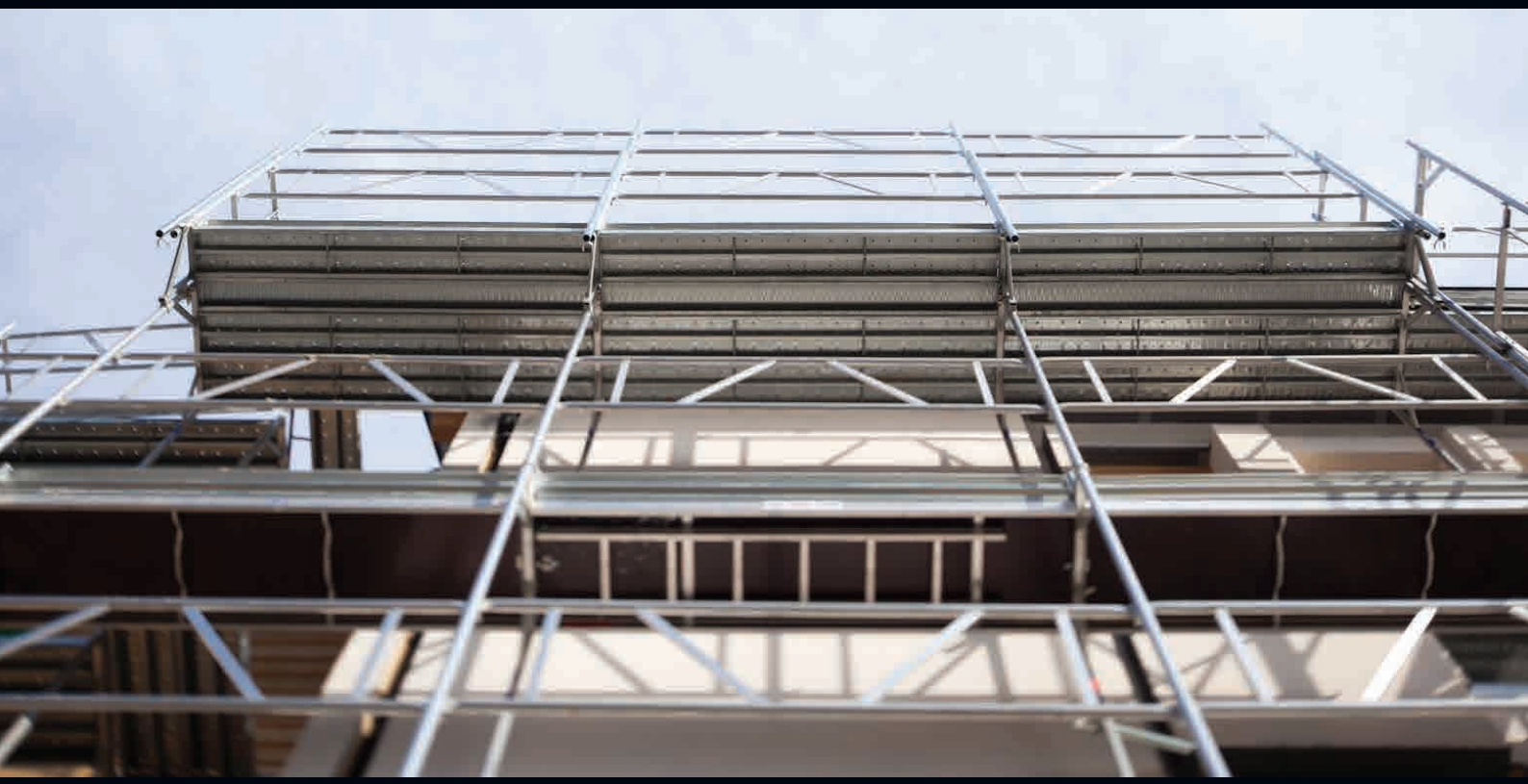
