汇来国际®
HUI LAI INTERNATIONAL

CONSTRUCTION FORMWORK

GLOBAL PROVIDER OF COMPREHENSIVE FORMWORK SOLUTIONS

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ADVANCED PRODUCTION LINE

Web Grooving

Precision Cutting of Wooden I-Beams

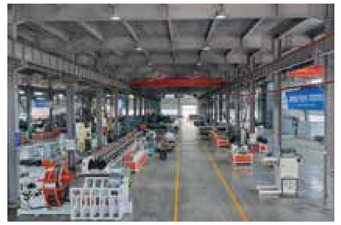
Automatic Spraying

Custom Formwork Carving (CNC)

shot blasting

Stamping

Laser Welding

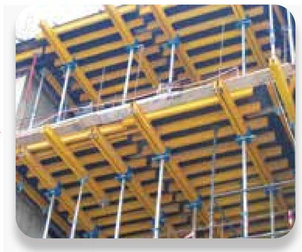


High-Strength Alloy Formwork Production Line

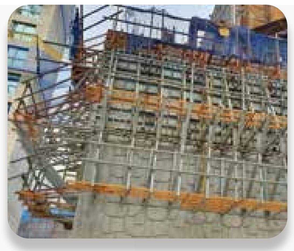
XC-300A Special Multi-Spindle Grooving Machine

N+1 PRODUCT SYSTEM

Steel prop



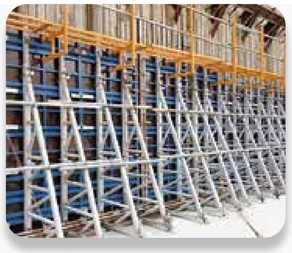
H20 Timber slab Form



Climbing bracket

Aluminum Formwork

Timber circular
column formwork



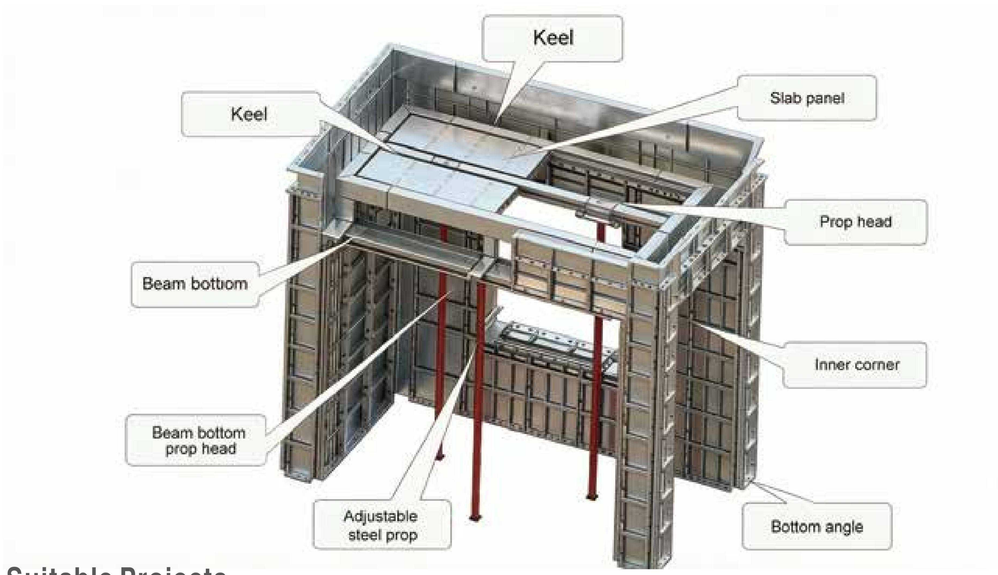
Single-side shoring
Formwork

B-form wall formwork

B-form adjustable
column formwork

ALUMINUM ALLOY FORMWORK

Aluminium Formwork System is a modern construction system for forming cast-in-place concrete structure of a building. It is also a system for scheduling andcontrolling the work of other construction work such as steel reinforcement, concreteplacement and mechanical and electrical conduits.



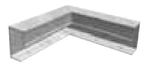
Suitable Projects

High-rise residential buildings, affordable housing, villa complexes;Standardized commercial buildings such as high-end apartments, hotels, office buildings and commercial complexes.

ALUMINUM FORMWORK COMPONENTS

WALL PANEL

Wall panel and Cylinder panel Components.
Standard wall panel and non-standard wall panel are both used.



INNER CORNER

Main component which connect the panel of inner corner.

BEAM PANEL

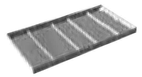
Connect the wall panel and the top wall panel.

