



## STS Directory

## Accreditation number: STS 0021

International standard: ISO/IEC 17025:2017  
Swiss standard: SN EN ISO/IEC 17025:2018

LPM AG  
Labor für Prüfung und  
Materialtechnologie  
Tannenweg 10  
5712 Beinwil am See

Head: Ruedi Herren  
Responsible for MS: Stefan Stiehl  
Telephone: +41 62 771 55 55  
E-Mail: admin@lpm.ch  
Internet: www.lpm.ch  
Initial accreditation: 21.05.1993  
Current accreditation: 21.08.2022 to 20.08.2027  
Scope of accreditation see: www.sas.admin.ch (Accredited bodies)

### Scope of accreditation as of 21.08.2022

#### Testing laboratory for concrete, mortar, aggregates, natural stones, plastic, reinforcing steel, surface protection/repair

| Group of products or materials, field of activity  | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test) | Test methods, remarks (national, international standards, in-house test methods)                                 |
|--|--|--|
| Various tests with multiple applications: building materials, buildings, water, wood, plastics, etc. | Wear test using the grinding wheel according to Böhme                                    | DIN 52108  |
|  | Determination of abrasion, abrasive disk method (Taber)                                  | DIN 53754  |
|  | Determination of water tightness of pipe lining systems                                  | DWA-A 143-3: Sanierung von Entwässerungssystemen ausserhalb von Gebäuden. Teil 3: Vor Ort härtende Schlauchliner |
|  | Determination of soluble salts content according to norm                                 | In-house procedure, SOP 517  |
|  | Determination of the sulfate content - total content                                     | In-house procedure, SOP 514  |



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity  | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)  | Test methods, remarks (national, international standards, in-house test methods) |
|--|---|--|
| Various tests with multiple applications: building materials, buildings, water, wood, plastics, etc. | Determination by ion chromatography IC of ammonium, calcium, potassium, magnesium and sodium content  | In-house procedure, SOP 513.3  |
|  | Determination by ion chromatography IC of chloride, nitrite, nitrate and sulfate content  | In-house procedure, SOP 513.2  |
|  | Microscopic examination (textural analysis on thin section)   | In-house procedure, SOP 300, 301, 303  |
|  | Sampling, testing and assessing the suitability of water, including water recovered from processes in the concrete industry, as mixing water for concrete | SN EN 1008 resp. SIA 162.157   |
|  | Determination of wear resistance-Bohme - Methods of test for screed materials   | SN EN 13892-3 resp. SIA 252.005  |
|  | Determination of ignition loss according to norm: Determination of the textile-glass and mineral-filler content; calcination methods (plastics)           | SN EN ISO 1172   |
|  | Determination of moisture content by drying at elevated temperature; Hygrothermal performance of building materials and products                          | SN EN ISO 12570 resp. SIA 180.214  |
|  | Hygrothermal performance of building materials and products - Determination of hygroscopic sorption properties  | SN EN ISO 12571 resp. SIA 180.215  |
|  | Determination of flexural properties (plastics)   | SN EN ISO 178  |
|  | Determination of tensile properties (plastics)  | SN EN ISO 527  |
| (Hardened) concrete  | Determination of pull-off (tension) strength  | DIN 1048, repealed standard, Teil 2  |
|  | Pore analysis and characterization  | In-house procedure, SOP 104  |
|  | Determination of the porosity   | In-house procedure, SOP 100.1  |
|  | Determination of the depth of penetration of water under pressure on cored specimens  | In-house procedure, SOP 117.2  |

1) Scope of accreditation type A (fix)

2) Scope of accreditation type B (flexible)

3) Scope of accreditation type C (flexible)

