MOSTOSTAL
SCAFFOLDING
FORMWORK

ALTRAD

PRODUCT CATALOGUE

STRENGTH. MODERNITY. STABILITY.

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Safety Certificate
Modular Scaffold


CERTYFIKAT BEZPIECZEŃSTWA
NR B/006/21

Safety Certificate
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CERTYFIKAT BEZPIECZEŃSTWA
NR B/02/003/19

Safety Certificate
Frame Scaffold


CERTYFIKAT BEZPIECZEŃSTWA
NR B/007/21

Safety Certificate
Mobile Scaffold


CERTYFIKAT BEZPIECZEŃSTWA
NR B/02/005/19

Welding Certificate
Aluminium


Welding Certificate
DVS ZERT-EN1090-3-SZ-2014.0004.004

Welding Certificate
Steel


Welding Certificate
DVS ZERT-EN1090-2-SZ-2014.0101.004

Certyfikate
ISO 9001 : 2000


CERTYFIKAT

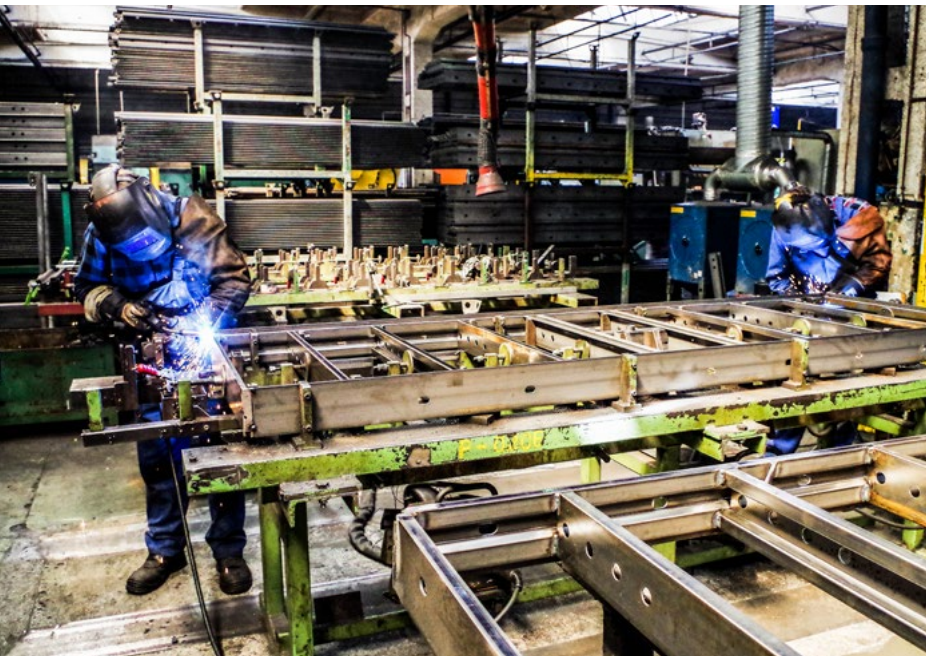
CHARACTERISTICS

ALTRAD-MOSTOSTAL has a long history in the scaffold and formwork industry. We have been present on the Polish market since 1996 where initially we operated as Baumann-Mostostal. We are among the top Polish and European manufacturers, developing our potential constantly within the global Altrad Group.

Our company uses modern technical equipment, highly automated manufacturing processes and, most importantly, is well organized and serves its customers efficiently. The manufacturing process at ALTRAD-MOSTOSTAL is very detailed so that the final products meet the customer needs, are functional and provide user safety. Our scaffolds and formworks are of top quality and have been tested in the most extreme conditions with the complex construction projects.

The company is professional due to engaging the qualified engineers and technical and sales personnel. The entire manufacturing and order completion process – design, manufacturing, sales and transport, is supervised by 305 persons who work at the company headquarters in Siedlce as well as in the field.

Choose ALTRAD-MOSTOSTAL to get the reliable products made of the best materials and your orders will be completed completely and professionally.



STONEMILES

1996 **Baumann-Mostostal** starts its business, frame scaffold manufacturing

1997 started **Rotax Modular scaffold** production

1998 started **mobile scaffold** production

1999 expanded offer with **ceiling formworks**

2000 started **MIDI BOX wall formwork** production

2001 expanded the range of formwork manufactured with **MIDI BOX PLUS**, started **collaboration with Altrad**

2002 **ALTRAD France** took over Baumann GmbH and acquired **48% of shares** in **Baumann-Mostostal**

2005 introduced a new product – **ALUstrop**, Altrad France purchases 52% of shares from Polimex-Mostostal

2006 changed current **name and logo** of Baumann-Mostostal Sp. z o.o. to **Altrad-Mostostal sp. z o.o.**

2016 expanded offer with: **ALUrotax scaffolds** and **ALUsky roofs**

2017 introduced a new global **ALTRAD logo**

ALTRAD

ALTRAD GROUP **HISTORY**

Altrad Group dates back to 1985. At that time, Mohed Altrad started to build the group which currently is a powerful European and global undertaking with an annual turnover of nearly EUR 3.3 bn.
Currently, the group includes more than 1,700 companies. The products offered in more than 100 countries are the strength of ALTRAD. The company employs about 39,000 employees.

Main business areas of the Group are as follows:

- **manufacturing**
- **sales**
- **rental**
- **logistics**

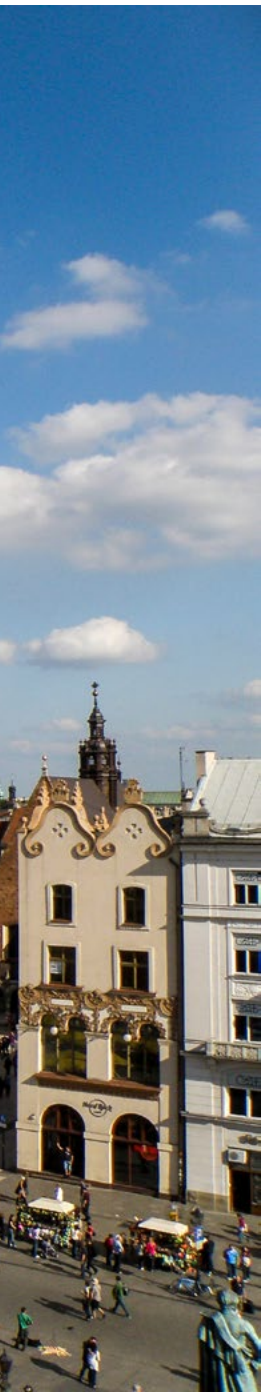
Our offer includes: scaffolds, formworks, supports, concrete mixers, barrows, products for local governments, wide range of construction equipment, i.e. mixers, compactors, concrete mixers etc.

FRAME SCAFFOLDS

Frame scaffolds installed at **Sukiennice in Cracow**

ALTRAD-MOSTOSTAL manufactures steel and aluminium frame Mostostal Plus scaffolds. The system consists of basic components such as: frames, rails, braces, platforms, toe boards and jacks.

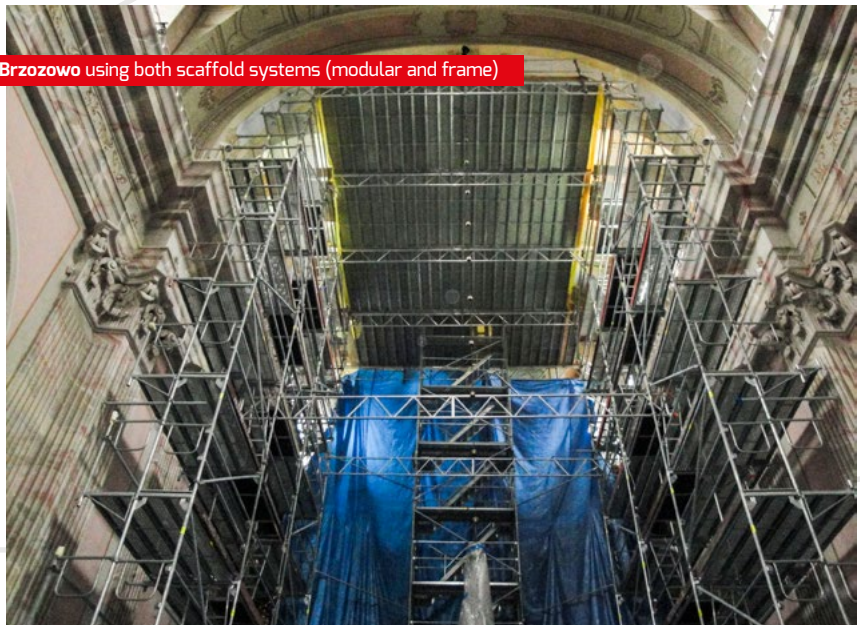
The distance between the individual scaffold levels is determined by the frames which are 2,00 m high and 0,73 m or 1,09 m wide. The system working bay platform lengths are: 0,73 m, 1,09 m, 1,57 m, 2,07 m, 2,57 m and 3,07 m.



Wawel Tower - Cracow

Frame Scaffolds | **AGH University of Science And Technology in Cracow**

Renovation inside Church in Brzozowo using both scaffold systems (modular and frame)



Gdańsk Airport

The scaffold load-bearing capacity depends on its width and length of platforms used to install the specified assembly and may range from 2 up to 6 kN/m2 (loading classes as per PN-EN 12811-1:2004).
The scaffold load-bearing capacity is connected with the frames, platforms and jacks.
The system horizontal and vertical braces ensure the structure is rigid.
The safety components include: rails, double rails, front rails and toe boards.
The scaffold may be expanded while meeting the safety principles using these components and other components available in the system.

