

APPARATUS / SECTION 5

1. PYCNOMETER: with a volume at least twice the volume of the soil to be tested and being one of the following depending on the maximum size of the largest particle._____
 - 1.1. STOPPERED BOTTLE: Having a capacity of at least 250 mL with stopper of same material with a small hole in centre of stopper to let air and water out per clause 5.1?... _____
 2. DESSICATOR: A cabinet or large jar of suitable size containing silica gel or anhydrous calcium sulphate (Drierite)....._____
 3. INSULATED CONTAINER: A Styrofoam cooler and cover or equivalent that can hold 3-6 pycnometers plus a beaker (or bottle) of deaired water, and a thermometer per clause 5.7?....._____
 4. BALANCE: Meeting the requirements of ASTM D 4753, Class GP1, readable to at least 0.1% of the specimen mass._____
 5. THERMOMETER: Readable to 0.5°C and calibrated to a thermometer accurate to 0.1°C....._____
 6. OVEN: A thermostatically controlled, forced-draft type oven, capable of maintaining uniform temperature throughout the chamber._____
 7. VACUUM SYSTEM: A vacuum pump capable of producing a partial vacuum of 100 mm Hg absolute pressure....._____
- OR
- The test method allows the alternative of removing air by boiling (clause 8.2.2) If this practice is followed, the vacuum pump is not needed....._____
8. WATER: A supply of distilled water..... _____

CALIBRATION OF PYCNOMETER / SECTION 8

1. Determine the mass of the pycnometer for a total of 6 times per 8.1?....._____
2. Fill the pycnometer with deaired water per clause 8.2?....._____
3. Calibrate pycnometer is insulated container per clause 8.3?....._____
4. Adjust the water level per clause 8.4?....._____
5. Record the temperature and mass of filled pycnometer per clauses 8.5 & 8.6?....._____
6. Repeat clause 8.6 for a total of 5 times per 8.6.1?....._____
7. Calculation used per clause 8.7?....._____

COMMENTS