



MonoWal

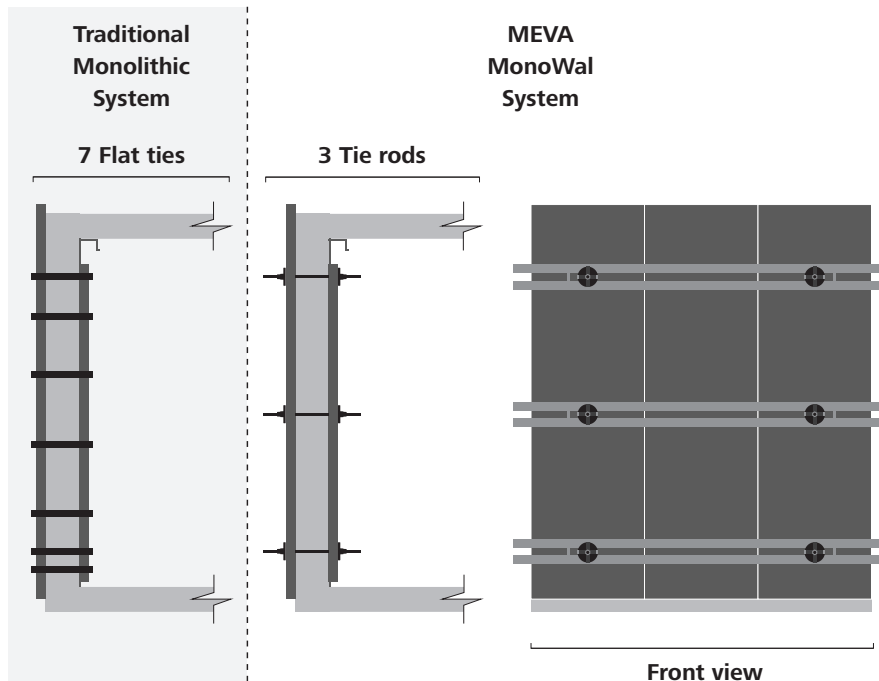
The light and robust wall
and monolithic formwork



With industry first features

MonoWal

The new MonoWal is an innovative aluminium formwork system. It saves time and labour by eliminating the need for tie plates by using aluminium walers and tie system. The system requires only three vertical levels of tie rods for a height of 3 meters. These tie rods can be spaced horizontally at 1.2 meters, ensuring faster erection and dismantling, thus enhancing efficiency on the construction site.





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Simply smart

- **Saves time, labour and material**
 - The new MonoWal system, compared to traditional monolithic systems, eliminates the need for tie plates, resulting in cost savings related to greasing and grouting tie plate openings
 - Lightweight panels are easy to handle and connect intuitively with a wedge and pin arrangement. Aluminum walers with a tie system help expedite the erection and dismantling process, saving valuable construction time
- **High capacity and durability**
 - Permissible fresh concrete pressure of 60 kN/m²
 - The MonoWal panels are durable and capable of withstanding challenging working environments on construction sites
- **High versatility and flexibility**
 - MonoWal panels are versatile and can be used for both vertical and horizontal applications
 - In combination with MonoFix panels any concrete dimension can be achieved on jobsites
 - Standard panels are available in 60, 55 and 50 cm width and up to 300 cm height; longer panels are available on request
- **Perfect results**
 - A bulging-free, superior concrete finish is achievable due to the longitudinal stiffener design; supported by aluminium walers and tie system

