

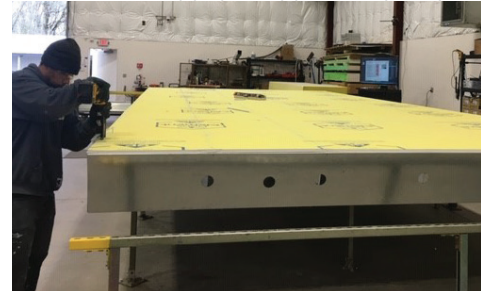


Service/Hospitality

## Case Study | 013



### Bringing Majesty to Life with Panelized Construction: Emerald Queen Casino



Rising above Interstate 5 in Tacoma, Washington, the Puyallup Tribe of Indians' glamorous new Emerald Queen Casino is about to become an entertainment mecca that will beckon drivers to experience a bit of Las Vegas, Pacific Northwest-style.

The Emerald Queen's journey to star status began as a modest bingo hall built in 1992. But the Tribe had a grander plan – an unrivaled entertainment destination in the greater Seattle metro area including a hotel, casino and event venue. In the summer of 2018, construction began on a brand-new \$310 million casino scheduled to open in December 2019. In addition to 310,000 square feet of space for gaming, the building will also feature a 2,000-seat events center, three restaurants and a second parking garage.

"It will have everything we could have dreamed of," said Emerald Queen Casino General Manager Frank Wright. "It's going to be fantastic."

#### Process meets product to create harmonious efficiency

When a concept has merit, its adoption populates industry consciousness quickly. Offsite construction is a scheduler's nirvana. A temperature-regulated, professional work environment replaces scaffolding holding crewmembers at perilous heights. Rain, snow, temperature and wind are locked into the construction approach of the past – forever neutralized. The seriously innovative are the early adopters – architects, contractors and product manufacturers.

When Cunningham Group Architecture (CGA) was awarded the project, the firm recognized that panelized construction would be the ideal process. Since the casino would be built above an existing three-story parking structure, traditional construction would require crews to work hundreds of feet in the air, and the rainy Seattle climate could cause weather delays. With panelized construction, most of the work would take place in a climate-controlled warehouse.

Georgia-Pacific applied the same efficiency principles to DensElement® Barrier System – eliminating an application step, shortening cure time and enabling the same crew to both install and finish. By adding exponential efficiency in the sheathing process, time and labor savings are realized. In addition, factory output is increased.

"The speed that we can put DensElement® Barrier System through our facility is amazing to me. The overall time savings for us is just tremendous."

– Matt Wallace, Panelization Facility Manager, Western Partitions, Inc.



<https://tacomaweekly.com/front-page/puyallup-tribal-leadership-unveils-new-casino-plans-to-city-council/>

#### Component Quantities:

185,000 MSF of  
DensElement® Sheathing

#### Key Companies:

Architect:  
Cunningham Group  
Architecture –  
Las Vegas, Nevada

General Contractor:  
Absher-Kitchell  
Construction –  
Puyallup, Washington

Panelization Contractor:  
Western Partitions, Inc. –  
Wilsonville, Oregon

Distributor  
(DensElement® Barrier System):  
GTS Interior Supply –  
Ferndale, Washington

Having recently used DensElement Barrier System on a 21-story mixed-use tower in Portland, Oregon, the selected panelizer, Western Partitions, Inc. (WPI), knew it was ideal for the new Emerald Queen.

“We knew the feasibility of getting workers onto the building to install sheathing and the specified fluid-applied Water Resistant and Air Barrier (WRB-AB) just wasn’t there,” said Nathan Sumison, WPI’s Estimator and Project Manager. “That’s why we proposed DensElement Barrier System. When we don’t have to have men installing a fluid-applied WRB-AB in a boom lift or on a swing state or a scaffold, it saves a lot of time and increases the safety factor. I’d estimate we saved 50% in overall labor by not having to install a fluid-applied barrier onsite.”

With DensElement Barrier System, no separate WRB-AB is needed. By filling microscopic voids in the glass mat and gypsum core of DensElement Barrier System via AquaKor™ Technology, a hydrophobic, monolithic surface is created that blocks bulk water while retaining vapor permeability. It eliminates an application step – both in the factory and on the job site. There’s no cure time slowing crews down, plus it’s protected during transportation.

“The speed that we can put DensElement Barrier System through our facility is amazing to me,” reflected Matt Wallace, WPI’s panelization facility manager. “We’re able to put the sheathing on the panel, seal the seams and hit the screws with PROSOCO R-Guard® FastFlash®, and have it dry and ready for whatever process we have next. Rather than having to inspect every square inch of surface like you do with a fluid-applied barrier, we only have to make sure that the PROSOCO was applied at the right mil thickness. The overall time savings for us is just tremendous.”



#### Easier to transport, quicker to install

Wallace’s team constructed and shipped approximately 300 panels to the Emerald Queen job site.

“By using DensElement, we were able to use drywall sleuters – special boards we place in between the panels for transport,” Wallace remarked. “Panels with a fluid-applied WRB-AB tend to stay tacky, and we’ve had problems with whatever protection was in between them sticking and ripping the fluid-applied off.”

Once the panels arrived, crews immediately began installing them on the structure.

“Using DensElement, we don’t have to be out on the building as much,” Sumison added. “We can hang the panels, hit the screw heads, joints and seams, walk away and we’re done – it doesn’t get any easier than that.”

#### Proven performance inspires confidence

Wallace estimates the panels were left exposed for approximately three weeks before the cladding was installed.

“That’s another great thing about DensElement,” Sumison continued. “We can hang it in any type of weather, and the PROSOCO R-Guard® FastFlash® can be applied to damp surfaces, which has helped us with this project.”

Both Wallace and Sumison view DensElement Barrier System as their system of choice for all their projects moving forward.

“My crew and I definitely prefer it,” Wallace said. “It’s faster and easier to work with than the fluid applied. They can get their footages and then move the panels out of the way to get working on the next one right away.”

Efficiency and schedule control are hallmarks of offsite construction, but using DensElement Barrier System adds exponential productivity by eliminating the application step and cure time that comes with fluid-applied products. Add in the reduced quality control time – just checking fasteners, penetrations and seams instead of the entire surface – and your production schedule is shortened considerably.

“It’s the product we want to work with on all of our jobs with exterior sheathing,” Sumison concluded. “It just makes sense.”

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The fact that DensElement Barrier System is available in 12-foot sheets was also a boon for the project.

“Other sheathing products are only available in 4’x8’ sheets,” Sumison explained. The panels we built for the Emerald Queen were 12 feet wide, so we were able to quickly and easily lay the 12-foot sheets of DensElement like railroad track. Our team didn’t have to make cuts, which saved time, and there were hardly any leftover scraps, which helped minimize waste and save money.”

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