## ECO-FRIENDLY GOEPOLYMER CONCRETE BLOCKS

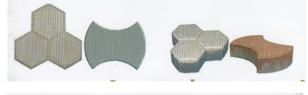
A novel technology for producing eco-friendly geopolymer concrete (GPC) blocks with zero Portland cement

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai has developed ambient temperature cured concrete blocks using geopolymer technology. These blocks are of different types - building blocks, paver blocks, hollow blocks and lightweight blocks. This technology offers a speedy, cost-effective and environment-friendly alternative to conventional Portland cement based blocks. The production of GPC blocks lead to a scientific, systematic and eco-friendly utilization of industrial wastes. The technology has been already demonstrated in pilot scale.

## FEATURES / HIGHLIGHTS

- Environment-friendly and sustainable
- Complete replacement of Portland cement in concrete with cementitious materials such as fly ash and ground granulated blast furnace slag
- Water not required for curing
- · Less energy requirement and low carbon footprint
- Good mechanical and durability properties
- · High early strength
- Better life-cycle cost when compared to Portland cement based concrete







## **APPLICATIONS**

- Alternate to conventional Portland cement based blocks
- Can be used in buildings, landscaping, container yards, foot paths, parking lots, pavements, etc.

## TECHNOLOGY TRANSFER

- Technology transferred to M/s Kiran Global Geocements Private Limited, Chennai, on non-exclusive basis
- Technology is available for transfer to other interested players in the industry



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