

**Standard Method of Test for
Determination of Placement Rate of Asphalt Mixtures
SCDOT Designation: SC-T-85 (04/19)**

1. SCOPE

- 1.1. This method covers the necessary calculations for calculating the rate of spread of asphalt mixture in pounds per square yard by using the asphalt truck delivery tickets.

2. SIGNIFICANCE AND USE

- 2.1. The purpose of this procedure is to ensure that the proper amount of asphalt mixture is applied to the roadway according to the project requirements.

3. APPARATUS

- 3.1. Tape measure capable of measuring entire width of roadway being paved

4. PROCEDURE

- 4.1. Determine the length of roadway being surfaced using station numbers (feet).
- 4.2. Measure the width of pavement placed (feet).
- 4.3. Determine the area measured (square feet).
- 4.4. Calculate the weight of the mix placed in a section by totaling the amount of mix used from the asphalt truck delivery tickets (pounds).
- 4.5. Divide the placement area into the weight of mix placed in the roadway section.

5. CALCULATIONS

- 5.1. Calculate the mix rate in (pounds per square yard).
- 5.2. Determine the length of roadway section by calculating the distance based on the established station numbers.

Example:

Ending Station	14 + 75
- <u>Beginning Station</u>	<u>-12 + 50</u>
	= 2 + 25

Convert station numbers to feet: sta 2 + 25 X 100 = 225 linear feet

- 5.3. Determine the area of the roadway section. Multiply the length of the section by the width of placement (convert this value to square yards).

Example: (225 linear feet x 10 feet wide) ÷ 9 square feet = 250 square yards
Note: 9 square feet = 1 square yard

- 5.4. Based on the delivery tickets, determine the total weight of asphalt mix applied to the section (convert tons to pounds).

Note: 1 ton = 2000 pounds

Example: 12.5 tons x 2000 pounds= 25,000 pounds of asphalt mix placed in this test section.

- 5.5. Calculate the placement rate by dividing the weight of asphalt mix placed by the area of the section.

Example: 25,000 pounds ÷ 250 square yards = 100 pounds per square yard (psy).

6. REPORT

- 6.1. Report the actual rate in pounds per square yard on the Asphalt Daily Road Inspection Report Form 400.04.