EA MLA Signatory
Český institut pro akreditaci, o.p.s.
(Czech Accreditation Institute)
Hájkova 2747/22, Žižkov, 130 00 Praha 3

issues

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

CERTIFICATE OF ACCREDITATION

No. **433/2026**

Zkušebna kamene a kameniva, s.r.o.
with registered office Husova 2274, 508 01 Hořice
Company Registration No. 64828042

for the Testing Laboratory No. **1046**
Testing Laboratory

Scope of accreditation:

Testing of properties of stone and aggregate, including sampling, and testing of properties of concrete 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 abovementioned Accredited Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited 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.: 427/2025 of 14/08/2025, and/or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **17/09/2031**

Prague: 17/09/2026

Český institut pro akreditaci, o.p.s. «CAI»

Signed in the Czech original:
Jan Velíšek on 17/09/2026

Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

This translation of the Czech original has been issued by: Andrea Muzikářová

The Appendix is an integral part of
Certificate of Accreditation No. 433/2026 of 17/09/2026

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Zkušebna kamene a kameniva, s.r.o.
CAB number 1046, Testing Laboratory
Husova 2274, 508 01 Hořice

Testing laboratory locations:

1. **TL Hořice** Husova 2274, 508 01 Hořice
2. **TL Branch Bílá Lhota** Bílá Lhota 34, 783 26 Bílá Lhota

The laboratory provides opinions and interpretations of the test results.
The laboratory is qualified to carry out standalone sampling.
Detailed information on activities within the scope of accreditation (determined characteristics and parameters) is given in the section „Specification of the scope of accreditation".

Tests:

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1[1]	Determination of resistance to wear (micro-Deval)	ČSN EN 1097-1	Aggregates	-
2[1]	Determination of resistance to wear (micro-Deval)	ČSN EN 13450, Annex E	Railway ballast	-
3[1,2]	Determination of resistance to fragmentation by Los Angeles test method	ČSN EN 1097-2, chap. 5	Aggregates	-
4[1,2]	Determination of Los Angeles index	ČSN EN 13450, Annex C	Railway ballast	-
5[1]	Determination of resistance to fragmentation by impact fragmentation test method	ČSN EN 1097-2, chap. 6	Aggregates	-
6[1]	Determination of impact fragmentation	ČSN EN 13450, Annex D	Railway ballast	-
7[1,2]	Determination of loose bulk density and voids	ČSN EN 1097-3	Aggregates	-
8[1,2]	Determination of the water content by drying in a ventilated oven	ČSN EN 1097-5	Aggregates	-
9[1,2]	Determination of particle density and water absorption	ČSN EN 1097-6	Aggregates	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
10[1]	Determination of the particle density of filler - Pycnometer method	ČSN EN 1097-7	Aggregates	-
11[1]	Determination of polished stone value	ČSN EN 1097-8	Aggregates	-
12[1,2]	Determination of resistance to freezing and thawing	ČSN EN 1367-1	Aggregates	-
13[1,2]	Determination of resistance to freezing and thawing	ČSN EN 13450, Annex F	Railway ballast	-
14[1]	Determination of thermal and weathering properties – Magnesium sulphate test	ČSN EN 1367-2	Aggregates	-
15[1]	Determination of resistance by magnesium sulphate test	ČSN EN 13450, Annex G	Railway ballast	-
16[1]	Determination of thermal and weathering properties – Boiling test for Sonnenbrand basalt	ČSN EN 1367-3	Aggregates	-
17[1,2]	Determination of lightweight pollutants	ČSN EN 1744-1+A1, chap. 14.2	Aggregates	-
18[1,2]	Determination of content of humus particles	ČSN EN 1744-1+A1, chap. 15.1	Aggregates	-
19[1]	Determination of simplified petrographic description	ČSN EN 932-3	Aggregates	-
20[1,2]	Determination of particle size distribution – Sieving analysis	ČSN EN 933-1	Aggregates	-
21[1,2]	Determination of particle shape - Flakiness index	ČSN EN 933-3	Aggregates	-
22[1,2]	Determination of particle shape - Shape index	ČSN EN 933-4	Aggregates	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
23[1,2]	Determination of percentage of crushed surfaces	ČSN EN 933-5	Aggregates	-
24[1]	Determination of flow coefficient	ČSN EN 933-6, chap. 8	Aggregates	-
25[1]	Determination of shell content - percentage of shells	ČSN EN 933-7	Aggregates	-
26[1,2]	Sand equivalent test	ČSN EN 933-8+A1	Aggregates	-
27[1,2]	Methylene blue test	ČSN EN 933-9	Aggregates	-
28[1]	Test of grading of fillers (air-jet sieving)	ČSN EN 933-10	Aggregates	-
29[1,2]	Determination of dense aggregate durability by accelerated test with sodium sulphate	ČSN 72 1176, chap. II. A	Aggregates	-
30[1,2]	Determination of various aggregate particles	ČSN 72 1180	Aggregates	-
31[1]	Determination of alkali expansivity of natural carbonate rocks for building purposes	ČSN 72 1160	Aggregates, rocks	-
32[1]	Dilatometric test of cement mortar expansion	ČSN 72 1179, chap. B; TP 137, Annex 2	Aggregates	-
33[1,2]	Test of loss by drying	ČSN 72 1187	Aggregates	-
34[1]	Determination of alkaline expansion	TP 137, Annex 1	Aggregates	-
35[1,2]	Determination of angularity of particles	OTP SŽ No. 38992/2020-SŽ-GŘ-013 (3), Annex E	Railway ballast	-
36[1]	Determination of water absorption coefficient by capillarity	ČSN EN 1925	Stone	-
37[1]	Determination of compressive strength	ČSN EN 1926	Stone	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
38[1]	Determination of real density and apparent density and of total and open porosity	ČSN EN 1936	Stone	-
39[1]	Determination of density and water absorption	ČSN EN 14617-1	Artificial stone	-
40[1]	Determination of resistance to frost	ČSN EN 12371	Stone	-
41[1]	Determination of flexural strength under concentrated load	ČSN EN 12372	Stone	-
42[1]	Determination of flexural strength	ČSN EN 14617-2	Artificial stone	-
43[1]	Determination of water content	ČSN EN ISO 17892-1	Soils	-
44[1]	Petrographic examination	ČSN EN 12407	Stone	-
45[1]	Determination of water absorption at atmospheric pressure	ČSN EN 13755	Stone	-
46[1]	Determination of the breaking load at dowel hole	ČSN EN 13364	Stone	-
47[1]	Determination of resistance to ageing by thermal shock	ČSN EN 14066	Stone	-
48[1]	Determination of abrasion resistance	ČSN EN 14157	Stone	-