END OF WALL PANELPANEL COVER

Shape like WEP,and it was set on the beam.

PRE- EMBEDDED BOX

Used for reserving hole which can transfer the panel to next floor.



SLAB PANEL

Use for top wall and have both standard and non-standard type.

BEAM SLAB ARCH

Connect the wall panel and tower panel

MIDDLE BEAM

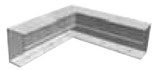
It's a beam for floor building and it was used for connect the wall panel when install the floor.

JOIN BAR

Supporting materials when using MB and EB for install the floor with props.

END BEAM

Connect the wall panel when in stalling it. It's the component for wall panel structure. It was installed at the end of the floor panel.



FLOOR INNER CORNER

Inner component for connect the wall panel and top floor panel.

FLOOR OUTER CORNER

Outer component for connect the wall panel and top floor panel.

WALL END PANEL

Component for the end of the wall panel. Forming the wall different type by panel to pressing one side or two as different angle.

FLOOR ANGLE PANEL

Connect the wall panel and helpful discharge the wall panel. It can be fastened with nut when installing

PROP HEAD

Connect the join beam when installing the floor panel. It's abeam panel for floor structure. It was installed between two floor panels. And it can unloading load for floor panel

ALUMINUM FORMWORK TIE ROD SYSTEM

ALUMINUM FORMWORK FLAT TIE SYSTEM

Performance Advantage

· Ultra-High Reusability: Reusable up to 300 times, drastically cutting average cost

· Superior Safety: 60KN/m² load capacity for reliable construction

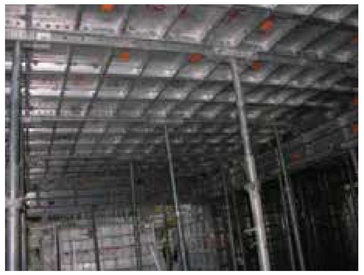
· Lightweight & Efficient: 22-25kg/m² weight for fast installation/dismantling

· Excellent Value Retention: 90% of aluminum ingot price when recycled

· Eco-Friendly: 100% recyclable, zero construction waste

SLAB

BEAM



PROP

WALL

COLUMN

STAIRWAY

HIGH-STRENGTH STEEL FORMWORK

Performance Features

· Advanced material: Hot-dip galvanized magnesium-aluminum high-strength alloy steel JL-07-01

· High strength and rigidity, excellent corrosion resistance,non-rusting

· High load capacity: >60 KN/▯ | Yield strength: >700MPa | Tensile strength: >700MPa

· New process: U-shaped steel formed by one-step bending, back stiffeners automatically laser-welded—no deformation or cracking

Environmental Friendliness

Production of 1 ton of steel consumes about1/9th the energy required for 1 ton of alumi-num, and steel formwork can be refurbishedwithout manual polishing, reducing noise pol-lution.

Economic Efficiency

Raw material costs for high-strength alloy steel formwork are approximately 70% lower than those for aluminum formwork, with new plate production costs being 5%-8% lower, and refurbishment costs reduced by around 30%.

High Strength

Utilizes Q700 grade material, offering su-perior hardness, pressure resistance, anddurability compared to aluminum.

Superior Forming Quality

Better adhesion properties, easier demold-ing, fewer bubbles, and better surface finishcompared to aluminum formwork.

Reduced Procedures

Eliminates the need for formwork spraying.

Simplified Management

Lower cost and simplified managementrequirements due to ease of handling.

HIGH-STRENGTH STEEL FORMWORK COMPONENTS

Support Systems

Independent Steel Supports

Suitable for structures up to 3.2 meters in height.

Plug-in Supports

Lower cost; can serve both as independent supports and full-hall scaffolding depending on the support height.

Specifications

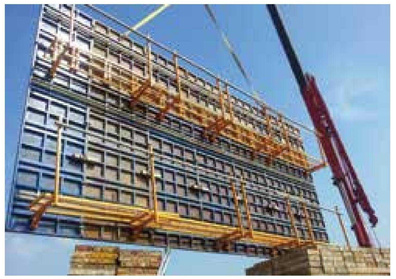
- Structure: Spatial ribbed design
- Weight: 25.5–26 kg/m² for standard panels
- Panel thickness: 1.5 mm
- Standard panel width: 100–400 mm in 50 mm increments
- Frame height: 65 mm
- Frame hole spacing: 50 mm

