

# **Product Profile**

Solution for Temporary Works and Construction Method Engineering (CME)

# **Contents** 02 About Us **WONDERS**leeve 03-04 **Product Solution Overview PC Forging Accessories** 05-12 WONDERDeck ™ Safety Accessories 13-14 W100 - Wall & Column Formwork 15-18 pecaform ™ 19-22 WONDERBeam 23-26 WONDERBoard ™ 27-30 WONDERProp 31-36 **WONDERCrab** 37-44 WONDERAluTower 47-54 WONDERScreen K21 Mobile House 55-56 57-58 **PLYTEC Fencing**

SELF-CLIMBING PERIMETER PROCTECTIVE SCREEN with Working Platform

**WAY UP:** HARMONIZING SAFETY, PRODUCTIVITY & TECHNOLOGY

# **About Us**

# Committed to safety, productivity & technology

PLYTEC Group has grown from a trading and distribution hub for building materials into a trusted industry partner since its establishment on March 9, 1999. Dedicated to excellence and driven by innovation, PLYTEC has diversified into various segments including Construction Method Engineering (CME), Digital Design Engineering (DDE), and Precast Concrete (PC) Solutions. Embracing industrialization and digitalization, PLYTEC has expanded its business to include the manufacturing of construction temporary works equipment. Through continuous innovation and strategic growth, PLYTEC is committed to driving progress and shaping the future of the construction industry.

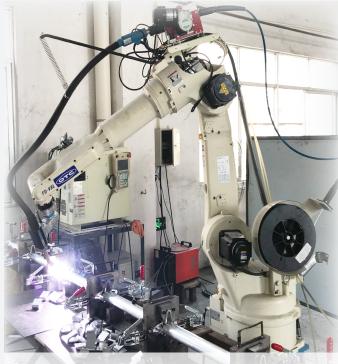
PLYTEC Formwork® is one of the subsidiaries of PLYTEC Holding Berhad, a group of companies comprising multiple business entities operate in synergy and envisions to pioneer value engineering in construction industry with smart technology.

PLYTEC Formwork <sup>®</sup> specializes in Construction Method Engineering (CME) field of temporary works for the forming and erection of concrete structures, and workplace access on job site. We provides full range of product solutions to perform scaffolding, falsework, shoring and formworks in compliance with the codes of practice.



The Equipment Hub, Olak Lempit, Banting

Current operation as CME temporary works equipment refurbishment, production, maintenance and inventory management center.



**Industrial Robotic Arm for Precision Aluminum Welding** 

PLYTEC Formwork® focuses in:

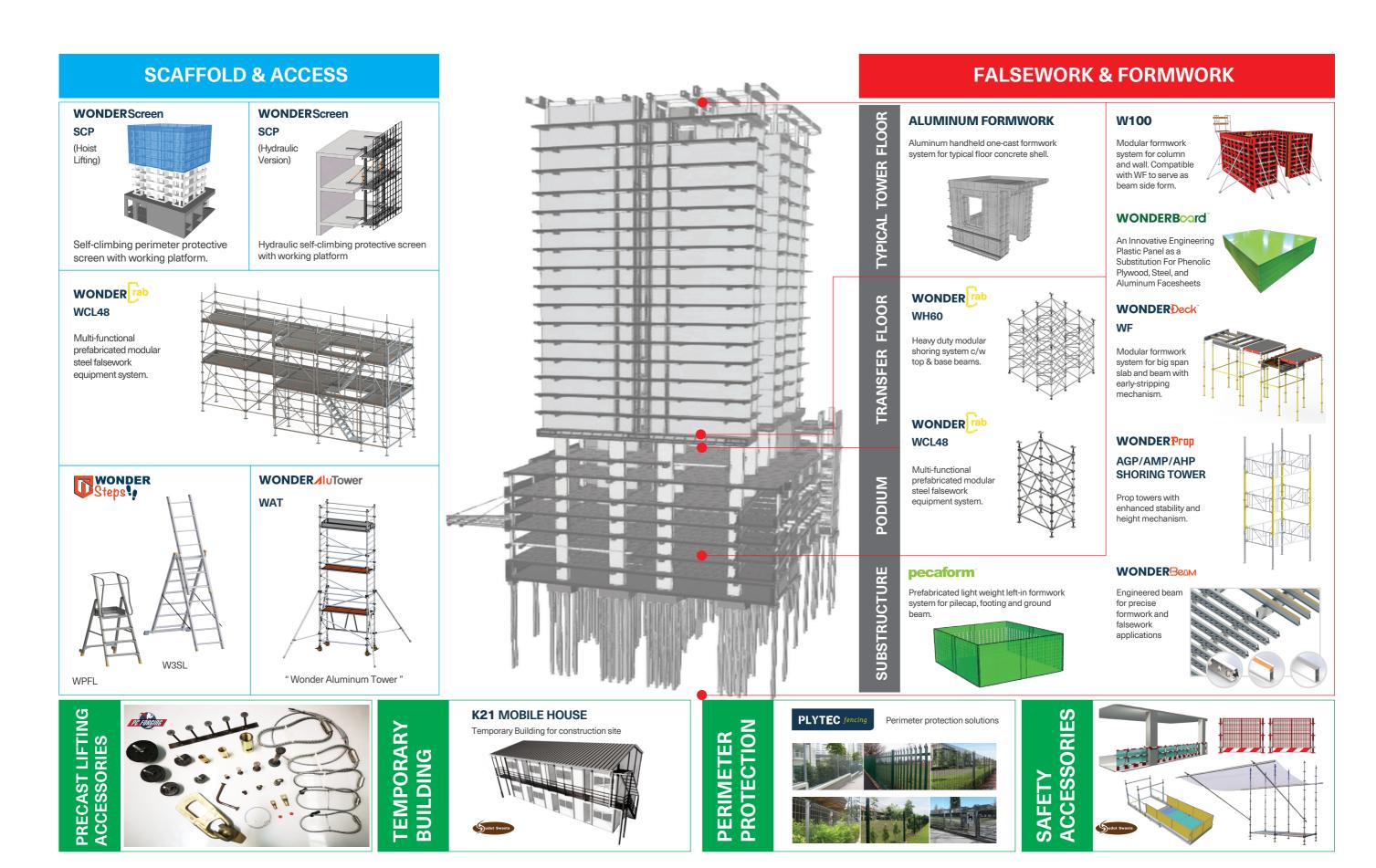
- I) Product Solutions
- II) Engineering services in temporary building structures
  III) CDM Compliance & Building Information Modeling (BIM)

Through an exclusive conglomerate partnership with WONDER, a renowned specialist in aluminium formwork and construction access equipment; PLYTEC has established its own manufacturing lines and R&D unit. This strategic move allows PLYTEC to better comprehend and complement its supply chain pipeline, enhancing product consistency, innovation, and operational synergy.

We rely on precision engineering and quality control in production processes and workflows to deliver and fulfill our commitment to quality standards and excellence.

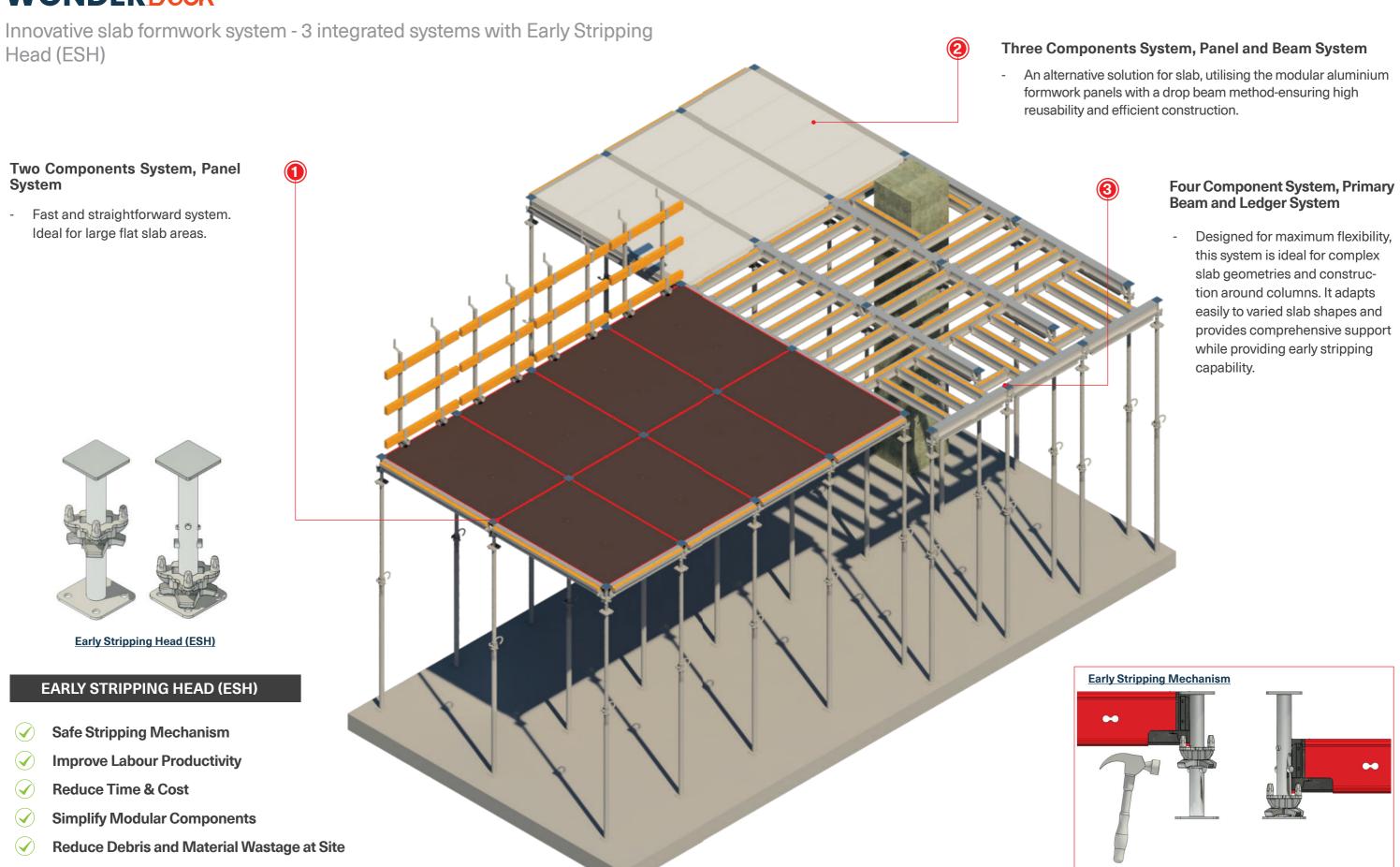
PLYTEC believes in its organizational core values of Integrity, Innovation & Excellence (IIE); and practices the culture of knowledge sharing.