49[1]	Determination of resistance to ageing by SO2 action in the presence of humidity	ČSN EN 13919	Stone	-
50*[1]	Determination of geometric characteristics on units	ČSN EN 13373	Stone	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
51[1]	Determination of the dynamic elastic modulus of elasticity (by measuring the fundamental resonance frequency)	ČSN EN 14146, chap. 5.2 and 7.2.2	Stone	-
52[1]	Determination of the slip resistance by means of pendulum tester	ČSN EN 14231	Stone	-
53[1]	Petrographic examination	ČSN 72 1153	stone, aggregates	-
54[1]	Determination of weather resistance	ČSN 72 1159	Stone	-
55[1]	Determination of resistance to water and chemical de-icing agents	ČSN 73 1326, chap. III. A	Stone, hardened concrete	-
56[1]	Determination of water absorption due to capillary action and the initial rate of water absorption	ČSN EN 772-11	Hardened concrete, stone, masonry units, concrete masonry units	-
57[1]	Determination of compressive strength of test specimens	ČSN EN 12390-3	Hardened concrete	-
58[1]	Determination of flexural strength of test specimens	ČSN EN 12390-5	Hardened concrete	-
59[1]	Determination of mass per unit volume	ČSN EN 12390-7	Hardened concrete	-
60[1]	Determination of alkali expansivity of carbonate rocks	STN 72 1160	Aggregates, stone	-
61[1]	Determination of resistance to thermal shock	ČSN EN 1367-5	Aggregates	-
62[1]	Determination of particle size distribution of coarse grains	ČSN EN 13383-2, chap. 5	stone, aggregates	-
63*[1]	Determination of mass distribution of lightweight and heavyweight grains	ČSN EN 13383-2, chap. 6	stone, aggregates	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
64*[1]	Determination of ratio of aggregates for water constructional works with length/thickness ratio above 3	ČSN EN 13383-2, chap. 7	stone, aggregates	-
65[1]	Determination of density and water absorption	ČSN EN 13383-2, chap. 8	stone, aggregates	-
66[1]	Determination of resistance to freezing and thawing	ČSN EN 13383-2, chap. 9	stone, aggregates	-
67[1]	Determination of resistance to salt crystallization	ČSN EN 12370	Stone	-
68[1]	Determination of static modulus of elasticity	ČSN EN 14580	Stone	-
69[1]	Determination of compressive strength	ČSN EN 772-1+A1	Masonry units	-
70[1]	Determination of dry density	ČSN EN 772-13	Masonry elements, materials for masonry elements	-
71[1]	Determination of resistance to frost	ČSN EN 14617-5	Artificial stone	-
72[1]	Determination of liquid limit by cone method	ČSN EN ISO 17892-12, chap. 5.3	Soils, aggregates	-
73[1,2]	Determination of plastic limit	ČSN EN ISO 17892-12, chap. 5.5	Soils, aggregates	-
74[1]	Determination of laboratory reference density and water content – Proctor test	ČSN EN 13286-2	Soils, aggregates	-
75[1]	Determination of dimensions	ČSN EN 772-16	Masonry units	-
76[1]	Determination of flatness	ČSN EN 772-20	Masonry units	-
77[1]	Determination of rupture energy	ČSN EN 14158	Stone	-
78[1]	Determination of expansion of steel-furnace slag	ČSN EN 1744-1+A1, chap. 19.3	Artificial stone	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
79[1]	Determination of resistance to freezing and thawing in the presence of salt (NaCl)	ČSN EN 1367-6	Aggregates	-
80[1]	Determination of the resistance to wear by abrasion from studded tyres - Nordic test	ČSN EN 1097-9	Aggregates	-
81[1]	Classification test for the constituents	ČSN EN 933-11	Coarse recycled aggregate	-
82[1]	Delta ring and ball test	ČSN EN 13179-1	Filler aggregates used in bituminous mixtures	-
83[1]	Determination of density, apparent density and of total and open porosity	ČSN EN 772-4	Natural stone masonry units	-
84[1]	Determination of sensitivity to changes in appearance produced by thermal cycles	ČSN EN 16140	Stone	-
85[1]	Determination of bitumen number	ČSN EN 13179-2	Filler aggregates used in bituminous mixtures	-
86[1]	Determination of drying shrinkage	ČSN EN 1367-4	Aggregates	-
87[1]	Determination of California bearing ratio, immediate bearing index and linear swelling	ČSN EN 13286-47	Soils, aggregates	-
88[1]	Determination of the signs of disaggregation of “Sonnenbrand” and steel-furnace slag	ČSN EN 13383-2, chap. 10	Aggregates, steel-furnace slag	-
89[1,2]	Determination of water solubility of filler	ČSN EN 1744-1+A1, chap. 16.2	Aggregates	-
90[1]	Determination of silicate disintegration of air-cooled blast-furnace slag	ČSN EN 1744-1+A1, chap. 19.1	Blast-furnace slag	-
