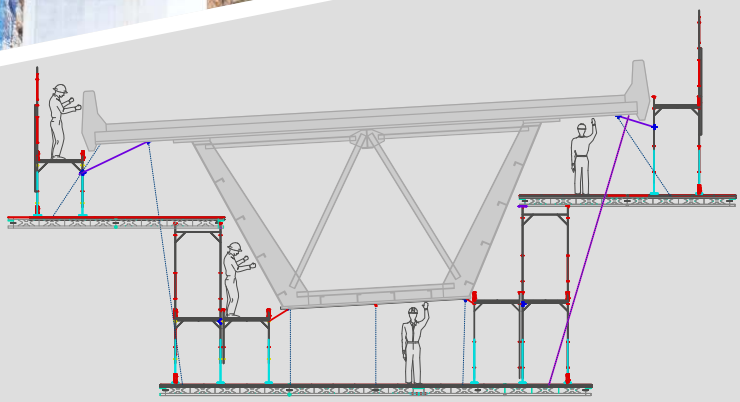


60+ SINCE 1961

THE FLYDECK SYSTEM

Patented System

ENGLISH



SEZIONE DELLA CAMPATA SERVITA

PILOSIO

SCAFFOLDING & SUSPENDED SYSTEMS

Made in Italy

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SUSPENDED FLYDECK STRUCTURE: WHAT IT IS

FLYDECK is a suspended structure for bridge and viaduct maintenance as well as general ceiling maintenance and fitting. The Flydeck system consists of a temporary, suspended, modular working platform that is quickly assembled using a pair of FLYRAIL guides.
The beams are made of 25 cm or 45 cm aluminium (steel is also available on request) and are reversible, i.e. they can be used with both U-mounted and tube-mounted decks. They are available in various lengths up to 6 m and are connected by two spigots and eight unique spring pins that make the connection quick, safe, and easy. The FLYRAIL guide is designed to speed up assembly and to create a Flydeck suspended platform by passing over piers and pier caps (or any other obstacle) and continuing with the structure into the next span without interrupting the roadway with additional supports.
Thanks to the use of FLYRAIL guides, the beams can be positioned longitudinally or transversely to continue the assembly in a forward or lateral direction.
The use of FLYRAIL guides ensures that operators can always work safely from a suspended platform.
A team of three trained operators can assemble approximately 200 m^2 per day with the help of a pair of FLYRAIL guides.

The FLYDECK structure can be integrated with any type of scaffolding for the maintenance of edge beams, shaped decks, or geometrically complex artefacts.

THE COMPONENTS OF THE FLYDECK SYSTEM

ANCHORING	CHAINS	FLYRAIL GUIDES	BEAMS 25 cm - 45 cm	DECKS	GUARDRAILS	SAFETY NETS	BLUESKY	SPECIAL COMPONENTS

GUARANTEED LOAD-BEARING CAPACITY WITH L=200 CM DECKS

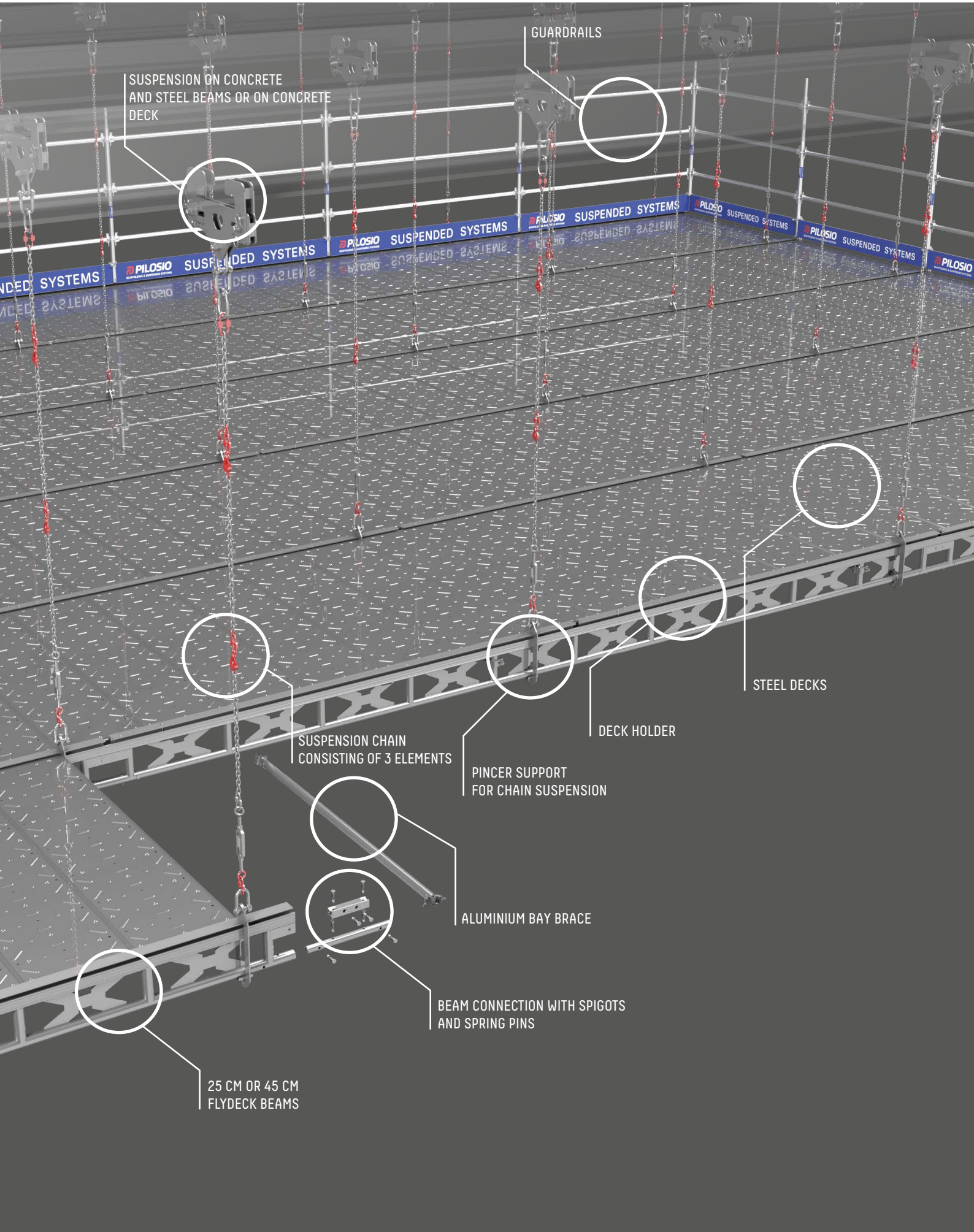
1.5 kN/m^2 with chains every 6 m^2
3.0 kN/m^2 with chains every 4 m^2
The load-bearing capacity can be increased by increasing the number of chains and/or decreasing the beams' span.

ADVANTAGES

HIGH MANAGEABILITY	TIME SAVINGS	REDUCED TRANSPORT COSTS	LESS EFFORT	HIGH SAFETY	IMMEDIATE JOINING
of the 25 cm aluminium beams	30 to 50 per cent less per work step	and smaller storage space	for operators and higher productivity	during assembly and disassembly	very fast and without tools

The FLYDECK system is a patented and certified working platform.
25 cm aluminium beam: Registered Community Design.
Spring pin: Patented and Registered Community Design
Flyrail guide: CE marking

NB: It is mandatory to draw up an executive project, a Calculation Report and anchorage pull-out tests for each project.
NB: Compulsory PPE in accordance with applicable rules in the nation where the worksite is located.


GUARDRAILS
SUSPENSION ON CONCRETE AND STEEL BEAMS OR ON CONCRETE DECK
STEEL DECKS
DECK HOLDER
SUSPENSION CHAIN CONSISTING OF 3 ELEMENTS
PINCER SUPPORT FOR CHAIN SUSPENSION
ALUMINIUM BAY BRACE
BEAM CONNECTION WITH SPIGOTS AND SPRING PINS
25 CM OR 45 CM FLYDECK BEAMS

ANCHORING

The Flydeck structure can be suspended with chains either from the concrete bridge deck or from any type of steel or concrete beam.

SUSPENSION FROM CONCRETE



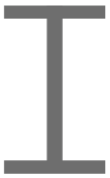




By means of an expansion plug and female eyebolt
(load-bearing capacity: 40 kN, factor of safety: 4).

NB: The anchoring system in the reinforced concrete intrados (e.g. by means of chemical anchors or expansion plugs) is the responsibility of the customer and must be determined following a pull-out test by a qualified technician.
Pull-out tests are the responsibility of the customer.

SUSPENSION FROM STEEL BEAMS







By means of an adjustable 140 to 300 mm clamp
(load capacity: 20 kN).
Alternatively, Pilosio supplies polyester lifting straps
(load capacity: 20 kN).

SUSPENSION FROM CONCRETE BEAMS







400 to 800 mm adjustable clamp for suspension on precast reinforced concrete beams
(load capacity 20 kN).

CHAINS

The Flydeck system is suspended by chains. To simplify assembly on site, the suspension chains consist of two mandatory elements (a top and a bottom one) to be connected in order to achieve a standard working height of 1.80/2.00 m.
One or more intermediate elements can be added when the height exceeds 2 m.
The chains are CE-certified.

NB: All chains supporting the Flydeck must always be tensioned.



Top element L=70 cm
It hooks onto the eyebolt via the shackle.
The shortening hook allows the height of the chain to be adjusted.
Load capacity: 20 kN
MANDATORY ELEMENT



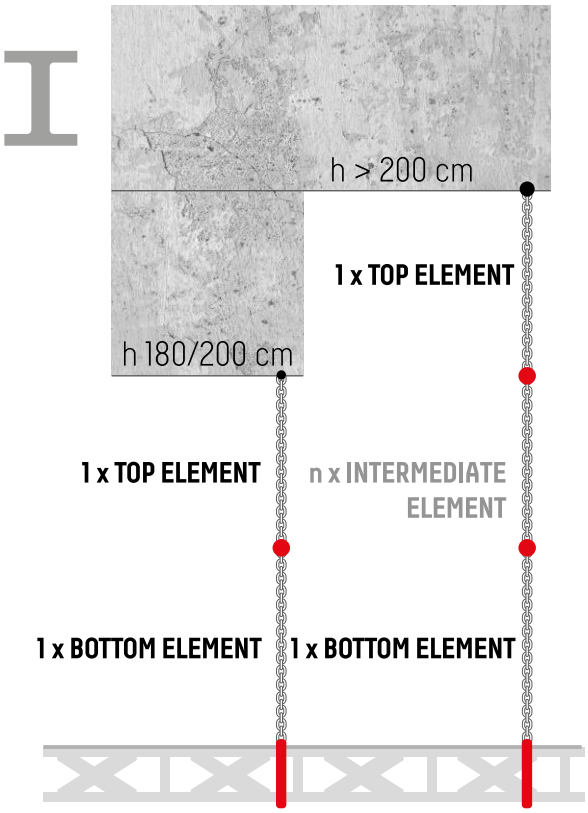
Intermediate element L=100 cm
Add n elements when the height exceeds 2 m.
The shortening hook allows the height of the chain to be adjusted.
Load capacity: 20 kN



Bottom element L=130 cm
The turnbuckle allows the adjustment of the chain's height to the millimetre and the tensioning of the deck.
Maximum excursion: 12.6 cm.
Load capacity: 20 kN
MANDATORY ELEMEN



The pincer support is the connecting element between the chain and the beam.
It can be used with both top and bottom U-profile beams.
The chain hooks onto the shackle.
The support can be moved and/ or removed without detaching the chain.



CHAIN COMPOSITION

Height ≤ 2,00 m
- Female eyebolt / Attachment on beam
- Top element L=70 cm
- Bottom element L=130 cm
- Pincer support

Height ≥ 2,00 m
- Female eyebolt / Attachment on beam
- Top element L=70 cm
- N. intermediate elements L=100 cm to the desired height
- Bottom element L=130 cm
- Pincer support

FLYRAIL GUIDES

THE FASTEST AND SAFEST WAY TO SET UP A SUSPENDED FLYDECK PLATFORM

The innovative Flyrail system consists of a pair of aluminium rails suspended from the intrados for the assembly and disassembly of the Flydeck platform:

- They allow operators to safely arrange the decks and suspend the platform with chains while the beams are temporarily supported by the safety chain of the Flyrail guide
- They allow beams to be installed longitudinally and transversely so that a platform can easily be created around a pier or other obstacle
- They are very easy to handle and are equipped with an electric or manual hoist and wireless hand control
- Can be used with all 25 cm and 45 cm beam sizes, with lengths from 100 cm up to 600 cm
- Longitudinal advancement with L=600 cm Flydeck beams and a pair of Flyrail rails is the most productive mode for creating the suspended Flydeck structure

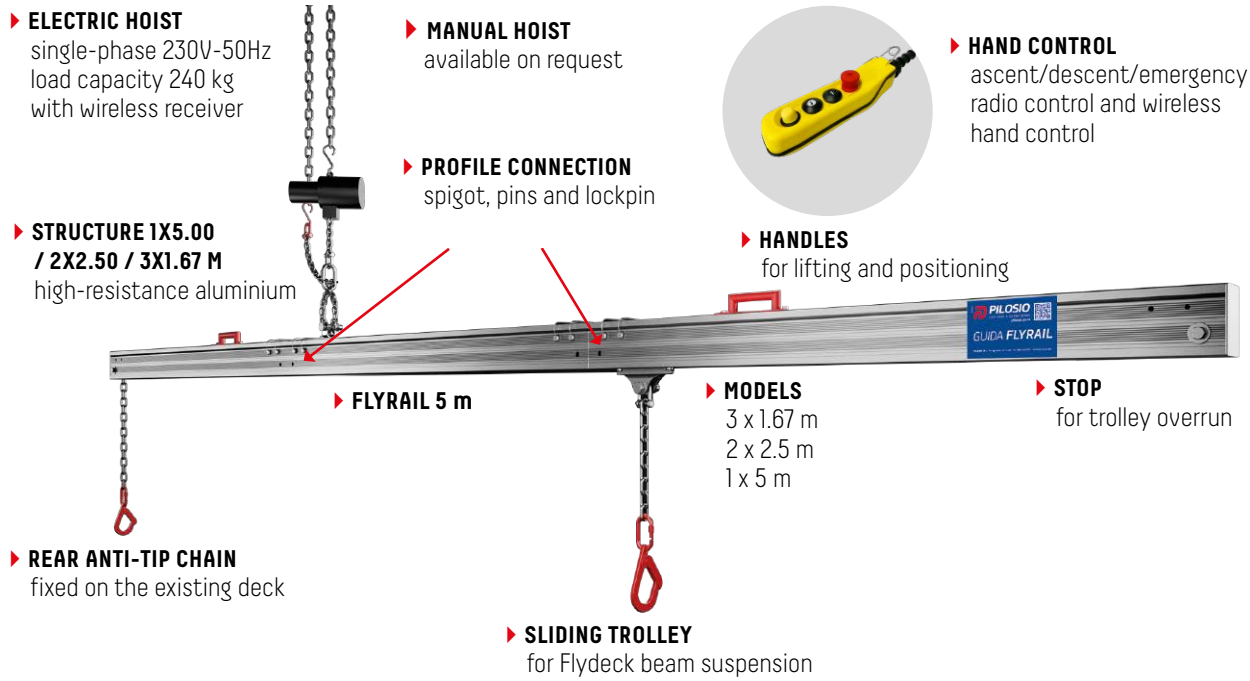
ADVANTAGES

- Significant reduction in set-up time: 30 to 50 per cent time saved, especially when using 600 cm beams
- High speed even during disassembly
- Total safety for operators
- Effort relief for operators
- Suitable for any sector: bridges, viaducts, and large ceilings such as museums, sports, or commercial buildings