# **Product Solutions Overview**



03 04

# **WONDER** Deck

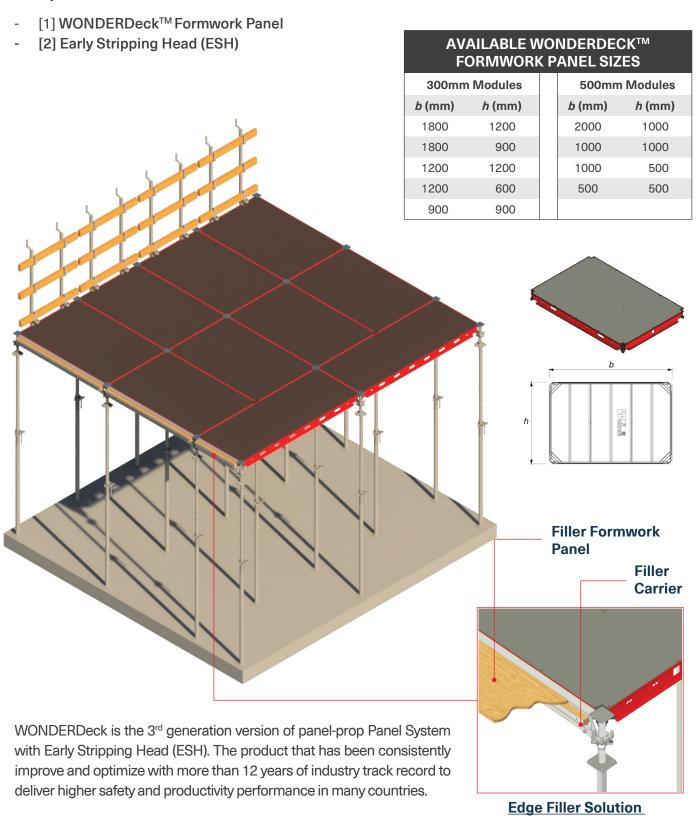


05



# Two Componets System, Panel System

## **Components:**



# WONDERDeck

Two Componets System, Panel System

# **Project References**

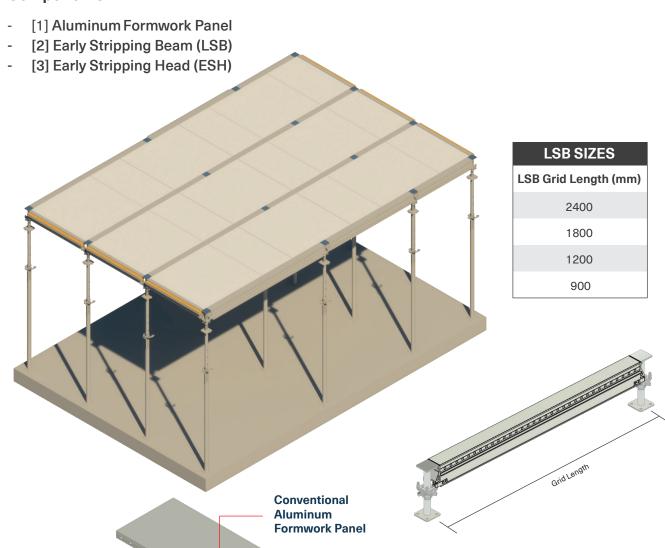






# Three Components System, Panel and Beam System

### **Components:**



The WONDERDeck Panel & Beam System combines custom aluminium beams with modular aluminium panels to support slab construction, especially in projects requiring early stripping beams or additional load-bearing capacity. It ensures efficient load distribution, enabling high-quality slab finishes while offering flexibility and adaptability to diverse construction conditions.

Secures with Pin & Wedges

**LSB** 

# WONDERDeck

Three Components System, Panel and Beam System

# **Project References**

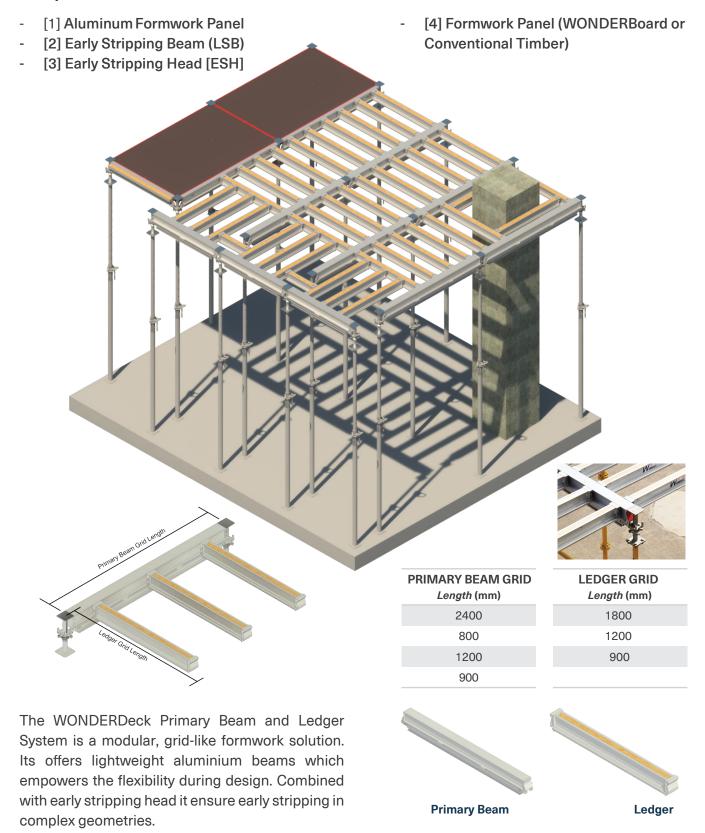






Four Components System, Primary Beam and Ledger System

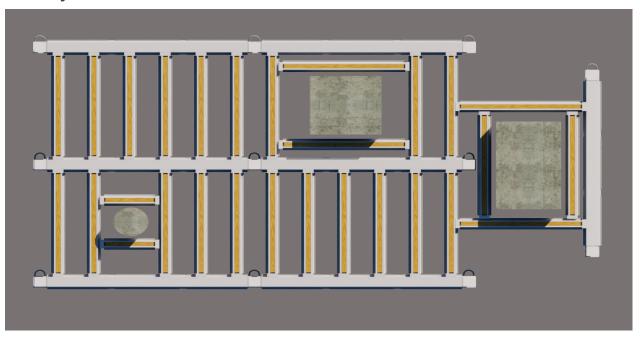
## **Components:**



# **WONDER** Deck

# Four Components System, Primary Beam and Ledger System

## Flexibility around the columns



Primary Beam and Ledger System can effectively arrange around obstruction. Ledger are designed to be able to stack on each other for adjustament required.

## Flexible Ledger grid for difficult geometry



## **Integrable with Panel System**

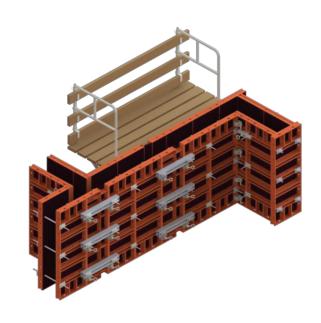


# W100 - Wall & Column Formwork

A total solution for slab, wall and column formwork

W100 system is a multi-functional formwork comprised of aluminum frame and plywood. It offers a total formwork solution for all wall and column construction with a high degree of flexibility. In combination with fixed and hinged corners, it allows the formation of any wall and rectangular shapes on site.