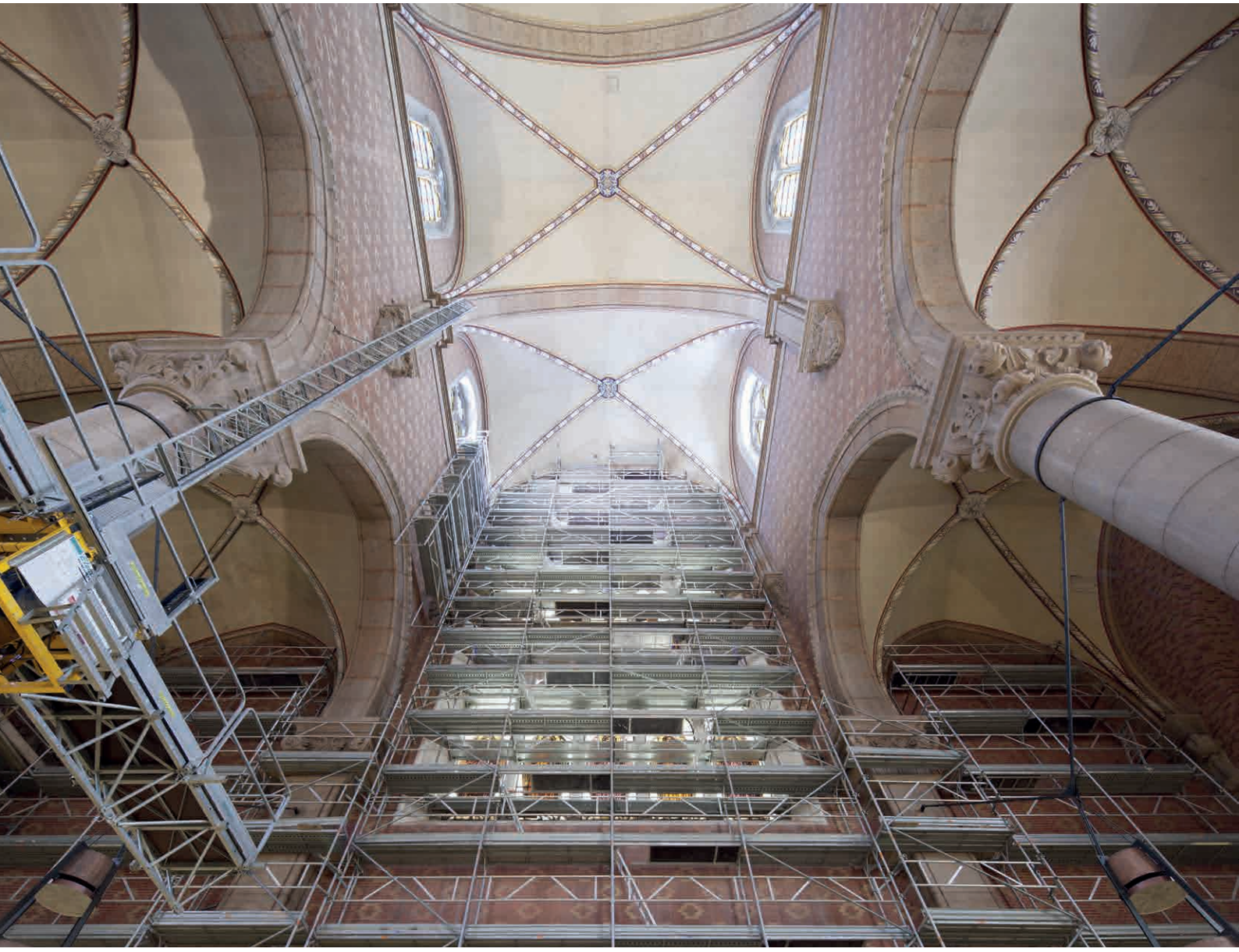
60+ SINCE 1961

