

CERTIFICATE OF ACCREDITATION

This is to attest that

PACIFIC SOILS ENGINEERING & TESTING

894-C NORTH MARINE CORPS DRIVE UPPER TUMON, 96913, GUAM

Testing Laboratory TL-386

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date December 15, 2022



President

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PACIFIC SOILS ENGINEERING & TESTING

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Accredited to ISO/IEC 17025:2017

Effective Date December 15, 2022

| СМТ | |
|----------------------|--|
| AASHTO T 2 | Standard practice for sampling aggregates |
| AASHTO T 11 | Materials finer than 75-µm (no. 200) sieve in mineral aggregate by washing |
| AASHTO T 19 | Bulk density ("unit weight") & voids in aggregate |
| AASHTO T 21 | Organic impurities in fine aggregates for concrete |
| AASHTO T 22 | Compressive strength of cylindrical concrete specimens |
| AASHTO T 23 | Making and curing concrete test specimens in the field |
| AASHTO T 24 | Standard method of test for obtaining and testing drilled cores and sawed beams of concrete |
| AASHTO T 27 | Sieve analysis of fine and coarse aggregates |
| AASHTO T 30 | Mechanical analysis of extracted aggregate |
| AASHTO T 84 | Specific gravity and absorption of fine aggregate |
| AASHTO T 85 | Specific gravity and absorption of coarse aggregate |
| AASHTO T 89 | Determining the liquid limit of soils |
| AASHTO T 90 and T 91 | Standard method of test for determining the plastic limit and plasticity index of soils |
| AASHTO T 96 | Resistance to degradation of small-size coarse aggregate by abrasion and impact in the Los Angeles machine |
| AASHTO T 99 | Moisture-density relations of soils |
| AASHTO T 100 | Standard method of test for specific gravity of soils |
| AASHTO T 104 | Soundness of aggregate by use of sodium sulfate or magnesium sulfate |
| AASHTO T 112 | Standard method of test for clay lumps and friable particles in aggregate |
| AASHTO T 113 | Standard method of test for lightweight pieces in aggregate |
| AASHTO T 119 | Standard test method for slump of hydraulic-cement concrete |





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| AASHTO T 121 | Density (unit weight), yield and air content (gravimetric) of concrete |
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| AASHTO T 126 | Standard method of test for making and curing concrete test specimens in laboratory |
| AASHTO T 141 | Method of test for sampling freshly mixed concrete |
| AASHTO T 152 | Air content of freshly mixed concrete by the pressure method |
| AASHTO T 166 | Bulk specific gravity of compacted asphalt mixtures using saturated surface-dry specimens |
| AASHTO T 168 | Sampling of bituminous paving mixtures |
| AASHTO T 176 | Plastic fines in graded aggregates and soils by use of the sand equivalent test |
| AASHTO T 180 | Standard method of test for moisture-density relations of soils using a 4.54-kg (10lb) rammer and a 457-mm (18-in.) drop |
| AASHTO T 191 | Standard Method of Test for Density of Soil In-Place by the Sand-Cone Method |
| AASHTO T 193 | Standard method of test for the California bearing ratio |
| AASHTO T 196 | Air content of concrete (volumetric method) |
| AASHTO T 207 | Standard test method of test for thin-walled tube sampling of soils |
| AASHTO T 209 | Theoretical maximum specific gravity and density of hot mix asphalt |
| AASHTO T 231 | Capping cylindrical concrete specimens |
| AASHTO T 245 | Method of test for resistance to plastic flow of bituminous mixtures using Marshall apparatus |
| AASHTO T 248 | Reducing samples of aggregate to testing size |
| AASHTO T 255 | Total evaporable moisture content of aggregate by drying |
| AASHTO T 265 | Laboratory determination of moisture content of soils |
| AASHTO T 269 | Standard method of test for percent air voids in compacted dense open asphalt mixture |
| AASHTO T 275 | Standard method of test for bulk specific gravity (GMB) of compacted hot mix asphalt (HMA) using paraffin-coated specimens |
| AASHTO T 308 | Determining the asphalt binder content of hot mix asphalt (HMA) by the ignition method |
| AASHTO T 309 | Standard method of test for temperature of freshly mixed Portland cement concrete |
| AASHTO T 310 | In-place density and moisture content of soil and soil-aggregate by nuclear methods (shallow depth) |
| ASTM C29/C29M | Standard test method for bulk density ("unit weight") and voids in aggregate |





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| ASTM C31 | Standard Practice for Making and Curing Concrete Test Specimens in the Field |
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| ASTM C33/C33M | Standard specification for concrete aggregates |
| ASTM C39 | Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens |
| ASTM C40 | Standard Test Method for Organic Impurities in Fine Aggregates for Concrete |
| ASTM C42/C42M | Standard test method for obtaining and testing drilled cores and sawed beams of concrete |
| ASTM C70 | Standard test method for surface moisture in fine aggregate |
| ASTM C78/C78M | Standard test method for flexural strength of concrete (using simple beam with third-point loading) |
| ASTM C88 | Standard test method for soundness of aggregates by use of sodium sulfate or magnesium sulfate |
| ASTM C94/C94M | Standard specification for ready-mixed concrete |
| ASTM C117 | Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing |
| ASTM C127 | Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate |
| ASTM C128 | Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate |
| ASTM C131/C131M | Standard test method for resistance to degradation of small-size coarse aggregate by abrasion and impact in the Los Angeles machine |
| ASTM C136 | Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates |
| ASTM C138 | Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete |
| ASTM C142/C142M | Standard test method for clay lumps and friable particles in aggregates |
| ASTM C143 | Standard Test Method for Slump of Hydraulic-Cement Concrete |
| ASTM C172 | Standard Practice for Sampling Freshly Mixed Concrete |
| ASTM C173 | Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method |
| ASTM C174 | Standard Test Method for Measuring Thickness of Concrete Elements Using Drilled Concrete Cores |
| ASTM C192/C192M | Standard practice for making and curing concrete test specimens in the laboratory |
| ASTM C231 | Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method |