Applications

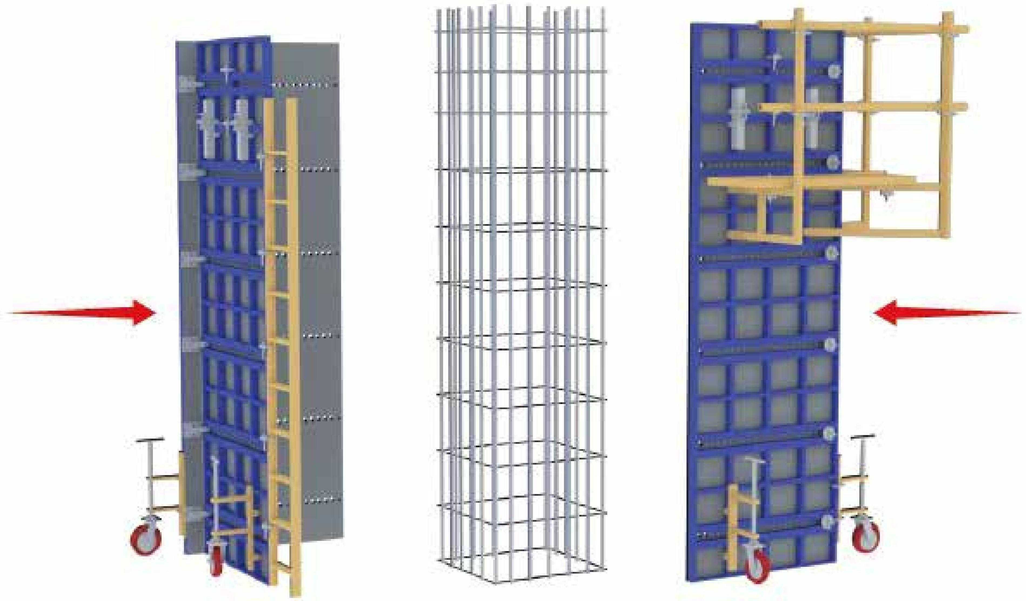
- Residential buildings, office towers, hotels with multiple standard floors
- Repetitive-structure projects such as resettlement housing and villas
- Steel-wood composite systems for basements, non-standard above-ground floors, warehouses, workshops, etc.
- All structural projects compatible with steel-aluminum composite systems

B-FORM SYSTEM

Ultra-efficient Formwork Solutions



Super-Fast Formwork Erection



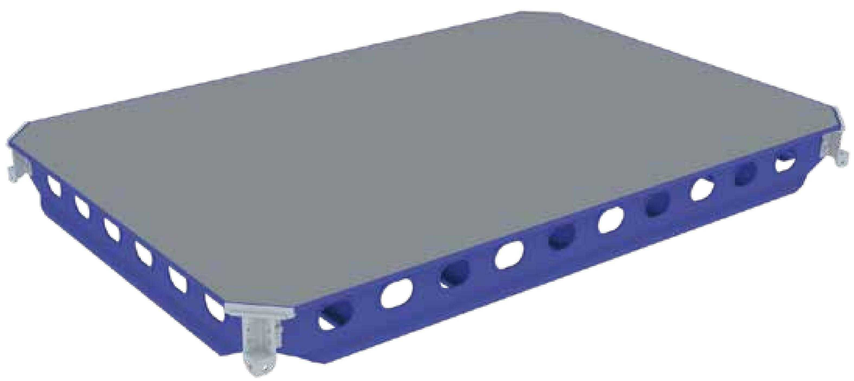
Average rate: 20 min complete column form setup

Size (position) adjustable

Suitable for any dimension wall & column

T-FORM SYSTEM

Fastest Horizontal formwork solution : T-form



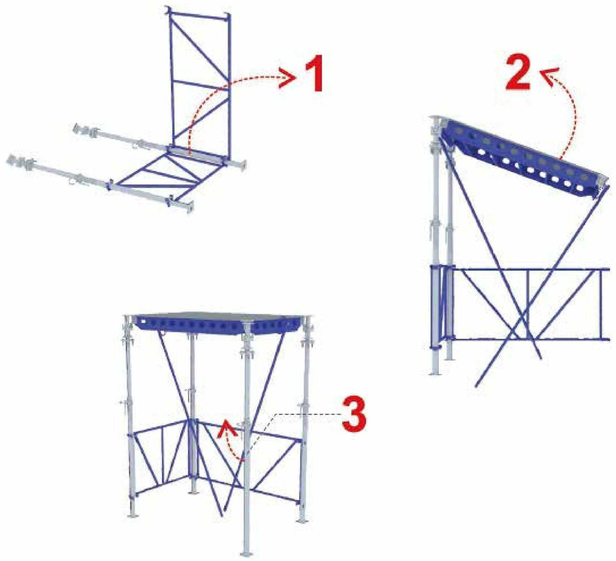
Hand-held design

Largest size panel 1800x1200mm only 44kg
(Every person max. operating weight 22kg)

Only Panel& Prop

Easy to be managed, storage, repair and search.