Aluminium wall system

MonoWal components

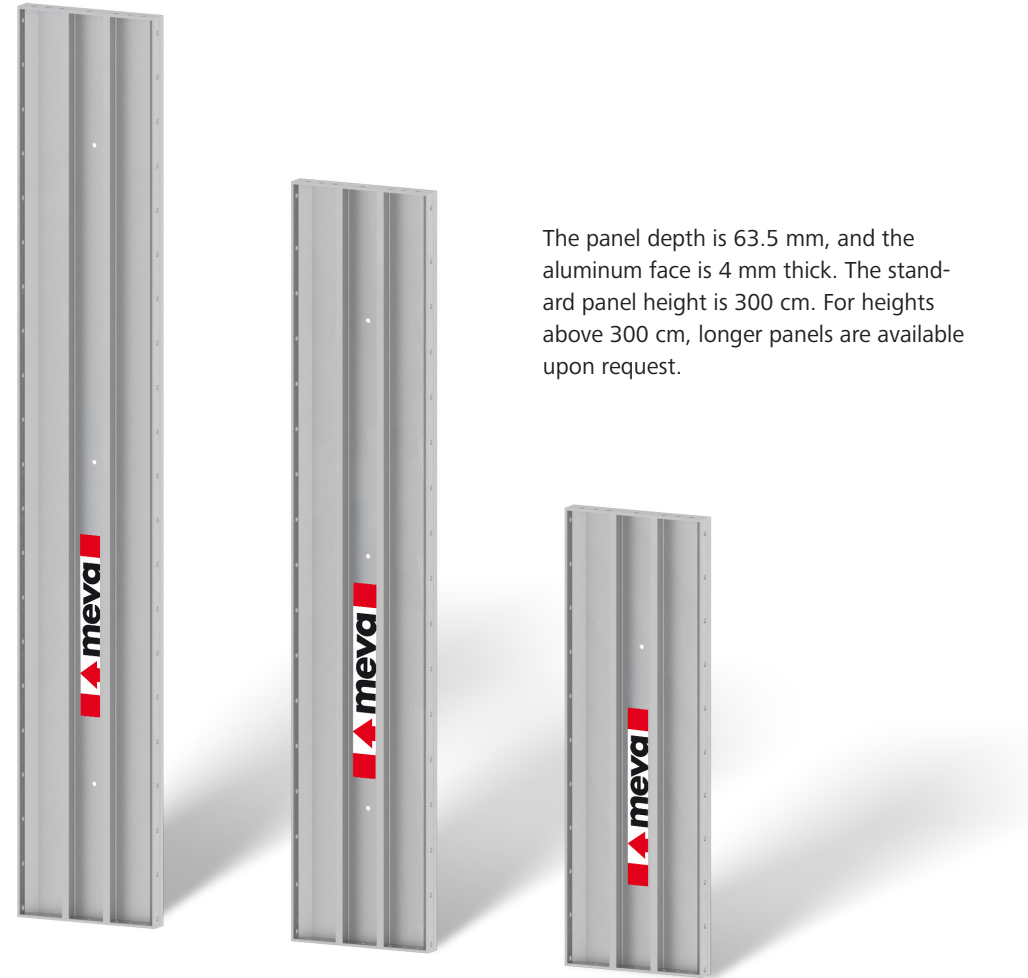
Lightweight, easy and recyclable

The aluminum alignment walers, made of 100 mm high back-to-back C channels, ensure precise alignment of MonoWal panels and safely transfer concrete pressure to the tie rods. When used with the tie rods, the alignment walers eliminate the need for tie plates, making the assembly and dismantling process faster and more economical.



MonoWal panels are made of aluminum, weighing 18.6 kg/m², making them easy to handle due to their lightweight design.

The panels, which are 100% recyclable, come in standard widths of 60 cm, 55 cm, and 50 cm.

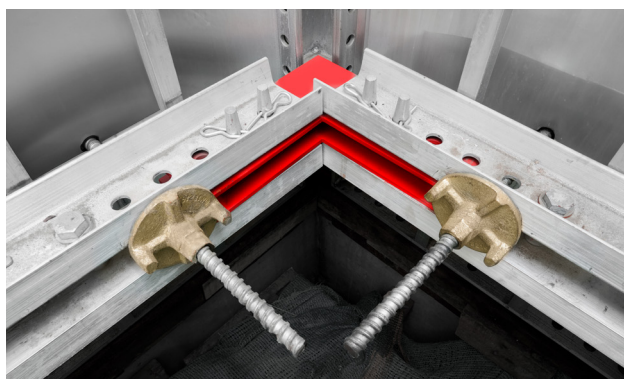


The panel depth is 63.5 mm, and the aluminum face is 4 mm thick. The standard panel height is 300 cm. For heights above 300 cm, longer panels are available upon request.



