

LIRIA

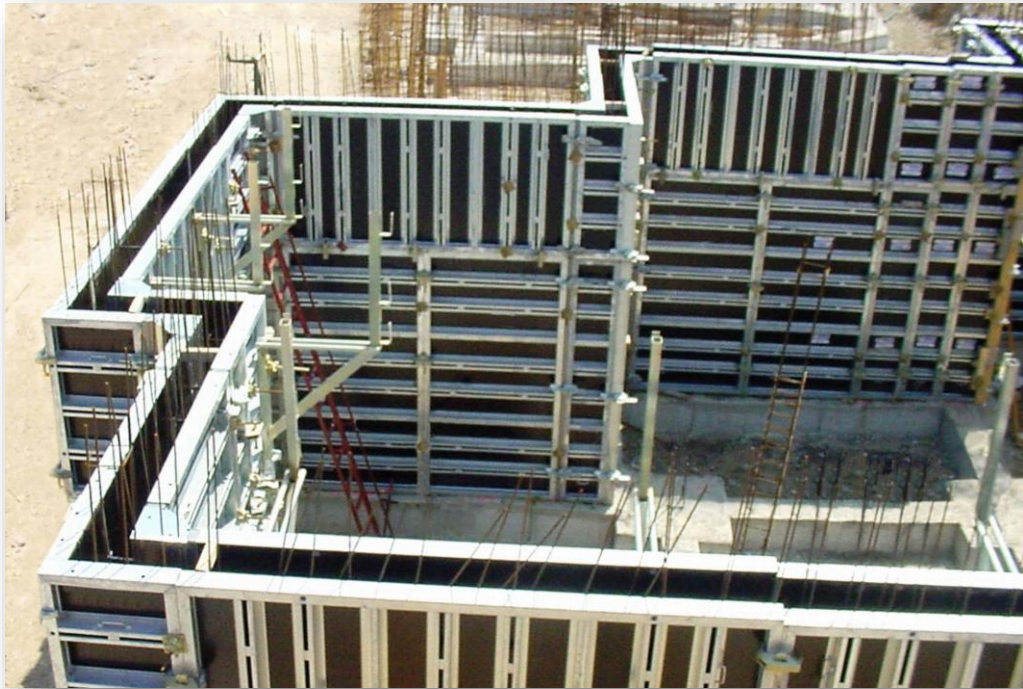
Wall Formwork



v.20250114

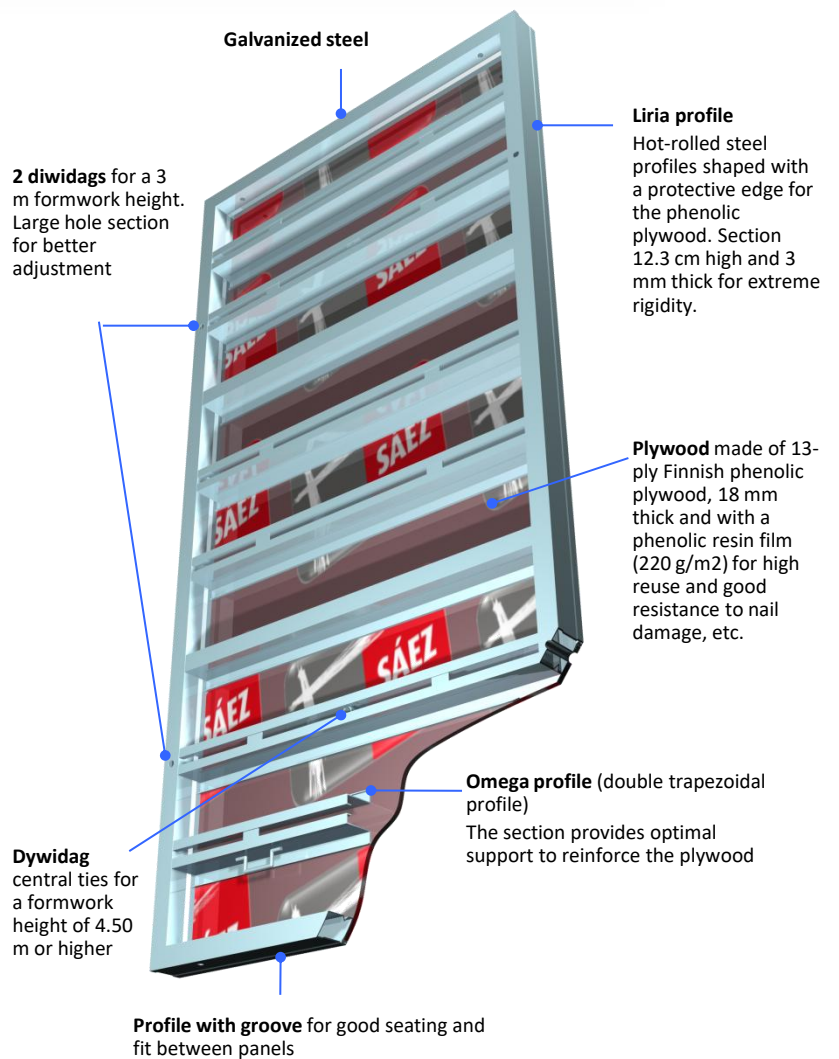
SAEZ FORMWORKS, S.L.
B75465989

CTRA. DE BENIAJAN, 10
30570 MURCIA



FEATURES

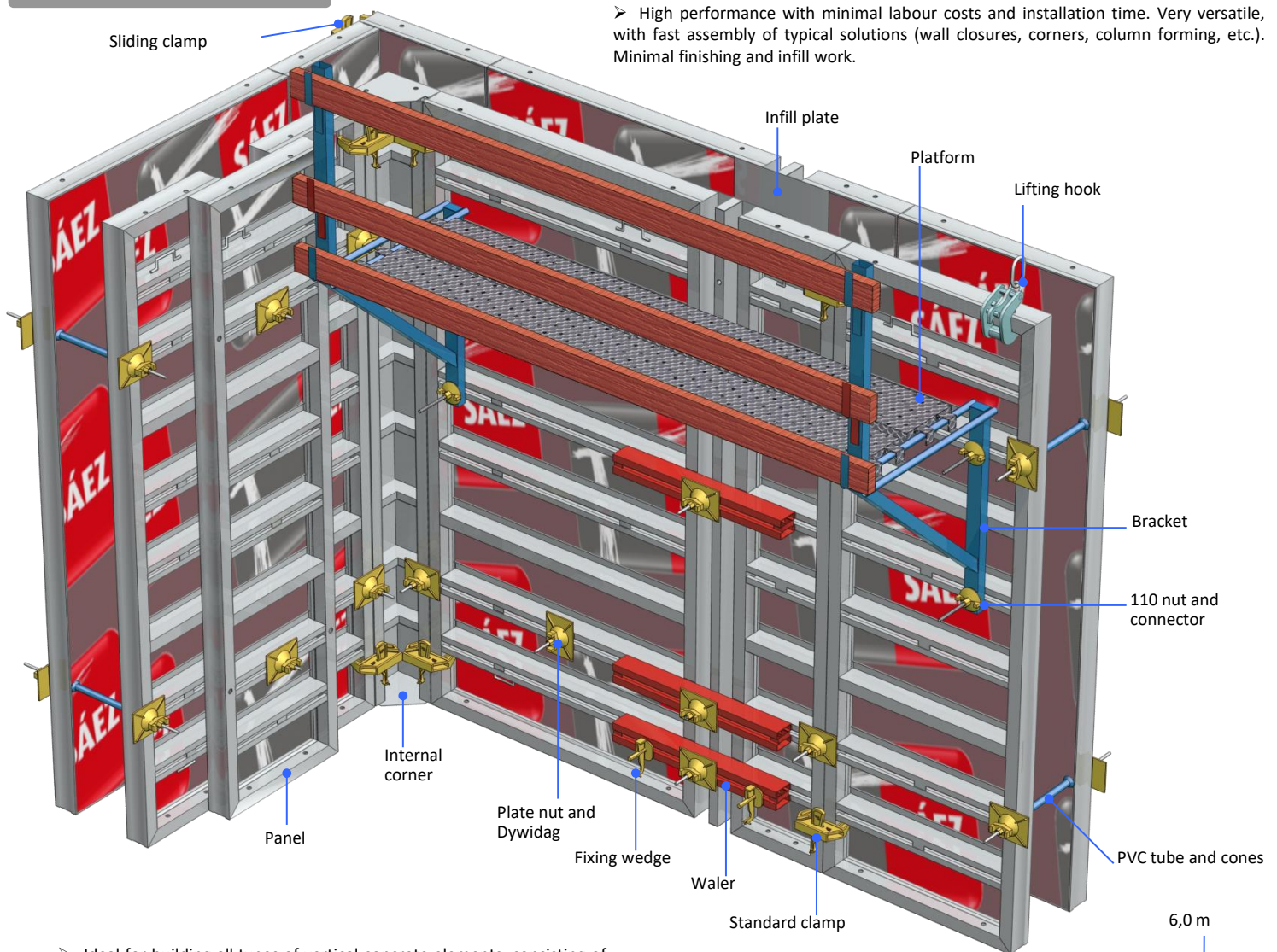
- Frames of **galvanized steel**; providing a long service life.
- Profiles designed to **withstand high loads** of torsion.
- Load capacity up to **70 KN/m²**.
- **Protected phenolic plywood** at its edges by the steel frame.
- **Robust board** 18 mm plywood.
- Panel holes protected by **sleeved tubes**.
- Possibility of using 20 mm Dywidag bars.
- Working bracket attachment in different positions.
- **Considerable reduction in accessories** thanks to the 3000x1500 modulation.
- The system logic considerably reduces timber infills.
- Easy attachment of accessories to the integrated fixing system.
- Infills up to 10 cm with sliding clamp.
- Infills up to 35 cm with infill panel.
- Corner solutions for all wall thicknesses.