91[1]	Determination of iron disintegration of air-cooled blast-furnace slag	ČSN EN 1744-1+A1, chap. 19.2	Blast-furnace slag	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
92[1]	Determination of alkali expansivity – Dilatometric test	STN 72 1179, chap. 7	Aggregates	-
93[1]	Determination of the influence of recycled aggregate extract on the initial setting time of cement	ČSN EN 1744-6	Aggregates	-
94[1]	Determination of loss of ignition of Municipal Incinerator Bottom Ash Aggregate (MIBA Aggregate)	ČSN EN 1744-7	Aggregates	-
95[1]	Sorting test to determine metal content of Municipal Incinerator Bottom Ash Aggregate (MIBA Aggregate)	ČSN EN 1744-8	Aggregates	-
96[1]	Determination of disintegration of blast-furnace slag aggregates - autoclave test	TP 268, Annex 6	Aggregates	-
97[1]	Determination of particle density	ČSN EN ISO 17892-3	Soils	-
98[1]	Determination of particle size distribution – combined method	ČSN EN ISO 17892-4, except cl. 4.5 and 5.4	Soils	-
99[1]	Determination of dimensional and geometric parameters	ČSN EN 12326-2, chap. 5, 6, 7, 8, 9	Slate	-
100[1]	Determination of sound speed propagation	ČSN EN 14579	Stone	-
101[1]	Determination of linear thermal expansion coefficient	ČSN EN 14581, Method A	Stone	-
102[1]	Determination of abrasion resistance	ČSN EN 14617-4	Artificial stone	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
103[1]	Determination of dimensional stability	ČSN EN 14617-12	Artificial stone	-
104[1]	Determination of dimensions, geometric characteristics and surface quality of modular tiles	ČSN EN 14617-16	Artificial stone	-
105[1]	Determination of the affinity between aggregate and bitumen by rolling bottle method	ČSN EN 12697-11, chap. 5	Aggregates	-
106[2]	Determination of aggregate-alkali reactivity by chemical testing	ČSN 72 1179, chap. A	Aggregates	-
107[1]	Determination of adhesion of bituminous binder to aggregate	ČSN 73 6161	Aggregates	-
108[2]	Determination of aggregate-alkali reactivity by chemical testing	STN 72 1179, chap. 6	Aggregates	
109[1]	Determination of resistance to freezing and thawing	ČSN EN 1367-7	Lightweight aggregates	-
110[1]	Determination of resistance to disintegration	ČSN EN 1367-8	Lightweight aggregates	-
111[1]	Determination of compressibility and compressive strength	ČSN EN 1097-11	Lightweight aggregates	-
112[1]	Determination of the voids of dry compacted filler	ČSN EN 1097-4	Aggregates	-
113[1]	Verification of the presence of reactive iron sulphide particles	ČSN EN 1744-1+A1, chap. 14.1	Aggregates	-
114[1]	Determination of fulvic acid content	ČSN EN 1744-1+A1, chap. 15.2	Aggregates	-
115[1]	Determination of solubility of aggregates in water, except filler	ČSN EN 1744-1+A1, chap. 16.1	Aggregates	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
116[1]	Determination of working index	Test procedure No. 07 (Manual: Technologie úpravy kameniva, authors: Ing. Hynek Čep and Ing. Renáta Špírková, Prague, May 1997)	Aggregates	-
117[1]	Determination of relative density of non-cohesive soils	ČSN 72 1018	Soils, aggregates	-
118[1]	Determination of permeability at a constant gradient	ČSN EN ISO 17892-11	Soils, aggregates	-
119[1]	Determination of abrasiveness	Test Procedure No. 08 (ON 72 1184, March 1991)	Aggregates	-
120[1]	Corrosion resistance test	DIN 52008, chap. 4.4.9.2.2	Stone	-
121[1]	Determination of slip resistance of pedestrian surfaces under simulated conditions of use	ČSN EN 16165, except Annex D	Stone	-
122[1]	Determination of water suction height	ČSN EN 1097-10	Aggregates	-
123[2]	Determination of water-soluble chloride salts by Volhard method	ČSN EN 1744-1+A1, chap. 7	Aggregates	-
124[1,2]	Determination of water-soluble chloride salts by potentiometry	ČSN EN 1744-1+A1, chap. 8	Aggregates	-
125[1,2]	Determination of water-soluble sulphate	ČSN EN 1744-1+A1, chap. 10	Aggregates	-
126[1,2]	Determination of total sulphur content	ČSN EN 1744-1+A1, chap. 11	Aggregates	-
127[1,2]	Determination of acid-soluble sulphate	ČSN EN 1744-1+A1, chap. 12	Aggregates	-
128[1,2]	Determination of loss on ignition	ČSN EN 1744-1+A1, chap. 17	Aggregates	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
129[1]	Determination of the modulus of rupture	ČSN EN 12326-2, chap. 10	Slate	-
130[1]	Determination of physical characteristics	ČSN EN 12326-2, chap. 11, 12, 14, 15	Slate	-
131[1]	Determination of petrographic characteristics	ČSN EN 12326-2, chap. 16	Slate	-

