



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NORTHWEST GEOTECH, INC.
d/b/a NORTHWEST TESTING, INC.
9120 SW Pioneer Court, Suite B
Wilsonville, OR 97070
Thomas Ginsbach, P.E. Phone: 503 682 1880

Valid To: February 28, 2019

Certificate Number: 3087.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for:

CONSTRUCTION MATERIALS ENGINEERING

ASTM: C1077 (Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation);
C1093 (Standard Practice for Accreditation of Testing Agencies for Masonry);
D3666 (Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials);
D3740 (Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction);
E329 (Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection);
E543 (Standard Specification for Agencies Performing Non-Destructive Tests)

CONSTRUCTION MATERIALS TESTING

<u>Test Method:</u>	<u>Test Description:</u>
<u>Aggregates:</u>	
ASTM C29	Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C40	Organic Impurities in Fine Aggregates for Concrete
ASTM C88	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C123	Lightweight Particles in Aggregate
ASTM C127	Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASTM C128	Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate
ASTM C131	Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C142	Clay Lumps and Friable Particles in Aggregates

<u>Test Method:</u>	<u>Test Description:</u>
ASTM C535	Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C702	Reducing Samples of Aggregate to Testing Size
ASTM C1252	Uncompacted Void Content of Fine Aggregate
ASTM C1260	Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1567	Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)
ASTM D75 ¹	Sampling Aggregates
ASTM D4791	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D5821	Determining the Percentage of Fractured Particles in Coarse Aggregate
AASHTO T2	Sampling of Aggregates
AASHTO T11	Test for Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
AASHTO T19	Bulk Density ("Unit Weight") and Voids in Aggregate
AASHTO T21	Organic Impurities in Fine Aggregates for Concrete
AASHTO T27	Sieve Analysis of Fine and Coarse Aggregates
AASHTO T84	Specific Gravity and Absorption of Fine Aggregate
AASHTO T85	Specific Gravity and Absorption of Coarse Aggregate
AASHTO T96	Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
AASHTO T104	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
AASHTO T112	Clay Lumps and Friable Particles in Aggregate
AASHTO T113	Lightweight Pieces of Aggregate
AASHTO T248	Reducing Samples of Aggregate to Testing Size
AASHTO T255	Total Evaporable Moisture Content of Aggregate by Drying
<u>Bituminous:</u>	
ASTM D75	Sampling Aggregates
ASTM D979 ¹	Sampling Bituminous Paving Mixtures
ASTM D1188	Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
ASTM D2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D2726	Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D2950 ¹	Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D3549	Thickness or Height of Compacted Bituminous Paving Mixture Specimens
ASTM D5444	Mechanical Size Analysis of Extracted Aggregate
ASTM D6307	Asphalt Content of Hot-Mix Asphalt by Ignition Method
ASTM D6925	Preparation and Determination of the Relative Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyrotory Compactor
ASTM D6926	Preparation of Bituminous Specimens Using Marshall Apparatus

