



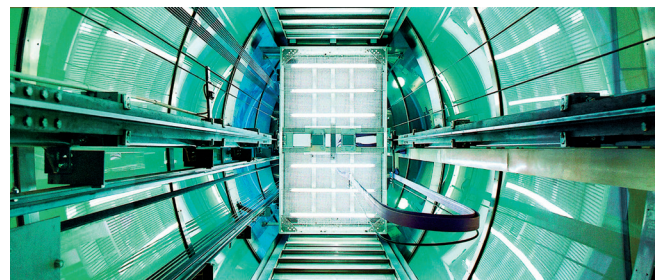
Basotect®

Ascending quietly and quickly: Basotect® used for noise suppression in elevators in a New York skyscraper

The companies ThyssenKrupp Elevator and National Elevator Cab and Door, experts in elevator construction, were faced with the challenge of ensuring a comfortable and quiet environment for passengers even in modern, fast elevators. In a joint project to construct high-speed elevators in a high-rise building in New York, the companies decided to use the melamine resin foam Basotect® from BASF. This foam ensures that the noise while the elevator travels are optimally muffled inside the car. The target for the noise level in the cars was to remain below 50 dB – this is quieter than a conversation between two people – even though the elevator could reach speeds of up to 37 km/h.

Prior to the construction of these elevators, the material was tested in an elevator model that was built by National Elevator in collaboration with Soundcoat, a subsidiary of the Recticel Group, and the acoustic consultant Frank Kirschner.

In addition to the noise absorption requirements, Basotect® also met other important application criteria: The material corresponds to class A for flame spread and smoke density according to ASTM E84. In addition, despite the strong air current that is produced when the elevator car moves, no fibers or particles are released. In order to reduce the amount of energy required for starting and stopping the elevator, it was also particularly vital to design the car to be as light as possible. With a very low weight of just 9 kg/m³, Basotect® helps to ensure that the car meets this requirement. In addition, the flexibility of the foam and the ease with which it can be processed during installation is a major advantage as Basotect® can also be fitted without any problems in tight gaps and spaces that are difficult to access.



Basotect® melamine foam, which is widely known as a lightweight acoustic insulation material in automotive and interior construction applications, is expanding its application range into the acoustic treatment of elevators.