Hellenic Accreditation System

Annex F1C/4 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 according to the Method "Ministry for the Environment, Physical Planning and Public Works SK-303": 1. Cubes: - 150 X 150 X150 mm - 200 X 200 X200 mm 2. Cylinders: - 100 X 200 mm	Compressive strength test	Specification: HMEPPPW SK-303, SK-304
Concrete specimens with dimensions: Cubes: 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 2850-24
	One dimensional consolidation test	ASTM D 2435-11
	Residual shear strength in ring shear apparatus	ASTM D6467-21e1
	Determination of moisture – density relation (PROCTOR standard method): -Moisture -Density	Specification: HMEPPPW E 105:1986, §10
	Laboratory Compaction Characteristics of Soil Using Standard	ASTM D 698-21

Materials/ Products to be tested	Types of test / Properties to be measured	Applied methods / Techniques to be used
	Effort (12,400 ft-lbf/ft^3 (600 kN-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
	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
	Slake Durability of Shales and Other Similar Weak Rocks	ASTM D4644-16
Physical tests		
Soil	Dry preparation of soil samples	Specification: HMEPPPW* E 105:1986, §1
	Determination of moisture of soil: - Moisture	Specification: HMEPPPW E 105:1986, §2
	Specific gravity of soils/specific gravity	Specification: HMEPPPW E105:1986 §4
	Liquid limit	Specification: HMEPPPW E105:1986 §5
	Determination of plastic limit and plasticity index	Specification: HMEPPPW E105:1986 §6
	Sieve analysis of fine and coarse soils (dry method) / Amount of passing material	Specification: HMEPPPW E105:1986 §7
	Determination of material of soils finer than the No 200 (75μm) sieve / Amount of passing material	Specification: HMEPPPW E105:1986 §8
	Determination of Density of Soil	ASTM D 7263-21 Method B
	Laboratory Determination of Water (Moisture) Content of	ASTM D 2216-19

Materials/ Products to be tested	Types of test / Properties to be measured	Applied methods / Techniques to be used
	Soil and Rock by Mass	
	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
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 ASTM C535: 2016
	Reducing field samples of aggregate to testing size	ASTM C702/C702M:2024 ΕΛΟΤ EN 932-2: 2000 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: 2019, §7.3, 8, 9
	Determination of specific gravity of fine aggregates / Specific gravity	ASTM C128: 2022, §8, 9, 10.2
	Determination of absorption of fine aggregates /Amount of absorbed moisture	ASTM C128: 2022, §8, 9, 10.3
Coarse aggregates	Sieve analysis of coarse aggregates/ Amount of passing material	ASTM C136/C136M: 2019, §7.4, 8, 9
	Determination of specific gravity of coarse aggregates / Specific gravity	Specification: HMEPPPW SK – 301: 1985 §5, 6, 7.1 ASTM C127: 2024
	Determination of absorption of coarse aggregates / Amount of absorbed moisture	Specification: HMEPPPW SK – 301:1985 §5, 6, 7.3 ASTM C127: 2024

Materials/ Products to be tested	Types of test / Properties to be measured	Applied methods / Techniques to be used
Fresh concrete	Slump of concrete / Measure of height of specimen	Specification: HMEPPPW SK – 309:1986
	Determination of air content of freshly mixed concrete by the pressure method/air percent	ASTM C231/C231M: 2024
	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	Preparation and curing of concrete specimens: - Dimensions - Density	Specification: HMEPPPW SK-303:1985
	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 805-18
	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
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. Papathanasiou, A. Kontou, A. Koukiasa**

This Scope of Accreditation replaces the previous one dated 24.01.2025.
The Accreditation Certificate No. **90**-9, to ELOT EN ISO/IEC 17025:2017, is valid until 02.07.2027.

Athens, 23.06.2025

Konstantinou Evangelos Apostolos
CEO of ESYD