

Hellenic Accreditation System S.A.



Annex F1/6 to the Certificate No. **15-4**

SCOPE of ACCREDITATION of the **Testing Laboratory** of the **Hellenic Cement Research Center (EKET)**

Materials / Products to be tested	Types of test / Properties to be measured	Applied methods / Techniques to be used
	Physical tests	
1. Concrete	Test method for slump of hydraulic cement concrete	Nat. Reg. SK 309: 1986
2. Aggregates	Tests for geometrical properties of aggregates – Part 1: Determination of particle size distribution – Sieving method	ELOT EN 933-1: 1998 & ELOT EN 933-1/A1: 2006
	Tests for mechanical and physical properties of aggregates – Part 2: Methods for the determination of resistance to fragmentation (Los Angeles method)	ELOT EN 1097-2: 1998 & ELOT EN 1097-2/A1: 2007
	Tests for thermal and weathering properties of aggregates – Part 2: Magnesium sulfate test	ELOT EN 1367-2: 1999
	Tests for mechanical and physical properties of aggregates – Part 6: Determination of particle density and water absorption	ELOT EN 1097-6: 2000 & ELOT EN 1097-6/A1: 2006
	Tests for geometrical properties of aggregates – Part 8: Assessment of fines – Sand equivalent test	ELOT EN 933-8: 2000

Materials / Products to be tested	Types of test / Properties to be measured	Applied methods / Techniques to be used
3. Cement	Determination of setting time and standard consistence test	ELOT EN 196-3+A1: 2009 §5 & 6
	Determination of fineness (Paragraph 4: Air permability method Blaine)	ELOT EN 196-6: 1994
Mechanical tests		
1. Concrete	Making and curing concrete test specimens in the laboratory and determination of compressive strength of concrete cubic specimens	Nat. Reg. SK 303: 1985, SK 304: 1986
2. Cement	Determination of strength	ELOT EN 196-1: 2005
Chemical tests		
1. Cement	Determination of loss on ignition	ELOT EN 196-2: 2005 § 7
	Determination of residue insoluble in hydrochloric acid and sodium carbonate	ELOT EN 196-2: 2005 § 9
	Gravimetric determination of sulfates	ELOT EN 196-2: 2005 § 8
	Determination of the chlorides	ELOT EN 196-2: 2005 § 14
2. Cement/ Clinker/ Raw Meal	Chemical analysis of cement/clinker/raw meal by X-ray fluorescence (Determination of SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , CaO, MgO, Na ₂ O, K ₂ O)	prEN 196-2.2: 2005
3. Cement/Raw Meal	Determination of carbon dioxide (reference method)	In house method based on European Standard EN 196-2: 2005 (§ 15)
4. Solid mineral fuels	Determination of gross calorific value by the bomb calorimetric method and calculation of net calorific value	ISO 1928: 2009
	Determination of total carbon, hydrogen and nitrogen	ISO/TS 12902: 2001

Site of assessment: **Permanent laboratory premises, 15 K. Pateli Str., Lycovrissi, Attiki, Greece.**
Approved signatories: **Zoe Tsibouki, Vassilios Kaloidas.**

This Scope of Accreditation replaces the previous one dated 19.5.2009.
The Accreditation Certificate No. **15-4**, to ELOT EN ISO/IEC 17025: 2005, is valid until 5.2.2013.

Athens, May 28th, 2010

Prof. Nicolaos D. Stathopoulos
Chairman of ESYD