



NICHIHA CASE STUDY

Modular Construction Success at the Kalahari Resort

There are always issues that come up in a construction project: Product demand, weather delays, site development issues and crew member absences can all hinder your deadline. When Kalahari Resorts started the construction of its Austin location, the COVID-19 pandemic had just begun, and architects on the project specified a product the installation crew hadn't used before: Nichiha's VintageWood.

New Fiber Cement Product, New PMC Process

Project Superintendent Dustin Patteson has 19 years of experience in the construction industry, and he is familiar with a wide variety of wall construction methods and prefab products. Still, he and his crew at Standard Drywall hadn't worked with the Nichiha product before. "As far as fiber cement goes, I've worked with Hardie Board before, but Nichiha was a new system for us," he explained.



PROJECT DETAILS

BUILDING OWNER

Todd Nelson

CONTRACTOR

Standard Drywall Inc.

SUPERINTENDENT

Dustin Patteson

LOCATION

Round Rock, Texas

PRODUCT

VintageWood - Cedar & Bark

COMPLETION

2020

CHALLENGE

Everything is bigger in Texas, and the Kalahari construction project was no different. It included a water park and family resort that sits on 350 acres. The installation team had never used Nichiha's products before, and Nichiha hadn't been installed in this type of modular construction process before. The team had a huge job ahead of them at the newest (and largest) Kalahari Resort — along with a tight deadline.

SOLUTION

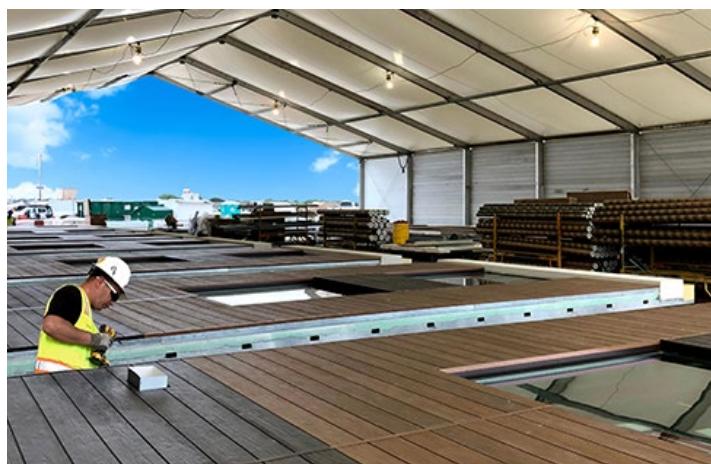
Project superintendent Dustin Patteson found that Nichiha's clip design made for a smooth installation, and his team was able to set up the fiber cement cladding quickly enough to meet project deadlines. Nichiha representatives came out to the site to provide additional guidance and ensure efficiency during the commercial modular construction process.

RESULTS

Kalahari Resorts ended up with a successfully stylish and highly durable exterior on the expansive structure — an exterior that would stand up to Texas weather and maintain its unique brand-centric style for decades.

The Kalahari Resort is incredibly expansive:
The hotel, convention center and waterpark span 350 acres
and cover 1.5 million square feet in Round Rock, Texas.

Despite the fact that the crew hadn't worked with Nichiha previously, contractors were able to navigate the installation with ease, keeping construction costs within budget for their client. The modular approach, also called PMC or permanent modular construction—where part of the construction process is completed off-site in a controlled environment—was a big factor in the smooth installation process. The Architectural Wall Panels (AWP) from Nichiha were specified because they can be installed to support a permanent modular building construction process.



"It was a new methodology for us," says David Hohenstern, Technical Manager at Nichiha. "Normally, AWP is installed after the structure and exterior framing are already in place. It was the first time we fully vetted and sanctioned off-site construction and on-site transportation of the installed AWP."

The time-efficient modular construction approach was necessary for a job of this size.

**The Kalahari Resort, Texas —
a Modular Construction Behemoth**

The Kalahari Resort is incredibly expansive: The hotel, convention center and waterpark span 350 acres and cover 1.5 million square feet in Round Rock, Texas. This newest addition to the Kalahari Resort family also boasts the largest indoor waterpark in America.

