



Gating Access: Challenges in Multifamily Properties

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Gating Access: Challenges in Multifamily Properties

Multifamily owners and property managers are seeing increased benefits in improving access control. Secure access control mechanisms, including doors and gates, are vital in ensuring that residents, guests, delivery persons, employees, and vendors have easy and appropriate levels of access to community areas and residential units. The adoption of access control technology enables multifamily owners and property manager to reduce costs, better secure the community and residents, generate new insights, and increase visibility throughout the property. In addition, these new solutions simplify operational processes such as rekeying locks or granting access to units for tours, maintenance, new residents, and others as needed.

Access control is also enabling a wide range of new use cases, from improved package delivery for residents to integration with lifestyle apps offering services such as dog walking or home cleaning.

In the area of package delivery, the growth of e-commerce and online ordering has led to an increase in package theft and mis-delivery, creating a need for enhanced ways to receive and secure packages. Communities may not have the space or internal resources to hold packages at their on-site offices, lockers may not have sufficient space, and package holding companies may delay deliveries for several days.

Furthermore, delivery drivers often face challenges in gaining access and delivering packages appropriately, and communities often struggle to find the right balance between ensuring easy delivery access and maintaining secure entry points.

This white paper examines the current state of access control adoption in the US multifamily housing market, looking at use cases, deployment models, best practices, and priorities when retrofitting versus implementing solutions in new construction.





Various types of gates and buzzer building solutions have been in use for decades, but new tech solutions featured in hotels and single-family housing are now making their way into apartment complexes and condominiums. Electronic systems, many of which are internet-connected and app-controlled, are increasingly replacing physical keys.

These advances will increase adoption of smart gates and access controls, currently in its early days, and increase awareness of their security benefits.

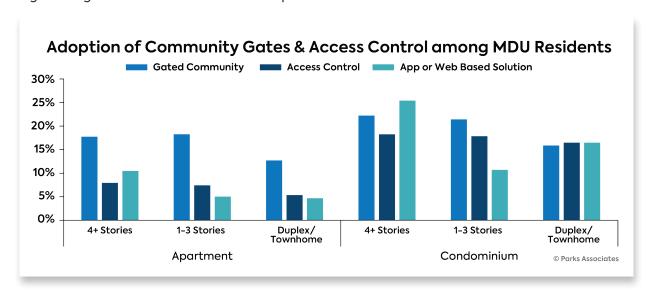
According to Parks Associates' consumer surveys of US internet households, 17% of overall MDU residents report living in a gated community, and 11% report living in a building with smart locks or access control systems.

Apartment Market Sizing

Of the estimated 26M+ apartment units in the US, 4.3M units are in gated communities, 1.9M in access-controlled communities, and 1M are currently associated with a community app or web portal that gives control over gates or doors.

Access control systems in this sense include a diverse mix of systems controlling access to residential units, amenity rooms or buildings, or the building as a whole. It does not include exterior community gates, shown separately.

Penetration of app or web-based control is set to grow, particularly in gated communities: out of these 4.3M units, only 19% of those living in a gated community report using an internet-based solution to control the gate, compared to 38% of those living in access-controlled spaces. Adoption of these solutions tend to be higher among residents of condominiums compared to apartments, and somewhat higher in high- or mid-rise communities compared to lower rises.

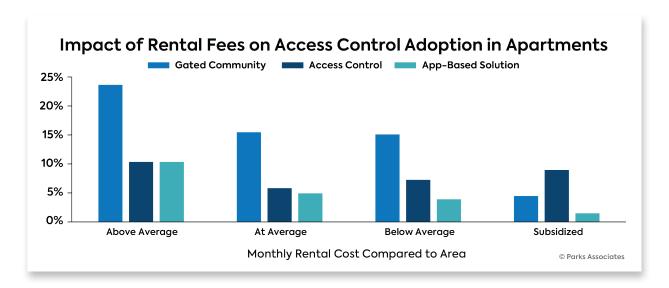






Historically, access control solutions have been considered a premium amenity for luxury communities. This is still true, particularly in the apartment market. Parks Associates' consumer surveys reveal that access control technology is more commonly adopted in communities that charge higher monthly rents compared to those with lower rents. Adoption is lower in communities charging average or below average rent, with a wider gap between any access control solution and adoption of app-based solutions.

This trend is expected to change. As technological developments continue to improve access control solutions and offer more practical uses, deployment costs become more affordable while still providing higher ROI.