W100 system is compatible with WONDERDeck system to allow continuous casting of vertical and horizontal structural elements.





Horizontal adjustment panel



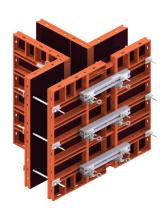
Vertical adjustment panel



Right angle corner & wall end



Column formwork



T-shape wall



Integrated wall and slab

# W100 - Wall & Column Formwork

A total solution for slab, wall and column formwork

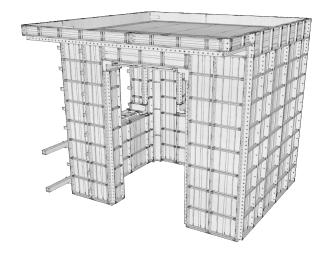
## **Project References**

- P22048 @ WANGSA MAJU, ACADEMIC FACILITY BUILDING



# **ALUMINUM Formwork**

IBS reusable one- cast formwork system



Aluminum Formwork is an IBS reusable one-cast system which allows monolithic pouring of wall, slabs, beams, stairs, window hoods and various decorative features in exact accordance with architects' and engineers' design.







### **ALUMINUM FORMWORK BENEFITS**

### Easy to Handle

Every panel is engineered to be high strength and lightweight — can be handled by a single worker.

### **✓** One-time Pouring

The system allows for monolithic pouring of all walls, slabs, stairs, etc. which form a strong RCC framed structure.

### **✓** High Concrete Pouring Rate

Early Stripping Theory — with one-floor forms and three-floor props, it enables pouring job of one floor in 3-4 days.

### Environmental Friendly

There is no use of timber. All panels are made of aluminium; there is no galvanization.

### ✓ Great Recyclable Value

Used aluminium material has greater recyclable value, over 35% higher than steel.

### **✓** More Reuses

Reuse more than 300 times (subject to correct site practice).

### **BASIC COMPONENTS**





**Wedges** Size: δ 3x24.5x68mm



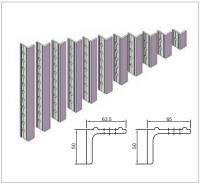


Fast Stripping Bar Size: 26x46.8x348mm



**Slab Panel** 

Length: 100-1500mm Width: 100-600mm



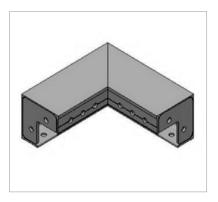
**Foot Panel** 

Length: 100-650mm Width: 65-50mm



**Beam Bottom Panel** 

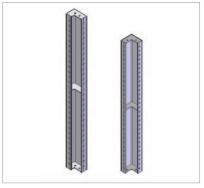
Length: 300-1200mm Width: 200-500mm



**Outside Corner Panel** 

Length: (100/150/200/250/300/350) X (100/150/200/250/300/350) mm

Width: 150-150mm



**Trigonal Iside Corner Panel** 

Length: 100-2450mm Width: 100-150mm / 150-150mm



**Trepanning Panel** 

Length: 800-3000mm Width: 100-600mm

## **TECHNICAL SPECIFICATION**

Item	Aluminum Formwork	Timber Formwork	Composite Steel Formwork	All-Steel Formwork
Panel Thickness	4mm Aluminum	15mm Plywood	2.5mm Steel Panel	6mm Steel Panel
Weight (kg/m²)	20-25	10.5	35-40	85-95
Loadig Capacity	60 kN/m²	30 kN/m²	30 kN/m²	60 kN/m²
Turnover (Times)	more than 300	3-8	more than 100	/
Construction Difficulty	Easy	Hard	Hard	Hard
Assembly Speed	High	Low	Low	Low
Application Scope	All Structure Part	Wall, Column & Beam	Wall, Column & Beam	Wall, Column & Beam
Concrete Surface Quality	Easy to Achieve	Hard	Hard	Able to Achieve
Recycle Value	High	Low	Medium	Medium
Dependence on Tower Crane	Not dependent	Dependent	More dependent	Most dependent

# **ALUMINUM Formwork**

IBS reusable one- cast formwork system

## **Project References**

- P22035 @ SEMENYIH, SELANGOR, DOUBLE STOREY TERRECE HOUSE







# **ALUMINUM Formwork**

IBS reusable one- cast formwork system

## **Project References**

- P23156 @ PUCHONG, WYN RESIDENCE







# **pecaform**<sup>™</sup>

## **Foundation Formwork**

When **Speed** Counts!

Pecaform<sup>™</sup> is the result of many years of intensive research and development overseas. The basic material consists of a steel wire mesh with a heat-shrunk layer of polyethlene applied to both sides of the mesh.

This combination creates a material that is both light and structurally strong, making it extremely easy to handle.

## **PECAFORM**™ BENEFITS

- ✓ Fast & Easy
- Light Weight
- **✓** High Productivity
- ✓ Flexible & Easy Shaping
- ✓ Minimal Labour Input
- Zero Debris Removal
- ✓ Enhance Site Safety
- ✓ Minimize Excavation

### TYPICAL LAYOUTS

for different pile cap configurations









Single Pile

Double Pile

Triple Pile

Multiple Pile

## **APPLICATIONS**

Ground beams, Footings and bases, Pile caps, Temporary fencing, Safety Screens, Others..



Installation

01



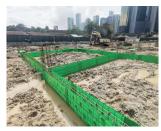
Backfill

02



Casting

03











# When **Speed** Counts!

# Foundation Formwork

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<b>TECHNICAL</b>	CDLAIL	ואראוואיאנ
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PECAFORM™ STANDARD SHEET SIZES				
Height (mm)	Width (mm)			
600				
900				
1200	2250			
1500				
1800				

	PECAFORM™ STANDARD
Main Wire size (Nominal)	5.5 mm diameter
Main Wire spacing	150 mm c/c
Cross Wire size (Nominal)	4 mm diameter
Cross Wire spacing	100mm c/c
Wire specification	High tensile steel of tensile strength 500 N/mm² - Non Galvanised
Polyethylene film	0.12 mm thick - One Layer Each side
Polyethylene colour (*)	Green
Weight	2.64 kg/m²
Standard size a) Width b) Height	2250 mm Can be varied According to Order Requirements

# **PERFORMANCE** COMPARISON

PERFORMANCE DIMENSIONS	PECAFORM <sup>TM</sup>	CONVENTIONAL (TIMBER / PLYWOOD)	ALUMINIUM / STEEL FORMWORK	ADVANTAGES OF PECAFORM™
SPEED	Faster	Slower	Medium	Early Completion     Saving in Preliminaries cost     Client Incentives     Less dependent on weather
INVESTMENT COST	Low	Low	High	Low Investment Cost
LABOUR REQUIREMENT	Lower	Higher	Medium	Less Reliance on Skilled Labour     Lower Labour cost
SKILLS	General Workers	Skilled Carpenters & General Workers	Skilled Workers	<ul><li>Saving in Labour cost</li><li>Availability &gt; Speed</li></ul>
INSTALLATION	Light & Easy	Tedious & Times Consuming	Simple but Skilled Labour required	<ul><li>Save Time</li><li>Saving in Labour cost</li></ul>
DEBRIS REMOVAL	Not required	Required	Not required	<ul><li>Saving in Debris Removal cost</li><li>Save the Environmental/Forest</li></ul>
LIFTING DEVICE/ CRANAGE	Man handled	Cranage required	Cranage required	Saving in Machinery / Cranage cost     Saving in Operator cost
STORAGE REQUIREMENT	Minimum	High	High	Smaller storage space     More working space
FROMWORK REMOVAL	Not required	Required	Required	Save Time
ENVIRONMENTAL ACCEPTANCE	Environmental friendly	High Rate of Timber Consumption & Burning	Environmental friendly	Complies with Legislation     Save the Forest
SITE CLEANLINESS	Neat and clean	Untidy, Dangerous and Hazardous	Neat and clean	Enhance Site Sfety     Improve Productivy
CORPORATE IMAGE	Excellent	Poor	Good	Enhance Corporate Image



## **Foundation Formwork**

When **Speed** Counts!

### **FOUNDATION - BASES**

Bases can be constructed from either **L-shapes** or **flat strips of Pecaform**™ similar to either beam or pile cap construction. Lean concrete blinding is applied in the traditional manner, and the reinforcement cage complete with spacer blocks at the bottom is lowered onto the blinding.

**Pecaform™** is then placed against the side of the cage and spaced off the reinforcement with strips of long spacers, bar chairs or equivalent.

Backfill excavation up to 150mm from the top of the **Pecaform™** to prevent contamination.