VERTICAL FORMWORK

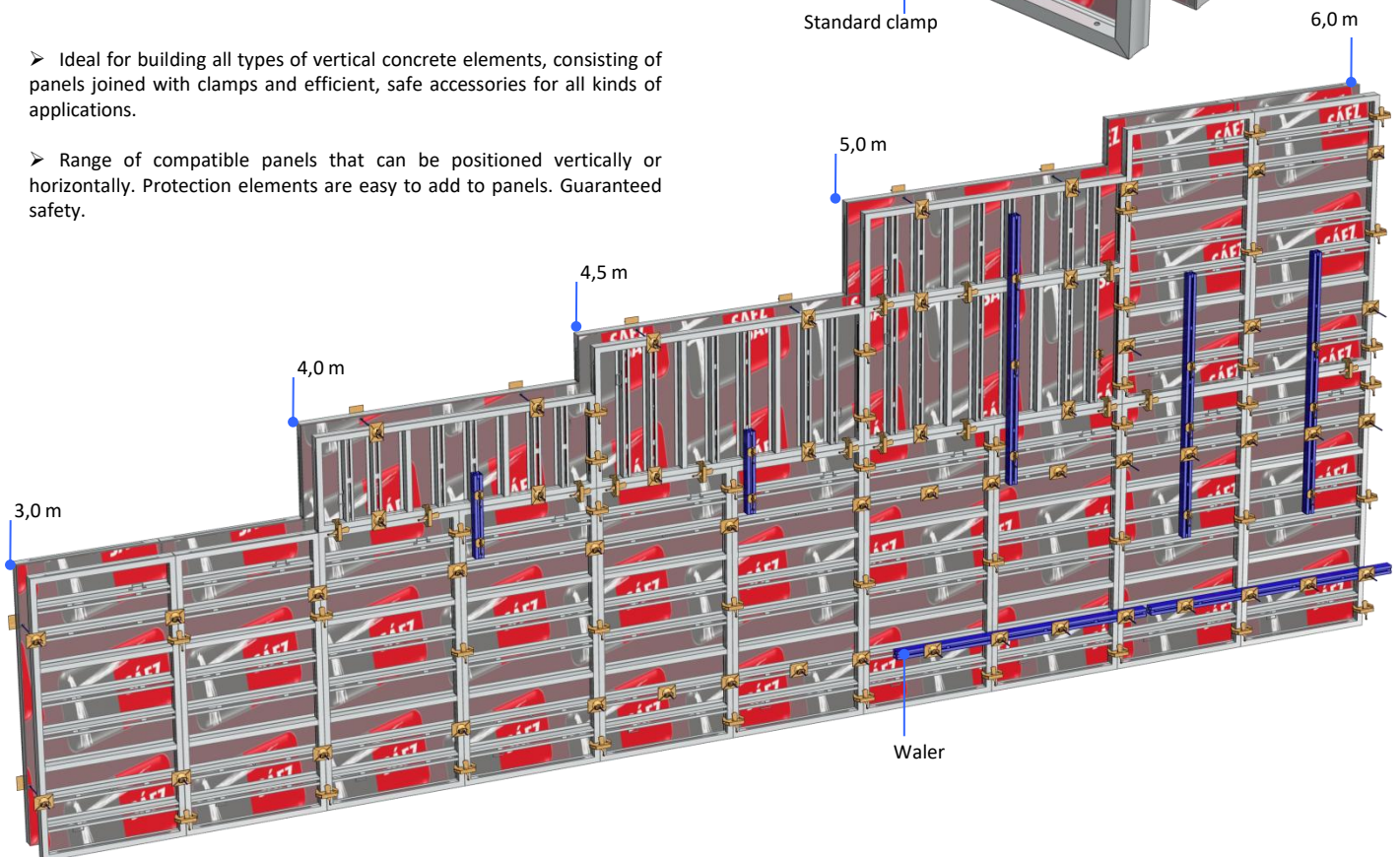
Liria wall system system description

Double-sided wall



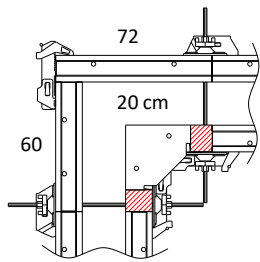
➤ Ideal for building all types of vertical concrete elements, consisting of panels joined with clamps and efficient, safe accessories for all kinds of applications.

➤ Range of compatible panels that can be positioned vertically or horizontally. Protection elements are easy to add to panels. Guaranteed safety.

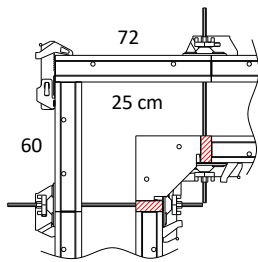


Corner Formation

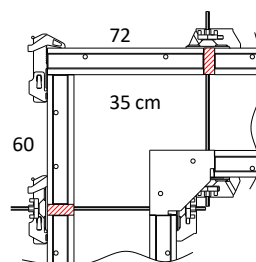
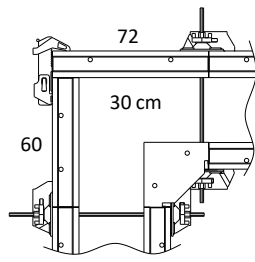
* Sliding clamps on external corners, every 75 cm in height



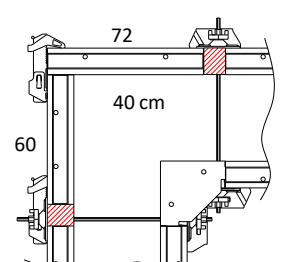
Infills
internas : 10 cm



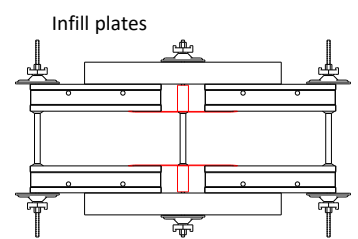
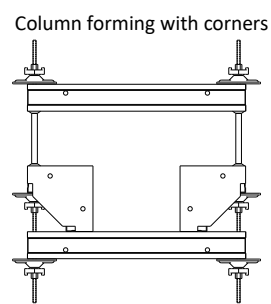
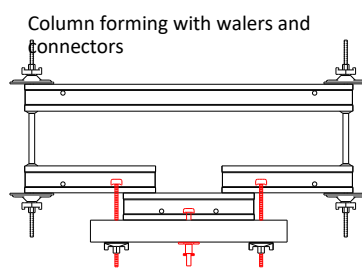
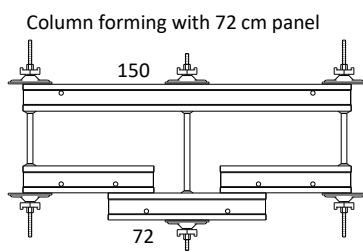
Infills
internas : 5 cm



