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| Titolo | Fire Hazard and Fire Resistance of Wooden Structures / / by Sivenkov Andrey Borisovich, Berlin Alexander Alexandrovich, Mukhamedgaliev Bakhtiyor Abdukadirovich, Almenbayev Mirzhan Maratovich, Makishev Zhandos Kuandykovich, Berik Zhambulovich Rakhmetulin |
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| Nota di contenuto | Preface -- Introduction -- Chapter 1. General information about the structure and properties of wood -- Chapter 2. Fire hazard and fire resistance of wooden structures, their fire protection -- Chapter 3. The effect of the aging process on the properties and structure of long-aging wood -- Chapter 4. Investigation of the influence of the duration of operation of wooden -- structures on their fire hazard and fire resistance -- Chapter 5. Investigation of the effect of a long service life on the fire resistance of wooden structures -- Chapter 6. The effectiveness of fire protection to reduce fire danger and increase the fire resistance of wooden structures -- Conclusion -- Subject index. |

Sommario/riassunto

This monograph discusses fire hazard and fire resistance in wooden structures with a long duration of operation. Aside from its increasing importance for modern architecture, wood has been the most important building material in the past. It has a distinct aesthetic, high mechanical strength, and resistance against many environmental changes. These properties are evident in structures like the still standing Grinstead Chuch, which has been built in 1045. Readers will however learn about the decreasing fire resistance in wooden buildings with a long service live. Considering the cultural value of medieval wood buildings, this topic becomes increasingly relevant. The chapters discuss the mechanical, physico-chemical and thermophysical properties of wooden structures over different lifespans. Many factors contributing to the changing fire resistance in the ageing process of wooden structures, are explained. This book is a valuable resource for students, teachers and scientists inthe areas of wood science, fire research and forestry.