

**APPENDIX A-7**  
**REQUIREMENTS FOR PERFORMANCE GRADED ASPHALT CEMENT**  
**LABORATORIES (TYPE F)**

This class of laboratory conducts tests to check for compliance with specifications for Performance Graded Asphalt Cement. The laboratory must have the necessary general equipment for sampling, transportation, storage and sample preparation without adverse effect. The laboratory must have the capability to support the specific testing involved.

**Staff**

The testing services will be under the direction and control of a person charged with engineering-management responsibility. This designated person shall be a Professional Engineer (or equivalent as approved by CPAC) and a full-time employee of the PGAC Laboratory and have at least three years experience in the testing of construction materials.

The direct testing services of the Laboratory will be supervised and reported by a supervisory laboratory technician with at least three years experience performing tests on construction materials. This designated person shall be able to demonstrate the ability to perform all tests required in the manner stipulated under the governing procedures. This person will keep up with developments in asphalt technology and have C.E.T. designation (or equivalent as approved by CPAC).

Technicians employed in the Laboratory shall have the necessary experience to complete the required tests under the direct supervision of the supervisory laboratory technician. There shall be at least one laboratory technician who has met the requirements of the CCIL Superpave Asphalt Technician Certification Program working in the laboratory while that laboratory is in operation.

**Equipment, Manuals and Reporting Procedures**

The Laboratory must have the necessary equipment, manuals and reporting procedures to perform compliance checks on PGAC in accordance with current AASHTO (M, R, T) Methods:

M320	Performance Graded Asphalt Binder
R28	Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
R29	Grading or Verifying the Performance Grade of an Asphalt Binder
T240	Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test)
LS-308/T313	Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)

- T314 Determining the Fracture Properties of Asphalt Binder in Direct Tension (DT)
- T315 Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
- T316 Viscosity Determination of Asphalt Binder Using Rotational Viscometer (RV)

The Laboratory must keep up with any changes to these methods and procedures, and only complete testing and inspections to other methods as requested (ASTM, Transport Canada, etc.), if the laboratory has the necessary equipment, manuals and reporting procedures.