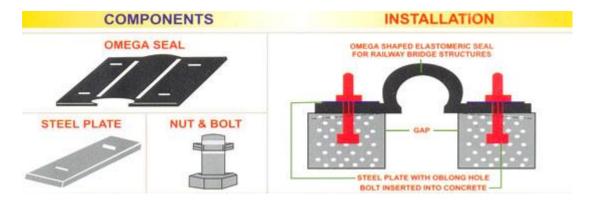
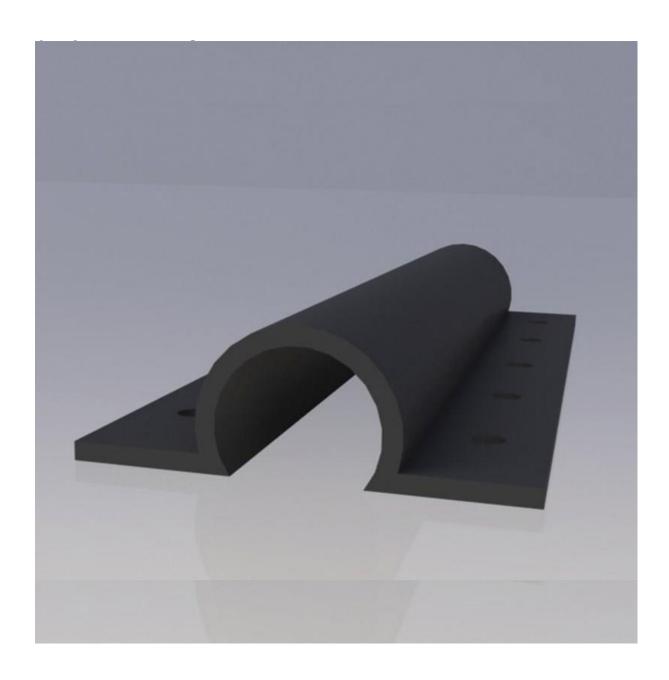
Main components are Omega Seals, Steel Plates and Nut & Bolts.



- 1. Cap Seal Expansion Joint (Omega Seal) for Railway Bridges.
- 2. Surface shall be 1% slope in order to get water drained as shown in figure.
- 3. Steel bolt shall be inserted into the recess made in the deck and to be filled with M 35 grade concrete.
- 4. Cap seal to be positioned on both sides of the decks such a manner that the omega shape covers the gap and the plain surface are perfectly sat on the deck slab.
- 5. Galvanized steel plate(80 X 80mm) having oblong hole (40 X 20mm) to be placed on the plain surface of the seals at both sides, such a manner the bolt is inserted through the oblong hole. Seal also to be punched with a hole suiting to oblong hole of the steel plate to enable to get inserted through the bolt.
- 6. Nut to be tightened on every bolt properly and tack welded to ensure the locking.
- 7. On completion of installation, every aspects to be checked for proper installation.
- 8. Wearing coat shall be done with proper care without disturbing the seal.
- 9. STEEL PLATE:
- 10. It is hot dip galvanized steel plate of 80mm wide x 8mm thickness with oblong holes of 40 x 20mm in every one meter.
- 11. RIGID BOLT:
- 12. The rigid bolt will be anchored to the both decks by reinforced concrete, in every one meter, all along. After installation
- 13. elastomeric seal and steel plate inserting into the bolts anchored in the decks, the nut to be tightened well and tack
- 14. Welded. The dimension of the bolt will be 16mm dia @ 400c/c.



It provides unique properties to withstand high water pressure in combination with large movements in all directions.

It is an ideal solution for joints where large gap movements are expected as a result of

- 15. It is made out of chloroprene elastomer to the shape Omega, by compression moulding process. The seal with omega
- 16. shaped design will be cast as single unit in a mould and vulcanized under uniform heat and pressure. The mould used for
- 17. manufacturing such seal will be free from defects and will have polished surfaces in order to get the elastomeric seals free
- 18. From any surface blemishes.
- 19. Chloroprene elastomer is used to manufacture such seals and they are with low crystallization rates and adequate shelf
- 20. Life. Generally Neoprene WRT, Bayprene 110, Skyprene B5 and Denka S 40V are used as raw material of Chloroprene
- 21. Elastomer.
- 22. THE PHYSICAL PROPERTIES OF THE ELASTOMERIC SEAL WILL BE AS FOLLOWS: -
- 23. Hardness: 63 (+/-) 5 in shore A scale
- 24. Tensile strength: 17Mpa Minimum
- 25. Elongation at break: 400% Minimum
- 26. Compression set: 35% Maximum
- 27. AFTER ACCELERATED AGEING:
- 28. Change in hardness: + 15 Maximum
- 29. Change in tensile strength: 15% Maximum
- 30. Change in elongation: 40% Maximum