**Joint Installation Procedure:**

1. Install the Strip Seal Expansion Joint as recommended by the manufacturer.
2. A manufacturer's representative shall be present during installation of the joint.
3. Place steel retainer rails in joint opening, properly align the rails both horizontally and vertically. Do not rely on support system to the metallized surfaces of the steel retainer rails.
4. Contacting retaining steel may be shimmed slightly and necessary.
5. Deck slab concrete placement operations shall continue for the pouring sequence after final joint alignment is set.
6. Protect the steel retainer rails from being rubbed by concrete spalls during the deck pour.
7. Position the steel retainer rail support system to allow movement while concrete cures.
8. Position and realign steel retainer rail as required on opposite side of joints.
9. Place approach seal concrete.
10. Once the concrete has hardened sufficiently on both sides, the steel retainer rails shall be cleaned thoroughly and seal channels shall be inspected to ensure the presence of concrete is correct.
11. Coat the strip seal edges with lubrication-adhesive and install the neoprene strip seal gland as recommended by the strip seal expansion joint manufacturer.

**Strip Seal Expansion Joint Details**

**Section Normal to Joint -- Steel Superstructure**

**Strip Seal Expansion Joint Details**

**Typical Section Steel Retainer Rail**

**Metallizing Detail**

**General Notes**

1. Strip Seal Expansion Joints, see special provisions.
2. Steel retainer rails and cover plates shall conform to AASHTO M270, Grade 25 or Grade 50. Steel rail and anchor bolts shall conform to AASHTO M169, Grade 12L14. Tensile capacity shall be 3000 lbs. minimum.
3. Steel retainer rails shall be closed end and shall conform to AASHTO M169, Grade 12L14 or Grade 1020 or equivalent. All steel retainer rails consisting of two or more components need welding to obtain their final cross-sectional shape are not permitted.
4. Stud anchors shall be shop welded and shall be electrically and mechanically connected to complete assembly.
5. Surfaces coming in contact with strip seal gland shall be ground smooth prior to metallizing.
6. Upon completion of shop fabrication, the steel retainer rails shall be metallized as shown in the "Metallizing Detail".
7. Special provisions for thermal sprayed coatings installation.
8. Installed steel retainer rails shall follow the roadway slope.
9. Field splices of the retainer rails shall be kept to a minimum. Contractor shall furnish detailed plans showing splices. Location for approval. Painted splices shall be masked in accordance with special provision for thermal sprayed coatings installation.
10. Neoprene strip seal gland shall be continuous throughout the joint and shall be compatible with the steel retainer rails. Field splicing the gland is not permitted.
11. No alternate joint details shall be permitted in lieu of those shown on these plans.
12. The cover plates shall be galvanized or metallized in accordance with the standard specifications for thermal sprayed coatings installation. See special provisions.
13. The contractor may, at his option, utilize shop anchored anchor bolts in place of concrete embeds for cover plates. The field load of the 1½ bolt 3½ inch field testing of the adhesive bonding system is not permitted.

**Strip Seal Expansion Joint Details**

**Section Normal to Joint -- Steel Superstructure**

**Typical Section Steel Retainer Rail**

**Metallizing Detail**

**General Notes**