Frame Scaffold | **"Business Garden" Office Park in Warsaw**

Frame Scaffolds are used for:

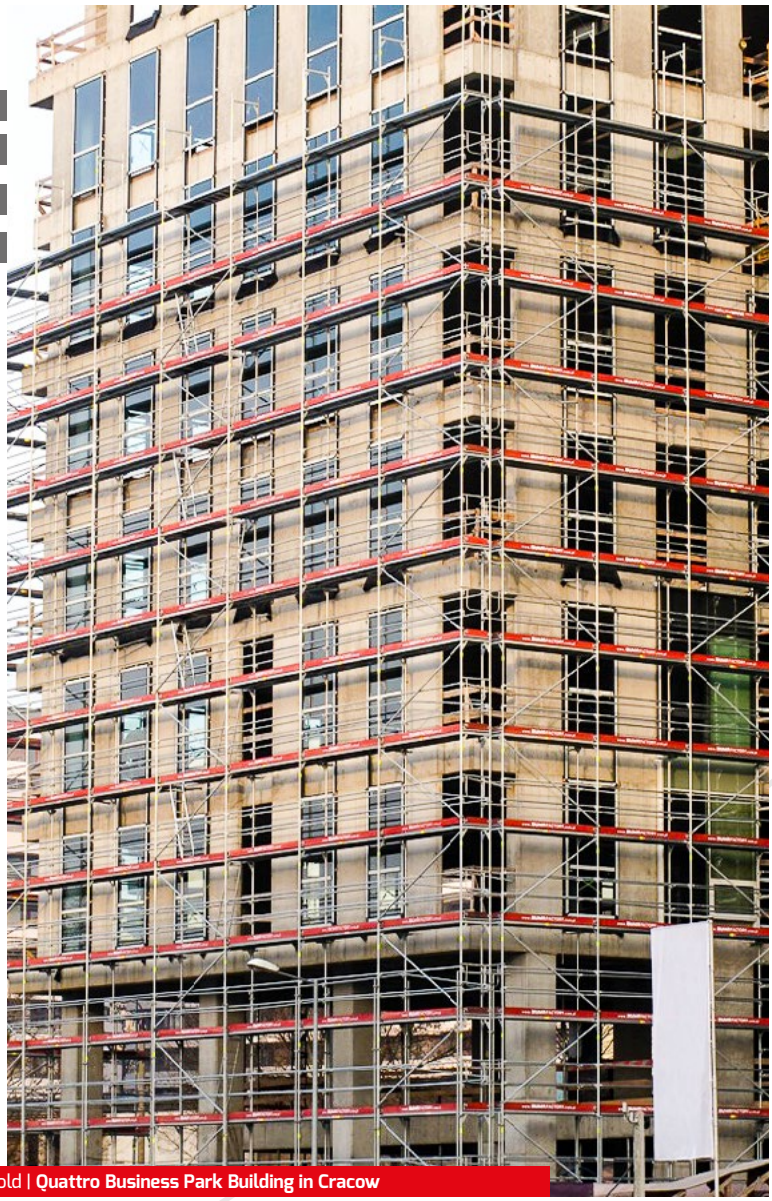
- plastering
- painting
- installing thermal insulation
- laying bricks

Additional applications:

- **scenes,**
- **ceiling platforms,**
- **supporting or load-bearing structures** for ads, tv camera stations and stands.

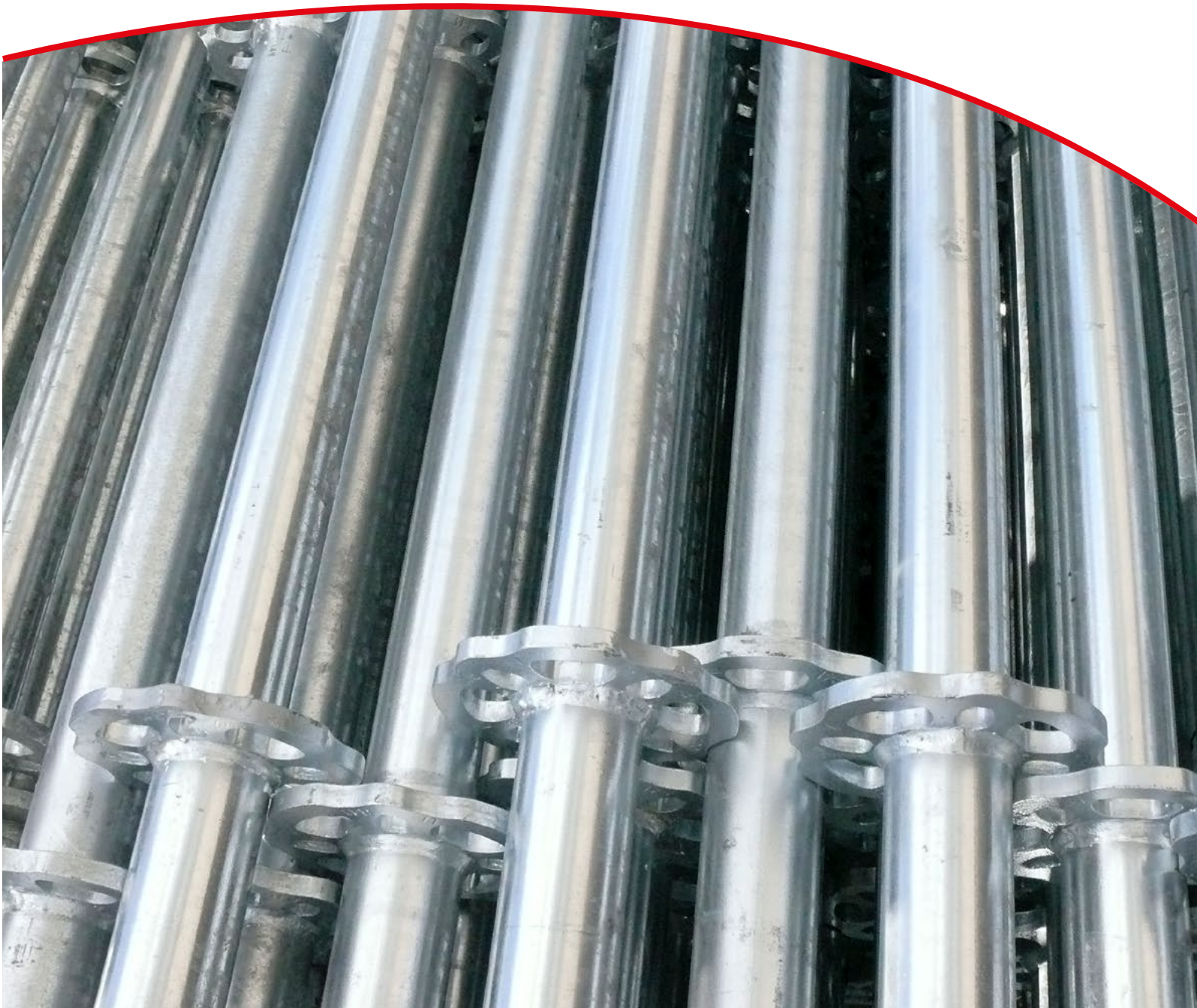
Safety Certificate
Frame Scaffold


CERTYFIKAT BEZPIECZEŃSTWA
NR B/007/21


Frame Scaffold | **Quattro Business Park Building in Cracow**


Frame Scaffolds | **Warsaw Old Town**

MODULAR SCAFFOLDS

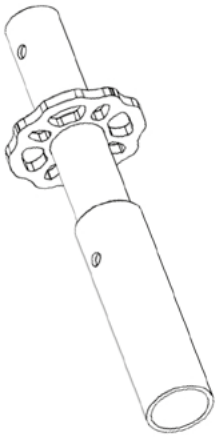


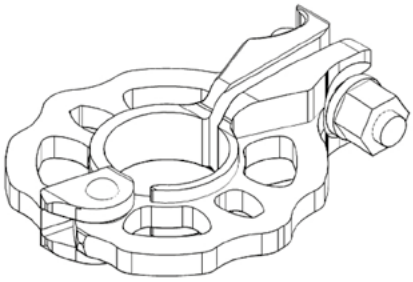
ROTAX Plus

ROTAX Plus modular scaffolds are used during works at: industrial buildings with many systems or pipelines (refineries, shipyards etc.); monuments of irregular shapes; communication infrastructure facilities; by the power, shipyard industry etc. They are also used inside the buildings as ceiling platforms to perform renovation works as well as to install scenes and stands at the cultural and entertainment event sites etc.

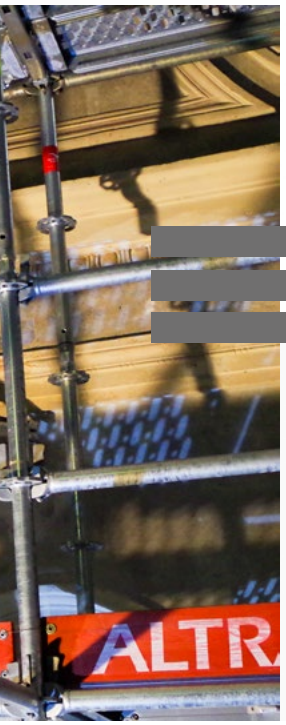
Compared to the frame scaffolds, the modular systems feature a better adaptability to building shapes, both outside and inside.

ROTAX Plus Modular Scaffolds | **Castle Chapel – Pieskowa Skała**





The specific Rotax node properties and the wide component (mainly stands and transoms) bay length range ensure the modular scaffolds are a universal solution.
The stands have various dimensions (from 0.5 up to 4 m). Hole disks are welded to them every 0.5 m to install the Rotax fastening node used to install the girders, decks, transoms etc. Using the disk joint or the adjustable hole disk you can create an additional node at any stand height.
The nodes feature a high material and structural strength thus you can fasten up to 8 components such as transoms and vertical braces to expand the system in various directions and planes. Standard stands are fitted with the so-called pilot joints which serve as a base to install next components thus allowing you to expand the whole module. The stands with screwed-on pilot joints are in turn used to install the so-called suspended scaffolds.



The possibility to erect additional platforms using the grate girders or typical transoms also impacts the modular system multifunctionality.

