

WSDOT FOP for AASHTO T 22

Compressive Strength of Cylindrical Concrete Specimens

WSDOT has adopted the published AASHTO T 22-17 with errata's below.

AASHTO Test Methods cannot be included in Materials Manual due to copyright infringement.

WSDOT employees can access AASHTO and ASTM test methods in the following web address:

<http://wwwi.wsdot.wa.gov/MatsLab/BusinessOperations/ASTMLogin.htm>

Non-WSDOT employees can order AASHTO's Standard Specifications for Transportation Materials and Methods of Sampling and Testing, using the following web address: <https://store.transportation.org>

4. Significance and Use

4.2. *Include Note below.*

Note: Testing for determining compressive strength of cylinder specimens shall require a set of two specimens made from the same sample.

6. Specimens

6.3. *Step not recognized by WSDOT.*

6.4. Determine specimen mass and length as described below.

Remove any surface moisture with a towel and measure the mass of the specimen using a balance or scale that is accurate to within 0.3 percent of the mass being measured. Measure the length of the specimen to the nearest 1 mm (0.05 in.) at three locations spaced evenly around the circumference. Compute the average length and record to the nearest 1 mm (0.05 in.).

7. Procedure

7.3. *Include Note below.*

Note: The 28-day compressive break may be extended by up to 48 hours if the scheduled 28-day break falls on a Saturday, Sunday, or Holiday. The Regional Materials Engineer must authorize the time extension in writing.

Performance Exam Checklist

Compressive Strength of Cylindrical Concrete Specimens

AASHTO T 22

Participant Name _____ Exam Date _____

Record the symbols “P” for passing or “F” for failing on each step of the checklist.

Procedure Element	Trial 1	Trial 2
1. The tester has a copy of the current procedure on hand?	_____	_____
2. All equipment is functioning according to the test procedure, and if required has the current calibration/standardization/check and maintenance tags present?	_____	_____
3. Specimens kept moist between removal from moist storage and testing?	_____	_____
4. Diameter of the cylinder recorded to the nearest 0.01 inch by averaging two diameters taken at about mid-height?	_____	_____
5. Specimen not tested if individual diameter readings differ more than 2 percent?	_____	_____
6. Ends of specimen checked for perpendicularity to the axis?	_____	_____
7. Specimen mass and length recorded?	_____	_____
8. Ends of specimen checked for plane?	_____	_____
9. If ends not plane, specimen sawed or ground to meet tolerance or capped in accordance to either AASHTO T 231 or ASTM C1231? (Refer to AASHTO T 231 or ASTM C1231 procedure and checklist if used)	_____	_____
10. Bearing faces wiped clean?	_____	_____
11. Load indicator set to zero?	_____	_____
12. Spherical seated block parallel to top of specimen prior to applying load?	_____	_____
13. If using Unbonded Caps, alignment of specimen checked after application of load but before reaching 10 percent of anticipated load strength?	_____	_____
14. Load applied continuously and without shock?	_____	_____
15. The designated load rate maintained at least during the latter half of anticipated load strength?	_____	_____
16. No adjustment to load rate as ultimate load is being approached?	_____	_____
17. Compressive load continued until tester is certain ultimate capacity has been attained?	_____	_____
18. Maximum load and type of fracture recorded?	_____	_____
19. Specimens broken within permissible time tolerances?	_____	_____
20. All calculations performed correctly?	_____	_____

First Attempt: Pass Fail Second Attempt: Pass Fail

Signature of Examiner _____

Comments: