

**OHD L-39
METHOD OF TEST FOR
WATER IMMERSION TEST FOR DETERMINING PERCENT MOISTURE
ABSORPTION OF CORE TAKEN FROM PORTLAND CEMENT CONCRETE TO WHICH
WATER REPELLENT SOLUTION HAS BEEN APPLIED**

- I. **SCOPE.** This method covers the determination of percent moisture absorption in hardened concrete to which penetrating water repellent treatment solution has been applied.
- II. **TEST SAMPLE.**
- A. One core, four (4) inches (10 cm) diameter by four (4) inches (10 cm) length retrieved from the surface of Portland Cement concrete to which penetrating water repellent treatment solution has been applied.
- B. The core shall be retrieved no sooner than five (5) days after the penetrating water repellent solution has been applied to the surface of the Portland Cement concrete.
- III. **PROCEDURE.**
- A. The core shall be oven dried as designated by ASTM C-642 Test Method 5.1. The core shall then be sealed with paraffin on the sides and bottom. The paraffin shall overlap the top edge of the core $\frac{1}{8}$ inch (3mm). The core shall be weighed to determine the oven dry weight of the core and paraffin. This weight shall be designated as "A".
- B. The core, processed in accordance with III, A, shall be immersed in a suitable receptacle, covered with tap water and the procedure as designated by ASTM C-642 Test Method 5.2 shall be followed to determine the soaked, surface dried weight of the core and paraffin. This weight shall be designated as "B".
- C. Determine the percent moisture absorption of the core using the following formula:

$$\frac{B - A}{A} \times 100$$

- IV. **REPORT.** Report weights A and B and percent moisture absorption.