

CMC

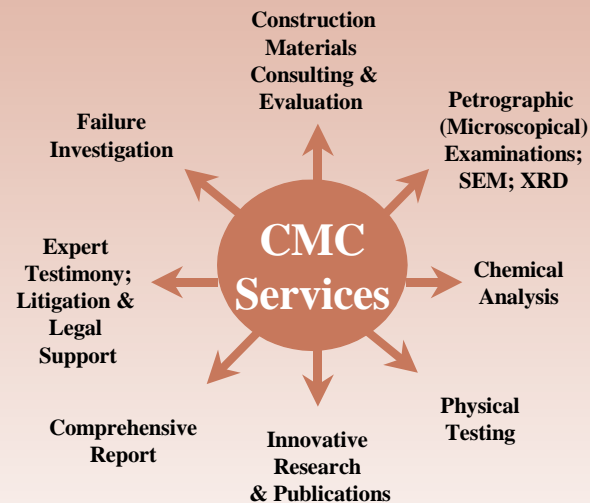
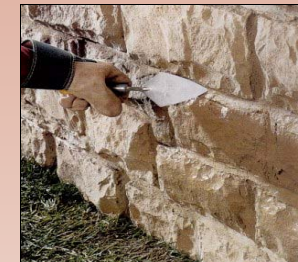
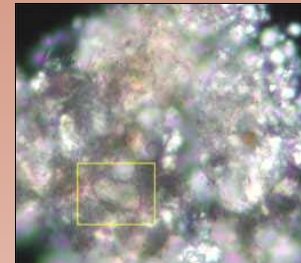
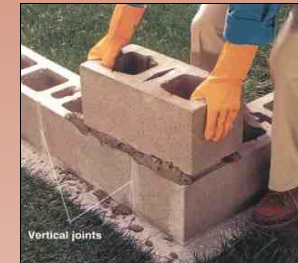
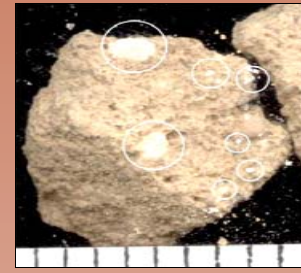
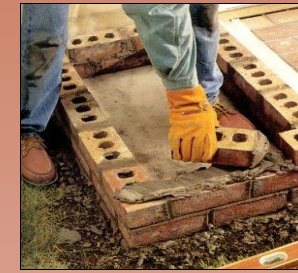
**Construction Materials
Consultants, Inc.**

**MASONRY &
MORTAR
DIVISION**

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BENEFITS

- Comprehensive Professional Report
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- Years of Experience in Materials Evaluation and Failure Investigation
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Top Left = Placement of Brick Masonry Units; Top Right = White Lumps of Hydrated Lime in Portland Cement-Lime Mortar; Middle Left = Placement of Concrete Masonry Units; Middle Right = Oil Immersion Mount of a Masonry Cement Mortar; Bottom Left = Stone Masonry Wall; Bottom Right = Grog Particles on the Lapped Section of a Brick

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Construction Materials Consultants, Inc.**

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evaluation, and consulting services,
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CMC

Construction Materials Consultants, Inc.

Masonry & Mortar Division

CMC, Construction Materials Consultants, Inc., is a reputable, full-service, independent consulting and testing firm dedicated to providing services to the cement, aggregate, concrete, masonry, mortar, stone, and tile industries.

For manufacturers, distributors, and wholesale retailers of brick, stone, and concrete masonry units, the **Masonry & Mortar Division** of CMC provides a variety of industry-recommended standard tests for quality assurance, materials evaluation, performance, and durability evaluation.

What sets CMC apart from other testing laboratories is the expertise in failure investigation of various masonry problems in the field. CMC has years of experience in investigating whether or not a particular distress is related to materials, installation practices, design, or environment. CMC offers services to contractors, insurance companies, law firms, architectural firms, engineering firms, and homeowners concerning various masonry problems related to materials, installation procedures, design, moisture, or environment. Proper diagnosis of problems provide proper solutions and remedial actions.

Following is a list of commonly requested laboratory tests for quality assurance of masonry units and failure investigations of brick, stone, or concrete masonry structures. Call us with your questions or concerns. We will be more than happy to help you!

LABORATORY TESTING FOR QUALITY ASSURANCE

BRICK, CONCRETE, & STONE MASONRY UNITS

- Specifications of Clay, Concrete, & Stone Masonry Units (ASTM C—55, 62, 73, 90, 129, 216, 410, 652, 744, 896, 902, 936, 1088, 1209, 1319, etc.)
- Absorption and Saturation Coefficient (ASTM C 67)
- Tests of Concrete Masonry Unit (ASTM C 140)
- Efflorescence (ASTM C 67)
- Freeze-Thaw Durability (ASTM C 67, C 1262)
- Initial Rate of Absorption (ASTM C 67)
- Modulus of Rupture (ASTM C 67)
- Petrographic Examinations (ASTM C 856)
- Compressive Strength (ASTM C 67, C 1388)
- Drying Shrinkage (ASTM C 426)
- Bond Strength (ASTM C 952, C 1357)
- Splitting Tensile Strength (ASTM C 1006)
- Miscellaneous Physical Tests
- Accelerated Weathering (Heating-Cooling, Freezing-Thawing, Wetting-Drying Tests)
- Tests for Detection of a Sealer and Water Tightness.

MORTARS & GROUTS

- Cement Specifications (ASTM C 91, C 150, C 1329)
- Mortar & Grout Specifications (ASTM C 270, C 476)
- Aggregate for Mortar & Grout (ASTM C 144, C 404)
- Compressive Strength (ASTM C 109)
- Petrographic Examinations (ASTM C 1324)
- Chemical Analysis (ASTM C 1324)
- Sulfate Content (ASTM C 265, C 1038)
- Drying Shrinkage of Mortar (ASTM C 1148)
- Sulfate Resistance (ASTM C 452, C 1012)
- Determination of Composition and Type M-S-N-O (ASTM C 270, ASTM C 1324)
- Matching Existing Mortar or Grout
- Sampling & Testing of Grout (ASTM C 1019)
- Terminology (ASTM C 1180, C 1232)

FAILURE INVESTIGATION

- Efflorescence
- Cracking
- Masonry—Mortar De-bonding
- Discoloration & Staining
- Mortar Disintegration
- Dusting, Fracturing
- Water Penetration
- Moisture-Related Damage
- Cyclic Freezing-Related Damage
- Early Freezing of Mortar
- Mortar Over-sanding; Low Strength; Mismatch

DIAGNOSING FAILURE BY

- Field Reconnaissance
- Petrographic Examinations
- Chemical Analysis
- Physical (Absorption, Strength) Tests
- Freeze-Thaw Durability Tests
- Volume Change Experiments
- Miscellaneous Project-Related Investigations

OUR CLIENTS

- Manufacturers, Distributors, Retailers
- Contractors, Installers
- Homeowners
- Testing & Consulting Companies
- Civil, Structural, and Architectural Engineering Firms
- Insurance Firms
- Law Firms—Expert Testimony in Litigation