Pechanga Resort and Casino
Temecula, CA

Case Study

The Whalen Company

Pechanga Resort and Casino Opts for Skill Over Chance in Recent $285 Million Expansion

Since opening its doors in the summer of 2002, Pechanga Resort & Casino has become a popular and well-loved West Coast destination for live entertainment, fine and casual dining, and invigorating games of chance. In alignment with the surrounding Temecula Valley region, Pechanga has experienced significant growth over the past 15 years – attracting a loyal regional following, and drawing visitors from neighboring counties, surrounding states and as far as Europe and Asia.

As Pechanga's patronage, and especially those seeking an exciting out-of-town getaway, continued to increase, it became clear to Pechanga's ownership that expansion was on the horizon.

"Pechanga Resort & Casino is dedicated to ensuring its guests receive the best resort experience they possibly can," said John Flaherty, vice president of facilities at Pechanga. "Committed to maintaining Four Diamond level standards, we are continually reinvesting in our property and its amenities. This has most recently included an investment to address extremely high demand for accommodations and the subsequent need for more hotel rooms and resort activity spaces."

In 2015, Pechanga held an official groundbreaking to add 568 rooms and suites to Pechanga's existing hotel facilities, as well as expand the resort's dining, spa, outdoor recreation and meeting facilities.

"In addition to a new 13-floor hotel wing, the expansion build-out was drawn to include a new two-story luxury spa and salon with 17 treatment rooms, an outdoor activity area and 4.5-acre resort-style pool complex, a fitness center and hydrotherapy pool terrace, and two new food and beverage outlets," Flaherty said.

According to Flaherty, nearly 70,000 square feet of additional ballroom and meeting space was also included in the expansion plans, to accommodate larger conferences and events in the future. "With a convenient and centralized location between Los Angeles and San Diego, and the benefit of a year-round warm and sunny climate, Pechanga Resort & Casino provides an ideal venue for industry conferences, corporate retreats, destination weddings, and other special events," explained Flaherty.

Shortly after the first phase of construction – which created a new five-level, state-of-the-art parking structure – the project's Los Angeles-based general contractor, Tutor Perini Corporation, was inclined to make a change to the original mechanical system design of the hotel tower plans.

"Despite the tight construction timeline, we felt compelled to consider another option for the nearly 700 vertical stack fan coil units to be installed throughout the three new hotel wings," said Bill Abbott, project manager at Tutor Perini. "With sovereign entity projects, particularly of this scope, we assume a lot of potential risk, and we wanted to make sure we were working with a mechanical equipment provider dedicated to top-notch, white-glove service, and one that could work outside the box if needed."

Tutor Perini subsequently encouraged the project's MEP firm in El Cajon, Calif., University Mechanical & Engineering Contractors, to reach out to Southern California-headquartered Air Treatment Corporation (ATC), and examine an alternative option from The Whalen Company.

"The GC wanted a manufacturer that was hands-on and could provide exceptional customer support, as well as proprietary equipment designs," explained Dan Reeves, sales engineer at ATC.

"They had worked with The Whalen Company on a previous sovereign entity project, and felt confident the company could provide a custom mechanical system solution – particularly considering the large scope of required units, and aggressive overall construction timeline."

Reeves and the ATC team met with engineering and product management staff from the Easton, Maryland-based Whalen Company to further examine what might be possible for the project.

"We were dealing with several variables on the Pechanga project, including code requirements for hotel room units able to deliver outside air," he said.