SPECIFICATIONS

- 5 m long aluminium guide with two handles
- For ease of transport it can also be supplied in 2 x 2.5 m elements or 3 x 1.67 m elements
- 2.4 kN electric hoist with hand control and safety chain
- Rear anti-tip chain fixed to the anchored platform
- Sliding trolley with quick coupling for handling beams
- Each Flyrail comes with a wheeled case containing all accessories

FLYRAIL GUIDE



CE

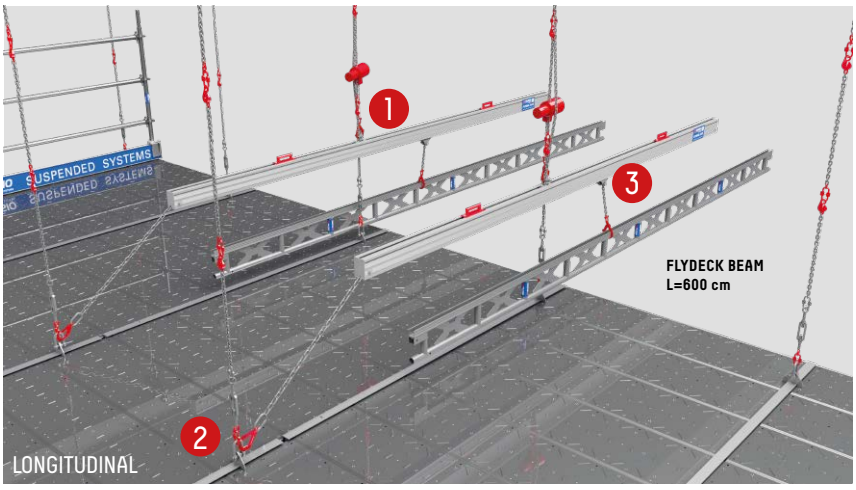
CORRECT POSITION OF THE FLYRAIL GUIDE TO OPTIMISE PRODUCTIVITY

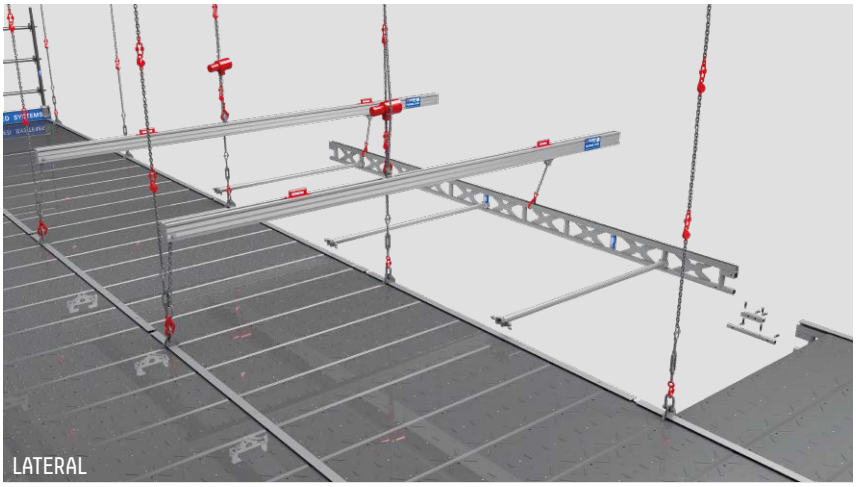
The following is a standard situation with aluminium h=25 cm beams, 50x200 cm planks and chains every 3 m.

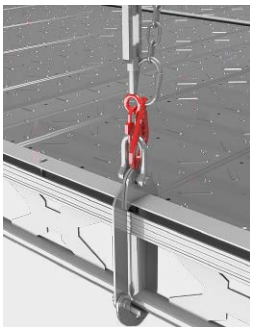
Height of the FLYRAIL guide relative to the Flydeck deck: approx. 70 cm
1. Hoist hooked to the last suspension chain of the Flydeck platform
2. Rear anti-tip chain fixed on the penultimate pincer support
3. Sliding carriage attached to the new Flydeck beam near the 5th vertical upright (for L=600 cm beam)

SAFETY CHAIN - MANDATORY ELEMENT

The hoist is equipped with a safety chain that directly suspends the Flyrail guide at the intrados and supports the weight when the operators start to lay the planks on the beams. It is mandatory to hook and tension the safety chain after the two beams have been connected to the existing ones and before starting the laying of the planks.







Rear anti-tip chain fixed on the penultimate pincer support.





BEAMS

H=25 CM ALUMINIUM U-BEAMS

25 cm aluminium beams that are 50 per cent lighter than a 45 cm steel beam. All tubes are Ø 48.3 mm so that a coupler can be used if necessary.
The beam with the special "X" stiffening plate guarantees a load-bearing capacity of 1.5 kN/m^2 at 200 cm span, which is adequate for maintenance work, and, in any case, the load-bearing capacity can be increased by increasing the anchorage points and/or decreasing the beam span. The position of the stiffening plates allows to attach the coupler in several positions.
The beam consists of a U-profile and a tube and is reversible: it is used with the U on top for decks with a U-attachment or upside down for decks with a tube attachment.

On request, beams are also available in steel.





HIGHLIGHTS

- High manoeuvrability
- Reduced time for each assembly and disassembly step
- Lower transport costs and storage space
- Reduced operator fatigue
- High safety
- Registered Community Design

SPECIFICATIONS

- Aluminium alloy EN AW 6082 T6 with high mechanical properties
- Ø 48.3 mm tube
- 5 mm thick "X" stiffening plate
- Seven available lengths: 1.0 m, 1.5 m, 2.0 m, 3.0 m, 4.0 m, 5.0 m, 6.0 m
- Size of beam engraved on the X-shaped reinforcement

H=45 CM ALUMINIUM U-BEAMS

Lightweight and strong aluminium lattice h=45 cm beam, suitable for multiple uses. The beam is reversible and can be used with the U-profile on top (for U-mounted decks) or upside down for tube-mounted decks.

On request, beams are also available in steel.



SPECIFICATIONS

- Beam height 45 cm
- Aluminium alloy EN AW 6082 T6 with high mechanical characteristics
- Ø 48.3 mm tube
- Seven dimensions: 1.0 m, 1.5 m, 2.0 m, 3.0 m, 4.0 m, 5.0 m, 6.0 m

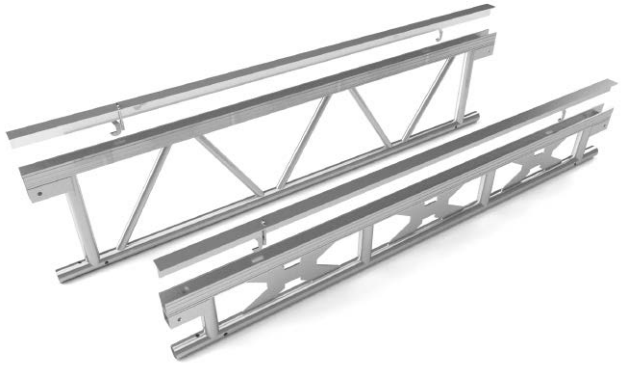
DECK HOLDER

DECK HOLDER FOR U-BEAMS (H=25 CM, H=45 CM)

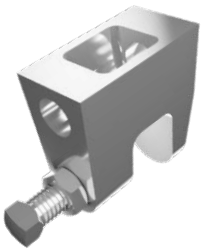
The deck holder for U-mounted decks prevents accidental lifting.
The T-profile is provided with two hooks that engage in the two slots in the beam's U-profile and one safety latch that locks it to the beam.
No risk of tripping due to the very low thickness of the upper plate.
It can be used for both h=25 cm and h=45 cm beams.
Available in four lengths.

The table below specifies the combination of deck holders with beams with top U-profile.

Beams	Deck holder
L=100 cm	n.1 L=100 cm
L=150 cm	n.1 L=150 cm
L=200 cm	n.1 L=200 cm
L=300 cm	n.1 L=300 cm
L=400 cm	n.2 L=200 cm
L=500 cm	n.1 L=200 cm + n.1 L=300 cm or + n.1 L=300 cm + n.1 L=200 cm
L=600 cm	n.2 L=300 cm or n.3 L=200 cm







HEAD DECK HOLDER

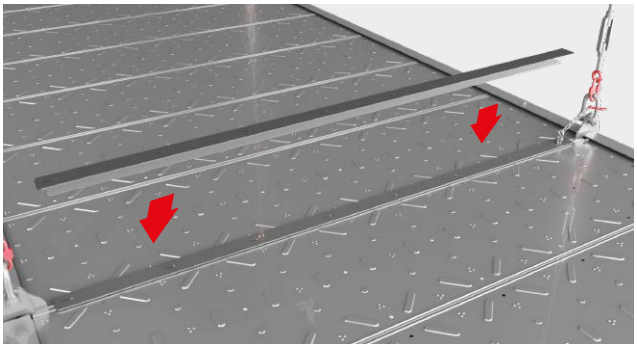
Aluminum head deck holder that is locked to the head of the beams with an elastic pin and prevents accidental slipping of the decks.
For h=25 cm and h=45 cm beams.

SCREW CLAMP

Screw clamp that locks onto the U-profile to prevent the decks from slipping when the decks do not cover the full length of the beam.

INFILL AT PINCER SUPPORTS

There is a small gap (approx. 1 cm) between the planks on the Flydeck platform at the pincer supports for the suspension chains, which it may be useful to close.
The infill is a galvanised steel 'T'-shaped closing element, which is inserted between the planks and blocked on one side to the pincer support with a chain and a snap hook.
Lengths are available for 100 cm, 150 cm, 200 cm, 250 cm, and 300 cm decks.



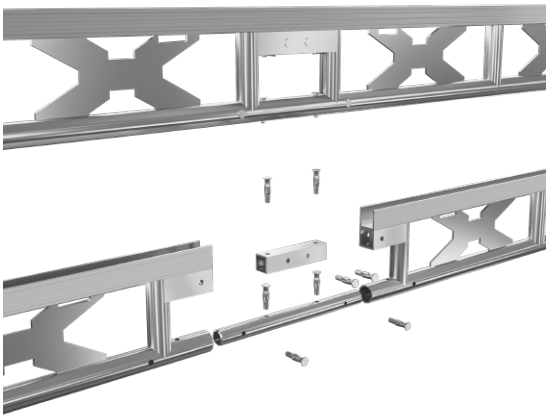
BEAM CONNECTIONS

SPIGOTS AND SPRING PINS

To join the beams quickly and easily, a spigot system with unique spring pins has been designed to replace screws and nuts, making the connection simple and immediate even during disassembly without tools. It allows the creation of a continuous beam with perfect load distribution and achieving a continuous, coplanar working surface.







HIGHLIGHTS

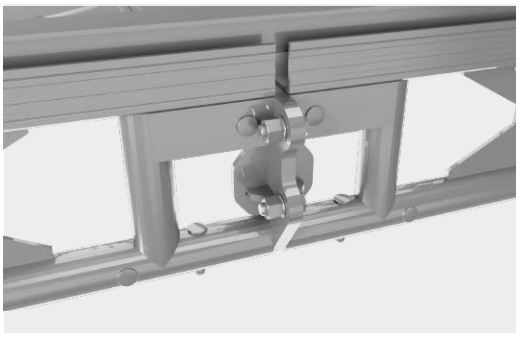
- Fast and instant connection without tools
- Also fast to disassemble
- Also M12 screws and nuts can be used

NB: When using pins and/or spigots of other brands (not Pilosio), it is mandatory to lock the pin with a P-shaped cotter pin.

BEAMS QUICK RELEASE

When removing a portion of the Flydeck platform while keeping suspended the part of the structure connected to it, a specific beam connection that can be released at any time is necessary.
It consists of four spigots and two plates joined by four bolts, which only need to be released to remove the beam.
This type of connection must be arranged during the set-up phase.

NB: The portion of the Flydeck platform to be removed must be defined during the design phase. Plates with connecting spigots are used instead of the normal spigots on both sides of the Flydeck beams to be removed.

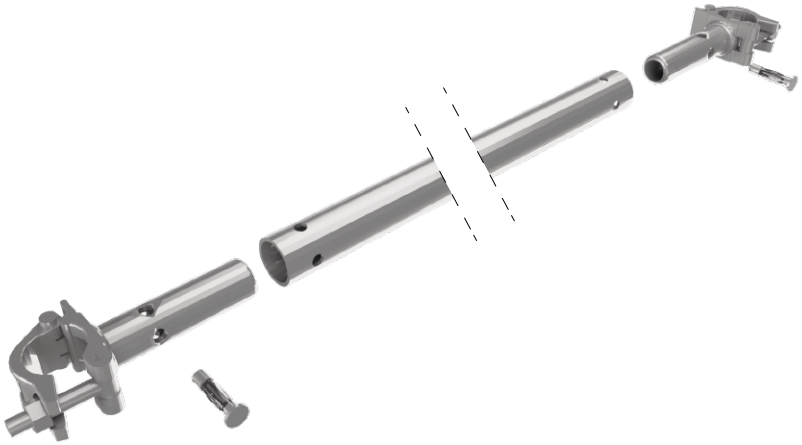




BAY BRACE

Aluminium bay brace ø 48.3 mm that has to be attached to the uprights of the Flydeck beams at each suspension point.

