Biological safety cabinets - Part 5: Installation, commissioning and routine testing

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12469-5:2025 sisaldab Euroopa standardi EN 12469-5:2025 ingliskeelset teksti.	This Estonian standard EVS-EN 12469-5:2025 consists of the English text of the European standard EN 12469-5:2025.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.11.2025.	Date of Availability of the European standard is 19.11.2025.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 07.100.01

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12469-5

November 2025

ICS 07.100.01

English Version

Biological safety cabinets - Part 5: Installation, commissioning and routine testing

Postes de sécurité microbiologique - Partie 5 : Installation, mise en service et essais de routine

Biologische Sicherheitswerkbänke - Teil 5: Aufstellung, Inbetriebnahme und Wartung

This European Standard was approved by CEN on 5 October 2025.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 12469-5:2025 E

Contents

Page

European foreword

This document (EN 12469-5:2025) has been prepared by Technical Committee CEN/TC 332 “Laboratory Equipment”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document, together with EN 12469-1:2025, EN 12469-2:2025, prEN 12469-3:— [1] and prEN 12469-4:— [1], will partially supersede EN 12469:2000.

EN 12469-5:2025 includes the following significant technical changes with respect to EN 12469:2000:

— the structure has been changed to emphasize different classes of biological safety cabinets (BSC);

— the text of the entire document has been revised and references have been updated.

EN 12469:2025 consists of the following parts, under the general title *Biological safety cabinets*:

— Part 1: Classes, terminology and basic requirements

— Part 2: BSC class II

— Part 3: BSC class III

— Part 4: BSC class I

— Part 5: Installation, commissioning and routine testing

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

[1] Under preparation.

Introduction

Biological safety cabinets (BSC) are designed to protect the operator and the environment against the risks associated with the handling of biological agents. Depending on the classes, a BSC can additionally protect the product.

Each BSC class has its own design and performance criteria. The choice of a BSC class depends on the type of protection required and the assessment of the risk to be controlled.

EN 12469 describes the BSC classes, their design, correct usage, and testing principles.

This document is a product standard. Occupational health and safety assessments methods are not included.

1 Scope

This document gives requirements and recommendations for installation, commissioning and routine testing of BSC.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12469-1, *Biological safety cabinets - Part 1: Classes and basic requirements*

CEN/TS 17441, *Laboratory installations - Ventilation systems in laboratories*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12469-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

3.1
commissioning
process of ensuring that the BSC is installed and tested according to this document

3.2
corrective maintenance
maintenance carried out after fault recognition and intended to restore an item into a state in which it can perform a required function

[SOURCE: EN 13306:2017, 7.9]

3.3
hard duct
connection between two air handling devices that does not have any open sections

3.4
installation
physical placement including connection of mechanical, electrical, and communication services within a building

3.5
maintenance
combination of all technical, administrative and managerial actions during the life cycle of an item intended to retain it in, or restore it to, a state in which it can perform the required function

Note 1 to entry: Technical maintenance actions include observation and analyses of the item state (e.g. inspection, monitoring, testing, diagnosis, prognosis, etc.) and active maintenance actions (e.g. repair, refurbishment).

[SOURCE: EN 13306:2017, 2.1, modified, Notes 2 and 3 to entry removed]