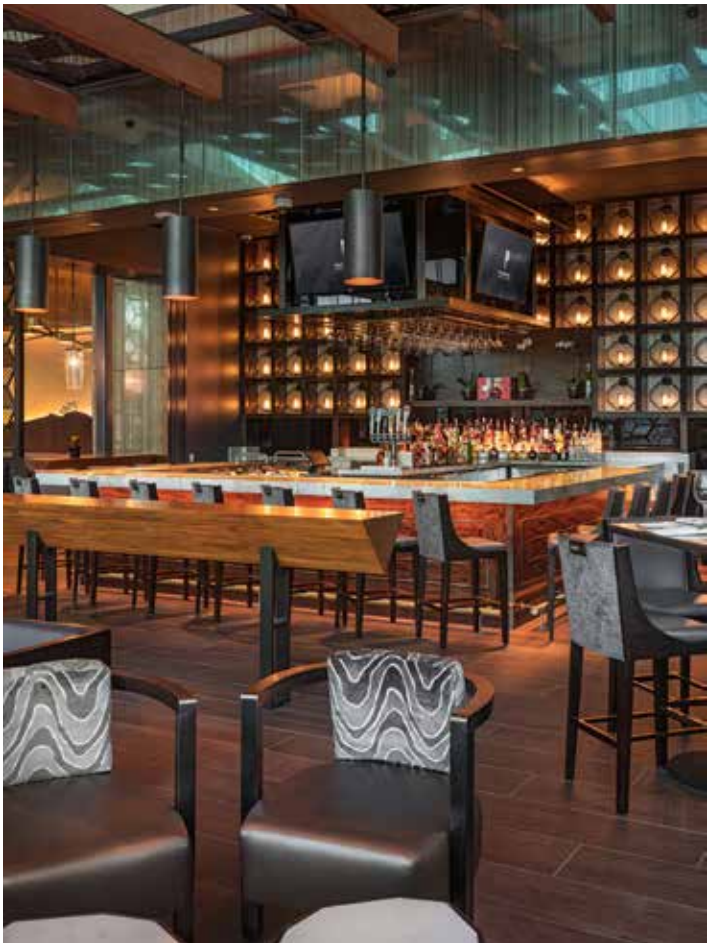
According to Reeves, typical fan coil units with outside air intake capabilities are designed with air returns at the bottom of the face front of the unit, and discharge at the top of the face front of the unit.

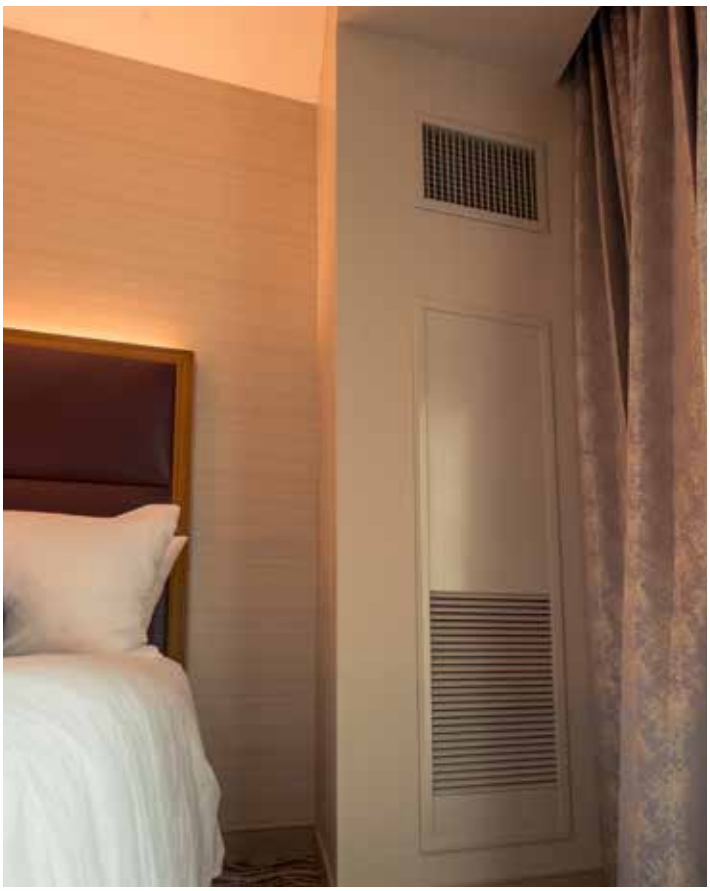
"Traditionally, vertical stack fan coils take in outside air from ducting that connects to the side and toward the bottom of the unit," Reeves shared. "The air is then conditioned by the coil and discharged out of a grill at the top.

"With this type of unit design, ductwork must be run up against the side of the fan coil, connecting the unit's air inlet to the air movement mechanism outside the building. As imagined, the sheet metal labor required to achieve this can be rather substantial, resulting in an extended construction timeline and elevated material and labor costs."

