

| Determination/activity | | Standard or guideline | Accepted time needed | Quantity needed/predescribed number of samples form standard |
|------------------------|---|----------------------------------|----------------------|--|
| 1 | Analysis of clay, additives and solutions | | | |
| | General: Sample preparation and removal contribution (per sample) | | | |
| 1.1. | Physical analyses | | | |
| 1.1.1. | Moisture content and/or density | TCKI method | 3 weekdays | 150 g |
| 1.1.2. | Particle size distribution | | | |
| | • Clay analysis: Loam, course sand, fine sand (<10, 63-250 resp. >250 µm) | TCKI method | 1 weekday | 150 g |
| | • 2 µm | TCKI method | 2 weeks | 150 g |
| | • 16 µm | TCKI method | 2 weeks | 150 g |
| | • 45 en 125 µm | TCKI method | 2 weeks | 150 g |
| | • Total granular (2, 10, 16, 45, 63, 125, 250 µm) | TCKI method | 2 weeks | 500 g |
| | • Granular-curve (laser diffraction) | - | 2 weeks | 150 g |
| | • Sieve analysis, 8 fractions (0.045 - 4 mm) | TCKI method | 1 week | 500 g |
| | • Particale size distribution sand gutter material, 6 fractions (1 to 5.6 mm) | TCKI method | 1 week | 500 g |
| 1.1.3. | Seperation of solid particles | TCKI method | 2 weeks | 3000 g |
| 1.1.4. | Separation of heavy minerals (for iron ore analysis) | TCKI method | 2 weeks | 1000 g |
| 1.1.5. | Specific surface area | TCKI method | 2 weeks | 100 g |
| 1.1.6. | Specific surface according to Blaine, including pycnometer density | EN 196-6 | 2 weeks | 100 g |
| 1.1.7. | Pore size distribution (Mercury porosimetry) | DIN 66133 | 2 weeks | 100 g |
| 1.1.8. | Consistency stability according Pfefferkorn | TCKI method | 2 weeks | 1000 g |
| 1.1.9. | Plasticity index according to Atterberg | Std. RAW determinations: test 14 | 2 weeks | 1000 g |
| 1.1.10. | Moisture conductivity coefficient (k-value) | TCKI method | 2 weeks | 1000 g |



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| 1.1.11. Total porosity (hydrostatic weighing) | TCKI method | 2 weeks | 250 g |
| 1.1.12.a Determination of the viscosity (reference measurement) | TCKI method | 3 weeks | 3 l |
| 1.1.12.b Determination of the viscosity (repeat measurement) | TCKI method | 1 week | 1.5 l |
| 1.2. Chemical analysis | | | |
| 1.2.1. Iron and calcium (XRF), digestion included | TCKI method | 1 weekday | 100 g |
| 1.2.2. Manganese, titanium, chromium, barium, iron and calcium (XRF), digestion included | TCKI method | 1 weekday | 100 g |
| 1.2.3. Loss on ignition, 1025 °C | TCKI method | 1 week | 100 g |
| 1.2.4. Chemical composition Si, Al, Ca, Fe, Mg, K, Na, Mn, Ti, Cr, Ba, P, Co, Cu, Mo, Ni, Pb, Sn, Sr, V, Zn and Zr (XRF), loss on ignition 1025 °C and digestion included | EN 15309 | 1 week | 100 g |
| 1.2.5. Element scan X-ray fluorescence | TCKI method | 1 week | - |
| 1.2.6. Small spot Analysis (XRF) | TCKI method | 1 week | - |
| 1.2.7. Reduced iron (Fe ²⁺) and total iron in solids (spectrophotometry), digestion included | ISO 14719, method A | 1 week | 100 g |
| 1.2.8. Electron microscopy-element scan (SEM, EDX) | - | 2 weeks | - |
| 1.2.9. Leaching: Shaken test for water soluble salts in dried clay (element determinations excluded) | TCKI method | 1 week | 250 g |
| 1.2.10.a Packet water-soluble salts; S, Ca, K, Na, Mg and electrical conductivity of the eluate, preparation excluded (ICP-OES and potentiometry) | NEN 6966 and ISO 7888 | 2 weeks | 250 g |
| 1.2.10.b Water-soluble SO ₄ , (ICP-OES), preparation excluded | NEN 6966 | 2 weeks | 250 g |