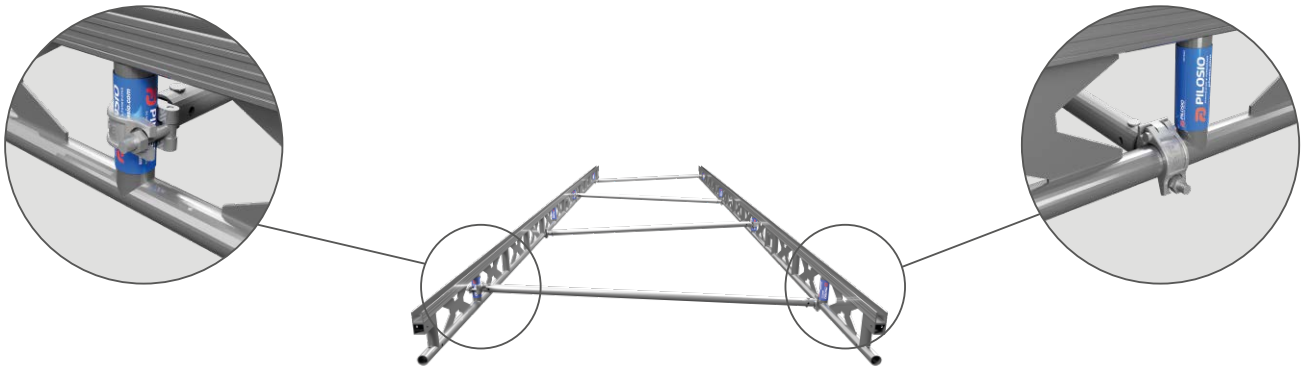
NB: A bay brace is needed for each suspension chain.
Dimensions 100 cm, 150 cm, 200 cm, 250 cm, 300 cm
Dimensions 109 cm, 157 cm, 207 cm, 257 cm, 307 cm



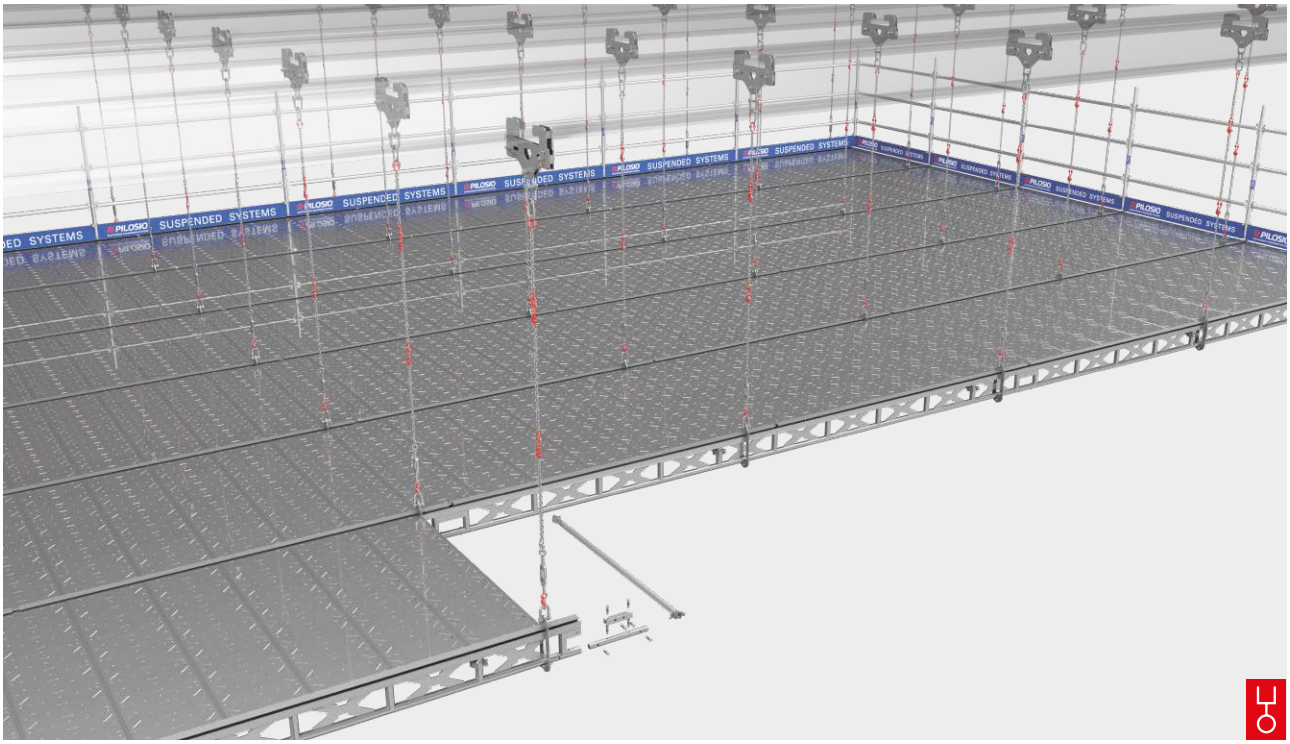
BAY BRACE FOR DIFFERENT BEAM LENGTHS

If Flydeck beams of different lengths are used, the bay brace will be installed as follows:

- Remove one of the two spigots with the coupler, turn it crosswise and secure it with the pin.
  Attach the bay brace in the vicinity of the chain support with one coupler on the upright post and the other on the beam's bottom chord
- Reverse the position of the next bay brace: attachment on the tube on one side and the upright on the other
- Continue alternating bay brace attachments

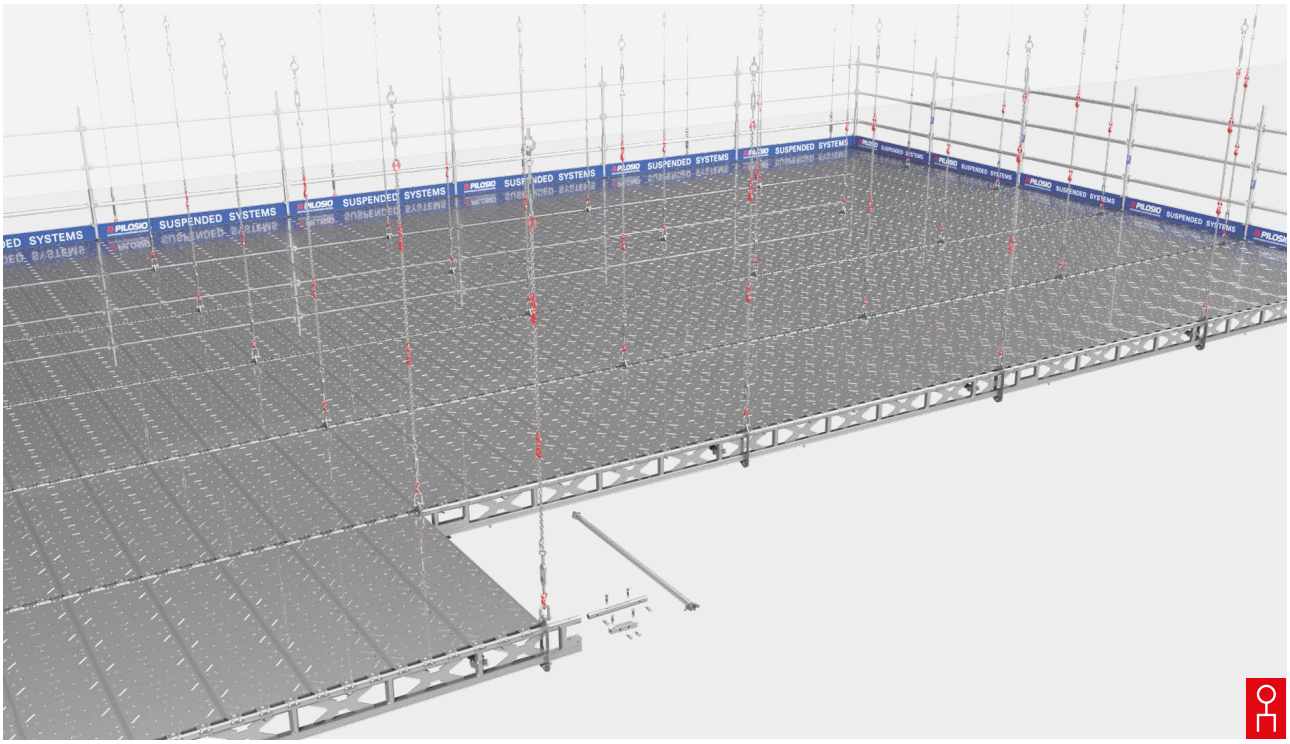


POSSIBLE **BEAMS** CONFIGURATIONS
H=25 cm ALUMINIUM BEAMS



H=25 CM BEAMS WITH U-PROFILE ON TOP

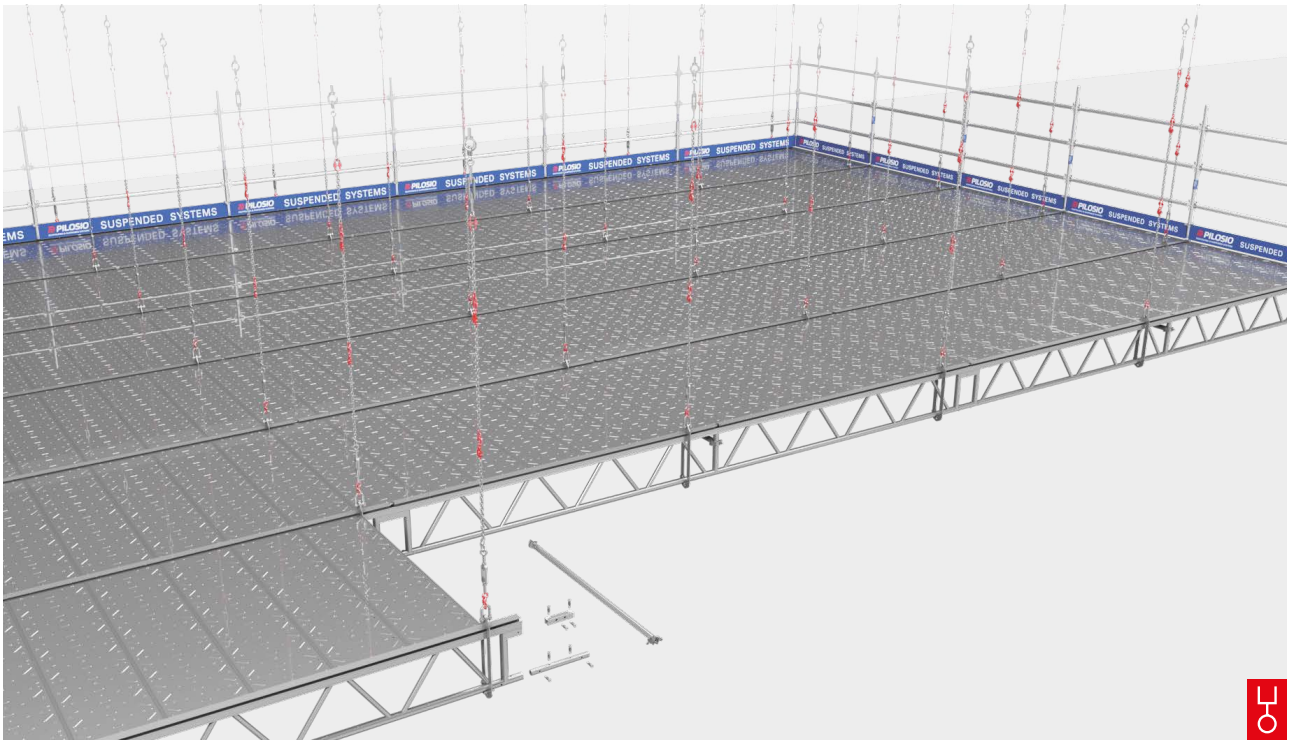
Suspended platform with U-profile on top, 50x200 cm decks, deck holders and chains every 3 m.
33 cm and 33 cm HGH decks with lengths from 100 to 250 cm are available. Chain attachment on concrete bridge deck or beams.



H=25 CM BEAMS WITH TUBE ON TOP

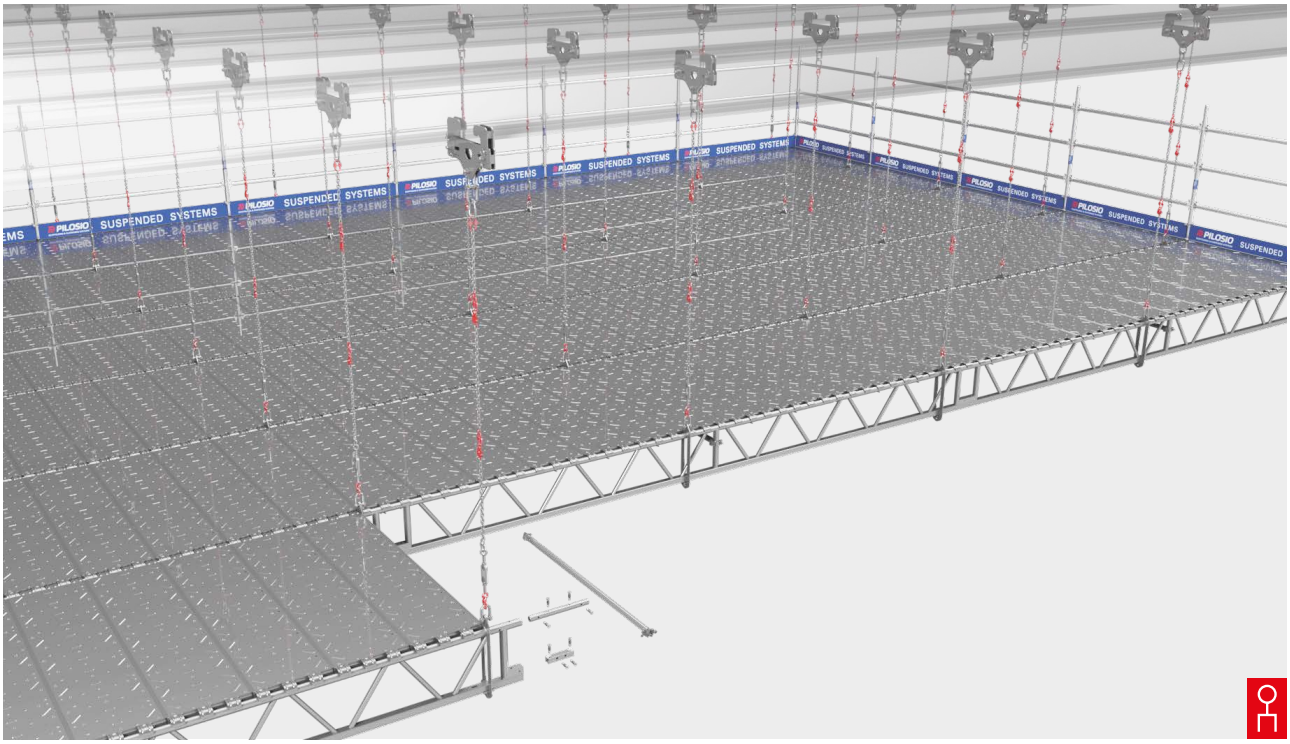
Suspended platform with beams with the tube on top, 50x200 cm decks and chains every 3 m.
33 cm and 33 cm HGH decks with lengths from 100 to 250 cm are available. Chain attachment on concrete bridge deck or beams.

