



Basotect[®] UF: One more step towards fire safety

Case Study

BASF foam passes tests of the EU fire classification standards for buildings and trains

BASF's melamine resin foam, Basotect[®] UF, already now attains the highest possible rating for organic insulating materials according to the new, more stringent EU fire protection standards for buildings and trains. At present, these two EU directives still exist alongside the national regulations, but they will completely replace them in the coming years. By meeting the new EU standards, Basotect[®] UF, which is employed primarily for sound absorption and thermal insulation, gives engineers and processors in all European countries the planning reliability needed to design the insulation of buildings and railroad vehicles. In Germany, Basotect[®] UF is rated as a construction material of "low flammability" (DIN 4102-1 B1).

B rating in the more stringent EU fire classification standard for construction materials

According to EU standard EN 13501-1, whose fire tests will be mandatory in the future for all building construction materials, Basotect[®] UF attains the highest possible rating for organic materials, namely, B, s1, d0. Only inorganic materials, and thus construction materials in the "non-combustible" class, perform better. The favorable fire behavior of Basotect[®] UF has been demonstrated in model fire tests that simulate actual-practice conditions, such as the so-called Single Burning Item Test: the high nitrogen content of the resin ensures that the foam is extremely flame-resistant without the addition of flame retardants. Basotect[®] does not melt or drip when exposed to a flame. This foam becomes charred with slight smoke formation only and does not exhibit any afterglow. Building designers are increasingly looking towards the new, detailed fire ratings of the EU directive, which has existed since 2001 alongside the national regulations. This transition phase will come to an end in a few years, after which the EU stipulation will be the sole applicable law for the rating of construction materials in terms of their fire behavior and the pertaining tests.

