

**PROCEDURE FOR THE VERIFICATION OF THE
RECORDING THERMOMETER
ASTM C 511**

A. PURPOSE

The purpose of this procedure is to verify the accuracy of the recording thermometer located in the moist cabinet. This procedure will be performed semi-annually.

B. APPARATUS REQUIRED

1. One calibrated thermometer capable of reading to 0.5 °C and in the range to be tested
2. Container to hold the water and the thermometer

C. PROCEDURE

1. Place the container with the water and the thermometer next to the recording thermometer probe. (This can be permanently attached.)
2. Allow the water temperature to stabilize prior to beginning the verification.
3. Observe the temperature indicated by the glass thermometer and record the indicated temperature and the time the check was made. Continue this at two (2) hour intervals for six (6) hours (three observations).
4. Compare the temperatures recorded from the glass thermometer with the temperature recorded by the recording thermometer.
5. If the observed readings and the recorded readings differ by more than 1 °C, adjustment shall be made to the recording thermometer.
6. This process should continue until the desired temperature, the observed temperature, and the recorded temperature are within $\pm 1^{\circ}\text{C}$.

D. TOLERANCE

The tolerance is as specified in ASTM C 511, Section 4.4. 1.

EQUIPMENT VERIFICATION RECORD

Verified By: _____	Date: _____
Equipment: <u>Recording Thermometer</u>	Location (Lab): _____
Identification No.: _____	Verification Frequency: <u>6 months</u>
Previous Verification Date: _____	Next Due Date: _____
Verification Equipment Used: <u>Timer; Calibrated thermometer (graduated in increments of 0.5°C and having a range that includes the temperature to be checked)</u>	
Verification Procedure: <u>(In-house) OMR-CVP-37</u>	

DATE	TIME		TEMPERATURE C.			MEETS Yes / No	VERIFIED BY
	Beginning	Ending	Calibrated Thermometer	Recording Thermometer	Difference		