Guidelines for Designing Safe Lab Spaces
5 Steps to Consider Before Getting Started | By VWR, Part of Avantor

Having an efficient and safe lab helps reduce unforeseen costs in the future, such as safety remediation and lost products due to improper storage or spills. Whether you are renovating an old lab or building a new one, the following steps will help you balance the needs of your researchers along with ensuring that they are maintaining a safe environment.

Step 1: Choose a winning team.

Project teams should include a researcher or end-user who will be utilizing the space, a supervisor to facilitate communication during the project, facilities management personnel, and health and safety personnel to ensure safety issues are considered and addressed up front.

Step 2: Survey the area and select a design.

It’s important to carefully survey the area designated for the laboratory, and when possible, to consider future needs, such as future ventilation or drainage needs.

Determine the requirements that must be met, including general requirements to meet the purpose of the room, safety requirements, technology requirements, and environmental requirements. Be careful to ensure that all the necessary utility services and sanitary or chemical drains are available.

Select a design that best adapts to your space, pre-determined requirements, complies with all established safety guidelines, and if necessary, adheres to the Americans with Disabilities Act.

Review the laboratory layout to identify potential shortcomings for the final design. Consider storage areas, including properly ventilated spaces for chemical storage, safety areas, including eye wash stations and showers, utilities and technological requirements, traffic flow, and general ventilation.

Step 3: Choose a casework layout and select all components.

When making a list of all the components your lab will need, remember to include cabinets, countertops, fixtures and fittings, fume hoods, lockers, refrigerators, seating, sinks, etc.

Measure twice, cut once. Once the requirements are outlined, and components are selected, it’s important to have a good sketch showing the room dimensions and potential obstructions.
Step 4: Coordinate delivery and installation.

Your team of VWR Specialists will coordinate every aspect of your order, including from delivery to installation. They will help ensure that all safety considerations and requirements outlined and designed in steps 1 and 2 are met.

Step 5: Sit back and relax!

With the help of VWR, you can be confident that your new lab is outfitted to ensure that your researchers have the space and tools necessary to maintain a safe environment.

For more information on how to design an efficient and safe laboratory space, including detailed checklists and other considerations, visit https://us.vwr.com/cms/furniture_main. VWR also has a full safety portfolio to meet your on-going safety needs: https://us.vwr.com/cms/safety

Learn about E&I’s competitively solicited VWR contract at www.eandi.org/contracts/vwr.

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