



**INDIAN CONCRETE INSTITUTE**

**BENGALURU CENTRE**

**ONE DAY NATIONAL SEMINAR  
ON  
SCAFFOLDING & FORMWORK**

**On Wednesday, 19th October 2022 at 9.00 AM**

**Er.N. Srinivasan,  
Senior General Manager –Southern Region  
PERI INDIA PVT LTD**

**Venue:  
Glitter Hall, The Rialto Hotel,  
No.20-21 | Seshadri Road | Bangalore 560009  
Karnataka | INDIA**

# **PERI HANDSET ALPHA**

**– Simple Panel System for Walls & Columns**



## Handset Alpha | Product features



Modular robust steel panels ~ 34.5 kg/Sq.m



100% Multi-panels



Panel height 120/150/300 | Width 90/60/30



Column size 15x15 till 90x90



Concrete pressure 60kN/sqm (Column 75kN/sqm)



Sloping profiles ~ easy cleaning



Easy wedge clip | In-built brace connector | Handle



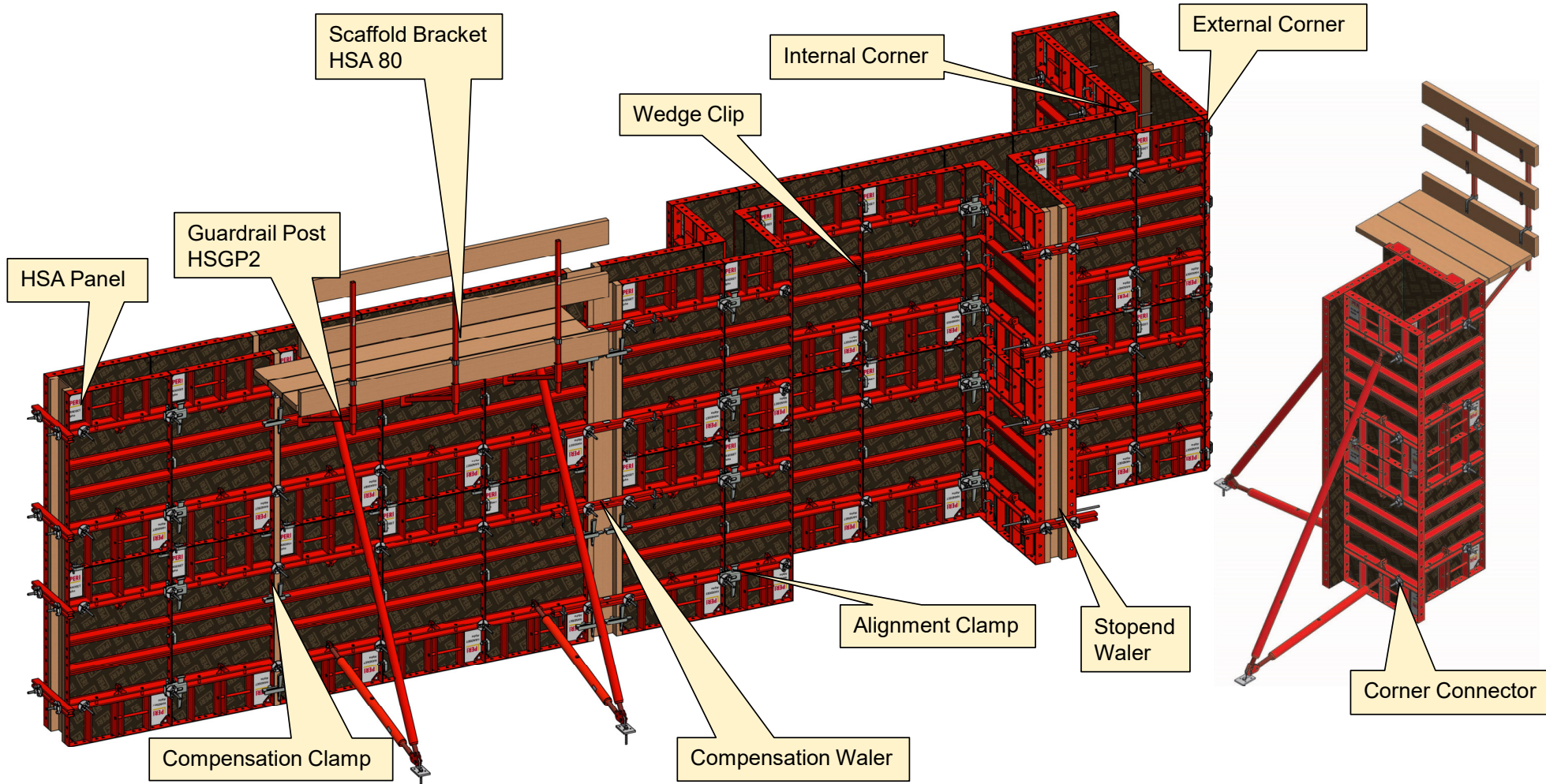
12mm PERI Plywood

No waler required for horizontal alignment



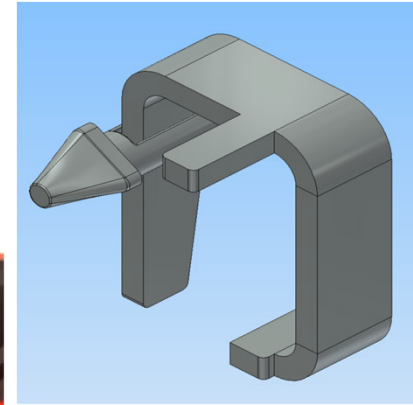


# Handset Alpha | Overview





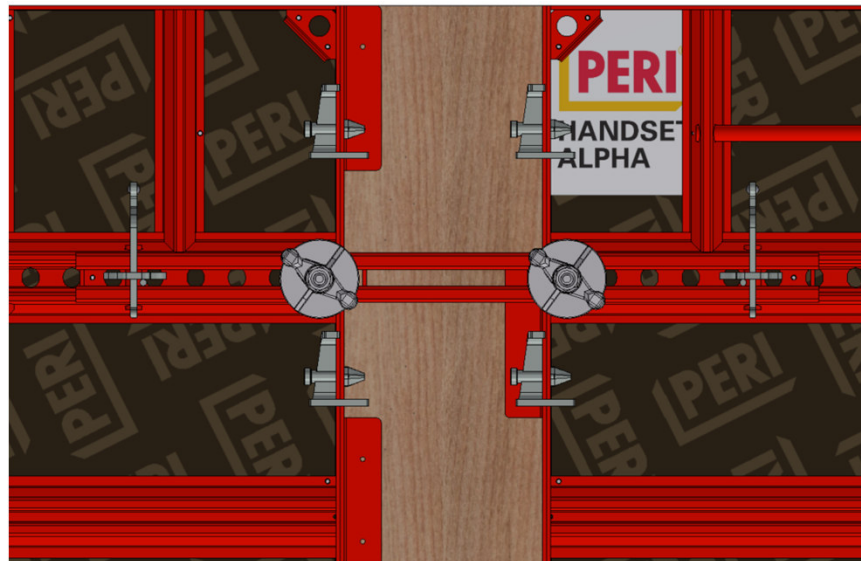
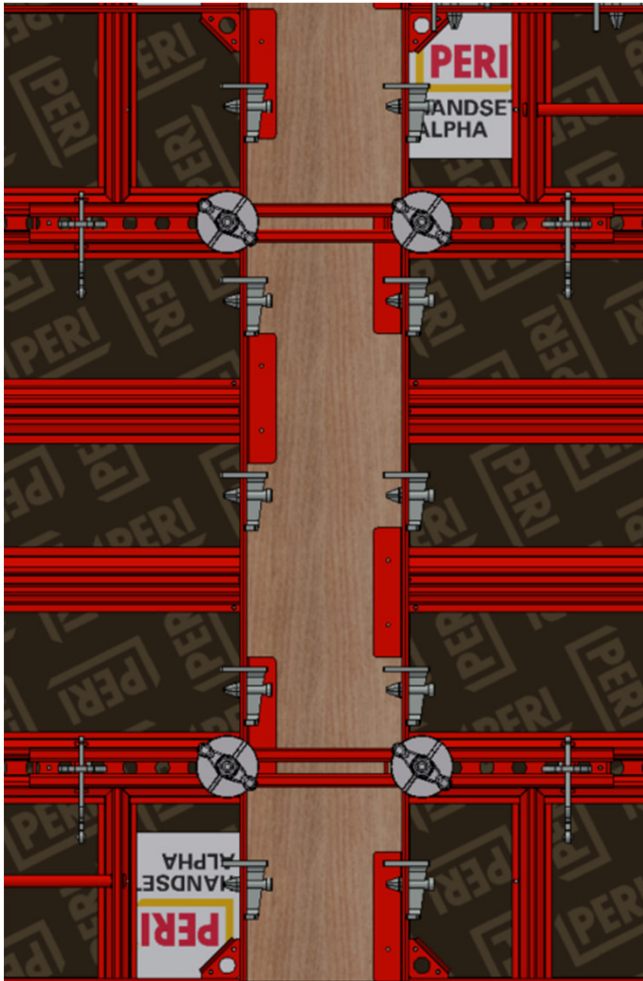
## Handset Alpha | Panel Connection | Wedge Clip



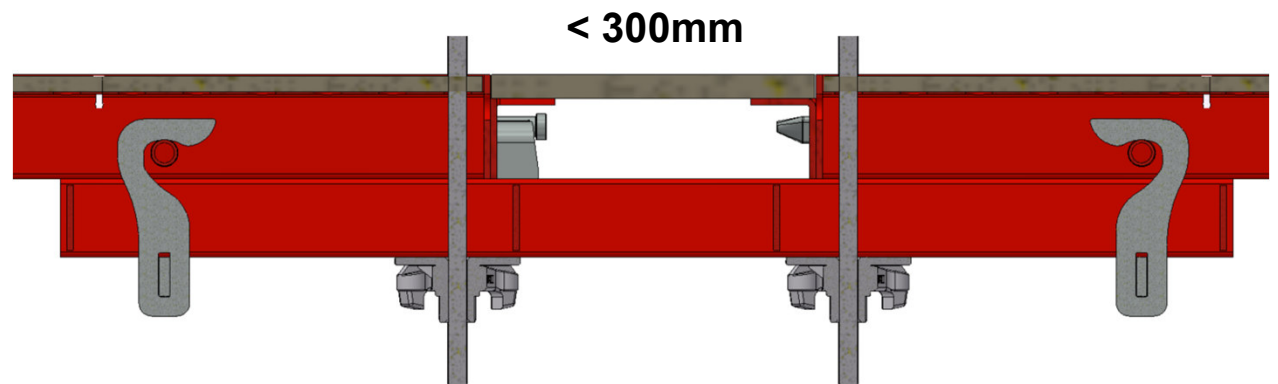
- Simple wedge clip
- Wedge is captive
- Shape of wedge avoids rotation of wedge during hammering



## Handset Alpha | Compensation Waler & HFS



- To compensate gaps between 100mm to 300mm
- Aligns panels for horizontal as well as vertical
- Length is 950mm. Only the waler is the Stopend waler.





## Handset Alpha |Liftwall Formwork





# Handset Alpha | Column Formwork







## Handset Alpha | Circular Tank Formwork















# **PERI ALPHADECK**

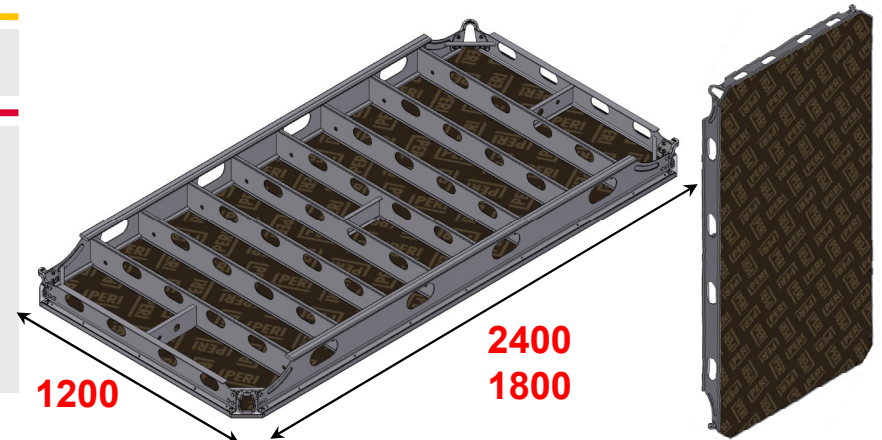
- Large Area Panel System for Flat Slabs**



## Alphadeck I Product features

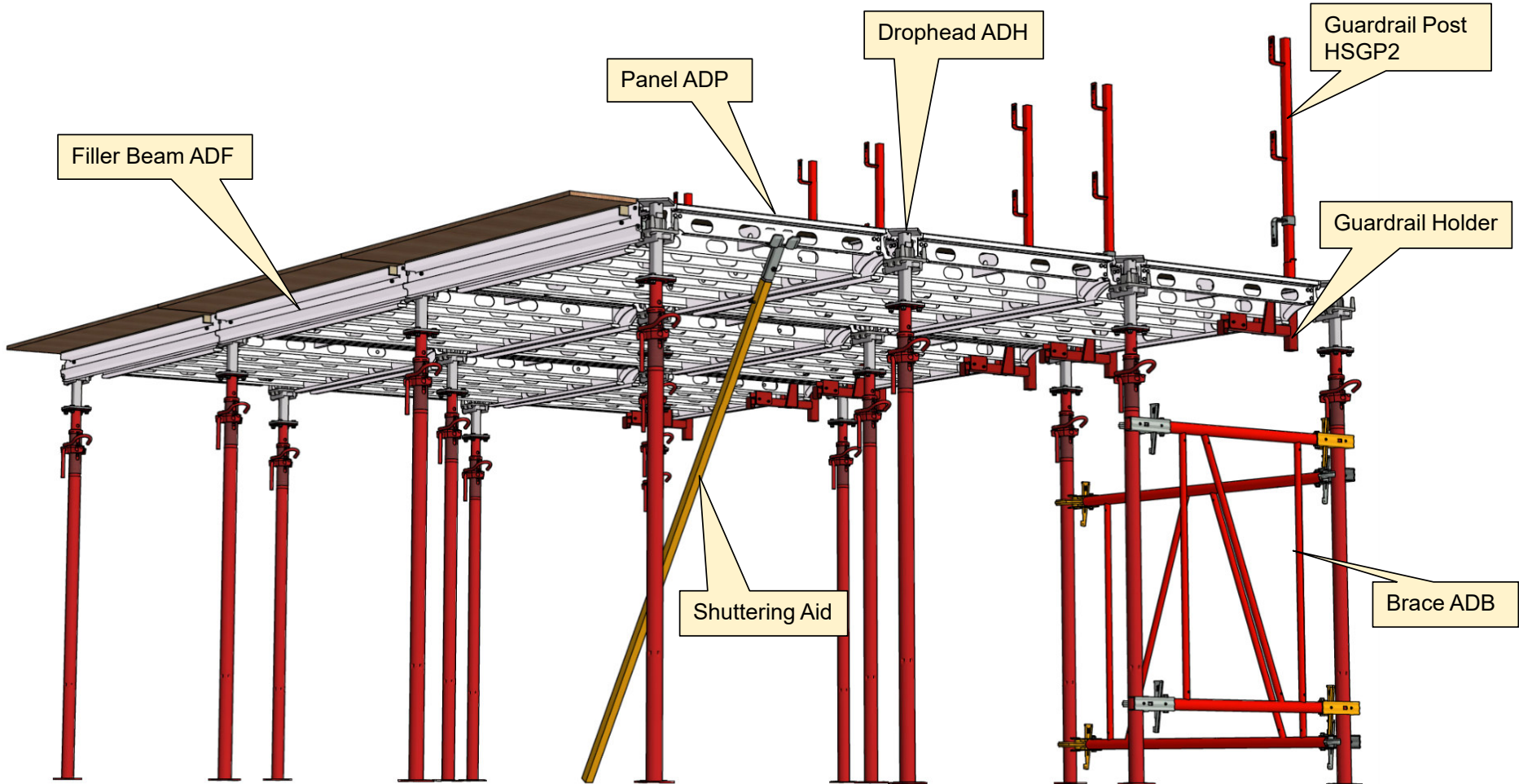


-  3 basic parts | Panel, Prop & Drophead
-  Only 2 Std panels – 240x120 & 180x120
-  17 Kg/m<sup>2</sup> (2.4m/49kg, 1.8m/38kg)
-  9mm PERI ply
-  Powder-coated Aluminium frames
-  Can be used upto 550 thk slab
-  Compatible with PERI Props, PU MI, (even Cuplock)
-   Minimum panel contact ~ less cleaning
-   2 way erection & striking
-   For rentable panels composite ply is possible





