J. If during the course of the Contract it should become apparent that the Contractor's methods of forming construction joints are not proving effective the Engineer may order the Contractor to execute at the Contractor's expense such preventative measures, as the Engineer may consider necessary to ensure the water tightness of construction joints in further work.

## 1.3.5 Movement Joints

- A. Construct movement joints for expansion and contraction in accordance with the details and to the dimensions shown on the drawings or where otherwise ordered by the Engineer.
- B. Pay particular attention to the effect of climatic extremes on any material used in any movement joint. Submit for the approval of the Engineer your proposals for the proper handling and use of the said materials having due regard for any recommendations made by manufacturers.
- C. Incorporate water stops into all expansion and contraction joints of structures, which retain liquid, or any structures below water level.
  - 1. Do not use different types of water stop material together in any complete installation.
  - 2. For horizontally placed surface type water stop, use water stop of an interposing sliding plate.
  - 3. Maintain water stops carefully in the position shown on the drawings. Support the water stop on accurately profiled stop boards to create rigid conditions.
- D. Fix the joint filler to the required dimensions of the joint cross section. Provide a firm base for the joint sealer. Where the depth of joint between the concrete surface and the water stop does not exceed 500mm place filler in a single pieces.
- E. Carry out the sealing of movement joints only when adjacent concrete surfaces are perfectly dry.
- F. Clean the joint grooves, insert a bond breaker, and adequately prime and fill the groove with approved sealer strictly in accordance with the manufacturer's instructions.
- G. Store the sealer in accordance with the manufacturer's instructions. Do not use sealer after its shelf life has elapsed.