Access control systems offer many benefits:

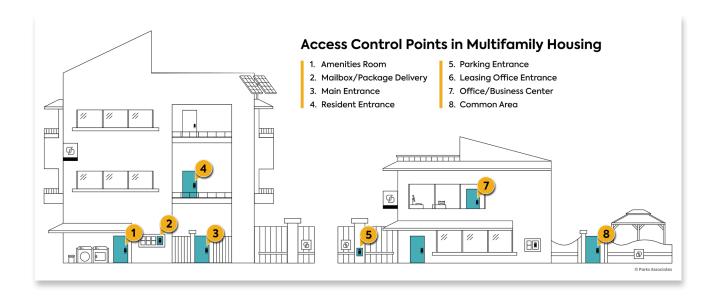
- improved operational efficiency
- · reduced labor costs
- · mitigation of theft or safety risks
- · increased resident satisfaction
- resident-facing needs, i.e., self-guided tours, dog walker entry, dry cleaning pick-up

MDU residents with access control report higher satisfaction with their apartment, condo, or townhome. 73% with an app-based solution reported they were 'highly satisfied' versus 45% without.

These systems are making their way across the spectrum of multi-dwelling properties. In many markets, access control features and applications are becoming the standard and transforming the resident experience. Additionally, these technologies provide new context to the physical space and information on the most critical concerns: security and safety.







Existing technologies and specific methods used for access control vary greatly, which can significantly impact technology requirements and deployment outcomes. Many existing solutions rely on key fobs or gate codes for accessing the exterior of a community or public areas. Residents can use the fob or code to open the gate or main entrance, and some solutions offer a callbox where visitors can request entrance. For decades, wired intercoms have been used with callboxes that connect an external box to a box within the resident's unit or the leasing office.

Access control solutions have been updated for the mobile phone and smartphone era, incorporating internet-connected technology and mobile apps. These modern solutions can call a resident's cellphone or a number monitored by property staff. As telephone companies phase out copper-based phone lines, also known as "plain old telephone service" or "POTS," these systems are transitioning to direct communication over the internet.

While many communities still use physical keys and mechanical locks, more are recognizing the operational benefits of using RFID and/or smart lock solutions. RFID technology has expanded from the hotel industry to multifamily housing.

Backend systems control the cardholder's access into different areas and property staff are able to easily onboard and offboard individuals as they cycle into and out of the community. Smart locks work similarly but require additional infrastructure, such as networking equipment and power sources, and offer a wider range of software-enabled use cases.







Access control and smart gate technologies increase convenience for residents, security for communities, improve operational efficiencies, and introduce cost savings, while enabling new use cases for residents and staff.

Resident Benefits

- Ability to enter or leave the property using their cellphone or fob, even if one is left behind
- Reduced likelihood of being locked out of their apartment and easy access without needing an in-person visit from on-site staff
- Easier to grant or revoke property access for authorized visitors, such as friends and family
- Ability to allow temporary, keyless access to third-party service providers, such as cleaners or dog walkers, allowing MDUs to market lifestyle as an amenity

Property Manager and Staff Benefits

- Reduced need to rekey locks, allow residents into units when keys are lost, or reset code combinations, among other manual tasks
- Eliminate management of physical keys, improving on-site security and reducing risk
- Improved cost savings by reducing need for 24/7 on-site staff
- Ability to offer self-guided tours of units during off-hours
- Improved efficiency of maintenance staff and other workers by making it easier to enter units
- Reduced liability and increased visibility by keeping access logs of people entering or leaving the property

In a recent study of property owners and managers, Parks Associates tested the key functions of smart door locks for operations, finding that a majority of respondents found use cases appealing. Property owners and managers were interested in minimizing key replacement costs, tracking those who entered and left the property, and remotely enabling third parties to enter and leave the property securely.





Very Appealing Functions of Smart Door Locks

74% (Minimize key replacement costs

72% Track who enters and leaves the property using temporary, unique access codes

71% Grant access to units remotely for unaccompanied viewings, package delivery, or third-party services

70% Monitor labor time for contractors in each unit

Provide maintenance staff and contractors access to unit remotely, removing need for accompanying staff

69% Bar access to evicted residents

% of Property Managers/Owner Rating "Very Appealing"

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Access control and smart gating solutions also solve a key pain point in package and mail delivery. Multiple delivery drivers may need daily access to the property, and without a streamlined solution for secure access, many communities resort to writing down gate codes on callboxes or waving drivers through without confirming their identities. Communities with tighter security risk having deliveries or appointments missed, which can introduce new problems and potentially upset residents.

Multifamily properties face challenges in managing packages once they are delivered, with package theft being an ongoing problem that can impact resident satisfaction. A common solution for communities is to accept package delivery at a main office or other area and inform residents that their packages are available for pickup. However, securing packages and releasing them to residents can prove challenging. It requires staff to take on additional low-value tasks, introduces liability if an individual takes a package that isn't theirs, and increases resident frustration if they can't easily get their package.