ENGLISH



ALUMINIUM SCAFFOLDINGS P.L.A.

PILOSIO
SCAFFOLDING & FORMWORKS



ALUMINIUM SCAFFOLDING FOR MAINTENANCE AND RESTORATION

The P.L.A. aluminium frame scaffolding is the most appropriate and specific system for short-term operations such as those involving maintenance, painting and restoration, both for interior and exterior use. Unlike medium-long term construction sites, these tasks are usually short term and, therefore, the assembly and disassembly operations of scaffolding must be quick, simple and safe not to affect the overall timing of the operation.

The use of the aluminium as main material allows to create elements which do not require surface treatments for protection against atmospheric agents and do not require periodic maintenance.
The reduced weight of components makes them easy to be manually handled improving the assembly and dismantling operations. The use of the aluminium equipment is perfectly suitable to minimize the weight of the provisional structure in special situations such as the restoration of historic buildings with wooden slabs or buildings with antique marble floors and, in general, in every situation that require low pressure on the floors.

The aluminium finishing, aesthetically pleasing, can be easily suited for prestigious places such as churches and historic buildings, as well as in contexts open to the public with works in progress.

Finally, we cannot underestimate the possibility of using small capacity trucks to transport the scaffolding on construction sites and on historic centers.

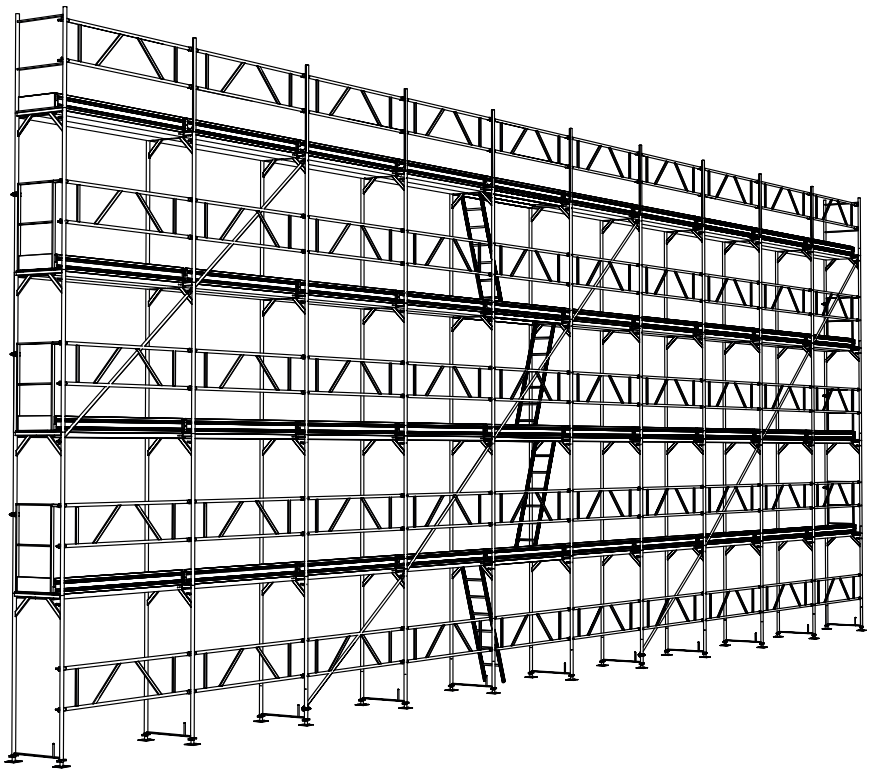
With the use of some additional accessories, it is possible to convert the **P.L.A**. façade scaffold in a certified mobile "tower" on wheels, for quicker or special operations.

P.L.A. MODEL
With **double-braced aluminium guardrail:** it is a structural element that acts as a stabilizer and facilitates the proper leveling of the scaffold, allows very quick operations of assembly and dismantling, has 4 quick coupling points, a reduced weight and a number of anchoring points.

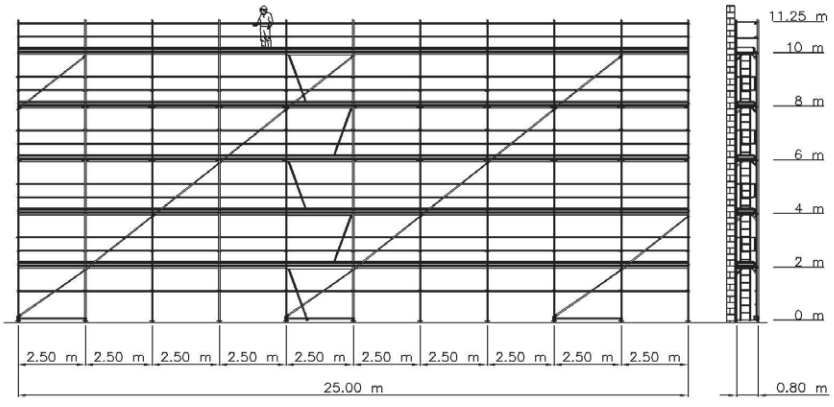
ALU SIMPEL MODEL
It uses the same components of the **P.L.A**. model except for the guardrail: in the **ALU SIMPEL** model it consists of two horizontal ledgers. At any moment the ledgers can be replaced by double-braced guardrail.

