Hellenic Accreditation System

Annex F1/B26 to the Certificate No. **64**-7

SCOPE of ACCREDITATION

of the

Testing Laboratories

of the

Materials Industrial Research and Technology Center S.A.
(MIRTEC S.A.)
(Thiva Laboratory)

Materials / Products to be tested	Types of test / Properties to be measured	Harmonized Standard/ Applied methods/ Techniques to be used
Physical tests		
1. Aggregates	1. Tests for mechanical and physical properties – Part 2:Methods for the determination of resistance to fragmentation (Los Angeles test)	ΕΛΟΤ EN 1097-2:2020
	2. Test for mechanical and physical properties – Part 6:Determination of particle density and water absorption.	ELOT EN 1097-6:2022 §7,8,9
	3. Tests for thermal and weathering properties – Part 2:Magnesium sulfate test (test of rock health).	ELOT EN 1367-2:2010 Annex C excluded
2. Adhesives for tiles (cementitious adhesives)	Requirements, evaluation of conformity, classification and designation European Regulation **305/2011/Eε** ELOT EN 12004-1:2017 for cementitious adhesives ELOT EN 12004:2007+A1:2012	
	Adhesives for ceramic tiles Part 2 Test Methods Par. 8.1 Determination of open time	ELOT EN 12004-2:2017 par.8.1 EN 1346 E2:2008
3. Clay materials	1. CO_2 determination with differential thermal gravimetric analysis (TG-DTA)	In house method (Method code LABENV-403)
Mechanical tests		
1. Cement	1. Methods of testing cement – Part 1:Determination of strength	ELOT EN 196-1:2016
	2. Methods of testing cement – Part 3:Determination of	ELOT EN 196-3:2016

Materials / Products to be tested	Types of test / Properties to be measured	Harmonized Standard/ Applied methods/ Techniques to be used
	setting times and soundness	
	3. Methods of testing cement – Part 6:Determination of fineness (Blaine method)	ELOT EN 196-6:2018 §4
2. Aggregates	1. Tests for mechanical and physical properties of aggregates - Part 1:Determination of the resistance to wear (micro-Deval)	ELOT EN 1097-1:2023
3. Concrete	1. Testing hardened concrete - Part 3: Compressive strength of test specimens	EN 12390-3:2019
4. Adhesives for tiles (cementitious adhesives)	Requirements, evaluation of conformity, classification and designation European Regulation **305/2011/EE** ELOT EN 12004-1:2017 for cementitious adhesives ELOT EN 12004:2007+A1:2012	
	1. Adhesives for ceramic tiles Part 2 Test Methods Par. 8.3 Determination of tensile adhesion strength for cementitious adhesives	ELOT EN 12004-2:2017 par.8.3 EN 1348 E2:2008
	2. Adhesives for ceramic tiles Part 2 Test Methods Par.8.2 Determination of slip	ELOT EN 12004-2:2017 par.8.2 EN 1308 E2 :2008
5. Asbestos containing materials(bulk)	Sampling of materials	HSG248 2021 (second edition) :Asbestos the analysts´ guide, Health and Safety Executive, UK 2021
	1. Detection of asbestos fibers.	HSG248:2021 (second edition) :Asbestos the analysts´ guide, Health and Safety Executive, UK 2021
Chemical tests		
1. Cement	1. Methods of testing cement – Part 2:Chemical analysis of cement – Determination of loss on ignition	ELOT EN 196-2:2013 § 4.4.1
	2. Methods of testing cement – Part 2:Chemical analysis of cement – Gravimetric determination of sulfates.	ELOT EN 196-2:2013 § 4.4.2
	3. Methods of testing cement – Part 2:Chemical analysis of cement – Determination of residue insoluble in hydrochloric acid and sodium carbonate.	ELOT EN 196-2:2013 § 4.4.3
	4. Methods of testing cement – Part 2:Chemical analysis of cement – Determination of the chloride.	ELOT EN 196-2:2013 § 4.5.16
2. Materials and articles in contact with foodstuffs	1. Silicate surfaces – Part 1:Determination of the release of lead and cadmium from ceramic ware	ELOT EN 1388-1:1995
3. Water (potable, underground, surface)	1. Determination of chromium (VI) – Photometric method for weakly contaminated water	ELOT EN ISO 18412:2006
	1.Determination of pH	BS EN ISO 10523:2012
	2.Determination of electrical conductivity	EN ISO 27888:1999

Materials / Products to be tested	Types of test / Properties to be measured	Harmonized Standard/ Applied methods/ Techniques to be used
4. Admixtures for concrete, mortar and grout	1. Determination of chlorine content	ELOT EN ISO 1158:1998 (with the modifications included in ELOT EN 934-2:2009 +A1:2012)
	2. Determination of water soluble chloride content (Cl^-)	ELOT EN 480-10 E2:2010
5. Toys	1. Determination of Barium and Manganese	EN 71-3:2019+A1:2021
6.Coal	1. Determination of total moisture	ISO 589:2008 (Method A2)
	2. Determination of volatile matter	ISO 562:2024
7. Coke	1. Determination of moisture in the general analysis test sample	ISO 687:2024
	2. Determination of volatile matter	ISO 562:2024
8. Solid mineral fuels	1 Determination of ash	ISO 1171:2024
	2. Determination of total carbon, hydrogen and nitrogen content -- Instrumental method	ISO 29541:2010
	3. Determination of gross calorific value by the bomb calorimetric method and calculation of net calorific value	ISO 1928:2020
	4. Determination of volatile matter	ISO 562:2024

Site of assessment: **Permanent laboratory premises, 76th km Athens-Lamia National Road, Ritsona, Greece.**
Approved signatories:**Evaggelos Mpakeas, Paraskevi Oikonomou, Georgios Archontis.**

This Scope of Accreditation replaces the previous one dated October 11th, 2022.
The Accreditation Certificate No. **64-8**, to ELOT EN ISO/IEC 17025:**2017**, is valid until 28.02.2026.

Athens, January 09th, 2025

Konstantinou Evangelos Apostolos
CEO of ESYD