

## **AASHTO T 99**

### ***Moisture-Density Relations of Soils Using a 5.5 lb (2.5 kg) Rammer and a 12 in (305 mm) Drop***

AASHTO T 99, Method A, has been adopted by WSDOT.



## Tester Qualification Practical Exam Checklist

### *Moisture-Density Relations of Soils Using a 5.5 lb (2.5 kg) Rammer and a 12 in (305 mm) Drop FOP for AASHTO T 99*

Participant Name \_\_\_\_\_ Exam Date \_\_\_\_\_

<b>Procedure Element</b>	<b>Yes</b>	<b>No</b>
1. The tester has a copy of the current procedure on hand?	<input type="checkbox"/>	<input type="checkbox"/>
2. All equipment is functioning according to the test procedure, and if required, has the current calibration/verification tags present?	<input type="checkbox"/>	<input type="checkbox"/>

#### **Sample Preparation**

1. If damp, sample dried in air or drying apparatus, not exceeding 140°F (60°C)?	<input type="checkbox"/>	<input type="checkbox"/>
2. Sample pulverized and adequate amount sieved over the No. 4 (4.75 mm) sieve?	<input type="checkbox"/>	<input type="checkbox"/>
3. Material retained on the sieve discarded?	<input type="checkbox"/>	<input type="checkbox"/>
4. Sample passing the sieve has appropriate mass?	<input type="checkbox"/>	<input type="checkbox"/>

#### **Procedure**

1. Sample mixed with water to approximately 4 percent below expected optimum moisture content?	<input type="checkbox"/>	<input type="checkbox"/>
2. Layer of soil placed in mold with collar attached?	<input type="checkbox"/>	<input type="checkbox"/>
3. Mold placed on rigid and stable foundation?	<input type="checkbox"/>	<input type="checkbox"/>
4. Lightly tamp soil in mold?	<input type="checkbox"/>	<input type="checkbox"/>
5. Soil compacted with 25 blows?	<input type="checkbox"/>	<input type="checkbox"/>
6. Scrape sides of mold and evenly distributed on top of the layer?	<input type="checkbox"/>	<input type="checkbox"/>
7. Soil placed and compacted in three equal layers?	<input type="checkbox"/>	<input type="checkbox"/>
8. No more than ½ inch of soil above the top of the bottom portion of the mold?	<input type="checkbox"/>	<input type="checkbox"/>
9. Collar removed and soil trimmed to top of mold with straightedge?	<input type="checkbox"/>	<input type="checkbox"/>
10. Mass of mold and contents determined to appropriate precision?	<input type="checkbox"/>	<input type="checkbox"/>
11. Wet mass of specimen multiplied by mold factor to obtain wet density?	<input type="checkbox"/>	<input type="checkbox"/>
12. Soil removed from mold using sample extruder when applicable?	<input type="checkbox"/>	<input type="checkbox"/>
13. Soil sliced vertically through center?	<input type="checkbox"/>	<input type="checkbox"/>
14. Moisture sample removed from the entire face of one of the cut faces?	<input type="checkbox"/>	<input type="checkbox"/>
15. Sample weighed immediately and mass recorded?	<input type="checkbox"/>	<input type="checkbox"/>

16. Moisture sample mass per Table 1?
17. Sample dried and water content determined according to AASHTO T 255 or T 265?
18. Remainder of material from mold broken up to about passing sieve size and added to remainder of original test sample?
19. Water added to increase moisture content in approximately 2 percent increments?
20. Steps 2 through 15 repeated for each increment of water added?
21. If soil is plastic (clay types):
- a. Sample mixed with water varying moisture content by approximately 2 percent, bracketing the optimum moisture content?
  - b. Samples placed in covered containers and allowed to stand for at least 12 hours
22. Process continued until wet density either decreases or stabilizes?
23. Water content and dry density calculated for each sample?
24. All calculations performed correctly?

First Attempt: Pass  Fail

Second Attempt: Pass  Fail

Signature of Examiner \_\_\_\_\_

Comments: