



Masonry Brick 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 Brick Inspection:

- C67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile
- C1093 Accreditation of Testing Agencies for Masonry

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. All of the associated equipment being presented must be 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 masonry bricks available 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 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) (C67)	Have ovens pre-heated to testing temperature.
	Sample conditioning (C67)	Indicate brick conditioning room and/or cabinet (30-70% RH).
	Balances and Scales (C67)	Clearly indicate which balances and scales are used for testing.
	Measurement of Dimensions (C67)	All required measurement devices should be readily accessible.
	Compressive Strength (C67)	Compression machine should be in safe operating condition
	Absorption of Brick (C67)	Please have the apparatus completely assembled prior to the inspection (balance, basket, and tank), including boiling apparatus.
	Initial Absorption of Brick (if demonstrating) (C67)	Please have the apparatus completely assembled prior to the inspection (tray, supports, reference brick) and demonstrate suitable means for controlling water level as required
	Capping of Brick (C67)	Devices and accessories should be readily accessible.

Be prepared to demonstrate the following procedures:

	Sampling and Specimen Preparation of Brick (C67)	<i>This test is discussed with the inspector, but not physically performed.</i>
	Measurement of Dimensions of Brick (C67)	Have a brick sample available to measure.
	Capping (C67)	The laboratory may present sample preparation and capping with sulfur mortar and/or gypsum cement.
	Absorption of Brick (C67)	Be prepared to demonstrate 5- or 24-hour submersion, and 1, 2, and 5 hour boiling. <i>This test is discussed with the inspector and physical demonstration is limited to immersion.</i>
	Initial Rate of Absorption (C67)	Be prepared to demonstrate this test fully within the required time limit.
	Compressive Strength (C67)	The laboratory should have a capped specimen prepared in advance to break for demonstration.

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.

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