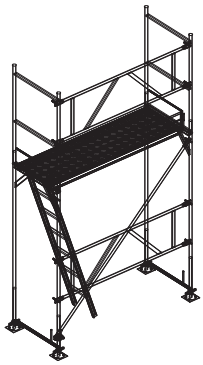
P.L.A. and **ALU SIMPEL** scaffolding are marketed under the brand **LAMA.**

ALUMINIUM DOUBLE BRACED GUARDRAIL (PLA - MODEL)



GALVANIZED STEEL DOUBLE LEDGER GUARDRAIL (ALU SIMPEL - MODEL)





MODULARITY

VERSATILITY

HIGH PRODUCTIVITY

SPECIAL ACCESSORIES

P.L.A.

STRENGTHS

- lightness, withthe same performances of steel scaffolding for maintenance
- very easy to handle
- high-speed in assembly and dismantling operations
- simple and intuitive preparation
- double-braced guardrail with 4 coupling points which ensure great stability to scaffolding and quick assembly
- platforms with handles for functional assembling
- transportation by using small capacity trucks
- low weight that allows you to fasten it on any structure and to use it also on low load capacity floors
- system made of few modular elements
- with its components and adding few accessories you can also construct mobile towers on wheels
- anchoring points every 20 m^2.

FEATURES

- high-performance structural aluminium alloy
- ø48.3 mm tubes for the uprights of the frames
- scaffolding frame with pin connections
- decks made of plywood and aluminium, aluminium or galvanized steel
- double braced structural guardrail in aluminium (**PLA** model)
- guardrail composed of two ledgers in galvanized steel (**ALU SIMPEL** model)
- bay length: 200 cm or 250 cm
- load capacity 150 kg/m^2

WEIGHT

for **P.L.A.** aluminium scaffolding 2.50 m bay length:
- frame 8.5 kg
- double braced guardrail 6 kg
- aluminium platform 10 kg
- toe-boards 6 kg

USING OF A TEMPORARY GUARDRAIL FOR THE SAFE ASSEMBLY AND DISMANTLING OF SCAFFOLDING WITHOUT SAFETY BELT.

Using a temporary guardrail allows you to temporarily place the guard of any platform directly from the lower floor. This allows the operator, once he has climbed on the higher platform, to complete safely the assembly of the bays with the double braced guardrail and toe-boards. Repeating the aforesaid operation you can complete the assembly of the whole scaffolding.

This device is in aluminium; it weighs only 13 kg and can be disassembled into two parts to allow an easy transportation. You can also apply the toe-boards.

The use of personal protection equipment, (restraint line, safety belt, retractable winder, etc.) that limit the assembly and dismantling operations, is not required if the temporary guardrail is assembled.

P.L.A. scaffolding is suitable for walls 20 meters high. By using the double-braced guardrail, the scaffolding is also suitable to create bays of reduced length without necessarily increasing the number of façade diagonals.

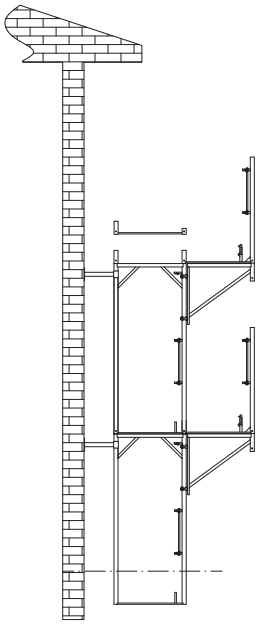
On the façades of historic buildings, with engaged columns and moldings and other various objects, it is particularly convenient to use the **P.L.A.** aluminium scaffolding set with interior and exterior brackets.

P.L.A. scaffolding with stop piers allows access to the interior of a building. Depending on the needs the lattice girder can be positioned at any height, thanks to versatility of the fastening through joints embedded in the beam.

