



Biological Safety Cabinets: Selection, Installation and Field Certification

This information is provided by Biological Safety for assistance in compliance with federal regulations or standards, and in locating an appropriate vendor for these services.

Selection and Installation

Information on the selection, installation and use of Biological Safety Cabinets (BSCs or tissue culture hoods) is provided in the [NIH-CDC, Appendix A, Biosafety in Microbiological and Biomedical Laboratories](#), in addition the applicable manufacturer's information. For questions about selection of the correct BSC for research, academic or clinical applications, consult with Biological Safety prior to purchase.

Field Certification

Per NIH and CDC, all BSCs are to be field certified to the current NSF/ANSI Standard 49, Annex F upon installation, and annually thereafter, and whenever they are moved or relocated. Environmental Health and Safety strongly recommends using vendor technicians who are accredited by NSF-49, and have been trained to perform field certifications to NSF/ANSI Standard 49, Annex F. The vendor must be able to provide documentation/verification of their technician's current NSF-49 accreditation.

The standard used to properly evaluate Class II biosafety cabinets, NSF/ANSI Standard 49 *Biosafety Cabinetry: Design, Construction, Performance, and Field Certification*, is designed to minimize hazards inherent in work with agents assigned to Biosafety Levels or Animal Biosafety Levels 1, 2, or 3 at this institution. It also defines the tests that cabinets must pass to meet this Standard.

Field Certification Performance reports must be forwarded to Environmental Health and Safety, Biological Safety at Mail Stop F484, or emailed to biosafety.program@ucdenver.edu

All BSCs in BSL3 or ABSL3 facilities will be field certified to meet the NSF/ANSI Standard 49, Annex F

Moving an Installed Biosafety Cabinet

Any time a BSC is moved, it must be certified according to applicable performance standards. From NSF Standard 49, Appendix F:

"E.6.1 It is a common practice to move permanently installed BSCs to other locations within a laboratory or to other laboratories. ...there are certain conditions that must be met prior to moving

this equipment. BSCs should not be moved without consultation with a biosafety officer or qualified safety professional.

“E.6.2 Existing BSCs and ancillary equipment, such as canopy connection exhaust ducting, gas, electric and vacuum connections, should be cleared for maintenance by a biosafety officer or qualified safety professional prior to disassembly. Depending on circumstances of the move, (i.e., cabinet use, new location, etc.), BSCs may be required to be decontaminated. After a BSC is moved, it should be certified according to applicable performance standards.”

If a BSC is to be relocated in the same building, a surface disinfection wipe down is sufficient for a green tag approval. Recertification has to be done if the BSC is removed from the base during the move.

If a BSC is to be relocated to another building or off-campus via a truck, a full decontamination with a gaseous or vapor fumigant must be performed by an approved vendor before a green tag will be issued. Recertification is always required once it is positioned in the new location.

Vendors

The following businesses provide the above services in the Denver metro area.

Below is the list of current (as of July, 2021) vendors approved to perform work on Biological Safety Cabinets on this campus. These vendors have provided the current certifications to meet national best practices and NSF standards.

Technical Safety Services (TSS)

Andrea Lauritzen

720-981-4965 | alauritzen@techsafety.com

HSS

Oleg Prochoda

C: 720-641-4459 | oleg.prochoda@hss-us.com

Hss-us.com

If you have been using another vendor, please discontinue, or have them contact our office to become an approved vendor. Biosafety.program@ucdenver.edu