

## High opening speeds guarantee lifesavers valuable seconds

Bonn fire brigade has a wide range of requirements for high-speed doors from EFAFLEX

**August 2017, construction work in fire station 1 of the professional fire brigade Bonn: EFAFLEX, the specialist for high-speed industrial doors, fitted the vehicle hall with six new high-speed doors EFA-STT®-L. The works must be excellently organised, because the work processes of the fire-fighters and rescue teams must under no circumstances be impeded by the installation of the doors. The technicians already have experience in coordination and cooperation with the lifesavers. In autumn 2016, they installed nine doors in fire station 1.**

“The old automatically driven steel slide and fold doors from the 1970s were showing signs of ageing and were no longer reliable,” reports Marcel Fröhlen, Technical Manager of the Bonn professional fire brigade.

“To choose the new doors, we contacted other fire brigades and looked at doors in industrial operations. After a Europe wide tender, EFAFLEX was awarded the contract.” The requirement profile for the doors was very varied. Marcel Fröhlen explains why the doors must have a very high opening speed: “If valuable seconds are lost getting out and therefore setting off, this means that human life is endangered.” A fire can get out of control, even in 30 seconds. The quiet running was another essential criterion for choosing the doors from EFAFLEX. “To keep the distance to the vehicles short, the rest room of the fire fighters is directly above the vehicle hall. If only the rescue service is called out and the door opens and closes with a great deal of noise on exiting and again on returning, then our colleagues won’t get any rest.”

The wind and weather resistant door leaf of the EFA-STT® is made of crystal-clear and PVC-free laths made of acrylic glass. It is divided in a grid dimension of 225 mm. This means that over 70 % of the door area is transparent. On the one hand, this brings a lot of daylight into the hall, and the clear view through the door significantly helps to avoid accidents and guarantee flawless sequences. The opened door leaf is incorporated into the original EFAFLEX spiral, in a compact, contact-free and therefore wear-free way, because the individual “layers” are continually kept apart during the high movement speeds of up to 3.0 m/s. This exemplary functional principle combines easy door movement with long life span and the highest availability. Even after many years in the most strenuous use, high-speed EFA-STT® still impress due to absolute economic viability and a flawless look. Furthermore, innovative product characteristics make it universally usable in architecture, for building sizes up to 8,000 mm width x 7,800 mm height. On request, various combinations with (e.g. grey) dyed and/or translucent laths can be realised for a variety of areas of application. The rescue service of the Bonn fire brigade is called out on average 15 times a day. This means around 60 door opening cycles in 24 hours. Three of the doors in the front are controlled with transponders and used for passenger transport. The doors record significantly more opening cycles there. A technical malfunction of the doors is not an option for the Bonn professional fire brigade. “If you press a button on the door, the door must open,” emphasises Marcel Fröhlen. The door systems are multiply safeguarded against the situation of a power cut. There is an emergency power generator and possibility for quick manual emergency opening. In terms of control, the doors are pre-installed in such a way that soon they can be switched on via the control centre. The Bonn professional fire brigade serves 320,000 residents. 350 fire fighters in the emergency services are divided between three fire and rescue stations in the city district. The university hospital fire station is also manned by the Bonn professional fire brigade. Another rescue station is also affiliated with the city of Bonn. 50 employees work for the fire brigade in administration and garages. The staff for the rescue service and ambulance service is also provided by the fire brigade, but the majority is also provided by charities. The Bonn fire fighters receive support from strong voluntary fire brigades with 500 emergency personnel from 18 locations.