

Case Study Compilation

Education Buildings





CUSTOM-MADE 6 METER TALL DOOR FOR UNIVERSITY ENTRANCE

With its glass walls, transparent façade and LED lighting, the Victor J. Koningsberger building, in the suburb of Uithof in Utrecht, cannot help but capture the eyes of all passers-by. The Viktor J. Koningsbergergebouw is dedicated to the faculties of Geosciences, Science and Medicine was designed by the renowned Rotterdam-based Ector Hoogstad Architects.

This latest building addition to the University of Utrecht opted for a revolving door at their main entrance. The 3-winged Tourniket revolving door was custom-made and has been constructed almost entirely of glass. Director and project architect Joost Ector said, "The entrance had to be functional and recognisable, but also belong to the story of the building."

CONNECTING SCIENCE BUILDINGS AS ONE

Ector Hoogstad Architects was asked to create a building that served as an addition to two other

existing buildings: the Minnaert building and the Buys Ballot building. Ector explains: "All buildings had to be combined into one educational centre for the science faculties. We solved that very simply by making a kind of 'loop' on the first floor; a circuit that runs through all the buildings. A new building has been added on the corner, and that is what has become the Koningsberger building. Through the 'walk' all buildings are now connected, and the students can easily walk from one building to another".

CUSTOM-MADE

According to Ector, the choice for this revolving door entrance solution came naturally: "Once decided to go with the Tourniket revolving door, there was obviously only one name in the Netherlands that stood out - and that was Boon Edam. We knew that Boon Edam made premium products and was capable of doing what we needed when it comes to these kinds of custom-made solutions. We came to our final solution after close consultation with their experts."

"You walk down to the building, make that little turn through the entrance and then you suddenly see that the big atrium is going up a hundred times. We just love that!" - Joost Ector, Director and Project Architect

CHALLENGE

To provide a functional and recognisable entrance that formed an integral part of the story of the building. The entrance needed to be impressive, yet still provide safety to the students.

SOLUTION

- Install a custom-made Tourniket revolving door at the main entrance
- A special illuminated high cylinder on top of the revolving door for an impressive and recognisable appearance
- A 3-winged manual Tourniket revolving door for a save and high throughput

BENEFITS

- Provide a welcome feeling
- Allow a high throughput of students
- Aesthetically pleasing yet functional

FUNCTIONAL AND AESTHETIC

The central themes in the design of this iconic building are lightness, openness and transparency. These properties are reflected in the façade and also play an important role at the main entrance. Ector: "Of course we want you to be able to enter the cluster of buildings from all sides of the campus easily. So the new entrance had to be functional and recognisable, but also belong to the story of the building as a whole. You walk down to the building, make that little turn through the entrance and then you suddenly see that the big atrium going up a hundred times. We just love that!"

"I think that when you walk towards a façade, you first have to be outside a shelter before you enter the building. That means in my theory that you never place a Tourniket revolving door half in the façade unless there is a canopy above it," says Ector. However, for the Viktor J. Koningbergergebouw, the project architect opted for another solution: "We did not want this situation and we placed the revolving door in the hall, as it was, back in relation to the façade. Then we thought it would be nice to give it the impressive full height of the two floors."





BEACON OF LIGHT ABOVE THE ENTRANCE

The revolving door is as a whole nine meters high. Nine-meter high rotating parts were not desirable, so a different solution was chosen. Ector: “We thought; surely we can cheat this? We also thought about how we could apply the same feeling you get when looking into very old houses, such as canal houses. There is sometimes a kind of ‘lantern’ incorporated in the skylight above the front door in these old-fashioned homes. We recognised this in the Tourniket door. The cylinder was pulled upwards, and an illuminated element has was manufactured. This constructed feature can be seen from both

the outside and inside and serves as a beacon of light in the evening to help guide and locate the entrance.”

CHERRY ON THE TOP

Ector looks back proudly on the project: “We think it is very beautiful and that is of course important. But if I am here like I am today, then people who recognise me give their compliments about how marvellous the building has become. Then I really believed it. Because we like it is important, but that the people who use it every day feel at home here, and that they like it, that is the cherry on the top for us.”



