Experience. Innovation.

CASE STUDY

Hale Centre Theatre | Sandy City, Utah

Smoke Vents, Specialty Doors Help Utah Theater Come Alive

Theater construction projects come with an inherent set of challenges for engineers, architects and construction managers. Besides audience safety, they also must meet the needs of performers, create space for set deployment, and account for directors and producers who demand precise timing and mechanical performance to deliver the best production possible. Unlike the tales told on stage, there is no magic wand to take care of all those concerns.

Architects were especially challenged by the newly-constructed Hale Centre Theatre in Sandy City, Utah. The theater cost \$80 million, construction began in 2015 and the venue officially opened on September 1, 2017. The new structure replaces a facility in nearby West Valley City, and includes two stages that seat 1,360 guests. Tait Towers, whose portfolio includes work for the Opening Ceremonies at the 2012 Summer Olympics in London, designed the stage. The theater is among the most technologically advanced in the United States, and perhaps the world.

Among the challenges for Layton Construction, the general contractor for the project, were its roofing and flooring needs. Both are essential components to quality theater performance, and with a project of this magnitude, the contractor needed to have the equipment that would make the project sing.

Layton turned to Cannon Sales in Centerville, Utah, for help with roofing and flooring. Cannon is one of Utah's most experienced resources for commercial construction specialty products. Zack Williams of Cannon suggested BILCO acoustical smoke vents and double-leaf terrazzo doors, all of which proved essential to the project's construction.

BILCO provided 20 acoustical smoke vents with 24-volt electric thermolatches, which prevent inadvertent opening of the covers that can be caused by wind or building vibrations. The smoke vents feature an STC-46 acoustical sound rating, which guard against noise intrusion, a must-have for the Hale Centre. The smoke vents are commonly used in concert halls, theaters and other interior applications that restrict noise from the outside.

They also provide the security of automatic smoke venting. The vents include gas spring operators to open the covers in snow and wind, and have built-in dampers to assure smooth opening and eliminate the possibility of operational, roofing



or structural damage.

Layton installed two double leaf terrazzo doors, which are designed with a pan cover to accept a variety of flooring



materials. Each door is spring balanced to ensure smooth, easy operation upon installation of the flooring material. The door includes an aluminum frame with built-in anchor flange around the perimeter.

The theater's construction was a complicated and extensive process. Williams said the contractor appreciated finding a supplier with critical components to a puzzle that needed extreme detail. Like the shows on the Hale Centre Theater's stages, every construction piece had to be perfect.

"The thermolatches are integral with the smoke vents," Williams said. "The fact that BILCO makes those and floor doors as well made it easier for the contractor to come to us and kill two birds with one stone." "Hale Centre Theatre does great things with what it has now," said Jeff Beecher, Vice President of Layton Construction in an interview with Deseret News, a daily newspaper in Salt Lake City, Utah. "It's going to be unbelievable what they're going to be able to do with this building."



Keep up with the latest news from The BILCO Company by following us on Facebook and LinkedIn.

For over 90 years, The BILCO Company has been a building industry pioneer in the design and development of specialty access products. Over these years, the company has built a reputation among architects, and engineers for products that are unequaled in design and workmanship. BILCO – an ISO 9001 certified company – offers commercial and residential specialty access products. BILCO is a wholly owned subsidiary of AmesburyTruth, a division of Tyman Plc. For more information, visit www.bilco.com.