

Early design collaboration reaps time and cost savings

The Natural History Museum of Utah (NHMU), located at the \$103 million, 163,000 square foot Rio Tinto Center on the campus of the University of Utah in Salt Lake City, shows exhibits touting the state's natural history. The museum strives to illuminate the natural world and the place of humans within it. Its new building, conceived as an extension of the land it occupies, is one of only 18 facilities with LEED Gold certification in the Salt Lake Valley. The project also won the Engineering News Record/McGraw Hill award for Best Overall Project in the Intermountain Region (Utah, Idaho and Montana) in 2012.

Opened in late 2011, the building, which houses a collection of 1.2 million specimens and objects, posed a series of access control challenges that were met before the museum was even built because the architect, integrator and specification writer started collaborating practically from Day 1—approximately a year and a half prior to installation of the access control system.

The collaboration process started when John Branson with GSBS Architects was chosen as one of the architects. Because he'd previously worked with Julia Farmer, a specification writer with Allegion, on several projects on the University of Utah campus, he knew her specifications already met university standards. Even more, he knew the benefit of tapping into her expertise early on in the process.

"This looked like it was going to be a fun project since so many components were going to be used," remembers Farmer. "The museum was going to have positive and negative pressure doors, restricted and unrestricted stairs, and rated and nonrated openings. We were looking at wood, metal, aluminum and butt-glazed doors, many of which would use card access. The building had (electromagnetic) shear locks, concealed closers and ADA operators, electric strikes, electrified trim on exit devices and electrified locksets.



Architect: John Branson, GSBS Architects
(Salt Lake City, UT)

Integrator: Mike McKay, Beacon Metals
(St. George, UT)

Specification Writer: Julia Farmer, AHC, CDT,
CSI, Allegion (Salt Lake City, UT)

“We used all Premium or Performance Brand products, including LCN closers, Von Duprin exit devices, Steelcraft doors and Schlage L-Series locks,” Farmer continues. “They outperform the standards set by BHMA by 10 times. For instance, Street or Grade 1 brands are competitive with every other competitor. BHMA requires 1-1.5 million cycles. Premium runs 10 million cycles!”

The team faced some unique challenges. For instance, the museum is terraced up a hillside, clinging to the formation of the land on which it is built. It ends with a terrace, where functions are held, that butts right up against the hill. It is very easy to jump from that hill onto the terrace. How could the team figure out how to let ticket holders back into the venue while preventing jumpers from entering? Answer: They used access control components with alarmed exit devices on several doors. An unauthorized entry sets off an alarm and the jumper is escorted out.

How collaboration helped Beacon Metals make the project more efficient

Mike McKay, the security integrator from Beacon Metals, was also brought in early, soon after they had the drawings completed and the doors were loosely specified. In a five-hour meeting—which also included the owners and a consulting museum architect—the team covered the specific security needs of every door, including all exterior and interior door access and all high risk openings.

After the meeting, the team created rough drafts and held several more meetings until all were in agreement. The University of Utah’s standards include Allegion products. However, the specification was not a closed spec, and the team had to work together to determine the best solution for each opening.

“Bottom line, the collaboration made the installation much easier,” emphasizes McKay. “It gave us a peek behind the curtains that proved invaluable. We now knew the purpose of the design specs.

“Too often, if we are brought in at a later stage, we have to second guess why a specific product decision was made and, as a result, we might guess wrong and install an incorrect solution. If we’re in on the actual planning, we know exactly what the thinking is and can properly prepare our installers to assure the job is done correctly the first time.

“Likewise, we can provide the architect and spec writer with input if a potential product will not meet expectations and offer suggestions on alternatives that will meet the goals of that particular access point. Without question, such collaboration saved the University money on this project. It’s just a more logical and economical process.”

About Allegion

Allegion (NYSE: ALLE) helps keep people safe and secure where they live, work and visit. A \$2 billion leading provider of security products and solutions, Allegion offers products under 23 brands in more than 120 countries. Allegion’s portfolio includes CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. For more, visit allegion.com.