

3. Self-swelling waterbars may be used in construction joints in lieu of conventional waterstops at the discretion of the Engineer.
4. 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.

11.3.2 Movement Joints

1. Incorporate water stops into all expansion and contraction joints of structures, which retain liquid, or any structures below ground water table.
2. Do not use different types of water stop material in any single complete installation.
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.
4. Install water stops in accordance with manufacturer's instructions without displacing reinforcement.
5. Water stop splicing defects which shall be considered unacceptable shall include but not be limited to:
6. Tensile strength less than 80% of parent section.
7. Misalignment of centre bulb, ribs and fins by an amount greater than 1.5mm.
8. Bond failure at joint deeper than 1.5 mm or 15% of material thickness whichever is greater.
9. Visible porosity in the welded joint.
10. Charred or burnt material.
11. Visible signs of splice separation when cooled splices are bent by hand to a sharp angle.

11.3.3 Joint Sealant

1. The manufacturer's technical representative shall be present when commencing the installation of each type of sealant.
2. Sealants shall not be installed when extreme temperatures or heavy winds are forecast during the curing period.
3. All joints to be sealed shall be formed and the joint mechanically abraded to remove all traces of deleterious materials such as form oil or curing compounds and also to remove any surface laitance from the sides of the joint.
4. Fix the joint filler to the required dimensions of the joint cross section to provide a firm base for the joint sealant. Where the depth of joint between the concrete surface and the waterstop does not exceed 500mm place filler in a single piece.