



JIM COULSON

# WOOD IN CONSTRUCTION

HOW TO AVOID COSTLY MISTAKES

 WILEY-BLACKWELL

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How to Avoid Costly Mistakes

Jim Coulson

 **WILEY-BLACKWELL**

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# WOOD IN CONSTRUCTION

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There is a growing interest in the use of wood in new building, not least because it has low embodied energy and it is an infinitely renewable resource. Despite a great deal of innovation in the use of wood in construction in recent years, the fundamentals of using this natural material have not really changed: the different types of wood have different properties and differing responses to the environment in which they are used. When used correctly, wood is an excellent building material but when inappropriately specified or used, it may cause problems. Poor understanding of the properties of wood and the many species and grades that are commercially available can result in this versatile material performing below expectation, and certainly less well than could have been achieved with greater understanding about how best to use it.

*Wood in Construction* focuses on the basic properties of wood and the appropriate use of timber and wood-based materials, showing in clear, non-technical language, how to avoid making expensive mistakes.

It describes the main reasons why things can go wrong when using wood and shows how to avoid or minimise problems, thus reducing the difficulties for the architect, engineer or designer, builder or building owner. Based on the author's extensive experience within the timber and construction industries, this book is technical enough to explain why things should be done in specific ways, but more importantly the author demonstrates, in a friendly and ultimately practical way, how best to use wood in the real world.

## About the Author

James C. Coulson FIWSe FFB is a Wood Scientist and Timber Technologist with an encyclopaedic experience of the use of wood in construction, extending back over more than 35 years. He served as President of the Institute of Wood Science from 2002 to 2004 and he is currently a member of the Board of the Wood Technology Society (WTS), a Division of the Institute of Materials, Minerals and Mining (IOM3). He is a member of the WTS's Education Working Group and a tutor for the IOM3 courses on Wood Science and Timber Technology. He has been a Visiting Lecturer to the Universities of Newcastle and Durham Schools of Architecture and Engineering, as well as to Leeds College of Building. He is also a member of the UK Executive Committee of ICOMOS and a specialist in condition surveys of historic timber buildings (he was technical timber advisor for Shakespeare's Globe Theatre, working on that project for about 4½ years). He founded *Technology For Timber Limited*, a consultancy practice dealing with all aspects of timber and wood-based products, in 1991.

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