

Abstract

The objective of this limited study is to provide an overview of the effects of elevated temperature on the behaviour of wood, gypsum board, limestone, concrete and steel. In meeting this objective, summarised the tests that conducted, in various laboratories by the researchers for each physical, thermal and mechanical properties and their results published by them. This literature include the major physical properties density, porosity and thermal properties thermal conductivity, specific heat, mass loss and mechanical properties modulus of elasticity, compressive, tensile and bending strengths. The report also included the objective of fire resistance and fire resistance testing. Also mentioned the equations for time-temperature fire curve by ISO 834, CAN/ULC-S101-M89 and BS 476: Part 20.