Infills
externas : 5 cm



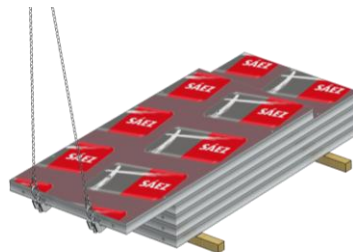
Infills
externas : 10 cm



Assembly del wall

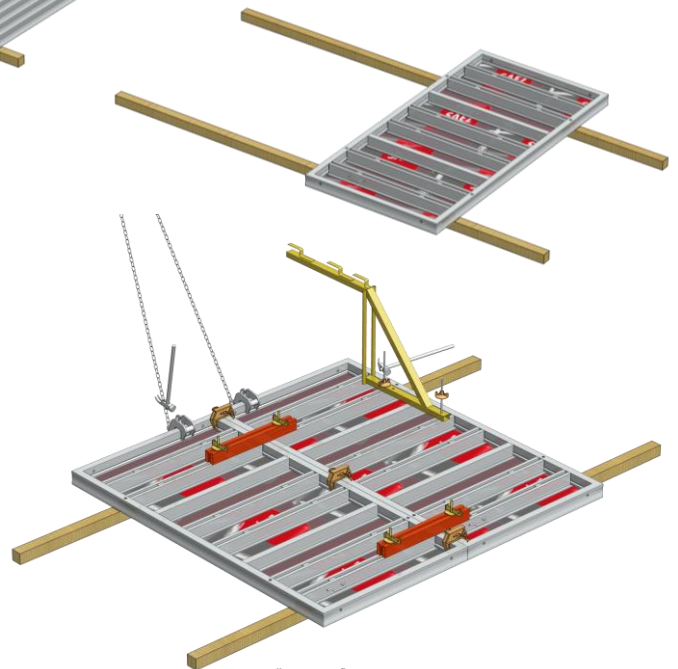
1

- Rest the formwork panels on sleepers with the metal frame facing up.



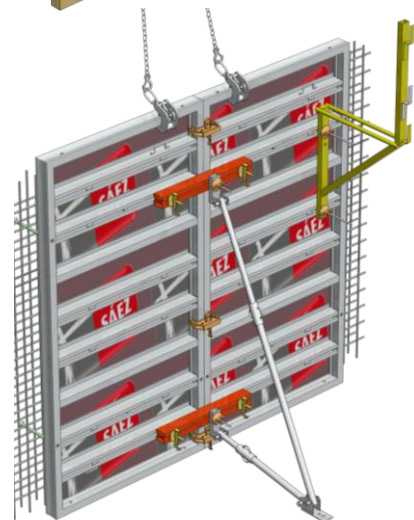
2

- Join the panels with the clamps. As far as possible, install the accessories needed for the wall from ground level.



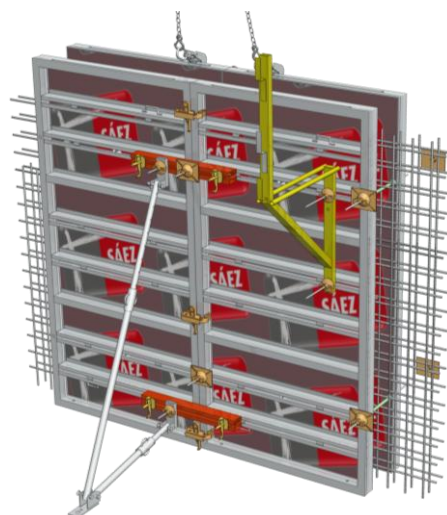
3

- Attach the lifting hooks. Lift it to the final position. Anchor the assembly with the stabilizer.



4

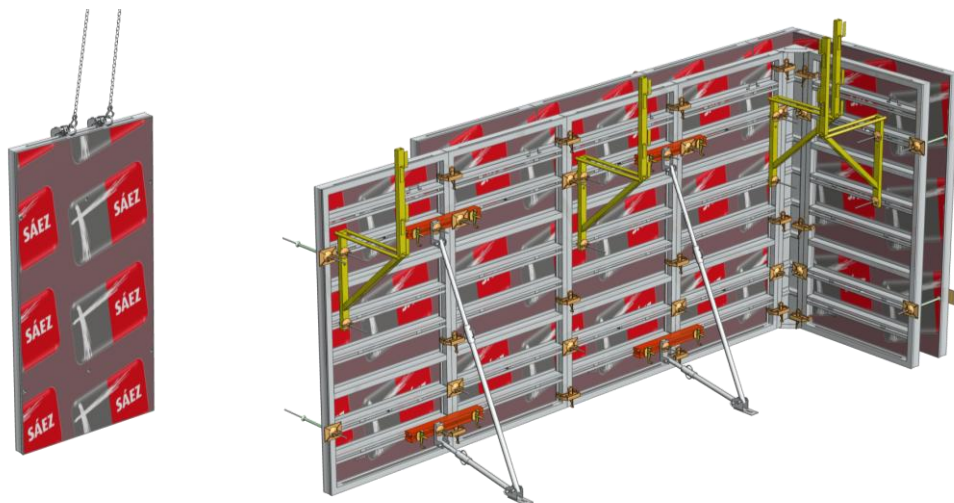
- Repeat the assembly process with the panel assembly on the opposite face. Place the Dywidags and fix them with the nuts.



Assembly del wall

5

- Repeat the process with the remaining panel assemblies until the wall is formed.



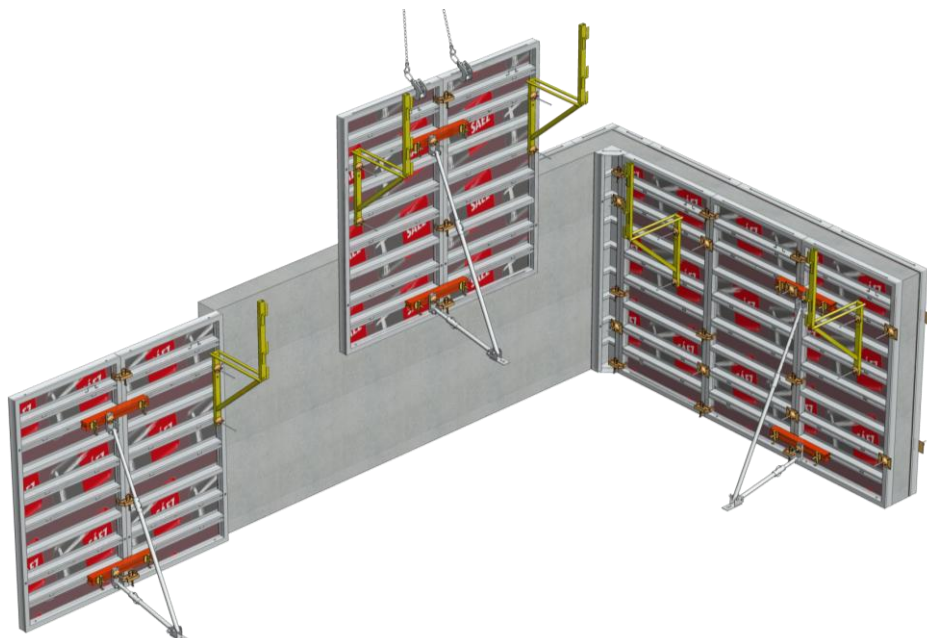
6

- Place the guardrails and side closures. Place the working platforms. Proceed to pour concrete.