### **BEAM OPTIONS**

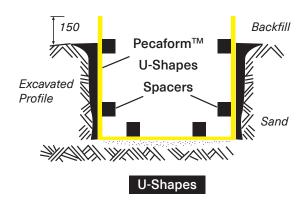
Ground beams can be divided into 2 categories:

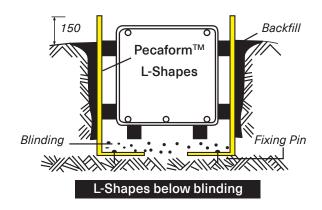
### Suspended Beams (on piled foundation)

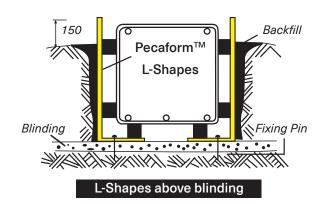
The ground on which the beam is constructed should be capable of safely supporting the weight of the wet concrete during construction. Only nominal surface compaction is requires and a thin layer of sand blinding to level the formation and bed-in the beam soffit may be necessary.

### **Ground Bearing Beams**

These are founded in the bearing strate. Therefore, a thin layer of sand may be used as blinding to bed-in the Pecaform™. Unless supported independently, Pecaform™ relies on backfill to counteract the pressure exerted by the concrete pour. Suitable spacers attached to the reinforcement cage ensure the beam profile is maintained.







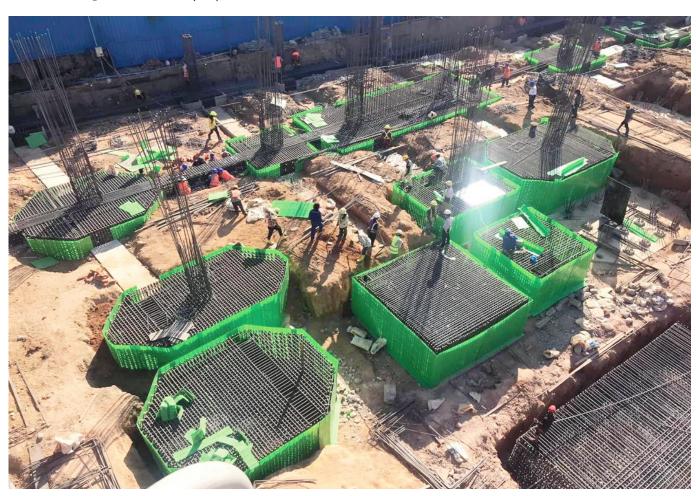
# **pecaform**<sup>™</sup>

When **Speed** Counts!

Foundation Formwork

## **Project References**

- P23158 @ NORTH KIARA, KL, RESIDENTIAL BUILDING

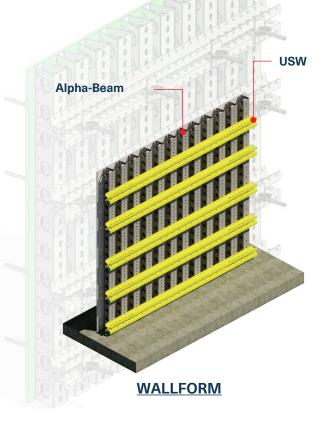


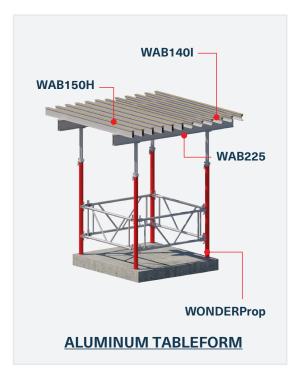




Overview

WONDERBeam comprised of steel and aluminum series. Both are engineered to suit different application in formwork and falsework application.





## **WONDERBEAM PRODUCTS**





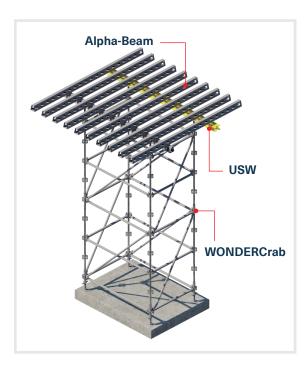
# Alpha-Beam

A high-strength, heavy-duty steel beam for falsework and formwork, offering superior load capacity, durability, and corrosion resistance. Ideal for robust structural support in demanding construction environments.

### **Mechanical Properties**

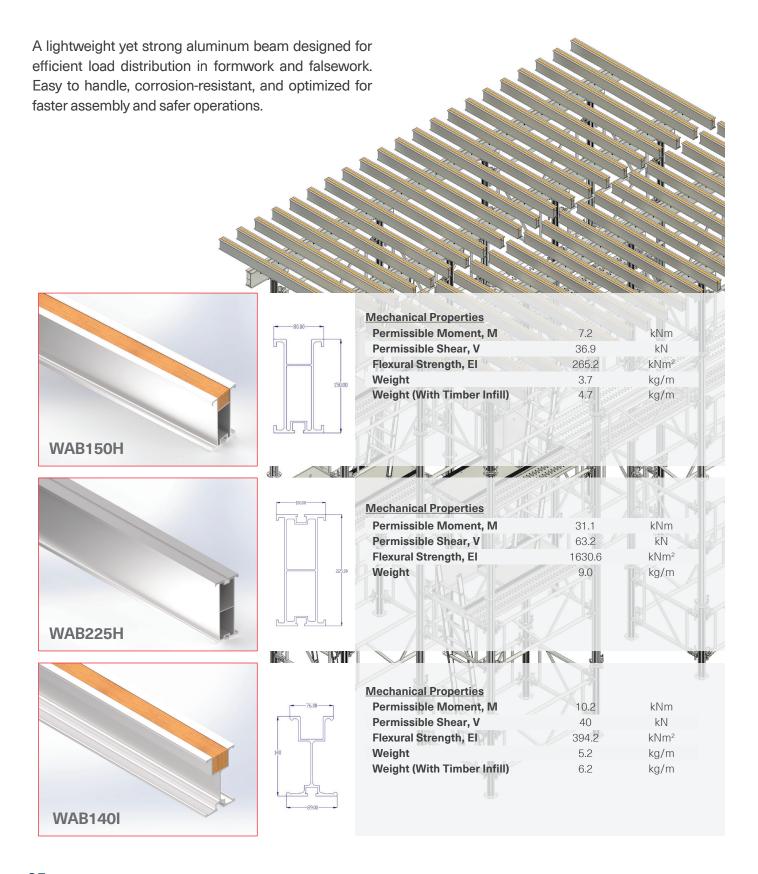
Permissible Moment, M	8.05	kNm
Permissible Shear, V	14.34	kN
Flexural Strength, El	330	kNm²
Weight	5.0	kg/m





Tableform Solution. WONDERBeam and WONDERCrab

## Alu-Beam



## **Project References**

P23007 @ PASIR GUDANG, JOHOR, DOUBLE STOREY WAREHOUSE









For Sustainable Construction

# Our Circular Economy Program—Your ESG Enhancement

At PLYTEC POLYMER, sustainability is not just a commitment — it is embedded in every WONDERBoard™ panel we produce. Designed for exceptional strength, reusability, and long-term cost-efficiency, WONDERBoard™ leads the formwork industry in aligning with global ESG (Environmental, Social, Governance) goals and true circular economy principles.



# CIRCULAR ECONOMY In Action



The on infinity symbol in the WONDERBoard™ logo represents our closed-loop lifecycle model — a guarantee that no WONDERBoard™ panel ends up in landfills, unregulated plastic scrap markets, or environmentally harmful disposal routes.

# Recycle Circular **Economy & ESG** 100% Recycled & Reused Model All collected panels are returned to PLYTEC POLYMER where they are fully recycled and reengineered into new WONDERBoards — without compromise in strength or

### **Distributors & Buyers** as Return Network

Every official WONDERBoard™ distributor and product buyer will enter into a Circular Economy Pledge, committing to return all end-of-life WONDERBoard™ panels through our established distribution network.

# **Client Incentive**

Users who return used WONDERBoard™ panels to authorized collection hubs will receive a credit discount toward their next purchase rewarding responsible disposal while enhancing long-term distributor-client relationships.

# Here's how our system works

durability. This creates a zero-waste production

ecosystem.

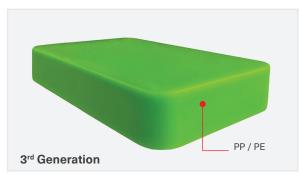
# **WONDERB**oard

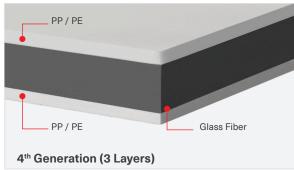
For Sustainable Construction

# Our Circular Economy Program—Your ESG Enhancement

A revolutionary engineered plastic panel made from a unique formulation of Polypropylene (PP) and Polyethylene (PE). Designed to address the challenges faced by builders and developers in the construction industry, WONDERBoard™ offers unparalleled durability, cost-effectiveness, and environmental sustainability.

This cutting-edge panel is set to replace traditional form-lining and face-sheet materials like steel, aluminium, and phenolic plywood, offering a superior alternative that meets the industry's evolving needs.