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| ASTM C496 | Standard test method for splitting tensile strength of cylindrical concrete specimens |
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| ASTM C566 | Standard test method for total evaporable moisture content of aggregate by drying |
| ASTM C567/C567M | Standard test method for determining density of structural lightweight concrete |
| ASTM C617 | Standard Practice for Capping Cylindrical Concrete Specimens |
| ASTM C702/C702M | Standard practice for reducing samples of aggregate to testing size |
| ASTM C1064 | Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete |
| ASTM C1077 | Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation |
| ASTM C1231/C1231M | Standard practice for use of un-bonded caps in determination of compressive strength of hardened cylindrical concrete specimens |
| ASTM C1252 | Standard test methods for un- compacted void content of fine aggregate (as influenced by particle shape, surface texture, and grading) |
| ASTM D75 | Standard practice for sampling aggregates |
| ASTM D290 | Standard practice for bituminous mixing plant inspection |
| ASTM D420 | Standard guide to site characterization for engineering design and construction purposes |
| ASTM D421 | Standard practice for dry preparation of soil samples for particle-size analysis and determination of soil constants |
| ASTM D698 | Standard test methods for laboratory compaction characteristics of soil using standard effort (12,400 ft-lbf/ ft ³ (600 kN-m/m ³)) |
| ASTM D854 | Standard test methods for specific gravity of soil solids by water pycnometer |
| ASTM D979/D979M | Standard practice for sampling bituminous paving mixtures |
| ASTM D1140 | Standard test methods for determining the amount of material finer than 75-µm (no. 200) sieve in soils by washing |
| ASTM D1188 | Standard test method for bulk specific gravity and density of compacted bituminous mixtures using coated samples |
| ASTM D1556 | Standard test method for density and in place by the sand-cone method |
| ASTM D1557 | Standard test methods for laboratory compaction characteristics of soil using modified effort (56,000 ft-lbf/ ft ³ (2,700 kN-m/m ³)) |
| ASTM D1559 | Test method for resistance of plastic flow of bituminous mixtures using Marshall apparatus |





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| ASTM D1587/D1587M | Standard practice for thin-walled tube sampling of fine-grained soils for geotechnical purposes |
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| ASTM D1833 | Standard test method for California bearing ratio (CBR) of laboratory- compacted soils |
| ASTM D2041 | Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures |
| ASTM D2216 | Standard test methods for laboratory determination of water (moisture) content of soil and rock by mass |
| ASTM D2217 | Standard practice for wet preparation of soil samples for particle-size analysis and determination of soil constants |
| ASTM D2419 | Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate |
| ASTM D2487 | Standard practice for classification of soils for engineering purposes (unified soil classification system) |
| ASTM D2488 | Standard practice for description and identification of soils (visual-manual procedure) |
| ASTM D2726/D2726 | Standard test method for bulk specific gravity and density of non-absorptive compacted bituminous mixtures |
| ASTM D2950/D2950M | Standard test method for density of bituminous concrete in place by nuclear |
| ASTM D3203/D3203M | Standard test method for percent air voids in compacted dene and open bituminous paving mixtures |
| ASTM D3282 | Standard practice for classification of soils and soil-aggregate mixtures for highway construction purposes |
| ASTM D3666 | Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials |
| ASTM 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 |
| ASTM D4318 | Standard test methods for liquid limit, plastic limit, and plasticity index of soils |
| ASTM D4429 | Standard test method for CBR (California bearing ratio) of soils in place |
| ASTM D4791 | Standard test method for flat particles, elongated particles, or flat and elongated particles in coarse aggregate |
| ASTM D5821 | Standard test method for determining the percentage of fractured particles in coarse aggregate |
| ASTM D6307 | Standard test method for asphalt content of hot-mix asphalt by ignition method |
| ASTM D6926 | Standard Practice for Preparation of Asphalt Mixture Specimens Using Marshall Apparatus |





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| ASTM D6927 | Standard Test Method for Marshall Stability and Flow of Asphalt Mixtures |
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| ASTM D6938 | Standard test method for in-place density and water content of soil and soil aggregate by nuclear methods (shallow depth) |
| ASTM E329 | Test methods referenced under bituminous inspection and testing (limited to ASTM standards D2041, D3666, D6926 and D6927), under concrete inspection and testing (limited to ASTM standards C31, C39, C138, C143, C172, C173, C174, C231, C617, C642, C1064 and C1077), under masonry inspection and testing (limited to ASTM standards C1093 and C140-88), and under soils and rock inspection and testing (limited to ASTM standards C1093 and C140, C117, C127, C128, C136, D75 and D2419) |

AASHTO- The American Association of State Highway and Transportation Officials

TL-386 Pacific Soils Engineering & Testing



