SCHACH™
ENGINEERS
SETTING HIGHEST STANDARD OF SAFETY TO WORK AT HEIGHT

# ALUMINIUM FORMWORK SYSTEM

## TECHNOLOGY FOR A BETTER TOMORROW

TÜV NORD
TÜV NORD Polska Sp. z o.o.
PN-EN ISO 9001

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# COMPANY PROFILE

Schach Engineers is an Indian company that specializes in the design, engineering, manufacturing, and installation of high-quality aluminum formwork systems. The company is based in Mumbai and has been providing innovative formwork solutions to the construction industry for over 15 years.

At Schach Engineers, we understand the importance of quality and safety when it comes to aluminium formwork system. That's why we only use the best materials and cutting-edge technology to manufacture our products. Our team of experts is committed to ensuring that our products meet the highest standards of quality and safety, making us your trusted partner in scaffolding and aerial work platform solutions.

In conclusion, we invite you to discover the quality and reliability of Schach Engineers' scaffolding and aerial work platform solutions. We are confident that our products and services will meet and exceed your expectations.

# COMPANY
# VISION & MISSION

## Vision

To be the first choice for ‘work at height’ solutions across the globe. We at SCHACH engineers are committed to set the highest standards of safety to work at heights.

## Mission

SCHACH engineers aim to serve safety to our clients around the world with the best safety solutions. We believe in innovation and adopt new technology to provide the best solutions for safety in ‘work at height’. We are eager to resolve any problems related to ‘work at height’ operations for our customers

# PROCESS OF
# ALUMINIUM FORMWORK

Aluminium Formwork System – Schach Engineers advanced aluminum formwork system is designed to provide faster construction, higher accuracy, and greater cost-effectiveness than traditional formwork systems.

Customized Solutions - Schach Engineers provides customized formwork solutions to meet the specific needs of individual construction projects. Their team of experienced engineers can work closely with clients to design and develop the best possible solution for their requirements.

Installation and Technical Support – Schach Engineers provides on-site installation and technical support to ensure that their formwork systems are installed safely and efficiently.

Training and Consultation - Schach Engineers offers training and consultation services to help clients understand the benefits and advantages of using their aluminum formwork system.

Accessories – Schach Engineers also offers a range of accessories for their formwork system, including wall ties, corner angles, and clamping devices.

# TECHNOLOGY COMPETENCY

# AND DESIGN SOLUTION

Aluminium Formwork System is highly suited to load-bearing wall construction whereas traditional formwork consisting of plywood and timber is not suitable for the high pressures of fresh concrete on the wall.

1

## COST

Use of this formwork in load bearing design gives an average of 15 per cent cost saving in the structure of the building and increased usable floor spaces of 8 per cent over RCC design.

2

## TIME

For 100 per cent work, construction through slab beam wall construction takes X time and through Aluminium Formwork technology the time required is 1/6th of the X time.

3

## ENVIRONMENT FRIENDLY

The technology is environmentally friendly as there is no use of timber. The formwork gives the box or cellular design resulting in the walls giving support to the superstructure in two directions. As a result, the structures are more resistant to earthquakes than the traditional RCC column and beam designs.

4

## LIFTING

As the Aluminium Formwork is lightweight, no tower cranes are required for the same unlike in tunnel Framework.

5

## LABOURS

Due to simplicity of the assembly, only unskilled labors are required with minimal supervision.

6

## REPETITIONS

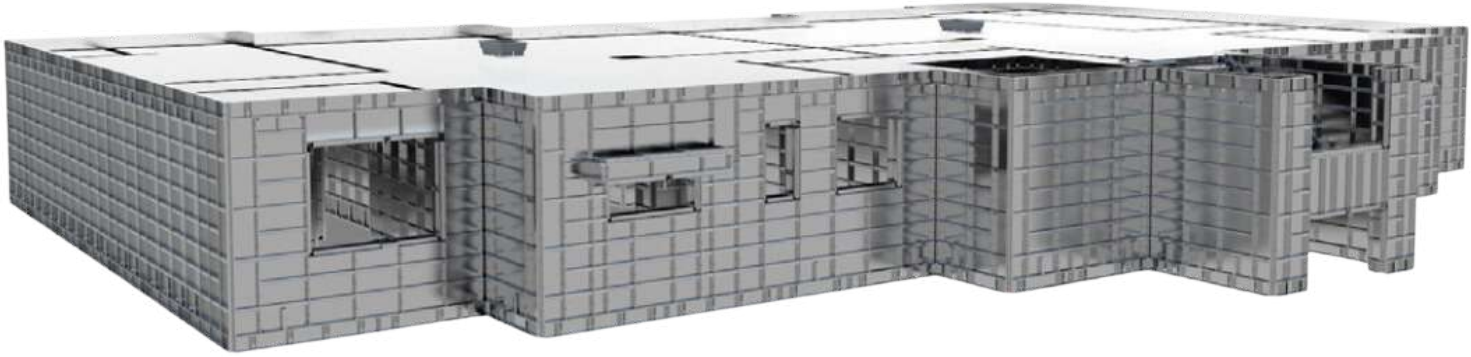
The Aluminium Formwork System is removable and can be reused hundreds of times with little maintenance.