Reeves was pleased to discover that, with longstanding industry experience, The Whalen Company had recently developed a unique fan coil unit design to address this particular challenge. This new "internal duct" outside air option eliminates the need for any duct work that would otherwise be external to the cabinet, as it is pre-installed on the inside of Whalen's fan coil unit cabinet in the plenum section of the unit. In addition to reducing installation costs associated with sheet metal material, Whalen's internal duct design allows for the outside air to be delivered prior to the coil and filter, thus enabling its pre-filtering and pre-conditioning.

"Our Inteli-line® vertical stack fan coil unit is fully assembled with factory-installed piping packages, controls and risers," said Tony Landers, Vice President of Sales and Marketing at The Whalen Company.





"We provide a complete solution when it comes to any required connection piping, the unit is ideal for installation in multi-floor commercial applications like hotels, apartments and dormitories. Its small footprint also facilitates the ability to be furred into columns and walls, as well as tighter spaces like closets. This translates to the creation of more usable, functional square footage for occupants which, for a hotel application like Pechanga, was particularly key."

According to Landers, the Pechanga project likely stood to save hundreds of thousands of dollars in labor and material costs by opting for use of the Inteli-line vertical stack fan coil from Whalen.

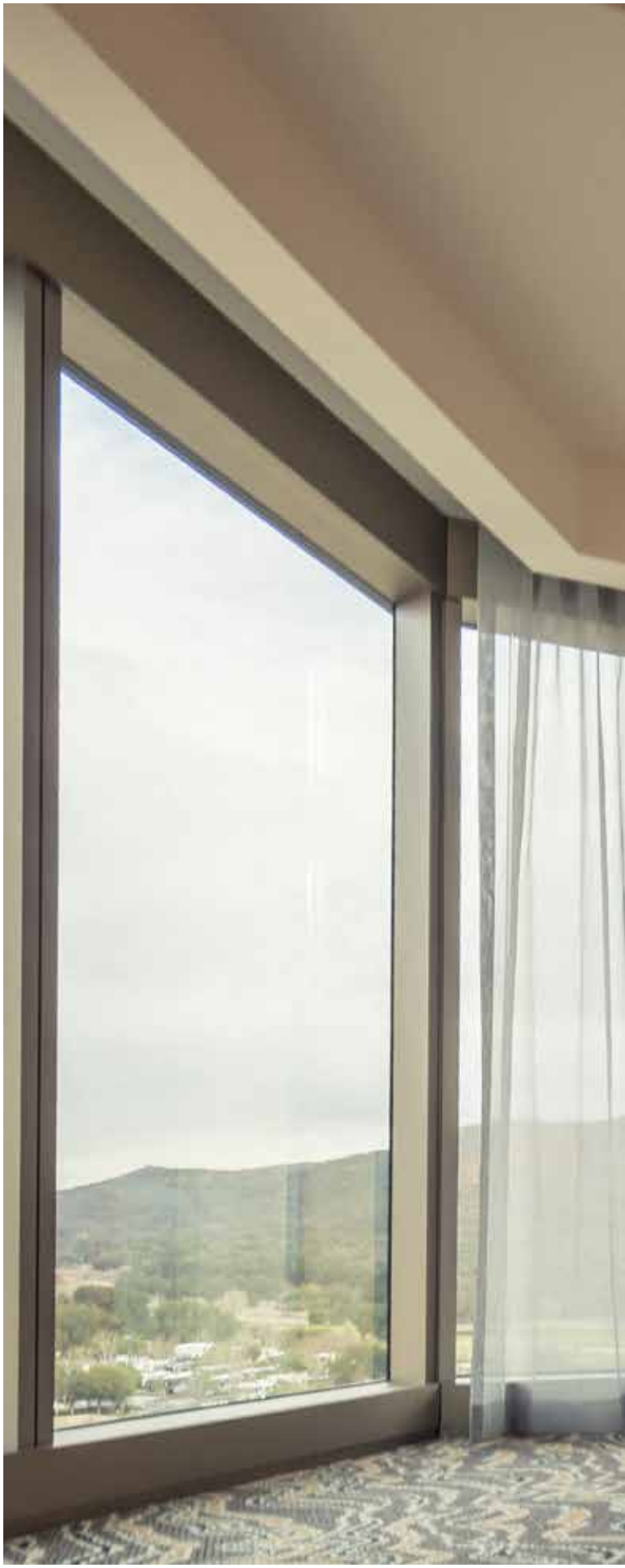
Reeves and The Whalen Company team worked to deliver a number of Inteli-line units at the Pechanga jobsite later in 2016, as the project at-large continued to progress. During that time, Reeves had the opportunity to demonstrate several additional benefits to both the GC and MEP firm.

