

alufase

# Height solutions

ALUMINUM SCAFFOLDING

## Assembly guide

Models 300 and 400



USA - EUROPE - SOUTHAMERICA  
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More than 30 years of experience.





This manual provides the necessary instructions for the correct assembly and safe use of **ALUFASE Scaffolding Systems** (300 and 400 models).

The difference between the models (300 and 400) is that for the 400 model it is necessary to supply each level with an access ladder, in order to ascend to the different levels of the scaffold by ladder through the platform trapdoors. In model 300 users are allowed to use the frames as a ladder, as long as they climb on the inside of the scaffold.

The company contracting the scaffolding has the responsibility to inform the workers who are going to use the scaffolding about the information contained in this "Manual of Assembly and Use". They must also guarantee that all users who assemble or use the tower are trained according to the current regulations.

#### HOUSTON

6060 Brookglen Suite B  
Houston, TX 77017

Tel: +1 (713) 910 5600  
Fax: +1 (713) 910 5601

#### MIAMI

2372 W 77th St. Hialeah,  
FL 33016, EE.UU.

Tel: +1 (786) 636 6980  
Fax: +1 (786) 558 7308

#### SPAIN

Ctra. M-114, Km 1  
28864 Ajalvir-Madrid (Spain)

Tel: +34 91 884 4906  
Fax: +34 91 884 4892



 **Assembly**  
*guide* Models 300 and 400

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# Aluminum scaffolding

 **alufase**  
*"Height solutions"*





**DEFINITION AND USE**

Mobile towers are scaffolding structures assembled by components which are able to be moved by hand over a flat surface. These towers are a safe solution for jobs such as cleaning, painting, covering, constructing, etc., when these operations do not need heavy quantities of materials to be on the platforms.

**Maximum permitted loads**

- Maximum load per tower < **1,590 lb** (720 kg)
- Maximum load per DW level < **790 lb** (360 kg)
- Maximum load per platform < **550 lb** (250 kg)
- Light duty capacity **25 psf**

**Maximum permitted height**

Type	Indoor placed systems	Outdoor placed systems
Single width (SW)	<b>26'</b> (7.9m)	<b>26'</b> (7.9m)
Double width (DW)	<b>40'</b> (12.2m)	<b>26'</b> (7.9m)



**Attention**

*If more than the maximum permitted heights are required, please ask for technical assistance.*



It is a must to proceed carefully when ALUFASE towers are used in places where there is a possibility of them being left exposed to wind forces. It is necessary to take into account the "chimney effect" between buildings or even inside buildings which are open at the ends.

**Recommendations**

When the wind force is higher than **FORCE 4 Beaufort** (Moderate breeze), **DO NOT USE THE SCAFFOLDING.**

If you believe the wind force may reach **FORCE 6** (Strong breeze), **TIE THE TOWER TO A RIGID STRUCTURE.**

If you foresee a wind **FORCE 8** (Gale), **DISMANTLE THE TOWER OR MOVE IT TO A SAFE PLACE.**

The distance between the outriggers of the small side of the base has to be at least 1/3 of the height in single width and 10' (3m) high for double width.



**Attention**

- Assemble outriggers in all towers higher than 6'6" (2m) in single width and 10' (3m) of height for double width.
- Assemble guardrails and toe boards on all the work platforms.
- Always fasten the towers to fixed points when there is danger of instability or the weather conditions require doing so.

**Wind speeds**

Force	Peak mph	Peak km/h	Peak m/s	Guidance
4	18	29	8.1	<b>Moderate breeze</b> <i>Raises dust &amp; loose paper</i>
6	31	50	13.9	<b>Strong breeze</b> <i>Difficult to use umbrella</i>
8	48	74	20.8	<b>Gale force</b> <i>Walking is difficult</i>





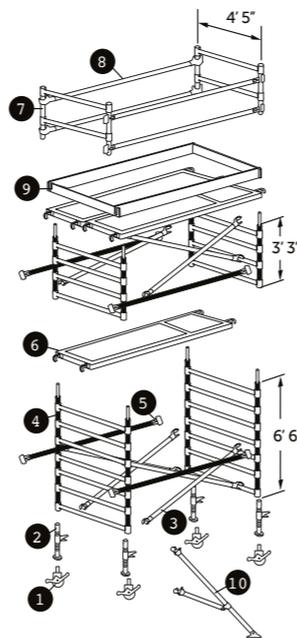
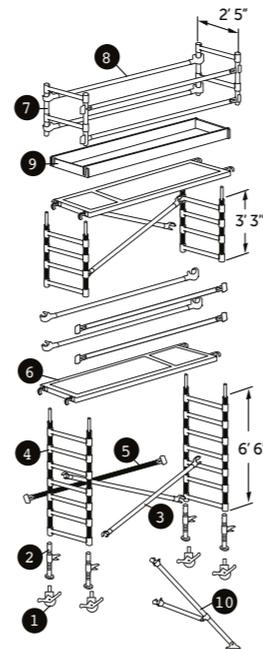
## Assembly Guide Scaffolding Components

### Single Width (2'5" / 74cm)

1. Locking casters
2. Adjustable legs
3. Diagonal braces
4. Lateral frames
5. Horizontal braces
6. Platform with trapdoor

### Double width (4'5" / 135cm)

7. Guardrail frame
8. Horizontal braces (functioning as a guardrail)
9. Toe boards



### MODEL 300 WEIGHT TABLE

- 1.- Locking casters (4.7"/6"/7.8" (125/150/200mm)): 4.8/6/9.5 lb (2.2/2.7/4.3 kg).
2. - Adjustable legs (15.8"/23.7"/31.5" (40/60/80 cm)): 2.4/4.6/6.5 lb (1.1/2.1/2.9 kg).
3. - Diagonal braces (3.7"/6.3"/8.2"/10' (1.12/1.91/2.50/3.05m)): 3/4/5/6 lb (1.4/1.8/2.3/2.7 kg).
4. - Model 300 lateral frames for SW and DW (3'3"/6'6" (1m/2m) Single width 11.6/19.8 lb (5.2/8.9 kg). Double width 15.5/33 lb (7/15 kg).
- 5 and 8. - Horizontal braces (3.7"/6.3"/8.2"/10' (1.12/1.91/2.50/3.05m)): 2.6/3.7/4.8/5.7 lb (1.2/1.7/2.2/2.6 kg).
6. - Platform with trapdoor (3.7"/6.3"/8.2"/10' (1.12/1.91/2.50/3.05m)): 19/29.3/38.6/45.9 lb (8.7/13.3/17.5/20.8 kg).
7. - Guardrail frame (SW/DW): 7/8.4 lb (3/3.8 kg).
9. - Toe boards (3.7"/6.3"/8.2"/10' (1.12/1.91/2.50/3.05m)): 2.8/4.8/6.8/8.6 lb (1.3/2.2/3.1/3.9 kg).  
Toe Board for SW (2'5" (74 cm) and for DW (4'5" (135 cm)): 1.76/3.5 lb (0.8/1.6 kg).
10. - Telescopic/Reinforced outrigger: 11.4/15 lb (5.2/6.8 kg).



