

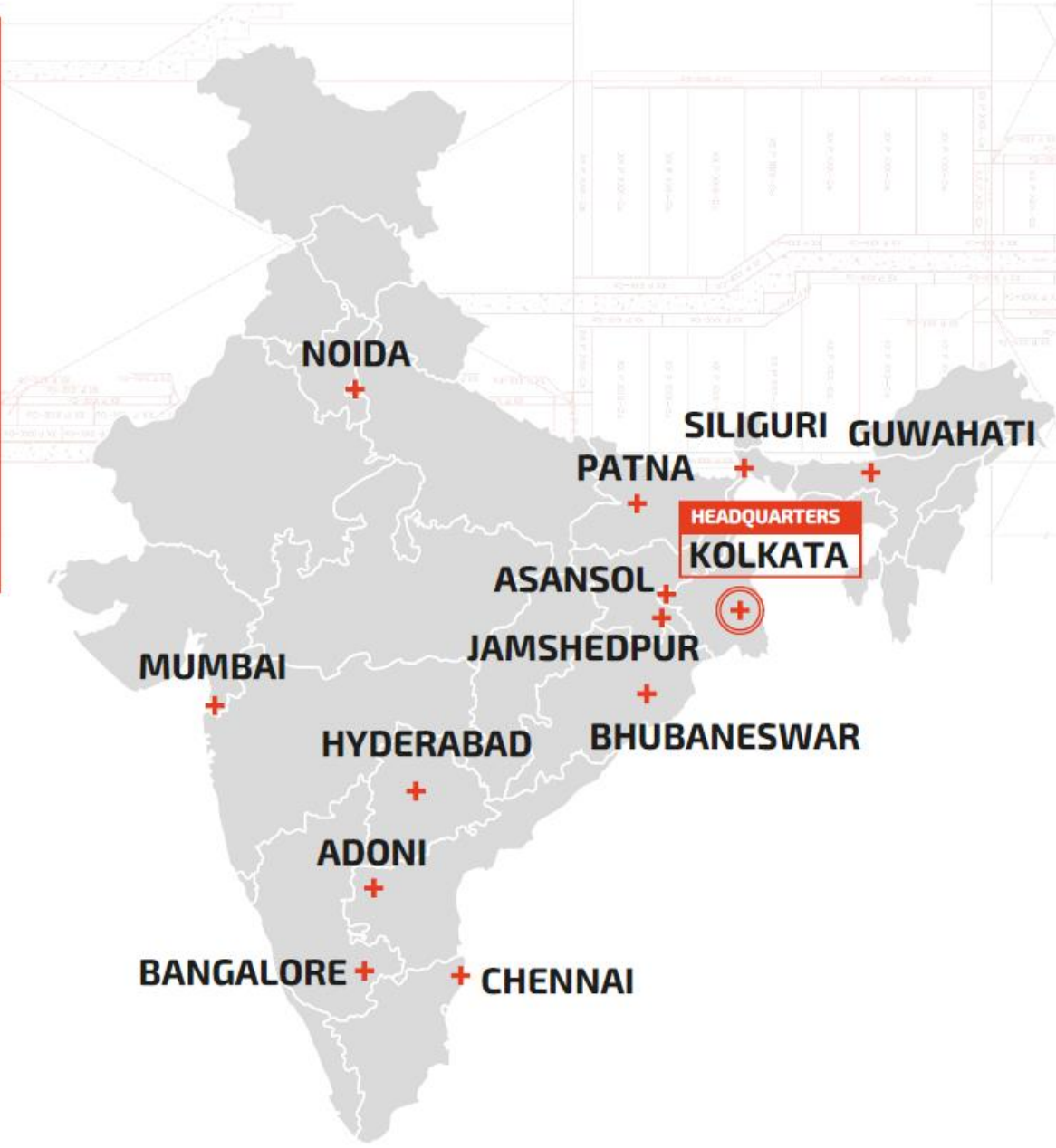


Trusted Aluform Partner

**TOTAL  
ALUMINIUM  
FORMWORK  
SOLUTIONS  
PROVIDER**



Reach across India



**400+**  
crores  
FORMWORK  
ASSET  
MANAGEMENT

**4L+**  
sq.mtr.  
FORMWORK  
SUPPLIED

---

**200+**  
COMPLETED  
PROJECTS

**10 +**  
YEARS OF  
EXPERIENCE



# Timeline

**2013**

Company Started with Architectural Products.



**2015**

First Supply of customized Aluminium formwork components.

Started Formwork Asset Management Services



**2016**

First supply of Aluform Monolithic System.



**2017**

Column box formwork supplied at 'The 42' project (most iconic tower in Kolkata).

**2018**

Provided Formwork Engineering Services to Prestigious IIT Bhubaneswar Project under Simplex & NBCC.

**2019**

Got certification under ISO 9001:2015.



Achieved the landmark of supplying 1 lakh sq.mtr. of aluminium formwork.

**2020**

Achieved the landmark to service across 100 numbers of projects across India

**2021**

Achieved the landmark of manage asset worth over Rs.300 crore.

**2022**

Achieved over 3 lac sq. mt. of aluminium formwork experience



**2023**

Enhanced Manufacturing Capacity at the new plant at Amta, Howrah.



**2024**

Recognized as Eastern India's Leading Formwork Manufacturer by TIMES BUSINESS BRANDS

Aluminium Formwork helps in improving efficiency and provides an outstanding sturdy structure with perfect concrete finish. It is very light weight, easy manual handling, has a long life and high salvage value.

