

Laboratory Assessment Preparation List

General Assessment Guidance: This document is intended to provide guidance for laboratories preparing for an AMRL 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. Where applicable, 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 AMRL at (240) 436-4900 if your laboratory has additional questions with regard to preparing for the On-Site Assessment.

Metals Assessment Preparation			
Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products AASHTO M111 / ASTM A123			
Thickness of Zinc Coating	T65	A90	Have specimen and stripping solution (as needed).
Steel Welded Wire Reinforcement, Plain, for Concrete AASHTO M55/ ASTM A185			
Steel Welded Wire Reinforcement, Deformed, for Concrete AASHTO M221/ ASTM A497			
Bend Test	-----	-----	Have specimen.
Weld Shear	-----	-----	Have specimen. Prepare compression machine for test (jig assembly, grip set-up, adjust strain rates, etc.).
Tensile Strength	T244	A370	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
High-Strength Bolts for Structural Steel Joints ASTM A325			
Rotational Capacity	-----	-----	Have specimen.
Brinell Hardness	none	E10	Have specimen.
Rockwell Hardness	none	E18	Have specimen, test blocks and machine accessories available.
Tensile Strength	T244	F606	Have specimen.
Proof Load Determination	T244	F606	Have specimen.
Steel Strand, Uncoated Seven-Wire for Concrete Reinforcement AASHTO M203/ ASTM A416			
Tensile Strength	T244	A1061	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Gray Iron Castings AASHTO M105/ ASTM A48			
Tensile Strength	none	E8	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Steel Wire, Plain, for Concrete Reinforcement AASHTO M32/ ASTM A82			
Steel Wire, Deformed, for Concrete Reinforcement AASHTO M225/ ASTM A496			
Bend Test	-----	-----	Have specimen.
Tensile Strength			Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement AASHTO M31/ ASTM A615			
Rail-Steel and Axle-Steel Deformed Bars for Concrete reinforcement AASHTO M322/ ASTM A996			
Low-Alloy Steel, Deformed and Plain Bars ASTM A706			
Tensile Strength	T244	A370	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Bend Test	T285	E290	Have specimen.

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Metals Assessment Preparation (Continued)			
Structural Steel AASHTO M270/ ASTM A709			
Tensile Strength	none	A6	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Bend Test	none	A6	Have specimen.
Charpy V-Notch	T266	E23	Have specimen and Charpy machine ready.
Zinc-Coated Steel Wire Rope and Fittings for Highway Guardrail AASHTO M30/ASTM A741			
Ductility of Steel (Wrap Test) / Adherence of Coating	-----	-----	Have specimen.
Tensile Strength	T244	A370	Have specimen. Prepare compression machine for test (grip set-up, adjust strain rates, etc.).
Mass of Zinc Coating	T65	A90	Have specimen
Epoxy Coated Reinforcing Bars AASHTO M284/ ASTM A775			
Coating Flexibility (Bend Test)			Have specimen.
Film Thickness			Have specimen. Prepare to demonstrate standardization and calibration of gage.
Continuity of Coating (Holiday Test)			Have coated bar and holiday detector available.

