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Autore	Rohana Hassan
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Sommario/riassunto	This book describes the application of mathematical and fundamental theory as stated in the relevant standards, namely EYM and NDS. Timber is one of the important building materials in the field of engineering, other than concrete and steel. However, there is still a lot of unexplored knowledge about timber, including how timber connections are made. One of the main types of timber connection is mortise and tenon. Mortise and tenon are widely seen as one of the most important traditional timber structural joint. In order to understand the load-carrying capacity and performance of the structural mortise and tenon joint, the existing theoretical background of timber joint design is made as a reference. Current equations applicable in estimating the load-carrying capacity of timber joint uses the European Yield Model (EYM). Therefore, the main aim of this book is to share the basic design knowledge, inclusive of safety factor limitations (as engineering main factor) in structural design.