

Method for evaluating fire resistance of load-bearing and self-supporting walls during thermal testing using electric heating panels involves assessing the fire resistance of load-bearing and self-supporting walls using experimental-calculational method, which combines thermal testing in test rigs without load-bearing load-bearing units, followed by the interpretation of the obtained temperature data through the solution of a structural problem based on mathematical models of the stress-strain state of reinforced concrete and the patterns of degradation in the mechanical properties of its components. Specimen is heated using electric heating panels. During heating, the temperature is measured at control points across the cross-section of load-bearing and self-supporting walls. When calculating the fire resistance limit, the additional load and the actual dimensions of specimen are taken into account.