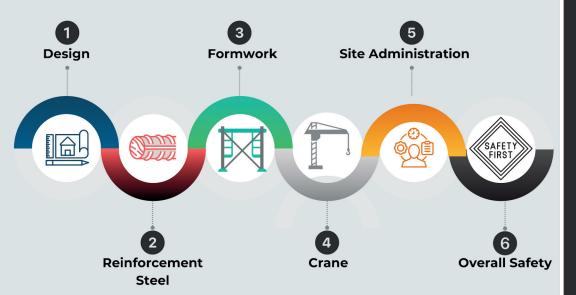
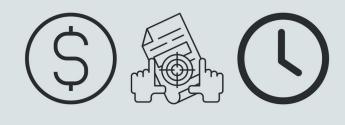
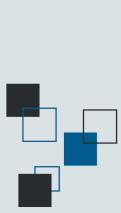
# ELEVATING CONSTRUCTION



## Highlighting the Impact of Rapid Columns













### DESIGN

Shop Drawings will be generated, reviewed and approved in coordination with the site Structural Engineer prior to fabrication:

- Minimises drawings updates required.
- Eliminates the need for variation works.



#### **REINFORCEMENT STEEL**

## Steel Schedule and steel delivery will be managed by Rapid Columns Team in a controlled environment:

- Minimises the risk of unforeseen delays as a result of missing steel, wrong delivered quantities, or design issues.
- Minimises dumping, installation, and supply cost of extra steel usually delivered on site.

#### **Fabrication following approved shop drawings:**

- Eliminates the risk of errors in steel placement and column forming.
- Ensures achieving steel cover requirements.
- Ensures correct reinforcement steel dimensions and precise integration with Formwork.
- Eliminates the risk of variation works by Steel fixers.

## Engineering Inspection will be carried out at Rapid Columns Facility in coordination with the Site Structural Engineer:

- Eliminates the risk of delays affecting the Formworkers.
- Eliminates the risk of delays as a result of requiring extra engineering inspections.

#### Prefabricated Columns will be transported to site, ready for installation:

- Minimises the number of deliveries required (for steel, formwork material, etc.)
- Reduces the storage requirements on site.
- Reduces the work area needed by the steel fixers to form the columns.
- Minimises Labour required by Steel fixers on site.







#### **FORMWORK**

#### Columns will be completely prefabricated off-site:

- Eliminates the risk of mistakes and errors (dimensions, elevation, etc.)
- Addresses today's labour and skills shortage by minimising number of workers usually needed for formwork erection; and reducing the skill requirements.

#### System requires less material for forming the columns:

- Minimises site storage requirements.
- Minimises delivery costs.
- Enhances site access & Housekeeping.

#### **Stripping for return and re-use:**

- Reduces Labour required for Columns Stripping.
- Minimises material wastage and dumping costs.
- Enhances Site access & Housekeeping.

#### **Fabrication is Quality Assured:**

- Ensures material used is suitable for achieving the desired Finish class as per Architectural Drawings.
- Minimises the risk of defects, variations, and rectifications.

#### Formwork Design

• Allows following the Formwork Design for the horizontal elements without requiring frequent updates.





#### CRANE

#### **Crane Lifts Required:**

- Reduces the amount of Crane lifts usually required to lift the conventional formwork components individually, formwork consumables, and reinforcement steel.
- Enhances crane efficiency and productivity, benefiting all site trades.



#### **Utilising Rapid Columns System reduces Manpower attendance on site:**

- Reduces the Site Facilities required such as (Site Sheds, Lunchrooms, Toilets, etc.)
- Reduces site inductions time and cost.
- Reduces Site delays as a result of program changes, human errors, or safety incidents.



#### SAFETY

#### Fall from Heights:

• Eliminates Slab Column Penetrations leading to significantly minimising fall from height risks.

#### Access:

Enhances site access by only adding approximately <u>60mm</u> to the column dimensions VS approximately <u>540mm</u> thickness added when forming using conventional methods.

#### Risk on Injuries:

- Reduces on-site Hot Work Activities which minimises risk of Burns, Cuts, Eye Injuries, Fire, etc.
- Ensures Site Cleanliness and Housekeeping (No offcuts, steel bars, extruding nails, etc.) which minimises risk of trips, falls and injuries.
- Allows installation of safety caps on exposed rebar ends prior to columns installation which reduces the risk of impalement injuries.