H=45 cm ALUMINIUM BEAMS



H=45 CM BEAMS WITH U-PROFILE ON TOP

Suspended platform with U-profile on top, 50x200 cm decks, deck holders and chains every 3 m.
33 cm and 33 cm HGH decks with lengths from 100 to 250 cm are available. Chain attachment on concrete bridge deck or beams.



H=45 CM BEAMS WITH TUBE ON TOP

Suspended platform with beams with the tube on top, 50x200 cm decks and chains every 3 m.
33 cm and 33 cm HGH decks with lengths from 100 to 250 cm are available. Chain attachment on concrete bridge deck or beams.

DECKS

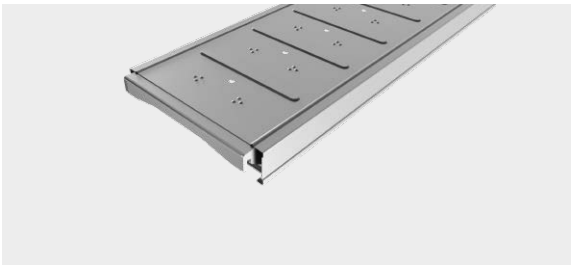
Three types of decks are available with U-profile attachment:

50 cm cold-dip galvanised steel deck
lengths 100 cm, 150 cm, 200 cm, 250 cm
50x200 cm Class 4 - 3,0 kN/m²

33 cm cold-dip galvanised steel deck
lengths 100 cm, 150 cm, 200 cm, 250 cm, 300 cm
33x200 cm Class 5 - 4,5 kN/m²

33 cm hot-dip galvanised steel HGH deck
lengths 100 cm, 150 cm, 200 cm, 250 cm, 300 cm
33x200 cm Class 6 - 6,0 kN/m²





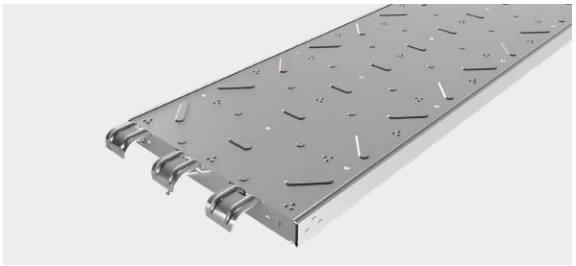


Three types of decks are available with tube attachment:

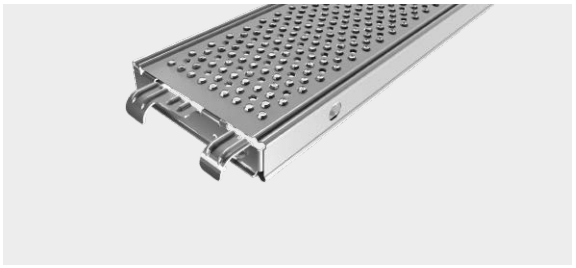
50 cm cold-dip galvanised steel deck
lengths 100 cm, 150 cm, 200 cm, 250 cm
50x200 cm Class 4 - 3,0 kN/m²

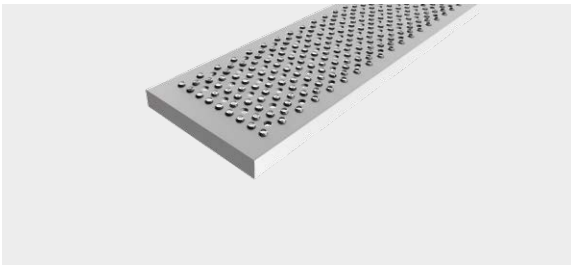
33 cm cold-dip galvanised steel deck
lengths 100 cm, 150 cm, 200 cm, 250 cm, 300 cm
33x200 cm Class 5 - 4,5 kN/m²

33 cm hot-dip galvanised steel HGH deck
lengths 100 cm, 150 cm, 200 cm, 250 cm, 300 cm
33x200 cm Class 6 - 6,0 kN/m²









It may happen that there are spaces left to close or residual corners due, for example, to curved structures. In such cases, steel cover boards are used, which are placed on top of the steel planks and secured at each end with two fastening screws.

31 cm hot-dip galvanised steel cover board
lengths 100 cm, 150 cm, 200 cm, 250 cm
31x200 cm Class 6 - 6,0 kN/m²
For all steel planks with both U- and tube mounting

GUARDRAILS

GUARDRAIL SUPPORTS

All supports with spigots allow to accommodate an MP Pilosio upright to create the guardrail or the Tube & Coupler system.
Available for 25 cm and 45 cm beams.



HEAD SUPPORT
(U profile upwards)



LATERAL SUPPORT
(U profile upwards)



HEAD SUPPORT
(U profile downwards)



LATERAL SUPPORT
(U profile downwards)







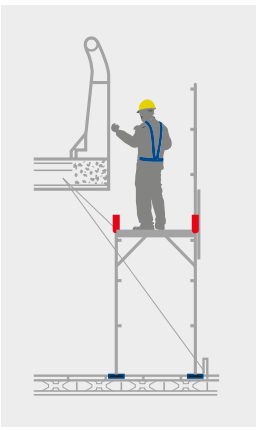


LATERAL SCAFFOLDING

It may be useful to provide scaffolding on the lateral parts of the Flydeck platform to work easily on edge beams.







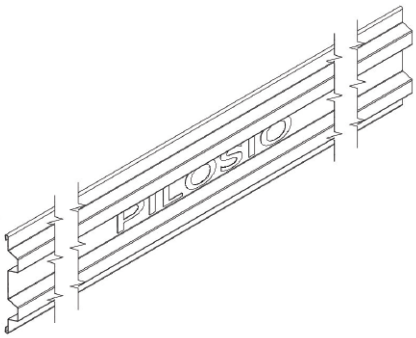
GUARDRAILS - TOE BOARDS

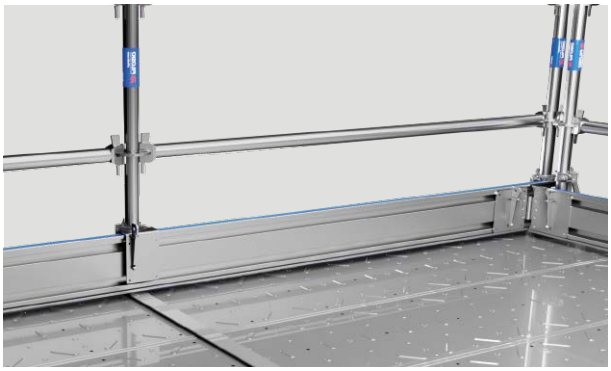
Flydeck toe boards are elements specifically designed for this system and consist of:

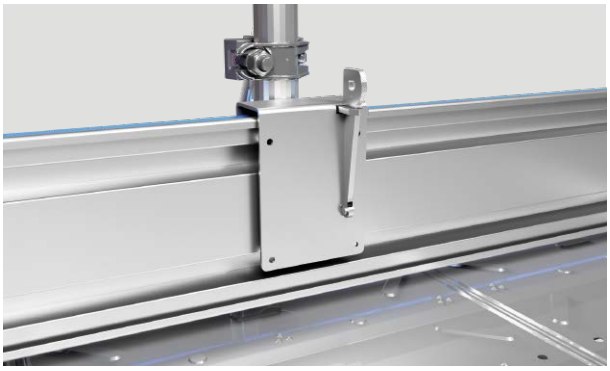
Galvanised steel toe board H=15.3 cm flap available in two lengths: L=250 cm and L=320 cm.

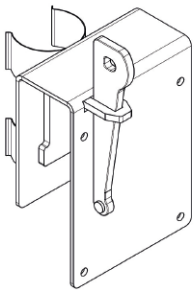
Galvanised steel linear block with two wedges for locking the toe board to the upright. It allows two toe boards to be overlapped to achieve the required length.

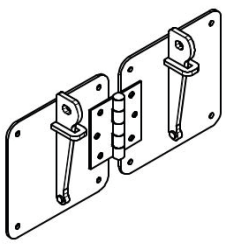
Variable corner block made of galvanised steel with two wedges and a hinge that allows a variable opening angle from 45° to 270° and provides complete protection even in corners.

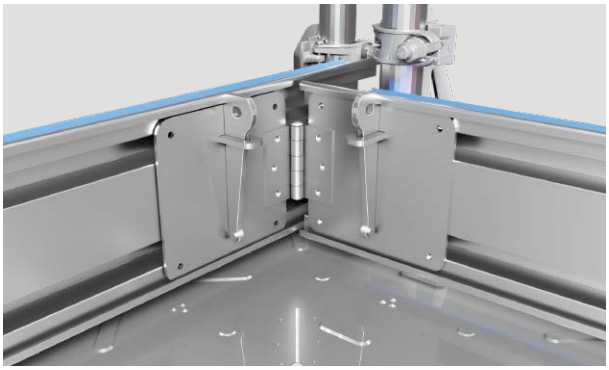












SAFETY NETS

The safety net is installed during the assembly of the Flydeck platform, generally after the suspension chains are in place. Hence, there is no need to create underdecks, which significantly reduces set-up time and the overall weight of the structure.

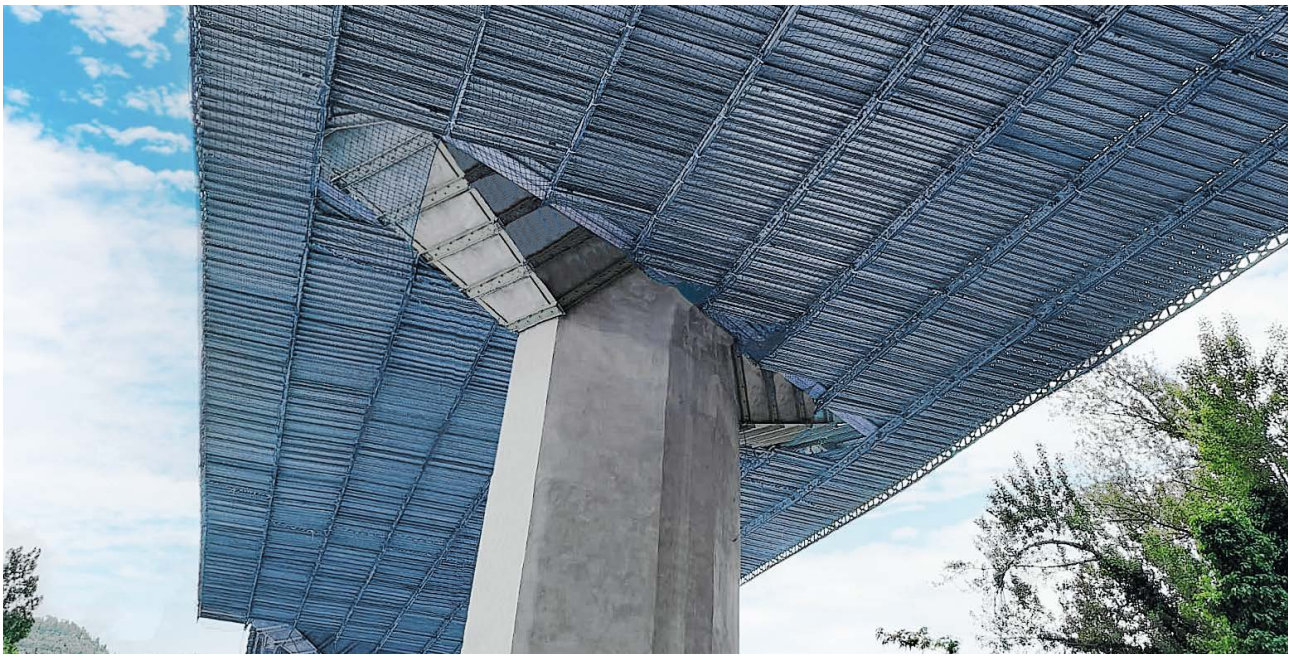
SPECIFICATIONS

- Certified polyethylene net (HDPE) with 100x100 mm mesh
- Fastening on the lower chords of the Flydeck beam by means of a lanyard positioned every 2.5 m with a triple knot
- 75 cm long polyester rope with a loop at one end
- The net is supplied in 15 m rolls
- Widths: 100 cm, 150 cm, 200 cm, 250 cm

NB: Distance between knots: maximum 2.5 m.







BLUESKY

BLUESKY is an innovative system that simplifies and optimises the collection of water and materials from hydro-sandblasting, hydro-washing, etc., offering total containment and preventing leakage into the environment.

Bluesky consists of a PVC "collector" positioned under the Flydeck beams that completely seals off the area underneath and to the side of the suspended platform. It collects all water and residual materials from the cleaning processes and conveys them into the container bags. Water and materials are drained away via suction pumps operated from the Flydeck platform.
This prevents any leakage into the surrounding environment, and the Flydeck surface remains less slippery.
The container bags are placed every 12 m^2 and equipped with a hermetic cap that can be opened to drain rainwater when necessary.

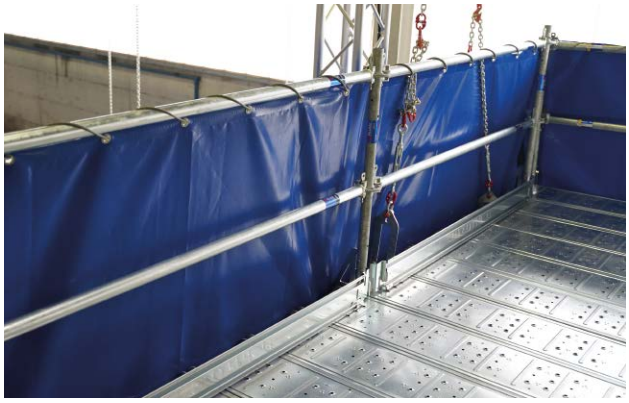
NB: The type of pump to be used, the position, and the flow rate of the water sucked in must be calculated by the customer according to the type of work to be done.

