KANTA



KANTA RUBBER PRIVATE LIMITED

Product Catalogue & Technical Data Sheets

Railway Expansion Joints

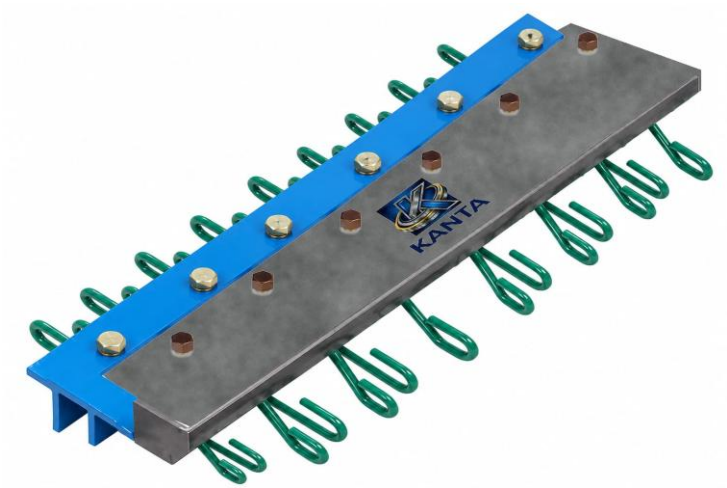
Manufactured & Tested as per Indian Standards

IRC:SP:69 | IRC:6 | IS:3400 | IS:12200 | MORTH Specifications

with reference to RDSO Drawings & UIC 772-2R (Railway / Metro Applications)

3. Railway Expansion Joints

3.1 Sliding Joint for Abutments & Piers (Ballasted Track)



Applicable Standard: *RDSO Approved GA Drawing, IRS specifications*

Sliding rail expansion joint provided at bridge abutments/piers on ballasted track, manufactured to RDSO approved General Arrangement drawings, permitting rail elongation and contraction due to structural movement without inducing stress into the continuous welded rail (CWR).

Parameter	Specification / Typical Range
Movement Capacity	As per RDSO approved GA drawing (typical ± 50-150 mm)
Material	High strength rail steel conforming to applicable IRS specification
Sliding Mechanism	Machined tongue and stock rail with lubricated sliding plates
Approval	Manufactured to RDSO approved GA drawing

Key Features

- Prevents stress transfer into continuous welded rail (CWR)
- RDSO drawing compliant manufacture

Typical Applications

- Railway bridges with ballasted track carrying long welded rail

3.2 Omega Shaped Elastomeric Joint (Metro Rail)





Applicable Standard: *UIC 772-2R, RDSO*

Metro rail and elevated-viaduct structures typically call for joints that can accept large gap movements from temperature effects and settlement, together with high water-tightness — a requirement well suited to the Omega profile.

- Withstands high water pressure combined with large movement in all directions
- Suited to joints where large gap movement is expected from temperature effects and/or settlement
- Manufactured in a range of profile sizes to fit the specified movement and gap width
- Widely adopted for metro rail viaduct and station structures

Omega (Ω) profile elastomeric expansion joint spanning the structural gap in metro rail viaducts and stations, in line with UIC 772-2R guidelines and RDSO practice, providing watertight continuity of the deck while accommodating structural movement.

Parameter	Specification / Typical Range
Movement Capacity	± 50 - 150 mm
Material	Elastomeric Sealing Profile
Profile Shaped Omega	Omega Shaped
Fire Rating	As required for metro station application

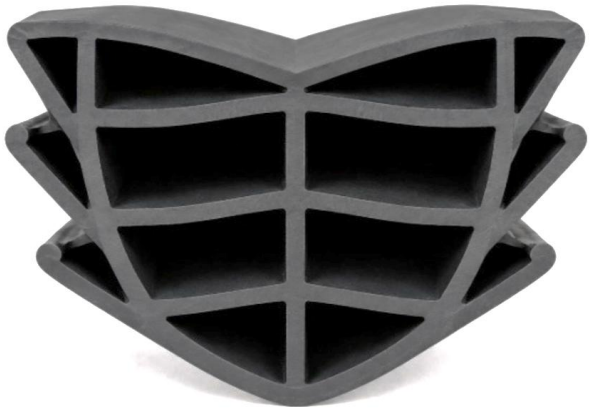
Key Features

- Watertight structural continuity at viaduct/station joints
- Suitable for pedestrian and vehicular metro decks

Typical Applications

- Metro rail viaducts and elevated stations

3.3 Compression Seal for Elevated Viaduct & Station (Metro Rail / HSR)



Applicable Standard: *UIC 772-2R, RDSO*

Compression seal joint adapted for metro rail and high-speed rail elevated structures, per UIC 772-2R guidelines, sealing structural gaps at viaducts and stations against water ingress while permitting design movement.

Parameter	Specification / Typical Range
Movement Capacity	± 25 - 60 mm
Seal Material	Neoprene multi-cell profile
Edge Armor	Steel, galvanized or stainless as per project specification

Key Features

- Reliable watertightness at station/viaduct joints
- Low maintenance

Typical Applications

- Metro rail and high-speed rail elevated viaducts and stations