# Alphadeck | Overview



**Alphadeck | Video**



## Alphadeck | Site Photos



**69 Sqm erected by 5 workers in 2.5 hours ~ 0.18 manhrs/sqm**

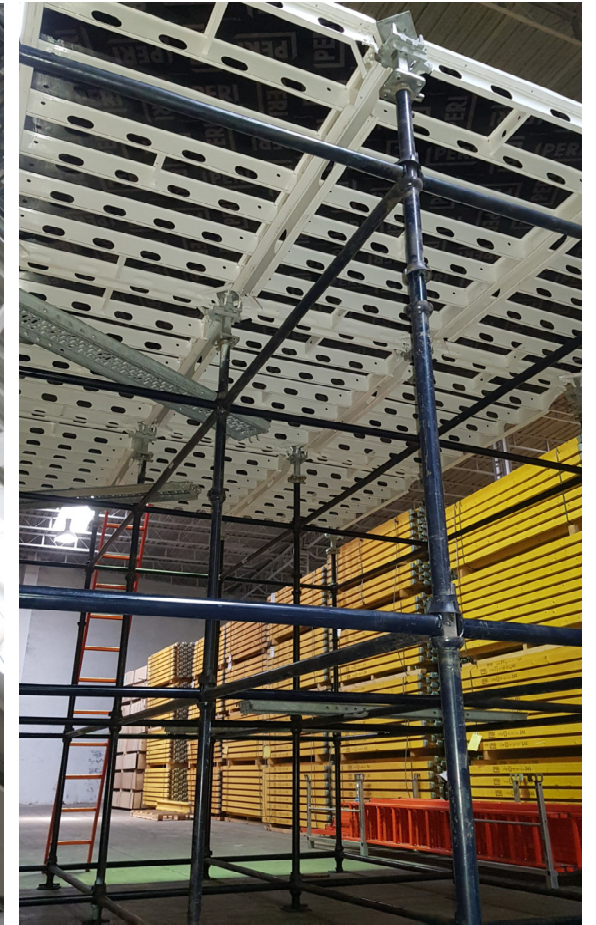


### **COMMERCIAL TECH PARK-BANGALORE**

**Formwork Area :6000 Sq.m  
Floor to floor Height : 4.05m  
Cycle Time Achieved : 7 days**



## Alphadeck | Compatibility with PU MI / Cuplock





**PERI SHORE**  
**– Heavy Duty Shoring Tower**



Our present Infrastructure Construction World.....





