

## **Concrete Masonry Units 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 CMU Inspection:

- C140 Sampling and Testing Concrete Masonry Units and Related Units
- C1093 Accreditation of Testing Agencies for Masonry
- C1552 Standard Practice for Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing

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 two concrete masonry units available for demonstration purposes. If you are presenting C1019 or C1314 as an additional test method, you must have specimens prepared and cured prior to the inspection.
- 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.
- 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 CMU 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:

Sample drying equipment (Ovens) (C140)	Have ovens pre-heated to testing temperature.
Balances and Scales (C140)	Clearly indicate which balances and scales are used for testing.
Compressive Strength of Concrete Masonry Units (C140)	Compression machine should be in safe operating condition. If bearing plates are used, they should be made available.
Measurement of Dimensions of Concrete Masonry Units (C140)	All required measurement devices should be readily accessible.
Absorption & Moisture Content of Concrete Masonry Units (C140)	Please have the apparatus completely assembled prior to the inspection (balance, basket, and tank).
Capping Concrete Masonry Units (C1552)	Devices should be readily accessible.
Equipment (Test Method)	Devices should be readily accessible.

# Be prepared to demonstrate the following procedures:

Sampling and Identifying CMU (C140)	This test is discussed with the inspector, but not physically performed.
Measurement of CMU (C140)	Have a CMU specimen available to measure.
Absorption and Moisture Content (C140)	Be prepared to demonstrate this test fully within the required time limit
Capping (C1552)	The laboratory may present capping with sulfur mortar and/or gypsum cement
Compressive Strength (C140)	The laboratory should have a capped specimen prepared to break

### C1093 Quality System Requirements:

Equipment Inventory, Calibration, Maintenance	Calibration, maintenance, and verification records for each required apparatus (current and previous two records need to be available). Please have a printed, current inventory for use by the inspector.
Human Resources	Training and evaluation records for each technician, biographical sketches for supervisory personnel.
Operations	Procedures as they pertain to materials testing.
Reports and Records	A completed break report as it would be issued to a client.
Quality Control	Written procedures and policies, Proficiency Sample Program records, internal reviews, and current ASTM methods.