

**IA Checklist
 T-85
 SPECIFIC GRAVITY AND ABSORPTION
 OF COARSE AGGREGATES**

Procedure		P	F	NA
1	Sample the aggregate in accordance with T 2. Thoroughly mix the sample of aggregate and reduce it to the approximate quantity needed using the applicable procedures in R 76. Reject all material passing a 4.75-mm (No. 4) sieve by dry sieving and thoroughly washing to remove dust or other coatings from the surface.			
2	Dry the test sample to constant mass at a temperature of $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$), cool in air at room temperature until the sample has cooled to a temperature that is comfortable to handle (approximately 50°C 122°F). Subsequently immerse the aggregate in water at room temperature for a period of 15 to 19 hours.			
3	Remove the test sample from the water and roll it in a large absorbent cloth until all visible films of water are removed. Wipe the larger particles individually. A moving stream of air may be used to assist in the drying operation. Take care to avoid evaporation of water from aggregate pores during the operation of surface-drying. If the test sample dries past the SSD condition, immerse in water for 30 min, and then resume the process of surface-drying. Determine the mass of the test sample in the saturated surface-dry condition. Record this and all subsequent masses to the nearest 1.0 g or 0.1 percent of the sample mass, whichever is greater.			
4	After determining the mass, immediately place the saturated surface-dry test sample in the sample container and determine it's mass in water at $23.0 \pm 1.7^{\circ}\text{C}$ ($73.4 \pm 3^{\circ}\text{F}$), having a density of $997 \pm 2 \text{ kg/m}^3$. Take care to remove all entrapped air before determining the mass by shaking the container while immersed. Maintain the water level in the bath at the overflow depth to obtain a constant water level throughout the test.			
5	Dry the test sample to constant mass at a temperature of $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$), cool in air at room temperature until the aggregate has cooled to a temperature that is comfortable to handle (approximately 50°C), and determine the mass.			

Remarks: