DIAPHRAGM STABILIZATION OF STEEL BUILDINGS IN FIRE – REFERENCE SURVEY

Abstract

The objective is to study the material available about the diaphragm stabilization of steel buildings in elevated temperature. Bracing used in structural systems generally serve two primary functions. They resist secondary loads on structures (e.g. wind bracing) and increase the strength of individual members by resisting deformation in the weakest direction.

The use of self-supporting sandwich panels as stabilizing elements in normal temperature for single steel members such as beams or columns has been recently researched and Recommendations on the Stabilization of Steel Structures by Sandwich Panels published. The next objective is to develop stabilization guides for sandwich panels in elevated temperature.

The European standards give instructions about diaphragm stabilization and connection forces in normal temperature. This short survey is made to check the present references dealing the diaphragm stabilization of steel buildings in elevated temperature.