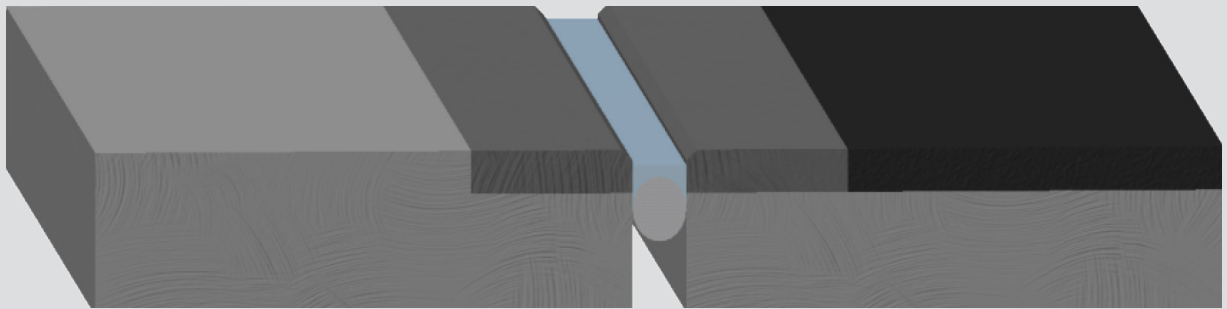




Expansion joints

Infrastructure | Buildings | Industrial structures

# mageba expansion joints – for lasting driving comfort



## **TENSA<sup>®</sup>SEAL expansion joint**

versatile, watertight, durable

**mageba**

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## Expansion joints

# Product characteristics

### Principle

The TENSA®SEAL expansion joint system is designed to be able to be installed quickly and easily, and it is therefore an extremely versatile option suitable for both new structures and replacement of defective joints on existing structures.

#### Scope of Application

- Bridge structures for all traffic types (also suitable for street and pedestrian bridges)
- Architectural and industrial structures
- Parking decks

### Properties

The TENSA®SEAL joint combines a well-proven joint sealant with polymer concrete nosing material.

The sealant is capable of sustaining movements of up to 100 % expansion and 50 % contraction, meaning that the joint is able to readily cater for the range of movements experienced by typical-sized structures.

The two-component material is mixed in complete packing units at ambient temperature, thus avoiding the possibility of on-site mixing failures. The joint can be driven over after a few hours.

The polymer concrete nosing is designed to prevent damage to the highly-stressed region on either side of the joint. The material is extremely durable, resistant to chemical contaminants commonly encountered on road bridges such as fuel, and has superior bond strength. Both the sealant and nosing are in-situcold-applied materials.

### Design details and movement capacity

The range of possible installation gaps and corresponding maximum expansion and contract movements are shown in the following table.

Installation gap (mm)	Maximum expansion (mm)	Maximum contraction (mm)
25.0	50.0	12.5
30.0	60.0	15.0
35.0	70.0	17.5
40.0	80.0	20.0
45.0	90.0	22.5
50.0	100.0	25.0
55.0	110.0	27.5
60.0	120.0	30.0
65.0	130.0	32.5
70.0	140.0	35.0
75.0	150.0	37.5

### Notes

- Joint can be used on Skew Bridges, the joint width should be nominated such that the resultant movement vector will be less than 100 % of the installed gap width.
- Minimum nosing width: asphalt 150 mm, concrete deck 100 mm
- Minimum nosing depth: 40 mm for any surface
- Maximum nosing thickness in general shall be 150 mm, however for the asphaltic thickness greater than 150 mm and in order for the joint to function appropriately the nosing width should be increased to maintain a minimum 1:1.25 depth to width ratio, example for 175 mm asphaltic depth a minimum of 220 mm nosing width will be required.

### Installation

Traffic accidents or road maintenance vehicles can cause damage to traditional expansion joints leading to high repair costs. The joint sealant will readily bond to itself, enabling repairs to be performed. This capability also allows lane-by-lane installation if necessary.

### Quality

The quality and durability of mageba bearings is ensured not only by their well-proven product properties, but also by the extensive experience of our personnel.

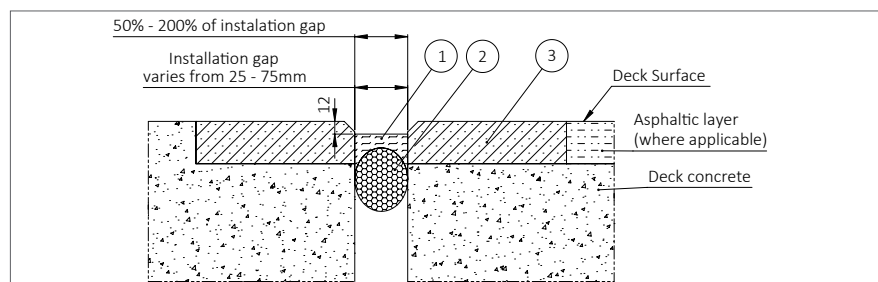
mageba operates a process-oriented quality system that is certified in accordance with ISO 9001:2008. mageba factories are certified for welding in accordance with ISO 3834-2, and according to the current steel construction standard EN 1090.

### Support

Our experienced product specialists are ready to provide you with further information and to advise you in selecting the optimal solution for your project. In addition, mageba Australia offers an on-site delivery and installation service. Please contact us directly via [info.au@mageba-group.com](mailto:info.au@mageba-group.com).

### Section Details (read along with Notes)

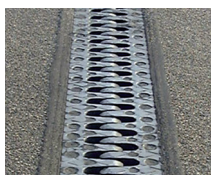
- ① Joint Sealant- Dow Corning 902 RCS
- ② Backing Rod- PE Foam
- ③ Joint Nosing Transition Strip- Britlflex Polymer concrete



### mageba expansion joint types



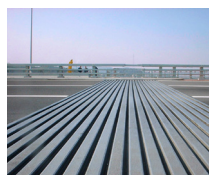
Single gap joints



Cantilever finger joint



Sliding finger joints



Modular expansion joints

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