7

- For dismantling, remove loose parts.
- Move panel assemblies.
- Clean the surface phenolic of concrete residue and spray with release agent.
- Start the formwork process or store.





Support Frames

SINGLE-SIDED WALL. FEATURES

- Structures designed to withstand concrete pressure in single-sided walls.
- Various combinations possible according to wall height
- Compatible with all Gruas Saez wall formwork systems.
- Delta Frames: for walls up to 3 m high.
- Stabilizing Frames: for walls up to 4 m high.
- Support Frames: for walls up to 8.4 m high.
- The frame structures can be moved together with the formwork panels for subsequent pours.
- Fast and easy attachment to panels using connectors.
- Fixing to the concrete footing using lost anchors or recoverable anchors.
- Delta Frames can also be anchored to the footing using resin and rod inserted into the footing.
- Concrete pressure is transferred to these anchors and through the support of the structures on the footing.

Delta Frames



Fixing with dead anchors



Fixing with recoverable anchors



Fixing with rod and resin



VERTICAL FORMWORK

Liria wall system
single-sided wall features



Support Frames



Delta frame	101 kg
Support frame assembly 3.50 m	375 kg
Support frame assembly 6.00 m	670 Kg
Support frame assembly 8.40 m	1160 kg
Support anchoring beam 280	127 kg
Delta anchoring beam 280	60 Kg
Dead anchor	1,6 kg
Anchor head	3 kg
Anchor recuperab. M36	4,3 kg
Dywidag d20	2,6 kg
Nut 130 d20	1,3 kg



TC 1500 prop	32 kg
TC 3500 prop	57 kg
3 m vertical waler	55 kg
2 m horizontal waler	30
Extension walers	40

Stabilizing Frames



VERTICAL FORMWORK

Liria wall system climbing wall features

CLIMBING FORMWORK

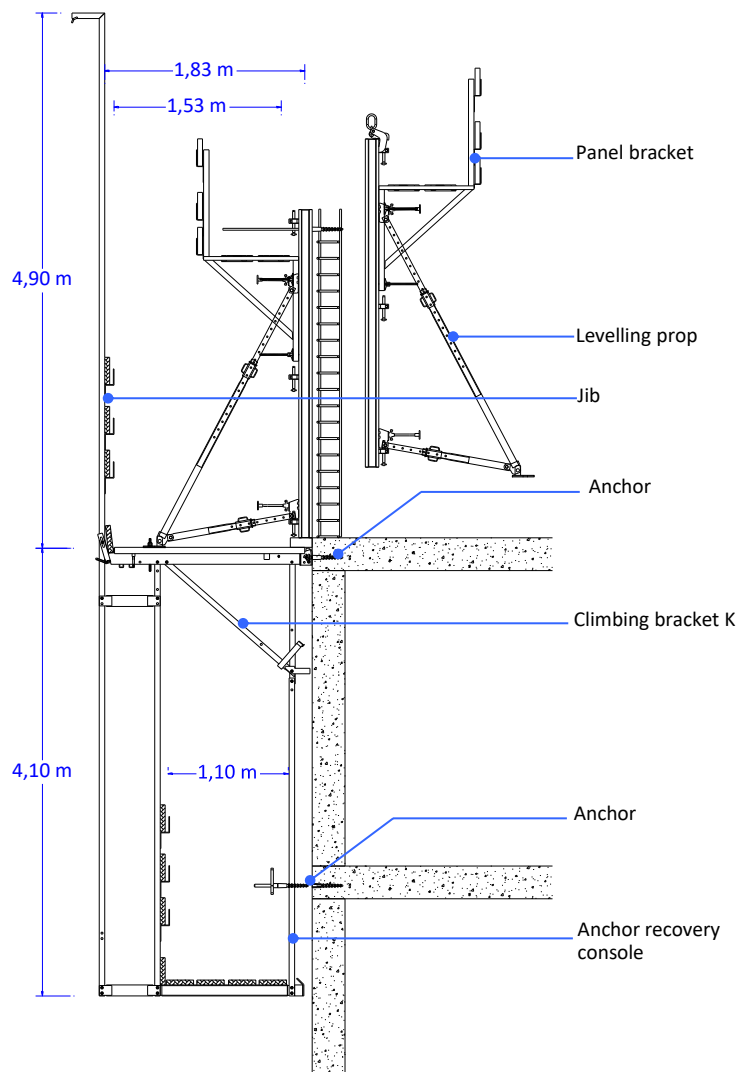
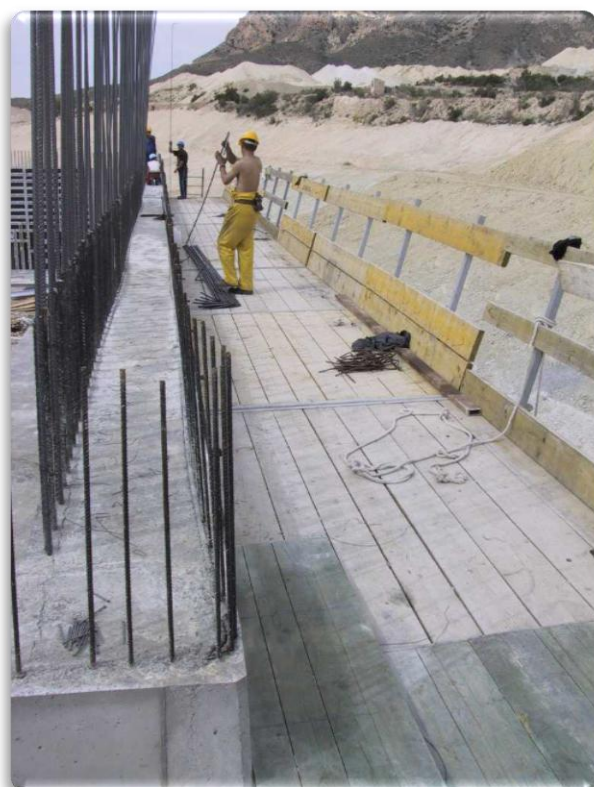
They are located around the building perimeter. **They are moved from one floor to another as the building rises.**