## Assembly Guide System Components

### Lateral frames

ALUFASE has lateral frames available in different sizes to achieve the desired height. Lateral frames are distinguished by the number of rungs:

**Model 300**  
7 rungs: 6' (1.8 m)  
4 rungs: 3' (1 m)

**Model 400**  
5 rungs: 7' (2.07 m)  
4 rungs: 5' (1.6 m)  
3 rungs: 4' (1.2 m)

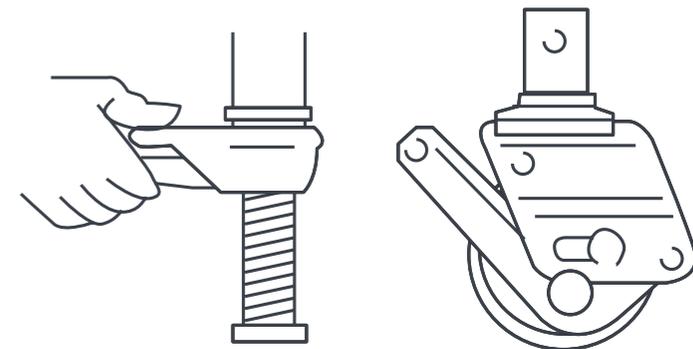
At the final module of the tower, a 2-rung lateral frame called "guardrail frame", or any other lateral frame which complies with the minimum collective security measures, is to be assembled.

### LEGS/LOCKING CASTERS/BASE PLATES

Adjustable legs are inserted in the holes at the bottom part of the lateral frames and consist of a threaded spindle and a leg adjuster. For a quick leveling adjustment, the adjuster must be pressed and slid along the threaded spindle until the desired setting is obtained.

To perform a more accurate adjustment, spin the leg adjuster, without pressing the release handle, around the threaded spindle. The leg is automatically locked upon releasing the handle and thus preventing its use when loaded. The locking casters or the base plates are attached to the legs by pressure.

The locking casters have brakes that must be activated before using the tower. Never pull out the leg in order to gain some height, only to level out. If you need to extend more than 12" (30 cm) of leg, seek advice.

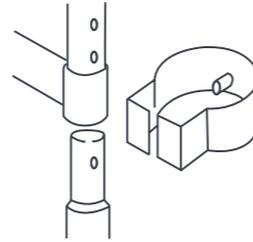




## Assembly Guide System Components

### INTERLOCK CLIPS

These interlock clips are used to join the upper part of a lateral frame with the lower part of the next one. The interlock clip has an interlock pin which, when introduced into the lower hole, fixes the lateral frame itself to the lower frame, which has a spigot with a hole at the end. To dismantle, simply pull the clip without taking it out completely and introduce it into the upper hole. If it were necessary to move the tower using a crane, make sure the metallic clip is a "Thru clip", meaning that it goes fully through the hole of the spigot. If not so, seek advice in order to see how to reinforce the tower, before attempting to move it.



### BRACES

There are 3 different types of braces: **HORIZONTAL, DIAGONAL AND HORIZONTAL WITH CLAMPS.**

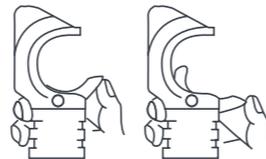
**HORIZONTAL BRACES:** They are used structurally at the base. They are of the same length as the platforms and are distinguished from the diagonal braces because of their length (they are shorter) and their color or an identification sticker. They are used as guardrails.

**HORIZONTAL WITH CLAMPS:** They are used as side guardrails, mainly in double width towers erected with only one platform. They have the same characteristics as the horizontal braces described above, with the difference that they have clamps instead of hooks at the ends of the braces (in order to avoid slipping).

**DIAGONAL BRACES:** They are longer than horizontal braces and normally have no color. They are used in all the modules and they have a structural function. They are placed on the lateral frame rungs and either 2 or 4 braces are assembled for each level depending on the width of the scaffolding.

### HOOKS

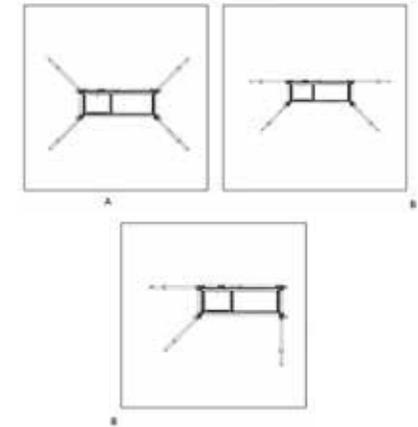
Both the horizontal and the diagonal braces have hooks at their ends with an automatic lock to anchor them to the corresponding tube. All the components will be always installed with the hooks facing out. To release, retract the latch. Always ensure that the hooks are fully inserted and the latches embrace the tube perfectly. Avoid hitting the scaffolding elements with hammers or any other tools that may deform the scaffolding components.



## Assembly Guide System Components

### OUTRIGGERS

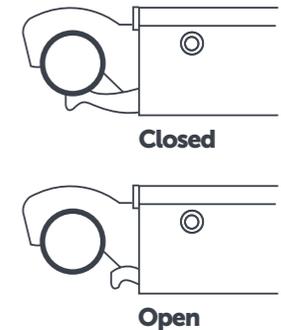
They must be assembled in all towers higher than 6'6" (2 m) in single width and 10' (3 m) for double width. They might be either of a telescopic length or reinforced. In the area of contact with the ground, there is a revolving brake shoe which allows for contact with irregular surfaces. The clamps joining them with the tower have wing nuts, in order to allow for manual adjustments. Make sure that the upper clamp stays immediately below the lateral frame junction and tighten it enough as for it to remain fixed. Ensure that the rubber sole is in firm contact with the ground. The outriggers are assembled as it is shown in picture A. In the event that the tower is close to a resistant wall, they may be placed as shown in picture B, as long as the wall is resistant and is at least 2/3 of the tower's height.



The smallest side of the footprint (including the outriggers) must be at least 1/3 of the tower's height in order to guarantee its stability. When moving the tower, check that there are no obstacles and do not lift the outriggers more than 1" (25 mm) from the ground (to prevent a potential overturning). Once it occupies its definite position, check the leveling once more, the adequate assembly of the outriggers and if the casters are locked.

### PLATFORM WINDLOCKS

Every platform of ALUFASE has an interlock pin or windlock in at least one of its support hooks, whose purpose is to prevent the platform from being moved for unwanted reasons (wind, etc.). This interlock pin is activated by pulling out the latch and released by pushing it in. Check that the pins and the hooks of the platforms are not damaged and are free of cuts, cracks, etc. To dismantle the platforms, you only have to remove the platform windlocks.





# Safety instructions

## BEFORE ERECTING A TOWER

Make sure that the worksite which is prepared for the assembly is safe and adequate according to the following guidelines:

### 1. Ensure the ground is firm and leveled.

A tower with locking casters must not be assembled on an incline which makes it difficult to control. Do not set the tower bases (locking casters or base plates) over sewers or similar surfaces. If necessary, some weight distribution boards will be placed in order to share out the load.

Check that the ground on which the scaffolding is going to be assembled can bear both the tower's weight and the load.

### 2. Ensure the area is clear of obstacles.

Remove any obstacles that complicate the assembly, any movement or the job. Do not assemble scaffolding close to electrical power lines without having received advice from certified personnel.

### 3. Ensure there are acceptable wind conditions, (see page 7).

### 4. Personal Protective Equipment (PPE).

Check that all components are available in the place where the scaffold is going to be assembled. Ensure that you also have all necessary tools and PPE (harness, gloves, goggles, safety footwear, helmet, rope, etc.). Make sure that they are all in good condition.



# Assembly process

1



Classify the different braces as **Horizontal** or **Diagonal**. They are distinguished because of their size, color or identification sticker.

**Horizontal:** shorter braces  
**Diagonal:** longer braces

2



Introduce the caster/base plate into the adjustable legs and insert these into the bottom holes of the two lateral frames. To level the towers out, spin the leg adjuster around the threaded leg until an adequate leveling is achieved (check with the spirit level).

