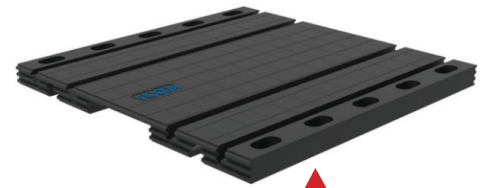


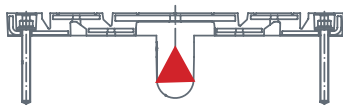
EXPANSION JOINTS

Roadway expansion joints bridge gaps in the carriageway and pavement areas in a way that permits traffic to pass over them safely. Any movements that occur in the bridge must be absorbed without distortion

The basic function of expansion joints is to allow a smooth flow of traffic while at the same time allowing movement of the bridge as the result of thermal expansion and the creeping or shrinking of concrete or of composite structures.



Elastomer Joint



Reinfroced
Expansion
Mat

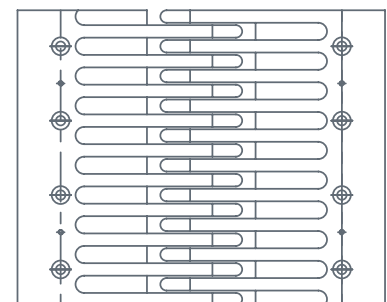
Reinforced expansion mats of the Type S-Flex are designed to compensate for longitudinal and transverse movements from 50 mm to 320 mm. Vertical movements of up to 20 mm and rotations can also be absorbed.

Expansion joints are a very compact and cost effective solution, particularly suitable for replacements due to the low space requirement and the simple installation concept

Finger-type expansion joints are designed to cover longitudinal movements of the bridge deck from 50mm to 1,600 mm. Their robust design allows high traffic loads and ensures extreme resistance to material fatigue, guaranteeing a long service life



European Ap-
proved Finger
Expansion
Joints



Roadway expansion joint construction without noise reduction

The SP expansion joint consists of two parallel steel profiles. These are connected by an elastomer profile which provides the bridge joint with a watertight seal. To connect the joint to the bridge, the anchor elements that are welded to the steel profiles are fixed into the concrete of the superstructure and the abutments. This guarantees a very robust connection and excellent fatigue strength. Various anchor systems are available, meaning that the SP series can be installed in all conventional bridge structures. In addition, they are particularly suitable as replacement systems in existing bridges because they only require a small installation space.

Roadway expansion joint construction with noise reduction

To meet the demand to keep noise emissions from roadway expansion joints as low as possible, single-cell joints are equipped with noise-reducing profiles. The VS-JSR expansion joint consists of two basic profiles onto which two sinusoidal steel plates are bolted. When a vehicle drives over the expansion joint, at least one wheel always touches one of the steel plates, with the result that the joint is driven over more quietly. These sinusoidal plates reduce the noise emitted when traffic passes over the VS-JSR series.