Our solution to tackle the present World

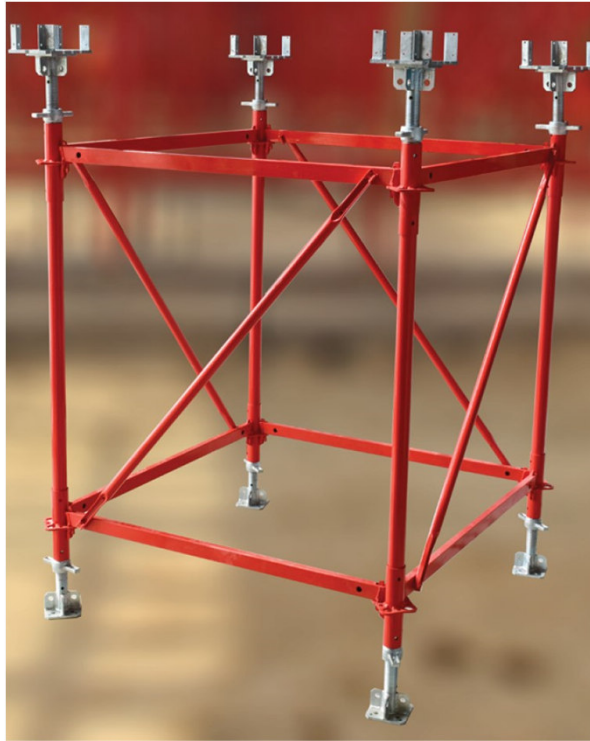


**PERI UP MI**



**Light Duty**

**PERI Shore (IN)**



**Medium Duty**

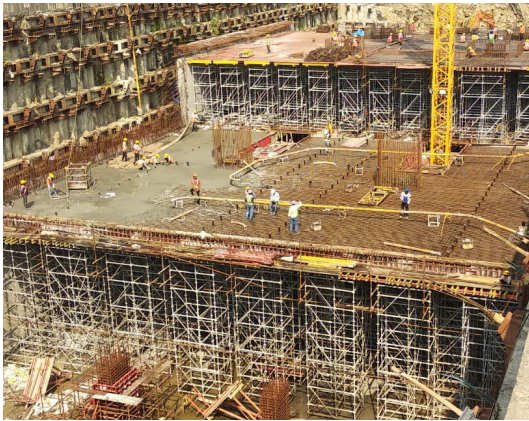
**ALPHAKIT**



**Heavy Duty**



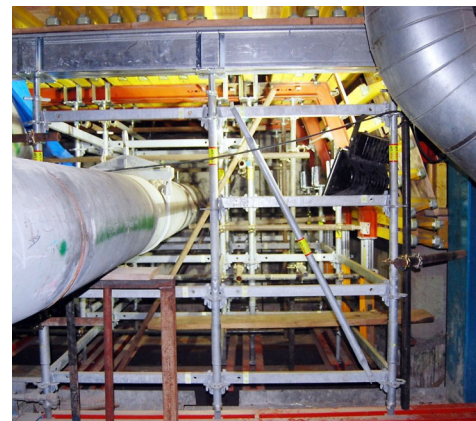
## Application Field



**Heavy Beam and Slabs**  
**High-rises, Airports, Metro**



**Pier Cap Support**  
**Bridge**



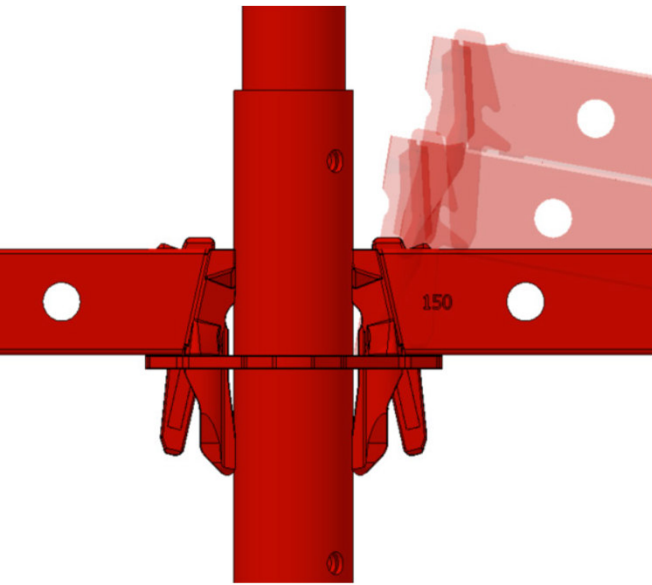
**Turbine Generator Decks**



**Metro and Highway**  
**Bridge Decks**



## PERI UP MI | Ledger



**Ledger Gravity lock →**  
Wedge drops by gravity and secures automatically



**Rectangular shape →**  
Easy handling at jobsite



**Safe & secure →**  
One man handling

**Robust →**  
Forged ledger heads



## PERI Shore (IN) | Ahmedabad Metro Project





## PERI Shore (IN) | Ahmedabad Metro Project



Max leg load = 6.4 MT



## PERI Shore (IN) | Successful Project!





# PERI Rail Climbing System-RCS

– Most efficient self climbing system





## High-rise Projects – External Parameters



### ■ Space

- Constraint of existing road or building
- Storage area
- Assembly area

### ■ Wind

- Wind load

### ■ Crane

- Capacity
- Availability
- Type
- Boom Reach

### ■ Safety

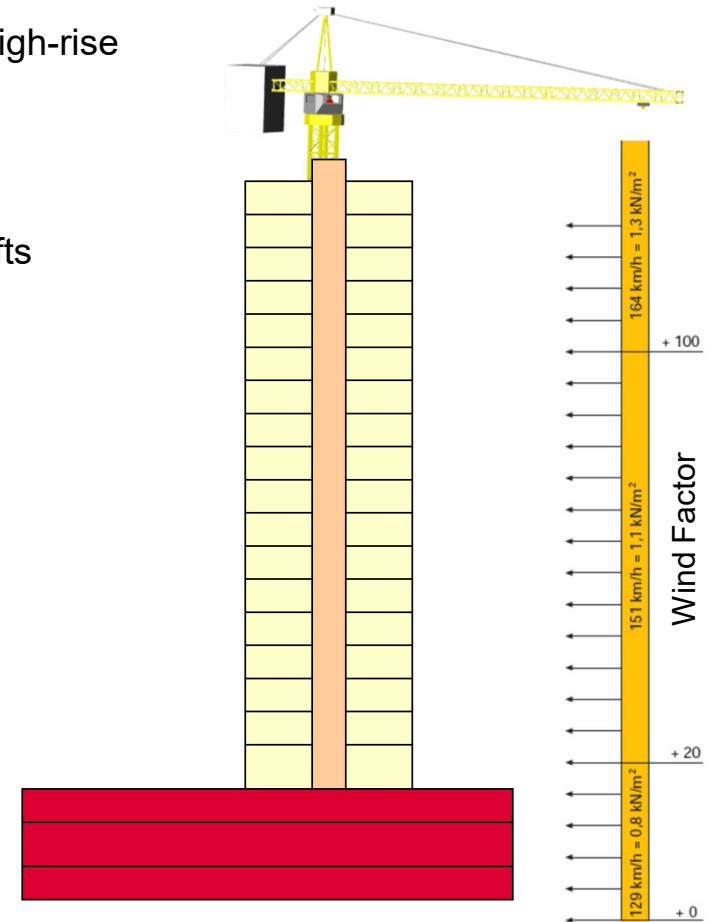
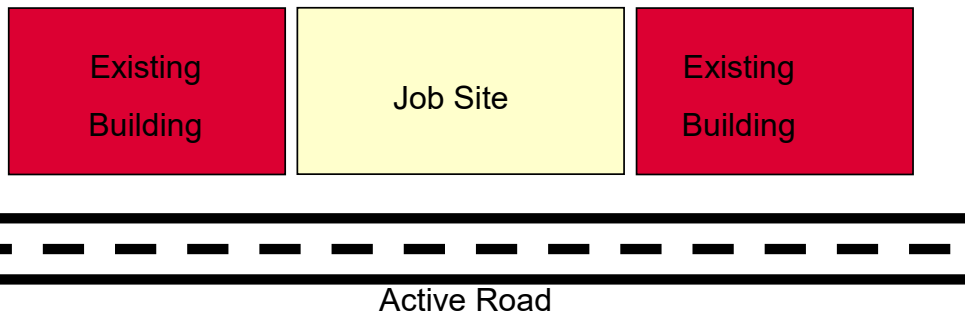
- Special requirement at high-rise building

### ■ Construction planning

- Milestones
- Working schedules / Shifts
- Project duration
- Religious holidays
- Weather conditions