A universal modular scaffold system is comprised of many various atypical components which are also an important factor that allows you to:

reduce the scaffold bay size

widen or narrow the platforms

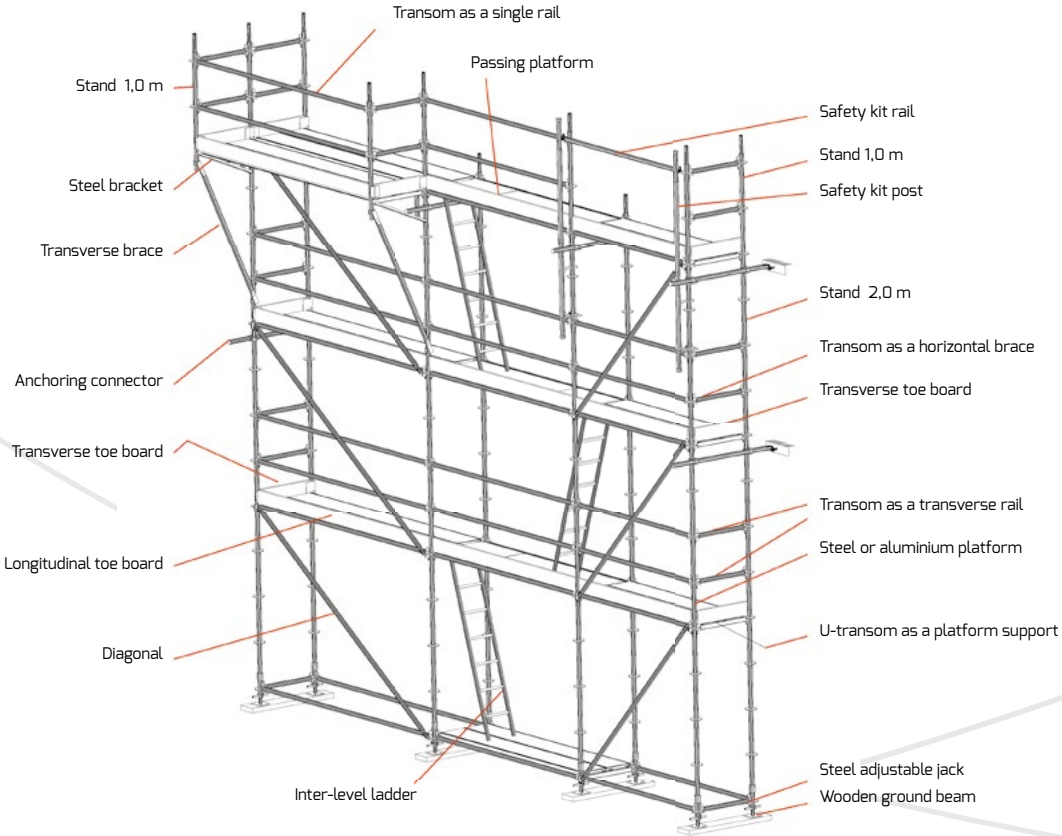
install the protection components using small connectors

Because the individual ROTAX Plus system components can be installed in any manner to erect atypical structures it is necessary to perform individual structural analyses. Due to an unlimited modular scaffold setup configurations each solution must be considered separately.
Please also remember to check each structure for safety of its users.

ROTAX Plus Modular Scaffolds | **Bridge near Ostróda at S7 Route**

Exhaust Duct Installation – Rybnik

Example of a
ROTAX Plus Set



ROTAX Plus is a modern, innovative and economical solution.

ROTAX Plus is a quick and logic scaffold installation system.

ROTAX Plus guarantees construction safety.

ROTAX Plus system scaffolds are used as:

- spatial structures;
- irregular shape scaffolds;
- platforms for working at heights;
- supporting (load-bearing structures) – supporting towers;
- mobile scaffolds;
- suspended scaffolds;
- facade scaffolds.

Safety Certificate
Modular Scaffolds


CERTYFIKAT BEZPIECZEŃSTWA
NR B/006/21

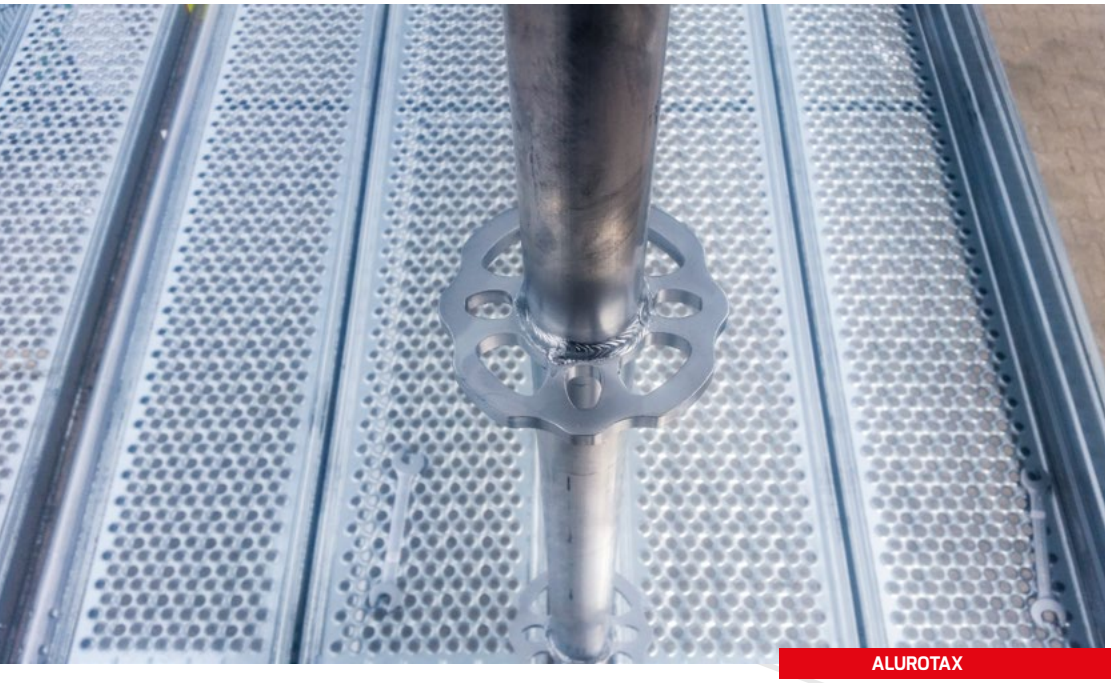
Professional ALTRAD Mostostal Installers Installation

ALUROTAX

ALUROTAX scaffolds are aluminium system scaffolds erected on the structural net which is 3.07 m, 2.57 m, 2.07 m, 1.57 m long and 0.73 m and 1.09 wide – with the possibility to expand the net in all directions. The system allows you to relocate the components by 0.5 m in the vertical plane.

ALUROTAX scaffold allows you to erect complex spatial structures quickly and efficiently. You can also use it to erect large platforms.

The permissible facade setup scaffold working load is 2 kN/m2 for the scaffold 0,73 m wide and 3 kN/m2 for the scaffold 1,09 m wide.



ALUROTAX

Safety Certificate
ALUROTAX


INSTYTUT MECHANIZACJI BUDOWNICTWA I GÓRNICTWA SKALNEGO

CERTYFIKAT BEZPIECZEŃSTWA
NR B/02/003/19

ALTRAD Mostostal Sp. z o.o.
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Rusztowania stojakowe
ALUROTAX

B 15

The scaffold is erected using the stands and aluminium transoms, perforated steel or aluminium platforms with catches for the O-transom or U-transom and the aluminium and plywood platforms with the load-capacity of 2 kN/m2. The whole scaffold erection system is based on using the possibilities provided by the specified structural nods which connects the transoms, horizontal and vertical braces.

Warehouse

Platform Manufacturing

MOBILE SCAFFOLDS

MOBILE SCAFFOLDS

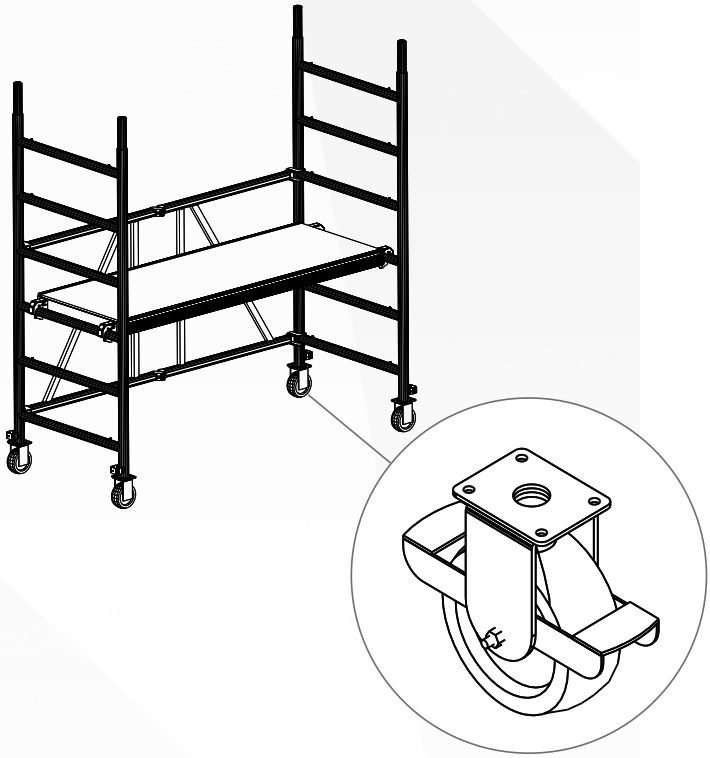
MP MINI, MP 600, MP 800, MP 1000, MP 2000

are used for building and installation works both inside and outside of the buildings. In particular, they are used for installation and finishing works.
The individial mobile scaffold series may use the typical system components to expand the existing schedules. The self-latching clamps require no additional tools for installation and removal – quick and efficient.

MP MINI Mobile Scaffold

The high-grade aluminium makes the whole mobile scaffold group light and exceptionally durable. The casters with the diameter of 200 mm and 125 mm ensure comfort maneouvering. When the scaffold is put in the desired location you can secure it with the foot brake. Addiotnally, the adjustable jacks ensure precise structure setting by exact structure levelelling. The scaffold is stable due to universal and exapandable mobile beams as well as supports.

The aluminium frames are of a spoke type. The ribbed spokes ensure safety of the installers who climb the scaffold. The frame design allows you to install the platforms in the 27.5 cm modules over the entire scaffold height to significantly faculitate the working height adjustment. When folded, the scaffolds occupy little space during storage and transport.