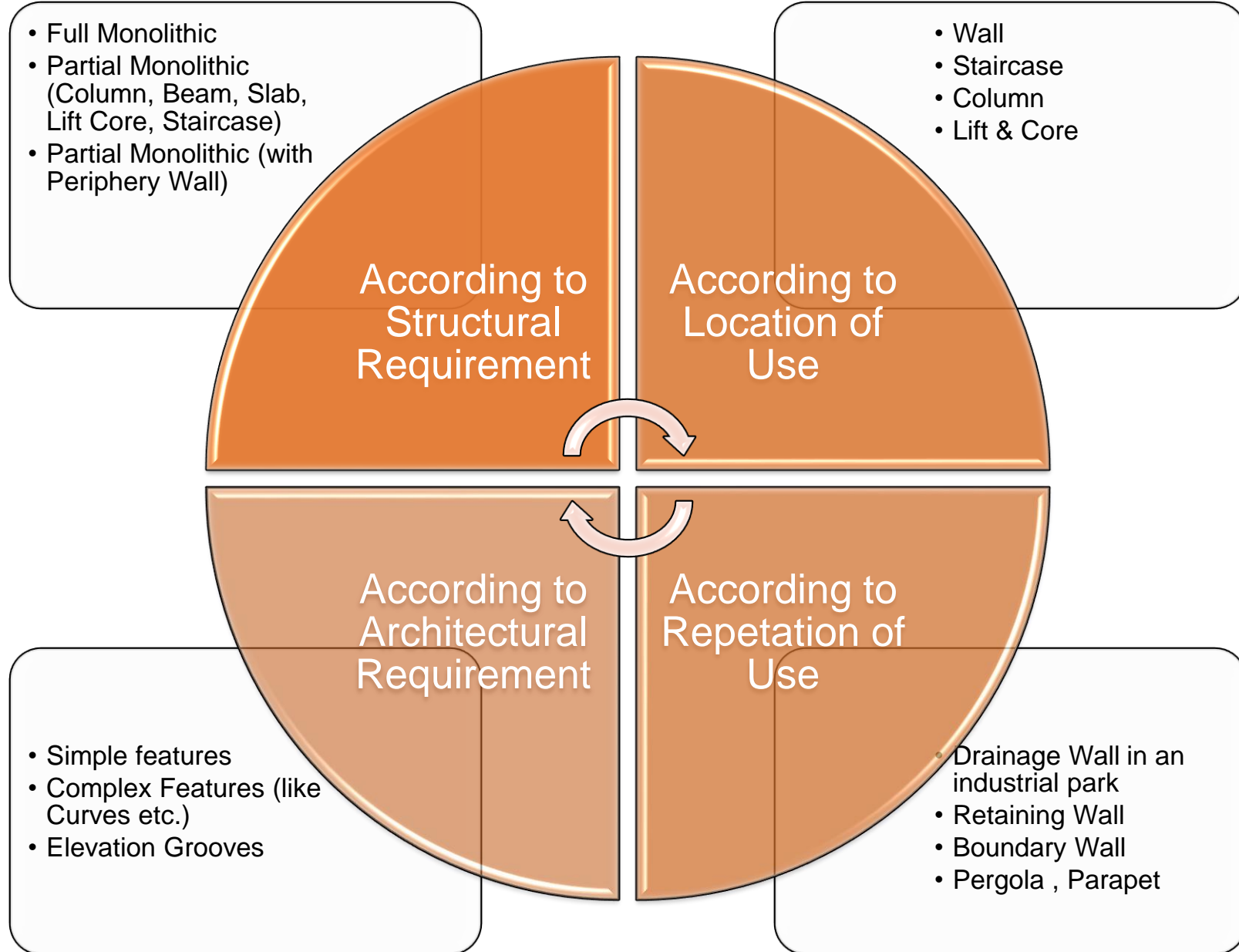
It helps us to achieve:

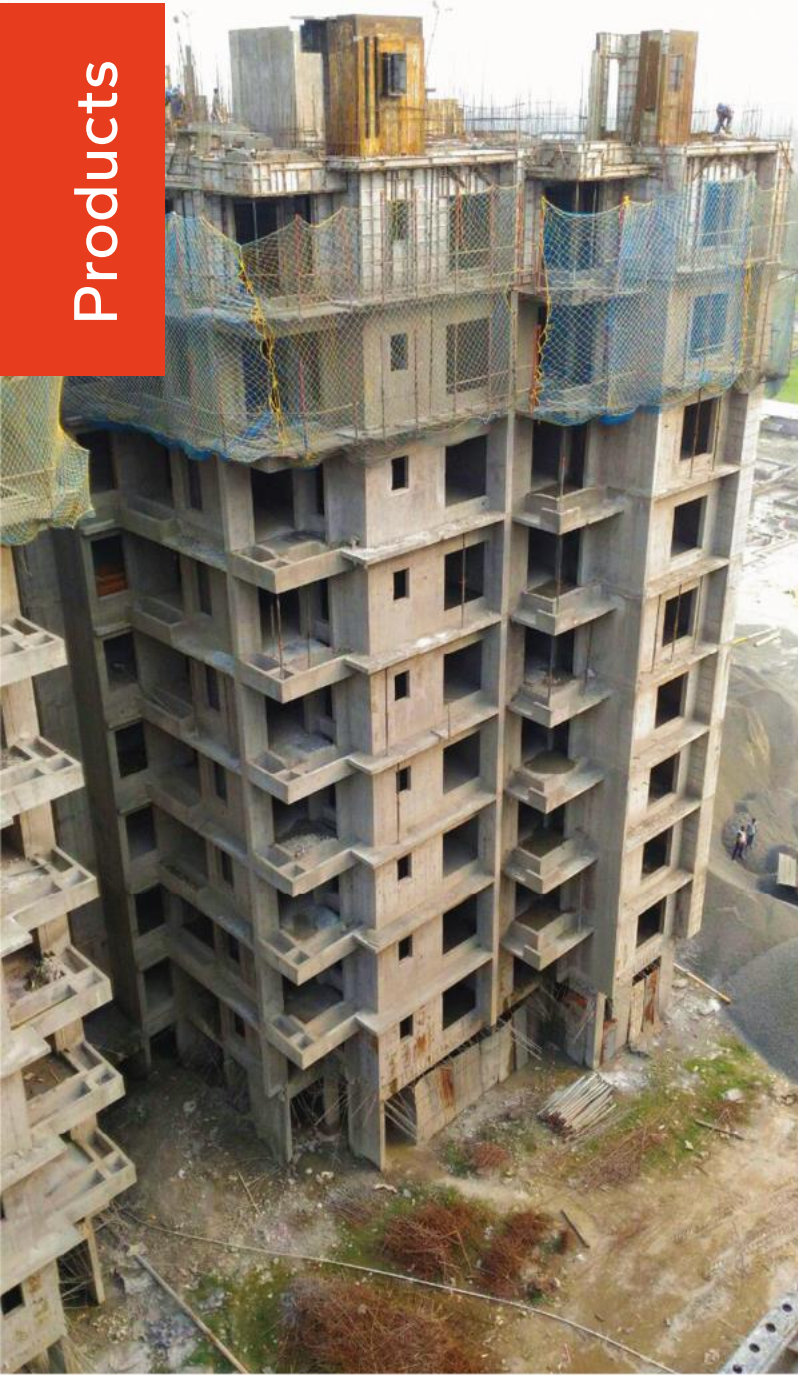
- + **Exponential increase in Construction Speed (Saves about 2 weeks per slab)**
- + **Eliminates Plastering**
- + **Casting of walls and slabs simultaneously**
- + **Increased Earthquake resistance**
- + **Savings on overhead expenses due to speedy construction**
- + **Monolithic Crack free**
- + **High Scrap Value**
- + **Panels can be reused over 1 50 times**