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| 1.2.11.a Element analysis, ICP-OES/ICP-MS (per element; V, Mo, As, Ba, Ni, Cu, Pb, Zn, Co, Cr, Cd, Ca) | AP04-E (Different numbers) | 1 week | 100 g/100 ml |
| 1.2.11.b Element analysis, ICP-OES-hydride/ICP-MS Sb, Sn, Se and Hg (per element) | AP04-E (various numbers) Hg: if measured with ICP-OES: equivalent to NEN 7324 | 1 week | 100 g/100 ml |
| 1.2.11.c Other elemental analysis ICP-OES | NEN 6966 | 2 weeks | 100 g/100 ml |
| 1.2.11.d Element analysis AP04-package (Hg excluded) (V, Mo, As, Ba, Ni, Cu, Pb, Zn, Co, Cr, Cd, Sb, Sn, Se, Br, F, Cl ,SO ₄ , pH, conduction) | AP-04E (various numbers) | 3 weeks | 200 ml |
| 1.2.12.a Element analysis ICP-OES (per element V, Mo, As, Ba, Ni, Cu, Pb, Zn, Co, Cr, Cd, Ca, K, Mg, Na) | NEN 6966 | 1 week | 100 g/100 ml |
| 1.2.12.b Element analysis ICP-OES (per element Sb, Sn, Se en Hg) | NEN 6966 Hg: TCKI methode | 1 week | 100 g/100 ml |
| 1.2.13. Microwave digestion | TCKI method | 1 week | 100 g |
| 1.2.14. Digestion with aqua regia | TCKI method | 1 week | 200 g/100 ml |
| 1.2.15.a Sulphur in clay or fired material (ICP-OES), digestion included | TCKI method | 1 week | 100 g/100 ml |
| 1.2.15.b Sulphur (ICP) digestion excluded | TCKI method | 1 week | 100 ml |
| 1.2.16.a Fluorine (potentiometry ISE), AP04 | AP-04-E-XVIII and NEN 6578 | 2 weeks | 100 ml |
| 1.2.16.b Fluorine (potentiometry ISE), wash bottles | Equivalent to ISO 15713 | 2 weeks | 100 ml |
| 1.2.17. Fluorine in raw materials or ceramics, digestion included (potentiometry ISE) | NEN 3106 and NEN 6578 | 1 week | 100 g |
| 1.2.18. Chlorine (potentiometry) | TCKI method | 1 week | 250 ml |
| 1.2.19. CaO-bound CO ₂ (Volumetry) | TCKI method | 1 week | 100 g |
| 1.2.20. Organic Carbon (Infra red) | TCKI method | 1 weekday | 100 g |

