

ALDOT-362-89
PROCEDURE FOR MEASUREMENT OF THE SURFACE
TEMPERATURE OF PAVEMENT

1. Scope

- 1.1. This procedure describes the equipment and techniques used in measuring the surface temperature of pavement. Pavement temperatures are used to control placement of asphalt, rolling, and other operations in the field. This procedure should be followed as closely as possible to insure accurate and reproducible results.

2. Apparatus

- 2.1. Surface Temperature Thermometer, dial type, having a range of 0°F – 300°F (5°C - 150°C), accurate to 2.5 percent. Silicone grease or equivalent.

3. Procedure

- 3.1. Find a smooth spot on the surface of the pavement large enough to place the thermometer. The smoother the pavement the more accurate the reading.
- 3.2. Place a small amount of silicone grease on the back of the thermometer and stick the thermometer to the surface of the pavement. Apply enough pressure to the thermometer to assure that the grease has spread and that the thermometer is in good contact with the pavement.
- 3.3. Protect the thermometer from direct wind and sunlight and allow the thermometer to stabilize for a minimum of three minutes. No physical contact should be made with the thermometer during this period. The temperature can be read at the end of the stabilization period. The thermometer should be removed after the reading has been taken and all grease removed.
- 3.4. The accuracy of the thermometer should be checked periodically by placing it on a surface of known temperature.