External corner solution

External corners are formed with external corner connectors (red), aluminium walers and standard tie rods with flange nuts.



Internal corner solution

Internal corners are formed with internal corner connectors (red), aluminium walers and standard tie rods with flange nuts.

Industry first features



1800 × 1800 mm grid

A slab thickness of 27.5 cm is easily achievable with a spacious grid of 180 cm x 180 cm. This facilitates faster erection and provides ample clearance for easy movement on the site.

Monolithic method

Application with MonoFix

Efficiency & savings with MonoWal and MonoFix

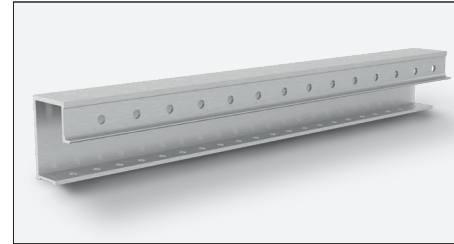
MonoWal and MonoFix provide an innovative solution for pouring walls and slabs monolithically. The integrated tie rod and waler connection saves both time and money. This innovative system reduces labour and material costs while ensuring easy assembly and dismantling.

MonoWal and MonoFix form an ideal combination wherever high-quality results and cost-effectiveness are required.

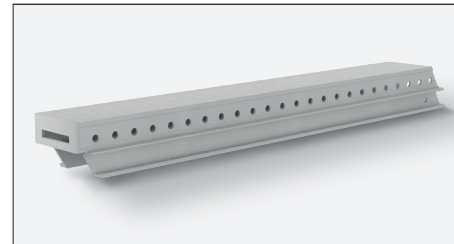


The MonoWal system includes integrated stair forms. These stair forms are connected to the side wall panels and supported by MEVA props. Stairs can be poured monolithically with the walls and slabs. Customized production of the stair forms allows MonoWal to meet architectural requirements.

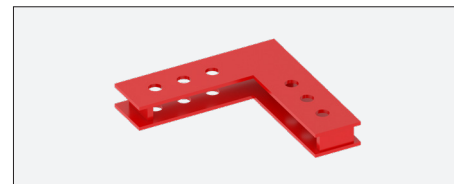
MonoDec (MND) panel
for the monolithic casting of slabs in a single pour



Slab connector
to connect wall panels with slab panels



Primary beam
to support MonoDec panels



Internal corner connector
attached to waler and secured with tie rod and flange nut to form a 90° internal corner

Props
to support all slab components





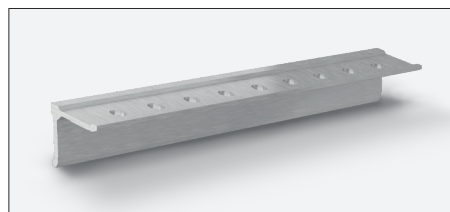
Kicker panel
to support outside wall panels during next pouring cycle



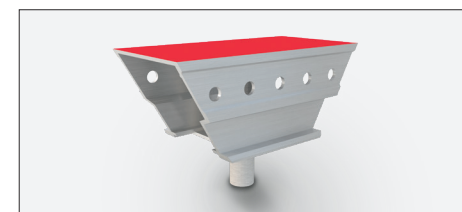
Reinforced outside corner
to connect wall and stop-end panels; it is reinforced with stiffeners to enhance its resistance to impacts, stress, and deflection

Aluminium waler
to support and align the panels and transfer the fresh concrete pressure to the tie system

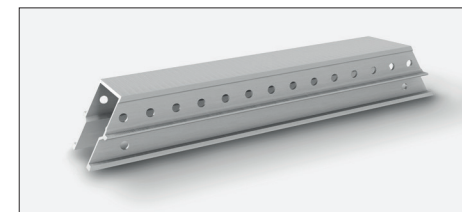
Tie rod with flange nut
to provide structural support and maintain panel spacing; flange nuts secure the tie rods, allowing for easy adjustments; together, they ensure stability and alignment during concrete pouring



