

## **Aluminium sound barrier panels with DB certification for 300 km/h**

Faist Anlagenbau in Krumbach has developed a highly effective and visually appealing sound barrier system for road and rail. The individual elements are made of aluminium, and are self-supporting. The fact that it has been certified by DB Netz AG for high speed routes, where speeds of up to 300 km/h are reached, clearly demonstrates that the system is suitable for universal use.

The system is based on a construction that differs considerably from sound barrier walls which have been available until now. A concrete base element is first hung in between standard steel posts, and then come the actual sound barrier panels. The aluminium elements, which have visible perforated sheets, give it an appealing look. According to the certification the elements can be produced in lengths from 2 to 5 metres. This allows for large distances between posts, which in turn simplifies the installation of the sound barrier system even more.

Despite being easy to install, the Faist Rail system provides very good noise absorption characteristics: It achieves a noise damping level of 31 dB according to DIN EN ISO 717, and a degree of absorption of 14 dB. Its mechanical strength under the given dynamic loads is also very good. Included in the testing was a simulation of five million load cycles. That corresponds to an ICE train driving by once per hour, thereby generating three pressure and suction waves each time, for a period of 50 years.

The certification by DB Netz AG was preceded by comprehensive tests in the Faist development centre, as well as at several universities and by the federal railway authority (EBA). It also successfully completed an acoustic test by DB Systemtechnik.

---

### **Your contact:**

#### **Anncathrin Wener**

Public Relations

Gesamtverband der Aluminiumindustrie e.V.

Phone: + 49 211 47 96 282

Mail: [anncathrin.wener@aluinfo.de](mailto:anncathrin.wener@aluinfo.de)