



RETROFIT VS. REPLACE:

A SMARTER APPROACH TO SECURITY ENTRANCE UPGRADES

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INTRODUCTION

RETROFITTING VS. REPLACING: WHAT'S THE DIFFERENCE?

When it comes to enhancing your building's security entrances, you have two primary options: retrofitting or replacing your secured entrances. Retrofitting refers to the process of upgrading or modifying existing infrastructure with new security technologies, while Replacing involves removing the current system entirely and starting from scratch. While the rip-and-replace approach may seem appealing, retrofitting often provides significant advantages in terms of cost, time, and sustainability — avoiding extensive structural changes, longer project timelines, and higher costs.



WHEN TO RETROFIT RATHER THAN RIP-AND-REPLACE

When dealing with severely outdated equipment and/or infrastructure, or undergoing large-scale building renovations, you may be best served with a rip-and-replace of old security entrances. In many instances, however, retrofitting provides a more strategic and efficient approach, especially when the existing infrastructure is functional and only requires upgrades to meet modern standards. Retrofitting also provides a more sustainable choice for many organizations by leveraging current assets, avoiding unnecessary demolition, and accelerating deployment. Additionally, retrofits are typically easier to permit and integrate more seamlessly with existing operational processes.

“MEASURE TWICE, CUT ONCE”

Boon Edam recommends beginning every retrofit evaluation by assessing your facility's current infrastructure and devices, security goals, and culture. With a careful review of risks, technology compatibility, and stakeholder needs, most organizations can achieve high-impact security upgrades without starting from scratch.

THE BUSINESS CASE FOR RETROFITTING SECURITY ENTRANCES

LEVERAGE YOUR EXISTING TECHNOLOGY INVESTMENT

Preserve and reuse technology investments such as access readers, biometric systems, sensors, EAC software, power supplies, and cabling. By integrating these components into your security entrance retrofit plan, you significantly reduce waste and overall costs while maximizing previous capital investments. Renovations even add 9% or more in asset value according to Construction.com.

REDUCED CAPITAL EXPENDITURES

Retrofitting avoids the high costs associated with structural demolition, extensive rebuilds, and post-project repairs. By preserving building integrity and working with existing features, organizations reduce labor, materials, and clean-up expenses. Retrofits can also reduce costs up to 40%, often driven by modernization goals, according to Natural Resources Canada.

FASTER IMPLEMENTATION

Retrofitting accelerates the implementation process. The more existing assets you can reuse, the fewer approvals, contractors, and design adjustments are needed. This leads to quicker deployment and an earlier return on investment (ROI).

MINIMIZED OPERATIONAL DISRUPTION

Operations can continue with minimal disruption during most retrofits, avoiding inconvenience and confusion for staff and visitors. Retrofit projects require fewer shutdowns or rerouting of foot traffic, maintaining business continuity throughout the upgrade process.

SUSTAINABILITY WINS

Retrofitting is inherently sustainable, documented by the U.S. Department of Energy to yield 49% to 82% in energy savings. It extends the life of infrastructure, reduces material waste, and limits the carbon footprint associated with new construction. With proper service and scheduled maintenance, security entrances can last for decades. Deep retrofits also cut CO₂ emissions and operational costs while improving ROI.

LONG-TERM COST SAVINGS

Energy-efficient security entrances reduce HVAC loads by minimizing air infiltration and enabling better climate control. Combined with automation, they also reduce staffing needs and enable smarter energy management. According to Ruby Homes' Green Building Stats, retrofitting yields first-year savings of 10.5%, 16.9% over five years, and boosts asset value by more than 9%.



A STRATEGIC, LAYERED APPROACH TO SECURITY

ENABLING PHASED IMPLEMENTATION

Retrofitting supports the phased roll-out of a layered security strategy. It allows organizations to prioritize high-risk areas while progressively building a stronger security posture.

TYPICAL SECURITY ENTRANCE RETROFIT ENHANCEMENTS

- Perimeter security: Add gates and barriers with access control and automated sensors to detect common unauthorized entry tactics such as tailgating.
- Entry points: Upgrade to optical turnstiles, full-height turnstiles, or revolving doors for enhanced flow management.
- Internal zones: Introduce mantraps or interlocking doors to secure critical operations and sensitive areas.

