



ECO HOUSING



Introduction

Good low cost housing is essential for fast developing nations to sustain or exceed their rate of economic growth and provide decent living environments for an expected influx of migrants into the cities. An excellent innovative building system will help governments achieve this goal in rapid fashion.



Factors to consider for an innovative Building system

- Speed.
- Cost Effectiveness
- Availability of resources
- Skill level of the labour force.
- Quality.



What is the Progressive Strength Method?

The Progressive strength method is a load bearing system which allows columns, beams and slabs to be cast in a single operation. This prop free system consists of a one way beam and slab formwork supported by steel trusses which transfers construction load onto the column forms.



How it works?

Day 1

- Erection of column reinforcements.
- Erection of prefabricated column formwork.
- The formwork is easily fitted by means of clips.
- This way 4 men can erect 40 columns in 2 hours!
- Brace Columns for Verticality
- The beams and trusses are then erected between the columns.

Day 2

- Erection of the Edge beams.
- Placing of the slab soffits.
- This completes formwork for the floor.

How it works?

Day 3

- Prefabricated Beam reinforcements are placed together with mesh reinforcements for slab.
- Plumbing/Electrical services & Coreholes installed
- A final quality check is carried out
- The resulting area is clear and free from props.

Day 4

- Concrete is poured mechanically on the column, beams and floor.
- This completes one floor cycle.
- Works continues on another part of the building.

How it works?

2 Days Later

- The concrete has gained sufficient strength to support itself.
- The trusses are first stripped,
- Then the formwork for the beams, columns and floor slab are removed.
- Formwork quality is inspected for defects and oiled before lifting to the next level for use again.

Advantages of the Metal Forms

- Very high quality of finish.
- Easily repaired and maintained.
- Very high number of Re-uses.
- Minimal material wastage.
- Cleaner area and therefore safer worksite.



Benefits of the Progressive Strength Method

- Labour force is mainly unskilled.
- Requires only half the workers of the conventional method.
- Does not need heavy plants or equipment.
- The Progressive Strength Method can complete 4 structural floors per month or a 15 storey apartment structure in 7-8 months.
- Applicable to high rise, medium rise and building complexes.
- Material Wastage very low due to Industrialised System used.
- No plastering required because of metal form used.

Value Additions

- JM Mechanical Splice System
- LED Lighting System especially for the common area & facility
- KY Heat & Water Resistant Paint for the External
- Lift with VVVF System
- Engineering Timber Floor Board for the Bedrooms



Potential Market

- Singapore
- Malaysia
- Indonesia
- East Timor
- Vietnam
- India
- Bangladesh
- Sri Lanka
- Myanmar





Thank You

Contact Us:

EFICAZ HOLDINGS PTE LTD

10 Marina Boulevard, #39-00,
Marina Bay Financial Centre Tower 2,
Singapore 018983.

Tel: +65 6818 5721 Fax: +65 6219 4008

Email: info@eficazholdings.com