### ■ Local rules & regulations

- Permits
- Restricted noise at night
- Safety requirement





## Need for Self Climbing in High Rise Buildings?

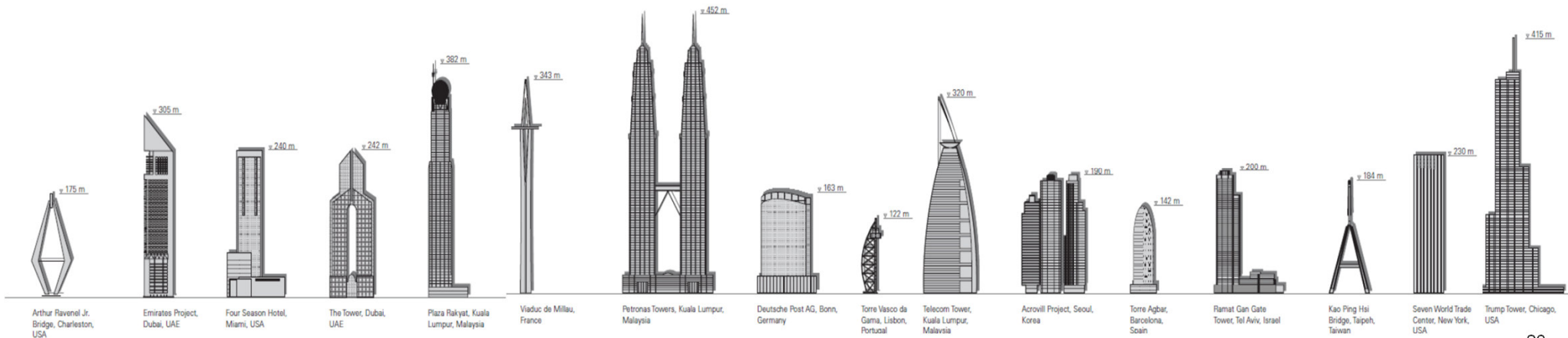


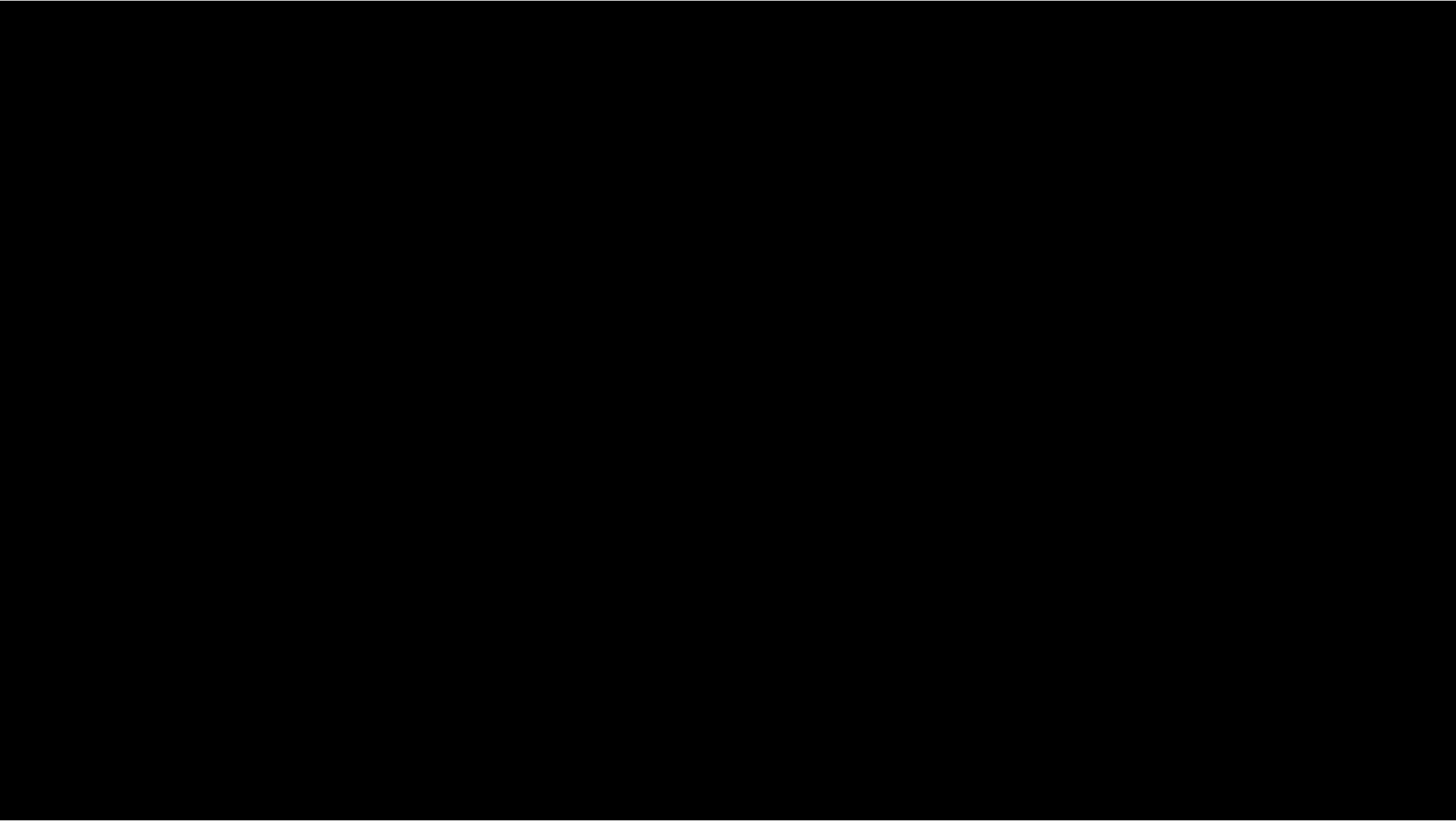
The Core when self climbed is out of the critical path of construction. A Self Climbing system for the Core & a good slab formwork system can reduce the overall construction period.

Ensures high safety as using conventional or crane handled system is very risky as high wind loads can disturb formwork operation.

The system drastically reduces Tower Crane time which is very crucial for a High-Rise Building.

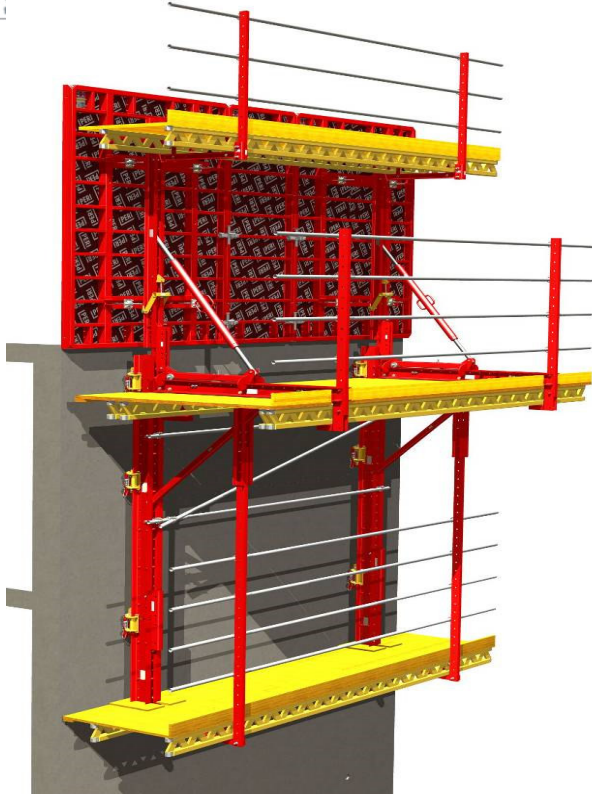
The self-climbing system for the Core acts as a guide to the whole structure. A faster cycle time of the core creates a psychological effect on the slab team to speed up.





