

ACCREDITATION CERTIFICATE

No. LA.01.029

National accreditation body hereby certifies that

complies with the requirements of

**Building Materials and Structures Research
Centre of Kaunas University of Technology**

LST EN ISO/IEC 17025:2018

legal entity: Kaunas University of Technology
legal entity code: 111950581

and is competent to perform this accredited activity:

testing of aggregates, mortars, concretes, concrete elements for landscaping, concrete and reinforced concrete products, as well as testing of masonry products, natural stone, concrete and reinforced concrete constructions, natural and glued wood constructions, mineral aggregates and cement

The scope of accreditation below is an integral part of this certificate. Locations of the conformity assessment body are specified in the scope of accreditation

Initial accreditation date: **1999-12-01**

Certificate issued / valid since: **2024-11-29**

Version of: **2026-09-21**

Expiry date: **2029-11-28**

Director of the Accreditation Department


TADAS JUODELIS

The certificate may be changed, its validity suspended or withdrawn by the decision of the National accreditation Body. Information on the actual data of accreditation certificates may be verified at lasa.lrv.lt





SCOPE OF ACREDITATION (flexible)*

Building Materials and Structures Research Centre of Kaunas University of Technology, accredited in accordance with
LST EN ISO/IEC 17025:2018

The addresses of the activity locations are provided before specifying the accredited activity carried out at each particular address

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
CONCRETE TECHNOLOGY LABORATORY, Studentų g. 48, Kaunas			
1. Aggregates			
Sand, gravel, crushed stone, mixtures, primers	Sampling	LST EN 932-1	From the bunker, from the piles
	Granulometric composition	LST EN 933-1	Washing and sieving or dry sieving
	Flakiness index	LST EN 933-3	Sieving through bar sieves
	Shape index	LST EN 933-4	Measurement with a special gauge
	Bulk density and voids	LST EN 1097-3, except the Annex A	Weighing method, counting method
	Particle density and water absorption	LST EN 1097-6	Wire basket method for aggregate particles from 31.5 mm to 63 mm; pycnometer method for filler particles from 4 mm to 31.5 mm and for filler particles from 0.063 mm to 4 mm
	Resistance to freezing and thawing (loss of mass)	LST EN 1367-1	Determination of mass loss after cyclic freezing and thawing
	MS value	LST EN 1367-2	Magnesium sulfate method
	Los Angeles coefficient LA	LST EN 1097-2	The Los Angeles Method
	Relative amount of crushed particles	LST EN 933-5	Weighing of selected (sorted) particles
	Number of shells (SC)	LST EN 933-7	By selecting shells and shell fragments from coarse aggregates and determining the mass ratio

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
	Resistance to splitting (Ca)	LST EN 13055, Annex C	Determination of mechanical resistance under compression in a cylinder
	Amount of reactive rocks (copper and flint)	LST 1974, Annex M, M.1 p.	Dissolving reactive rocks in a 10% NaOH solution
	Laboratory test methods to determine density and water content	LST EN 13286-2	Proctor mold (C) with a 15.0 kg hammer (C)
	Water permeability	LST EN ISO 17892-11	Determination with a cylindrical rigid wall permeability meter under conditions of constant hydrostatic pressure
	Resistance to freezing and thawing in the presence of salt (mass loss)	LST EN 1367-6	Determination of mass loss after cyclic freezing and thawing in salt solution
2. Mortars			
Construction mortars and their mixtures (excluding lime)	Sampling and preparation	LST EN 1015-2	Collection of a composite sample and preparation of a composite test sample from it; Production of mortars from dry components and water
		LST EN 934-6	
	Density	LST EN 1015-10	Determining density by measuring dimensions and mass
	Bending and compressive strength	LST EN 1015-11	Bending and/or crushing the specimens until disintegration
		LST EN 12190	
		LST EN 13892-2	
	Freezing resistance (compressive strength and/or change in mass)	LST L 1413.11	Determination of compressive strength and/or mass change after cyclic freezing and thawing
	Adhesion strength	LST EN 1542	Determination of adhesion strength under mechanical loads
		LST EN 1015-12	
	Bulk density	LST EN 1015-6, except 7.2.1 p.	Determining density by measuring dimensions and mass
	Moisture; Water soak	LST 1413 10	Determination of moisture and water absorption during drying
3. Concrete mixtures			
Concrete mixtures	Sampling	LST EN 12350-1	Local and composite sampling
	Fluency	LST EN 12350-2	Evaluation of compacted concrete mix consistency by concrete shrinkage distance after cone removal
	Spread t_{500} duration	LST EN 12350-8	Scatter measurement using a standard cone
	Vebe time	LST EN 12350-3	A method for determining the consistency of a concrete mixture using Vebe time
	Compactibility	LST EN 12350-4	Method for determining the consistency of the concrete mixture by determining compaction
	Emissivity value	LST EN 12350-5	Determination of the consistency of the concrete mixture by measuring the spread of the concrete mixture on a flat slab