# PRODUCTS

# DESCRIPTIONS

## Specific Information

- Raw Material — Aluminum Extrusion : Aluminum A6013-T6, A6061-T6
- Fabrication — Cutting, welding, CNC, and pressing
- Coating — KOTEC-701SN (Acrylic)
- Wall Panel — Width 600mm/450mm/300mm X Height 2,450mm X Thickness 66mm
- Slab Panel — Width 600mm/450mm/300mm X Length 1,200mm X Thickness 66mm



# COMPONENTS

# ALUMINIUM FORMWORK

- Wall & Slab

Aluminum panels for wall and slab can endure significant amount of load while pouring the concrete, and it precisely form the structure components for smooth construction phase

### 1. Wall Panel(W)

600/500/450/400*300 X 2,450mm
Maximum Weight 30kg
Thickness 66mm

### 2. Slab Deck(D)

600/500/450/400*300 X 1,200mm
Maximum Weight 13kg
Thickness 66mm

### 3. Soffit Length(S.L) / Soffit Length Corner(S.C)

(D)100*(H)100~225*(L)600~2,400mm
Maximum Weight 15kg

# COMPONENTS

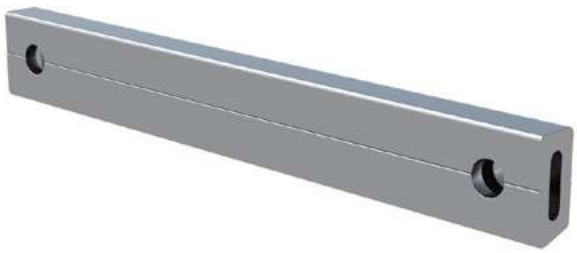
# ALUMINIUM FORMWORK

- Beam

  These components for the beam are assembled together to make solid beams.

(D)150*(H)125*(L)600/900/1,150/1,300
Maximum Weight 9kg

### 4. Middle Beam/End Beam(MB/EB)



### 5. Deck Prop(DP)

(D)150*(L)300*(H)125
Maximum Weight 2kg

### 6. Beam Joint(BJ)

(L)350mm
Maximum Weight 0.729kg

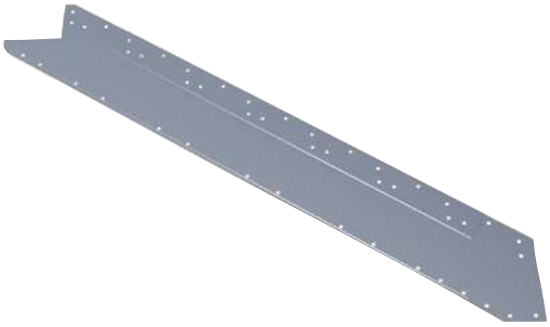
# COMPONENTS

# ALUMINIUM FORMWORK

The delicacy of the components of the stairs is produced with our engineer's precision, and each part are installed according to our design to create durable stairways.

**7. Special Step Panel(SSP)**

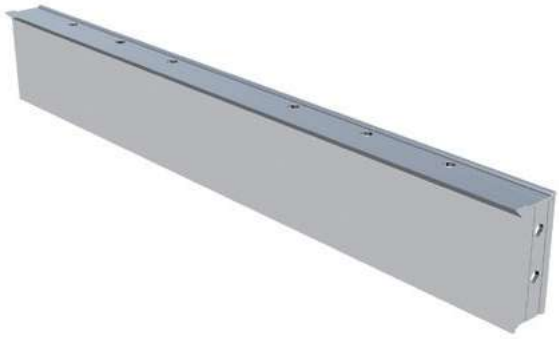
Length and weight vary



**8. Step Panel(SP)**

**9. Step Cap Panel(SCP)**

Length and weight vary



**10. Step Angle(SA)**

The staircase formwork is customized according to specifications of each site. It is easy to install with exclusive and rigid appearance in any construction site.

