Record Nr. UNINA9910337606903321 Autore Barreira Eva Titolo Infrared Thermography for Building Moisture Inspection / / by Eva Barreira, Ricardo M.S.F. Almeida Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-319-75386-X Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (71 pages) Collana SpringerBriefs in Applied Sciences and Technology, , 2191-530X Disciplina 693.893 Soggetti Building repair Buildings—Repair and reconstruction **Building materials** Thermodynamics Heat engineering Heat transfer Mass transfer Physical measurements Measurement Building Repair and Maintenance **Building Materials** Engineering Thermodynamics, Heat and Mass Transfer Measurement Science and Instrumentation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Buildings and infrared thermography -- Case study 1 -Nota di contenuto Measurement of surface temperature using different devices -- Case study 2 - IRT versus moisture: laboratory tests on full-scale model.-Case study 3 – IRT versus moisture: in situ tests on indoor environment -- Case study 4 – IRT versus drying: in situ tests on outdoor environment -- Conclusions and recommendations. Sommario/riassunto This book presents the state-of-the-art in infrared thermography (IRT) applications with a focus on moisture assessment in buildings. It also

offers practical discussions of several case studies, including

comparisons of IRT with other surface temperature measurement techniques. In closing, it demonstrates how IRT can be used to assess capillary absorption, and addresses moisture in walls due to wind-driven rain infiltrations, and the drying process. The book equips readers with a deeper understanding of the ideal conditions for accurate IRT assessment and offers practical recommendations.