By Terry Kilduf and Steven Feldman: Trends in high-rise security: Web-based entry systems

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Increased security levels mandate that high-rise and large structure building owners and managers evaluate and prospectively update security systems, making them upgradeable as future needs warrant and/or new technologies become available.

Rapid technological advancements and design ingenuity now allow for the full integration of all aspects of the security management system. Over the last few years, the installation of high-end electronic turnstiles that offer web accessed integration of the visitor management system, access control and elevator control have increased over 400%. Despite the economic downturn, building owners continue to invest in security areas that offer a rapid return on investment. Spectrum Integrated Technologies' Integrated Visitor system, allows for tenants themselves to pre-enroll expected visitors and set the locations and times that they should be allowed access. This technology results in decreased cost of security personnel.

The system works in the following manner. Upon entry to the building, the registered visitor is prompted to use unmanned visitor kiosks, which feature a touch-screen display, license scanner, and card stock printer, all integrated in either a free standing or wall-mounted unit. The Spectrum system provides communication between the state-of-the-art AMAG access control system and the visitor system, manufactured by Building Engines and ITS. The visitor runs their driver's license through the scanner and their information will automatically be checked against the tenant information. If the data matches, a bar code-enabled visitor pass will be printed and presented to the visitor. This entry card can be enabled for electronic turnstiles as well as integrated elevator cabs and standard access controlled doors. In the event the visitor has not been pre-enrolled by the tenant, the visitor can come up to the reception desk and have the pass created in the traditional manner.

The fully integrated lobby system has been successfully employed in a myriad of Boston high rises and has become the standard for all of Equity Office / Blackstone buildings in their Greater Boston portfolio. It provides greater tenant control over their guests, a very high tech appeal to the process, and of course, tremendous reduction in guard staff, who oversee lobby access as well as access to the elevators and stairwells. Buildings employing these technologies are rightfully considered at the top of the technological pyramid.

The latest integrations allow for use of the new slim line of turnstiles from security manufacturers Gunnebo and Smarter Security. These slim line units take up half the width of the previous units, with either, stainless steel or glass taking up the majority of the turnstile body. They can be fitted with custom millwork, stone or Corian type materials to match the aesthetics of the building's lobby. Spectrum IT has also lit the glass barriers with cold cathode beams to provide a unique lighting and visibility component to the installation.

When upgrading lobby security systems, the selection of both the security turnstile installer and manufacturer is of paramount concern. Spectrum IT maintains relationships with organizations that have dedicated research and development of new technologies and that feature electronic turnstiles as their major business line. As New England's foremost designers and installers of turnstile applications, Spectrum has found that the level of technology and structural integrity of the turnstiles have a direct correlation with the longevity of the product. Even in this economy, electronic turnstiles and their installation are not areas in which to cut costs. It is essential the installation organization understand the complexities of line voltage and low voltage types of applications. The installer must have experience with the complexity of the mechanical aspects of the installation as well as real world concerns of functionality in a heavily trafficked building. It is essential that the installers have both their "S" license for security work in the Commonwealth of Massachusetts as well as an electrical constructor license, as both high and low voltage work is required in these projects.

It is to be noted that lobby security systems require interface with the building's fire alarm system and it is well advised to have an installer that is experienced in the tie-in to the building's life safety system. An additional consideration is the growing requirement to allow for the exchange of data between the building's access system and the system which may be employed by the tenants.

In 2011, all sub-systems and components within a high-rise facility's security system, including access control/card access, CCTV, intrusion detection, intercom, digital recording, and electronic turnstiles can now be fully integrated into the overall security management system. The result of upgrading to fully integrated lobby turnstile systems is a higher and more efficient level of security for commercial buildings.

Steven Feldman is a director and Terry Kilduff is a manager of security operations with Spectrum Integrated Technologies, Jamaica Plain, Mass.