

1. Record Nr.	UNINA9910824616403321
Titolo	Advanced timber structures : architectural designs and digital dimensioning / / Yves Weinand (editor)
Pubbl/distr/stampa	Basel, [Switzerland] : , : Birkhauser, , 2017 ©2017
Descrizione fisica	1 online resource (240 pages) : illustrations, photographs
Disciplina	674
Soggetti	Timber
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Frontmatter -- Table of contents -- Introduction. How can a schedule and a technologically innovative process shift the perspective of the construction industry toward sustainability? -- 1. Folded plate structures -- 2. Advanced architectural geometry -- 3. Active bending -- 4. Form-finding and mechanical investigations of active bended systems -- 5. Customized construction -- The Research Laboratory IBOIS at the EPFL Lausanne -- Picture credits
Sommario/riassunto	Ungenutzte Potenziale von Holz entdecken Wood is usually perceived as a "traditional" material. However, the properties of this material have now for some time made it possible to design free shapes and highly complex structures. Today, the wood laboratory of the EPF Lausanne, which was originally founded by Julius Natterer, is testing the production of origami structures, ribbed shells, fabric structures and curved panels under the guidance of Professor Weinand using digital calculation and computer-aided processing methods. The research results are tested in prototypes, which demonstrate the potential applications in large-scale timber buildings. By exploring the hitherto unused potential of wood as a construction material, this book provides an exciting and inspiring outlook on a new generation of timber buildings.