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| 1.2.21. Total Carbon (Infra red) | TCKI method | 2 weekdays | 100 g |
| 1.2.22.a Electrical conductivity of an eluate (potentiometry) | ISO 7888 | 1 week | 100 ml |
| 1.2.22.b pH of an aqueous solution (potentiometry) | EN-ISO 10523 | 1 week | 200 ml |
| 1.2.22.c Combination of pH and the electrical conductivity of a liquid (diffusion test) | ISO 7888, EN-ISO 10523, AP04-4-IV and AP04-4-V | 1 week | 200 ml |
| 1.2.23. SO_4^{2-} (ion-chromatography) | AP04-E-XVII | 1 week | 100 ml |
| 1.2.24. Cl^- (ion-chromatography) | EN-ISO 10304, AP04-E-XVII, equivalent to and conforming EN 1911 | 2 weeks | 100 ml |
| 1.2.25. NO_3^- , PO_4^{3-} (ion-chromatography) | TCKI method | 1 week | 100 ml |
| 1.2.26. Cr^{6+} (ion-chromatography) | TCKI method | 1 week | 100 ml |
| 1.2.27. Br^- (ion-chromatography) | EN-ISO 10304-1, AP04-E-XVII | 1 week | 100 ml |
| 1.2.28. SO_x , bubbler bottles (ion-chromatography) | Equivalent to EN 14791; conforming to (H_2O and H_2O_2) | 2 weeks | 250 ml |
| 1.3. Thermal analysis | | | |
| 1.3.1.a Dilatometry, molded product; 1 °C/ min. up to 1200 °C | TCKI method | 2 weeks | 100 g |
| 1.3.1.b Dilatometry, clay powder; 1°C/min. up to 1200 °C | TCKI method | 3 weeks | 300 g |
| 1.3.1.c Dilatometry, molded product; > 24 hours, program curve | TCKI method | 2 weeks | 100 g |
| 1.3.1.d Dilatometry, clay powder; > 24 hours, program curve | TCKI method | 3 weeks | 300 g |
| 1.3.1.e Dilatometry; expansion-coefficient, up to 750 °C | TCKI method | 1 week | 100 g |

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| 1.3.1.f | Dilatometry; linear thermal expansion up to 100 °C | ISO 10545-8 | 1 week | 100 g |
| 1.3.1.g | Dilatometry; 10 °C/min. to 550 °C, cooling down to room temperature (moisture expansion measurement) | TCKI method | 2 weeks | 100 g |
| 1.3.1.h | Preparation of glaze stick for expansion coefficient measurement | TCKI method | 1 week | 100 g |
| 1.3.1.i | Stress measurement; 1 °C/ min. up to 1200 °C | TCKI method | 2 weeks | Flat testpiece |
| 1.3.1.k | Flex measurement; >2 hours, program curve | TCKI method | 2 weeks | 100 g |
| 1.3.1.j | Flex measurement; < 2 hours, program curve | TCKI method | 2 weeks | 100 g |
| 1.3.2. | TGA/DSC (Thermogravimetric Analysis/Differential Scanning Calorimetry) | TCKI method | 2 weeks | 100 g |
| 1.3.3.a | Firing test; electric furnace, 0-24 h | TCKI method | 2 weeks | - |
| 1.3.3.b | Firing test; electric furnace, 24-48 h | TCKI method | 2 weeks | - |
| 1.3.4.a | Firing test; gas fired kiln (oxidizing or reducing atmosphere), 0-24 h | TCKI method | 2 weeks | - |
| 1.3.4.b | Firing test; gas fired kiln (oxidizing or reducing atmosphere), 24-48 h | TCKI method | 2 weeks | - |
| 1.3.4.c | Firing test; gas fired kiln (oxidizing or reducing atmosphere), >48 h | TCKI method | 2 weeks | - |
| 1.4. | Mineralogical analysis | | | |
| 1.4.1. | Qualitative (semi-quantitative) mineralogical composition (XRD) | TCKI method | 2 weeks | 10 g |
| 1.4.2. | Qualitative (semi-quantitative) clay mineral composition, (XRD) | TCKI method | 5 weeks | 100 g |

