

1. Record Nr.	UNINA9910254313003321
Autore	Pinteri Marko
Titolo	Building Physics : From physical principles to international standards // by Marko Pinteri
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-57484-1
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 254 p. 153 illus., 40 illus. in color.)
Disciplina	624.17
Soggetti	Buildings - Environmental engineering Physics Thermodynamics Heat engineering Heat transfer Mass transfer Acoustical engineering Building Physics, HVAC Applied and Technical Physics Engineering Thermodynamics, Heat and Mass Transfer Engineering Acoustics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- 1 Basics of thermodynamics -- 2 Heat transfer -- 3 Heat transfer in building components -- 4 Moisture in building components -- 5 Basics of waves -- 6 Sound propagation -- 7 Building acoustics -- 8 Illumination -- Appendix A -- Tables -- Bibliography -- Index.
Sommario/riassunto	This textbook provides thorough coverage of the most important building physics phenomena: heat transfer, moisture, sound/acoustics, and illumination. Since the book is primarily aimed at engineers, it addresses professional issues with due pragmatism, and by including many practical examples and related ISO standards. Nevertheless, in order to guarantee full comprehension, it also explains the underlying

physical principles and relates them to practical aspects in a simple and clear way. This is achieved with the aid of more than 100 figures and consistent cross-referencing of formulas and ideas. In addition, interrelationships between the different building physics phenomena are elucidated in a way that will enable readers to develop performance specifications that inform the design process. The book will primarily appeal to students of civil engineering and architecture, as well as to all practitioners in these areas who wish to broaden their fundamental understanding of topics in building physics.