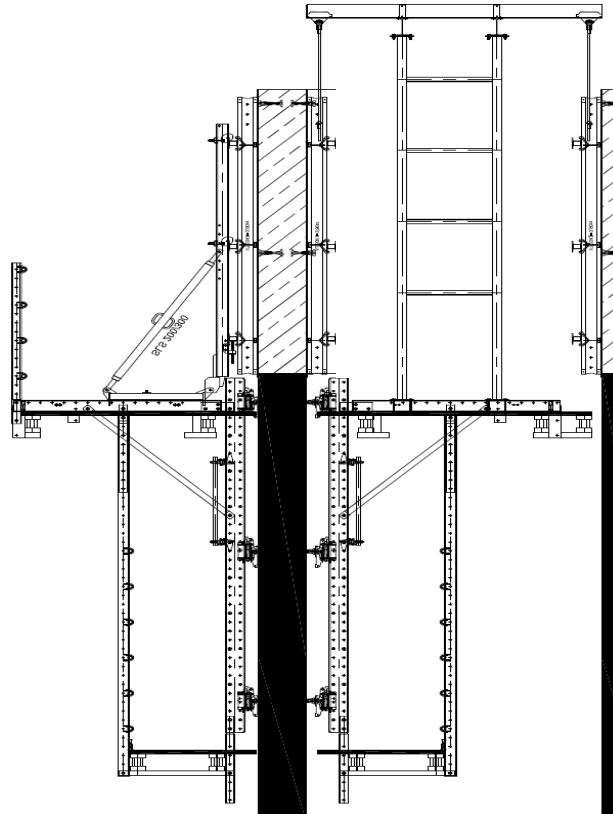


## RCS Self Climbing System – Construction Kit



**RCS CL**

with **C**arriage



**RCS TL**

with **T**ower



**RCS Outrigger**

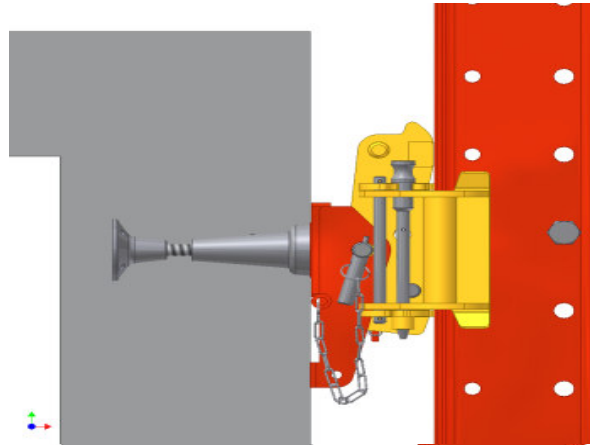
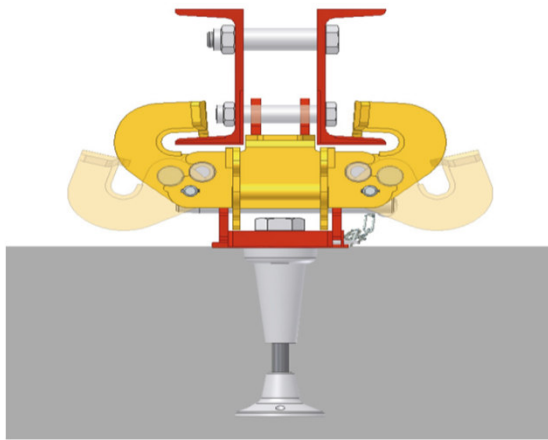


- The versatile girder wall formwork system, customized and assembled specially for the project:
- Form-lining shall be 18mm PERI Plywood (no plywood replacement till last pour)
- Specially designed large elements, makes shutter handling efficient in the Climbing System. Reduces element connections.
- Multiple Levels of Steel Walers to create robust panels.
- Permissible fresh concrete pressure of 50 kN/sqm

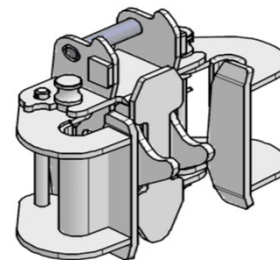




## RCS Climbing Shoe



- RCS Climbing Shoe
- Guides the climbing rail during crane-climbing
- Pawl secures system every 50 cm automatically
- Anchoring on the slab with slab shoe
- Anchoring on the wall with wall shoe
- Inclinations up to 4° adjustable

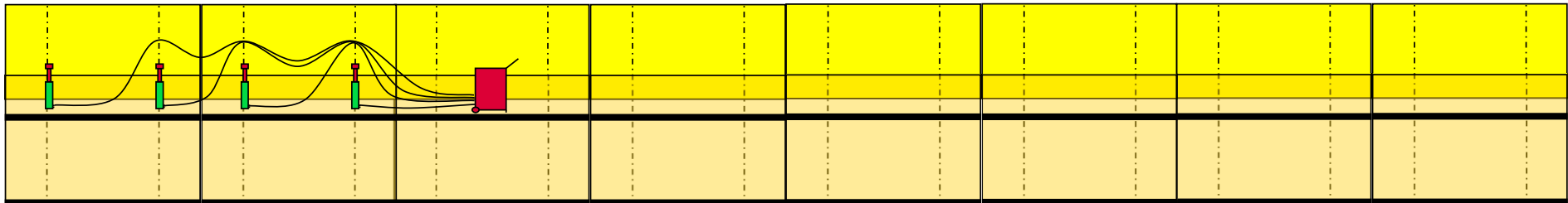
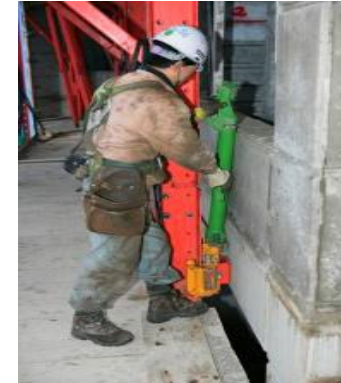
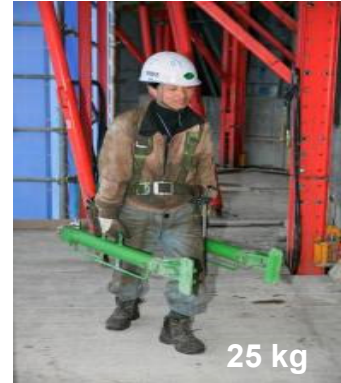




## PERI RCS – Climbing sequence



- Light weight mobile Hydraulic Unit.
- Climbing Device of 5MT capacity with 50cm stroke length
- Integrated hydraulic flow divider for synchronous climbing.