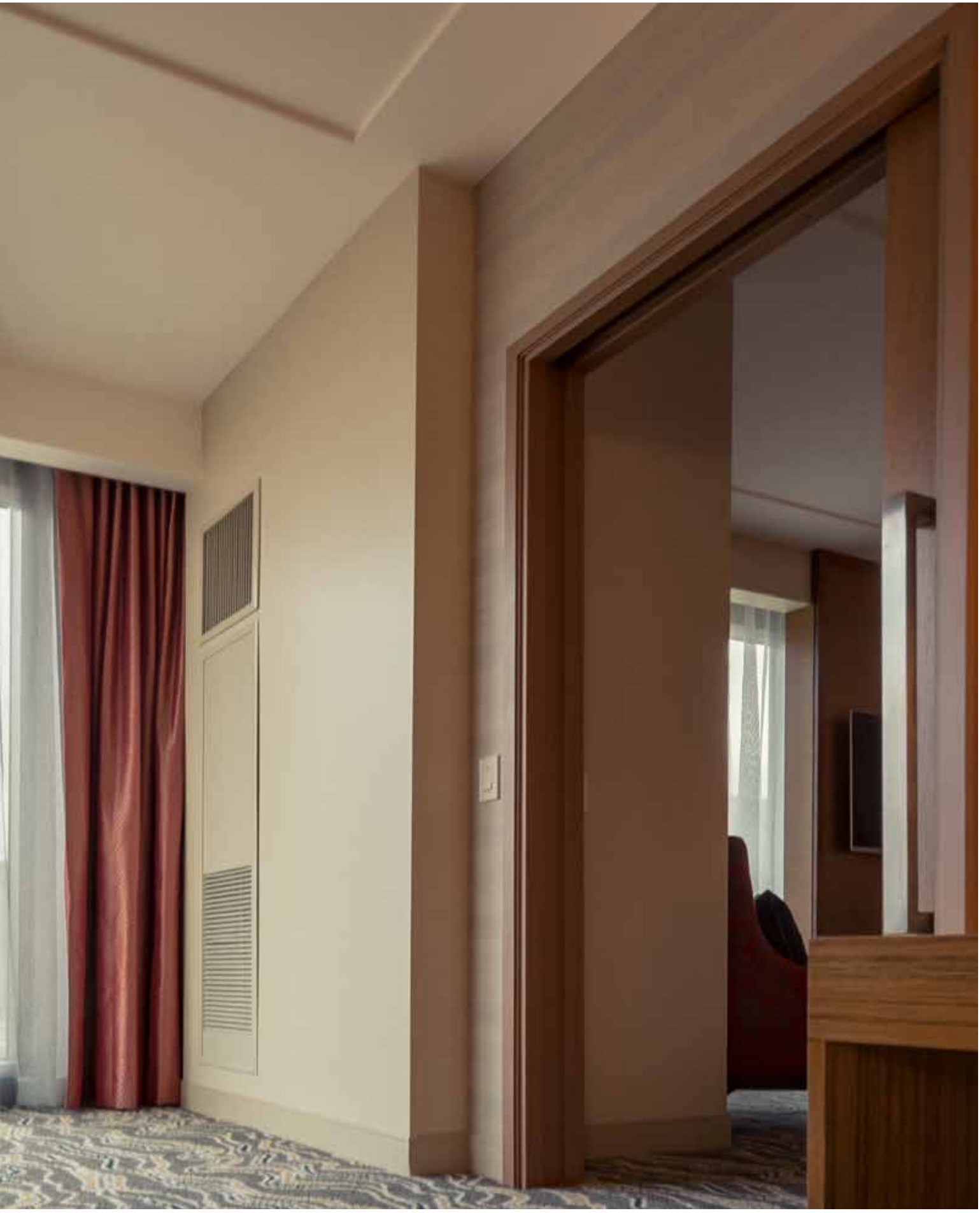
"In addition to integrated piping, Whalen's Inteli-line has a slide-out chassis that provides huge installation and maintenance benefits," he shared. "We were able to demonstrate this advantage to Pechanga's facility management staff, and they were very impressed to see us do so in less than two minutes' time."

