Quality Control Services Testing Lab
Specializing in Aggregates, Concrete & Construction Materials
County Materials’ Testing Laboratory specializes in comprehensive sampling, testing and failure analysis for aggregates, concrete and related construction materials.

**Scope of Services**

Material Sampling, Testing & Analysis

**Aggregates**
- Particle Size Analysis
- Specific gravity
- Hydroscopic Moisture
- Angularity
- Hardness
- Unit Weight
- Absorption

**Concrete (flat work, pipe and CMUs)**
- Mix Design & Verification
- Compressive & Flexural Strength
- Concrete Core Samples & Testing

**Cements and grouts**

Masonry units

**Certifications**

Our in-house testing lab has achieved accreditation or certification by several agencies:

- The American Association of State Highway and Transportation Officials (AASHTO) AMRL Proficiency Testing, the primary accreditation body for construction material testing in the United States.
- Cement and Concrete Reference Laboratory (CCRL), an agency committed to the improvement of quality testing in the construction materials industry through laboratory assessments, proficiency samples, instruction, guidance, and clarification of ASTM standards.

Our quality control group has over 50 years of combined experience and participates in a number of qualification programs:

- Wisconsin Department of Transportation
- Minnesota Department of Transportation
- Iowa Department of Transportation
- Illinois Department of Transportation
- NPCA-National Precast Concrete Association
- Precast/Prestress Concrete Institute (PCI)
- Wisconsin Ready Mix Concrete Association (WRMCA) for Concrete Field/Lab testing and Concrete Mix Design testing
- American Concrete Institute (ACI)

**Responsiveness**

Our Testing Laboratory is staffed to respond rapidly to most situations involving aggregate and concrete testing and evaluation. Our personnel follow rigorous quality assurance/quality control policies and procedures to ensure the integrity of the scientific data on which decisions are based.

Technicians utilize a variety of testing methods as necessary to characterize the materials and site conditions and provide prompt recommendations. Our Mobile Laboratories are well equipped to perform field and laboratory testing on aggregates and concrete at the project site or material source in order to provide test results on an expedited basis. All of our field and laboratory reports are computer generated. Our reporting formats include all the information required by specific test standards. Reports are concise, reference-specified requirements and specifically address whether construction methods or materials are in compliance.
Experience

Since 2006, County Materials’ Testing Laboratory has provided in-house lab and field testing services for municipal, commercial and industrial clients and project applications of all sizes.

Contact Us

Call County Materials when you need professional materials testing from a certified laboratory.

(800) 289-2569

205 North Street
P.O. Box 100
Marathon, WI 54448

You are welcome to schedule a meeting with key project personnel and tour our laboratory. Should you have questions or wish to request additional information, please contact Mike Strong or Chris Kirchner.
Quality Control Services Testing Lab

**ASTM Testing Capabilities** - All testing is performed in accordance with ASTM, AASHTO, ACI and D.O.T. guidelines or design specification requirements.

### Aggregates

- **ASTM C29** Test method for bulk density and voids in aggregate
- **ASTM C40** Test method for organic impurities in fine aggregate
- **ASTM C87** Test method for effect of organic impurities in fine aggregate on mortar
- **ASTM C88** Test method for soundness of aggregate by sodium sulfate or magnesium
- **ASTM C117** Materials finer by No. 200 sieve in aggregates by washing
- **ASTM C127/128** Density and absorption of coarse / fine aggregate
- **ASTM C131** Resistance to degradation of small size coarse aggregate by abrasion and impact in L.A. machine
- **ASTM C136** Sieve analysis of fine and coarse aggregates
- **ASTM C142** Clay lumps and friable particles in aggregates
- **ASTM C1252** Uncompacted void content of fine aggregate

### Concrete (Pipe & CMUs)

- **ASTM C31** Curing concrete test specimens in field
- **ASTM C39** Compressive strength of cylindrical concrete test specimens
- **ASTM C138** Density, yield and air content of concrete
- **ASTM C143** Slump of hydraulic cement concrete
- **ASTM C173** Air content of freshly mixed concrete by volumetric method
- **ASTM C231** Air content of freshly mixed concrete by pressure method
- **ASTM C403** Time of setting of concrete mixtures by penetration resistance
- **ASTM C642** Density, absorption and voids in hardened concrete
- **ASTM C672** Scaling resistance of concrete surfaces exposed to deicing chemical
- **ASTM C1074** Estimating strength at concrete by maturity method
- **ASTM C1231** Compressive strength of hardened concrete cylinders
- **ASTM C1611** Slump flow of SCC concrete
- **ASTM C1621** Passing ability of SCC by J-Ring
- **ASTM C1688** Density and void content of pervious concrete

### Cement & Grouts

- **ASTM C109** Compressive strength of hydraulic cement mortars
- **ASTM C185** Air content of hydraulic cement mortar
- **ASTM C187** Normal consistency of hydraulic cement
- **ASTM C191** Time of setting of hydraulic cement by Vicat needle
- **ASTM C266** Time of setting of hydraulic cement paste by Gillmore needles
- **ASTM C430** Fineness of hydraulic cement by No. 325 sieve
- **ASTM C1019** Test methods for sampling and testing grout
- **ASTM C1437** Flow of hydraulic cement mortar

### Masonry Units

- **ASTM C90** Loadbearing concrete masonry units
- **ASTM C140** Sampling and testing concrete masonry units
- **ASTM C936** Solid concrete interlocking paving units
- **ASTM C1372** Dry cast segmental retaining wall units
- **ASTM C1403** Test method for rate of water absorption of masonry mortars

### Cast Stone Units

- **ASTM C1194** Compressive strength of architectural cast stone
- **ASTM C1195** Absorption of architectural cast stone
- **ASTM C1364** Architectural cast stone