CASE STUDY
Municipal Aquatic Center
Mason, Ohio
CASE STUDY

CAN A SINGLE BUILDING ENCLOSURE SYSTEM SAVE TIME AND MONEY ON MULTIPLE BUILDING PROJECTS? ARMORWALL CAN!

In the fall of 2019, the City of Mason began demolition of an outdoor pool in order to make way for the construction of a new state-of-the-art aquatic center with both indoor and outdoor amenities, and an addition to follow, that would serve as a premier amenity for City of Mason residents. The new center features a heated leisure pool, an enclosed 50-meter pool, a community room, a catering area and covered entrance to welcome guests.

For this project, a traditional building envelope system had been planned, but, a cost-benefit analysis performed once construction began revealed that a less expensive system was needed. When assessing ArmorWall, the project team determined that the slightly higher up-front costs of the ArmorWall product would yield $11,000 in total project savings through a faster installation time and less labor on the job, and an overall increase of 6 - 9% energy efficiency!

Flipping the specification to ArmorWall allowed the project team to eliminate the fluid applied vapor barrier and provide the thermal rating needed to meet code. ArmorWall’s ability to combine multiple materials into one sheathing system allowed the team to reduce time and costs in many areas throughout the construction process.

“Having the fire rated material pre-installed is great because you don’t have to go back and touch it again. From my experience with exterior sheathings, they are too easily damaged. Without any hesitation ArmorWall has become my favorite building enclosure product for its durability once installed. That Magnesium Oxide coating is harder than heck, it’s such a different product.”

Mike Heinlen, Project Superintendent

“With a 30 - 35% labor shortage occurring during construction, eliminating trips around the building to perform the installation absolutely saved us time and trouble. We picked up several days as a result of the faster and easier install, even with less labor on the job. And my crew liked the ArmorWall product because they could cut and install it with regular tools, it was easy.”

Terry Diltz
Valley Interior Systems
GENERAL CONTRACTOR BENEFITS

General contractors like ArmorWall for the benefits it provides through the installation process and on the project's overall schedule and budget. The faster installation and less labor on the job site save both time and money, and having fewer inspections is a nice benefit as well.

For projects like this one, general contractors may see benefits to using alternative building envelope products to OSB and weather barrier wraps, which provide far less insulation value than a product like ArmorWall. These products are also more easily damaged by equipment and trades on the job site and can deteriorate when exposed to sunlight, rain and other weather conditions over time. For short or longer projects where weather may be an issue, a more durable product like ArmorWall adds extra protection and helps interior work begin sooner.

"Every general contractor we've shown it to absolutely loves ArmorWall because of the time and cost savings. When you factor those in on the project, you spend less and get more. When you factor in the energy savings over time, the building owner gets a lot more."

Bill Spencer, REPS of Ohio

ARCHITECTURAL BENEFITS

Despite all of the benefits and cost savings for this project, the greatest benefit may be realized in how ArmorWall was used in sections of the building's exterior walls that required a fire rating assembly. And why was that needed?

Thinking ahead, the City of Mason and project team used ArmorWall in this section so that a planned building expansion could be constructed close to it in the future. Without this fire-rated section, which is made available thanks to the Magnesium Oxide coating found in ArmorWall, many additional costs would be incurred later on, such as having to add fire sprinklers to the new building or intensive fire proofing between the two buildings. With ArmorWall, the needed fire rating was already included!

"ArmorWall is a great all-in-one product that distributors can take to market as a value-add to their customers. It can be used to widen the scope of their work with air barrier and continuous insulation solutions. ArmorWall provides the contractor one easy step to achieve that."

Aaron Spencer, L&W Supply

For more information about ArmorWall VP go to: www.MaxLifeIndustries.com/ArmorWall-VP
CITY OF MASON BENEFITS

One last and significant benefit to the ArmorWall installation won’t be realized until the building begins welcoming local residents. The architect had planned for the building to be 2% more energy efficient than code required, a nice add-on to help save the City utility costs for many years to come. But, when the industry-leading insulation value of ArmorWall was added to the project, the energy model showed a 6 - 7% improvement from the traditional system originally planned resulting in an 8 - 9% energy savings compared to code! With a wealth of glass used throughout the building, saving energy through the building envelope system became a huge benefit. These additional energy savings can be used by the City to cover operating costs, host special events and more.

“By performing a thorough cost-benefit analysis that compared the slightly higher up-front costs of the ArmorWall product to the lower overall project costs that result from the labor and time savings, we were able to show that switching to ArmorWall was less expensive overall.”

Chris Sample, Champlin Architecture

**FAST INSTALLATION**
Valley Interior Systems reduced the installation time by up to five days

**TRADITIONAL TOOLS USED**
No specialized tools were needed to cut panels to size or perform any part of the install

**FIRE PROTECTED**
Our NFPA 285 rate assemblies offer up to 2-hours of fire protection

**$11,000 COST SAVINGS**
Labor and time savings amounted to $11,000, but more will be saved in lower energy costs over time

**ONE INSTALLATION CREW**
Installation was performed by one crew, reducing time, labor costs and eliminating risks

**EXPANSION READY**
A second building can be built easier, faster and less costly thanks to a fire-rated section of ArmorWall