The mobile scaffolds have the **Safety Certificate** no. B/02/003/11 issued by the Institute of Mechanised Construction and Rock Mining in Warsaw.

Scaffold Type	Platform Dimensions (m)	Working Deck Height (m)	Working Height Usable Load (kN/m2)
MP MINI	1,80 x 0,75	0,90 - 3,53	2
MP 600	1,80 x 0,75	2,32 - 5,07	2
MP 800	1,80 x 1,50	2,17 - 11,80	2
MP 1000	2,80 x 0,75	2,32 - 11,95	2
MP 2000	2,85 x 1,50	2,17 - 10,85	2

The mobile scaffolds offered by ALTRAD-MOSTOSTAL are used to work inside and outside the building with the usable working deck load of 2.0 kN/m2 (200 kg/m2.)

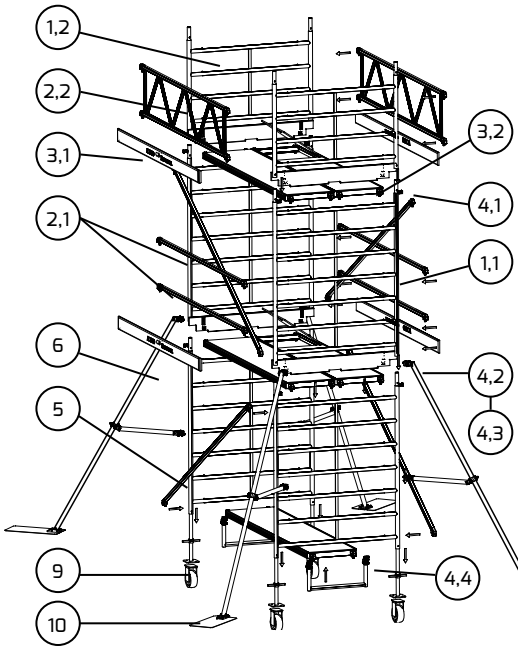
The maximum working deck height should not exceed 12 m in the closed rooms and 8 m outside the building.

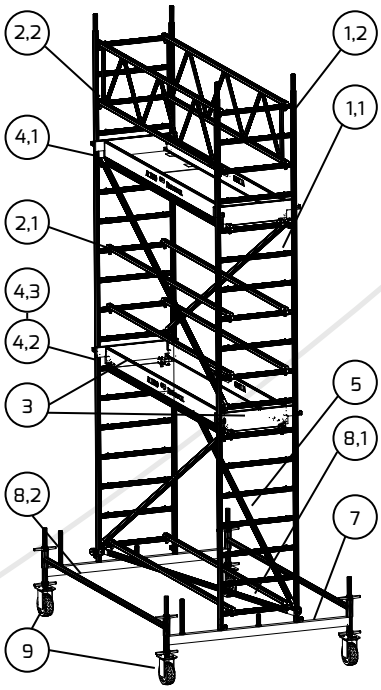
The scaffolds can be installed and used in the following variants:

- without the mobile beam, with the diagonal supports or without supports;
- with the mobile beam, located centrally or on one side on the beam.

The scaffold components are made of steel (mobile beams) and aluminium (frames, braces, rails, decks). The decks are filled wih water-proof plywood. The toe boards are made of wood with te polyamid wheel rims.

MP 600 Mobile Scaffold





Mobile Scaffold Set Components:

1. Frames
- 1.1 load-bearing
- 1.2 front

2. Rails
- 2.1 single rail
- 2.2 railing girder

3. Toe boards
- 3.1 longitudinal
- 3.2 transverse

4. Decks
- 4.1 working
- 4.2 protection
- 4.3 landing
- 4.4 stabilising

5. Vertical braces

6. Supports

7. Mobile beams

8. Horizontal braces
- 8.1 diagonal brace
- 8.2 stiffening joint
- 8.3 base joint

9. Wheels – driving sets

10. Ballast foot

Safety Certificate
Mobile Scaffolds


CERTYFIKAT BEZPIECZEŃSTWA
NR B/02/005/19

FORMWORK SYSTEMS

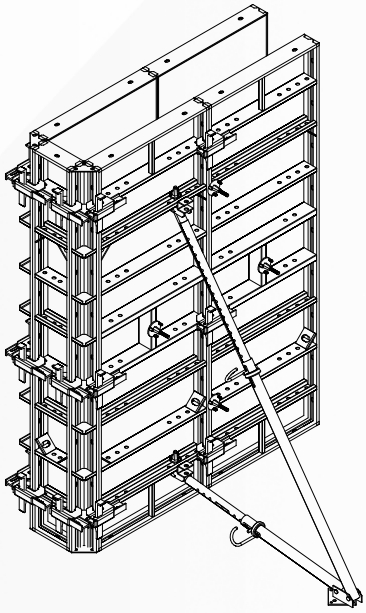
MIDI BOX Formworks
Conventional Ceiling
ALUstrop

Building | MIDI BOX Wall Formwork

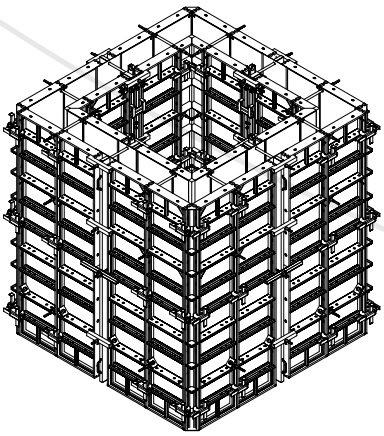
MIDI BOX formwork systems are spatial components used for multiple installations. They are intended for forming strip foundations, walls and square or rectangular posts, horseheads, elevator shafts and atypical structural components, among other things, in virtually every facility.

These system components include the entire schedule of frame boards filled with plywood and fitted with a complete set of connecting, stiffening, compensating and plumbing parts. The wide opportunity range and continuous formwork improvements and innovation meet the constantly increasing requirements of the current building, industrial or power sectors.

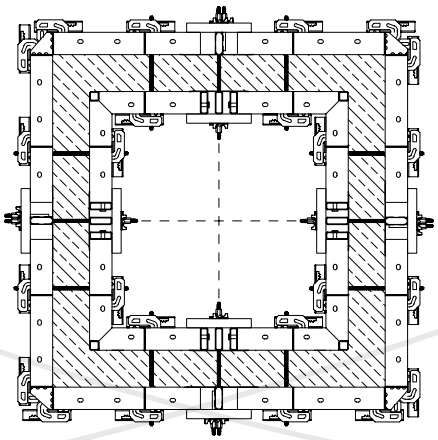
The wall formworks are divided due to their concrete load. There are medium and high load systems. Various permissible fresh concrete pressure standards depend on the type of boarding manufactured by the specific company and equal to at least 10 kN/m2 with some exceeding even 80 kN/m2.



Installed Formwork
Elevator Shaft



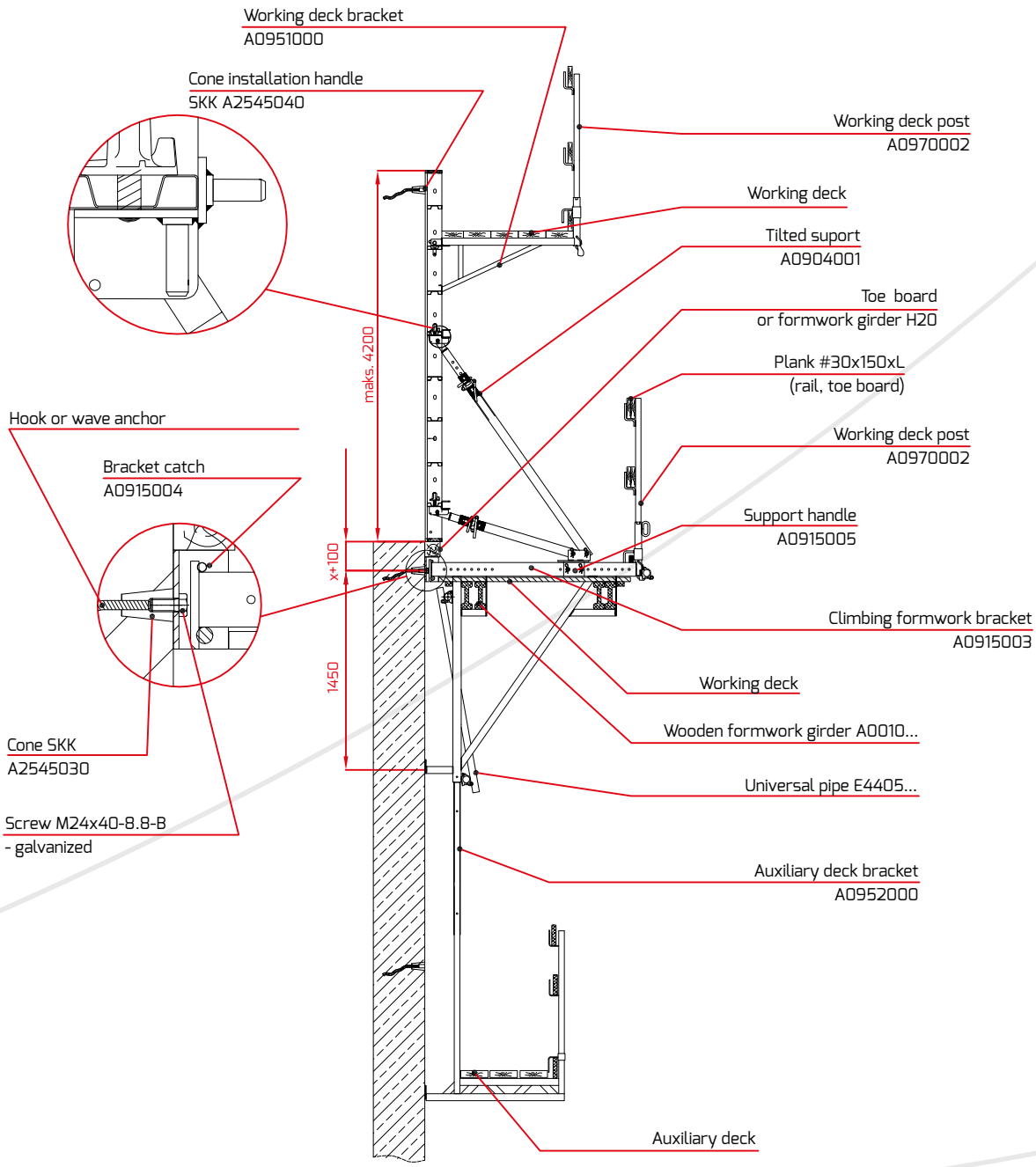
Concrete in an Installed
Formwork



The basic system components include the formwork boards of various dimensions. These are frames reinforced with additional closed profile ribs made of high-grade steel. The boards are covered with a multi-layered, water-proof plywood with a resin coat on both sides for long life and high concrete surface quality. When stripped, it does not require plastering and you can only apply thin plaster or lute.

