(INACTIVE)
OHD L-29
METHOD OF TEST FOR
SHRINKAGE OF WATERPROOFING MEMBRANES

I.   **SCOPE.** This method was developed to determine shrinkage of a membrane during overlay with   hot asphaltic concrete.

II.   **APPARATUS.** The apparatus for this test will consist of the following:

   A.   **Concrete Blocks,** 9 x 18 x 1.5 inches (23 x 46 x 3.8 cm). (Commercial Patio Blocks are satisfactory for this purposed.)

   B.   **Electric Oven,** capable of maintaining specified temperature ± 5° F (3°C).

   C.   **Measuring Device** with an accuracy of 0.015 inch (0.4mm).

III.   **PROCEDURE.**

   A.   Cut two (2) specimens, 15 x 1¼ inches (38 x 3.2 cm), from each lot. (One with the direction of the roll, the other perpendicular to the direction of the roll.)

   B.   Attach specimens to the concrete block using manufacturer's primer and instructions.

   C.   Place gauge marks on each specimen near the ends to facilitate measurement.

   D.   Measure length between gauge marks (to nearest 0.015 inch (0.4mm)) and record.

   E.   Place concrete blocks with specimens attached in oven at 270° ± 5° F(132 ± 3°C) for 60 ± 5 minutes.

   F.   Remove blocks from oven, allow to cool to room temperature and measure length between gauge marks and record.

IV.   **CALCULATIONS.** Calculate the percent change in length of each specimen as follows:

$$P = \frac{L_1 - L_2}{L_1} \; x \; 100$$

   Where:

   P   =   Percent change in length
   L_1 =   Distance between gauge marks before heating
   L_2 =   Distance between gauge marks after cooling

V.   **REPORT.** Report percent change in length for each specimen.