## Product Categories

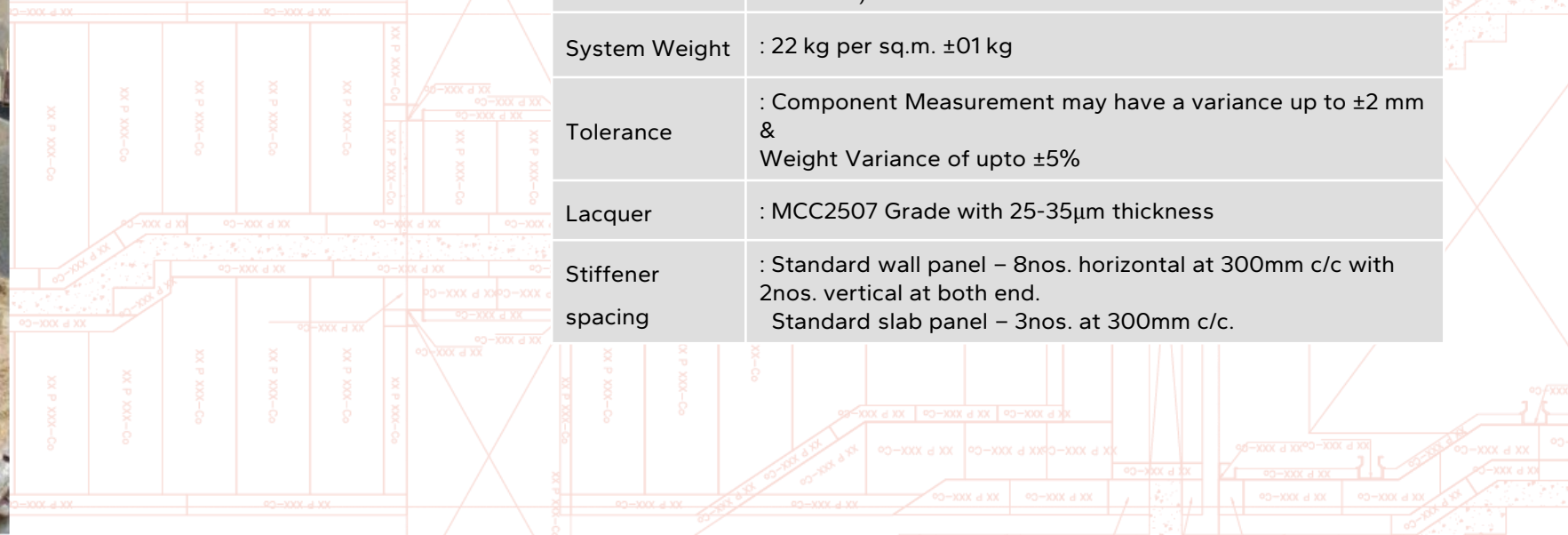




# Aluform Monolithic System

This system helps achieve fastest casting cycle and is available both with partition walls and without partition walls (i.e. only with periphery walls and structural columns) solution.

Alloy	: A6061-T6. or Equivalent.
Thickness	: 3.80 mm to 8.00 mm thick ( $\pm 0.20$ mm)
Wall panel	: Standard panel 600mm x 2400mm
Slab panel	: Standard panel 600mm x 1200mm
Welding	: Friction stir welding (FSW) for standard panel. MIG welding – 6mm fillet, AA5356 wire, Semi-Automatic Linear Welding for Non Standard Panels.
Argon Gas	: Liquid / Compressed Argon Gas 4.60 grade (Purity-99.999%)
System Weight	: 22 kg per sq.m. $\pm 01$ kg
Tolerance	: Component Measurement may have a variance up to $\pm 2$ mm & Weight Variance of upto $\pm 5\%$
Lacquer	: MCC2507 Grade with 25-35 $\mu$ m thickness
Stiffener spacing	: Standard wall panel – 8nos. horizontal at 300mm c/c with 2nos. vertical at both end. Standard slab panel – 3nos. at 300mm c/c.





# Partial Monolithic System

This system helps to cast the outer periphery, internal column, beam, slab & other RCC load bearing elements in a floor to give the flexibility to choose a customized layout by providing all other non-structural elements in AAC blocks.

Alloy	: A6061-T6. or Equivalent.
Thickness	: 3.80 mm to 8.00 mm thick ( $\pm 0.20$ mm)
Wall panel	: Standard panel 600mm x 2400mm
Slab panel	: Standard panel 600mm x 1200mm
Welding	: Friction stir welding (FSW) for standard panel. MIG welding – 6mm fillet, AA5356 wire, Semi-Automatic Linear Welding for Non Standard Panels.
Argon Gas	: Liquid / Compressed Argon Gas 4.60 grade (Purity-99.999%)
System Weight	: 22 kg per sq.m. $\pm 01$ kg
Tolerance	: Component Measurement may have a variance up to $\pm 2$ mm & Weight Variance of upto $\pm 5\%$
Lacquer	: MCC2507 Grade with 25-35 $\mu$ m thickness
Stiffener spacing	: Standard wall panel – 8nos. horizontal at 300mm c/c with 2nos. vertical at both end. Standard slab panel – 3nos. at 300mm c/c.



# Aluform Multicast System

This system enables traditional construction process with the benefits of a modular formwork such as cost & time optimisation. The horizontal and vertical structural elements can be casted separately as well as all-together.

Alloy	: A6061-T6. or Equivalent.
Thickness	: 3.80 mm to 8.00 mm thick ( $\pm 0.20$ mm)
Slab panel	: Standard panel 600mm x 1200mm
Welding	: Friction stir welding (FSW) for standard panel. MIG welding – 6mm fillet, AA5356 wire, Semi-Automatic Linear Welding for Non Standard Panels.
Argon Gas	: Liquid / Compressed Argon Gas 4.60 grade (Purity-99.999%)
Tolerance	: Component Measurement may have a variance up to $\pm 2$ mm & Weight Variance of upto $\pm 5\%$
Lacquer	: MCC2507 Grade with 25-35 $\mu$ m thickness
Stiffener spacing	: Standard wall panel – 8nos. horizontal at 300mm c/c with 2nos. vertical at both end. Standard slab panel – 3nos. at 300mm c/c.

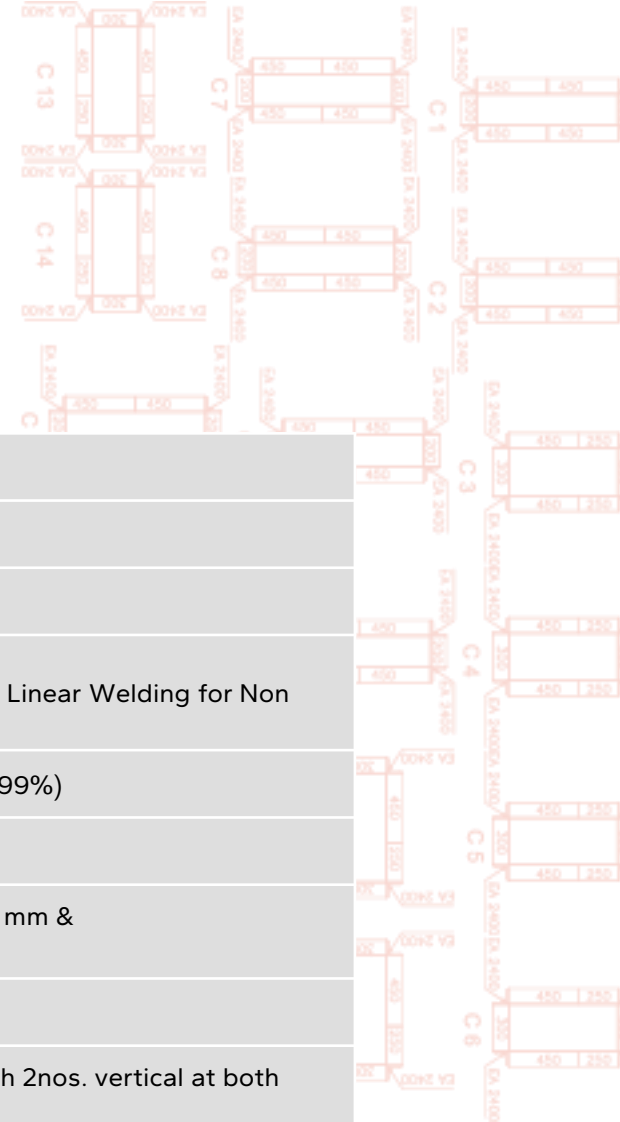






# Flexi Column System

Suitable for traditional column box shuttering with less manpower requirement and better quality & casting cycle. A Single Panel could be used in differential of 50mm to enable width flexibility and achieve over 250 repetitions.



Alloy	: A6061-T6. or Equivalent.
Thickness	: 3.80 mm to 8.00 mm thick ( $\pm 0.20$ mm)
Wall panel	: Standard panel 600mm x 2400mm
Welding	: Friction stir welding (FSW) for standard panel. MIG welding – 6mm fillet, AA5356 wire, Semi-Automatic Linear Welding for Non Standard Panels.
Argon Gas	: Liquid / Compressed Argon Gas 4.60 grade (Purity-99.999%)
System Weight	: 21 kg per sq.m. $\pm 01$ kg
Tolerance	: Component Measurement may have a variance up to $\pm 2$ mm & Weight Variance of upto $\pm 5\%$
Lacquer	: MCC2507 Grade with 25-35 $\mu$ m thickness
Stiffener spacing	: Standard wall panel – 8nos. horizontal at 300mm c/c with 2nos. vertical at both end.

# Customised Formwork

To meet the high-quality engineering needs specific to your project, these components are manufactured in a compatible way so as to suit your existing system. We also customize complex formwork shuttering requirements like Lift Core Wall, Flair column / Retaining Wall etc.

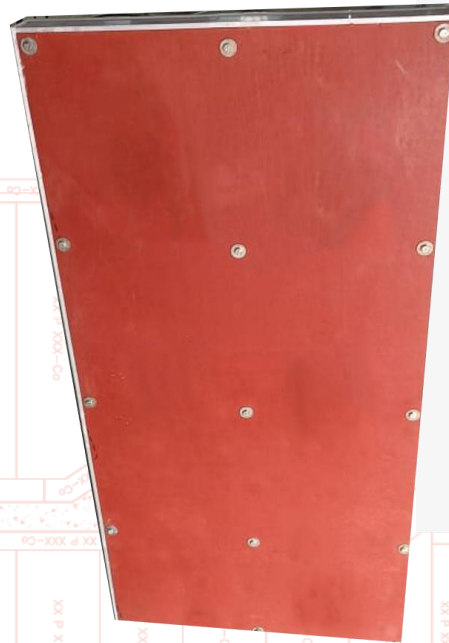
Alloy	: A6061-T6. or Equivalent.
Thickness	: 3.80 mm to 8.00 mm thick ( $\pm 0.20$ mm)
Wall panel	: Standard panel 600mm x 2400mm
Welding	: Friction stir welding (FSW) for standard panel. MIG welding – 6mm fillet, AA5356 wire, Semi-Automatic Linear Welding for Non Standard Panels.
Argon Gas	: Liquid / Compressed Argon Gas 4.60 grade (Purity-99.999%)
Tolerance	: Component Measurement may have a variance up to $\pm 2$ mm & Weight Variance of upto $\pm 5\%$
Lacquer	: MCC2507 Grade with 25-35 $\mu$ m thickness





# Hybrid Formwork System

In this system, the concrete face is replaced with the traditional concrete plywood board or Wood-Plastic Composite (WPC) board to gain some major benefits. The aluminium stiffeners used is designed adequately to provide the long life of the frame, to bear the concrete with other simultaneous loads and to make it economical.



## ADVANTAGES:



The initial cost becomes **cheaper** than Aluminium Formwork System.



The **time schedule** of the structure remains same as using Aluminium Formwork System



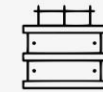
The weight of form panels are **lighter** than traditional MS formwork.



