FLORIDA DEPARTMENT OF TRANSPORTATION
State Materials Office
5007 NE 39th Avenue,
Gainesville, Florida 32609

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Florida Method of Test
for
DETERMINING AMBIENT TEMPERATURE

Designation: FM 5-616

1. SCOPE

   This method covers the determination of the ambient temperature at the job site for the control of field operations.

2. APPARATUS

   2.1 Temperature Measuring Device (TMD) – Any suitable device capable of accurately measuring the temperature of the air to ±1°F [±0.5°C] throughout a range of 30° to 120°F [0° to 50°C].

   2.2 Reference Temperature Measuring Device (RTMD) - Readable and accurate to ±0.5°F [±0.2°C] at the verification points. A certificate or report shall be available and provide documentation that the RTMD used in the verification is traceable to the National Institute of Standards and Technology (NIST).

3. VERIFICATION OF ACCURACY OF TEMPERATURE MEASURING DEVICES

   3.1 The accuracy of the TMD used for determining the ambient temperature shall be verified (at 2 points within the range of the locally expected temperature) with a RTMD at least once each year or whenever there is a question of accuracy. Document the comparison showing the date, two readings of the TMD and RTMD, description of the TMD, description of the RTMD and signature of Department representative conducting the comparison.

   3.2 Verify the accuracy of the TMD by comparing the readings of the RTMD to the temperature measuring device. If the readings from the TMD is not within ±1°F [0.5°C] of the RTMD temperature, the TMD is not satisfactory for use.

4. PROCEDURE

   4.1 Position the TMD so that the end of the temperature sensing portion is exposed to the ambient air temperature.

   4.2 The temperature sensing portion of the device should be dry, shaded from the direct sunlight and 10 feet away from any artificial heat source.

   4.3 Allow the TMD to stabilize for at least 2 min but not more than 5 min, then read and record the temperature to the nearest 1°F [0.5°C].

5. REPORT

5.1 Report the measured temperature in the daily construction log or other suitable document.