**INSTALLATION DETAIL**

* TO SET MINIMUM JOINT OPENING "W"

\[ W = \frac{a^*}{(a + cg + 12)(\text{contributory } L \text{ in feet})} \]

- \( a^* \) = (Max Str temperature in °F) - (Min Str temperature in °F)
- \( c \) = 0.0000065 (Steel)
- \( c \) = 0.0000060 (Concrete)

**NOTES:**

1. Not all reinforcement and joint details are shown for clarity.
2. Plane nipples are optional. Exact pipe nipple hole sizes and tolerances at deck and support plate locations must be determined prior to seismic joint fabrication.
3. After joint installation fill all deck plate holes with silicone joint sealant and plug all nipple holes if used, with threaded steel plugs.
4. Place deck plate, support plate, and channel assembly so that full bearing is achieved between I) deck, support plate and II) deck plate and channel assembly.
5. "W" is the joint opening at the deck, support plate and channel assembly.
6. If pipe nipples used, plug pipe nipple holes with threaded steel plugs; fill deck holes and joint with silicone joint sealant.

**PHASE 1 (ELEVATION)**

**CONSTRUCTION SEQUENCE:**

1. Clean joint blockout, place forms and reinforcement.
2. Set joint modules into place so the face of the joint opening (sliding side) is aligned with the support plate. Slide deck plate and channel assembly together so the face of the joint opening (channel assembly side) is aligned with the support plate. If used, with threaded steel plugs.
3. Install temporary steel frame, with roller on channel assembly side and pin on support plate side.
4. Set all-thread rods to support and adjust joint modules.
5. Align and secure all joint modules together to correct position, remove temporary timber supports.
6. Pour SCC below support plates, let SCC develop a minimum 1500 psi strength before proceeding to the next step.

**PHASE 2 (ELEVATION)**

**CONSTRUCTION SEQUENCE:**

1. Change the pin support of the temporary frame to roller. Release deck plate from support plate. Slide deck plate and channel assembly together so the face of the joint opening (channel assembly side) is aligned with the channel assembly. Change the roller support of the temporary frame to pin (channel assembly side). Secure all joint modules together to final position.
2. Pour SCC around the channel assembly, let SCC develop a minimum 1500 psi strength before proceeding to the next step.
3. Release joint and remove temporary steel frame.
4. Remove pipes, bolts, forms and clean surfaces.
5. Place SSJA to the correct minimum joint opening "W". Place polyester concrete between the SSJA and the bridge deck.
6. If pipe nipples used, plug pipe nipple holes with threaded steel plugs; fill deck holes and joint with silicone joint sealant.