Rocker
connected to the bottom of a wall panel, allows easy stripping of the inside wall panels



Prop head
to connect the main beams, supported by slab props; back propping is possible with a prop head, which remains in place even after early stripping of slab panels; alternatively, an MonoDec drop head can be used instead of a prop head for easier and faster de-shuttering activities



Middle beam
connects with a prop head to support the MonoDec Panel



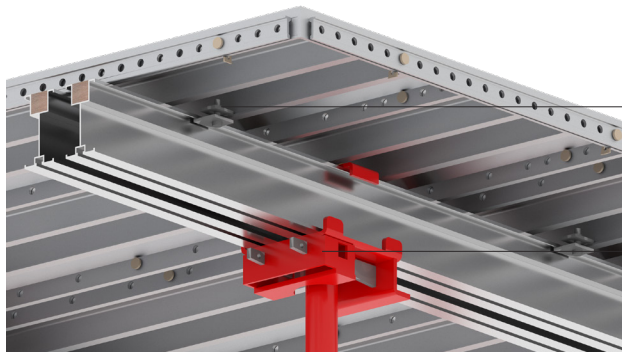
Beam slab connector
connected with wall end panel and a beam panel, it is used to form a door or a window

Different solutions

MonoWal tableforms

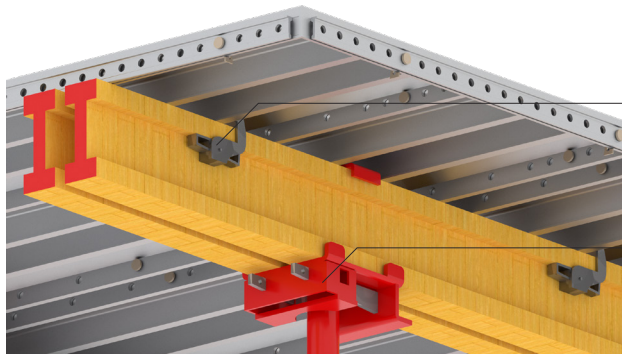
The MonoWal tableform system significantly reduces labour dependency, enabling workers to be reassigned to other tasks. This enhances operational flexibility and leads to substantial cost savings.

Choice of H20 wooden girders or K6 aluminium beams as primary and secondary members



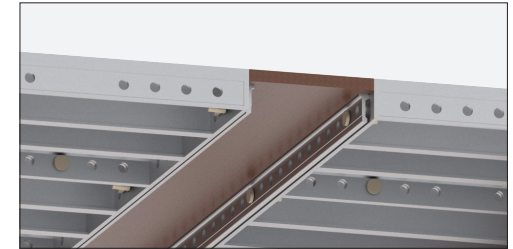
Beam clamp
Connection K6 beams with MonoWal panels

