



Casework Solutions

Laboratory

Within the laboratory environment, excellence is simply the expected standard. Precision is essential. Work processes demand durable environments which support the pursuit of accuracy and perfection.

When asked what they expect from casework, people who work in laboratories universally list four attributes: durability, functionality, flexibility, and aesthetics. Since researchers work directly with and on the casework, durability is most often listed as the primary concern. TMI casework lasts, meeting or exceeding industry construction standards.

Expertise In Laboratories



Biotech Lab

Colorado State University
Fort Collins, Colorado

From heavy-duty five-knuckle stainless steel or epoxy powder coated hinges to epoxy tops, we are responding by building casework which withstands the unique rigors of laboratory environments. Our surfaces are engineered to resist chemicals and moisture, and our doors and drawers are designed to open and close smoothly, even after years of continuous use.

Durability, however, is just the beginning. We also design laboratory environments to be highly functional. On one level this means effectively addressing logistical concerns such as the management of utilities, including water, gas and electrical runs. On another level, we seek to optimize harmony between the work environment and the human element. People who work in laboratories furnished with TMI casework find them to be efficient and comfortable.

Since rapidly changing technology continues to play an important role in laboratory activities, the ideal casework will offer the flexibility to accommodate new computers and instruments. By combining our fixed modular and flexible rail-mounted casework, TMI will help create environments which readily accommodate evolving needs.

A durable, functional, flexible laboratory can be highly attractive. Indeed, aesthetics are often pivotal in attracting and retaining high caliber research staff. By combining laminate colors, solid surfacing, and architectural woodwork, TMI can help create laboratories which appear impressive and exceptional. An example is the Schering-Plough facility, pictured below, which received a nomination for Lab of the Year by R&D Magazine.

Quality Control Lab

Schering-Plough
Union City, New Jersey

Perhaps what makes TMI so increasingly popular among laboratory planners and designers is our ability to achieve all of these requirements while maintaining cost efficiency. Through our extensive experience in a variety of laboratory applications, we have been able to engineer durable, functional, flexible, attractive workspace and storage solutions which are also affordable.



Research Labs

Research processes place exacting requirements on facilities. Each activity and experiment presents its own set of spatial needs. To accommodate these differences in the laboratory pictured above, TMI engineered and built casework to fit repetitive lab modules which readily adapt to the changing needs of the facility. The result is a much more comfortable relationship between researchers and the various types of equipment and apparatus their research requires. This particular lab also exemplifies our understanding of the need to maintain a clean research environment.

Research Lab

UCHSC Research Complex I
Aurora, Colorado



Any risk of contamination threatens the success of the research and compromises the validity of the results. We construct all surfaces and seal edging to resist water and chemicals, and to provide an environment which can easily be sanitized and wiped clean.



UCHSC Research Complex I

Aurora, Colorado

Every research laboratory has its own requirements. All however, like the one pictured below, require that individual researchers have ample bench space upon which to conduct their work. To further provide a comfortable environment, white epoxy countertops were used. With excellent light reflection, these countertops help create a bright, well-lit space.

This particular lab also illustrates the growing desire to provide research staff with an environment that encourages interaction and the free exchange of ideas. With no upper cabinets to create visual barriers, researchers have a clear line of sight and are free to make eye contact with others across the bench and throughout the room.

Research Lab

Schering-Plough
Union City, New Jersey



Many research laboratories are even creating an interaction area outside of the lab equipped with chairs, tables, a white board, photocopier, and snack station where researchers can congregate, and through 'chance encounters' share information with colleagues who might provide new insights into their work.

Research Labs



Research Lab

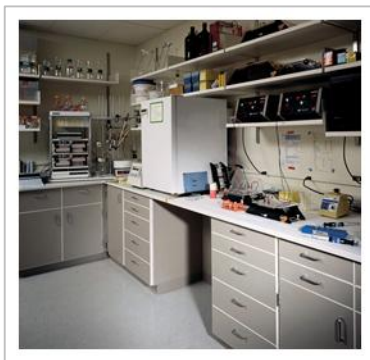
Saulk Institute
La Jolla, California

At TMI, we are quite accustomed to providing casework for laboratories with even the most heavy-duty requirements. We build our products to be tough and durable, to easily support heavy instruments. We will also supply countertops which withstand exposure to strong chemicals. With counter space in most labs at a premium, we offer pullboards to provide extra work surfaces.

Salk Institute La Jolla, California



A research lab is essentially a workshop. In such an environment, researchers expect the casework to faithfully perform its two main functions: First, it must provide easy access to the researcher's equipment and instruments. Conveniences such as adjustable shelves are every bit as important as doors and drawers that open smoothly even after many years of use. Second, it will be expected to provide a resilient work surface.