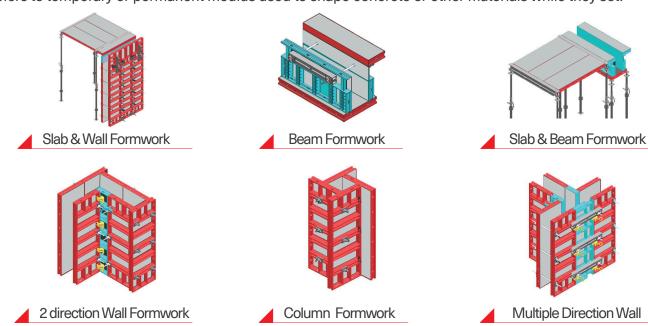
### **WONDERBoard™** BENEFITS

- ✓ 100% PVC Free
- **✓** Easy Maintenance
- ✓ Waterproof
- ✓ Dimensional Stability
- ✓ Circular Economy Model

- ✓ Light Weight
- Repairable
- **✓** Easy Installation
- ✓ High Impact Strength
- Reusable over 200 Times

## WONDERBoard™ VERSATILITY IN FORMWORK APPLICATIONS

WONDERBoard™ is highly adaptable product specifically used in various formwork applications. Formwork refers to temporary or permanent moulds used to shape concrete or other materials while they set.





For Sustainable Construction

# Our Circular Economy Program—Your ESG Enhancement

## WONDERBoard™ SIZES AND SPECIFICATIONS

Standard Size	Area (m²)	Standard Size	Area (m²)
1.8m x 12.m	2.16	2.4m x 12.m	2.88
Thickness (mm)	Weight (kg)	Thickness (mm)	Weight (kg)
10	21.12	10	28.17
11	23.24	11	30.98
12	25.35	12	33.80
13	27.46	13	36.62
15	31.69	15	42.25
17	35.91	17	47.88
18	38.02	18	50.70
20	42.25	20	56.33



### Remark:

Size & Thickness: Subject to  $\pm 3\%$  tolerance. Custom sizes & thickness are available upon request, with width up to 1500mm and thickness up to 30mm.\*

## WONDERBoard™ with H20 Beam

COLUMN SIZE:

1115 X 1115 X 4650MM





## WONDERBoard™ with 140 Aluminum Beam

COLUMN SIZE: 900 X 2200 X 4200MM



# **WONDERBoard**<sup>™</sup>

For Sustainable Construction

Our Circular Economy Program—Your ESG Enhancement

## **Project References**















# **WONDER** Prop

# EN1065 Adjustable Telescopic Steel Prop

The Adjustable Steel Prop is designed in accordance with EN 1065, engineered to deliver optimal strength-to-weight performance based on the nominal characteristic strength specified in the standard.

It serves as a robust vertical support component commonly used in construction for temporary shoring applications. It is specifically designed to support formwork, beams, and concrete slabs during casting and curing phases.

## SPECIFICATIONS



PROP	PROP A	PROP B	PROP C	PROP D	PROP E
Product Code	PA300 PA350		PC300 PC350		PE350 PE400



### **Product Features:**

- Certified according to EN 1065
- · Anti-hand trapping gap of over 100 mm
- Permanent anti-disengagement system
- Minimum adjustable length of 1.0 m
- Rapid adjustment
- Available in painted and hot-dip galvanized finishes



# **WONDER** Prop

EN1065 Adjustable Telescopic Steel Prop

## **Project References**

- P22172 @BANDAR KUALA LUMPUR, WILAYAH PERSEKUTUAN KUALA LUMPUR





- P23097@MUKIM BANDAR JOHOR BAHRU, JOHOR DARULTAKZIM

>100mm

AMP

BS EN16031 TYPE2

(Pin and Collar Nut)

# **WONDER** Prop

**SPECIFICATIONS** 

# BS EN 16031 Adjustable Telescopic Aluminium Prop

The Adjustable Aluminium Prop is designed in accordance with BS EN 16031, engineered to deliver optimal strength-to-weight performance based on the nominal characteristic strength specified in the standard.

It serves as a reliable vertical support for temporary shoring, ideal for formwork, beams, and slabs, and it can be seamlessly integrated into table formwork systems for efficient on-site operations.

**Product Features:** 

**Adjustment Device** 

AGP/AHP/ASP

BS EN16031 TYPE1 (Threaded Inner Tube)

- Certified according to BS EN16031
- · Anti-hand trapping gap over 100mm
- · Permanent anti-disengagement system
- · Rapid adjustment
- Powder-Coated finishes



Specification	AGP	AMP	AHP	ASP	
Product Code	AGP350	AMP350	AHP350	ASP350	

(AHP)

(ASP)

(AMP)



(AGP)

# **WONDER** Prop

BS EN 16031 Adjustable Telescopic Aluminium Prop

## **Project References**

- P23007 @ PASIR GUDANG, JOHOR, DOUBLE STOREY WAREHOUSE









# Permissible Load Capacity of Steel Prop

### Permissible Load Capacity of Steel Prop: (Selection Table)

The permissible load capacity is determined in accordance with BS 5975, Clause 16.9.6.3, by applying a load factor of 1.5 and a material factor of 1.1.

Extension	PRO	PA	PRC	P B	PRO	OP C	PRO	P D	PRC	)PE
Length (m)	EN 1065	Class A	EN 1065	Class B	EN 106	5 Class C	EN 1065 Class D		EN 1065 Class E	
	PA300	PA350	PB320	PB350	PC300	PC350	PD350	PD400	PE350	PE400
1.7	26.7				36.1					
1.8	26.7		30.9		36.1					
1.9	25.7		30.9		36.1					
2.0	23.2	26.7	30.9	30.9	36.1	36.1	20.6		30.9	
2.1	21.0	24.5	29.9	30.9	36.1	36.1	20.6		30.9	
2.2	19.2	22.4	27.2	29.8	36.1	36.1	20.6	20.6	30.9	
2.3	17.5	20.4	24.9	27.3	35.1	36.1	20.6	20.6	30.9	
2.4	16.1	18.8	22.9	25.0	32.2	36.1	20.6	20.6	30.9	30.9
2.5	14.8	17.3	21.1	23.1	29.7	34.6	20.6	20.6	30.9	30.9
2.6	13.7	16.0	19.5	21.3	27.4	32.0	20.6	20.6	30.9	30.9
2.7	12.7	14.8	18.1	19.8	25.4	29.7	20.6	20.6	30.9	30.9
2.8	11.8	13.8	16.8	18.4	23.7	27.6	20.6	20.6	30.9	30.9
2.9	11.0	12.8	15.7	17.2	22.1	25.7	20.6	20.6	30.9	30.9
3.0	10.3	12.0	14.7	16.0	20.6	24.0	20.6	20.6	30.9	30.9
3.1		11.3	13.7	15.0		22.5	20.6	20.6	30.9	30.9
3.2		10.6	12.9	14.1		21.1	20.6	20.6	30.9	30.9
3.3		9.9		13.3		19.9	20.6	20.6	30.9	30.9
3.4		9.4		12.5		18.7	20.6	20.6	30.9	30.9
3.5		8.8		11.8		17.7	20.6	20.6	30.9	30.9
3.6								20.6		30.9
3.7								20.6		30.9
3.8								20.6		30.9
3.9								20.6		30.9
4.0								20.6		30.9

### Note:

- Permissible load capacity is based on a single prop without bracing.
- Tested results may be used to derive the Safe Working Load, applying a factor of safety (FOS) of 2.0 in accordance with BS 5975, Clause 16.9.6.3.



# Permissible Load Capacity of Aluminium Prop

### Permissible Load Capacity of Aluminium Prop: (Selection Table)

The permissible load capacity is determined by conservative calculation and applying a load factor of 1.5 and a material factor of 1.2.

Extension Length		Outy Prop GP)	Medium-Duty Prop (AMP)			Outy Prop HP)	Super-Duty Prop (ASP)	
(mm)	BS16031 Class E	BS16031 Class D	BS16031 Class R	BS16031 Class E	BS16031 Class V	BS16031 Class E	BS16031 Class W	BS16031 Class R
	AGP350	AGP400	AMP350	AMP500	AHP350	AHP625	ASP350	ASP480
2.0	55				91		93	
2.1	53		64		90		93	
2.2	52		64		89		92	
2.3	50		63		88		91	
2.4	48		62		86		90	
2.5	46	46	61		85		89	
2.6	45	45	60		84		88	88
2.7	43	43	58		82		86	86
2.8	41	41	57		80		93	85
2.9	39	39	55		78		84	84
3.0	37	37	54		76		82	82
3.1	35	35	52		75		81	81
3.2	33	33	51		73		79	79
3.3	32	32	50	50	70		77	77
3.4	31	31	48	48	68		75	75
3.5	29	29	46	46	66		74	74
3.6		28		45				71
3.7		27		43				70
3.8		25		41				67
3.9		24		40				66
4.0		23		38				64
4.1				37				61
4.2				35				60
4.3				34		50		57
4.4				33		48		56
4.5				32		46		54
4.6				31		44		52
4.7				29		42		51
4.8				28		41		49
4.9				27		40		
5.0				26		38		
5.1						37		
5.2						36		
5.3						34		
5.4						33		
5.5						32		
5.6						31		
5.7						30		
5.8						29		
5.9						28		
6.0						27		
6.1						27		
6.2						26		
6.3						25		

### Note:

- Permissible load capacity is based on a single prop without bracing.
- Tested results may be used to derive the Safe Working Load, applying a factor of safety (FOS) of 2.0 in accordance with BS 5975, Clause 16.9.6.3.