<u>Test Method:</u>	<u>Test Description:</u>
ASTM D6927	Marshall Stability and Flow of Bituminous Mixtures
AASHTO T30	Mechanical Analysis of Extracted Aggregate
AASHTO T166	Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface-Dry Specimens
AASHTO T168	Sampling Bituminous Paving Mixtures
AASHTO T209	Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
AASHTO T269	Percent Air Voids in Compacted Dense and Open Asphalt Mixtures
AASHTO T275	Bulk Specific Gravity of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens
ODOT/ AASHTO T283 (excluding 10.3.7)	Resistance of Compacted Hot Mix Asphalt (HMA) to Moisture-Induced Damage
AASHTO T312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyrotory Compactor
<u>Concrete:</u>	
ASTM C31/C31M ¹	Making and Curing Concrete Test Specimens in the Field
ASTM C39/C39M	Compressive Strength of Cylindrical Concrete Specimens
ASTM C42/C42M	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
ASTM C78/C78M	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C138/C138M ¹	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C143/C143M ¹	Slump of Hydraulic-Cement Concrete
ASTM C172/C172M ¹	Sampling Freshly Mixed Concrete
ASTM C173 ¹	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C192/C192M	Making and Curing Concrete Test Specimens in the Laboratory
ASTM C231/C231M ¹	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C496/C496M	Splitting Tensile Strength of Cylindrical Concrete Specimens
ASTM C617	Standard Practice for Capping Cylindrical Concrete Specimens
ASTM C642	Density, Absorption, and Voids in Hardened Concrete
ASTM C805/C805M ¹	Rebound Number of Hardened Concrete
ASTM C1064/C1064M ¹	Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM C1140	Preparing and Testing Specimens from Shotcrete Test Panels
ASTM C1231/C1231M	Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
AASHTO T22	Compressive Strength of Cylindrical Concrete Specimens,
AASHTO T23	Making and Curing Concrete Test Specimens in the Field
AASHTO T24	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
AASHTO T97	Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
AASHTO T119	Slump of Hydraulic Cement Concrete,
AASHTO T121	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
AASHTO T141	Sampling Freshly Mixed Concrete
AASHTO T152	Air Content of Freshly Mixed Concrete by the Pressure Method
AASHTO T196	Air Content of Freshly Mixed Concrete by the Volumetric Method
AASHTO T198	Splitting Tensile Strength of Cylindrical Concrete Specimens
AASHTO T231	Capping Cylindrical Concrete Specimens
AASHTO T309	Temperature of Freshly Mixed Hydraulic Cement Concrete



<u>Test Method:</u>	<u>Test Description:</u>
<u>Fireproofing:</u>	
ASTM E605 (excluding section 8.3)	Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members
ASTM E736 ¹ (field only) (excluding section 7.1)	Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members
AWCI Technical Manual 12-A	Field Applied Sprayed Fire-Resistive Materials
ASTM E2174	On-site Inspection of Installed Firestops
ASTM E2393	On-site Inspection of Installed Fire Resistive Joint Systems and Perimeter Fire Barriers
<u>Masonry:</u>	
ASTM C109/C109M	Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
ASTM C140	Sampling and Testing Concrete Masonry Units and Related Units
ASTM C1019 ¹	Sampling and Testing Grout
ASTM C1314	Compressive Strength of Masonry Prisms
ASTM C1552	Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing
AASHTO T106	Compressive Strength of Hydraulic Cement Mortar (Using 50-mm or 2- in. Cube Specimens)
<u>Soils:</u>	
ASTM D421	Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants
ASTM D422	Particle-Size Analysis of Soils
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D854	Specific Gravity of Soil Solids by Water Pycnometer
ASTM D1140	Amount of Material in Soils Finer than No. 200 (75- μ m) Sieve
ASTM D1556 ¹	Density and Unit Weight of Soil in Place by Sand-Cone Method
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D1883	CBR (California Bearing Ratio) of Laboratory-Compacted Soils
ASTM D2166	Unconfined Compressive Strength of Cohesive Soil
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2419	Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2434	Permeability of Granular Soils (Constant Head)
ASTM D2435	One-Dimensional Consolidation Properties of Soils Using Incremental Loading
ASTM D2487	Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2488 ¹	Description and Identification of Soils (Visual-Manual Procedure)
ASTM D2850	Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils
ASTM D2922-05 (Withdrawn 2007) ^{1,2}	Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D2937	Density of Soil in Place by the Drive-Cylinder Method
ASTM D3017-05 (Withdrawn 2007) ^{1,2}	Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
ASTM D3080	Direct Shear Test of Soils Under Consolidated Drained Conditions

