NACIONALINIS
AKREDITACIJOS BIURAS

Lithuanian National Accreditation Bureau is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (for accreditation of testing, calibration, medical examinations, certification of products, persons and management systems and inspection) and International Accreditation Forum (IAF) Multilateral Recognition Arrangement (for accreditation of product certification, management system certification and certification of persons)

# ACCREDITATION CERTIFICATE
## No. LA.01.031

Lithuanian National Accreditation Bureau hereby certifies that

**Building physics laboratory of**
**Institute of architecture and construction of**
**Kaunas university of technology**

legal entity: Kaunas university of technology
legal entity code: 111950581
and is competent to perform:

complies with requirements of

**LST EN ISO/IEC 17025:2018**

**Testing of physical properties of thermal insulation materials and products, doors and windows; building acoustic, air permeability and illuminance testing; testing of paints, varnishes, primers, sealants and adhesives, roof and floor coverings and products, mortars, impact attenuating surfaces (Table 1 of the scope of accreditation)**

**assessment and verification of constancy of performance of thermal insulation materials and products, windows and doors according to requirements of Regulation (EU) No. 305/2011 of the European Parliament and of the Council (Table 2 of the scope of accreditation)**

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: **2000-04-10**

Certificate issued / valid since: **2025-03-12**
Version of: **2025-03-06**
Expiry date: **2030-03-11**

Director
DALIA BALEŽENTĖ

The certificate may be changed, its validity suspended or withdrawn by the decision of the National Accreditation Bureau.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

NACIONALINIS AKREDITACIJOS BIURAS

Bandymai / tyrimai ISO/IEC 17025

**SCOPE OF ACREDITATION**
(flexible)*

# Building physics laboratory of Institute of architecture and construction of Kaunas university of technology, accredited in accordance with **LST EN ISO/IEC 17025:2018**

Location of the conformity assessment body

**Tunelio str. 60, 44405 Kaunas**

**Table 1**

| 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 |
|---|---|---|---|
| **1. Thermal insulating products for building applications** | Steady-state thermal transmission properties | LST EN ISO 8990 | Hot box method |
| | Thermal conductivity<br>Thermal resistance | LST EN 12667<br>LST EN 12939<br>LST EN 12664 | Heat flow method |
| | Thermal resistance (reflective insulation products) | LST EN ISO 22097<br>LST EN 16863 | Hot box method |
| | Thermal resistance and thermal transmittance | LST EN ISO 6946 | Calculation method (simplified) |
| | Length and width | LST EN ISO 29465<br>LST EN ISO 29768 | Determination of linear dimensions on a flat surface |
| | Thickness | LST EN ISO 29466<br>LST EN ISO 29768 | Determination of linear dimensions on a flat surface |
| | Squareness | LST EN 824 | Determination of deviation from rectangle |
| | Apparent density | LST EN ISO 29470 | Calculation of mass to volume ratio |
| | Long term water absorption by immersion | LST EN ISO 16535 | Determination of mass change by partial or total immersion |
| | Short term water absorption by partial immersion | LST EN ISO 29767, except B method | Determination of mass change by partial immersion and free draining |
| | Organic content (mineral wool only) | LST EN 13820 | Determination of mass loss at high temperature |
| | Tensile strength parallel to faces | LST EN ISO 29766 | Stretching method |
| | Tensile strength perpendicular to faces | LST EN 1607 | Stretching method |
| | Compressive strength | LST EN ISO 29469 except A method | Compression method |

