Abstract

Testing of building structures for their endurance in fire, necessitated by the rise of skeleton-type construction, was started in the last years of the nineteenth century. But before this, there was an effort to provide fire resistant buildings by the use of noncombustible materials such as masonry walls, and iron columns, girders, and beams. A particular problem, and the basis of many early tests, was the design of floors. The need for a fire-resistive covering for the protection of the iron—and later steel—columns also became apparent. To impede the horizontal spread of fires, resistive partition constructions were developed. In addition to presenting a review of some of the early tests for fire endurance of these structures and a few concurrent tests of building materials, the paper describes the establishment of ASTM standards for such tests, under the cognizance of what is at present Committee E-5.

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