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Presents...

CONSTRUCTION OF *Semi* – PRECAST SLAB

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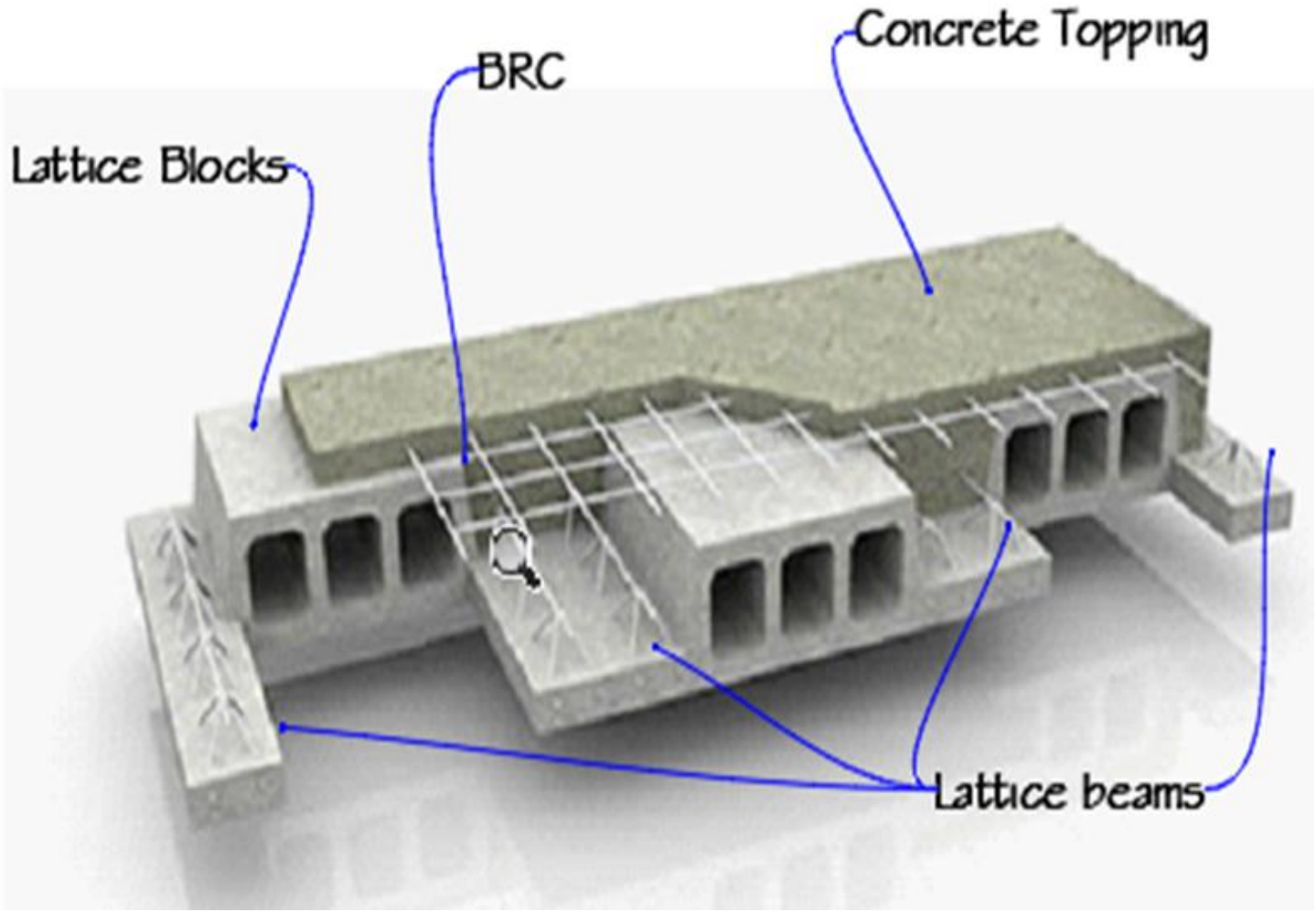
Semi-Precast Slab is a composite decking system comprised of:

- Lattice beams,
- Lattice blocks(Filler material)
- and Concrete topping.

SEMI – PRECAST SLAB *(Illustration)*



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The use of Lattice Reinforced Joists-Slab System is one of the most modern construction technique in Tanzania

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Why SEMI – PRECAST SLAB?

The use of semi- precast slab in construction provides clients with numerous financial and performance benefits as compared to the traditional method of construction:

- Easy installation;
- No Skilled labour necessary;
- Reduces temporary propping;
- Faster construction with stripping time between 7 –14 days;

Materials cost-effective:

- 30% saving in concrete;
- 67% saving on propping;
- 40% saving on installation time;
- Substantial saving on reinforcement.

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PRODUCTION OF UNITS

The production of precast beams and hollow blocks at the factory follows strict quality control procedures that have been documented in the Company's QMS

INSTALLATION:

The installation process is made easy by the pre-designed arrangement of precast units.

The light weight of the units calls for no special hoisting equipment making the technology compatible for both large and small projects.

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WORKING TO SEQUENCE

Prior to the arrival of the installation team, a sequence for on-site installation must have been agreed, with records kept on site and a copy handed to the Foreman.

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SUPPORT SYSTEM

The installation of Lattice Reinforced Slab requires the use of temporary supports. In most cases, the support system will be in form of propping.

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INSTALLATION (Cont'd)

The neatly arranged pre-cast units serves as formwork for the upcoming in-situ concrete.

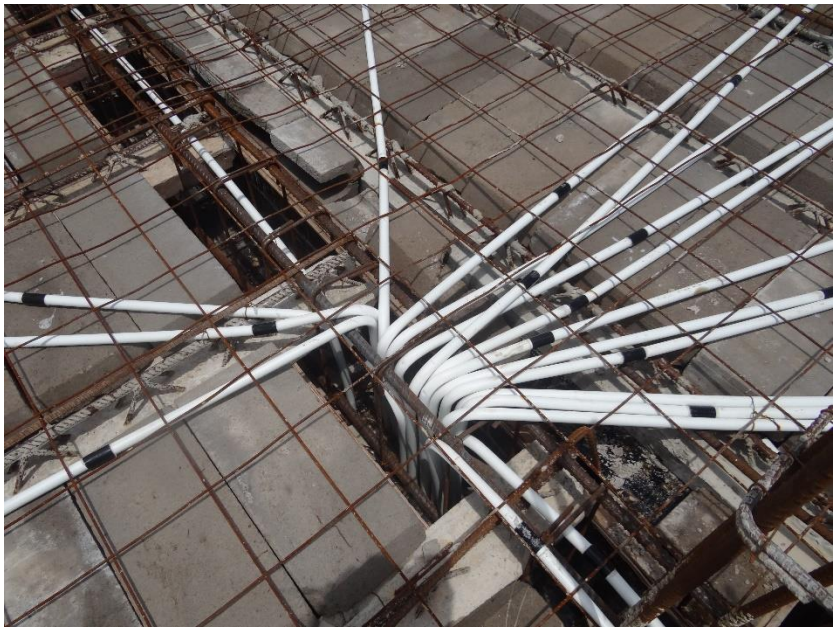
The arrangement requires minimum propping leaving the site clear.

The soffit of the slab can be plastered or left in case suspended ceilings are used.

SERVICES INSTALLATION

Electrical, plumbing and other services can easily be installed prior to casting the in-situ concrete topping .

The installation requires no chasing or drilling of precast elements



TOPPING REINFORCEMENT

BRC wire mesh is laid to control surface cracks, Negative moments are accounted for by adding continuity bars.

The projecting triangular bars provide support to the upper mesh reinforcement.

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CONCRETE TOPPING

The in-situ concrete topping is then casted to provide a monolithic structure.

The lattice projecting triangular bars ensures an effective mechanical bond between the precast element and the in-situ concrete topping

CONCRETE TOPPING (Cont'd)

The top of the slab is levelled to provide a flat surface as in conventional methods .

The soffit remains dry even after wet concrete is poured on top. This ensures no/minimum loss due to bleeding (indication of a perfect formwork).

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USAGE

Lattice reinforced slab - system can be applied for decking both residential and multi-storeys' (floor or roof slabs).

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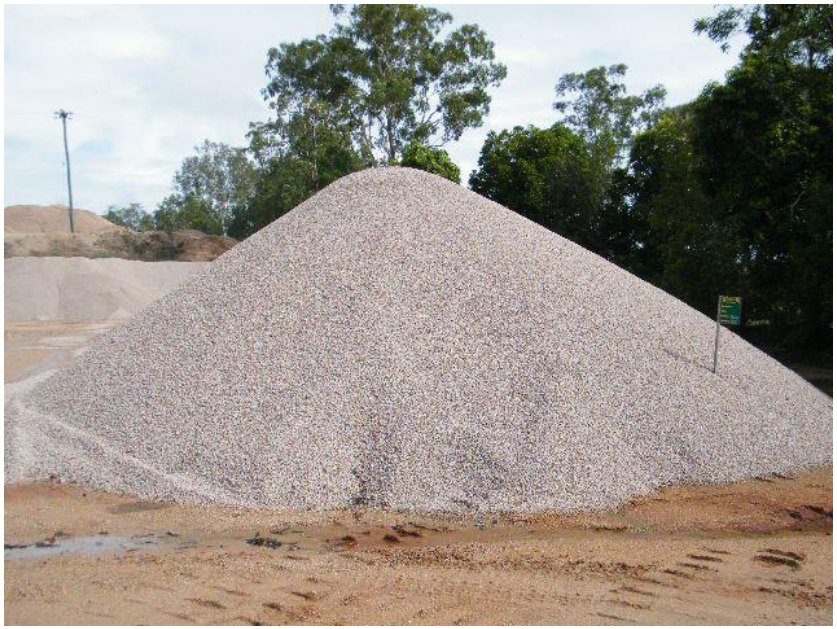
MATERIALS

(In a nutshell)

- *Lattice beams*
- *T-beams*
- *Lattice / Hourdi Blocks (Filler material)*

MATERIALS (Cont'd)
(In a nutshell)

- *Concrete*
- *BRC Wire mesh*
- *And Minimal steel bars for primary beams.*



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THE END