CASE STUDY 03
BLUE VALLEY SOUTHWEST HIGH SCHOOL

STRATEGICALLY PLACED, EASY-TO-USE AND DURABLE — SKYFOLD RETRACTING WALLS MAXIMIZE FLEXIBILITY AND SPACE AT A NEW KANSAS HIGH SCHOOL.

Schools old and new have relied on operable walls for ages to make educational and extracurricular spaces more flexible. Yet, for Blue Valley Southwest High, a new campus located in a 21,000-student district in the bustling Kansas City suburb of Overland Park, the project team broke with tradition by upgrading to Skyfold.

Frustrated with the maintenance and operational issues associated with standard operable partitions – including the set-up time and the lack of consistent acoustical performance – Scott Crain, director of design and construction for the district, searched for a different solution.

PROJECT FACTS
BLUE VALLEY SOUTHWEST HIGH SCHOOL
Overland Park, Kansas, December 2009
Classrooms & Gymnasium (new construction)
Design challenge: Create flexible learning spaces and gymnasiums
Design Team: HTK Architects with Perkins+Will

SKYFOLD SPECS
Installation: 1 Skyfold Classic™ wall,
4 Skyfold Eclipse™ walls
Panel finish: Vinyl wallcovering - Porcelain Series

Organized around a large courtyard, Blue Valley Southwest High School used Skyfold partitions to create more flexible and efficient learning spaces.
“The goal was to improve space options while maximizing return-on-investment, or ROI. Working with Topeka’s HTK Architects, Chicago’s Perkins+Will and general contractor Crossland Construction, the group acted to reduce construction cost, maximize the usable square footage of the building, and lower the maintenance over the life of the partitions,” say Mike Bono, president of Abbey Simons, a Kansas City-based supplier of window treatments, folding doors and operable partitions. Two applications were needed, according to Gary Howard, athletic director and vice principal: Separation between the main and auxiliary gyms and four “flex” classrooms adjacent to a student gathering area. The wall in the flex classrooms can be raised to create double-sized learning areas accommodating 60 students.

“This was the first time we considered using Skyfold after numerous projects with typical sliding partitions,” says HTK Architects’ project leader, Burke Kitchen, AIA. “Paired horizontal partitions with drop-bottom seals don’t tend to last very long – the seals lose the ability to operate and sometimes get snagged in the carpets. For the big wall between the two gyms, opening and closing a manually operated sliding-type wall takes time, strength and skill. The school planned to use the wall multiple times per day, so Skyfold’s quick operation was a plus.”

Beyond complementing the architectural look of this state-of-the-art secondary school, the Skyfold wall systems offered other benefits as well. First, the project team anticipated a 40% savings in structural steel costs for the related wall areas because the Skyfold partitions weigh less than typical operable walls. Add to that further savings in maintenance costs and the increase in usable space – no floor stack is required – and the high ROI was obvious. The estimated payback for using Skyfold would be three to six years.

A number of additional benefits were considered by Scott Crain and his team. Among the most important:

• **ACOUSTICAL PERFORMANCE**: Constructed of steel panels separated by an anechoic air chamber, the approximately 12-inch-thick Skyfold® Classic™ offered an STC (Sound Transmission Class) rating of 51 and would be ideal for the noise control needed between the gyms. For the flexible classrooms, Skyfold Eclipse™ also provided good, low-cost sound control.

• **EASE OF OPERATION**: The Skyfold powerlift partitions are completely automated. With the turn of a key and constant pressure on the buttons, teachers can easily deploy or retract the walls in minutes whenever needed without assistance by janitorial or facilities staff.

**ULTIMATE FLEXIBILITY**
The high school used Skyfold walls to enlarge classrooms and divide the gym, at the turn of a key and pressing a few buttons.

**QUICKLY DEPLOYS AND RETRACTS**
The Skyfold walls move 1 foot per 10 seconds, allowing fast, easy room changes.

**ATTRACTIVE CUSTOM FINISHES**
The architects specified white and off-white protective vinyl finishes to match the modern design.
"THE WALL IS USED MULTIPLE TIMES PER DAY, SO SKYFOLD’S QUICK OPERATION IS A PLUS."

BURKE KITCHEN, AIA, PROJECT ARCHITECT, HTK ARCHITECTS

• REDUCED MAINTENANCE: “Conventional side-retracting walls may be a less expensive option based on initial cost,” says Kitchen “But they require extensive maintenance. Skyfold is a very low-maintenance product.”

• FAST, QUIET OPERATION: Skyfold’s Classic™ and Eclipse™ powerlift walls are virtually silent when in motion. The acoustical seals automatically engage the side walls, floors, and ceiling – ensuring consistent acoustical performance even over time.

• TRULY FLEXIBLE SPACE: Many districts are now managing with less space and fewer personnel. The ability to reconfigure space more quickly (even between classes), reducing labor costs and increasing the utilization of space plus other long term benefits, explains why even cash-strapped school districts are choosing Skyfold.

The designers at HTK Architects and Perkins+Will made Blue Valley Southwest one of the country’s most beautiful and state-of-the-art high schools, selected by Newsweek for its prestigious Top U.S. Schools list. From its theatrical central courtyard to the smooth concrete floors and large windows throughout, the facility is strikingly attractive yet simply detailed and cost-conscious.

Skyfold was a natural specification: In both retracted and deployed positions, the walls are attractive – with custom panel finishes in easy - care vinyl to match the architectural interiors. White was selected for the gymnasium to seamlessly integrate with the clean, painted walls; off-white for the flex classrooms complements the school’s contemporary interiors.

For Burke Kitchen at HTK Architects, the proof of Skyfold’s value is in the ease of use and efficient facility operations. “Reactions concerning the Skyfold partitions have been positive. Both Scott Crain and Gary Howard, previously at another high school, had experience with the other type of folding operable walls,” says Kitchen “They’ve been pleased with the Skyfold walls.”

For more information on Skyfold powerlift partitions, visit www.skyfold.com
SKYFOLD’S EXCLUSIVE LINE OF VERTICALLY FOLDING OPERABLE WALL SYSTEMS PROVIDES A UNIQUE WAY TO SUBDIVIDE SPACE. OUR CUSTOM BUILT SYSTEMS ARE COMPLETELY AUTOMATIC AND RETRACT INTO A CEILING CAVITY WITH A SIMPLE TURNKEY OPERATION.

/ CLASSIC SERIES State-of-the-art acoustics for privacy and soundproofing
/ ZENITH SERIES Cutting-edge, innovative vertical wall technology
/ MIRAGE Brings in the light with your choice of transparent panels

Skyfold is pleased to be an official member of the U.S. Green Building Council. The Green Council is committed to promoting better designed buildings that are not only more environmentally and socially responsible, but also help improve the quality of life for those who occupy them and the communities in which they are built. The Council has developed a benchmarking system known as LEED (Leadership in Energy & Environmental Design). When it comes to recycled materials, architects and owners who choose a Skyfold vertically folding operable wall system can calculate the following toward LEED accreditation on their projects.

In order to continue protecting our environment, it is essential that we all do our part by using recycled materials whenever possible. Skyfold is proud to help.

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SKYFOLD® LIMITED WARRANTY

WORKMANSHIP: Parts & labour - 2 years or 5,000 cycles*  
Optional extended warranty on parts available - 10 years or 5,000 cycles*  
Acoustical Performance - 10 years  
*First occurrence from date of shipment

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