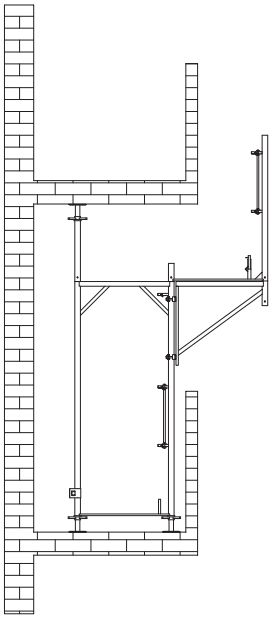
Maintenance of a bell tower of considerable height (about 22 m). The side facing the roof of the apse is cantilevered and completely hanged and bound to the wall through reinforced brackets, plate anchors and tie-rods to prevent the structure from laying on the roof.

Using the same components of the **P.L.A.** scaffold it is possible to create structures of various sizes and shapes which can be moved on wheels in any direction. These structures can be used both for operations on façades and for interior operations on vaults and domes. The movement can be manual or supported.

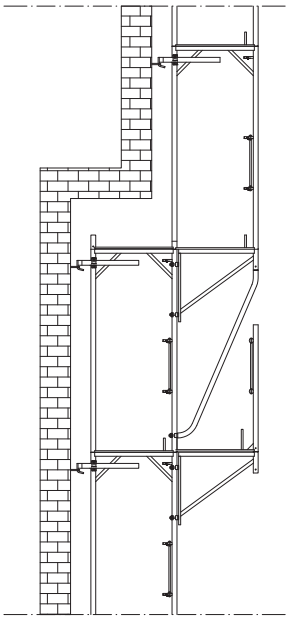
It is possible to set up the **P.L.A.** scaffolding also on prefabricated structures with a circular plan by subdividing the structure in sections to better define the curved wall and limit the number of diagonals.



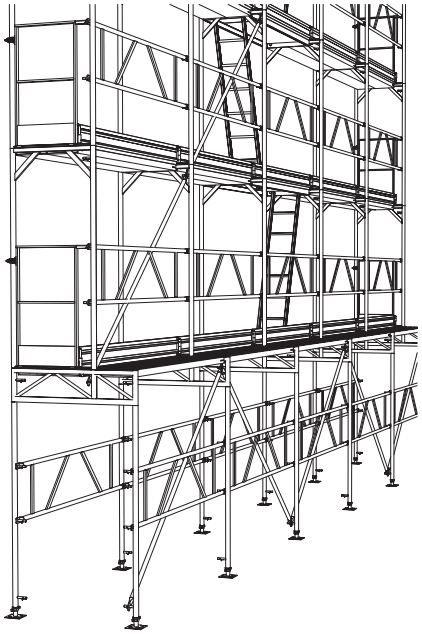
Use of the bracket for intervention on the roof.



Solution for intervention on the outside balcony by using the bracket 80.



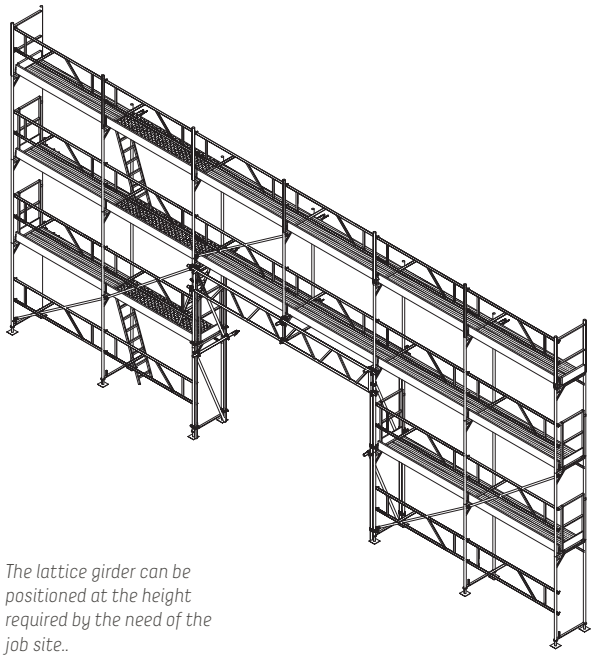
Example of a continuation of the cantilevered scaffold with the use of brackets 80 cm and 80x200 cm struts for the brackets in galvanized steel.



Construction of a pedestrian walkway for the entire length of the scaffolding through the use of special frames in galvanized steel for pedestrian underpass.