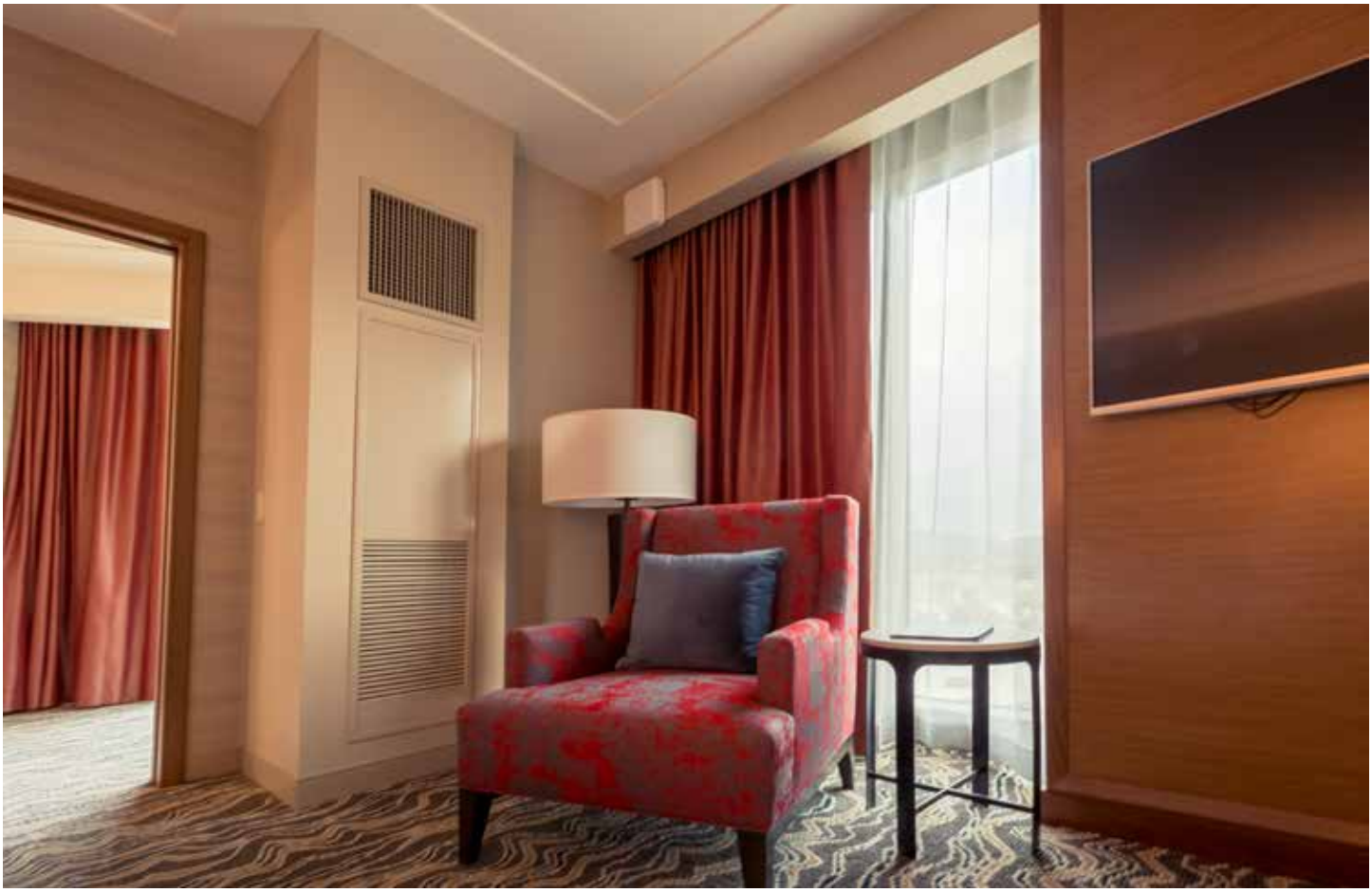
According to Reeves, fan coil unit installation – particularly in multi-story applications – requires aligning the unit above with the riser of the unit on the floor below."This can be tricky, as you're propping up and shifting the unit around during this whole process," he explained. "There's no way it can be a one-man job. With a removable chassis however, the housing itself can be installed initially and independently, making it possible for a single person to manage."