<u>Test Method:</u>	<u>Test Description:</u>
ASTM D3282	Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4718	Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4767	Consolidated Undrained Triaxial Compression Test for Cohesive Soils
ASTM D4829	Expansion Index of Soils
ASTM D5084	Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter
ASTM D6913	Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
ASTM D6938 ¹	In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
AASHTO T099	Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop
AASHTO T100	Specific Gravity of Soils
AASHTO T180	Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop
AASHTO T208	Unconfined Compressive Strength of Cohesive Soil
AASHTO T215	Permeability of Granular Soils (Constant Head)
AASHTO T216	One-Dimensional Consolidation Properties of Soils
AASHTO T236	Direct Shear Test of Soils under Consolidated Drained Conditions
AASHTO T297	Consolidated, Undrained Triaxial Compression Test on Cohesive Soils
<u>Steel (Shop & Field) ¹:</u>	
AWS D1.1 Structural Welding Code (Clause 6, Inspection)	Structural Welding Code- Steel
AWS D1.3 Structural Welding Code (Clause 6, Inspection)	Structural Welding Code - Sheet Steel
AWS D1.4 Structural Welding Code (Clause 6, Inspection)	Structural Welding Code - Reinforcing Steel
AWS D1.5 Bridge Welding Code (Clause 6, Inspection)	Bridge Welding Code
AWS D1.8 Structural Welding Code (Clause 7, Inspection)	Seismic Supplement
ANSI/AWS B2.1	Specification for Welding Procedure and Performance Qualification Annex A (Macroetch), Section 2.8.5 (Fillet Bend-Break Test)
AISC 360 (Chapter N, QA/QC Fabrication & Erection)	Specification for Structural Steel Buildings
RCSC (Section 9, Inspection)	Specification for Structural Joints Using High-Strength Bolts
API 1104	Welding of Pipelines and Related Facilities
ASME Section V (Article 6)	Non-Destructive Examination
ASME Section VIII	Pressure Vessels
ASME Section IX	Welding, Brazing and Fusing Qualifications
FEMA 353	Guidelines for Steel Moment-Frame Construction for Seismic Applications
<u>Nondestructive:</u>	
ASTM A388 ¹	Ultrasonic Examination of Steel Forgings
ASTM E709 ¹ (Yoke – Dry)	Magnetic Particle Testing
AWS D1.1 (Clause 6 Part F)	Ultrasonic Testing (UT) of Groove Welds
AWS D1.1 (Clause 6 Part C)	Magnetic Particle Testing



<u>Test Method:</u>	<u>Test Description:</u>
AWS D1.5 (Clause 6 Part C)	Ultrasonic Testing (UT) of Groove Welds
AWS D1.8 (Clause 7.10)	Ultrasonic Testing
AWS D1.8 (Annex G)	Magnetic Particle Testing
<u>Rock:</u>	
ASTM D4543	Preparing Rock Core as Cylindrical Test Specimens and Verifying Conformance to Dimensional and Shape Tolerances
ASTM D7012 (Method C only)	Unconfined Compressive Strength of Intact Rock Core Specimens

¹This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing Laboratories* for these tests.

²This laboratory’s scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered “historical” and not that the laboratory’s accreditation for the method has been withdrawn.

The laboratory is only accredited for the test methods listed above. The accredited test methods are used in determining compliance with the specifications listed below or, in some cases, the specification is used to show that the required environment for testing has been established. The inclusion of these specifications on this Scope does not confer laboratory accreditation to the specifications nor does it confer accreditation for any method(s) embedded within the specifications.

<u>Specification</u>	<u>Description</u>
ASTM C511	Specification for Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
ACI 301	Specifications for Structural Concrete of Buildings
ACI 318	Building Code Requirements for Structural Concrete
ACI 530	Building Code Requirements & Specifications for Masonry Structures





Accredited Laboratory

A2LA has accredited

NORTHWEST GEOTECH, INC. D/B/A NORTHWEST TESTING, INC.

Wilsonville, OR

for technical competence in the field of

Construction Materials Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 21st day of February 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 3087.01
Valid to February 28, 2019
Revised January 17, 2019

For the tests to which this accreditation applies, please refer to the laboratory's Construction Materials Scope of Accreditation.