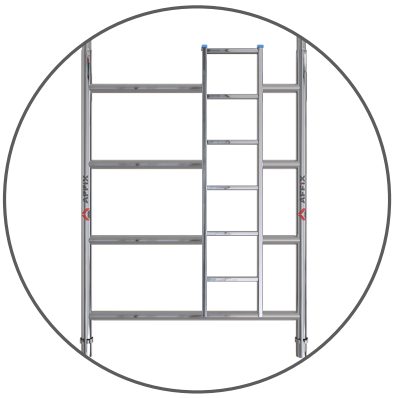
Then insert the **Side Toeboard** and the **End Toeboard** in the respective toeboard slots as shown in the figure.

Clamping Instructions

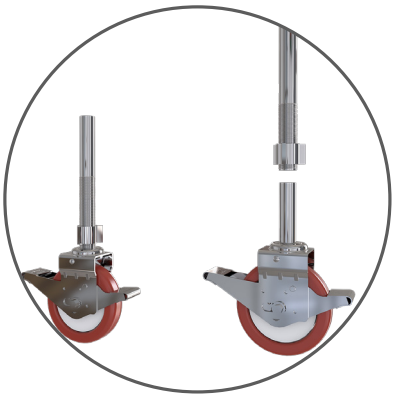
Always ensure the **Spring Clips** are in the lock position after inserting the upper frame in the **Spigot**. To insert, unlock the **Spring Clip**.