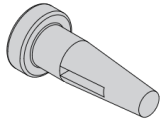
The aluminium frame is recyclable for more than 200 times. Beyond that, the **scrap value of it is very high** relative to other traditional systems.



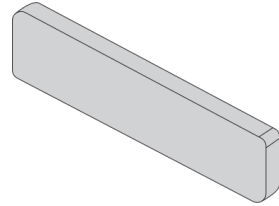
The shuttering process is very similar to the aluminium formwork system.



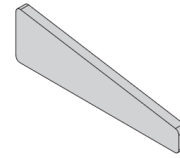
A flexible modular system wherein replacing the plywood sheet/WPC board increases the repeatedness.



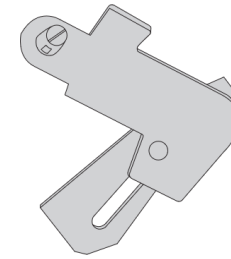
**1 Stub Pin**  
16x50 & 16x192  
with Ductile Iron



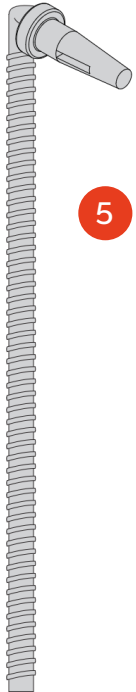
**2 Reusable Wall Tie Sleeve**  
Polypropylene  
Sheet 375GSM.



**3 Wedge**  
70mm long 3mm  
thick with hole  
and embossed.



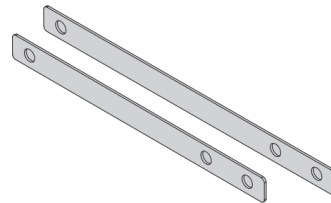
**4 Wall Holder**  
For 50mm waller  
with zinc electro plated



**5 L - Pin**  
225mm  
long  
with Zinc  
Electro  
Plated



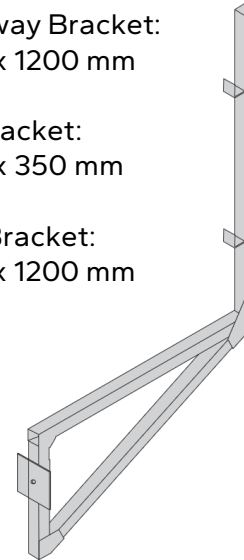
**6 Anchor Nut**  
100mm OD with  
Zinc Electro Plated.



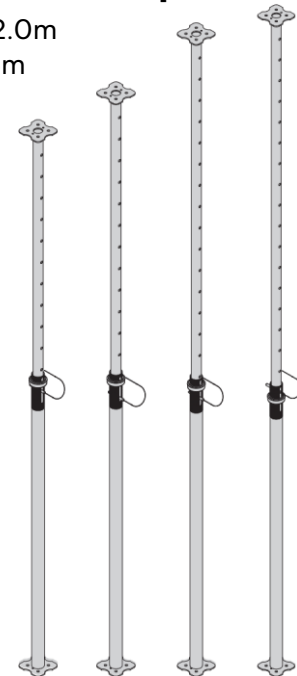
**7 Wall Tie: Reusable/sacrifice**  
Mild Steel - Bright Zinc Coated,  
33 mm wide x 3 mm thick x length as  
per width of wall.



**8 Bracket**  
Walkway Bracket:  
1000 x 1200 mm  
Lift Bracket:  
1000 x 350 mm  
Slab Bracket:  
1400 x 1200 mm



**9 Adjustable Props**  
1.5m x 2.0m  
1.5 x 1.5m







### 1 Wall Panel

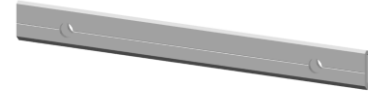
100-600 x 2400 (mm)  
Used for the walls of the formwork system.

### 2 External Corner

65 x 65 (mm)  
Used to connect the panels perpendicular at external face.

### 3 Slab Panel

100-600 x 1200 (mm)  
Used for the slab soffit of the formwork system.



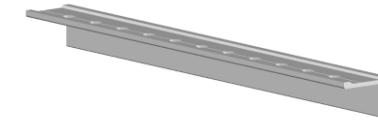
### 4 Link Bar

420 mm  
Used for the connect End Beam, Mid Beam & Prop Head.



### 5 Mid Beam

150 mm wide  
Used to support the slab panels.



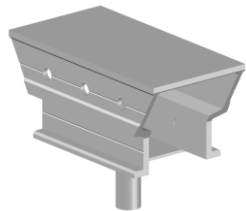
### 8 Rocker

65 x 50/75/100 (mm)  
Used to place the wall panels.



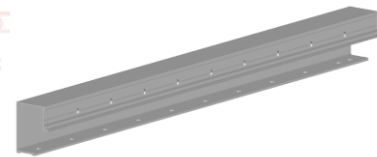
### 10 End Beam

150 mm wide  
Used to support the slab panels.



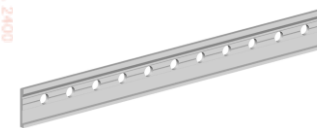
### 6 Prop Head

150 x 300 (mm)  
Used to bear the verticle load of slab.



### 7 Slab Link

100 x 100/125/140/150 (mm)  
Used to connect the wall panels and slab panels.



### 9 Side Rail

61 / 65 mm  
Used to fix the Pin-Wedges.



# Asset Management Solution

## REFABRICATION AND REDESIGN

1. Optimized repetition of existing formwork at site.
2. Maximized use of aluminium components across different projects with minimum scrap generation.
3. Detailed timeline with repetition pattern and estimated formwork cost.
4. On site execution, planning and rigorous supervision during segregation, stacking and setting.
5. Lead time minimization with material and process management.