To address this challenge, communities have turned to package lockers and delivery scheduling systems, but these can also present their own headaches when storage runs out or deliveries run late. Increasing the overall safety and security of communities can be a more straightforward solution than creating a specialized package management service, reducing the risk of theft.





Deployment of Access Control Technologies by Leading Companies



Brookfield Properties makes heavy use of access control in its properties, investing in a software-driven approach with distributed credentialing that allows its users to grant access to delivery persons, maintenance crews, or cleaners – and revoking that access at a later time.



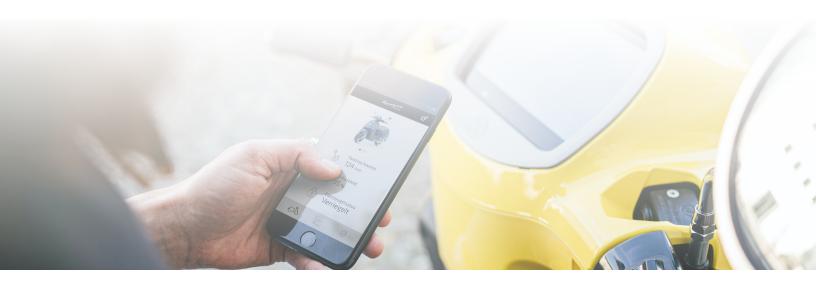
Select AvalonBay Communities including Kanso Twinbrook in Rockville, Maryland, have deployed smart entry locks as a resident amenity to support connected lifestyles, as an operational tool to save costs, and to enable new use cases such as self-service touring.



GreyStar is deploying and managing access control, unit entry, and smart gating solutions in many sites. The company reports lowered costs through eliminating or reducing the need for key management, lower liability by removing master keys, improved efficiency with maintenance operations.

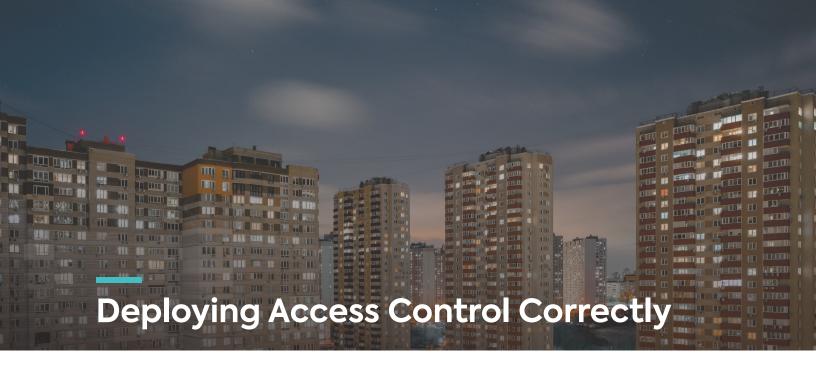
Major players have begun deploying access control across their footprints, prioritizing new builds and new construction where it is easier to establish the networks needed for connecting these systems to the internet. However, with the majority of the MDU market comprised of existing buildings, this poses challenges for those owning and managing these communities.

Companies are looking to new solutions that avoid the need for costly network retrofits, including solutions making use of cellular connectivity or IoT-specific networking protocols.









Deploying new access control and smart gating solutions can be a complex undertaking for multifamily properties. When evaluating options and strategies, properties must consider operational logistics, the user and resident experience, integration with existing technology stacks, and performance under emergency conditions.

MDUs must carefully consider smart access control solutions' operational needs and requirements. Solutions with app-based or IP-based components require a network for communications, which may require upgrading or installing new networking equipment. Solutions also require power, with gate technology commonly needing to be wired in and smart locks requiring regular battery replacement.

Properties must ensure that they have a physical override to ensure tenants can access their units in the event of a power or internet outage

Questions for Deployment Strategy and Solution

- · Will existing property networks offer sufficient coverage and reliability
- · Will a property need to upgrade or install new networking equipment?
- · Will the solution be capable of alerting maintenance teams when battery life is low?
- · How will the solution behave in the event of a power or internet outage?

Properties must decide whether to make use of point solutions or integrate solutions into their existing property management solutions and workflows. MDUs face an increasingly complex technology landscape, with more solutions coming onto the market daily. Many properties are already overwhelmed by fragmented resident management tools and multiple logins. Integration into technology stacks, and/or support for single sign-on are increasingly important.



Disaster preparedness is also crucial for properties as they rely on technology for essential functions. Power and internet outages can be disruptive for tenants, particularly in communities with access control. Systems that lack manual overrides or resiliency may shut off in the event of outages, preventing tenants from entering or leaving their units or the community. These events can decrease resident satisfaction and increase resident turnover.

