

STRUCTURAL CONSULTANCY SERVICES

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We deliver more than the scope
– we deliver solutions exceeding
expectations

WHO WE ARE

Reci Engineering delivers success with projects completed on time and to paramount standards.

Our innovative approach finds the best possible structural solutions for our clients has helped us be distinct to our competition. Reci prides itself on the depth of experience of its staff combined with the appropriate utilisation of technology to deliver our solutions.

Our design philosophy supports the needs of the developer, appreciating the essence of the architecture through our design combined with a thorough understanding of the fabrication and construction process.

CLIENT FOCUS

Reci has an in-depth understanding of the construction industry. We appreciate and react to client timing, budgetary restrictions and governmental influences.

We fully integrate with existing teams, working as a natural extension of our client's existing team.

THE RECI DIFFERENCE

We take an innovative and sometimes unorthodox first principal approach to structural design. The key drivers being the economic use of materials and reduction in complexity for activities.

Our years of experience working in the high-rise sector generates only the most efficient designs. Efficient designs that translate to:

- lower material usage
- major reductions in project costs
- increased buildability
- faster construction times
- more environmentally sustainable structure.

Every project receives high-level technical attention with rigorous quality assurance reviews at every stage of the design.

Our designs are delivered through BIM, helping improve coordination between teams and minimising issues on site. Presenting multiple options for the client to arrive at the most appropriate solutions to ensure designs that are economic, buildable and that works for all teams.

OUR EXPERTISE



Structural Design

We offer investigation, analysis and design services for all projects from sky scrapers to spread out developments.



Structural Peer Review

Independent evaluations of project designs to remove defects as early as possible in the design development.



Value Engineering

Value engineering is a systematic approach of reviewing a project to avoid unnecessary costs while maintaining or improving quality.



RANJITH CHANDUNNI DIRECTOR

Ranjith has over 30-years of experience in the construction industry, of which 17 years have been in the Middle East in the design and construction of various influential projects.

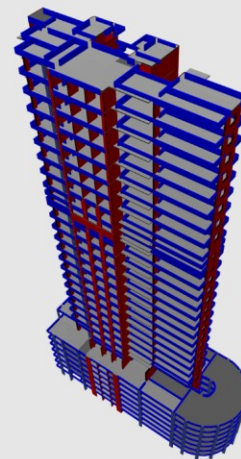
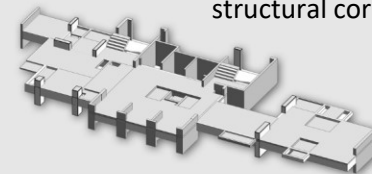
He is actively involved in technical roles including producing conceptual sketches to leading a large team of professionals delivering design of all aspects of complex and large scale projects.

He is specialised in tall buildings having worked on many high-rise projects in Dubai and India. As lead structural designer, he has delivered more than 20 buildings over 40 storey high including buildings of complex geometry. He is a fellow member of the institution of Engineer IS code Tall buildings subcommittee; thus, ensuring the implementation of the most up to date design codes and forefronts of thinking in the country to the design work at Reci.

PITTIE

Peer review and Design Services

Lateral stability provided by two split structural cores linked together by coupling beams.

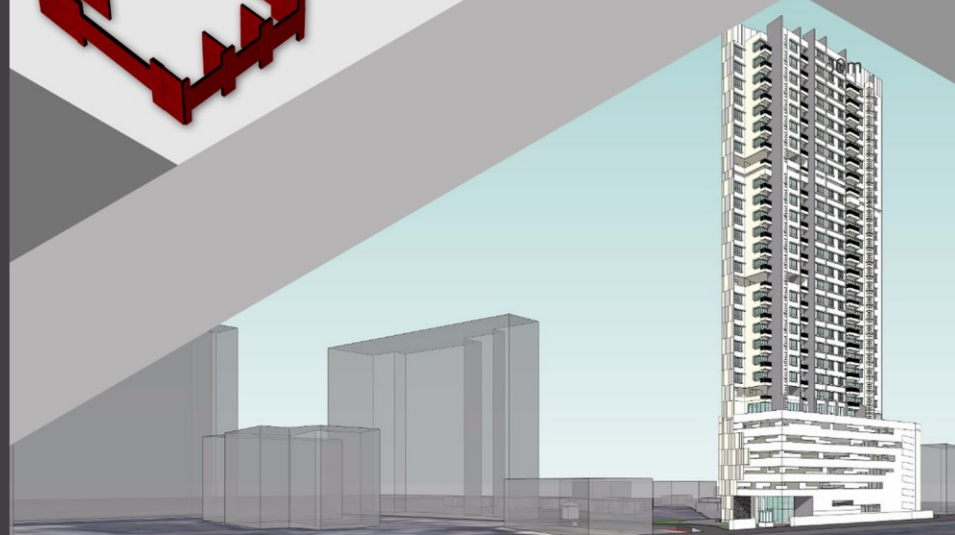
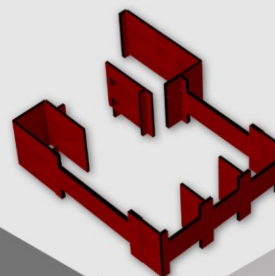


- The height to width ratio of the building is over 6 – making it slender and challenging to design structurally.
- 6 levels of podium, amenity level, 23 typical levels, 1 service level and 1 fire check level
- The total built-up area of the project is approximately 18,174m²
- The roof is 105m above ground
- Refuge areas are provided on the 1st, 8th, 15th and 22nd levels.



