When the College of Charleston (CofC), the oldest institution of higher education in South Carolina and one of the oldest in the United States, recently opened the $30 million, 140,000 square-foot Addlestone Library, it was with an eye to the future and a plan to maximize growth of the collections without having to increase the size of the new building.

The old library had run out of space 10 years before the new facility was built, so Dean David Cohen and Director Claire Fund, after evaluating the future needs of their expanding collection, had to find a solution. Library architect Michael Cohen, AIA, of Boston’s Fletcher, Harkness, Cohen, Moneyhun, Inc., recommended high-density (compact) mobile shelving as a solution for the future.

Not totally convinced, Dean Cohen visited campus libraries at the University of Kentucky and Central Michigan to see compact shelving (Spacesaver’s) in action and speak with librarians. “Once we determined that compact mobile shelving was good, we decided it was great!” said Dean Cohen.

“Colleges and universities everywhere are looking for ways their collections can grow without adding square footage,” the architect, Cohen, explained. “By planning for future growth at the time of design and construction, we were able to build capacity into the floor slabs for eventual compact shelving throughout the stack area of the building. The structural requirement for the floor load, or weight, of compact shelving is 300 pounds per square foot, versus 150 for standard shelving, so the columns and floor slab had to be stronger. This adds a relatively small increase in the cost per square foot, but it gives you the potential of two to two-and-a-half times the capacity in the long term.”
The Addlestone Library currently shelves over 500,000 volumes, with about a third of the collection on compact shelving and potential capacity for a million volumes. Bound Journals in the public space on the second floor are housed in three banks of Spacesaver powered systems, which move at the touch of a button and feature AisleGuard® as the passive safety system and PowerLink™ as the monitoring system, assuring optimal operation. Across the floor, some portion of the general book collection is housed in compact shelving and the balance is on stationary shelving.

Special Collections, including rare books and manuscripts (shown at left), are stored on mechanical-assist compact mobile systems in two non-public vaults on the third floor. Shelf spacings were set to optimize every cubic foot of space.

The reference section of the library, located on the first floor, features stationary Spacesaver cantilever shelving with customized glass end-panels. Height variations add interest and function.

All shelving was seismically reinforced with third spreaders and gussets to meet local building codes.

Compact shelving helped minimize the footprint of the Addlestone Library, which had a height restriction of three floors. The architect estimates that the existing compact shelving, not counting the expansion capacity, saved 4,000 square feet. “This translates to a fair amount of money, especially when compared to the small cost of increasing the structure of the slab,” he said.

Preparing the floors for compact shelving at the time of construction gave the new Addlestone Library potential to more than double its collection. It also helped free up space for the atrium, a variety of study areas, computers, meeting rooms, a café and tutoring facilities. Ben McCollum of Patterson Pope is local servicing area contractor representative.

“We had worked with Spacesaver before, and we like them,” Architect Michael Cohen said. “We’re extremely happy with the outcome.”