**PRACTICAL ADVICE:** Let 4" (10 cm) of leg stand out on each of the lateral frames. This will permit you to level off the tower more easily when necessary. **NOTE:** Press the brake cam in order to lock the casters. The casters' brakes must be always activated unless in movement. Never pull out the legs in order to gain some height, only to level out.

3



Insert the end of a horizontal brace (with the hooks facing out) into the lower part of a vertical tube and place the other end of the brace on the ground (to hold the structure).

4



Place another lateral frame on the opposite side and insert the free end of the horizontal brace at the same height (generally at the base). When assembling towers with a double width (4'5" / 135 cm), place two horizontal braces at the base (one on each side of the lateral frame).





Assemble two diagonal braces opposite one another. The hooks of the braces must be fitted in the rungs of the lateral frames (generally, on the 2<sup>nd</sup> and the 5<sup>th</sup> rung) and as close as possible to the vertical tubes of each lateral frame. When assembling towers with a double width (4'5" / 135 cm), 4 diagonal braces are required, placing 2 on each end of the lateral frames in the shape of an x.

- **Single width (2'5" / 74 cm):** 2 diagonal braces per module.
- **Double width (4'5" / 135 cm):** 4 diagonal braces per module.



Afterwards, the leveling of the base (both in the horizontal and vertical planes) must be checked in the place where the tower will be used. Using a spirit level, make sure that the lateral frames stand upright and the horizontal braces are properly assembled. Any due corrections will be performed using the leg adjusters.



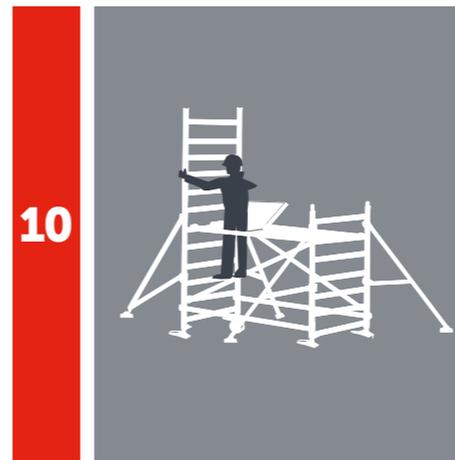
Unlike the Model 300, the assembly process for the Model 400 requires that an access ladder is installed on each of the levels in order to access an upper level through a ladder, by opening an access trapdoor on the platform (as long as there is not an upright built-in ladder in the lateral frame of the scaffolding itself). The access ladders and the trapdoors on the platforms will be assembled in alternating levels.



Assemble 1 or 2 platforms on the rungs of a lateral frame (depending on whether it is for single width or double width). If you do not have to assemble any more modules, continue with Step 12. EXCEPTION: for double-width towers with an uneven height, a three-foot-high (one-meter-high) platform will be installed to facilitate the access to the inside of the scaffolding. In all the other levels, as a general rule, 2 platforms will be placed. From 6'6" (2 m) of height upwards, an assistant is required to continue with the assembly of the scaffolding.



Assemble the outriggers. These must be tied to each corner of the tower in the same tube we have inserted the legs, by using the incorporated clamps. The upper clamp must be fixed just below a joint of the lateral frame in order to avoid any slipping. Make sure that the revolving brake shoes are firmly in contact with the ground. Assemble the outriggers or stabilizer bars as described on page 11 in this guide.



Climb up the built-in ladder, always using the fall arrest safety harness with a shock energy absorber and an anchorage point. Insert the two upper lateral frames by inserting them into the tenons of the lower lateral frames. Introduce the metallic interlock clips also into the lower hole (in order to join both lateral frames). After that, assemble the corresponding horizontal and diagonal braces.

**OPTION RECOMMENDED BY ALUFASE**

**Single width:** 2 diagonal braces (one on each side of the lateral frame) and 4 horizontal braces (starting from the 6<sup>th</sup> foot/2<sup>nd</sup> meter). Normally, the diagonal braces will be placed on the 2<sup>nd</sup> and 5<sup>th</sup> rungs and the horizontal braces at the height of the 2<sup>nd</sup> and 4<sup>th</sup> rung, thus functioning as a guardrail.

**Double width:**

FOR EVERY DOUBLE PLATFORM: 4 diagonal braces (crisscrossing on each side of the lateral frame) and two horizontal braces (starting from the 6<sup>th</sup> foot/2<sup>nd</sup> meter). Normally, the diagonal braces will be placed on the 2<sup>nd</sup> and 5<sup>th</sup> rungs and the horizontal braces at the height of the 2<sup>nd</sup> rung.

WITH ONE PLATFORM: 4 diagonal braces (crisscrossing on each side of the lateral frame), 1 normal horizontal brace and 2 horizontal braces with clamps (starting from the 6<sup>th</sup> foot/2<sup>nd</sup> meter). Normally, the diagonal braces will be placed on the 2<sup>nd</sup> and 5<sup>th</sup> rungs, the normal horizontal brace on the 2<sup>nd</sup> rung (on the outer side) and the horizontal braces with clamps on the 2<sup>nd</sup> and 4<sup>th</sup> rung (on the inner side of the tower).

In case of it being a work platform, ALUFASE recommends perimeter toe boards.



11



In the Model 400, place an inner access ladder only if there is not a built-in ladder on the lateral frame itself. Place another platform at the top and repeat step number 10 for every additional module. Structurally, platforms cannot be spaced out for intervals of more than 13' (4 m). However, ALUFASE recommends keeping 6'6" (2 m) as the maximum distance between platforms.

12



Once the top level has been placed, and always using the safety harness, assemble the guardrail frames and insert all the metallic interlock clips. Never assemble platforms on top of the guardrail frames of the scaffolding. Keep yourself secured (use a double point of anchorage if necessary).

13



Assemble, on the lateral guardrail frames, two horizontal braces on each side of the tower (the upper hook resting on the flanges off the guardrail frame in order to avoid slipping), thus sealing off the working level completely. NOTE: Remember that the correct position for the braces is with their hooks facing outwards.

14



ALUFASE recommends installing toe boards on every work level. Make sure that the platform windlocks on all the platforms have been set. Before using the scaffolding, check that the locking casters are activated and the outriggers are assembled correctly. Go through the checklist attached to this guide, before using the tower.



Open Closed

DISMANTLING: Follow the reverse procedure making sure that all the locking casters are set. Dismantle the toe board on the top level and, once having attached yourself with the harness, dismantle the hooks of the braces on the top level of the tower and complete the operation from the protected position on the trapdoor. Extract the platforms from the lower level. Hand down the components safely to the person assisting you in the dismantling process (use the rope if necessary).

**BEFORE DISMANTLING**

1. Ensure that the personnel in charge of assembling the scaffolding are capable of both performing the task and complying with the established safety rules and procedures. From 6'6" (2 m) of height upwards, at least two workers are needed for the assembly and the dismantling.
2. Only the staff which has been expressly authorized by the installation company will be allowed to access the scaffolding during its assembly or dismantling, in order to prevent the scaffolding being used by third parties before the assembly process has been finalized.
3. Personal protective equipment to erect the scaffolding. All personnel dedicated to the assembly or dismantling of scaffolding are obliged to use, and must have available, the following personal protective equipment:
  - **Safety hardhat, safety footwear, safety harness, safety gloves, anti-shock goggles and adequate clothes.**

Any other types of equipment will depend on the type of job to be performed, the state of the place where the scaffolding has been installed or on any other conditions stated on the Safety Plans or Hazard Assessments.



# Safety Instructions

## BEFORE ASSEMBLY

The personnel who are working at more than 6'6" (2 m) of height are obliged to use a safety harness, whenever they cannot count on collective protective measures which prevent falls from a height.