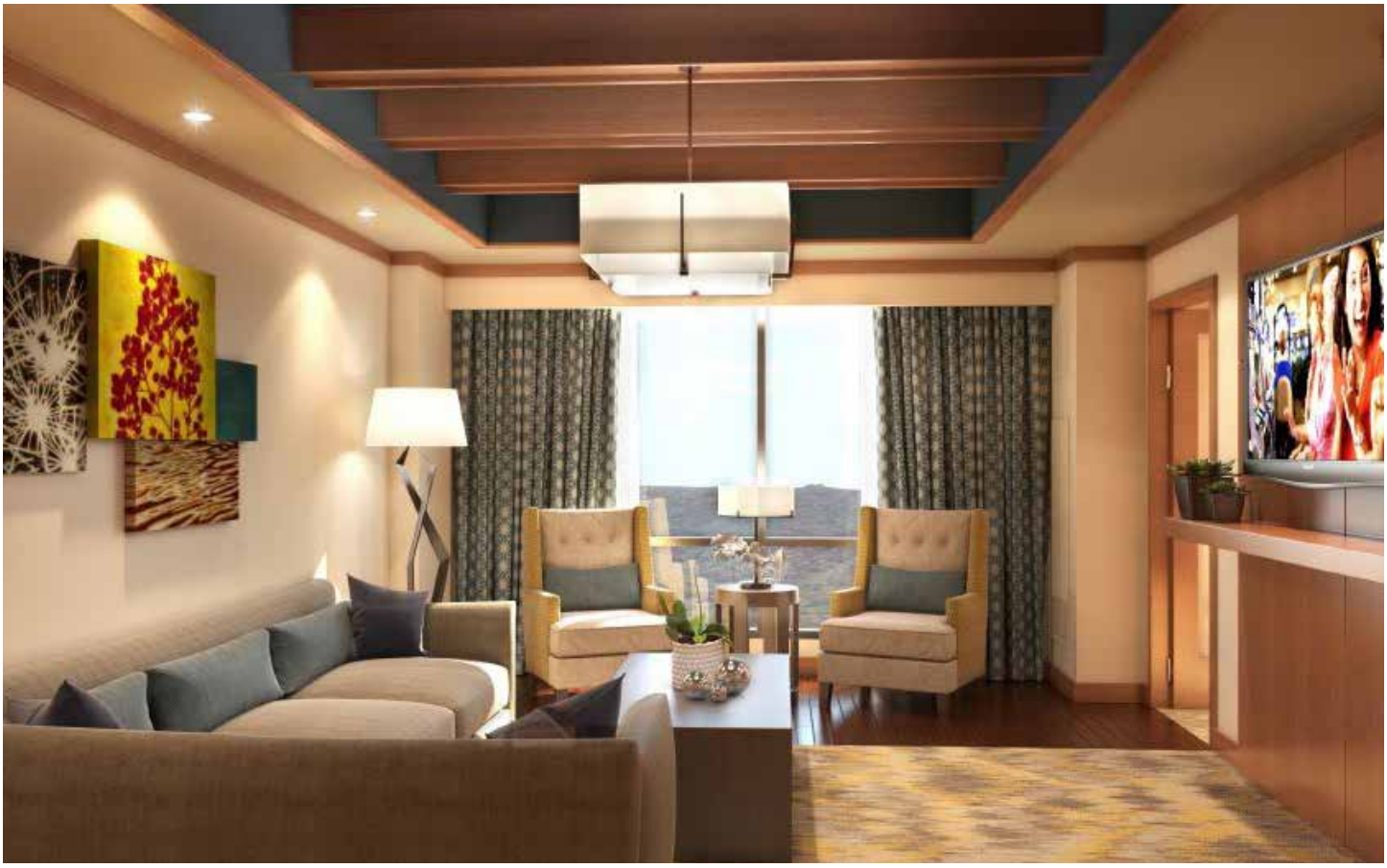
Further, a removable chassis equates to several additional benefits related to the construction timeline and installation staging.

