# Top Nonconformities of AASHTO T 84 and ASTM C128

On season 2 episode 31 we discuss common nonconformities for the Standard Method of Test for Specific Gravity and Absorption of Fine Aggregate and how to resolve them. LISTEN HERE or go to podcast.aashtoresource.org.

| | Nonconformity | Resolution |
|---|---|---|
| PROCEDURAL | In the procedure used to fill the pycnometer, water was not added before the sample was introduced as specified in Section 9.2.1 of C128. | These are likely to be procedural nonconformities which must be resolved by retraining the technicians on the step(s) that were incorrectly performed. If the issue is found to be an equipment or facilities problem, the laboratory must provide sufficient evidence to prove that the issue has been resolved. |
| | The temperature of the contents in the pycnometer was not adjusted to 23.0 ± 1.7°C (73.4 ± 3°F) [ASTM: 23.0 ± 2.0°C] after the elimination of the air bubbles. The temperature of the contents was not determined. | |
| | The volume of the pycnometer presented, a fruit jar fitted with a pycnometer top, could not be reproduced to ± 100 cubic millimeters. The pycnometer was filled with water to a line marked on the jar rather than to the top of the pycnometer top. | |
| | When the cone test for surface moisture was performed, the material above the top of the conical mold was struck off level with the top of the mold prior to tamping the material. This step is not specified in the test method. | |
| | When the cone test for surface moisture was performed on an aggregate material that readily slumped, the conical mold was not filled in the manner described in the test method. The mold was filled using the provisional cone test procedure specified for materials that do not readily slump. It was understood that the provisional cone test is used to test all aggregates regardless of slumping characteristics. | |

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|---|---|---|
| RECORDS | Records were not presented to indicate that a comparison had been made to ensure that the results of mechanical agitation fall within the acceptable limits of manual agitation listed in Table 1. | This is partly a procedural issue and partly a records issue. The laboratory will need to update its procedure to carry out this comparison and will need to document it properly. The corrective action will need to address the changes and include a copy of the resulting record. |