| 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 |
|---|---|---|---|
| | Bending strength | LST EN 12089 | Bending method |
| | Airflow resistance | LST EN ISO 9053-1 | Heat flow method |
| **2. Windows** | Mechanical strength: resistance to vertical load, resistance to static rotation, operating forces | LST EN 14608<br>LST EN 14609<br>LST EN 12046-1<br>LST EN 13115 | Static load method |
| | Load-bearing capacity of safety devices: resistance to static rotation | LST EN 14609<br>LST EN 14351-1, clause 4.8 | Static load method |
| | Resistance to repeated opening and closing | LST EN 1191 (only in according with Annex A Turn-only windows)<br>LST EN 12400<br>LST EN 12046-1<br>LST EN 13115 | Calculation of opening - closing, cycles. Determination of linear dimensions. |
| **3. Doors** | Mechanical strength: resistance to vertical load, resistance to static rotation, resistance to soft and hard body impact, resistance to hard body impact, operating forces | LST EN 947<br>LST EN 948<br>LST EN 949<br>LST EN 950<br>LST EN 1192<br>LST EN 12046-2<br>LST EN 12217 | Static and dynamic loading method |
| | Load-bearing capacity of safety devices: resistance to static rotation | LST EN 948<br>LST EN 14351-1 clause 4.8 | Static load method |
| | Resistance to repeated opening and closing | LST EN 1191 (only in accordance with Annex H for swing doors)<br>LST EN 12400<br>LST EN 12046-2<br>LST EN 12217 | Calculation of opening - closing, cycles. Determination of linear dimensions. |
| **4. Windows and Doors** | Thermal transmittance | LST EN ISO 12567-1<br>LST EN ISO 8990 | Hot box method |
| | Thermal transmittance | LST EN ISO 10077-1<br>LST EN ISO 10077-2, except clause 6.4.2 | Calculation method (except the radiosity method) |
| | Burglar resistance | LST EN 1627 clause 3.3<br>LST EN 1628<br>LST EN 1629<br>LST EN 1630 | Static and dynamic load methods, Manual hacking |
| | Air permeability | LST EN 1026<br>LST EN 12207 | Differential pressure method |
| | Water tightness | LST EN 1027<br>LST EN 12208 | Differential pressure method |
| | Resistance to wind load | LST EN 12211<br>LST EN 12210 | Differential pressure method |
| | Acoustic performance | LST EN ISO 10140-1<br>LST EN ISO 10140-2<br>LST EN ISO 10140-4<br>LST EN ISO 10140-5<br>LST EN ISO 717-1 | Sound pressure level method |

| 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 |
|---|---|---|---|
| **5. Buildings and parts** | The difference in sound levels<br>Normalized sound level difference<br>Standardized difference in sound levels<br>Apparent sound reduction coefficient | LST EN ISO 16283-1<br>LST EN ISO 717-1 | Sound pressure level measurements |
| | Impact sound pressure level<br>Normalized impact sound pressure level<br>Standardized impact sound pressure level | LST EN ISO 16283-2<br>LST EN ISO 717-2 | Sound pressure level measurements |
| | Airborne sound insulation of facade and facade elements | LST EN ISO 16283-3<br>LST EN ISO 717-1 | Sound pressure level measurements |
| | Duration of reverberation in normal rooms | LST EN ISO 3382-2, except clauses 5.3 | Noise reduction curve method |
| | Illuminance in workplaces | HN 98, HN 32<br>SFL-25.01 | Field measurements |
| | Air permeability of buildings | LST EN ISO 9972 | Fan pressurization method |
| | Air permeability of buildings | LST EN 12114 | Fan pressurization method |
| | Tabular design values and declared and design thermal values | LST EN ISO 10456 | Calculation method |
| **6. Paints, varnishes, primers** | | | |
| 6.1 Paints, varnishes and primers | Non-volatile-matter content | LST EN ISO 3251 | Gravimetric method |
| | Drying time | LST EN ISO 9117-3 | Surface-drying test using ballotini |
| | Loss in film thickness | LST EN ISO 11998<br>LST EN 13300 | Wet-scrub resistance Classification |
| | Hiding power | LST EN ISO 6504-3, method A<br>LST EN 13300 | Spectrometric method Classification |
| | Resistance to liquids | LST ISO 2812-1 method A<br>LST EN ISO 2812-2 | Immersion in liquids other than water<br>Water immersion method |
| | The effect of heat | LST EN ISO 3248 | Visual method |
| | Adhesion | LST EN ISO 2409 | Cross-cut test |
| | Film thickness | LST EN ISO 2808 methods 4A, 7B.2<br>LST EN ISO 2178 | By difference in thickness<br>Magnetic-induction principle |
| | Evaluation of degradation of coatings | LST EN ISO 4628-1 | Visual method |
| | Degree of blistering | LST EN ISO 4628-2 | Visual method |
| | Degree of rusting | LST EN ISO 4628-3 | Visual method |
| | Degree of cracking | LST EN ISO 4628-4 | Visual method |
| | Degree of flaking | LST EN ISO 4628-5 | Visual method |
| | Degree of chalking | LST EN ISO 4628-6, except 6.2 | Adhesive tape method |