Formwork Board Manufacturing

Installing Formwork on Brackets

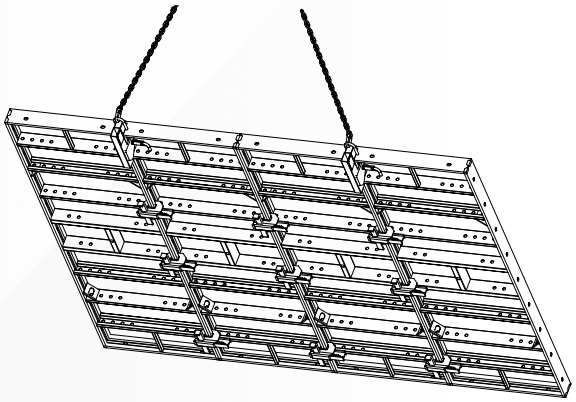


MIDI BOX Formworks

The boards are 90 cm, 120 cm, 150 cm, 270 cm, 300 cm, and 330 cm high and their widths range from 25 cm up to 240 cm.

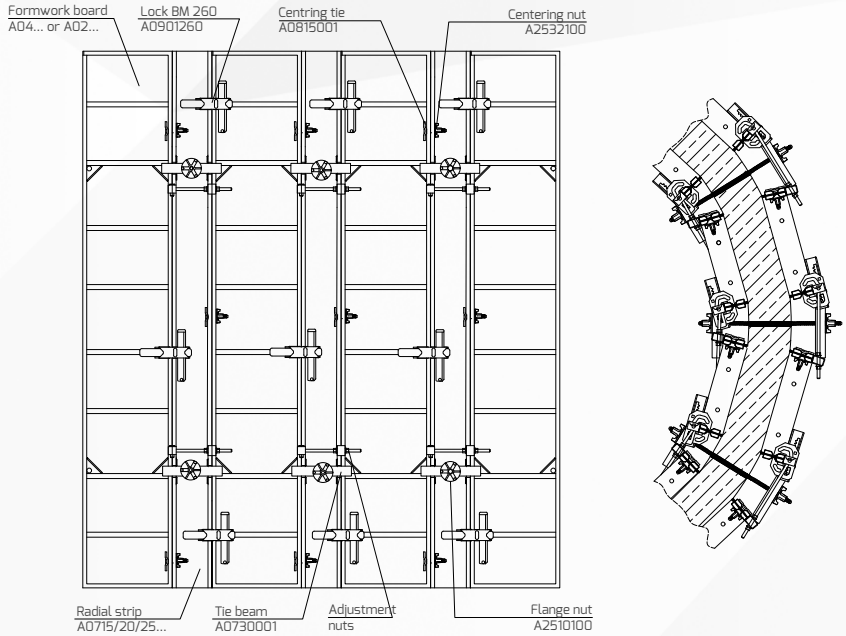
The compact internal profiles called ribs make the frame rigid so that the concrete pressure does not deform the plywood. The special handles facilitate comfortable manual formwork board handling. In turn, clear rib design with process holes allows you to hang the working deck brackets to perform inspection activities inside the formworks and are very helpful when vibrating the concrete mix.

The external steel frame structure profile is also provided with the specific process holes to connect the boards and other components necessary for planking using the ties and centring nuts.

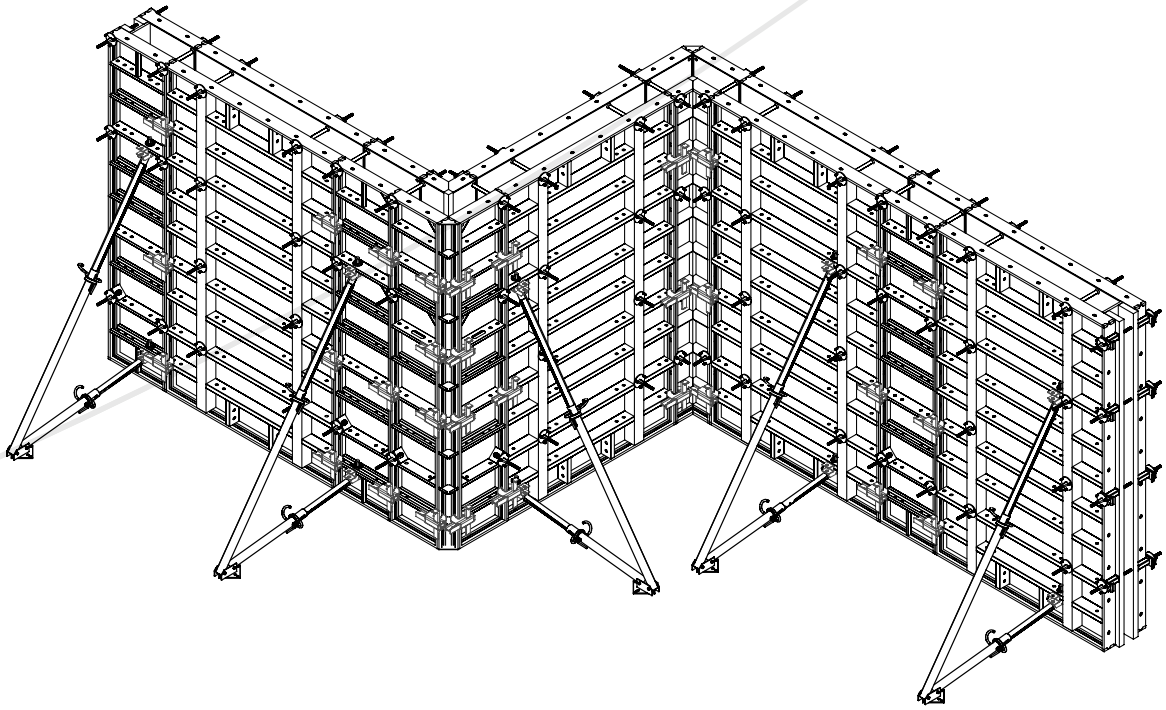


Handling Formwork Boards with a Crane

Szalunek radialny



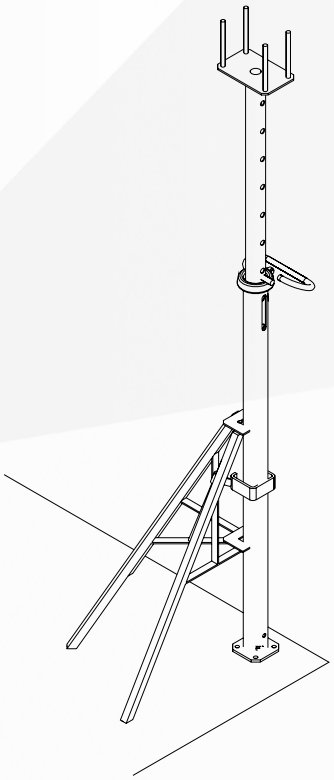
Straight Formwork



Conventional Ceiling

The conventional ceiling formwork system (commonly known as a girder and plywood system) is intended for planking the ceilings of any shape. It consists of a few components so that its installation and removal as quick and easy.

Using the ceiling planking you can also construct ties of various sections. The conventional girder and plywood formwork consists of three basic structural component groups:

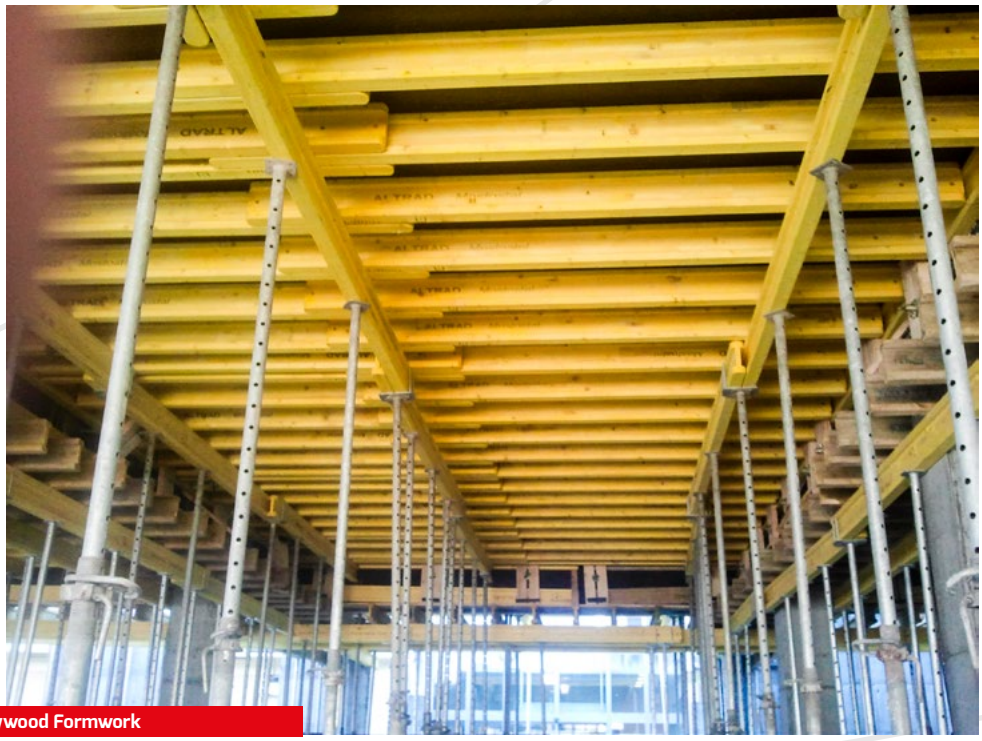


- ceiling supports;
- wooden girders;
- formwork cover or plywood with the applicable technical parameters and supplemental components to position the formwork, i.e. tripods, heads, beam clamps, rails, railing posts and square-sawn timbers.