With such a large construction project, Superintendent Dustin Patteson had to ensure that all aspects of the installation were accounted for. "There are just more panels, more work and more coordination on a job of this size," explains Dustin.

The Kalahari Resort was scheduled to open in late 2020, and to stay on track, a smooth installation process was key for the project's success. There were a few aspects of the modular construction process that hadn't been encountered by Nichiha's Technical team before.

"The two-story panel walls were lying like tabletops, so the normal aid from gravity was not present when installing Nichiha AWP," explains David Hohenstern with Nichiha. "Extra emphasis on the AWP fitting properly was needed, so that nothing would shift when the walls went upright. Also, the installers had to acquire more robust equipment in order to move the Nichiha-clad wall panels, which were heavier than walls with EIFS."

"Our production increased drastically, and the team got faster after just a couple weeks on the job."

**DUSTIN PATTESON
PROJECT SUPERINTENDENT, KALAHARI RESORT**



On the Job Training

Handling a project like this requires a considerable amount of experience, planning and oversight in the construction services industry, which is exactly what Dustin Patteson does. "I'm hands-on with a lot of the project; it's the best way to do it," says Dustin. One of the benefits of working with a product manufacturer like Nichiha is its customer service. Dustin realized that he and his crew would need some training on the new product. "We took a lot of information off the website, and reviewed that with the project foreman and supervisors," says Dustin.

Several of Nichiha's team members also met with Dustin and his crew at the job site. "We worked with the installer and general contractor on the overall plan, and developed the key detailing and how the wall panels would join. We also made multiple advisory visits to educate the installers and confirm the actual implementation methods," explains David Hohenstern with Nichiha.

"It's a new product, so you learn a little more as you go along," explains Dustin. "And it's easier doing that in person: Seeing the product and having it on hand was incredibly helpful. People learn more quickly when it's hands-on."

Prefab Plus Easy Installation Yields Success

While this modular building construction was new for Nichiha, the company's quality control during the manufacturing process of the Architectural Wall Panels (AWP), coupled with Nichiha's proprietary installation system helped to mitigate further construction delays.

"The contractors did not have to build scaffolding or utilize platform lifts to install Nichiha. All Nichiha installation was done in a controlled setting, sheltered from the Central Texas weather," says David with Nichiha.



"It checked all of our boxes, and then some.

Everyone is in love with this product;

it's seamless, and we're very impressed."

**DUSTIN PATTESON
PROJECT SUPERINTENDENT, KALAHARI RESORT**

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Because of Nichiha's high-quality training and customer service, installing and using Nichiha's clip installation system was a breeze for Dustin and his team at Standard Drywall. "This cladding installation was different. The clip system is plug-and-play, so once you get one section done, the guys get pretty fluent in the process," says Dustin.

Nichiha's clip system is designed for efficiency and ease of installation on large commercial, national brand, or multifamily modular construction projects. "Our production increased drastically, and the team got faster after just a couple weeks on the job," says Dustin.

The modular construction approach and Nichiha's easy-to-install product made the job seamless for installers on the project, and the service provided to Dustin and his crew helped to ensure the final result was a true success.

"Everything is bigger in Texas, so it was the perfect place for our largest and most luxurious resort yet," said Todd Nelson, owner of Kalahari Resorts and Conventions, in November 2020. "We're proud to be able to open the Round Rock location as scheduled despite what a challenging year it's been for everyone."

"It checked all of our boxes, and then some. Everyone is in love with this product; it's seamless, and we're very impressed," says Dustin.



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Nichiha USA, Inc., a subsidiary of Nichiha Corporation, was established 1998 and is headquartered in Johns Creek, GA. Nichiha Corporation, an international leader in fiber cement technology for more than 35 years, has 13 plants worldwide and markets distinct patterns of fiber cement siding products in the U.S. In 2007, Nichiha opened its first U.S. manufacturing plant in Macon, GA, responding to an increase in demand for fiber cement products in the Southeast market. For more information, call 1.86.NICHIHA1 or visit www.nichiha.com.

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