# ACCESSORIES

# ALUMINIUM FORMWORK

Pins and ties are used to hold the formwork firmly while pouring the concrete, and they are the most essential components for our strategic and advanced formwork system

### 11. Stub Pin / Wedge Pin / Long Pin

Weight 0.074kg / 0.021kg / 0.224kg

Stub pin and wedge pin are used to interlock wall panels and slab panels together.
Beam pin and wedge pin are used to interlock deck prop (DP) with end beam (EB) and middle beam (MB)

### 12. Reusable Flat Tie / PVC Sleeve / Integral Type / Embeded Flat Tie

Flat tie is used to interlock the wall panel with the opposite side wall panel. PVC sleeve are parts enabling ties to reuse.

# ACCESSORIES

# ALUMINIUM FORMWORK

### 13. Steel Support

| Type | Length(M) | Weight(kg) |
|---|---|---|
| V1 | 1,800~3,20 | 10.9 |
| V2 | 0 | 11.5 |
| V3 | 2,000~3,4 | 12.5 |
| V4 | 00 | 13 |
| | 2,400~3,8 00 | |
| | 2,600~4,0 00 | |

### 14. Aluminum System Support

| Type | Length(mm) | |
|---|---|---|
| HP | 2,863~4,062 | |

### 15. Wall Bracket / Slab Bracket / Elevator Bracket

Each bracket works on the external walls, slabs, and elevators.
Each bracket will be mounted and fixed on the concrete surface when in use.

# ACCESSORIES

## ALUMINIUM FORMWORK

16. AL-NEW BRACKET

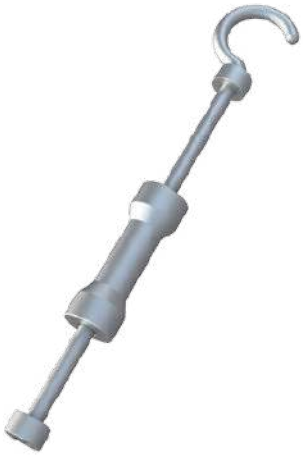
17. PANEL PASSAGE

18. BRACING

19. AL-ADJUSTABLE BRACKET

# ACCESSORIES

## ALUMINIUM FORMWORK



20. TIE PULLER

21. TIE BREAKER

22. EJECTOR BAR

23. PANEL PULLER

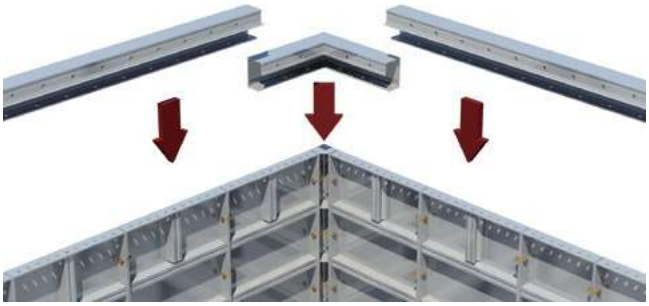
# INSTALLATION

# DISMANTLEMENT

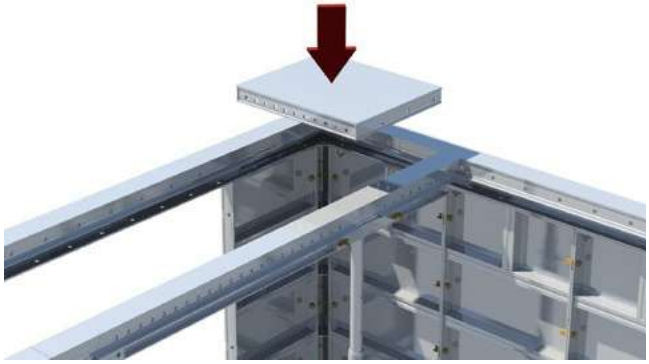
- Installation of Wall and Slab Panels

We use SL(Soffit Lengths), end beam(EB), and middle beam(MB) components to connect wall and slab components together firmly

1. Installation of wall panels



2. Installation of soffit lengths (SL) and soffit corners (SC)



3. Installation of standard deck panels

4. Installation of end beams (EB) and middle beams (MB)

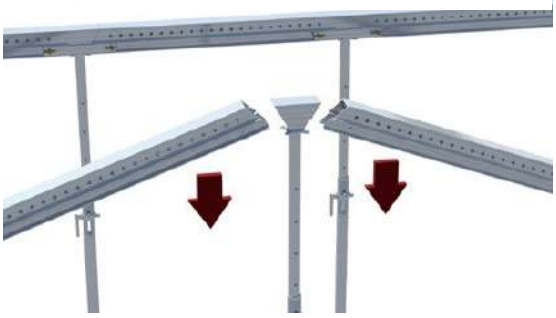
# INSTALLATION

# DISMANTLEMENT

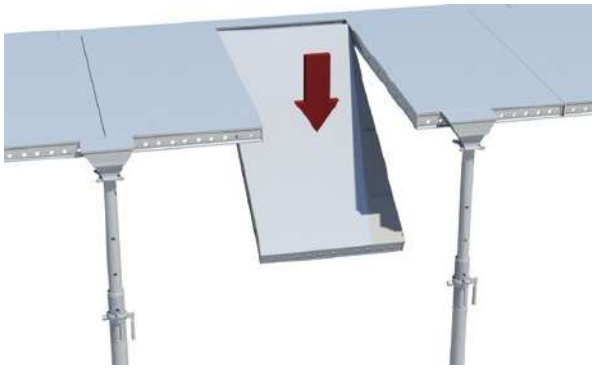
- Dismantlement of Wall and Slab Panels

Dismantling process require the wall panels to be disassembled first, then beams, slabs, and SL

