



fire



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Glass at Elevated Temperatures and in Fire

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Message from the Guest Editors

In recent years, glass has been a largely used material for load-bearing or nonstructural components in buildings and other constructions. This includes building components such as facades, floors, roofs, walls, and columns that can be subjected to a multitude of permanent/accidental mechanical and thermal loads and their combinations. In spite of a large number of practical applications and research projects on structural glass, relatively little is understood about its mechanical performance under fire scenarios as a constructional material. As far as accidental design actions may derive from natural hazards, such a condition represents a huge limitation for design developments. Furthermore, wildfires represent a high risk in the same way as tornados, hurricanes, and earthquakes. For this reason, dedicated research, calculation methods, and approaches are required to understand the major loading and boundary conditions that are of technical interest for safe design purposes.

The goal of this Special Issue is to compile a set of scientific articles describing the phenomena related to the behaviour of glass at elevated temperature and in fire.



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Special Issue