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| 1.5. | Hydrophobic agent analyses | | | |
| 1.5.1. | Impregnation to investigate the hydrophobic agents | BRL 1154 | 6 weeks | 10 l |
| 1.5.2. | Penetration depth of the hydrophobic agent, per product per surface | BRL 1154 | 6 weeks | 5 l |
| 1.5.3. | Resistance against water absorption under low pressure, per product per subsoil, Carsten tube | BRL 1154 | 6 weeks | 5 l |
| 1.5.4. | Water pressure resistance after artificial ageing, 3 products | BRL 1154 | 12 weeks | 5 l |
| 1.5.5. | Appearance and colour hydrophobic agent | TCKI method | 1 week | 1.5 l |
| 1.5.6. | Determination of water vapour permeability, including impregnation (per brick type) | EN-ISO 12572 | 12 weeks | 10 l |
| 1.5.7. | Determination of the active part of hydrophobic agent by drying | BRL 1154 | 3 weeks | 0.5 l |
| 1.5.8. | Determination of the active part in hydrophobic agents by complete hydrolysis | BRL 1154 | 2 weeks | 0.5 l |
| 1.5.9. | Determination of pH (indicator paper) of water based hydrophobic agent | TCKI method | 1 week | 100 ml |
| 1.5.10. | Density Pykno meter | EN-ISO 2811-1 | 2 weeks | 1 l |
| 1.5.11.a | Chemical composition of the active content(s) (FTIR) | TCKI method | 2 weeks | 0.5 l |
| 1.5.11.b | (Control of) chemical composition of the active content(s) of hydrophobic agent (FTIR) | TCKI method | 2 weeks | 0.5 l |

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| 2 | Analysis of products and materials | | | |
| | <i>Assessment is only possible after testing of the number of products prescribed by the standard.</i> | | | |
| | Prices are based on tests per product, unless stated otherwise. | | | |
| 2.1. | Dimensions, geometry and appearance | | | |
| 2.1.1.a | Dimensions/curvature; clay masonry bricks, per stretcher | EN 772-16 | 1 week | 10 units |
| 2.1.1.b | Face sizes, stretcher; clay masonry bricks, per header | BRL 1007, Annex 2B | 1 week | 10 units |
| 2.1.1.c | Face sizes, header; clay masonry bricks | BRL 1007, Annex 2B | 1 week | 10 units |
| 2.1.2. | Determination of the flatness of the surfaces; masonry bricks | EN 772-20 | 1 week | 3 units |
| 2.1.3. | Rectangularity of shape; clay masonry bricks | NBN B24-207 | 1 week | - |
| 2.1.4. | Combined thickness of Webs and shells (always in combination with dimensions following 2.1.1.a); perforated masonry bricks | EN 772-16 | 1 week | 10 units |
| 2.1.5. | Plane parallelism of the bed faces; masonry bricks | EN 772-16 | 1 week | 3 units |
| 2.1.6. | Damage masonry bricks | BRL 1007, Annex B | 2 weeks | 50 units |
| 2.1.7. | Dimensions; clay roof tiles | EN 1024 | 1 week | 10 units |
| 2.1.8.a | Overlap dimensions; clay roof tiles (price based on 24 units) | EN 1024 and BRL 1510 | 1 week | 24 units |
| 2.1.8.b | Overlap dimensions; clay roof tiles and fittings (price based on 12 units) | EN 1024 and BRL 1510 | 1 week | 12 units |
| 2.1.9. | Camber and twist; clay roof tiles | EN 1024 and BRL 1510 | 1 week | 10 units |
| 2.1.10. | Damage roof tiles | EN 1304 and BRL 1510 | 2 weeks | 100 units |
| 2.1.11.a | Dimensions; clay pavers | EN 1344 | 1 week | 10 units |