"With the slide-out chassis version of Whalen's Inteli-line vertical stack valve control fan coil unit, the chassis can be removed or installed using just four fasteners," said Whalen's Landers. "This means we have the ability









to ship the chassis components separate from the cabinet, so they're not just sitting around the jobsite accumulating dust or, even worse, at risk for being damaged or stolen. The Inteli-line offers further benefit in ongoing maintenance, with easy access to the drain pan and all internal components, and the ability to replace just the chassis if necessary. For Pechanga, this meant minimizing any hotel room inventory downtime while servicing the units." ATC's successful conversion to Whalen resulted in specification of 697 vertical stack fan coil units, to be installed in the hotel room/suite, housekeeping and elevator areas of Pechanga Resort & Casino's new east, west and north hotel wings.

This included: 522 four-pipe, 400 cfm heating and cooling units; 44 four-pipe, 600 cfm heating and cooling units; 98 four-pipe, 800 cfm heating and cooling units; 21 two-pipe, 600 cfm cooling-only units; 11 four-pipe, 800 cfm heating and cooling units and 1 two-pipe 1000 cfm cooling-only unit.

Additionally, 70 horizontal fan coil units were specified for the other areas of the resort expansion.
Staged delivery of the units began in February 2017, with the vertical stack fan coil unit cabinets shipping in advance of the chassis components. Mechanical component installation began shortly thereafter, and with an aim of completing construction of all hotel rooms prior to the end of the year, both University Mechanical and The Whalen Company were required to perform in alignment with the aggressive construction schedule.

"We made a plan to work our way up the building, with a goal of installing all primary units first on the lowest three floors, after which the secondary units, which share the primarys' risers, would be installed," explained Ted Obrockta, former mechanical project manager at University Mechanical. "That way, all the pipe would be exposed and ready as we installed each secondary unit, and we could work as quickly as possible to stay in line with construction deadlines. To remain on track, we planned to tackle 15 to 20 units a day, with installers working double and even triple shifts each day."

"The installation schedule was bordering on unrealistic at certain points, despite everyone working as hard and smart as possible," said Reeves at ATC. "On more than one occasion, Whalen worked with us and was able to shift things around on their manufacturing lines to meet – and even exceed – drop schedules for the cabinets."

Mechanical system installation wrapped up in fall 2017, with testing and balancing following throughout the last months of the year.

"Whalen was with us the entire way through the project, and was even able to deliver on custom requests like labeling the hot and cold water supply and return hoses, and sourcing custom colors for the grill covers," said Reeves.