Manual operation (maximum panel size: 1800×1200 mm, weight only 44 kg — single-person load does not exceed 22 kg)
The main components consist of only two parts: the formwork and the support (easy to operate, convenient for storage and transportation, as well as for maintenance and on-site allocation).



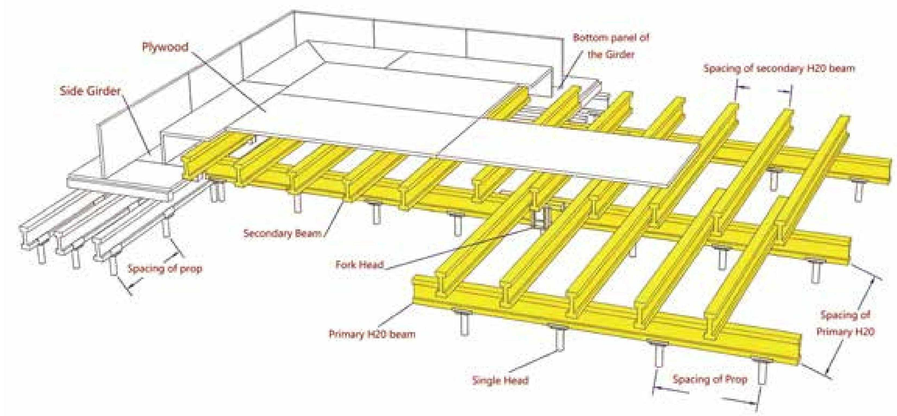
1, 2, 3 Only three steps to complete formwork installation and locking (self-locking design).

Super-Fast Formwork Erection

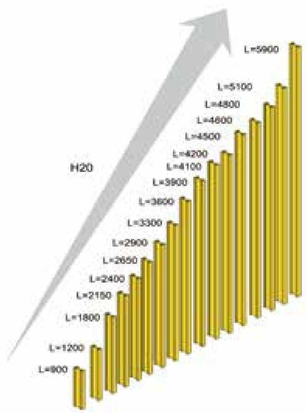
Average rate: 1 person 100 ㎡ /day

H20 SLAB FORMWORK

A-02-01-MGZL-0000-20-000



- High standard Manufactured on production line
- Super performance Fully automatic finger jointing
- Good quality Raw matefials imported



PRIMARY AND SECONDARY BEAMS

aluminum beams

H20 beams

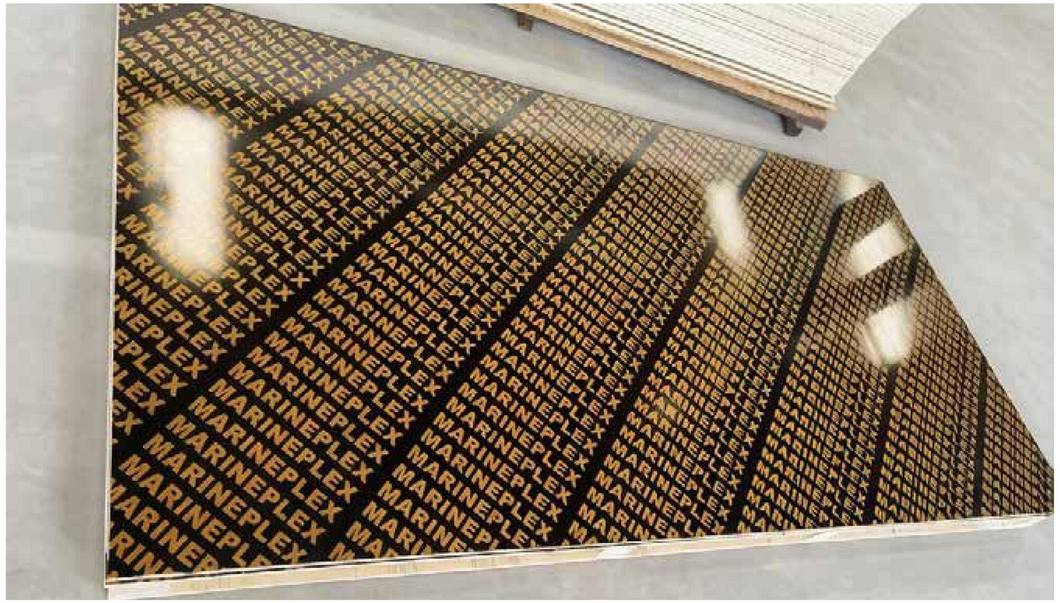
Permissble spacings between primary beams and Props