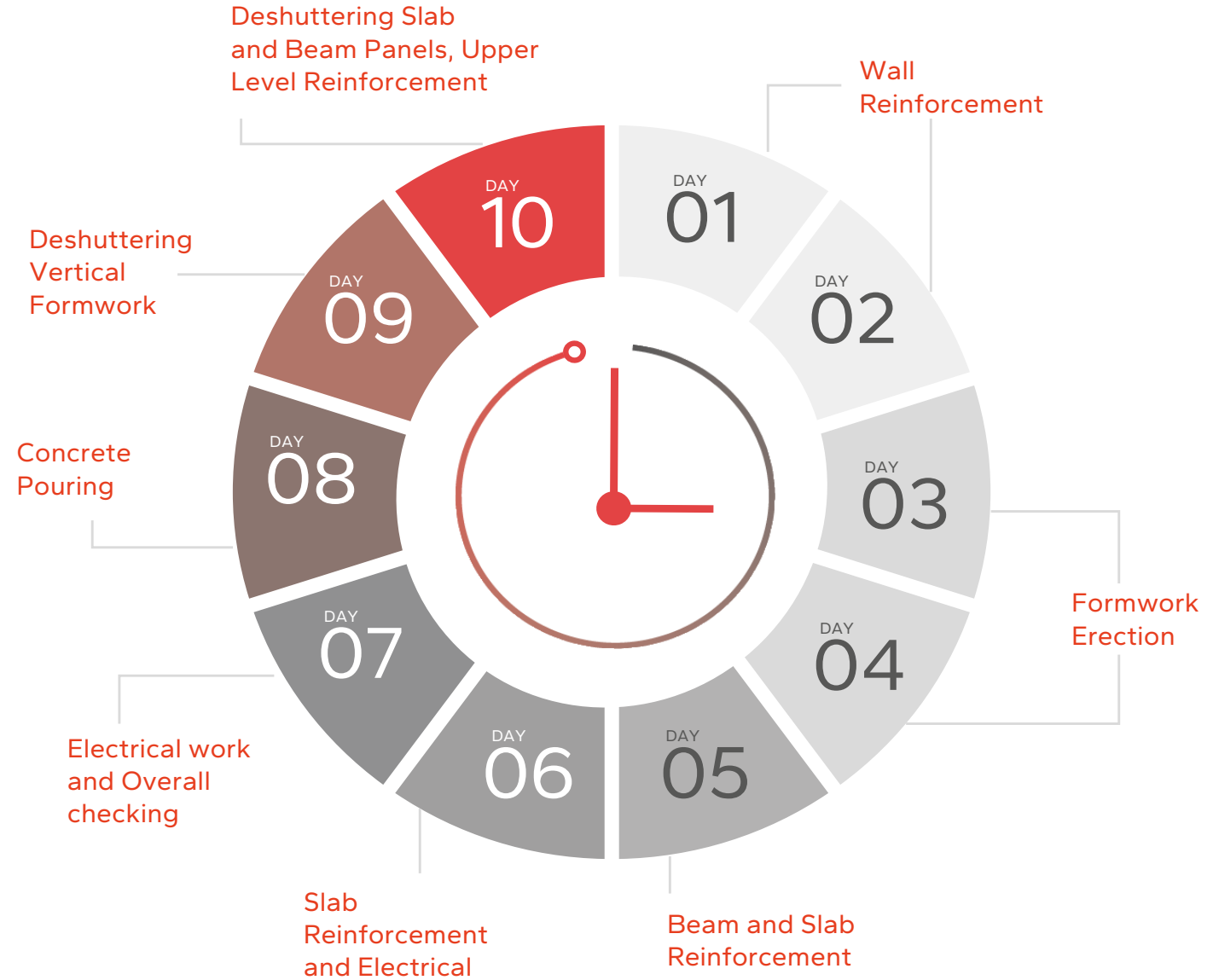
# Setting Up Process

Due to its easiness of assembly, our Aluminum Formwork allows an average of 6 days cycle compared to 14~30 days cycle with the conventional method.

- 01 Structural line and level check
- 02 Installation of electrical, plumbing components and steel rebar. Installation of I/C and wall panels
- 03 Installation of beam and SC panels
- 04 Installation of staircase panels
- 05 Installation of slab panels
- 06 Installation of electrical, plumbing components and steel rebar

