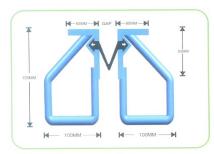
# KANTAFLEX STRIP SEAL EXPANSION JOINT WITH METAL STRUCTURE



- Edge beam flange & web10mm thickness steel groove
- · 6mm thickness overall cross sectional area
- · Height anchor bar16mm thickness ultimate resistance of anchorage
- Special claw leg profile
- Hot rolled to lock seal welded profile1550 sq.mm 82mm welded to
- Edge beam at 250mm c/c
- 600 kn/ mtr



**RUBBER SEAL:** It is made out of specially designed synthetic elastomeric compound (chloroprene rubber), with high tear strength and high resistance to ageing. It is extruded to the shape to suit to insert into steel groove provided in the edge beam in single length to full length of the joint, with water tight sealing.

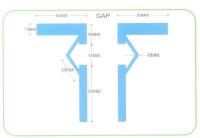
#### **MATERIAL:**

- EDGE BEAM : ASTM A 36 / A 588
- ANCHORAGE: IS 2062
- RUBBER SEAL MORTH clause 2607 & Table 2600 -1

### WORKING MOVEMENT

80MM – 100MM AT RIGHT ANGLE TO THE JOINT AND + /- 40MM PARALLEL TO THE JOINT

## **INSTALLATION PROCEDURE**



- The width of the gap to cater for movement due to thermal effect, free stress, shrinkage, and creep, super structure deformation and substructure deformation should be intimated to the manufacturer while releasing the order. Depending upon the temperature at which the joint is to be installed, the gap dimension shall be preset.
- The dimension of the recess in the decking shall be established in accordance with drawing or design data provided herein. The surface of the recess shall be thoroughly cleaned and all dirt and debris removed.

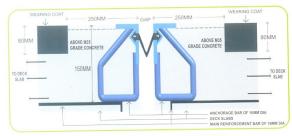
The exposed reinforcement shall be suitable adjusted to permit unobstructed

lowering of the joint in to the recess.

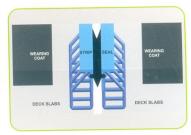
- The recess shall be shuttered in such a way that the dimension in the joint drawing is maintained the form work shall be tight.
- Prior to placing the joint the presetting shall be inspected. If the actual temperature of the structure is different











CLEAR SECTION VIEW AFTER INSTALLATION

TOP VIEW OF STRIP SEAL EXPANSION JOINT IN DECK SLAB

STRIP SEAL IN DECK SLAB

from the temperature provided for presetting, correction of the presetting shall be done. After adjustment the bracket shall be tighten again.

- The joint shall be lowered in a predetermine position. Following placement of the joint in the prepared recess, the joint shall be level and finally aligned and the anchor loop of one side of the joint welded to the exposed reinforcement bars of the structure. Upon completion the same procedure shall be followed for other side of the joint. With the expansion joint finally held at both side, the auxiliary brackets shall be released, allowing the joint to take up the movement of the structure.
- The recess to be filled with high quality of concrete as same as the strength of the super structure, but not less than M35 grade after the concrete become cured the movable installation bracket in place shall be removed.
- The Neoprene Strip Seal shall be cut in to required length and inserted between edge beams by using the suitable devise pushing the bulb of the seal into the steel grooves of the edge beams. To ensure proper fit of the seal and enhance to easy installation dirt, spatter or standing water shall be steel grooves. During the seal insertion care should be taken that there shall be no damage to the seal.
- As soon as the concrete in the recess become initial set, the sturdy ramp shall be placed over the joint to protect exposed steel beams and the neoprene strip seal from site traffic. Expansion joint shall not be exposed to the traffic loading before the carriage way surfacing is placed.
- The carriage way surfacing shall be completed with the top of the steel sections. The actual junction of the surfacing / wearing coat with the steel edge section shall be found by the wedge shaped joint with a sealing compound. The horizontal leg of the edge beam shall be cleaned before handed. It is important to ensure through and careful compaction of the surfacing in order to prevent any premature depression forming in it.

## FABRICATION AT MANUFACTURER'S WORKS (SCOPE OF MANUFACTURER)

- Edge beams shall be made ready to required length
- In case of slope structure, the entire length shall be covered in 4 pieces.
- Anchoring rods shall be welded with the edge at equal distance of 250MM center to center
- Both edge beams shall be aligned uniformly for the required gap and if needed temporary metal strip can be welded across edge beams
- Anti-corrosive paint shall be applied on entire metal structure.

# INSTALLATION AT PROJECT SITE (SCOPE OF CONTRACTOR)

- On clear and uniform surface, edge beams shall be mounted on the edges of deck slabs
- Anchoring rods shall be welded to main reinforcement bar
- Edge beams shall be welded, duly maintaining the expansion gap and slope, and shall be ensured for smooth finish for unharmed traffic.
- Recess shall be filled with not less than M35 grade concrete.
- For entire length, single piece of elastomeric seal shall be inserted into the metal grooves provided in the edge beams as per manufacturer's guidance.