Construction Site Using the Girder and Plywood Formwork

These system supports are made of steel hot dip galvanized pipes. The support height can be adjusted within 1,482 mm up to 5,500 mm. The wide adjustment range allows you to precisely compensate the ceiling surface and the ground irregularities.
The girders are made of K27 wood and a specific glued plywood board. They are impregnated for longer durability and their length varies from 1,800 mm up to 5,900 mm. The entire support and girder range provides the optimum configuration of any ceiling formwork.

The system is mainly intended for all ceilings with irregular dimensions and many atypical contours, ties and ceiling beams. You can use to erect a ceiling surface precisely and easily without any additional machining required as well as to easily inspect the correct installation.



Girder and Plywood Formwork

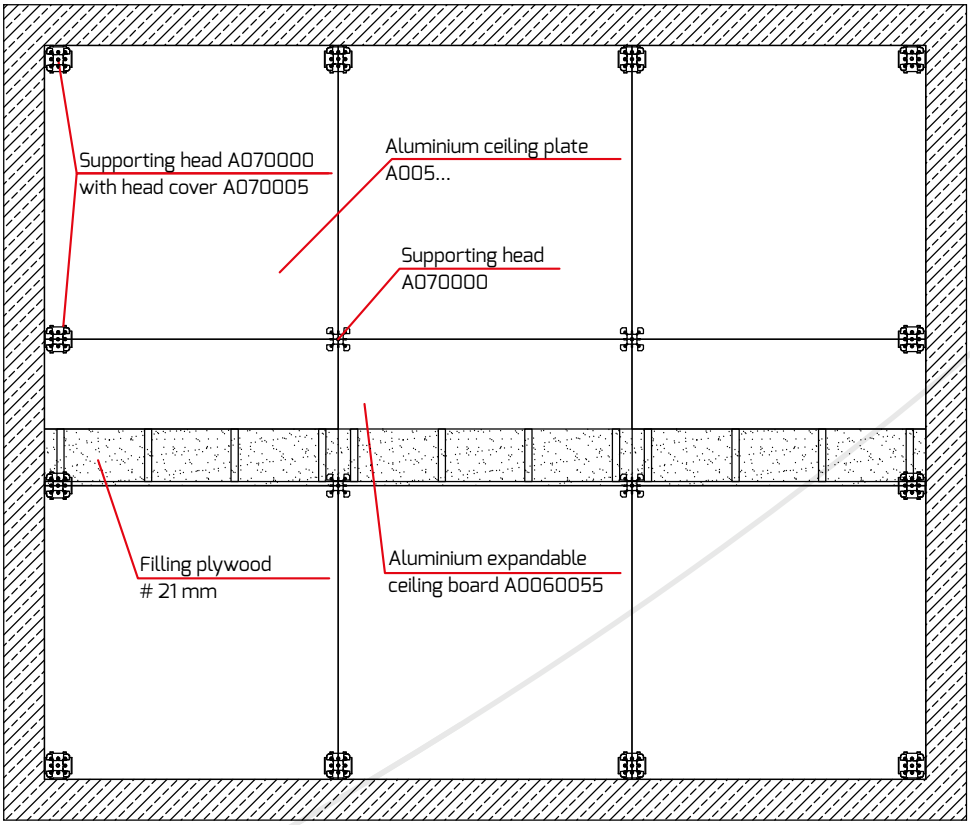
ALUstrop

ALUstrop is a modern formwork system that significantly reduces time required to work at a construction site. It consists of aluminium plates and supports. The aluminium plate structure corners are reinforced to provide longer durability and higher resistance to impacts and it is covered with waterproof 10 mm thick plywood. The shape of the aluminium profiles used as the plate frame protects it from dirt due to leaking concrete at contact points.

ALUstrop – plate connection manner

ALUSTROP

- attractive costs (economic solution with ceilings higher larger than 100 m2)
- light structure
- easier transport and storage (due to light structure)
- efficient installation and removal – about 0.2 h/m2; when compared to a conventional ceiling – about 0.55 h/m2
- durable components (made of weatherproof materials)
- equipment rotation during construction
- appropriate smoothness of the surface obtained
- pleasant formwork installation and removal

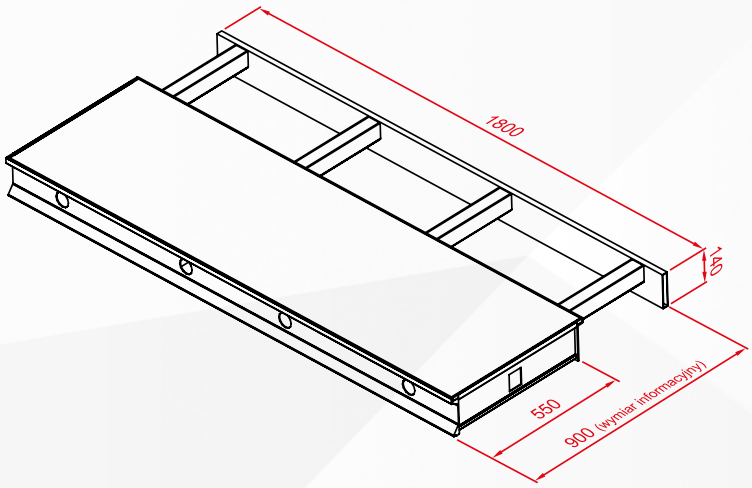


The variety of formwork boards ensures proper fitting to each ceiling and the gaps between the existing walls can be filled with the expandable board and 21 mm thick plywood.
The plywood is installed on the specific girders (levelling and transverse) or square-sawn timbers. The formwork boards are supported by the typical construction supports with the supporting heads.

- ALUstrop can be installed up to the height of 3.5 m
- The maximum ceiling thickness is 0.5 m

ALUstrop

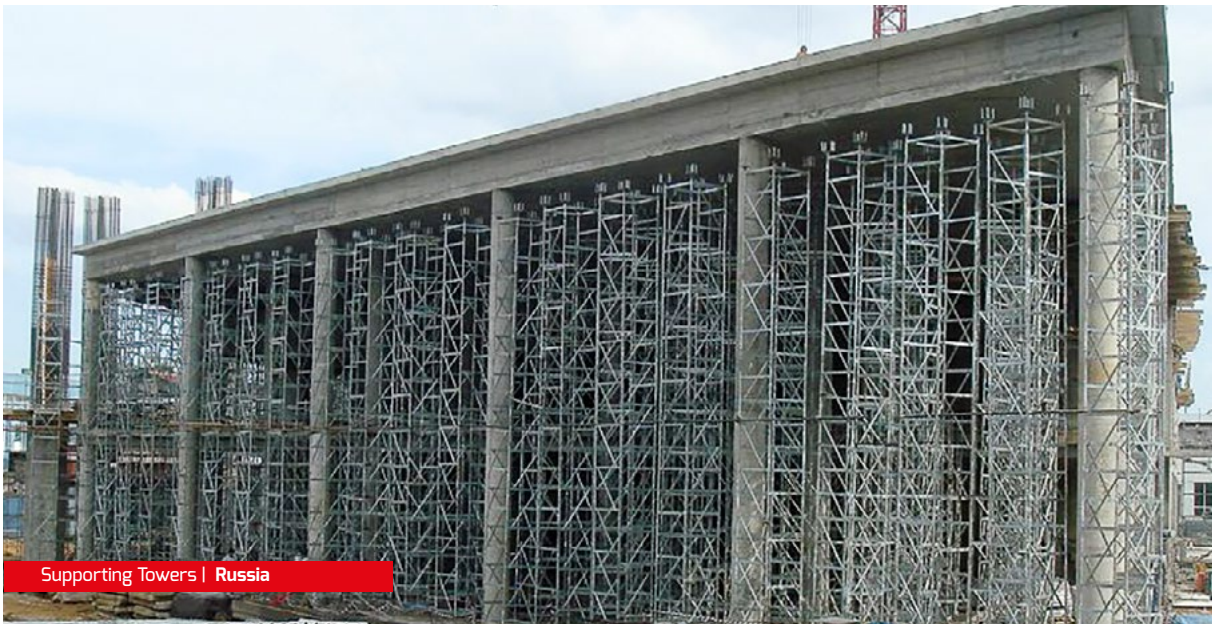
The ALUstrop system is supplemented with the expandable formwork board which can be adjusted within 55 cm-90 cm as opposed to a typical formwork board.



ALUstrop – Board Installation

In general, the ALUstrop system makes the installer/carpenter work very easy as it is repeatable and the complexity of its installation is very low. However, it is not the cheapest formwork solution, the time saved during its installation provides an added value when considering this system as a whole.

Warehouse - Supports



Supporting Towers | **Russia**

Supporting Tower

The tower structure consists of steel frames with the supports spaced at 1.0 x 1.0 m and height increments of 0.5m. The tower height is continuously adjusted to your needs by modifying the jack and adjustable head expansion.

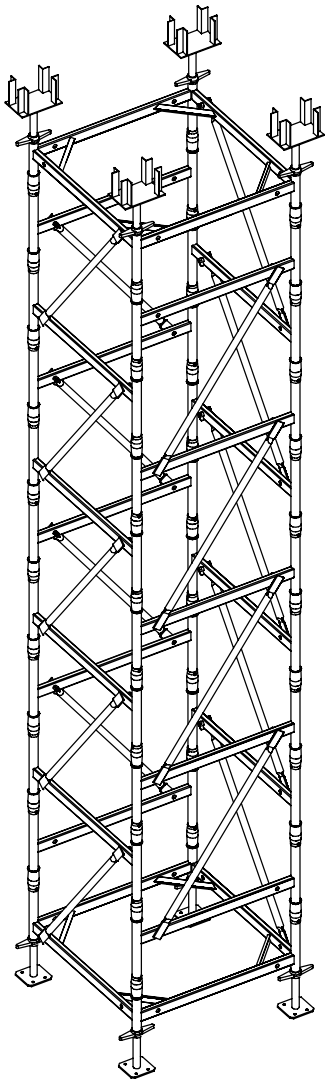
The basic frames and vertical braces that make the other frame rigid ensure the tower is rigid in both perpendicular directions. The frames can be rotated by 90° during installation.