Due to the quality of the material and its construction, the system guarantees total containment even when exposed to direct contact with high-pressure jets.

APPLICATIONS:

For all types of hydro jet and high-pressure washing technology, on all types of surfaces, including steel and concrete.
For the rail, road, oil and gas, civil, and energy sectors.











BLUESKY CONSISTS OF:

- Primary, connecting, and lateral PVC tarpaulins to completely seal the area below the Flydeck platform
- PVC container bags with a double layer of Velcro joints to be placed every 12 m^2
- Aluminium rails of various lengths up to 6 m
- Special quick-release clamps connecting the rails on the bottom tube of the Flydeck beams

SETUP

- Tarpaulin connection via double Velcro layers
- The tarpaulins slide inside special aluminium rails positioned around the entire perimeter of the cleaning area
- The Bluesky system is completely below the Flydeck worktop level
- System available for beams h=25 cm.

INFILL LEDGER FOR DECK COMPENSATION

When a gap of 1 m or less remains between the Flydeck platform and the pier, the procedure is as follows:

- Attachment of two eyelet anchors on the pier
- Clamp the infill ledgers on one side in the eyelet using the wedge clamp and, on the other side, rest them on the Flydeck platform
- Lay the decks on the infill ledgers and block them with deck holder

For clearances up to max. L=100 cm
Infill ledger L=115 cm
Infill ledger for U-profile attachment decks



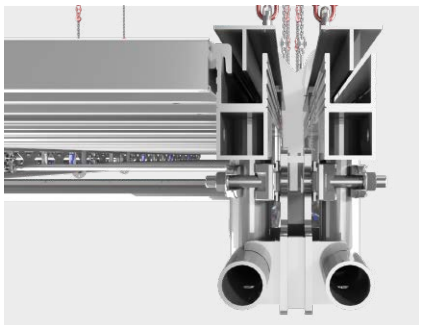


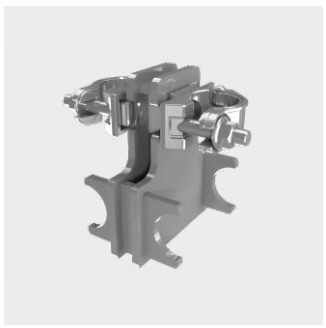
BEAMS DOUBLING

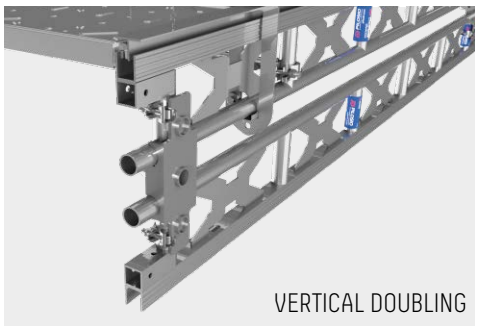
In special cases, to increase the load-bearing capacity of Flydeck suspended platform or to solve the difficulty of large distances between suspension points, special accessories can be used to double the beams. In this way, two or four beams work together, increasing the load capacity.
The elements connect the vertical uprights of all h=25 cm beams by means of a coupler.



HORIZONTAL DOUBLING

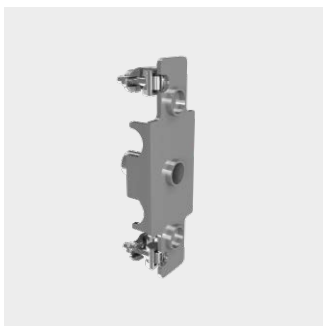






VERTICAL DOUBLING



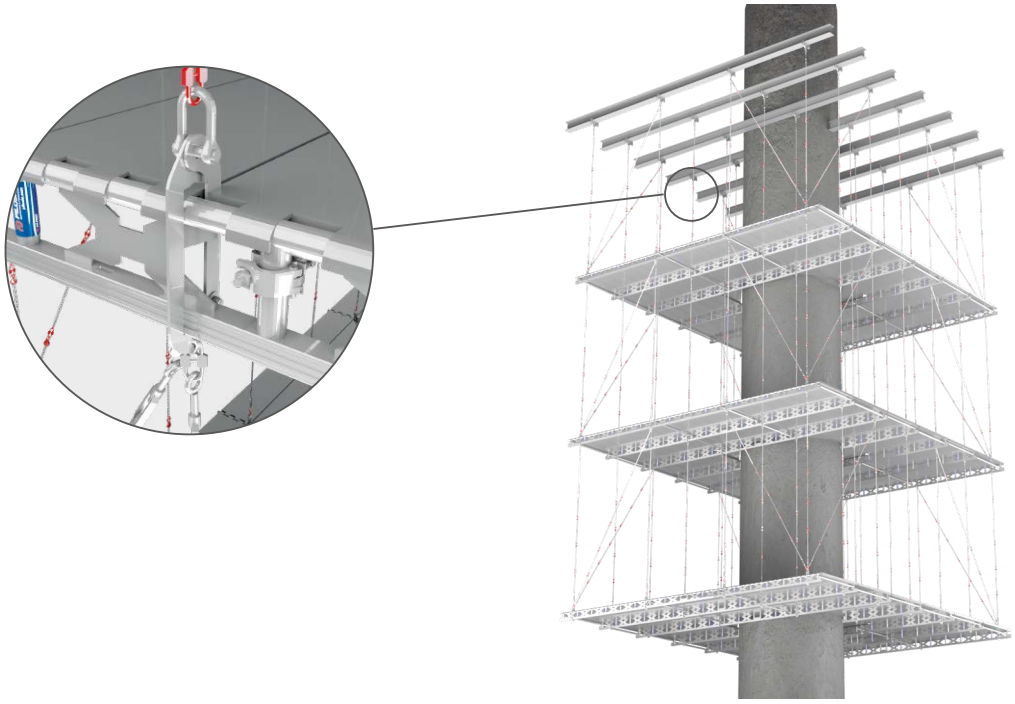


GUARANTEED LOAD CAPACITY (WITH STEEL DECKS L=200 CM)

- Single beam: 1.5 kN/m^2 with chains every 6 m^2
- Single beam: 3.0 kN/m^2 with chains every 4 m^2
- Double beams: 1.5 kN/m^2 with chains every 12 m^2
- Quadrupled beams: 0.75 kN/m^2 with chains every 24 m^2

MULTI-PLATFORM

The special pincer support for chain also allows the creation of one Flydeck platform on top of the other for maintenance on different levels.



MOVING A FLYDECK PLATFORM

Sometimes, for various reasons, it is necessary to move a complete Flydeck platform, just part of it, or even a multi-storey Flydeck for working at different heights without having to disassemble and reassemble the structure, or quickly lift the platform to secure it.
Pilosio offers a complete range of motors with load capacities from 200 kg up to 2000 kg that are operated via a controller that operates several motors simultaneously.
To move only a portion of the Flydeck, use the special beam quick release connections.
During handling, be sure to secure both platform, the fixed and the motorised one.

NB: The customer must calculate the type of motors to be used, their position, and load capacity according to the type of handling to be performed.

The average weight of a Flydeck structure without guardrails is 22/24 kg/m^2.
Other models are available.



XForce Hoist 2000 D8 Plus – 4m/min
Plus model that keeps the load suspended without the need for a security chain



4 e 8 channels Motor Controller
To operate the various motors from one location

BEAMS FOR OTHER PURPOSES

O/O BEAM FOR BUILDING RENOVATION AND CONSTRUCTION

The innovative 25 cm aluminium Flydeck beam's advantages of lightness, assembly speed, and great manoeuvrability can also be very useful in the building sector, especially in restoration work to create worktops under vaults, domes, and ceilings in general.
The ø 48.3 mm tubes of the beam make it compatible with any scaffolding system on the market.
The beams are joined using spigots and spring pins as for the U-beam.





U/O BEAM FOR WOODEN WORKTOPS

25 cm or 45 cm aluminium beams with a U-profile on top are suitable for housing a solid wood batten onto which a plank floor can be nailed for the construction of wooden plank floors.
The beams are connected with spigots and pins as for the others.
The beams can also be supplied with the wooden batten.



CHARACTERISTICS OF O/O AND U/O BEAMS

- Aluminium alloy with high mechanical properties
- ø 48.3 mm chords and uprights
- Seven lengths available: 1.0 m, 1.5 m, 2.0 m, 3.0 m, 4.0 m, 5.0 m, 6.0 m

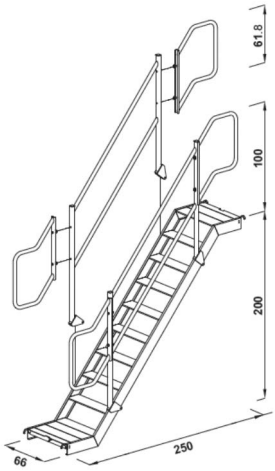
SET-UP - STARTING PHASES

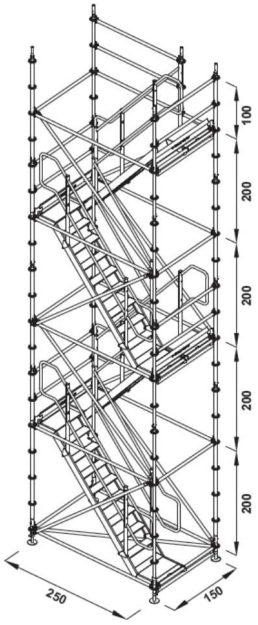
MP TOWER STAIRCASE

The Pilosio range offers a convenient MP tower staircase to be anchored to the pier of the bridge or viaduct to easily and safely reach the working height from the ground. The staircase consists of MP scaffolding elements, with a 250x200 cm aluminium ramp and 60 cm passage width. The lightness of the stair ramp and the removable handrails facilitate assembly and transport. Any height can be reached.

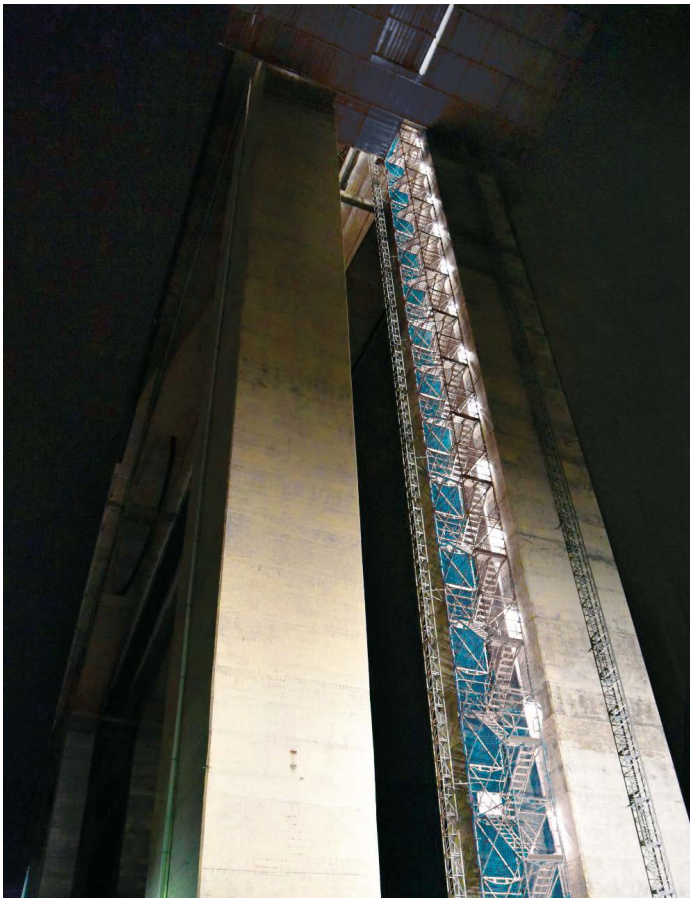
SPECIFICATIONS

- Tower footprint 250x150 cm
- Aluminium ramp H 200 cm
- Passage width: 60 cm
- Steel guardrails

