**KANTAFLEX™ EXPANSION JOINT SYSTEM**

General concept of expansion joint is to provide the continuity between two parts of a structure which are in relative movement because of vibration, seismic load, thermal expansion or contraction, shrinkage etc. Expansion joints are used primarily to relieve stress due to confinement of a slab. An expansion joint is an assembly designed to safely absorb the heat-induced expansion and contraction of various construction materials, to absorb vibration, or to allow movement due to ground settlement or earthquakes. Expansion joints are designed to support heavy and rigorous traffic load with minimum noise and bumps so that the driving experience can be with maximum pleasure. KRPL is a quality manufacturer of various expansion joint systems servicing a number of satisfied customers across India with its superior products at a cost effective pricing. Some of our main products in this category are explained below. We welcome the enquiry of any kind of expansion joint to offer a great solution from our product portfolio or from the product portfolio of some of our foreign principals.

1. **KANTAFLEX™ Elastomeric Strip Seal Joint:** As per MoRTH Section 2600, Clause 2607. Main components are Edge Beam and E Seal.

![KANTAFLEX ELASTOMERIC STRIP SEAL JOINT](image)

- Edge beam shall be placed in such a manner that the grooves are positioned properly.
- Steel structure and main reinforcement bar shall be anchored with proper welding.
- Alignment shall be checked for both steel structures, if required by using suitable device.
- Recces shall be filled with high quality of the concrete not less than M 35 grade.
- If any installation brackets were used, shall be removed after the concrete has cured.
- Kantaflex elastomeric strip seal shall be cut into the required length and inserted between the beams by using the proper device and to be ensured that the bulb of the seal is getting into the steel grooves of the both edge beams.
- When the recces concrete has become set, a sturdy ramp shall be placed over the joint to protect the exposed steel beams and the elastomeric seal from the traffic.
- Without the carriage way surfacing, expansion joint shall not be exposed to traffic loading.
2. **KANTAFLEX™ Expansion Filler Joint**: As per MoRTH Section 2600, Clause 2605. Main components are Copper Expansion Joints, Filler Joint, and Compression Fibre.

3. **KANTAFLEX™ Elastomeric Slab Seal Unit**: As per MoRTH Section 2600, Clause 2606. Main components are Elastomeric Slab Seal, Steel Structure and SS Bolt.
4. **KANTAFLEX™ Compression Pavement Seal:** Main components are V / E Seals.

![Diagram of V and E Seals]

- Recess shall be prepared little lowered in a pre-determined position.
- Either "V" seal or "E" seal shall be inserted into the recess, duly applying the adhesive recommended by the manufacturer.
- Wearing coat shall be done with proper care without disturbing the seal.

5. **KANTAFLEX™ Elastomeric Compression Seal:** Main components are Edge Beam and Seal.

![Diagram of Elastomeric Compression Seal]

- Recess shall be prepared little lowered in a pre-determined position and the edge beams shall be placed in a position that both are aligned properly.
- Steel structure and main reinforcement bar shall be anchored with proper welding.
- Alignment shall be checked for both steel structures, if required by using suitable device.
- Recess shall be filled with high quality of the concrete not less than M 35 grade.
- Kantaflex compression seal of the required length shall be inserted between the edge beams by using the proper device, duly applying adhesive recommended by the manufacturer.
- When the recess concrete has become set, a sturdy ramp shall be placed over the joint to protect the exposed steel beams and the elastomeric seal from the traffic.
- Without the carriageway surfacing, expansion joint shall not be exposed to traffic loading.
6. **KANTAFLEX™ Cap Seal Expansion Joint System (Omega Seal) for Railway Bridges:** Main components are Omega Seals, Steel Plates and Nut & Bolts.

![Diagram of KANTAFLEX™ Cap Seal Expansion Joint System](image)

- Surface shall be 1% slope in order to get water drained as shown in figure.
- Steel bolt shall be inserted into the recess made in the deck and to be filled with M 35 grade concrete.
- Kantaflex Cap Seal to be positioned on both sides of the decks such a manner that the omega shape covers the gap and the plain surfaces are perfectly sat on the deck slabs.
- Galvanized steel plate (80 x 8mm) 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 suitling to oblong hole of the steel plate to enable to get inserted through the bolt.
- Nut to be tightened on every bolt properly and tack welded to ensure the locking.
- On completion of installation, every aspects to be checked for proper installation.
- Wearying coat shall be done with proper care without disturbing the seal.

7. **KANTAFLEX™ Bridging Seal Expansion Joint:**

![Diagram of KANTAFLEX Bridging Seal Expansion Joint System](image)

- Special type of steel bolt shall be inserted into the recess made in the deck and to be filled with M 35 grade concrete.
- Kantaflex bridging seal to be positioned on both sides of the decks such a manner that the cup shape of bridging seal covers the gap and the plain surfaces are perfectly sat on the deck slabs.
- Galvanized steel plate 20mm thick having hole to suit special type of nut & bolt to be placed on the plain surface of the seals at both sides, such a manner the bolt is inserted through the hole. Seal also to be punched with a hole suitling to hole of the steel plate to enable to get inserted through the bolt.
- Nut to be tightened on every bolt properly and tack welded to ensure the locking.
- On completion of installation, every aspects to be checked for proper installation.
- Wearing coat shall be done with proper care without disturbing the seal.
8. **KANTAFLEX™ PVC Expansion Joint**: Main components are PVC Expansion Joints and Filler Joints.