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Edizione	[Second edition.]
Descrizione fisica	1 online resource (388 illus., 310 illus. in color. eReference.)
Collana	Encyclopedia of Sustainability Science and Technology Series
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Soggetti	Sustainable architecture Sustainable construction
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Livello bibliografico	Monografia
Nota di contenuto	Part I: Sustainable Built Environment -- Bioclimatic Design -- Daylighting Controls, Performance, and Global Impacts -- Facades and Enclosures, Building for Sustainability -- Geothermal Conditioning: Critical Sources for Sustainability -- Indoor Environmental Quality and Health Improvement, Evidence-Based Design for -- Natural Ventilation in Built Environment -- Passive House (Passivhaus) -- Passive Solar Heating in Built Environment -- Rating Systems for Sustainability -- Regenerative Development and Design -- Resource Repletion, Role of Buildings -- Sustainability Performance Simulation Tools for Building Design -- Sustainable and Healthy Built Environment -- Sustainable Built Environment, Introduction -- Sustainable Design and Construction, Integrated Delivery Processes and Building Information Modeling -- Sustainable Heating Ventilation and Air Conditioning -- Part II: Sustainable Landscape Design, Urban Forestry and Green Roof Science and Technology -- Biodiversity in Cities, Reconnecting Humans with Nature -- Green Infrastructure and Climate Change -- Green Roofs, Ecological Functions.
Sommario/riassunto	This volume in the Encyclopedia of Sustainability Science and Technology, Second Edition, describes the breadth of science and engineering knowledge critical to advancing sustainable built environments, from architecture and design, mechanical engineering, lighting, and materials to water and energy, public policy, and

economics. Covering both building, landscape and green infrastructure design and management, detailed consideration is given to how the building sector, the biggest player in the energy use equation, can minimize energy demand while providing measurable gains for productivity, health, and the environment. With a focus on the environmental context, the reader will understand how sustainable design merges the natural, minimum resource conditioning solutions of the past (daylight, solar heat, and natural ventilation) with the innovative technologies including nature-based solutions of the present. The desired result is an integrated “intelligent” and as socially “just as possible” system that supports individual control with expert negotiation for resource consciousness.

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