



Reinforcing Bar Laboratory Inspection Checklist

It is advised that a careful review of the following criteria be undertaken by the laboratory personnel who will be taking an active role in the inspection.

Scope of Inspection

The inspection covers the demonstration of each test method presented and a review of the equipment associated with each test.

The following ASTM test methods are included during a CCRL Rebar Inspection:

- A370 Standard Test Methods and Definitions for Mechanical Testing of Steel Products
- A615 Deformation and Plain Carbon-Steel Bars for Concrete Reinforcement
- A706 Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement
- A996 Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement
- E8 Tension Testing of Metallic Materials

There are various additional test methods (listed on the request form) that the laboratory may wish to add on to the scope of their inspection. Any additional tests that the laboratory might wish to include for inspection should be clearly conveyed to the inspector **prior to the scheduled inspection date.**

How to Prepare for Your Inspection

- Have individual samples for each test method and all of the associated equipment being presented ready for inspection/demonstration. Equipment should be clean and free of debris from laboratory testing, in working order, and in an accessible location. Any equipment that requires calibration/verification should be marked with accurate identification numbers. Have two sample bars between No. 3 to No. 20 size and of appropriate length available in the laboratory for demonstration purposes.
- Have two sample bars between No. 3 to No. 20 size and of appropriate length available in the laboratory for demonstration purposes.
- The demonstrations of these procedures should be made in accordance with the requirements of the applicable **ASTM test methods**, and **special laboratory practices should be avoided.**
- The following checklists are not all inclusive and should be used along with careful review of the applicable standards to prepare the laboratory for the rebar inspection.

Those pieces of equipment which the laboratory would like to present for inspection should be cleaned, in working order, and in an accessible location for the inspector's examination. Have the following equipment ready and available:

	Elongation Measuring Equipment (E8, A370, A615, A706, A996)	All equipment should be readily available.
	Balance and/or Scale (A615, A706, A996, E8)	Indicate which balances are used for rebar testing.
	Tensile Testing Machine (A370, A615, A706, A996, E8)	Machine should be in good working order. If a spherical head or plate can be inserted into the machine for verification purposes, please make it available during the inspection.
	Bend Jig (A615, A706, A996)	Identify bending pins for each bar of the sizes presented.

Be prepared to demonstrate the following procedures:

	Measurement of Deformation (A615, A706, A996)	Have a sample bar available to measure.
	Tensile Strength (A370, A615, A706, A996, E8)	Be prepared to pull a sample bar.
	Bend Test (A615, A706, A996)	Be prepared to perform the test as required.