**4.** Before starting to assemble the scaffolding, the condition of all the material which will be used must be checked. Never use faulty material. Likewise, the tools for the assembly and the protective equipment that have any defects must be replaced by different ones.

**5.** Before starting to assemble the scaffolding, the installation company must inform of the weight of the scaffolding so that the relevant person related to the property, the contractor, etc., can check that the ground on which the scaffolding will be erected is capable of bearing such a load.

## DURING THE ASSEMBLY

**1.** Use only locking casters/base plates and legs in good condition for the tower. Do not use other objects to support the structure such as barrels, boxes, loose bricks or wooden blocks.

**2.** Before assembling the scaffolding, you must ensure that none of its elements enter the area of operation of cranes or any other moving machinery. For scaffolding higher than 6'6" (2 m), two assembly workers are required.

**3.** A new level will not be started unless the starting level has been completed with all the safety and stability elements. **IMPORTANT:** assemble access ladders on each level on the Model 400 as long as there is not a built-in vertical ladder on the lateral frame itself.

**4.** The work platforms will be reinforced as soon as they have been installed, by setting the platform windlocks. Check that the interlock clips are perfectly fixed in the lower hole. Replace any damaged clips.

**5.** The safety standard on the secured starting level should be such that the safety harness will be offered all necessary guarantees in terms of safety when tied to it.

**Recommended anchorage point:** lateral frame's rung, the closest to the joint connected to the vertical bar (T-shaped junction).



# Safety Instructions

**6.** Tie the towers to fixed points (every 13'-20' / 4-6 m) when there is danger of instability or it is required by bad weather conditions.

**7.** As a general rule, the personnel who work at more than 6'6" (2 m) of height are obliged to use a safety harness, whenever they cannot count on collective protective measures which prevent the risk of falling from a height. The safety harness will be anchored to:

- Cables or ropes previously extended for this purpose (life lines).
- Firm points of the building.
- Scaffolding structure which has already been secured (stabilizers or supports, etc.). The recommended anchorage point will be the rung of the lateral frame (the closest to the joint connected to the vertical bar).

**8.** As a general rule, the scaffolding which has been erected less than 15" (36 cm) away from the façade, does not need to have a guardrail frame on that side of the scaffolding.

**9.** Lift all the components using ropes and a safety knot. Perform the lifting within the area on which the tower stands. It is forbidden for all workers to remain in the load lifting area.

**10.** It is prohibited to throw objects directly from the platforms of the scaffolding.

**11.** Platforms will NEVER be assembled on the guardrail frames. These components work simply as protective elements and, under no circumstances, can they be considered structural parts of the scaffolding.

**12.** The elements which show any technical fault or bad structural behavior will be dismantled immediately, proceeding to its repair or replacement.

**13.** Those parts of the scaffolding which are not ready to be used, mainly during the assembly, will be marked and conveniently identified.





# Safety Instructions

## DURING DISMANTLING

Make sure the scaffolding has not been modified in a way that makes it unsafe and, if it has, rebuild it and stabilize it where necessary before starting the dismantling (this includes all the braces and outriggers of the scaffolding).

1. Remove all the materials and tools from the platforms in order to avoid the falling of objects.
2. Clean the platform to avoid falling debris.
3. The worksite on which the scaffolding will be dismantled must be adequately indicated and the access to the area restricted to the workers who will dismantle the scaffolding.
4. The dismantling must be carried out in reverse order to assembly. Always use a safety harness (if necessary, use a double point of anchorage in order to be attached at all times).
  - Do not dismantle a component of the scaffolding without considering the effect of such removal.
  - Do not accumulate an excess of components or equipment on the level which is being dismantled.
  - The dismantled scaffolding must be stored properly.
5. If the materials cannot be handed down, they must be taken down with ropes. They must NEVER be thrown.

## DURING USE

1. The brakes of the casters must be always set, except when in movement. Press the lever to activate. None of the components of the scaffolding must be altered. If you need to do it, seek technical assistance from qualified personnel.
2. When you move the tower:
  - A. **DANGER:** Pay attention to aerial cables and other obstacles.
  - B. Never move the towers with people and/or tools on them. All materials which are susceptible to fall must be removed before the movement starts.



# Safety Instructions

- C. If the erected tower has outriggers, raise them as little as possible from the ground and move it carefully. If the outriggers impede the movement of the tower, dismantle it to a height of 6'6" (2 m) for single width towers or 10' (3 m) for double width towers, move it and assemble it again.
  - D. After the movement, make sure the tower is correctly leveled, the outriggers are placed in perfect contact with the ground and the brakes are set.
  - E. Make sure that the ground to which the tower will be moved is capable of bearing the structure.
  - F. The tower must only be moved manually, not using machinery, by pushing it uniformly from the base on ground which is firm, leveled and free of obstacles. When moving the tower, do not move faster than a person's normal walking speed.
3. The tower must be upright and in a leveled position. Make sure that the legs are correctly stabilized.
    - NEVER** increase the height of the tower by using the adjustable legs.
    - NEVER** adjust the legs while there are workers, tools or other materials on the platforms.
 Before going up the tower, verify that it is perfectly assembled by going through the checklist that you will find at the end of this guide.
  4. **NEVER** lean ladders or other objects against the scaffolding.
    - NEVER** place ladders or other objects on the platforms in order to gain extra height.
    - NEVER** lean the tower against a wall unless it is perfectly tied to a building.
  5. Be careful with horizontal forces that can increase the instability of the scaffolding. **Maximum horizontal force: 44 lb.**
  6. **NEVER** climb using diagonal braces. **ALWAYS** climb using ladders or the integrated vertical ladder in model 400, or use the structure as a ladder in Model 300. Go through the platforms using the trapdoors.
 

**NEVER** jump on the platforms. **ALWAYS** work inside the tower. **NEVER** climb on the outer side of the tower. Never swing on the tower.



# Safety Instructions

7. Do not assemble the tower on cables or pressing against them. Do not erect the scaffolding in contact with or close to parts that might be accidentally live with electrical current. Always keep the safety distance required in relation to high-voltage, medium-voltage and low-voltage lines.
8. Never use a tower with winds higher than FORCE 4. Remove the accumulation of ice or snow on the platforms. If necessary spread salt in order to avoid any slipping. Be careful with the air flow between buildings. Do not move the tower when there is a strong wind. Tie it to fixed points when the weather conditions require so.
9. Do not cover the scaffolding with meshes, canvas, nets or any other similar device. In case that you need to do it, seek technical advice.
10. **NEVER** store tools, materials or rubbish on platforms.
11. Diluted hydrochloric acid, potash and other similar substances are corrosive for the scaffolding and can reduce the equipment's resistance. Do not expose the aluminum to these substances.
12. **NEVER** assemble pulleys or raise heavy materials from the outer side of the scaffolding.
13. When the scaffolding is not being used, always tie the tower to a fixed point.
14. The worksite where the scaffolding is going to be assembled or dismantled must be indicated properly and with access restricted. Put signage at the base of the scaffold to avoid use when it is not ready to be used.
15. **NEVER** exceed the maximum permitted loads: 550 lb / platform; 790 lb / level; 1,590 lb / tower (250 Kg/platform; 360 Kg/level; 720 Kg/tower).
16. Working on a platform placed under another platform where people are working is strictly forbidden.
17. As a general rule, the towers are not designed to be lifted or suspended. If you need to do so, seek technical advice. When it comes to moving a tower by crane, special components are necessary and compliance with certain safety rules is required.