Versatile modular scaffolding and shoring

# [1] WH60 WONDER Heavy Duty Shoring System

# [2] WCL48 WONDERCrab Lock Modular Shoring System

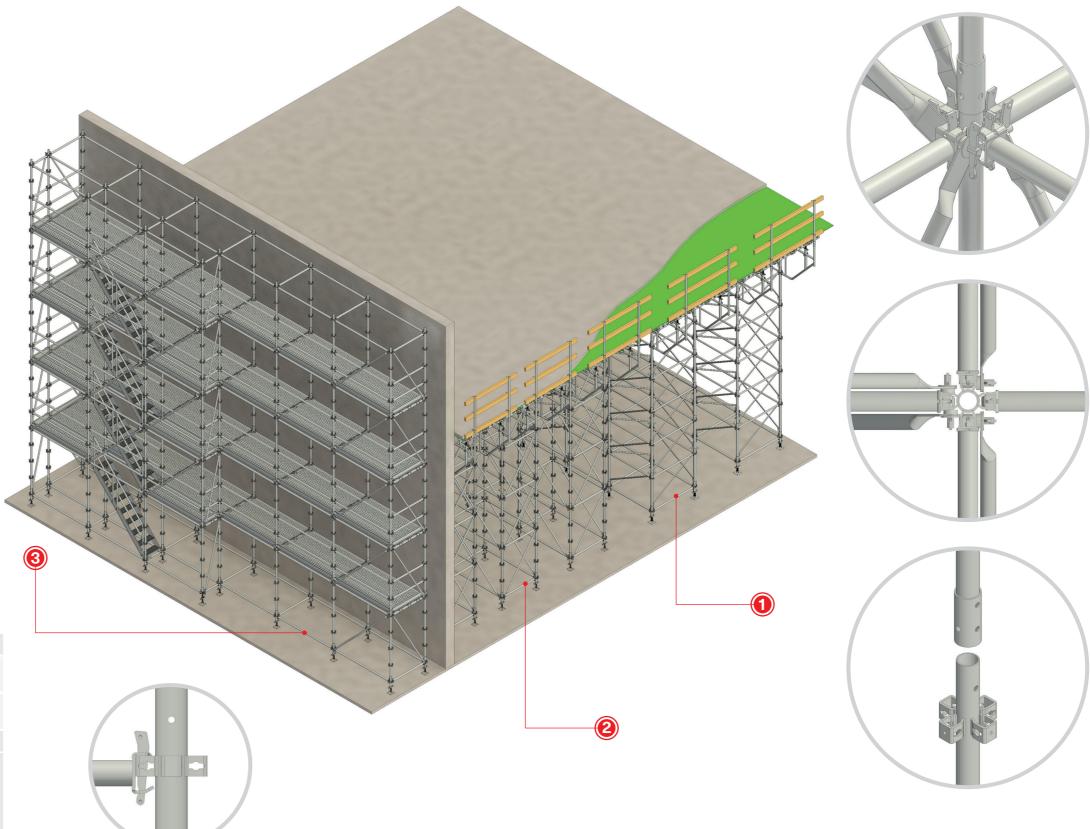
# [3] WCL48 WONDERCrab Lock Modular Scaffolding System

The WONDERCrab system is a modular steel framework engineered for both scaffolding and shoring applications. It is designed to provide reliable structural support while maximizing operational efficiency throughout the construction process.

The WONDERCrab Lock system features a specially engineered lock mechanism that enables fast, secure, and flexible assembly. Each ledger is equipped with a C-Shape Wedge that locks onto a stirrup integrated into the vertical member. This allows ledgers to be connected from any orthogonal direction with minimal effort.

The Vertical Member allows up to eight components to connect at a single joint, including four ledgers and four diagonal braces. This enables quick, stable, and flexible assembly.

System	WCL48	WH60
Application	Scaffolding and General Duty Shoring	Heavy-Duty Shoring
Ultimate Capacity	68kN	133kN
Diameter	48mm	60mm
Profile	0,10	

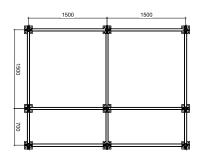




# WH60 WONDER Heavy-Duty Shoring System

WH60 Shoring System is a high-capacity modular steel shoring system, engineered for applications requiring exceptional load-bearing performance, such as high-rise construction, bridge formwork, and heavy civil infrastructure works.

WH60 system includes two tower types:



#### WH60 T-Frame Shoring Tower

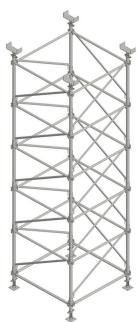
 Modular design available in 700mm and 1500mm widths, enabling efficient assembly and high load-bearing performance.

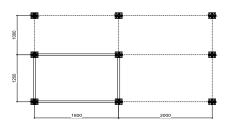
## a) WH60 T-Frame Shoring Tower

>> High load capacity and rapid assembly: The T-Frame is a single welded unit with integrated vertical, horizontal, and diagonal members, offering high load capacity and quick assembly.

# Ultimate Load Capacity: 133 kN per leg

# Application Areas: Large transfer floor area.





#### WH60 Post-Ledger Shoring Tower

 Modular design available in 300mm and 500mm incremental configurations, offering flexibility for various layouts.

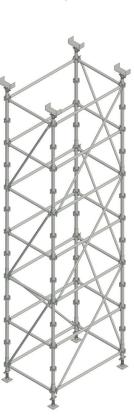
## b) WH60 Post-Ledger Shoring Tower

Flexible Tower Configuration: Supports various bay widths and overlapping setups to suit complex layouts.

# Wiltimate Load Capacity: 116 kN per leg

## Application Areas:

Suitable for confined or irregular spaces requiring flexible tower positioning and high load demand.





# WH60 WONDER Heavy-Duty Shoring System

# **Project References**

- P23173 @ BATU KAWAN, PENANG, TWO STOREY WAREHOUSE





- P23039 @ MONT KIARA, KL, RESIDENTIAL BUILDING



# WCL48 WONDERCrab Lock Modular Shoring System

The WCL48 shoring system is a high-performance, prefabricated modular steel falsework solution engineered for optimized load capacity.

Its modular design enhances efficiency, adaptability, and ease of assembly, making it ideal for construction projects that demand both strength and flexibility — while minimizing weight for improved handling and transportation.

#### WCL48 Shoring Tower:

# >> Strength-to-Weight Optimized:

Optimized strength-to-weight ratio for faster transport, handling, and assembly.

## >>> Flexible Tower Configuration:

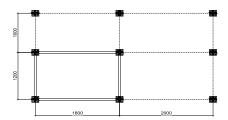
Supports various bay widths and overlapping setups to suit complex layouts.

## William Ultimate Load Capacity:

68kN per leg

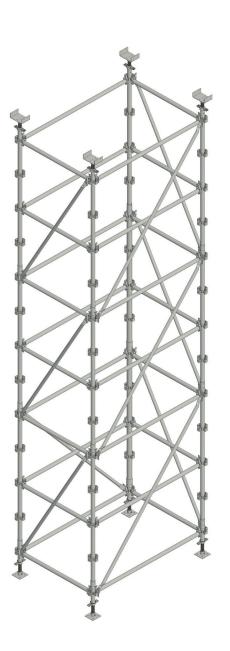
## Application Areas:

Suitable for confined or irregular spaces requiring flexible tower positioning and medium load demand.



## WHCL48 Shoring Tower

 Modular design available in 300mm and 500mm incremental configurations, offering flexibility for various layouts.





# WCL48 WONDERCrab Lock Modular Shoring System

# **Project References**

P22083 @ KUCHAI LAMA, KL, RESIDENTIAL BUILDING

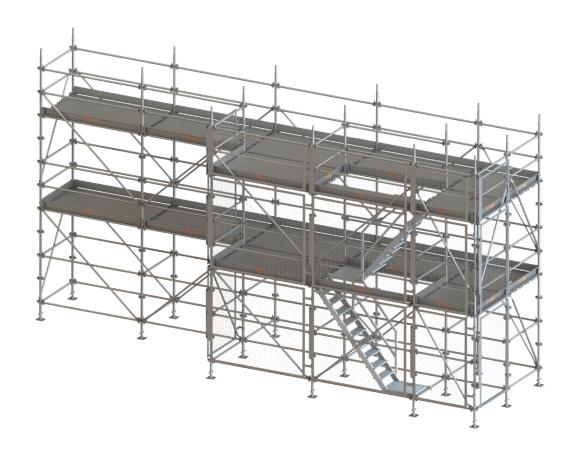








# WCL48 WONDERCrab Lock Modular Scaffolding System



WONDERCrab Lock (WCL48) scaffolding is an innovative, multi-functional, prefabricated modular steel scaffolding system. Designed for efficiency and adaptability, it integrates aluminum scaffold components to enhance safe access solutions. The system shares all components with WH60, except for the primary load-bearing component, making WCL48 a more versatile and lightweight solution while maintaining high structural integrity and load capacity.

