

insulated with polystyrene. Temperature measurements shall be carried out in accordance with the Specification clauses for controlling heat and shall determine the peak temperature generated within the test sample.

3.1.14 Concrete Under Water

- A. Ensure that the actual mix proportions and selection of aggregates for concrete to be placed in or under water will result in a concrete with a good flow and cohesion characteristics.
- B. Provide the concrete for under water including piles with cement content of 10% greater than for a comparable mix for use in dry conditions. Use a mix designs capable of producing minimum works cube strength for all concrete as given in Table 3-3 for the comparable mixes for use in dry conditions.
- C. The slump of the concrete must not be less than 125 mm when tested in the dry condition in accordance with BS 1881.

3.2 Part 2 Products

3.2.1 Concrete Materials

- A. Cement: Comply with ASTM C150 Type I & Type II – Ordinary Portland Cement and Moderate Sulphate Resisting Cement, respectively.
 - 1. Use Type I Ordinary Portland cement throughout the works except for the substructures, piling and sanitary related structure where moderate sulphate-resisting cement type II shall be used unless otherwise stated on the contract documents or drawings or dependent on soil conditions as determined by the Engineer.
- B. Fine and Coarse Aggregates: Shall be examined for classification by petro graphic examination and shall comply with the requirements of Section 02207 and the following:
 - 1. Hard strong and durable. Contain no harmful material in sufficient quantity to affect adversely the strength or the durability of the concrete or in the case of reinforced concrete to attack the reinforcement.
 - 2. Clay, silt and dust shall be to the minimum level acceptable in accordance with BS 882.
 - 3. Coarse aggregates: Crushed quarried gabbro type, or limestone that meets the physical requirements and chemical properties specified hereinafter.
 - 4. Fine aggregates: Natural gabbro sand or Crushed quarried gabbro or lime