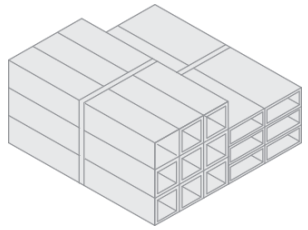


# 10 Day Casting Cycle

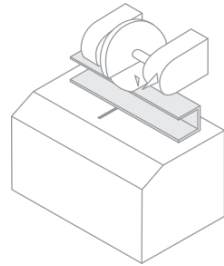




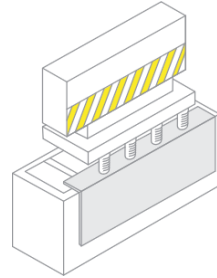
# Manufacturing Process



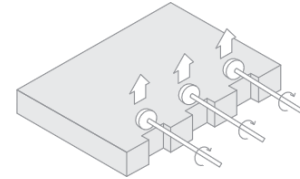
01 Warehousing of raw materials



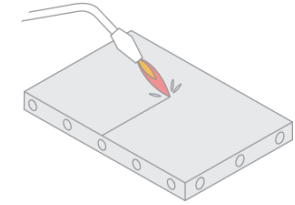
02 Cutting



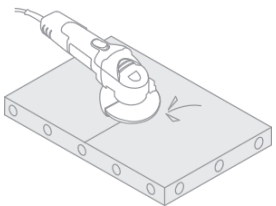
03 Hole processing



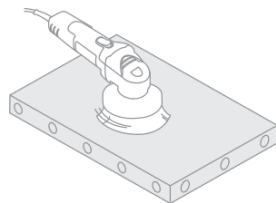
04 Routing



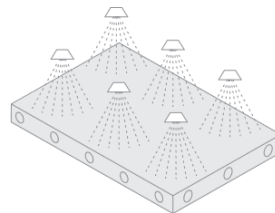
05 Welding



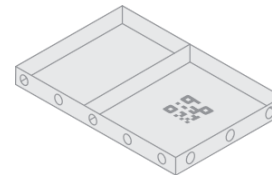
06 Grinding



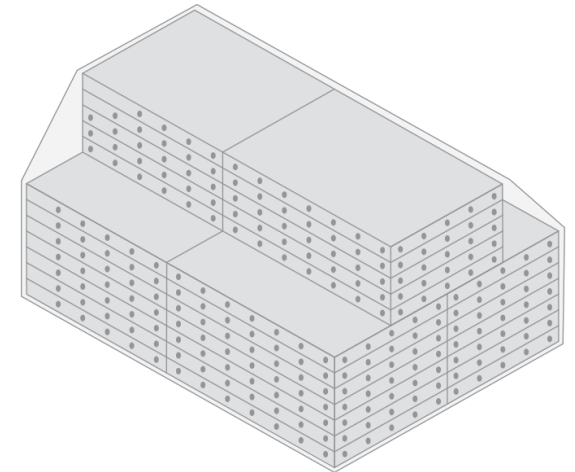
07 Buffing



08 Coating



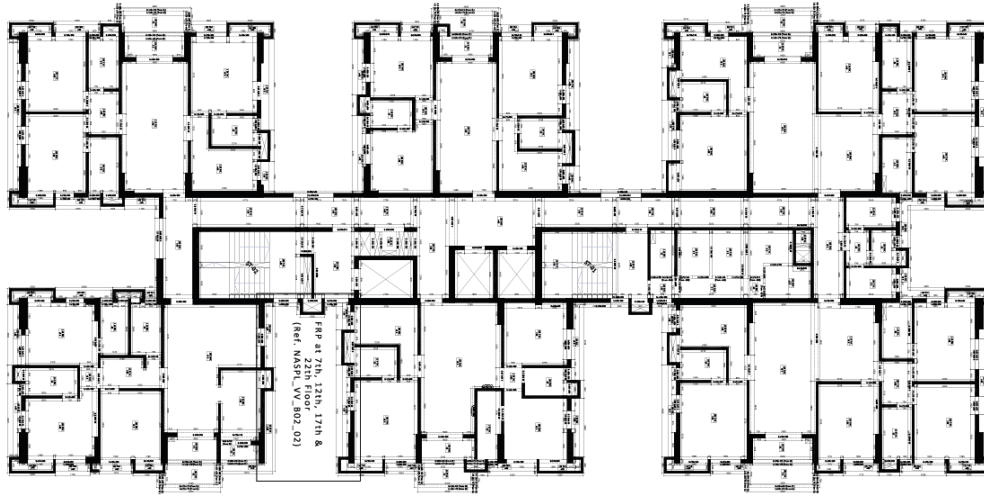
09 QR coding of panels



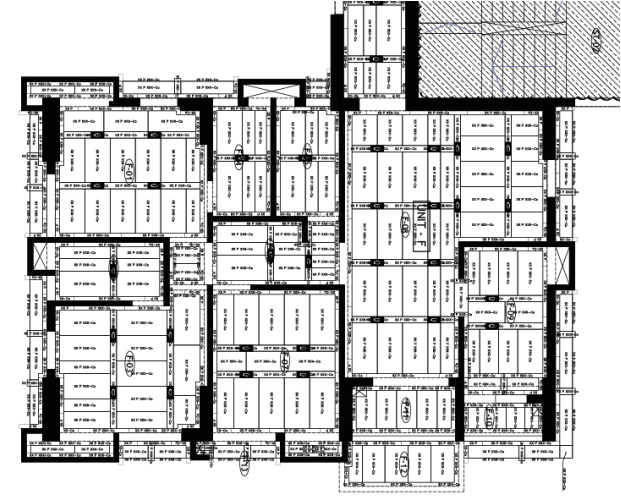
10 Packing

Navkaar offers a detailed CAD design support in sync with the architectural, structural, and PHE consultants. We provide engineering booklets for all on site working.

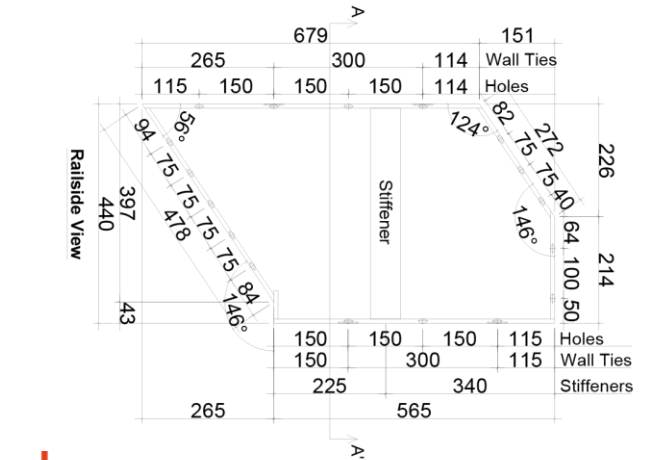
**+ Plan**



**+ Modulation**



**+ Elevation**



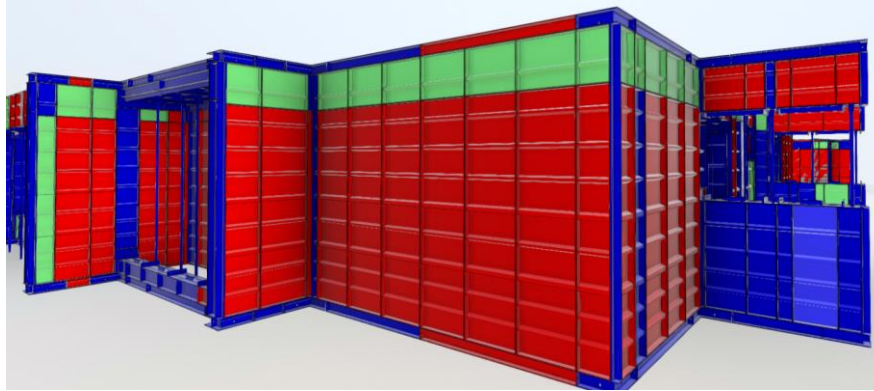
**+ Fabrication**



Navkaar offers 3D modulation for enhanced clarity in component placement, comprehensive checklists to ensure top-quality concrete surfaces and formwork components, detailed guidelines on Do's and Don'ts for formwork maintenance, and stage-wise meetings at the site to review work progress, fostering strong relationships with clients and contractors.



