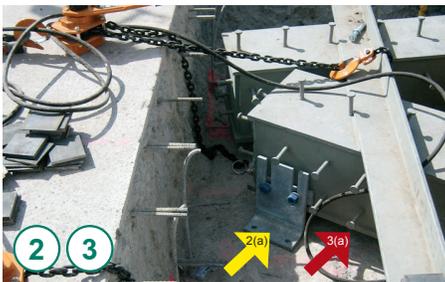


Expansion Joint Systems

Swivel Expansion Joints Installation



The following is a recommended procedure for the installation of swivel expansion joints. Consult contract plans and D.S. Brown shop drawings for blockout dimensions, placement of the joint, and the effects of temperature on their positioning.

Note: Field Engineer shall determine joint opening on day of installation. See D.S. Brown shop drawings for joint alignment and temperature adjustment chart.

1. Place joint in blockout and roughly align both horizontally and vertically. (Joint must follow roadway grade.) Note: the modular joint upturns begin inside the curb line.
2. Loosely attach support angle and 13mm washer plate as shown in shop drawings. Do one side of the joint at a time. Position each support angle along bottom of blockout, and mark hole locations for expansion anchors. Drill hole for expansion anchor according to manufacturers recommendation. Use support angles to make final adjustments to expansion joint alignment and grade. Upon completion of final adjustment, tighten all nuts, and tack weld support angle and shim plate to support box to assure fixity (arrow 2a). When one side of the joint is completely bolted down, use hydraulic jacks or “comealongs” to adjust joint opening to the correct setting and to properly align the opposite side of the joint. Again attach support angles and shims to side of support box, and locate position of expansion anchors along the bottom of blockout. Drill holes for expansion anchors. When final adjustment is complete tighten all nuts, and tack weld support angle and shim plate to side of support box for final positioning.
3. If clearance is less than 3” place non-shrink, high-strength grout under support boxes (arrow 3a).
4. Contractor to place formwork so that no concrete flows into support boxes and joint gap openings.
5. Pour and vibrate concrete into blockout and remove formwork after cure time, as determined by field engineer.