

# *Quality Control Services Testing Lab*

*Specializing in Aggregates, Concrete & Construction Materials*



# Quality Control Services Testing Lab

**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
- Hydrosopic 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.



*Concrete Cylinder Compressive Strengths Test*



*Aggregate Moisture Test*

# Quality Control Services Testing Lab

## 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.



*Hwy 51 and Hwy 29 Interchange*



*Hwy 10 Bridge Crossing*



*First Wausau Towers-Dudley Building*

## 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



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[www.countymaterials.com](http://www.countymaterials.com)

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