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| 2.1.11.b Curvature; clay pavers (per face) | BRL 2360, Annex I | 1 week | 20 units |
| 2.1.11.c Header/stretcher proportion; clay pavers (always in combination with dimensions according to 2.1.11.a) | TCKI method | 1 week | 10 units |
| 2.1.12. Geometric properties natural stone | EN 13373 | | - |
| 2.1.13.a Geometric properties; square wall and floor tiles, up to 60 x 60 cm, including thickness | EN-ISO 10545-2 | 1 week | 10 units |
| 2.1.13.b Geometric properties; square wall and floor tiles, up to 60 x 60 cm, excluding thickness | EN-ISO 10545-2 | 1 week | 10 units |
| 2.1.13.c Geometric properties; rectangular wall and floor tiles, with a maximum length of 60 cm, including thickness | EN-ISO 10545-2 | 1 week | 10 units |
| 2.1.13.d Geometric properties; rectangular wall and floor tiles, with a maximum length of 60 cm, excluding thickness | EN-ISO 10545-2 | 1 week | 10 units |
| 2.1.14.a Geometric properties; square wall and floor tiles, >60 x 60 cm up to 1.60 x 1.60 cm, including thickness | EN-ISO 10545-2 | 2 weeks | 10 units |
| 2.1.14.b Geometric properties; square wall and floor tiles, >60 x 60 cm up to 1.60 x 1.60 cm, excluding thickness | EN-ISO 10545-2 | 2 weeks | 10 units |
| 2.1.14.c Geometric properties; rectangular wall and floor tiles, with a maximum length >60 cm and length up to 1.60 cm, including thickness | EN-ISO 10545-2 | 2 weeks | 10 units |
| 2.1.14.d Geometric properties; rectangular wall and floor tiles, with a maximum length >60 cm and length of 1.60 cm, excluding thickness | EN-ISO 10545-2 | 2 weeks | 10 units |
| 2.1.15 Surface quality; wall and floor tiles (price based on 30 units) | EN-ISO 10545-2 | 1 week | 30 units |
| 2.2. Mechanical properties | | | |
| 2.2.1. Compressive strength; masonry bricks | EN 772-1 | 2 weeks | 10 units |

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| 2.2.2. | Splitting tensile strength; masonry bricks | EN 1996-1-1 and C1/NB | 2 weeks | 6 units |
| 2.2.3. | Flexural strength; mansony stone | EN 1996-1-1 and C1/NB | 2 weeks | 6 units |
| 2.2.4. | Flexural strength; clay roof tiles | EN 538 | 2 weeks | 10 units |
| 2.2.5. | Flexural strength; concrete roof tiles | EN 491 | 2 weeks | 3 units |
| 2.2.6. | Transverse breaking load and modulus of rupture; clay pavers | EN 1344 | 2 weeks | 10 units |
| 2.2.7. | Resistance to deep abrasion (small wheel); clay pavers and unglazed tiles | EN 1344 and EN-ISO 10545-6 | 2 weeks | 5 units |
| 2.2.8. | Compressive strength; natural stone | EN 1926 | 2 weeks | 10 units |
| 2.2.9. | Flexural strength; natural stone | EN 12372 | 2 weeks | 10 units |
| 2.2.10. | Abrasion resistance; natural stone (broad wheel) | EN 14157 | 2 weeks | 6 units |
| 2.2.11. | Impact resistance, natural stone (price per 6 units) | EN 14158 | 2 weeks | 6 units |
| 2.2.12. | Resistance to surface abrasion; glazed tiles price based on 11 + 8 units | EN-ISO 10545-7 | 2 weeks | 11 + 8 units |
| 2.2.13. | Modules of rupture and breaking strength; ceramic tiles | EN-ISO 10545-4 | 2 weeks | 5 - 10 unit |
| 2.2.14. | Impact resistance; ceramic tiles (price per 5 units) | EN-ISO 10545-5 | 2 weeks | 5 units |
| 2.2.15. | Resistance to thermal shock; unglazed tiles, entire immersion | EN-ISO 10545-9 | 2 weeks | 5 tiles |
| 2.2.16. | Resistance to thermal shock; glazed tiles, without immersion | EN-ISO 10545-9 | 2 weeks | 5 units |
| 2.2.17. | Splitting tensile strength; concrete paving block | EN 1338 | 2 weeks | 8 units |
| 2.2.18. | Abrasion resistance (broad wheel); concrete blocks/-paving flags/-kerbs | EN 1338, EN 1339 | 2 weeks | 5 units |
| 2.2.19. | Bending strength concrete paving flags/-kerbs | EN 1339 | 2 weeks | 8 untis |

