

# MAGNESIUM FORMWORK

Leading the Future of Lightweight Construction



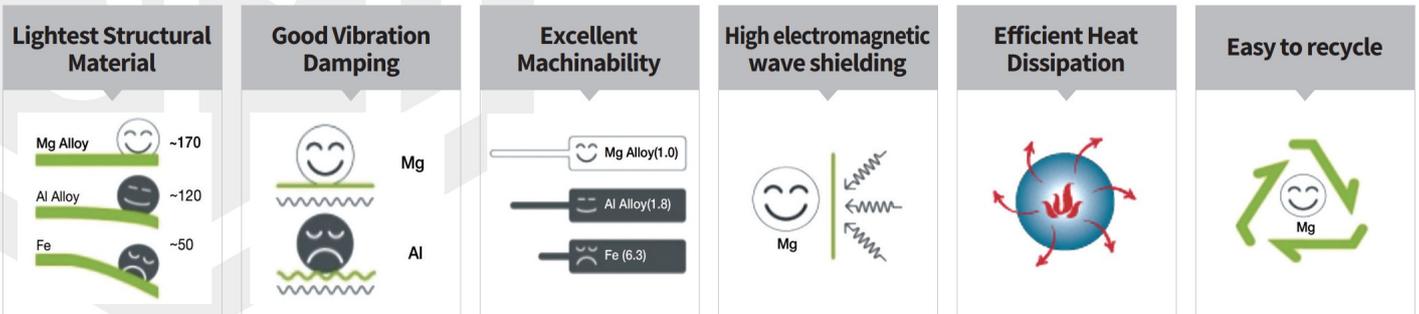
**PPM**  
PINETREE POS MAGNESIUM

Pinetree Pos Magnesium Co., Ltd.

# The Future of Formwork : Magnesium (Mg)

Introducing our revolutionary magnesium formwork, designed to meet the growing demands of the construction industry. With world-leading size capabilities and ultra-lightweight characteristics, our magnesium formwork provides unmatched performance, offering a range of benefits that improve both efficiency and durability on site.

## Advantages of Magnesium



## Feature & Benefits of Mg Formwork

### Lightweight Excellence

- Mg Formwork is Over 20% lighter than aluminum (Al) formworks, Minimizes worker strain and reducing installation, removal, and transport times.
- Significantly accelerates workflows with faster formwork handling.

### Corrosion Resistance

- Designed for durability, our Mg formwork is equipped with a specially developed epoxy Coating that offers superior corrosion resistance, making it suitable for a wide range of environmental conditions.
- This protective feature extends the formwork's lifespan and reduces long-term maintenance costs.

### Able to provide all required sizes for construction sites

### Advanced Manufacturing Technology

- Our Mg formwork can be produced in widths of up to 1800 mm without the need for face welding, a feat that is not achievable with extruded materials.
- The face is made using Twin Roll Casting followed by rolling (4 mm thick, AZ31B).
- The side rail and channel brace are extruded from AZ31B.

## Why Choose Magnesium Formwork?

### Increased Efficiency

- The use of lightweight materials results in quicker setup, takedown, and relocation, saving time and accelerating project timelines.

### Cost-effective

- The lightweight nature of the material results in reduced transportation and labor costs.

### Eco-friendly

- Magnesium is a more sustainable alternative to traditional materials, contributing to greener construction practices.

### Safety and Performance

- Our Mg formwork undergoes rigorous testing and optimization to ensure the highest levels of safety and structural integrity. Whether for commercial, residential, or industrial projects, it is certified to perform under the most demanding conditions.

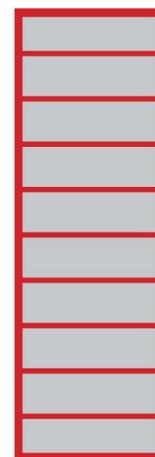
### Efficient maintenance work

- Due to the properties of the epoxy coating, concrete adheres poorly to the surface, significantly reducing the volume of concrete to be removed.
- Any residual concrete can be easily removed using shot blasting, high-pressure water spraying, or concrete dissolvers.

Size 600mm(W) x 2400mm(H)



Aluminium Formwork  
66 lbs (30Kg)

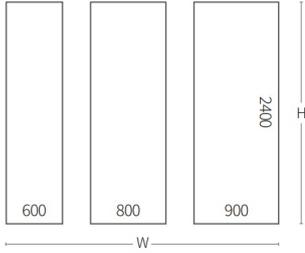


Magnesium Formwork  
50 lbs (23Kg)

Mg Formwork  
23%  
Lighter

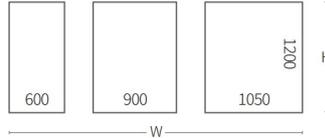
# Certified Specifications of Mg Formwork

## ▶ Wall Formwork Sizes



- 600mm(W) x 2400mm(H)
- 800mm(W) x 2400mm(H)
- 900mm(W) x 2400mm(H)

## ▶ Slab Formwork Sizes

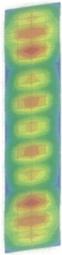


- 600mm(W) x 1200mm(H)
- 900mm(W) x 1200mm(H)
- 1050mm(W) x 1200mm(H)

## ▶ Custom Design Available

We provide design and production solutions for both standard and non-standard sizes, tailored to project requirements.

# Certified for Safety and Performance



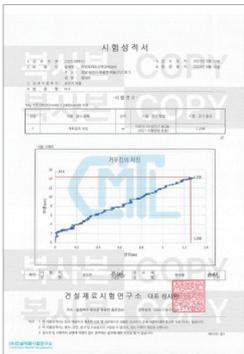
## ▶ Structural Analysis

- Conducted by a specialized structural analysis to optimize the design of the Face, Side Rail, and Channel Brace.
- Meets A-grade displacement standards during concrete pouring (displacement within 3mm)



## ▶ Approval from a certified engineer (mandatory)

- Meets A-grade displacement standards during concrete pouring (displacement within 3mm)



## ▶ KS Standard Deflection Test Passed

- Successfully passed the deflection test accordance with KS standards, meeting the deflection criteria of within 1.4mm



## ▶ Hydraulic Pressure and Concrete Pouring Tests Conducted to Reconfirm Displacement



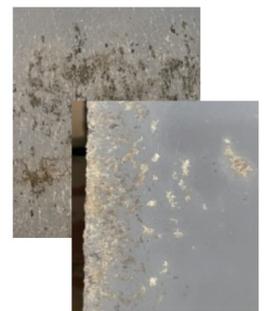
**Epoxy Coating**  
(Excellent Surface)



**Other company**  
(Inside coating layer/  
extreme partial corrosion)



**2-layer**  
(Fluoresin + Acric resin)  
(Small Partial Corrosion)



**1-layer**  
(Extreme partial corrosion /  
partial bleaching)

## ▶ Corrosion Resistance

- Development of a new epoxy coating to ensure corrosion resistance, with superior performance proven through 30 concrete pour tests.

## Example Projects

- 15-story residential building / Seoul, Republic of Korea
- 20-story residential building / Daegu, Republic of Korea



## Contact Information

### Optimize Your Projects with Magnesium Formwork

Embrace the future of construction with our cutting-edge magnesium formwork. Designed for modern building requirements, it offers unmatched performance, reduced labor, and long-term durability. Upgrade to magnesium formwork today and see the difference.

For more information, contact us at:

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