They function as **support** for the formwork and for subsequent tasks (closures or wall repairs).

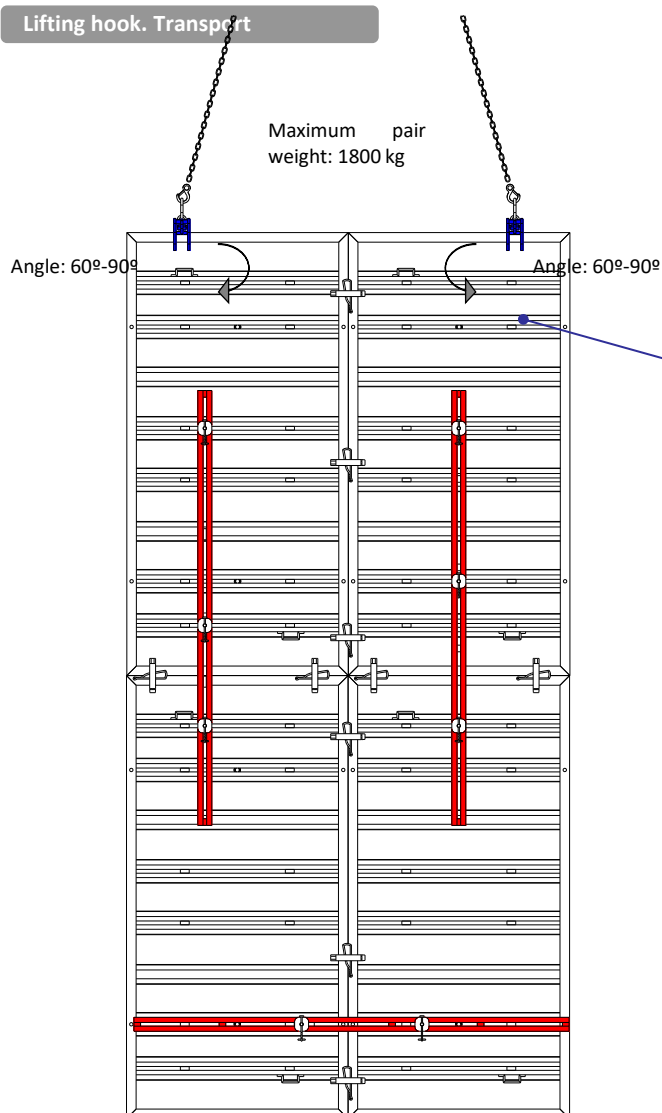
Lifting of the formwork independent of the platforms

FEATURES

- Application: Building construction.
- Platform width: 1.80 m.
- Platform length: 3.00 m
- Maximum formwork height: 4.50 m
- Load capacity class.
- Anchoring on wall or slab.
- Allows window openings to be bridged.
- Foldable working platform for transport
- Ensures safety for work at height



Lifting hook. Transport



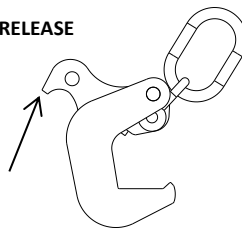
➤ The panels will be lifted with the hook Liria lifting hook. It allows large element assemblies to be moved safely.

Lifting hook

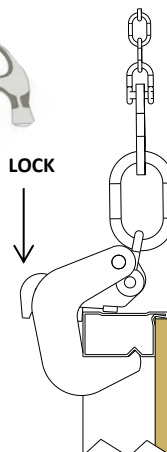
This element must be placed only on the perimeter profiles of the Liria panel. The spacing between hooks is important to ensure assembly stability.



RELEASE



LOCK



Visually check the connection between the hook and the frame profile. The handle must be closed.

Transport

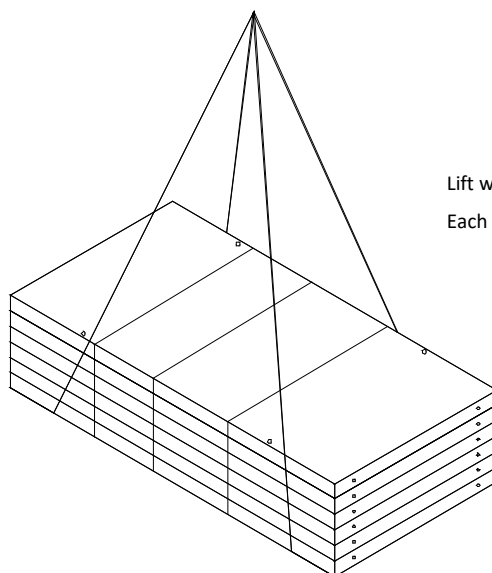
Precautions:

Weight not exceeding 1500 kg

Do not stack more than 10 panels.

For more than 5 panels, use intermediate timber.

Use at least 3 straps.

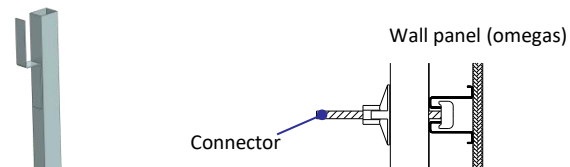


Lift with double slings.