Wedge head
Connection for K6 beams and props

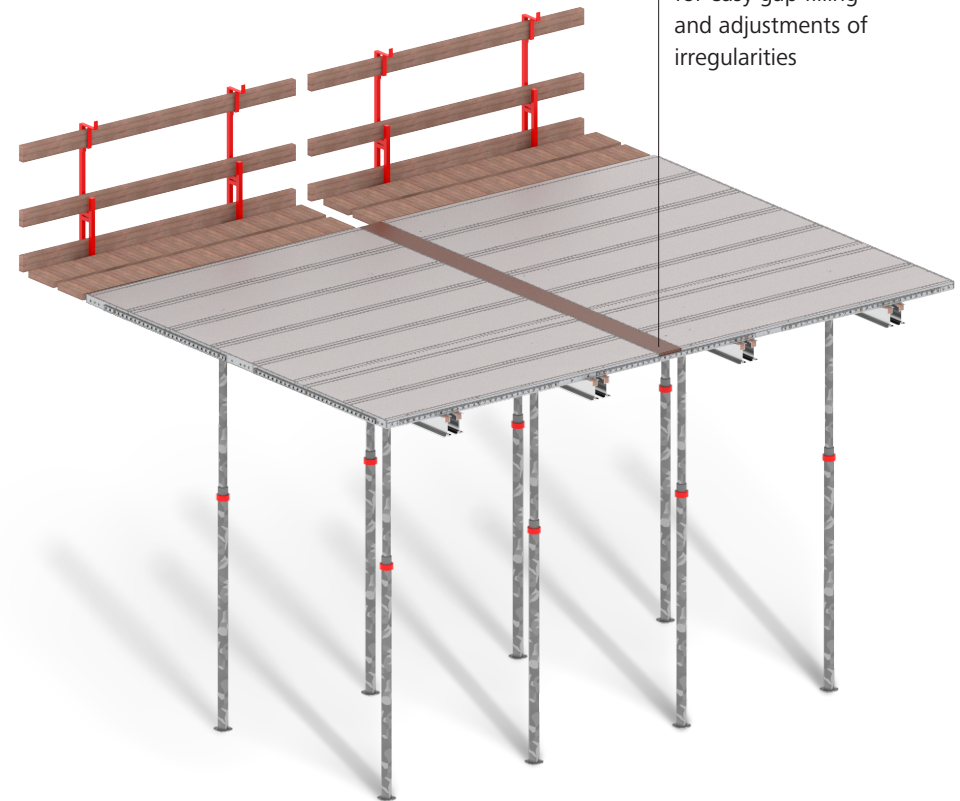


H20 clamp
Connection H20 beams with MonoWal panels

Wedge head
Connection for H20 beams and props



Compensation beam and panel
for easy gap filling and adjustments of irregularities



Different solutions

MonoWal single sided solution

Aluminium MonoWal panels can be used with STB 300 frame (29-402-62) in the single sided wall application.

The anchor loops are easy to use, and load charts simplify formwork planning while providing maximum safety on the construction site.



STB 300

MonoWal panels

Beam clamp

Scaffold tubes

Coupling nut

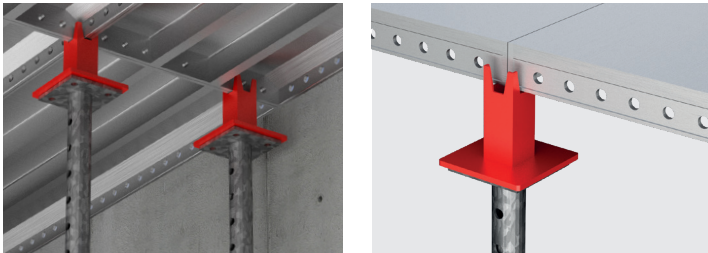


Anchor loop

Using wall panels for slabs with ease

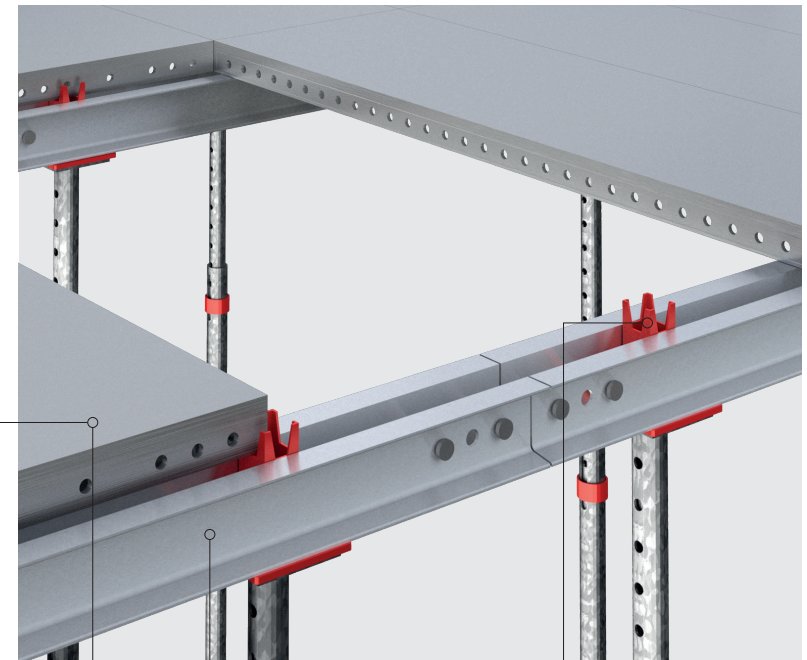
MonoWal Prop Head

The new MonoWal prop head enables the MonoWall system to serve as slab formwork, supported by walers and props and securely held in place by the prop head's spikes.