Outrigger walls and belt walls at fire check floor for enhancing lateral stiffness of the structure.

One floor deep in plane column transfer avoiding deep transfer girders.

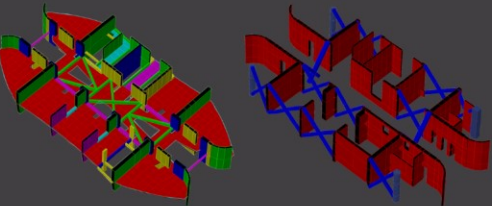


NAMASTE TOWER

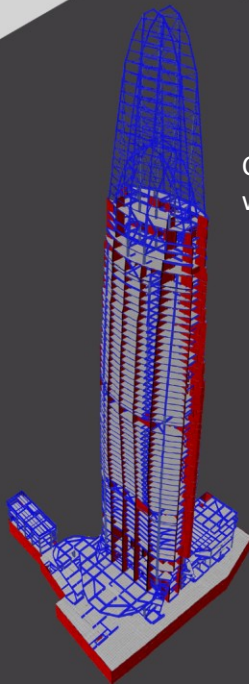
DB CROWN

Peer review and Value engineering

- Unique architectural shape resembling hands folded in a "Namaste" gesture.
- Approximate built up area of 116,000 m²
- Hotel tower 308m tall, 62 floors
- Coupled core with series of cross bracings
- 72m tall top roof feature with tapered trussed form braced at the top



Belt truss and internal bracing arrangement at plant floor

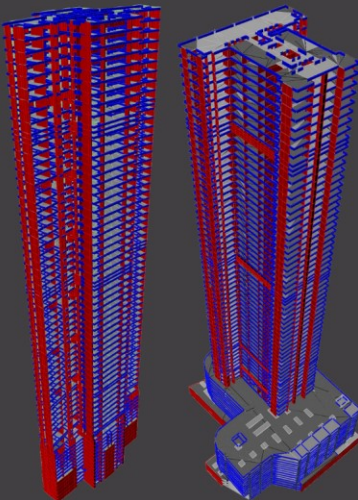


Coupled core with bracing

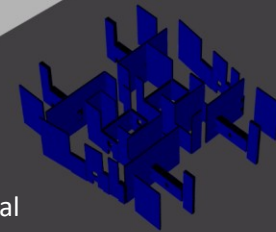


Peer review and Value engineering

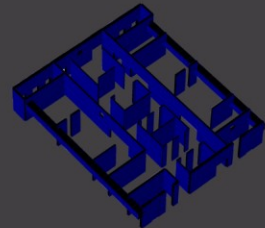
- Three tower development with breath taking views of the Arabian sea and the Bandra-Worli Sea link
- 79 stories, 254m above ground.
- The structural system is in-situ concrete core and columns with combination of post tensioned and conventional concrete slabs.
- Peer reviewed to eliminate abnormalities in wind-tunnel studies and value engineered for optimum reinforcement.



Belt walls for effective engagement of blade walls and enhancement of torsional stiffness



Outriggers engages external columns





TRELLIS & JOGGING TRACK

Design Services

TRELLIS

- 30m roof feature on top of 200m tall tower.
- Made of lattice truss of open steel sections and clad with composite aluminium panels.
- Combination of moment resisting frame and bracings by bracketing of stiffness properties for resisting high wind loads.
- Steel tonnage: 350 tons.

JOGGING TRACK

- 100m long elevated jogging track.
- The structure is formed with two parallel trusses of rectangular hollow sections.
- Truss top chords restrained by U-frame action and bottom chords connected by deck bracings.
- Cladded in aluminium composite to achieve desired architectural appearance.
- Steel tonnage: 70 tons.

LAWNS & BEYOND

Detailed Design

- This Boutique residences offers breath-taking views of landscaped courtyards, the city and the urban infrastructure across the development.
- Consists of 16 Wings laid out in 10 structural blocks.
- All buildings with Ground and 21 typical floors over a very large double basement.
- Flexible design to combine adjacent units yet having no beams dropping into the living space.
- Predominantly of structural wall construction using aluminium formwork.
- Total built-up area of 184,500 m²

