Pre-Cast Concrete Kerbs, Channels, Edgings and Quadrants - Water Absorption

Lab Test Reference 336
British Standard Reference
BS 7263 : 1990 Appendix C

Principal Apparatus

Masonry Saw - Lab Invent No. xxx
Electronic Balance - Lab Invent No. xxx
Oven - Lab Invent No. xxx (BS2648) 1/2
Constant Temp Bath - Lab Invent No. xxx
Timer - Lab Invent No. xxx
Desiccator - Lab Invent No. xxx or xxx

1. Preliminaries

1.1 The test is carried out in the concrete laboratory. A flat area of clear bench shall be prepared and the equipment checked as follows.

1.2 Check the labels on the electronic balances indicate that calibrations are valid.

1.3 Check the calibration graphs on the ovens are valid.

1.4 Check the temperature of the water in the water bath are within permitted tolerances by using a calibrated thermometer.

2. Standard Test Method

2.1 Two test specimens are sawn from each of the three sample products having the dimensions stated in Table 10 of BS 7263. In each case the specimen will have two moulded faces and four sawn faces. These sub samples are marked by the registration technician with the sample number and a suffix number to identify each piece.

2.2 The specimens are placed in the drying oven together so that they are not nearer than 25mm to any heating surface or to any other test specimen. They are now dried at a temperature of 105^{o}C + 5 for 72 + 2 hours, after which they are cooled for 24 +/- ½ hour in a dry, air-tight vessel.

2.3 Choose a cube tank with a measured water temperature of 20^{o}C + 1^{o}C.

2.4 The specimens are weighed and immersed in the water bath for a period of 30 + ½ min. They are positioned so that the longitudinal axis is horizontal and is covered by 25 + 5mm of water.

2.5 After 30 mins, +0.5 mins the specimens are removed, drained and dried with a cloth until all the free water has been removed from the surface. They are weighed again and the absorption calculated by expressing the increase in weight as a percentage of the dry specimen to the nearest 0.1%.

2.6 The mean absorption of the two specimens from each sample is calculated and the three values from the pairs reported.