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Český institut pro akreditaci, o.p.s.
Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. 373/2019

Výzkumný a vývojový ústav dřevařský, Praha, s.p.
with registered office Na Florenci 7-9, č.p. 1685-1686, 111 71 Praha 1, Company Registration
No. 00014125

to the Testing Laboratory No. 1031
Testing Laboratory for Materials and Products

Scope of accreditation:

Testing of wood, products made of wood, windows, doors, floors, adhesives, glued joints, wood-based panels, paints and varnishes for wood and chemical wood preservatives against biotic pest and fire; chemical analyses, testing of air permeability and acoustic properties of buildings; and testing of to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 198/2018 of 17. 4. 2018, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **5. 12. 2021**

Prague: 24. 7. 2019



Jiří Ružička
Director
Czech Accreditation Institute
Public Service Company



**The Appendix is an integral part of
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Testing Laboratory for Materials and Products
Borská 471, 262 72 Březnice

The laboratory has a flexible scope of accreditation permitted as detailed in the Annex.

Updated list of activities provided within the flexible scope of accreditation is available in the laboratory from the Laboratory Manager.

Tests:

Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
1	Wood quality testing		
1.1*	Measurement of defects and biological degrade of wood	ČSN EN 1309	Round and sawn timber
1.2	Reserved		
1.3*	Strength grading of wood	ČSN 73 2824-1	Structural timber
1.4*	Measurement of defects of wood poles	ČSN EN 14229, p. 5.5. and 6	Poles
2	Testing of technical properties of wood		
2.1*	Determination of dimensions	ČSN 49 1010 ČSN EN 13145+A1 ČSN EN 14229, p. 5.5 and 6 ČSN EN 324-1 ČSN EN 324-2 ČSN EN 325 ČSN EN 13647 ČSN 73 0212-5 chap. 1–4	Sawn timber Sleepers Poles Wooden panels Wooden panels Wooden panels Floors, coverings Building components
2.2	Determination of dimensional variations	ČSN EN 318 ČSN EN 1910	Wooden panels Floors, coverings
2.3	Determination of resistance to axial withdrawal of screws	ČSN EN 320	Wooden panels
2.4	Determination of the adhesion of surface layers	ČSN EN 311	Wooden panels
2.5	Determination of the moisture resistance under cyclic test conditions	ČSN EN 321	Wooden panels
2.6	Testing of laminate floor coverings	ČSN EN 13329+A1, Annexes A, B,C,D,E,G	Floors

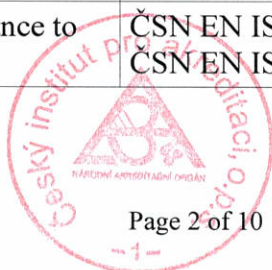


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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
3	Testing of physical properties		
3.1	Determination of moisture content	ČSN EN 13183-1 ČSN 49 0103 ČSN EN 322 ČSN EN 14229, p. 6.8 ISO 16979	Sawn timber Wood Wooden panels Poles Wooden panels
3.2	Determination of density	ČSN 49 0108 ČSN EN 323 ČSN EN 14229, p. 6.8	Wood Wooden panels Poles
3.3	Determination of swelling	ČSN EN 317	Wooden panels
3.4	Determination of resistance to humidity	ČSN EN 1087-1	Wooden panels
4	Testing of mechanical properties		
4.1	Determination of tensile strength	ČSN EN 319	Wooden panels
4.2	Determination of the bending strength and bending modulus of elasticity	ČSN EN 310 ČSN 49 0115 ČSN EN 408+A1, p. 10, 19 ČSN EN 789, p. 6, 7, 11 TP VVÚD 2.13.009 (DIN 1052-1/A1, Annex B) SANS 6122, p. 5.5	Wooden panels Wood, timber Finger joint and wooden panels Wooden panels Finger joint Wood, timber
4.3	Determination of compressive strength perpendicular to the grain	SANS 6122, p. 5.10	Wood, timber
5	Testing of paints, varnishes and coating systems		
5.1	Determination of non-volatile-matter content	ČSN EN ISO 3251	Paints, varnishes and coating systems
5.2	Determination of resistance to liquids	ČSN EN ISO 2812-1 ČSN EN ISO 2812-2	Paints, varnishes and coating systems



