

# Manual

Facade scaffolding

Conform NEN-EN 1298 – IM – nl x en x de x fr







This manual is property of:

ASC Group Leerlooierstraat 32 4871 EN Etten-Leur The Netherlands



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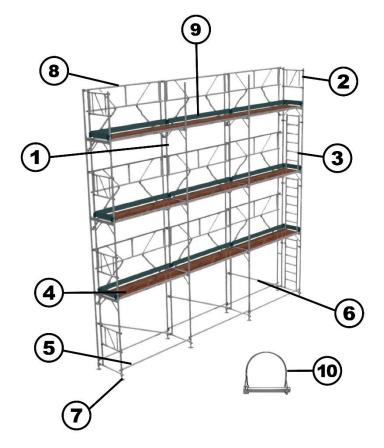
## 1 Overview

## 1.1 Application

A facade scaffold is intended for various work at height, where a solid, stable and safe work floor is required. The facade scaffold should not be used as a stair tower to provide access to other constructions. Nor is a facade scaffold suitable for use as a masonry scaffold. If in doubt, always consult your supplier or the manufacturer; the contact information can be found at the front of this brochure.

## 1.2 List of components

- 1. Facade frame walkthrough frame
- 2. Facade end railing
- 3. Facade ladder for base
- 4. Facade ladder frame
- 5. Facade base walkthrough frame
- 6. Platform
- 7. Horizontal brace
- 8. Diagonal brace
- 9. Spindle feet
- 10. AGS guardrail
- 11. Toeboard set
- 12. Anchor steel
- 13. Lockingclips



ASC facade scaffolding must be assembled by at least two people.



## 2 Assembly and use

### 2.5 Positioning

#### 2.5.0. Surface

Always position the tower on a stable and horizontal surface. Make sure that the tower cannot sink into the ground. In addition, the general slope of the surface may not exceed 8 degrees. Always place the facade scaffold on height-adjustable steel spindles with a maximum load capacity of 500 kg.

#### 2.5.1. Obstacles

Position the tower in such a way that no danger can arise for the climber when stepping down. Pay attention to obstacles on the ground and/or obstacles that require the climber to make extra effort to reach the top platform.

#### 2.5.2. Maximum height

This depends on the placement and type of scaffolding (see Table 1).

#### 2.5.3. Weather conditions

Consult the weather forecast to determine safety in various weather conditions. Consider the following factors and use common sense.

#### Windforce

At wind force 6 or higher a facade scaffold may not be used. Any materials such as canvas or foil must also be removed.

Type scaffolding	Inside	Outside	Secured
	(no wind)	(with wind)	
Facade Scaffolding	8,2 m*	8,2* m	16,2 m
Facade scaffolding with	Not Permitted	Not Permitted	16,2 m
roof, canvas or foil			

Table 1. Max. Height

## Precipitation

Remove snow and ice from the scaffolding before starting work. If necessary, sprinkle sand on the work floor to prevent slippage.

#### Cold

Avoid using the scaffold temperatures below freezing..

### 2.6 Personal Protective Equipment

- Always wear work gloves, safety shoes and safety helmet.
- When working at height, use a life-line.





<sup>\*</sup> This is the maximum platform height; it applies only to facade scaffolding with stabilizers. The outer uprights must always be secured. The inner uprights may be secured alternately.



## 2.7 Assembly

Aluminum facade scaffolding may only be assembled by professionals. According to regulations, every builder must therefore be in possession of a valid certificate.

Check all components (use the list of components) that are required for assembly, are present and undamaged. Damaged components should not be used.

For inspection of damage: see Section 3.

No tools are required when assembling a facade scaffold. Use a drill and wrenches for tall towers that are secured to the wall. For facade scaffolding from five meters it may be useful to use a rope (with or without attachment), to hoist the parts. Façade scaffolding is not designed to be lifted or hung as a whole.

## 2.8 Assembly Instructions

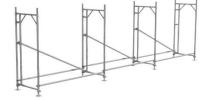
Always place a platform on each floor and between two standing frames.



1. Insert the spindle feet into the frames.

Preferably, the outer frames have a ladder frame.

- 2. Place two horizontal braces on the uprights, against the bottom rung.
- 3. Place a diagonal brace on the bottom rung and the appropriate ridge. All diagonal braces are in the same direction per gallery.



- 4. Then place a 3th horizontal brace between the appropriate rings on the uprights. (Not shown in pictures)
- 5. Level the entire scaffold.



- 6. Place the next frames on top of the first frames and secure them with the locking clips.
- 7. Place the AGS guardrail on the appropriate rungs in the narrow sections of the frames.
- 8. Place the platforms between the vertical frames on the lower rung of the upper frame. The platforms at walkthroughs are designed with a trapdoor. Place it in such a way that the trapdoor can be operated when climbing. The hatch is thus on the climbable side.
- 9. If the platform is not higher than 6.2 meters, place the stabilizers now and make sure they are firmly on the ground. To prevent slipping, always place a stabilizer link under a rung. (*No picture*)







Make sure the stabilizers for the middle frames are perpendicular to the scaffold; on the outer frames they should be at a 45-degree angle.

#### If an AGS guardrail has been placed skip steps 10 and 11

- 10. Place two horizontal braces per section between the rings, as hip- and knee braces.
- 11. Place the diagonal brace. Note that the diagonal braces of this gallery run opposite to the gallery below.

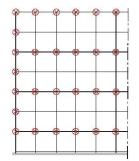
If the facade scaffolding is more than 15 centimeters from the wall, place handrails on both sides.



- 12. Repeat steps 7 and 8 until two galleries are built. Now anchor the scaffolding to the wall: secure the lower gallery just below the lowest platform. If no AGS are used, repeat steps 8, 10 and 11.
- 13. Repeat steps 4 through 6 until the requested height is reached. Anchor every second gallery to the wall and secure the outer sections on each gallery. Preferably secure the top gallery as well.

