

SUCCESS STORY

STATIC SUPPORT FOR BUILDINGS

Airport Tunnel Stuttgart, Germany

PROJECT DATA

Brief description

Static support of large-area components to guarantee permanent safety and stability for the highly stressed elements.

Requirement

- Compensation of component unevenness
- Non-ageing, wear-free material

Country, year

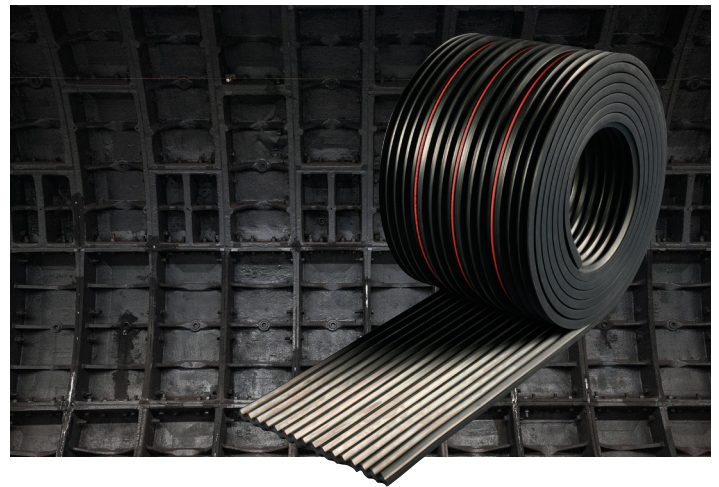
Stuttgart, 2022

PROJECT DESCRIPTION

The airport tunnel in Stuttgart, which will probably be ready to go into operation in 2025, is a largely underground railway line that connects Stuttgart Airport railway station with the new Stuttgart-Wendlingen line and passes under the trade fair halls. This will create a quick access to the airport and the trade fair grounds for residents and visitors in the future. The double-track line is ≈ 3 km long. Although the line also includes above-ground sections, it is called airport tunnel. In order to meet the specified requirements for permanent positional safety and stability, elastomeric bearings from Calenberg were used.

SOLUTION

For this project the unreinforced, approved Calenberg bi-Trapez Bearing® made of ageing-resistant, wear-free EPDM elastomer material was used. The material is weather and ozone resistant as well as quality controlled. The linear bearing compensates for plane-parallelism deviations and component tolerances with simultaneous centric load transfer into the adjacent structures, thus giving the tunnel the necessary lifelong stability.



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