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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
5.3	Surface drying test	ČSN EN ISO 9117-3	Paints, varnishes and coating systems
5.4*	Adhesion test	ČSN EN ISO 2409	Paints, varnishes and coating systems
5.5	Pull-off test for adhesion	ČSN EN ISO 4624	Paints, varnishes and coating systems
5.6	Determination of coating thickness	ČSN EN ISO 2808, procedure 1A, 1C, 4A, 4B	Paints, varnishes and coating systems
5.7	Natural weathering test	ČSN EN 927-3	Paints, varnishes and coating systems
5.8	Liquid water permeability test	ČSN EN 927-5	Paints, varnishes and coating systems
5.9	Print-free test	ČSN EN ISO 9117-6	Paints, varnishes and coating systems
5.10	Accelerated weathering test	TP VVÚD 3.64.001	Paints, varnishes and coating systems
6	Testing of adhesives and adhesive-bonded elements		
6.1	Determination of solids content	ČSN EN 827	Glues, adhesives
6.2	Determination of shear strength by compressive loading	TP VVÚD 3.64.003 (ČSN ISO 6238)	Adhesives and adhesive-bonded elements
6.3	Determination of strength of bonded joints	ČSN EN 302-1 ČSN EN 302-2 ČSN EN 302-3 ČSN EN 302-4 ČSN EN 204 ČSN EN 205	Glues, adhesives Glues, adhesives Glues, adhesives Glues, adhesives Glues, adhesives Glues, adhesives
6.4	Determination of the bonding quality	ČSN EN 14080, Annexes B3, C, D ČSN EN 16351, Annex C ČSN EN 314-1 ČSN EN 314-2 TP VVÚD 2.13.011 (ift-Ho-10/1, Annex 4) SANS 10096, Annex B	Glued laminated timber and finger joints Cross laminated timber Wooden panels Wooden panels Glued laminated timber Finger joints

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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
7	Testing of fire properties		
7.1	Modified fire resistance test	TP VVÚD 4.23.001 (ČSN EN 1363-1)	Building products Building materials
8	Testing of wood preservatives and wood protection		
8.1	Testing of effectiveness against moulds	ČSN 49 0604 (p. 67 – 85)	Wood preservatives and protected wood
8.2	Test of resistance to moulds	TP VVÚD 2.83.002 (ČSN 72 4310, ČOS 999905, chap. 5 and 12)	Building products and materials Military equipment
8.3	Determination of the effectiveness against soft rotting micro-fungi and other soil inhabiting micro-organisms	ČSN P ENV 807	Wood preservatives and protected wood
8.4	Determination of toxic values against wood destroying Basidiomycetes	ČSN EN 113	Wood preservatives and protected wood
8.5	Determination of the protective effectiveness against wood destroying Basidiomycetes - Application by surface treatment	ČSN EN 839	Wood preservatives and protected wood
8.6	Assessment of the effectiveness of a masonry fungicide to prevent growth into wood of Dry Rot <i>Serpula lacrymans</i>	TP VVÚD 2.83.014 (ČSN ENV 12 404)	Preservatives
8.7	Determination of the protective effectiveness of a preservative treatment against blue stain	ČSN EN 152	Wood preservatives and protected wood
8.8	Determination of the toxic values against larvae of <i>Hylotrupes bajulus</i> for deep protection	ČSN EN 47	Wood preservatives and protected wood
8.9	Determination of the preventive action against <i>Hylotrupes bajulus</i> for deep protection	ČSN EN 46-1	Wood preservatives and protected wood
8.10	Determination of the relative protective effectiveness of a wood preservative in ground contact	ČSN EN 252	Wood preservatives and protected wood



