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Nota di contenuto	Wood Deterioration, Protection and Maintenance; Contents; Preface; Acknowledgements; About the Author; 1 Wood Durability and Lifetime of Wooden Products; 1.1 Basic information about wood structure and its properties; 1.1.1 Wood structure; 1.1.2 Wood properties; 1.2 Types and principles of wood degradation; 1.3 Natural durability of wood; 1.4 Methods of wood protection for improvement its durability; 1.5 Service life prediction of wooden products; 1.5.1 Lifetime of wooden products; 1.5.2 Service life prediction of wooden products by factor method; 1.5.3 Life cycle assessment of wooden products ReferencesStandards; 2 Abiotic Degradation of Wood; 2.1 Wood damaged by weather factors; 2.2 Wood damaged thermally and by fire; 2.2.1 Thermal wood decomposition; 2.2.2 Wood burning: fire; 2.3 Wood damaged by aggressive chemicals; 2.3.1 Corrosion of wood by chemicals under aerobic conditions; 2.3.2 Corrosion of wood by chemicals under anaerobic conditions: wood fossilization; 2.4 Properties of abiotically damaged wood; 2.4.1 Properties of weathered wood; 2.4.2 Impact of increased temperature and fire on wood properties; 2.4.3 Impact of water and other chemicals on wood properties; References

Standards3 Biological Degradation of Wood; 3.1 Wood damaged by bacteria; 3.2 Wood damaged by fungi; 3.2.1 Reproduction, classification and physiology of wood-damaging fungi; 3.2.2 Wood-decaying fungi; 3.2.3 Wood-staining fungi and moulds; 3.3 Wood damaged by insects; 3.3.1 Reproduction, classification and physiology of wood-damaging insects; 3.3.2 Wood-damaging insects; 3.4 Wood damaged by marine organisms; 3.4.1 Shipworms; 3.4.2 Limnoria; 3.5 Mechanisms of wood biodegradation; 3.5.1 Biodegradation of cellulose; 3.5.2 Biodegradation of hemicelluloses; 3.5.3 Biodegradation of lignin 3.6 Properties of biologically damaged wood3.6.1 Properties of rotten wood; 3.6.2 Properties of wood having galleries; References; 4 Structural Protection of Wood; 4.1 Methodology of structural protection of wood; 4.2 Selection of suitable wood materials; 4.3 Design proposals for permanently low moisture of wood; 4.3.1 Estimated moisture of wood; 4.3.2 Shape optimizations for wood moisture reduction; 4.3.3 Waterproofing and other isolations of wood and wooden composites from water sources; 4.3.4 Structural design to prevent condensed water generation 4.3.5 Regulation of climatic conditions in interiors4.4 Fire sections and other fire-safety measures; References; Standards; 5 Chemical Protection of Wood; 5.1 Methodology, ecology and regulation of chemical protection of wood; 5.1.1 Methodology and legislation of chemical protection of wood; 5.1.2 Toxicological and ecotoxicological standpoints of chemical protection of wood; 5.1.3 Regulation of chemical protection of wood; 5.2 Preservatives for wood protection; 5.2.1 Bactericides; 5.2.2 Fungicides: for decay, sap-stain and mould control; 5.2.3 Insecticides; 5.2.4 Fire retardants 5.2.5 Protective coatings against weather impacts
