1. Record Nr. UNINA9910350306103321 Autore Nag Pranab Kumar Titolo Office Buildings: Health, Safety and Environment / / by Pranab Kumar Nag Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-13-2577-4 [1st ed. 2019.] Edizione Descrizione fisica 1 online resource (533 pages) Collana Design Science and Innovation, , 2509-5994 Disciplina 696 Soggetti Engineering design Buildings - Design and construction Quality of life **Engineering Design Building Construction and Design** Quality of Life Research Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Concept of Office and Office Space -- Spatial and Behavioural Attributes in Office Design -- Sick Building Syndrome and Other Building Related Illnesses -- Musculoskeletal Disorders: Office Menace -- Fundamentals of Office Ergonomics -- Ergonomics of Computer Workstation -- Strategic Office Lighting -- Visual Performance in Office -- Bioclimatic Approach: Thermal environment -- Characteristics of Indoor Environmental Quality -- Assessing IEQ Performance in Buildings -- Ventilation in Office Buildings -- Lighting Systems --Energy Performance in Buildings: Standards and Codes -- Green Building and Assessment Systems -- Building Sustainability: Credit Rating Criteria. Sommario/riassunto This book brings together concepts from the building, environmental, behavioural and health sciences to provide an interdisciplinary understanding of office and workplace design. Today, with changes in the world of work and the relentless surge in technology, offices have emerged as the repositories of organizational symbolism, denoted by the spatial design of offices, physical settings and the built

environment (architecture, urban locale). Drawing on Euclidian

geometry that quantifies space as the distance between two or more points, a body of knowledge on office buildings, the concept of office and office space, and the interrelationships of spatial and behavioural attributes in office design are elucidated. Building and office workrelated illnesses, namely sick building syndrome and ailments arising from the indoor environment, and the menace of musculoskeletal disorders are the alarming manifestations that critically affect employee satisfaction, morale and work outcomes. With a focus on office ergonomics, the book brings the discussion on the fundamentals of work design, with emphasis on computer workstation users. Strategic guidance of lighting systems and visual performance in workplaces are directed for better application of ergonomics and improvement in office indoor environment. It discusses the profiles of bioclimatic, indoor air quality, ventilation intervention, lighting and acoustic characteristics in office buildings. Emphasis has been given to the energy performance of buildings, and contemporary perspectives of building sustainability. such as green office building assessment schemes, and national and international building-related standards and codes. Intended for students and professionals from ergonomics, architecture, interior design, as well as construction engineers, health care professionals, and office planners, the book brings a unified overview of the health, safety and environment issues associated with the design of office buildings.