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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
8.11	Determination of the relative protective effectiveness of a wood preservative in out-of-ground contact	ČSN EN 330	Wood preservatives and protected wood
8.12	Test of extractability of a wood preservative from wood by extraction method	TP VVÚD 2.83.041	Wood preservatives and protected wood
8.13	Determination of corrosion effect of a wood preservative to metals	ČSN 49 0681-1	Preservatives
8.14	Determination of corrosion effect of protected wood to metals	ČSN 49 0681-2	Wood preservatives and protected wood
8.15	Determination of effect of wood preservatives to mechanical properties of wood	TP VVÚD 2.83.045	Wood preservatives and protected wood
8.16	Determination of the preventive action against <i>Hylotrupes bajulus</i> (Linnaeus) – Part 2: Ovicidal effect (Laboratory method)	ČSN EN 46-2	Wood preservatives and protected wood
8.17	Determination of the eradicator action against <i>Hylotrupes bajulus</i> (Linnaeus) larvae – Laboratory method	ČSN EN 1390	Wood preservatives and protected wood
8.18	Paints and varnishes - Laboratory methods for the testing of the efficiency of film preservatives in coating against fungi and moulds	ČSN EN 15457	Wood preservatives and protected wood
8.19	Determination of resistance to moulds on insulation	CUAP 12.01/02cl1 Annex C	Building products and materials
8.20	Accelerated ageing by evaporative procedure	ČSN EN 73	Wood preservatives and protected wood
8.21	Accelerated ageing by leaching procedure	ČSN EN 84	Wood preservatives and protected wood
8.22	Determination of the preventive effectiveness against sapstain fungi and mould fungi on freshly sawn timber - Field test	ČSN P CEN/TS 15082	Wood preservatives and protected wood

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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
8.23	Determination of the effectiveness against sapstain fungi and mould fungi on freshly sawn timber - Laboratory test	TP VVÚD 2.83.053 (NWPC STANDARD 1.4.1.3./79)	Wood preservatives and protected wood
8.24	Determination of emissions from preservative treated wood to the environment	ČSN P CEN/TS 15119-1 ČSN P CEN/TS 15119-2	Wood preservatives and protected wood
9	Testing of windows and balcony doors, doors, frames and gates		
9.1	Measurement of dimensions and squareness deviations	TP VVÚD 5.18.002	Windows and balcony doors
9.2	Air permeability test	ČSN EN 1026	Windows and balcony doors, door leaves
9.3	Test of the resistance to wind load	ČSN EN 12211	Windows and balcony doors, door leaves
9.4	Test of watertightness	ČSN EN 1027 except method 2A and 2B	Windows and balcony doors, door leaves
9.5	Testing of roof windows	TP VVÚD 4.10.001	Roof windows and skylights
9.6	Measurement of height, thickness and squareness	ČSN EN 951	Doors
9.7	Measurement of general and local flatness	ČSN EN 952	Doors
9.8	Testing of inner flush wooden doors	TP VVÚD 4.10.002 (ČSN 74 6402)	Doors
9.9	Determination of resistance to hard body impact	ČSN EN 950	Doors
9.10	Determination of the resistance to static torsion	ČSN EN 948	Hinged or pivoted doors
9.11	Determination of resistance to vertical load	ČSN EN 947	Hinged or pivoted doors
9.12	Air permeability test	ČSN EN 12427	Gates
9.13	Test of the resistance to wind load	ČSN EN 12444	Gates
9.14	Test of watertightness	ČSN EN 12489	Gates
9.15	Test of resistance to soft and heavy body impacts	ČSN EN 949	Doors
9.16	Measurement of operating forces for windows	ČSN EN 12046-1	Windows
9.17	Measurement of operating forces for doors	ČSN EN 12046-2	Doors

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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
9.18	Determination of resistance to racking	ČSN EN 14608	Windows
9.19	Determination of the resistance to static torsion	ČSN EN 14609	Windows
10	Testing of curtain walling		
10.1	Air permeability test	ČSN EN 12153	Curtain walling
10.2	Test of the resistance to wind load	ČSN EN 12179	Curtain walling
10.3	Laboratory test of watertightness under static pressure	ČSN EN 12155	Curtain walling
11	Test of pallets		
11.1	Test of EUR pallets	ČSN 26 9110	European timber flat pallet (800 x 1200) mm
12	Testing of building components of wooden buildings		
12.1*	Measurement of dimensions of building components	ČSN 73 0212-5, cl. 4	Building structures
12.2	Loading tests of building structures	ČSN 73 2030	Building structures
12.3	Static loading tests of building structures	ČSN EN 380	Building structures
12.4	Measurement of resistance of panels and prefabricated panels to impact	TR 001	Building structures
12.5	Determination of strength and rigidity of light beams and poles	TR 002	Beams, poles
13	Testing of physico-chemical properties of preservatives		
13.1	Determination of density	ČSN 65 0342 ČSN EN ISO 2811-1 ČSN 65 8050, p. 8	Aqueous solutions, preservatives
13.2	Determination of pH	TP VVÚD 2.10.006 ČSN ISO 10523+Z1	Aqueous solutions, preservatives
13.3	Determination of parameters of wood preservation oils (distillation fraction, water content, crystallization temperature)	TP VVÚD 2.10.005 (ČSN 65 8050, p. 7,9,10)	Wood preservation oils

