



Quality Assurance/
Quality Control



Geotechnical Engineering



Special Inspections



Specialty Engineering &
Non-Destructive Testing

Firm Overview

Fenagh Engineering and Testing (FET) was formed in 2014 as a response to meet clients' universal need for a responsive engineering and inspection consultant. FET's main office and full-service laboratory is located in Rancho Cucamonga with a field office in Gardena. We provide geotechnical engineering, special/deputy inspections, and material testing services for public and private projects throughout California. Our team of engineers, project managers, inspectors, and laboratory staff have countless years of experience in multiple markets and jurisdictions **understanding** what's **required** and **expected** of our role. Over the years, FET has established customer-focused procedures, producing efficient and hands-on project management. Our proactive, budget conscious management style will help you monitor your project for cost effectiveness and positive outcomes.

The Fenagh Difference

What makes FET different than most other inspection and testing consultants is our commitment to our clients and their needs as a quality/reliable consultant. We have established some core values for what owners and contractors can expect from us: **Quality, Integrity, Value, Safety, Code Driven and Liability Assurance Specialists**. As a third-party inspection and material testing laboratory, you can depend on FET to go above and beyond, ensuring projects are delivered on time and completed per code requirements.

Inspection Capabilities – Including Caltrans, DSA, OSHPD

- | | |
|--------------------------------------|------------------------------|
| • Reinforced Concrete | • Drilled in Anchors |
| • Pre-Stressed Concrete | • Building Envelope |
| • Steel | • Wood Framing |
| • Non-Destructive (UT, MT, PT, VT) | • Firestopping |
| • Masonry | • Soils & Asphalt |
| • Shotcrete | • Waterproofing |
| • Fireproofing | • EIFS |
| • Sound, Vibration, Crack Monitoring | • Quality Control Management |

Experienced & Certified Personnel

- American Welding Society (AWS)
- International Code Council (ICC)
- American Concrete Institute (ACI)
- Division of State Architect (DSA)
- California Department of Transportation (Caltrans)
- Office of Statewide Health Planning and Development (OSHPD)
- City of Los Angeles (LADBS)

Engineering Specialists

- Civil Engineers
- Structural Engineers
- Geotechnical Engineers

Accredited Laboratories *including mobile laboratories*

- AASHTO Materials Reference Laboratory (AMRL)
- California Department of Transportation (Caltrans)
- Cement and Concrete Reference Laboratory (CCRL)
- Office of Statewide Health Planning and Development (OSHPD)
- Department of State Architect (DSA)
- United States Army Corp of Engineers (USACE)
- City of Los Angeles (LADBS)
- City of San Diego

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www.fenaghengineering.com




Laboratory Capabilities

Concrete/Cement

- Compressive Strength of Cylindrical Concrete Specimens (6x12)
- Compressive Strength of Cylindrical Concrete Specimens (4x8)
- Compressive Strength of Cylindrical Concrete Specimens (over 8000 psi)
- Compressive Strength of Cylindrical Concrete Specimens (over 10000 psi)
- Compressive Strength of Lightweight Insulating Concrete
- Obtaining and Testing Sawed Beams and Drilled Cores of Concrete (cores)
- Flexural Toughness of Fiber Reinforced Concrete (Round Panel)
- Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
- Length Change of Hardened Hydraulic-Cement Mortar and Concrete
- Shotcrete Nozzleman Qualification
- Shotcrete Pre-Qualification Cores
- Shotcrete Production Cores
- Coefficient of Thermal Expansion
- Determining Density of Structural Lightweight Concrete (Cylinders)
- Standard Specification for Concrete Made by Volumetric Batching and Mixing
- Cement Quality Sampling
- Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete
- Splitting Tensile Strength of Cylindrical Concrete Specimens
- Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression
- Density of Hydraulic Cement
- Testing of Controlled Low Strength Material (CLSM) Test Cylinders
- GFRP Pull Test
- GFRP Flexural Test
- Foaming Agents for Use in Producing Cellular Concrete Using Preformed Foam (Cell-Crete)




Compressive Strength
Testing



Soil Testing/Analysis

Masonry

- Compressive Testing of Grout (Masonry)
- Compressive Strength of Hydraulic Cement Mortars Using 2" Cube Specimens
- Compressive Strength of Masonry Prisms
- Testing Concrete Masonry Units and Related Units (Core Compression)
- Compressive Strength of Molded Masonry Mortar Cylinders and Cubes (2" Sample)
- Testing Concrete Masonry Units (CMU) and Related Units (Full Unit)
- Linear Drying Shrinkage of Concrete Masonry Units (Per Unit)
- Masonry Core Shear Testing
- Testing Concrete Masonry Units (Absorption, Moisture Content, Unit Weight)
- Brick and Clay Tile (modulus of rupture, compression, saturation coefficient, suction rate, efflorescence)
- Mortar or Grout, Stored and Cured, Not Tested (including molds)



Masonry Block
Compressive Strength



Temperature/Moisture
Controlled Cure Room



Tensile Testing



Superpave

AGGREGATES (SOILS AND CONCRETE) – CONT.

- Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
- Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density
- Density of Hydraulic Cement
- Volatile Organic Content
- Semi Volatile Organics by GC/Ms (Basic Target List)
- Total Organic Carbon
- ICP Metals Concentration
- Total Extractable Petroleum Hydrocarbons: TPH, MTBE, Benzene, Toluene, Ethylbenzene, Zylenes, %SS
- ICP Metals Concentration
- Sequential Batch Extraction of Waste with Acidic Extraction Fluid
- Chromium Soluble
- Moisture, Ash and Organic Matter of Peat and Other Organic Soils (Organic Content)
- Universal Soil Classification System (USCS) Test
- California Bearing Ratio Test
- Unconfined Compressive Strength of Cohesive Soil

ASPHALT

- Quantitative Extraction of Bitumen from Bituminous Paving Mixtures (Solvent)
- Determining Low Temperature Performance Grade (PG) of Asphalt Binders
- Thickness/Height of Compacted Bituminous Paving Mixture Specimens (Cores)
- Method of Prep of Bituminous Mixture Test Specimens
- Bulk Specific Gravity and Density of Compacted Bituminous Mixtures (LTMD)
- Indirect Tensile (IDT) Strength of Bituminous Mixtures (TSR)
- Mechanical Size Analysis (Coarse and Fine) of Extracted Aggregate
- Marshall Stability and Flow of Bituminous Mixtures
- Theoretical Maximum Specific Gravity and Density (Rice)
- Measuring the Permeability of Bituminous Pavements and Seal Coats
- Swell of Bituminous Mixtures
- Moisture Vapor Susceptibility of Bituminous Mixtures/Moisture or Volatile Distillates in Asphalt
- Stabilometer Value
- Determination of Asphalt Content of Bituminous Paving Mixtures by the Ignition Method
- Determination of Correction Factor of Bituminous Paving Mixtures by the Ignition Method
- Determination of Asphalt and Moisture Contents of Bituminous Mixtures by Microwave Oven
- Effect of Water on Compressive Strength of Compacted Bituminous Mixtures



Mobile Laboratories



Sulfur Capping



Fireproofing



Viscosity Testing

Mechanical/Steel Testing

- Mechanical Testing of Steel Products (General Tensile)
- Fillet Weld Break Test for Qualification (Welding)
- Tension Testing of Metallic Materials, Tension Testing Wrought and Cast Aluminum and Magnesium-Alloy Products, (Welding Coupon Tensile)
- Mechanical Testing of Steel Products (Couplers)
- Impact Testing of Miniaturized Charpy V-Notch Specimens, Notched Bar Impact Testing of Metallic Materials
- Testing, Practices, and Terminology for Chemical Analysis of Steel Products
- Mechanical Testing of Steel Products & Bend Testing of Material for Ductility; #3-#8
- Mechanical Testing of Steel Products & Bend Testing of Material for Ductility; #9-#11
- Mechanical Testing of Steel Products & Bend Testing of Material for Ductility; #14+
- Mechanical Testing of Steel Products, Standard Specification for Steel Wire, Plain, for Concrete Reinforcement
- Guided Bend Test for Ductility of Welds, Mechanical Testing of Welds
- Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Anchor Bolts Only (Tension and Yield)
- Rockwell Hardness of Metallic Materials
- Proof Test for Carbon and Alloy Steel (Nuts Only)
- Radiographic Examination of Metallic Castings/Weldments
- Macroetching Metals and Alloys
- Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators, and Rivets (HSB Assemblies)
- Mechanical Testing of Steel Products (Terminators Tensile)
- Strength for Sewn or Bonded Seams of Geotextiles
- Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure
- Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- Tensile Properties of Fiber Reinforced Polymer Matrix Composite Bars
- Steel Strand, Uncoated Seven-Wire for Prestressed Concrete

Fireproofing

- Thickness and Density of Sprayed Fire-Resistive Material (SFRM)
- Cohesion/Adhesion of Sprayed Fire-Resistive Materials

Miscellaneous Testing

- Moisture Content of Non-Typical Materials
- Aluminum Oxide Content
- Viscosity of Non-Typical Materials
- Plastic Ultimate Tensile