



Expansion Joints

Infrastructure | Buildings | Industrial structures

mageba expansion joints – for lasting user comfort



Donaustadtbrücke Vienna

TENSA® RAIL RSU

proven, durable, safe



mageba



Product Characteristics & Benefits

Concept

mageba TENSARAIL RSU single gap expansion joints allow for movements up to 13.8 in (350 mm) as a standard. They are made of steel edge profiles and an elastomeric sealing fixed between the profiles. For larger movements, they are fitted with a drainage channel made of EPDM or stainless steel. The bridge's water insulation system is directly connected to the edge profiles which provide a horizontal connection surface for this purpose. Thus, the joint allows for a 100 % continuously waterproof system. The edge profiles are connected by means of studs or loop anchorage with the bridge superstructure in a permanent and fatigue-proof way. The joint's gap is protected from the ingress of dirt or ballast by a cover plate. The cover plate is fixed on one side to the edge profile while the other side rests and slides on the opposite edge profile.

Range of Application

TENSARAIL RSU expansion joints are suitable for the use in metro or railway bridges or segments with and without ballast. The ballast either lies directly on the joint or, ideally, on an insulation mat introduced between the ballast and the bridge slab. mageba is in a position to provide the necessary insulation mats in combination with the TENSARAIL expansion joints as a package offer.

TENSARAIL RSU expansion joints have been awarded in Austria with the national approval according to RVS 15.04.51.

Example Cross Sections

The cross sections below show examples of joints with of studs or loop anchorage. The optional insulation mat is shown as well. The detailed design of each joint is individually fitted to the customer's requirements.

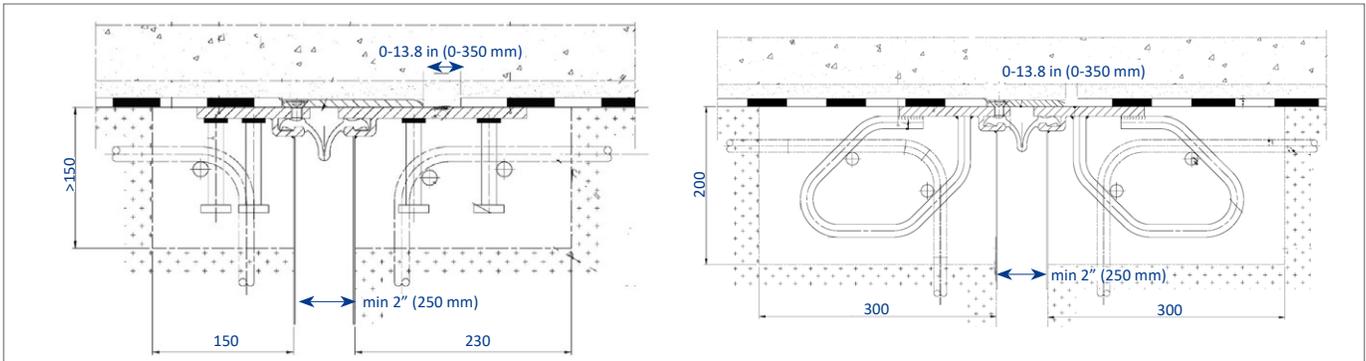
Quality

For five decades, mageba expansion joints have proven their worth in thousands of structures under the most demanding conditions. In addition to the product properties, the extensive experience of our well-qualified manufacturing and installation staff also contributes to the high quality and durability of the products.

mageba has a process-orientated quality system. In addition, its quality is regularly inspected by independent testing institutes. mageba factories are AISC certified for Major Bridges (CPT, STD, SPE) and also maintain AWS certifications for D1.1 and D1.5.

Additional Information

On our website, mageba-group.com, you will find further product information, including reference lists and tender documentation.



TENSARAIL RSU Product Features



Joint Ready For Installation



Loop Anchors



Joint Prior To Concreting



Edge Detail



Cover Plate



Installed Joint

mageba Expansion Joint Types



Single Gap Joints



Cantilever Finger Joints



Sliding Finger Joints



Modular Expansion Joints



engineering connections®