HELLENIC ACCREDITATION SYSTEM

# Annex F1C/6 to the Certificate No. **90**-9

## SCOPE of ACCREDITATION

of the

## Studies & Quality Control of Civil Engineering Works Testing Laboratory

of the

## PPC TESTING, INSPECTION AND CERTIFICATION SINGLE MEMBER S.A. (PPC INSPECTRA)

| Materials/ Products to be tested | Types of test / Properties to be measured | Applied methods / Techniques to be used |
|---|---|---|
| Mechanical tests | | |
| Concrete specimens with dimensions:<br>Cubes:<br>150 X 150 X 150 mm | Compressive strength test | ELOT EN 12390-3:2019 |
| Soil samples | Consolidated drained direct shear test, CD | ASTM D 3080-23 |
| | Unconfined compression test | ASTM D 2166-24 |
| | Consolidated undrained triaxial compression test (CUPP) | ASTM D 4767-11 |
| | Unconsolidated undrained triaxial test (UU) | ASTM D 2850-25 |
| | One-dimensional consolidation test | ASTM D 2435-25 |
| | One-dimensional swell or collapse of soils | ASTM D 4546-25 |
| | Consolidated undrained direct shear test, CU | Specification: HMEPPPW E 105:1986, §16 |
| | Residual shear strength in ring shear apparatus | ASTM D6467-21e1 |
| | Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft$^3$ (600 kN- | ASTM D 698-21 |

| Materials/ Products to be tested | Types of test / Properties to be measured | Applied methods / Techniques to be used |
|---|---|---|
| | $m/m^3$)) | |
| Soil samples | 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 D 1557-12 |
| | Standard Test Method for California Bearing Ratio (CBR) of Laboratory-Compacted Soils | ASTM D 1883-21 |
| | Unbound and hydraulically bound mixtures - Part 2: Test methods for laboratory reference density and water content - Proctor compaction | ELOT EN 13286-2:2010 |
| | Unbound and hydraulically bound mixtures - Part 47: Test method for the determination of California bearing ratio, immediate bearing index and linear swelling | ELOT EN 13286-47:2021 |
| Rock samples | Standard Test Method for Determination of the Point Load Strength Index of Rock and Application to Rock Strength Classifications | ASTM D 5731-16 (withdrawn without replacement) |
| | Compressive strength and elastic moduli of intact rock core specimens under varying states of stress and temperatures | ASTM D 7012-23 |
| | Direct Shear Strength tests of rock specimens under constant normal force | ASTM D 5607-16 (withdrawn without replacement) |
| | Slake Durability of Shales and Other Similar Weak Rocks | ASTM D4644-16 |
| | Preparing rock Core as cylindrical test specimens and verifying conformance to dimensional and shape tolerances | ASTM D4543-2019 |
| Bitumen mixtures | Specimen preparation by impact compactor | EN 12697-30:2019 |
| | Marshall Test | EN 12697-34:2020 |
| Physical tests | | |
| Soil | Dry preparation of soil samples | Specification: HMEPPPW*<br>E 105:1986, §1 |
| | Determination of moisture of soil:<br>- Moisture | Specification: HMEPPPW<br>E 105:1986, §2 |
| | Specific gravity of soils/specific gravity | Specification: HMEPPPW<br>E105:1986 §4 |
| | Liquid limit | Specification: HMEPPPW<br>E105:1986 §5 |
| | Determination of plastic limit and plasticity index | Specification: HMEPPPW<br>E105:1986 §6 |
| | Sieve analysis of fine and coarse soils (dry method) / Amount of passing material | Specification: HMEPPPW<br>E105:1986 §7 |
| | Determination of material of soils finer than the No 200 (75μm) sieve / Amount of passing material | Specification: HMEPPPW<br>E105:1986 §8 |