### 3 D Design




### Checklists


CHECKLIST TO START FORMWORK				Navkaar
Date of inspection :- 04.08.16	Project :- Abcd EfgH Ijkl Mnop			
Report No. :- 001	Tower/Block :- 01A			
SL NO.	CHECK ITEM	YES	NO	REMARKS
01.	Is all the formwork related drawings and BOM ready available?	✓		
02.	Is the level of slab checked? (supporting sheet to attach)	✓		
03.	Is proper action been taken for the high leveled slab top?		✗	Chipping needed
04.	Is the site has been properly prepared and is free from any obstructions or debris that may interfere with the formwork installation?		✗	Housekeeping in progress
05.	Is the wooden kicker has been fixed at the outer periphery, lift, stair-wall etc.?	✓		
06.	Is the ply-thesi fixed for all internal walls/columns?	✓		
07.	Is the stock of accessories sufficient as per provided list?	✓		
08.	Is all necessary safety equipment & Contractor tools, such as harnesses, safety ropes, and safety nets, turn buckle etc. are available?	✓		
09.	Is the form panels are free from concrete or any debris?	✓		
10.	Is the sequential erection decided so that all processes, such as rod binding and pallet unpacking, follow the same order?	✓		
11.	Is the clarity of work scope in between Bl. Incharge, Contractor foreman and Navkaar representative are clear?	✓		
12.	Is the escalation method for any issue arise at site has been established?	✓		
13.	Is the storage space for formwork materials is proper?	✓		
Any other comment? _____				
Start date of erection - 04.08.2016				
Target date of casting - 29.08.2016				




### Stage-wise meetings at site



  
 Formwork In-charge

  
 Site Engineer

  
 Navkaar Representative















# Why Navkaar?



An ISO 9001:2015 company with quality commitment enterprise



Detailed and optimized design



One house for all solution and service requirements



Adaptable systems customised for all major international brands



Core focus market of eastern India



Detailed project scheduling for efficient Turn Around Time (TAT)



Formwork asset management enterprise.



Active solution centric customer support



## Certificate Of Registration QUALITY MANAGEMENT SYSTEM

This is to Certify that the Quality Management System  
of

**NAVKAAR ALUFORM SERVICES PRIVATE LIMITED.**

Address: #303, Marble Arch, 236B, AJC Bose Road, Kolkata-700 020, W.B., India.  
has been assessed and found to comply with the requirements of:

### ISO 9001:2015

(Quality Management System)

*Scope of Certification:*

1. Aluminum Formwork System Supply including Designing and Fabrication for Monolithic, Column Box, Slab, Beam & Other Shuttering Requirements.
2. Aluminum Window System Supply including Designing, Fabrication & Installation for Sliding, Casement and Other Requirements.
3. Designing, Fabrication, Installation of Glazing, Curtain Wall, Aluminum Composite Panel and Other Architectural Requirements like Louver, Canopy, Railing and Skylight.

Sector Code: (ANZSIC CODE: 2290)  
Certificate Number: IN/QMS/01220/5967

Issue no.: 02

Date of approval : 07.12.2019      Valid until : 06.12.2022  
Revision no: nil      Revision date : nil

Original Certification Date: 07.12.2016



Surveillance Audit 1st Year

S. Dutta  
Managing Director



Surveillance Audit 2nd year



ACC.No.M4151008IK

**MS CERTIFICATION SERVICES PVT. LTD.**

Address: 3/23 R.K.Chatterjee Road, Kolkata-700042, West Bengal, India.

[www.ms-certification.net](http://www.ms-certification.net)

The validity of this certificate can be verified at [www.jas-anz.org/register](http://www.jas-anz.org/register) or [www.ms-certification.net](http://www.ms-certification.net)  
The Certificate is Valid Only if the Annual Surveillance Mark is Signed by Auditor on Original.  
F60,rev.05



**MS CERTIFICATION SERVICES PVT. LTD.**

HQ: 3/23 R.K. Chatterjee Road, Kolkata-700 042, India

Phone: 0091-33-2441-7656, 2441-7657 (Tele Fax)

E-mail: [info@mscertification.org](mailto:info@mscertification.org), [hq@mscertification.org](mailto:hq@mscertification.org)

[www.ms-certification.net](http://www.ms-certification.net)

Ref: MSCS/NASPL/21-22/68

Date: 23.12.2021

To  
**Navkaar Aluform Services Private Limited.**  
#303, Marble Arch, 236B, AJC Bose Road,  
Kolkata- 700 020, W.B., India.

Sub - Continuation of Certification Scheme - Quality Management System  
as per ISO 9001:2015

Ref: Certificate No - IN/QMS/01220

Dear Sir,

Against the 2<sup>nd</sup> surveillance audit of your organization as per above referred certification scheme as mentioned in the subject, we are pleased to inform that your organization has been approved for continuation of the certification, since last surveillance audit process and certification criteria have been completed successfully.

Thanking you,

Yours Sincerely  
For MS Certification Services Pvt. Ltd.

S. Dutta  
Managing Director

# MS CERT





**10<sup>th</sup>**  
INTERNATIONAL  
ACHIEVERS  
SUMMIT  
BANGKOK-THAILAND



INTERNATIONAL  
ACHIEVERS  
CONFERENCE

INTERNATIONAL ACHIEVERS CONFERENCE

## FASTEST GROWING INDIAN COMPANY EXCELLENCE AWARD

Presented to

Vinit Jain  
Managing Director  
NAVKAAR ALUFORM SERVICES PVT LTD  
KOLKATA

*On the Occasion of 10th International Achievers Summit on*

**" GLOBAL CORPORATE ACHIEVEMENTS  
&  
SOCIAL RESPONSIBILITIES "**

Friday, 20th April, 2018,  
Bangkok, (Thailand)

Secretary General



Industry Outlook



IS PROUD TO PRESENT

**NAVKAAR ALUFORM  
SERVICES**

AS ONE OF THE

TOP 10

**FORMWORK & SCAFFOLDING  
MANUFACTURERS**

2022

*in acknowledgement of its unwavering focus and dedication  
to achieve excellence in quality and delivery in this field.*

Sudhakar Singh  
Managing Editor  
Industry Outlook









3D Designing Model



Checklists with Do's & Dont's



Achieve Min. 100 Repetition



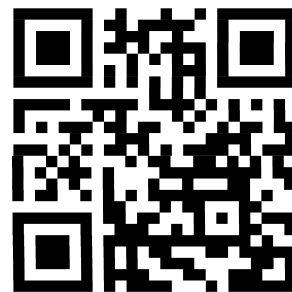
Trusted Aluform Partner

**Address:**

OFFICE – 303-Marble Arch, 236B-AJC  
Bose Road, Kolkata-700020  
WORK – Amta Industrial Park 1  
Amta-Ranihati Road, Islampur,  
West Bengal 711401

**Phone:** 9674916029 / 03322870378

**Email:** contact@navkaargroup.in



[www.navkaargroup.in](http://www.navkaargroup.in)