It is important to note that the braces ensure the structure is a single integral component which is important especially when the tower is transported vertically with the construction cranes.

Supporting tower is used for:

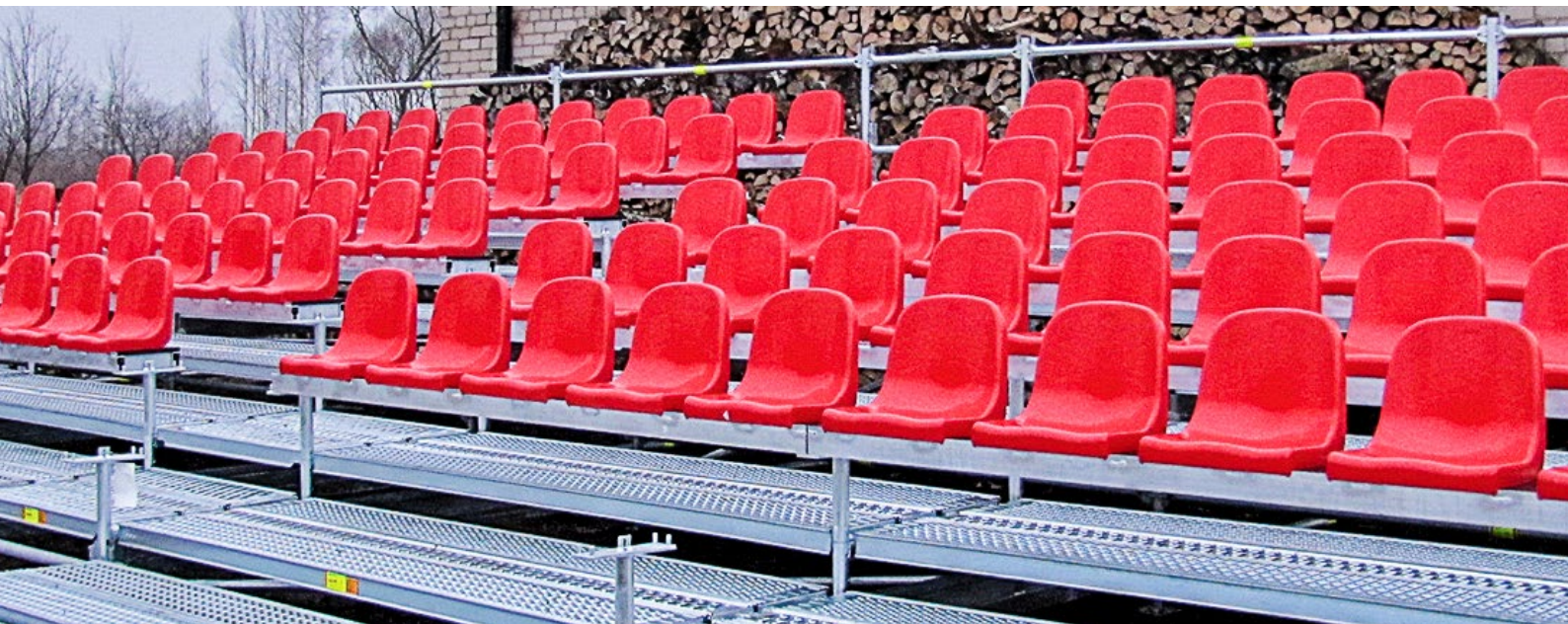
- erecting monolithic construction structure formworks,
- supporting construction structure prefabricated units,
- erecting supporting structures for working platforms,
- erecting protection decks.

All the S10 supporting tower components are galvanized.



S10 Supporting Tower Scheme

ROOF AND SCENE SYSTEMS



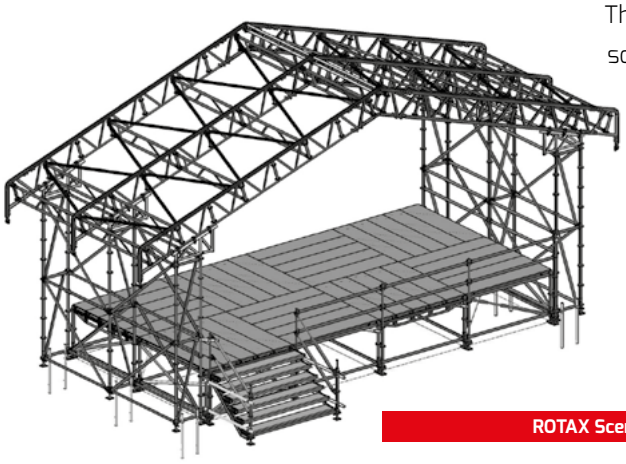
ALU-Sky Roof

ALU-Sky is a modular roof system. It is installed basing on the modular or frame scaffold system so the system is deemed universal as regards installation at various facilities.

ALU-Sky is mainly used to erect halls and temporary roofs, allows you to conduct construction works irrespective of weather conditions.

You can cover the roof structure with a canvas and the components are joined basing on the ALUROTX module system.

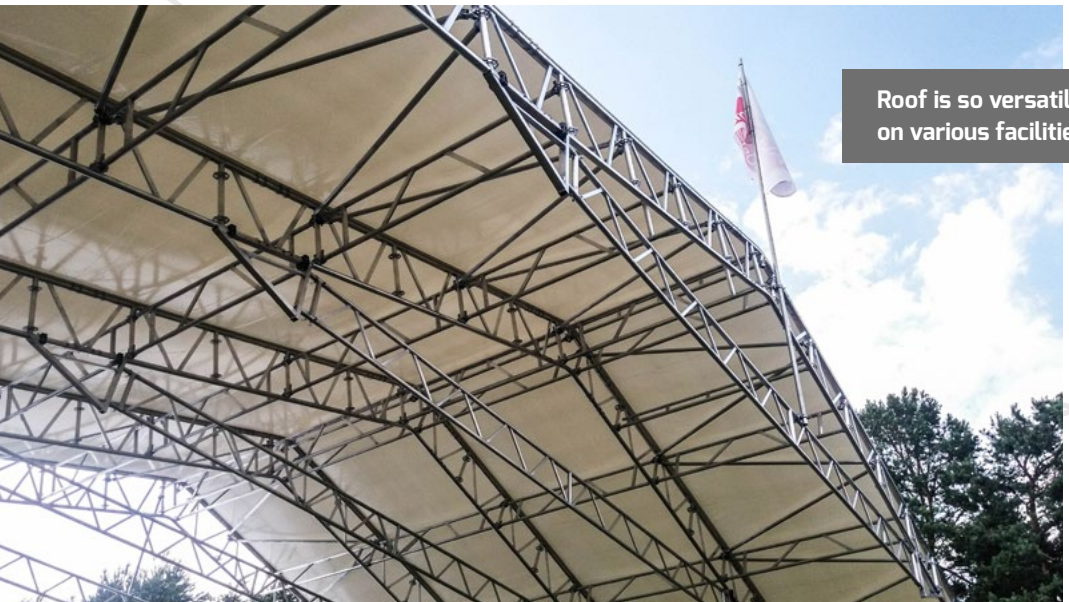
Roof Used at an Outdoor Event



ROTAX Scene with Roof

The main components of the roof structure that constitute the module scaffold system are as follows:

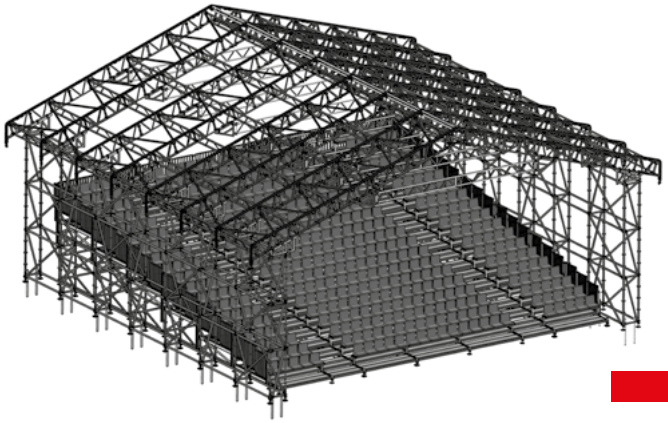
- roof girders
- transverse girders
- horizontal braces
- ridge transoms
- roof brackets



Roof is so versatile that it can be used on various facilities.

The Altrad Event stand system is a set of components that can be removed and installed many times to provide standing places and seats for the audience. The system has been designed on the structural net which is 2,57 m and 1,57 m long and 2,57 m wide and it can be expanded in all directions.

The components of Altrad Event stands and ROTAX Plus scaffolds ensure very quick and efficient spatial stand structure erection even it its shape is complex.



Stand with 475 Seats and Roof

ACCESSORIES

ACCESSORIES

BUILDING TRESTLES

Steel and aluminium **building trestles** are used for, including but not limited to, renovation and constructions works such as:

- painting,
- plastering,
- filling patches with plaster,
- wallpapering,
- laying bricks.

They are not only easy to install but also ensure comfortable and safe work.

Technical Trestle Solutions:

- comfortable, light, easy to handle and transport,
- simple working platform lifting mechanism by rotating a crank,
- working deck made of planks, beams or steel and wooden decks with pipe catches,
- lifting mechanism protected against moving back with a G-hook,
- possibility to install rails with railing posts,
- height of 0.62 m up to 3,63 m, depends on the trestle type,
- rails are required when the working deck height exceeds 1 m.

Building Trestle

ROOF SLOPE CARRIAGES

Used for horizontal transport of roof tiles on the roof surface.