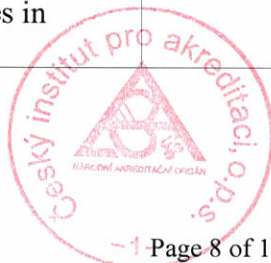


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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
14.	Chemical analytical testing		
14.1	Determination of the content of quarternary ammonium compounds by two-phase titration	ČSN EN ISO 2871-2	Aqueous solutions, preservatives
14.2	Determination of copper content by electrolysis	TP VVÚD 2.62.005, p. 4.2.1 (ČSN 49 0609)	Wood preservatives, protected wood and aqueous solutions
14.3	Determination of copper content by spectrophotometry	TP VVÚD 2.62.005, p. 4.2.3	Wood preservatives, protected wood and aqueous solutions
14.4	Determination of the content of boron by titration	TP VVÚD 2.62.007 (ČSN 49 0609)	Wood preservatives, protected wood
14.5	Determination of the content of tebuconazol by liquid chromatography method with UV detector	TP VVÚD 2.62.013	Preservatives
14.6	Determination of the content of propiconazole by liquid chromatography method with UV detector	TP VVÚD 2.62.014	Preservatives
14.7	Determination of the content of 3-iodoprop-2-ynylbutylcarbamate by liquid chromatography method with UV detector	TP VVÚD 2.62.017	Preservatives
14.8	Determination of the content of flufenoxuron by liquid chromatography method with UV detector	TP VVÚD 2.62.018	Preservatives
14.9	Determination of the content of deltamethrin, permethrin and cypermethrin by liquid chromatography method with UV detector	TP VVÚD 2.62.019	Preservatives
14.10	Determination of the content of tar oil based substances in protected wood	ČSN EN 12490	Protected wood



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Ordinal number ¹	Test procedure/ method name	Test procedure/ method identification ²	Tested object
14.11	Determination of the content of fenoxycarb by liquid chromatography method with UV detector	TP VVÚD 2.62.020	Preservatives
14.12	Determination of the content of quarternary ammonium compounds by two-phase titration	TP VVÚD 2.62.004	Protected wood
14.13	Determination of formaldehyde release by spectrophotometry - Extraction method called the perforator method	ČSN EN ISO 12460-5	Wooden panels
14.14	Determination of formaldehyde release by spectrophotometry - Gas analysis method	ČSN EN ISO 12460-3	Wooden panels Floor coverings Building materials
14.15 ^P	Determination of formaldehyde release - Chamber method	TP VVÚD 2.64.001 (ČSN EN 717-1, ASTM D 6007-14)	Composite wooden boards Wooden panels Floor coverings Building materials
15	Building diagnostic tests		
15.1*	Determination of air permeability of buildings - pressure method	ČSN EN ISO 9972	Construction works

¹ Asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² If the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes).

³ Superscript "P" at the ordinal number identifies tests assessed according to the relevant requirements of 40 CFR Part 770 (Regulation *Formaldehyde Emission Standards for Composite Wood Products* published by the *United States Environmental Protection Agency*, available at <https://www.epa.gov/formaldehyde>.)

Explanations:

ČSN EN ISO	Czech, European, International standards
TP VVÚD	Technical specification of VVÚD
TR xxx	Technical report No. xxx
CUAP	Common Understanding Assessment Procedures
NWPC Standard	Nordic Wood Preservation Council Standard
DIN	German technical standard
Ift-HO	Method designed by ift (institut für Fenstertechnik) Rosenheim
ASTM	Technical standard issued by ASTM (American Society for Testing and Materials)
SANS	South African National Standards
ČOS	Czech Defence Standard

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Annex:

Flexible scope of accreditation

Ordinal numbers of tests
3.1, 3.2, 3.3, 3.4
4.1, 4.2, 4.3
8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, 8.19, 8.20, 8.21, 8.22, 8.23, 8.24
13.1, 13.2, 13.3
14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.11, 14.12, 14.13, 14.14, 14.15

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.