#### The picture gives an idea of the pattern-

14. Place a handrail frame on the top gallery, at the ends, and secure this frame with a locking clip. Then repeat step 8.



- 15. Place the walkthrough frames in between on the uprights. Brace these as in steps 10 and 11.
- 16. Finally, place the toe boards on all the outside edges.





#### 2.9 Use

Before use, please check that:

- All parts are still present
- All the parts are still properly attached
- The tower is still perpendicular
- The scaffold is clean
- There are any changes in the surroundings which may affect safe use
- The brakes are working on the wheel
- The stabilizers are touching the ground
- All locking clips are correctly in place

Never use a facade scaffold tower near non-insulated, electrical installations or machinery.

### 2.9.1. Extension/increase

Never elevate the scaffolding with a tool. Therefore, do not use stairs, ladders, crates or steps on the scaffolding unless the stairs or ladder are intended to be part of the scaffolding.

#### 2.9.2. Maximum permissible weight

Please read on the sticker on the platform what the maximum load is. Each ASC Group scaffold may be loaded to a maximum of 200 kg/m2 and never more than 375 kg in total. This means on average: two people with (hand) tools. The maximum horizontal load is 30 kg.

#### 2.9.3. Further loads weights

When working on a scaffold, force is applied to the scaffold. Consider the push-off against the building when drilling into a wall or the wind tunnel effect (additional wind load) between or in front of large buildings. Such external loads must always be taken into consideration.

Do not attach a winch or hoist to the scaffold, but use a rope to lift parts, materials and tools (possibly in a bucket)

#### 2.9.4. Stabilization

A facade scaffold shall be provided with stabilizers in accordance with Table 2. The height is measured from the top of the highest platform to the ground.

Type scaffolding	Up to 6,2 m	From 6,2 m
Maximum 15cm from	On each standing frame a stabilizer	Starting at 2 m:
the wall	that extends at least 2.5 m	every 4 m horizontal fixation
Freestanding	On each standing frame two stabilizers	Not permitted
	extending at least 2.5 m	

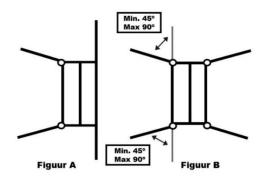
Table 2. Stabilization



#### 2.9.5. Stabilization

Stabilizers must always be installed for a scaffolding structure from a floor height of 4.20m. Stabilizers are supplied in an adjustable version.

They are placed on a scaffolding which is placed against a building as shown in figure A (max. 15cm from the wall) and a freestanding scaffold as shown in figure B.



#### 2.9.6. Sideboard set

Sideboards are always required on the platform being worked on.

#### 2.9.7. **Security**

Do not leave a mobile scaffolding unattended in a public place for an extended period. If this is nevertheless necessary, the scaffolding can be secured to a fixed object with a ring lock. To do this, put the ring lock through one of the frame's compartments and attach an anti-climb device.

#### 2.9.8. Relocation

A mobile scaffolding can be moved by dismantling and rebuilding it. After moving the scaffolding, it must be put back into plumb; therefore, go through the checklist again from Section 2.9.

## 2.10 Chemical products

Avoid contact with acids and chemical products. These can cause corrosion to the aluminium, which can affect the strength of the aluminium.



## 3 Inspection, care and maintenance

According to the regulations one must work safely at heights. On an ASC Mobile Tower, it is not obligatory to wear extra fall protection (provided that the recommendations in this manual have been followed).

#### 3.1 The Health and Safety Law

The Working Conditions Decree is a concrete elaboration of the Safe Working at Height Act. It states that everything above 2.50 meters is 'working at height' and is therefore a situation with increased risk of injury. This also means that all materials must be properly manufactured and checked in a quality cycle. ASC tests all materials and performs strength calculations. The user must also have the material inspected annually for defects.

#### 3.1.0. Annual control

Your Facade scaffolding must be inspected for any defects annually by an expert. The ASC Group can perform this control for you.

### 3.1.1. Self-inspection

The Facade scaffolding can be inspected by yourself. Before each use, always check the components for any damage. We certainly recommend larger companies to do a monthly inspection of all components of the Facade scaffolding and to record this inspection. If you are in doubt about damage, consult an accredited inspector.

#### 3.1.2. Damages

Examples of the most common damages on aluminium scaffolding;

- Components: if a claw or a sport is loose, the scaffolding must be rejected.
- Dents and or holes: if there is a big dent in the aluminium or even a crack or hole, the scaffolding must be rejected.
- Contamination: if there is too much concrete, paint or other non-removable contamination on the components, the scaffolding must be rejected; after all, you can no longer judge whether the components are still intact.

## 3.1.3. What to do in the event of damage

If there is any damage, which cannot be repaired, the component must be taken out and replaced. If repairing is possible, please contact ASC Group for further information.

#### 3.1.4. **Repair**

Repairing a component must be carried out by a certified body or person.



## 3.2 Transport

- Always transport the components in accordance with the locally applicable legislation.
- Stack the components correctly for transport; never place the heavy components on top.
- Transport the components of a scaffolding, preferably standing, f.e in a carrier.
- Handle the material with care. Do not drop components onto a hard surface; this can reduce the quality of the material.

## 3.3 Maintenance

- Make sure the scaffolding material is clean, especially the connecting pins. The frames should go in and out easily.
- Make sure the pawl of the hook of the diagonal and horizontal braces is clean. If necessary, lubricate it with a little oil. The same applies to the wheel spindle.
- Replace missing and broken parts in time.

### 3.4 Storage

Store components of the scaffolding preferably in a dry, clean, dark and frost-free place.