

Private Museum Increases Collection Storage Capacity by 50% with High-Density Compact Shelving

A private museum needed more back-of-house collection storage for incoming materials and long-term preservation. Southwest Solutions Group designed a high-density compact storage system around the existing post-and-beam floor, collection requirements, and budget.

INDUSTRY

Museum

Collection storage and preservation support for a museum environment.

LOCATION

Waco, TX

Completed for a collection storage area in Central Texas.

FACILITY TYPE

Collections and Preservation

Back-of-house storage supporting collections, archives, and preservation work.

SOLUTION

High Density Storage

A compact shelving design increased usable collection storage capacity within the existing facility.

PRODUCTS USED

Compact Museum Storage System

Mobile compact shelving, adjustable shelving, wide-span storage, art rack dividers, floor-mounted rail, and track sliders supported denser collection and archive box storage.

OPERATIONAL GOAL

Increase Capacity and Improve Conservation

The museum needed more storage capacity while replacing older shelving conditions that were not ideal for long-term collection preservation.

THE PROBLEM

Incoming Collections Were Outgrowing Stationary Shelving

The Collections and Preservation department needed more room for incoming materials, but the back-of-house storage area depended on older industrial-style stationary shelving. Wood decking, limited adjustability, masonite dividers, and post-and-beam floor conditions created capacity, preservation, and compact storage design constraints.



01

Limited Collection Capacity

Incoming collections were placing more demand on the museum's existing storage footprint. The stationary shelving layout did not provide the high-density museum storage needed to manage that growth efficiently.

02

Older Shelving Materials

The museum was using old industrial-style shelving that was difficult to adjust as collection sizes and storage needs changed. Wood decking and other organic materials were not favorable for long-term museum collection preservation.

03

Post-and-Beam Floor Conditions

The storage area was located on a post-and-beam floor, which made compact shelving design more complex than a standard shelving replacement. Southwest Solutions Group coordinated with the museum's structural engineer before finalizing the high-density storage system.

High-Density Compact Museum Storage Designed for Existing Floor Conditions

Southwest Solutions Group designed a compact museum storage system around the existing post-and-beam floor, preservation needs, and budget. The system used Spacesaver ActivRac 7M on floor-mounted rail with adjustable 4-post shelving, wide-span shelving, divider rods for art rack storage, and track slider systems for archive boxes and general collection storage. This approach replaced older stationary shelving with denser, more flexible storage while moving away from wood decking and improvised divider materials.



WHAT WE INSTALLED

Compact Shelving with Collection-Specific Components

The installed system included Spacesaver ActivRac 7M with floor-mounted rail, adjustable 4-post shelving, wide-span shelving, divider rods for art rack storage, and track slider systems for box archives and general collection storage.

WHY IT FIT

Designed Around the Post-and-Beam Floor

The museum's floor conditions required a compact shelving layout that accounted for existing structural and flooring requirements. Southwest Solutions Group worked with the museum's structural engineer to confirm a high-density shelving design that could function within those constraints.

OPERATIONAL IMPACT

Flexible Storage for Collections and Archives

The new layout replaced difficult-to-adjust stationary shelving and masonite dividers with adjustable storage, art rack divider rods, and track slider areas. The Collections and Preservation department gained better support for art materials, archive boxes, and general collection storage.

Storage Planning Coordinated Around Funding and Floor Conditions

Planning began in 2020, giving the museum a defined storage direction before grant and donation funding was available. After the project was booked in 2024, Southwest Solutions Group completed final layout coordination, structural review, delivery planning, and installation. The installation took about two weeks, and a floor flatness condition identified during the work was reviewed with the project team and resolved.

01 DISCOVERY & SITE SURVEY

Existing Collection Storage Reviewed

Southwest Solutions Group reviewed the need for more capacity, improved preservation support, and a storage system that fit the available budget. The site review included stationary shelving, wood decking, masonite dividers, and post-and-beam floor conditions.

02 LAYOUT, POWER & DATA PLAN

High-Density Storage Layout Developed

The team developed a compact storage layout with floor-mounted rail, adjustable shelving, art rack divider rods, and track slider areas. The layout accounted for existing floor conditions and coordination with the museum's structural engineer.

03 SUBMITTALS & APPROVALS

Structural Coordination Completed

Southwest Solutions Group worked with the museum's structural engineer so the compact shelving system could be designed for the existing floor. Project drawings supported layout review before the installation phase moved forward.

04 FABRICATION & DELIVERY

Storage Components Prepared for Installation

The approved scope included high-density storage components, adjustable shelving, floor-mounted rail, divider rods, and track slider systems. Delivery and installation planning were coordinated around the museum's collection storage area.

05 INSTALLATION & TRAINING

Compact Storage System Installed

The installation team completed the compact shelving system, shelving components, art rack storage, and archive storage areas in about two weeks. A floor condition was identified during the project, reviewed with the team, and resolved so the system could be completed.

06 MAINTENANCE & SUPPORT

Layout Set for Changing Storage Needs

After installation, the museum had a more flexible system for collection storage, art rack storage, and archive box storage. Adjustable shelving and defined storage areas give the department a practical layout as collection needs change.

RESULTS

50% More Capacity with Better Collection Organization

The completed high-density storage project increased the museum's collection storage capacity by 50% and improved support for long-term conservation. The Collections and Preservation department now has a more organized storage area for archive boxes, art materials, and general collection storage.

PRIMARY OUTCOME

50% More Collection Storage Capacity

The high-density compact shelving system increased the museum's collection storage capacity by 50%. This gave the department more room to manage incoming collections within the existing storage area.

WORKFLOW

More Flexible Collection Handling

The new system replaced older stationary shelving that was difficult to adjust. Adjustable shelving, divider rods, and track sliders support different storage needs for art materials, archive boxes, and general collection items.

ORGANIZATION

Defined Storage for Collections and Archives

The collection storage area is now much better organized for the museum's Collections and Preservation department. The system provides defined areas for art rack materials, box archives, and other collection storage needs.

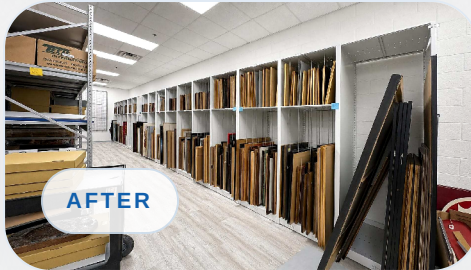
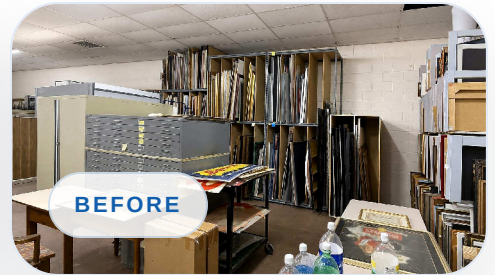
LONG-TERM VALUE

Improved Support for Museum Conservation

The project replaced wood decking and older storage methods that were not favorable for long-term museum preservation. The improved back-of-house storage area also allows the museum to give visitor tours with greater confidence.

Before and After Private Museum Collection Storage Improvements

Project photos show the museum's previous stationary shelving and the completed high-density compact storage system.



READY TO SOLVE A SIMILAR PROBLEM?

Need to Improve Museum Collection Storage?

Southwest Solutions Group helps museums plan storage systems around collection preservation needs, capacity goals, available space, budget requirements, and existing building conditions.

If your facility is managing outdated shelving, incoming collections, archive box storage, art rack storage, or floor constraints, our team can help evaluate the space and design a practical high-density storage solution.