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| 1. Record Nr.           | UNINA9910299623703321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Autore                  | Khazaii Javad                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Titolo                  | Energy-Efficient HVAC Design : An Essential Guide for Sustainable Building / / by Javad Khazaii                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ISBN                    | 3-319-11047-0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Edizione                | [1st ed. 2014.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Descrizione fisica      | 1 online resource (165 p.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Disciplina              | 338.927<br>621.042<br>624                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Soggetti                | Renewable energy resources<br>Civil engineering<br>Sustainable development<br>Renewable and Green Energy<br>Civil Engineering<br>Sustainable Development                                                                                                                                                                                                                                                                                                                                                                                         |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Note generali           | Description based upon print version of record.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Nota di bibliografia    | Includes bibliographical references at the end of each chapters and index.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Nota di contenuto       | A challenging task -- Integrated Design -- Categorizing Knowledge -- Frequently used Codes and Standards -- Performance Based Standards -- Indoor Air Quality -- Protective Design Practice -- HVAC Systems -- Building Automatic Controls -- Energy Modeling -- Sustainability and Energy Conservation Scoring Systems -- Renewable Energy & Sum-Zero Energy Building -- Uncertainty and Risk Management.                                                                                                                                       |
| Sommario/riassunto      | This book provides readers with essential knowledge enabling the successful design of today's new energy efficient HVAC systems. The author introduces important concepts such as Knowledge Categorization, Performance Based Design Standards, and Quantification of Uncertainty in Energy Modeling for Buildings. Pivotal topics that all HVAC and architectural engineers must master in order to navigate the green building renaissance are given focused attention, including the role of renewables, air quality, automatic controls, and |

thermal comfort. Relevant ASHRAE standards, as well as sustainability scoring systems such as BREEAM, HQE, LEED and CASBEE are explained and discussed. Armed with the material contained in this practical reference, students and practitioners alike will become more effective and prepared for engineering success.

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