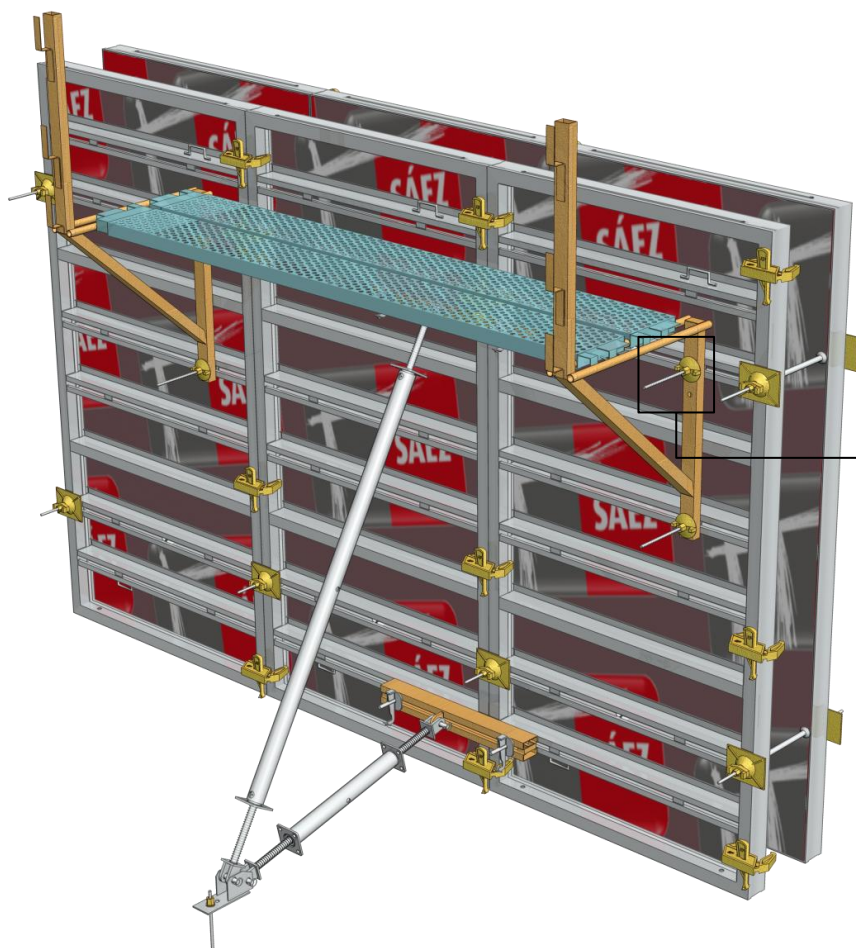
Each sling must be able to support 3000 kg.

Working bracket

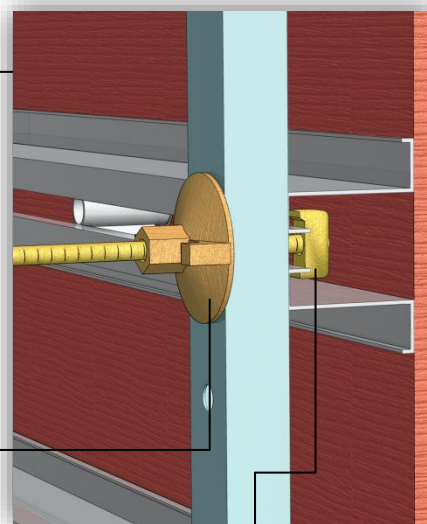
- When work cannot be carried out safely from the ground or from a structure, a suitable platform must always be provided.
- The brackets are temporary structures intended to support the working decks. The brackets have 2 parallel, spaced tubular elements to house the extendable arms of the decks.
- For safe work, each bracket must be installed with 2 connectors and 2 nuts.



The spacing between brackets must not exceed 3 m.
They must only be used on wall formwork designed for this purpose. Auxiliary elements and accessories such as props, ladders, etc. must be used if assembly stability is compromised.



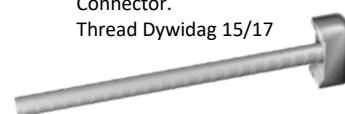
Working platform deck. Extendable
2.70 - 3.00 m.



Nut (110, 130, etc.)

