matter.

- 3. All materials shall be fully identified with brand, type, grade, class and all other qualifying information.
- 4. Any damaged materials shall be clearly marked "rejected" and removed from site.

## 11.1.7 Warranty

- 1. The manufacturer and the Contractor shall jointly guarantee the joint system to be watertight and free from defects in materials and workmanship for a period of 10 years from the date of completion of the works.
- 2. The Contractor shall furnish the Engineer with the manufacturer's guarantee and warranty certificates for all materials used.
- 3. If the joint system is found to be defective during the warranty period, the manufacturer and the Contractor shall replace and/or repair the joint system to the satisfaction of the Engineer.

## 11.2 Part 2 Products

## 11.2.1 General

 Materials for joints in water retaining structures and water tight structures for sewage shall be resistant to aerobic and anaerobic bacteriological attack and to attack by petrol, diesel oil, mineral acids, alkalis, sabkha soils and be suitable for long term immersion in seawater.

## 11.2.2 Water stops

- 1. Materials shall be a proprietary type and be sourced and supplied by a single manufacturer.
- 2. Type and configuration shall be as shown on drawings and as specified below.
- 3. Water stops shall be extruded from a high grade elastomeric polyvinyl chloride compound and manufactured from virgin materials necessary to meet the performance requirements below:
  - a. Suitable for storage, handling, installation and service within a range of 15°C to 50°C.
  - b. All water stop intersections and joints shall be factory made.
  - c. Site jointing shall be limited to butt joints, heat sealed using equipment and instructions as provided by the manufacturer.
  - d. All water stops shall have reinforced fixing eyes or clips for fixing in place.
  - e. Water stops shall be fabricated into the longest practical units at the manufacturers works.