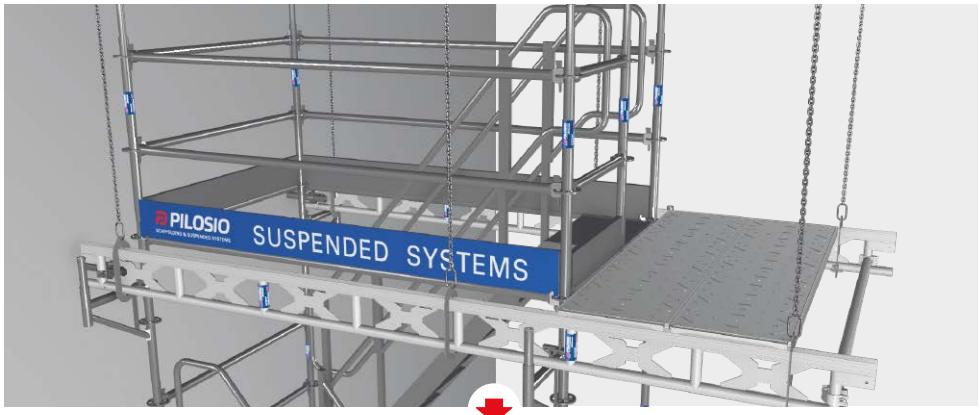


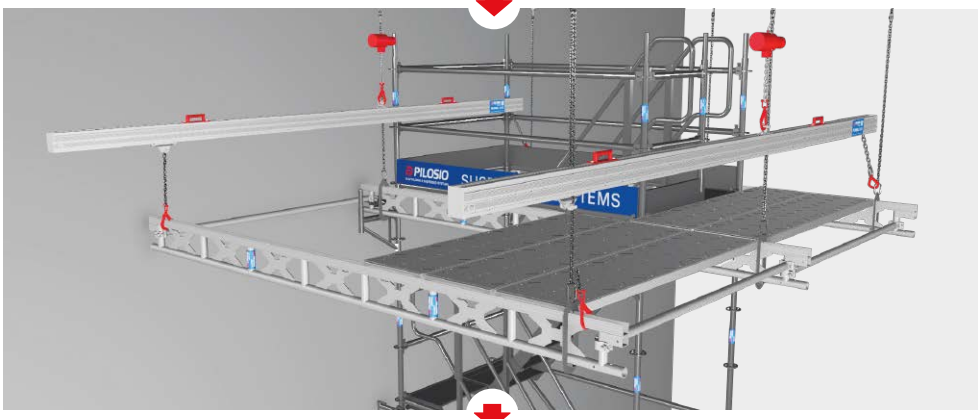




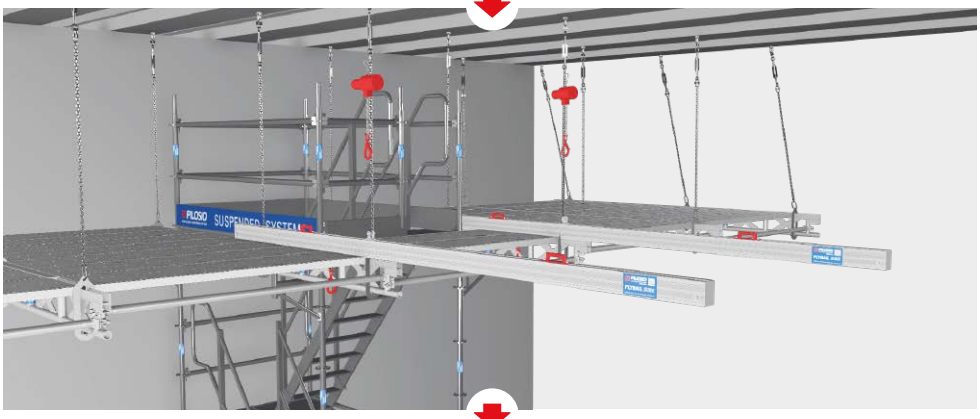


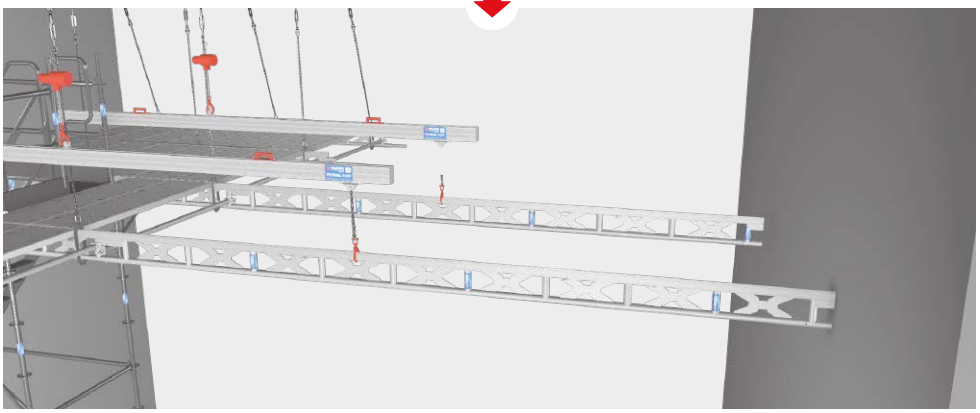
STARTING PHASES
STARTING FROM THE GROUND





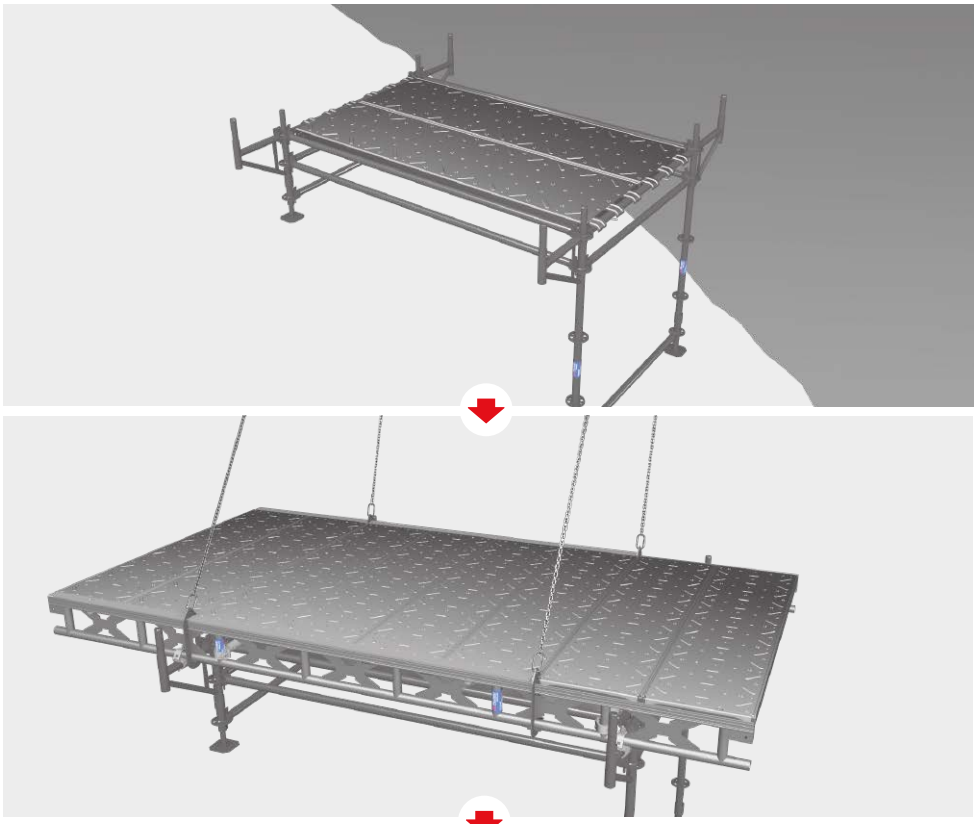
Having reached the desired height with the tower staircase anchored to the pier, create a Flydeck first platform with four brackets, two h=25 cm L=400 cm beams, and two 50 cm decks and suspend with four chains.



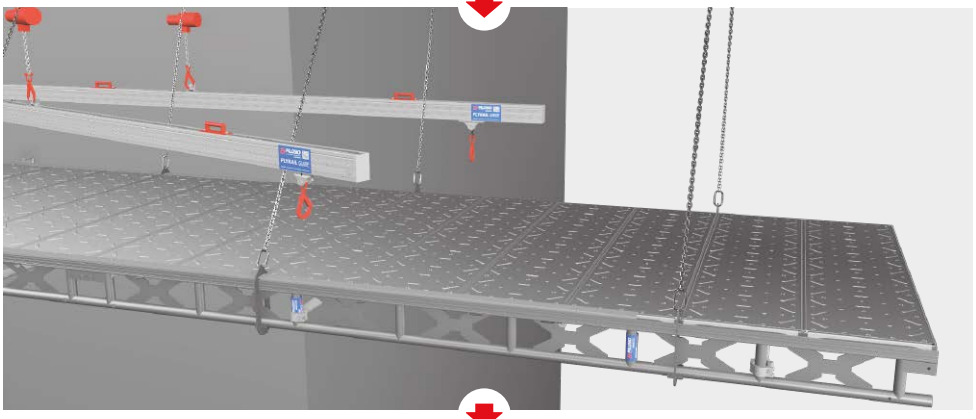


Using a pair of Flyrail guides placed crosswise (see next page), start creating the Flydeck platform parallel to the pier until the required width is reached. With longitudinal Flyrail guides (see next page) and L=600 cm beams, continue mounting the Flydeck longitudinally

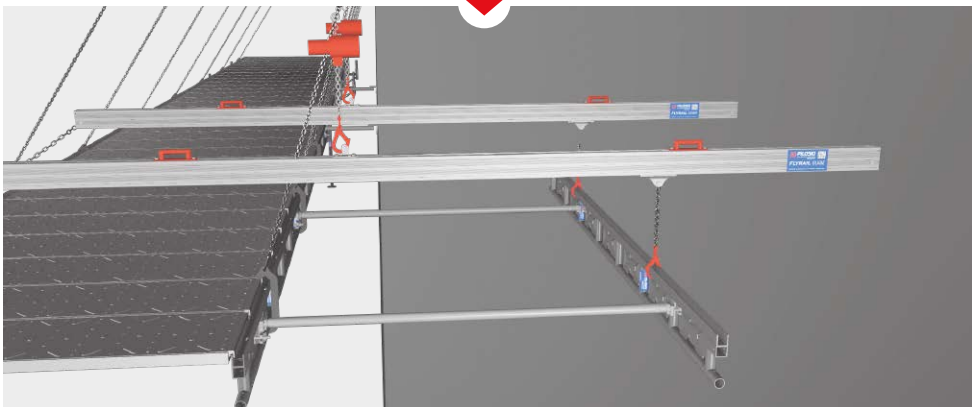
STARTING PHASES
FROM THE ABUTMENT



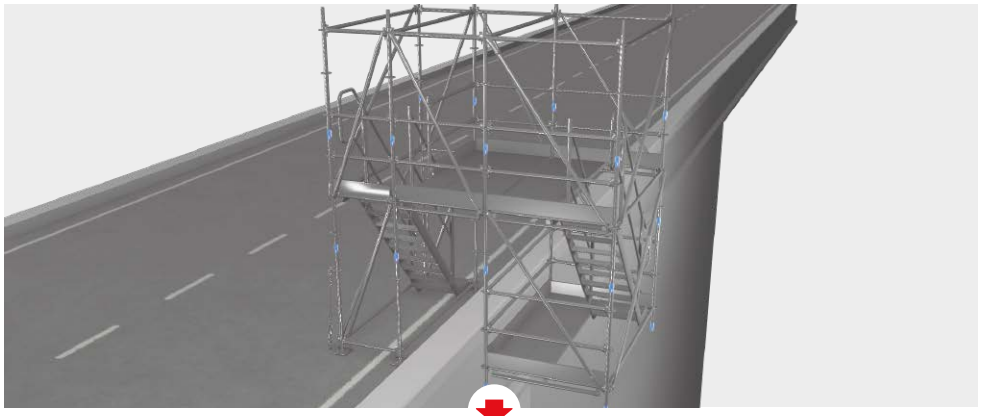
Solidly mount a scaffolding of approximately 115x250 cm on the abutment at the required working height and create a first Flydeck platform with four brackets and two h=25 cm L=400 cm beams anchoring it to the intrados with four chains.

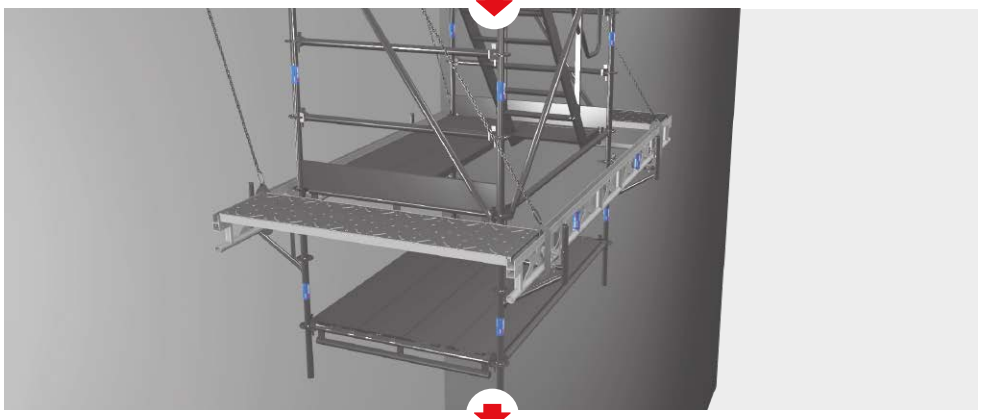


With a pair of longitudinal Flyrail guides, create a cantilevered Flydeck platform up to the abutment. Continue with transverse assembly (see next page) until the final width of the suspended platform is achieved, and then continue in the direction of the span with the longitudinal Flyrail guides.

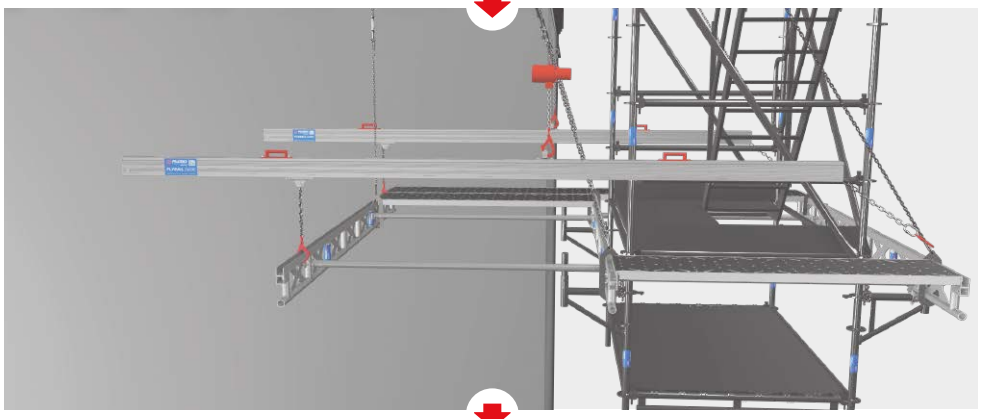


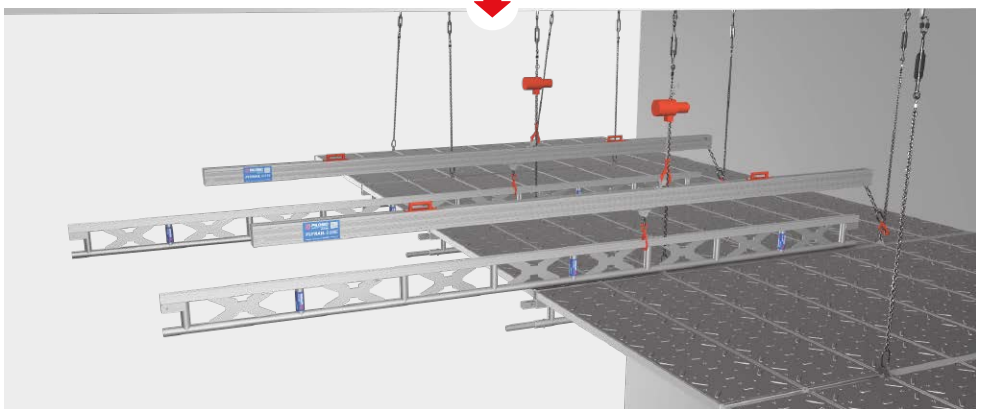
STARTING PHASES
STARTING FROM ABOVE





When access from the abutment or the ground is not possible, create an MP staircase tower anchored to the road surface, cantilever out, and descend to the desired height. Set up the first platform with four brackets, two h=25 cm L=400 cm Flydeck beams, and anchor to the underneath of the bridge with four chains.

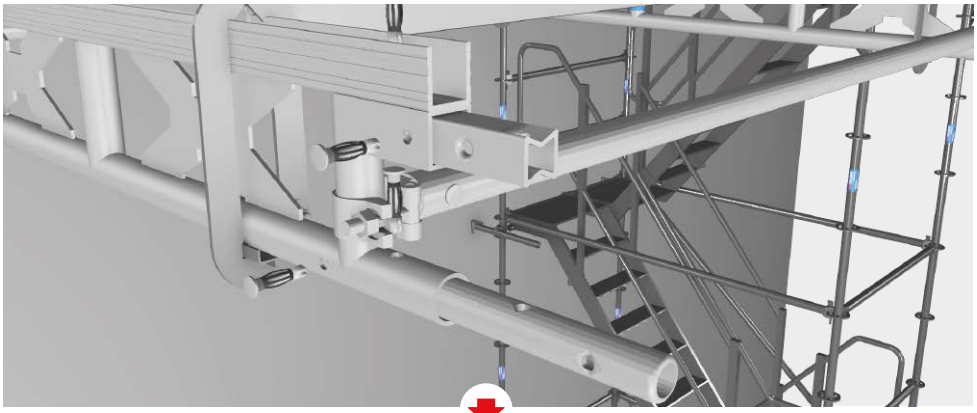




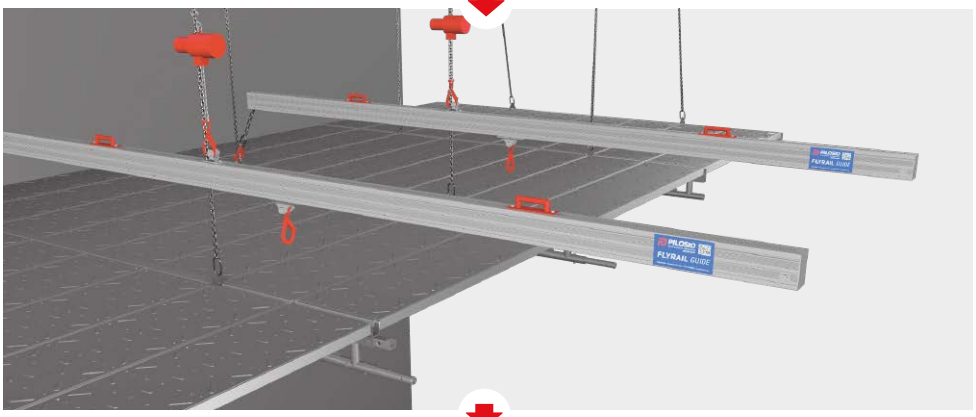
Using a pair of Flyrail guides placed transversally, begin to set up a Flydeck platform parallel to the pier. Once the required width has been reached, continue assembling the Flydeck with the longitudinal Flyrail guides and L=600 cm beams.

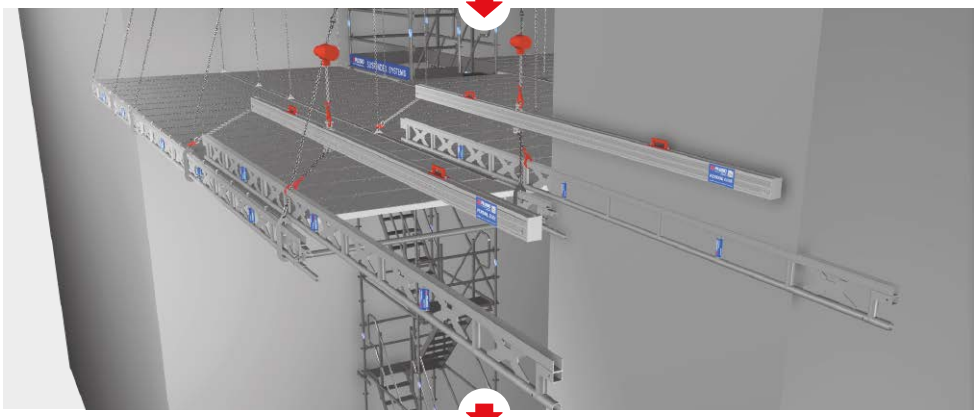
ADVANCEMENT

LONGITUDINAL ADVANCEMENT

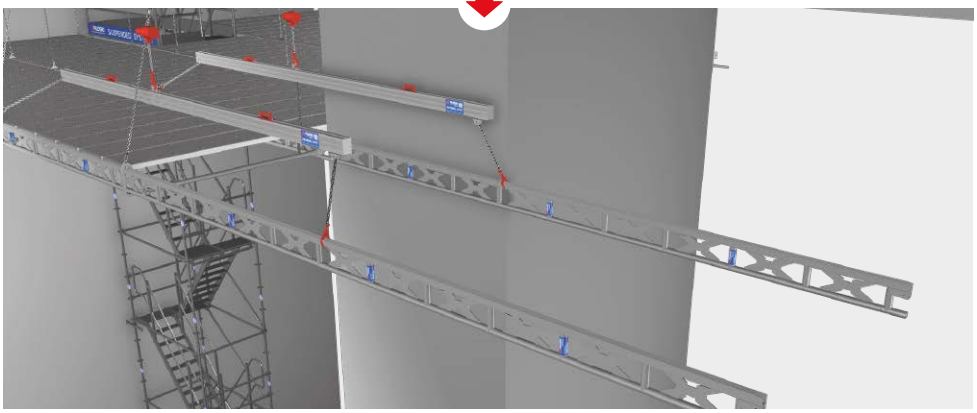


Standing on the anchored platform, secure the two spigots on the heads of the beams with two spring pins each. Position the pair of Flyrail guides. Attach the sliding carriage to the h=25 cm L=600 cm beam near the 5th vertical upright.



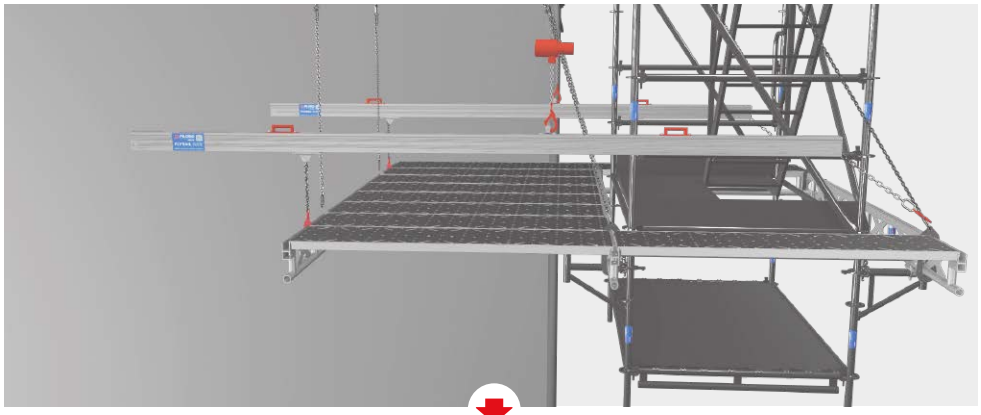


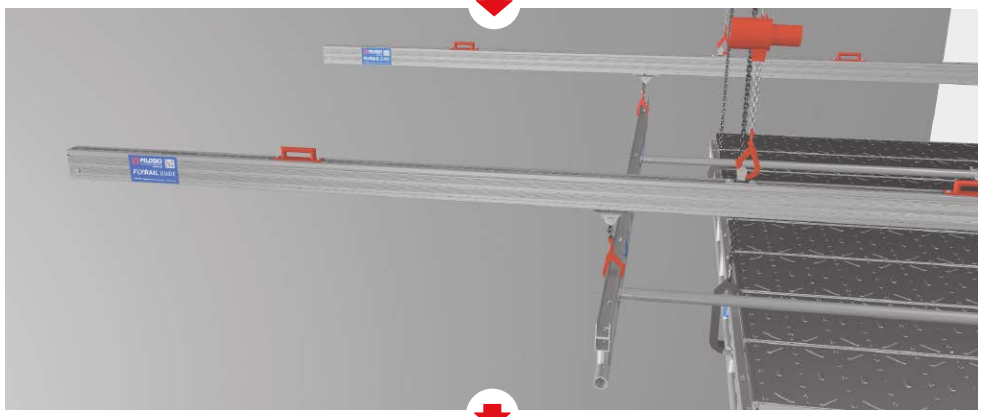
Drive and push the cantilever beam, lower it with the hand control to align it with the existing beam and connect it with four pins to the spigots. Attach and tension the safety chain. Do the same with the second beam. Lay the 50 cm decks with the deck holder, anchor with two chains 3 m away from the previous chain and attach the bay brace.



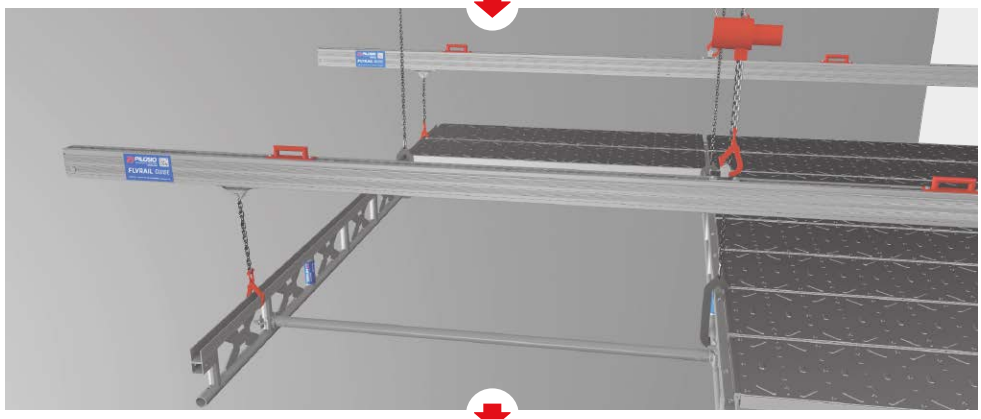
ADVANCEMENT

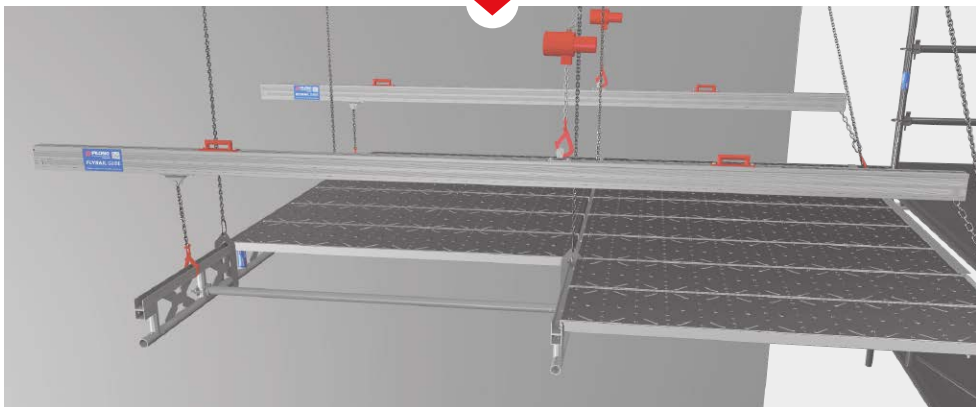
TRANSVERSE ADVANCEMENT





Position the Flyrail pair transversely at 90° to the plane. Suspend the Flyrail guides on the intrados and secure them with the rear anti-tip chain. Prepare a Flydeck beam and attach the bay braces to the ends of the beam.



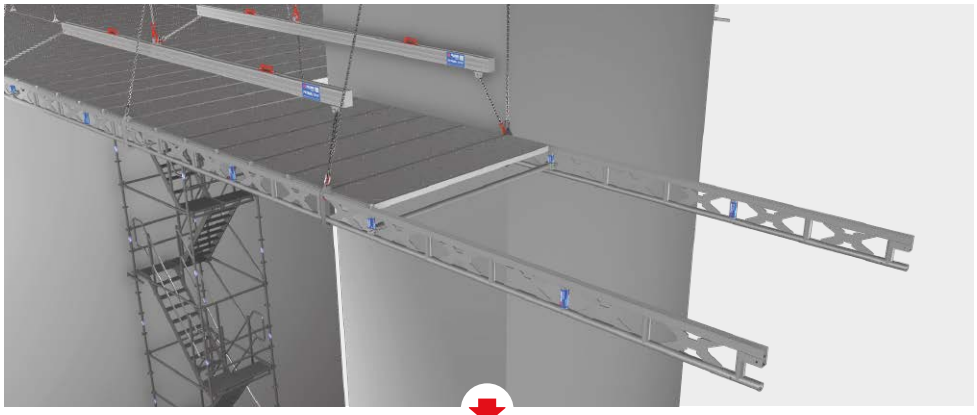


Suspend the beam with the sliding carriages of the Flyrail. Overhang the beam with the bay braces. Attach the bay braces to the existing beam. Tension the safety chains. Position the first two decks. Drill the concrete to suspend the first chain.

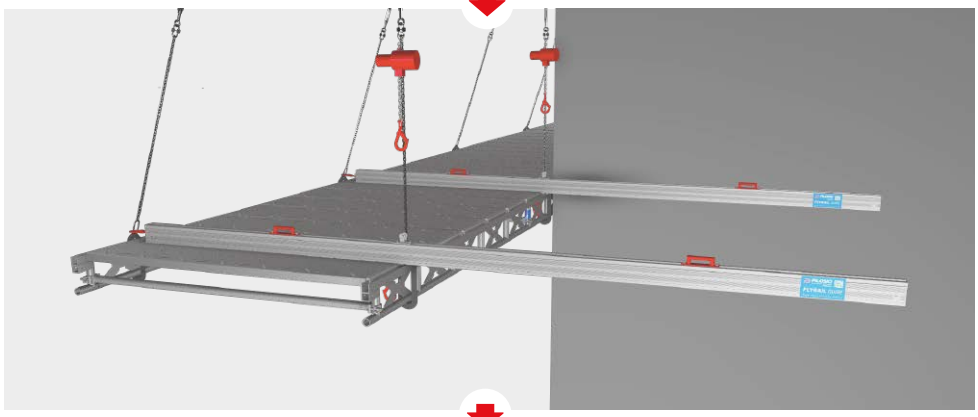
Continue with the other decks, drill, and attach the second chain. Unhook the two Flyrails and continue setting up the Flydeck in the chosen direction.

