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**EVALUATING SEGREGATION IN  
HOT MIX ASPHALT PAVEMENT  
USING A NUCLEAR DENSITY GAUGE**

**SCOPE**

This test method covers a procedure to evaluate segregation in hot-mix asphalt pavement.

The procedure is supplemental to the visual determination specified in Article 2303.03 and may be used to aid in determining segregation quantity and severity.

**APPARATUS**

Nuclear Gauge: CPN Model MC-1A, Troxler 3400, or Humboldt 5001

**PROCEDURE**

1. Visually select the areas where segregation is suspected. A minimum of three areas must be selected.
2. Take four nuclear density readings (back scatter mode, one minute count period), and convert to unit weights at each of the areas selected. Calculate the average density.
3. Select a non-segregated area near each segregated area tested.
4. Repeat step (2) for each non-segregated area.
5. Calculate the average density of each segregated area expressed as a percent of the average density for the respective non-segregated area.

**REPORT**

Report details of locations and nuclear density results for both segregated and companion non-segregated areas and the average density of each segregated area expressed as a percent of each non-segregated area.

**EVALUATION**

Segregation shall be evaluated and classified in accordance with the following table:

	<u>Significant</u>	<u>Severe</u>
Avg. Unit Weight, % (Segregated/Non-segregated)	98.0-95.1	95.0 and less

Price adjustments may be applied when segregation is significant or severe.