Definition of flexibility see SAS Document 741



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)  | Test methods, remarks (national, international standards, in-house test methods)  |
|---|---|---|
| (Hardened) concrete                               | <p>Pore analysis, spacing factor according to norm: Determination of air void characteristics in hardened concrete; Admixtures for concrete, mortar and grout. Test methods</p> <p>Determination of water infiltration rate</p> <p>Determination of the resistance to chlorides</p> <p>Determination of the Freeze-thaw resistance</p> <p>Determination of the resistance to sulfates</p> <p>Determination of resistance to carbonation</p> <p>Determination of shrinkage</p> <p>Determination of the flexural tensile strength according to norm: Betondecken</p> <p>Diagnostic determination of the Freeze-thaw resistance BE I FT according to norm: Betondecken - Prüfmethode zur Bestimmung des Frost- und Frostaumittelwiderstands</p> <p>Diagnostic determination of the Freeze-thaw resistance BE I F of the Freeze resistance according to norm: Betondecken - Prüfmethode zur Bestimmung des Frost- und Frostaumittelwiderstands</p> <p>Physical determination of the Freeze-thaw resistance BE II FT according to norm: Betondecken - Prüfmethode zur Bestimmung des Frost- und Frostaumittelwiderstands</p> | <p>In-house procedure, SOP 200</p> <p>SIA 262/1 appendix A resp. SN 505 262/1</p> <p>SIA 262/1 appendix B resp. SN 505 262/1</p> <p>SIA 262/1 appendix C resp. SN 505 262/1</p> <p>SIA 262/1 appendix D resp. SN 505 262/1</p> <p>SIA 262/1 appendix I resp. SN 505 262/1</p> <p>SIA 262/1:2019 Anhang F resp. SN 505 262/1, ungültige Norm</p> <p>SN 640 461</p> <p>SN 640 464</p> <p>SN 640 464</p> <p>SN 640 464</p> |



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)  | Test methods, remarks (national, international standards, in-house test methods) |
|---|---|--|
| (Hardened) concrete                               | Physical determination of the Freeze-thaw resistance BE II F of the Freeze resistance according to norm: Betondecken - Prüfmethoden zur Bestimmung des Frost- und Frosttaumittelwiderstands | SN 640 464   |
|   | Determination of secant modulus of elasticity in compression  | SN EN 12390-13 resp. SIA 262.263   |
|   | Determination of the shrinkage of concrete  | SN EN 12390-16 resp. SIA 262.266   |
|   | Making and curing specimens for strength tests  | SN EN 12390-2 resp. SIA 262.252  |
|   | Compressive Strength of test specimens  | SN EN 12390-3 resp. SIA 262.253  |
|   | Determination of flexural strength of test specimens  | SN EN 12390-5 resp. SIA 262.255  |
|   | Determination of Tensile splitting strength of test specimens   | SN EN 12390-6 resp. SIA 262.256  |
|   | Determination of the depth of penetration of water under pressure   | SN EN 12390-8 resp. SIA 262.258  |
|   | Determination of resistance to carbonation - Products and systems for the protection and repair of concrete structures  | SN EN 13295 resp. SIA 262.466  |
|   | Determination of chloride content in hardened concrete - Products and systems for the protection and repair of concrete structures  | SN EN 14629 resp. SIA 262.496  |
| Cement  | Determination of Strength (flexural strength)   | SN EN 196-1 resp. SIA 215.011  |
|   | Determination of Strength (compressive strength)  | SN EN 196-1 resp. SIA 215.011  |
| Mortar (for masonry)                              | Determination of flexural and compressive strength of hardened mortar   | SN EN 1015-11 resp. SIA 177.161  |
|   | Determination of water-soluble chloride content of fresh mortars - mortar for masonry   | SN EN 1015-17 resp. SIA 177.167  |

1) Scope of accreditation type A (fix)

2) Scope of accreditation type B (flexible)

3) Scope of accreditation type C (flexible)

Definition of flexibility see SAS Document 741



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)  | Test methods, remarks (national, international standards, in-house test methods) |
|---|---|--|
| Fresh concrete and mortar                         | Determination of the water content of freshly mixed concrete  | SIA 262/1 appendix H resp. SN 505 262/1  |
|   | Sampling fresh concrete   | SN EN 12350-1 resp. SIA 262.231  |
|   | Slump test  | SN EN 12350-2 resp. SIA 262.232  |
|   | Determination of degree of compactability   | SN EN 12350-4 resp. SIA 262.234  |
|   | Flow table test   | SN EN 12350-5 resp. SIA 262.235  |
|   | Determination of Density  | SN EN 12350-6 resp. SIA 262.236  |
|   | Determination of air content; Pressure methods  | SN EN 12350-7 resp. SIA 262.237  |
|   | Slump-flow test (Self- compacting concrete)   | SN EN 12350-8 resp. SIA 262.238  |
| Concrete structures and elements                  | Taking, examining and testing in compression cored specimens of concrete in structures  | SN EN 12504-1 resp. SIA 262.213  |
|   | Determination of resistance of capillary absorption - Products and systems for the protection and repair of concrete structures                                   | SN EN 13057 resp. SIA 162.463  |
|   | Determination of carbonation depth in hardened concrete by the phenolphthalein method - Products and systems for the protection and repair of concrete structures | SN EN 14630 resp. SIA 262.495  |
|   | Tensile testing according to norm: Test methods of reinforcing bar, wire rod and wire   | SN EN ISO 15630-1 resp. SIA 162.021  |
| Concrete and mortar: in situ tests                | Measurement of the pull-off strength of finished screeds  | SIA 251 resp. SN 567 251, chap. 6.4  |
|   | Measurement of the pull-off strength of floor coverings   | SIA 252 resp. SN 567 252   |
|   | Methods of test for screed materials - Part 8: Determination of bond strength   | SN EN 13892-8 resp. SIA 252.010  |