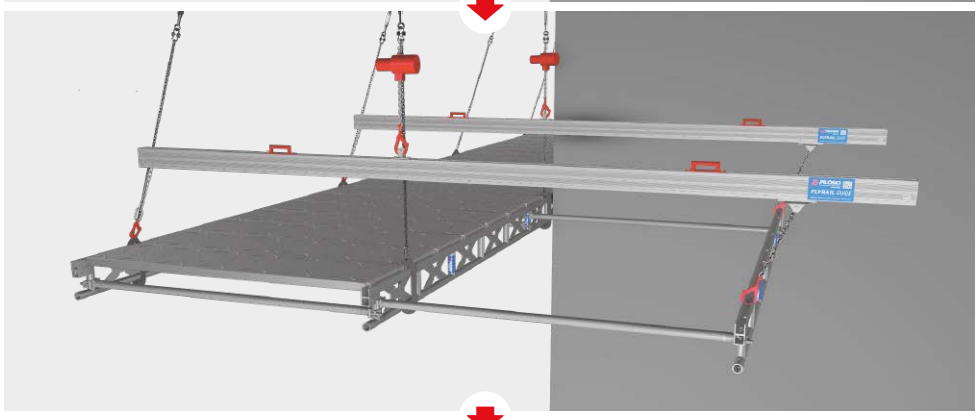
SET-UP

GOING BEYOND A PIER OR OBSTACLE

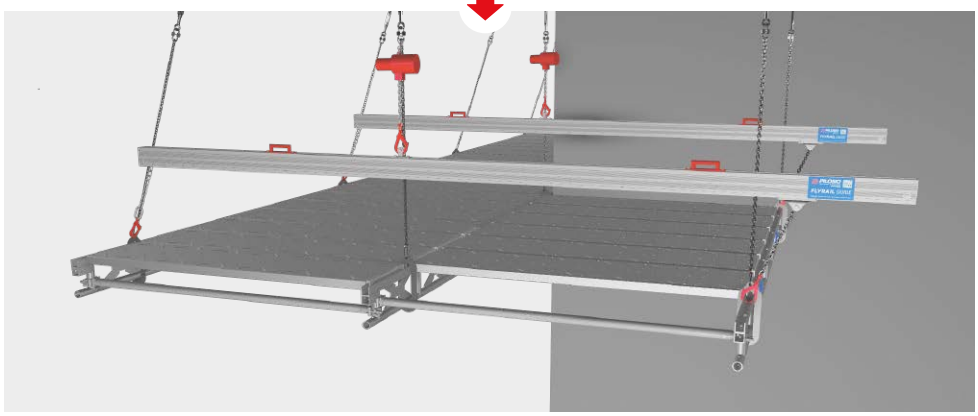


Continue with a platform parallel to the pier until you cross it. Turn the two Flyrail guides by 90° and engage them to continue crosswise. Using the two sliding carriage, attach the beam and fasten the L=200 cm bay braces to the ends of the beam.

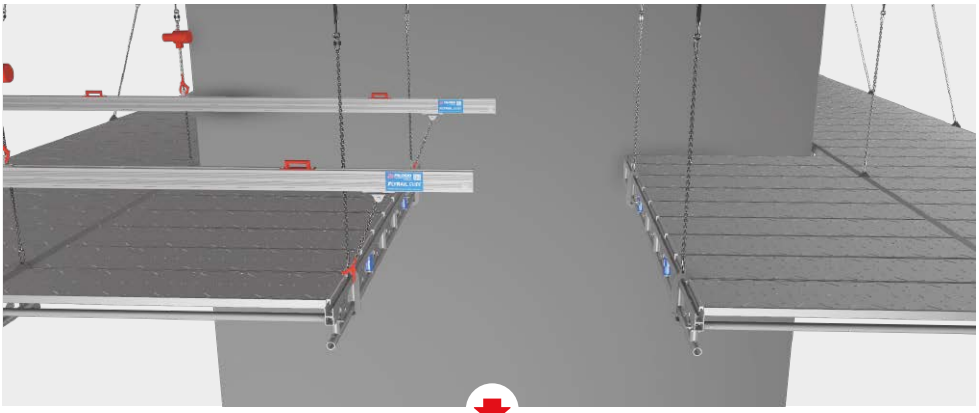


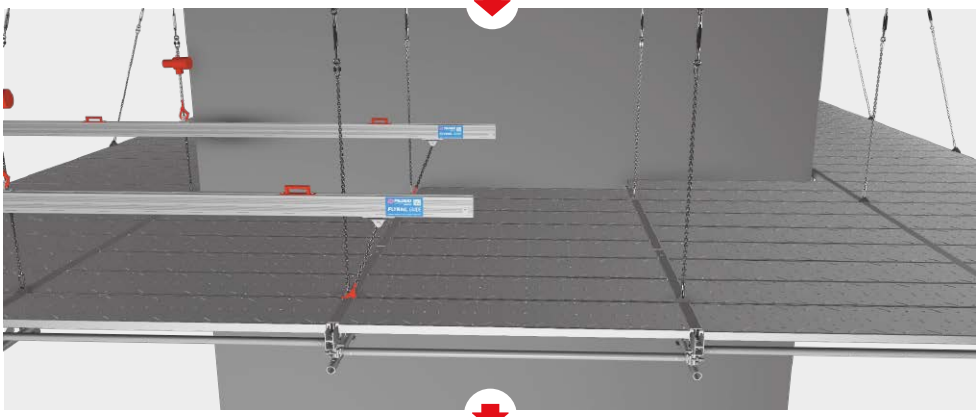


Overhang the beam by means of the bay braces. Attach the two bay braces to the existing beam. Lay the first two steel decks and suspend the beam with the first chain. Continue with the other planks and suspend with the second chain.

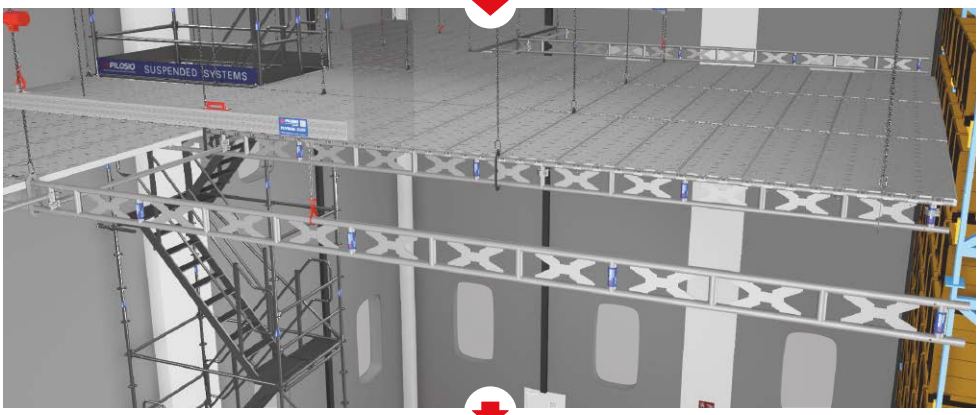


SET-UP
GOING BEYOND A PIER OR OBSTACLE





Continue transversely in the same way around the obstacle. Then, continue in the new span to the next pier in longitudinal with L=600 cm beams.





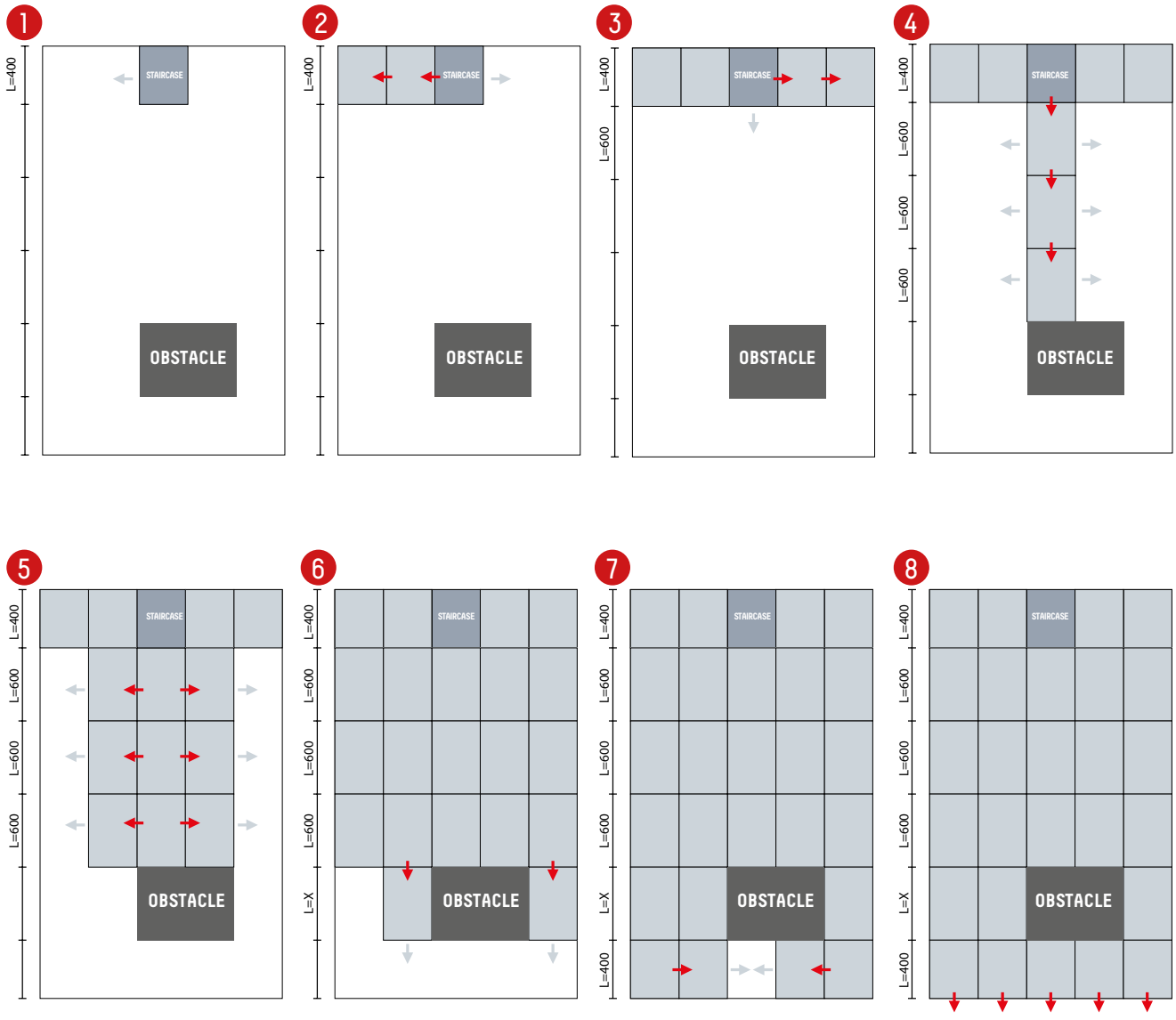
The longitudinal advancement with Flydeck L= 600 cm beams allows to proceed very quickly.
The suspended floor is completed with guardrails on all free sides or scaffolding for working on the edge beams, safety netting, and, if necessary, the Bluesky system for collecting water and residues from cleaning with jets and sandblasters.

HOW TO POSITION THE PAIR OF FLYRAIL GUIDES

Standing on the anchored platform, hook the hoist to the last suspension chain of the Flydeck platform.
Attach the rear anti-tip chain to the penultimate pincer support. Using the hand control, adjust the Flyrail guide height to 70 cm from the Flydeck floor.
As soon as the beams are connected to the existing ones, tension the safety chain before starting to lay the decks.

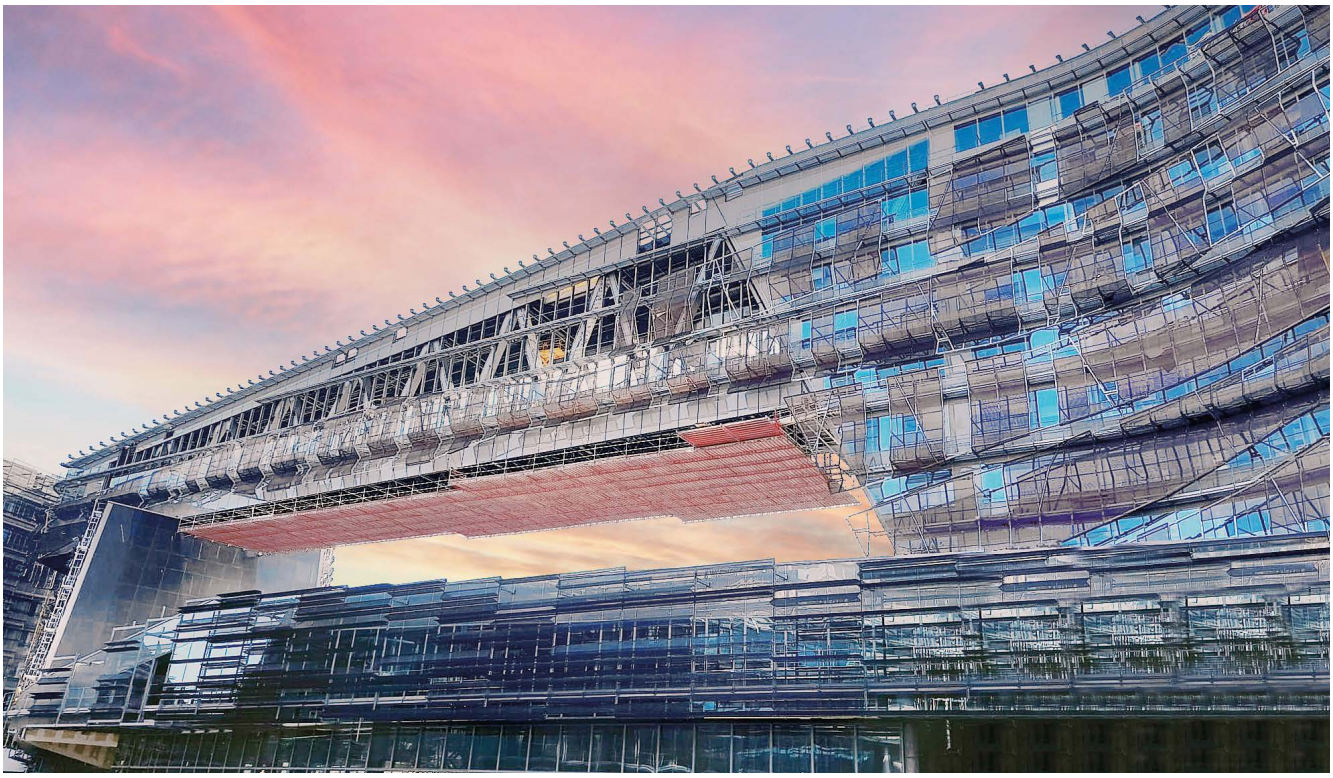
STANDARD WAY OF ASSEMBLY

A standard way of assembly uses 25 cm L=400/600 cm aluminium beams, which guarantees the installation of 200 m² with three workers per day.



CONSTRUCTION SITES









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