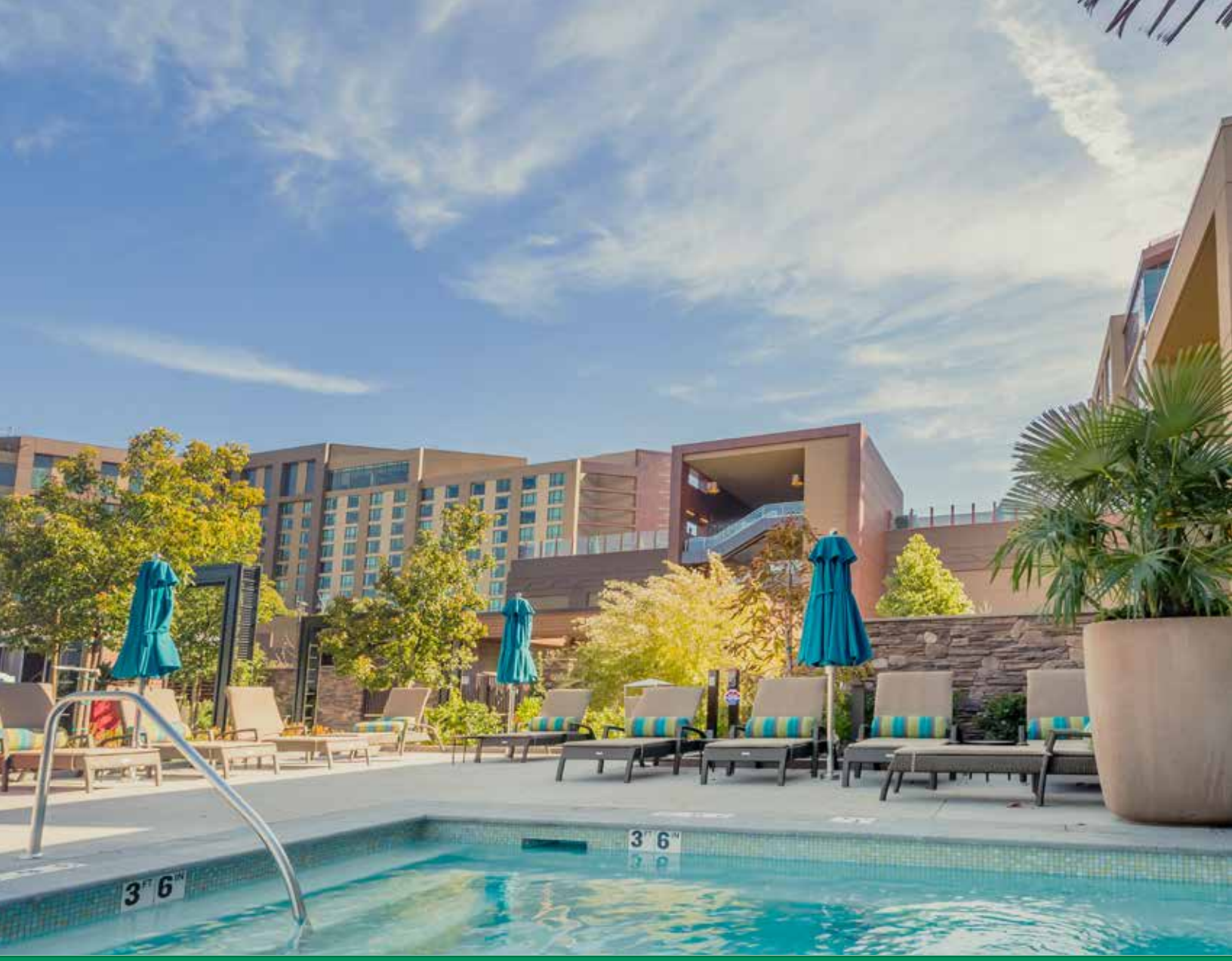
"At that level, a lot of other manufacturers would have told us this just wasn't possible, even though these are the kinds of things that can really make a difference on a project, and definitely on getting repeat business from a customer. It really exemplifies what The Whalen Company embodies and values, operating nimbly and intimately despite being a large manufacturing entity."

Pechanga Resort & Casino management anticipates the $300 million expansion project, once complete, will have utilized approximately 2,900 construction personnel, and will result in 750 permanent staff positions being created. Additionally, the resort and casino's management expects the new hotel, spa, pool complex and other entertainment and dining areas will result in a $550 million economic impact to the Temecula Valley region at-large.

About the Whalen Company

Founded in 1962, The Whalen Company supplies HVAC equipment and systems that are found in thousands of installations including offices, hotels, condominiums, apartments, nursing care and senior living facilities, as well as classrooms and dormitories. Whalen products are distinctive in concept, performance, reliability and energy efficiency, thereby delivering a "perfect fit" solution for customers. In addition to their popularity in new construction projects, they are highly suited for renovation or equipment replacement projects completed in less time and at a lower cost.

For more information about The Whalen Company and its product line, including resources such as technical data, engineering drawings and digital equipment selection software, visit www.whalencompany.com.



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