





Assembly Manual
Solo Towers MASL Series

Aluminium Mobile Solo Towers MASL

EN1004-1 3 2/5 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.





DESCRIPTION:

The Affix **MASL** 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 **MASL** 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 MASL 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 **600 kgs** including its own weight. The maximum safe working load of any individual platform is **200 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:

- Only one person can assemble, dismantle and move the 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.
- 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	ph 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	/
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 200kgs evenly distributed.
- The load on the tower should not exceed **600 kgs.**
- The recommended tower height is between 2M to 5M.

ASSEMBLY PROCESS:

PREPARATION

Locate the tower, ensuring ground is level.

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

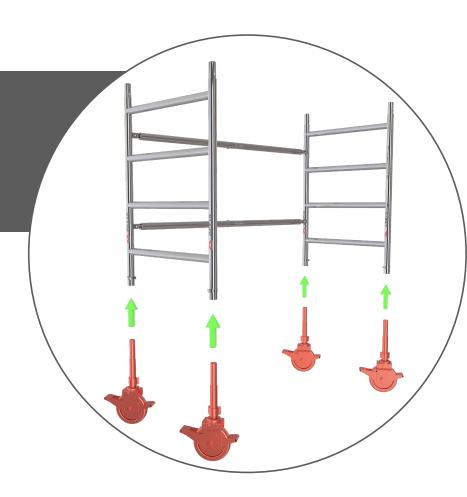
Lock the castor by moving the brake lever fully down.

FIRST LEVEL

Step 1

Insert the castor wheel with the jack pipe inside the bottom of the tubes of the **4 Rungs** Folding (only bottom frame) **Span Frame.**

DO NOT USE Hammer.



Step 2

Step 2.1

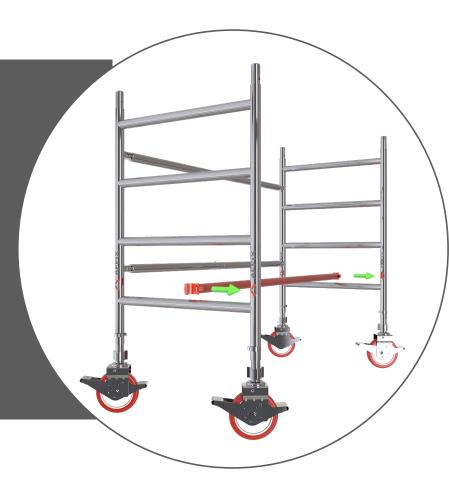
On the opposite face of the hinged braces, hook the bottom Horizontal Brace horizontally to both the Span frame's vertical pipes, just above the 1st rung.

Step 2.2

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

Step 2.3

Level the structure using a Spirit Level on the Rungs and the braces. If adjustment required, adjust using the adjustable jack.



SECOND LEVEL

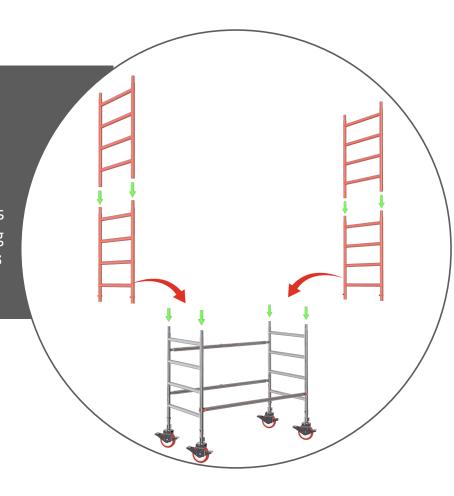
Step 3

Step 3.1

Join the **2nd level and 3rd level** frames of both sides together.

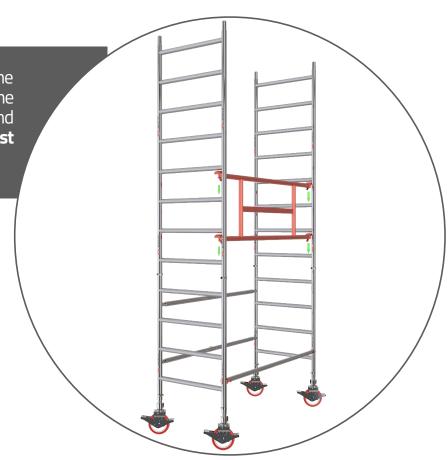
Step 3.2

Insert the frames on the respective sides into the corresponding spigots. For clamping instructions refer to the **Clamping Instructions** section on page 14.

