1. Record Nr. UNINA9910150344003321 Autore Chilton John (John C.) Titolo Timber gridshells: architecture, structure and craft // John Chilton and Gabriel Tang Pubbl/distr/stampa New York:,: Routledge,, 2016 **ISBN** 1-138-77530-4 1-315-77387-2 1-317-68272-6 Descrizione fisica 1 online resource (314 pages): color illustrations, photographs Disciplina 624.1773 Soggetti Building, Wooden Grillages (Structural engineering) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Introduction: shells with holes -- 2. Early gridshells -- 3. Secondgeneration deployable gridshells (post-Mannheim) -- 4. Ribbed gridshells -- 5. Alternative materials and systems -- 6. Small scaleprojects and experimentations -- 7. Made to measure: digital fabrication -- 8. Current practice. Sommario/riassunto "Throughout history, people have constructed simple timber lattice shelters such as the tepee or yurt, covered with animal skins, leaves, grasses and woven fabrics. Over the last fifty years, more sophisticated 'webs of wood' have emerged, with timber gridshells in particular becoming a structurally expressive form of architecture. Recent developments in digital design, 3-D modelling software, timber fabrication technologies as well as trends towards low-carbon construction have further reinforced architects' interest in the use of lightweight timber grids and lattice structures. This timely book charts the origin and evolution of the timber gridshell and its relation to timber lattice architecture. Drawing on a range of international case studies, the authors trace the effect advances in technology have had on design and construction in this field, providing a clear

understanding of the structure, morphology, design process, and construction technology, and examining both the application and

constraints of timber gridshells in architectural design. Timber Gridshells is a highly illustrated, up-to-date resource which provides detailed answers and inspires new ideas. As such, it is essential reading for students of architecture as well as professional architects"-- Provided by publisher.