PROFICIENCY TESTING PLAN

ZČB2027/2 – Fresh Concrete Testing - Czechia (Holubice)

Poskytovatel zkoušení způsobilosti při SZK FAST
Veveří 95, 602 00 Brno
Czech Republic

www.szk.fce.vutbr.cz
www.ptprovider.cz

Coordinator	Assoc. Prof. Ing. Tomáš Vymazal, Ph.D.	Approved: November 23, 2026
Supervisor	Ing. Petr Misák, Ph.D.	Approved: November 23, 2026
Approved for PT Provider	Assoc. Prof. Ing. Tomáš Vymazal, Ph.D.	Approved: November 23, 2026

Contents

1 Basic Information about the Proficiency Testing Program 2
2 Implementation of the Proficiency Testing Program 2
2.1 Specifications and Characteristics 2
2.2 Ensuring Homogeneity and Stability 4
2.3 Instructions for Eliminating Major Sources of Errors and Risks 4
3 Procedures used in the Statistical Analysis of Laboratory Results 5
4 Certificate of Participation and the Final Report on the Results of Interlaboratory Comparison 5
5 Safeguards for Confidentiality 5
6 Related Documents 5

1 Basic Information about the Proficiency Testing Program

The aim of the Proficiency Testing Program (PTP) is to compare and evaluate the results of tests conducted on fresh concrete in compliance with selected parts of ČSN EN 12350-2 [1], ČSN EN 12350-4 [2], ČSN EN 12350-5 [3], ČSN EN 12350-6 [4], ČSN EN 12350-7 [5], ČSN EN 12350-8 [6], ČSN EN 12350-9 [7], ČSN EN 12350-10 [8], ČSN EN 12350-11 [9] and ČSN EN 12350-12 [10].

The program strives to provide objective information about the measuring skills of PTP participants. The basic criterion for participation is timely registration for the program. The basic criterion for obtaining the Certificate of Participation and the Final Report on the Results of Interlaboratory Comparison is timely payment of the fee.

Venue: ZAPA beton a.s., Holubice, 683 51 Holubice u Brna, Czech Republic

Location: https://g.page/ZAPA-Holubice?share

Start: 9:00

Important dates:

Registration deadline:	**September 20, 2027**
Distribution of samples:	**September 23, 2027**
Realization/initiation of testing:	**September 23, 2027**
Results sent to the organizer:	**October 1, 2027**
Presentation of the Certificate of Participation:	**November 30, 2027**

Submission of test results takes place exclusively via the MyPT customer zone at https://ptprovider.cz/zona. Results are entered by the laboratory after signing in to their account, in the section of the respective programme.

2 Implementation of the Proficiency Testing Program

2.1 Specifications and Characteristics

Applications for this PTP are accepted from testing laboratories and other interested entities. The minimum number of participants in each part of the program is 5. If the number of participants approaches the minimum, the coordinator will consider using Horn's procedure to determine the assigned value and its uncertainty when evaluating the PTP results. The maximum number of participants is 30. If the minimum number of participants is not reached, the PT Provider reserves the right to cancel the PTP. In such a case, the procedure follows Chapter 3 of the "Cancellation and Complaint Proceedings" instructions [11], available at www.ptprovider.cz.

The program is implemented for the following characteristics:

ZCB01 ČSN EN 12350-2 [1]

- Characteristics: Slump test
- Units: mm

- Specification according to EN 206 [12]: S3 – S4
- Number of determinations: 3

ZCB02 ČSN EN 12350-4 [2]

- Characteristics: Degree of compactability
- Units: -
- Specification according to EN 206 [12]: C1 – C2
- Number of determinations: 3

ZCB03 ČSN EN 12350-5 [3]

- Characteristics: Flow table test
- Units: mm
- Specification according to EN 206 [12]: F3 – F4
- Number of determinations: 3

ZCB04 ČSN EN 12350-6 [4]

- Characteristics: Density
- Units: kg/m³
- Specification according to EN 206 [12]: 2000 - 2600
- Number of determinations: 3

ZCB05 ČSN EN 12350-7 [5]

- Characteristics: Air content
- Units: %
- Specification according to EN 206 [12]: 5 ± 4
- Number of determinations: 3

ZCB06 ČSN EN 12350-8 [6]

- Characteristics: Slump-flow test
- Units: mm
- Specification according to EN 206 [12]: SF2
- Number of determinations: 3

ZCB07 ČSN EN 12350-9 [7]

- Characteristics: V-funnel test
- Units: s
- Specification according to EN 206 [12]: VF2
- Number of determinations: 3

ZCB08 ČSN EN 12350-10 [8]

- Characteristics: L-box test
- Units: -
- Specification according to EN 206 [12]: PL1
- Number of determinations: 3

ZCB09 ČSN EN 12350-11 [9]