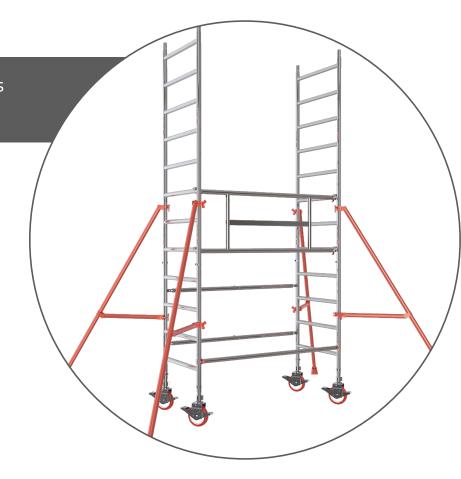


Step 4

Hook the Guardrail on the opposite side of the hinged brace. Clamp the top hook of the Guardrail Frame to the **3rd rung** of the 2nd level frame and the bottom hook to the **1st rung** of the 2nd level frame.

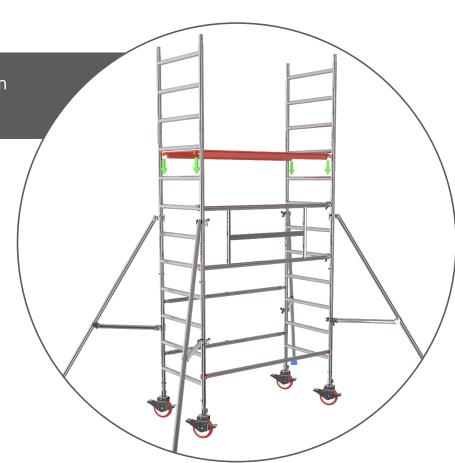


Clamp the 4 Stabilizers on all 4 corners as instructed in detail on **Page no.16.**

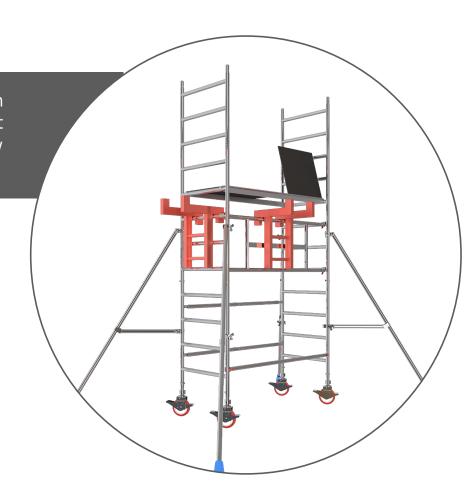


Step 6

Hook the Intermediate trapdoor platform on the **4th rung** of the 2nd level frames.

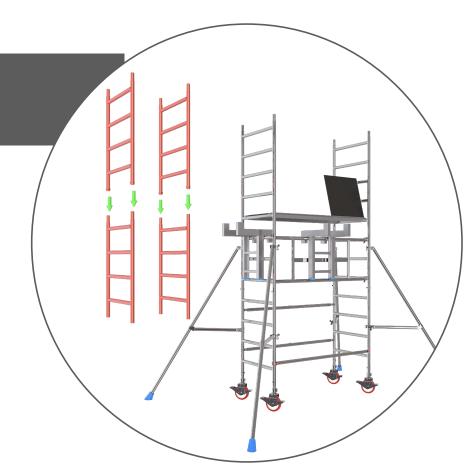


Hook the **2 Assembly Brackets** at an appropriate level from where you can lift the balance components easily. Preferably they should be hooked on any 2 sides.

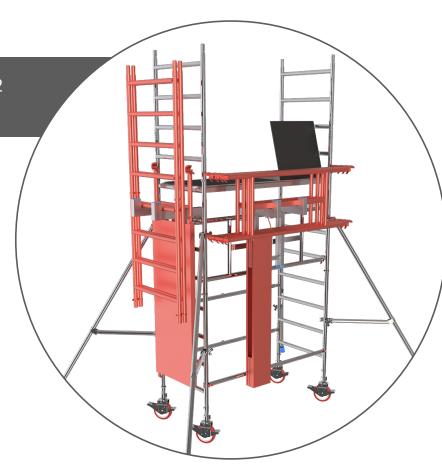


Step 8

Join the 4th and the 5th level frames of both sides together



Hang all the balance components on the 2 Assembly Brackets



Step 10

While sitting on the intermediate platform, with the safety belt hooked, take the following steps:

Step 10.1

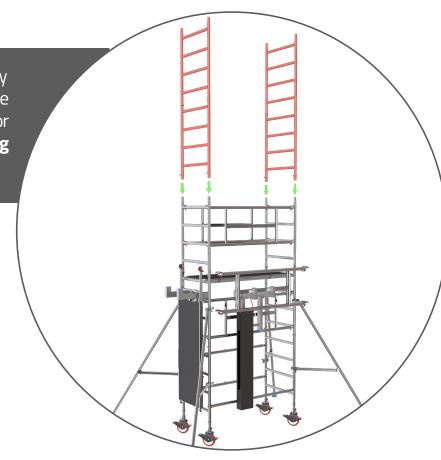
Hook 2 Guardrails on opposite sides. Clamp the top hook of the Guardrail Frame to the **4th rung** of the 3rd level frame and the bottom hook to the **2nd rung** of the 3rd level frame.



THIRD LEVEL

Step 11

Insert the 4th and the 5th level frames (already joined together in Step 8) on the respective sides into the corresponding spigots. For clamping instructions refer to the **Clamping Instructions section on page 14.**

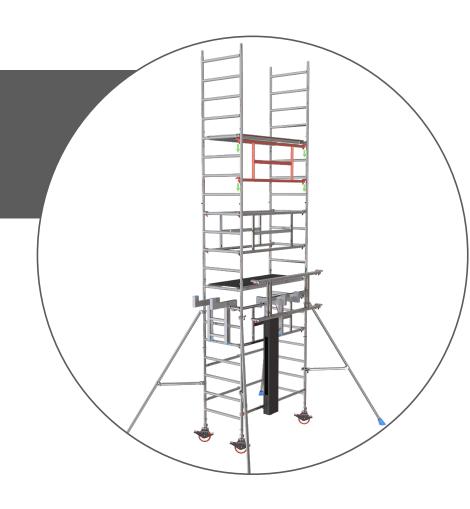


Step 12

Hook the Working trapdoor platform on the **4th rung** of the 4th level frames.



Hook 1 Guardrail on the hinged brace side. Clamp the top hook of the Guardrail Frame to the **3rd rung** of the 4th level frame and the bottom hook to the 1st rung of the 4th level frame.



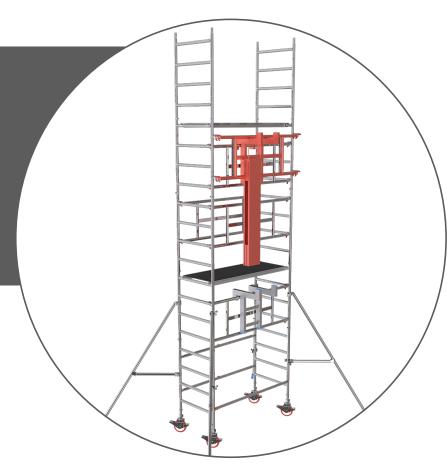
Step 14

Step 14.1

Shift the Assembly Brackets above at an appropriate level from where you can lift the balance components.

Step 14.2

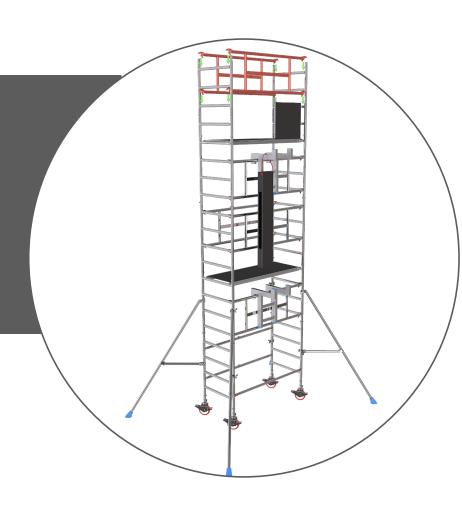
Hang the balance components on the Assembly Bracket.



While sitting on the intermediate platform, with the safety belt hooked, take the following steps:

Step 15.1

Hook 2 Guardrails on opposite sides. Clamp the top hook of the Guardrail Frame to the **4th rung** of the 5th level frame and the bottom hook to the 2nd rung of the 5th level frame.