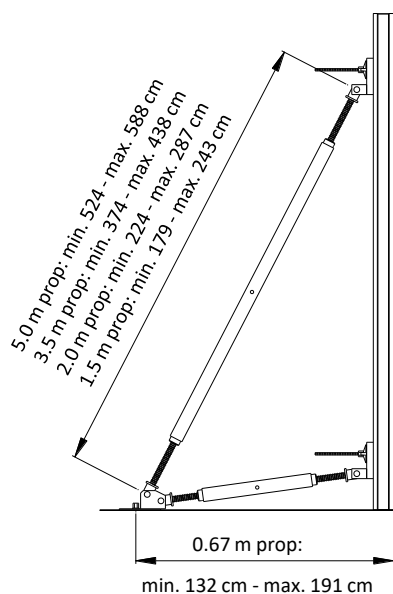


Connector.
Thread Dywidag 15/17

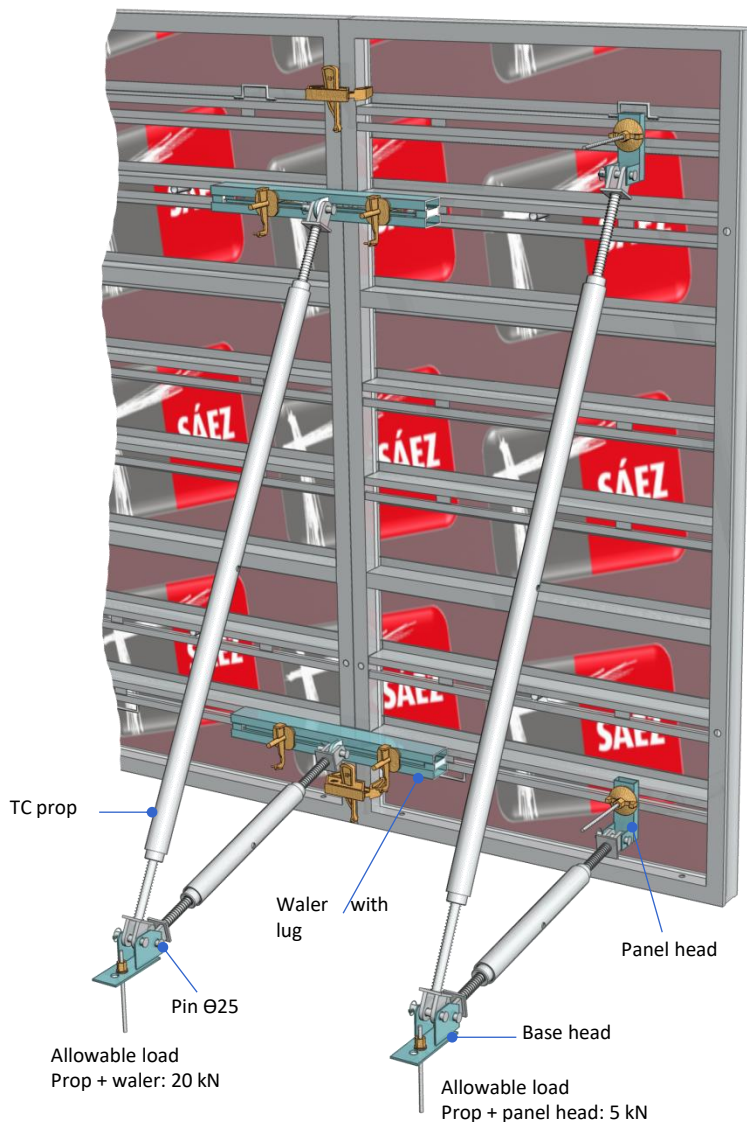


TENSION-COMPRESSION PROP FEATURES

- They provide **strength** against wind loads on the elements and make formwork plumbing easier.
- **They align** wall and column formwork quickly and safely.
- They absorb **tension and compression forces**.
- The articulated ends adjust to **any angle** or inclination with simple fixings.
- Easier and safer storage.

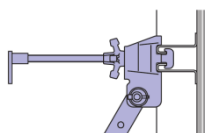


Designation	kg
Base head	3
Panel head	1
Waler with lug	10,5
0.67 m prop	22
1.50 m prop	34
2.00 m prop	41
3.50 m prop	58
5.00 m prop	78



STABILIZER PROP FEATURES

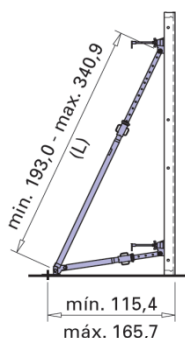
- Extendable in 8 cm increments.
- Precision adjustment with thread.
- Reduces loss of parts.
- Even the insertion tube is secured against loss.
- Also suitable for beam formwork without modification.



Designation	kg
E340 stabilizer	30
E540 stabilizer	45

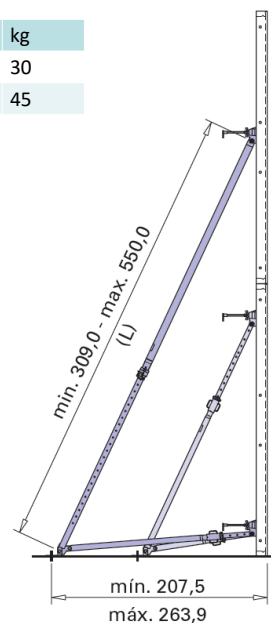
E340 STABILIZER

Length Extension L (m)	Allowable load Pressur e kN	Tension kN
2,00	22,0	15,0
2,20	21,0	15,0
2,40	17,5	15,0
2,60	14,5	15,0
2,80	12,5	15,0
3,00	11,0	15,0
3,20	9,5	15,0
3,40	8,0	15,0



E540 STABILIZER

Length Extension L (m)	Allowable load Pressur e kN	Tension kN
3,60	30,0	30,0
4,00	21,5	30,0
4,40	16,5	30,0
4,80	13,5	30,0
5,00	12,0	30,0
5,20	11,0	30,0
5,40	10,0	30,0
5,50	9,5	30,0



Designation	kg
panel 3000x2400	428
panel 3000x1500	236
panel 3000x1000	171
panel 3000x720	138
panel 3000x600	119
panel 3000x500	109
panel 3000x450	102
panel 3000x400	96
panel 3000x300	82
panel 1500x1500	130
panel 1500x1000	92
panel 1500x720	72
panel 1500x600	62
panel 1500x500	55
panel 1500x450	52
panel 1500x400	48
panel 1500x300	40
external corner artic.. 3000x100	71
external corner artic.. 1500x100	37
corner internal 3000x300	112
corner internal 1500x300	55
corner external 3000x100	65
corner external 1500x100	33
internal corner artic.. 3000x300	105
internal corner artic.. 1500x300	56
Infill panel 1500x500	31
Infill panel 3000x500	48
Infill profile 1500x50	9
Infill profile 3000x50	18



Dywidag
1,4 Kg/m



Swivel plate nut
2,6 Kg



Standard clamp
5,15 Kg



Sliding clamp
6,15 Kg



Waler 0,90 – 10 kg
Waler 2 – 25 kg
Waler 3 – 40 kg



Fixing wedge
1,40 kg



Conector 25 cm
0,38 kg



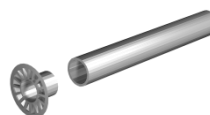
Working bracket
15 kg



110 nut
0,83 kg



Lifting hook
7,50 kg



PVC tube 26 - 0.20 kg/m
PVC cone 26 - 0.01 kg



PVC plug 32 - 0.01 kg