Max.deflection:	1/500
Live load:	1.5kn/m² or 20% of concrete weight
Permissible carring force of the Props:	min.22kn
Technical specifications:	permissible moment=5.0knm permissible shear force V=11.0kn

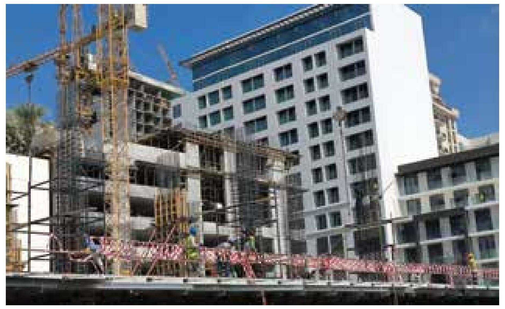
		Table 1:secondary beams spacing between secondary beams(m)				Table2: primary beams Selected spacingbetween the primary beams(m)								
		0.5	0.625	0.667	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	3.00	3.50
Floor thickness cm	Total load Kn/m²	Max.permissible Prop width of the secondary beam =spacing between primary beams				Max. permissible Prop width =spacing between Props								
10	4.35	3.67	3.40	3.33	3.20	2.91	2.70	2.48	2.29	2.14	2.02	1.92	1.69	1.44
12	4.87	3.47	3.22	3.15	3.03	2.75	2.55	2.34	2.17	2.03	1.91	1.81	1.51	1.29
14	5.39	3.30	3.07	3.00	2.89	2.62	2.43	2.22	2.06	1.93	1.81	1.63	1.36	1.17
16	5.91	3.17	2.94	2.88	2.77	2.52	2.33	2.12	1.97	1.84	1.65	1.49	1.24	1.06
18	6.43	3.05	2.83	2.77	2.67	2.42	2.23	2.04	1.89	1.71	1.52	1.37	1.14	0.98
20	6.95	2.95	2.74	2.68	2.58	2.34	2.15	1.96	1.81	1.58	1.41	1.27	1.06	0.90
22	7.47	2.86	2.66	2.60	2.50	2.27	2.07	1.89	1.68	1.47	1.31	1.18	0.98	0.84
24	7.99	2.79	2.59	2.53	2.43	2.21	2.00	1.83	1.57	1.38	1.22	1.10	0.92	0.79
26	8.51	2.72	2.52	2.47	2.37	2.16	1.94	1.72	1.48	1.29	1.15	1.03	0.86	0.74
28	9.03	2.65	2.46	2.41	2.32	2.10	1.88	1.62	1.39	1.22	1.08	0.97	0.81	0.70
30	9.61	2.59	2.41	2.36	2.27	2.04	1.82	1.53	1.31	1.14	1.02	0.92	0.76	0.65
35	11.17	2.47	2.29	2.24	2.16	1.89	1.58	1.31	1.13	0.98	0.88	0.79	0.66	0.56
40	12.73	2.36	2.19	2.15	2.05	1.73	1.38	1.15	0.99	0.86	0.77	0.69	0.58	0.49
45	14.29	2.27	2.11	2.05	1.93	1.54	1.23	1.03	0.88	0.77	0.68	0.62	0.51	0.44
50	15.85	2.20	2.01	1.95	1.83	1.39	1.11	0.93	0.79	0.69	0.62	0.56	0.46	0.40
55	17.41	2.13	1.92	1.86	1.68	1.26	1.01	0.84	0.72	0.63	0.56	0.51	0.42	0.36
60	18.97	2.05	1.84	1.74	1.55	1.16	0.93	0.77	0.66	0.58	0.52	0.46	0.39	0.33
65	20.53	1.97	1.71	1.61	1.43	1.07	0.86	0.71	0.61	0.54	0.48	0.43	0.36	0.31
70	22.09	1.90	1.59	1.49	1.33	1.00	0.80	0.66	0.57	0.50	0.44	0.40	0.33	0.28
75	23.65	1.84	1.49	1.40	1.24	0.93	0.74	0.62	0.53	0.47	0.41	0.37	0.31	0.27
80	25.21	1.75	1.40	1.31	1.16	0.87	0.70	0.58	0.50	0.44	0.39	0.35	0.29	0.25
85	26.77	1.64	1.31	1.23	1.10	0.82	0.66	0.55	0.47	0.41	0.37	0.33	0.27	0.23
90	28.33	1.55	1.24	1.16	1.04	0.78	0.62	0.52	0.44	0.39	0.35	0.31	0.26	0.22
95	29.89	1.47	1.18	1.10	0.98	0.74	0.59	0.49	0.42	0.37	0.33	0.29	0.25	0.21
100	31.45	1.40	1.12	1.05	0.93	0.70	0.56	0.47	0.40	0.35	0.31	0.28	0.23	0.20

Example of calculation:Floor thickness:20cm,distance between crossbeams:75cm;we are looking for the distance between the main beams and the supports.

