

Examination report No: 220007478-2009-05

Commissioned by: Betonseal GmbH & Co. KG

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Task

Test to examine water evaporation within treated and untreated concrete samples (Concrete density: C20/25, sample dimensions 500 x 500x 200mm) and on a treated and untreated brick wall.

Procedure

Application of coating

Specification

CONTROLL@INNERSEAL

Test description and relevant regulations

Water evaporation by weight.

DIN EN 480-5: Additives for concrete, mortar and injection or grouting mortar. Test process: Part 5 – Determining capillary water absorption (2005-12)

These test results relate solely to the above specified samples. Publication of the examination report is only permitted in its original form. No alterations or condensed summary of the content may be made without prior permission from the MPA NRW.

1 Description of the examination

Sample specification: Standard concrete (C20/25) submitted by the client.
Materials and construction undertaken by the client

Samples:

CONTROLL@INNERSEAL

Dose

Delivered and spray-coated by the client

The sample application was carried out by the client.
According to the client 0.5l of
CONTROLL@INNERSEAL was applied to each
sample.

The samples and both brick walls, both in an untreated state, were sprayed with water to saturation. The sample were placed in water to a depth of 3+-1 cm. The base of the samples were placed on stands allowing water penetration of the base. The water level was maintained at a constant level throughout the test.

After saturation one set of samples and one of the brick walls were treated with CONTROLL@INNERSEAL. Subsequently all the samples were replaced into the water and the water loss weighed at different intervals. The treatment of the samples was repeated at irregular intervals (see table)

The treated samples were placed with the treated surface facing up out of the water.

2 Test results

2.1 Water evaporation

The capillary water absorption was conducted according to DIN EN 480-5. The water evaporation was tested by weight regularly. The treated samples were resprayed with CONTROLL@INNERSEAL (see table 2)

The results can be found in table 1.

The time intervals between weighing and treating the samples is given in table 2.

Table 1. Results of the capillary water absorption and evaporation

Sample – Dry weight (in kg) – Water saturation (in kg / in %) – Weight of the samples after 102 days – Water absorption (+) / Water evaporation (-) (in kg / in %)

Table 2. Intervals between weighing and treating the samples

Testing day – Treatment – Weight in kg –

Dry weight

Saturated weight

Test undertaken by.

Date: