Laboratory Assessment Preparation List

General Assessment Guidance*: This document is intended to provide guidance for laboratories preparing for an AASHTO re:source On-Site Laboratory Assessment, specifically with regard to the preparation and availability of materials required for demonstration of the test method(s). Preparing for the assessment will improve the efficiency, productivity, and benefit of the assessment for the laboratory.*

This document does not address all of the apparatus and procedural requirements which may be evaluated during the assessment. Please consult the applicable AASHTO or ASTM standard for specific requirements. The laboratory may elect to demonstrate the AASHTO, ASTM, or both versions of the test method. The laboratory should be prepared to present required apparatus and to perform the test method in its entirety. Please contact us at (240) 436-4900 if your laboratory has additional questions with regard to preparing for the On-Site Assessment.

Iron and Steel Assessment Preparation

Specification	Test Method	Test Designation	Preparation requirements
Zinc Coatings on Iron and Steel	Thickness (Microscopy)	*M111* ***A123***	Have a specimen available and the equipment to demonstrate thickness by microscopy ready.
	Thickness (Stripping)	*M111-T65* ***A123-A90***	Have a specimen available and the stripping solution prepared.
	Thickness (Magnetic)	*M111* ***A123-E376***	Have a specimen available and a magnetic thickness gauge ready.
Welded Steel Wire & Steel Wire, Deformed and Plain	Bend Test	*M336* ***A1064***	Have a specimen available. Set up the bend test jig with the appropriate-sized pin.
	Weld Shear	*M336* ***A1064***	Have a specimen available. Prepare compression machine for test (jig assembly, grip set-up, adjust strain rates, etc.).
	Tension (Yield, Ultimate, Reduction of Area)	*M336-T244* ***A1064-A370***	Have a specimen available and be prepared to demonstrate the relevant portions of the tension test.
	Unit Weight	***A1064***	Have a specimen available.
Externally Threaded Fasteners (Bolts)	Rotational Capacity	***F3125***	Have a bolt and nut specimen ready to test. This test is required for E329 Steel Inspection.
	Brinell Hardness	***F3125-E10***	Have a bolt specimen, test blocks, and machine accessories ready to test.
	Rockwell Hardness	***F3125-E18***	Have a bolt specimen, test blocks, and machine accessories ready to test.
	Ultimate Tensile Strength	*T244* ***F3125-F606***	Have a bolt ready to test and adjust tensile machine for demonstration.
	Proof Load Determination	*T244* ***F3125-F606***	Have a specimen ready to test and the proof loading apparatus ready.
Internally Threaded Fasteners (Nuts)	Brinell Hardness	***A563-E10***	Have a nut specimen, test blocks, and machine accessories ready to perform testing.
	Rockwell Hardness	***A563-E18***	Have a nut specimen, test blocks, and machine accessories ready to perform testing.
	Proof Load Determination	***A563-F606***	Have a specimen ready to test and the proof loading apparatus ready.
Steel Strand, Uncoated Seven-Wire	Tension (Yield, Ultimate, Elongation)	*M203-T244* ***A416-A1061***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
Gray Iron Castings	Tension (Yield, Ultimate, Elongation)	*M105* ***A48-E8***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.

Specification	Test Method	Test Designation	Preparation requirements
Carbon-Steel Bars, Deformed and Plain	Testing Mechanical Splices	***A615-A1034***	Have a spliced specimen ready for testing.
	Unit Weight	***A615***	Have a specimen available.
	Tension (Yield, Ultimate, Elongation)	*M31-T244* ***A615-A370***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
	Bend Test	*M31-T285* ***A615-E290***	Have a specimen ready to test. Set up the bend test jig with the appropriate-sized pin.
	CA Mechanical and Welded Splices	***A615-CT670***	Have a spliced specimen ready for testing.
Low Alloy Steel Bars, Deformed and Plain	Testing Mechanical Splices	***A706-A1034***	Have a spliced specimen ready for testing.
	Unit Weight	***A706***	Have a specimen available.
	Tension (Yield, Ultimate, Elongation)	***A706-A370***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
	Bend Test	***A706-E290***	Have a specimen ready tot test. Set up the bend test jig with the appropriate-sized pin.
	CA Mechanical and Welded Splices	***A706-CT670***	Have a spliced specimen ready for testing.
Structural Steel	Tension (Yield, Ultimate, Elongation)	*M270-T244* ***A709-A6***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
	Charpy V-Notch	*M270-T266* ***A709-E23***	Have a machined V-notch specimen ready to test and the Charpy machine ready.
Metallic Coated Steel Wire Rope	Ductility (Wrap Test) / Adherence	*M30* ***A741***	Have specimen ready to test.
	Tension (Ultimate Tensile Strength)	*M30-T244* ***A741-A370***	Have specimen ready to test.
	Mass of Zinc Coating	*M30-T65* ***A741-A90***	Have specimen ready to test and the equipment to determine the mass of zinc coating ready.
Metallic Coated Steel Sheet	Mass of Zinc Coating	***A653-A90***	Have specimen ready to test and the equipment to determine the mass of zinc coating ready.
Epoxy Coated Reinforcing Bars	Film Thickness	***A775***	Have a specimen ready to test. Be prepared to demonstrate standardization and calibration of gage.
	Coating Flexibility (Bend Test)	***A775***	Have a specimen ready to test. Set up the bend test jig with the appropriate-sized pin.
	Continuity of Coating (Holidays)	***A775-G62***	Have a coated bar and Holiday detector available to demonstrate testing.
Headed Steel Bars	Bend Test	***A970***	Have a specimen ready to test. Set up the bend test jig with the appropriate-sized pin.
	Tension (Yield, Ultimate, Elongation)	***A970-A370***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
Hardened Steel Washers	Rockwell Hardness	***F436-E18***	Have a washer specimen, test blocks, and machine accessories ready to demonstrate testing.
Anchor Bolts	Tension (Yield, Ultimate Bar Stock, Elongation)	***F1554-A370***	Have a specimen ready to test and be prepared to demonstrate the relevant portions of the tension test.
	Tension (Ultimate *finished anchor bolts)*	***F1554-F606***	Have a finished anchor bolt ready for testing.
Leeb Hardness Testing of Steel Products		***A956***	Have a specimen ready for testing.