

Technology developed

Name of the technology developed	: Fly ash and Limestone Calcined Clay-based mixtures for Concrete 3D Printing
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Purpose	: This technology offers a sustainable, cost-effective, and high-performance material system for 3D concrete printing by partially replacing cement (15–25%) with a synergistic blend of limestone powder, calcined clay, fly ash, and silica fume. It significantly reduces CO ₂ emissions (up to 30–40%) and material cost while maintaining excellent printability, mechanical strength, and durability. The solution addresses a key industry challenge — reducing the carbon footprint of 3D printable concretes without sacrificing performance or scalability.
TRL	: 4