# Safety Instructions

## BEFORE EACH USE

- Check that the scaffolding has not been modified and is safe to be used.
- Check that the scaffolding stands upright, leveled and at a right angle.
- Make sure that the scaffolding is perfectly assembled on firm ground, with all the necessary safety devices, with the hooks well placed (facing out) and the interlock clips correctly installed on all the lateral frames.
- Ensure the brakes of the locking casters are set.
- Do not use any damaged or incomplete equipment or material.
- Go through the checklist attached below before each use of the scaffolding.
- It is compulsory for the user to use the adequate individual protective equipment for the job to be performed.

## CARE AND MAINTENANCE

- The scaffolding can only be assembled, dismantled or modified by workers who have received specific and appropriate training for such operations.
- When the access to the scaffolding or the performance of a particular task demands for a protective device against falls to be removed temporarily, the use of a harness will become compulsory. Once this particular job is definitively or temporarily finished, the collective protective devices against falls should be returned to their place. If necessary, a harness with a double point of anchorage will be used in order to be attached at all times.
- Performing temporary jobs at a height will only be possible when the weather conditions and the levels of lighting do not jeopardize the safety or well-being of the workers.



## CARE AND MAINTENANCE

- All the scaffolding components must be inspected regularly in order to detect potential damage. Check casters, brakes, threaded spindles of the legs, leg adjusters, lateral frames, lateral frame tenons, interlock clips, tube joints, braces, hooks, outriggers, platforms with their wood boards, pins, trapdoor locks, etc.

- Keep all the scaffolding components clean, especially the tenons and the openings where the lateral frames join together. If necessary, lubricate with oil. As a general rule, they must be kept upright to prevent them from getting damaged. Keep the platforms and the pins clean, as well as the locking hooks on the horizontal braces, diagonal braces and frames. Grease, if necessary.

- Any damaged or broken components must be repaired and replaced.

Keep the scaffolding components clean and in good condition. The threads of the adjustable legs must be clean and lubricated lightly in order to keep it functioning correctly. Remove the dirt from the adjustable legs with a brush. If necessary, grease the brakes of the locking casters with oil.



ALUFASE recommends inspecting all the scaffolding components regularly. However, scaffolding should always be inspected when:

- a)** It is going to be used
- b)** It has been returned after use or rental.
- c)** It has undergone any circumstance that may have affected the integrity of the scaffolding (an accident, adverse weather conditions, lack of use for a long period of time, etc.)

The inspection must be done by capable personnel who have the required protective equipment and training for this purpose.

## DEFINITION OF THE DEFECTS ON THE MATERIAL

- a)** Cut: an incision on the component's material which results from a deliberate or accidental action by the user.
- b)** Crack: a break on the component's material which results from overloading, accidental damage, incorrect storage, prolonged use, etc. It can also happen on the wooden board of the platforms.
- c)** Deformation: a defect of some scaffolding component which may affect the structural behavior of the scaffolding itself and its proper assembly with other parts. It may occur due to overloading, accidental damage, prolonged use, use of sharp or hard tools which hit the material, etc.



*Broken surface*



*Holes*



*Deformations*



*Corrosion*



*Dirt*

- d)** Holes: Punctures, of any dimension, which may be partial or go fully through the thickness of the material, as a result of an accidental or deliberate damage caused by the user.





# Material inspection procedure

## DEFINITION OF THE DEFECTS ON THE MATERIAL

**e)** Contamination: dirt on the scaffolding components. It is deemed unacceptable when the contaminant jeopardizes the user, generates a chemical or biological risk or has a negative effect on the piece of equipment. Some examples are: petroleum (risk of slipping, danger in the handling of the material, dermatological hazard, etc.), gypsum (creates a slippery layer and annuls the anti-slipping component of the platforms), diluted hydrochloric acid, potash and other similar substances, all of which are corrosive for the scaffolding and can reduce the equipment's resistance.

**f)** Broken surface: found on the wooden platform board and toe board. It presents a tripping hazard or a risk of cutting due to splinters. It may be caused via its use in extreme conditions, overloading, inadequate storage or accidental damage. If the hooks and the release handles of the braces and guardrail frames are broken, accidents may occur as the collective protective devices would not be properly installed, thus providing a feeling of safety that is not in line with reality.

**g)** Excessive corrosion: the traces or stains of red rust on screws, bolts, pins, etc., as well as white dust on the aluminum components show a defect on those parts that will have to be replaced.

## PLATFORMS

The wooden boards on the platform must be even (uninterrupted surface), free of cracks, cuts, holes or splinters. The surface must be sufficiently clean as for the platform not to be slippery and avoid unwanted falling.

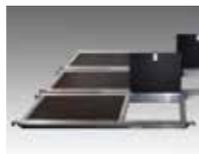
Check that the aluminum face of the platform has no structural dents, cuts, holes, etc.



Clean surface



Ring and opening mechanism free of dirt



Maximum load sticker



# Material inspection procedure

## PLATFORMS

Check if there is any corrosion, damage or excessive wear on the hinges or the opening ring of the trapdoors. Check that they work correctly when opening and closing the trapdoor (with the platform in a horizontal position, open the trapdoor completely and close it again. Clean the dirt which may have accumulated on the opening ring or the hinges).

Check that none of the rivets of the platform present damage or excessive corrosion.

Each platform has four support hooks. Check that the hooks are not damaged or loose. Check that the inner part of the hook is clean. Check that the fixing nuts and screws of the hooks on the face of the platform are free of corrosion and properly tightened. Place the platform on a lateral frame and check that all the hooks attach correctly.

On at least one of the hooks, the platform has a windlock whose function is to fix the platform to the tube. Check that it is in perfect condition, that it is clean and that it performs its function, by testing it on a tube (extract the windlock to check that it works and attaches correctly). Each platform must be tagged with a safety sticker where the maximum permitted weight is indicated. Make sure that it is still legible.



Dirty surface



Damaged face of the platform



Fastening screw oxidized hook



Wood not supported on the face of the platform

## LATERAL FRAMES AND GUARDRAIL FRAMES

Check that all the tubes are free of any damage, cuts, holes, deformations, cracks, dust or impregnations. Remember that the stretcher frame in the Model 300 can be used as a vertical ladder (the tube is threaded in order to prevent slipping and must not have any gypsum, dust or any other type of material which may affect people climbing it)

Check that all the T-shaped joints do not have any spaces or cracks.





# Material inspection procedure

## LATERAL FRAMES AND LATERAL GUARDRAIL FRAMES

Check that the joining screws of the tenons are properly tightened, are not corroded and there are no spaces. Check the correct attachment of the tenon to the tube.



Clean surface

Ferrules and clips

"Y" in good condition

Tenon screws

Check that there are two metallic interlock clips on each side. Verify that these clips are correctly inserted in the holes (with no spaces or dirt which impede their proper connection) and that they are in good condition, without corrosion or damage. Ensure they are not deformed.

Make sure that there is an identification sticker fixed on the vertical side of the lateral frame and that it is legible.

Check that there are flanges on the guardrail frames at the top of the vertical tube, which are necessary to prevent the frames of the guardrail from slipping. Verify that they perform correctly by attaching one frame of the guardrail and pushing it downwards. Check that there is a ferrule at the bottom which is not damaged, loose or deformed.



Holes on lateral frames

Dirt in the tenons

Dents and absence of interlock clips

Illegible stickers



# Material inspection procedure

## GUARDRAIL BARS AND FRAMES

The bars and their connecting hooks to the tube (located at the end of each bar) must be free of damage, cracks, deformations, dirt, etc. Check that the release handles are in good condition, without dents or deformations.