FS20135
Span Frame

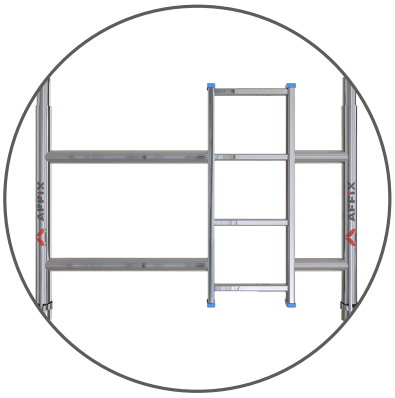


FL20135
Ladder Frame

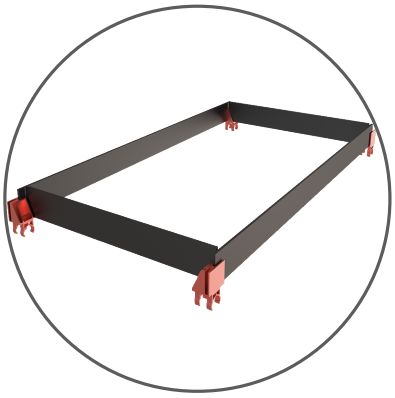


CW150/200, JA500
Castor Wheel, Adjustable Jack

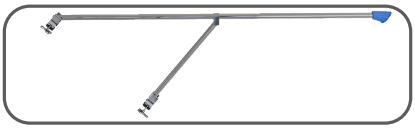
FS10135
Span Frame



FL10135
Ladder Frame



BT200/250
ToeBoard Set



ST200/300/450/600
Stabilizer

PF200/250
Fixed Platform

PT200/250
Trapdoor Platform

BD200/250, BH200/250
Diagonal Brace, Horizontal Brace

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

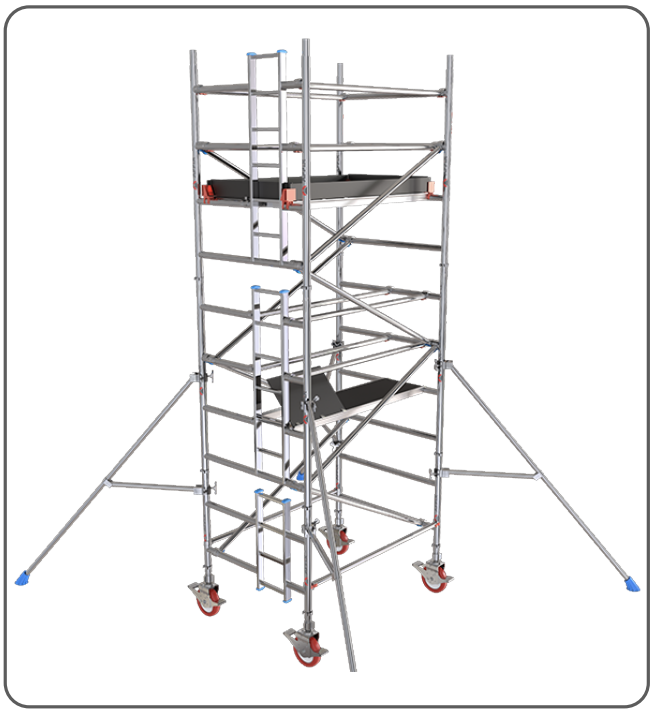


Fig. 01

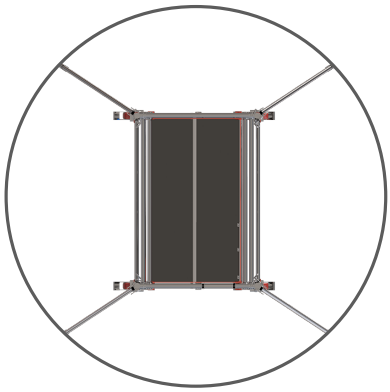


Fig. 02

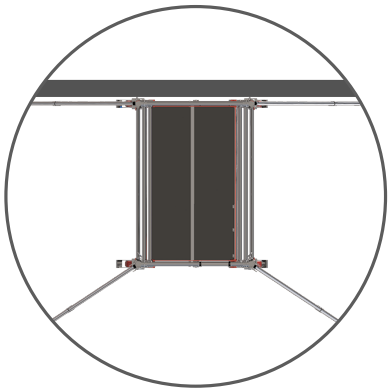


Fig. 03

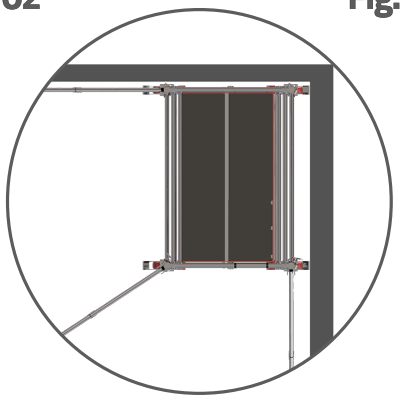


Fig. 04

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

MADW SERIES TABLE confirming to EN1004

ALUMINIUM DOUBLE WIDTH TOWER

	MADW	220	320	420	520	620	720	820	920	1020	1120	1220	1320
Tower Height	in Mtrs	2.2	3.2	4.3	5.3	6.3	7.3	8.3	9.3	10.3	11.3	12.3	13.3
Working Height	in Mtrs	3.2	4.2	5.3	6.3	7.3	8.3	9.3	10.3	11.3	12.3	13.3	14.3
Platform Height	in Mtrs	1.2	2.2	3.3	4.3	5.3	6.3	7.3	8.3	9.3	10.3	11.3	12.3
Weight	in Kgs	79/86	106/111	140/152	157/168	188/204	207/222	238/259	258/277	288/314	303/326	333/363	347/376
Components	**Code**	**Specs**											
Ladder Frame	FL20135	2.0 Mtrs	1	1	2	2	3	3	4	4	5	5	6	6
Span Frame	FS20135	2.0 Mtrs	1	1	2	2	3	3	4	4	5	5	6	6
Ladder Frame Mini	FL10135	1.0 Mtrs	0	1	0	1	0	1	0	1	0	1	0	1
Span Frame Mini	FS10135	1.0 Mtrs	0	1	0	1	0	1	0	1	0	1	0	1
Caster Wheel	CW150	6 Inches	4	4	0	0	0	0	0	0	0	0	0	0
Caster Wheel	CW200	8 Inches	0	0	4	4	4	4	4	4	4	4	4	4
Adjustable Jack	JA500	0.5 Mtrs	4	4	4	4	4	4	4	4	4	4	4	4
Horizontal Braces	BH200/250	2.0 Mtrs	6	6	10	10	14	14	18	18	22	22	26	26
Diagonal Braces	BD200/250	2.2 Mtrs	2	4	6	8	10	12	14	16	18	20	22	24
Stabilizer	ST200	2.0 Mtrs	4	4	0	0	0	0	0	0	0	0	0	0
Stabilizer	ST300	3.0 Mtrs	0	0	4	4	4	0	0	0	0	0	0	0
Stabilizer	ST450	4.5 Mtrs	0	0	0	0	0	4	4	0	0	0	0	0
Stabilizer	ST600	6.0 Mtrs	0	0	0	0	0	0	0	4	4	4	4	4
Platform Trapdoor	PT200/250	2.0 Mtrs	1	1	2	2	3	3	4	4	5	5	6	6
Platform Fixed	PF200/250	2.0 Mtrs	1	1	1	1	1	1	1	1	1	1	1	1
Toe Board	BT200/250	Set	1	1	1	1	1	1	1	1	1	1	1	1

EN1004-1 Certification by TUV India

TÜV INDIA
TÜV NORD Group

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)

Technical Inspection Services TUV India

Mahesh Gaur
General Manager - Product Certification and Product Testing
(This Statement of Confirmation is valid under the conditions stated overleaf)

Job no: 8118846165

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