



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)

2.3.3 Reinforced Coupled Elastomeric Slab Joint



Applicable Standard: IRC:SP:69-2011

Reinforced coupled elastomeric slab joint consists of multiple reinforced elastomeric slab joint modules coupled together through a central steel coupling beam, providing greater total movement capacity than a single slab joint, as per IRC:SP:69-2011.

Parameter	Specification / Typical Range
Movement Capacity	± 80 - 160 mm
Material	Coupled reinforced Neoprene / CR modules with steel coupling beam
Fixing	Bolted with anchor studs

Key Features <ul style="list-style-type: none"> • Higher movement capacity than a single slab joint • Modular, low-profile construction 	Typical Applications <ul style="list-style-type: none"> • Medium to large span bridges
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2.3.4 Copper Strip Expansion Joint

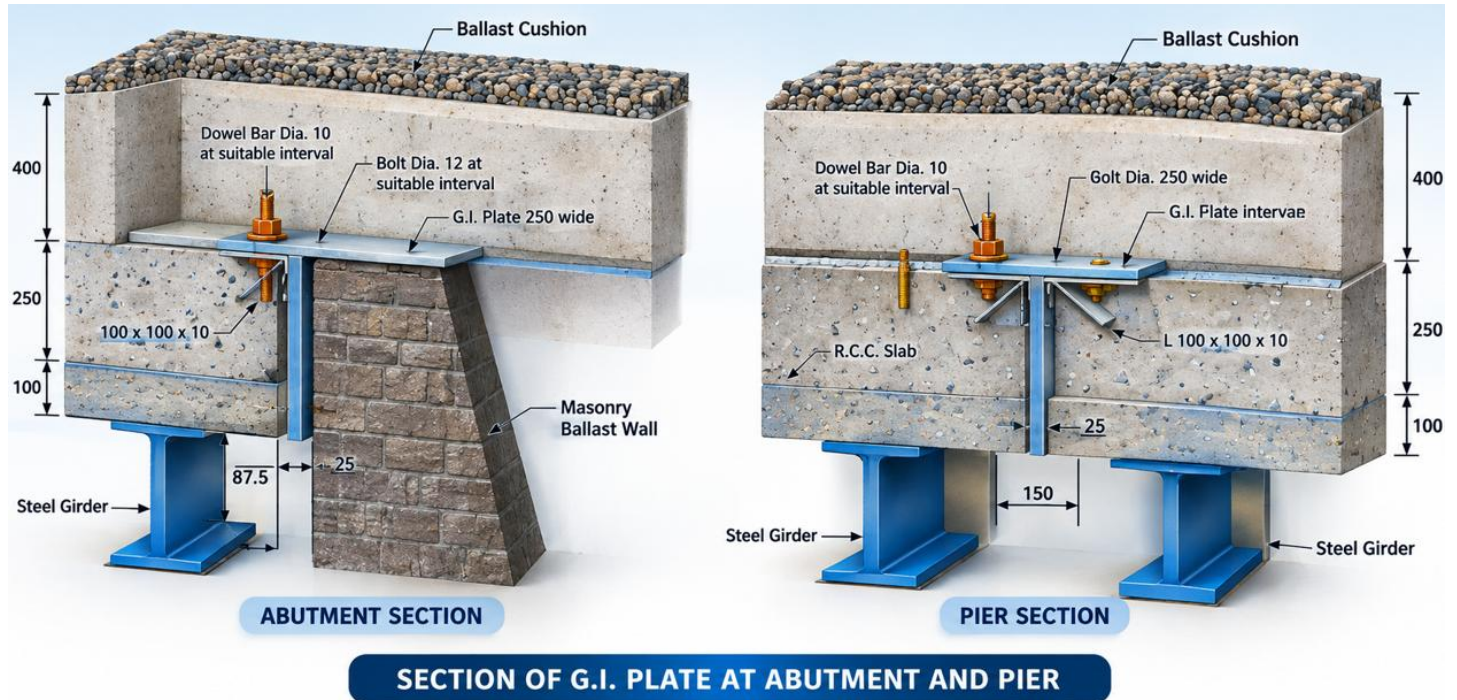


A watertight joint of long service life in which the expansion medium is a formed copper strip, profiled to flex through the full design movement range while maintaining a continuous waterproof barrier across the joint gap.

Manufactured and supplied with reference to IRC:SP:69 requirements for expansion joints; movement range and profile size are confirmed with our design team against the project's specified gap and deck detail.

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 $\pm 50-150$ 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.

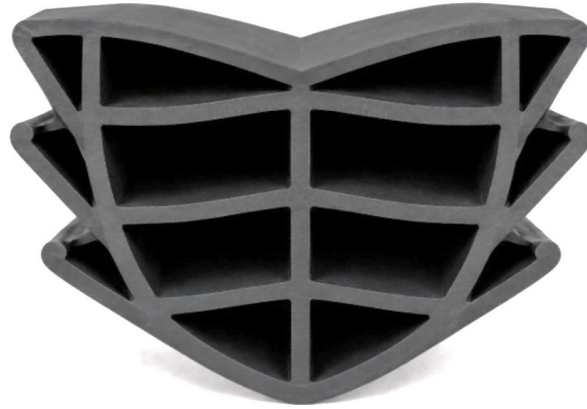
- Withstands high water pressure combined with large movement in all directions
- Suited to joints where large gap movement is expected from temperature effects and/or settlement
- Manufactured in a range of profile sizes to fit the specified movement and gap width
- Widely adopted for metro rail viaduct 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	EPDM / CR elastomer, UV and ozone resistant
Profile	Omega / loop shape, bonded and mechanically fixed to deck edges
Fire Rating	As required for metro station application

Key Features <ul style="list-style-type: none"> • Watertight structural continuity at viaduct/station joints • Suitable for pedestrian and vehicular metro decks 	Typical Applications <ul style="list-style-type: none"> • Metro rail viaducts and elevated stations
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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

<p>Key Features</p> <ul style="list-style-type: none"> • Reliable watertightness at station/viaduct joints • Low maintenance 	<p>Typical Applications</p> <ul style="list-style-type: none"> • Metro rail and high-speed rail elevated viaducts and stations
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