Record Nr. UNINA9910299601703321 Autore Piraccini Stefano Titolo Building a Passive House: The Architect's Logbook / / by Stefano Piraccini, Kristian Fabbri Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-69938-5 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource: illustrations (chiefly color) Collana Green Energy and Technology, , 1865-3529 Disciplina 720 Soggetti Energy efficiency Buildings—Design and construction Building Construction Engineering, Architectural **Building construction Energy Efficiency Building Construction and Design** Building Physics, HVAC Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di bibliografia Includes bibliographical references. Nota di contenuto 1. Where to start (S.Piraccini) -- 2. Boundary condition and Climate Design -- 3. Envelope design -- 4. Thermophysical performance (Fabbri K) -- 5. Thermal Bridge Design (Piraccini S, Potente M).- 6. Air tightness design -- 7. The technical installations and the CMV (Controlled Mechanical Ventilation) -- 8. Thermal Comfort, Indoor Air Quality (Fabbri K) -- 9. Environmental Monitoring (Fabbri K).- 10 Conclusion. Sommario/riassunto This book describes step-by-step the entire building process of a passive, energy-efficient house in a Mediterranean climate. It chronicles the creation of the Fiorita Passive House in Cesena, Italy, offering designers valuable tips and practical advice for their own projects. Written as a logbook, it not only provides essential technical information but is also an exciting story of the challenges encountered

and the solutions that were found. "How and where do I start when

building a passive house? Do I need consultants? Will it cost too much? What precautions should I take in a Mediterranean region? What tools do I need? I want to build in wood, but what technical solutions should I use? What must I do regarding plants and equipment? And then, finally, will it really work?" These and many other questions filled the head of the author and designer when he tried his hand at building a passive house in the Mediterranean. The designer, S. Piraccini, had long sought a book that would answer these answers – in vain. So he decided to brave these dangerous waters alone, and after successfully completing his project, he decided to write a book to help others in the same situation. The book is accompanied by detailed information on building physics and HVAC systems by his fellow architect, K. Fabbri.