Check that the spring of the release handle is in good condition. In order to do so, insert the hooks on the lateral frame and check that they work correctly. Apply force attempting to detach the bar and check that it is properly attached (it does not detach).

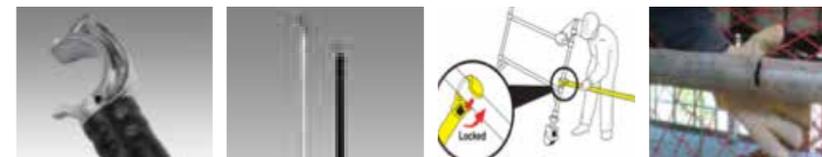


Broken flanges on the lateral frames

No ferrule at the bottom of the lateral guardrail frame

Dents and deformations

Bars must be straight without deformations or holes. Hooks must be properly adjusted and release handles in good condition. Hooks have to be always facing out with the latch retracted and embracing the tube.





# Material inspection procedure

## LEGS AND LOCKING CASTERS

The legs must be in good condition, without deformations, dents, corrosion or dirt. The threaded spindle must be CLEAN (free of gypsum, cement, dirt, etc.) and have NO DENTS, so that the leg adjuster can slide and hook on correctly.

Check that the inside of the leg is not damaged, or deformed, so that the caster can get in correctly. Verify this by introducing a caster into the leg.



*Dents on the thread of the tube*



*Dents inside the tube*



*Check the leg-tube fastening ball and the leg adjuster*



Check that the fastening ball is located on the outer top part of the tube and the caster and is in good condition. Verify that it works properly so that it fastens the leg to the tube and the caster to the leg. Introduce the leg into a lateral brace to check that it does not detach. Introduce the caster into the leg to ensure that it does not come loose.

Make sure that the leg adjuster spins around the entire threaded spindle correctly (without leaving significant spaces). Check that the cogs of the adjuster adjust properly to the thread of the tube (without spaces). Press the adjuster strongly to make sure that it remains attached when the load is applied.

Review the condition of the spring of the leg adjuster. In order to do so, check that it works correctly when pressing and releasing the adjuster. The adjuster must not present any deformations, cracks, tears, etc.



# Material inspection procedure

## LEGS AND LOCKING CASTERS

Check that the caster is not damaged or that its rubber surface is not worn down. Check that it is free of dirt and that the axis is unblocked. Verify that the caster turns adequately when the brake is not set.

Check that the condition of the casters' brakes is adequate. Activate the lever of the brake and check that the caster does not rotate.

Check that the upper rod of the caster remains in good condition and does not have any spaces or deformations.



*Caster in good condition*



*Blocked pivot point*



*Worn-down rubber*



*Rod in bad condition*

## TOE BOARDS

Check that the wood is in good condition, without splinters, breaks, etc. Check that the metallic rods to insert into the platform are in good condition and that they have all the rivets which fix them to the wood. Check that the fixing slots at the ends of the toe boards are free of dirt and in good condition.



*Incorrect rod*



*Broken wood*





# Material inspection procedure

## INNER LADDERS

Check that the body of the ladder and its rungs are neither damaged nor dented or cracked. Check that the surface is not covered by gypsum, cement or any other material that might provoke slips when going up the rungs.

Make sure that the hooks that attach to the tubes are in good condition (undamaged, without spaces, without dirt in the inside, etc). Ensure that there are supporting rubber wedges on the ladder.



*Dirt on the rungs*



*Absence of wedges*

## OUTRIGGERS AND CLAMPS

The tubes of the outriggers must be free of damage, cuts, cracks, dirt, etc. On the telescopic outriggers, check that the telescopic tube can be extracted correctly and that its holes are not damaged, deformed or covered by dirt. Insert the interlock clip in those holes and check they are properly placed (coming out at the back of the tube).



*Existence of metallic clips; rubber brake shoes and tubes are in good condition*



*Broken clamps, damaged and oxidized threads, etc*



# Material inspection procedure

## OUTRIGGERS AND CLAMPS

Ensure that the rubber brake shoe on the lower end is fixed to the tube and not significantly worn down.

Check that the condition of the clamps is good: They must not be dirty, corroded or dented at the wing nut or the thread's level. The thread must not be deformed, damaged or worn down so that it can tighten to the tube properly. Spin the wing nut around the thread and check that it works correctly.

Ensure that there are legible stickers related to the instructions of use of the outriggers.



*Octagonal, rotator or parallel clamps*





## 10 Keys to assemble the scaffolding correctly

The contractor of the scaffolding must ensure that the people who are going to assemble and supervise the correct assembly of the scaffolding know all the necessary information, included in this guide, and are adequately capable and trained.

### 1. Check that the material which you are going to use is in good condition.

If you find any faulty component, it must be replaced by one in good condition:

**A)** Scaffolding components: Pay special attention to the casters, the legs, the leg adjusters, the latches of the hooks, the interlocking clips, etc.

**B)** Work equipment: Harness, shock energy absorber, rope, helmet, boots, gloves, etc.

### 2. Never move the tower with people and/or tools on it.

Keep the brakes of the locking casters always set, unless in movement. Once the tower is positioned at its final location, check the correct positioning of the outriggers and set the caster brakes (lever downwards).

**3. Once the base of the tower is assembled,** you must check that the tower is leveled in order to continue with the assembly.

### 4. Always assemble the braces with the hooks facing out.

Make sure that the latch of the hooks has come out correctly, attaching itself to the tube.

### 5. When assembling the platforms, always extract all the windlocks.

Each platform has at least one windlock pin.

**6. Always assemble the outriggers in double width towers which are higher than 10' (3 m) and in single width towers higher than 6'6" (2 m).** Follow the instructions in this guide to assemble them correctly. For a tower to be self-standing, the small side of the base, including the distance between outriggers, must be at least 1/3 the height of the tower. If you cannot assemble them, seek technical advice (increasing the base size, fixing/fastening the tower, etc.)



## 10 Keys to assemble the scaffolding correctly

**7. You must know, before starting the assembly of the scaffolding,** the weight of the tower and the load capacity of the terrain on which the scaffolding is going to be settled. Respect the maximum loads which must be uniformly spread out, as established in this guide: 550 lb / platform; 790 lb / level; 1,590 lb / tower (250 Kg/platform; 360 Kg/level; 720 Kg/tower).

### 8. Respect the weather considerations established in this guide.

Pay special attention to the wind force. Use your common sense; if it is windy do not use the scaffolding, tie it or put it away in a protected place.

### 9. Whenever you assemble scaffolding and find yourself at more than 6'6" (2 m) of height, use a safety harness.

Use the double anchorage point to be attached at all times if necessary. When you use the scaffolding, it is advisable to use the safety harness even when there is collective protective equipment.

**10. Go through the checklist which is attached at the end of this guide daily** before climbing the scaffolding in order to ensure the scaffolding is correctly assembled.



## Recommendations of use by the SAIA

It shall be the responsibility of all users to read and comply with the following guidelines which are designed to promote safety in the erecting, dismantling and use of scaffolds. These guidelines do not purport to be all inclusive nor to supplant or replace other additional safety and precautionary measures to cover both usual and unusual conditions. If these guidelines in any way conflict with any state, local, federal or other government statute or regulation, said statute or regulation shall supersede these guidelines and it shall be the responsibility of each user to comply therewithin.