Metal Scaffolding / Prefabricated Scaffolds / Temporary Works Equipment:

- MS 1462-3&4
- BS EN12810-1&2
- BS EN12811-1

## ✓ Quality and durable

Product finished with hot dipped galvanized (HDG) surface treatment.

## ✓ Easy to handle

Optimized for storage space and transportation payload.

## ✓ Flexible and reliable

Lightweight and modular components allows for quick installation and dismantling with minimal labour



# WCL48 WONDERCrab Lock Modular Scaffolding System

# **Project References**

P21093 @ BATU KAWAN, PENANG, SEMI CONDUCTOR FACTORY







# WONDER⊿IuTower (WAT)

Mobile Access Platform



WONDERAluminum Tower (WAT) is a light weight, high strength, fast and easy-to-assemble system perfectly used as mobile access platform for work at multiple heights. WAT adopts the 3T (Through The Trapdoor) method to enhance the safety of its users.

Available in seven (7) series of designs, the self-supporting tower offers a wide range of solutions for the professional trades working in all environments – indoors and outdoors; narrow or spacious. The towers are manufactured from high-strength access aluminium alloy and have exceptional quality and long-life durability.

## **Product Tested and Complied with:**

- EN 1004 Class 3
- AS/NZS 1576.1~1576.3 and AS/NZS 1577
   Load bearing capacity up to 200kg/m²
- ✓ Rapid assembly by one person
- ✓ Stable and safe at height
- √ Highly versatile

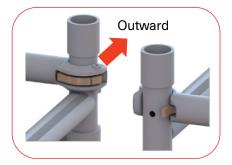
Various design for multiple heights and sizes

## ✓ Easy to handle

Optimized for storage space and transportation payload

# WONDER⊿IuTower (WAT)

# Mobile Access Platform



Automatic locking jaw for fast attachment



Secure stabilisers for access tower



Wind lock to prevents platform from uplifting



Non-skip rubber feet attached to the stabilisers



Adjustable leg for levelling and brake to prevent movement

# **Project References**

- P25122 PUCHONG, SELANGOR









# WONDERScreen Self-Climbing Platform SCP

# (Overview)

Harmonizing technology, safety and productivity

The SCP is an innovative self-climbing platform integrated with rigid screen that is used as perimeter protection and working platform for the high-rise building facade work.

SCP is available in steel and aluminium. Steel SCP has higher strength, while aluminium SCP is made from lightweight aluminium alloy that has good strength and excellent corrosion resistance.

SCP with multi-level platforms facilitates an efficient sequence of operations such as structural building work and architectural facade work to be performed at high level of productivity. Once the SCP installation is completed, the SCP will be self-lifted using electric hoists.





Lifting System Frame Material	Chain Hoist	Hydraulic
Steel	<b>✓</b>	<b>✓</b>
Aluminum	_	<b>✓</b>

Aluminum frame features a higher strength-to-weight ratio, enabling lesser operation cost.

# WONDERScreen Self-Climbing Platform SCP

# (Chain Hoist Lifting System)

Harmonizing technology, safety and productivity



#### ✓ One-time installation at low level

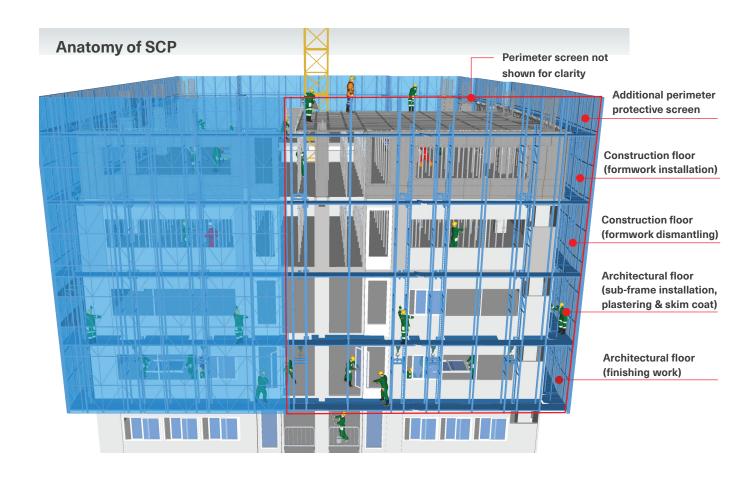
Once-off, safe and efficient installation at the bottom level. Subsequent installation is unnecessary with self-performing mechanical lifting.

- ✓ Consistently low risk regardless of height No additional installation and inspection at height are required.
- √ Full enclosure
- ✓ Low maintenance
- ✓ Efficient self-performing process half-day climbing weekly with minimum supervision
- ✓ Non-combustible metal material



# **WONDERScreen** Self-Climbing Platform SCP (Chain Hoist Lifting System)

Harmonizing technology, safety and productivity





# WONDERScreen Self-Climbing Platform SCP

# (Chain Hoist Lifting System)

Harmonizing technology, safety and productivity





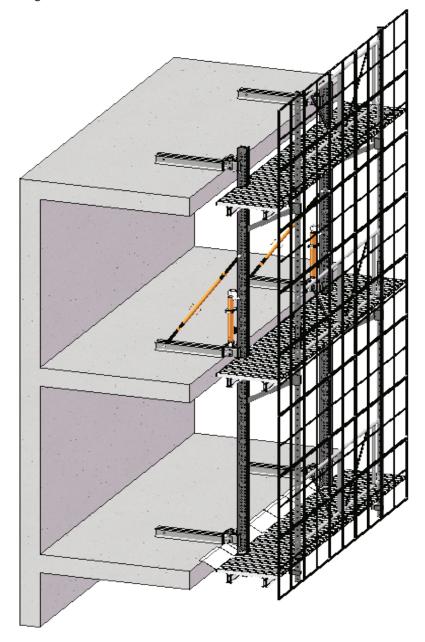




# **WONDERScreen** Self-Climbing Platform SCP (Hydraulic Lifting System)

Harmonizing technology, safety and productivity

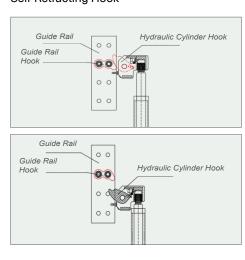
The Hydraulic Self-Climbing Platform SCP offers an alternative climbing solution by utilizing the hydraulic technology. Its also can be constructed from Aluminum frame to reduce the overall weight, enhancing cost effectiveness in the installation and usage.





# **Anti Fall Safety System**

Self-Retracting Hook



# **WONDERScreen** Self-Climbing Platform SCP (Hydraulic Lifting System)

Harmonizing technology, safety and productivity

# **Project References**

- P23030 @ BANDAR BARU SRI PETALING, KL, RESIDENTIAL BUILDING







# **K21 Mobile House**

# Temporary Building for construction site

PLYTEC® K21 Mobile House is an industrialised building system (IBS) which is lightweight, easy and fast-to-assemble. The system uses lightweight steel structure framing with rock wool sandwich panel, which requires no heavy machinery for installation.

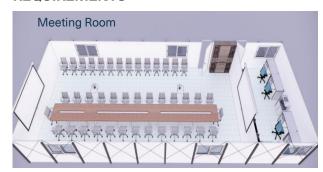
- *✓* LIGHT WEIGHT MATERIAL
- *Y Y*
- **✓** AFFORDABLE & REUSABLE

# **APPLICATIONS**

- · Worker Living Quarter
- · Site Office
- Temporary Refugee Camps
- · Disaster Relieve Centre
- Emergency & Disaster Sites as Camps
- Military Unit
- Medical Unit Temporary Accommodation
- Temporary Storage
- · Car Park Area



Design of Layout optimised to meet **ACT 446 REQUIREMENTS** 





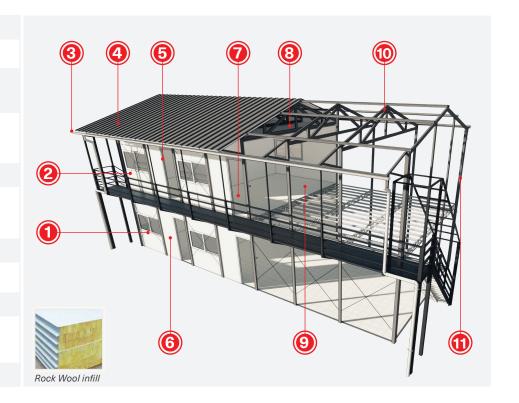
# **SPECIFICATIONS**

Main Structure	Prefabricated light-weight pre-galvanised steel
Wall Sandwich Panel	50mm thick c/w 80kg/m3 rockwool infill
Floor Panel	18mm thk. plywood c/w vinyl sheet (for 1st floor only)
Metal Roof	0.40mm TCT PPGI metal deck c/w 25mm- 55mm thick Polyurethane (PU) insulation
Staircase (for 2 storey)	1m wide (2 sets)
Outdoor Hanger	G.I. wire
Floor / Ceiling Height	2.85m / 2.5m
Ceiling (optional)	Suspended ceiling
Rainwater Components (optional)	Inclusive, plastic gutter & UPVC downpipe (Discharge connection by others)

# **K21 Mobile House**

Temporary Building for construction site

- [1] Sliding Glass Window
- [2] Turnbuckle & Wire Rope
- [3] Gutter & Rainwater Downpip (Optional)
- [4] Painted Pre-Galvanised Iron Sheet with Polyurethane (PU) insulation
- [5] Sandwich Panel Door
- [6] Painted Pre-Galvanised Iron Sheet with Rock Wool infill
- [7] Vinyl Sheet
- [8] Suspended Ceiling (Optional)
- [9] Plywood Flooring (18mm thick)
- [10] Galvanised A-Shape Roof Truss
- [11] Steel Column



# LIGHTWEIGHT MODULAR PARTITIONING SYSTEM

(Car Park Area)





Also available: Container House







# PLYTEC fencing

# Perimeter protection solutions

PLYTEC Fencing offers a comprehensive range of perimeter protection systems designed to suit diverse applications — from private estates and residential properties to equine facilities, airport boundaries, and agricultural land.