PLYWOOD SYSTEM



Plywood is the most predominant type of formwork currently used in building construction, accounting for approximately 80% to 90% of the market. Its core advantages lie in low overall cost, high construction adaptability, and mature, convenient operation.



BLACK FILM FACED PLYWOOD /MARINEPLEX

A-02-01-HMMB-0000-20-000

- **Main Material:** Finger Joint, Poplar, Eucalyptus(Hardwood), Birch
- Glue: WBP, Melamine, Phenolic
- One Time Pressed or Two Times Pressed
- Light Weight, suitable for the high-rise buildings and bridge construction
- **Corrosion Resistance:** No pollution to concrete surface
- Good weather resistance, can withstand temperatures -10℃~50℃
- Can be sawed, nailed, High-strength, can be used above 15 times

FINLAND DYNEA FILM FACED PLYWOOD

A-02-01-FTMB-0000-20-000

- **Material:** Poplar, Eucalyptus(Hardwood), Combi, Birch
- Two Times Pressed or Three Times Pressed
- Can be boiled up to 72hours
- High-strength, Good-toughness and Not easily deformed
- Suitable for Steel and Aluminum Formwork supporting, nuclear power plants, bridge tunnel projects, airport terminals, etc.
- Can be adapted to various climatic conditions, suitable for all kinds high standard and high-requirements construction projects.

FORMPLY F11 F14 F17 F22 F27 FORMWORK SOLUTIONS

A-02-01-XTMB-0000-20-000

- **Material:** Eucalyptus(Hardwood), Combi, Birch
- Three hot times pressed
- **Film:** Brown, Black(Matte and Gloss Face for choice), painting grey edge
- **AS6669:** 2016, AS/NZS2098.4:2006(R2016)
- Formaldehyde Emission classes: super E0
- **Adhesive:** Exterior Grade. Phenolic A Bond
- **Application:** Conventional & system formwork, Heavy civil engineering, Mining applications, Jumpforms, DecksPrecast, Tilt-up panels

BLACK FILM FACED PLYWOOD /MARINEPLEX

A-02-01-0FFB-0000-20-000

- **Material:** Poplar, Birch, Eucalyptus, Combi, Mixed hardwood, Pine, etc.
- Two Times Pressed or Three Times Pressed
- **Origin of film:** imported film (Dynea brand or Stora Enso brand) / China local film
- High durability, eco-friendly waterproof-wbp, high wear resistance, decorative patterns, etc.
- **Application:** Stage plate, Shelf board, Ship board, Speaker board, Carriage board, Grandstand, Bridge plate, Attic partition, Air box board, Scaffolding anti-skid pedals, Commercial supermarket trolley floor tent, Double Sided Anti-Slip Ship Board, Stable non-slip hoarding, Mechanical Equipment Anti-slip Accessories

PP FILM FACED PLYWOOD

A-02-01-FSMB-0000-20-000

- **Material:** Poplar, Eucalyptus(Hardwood), Combi, Birch
- Two Times Pressed
- When pouring concrete, its surface no need to brush the releasing agent, can be easily released.
- Can withstand temperatures -40℃~100℃
- Widely used in dams, nuclear power plants, bridges, tunnels, air-port, stadiums, etc. Also suitable for engineering guardrail and package of special mechanical equipment.

PVC BOARD

A-02-01-0PVC-0000-20-000

- **Materials:** PVC powder+calcium powder+others
- **Usage:** Billboard, or concrete formwork
- **High turnover times:** 50-60times
- **Feature:** Waterproof, colorful, easy to cut
- Can be easily nailed, screwed, sawed and drilled

PP HOLLOW CONSTRUCTION BOARD

A-02-01-0ZKB-0000-20-000

- **Materials**: Polypropylene (PP)
- **Convenient construction**: high strength, light weight, strong impact resistance, can be sawed, planed, nailed
- **High turnover times:** 30-50times
- Fast demoulding speed
- Easy to clean and maintain