### GENERAL GUIDELINES

- A. POST THESE SCAFFOLDING SAFETY GUIDELINES** in a conspicuous place and be sure that all the people who erect, dismantle or use scaffolding are aware of them.
- B. FOLLOW ALL STATE, LOCAL AND FEDERAL CODES, ORDINANCES AND REGULATIONS** pertaining to scaffolding.
- C. SURVEY THE JOBSITE.** A survey of the jobsite shall be made for hazards, such as untamped earth fills, ditches, debris, high tension wires, unguarded openings, and other hazardous conditions created by other trades. These conditions should be corrected or avoided as noted in the following sections.
- D. INSPECT ALL EQUIPMENT BEFORE USE.** Never use any equipment that is damaged or defective in any way. Remove it from the jobsite.
- E. SCAFFOLDS MUST BE ERECTED IN ACCORDANCE WITH DESIGN AND/OR MANUFACTURER'S RECOMMENDATIONS.**
- F. DO NOT ERECT, DISMANTLE OR ALTER A SCAFFOLD** unless under the supervision of a qualified person.
- G. DO NOT ABUSE OR MISUSE THE SCAFFOLD EQUIPMENT.**
- H. ERECTED SCAFFOLDS SHOULD BE CONTINUALLY INSPECTED** by the user to ensure that they are maintained in safe conditions. Report any unsafe condition to your supervisor.



## Recommendations of use by the SAIA

- I. NEVER TAKE CHANCES!** IF IN DOUBT REGARDING THE SAFETY OR USE OF THE SCAFFOLD, CONSULT YOUR SCAFFOLD SUPPLIER.
- J. NEVER USE EQUIPMENT FOR PURPOSES OR IN WAYS FOR WHICH IT WAS NOT INTENDED.**
- K. DO NOT WORK ON SCAFFOLDS** if your physical condition is such that you feel dizzy or unsteady in any way.

### GUIDELINES FOR ERECTION AND USE OF SCAFFOLDS

- A. THE SCAFFOLD BASE MUST BE SET ON BASE PLATES OR LOCKING CASTERS AND ON ADEQUATE SILL OR PAD** to prevent slipping or sinking and secured whenever required. Any part of a building or structure used to support the scaffold should be capable of supporting the maximum intended load to be applied.
- B. USE ADJUSTING SCREWS** or other approved methods to adjust to uneven gradient conditions.
- C. BRACING, LEVELING & PLUMBING OF FRAME SCAFFOLDS**
  1. Plumb and level all scaffolds as erection proceeds. Do not force frames or braces to make them fit. Level the scaffold until proper fit can be easily made.
  2. Each frame or panel shall be braced by horizontal bracing, cross bracing, diagonal bracing or any combination thereof for securing vertical members together laterally. All brace connections shall be made secure.
- D. BRACING, LEVELLING & PLUMBING OF SCAFFOLDS**
  1. Plumb and level all scaffolds as the erection proceeds. Do not force frames or braces to make them fit. Level the scaffold until proper fit can easily be made.
  2. Each frame or panel shall be braced by horizontal bracing, cross bracing, diagonal bracing or any combination thereof for securing vertical members together laterally. All brace connections shall not exceed manufacturer's recommended procedures.



## Recommendations of use by the SAIA

**E. TIE THE CONTINUOUS (RUNNING) SCAFFOLDS TO THE WALL OR STRUCTURE** at each end and at least every 30' (9.1m) of length when scaffold height exceeds the maximum allowable free standing dimension. Set up ties or stabilizers when the scaffold height exceeds that dimension, and repeat at vertical intervals not greater than 26' (7.9m). The top anchor shall be placed no lower than 4 times the dimension of the base from the top of the completed scaffold. Anchors must prevent the scaffold from tipping into or away from the wall or structure. Stabilize circular or irregular scaffolds in such a manner that the completed scaffold is secure and restrained from tipping. When scaffolds are partially or fully enclosed or subjected to overturning loads, specific precautions shall be taken to ensure the frequency and accuracy of the ties to the wall or structure. Due to increased loads resulting from wind or overturning loads the scaffolding component to which the ties are attached shall be checked for additional loads.

**F. WHEN FREE STANDING SCAFFOLD TOWERS**

exceed a height of four (4) times the smallest dimension of their base, they must be restrained from tipping.

**G. DO NOT ERECT SCAFFOLDS NEAR ELECTRICAL POWER LINES.** Consult a qualified person for advice.

**H. ACCESS SHALL BE PROVIDED TO ALL PLATFORMS.** Do not climb cross braces or diagonal braces.

**I. PROVIDE A GUARDRAIL SYSTEM, FALL PROTECTION AND TOEBOARDS WHERE REQUIRED BY THE PREVAILING CODE.**

**J. ALL SCAFFOLDING COMPONENTS** shall not be altered. The scaffold frames and their components manufactured by different companies shall not be intermixed, unless the component parts readily fit together and the resulting scaffold's structural integrity is maintained by the user.

**K. DO NOT RIDE A ROLLING SCAFFOLD.** ALUFASE does not recommend nor encourage this practice.



## Recommendations of use by the SAIA

**L. BRACKETS AND CANTILEVERED PLATFORMS**

1. Brackets for SYSTEM SCAFFOLDS shall be installed and used in accordance with the manufacturer's recommendations.

2. Brackets for SCAFFOLD FRAMES shall be seated correctly with the side brackets parallel to the frame and the end brackets at 90 degrees to the frames. Brackets shall not be bent or twisted from their natural position. Brackets (except mobile brackets designed to carry materials) are to be used as work platforms only and shall not be used for storage of material or equipment.

3. Cantilevered platforms shall be designed, installed and used in accordance with the manufacturer's recommendations.

**M. ALL SCAFFOLDING COMPONENTS** shall be installed and used in accordance with the manufacturer's recommended procedure. Components shall not be altered in the field. The scaffold frames and their components manufactured by different companies shall not be intermixed, unless the component parts readily fit together and the resulting scaffold's structural integrity is maintained by the user.

**N. PLANKING**

1. Working platforms shall cover the scaffold bearer as completely as possible. Only scaffold grade wood planking, or fabricated planking and decking which meet the requirements for the use of scaffold shall be used.

2. Check each plank prior to use to ensure the plank is not warped, damaged, or otherwise unsafe.

3. Planking shall have at least a 12" (304.8 mm) overlap and extend 6" (152.4 mm) beyond the center of support, or be cleated or restrained at both ends to prevent them from sliding off the supports.

4. Solid sawn lumber, LVL (laminated veneer lumber) or fabricated scaffold planks and platforms (unless cleated or restrained) shall extend over their end supports not less than 6" (152.4 mm) nor more than 18" (457.2mm). This overhang should not be used as a work platform.





## Recommendations of use by the SAIA

### O. FOR "PUTLOGS" AND "TRUSSES" THE FOLLOWING ADDITIONAL GUIDELINES APPLY:

1. RIDING A ROLLING SCAFFOLD IS VERY HAZARDOUS. The Scaffold Industry Association does not recommend nor encourage this practice. However, if you chose to do so, be sure to follow all State, Federal or other governmental guidelines.
2. Casters with plain stems shall be attached to the panel or adjustment screw by pins or other suitable means.
3. No more than 12" (304.8mm) of the screw jack shall extend between the bottom of the adjusting nut and the top of the caster.
4. Wheels or casters shall be provided with a locking mechanism to prevent caster rotation and scaffold movement and to keep them locked.
5. Joints shall be restrained from separation.
6. Use horizontal diagonal bracing near the bottom and at 20" (6.1m) intervals measured from the rolling surface.
7. Do not use brackets or others platform extensions without compensating for the overturning effect.
8. The platform height of a Rolling Scaffold must not exceed 4 times the smallest dimension of the base (CAL/OSHA and some Government agencies require a stricter ratio of 3 to 1).
9. Cleat or secure all planks.
10. Secure or remove all materials and equipment from the platform before moving.
11. Do not attempt to move a Rolling Scaffold without sufficient help. Watch out for holes in the floor and ensure that overhead obstructions are prevented from tipping.