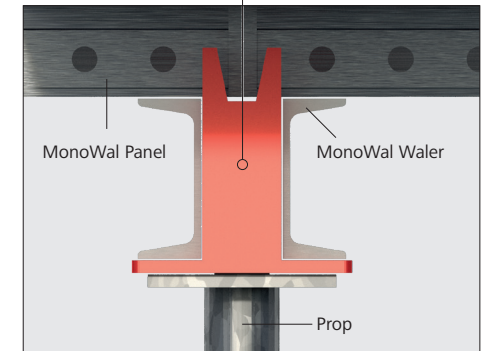


- **Saves time, labour and material**
The MonoWal prop head enables the reuse of formwork and accessories for slabs, with the option to support panels directly on the prop head, eliminating the need for beams
- **High capacity and durability**
Made from robust steel, the system offers high load capacity and durability with a single-piece steel prop head
- **Easy handling and flexibility**
The lightweight design ensures easy handling, and the versatile formwork is suitable for both walls and slabs

MonoWal Panel
Can be used horizontally as slab formwork panel



MonoWal Waler
works as alignment on wall formwork and as primary beam for slab formwork



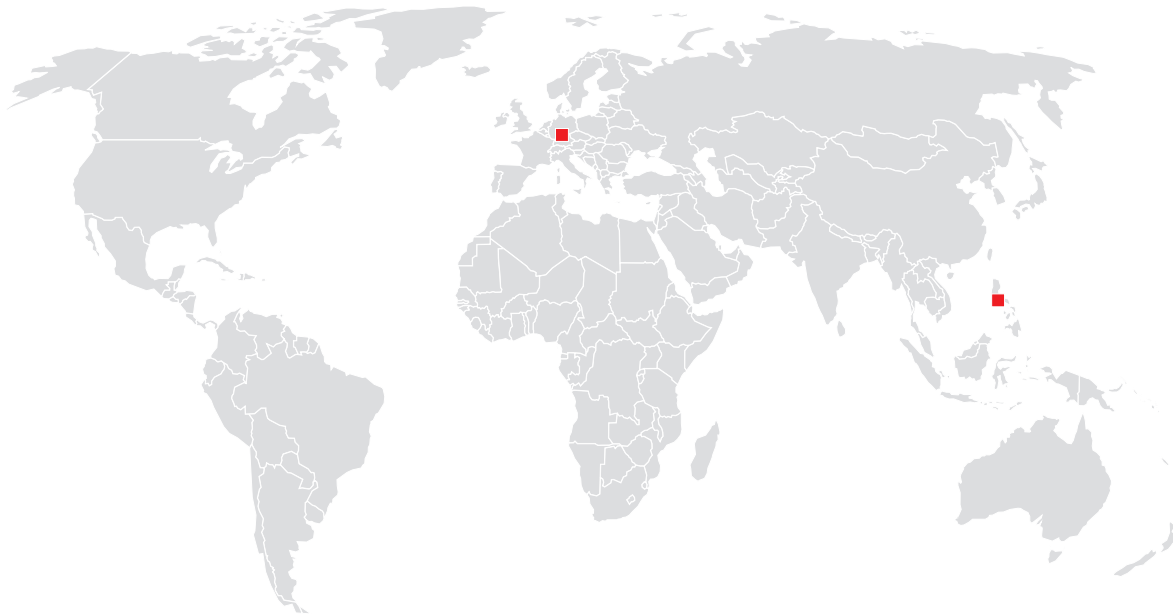
MonoWal Prop Head
It's passed through the waler and holds the panels together – supported by a prop

*Formwork.
Simple. Smart.*

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