| Materials/ Products to be tested | Types of test / Properties to be measured | Applied methods / Techniques to be used |
|---|---|---|
| | Determination of Density of Soil | ASTM D 7263-21 Method B |
| | Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass | ASTM D 2216-19 |
| | Determination of water content | ELOT EN ISO 17892-1:2014 |
| | Determination of liquid and plastic limit | ELOT EN ISO 17892-12:2018 |
| | Particle size analysis of soils by hydrometer | Specification: HMEPPPW* E 105:1986, §9 |
| | Liquid Limit, Plastic Limit, and Plasticity Index of Soils | ASTM D 4318-17e1 |
| Rock | Porosity and density determination of rock samples using micrometer and vacuum pump | Specification: HMEPPPW* E103: 1984, §2 |
| Aggregates | Determination of materials finer than No 200 (75 μm) sieve in mineral aggregates by washing / Amount of material finer than 75 μm | ASTM C117:2023 |
| | Resistance to degradation of coarse aggregates by abrasion and impact in the Los Angeles machine / Amount of loss of weight | ASTM C131/C131M : 2020<br>ASTM C535: 2016 |
| | Reducing field samples of aggregate to testing size | ASTM C702/C702M:2024<br>ΕΛΟΤ EN 932-2: 2000<br>Except §7, 12 |
| | Determination of particle size distribution - Sieving method | ELOT EN 933-1: 2012 |
| | Assessment of fines – Methylene blue test | ELOT EN 933-9:2022 |
| | Determination of resistance to fragmentation-Los Angeles Method | ELOT EN 1097-2:2020, except Annex A |
| | Determination of particle density and water absorption of aggregates | ELOT EN 1097-6:2022, §8, 9 |
| | Determination of particle shape - Flakiness index | ELOT EN 933-3:2012 |
| | Assessment of fines - Sand equivalent test | ELOT 933-8:2015 |
| Fine aggregates | Sieve analysis of fine aggregates / Amount of passing material | ASTM C136/C136M: 2025, §7.3, 8, 9 |
| | Determination of specific gravity of fine aggregates / Specific gravity | ASTM C128: 2025, §8, 9, 10.2 |
| | Determination of absorption of fine aggregates /Amount of absorbed moisture | ASTM C128: 2025, §8, 9, 10.3 |
| Coarse aggregates | Sieve analysis of coarse aggregates/ Amount of passing material | ASTM C136/C136M: 2025, §7.4, 8, 9 |

| Materials/ Products to be tested | Types of test / Properties to be measured | Applied methods / Techniques to be used |
|---|---|---|
| | Determination of specific gravity of coarse aggregates / Specific gravity | ASTM C127: 2025 |
| | Determination of absorption of coarse aggregates / Amount of absorbed moisture | ASTM C127: 2025 |
| | Determination of air content of freshly mixed concrete by the pressure method/air percent | ASTM C231/C231M: 2026 |
| | Determination of density (unit weight) of concrete / Unit weight | ASTM C138/C138M: 2024 |
| | Testing fresh concrete - Part 2: Slump test | ELOT EN 12350-2:2019 |
| | Testing fresh concrete - Part 7: Air content - Pressure methods | ELOT EN 12350-7:2019 |
| | Testing fresh concrete - Part 6: Density | ELOT 12350-6:2019 |
| Concrete specimens | Making and curing specimens for strength test | ELOT EN 12390-2:2019 |
| | Density of hardened concrete | ELOT EN 12390-7:2020, except §6.5 |
| | Testing hardened concrete - Part 8: Depth of penetration of water under pressure | ELOT EN 12390-8:2020 |
| | Testing concrete Part 122: Method for determination of water absorption | BS 1881-122:2020 |
| Hardened concrete | Testing Concrete – Part 204: Recommendations on the use of electromagnetic converters | BS 1881:204:1988 |
| | Standard Test Method for Rebound Number of Hardened Concrete | ASTM C 805-25 |
| | Standard Test Method for Ultrasonic Pulse Velocity Through Concrete | ASTM C 597-22 |
| | Low Strain Impact Integrity Testing of Deep Foundations | ASTM D 5882-16 (withdrawn without replacement) |
| | Cored specimens – Taking, examining and testing in compression | ELOT EN 12504-1:2020 |
| Bitumen mixtures | Soluble binder content | ELOT EN 12697-1:2020 |
| | Determination of particle size distribution | ELOT EN 12697-2:2025 |
| | Determination of bulk density of bituminous specimens | ELOT EN 12697-6:2020 |
| | Determination of the maximum density | ELOT EN 12697-5:2019 |
| | Determination of void characteristics of bituminous specimens | ELOT EN 12697-8:2018 |

| Materials/ Products to be tested | Types of test / Properties to be measured | Applied methods / Techniques to be used |
|---|---|---|
| Sampling | | |
| Fresh concrete | Sampling of fresh concrete | ΕΛΟΤ EN12350-1:2019 |
| On site Tests | | |
| Soil | Determining the deformation and strength characteristics of soil by the plate loading test | DIN 18134:2012 |
| | Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) | ASTM D 6938-23 |

Site of assessment: **Laboratory permanent premises, 9 Leondariou Str., Kantza, Pallini, Attiki, Greece.**
Approved signatories: **A. Kontou, A. Koukiasa**, **Ch. Stavrogianni.**

This Scope of Accreditation replaces the previous one dated 25.02.2026.
The Accreditation Certificate No. **90**-9, to ELOT EN ISO/IEC 17025:2017, is valid until 02.07.2027.

Athens, 01.09.2026

*Konstantinou Evangelos Apostolos*
*CEO of ESYD*