FEATURES:

- carriage load of 100 kg due to its low own weight (about 9.5 kg)
- used at the batten spacing of 25-50 cm. Recommended batten spacing: 25 cm, 30 cm, 35 cm, 37 cm, 50 cm. Verify the carriage is operational in case of different batten spacing.
- horizontal rollers placed on battens protect the carriage from slipping and contribute to safe and comfortable moves
- wide vertical rollers ensure reliability and practicability due to optimum batten placement

SCAFFOLD NETS AND CANVASES

The scaffolds nets and canvases completely reduce the interference of construction works for the immediate neighbourhood.

They protect the employees on the scaffold against adverse weather conditions: rain, wind, snow. They are perfect for long construction works on high buildings, towers, tanks.

The ensure a building looks aesthetic during the façade works. They feature high strength (made of polyethylene.)

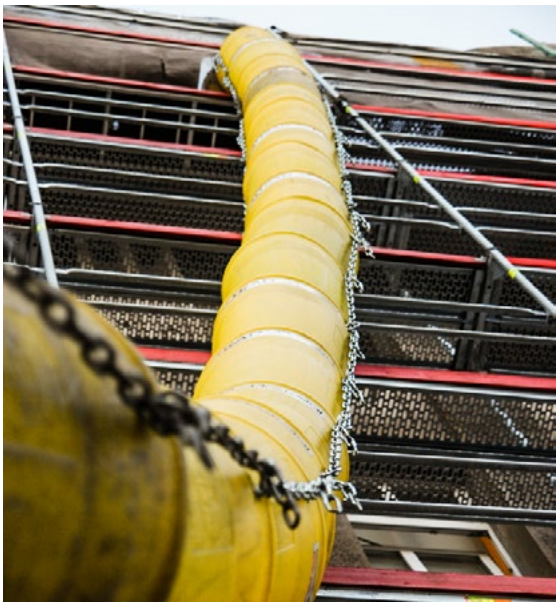
Different sizes and colours are available depending on the needs.

Scaffold Net | **PTransfiguration Parish in Garwolin**

Scaffold Canvas | **Bridge near Ostróda at S7 Route**

BUILDING CHUTES

Building chutes facilitate renovation and construction works while ensuring cleanliness.



FEATURES:

- building chutes are manufactured in Poland,
- made of polyethylene with high impact, abrasion and mechanical damage resistance,
- easy storage due to light weight, small dimensions and cone shape,
- transport debris directly to containers,
- feature high stability, functionality and easy installation

Building Chute | **Łomża**

Buliding chute consists of the following components:

- **basic segment** (with thicker walls for longer life),
- **charging segmen**t (fastened at the chute beginning),
- **intermediate segment** (to remove debris from lower storeys, fitted with a flexible guard and catches that hold the segment inlet),
- **reinforced segment** (optional, used in long assemblies),
- **winch segment**,
- **installation winch** (facilitates chute installation and removal),
- **load-bearing structur**e (adapted to wall installation),
- **reinforcing inser**t (made of galvanized sheet, protects final chute segments),
- **sealing band** (protects dust from getting out).

APPLICATION

- clean, quick and safe debris removal to provided containers,
- easier renovation.

WINDY I WCIĄGARKI

ELEVATORS AND WINCHES

FEATURES:

- rope winches with an electric drive, light, easy to operate,
- facilitate construction work up to the height of 76 m with the lifting speed of 69 m/min,
- designed so that they can be operated both at the bottom and top of scaffold,
- winch flexibility expands the wide assort - ment of: containers, buckets, baskets, slings, pallets – so that each material used at the construction site is delivered to the top quickly and safely.

APPLICATION:

Used to lift materials at each construction site.

Rope Winch

ROOF BRACKETS

Roof Bracket – with Overlay Frame

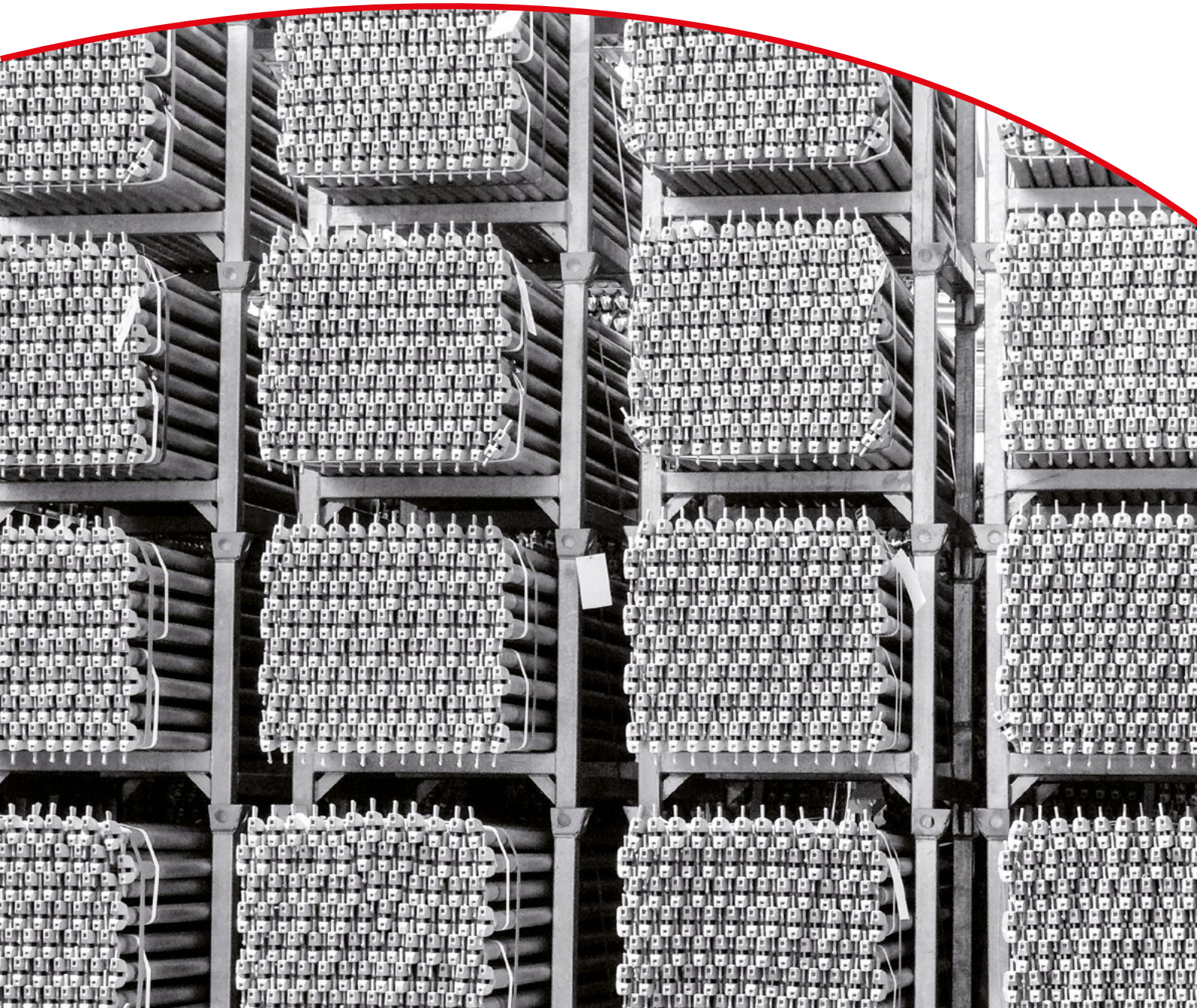
FEATURES:

- used to work on 20°-60° slanting roofs,
- working bay width: 90 cm,
- installed on roof rafters with no roof foil damage,
- light aluminium structure for easy bracket installation,
- material (roof ties) storage space – load of 10 kN.

APPLICATION:

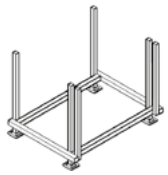
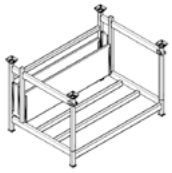
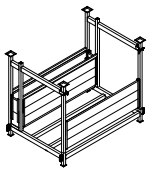
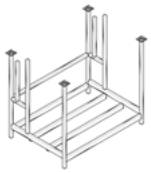
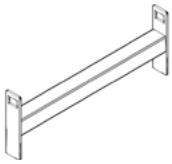
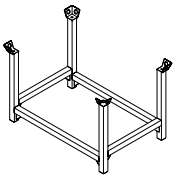
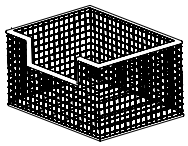
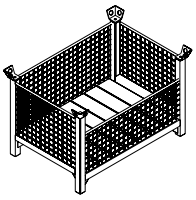
- used to facilitate roof works

PALLETS



Pallets for scaffold component storage and transport

The storage and transport pallets allow you to save time and money. We offer various versions of frame, deck, small parts etc. storage and vertical transport pallets. The pallets can be stacked and save not only space but also time and costs.

Index	Component Name	L./H. (m)	B. (m)	G. (kg)	
E826500	Scaffold pallet – Combi, steel for 15 frames. Used to store and transport of frames with the width of 0.73 m	1,20/0,95	0,90	40,70	
E824400	Pallet for 15 steel frames with the width of 0.73 m, galvanized	1,54/1,00	1,07	122,30	
E824410	Pallet for 15 steel frames with the width of 1.09 m, galvanized	1,54/1,36	1,07	125,10	
E824300	Steel scaffold pallet for 15 frames, 30 steel decks, galvanized	1,54/1,41	1,07	73,10	
E824301	Scaffold pallet for 23 steel or aluminium frames, galvanized	1,50/1,41	0,80	53,00	
E824302	Deck pallet for 15 aluminium decks E4919..., E4920... or E4921..., for 30 steel decks E491325 or E491330, galvanized	1,50/1,41	0,65	52,00	
E826701	Deck transport transom	0,67/0,24	-	4,28	
E822800	Module pallet, main wall profile 3 mm	1,28/0,88	0,80	40,20	
E823800	Light module pallet, main wall profile 2 mm	1,28/0,88	0,80	29,00	
E822900	Modul basket	1,06/0,59	0,61	30,40	
E822808	Palette with net	1,28/0,80	0,88	69,70	
E823808	Light palette with net	1,28/0,80	0,88	58,50	

MOSTOSTAL
SCAFFOLDING
FORMWORK

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