Step 16

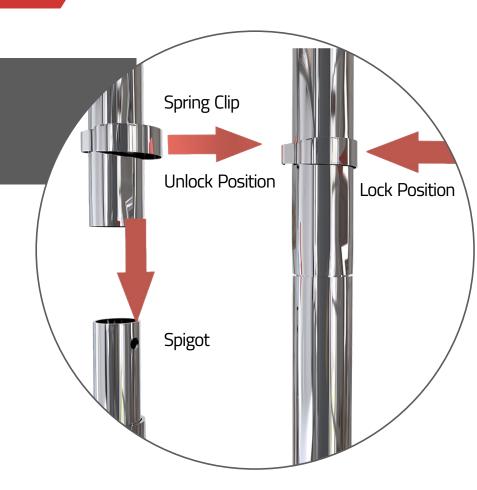
Fix the Toe-board.



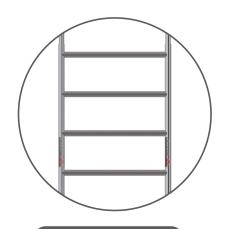
ASSEMBLY 14

Clamping Instructions

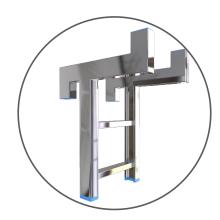
Always ensure the **Spring Clips** are in the lock position after inserting the upper frame in the **Spigot**. To insert, unlock the **Spring Clip**.



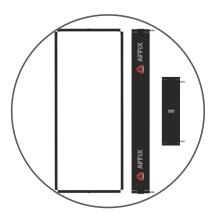
COMPONENTS



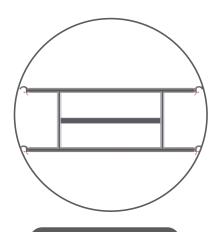
FS10750 Span Frame



BA0305Assembly Bracket



BT150 ToeBoard Set



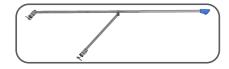
RG150 GuardRail Frame



FFB10750Base Frame (Folding)



CW150/200, JA500 Castor Wheel, Adjustable Jack



ST200/300 Stabilizer



PT150Trapdoor Platform



BH150Horizontal Brace

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

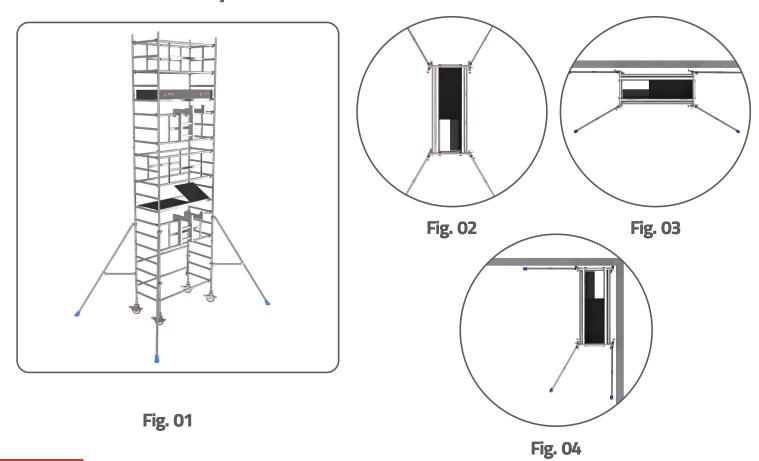


Fig. 01

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 200kgs/Sq Mtr, evenly distributed.
- Maximum permissible distributed load on the tower 600 Kgs.

Type Approval

The scaffold towers referred to herein have been tested by



MASL SERIES TABLE confirming to EN1004

SOLO TOWER

		MASL	215	315	415	515
Tower Height		in Mtrs	2.2	3.2	4.2	5.2
Working Height		in Mtrs	3.2	4.2	5.2	6.2
Platform Height		in Mtrs	1.2	2.2	3.2	4.2
Weight		in Kgs	59	81	113	122
		•				
Components	Code	Specs				
Base Frame (Folding)	FFB10750	1.0 Mtrs	1	1	1	1
Span Frame	FS10750	1.0 Mtrs	2	4	6	8
Adjustable Jack	JA500	0.5 Mtrs	4	4	4	4
Caster Wheel	CW150	6 Inches	4	4	4	4
GuardRail Frame	RG150	1.5 Mtr	2	3	4	6
Horizontal Braces	BH150	1.5 Mtrs	1	1	1	2
Trapdoor Platform	PT150	1.5 Mtrs	1	1	2	2
Stabilizer	ST200	2.0 Mtrs	0	4	4	0
Stabilizer	ST300	3.0 Mtrs	0	0	0	4
Assembly Bracket	BA0305	-	0	1	2	2
Toe Board	BT150	Set	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)

Job no: 8118846165

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To Check Assembly Video

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