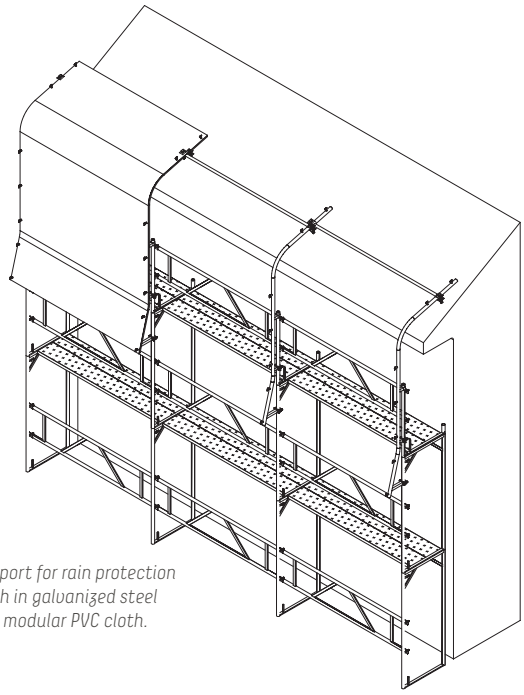
In addition to the access deck, it is possible to use the stairways which allows easier access to the floors.

CARRIAGE ENTRANCE OR PEDESTRIAN CROSSINGS



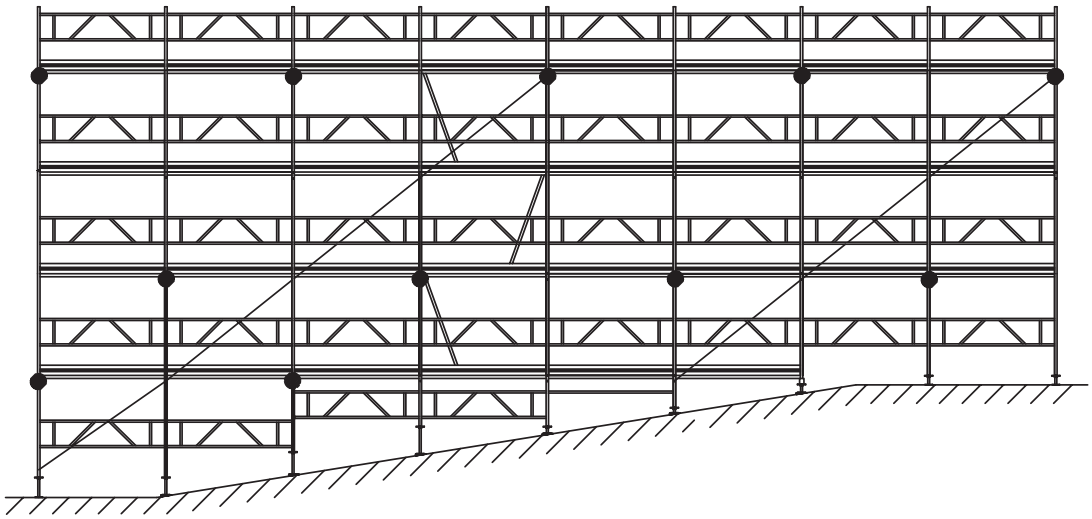
The lattice girder can be positioned at the height required by the need of the job site..

RAIN PROTECTION FOR SCAFFOLDING AND MOBILE TOWERS



Support for rain protection cloth in galvanized steel and modular PVC cloth.

CONSTRUCTION ON AN INCLINED PLANE



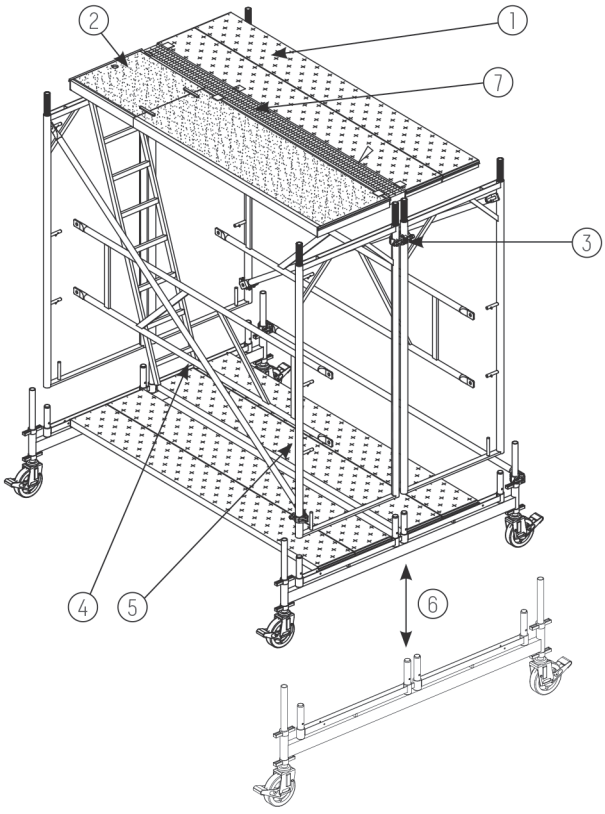
Example of scaffolding with a sloped mounting surface. Various types of accessories such as adjustable base jacks and frames of different heights have been used to compensate the slope.

