

A full scale fire test procedure for surface linings, the so called "Corner Test" is being developed within ISO/TC 92. The test is based on ASTM and NORDTEST methods.

The test is performed in a full size room having a normal size door opening and the product to be tested is lined on the walls and the ceiling. The ignition source is a propane gas burner located in a corner. All the combustion gases leaving through the doorway are collected in a hood connected to an exhaust duct where measurements of volumetric flowrates, concentrations of gas species, such as oxygen, carbon monoxid and unburnt hydrocarbons, and production of light obscuring smoke are made.

By knowing the amount of oxygen consumed by the fire it is possible to calculate the heat release rate. Thus, the method gives quantitative measurements of heat release, as well as of smokeproduction and toxic gas production rates. A simple mathematical model is presented.

The model can predictfull scale results according to the test method based on smallscale test data from the so called NBS-Cone Calorimeter. Products tested in the NORDTEST-method have also been tested according to European classification methods. The results indicate that the new full scale test can be related to existing classification procedures.