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity  | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)   | Test methods, remarks (national, international standards, in-house test methods) |
|--|--|--|
| Concrete and mortar: in situ tests<br><br>Protection and coating systems, coating materials, paints, impregnations, hydrophobics | Measurement of bond strength by pull-off   | SN EN 1542 resp. SIA 162.421   |
|  | Determination of the water absorption coefficient according to norm: Determination and classification of liquid-water transmission rate (permeability) of coating materials and coating system | In-house procedure, SOP 101  |
|  | Determination of liquid water permeability of paints and varnishes - Coating materials and coating systems for exterior masonry and concrete   | SN EN 1062-3   |
|  | Determination of carbon dioxide permeability   | SN EN 1062-6   |
|  | Determination of crack bridging properties   | SN EN 1062-7   |
|  | Determination of compressive strength of repair mortar (Products and systems for the protection and repair of concrete structures)   | SN EN 12190 resp. SIA 162.450  |
|  | Determination of shrinkage and expansion   | SN EN 12617-4 resp. SIA 162.459  |
|  | Determination of modulus of elasticity in compression (Products and systems for the protection and repair of concrete structures)  | SN EN 13412 resp. SIA 262.468  |
|  | Determination of thermal compatibility - Part 1: Freeze-thaw cycling with de-icing salt immersion  | SN EN 13687-1 resp. SIA 162.471  |
|  | Determination of thermal compatibility - Part 2: Thunder-shower cycling (thermal shock)  | SN EN 13687-2 resp. SIA 162.472  |
|  | Measurement of bond strength by pull-off   | SN EN 1542 resp. SIA 162.421   |
|  | Measurement of coating thickness. Microscopical method   | SN EN ISO 1463   |
| Cross-cut test (Paints and varnishes)  | SN EN ISO 2409   |  |

1) Scope of accreditation type A (fix)

2) Scope of accreditation type B (flexible)

3) Scope of accreditation type C (flexible)

Definition of flexibility see SAS Document 741



## STS Directory

## Accreditation number: STS 0021

| Group of products or materials, field of activity   | Principle of measurement <sup>2)</sup> (characteristics, measuring ranges, type of test)                               | Test methods, remarks (national, international standards, in-house test methods) |
|---|--|--|
| Protection and coating systems, coating materials, paints, impregnations, hydrophobics<br><br>(Mineral-) aggregates, sand, gravel, coarse aggregates, crushed stones, filler, unbound materials, etc. | Determination of water-vapour transmission properties - Cup method - Paints and varnishes                              | SN EN ISO 7783   |
|   | Determination of loose bulk density and voids of aggregates  | SN EN 1097-3 resp.<br>SN 670 903-3   |
|   | Determination of particle density and water absorption of aggregates   | SN EN 1097-6 resp.<br>SN 670 903-6   |
|   | Determination of particle size distribution of aggregates - Sieving Method   | SN EN 933-1 resp.<br>SN 670 902-1  |
|   | Tests for geometrical properties of aggregates - Classification test for the constituents of coarse recycled aggregate | SN EN 933-11 resp.<br>SN 670 902-11  |
| Rocks, natural stones   | Determination of Particle Shape of aggregates - Flakiness Index  | SN EN 933-3 resp.<br>SN 670 902-3  |
|   | Determination of flexural strength under concentrated load   | SN EN 12372 resp.<br>SIA 246.206   |

\* / \* / \* / \* / \*