THREE PLYYELLOW PLYWOOD

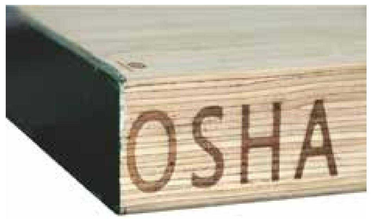
A-02-01-HJHB-0000-20-000

- **Material**: Radiate Pine
- **SURFACE TREATMENT**: UV & WBP PAINT COATING
- **LAYERS**: 3 PLY (LAYER)
- **ADHESIVE**: PHENOLIC FORMALDEHYDE ADHESICE, WBP GLUE, E0 CLASS
- **CIRCLE**: TIMES:25-30 TIMES
- **USAGE**: CONSTRUCTION/CONCRETE FORMWORK, TEMPLATE, MOLD,SHUT

OSHA LVL BOARD

A-02-01-0MTB-0000-20-000

- **Core material:** Pine, Radiata Pine
- **Standard:** OSHA,Middle Duty/Heavy Duty AS1577
- **Dimensions: Width:** 225mm,230mm,235mm etc.
  Thickness: 38mm, 42mm etc. **Legnth:** 2m,3.9m,4m,6m,etc.
- **Glue:** Melamine glue, WBP Glue, Phenolic glue etc.
- **Formaldehyde emission:** E2, E1 etc.
- **Surface:** Surface sanding, edges chamfer
- **End painting:** Green,Yellow or customized
- Edge Chamfered, logo and OSHA embossed



CIRCULAR FILMFACED PLYWOOD

A-02-01-QSYZ-0000-20-000

Quick Detail

· Core: Birch/poplar

· Glue: WBP/Melamine

Construction Process Advantages

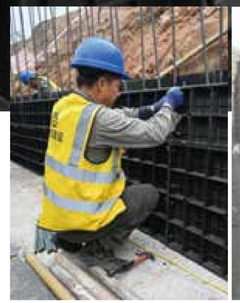
Manual installation and dismantling by 2–3 workers; no machinery required.

Groove-and-tongue design prevents grout leakage; smooth surface achieves fair-faced concrete finish.

Flexible specifications; can be cut and adjusted to size.

Application Scenarios

Used for projects requiring cast-in-place circular columns, including high-rise residential buildings, commercial complexes, office buildings, bridges, scenic ancient-style architecture, and landscape landscaping.



PLASTICFORM SYSTEM

SUPER LIGHT, REUSABLE AND MODULAR SYSTEM FOR CONCRETE WALL, COLUMN,AND SLAB PRODUCTION

Light

1500x600 panel's weight only 18kg, it can be handled quickly on site without having to use cranes or other mechanical lifting devices.

Fast

Light and easy to assemble, it can be installed by a single person.

Modular

All elements are based on 30cm long and only the elements necessary for the pour are used.

Reusable

It is cost effective as it can be reused more than 100 times when properly used and maintained.

Dismantling

Concrete does not stick to plastic; dismantling is extremely easy, the forms can be cleansed using just a little water, without any need of detergent.

Storage

It can be safely and conveniently stored in a damp and wet environment.

CANTILEVER FORMWORK

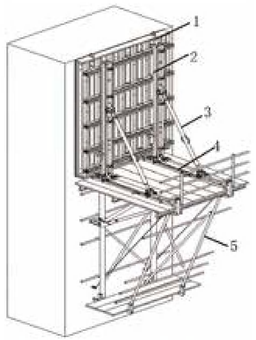
Combining a cantilever bracket with a formwork system, it is raised floor by floor using climbing cones and embedded anchors. Primarily used for continuous, high-efficiency construction of bridge piers, tall structures, and tower core walls.

Applicable Scenarios

Bridge Engineering

High-Rise and Super High-Rise Buildings

Hydropower & Special Structures



Construction Process Advantages

No scaffolding required Integral climbing Built-in working platform High-quality concrete finish

SINGLE-SIDED WALL FORMWORK

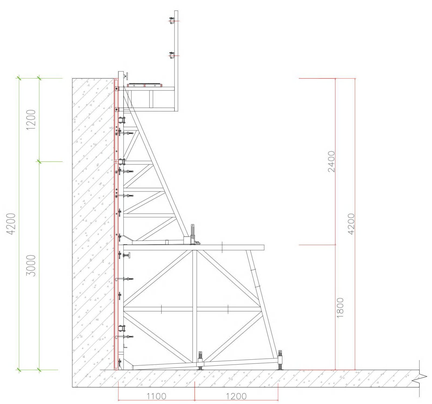
Designed for single-sided concrete wall placement, it requires no tie rods. It utilizes an embedded anchoring system and inclined braces to resist lateral concrete pressure. Ideal for basement exterior walls, excavation pits, and other applications where through-ties cannot be used.