| 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 |
|---|---|---|---|
| | Degree of chalking | LST EN ISO 4628-7 | Velvet method |
| | Adhesion | LST EN ISO 4624, method B | Pull-off test method |
| | Density | LST EN ISO 2811-1, except 6.b | Pycnometer method |
| 6.2 Polymer concrete floor composites | Non-volatile-matter content | LST EN ISO 3251 | Gravimetric method |
| | Resistance to abrasion | LST EN ISO 7784-2 | Method with abrasive rubber wheels and rotating test specimen |
| | Resistance to liquids | LST EN ISO 2812-1 method A<br>LST EN ISO 2812-2 | Immersion in liquids other than water<br>Water immersion method |
| **7. Sealants and adhesives** | | | |
| 7.1 Sealing mastic | Non-volatile-matter content | LST EN ISO 3251 | Gravimetric method |
| | Drying time | LST EN ISO 9117-3 | Surface-drying test using ballotini |
| 7.2 Polymer dispersions, adhesives | Non-volatile-matter content | LST EN ISO 3251<br>LST EN 827 | Gravimetric method |
| **8. Roof sheets and products** | | | |
| 8.1 Bitumen sheets | Tensile force | LST EN 12311-1 | Tensile test |
| | Elongation | LST EN 12311-1 | Tensile test |
| | Resistance to tearing | LST EN 12310-1 | Nail shank |
| 8.2 Metal corrugated and flat sheets, metal tiles | Film thickness | LST EN ISO 2808 methods 4 A, 7B.2<br>LST EN 13523-1, methods A, C | By difference in thickness<br>Magnetic-induction principle |
| | Adhesion | LST EN ISO 2409 | Cross-cut test |
| | The effect of heat | LST EN ISO 3248 | Visual method |
| | Hardness | LST EN 13523-4 | Pencil hardness |
| | Corrosion tests | LST EN ISO 9227, except 5.2.3, 5.2.4 | Salt spray |
| | Evaluation of degradation of coatings General introduction and designation system | LST EN ISO 4628-1 | Visual method |
| | Degree of blistering | LST EN ISO 4628-2 | Visual method |
| | Degree of rusting | LST EN ISO 4628-3 | Visual method |
| | Degree of cracking | LST EN ISO 4628-4 | Visual method |
| | Degree of flaking | LST EN ISO 4628-5 | Visual method |
| | Degree of chalking | LST EN ISO 4628-6, except 6.2 | Adhesive tape method |
| | Degree of chalking | LST EN ISO 4628-7 | Velvet method |
| | Maximum tensile strength | LST EN 12311-2 | Tensile 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 |
|---|---|---|---|
| 8.3 Flexible sheets for waterproofing | Elongation | LST EN 12311-2 | Tensile test |
| | Resistance to tearing | LST EN 12310-2 | Tensile test |
| | Thickness and mass per unit area | LST EN 1849-2 | Determination of linear dimensions on a flat surface gravimetric method |
| **9. Parquet, parquet boards, floor boards** | Moisture content | LST EN 13183-1 | Gravimetric method |
| **10. Construction mortars** | Tensile bond strength | LST EN 1542 | Pull-off test method |
| **11. Impact attenuating surface** | Critical fall height | LST EN 1177 | Drop test method |

* One degree of flexibility is defined and applicable for the 1st table of scope of accreditation:
- 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://asi.ktu.edu

## Building physics laboratory of Institute of architecture and construction of Kaunas university of technology, accredited in accordance with LST EN ISO/IEC 17025:2018

Location of the conformity assessment body:

**Tunelio str. 60, 44405 Kaunas**

**Table 2**

| Decision | Product family, product /Intended use | AVCP system** | Technical specification |
|---|---|---|---|
| Regulation (EU) No 305/2011 Construction products | | | |
| European Commission Decision No 99/93/EC | Doors and windows | System 3 | EN 14351-1:2006+A2:2016 |
| European Commission Decision No 99/91/EC | Thermal insulation products for buildings | System 3 | EN 13162:2012+A1:2015<br>EN 13163:2012+A1:2015<br>EN 13164:2012+A1:2015<br>EN 13165:2012+A2:2016<br>EN 13166:2012+A2:2016<br>EN 13167:2012+A1:2015 |

** System for evaluating and checking the constancy of operational properties

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 order of the Director of the National Accreditation Bureau, by which it was approved