"How will your solution be connected?"

Different networking technologies have different pros, cons, and requirements. The use of Wi-Fi in existing
buildings or infrastructure may require expensive (and extensive) retrofits. Using cellular connectivity or IoTspecific technologies may be more cost-effective and reliable alternatives, with cellular or low-power wide
area network technology such as LoRaWAN easier to deploy.

"How will your solution be maintained?"

 Solutions require regular maintenance such as battery replacements. Tenants will need to be entered and removed from backend systems to control their degree of access, and staff must be trained in how to perform this procedure on an ongoing basis given turnover.

"Does the system support manual overrides or local control?"

- Power or internet outages are a fact of life, with some areas suffering many per year. If an access control
 system does not support local control, tenants may be unable to enter or leave the property or their unit –
 without maintenance's help.
- Not all residents own or prefer to use a smartphone, and even younger consumers may prefer to go without. Supporting a mix of access methods ensures these residents' needs are met.







Access control is growing rapidly in adoption, with leading market players prioritizing its rollout alongside other solutions such as energy management and water leak detection. These solutions offer numerous benefits to MDUs: improving the resident experience, enabling new use cases, and lowering operating costs and risk. As the market moves in this direction, properties that do not have these solutions on their roadmap risk being left behind.

Smart technology is already the standard in new construction with developers seeing the operational benefits and responding to demand from prospective residents. However, retrofitting properties with solutions represents a logistical hurdle – and significant expense – for the hundreds of thousands of existing properties on the market. These properties must carefully evaluate their options and strategies for deploying new solutions – with connectivity being a key piece of the puzzle.

There is a strong need for solutions that do not require the extensive retrofitting needed to deploy Wi-Fi, instead making use of other technologies such as cellular solutions or IoT-specific networks.

With costs increasing in the MDU space, companies seek to control spending by automating processes and reducing or eliminating the need for manual labor in rekeying locks or assisting locked-out residents. Smart access control and smart gating systems provide a powerful benefit to MDUs, streamlining operations while also increasing resident satisfaction.



About Parks Associates



www.parksassociates.com info@parksassociates.com 972.490.1113 Parks Associates, a woman-founded and certified business, is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services. Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes new media, digital entertainment and gaming, home networks, internet and television services, digital health, mobile applications and services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security.

About Nimbio



Nimbio is the optimal solution for one of the largest challenges in property management: administering common access points like buzzer doors, property gates, and pool access. With Nimbio, you can easily and cost-effectively turn any electronic lock into a smart lock, allowing residents to control access from anywhere with their cell phone. Nimbio works with existing hardware, including doors and intercom solutions, making it affordable and universally compatible. Nimbio leverages a cellular connection in lieu of wi-fi, so it can be installed virtually anywhere with no need for the property to have a preexisting network. With a variety of digital key features that are part of the Nimbio platform, residents can securely buzz in family and friends or share keys with maintenance and delivery personnel from anywhere. Nimbio's Community Manager provides property managers a single interface that eliminates the need for onsite superintendents to support lost keys and late night lockouts. The Community Manager enables administrators to easily grant (and revoke) keys and view detailed reports about the traffic coming through each Nimbio-enabled common access point. Nimbio improves security by eliminating the risk of overshared access codes and physical keys, and the need for replacing expensive RFID cards. And Nimbio's partnerships with leading delivery companies eliminates issues with lost or missing packages by allowing delivery personnel access to properties to deliver safely and reliably, every time. Nimbio puts you fully in control of who is (or isn't) allowed in your building. Nimbio - secure and nimble access.

About the Author



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Kristen Hanich heads Parks Associates' consumer electronics and mobility research, with expertise in other verticals including connected cars, mobile networking, healthcare, wellness, and independent living. She leads a mix of custom and syndicated research projects throughout the year, with a focus on major players and emerging trends. Kristen specializes in bridging the gap between data-driven and narrative approaches to understanding the consumer markets via a mix of qualitative and quantitative research approaches.

Kristen has dual master's degrees in applied anthropology and public health from the Universities of North Texas in Denton and Fort Worth. She earned her BSc in health at the University of Texas at San Antonio and has a graduate certificate in Geographic Information Systems.

ATTRIBUTION

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RESEARCH & ANALYSIS

for Emerging Consumer Technologies

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- Grant keys, revoke keys, and review access logs from the Community Manager dashboard in the app.

- Keep tenant packages safe and ensure reliable, secure, delivery every time.
- Eliminate late night lock out calls, lost key fobs and the risk of untrackable shared keys and entry codes.



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