Applicable Scenarios

Underground & Foundation Engineering

Transportation Engineering

Hydraulic & Special Structures



SECTION A
(BASEMENT 1)

Construction Process Advantages

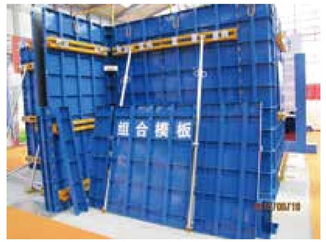
No tie rod holes; self-waterproofing structure

Single-sided operation; not restricted by narrow backfill grooves

Quick assembly and disassembly; integrated transfer

High rigidity; no bulging or misalignment

STEEL FORMWORK



ACCESSORIES

FORMWORK ACCESSORIES

TIE ROD

Code	Specification	Material
ADTO 01PJCM0107	12mm*6m	Q235
ADTO 01PJCM0108		45#
ADTO 01PJCM0109	17mm*6m	Q235
ADTO 01PJCMO110		45#

Washer Plate
0.57kg

Tie Nut
0.9kg

Wing Nut
0.28kg

Tie Nut
0.60kg

Steel Cone
0.615kg

Water Stop
0.48kg

Hexagonal Long Nut
0.21kg

PVC PIPE

Wedge and Pin
0.02-0.22kg

Steel prop
10-12kg

Flat Tie
0.2-0.8kg

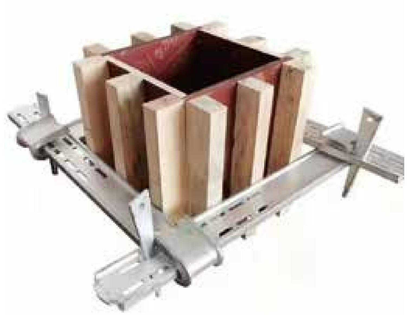
Pull push PROP
20-25kg

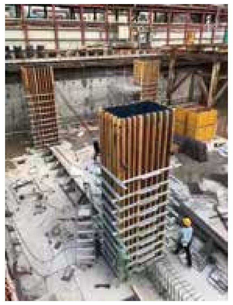
Waler Coupler
0.61kg

Waler
50*50/40*60mm

Pvc Sleeve
0.3-0.4kg/m

Spacer
50*50mm/0.2-0.4kg

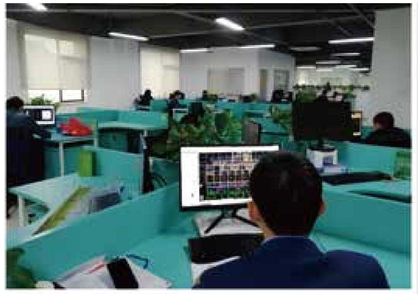




CUSTOMER SERVICE

Precision Formwork Design

Optimized formwork solutions maximize material utilization, reduce project costs from the source, and deliver both economic and construction efficiency.



First-Story Installation Support

On-site specialists guide first-story construction, establish operational standards, and prevent rework, laying a solid foundation for efficient project progression.

Professional Skills Training

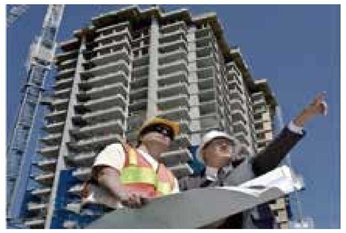
Systematic training enhances crew skills and compliance awareness, minimizing operational errors while ensuring safety and quality.

Full-Term On-Site Guidance

Comprehensive technical support throughout the project lifecycle ensures prompt on-site assistance, keeping construction on track for timely, high-quality delivery.

Maintenance & Formwork Re-design

Professional maintenance and Formwork Re-design solutions extend service life, improve utilization of used materials, and effectively reduce overall costs for subsequent projects.



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中国水电 SINOHYDRO
中广核 CGN

ENGINEERING CASE

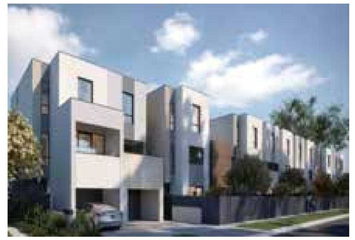
SHANGRI-LA HOTEL

PLANT TIPO ALBAI II

VILLA DELUXE ISLAND RESIDENCE

RSQUARE RESIDENCE

TWIN RESIDENCE


VILLA PROJECT

NATIONAL STANDIUM BIRD'S NEST PROJECT

AIRPORT PROJECT IN URUMGI

BEIJING INTERNATIONAL AIRPORT PROJECT

THE WORKING FIELD OF 24 CITIES IN CHENGDU

THE PROJECT OF THE CHINESE ACADEMY OFSCIENCES LABORATORY IN LANZHOU

VANKE JINYUHUAFU PROJECT IN URUMAQI