Biology Lab

Colorado State University
Fort Collins, Colorado

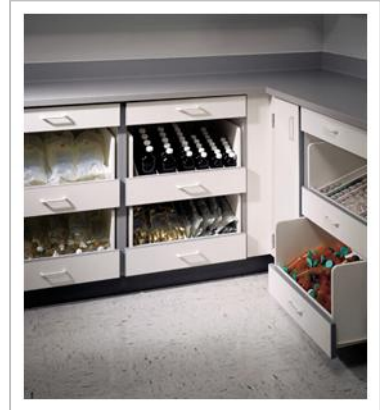
The countertop is the workbench. TMI and its dealers provide a variety of countertop options, from chemical resistant laminate to epoxy resins, which provide excellent chemical, heat, abrasion, and moisture resistance. Our countertops are supported by epoxy powder coated metal brackets to provide stability for heavy instrumentation. TMI casework and countertops are engineered for durability and resist warping and deflection.

Instructional Labs

Pharmaceutical Cabinets

East Grand Forks Technical College
East Grand Forks, Minnesota

Even though laboratories used for educating may be comparatively simple in their applications, they are quite demanding in their requirements. Besides being durable, they must provide locked storage for projects and supplies, and need to accommodate multiple utility runs. In some cases such as technical colleges, they even need to provide a true-to-life representation of the environments in which students will eventually work.



At TMI, we have been able to couple our knowledge of laboratories with more than three decades of experience in building casework for educational environments. The result is a thorough understanding of lab design which optimally facilitates both teaching and learning.



Four-Station Student Island

Norwood High School
Norwood, Minnesota

Instructional lab layouts should accommodate supervision of individual or partnered project work, as well as group instruction. A room which is visually open enables the instructor to maintain a sight line with all students and move about freely to offer assistance and answer questions.

With hundreds of students coming and going through the same lab every year, the durability of the casework and countertops must be uncompromising. In schools, colleges, and universities all across the continent, labs furnished by TMI have proven themselves resilient to the rigors of academic life. We build them tough. We build them to last.

Science Lab

Lake Junior High School
Woodbury, Minnesota

Appearances are also very important in instructional laboratories. In many cases, science labs make a visual statement about the facility's overall commitment to academic excellence. In colleges and universities, lab aesthetics can also be instrumental in recruiting top-notch faculty and students.



Medical Labs



Histology Lab
Scottsdale, Arizona

Evolving technology and changing dynamics in the healthcare industry have levied new and exciting challenges upon medical labs. Optimum efficiency is critical. Properly designed casework such as that shown at the left will help keep a lab running efficiently. Details such as foot-operated faucets add convenience, while elements like glass insert doors provide easy viewing of supplies and keep storage areas clean and dust free. Epoxy and stainless steel countertops and integral sinks resist acids and chemicals, wiping clean with ease.

Microbiology Lab
Summit Medical Center
Nashville, Tennessee



As in all laboratories, the casework in medical labs needs to be durable. At TMI, we build for strength and durability. Heavy-duty five knuckle hinges are used on doors that open and close 24 hours a day, and epoxy powder coated steel frames bear heavy loads across extra wide knee spaces. Such durability enables TMI's casework to stand up and serve even as procedures, technology, and techniques change. We build it strong to keep up with the rapidly accelerating pace of research and to continuously support demanding applications.

Planning Issues

While many labs are similar in function and requirements, each is unique in its applications. A well-planned lab provides harmony between people, equipment, and workspace. It will account for logistics common to all labs such as utility management and storage access, yet it will accommodate the specific processes and people it is intended to support.



TMI Service Chase

Configured to Accommodate TMI's Flexible Rail-Mounted Casework

Experienced architects and lab planners suggest beginning with a clear understanding of the functions which will need to be performed. They then consider the equipment, bench space, and processes required to support those functions. Finally, they factor in the human issues such as ergonomics, access to storage, and time spent in each area of the lab.

Reagent Shelf Support Options

Including Tubular Supports, Support Risers, and Unistrut Supports

Casework in a lab not only supports storage requirements, it also defines and provides the actual work space. It must be integrated with a variety of complex systems. Even architects who are experienced in lab design often confer with lab planning consultants on such issues as fume hood placement, instrument configurations, air flow management, and utility distribution and access. Other areas of concern include all issues of safety, especially those relating to the proper storage and disposal of hazardous materials. TMI casework can be configured to accommodate these requirements.



Heavy-Duty Supports

Provide Over-Counter Mounting of TMI's Rail-Mounted Casework