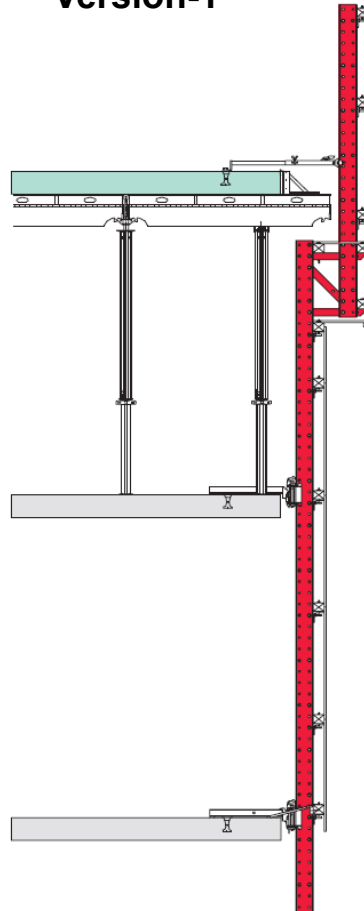




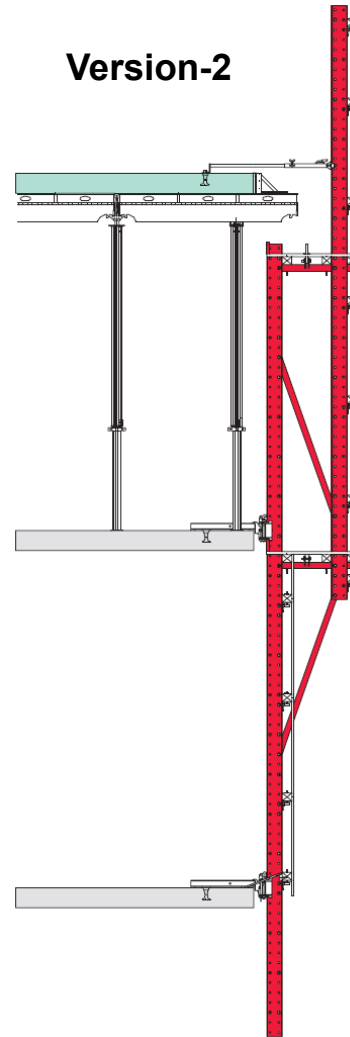
# Edge Protection System



Version-1



Version-2



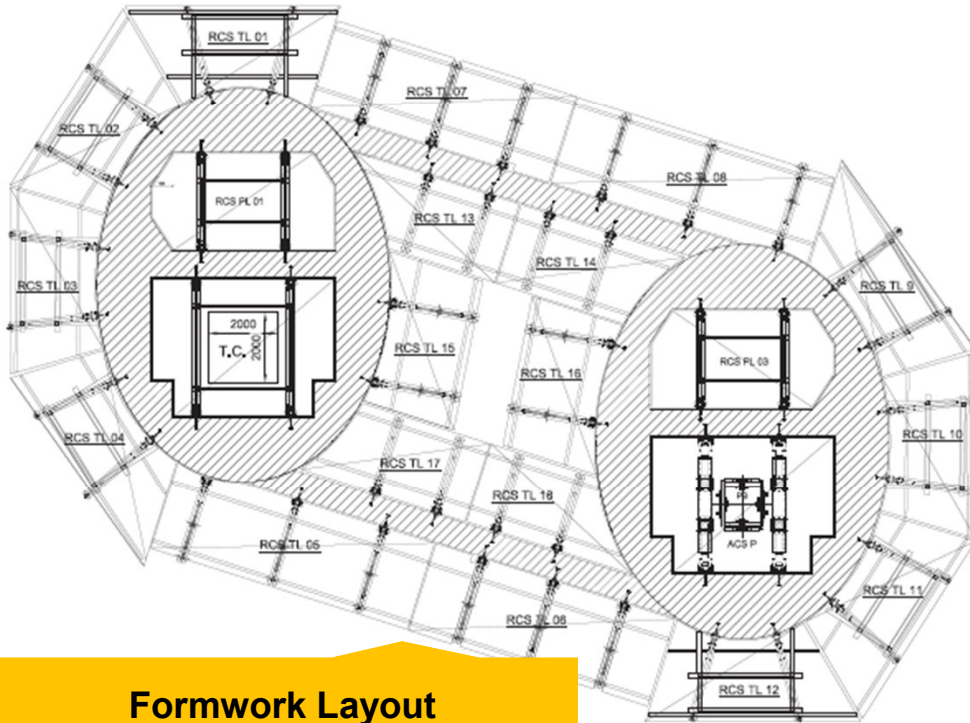


- The Enclosure enhances the feeling of Safety of site personnel and increases the work productivity at great heights.
- Site personnel and material is secured against falling at all times and protected against strong winds when working at great heights.
- The Rail guidance ensures a fast and safe climbing procedure in all weather conditions.
- Eliminate installation of guardrails for 3 floors.
- Crane independent climbing is possible thereby not affecting Tower Crane time.
- Advertising opportunities (large exposure)





**PROJECT: STATUE OF UNITY**



**STATUE OF UNITY PROJECT**

Structure Height:240m  
Formwork Area : 792 Sq.m  
Total RCS Units :22  
Cycle Time Achieved: 5 Days

**Formwork Layout  
RCS & ACS**



Wish you a flexible – safe – fast forming & scaffolding experience

Thank You

PERI (India) Private Limited

1406, DLH Park, S.V.Road, Goregaon (W) , Mumbai

+91 (22) 3371 7400

[info@peri.in](mailto:info@peri.in) | [www.peri.in](http://www.peri.in)

