

CTL Engineering is a leader in providing analytical services to the construction industry. We maintain a staff of experienced personnel and accurate equipment to guarantee dependable results. We evaluate all types of construction materials. Additionally, CTL Engineering can prepare and test Portland cement and bituminous concrete mixes for optimization studies to insure the proper mix design for specific jobs.

We provide complete testing of the following:

Aggregates

- ◆ Component Analysis (sand, gravel, limestone) – Department of Transportation
- ◆ Filter Sand – Environmental Protection Agency
- ◆ Railroad Ballast – American Railroad Engineering Association
- ◆ Rip-Rap – U.S. Soil Conservation Service



Soils

- ◆ Classification
- ◆ Compaction Parameters
- ◆ Permeability Tests

Concrete

- ◆ Mix Designs
- ◆ Mix Verification Tests to verify strength, air content, consistency, and yield of concrete
- ◆ Compression Tests
- ◆ Flexural and Split Tensile Strength Tests
- ◆ Modulus of Elasticity
- ◆ Creep Testing
- ◆ Drying Shrinkage
- ◆ Rapid Chloride Permeability Tests



Rapid Chloride Permeameter

Clay-brick, Pipe & Tile

CTL Engineering provides complete and thorough analysis of clay products. Some of the more common tests include:

- ◆ Compressive Strength
- ◆ Absorption
- ◆ Freeze-thaw
- ◆ Efflorescence
- ◆ Dimensional Analysis
- ◆ Acid resistance

In addition to the standard tests that are required by specification, we perform specific tests on construction materials as dictated by the needs of the customer.

CTL Engineering offers petrographic examination of construction materials.

These specialized microscopic evaluations allow us to closely evaluate concrete quality and determine the causes and extent of failures in concrete, in addition to potential future performance.

In addition to the standard ASTM tests of strength, absorption, dimensions unit weights, etc., CTL Engineering provides several specialty tests on concrete block and brick, including the fire rating test, specified by the BOCA, and efflorescence testing required by many architectural firms.

Asphalts

- ◆ Mix Designs
- ◆ Nuclear Gauge Calibrations Extraction and Grading
- ◆ Core Testing for Density and Strength.

You can be assured of complete quality testing for all of your construction mixes.