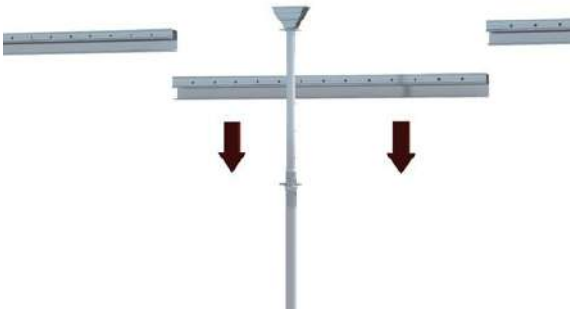
1. Dismantlement of wall panels



2. Dismantlement of beams



3. Dismantlement of slab panels



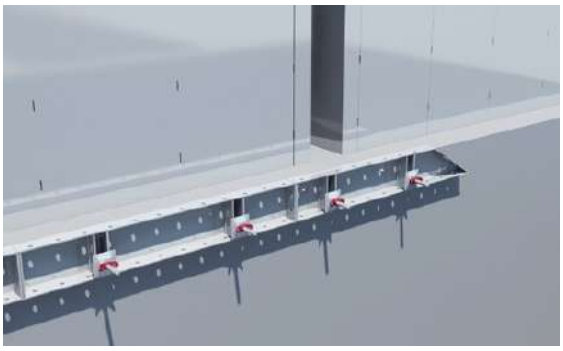
4. Dismantlement of soffit length

# INSTALLATION

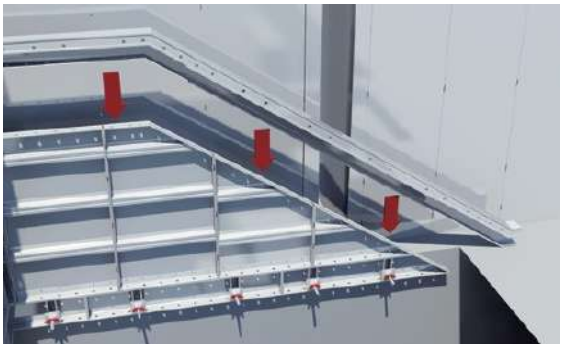
# DISMANTLEMENT

- Installation of Staircase Formworks

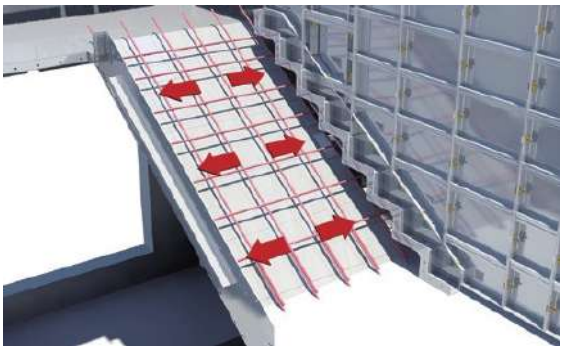
We create the basic frame guideline with SL for stairs, and step panels(SP), special step panels(SSP), and step angles(SA) are installed accordingly



**1. Installation of kickers**



**2. Installation of soffit length for stairs**



**3. Installation of step panels (SP) and special step panels (SSP)**

**4. Installation of step angles (SA)**

# OUR CLIENTELE

















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## COMPANY INFRASTRUCTURE

Mumbai Office
**201, Hari Om Plaza, Mahatma Gandhi Rd, Sukarwadi, Borivali East, Mumbai**

Factory
**Servey No -94, Jabarpada Pelhar, Road, near Patel Dairy,Vasai-Virar**

Hyderabad Office
**Add - H NO 11-50/3, Survey No 447, Ghatkesar, Hyderabad**

Bengaluru Office
**105/3, Behind Old SLV Kalyana Mantapa, Hennagara Cross, Hosur Main Road, Bommasandra, Bengaluru**

Indore Office
**408, Fourth Floor Apollo Premier Building, Vijay Nagar Square, Indore**

Noida Office
**G 401, AVJ Heights Sector Zeta 1, Greater Noida**