- Characteristics: Sieve segregation test
- Units: %
- Specification according to EN 206 [12]: SR1
- Number of determinations: 3

ZCB10 ČSN EN 12350-12 [10]

- Characteristics: J-ring test
- Units: s
- Specification according to EN 206 [12]: 10 (Passing ability PJ), 650 ± 50 (Flow spread SFJ), 5 ± 3 (Flow time f_{500J})
- Number of determinations: 3

2.2 Ensuring Homogeneity and Stability

The bulk sample of fresh concrete is taken from a single production batch and is homogenised by mixing before the individual samples are taken. Samples must be taken in accordance with EN 12350-1 [13]. The sample is formed by gradually dispensing small quantities (2 – 4 litres) of fresh concrete to each participant into prepared containers until all participants have a sufficient amount to perform the tests (approx. 50 litres). The stability of the sample is ensured, among other things, by a set-retarding admixture in the fresh concrete. Proficiency testing items are provided in cooperation with BETOTECH, s.r.o., Beroun 660, Beroun.

2.3 Instructions for Eliminating Major Sources of Errors and Risks

Participants of the PTP are required to:

- handle proficiency testing items in the same manner as the majority of routinely tested samples,
- follow the instructions of the PT Provider staff member responsible for the implementation of the PTP, particularly regarding the sampling of fresh concrete, its quantity, the type of test performed, the number of determinations and the timing of the testing,
- report measurement uncertainty in accordance with their documented procedures, including the appropriate coverage factor. Unless specified otherwise, participants shall use a coverage factor of 2, corresponding to a confidence level of approximately 95 %,
- adhere to the rules and principles of ethical conduct and avoid unfair practices that could negatively affect the evaluation of the PT program,

- follow occupational health and safety and fire protection principles and use only electrical equipment and instruments with a valid inspection,
- dispose of samples in accordance with the instructions of the PT Provider staff member and/or the relevant supplier and with the supplier's waste management rules,
- submit the results of testing of the proficiency testing items, including measurement uncertainties, to the PT Provider by the specified deadline, which the participants received in the confirmation e-mail.

3 Procedures used in the Statistical Analysis of Laboratory Results

Procedures used in the statistical analysis of proficiency testing programs can be found at ptprovider.cz.

4 Certificate of Participation and the Final Report on the Results of Interlaboratory Comparison

The PT Provider gives expert commentary on participant efficiency evaluation in the Final Report as part of training courses the PT Provider organises. The Final Report preserves the anonymity of the PTP participants. Each participant, or the participant's test results, is represented by an ID number. The Certificate of Participation in the PT programme is part of the Final Report. The Certificate is unique to each participant and includes the participant's ID number.

5 Safeguards for Confidentiality

The identity of PTP participants is confidential and only known to persons/subjects involved with the PTP. All participant information is considered confidential by the PT Provider. The participant may renounce this confidentiality for the purposes of discussion and mutual assistance until the PTP results are obtained. The PT Provider reveals the proficiency testing results to no third party with the sole exception of a written request by a regulatory authority submitted prior to the commencement of the PTP and which has been granted a written consent by the PTP participants.

6 Related Documents

- Quality Handbook of the PT Provider at the SZK FAST
- Cancellation and Complaint Proceedings available at http://ptprovider.cz/?lang=en [11]
- MPA 20 – 01 - . . for application of EN ISO/IEC 17043 Concordance Assessment – General Requirements for Proficiency Testing in the Accreditation System of the Czech Republic.

References

[1] EN 12350-2. *Testing fresh concrete - Part 2: Slump-test*. 2019.

[2] EN 12350-4. *Testing fresh concrete - Part 4: Degree of Compactability*. 2019.

[3] EN 12350-5. *Testing fresh concrete - Part 5: Flow table test*. 2019.

[4] EN 12350-6. *Testing fresh concrete - Part 6: Density*. 2019.

[5] EN 12350-7. *Testing fresh concrete - Part 7: Air content - Pressure methods*. 2019.

[6] EN 12350-8. *Testing fresh concrete - Part 8: Self-compacting concrete - Slump-flow test*. 2019.

[7] EN 12350-9. *Testing fresh concrete - Part 9: Self-compacting concrete - V-funnel test*. 2010.

[8] EN 12350-10. *Testing fresh concrete - Part 10: Self-compacting concrete - L-box test*. 2010.

[9] EN 12350-11. *Testing fresh concrete - Part 11: Self-compacting concrete - Sieve segregation test*. 2010.

[10] EN 12350-12. *Testing fresh concrete - Part 12: Self-compacting concrete - J-ring test*. 2010.

[11] *Cancellation and Complaint Proceedings – available at www.ptprovider.cz*.

[12] EN 206:2013+A2:2021. *Concrete - Specification, performance, production and conformity*. 2021.

[13] EN 12350-1. *Testing fresh concrete - Part 1: Sampling and common apparatus*. 2019.