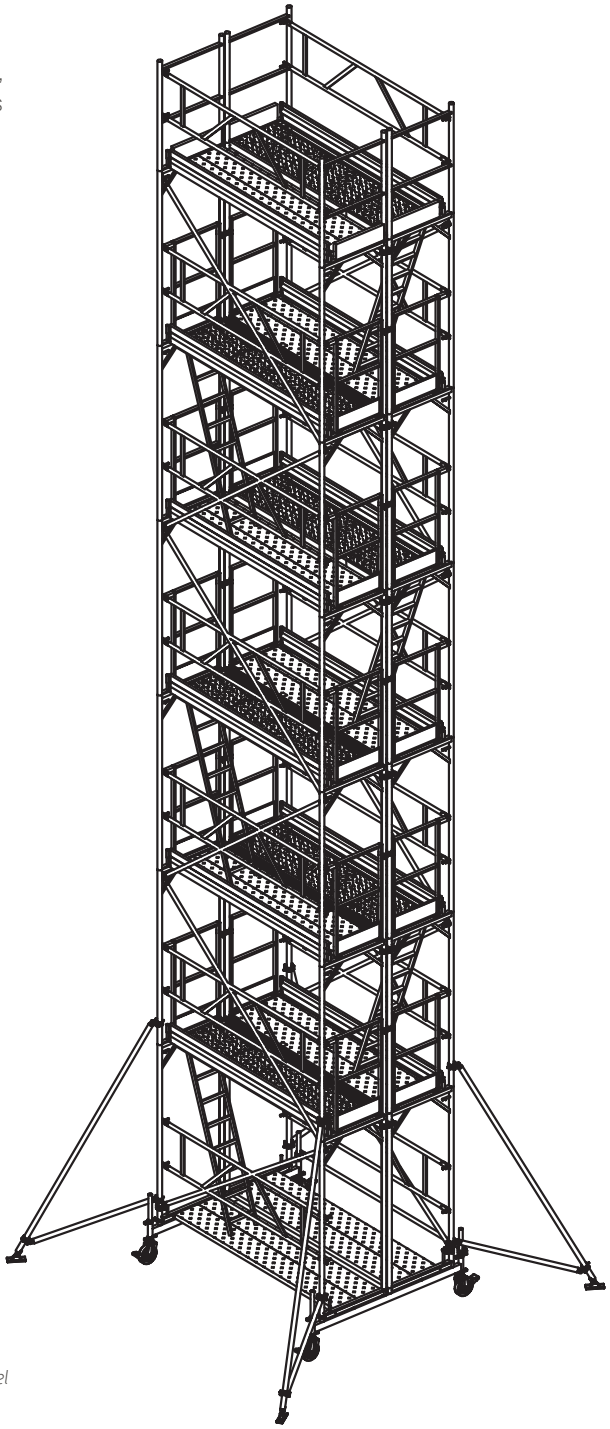
P.L.A. MOBILE TOWERS ON WHEELS

Using the same components of the fixed scaffolding and a limited number of accessories, it is possible to build mobile towers on wheels for various needs and for considerable heights, according to EN 1004 standard.