[1] asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises; the numerical index at the test ordinal number identifies the location carrying out the test (the identification of the locations is given on the first page of this document)

[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 valid edition of the specified procedure is used (including any changes)

[3] the laboratory does not apply a flexible approach to the scope of accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined characteristics and parameters)
99[1]	Parameters: length, width, thickness, dimensional tolerances, squareness, edge straightness, flatness
130[1]	Characteristics: water absorption, frost resistance, resistance to sulfur dioxide, resistance to temperature changes

Sampling:

Ordinal number[2]	Sampling procedure name	Sampling procedure identification[1]	Subject of sampling
1[1,2]	Sampling including the reduction of laboratory samples of aggregates	ČSN EN 932-1; ČSN EN 932-2	Aggregates
2[1,2]	Stone sampling	ČSN 72 1152	Natural building stone
3[1]	Sampling for alkali-aggregate reaction	TP 137, chap. 6.3	Aggregates
4[1,2]	Sampling of aggregates for water constructional works	ČSN EN 13383-2, chap. 4	Stone, aggregates
5[1]	Sampling - Rough blocks	ČSN EN 1467, Annex A	Rough-cut stone blocks
6[1]	Sampling - Rough slabs	ČSN EN 1468, Annex A	Rough-cut stone slabs

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Ordinal number[2]	Sampling procedure name	Sampling procedure identification[1]	Subject of sampling
7[1]	Sampling - Slabs for cladding	ČSN EN 1469 ed. 2, chap. 5.2	Stone cladding slabs
8[1]	Sampling - Thin slabs	ČSN EN 12057 ed. 2, chap. 5.2	Thin stone slabs
9[1]	Sampling - Slabs for floors and stairs	ČSN EN 12058 ed. 2, chap. 5.2	Stone slabs for floors and stairs
10[1]	Sampling - Dimensional stone work	ČSN EN 12059+A1, Annex A	Dimensional stone work
11[1]	Sampling - Manufactured stone masonry units	ČSN EN 771-5+A1, Annex A	Manufactured stone masonry units
12[1]	Sampling - Natural stone masonry units	ČSN EN 771- 6+A1, Annex A	Natural stone masonry units

[1] if the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

[2] superscript at the sampling ordinal number identifies the number of the location carrying out the sampling (the locations are identified on the first page of the document)

Explanatory notes:
TS - Technical Specifications
OTP SŽ - General Specifications of Správa železnic, state organization
TP - Technical conditions of the Czech Ministry of Transport and Communications
DIN - German technical standard

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."