Installation procedure

STRIP SEALS **SERIES 1100** GOODFLEX EXPANSION JOINTS

The joint assembly must first be fully installed in the concrete, including splice welds between joint sections, removal of temporary assembly angles, removal of formwork, removal of excess concrete, injection of epoxy and sealing of injection ports (if required). Please refer to the installation procedures for "Series 1100 Goodflex Expansion Joints with Bleeder Holes" and "Series 1100 Goodflex Expansion Joints with Epoxy Injection System (MTO procedure)", our shop drawings and, if necessary, clause 920.07* for more information.

1. Clean the angles by removing all concrete debris, particularly along the horizontal surfaces where the clamping plates will rest.

2. Inspect the gap of the joint assembly to ensure that it is unobstructed along the entire width of the bridge so as not to impede movement (see clause 920.07.04*).

3. Remove the protective caps from the threaded holes that will be used to bolt down the clamping plates. Clean each hole using compressed air.

4. Place the strip seal along the joint assembly while pressing the "V" shape of the seal into the gap. Allow the seal to exceed at least 50 mm at each end of the joint assembly. For projects in Ontario, the strip seal must exceed by at least 1,000 mm at one end to allow for field sampling and testing (see clause 1210.07.06*). The gap between the angles must be at least 25 mm wide so that the strip seal can be installed easily.

5. Place the clamping plates on each side of the joint assembly over the strip seal and align the holes with the threaded holes. The plates are identified and must be positioned using the marks visible on the stop bar found along the surface of the joint assembly. The cavity in the clamping plate must be aligned with the seal bulge (see Figure 1).

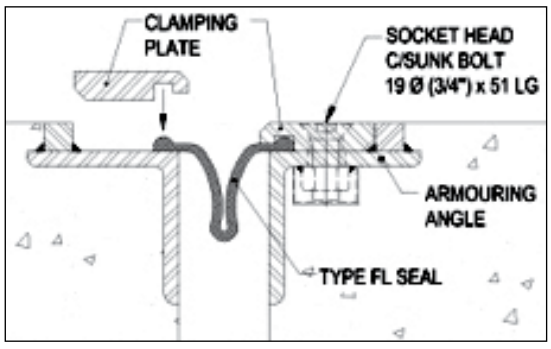

FIGURE 1: Alignement of the seal buldge with the machined notch in the clamping plate

6. After having first lubricated the threads and underneath the countersunk bolt heads using an anti-seize compound such as Locktite or an equivalent product (see clause 1210.05.06*), put the tightening bolts in place and partially hand-tighten them using the appropriate tools.

7. After making sure that the seal is properly positioned along the entire length of the joint assembly, tighten the bolts to 140 kN using a calibrated tool. It is very important that the bolts be tightened to the specified tension; otherwise, they will loosen as a result of the vibrations.

8. After the installation is completed, wipe off any excess anti-seize compound from the bolt heads to prevent the accumulation of debris.

9. If required, water test the efficiency of the seal as required by the resident engineer or according to clause 920.07.09.01*.

*For projects in Ontario, please refer to "OPSS 920" and "OPSS 1210" specifications. In this procedure, clauses beginning with "920 or "1210" are clauses of the corresponding OPSS standard.