Base 2.50x1.70 m. The height of the tower varies from 3.60 m to 13.60 m, with a maximum work height from 4.40 m to 14.40 m. The weight varies from 298 kg to 1115 kg

MOBILE TOWER ON WHEELS WITH P.L.A. COMPONENTS

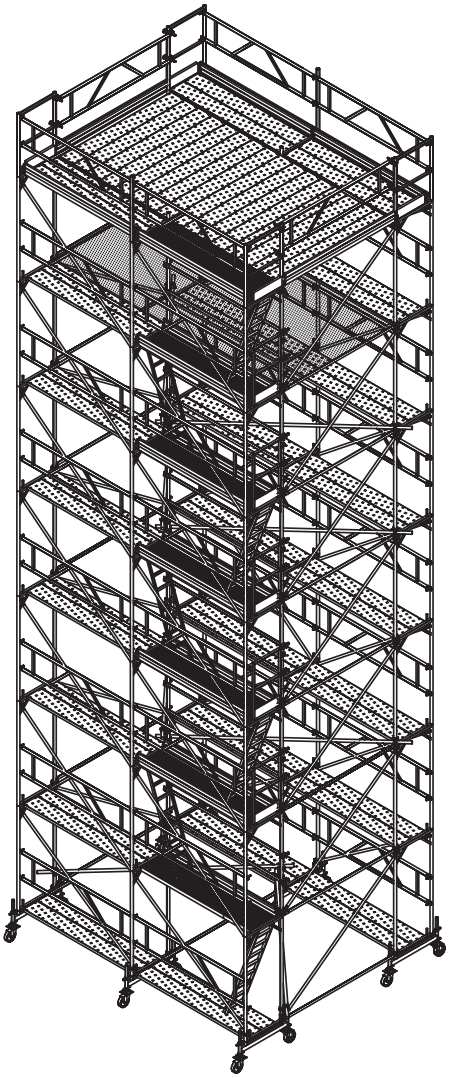


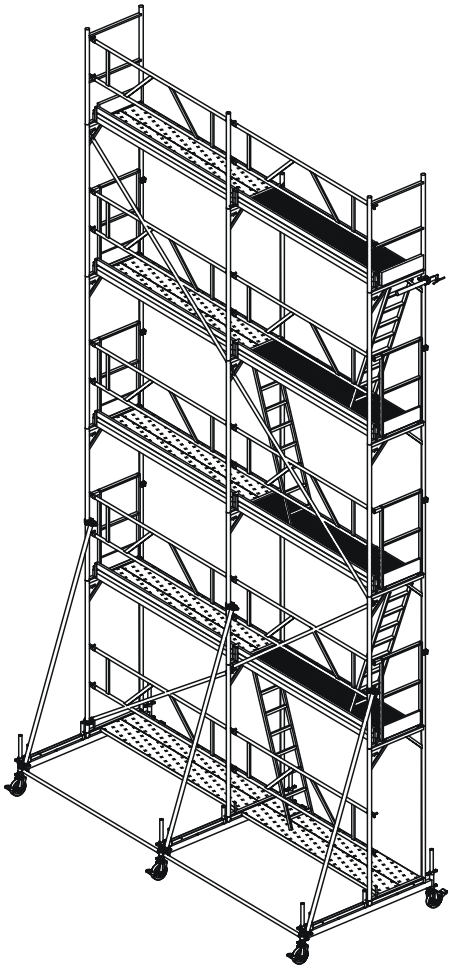


Base components for P.L.A. mobile tower on wheels.
1 250x31 cm platform in aluminium, galvanized steel (bay length 250 cm)
2 250x66 cm access deck in aluminium or plywood/aluminium
3 swivel coupler ø 48 mm in galvanized steel
4 250x50 cm double braced guardrail in aluminium
5 80x200 cm frame in aluminium
6 base for 2 frames with 2 adjustable wheels, load capacity 500 kg in galvanized steel
7 250 cm platform for tower in galvanized steel
8 250 cm additional guardrail in galvanized steel

SPECIAL MOBILE TOWERS ON WHEELS WITH P.L.A. ELEMENTS

P.L.A. Mobile Tower large area for restoration work on the ceilings and vaulted ceilings. The top can be reached by access stairs at each level. The internal span opening was replaced by safety nets. The scaffolding tower consists of two side by side units, connected with brace frames and diagonals, mounted on bases with wheels for traveling. The large work surface on the top allows more teams to work simultaneously.
Size in plan: 5,00x4,10 m
Maximum Height: 21,60 m.





Mobile tower unit with wall anchor for maintenance of the façade.
Size in plan:
length 5,00 m
width 1,70 m
maximum height 9,60 m