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| 2.2.20. Bending strength green (unfired) brick | TCKI method | 1 week | - |
| 2.2.21. 4-Point flex test; masonry elements, excluding preparation | EN 1052-2 | 2 weeks | 5 units masonry |
| 2.2.22.a Adhesive strength of surface material/layer, per measurement position, including drilling | EN 1015-12 | 2 weeks | 5 positons |
| 2.2.22.b Adhesive strength of an entire strip, per measurement position, exclusive sawing | TCKI method, BRL 1330 | 2 weeks | 1 panel |
| 2.2.22.c Bond strength adhesives bond cement-bound tile adhesive, per position, including preparation | EN 12004-2/EN 1348 | 8 weeks | 1 type of glue, 10 draw plates |
| 2.2.23. Shear strength for tile adhesive, per measuring position including preparation | EN 12004-2 | 6 weeks | 1 type of glue, 10 draw plates |
| 2.2.24. Shear and deformation dispersion adhesive for tiles, per measuring position including preparation | BRL 1011 | 6 weeks | 1 type of glue, 10 draw plates |
| 2.2.25.a Aging by heat and cooling dispersion adhesives (price per set) (for determination of the shear strength) | EN 12004-2 | 8 weeks | 1 set (10 units) |
| 2.2.25.b Aging after water immersion (price per set) (for determination of the shear strength) | EN 12004-2 | 6 weeks | 1 set (10 units) |
| 2.2.25.c Aging by heat and measuring of elevated temperature (for determination of the shear strength) (price per set) | EN 12004-2 | 8 weeks | 1 set (10 units) |
| 2.2.26. Resistance to thermal shock 70 °C, testpanel (max. dimensions 650 x 450 x 90 mm. Max. weight 60 kg) (price per panel) | TCKI method, BRL 1330 | 4 weeks | 1 panel |
| 2.2.27. Static point load; raised access floors | EN 12825 | 2 weeks | 1 unit |
| 2.2.28. Hard body impact; raised floors | EN 12825 | 2 weeks | 1 unit |
| 2.2.29. Scratch hardness of a surface according to Mohs | EN 101 | 2 weeks | 3 units |

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| 2.2.30. Adhesive strength of mortar to masonry bricks by a cross test (excluding preparation) | ASTM C952-12, BRL 1004 | 2 weeks | 10 units |
| 2.2.31. Determination of initial shear strength of horizontal mortar joints in masonry | EN 1052-3 | 6 weeks | 6 units |
| 2.2.32. Splitting and/or compressive strength of mortars and cements (excluding preparation) | EN 196-1, EN 1015-11 | 4 weeks | 10000 g |
| 2.2.33. Pendulum impact test vertical building elements and glazing (sand bag/dual wheel impactor) | ISO 7892, BS 8298-1, EN 12600, ISO 29584 | 4 weeks | 2 m ² |
| 2.2.34. Determination of secant modulus of elasticity in compression | EN 12390-13 | 2 weeks | 1 unit |
| 2.2.35. Determination the dynamic Young's modulus (resonance frequency) | EN 14146, ASTM E1876-15 | 4 weeks | 1 panel |
| 2.3. Mechanical properties; slip and skid | | | |
| 2.3.1.a Skid and slip resistance, paving and flooring materials | EN 1344, EN 16165 Annex C, CEN/TS 16165 Annex C, EN 1338, EN 1339, EN 1340, EN 1341, EN 1342, EN 1343 EN 14231, EN 13036-4, NPR CEN/TS 15676, EN 14904/ EN 13036-4, BS 7976-1, 2 and 3 | 2 weeks | 3 - 6 units |
| 2.3.1.b Skid and slip resistance, after polishing; paving and flooring materials | CEN/TS 12633 (Polishing method) | 2 weeks | 5 units |
| 2.3.1.c Skid and slip resistance, after additional polishing; paving and flooring | TCKI method | 2 weeks | 5 units |
| 2.3.2. Skid and slip resistance properties of floorings, ramp-walking method | EN 16165 Annex A and Annex B, CEN/TS 16165 Annex A en Annex B, DIN 51130, DIN 51097, EN 13451-1, EN 13845 | 2 weeks | 50 x 100 cm |