BENEFITS OF GRADUAL DEPLOYMENT

- Easier adoption by end users
- Better alignment with budget cycles
- Ongoing stakeholder feedback for improved design and implementation



COMMON RETROFIT CHALLENGES AND HOW TO OVERCOME THEM

THE ROLE OF FLOORING AND CONDUITS

Retrofits often underestimate the complexity of flooring. A perfectly level floor is critical for revolving doors and turnstiles to function properly. Uneven floors can lead to excessive wear and eventual system failure.

Common Pitfalls:

- Shimming as a shortcut leads to imbalance and operational issues.
- Breaking concrete to reroute conduits adds time and expense.

Solutions:

- Use prefabricated mounting platforms.
- Run electrical and access control wiring above-grade when needed.
- Ensure all utilities are in place before installation.

SPACE CONSTRAINTS

Older buildings with limited space may require creative solutions. Opt for compact models or reduce the number of units only after verifying throughput needs. Always balance space limitations with performance expectations.

Boon Edam addresses retrofit complexities with:

- Certified and experienced technicians/installers
- Products designed for space-constrained environments without compromised performance
- Retrofit-friendly products with plug-and-play compatibility

SERVICE AND MAINTENANCE CONSIDERATIONS

Retrofit success depends on long-term serviceability. Delayed service visits, parts shortages, or poor maintenance can undermine ROI.

Boon Edam offers:

- Local service networks
- Planned maintenance programs
- Readily available replacement parts



COMPLIANCE, CULTURE, AND CONTINUITY

STREAMLINED PERMITTING AND COMPLIANCE

Retrofits are typically classified as facility enhancements, not new construction. This speeds up permitting and simplifies compliance. Additionally, modern entrance systems support:

- Access control activity reports and logs
- Increased accuracy through automation
- Enhanced entrance security with safer emergency egress

SUPPORTING A STRONGER SECURITY CULTURE

Security upgrades shouldn't disrupt workplace culture or flow management. Retrofitting promotes smoother transitions and user adoption. It also presents a great opportunity to build a security-aware culture with:

- Employee engagement initiatives
- Security awareness training
- Clear communication from leadership to users



PLANNING YOUR RETROFIT ROADMAP WITH BOON EDAM

IS YOUR FACILITY A GOOD CANDIDATE?

Consider retrofitting if:

- Your infrastructure is structurally sound
- Your current security systems are still supported and serviceable
- You need minimal downtime and stringent cost controls

BUILDING A STRATEGIC RETROFIT ROADMAP

Steps to success:

1. Define security goals
2. Assess and evaluate existing assets
3. Gather stakeholder input (executives, facilities, IT, HR)
4. Outline timelines and phases
5. Determine operational needs and cultural fit



BOON EDAM VALUE-ADDS

- Technical site assessments
- Pilot programs and proofs of concept
- Long-term support through localized certified service technicians
- Lifecycle planning and scheduled maintenance



MAKING THE RIGHT CHOICE FOR YOUR FACILITY

While full replacement of your security entrances may be justified in specific scenarios, retrofitting often presents a more effective and efficient alternative. From leveraging existing investments in existing systems and infrastructure to minimize capital expenditures and ensuring long-term sustainability, retrofitting security entrances aligns strategic security goals with operational realities.

By collaborating with our highly experienced team of security entrance specialists, Boon Edam can help you better navigate through every stage of your retrofit project, delivering lasting security improvements with the highest levels of competence, proficiency and confidence.

REFERENCES AND RESOURCES

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- U.S. Department of Energy: System Retrofit Trends in Commercial Buildings — Retrofits can yield 49% to 82% in energy savings. [DOE](#)
- Ruby Homes: Green Building Stats — First-year savings of 10.5%, 16.9% over five years, and over 9% increased asset value. [Ruby Home](#)
- Construction.com: World Green Building Trends 2021 — Renovations add 9%+ in asset value. [Construction.com](#)
- Natural Resources Canada: Deep Retrofit Guide — Retrofits can save up to 40%, often driven by modernization goals. [NRCan PDF](#)
- JLL: Retrofitting Buildings to Be Future Fit — Deep retrofits cut CO2 emissions and operational costs while improving ROI. [JLL PDF](#)





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