18 February 2026

To: Laboratories conducting housing health analyses

Proficiency test ASTE 04/2026 Microbiological housing health analyses

Proftest Syke will organize a proficiency test (PT) in cooperation with the Aerobiology Laboratory of the Department of the Biodiversity Sciences, University of Turku for the laboratories conducting housing health analyses. Following samples will be provided in the PT: building material as well as suspension samples for dilution cultivation method, samples of pure cultures for identification, and building material samples for direct cultivation as well as for qPCR method for detection of microbial growth, and microscopical photographs of building material to detect fungal mycelia (mimicking direct microscopy of samples).

About 15 laboratories are expected to participate in this proficiency test. The organizing of this proficiency test is not included in the accreditation scope of Proftest Syke (finas.fi/sites/en), however, its organization follows the principles of accredited operations.

Timetable

Registration	**18 February – 18 March 2026**
Sample delivery	weeks 16–17/2026 (starting 13 April 2026)
Reporting the participant results	**13 April – 18 May 2026**
Preliminary results report	at the latest on **5 June 2026**
Final report	September 2026

Participation fee

The participation fee is **460 €** (+ VAT) including all measurements and samples.
See detailed information in Chapter 9 *Participation fee.*

Riitta Koivikko,
Coordinator

Mirja Leivuori,
Group manager

Proftest Syke is proficiency testing provider PT01 (EN ISO/IEC 17043:2010) accredited by FINAS (Finnish Accreditation Service, finas.fi/sites/en).

Proftest Syke guide for participants is available on Proftest Syke website (syke.fi/proftest/en). ProftestWEB is the electronic client interface for Proftest Syke proficiency tests wwwp5.ymparisto.fi/Labtest/en. Within the pages, instructions are available on every page. A short Getting started manual is available on ProftestWEB front page.

Organising the proficiency test

1 Organiser

Proftest Syke, Finnish Environment Institute (Syke)
Address: Mustialankatu 3, FI-00790 Helsinki, Finland
Email: proftest@syke.fi

Contact

Coordinator: Riitta Koivikko, tel. +358 295 251 750
Substitute for coordinator: Mirja Leivuori, tel. +358 295 251 366
Email: proftest@syke.fi

Cooperation partner and expert laboratory

University of Turku, Department of the Biodiversity Sciences, Aerobiology Laboratory (UTU, T312, finas.fi/sites/en)

Analytical experts

Sirkku Häkkilä, UTU, sirkhak@utu.fi
Anna-Mari Pessi, UTU, pessi@utu.fi

Subcontracting University of Turku, Department of the Biodiversity Sciences, Aerobiology Laboratory: Sample preparation and analytical expertise.

2 Samples and analyses

- Building material sample for dilution cultivation method, 1 sample (on registration form: N_Materiaali)
- Suspension sample for dilution cultivation method, 1 sample (N_Suspensio)
- Samples of pure cultures on plates for identification, 3 samples (N_Tunnistus)
- Set of microscopical photographs of building material sample to detect occurrence of fungal mycelia (mimicking direct microscopy), 3 samples (N_SMK)
- Building material sample for direct cultivation (semi-quantitative), 1 sample (N_ Suoraviljely)
- Building material sample for detection of microbiological growth by qPCR method, 2 samples (N_qPCR)

3 Registration

The registration for this proficiency test is open until **18 March 2026**.

Registration is done via the electronic client interface, ProftestWEB: wwwp5.ymparisto.fi/Labtest/en. If there are problems when using ProftestWEB or you need username and password, please contact proftest@syke.fi.

4 Sample delivery

The samples are delivered to participants in several packages: **samples for cultivation are delivered during the week 16 (starting 13 April 2026) and samples for identification in the beginning of the week 17 (starting 20 April 2026)**. The sample cover letter and the link to download the photographs for direct microscopy will be delivered via email on 13 April 2026.

If the cultivation samples have not arrived at the latest on **17 April 2026** and the other samples at the latest on **24 April 2026**, or there are missing and/or broken sample containers, please contact the provider (proftest@syke.fi). More contact details in Chapter 1 *Organiser*.

5 Sample storage and analysis

The samples are stored at (4 °C). Samples are analysed within the laboratory where they are delivered to, and analyses are conducted according to the participant's normal procedures. Results of Finnish participants should be given as demanded by Instructions for the application of the Housing Health Decree (Valviran ohje 8/16, part IV).

The samples for cultivation and qPCR method are to be analysed as soon as possible after their arrival.

6 Reporting the results

The participant results are reported to Proftest Syke at the latest on **18 May 2026**. The results are reported with a separate result sheet (Excel sheet, will be available via ProftestWEB and delivered via email together with the sample cover letter). The expanded measurement uncertainty (U_i %, k=2) is requested to be reported together with the results of total fungal concentrations of dilution cultivation method (building material sample) and of qPCR method. The measurement uncertainty data is used in reporting the participants' results and calculation of participants' E_n scores.

Proftest Syke delivers the preliminary results report to the participants latest in the week 23 (1 – 5 June 2026). The final report will be published at the latest in September 2026 and it is then available on ProftestWEB and on Proftest Syke website (syke.fi/proftest/en). The availability of the report will be informed to the participants.

7 Assigned values and performance evaluation

Either the robust mean, the median, or the mean of the results reported by the participants or the result of the expert laboratory (UTU) will be used as the assigned value for the measurand for the quantitative results. The calculation of the assigned value is based on the results reported according to the given guidelines. The evaluation of the results will be based on z scores. The preliminary standard deviation for proficiency assessment will be given in the cover letter of the sample. E_n or D% scores can also be used for the performance evaluation.

Qualitative results from direct microscopy, direct cultivation, and qPCR will be evaluated based on the interpretation of the result.

8 Confidentiality

The results of participants are treated anonymously by Proftest Syke. The participants' results and the preliminary results report of the round are confidential and should not be shared with third parties during the implementation of the round.

9 Participation fee

The participation fee is **460 €** (+ VAT) including all measurements and samples. Participants may order additional samples at a price of 50 € per sample (+ VAT). Participants may also report multiple sets of results; the fee for each additional result set is 80 € (+ VAT). In this case, please contact the organizer.

Note! If a participant orders more than one sample, the additional samples will be delivered if there are enough subsamples available.

The invoice will be sent after the delivery of the preliminary results report. If the participant orders additional samples, they are charged according to the prices listed above (if additional samples cannot be delivered, they are not charged).

Note! In Finland VAT is 25.5 %. Further, if the invoicing address or any other additional information has to be corrected after the sample delivery or after invoicing, the extra handling cost will be charged. The participant is also responsible for possible custom clearance or customs fee of the sample.