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| 2.3.3. | Dynamic friction coefficient floor materials, GMG 200, per surface, per contamination | EN 16165 Annex D, CEN/TS 16165 Annex D, DIN 51131, EN 14041, EN 13893, NEN 7909 | 2 weeks | 100 x 100 cm |
| 2.4. | Physical/hygric properties | | | |
| 2.4.1. | Free or forced water absorption, gross and net dry density; clay masonry bricks and clay pavers. | EN 772-21, 772-3 and 772-13 | 2 weeks | 10 units |
| 2.4.2. | Perforation volume of 'frog' or voids; masonry bricks | EN 772-9 | 2 weeks | 10 units |
| 2.4.3. | Initial rate of water absorption; clay masonry bricks | EN 772-11 | 2 weeks | 10 units |
| 2.4.4. | Water absorption by boiling in water; masonry bricks | EN 772-7 | 2 weeks | 10 units |
| 2.4.5. | Water impermeability; clay roof tiles | EN 539-1, method 2 and BRL 1510 | 2 weeks | 10 units |
| 2.4.6. | Progressive water absorption, roof tiles | TCKI method | 2 weeks | - |
| 2.4.7. | Water absorption natural stone bij at atmospheric pressure | EN 13755 | 2 weeks | - |
| 2.4.8. | Density, apparent density, total and open porosity natural stone | EN 1935 | 2 weeks | 6 units |
| 2.4.9. | Water absorption, aparent porosity, apparent relative density, and bulk density; ceramic tiles | EN-ISO 10545-3 | 2 weeks | 5 - 12 units |
| 2.4.10. | Crazing resistance; glazed ceramics tiles, without conditioning (by heat treatment) | EN-ISO 10545-11 | 2 weeks | 5 units |
| 2.4.11. | Sensitivity to moisture expansion, ceramic tiles (price per 5 units) | EN-ISO 10545-10 | 2 weeks | 5 units |
| 2.4.12. | Light and colour fastness; ceramic tiles (price per 5 units) | DIN 51094 | 6 weeks | 5 units |
| 2.4.13. | Hygric change in length and shrinkage of concrete stone | EN 772-14 | 6 weeks | 6 units |

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| 2.4.14.a Colour, gloss and (sun)light absorption/reflection of a surface | ASTM C609-07 | 2 weeks | 5 units |
| 2.4.14.b Sunlight absorption coefficient | ASTM C609-07 | 2 weeks | 5 units |
| 2.4.15. Optical condition of surfaces, pores and structures(microscopy) | TCKI method | 1-4 weeks | 1 unit |
| 2.4.16. Pore size distribution (Hg prosimetry): see 1.1.7. | TCKI method | | |
| 2.4.17. Water vapor permeability of a building material | EN-ISO 12572 | 8 weeks | 5 units |
| 2.5. Freeze-thaw and hygrothermal behaviour | | | |
| 2.5.1. Freeze-thaw resistance; clay masonry bricks/test panel (maximum dimensions 650x450x90 mm, max. weight 60 kg) (price per panel) | EN 772-22 | 10 weeks | 20 units |
| 2.5.2. Freeze-thaw resistance; clay roof tiles (price per 6 units) | EN 539-2 | 10 weeks | 6 units |
| 2.5.3. Freeze-thaw resistance; clay pavers (price per 10 units) | EN 1344 | 10 weeks | 10 units |
| 2.5.4. Freeze-thaw resistance; ceramic tiles (price per 10 units) | EN-ISO 10545-12 | 10 weeks | 10 units |
| 2.5.5. Freeze-thaw resistance; natural stone | EN 12371 | 10 weeks | 7 units |
| 2.5.6. Freeze-thaw resistance with de-icing salts; concrete blocks/tile (price per 3 units) | EN 1338, EN 1339 | 10 weeks | 3 units |
| 2.5.7. Freeze-thaw resistance; concrete bricks (price per 4 units) | BRL 1007 from 2010 and NEN 2872 | 10 weeks | 4 units |
| 2.5.8. Freeze-thaw resistance; calcium silicate masonry units (price per 6 units) | EN 772-18 | 10 weeks | 6 units |
| 2.5.9. Determination of hygrothermal behavior of strips of stone bonded to a surface | NEN-EN 16383 | - | 1 test panel |