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
	Density	LST EN 12350-6	Weighing the compacted concrete mixture in a container of known volume and mass
	Air volume	LST EN 12350-7	Pressure measurement method
	Flow time	LST EN 12350-9	Determining the flow time using a special V-shaped funnel
	Permeability ratio	LST EN 12350-10	Determination of permeability using a special L-shaped box
	Delaminated part	LST EN 12350-11	Determination of resistance to delamination by sieving
	Permeability; Spreading; Flow time	LST EN 12350-12	Determination of permeability, spread and flow time using a special blocking ring
	Setting time	LST EN 480-2	Determination of the binding duration (beginning and end) with the Viko device
	Water separation	LST EN 480-4	Determining the mass of released water
	Fiber content	LST EN 14721	Method B: determination of fiber content in fresh concrete
4. Hardened concrete			
The specimens of hardened concrete	Making and hardening of specimens for strength determination	LST EN 12390-2	Form preparation and filling, concrete compaction, surface leveling, sample hardening and transportation
	Compressive strength	LST EN 12390-3	Crushing of samples until disintegration; Maximum breaking load 3000 kN
	Density	LST EN 12390-7	Determining density by measuring dimensions and mass
	Tensile strength	LST EN 12390-6	Splitting samples to cracking; Maximum breaking load 3000 kN
	Depth of water penetration	LST EN 12390-8	Measurement of water penetration depth after exposure to water pressure
	Waterproof	LST 1974, Annex O	Measurement by increasing water pressure: 0.2; 0.4; 0.6; 0.8; 1.0; 1.2 MPa
	Shrinkage deformations	LST EN 12390-16	Determination of shrinkage deformations under drying conditions
	Coefficient of chloride migration	LST EN 12390-18	Assessment of the increase in sodium chloride
	Freezing resistance	LST 1428-17 SS 13 72 44	Determination of compressive strength and/or mass change after cyclic freezing and thawing
	Adhesion strength	LST EN 12636 LST EN 13892-8	Determining the adhesion of fresh concrete to the surface (glued liner method)
	Water absorption	LST EN 13369, Annex F	Mass estimation by weighing soaked and dried samples to constant mass
	Moisture	LST EN ISO 12570	Estimation of moisture content by change in mass
	Volume loss	LST EN 1338, Annex H	

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
		LST EN 13892-3	Measurement of abrasion (wear resistance) by the Bohme method
	Rebound number	LST EN 12504-2	Determination of rebound index using a sclerometer
	Carbonation depth	LST EN 14630	Phenolphthalein method
	Fiber content	LST EN 14721	Determination of fiber content in hardened concrete
	Resistance to carbonization	LST EN 13295	CO ₂ impact assessment
	Tensile strength in bending	LST EN 14651	Bending of specimens to failure
	Alkaline corrosion	ŠBK-1. Alkaline concrete corrosion determination methodology	Determining and visual assessment of expansion deformations
	Capillary absorption	LST EN 480-5	Determination of water absorption by mass change
	Bending strength	LST EN 12390-5	Bending of specimens to failure
	Freeze-thaw resistance	CEN/TS 12390-9	Determination of mass loss and visual assessment of damage after freeze-thaw cycling. Reference method
5. Cement			
	Setting times	LST EN 196-3, except 7 p.	Determining the duration (beginning and end) of bonding with the Viko device
	Compressive strength	LST EN 196-1	Crushing of specimens until disintegration. Maximum breaking load 600 kN
6. Masonry products			
Ceramic (except refractory), silicate, concrete, autoclaved aerated concrete, natural stone masonry products	Dimensions	LST EN 772-16	Measurement of geometric dimensions
	Capillary water absorption	LST EN 772-11	Measurement of the mass of water absorbed by the surface of aggregate concrete, autoclaved aerated concrete, artificial and natural stone masonry products over a specified period of time
	Initial rate of water absorption	LST EN 772-11	Measurement of the mass of water absorbed by the surface of ceramic masonry products within a specified time
	Compressive strength	LST EN 772-1	Crushing the samples by grinding them or covering them with mortar until disintegration;
	Freezing resistance	LST 1428-17	Determination of compressive strength and/or mass change after cyclic freezing and thawing
7. Concrete elements for landscaping			
Paving blocks, tiles, road and lawn curbs, etc	Sampling	LST EN 1338 Annex B	A random selection of typical products
		LST EN 1339 Annex B	
		LST EN 1340 Annex B	
	Dimensions, visual features	LST EN 1338, Annex C and J	Geometric assessment of dimensions; Visual assessment

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
		LST EN 1339, Annex C and J	
		LST EN 1340, Annex C and J	
	Flexural strength; Breaking load	LST EN 1339, Annex F	Bending of specimens until disintegration; Maximum breaking load 100 kN
		LST EN 1340, Annex F	
	Split tensile strength; Breaking load	LST EN 1338, Annex F	Splitting samples to disintegration; Maximum breaking load 600 kN
	Water absorption	LST EN 1338, Annex E	Mass estimation by weighing soaked and dried samples to constant mass
		LST EN 1339, Annex E	
		LST EN 1340, Annex E	
	Volume loss	LST EN 1338, Annex H	Measurement of abrasion (wear resistance) by the Bohme method
		LST EN 1339, Annex H	
		LST EN 1340, Annex H	
	Freezing resistance	LST 1428-17	Determination of compressive strength and/or mass change after cyclic freezing and thawing
		LST EN 1338, Annex D	
		LST EN 1339, Annex D	
		LST EN 1340, Annex D	
8. Natural stone			
Natural stone	Uniaxial compressive strength	LST EN 1926	Crushing of specimens until disintegration Maximum breaking load 3000 kN
	Water absorption	LST EN 13755	Determination of water absorption at atmospheric pressure
9. Concrete and reinforced concrete products			
Products for the installation of foundations, various panels, beams, trusses, stairs, columns, wells, posts, sleepers	Sampling	LST EN 12350-1	Local and composite sampling
	Sampling	LST EN 12504-1	Sampling (core drilling), core inspection and preparation
	Compressive strength	LST EN 12390-3	Crushing of samples until disintegration; Maximum breaking load 3000 kN
	Freezing resistance	LST 1428-17	Determination of compressive strength and/or mass change after cyclic freezing and thawing
	Depth of water penetration	LST EN 12390-8	Measurement of water penetration depth after exposure to water pressure
	Waterproof	LST 1974, Annex O	Measurement by increasing the water pressure: 0.2; 0.4; 0.6; 0.8; 1.0; 1.2 MPa
	Split tensile strength	LST EN 12390-6	Splitting samples to disintegration; Maximum breaking load 600 kN

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
	Carbonation rate	LST EN 12390-10	Determination of carbonation resistance of concrete at atmospheric carbon dioxide concentration
	Water absorption	LST EN 13369, Annex F	Mass estimation by weighing soaked and dried samples to constant mass
	Density	LST EN 12390-7	Determining density by measuring dimensions and mass
	Volume loss	LST EN 13892-3	Measurement of abrasion (wear resistance) by the Bohme method

CONSTRUCTION RESEARCH LABORATORY, Studentų g. 48, Kaunas

10. Concrete and reinforced concrete constructions

Ceiling and roof panels, multi-purpose columns, stair elements, lintels other than composite and composite lintels, of reinforced concrete sleepers	Dimensions	LST EN 13369, Annex G	Assessment of the geometric parameters of the specimen
	Bending moment test	LST EN 13230-2	Bending moment estimation
	Fatigue test	LST EN 13230-4	Fatigue assessment by wedge

11. Natural and glued wood constructions

Natural and glued wood	Moisture	LST EN 13183-1	Assessment of moisture by drying (up to completely dry sample weight) and electrical resistance measurement method
		LST EN 13183-2	Calculating the ratio of determined mass to volume
	Density	LST EN 408	Calculated ratio using measured mass and volume
	Bending strength	LST EN 408	4-point bending to disintegration

LABORATORY OF POLYMERIC MATERIALS AND COMPOSITES, Radvilėnų pl. 19, Kaunas

12. Mineral aggregates and cement

Sand, gravel, crushed stone, mixtures, primers; cement	Content of sulfate and sulfur	LST EN 1744-1, 10.1 p., 11.1 p., 12 p.	Gravimetry
	Content of chloride	LST EN 1744-1, 7 p.	Volhard method
	Content of alkali	LST EN 196-2, 4.5.19 p.	Flame photometry
	Content of carbon dioxide	LST EN 196-2, 4.5.17 p.	Gravimetry
	Content of of light pollutants	LST EN 1744-1, 14.2 p.	Gravimetry
	Content of organic impurities	LST EN 1744-1, 15.1 p.	Visual method
	Methylene blue indicator	LST EN 933-9	Methylene blue test

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause	Techniques, methods and/or equipment used
------------------------------	---	--	---

* One degree of flexibility is defined and applicable for the whole scope of accreditation:
 1st degree of flexibility - application of the updated documents of test methods already covered by accreditation or superseding them or application of equivalent documents.

Actual accreditation scope is published on the website at <https://saf.ktu.edu/smktc/>

Note. In case of any discrepancies, ambiguities or disputes regarding the subject matter content between the English and Lithuanian versions of the document, the Lithuanian version shall prevail.

The accreditation certificate is signed with a qualified electronic signature as an attachment to the decision of the National accreditation Body, by which it was approved