

1. Record Nr.	UNINA9911031568203321
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Titolo	Green Concrete : A Sustainable Construction Material // by Sushree Sunayana, Sudhirkumar V. Barai
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9669-82-0
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (257 pages)
Collana	Springer Transactions in Civil and Environmental Engineering, , 2363-7641
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Disciplina	691.3
Soggetti	Concrete Sustainable architecture Composite materials Sustainable Architecture/Green Buildings Composites
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Acknowledgment -- Green Concrete Materials, Mixing, Mix Proportioning and Environmental Impact -- Introduction -- Properties of Green Concrete -- Structural Performance assessment -- Durability and long-term concrete properties.
Sommario/riassunto	This book explores recycling and reusing construction wastes as alternative coarse aggregates and presents this as a possible solution for the major challenge of making sustainable concrete. It explores the reduction of cement use and the overcoming of some inferiorities in recycled coarse aggregate through the partial substitution of cement with supplementary cementitious materials (SCMs). The book evaluates the effect of low-volume SCMs (mainly fly ash) in 100% recycled coarse aggregate based concrete and comprehensively investigates this sustainable concrete for strength, safety, serviceability and sustainability. More specifically, this book discusses macro and microstructure properties, environmental impact assessment and performance of structural components. It explores the use of the particle packing mix design method (PPM) for concrete proportioning as it compensates lesser modulus of elasticity of RAC and is beneficial

in lowering the environmental impact of concrete. Necessary modifications in mix design, mixing and design of concrete mixes are suggested to make this concrete safe for construction practice. It illustrates different mechanisms and results through figures, histograms, tables and experimental test pictures showing the failure pattern of structural elements and microstructure of concrete. Readers can get a clear understanding of the performance of this SCM incorporated RAC at various scales like micro, macro and structural components.