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| 2.6. Chemical or environmental-hygienic properties | | | |
| 2.6.1. 'Active' water-soluble salts (Na, K, Mg, Ca, sulphate and electrical conductivity), shaking test included; clay masonry bricks (price per 10 units) | EN 772-5 (Na, K, Mg), NEN 6966 (Ca, SO ₄) and ISO 7888 (conduction) | 4 weeks | 10 units |
| 2.6.2. Efflorescence; clay masonry bricks; only in combination with dimensions according to 2.1.1.a (price for 1 set of 6 units) | NBN B24-209 | 3 weeks | - |
| 2.6.3. Acid resistance; clay pavers (price per 5 units) | EN 1344 | 2 weeks | 5 units |
| 2.6.4.a Pb and Cd release; consumer pottery and ceramic tiles (price per unit) | EN 1388-1/EN-ISO 10545-15 | 2 weeks | - |
| 2.6.4.b Pb and Cd release; consumer pottery and ceramic tiles (price per 3-4 units) | EN 1388-1/EN-ISO 10545-15 | 2 weeks | 3 - 4 units |
| 2.6.5. Chemical resistance; ceramic tiles (price per 3 units) | EN-ISO 10545-13 | 2 weeks | 3 units |
| 2.6.6. Resistance to staining; ceramic tiles (price per 5 units) | EN-ISO 10545-14 | 2 weeks | 5 units |
| 2.6.7. Leaching behaviour, building materials (granules), availability test, element analysis excluded (price per 3 units) | NEN 7371 | 4 weeks | 3 units |
| 2.6.8.a Leaching behaviour, monolithic building materials, tank test, element analysis excluded and excluded pH and conduction (price per 3 units) | NEN 7375/AP04-U-II, CEN/TS 166737-2 | 12 weeks | 3 units |
| 2.6.8.b Leaching behaviour, monolithic building materials, short tank test, element analysis, and pH conductivity excluded (price per 3 units) | BRL 52230 | 3 weeks | 3 units |
| 2.6.9. Leaching behaviour, granular materials, tank test, element analysis excluded and excluded pH and conduction | NEN 7347 | 12 weeks | 2000 g |
| 2.6.10.a Leaching behaviour, granulated building materials, column test, element analysis excluded, and pH conductivity excluded | NEN 7373, CEN/TS 16637-3, DIN 19528 | 10 weeks | 2000 g |
| 2.6.10.b Leaching behaviour, granulated building materials, short column test, element analysis excluded, and pH conductivity excluded | NEN 7383 | 10 weeks | 2000 g |

| Determination/activity | Standard or guideline | Accepted time needed | Quantity needed/predescribed number of samples form standard |
|---|-----------------------|----------------------|--|
| 2.6.11. Leach: Shake test stomach acid pH 1.5, excluding elemental analysis and excl. PH and conductivity | TCKI method | 1 week | 1000 g |
| 2.6.12. Determination of resistance to chemical corrosion glazes | ISO 28706-2 | 4 weeks | 4 units |

| Determination/activity | | Standard or guideline | Accepted time needed | Quantity needed/preprescribed number of samples form standard |
|------------------------|--|---|----------------------|---|
| 3 | Miscellaneous | | | |
| 3.1. | Binder in mortar | TCKI method | 2 weeks | 150 g |
| 3.2. | Preparation of wash bottles for (flue) gas (emission) measurements | NEN 2819, EN 14791 or EN 1911, CEN/TS 15675 | - | - |