

# An Automatic Winner



# Winner



*A Philadelphia project adds automated parking and gains fast loyalty with residents.*

By Ian Todd





**P**RESCRIBED PARKING MINIMUMS and concern about the anticipated effect of autonomous vehicles (which some would argue is overhyped) may help form developers' views on the importance of parking. However, some developers view parking, or rather fully automated parking, as an essential amenity in their developments and have even found it to be the amenity buyers value the most. One such developer is Scannapieco Development Corporation (SDC) based in Philadelphia, Pa.

SDC recently implemented an 86-space fully automated parking system in its 500 Walnut project. 500 Walnut, a 26-story residential tower at the corner of Philadelphia's Fifth and Walnut streets features 35 condominium residences and an impressive list of high-end amenities that make it one of the city's most exclusive, luxurious residential projects to date.

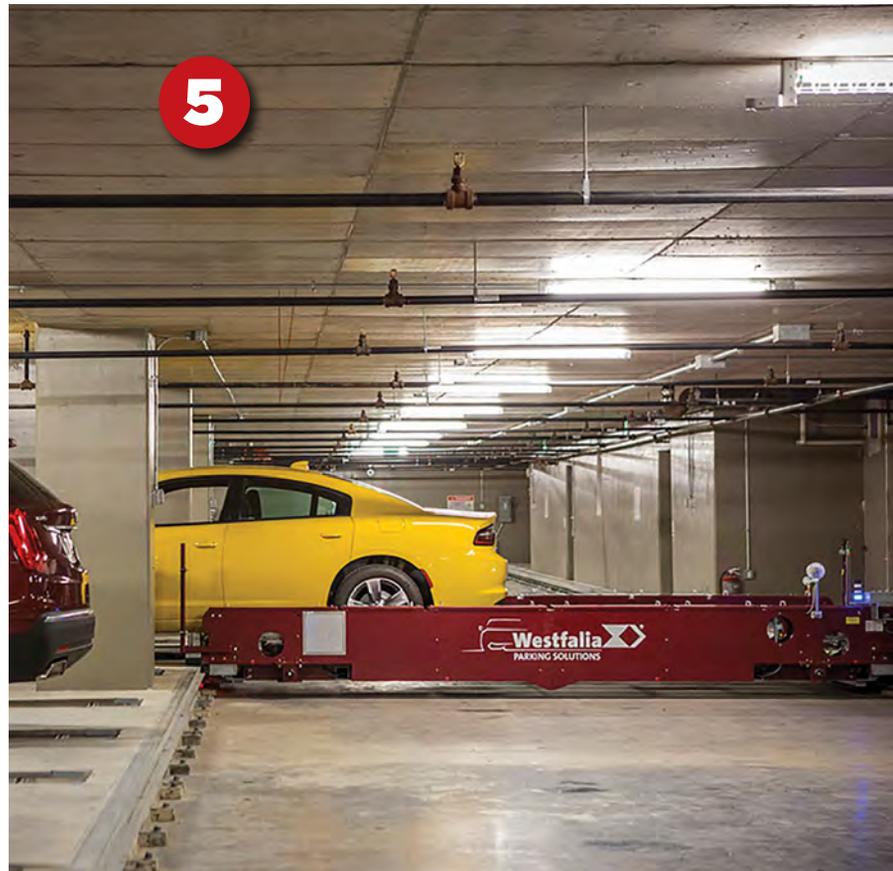
### The 500 Walnut Project

Targeting the ultra-high-end residential market, SDC has had the ongoing record of the highest condominium sale price in the city for almost 10 years. To help to ensure this project's success, SDC looked to improve its list of high-end amenities for 500 Walnut by implementing an automated parking garage.

SDC sought a vendor that could provide a system that used multiple pieces of equipment to park and retrieve vehicles, providing greater system redundancy, which minimizes system downtimes and increases convenience for residents. The system also had to provide full support services



Automated parking takes a car from the front entrance all the way to its parking space and then back again.



such as 24-hour remote monitoring and support and the ability to be onsite within a very short timeframe should an issue arise.

## The Parking System

The state-of-the-art, 86-space automated parking system is located in the basement of 500 Walnut. Westfalia worked closely with SDC and project architect Cecil Baker + Partners to ensure the parking system efficiently integrated with the building structure and maintained the ultra-luxury aesthetics where the residents interacted with the parking system in the two transfer areas on the first floor. Opened in early 2018, 500 Walnut uses a system that collects vehicles directly from the concrete floor of the two basement levels, allowing a high throughput.

Residents of 500 Walnut drive up to the building and a transponder in their vehicle sends a message to open the outer garage-style door, allowing them to enter the luxurious marble auto court area. Once in the auto court, the outer door closes and a transparent transfer area door opens in front of them, allowing them to park their vehicles in the correct position with guidance from an instruction screen. The residents then use a sleek touch screen immediately outside the transfer area to answer a set of standard questions and confirm they wish to park their vehicle in the system; the transfer area door then closes, and the automated system handles the rest. Residents have then completed the parking process in a private, hassle-free manner and then take the personal elevator to their condominium. No one has to get into the resident's vehicle, meaning residents can safely leave their personal belongings in the car without fear of tampering.

Once the transfer area door has closed and locked, the system scans the transfer area to ensure there are no people present. The vehicle is then lowered to a basement level where the mechanism drives under the vehicle, clamps its wheels, and transports it onto the transfer car. The vehicle lift can then return to the ground floor to allow another vehicle to enter the transfer area while the previous vehicle is being parked.

To retrieve their vehicles, residents can either swipe their fob at the reader in the personal elevator or at one of the fob readers immediately outside the transfer areas (or they can call down to the concierge to retrieve their vehicle for them). Once their fob has been read, the system retrieves the vehicle from its parked location and moves it to the vehicle lift, which raises the resident's vehicle to a transfer area on the ground floor. On one of the touch screens adjacent to the transfer areas, the residents are given an estimated

wait time—which averages just over two minutes—for their vehicle to be returned to the transfer area. When the vehicle lift is at the ground floor, the door opens, allowing the resident to enter the vehicle and drive it forward out of the transfer area to exit the property on to Fifth Street. The transfer area door closes as soon as the sensors indicate the vehicle is no longer present.

The parking system at 500 Walnut is equipped with two levels of parking with two individual transfer cars that can move within an aisle to store and retrieve vehicles.

The palletless system transports vehicles into the parking garage and positions them directly on a concrete or steel deck. Building construction can be based on concrete or steel or a combination of both, depending on project location and the client's construction preference.

## The Amenities

This system was customized for this specific development. Pictorial representations of the system and equipment pieces and simplified user screens were created to allow non-technical personnel to easily interact with the parking system. The concierges at 500 Walnut also have access via a terminal at their desk, allowing them to perform certain functions such as retrieving vehicles and permitting residents' visitors to use the system.

500 Walnut's facility offers:

- Cost- and time-efficient parking.
- Increased safety.
- Less human involvement and fewer human errors than traditional systems.
- Convenient 24/7 access. ◆



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## Features of 500 Walnut's Facility

- Two transfer areas with integrated vehicle lift.
- Two transfer cars.
- One redundant lift.
- Double-deep storage to maximize capacity.
- 86 parking spaces.
- 50,840 square-foot base area.
- Two levels.
- Palletless system.
- Residential use.
- Operational since 2018.