# **ADVANTAGES**

- **OURABILITY**
- **✓ ELEGANCE**
- **✓ RIGIDITY**
- **✓ LOW-MAINTENANCE**
- **EASY INSTALLATION**









## INTEGRATED SECURITY SOLUTIONS

Our systems seamlessly integrate with existing IT and security infrastructure, delivering a comprehensive, intelligent, and future-ready security solution.



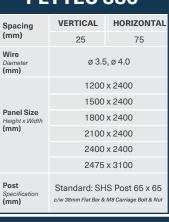








# **PLYTEC 380** Spacing (mm) 25 75 ø 3.5, ø 4.0 Diameter (mm) 1200 x 2400 1500 x 2400 Panel Size Height x Width (mm) 1800 x 2400 2100 x 2400 2400 x 2400





	PLY	/TEC 480
	W - PROFILE GRILL	
	Part Name	Specification
	Post SHS Section	Stantard: SHS 65mm x 65mm
	Rail Section	38mm x 38mm (L-Angle)
	Pale Section: W Section	65mm x 2mm
	Bolt & Nuts	M8 x 40mm
	Cup Square	M12 x 30mm



PLYTEG 580			
Spacing	VERTICAL	HORIZONTAL	
(mm)	75	12.5	
Wire  Diameter (mm)	ø 4.0		
	1200	x 2400	
Panel Size	1500 x 2400		
Height x Width	1800	x 2400	
(11111)	2400	x 2400	
	2700 x 2400		
	3000	x 2400	
Post Specification (mm)		S Post 65 x 65	



PLYTEC 680A		
Spacing	VERTICAL	HORIZONTAL
(mm)	50	150
Wire Diameter (mm)	ø 4.5, ø 5.0	
	900	x 2400
Panel Size	1200 x 2400	
Height x Width	1500 x 2400	
(11111)	1800 x 2400	
	2100	x 2400
	2400 x 2400	
Post Specification (mm)	Standard: Ultragal Post Ø 60 c/w Stainless U-Clip & M6 Bolt & Nut	



Spacing	VERTICAL	HORIZONTA
(mm)	50	200
Wire Diameter (mm)	ø 4.0, ø 4.5, ø 5.0,	
	930	x 2500
	1230 x 2500	
Panel Size Height x Width	1530 x 2500	
(mm)	1830 x 2500	
	2130 x 2500	
	2430 x 2500	
Post		tragal Post ø 60
Specification (mm)	Peach Po	nterlocking System st 70 x 100 late 140 x 140

**PLYTEC 780** 



PLYTEC 680B				
Spacing	VERTICAL	HORIZONTAL		
(mm)	75	300		
Wire Diameter (mm)	ø 6.0			
	900 x 2400			
	1200 x 2400			
Panel Size Height x Width	1500 x 2400			
(mm)	1800 x 2400			
	2100 x 2400			
	2400 x 2400			
Post Specification	Standard: Ultragal Post ø 60			
(mm)	c/w Stainless U-Clip & M6 Bolt & Nut			



PLYTEC 980Z				
Spacing	VERTICAL	HORIZONTAL		
(mm)	75	300		
Wire Diameter (mm)	ø 5.0			
Panel Size Height x Width (mm)	900 x 2400			
	1200 x 2400			
Post Specification (mm)	Standard: Ultragal Post Ø 60 c/w Stainless U-Clip & M6 Bolt & Nut			



	PLYTEC 880		
ı	Spacing (mm)	VERTICAL	HORIZONTAL
		50	200
	Wire Diameter (mm)	ø 6.0 / 5.0 / 6.0	
	Panel Size Height x Width (mm)	830 x 2500	
		1230 x 2500	
		1630 x 2500	
		1830 x	2500
	Post Specification (mm)		ragal Post ø 60
		Optional: SH	S Post 65 x 65



# Rebar Coupling Solution

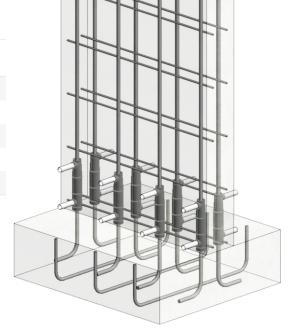
# **WONDERS**leeve

**CC-Series** 

The WONDERSleeve CC series is a precision-engineered solution, manufactured from ductile iron, designed for the reliable connection of precast concrete elements. It provides secure, grouted rebar connections that ensure efficient load transfer and structural continuity, making it ideal for a wide range of construction applications.

#### Tested and Conform to ISO 15835

Sleeve Model	Rebar Diameter (mm)	Sleeve Length L (mm)	Weight (kg)
CC20	12, 16, 20	285	1.35
CC25	20, 22, 25	370	2.14
CC28	22, 25, 28	415	2.53
CC35	28, 32, 35	495	3.36
CC40	32, 35, 40	620	5.32









# Precast Lifting Solution Accessories

# PC Forging specialist in prefabrication industry providing lifting solution for lifting needs



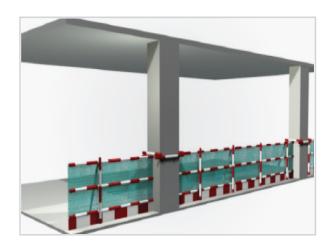




# **Safety Accessories**

Reliable fall prevention system for work at height

## SAFEGUARD RAILING WSR



WONDER Safeguard Railing (WSR) is engineered as a quick assembled fall prevention system, used to secure building and construction edges, openings, passageways and other areas where there is a risk of falling from height.

## √ Fast assembly

minimum component types, lightweight and easy to assemble

#### ✓ Reliable design

designed to meet the EN 13374 (Class A) standard

## PROTECTIVE PANEL WSP





WONDER Safety Protection Panel (WSP) is a modular protective screen of 2m height, used to barricade a building, structure, equipment, or access. The system comprises of two components, namely posts and grating, thus enabling fast assembly with minimal learning.

#### ✓ Easy assembly

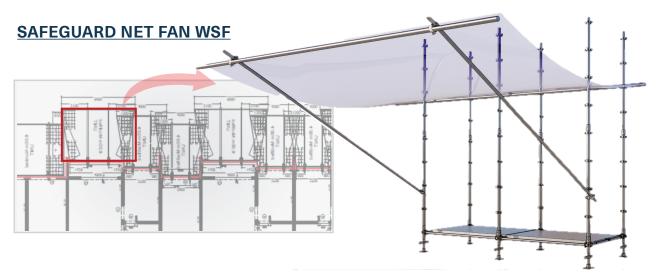
only 2 component types that require minimal learning to assemble

#### ✓ Reliable design

designed to withstand an accidental impact load

# **Safety Accessories**

Reliable fall prevention system for work at height

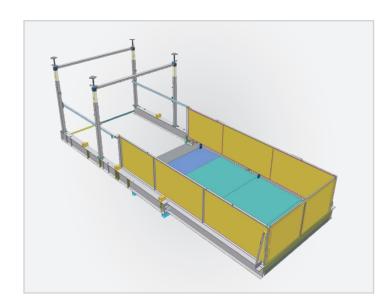


WONDER Safety Net Fan (WSN) is the latest innovation in fall prevention systems used to safely catch objects or people fall from heights. The system is engineered to form a collection bag around the trapped object or people with the elasticity of the net and a slight deformation of the frame, hence preventing the object or people from falling outside the system.

# ✓ Reliable design safety net is designed to meet the EN 1263-1 standard

- ✓ UV stabilised
- ✓ Rigorous test designed to meet the EN 13374 (Class A) standard

#### LOADING PLATFORM



WONDER Wonder Loading Platform (WLP) is a retractable loading platform system ideally used in multi-storey structures to crane building materials into the structure.

- ✓ Quick and easy installation and relocation
- ✓ Easy push-pull operation by one person in seconds
- ✓ Stackable, easy for transport and storage



# Change to PLYTEC Formwork logo



#### **PLYTEC Formwork System Industries Sdn Bhd**

A subsidiary of PLYTEC Holding Berhad

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Version: June 2025