## Recommendations of use by the SAIA

### P. SAFE USE OF SCAFFOLD

1. Prior to use, inspect scaffold to ensure it has not been altered and is in safe working condition.
2. Erected scaffolds and platforms should be inspected continuously by those using them.
3. Exercise caution when entering or leaving a work platform.
4. Do not overload the scaffold. Follow manufacturer's safe working load recommendations.
5. Do not jump onto planks or platforms.
6. DO NOT USE ladders or makeshift devices to increase the working height of a scaffold.  
Do not plank guardrails to increase the height of a scaffold.
7. Climb in access areas only and use both hands.





# Code of good practice

## ROLLING TOWERS AND MOBILE SCAFFOLD: Inspection, Maintenance and Use Tip Sheet.

The most common type of rolling tower/mobile scaffold is simply a single bay supported scaffold tower with casters. Mobile scaffolds may be constructed using tube and coupler scaffold, fabricated frame scaffold or modular type scaffold. As with any supported scaffold, however, it can be configured in many different ways. This tip sheet highlights some of the key items to keep in mind when inspecting, erecting, maintaining, and using mobile scaffold.

### Definition of rolling tower/mobile scaffold:

A powered or unpowered portable, caster or wheel-mounted supported scaffold.

### WORKSITE INSPECTION

Users of rolling tower scaffold must walk around the area in which they will work to remove any materials that may be a hazard to workers as the scaffolds are introduced onto the site.

Particular care must be taken to note floor hazards such as construction debris, holes in the floor, etc. Debris should be removed. Holes should be repaired or workers must work in areas free of such hazards. Rolling tower scaffold must only be used on solid, flat floor surfaces (concrete, etc.).



# Code of good practice

## EQUIPMENT INSPECTION PRIOR TO USE

The user of rolling tower/mobile scaffold must thoroughly inspect the scaffold prior to use. All components must be complete, functioning properly and correctly assembled. Any incomplete part, missing part, or ill-fitting part should be replaced prior to use. Never use rolling tower scaffold without first completely inspecting the unit. Do not intermix components from different manufacturers.

- Wheels or casters shall be locked to prevent caster rotation and scaffold movement when the scaffold is in use.
- No more than 12" (304.8 mm) of the screw jack shall extend between the bottom of the adjusting nut and the top of the caster.
- Joints shall be restrained from separation.
- Do not use brackets or other platform extensions without compensating for the overturning effect.
- The top platform height as measured from the rolling surface of a rolling scaffold must not exceed four (4) times the smallest dimension of the base (Some government agencies require a stricter ratio of 3:1).
- Secure all platforms.
- The scaffold must be erected with cross, horizontal, or diagonal braces, or a combination of these to prevent racking and provide a rigid structure.
- The scaffold must be plumbed, leveled and squared with all brace connections securely fastened.
- The scaffold casters must have a positive wheel and swivel locks to prevent movement of the scaffold when it is in use.
- The manual force used to move the scaffold must be applied as close to the base as possible, but not more than 5' (1.5 m) above the supporting surface.
- Platforms shall not extend outward beyond the base supports of the scaffold unless the outrigger frames or equivalent devices are used to ensure stability.





# Code of good practice

- Platforms must be checked for loose or missing edge banding, holes or thin spots where plywood has been worn. Worn or damaged boards must be discarded and replaced. A platform exposed to excessive heat, as in the case of fire, should be immediately removed from service, destroyed and replaced. Do not use acids or other corrosive substances on platform boards.
- Pins, springs and nipples must be lubricated whenever equipment is returned from use. Do not hammer lock pins. If the lock sticks, clean it and then grease it lightly. Move the pin back and forth to free movement. If the problem persists, replace the lock.
- Casters with plain stems shall be attached to the frames or to adjustment screws by pins or other suitable means. Casters and wheel stems must be checked for worn or damaged wheels, and missing or damaged snap rings. Wheels should spin freely and bearing races should turn freely and smoothly.

Axles, bearing races and stems must be lubricated whenever returned from the jobsite. Damaged casters and wheel stems must be discarded.

- Trusses and guardrail sides must be checked to make sure all the locking pins are straight and the locks are working. Any bent parts should not be used. Pins, springs and nipples must be lubricated whenever returned from a job.
- End frame access ladders and guardrail end frames must be inspected for loose or missing caster bushings and stack pins. Any bent parts should not be used. Caster bushings and stack pins must be lubricated whenever returned from the jobsite. Damaged ladders and guardrails must be discarded.
- Do not mix manufacturer platforms, casters, trusses, end frame access ladders, or other components.



# Code of good practice

- Keep the platform free from tripping hazards.
- Do not overreach. Keep your body within the boundaries of the guardrail and the scaffold section.
- Do not allow loose objects and debris to accumulate on the platform.
- Do not stand on the guardrail or use any components of the guardrails to gain additional standing height.
- Do not jump onto planks or platforms.
- Do not use ladders, chairs, boxes or makeshift devices to increase the working height.
- Make sure the unit is free from paint, mud, grease or other slippery or hazardous materials.
- Never leave the scaffold unattended. If you do leave the scaffold unattended, re-inspect the scaffold prior to using the unit again.
- Do not overload.
- Exercise caution when entering or leaving a work platform.

Through the OSHA and Scaffold & Access Industry Association (SAIA) Alliance, SAIA developed this Tip Sheet for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. 2014.





Assembly Guide  
**Current legislation**

ANSI/ASSE A10.8-2001: Scaffolding Safety Requirements - American National Standard for Construction and Demolition Operations.

**Regulation 1926.451 Scaffolding**



WORK SITE ..... DATE .....

Scaffolding characteristics:				Next revision:	
Elements to be checked	SAFE Condition	UNSAFE Condition	NOT Applicable	Observations	Approved for use
General stability of the scaffolding					
Legs are leveled / Casters are locked					
Outriggers properly placed					
Proper access to the working area via the inside of the scaffolding. Model 400 Material: Compulsory use of inner ladders					
Diagonal braces on all levels (2 or 4 depending on SW or DW). Placed on the 2 <sup>nd</sup> and the 5 <sup>th</sup> rungs					
Appropriate horizontal braces on the base (2 in DW and 1 in SW) always placed on the vertical tubes (hooks facing out)					
Horizontal braces on the intermediate levels					
Complete platform on the working levels					
Platform pins are correctly set					
Interlock clips between modules correctly installed. "Thru clips" to move using a crane					
Platform trapdoors closed					
Perimeter guardrails on the working area (hooks facing out)					
Perimeter toe boards on the working area					
Clamps properly tightened					
Area signaled. Hazard of objects falling on unsuspecting people					
Existence of electrical lines nearby					
Scaffolding tied to a vertical parameter					
Comments .....	Inspector's Name and Signature				
.....					
.....					







**alufase**  
ALUMINUM SCAFFOLDING

### **HOUSTON**

6060 Brookglen Suite B  
Houston, TX 77017

Tel: +1 (713) 910 5600  
Fax: +1 (713) 910 5601

### **MIAMI**

2372 W 77th St. Hialeah,  
FL 33016, EE.UU.

Tel: +1 (786) 636 6980  
Fax: +1 (786) 558 7308

### **SPAIN**

Ctra. M-114, Km 1  
28864 Ajalvir-Madrid (Spain)

Tel: +34 91 884 4906  
Fax: +34 91 884 4892

USA - EUROPA - SUDAMÉRICA  
**[www.alufase.com](http://www.alufase.com)**