CREATING A MODERN ACCESS CONTROL SYSTEM AT COLOMBIAN UNIVERSITY

With over 28 000 visitors entering the premises each day, the University of Antioquia in Medellin, Colombia, is one of the largest education institutions in the country. Such a high volume of visitors requires strict control of who can and cannot enter the institution. To achieve such a level of management, the security staff decided to install four Boon Edam Trilock 75 (waist height) turnstiles at each of the six entrances to the campus as an integral component of a new integrated security system.

With features such as the electromechanical meter, the direction rotation sensor and a user-friendly design according to university specifications, the turnstiles were also chosen for their high throughput capacity. Each turnstile allows one person to pass every two seconds—a very important feature during rush hours when lines grow long quickly as students try to get to class on time and employees want to reach their offices.

The University of Antioquia was the first campus in Colombia to be declared of Cultural Interest on the National Level by the Office of Property of the Colum-

bian Ministry of Culture. It is also the second oldest university in the country, founded back in 1803.

TIP IDENTIFY VERIFICATION

To enter the campus, students, staff and other members of the community use a “TIP” (an RFID smart card or Tarjeta de Identificación Personal) to verify their identity. Hueiman Montoya, from the security integrator company, Segurtec Limitada, explained, “The basic requirements at the university were very clear: they wanted to control who entered the campus using the TIP, which was adopted by university authorities some years ago and also works as a pass card for the Metro train system.”

Rubén Vélez, leader of the university’s Security Department, recounted how Boon Edam met the specific requirements of the institution as the turnstiles “are designed to handle high traffic robustly, which is important because sometimes certain protests and other high-volume gatherings occur inside the campus. Also, they complied with the specifications of the public bid, such as how many users the equipment must handle per minute, the warranties and servicing periods.”



“[Boon Edam turnstiles] are designed to handle high traffic robustly, which is important because sometimes certain protests and other high-volume gatherings occur inside the campus.” - Rubén Vélez, Security Department

CHALLENGE

With over 28 000 people moving through the campus per day, personnel struggled to keep up with the long lines of unhappy students and faculty.

SOLUTION

Install turnstiles working in tandem with a smart card system to effectively control the flow of traffic into the university and reduce long lines.

BENEFITS

- Access controlled at multiple entrances around campus
- Robust equipment designed for high traffic
- Seamless integration with access control software
- High operation with only minimal replacement or repair
- Expedited student and staff on-campus entry

INTEGRATION WITH ACCESS CONTROL SOFTWARE

The G-CURE9000 is the access control software used at the University, which integrates seamlessly with Boon Edam's turnstiles and is also capable of managing many other security systems simultaneously. Regarding the access control system, the software can manage the access level of each TIP card, from the highest clearance level granting access to all areas to basic access, granting entry only through turnstiles at the main entrances.

The turnstiles have been working non-stop since 2010, from 5:45 AM to 10 PM, with only short preventive maintenance service breaks requiring minimal replacement or repair.

Installation of the Boon Edam turnstiles has created fundamental, positive change for the university. Before installation, long rush hour lines at the entrances were a regular sight, and something students, staff and visitors had to suffer every day. The previous method to verify everyone's identity was to show a paper card and wait for the security staff to check every bag and briefcase before granting access. Now, long lines are a thing of the past: people simply touch their TIP to the installed turnstile reader, and the system quickly authorises their access.



"In today's environment, we're even more concerned with properly protecting our students, and Boon Edam turnstiles help us do that."

- Samuel Seaborn, Associate Director, Operations, at Liberty University

LIBERTY UNIVERSITY RECREATIONAL CENTRE PROTECTS STUDENTS WITH SPEED GATES

Liberty University, a private university in Central Virginia, provides a comprehensive curriculum with a Christian background for more than 110 000 students enrolled across the University's 17 colleges, schools, and online programs. The safety and security of students and faculty is a priority and has resulted in the implementation of state-of-the-art physical security measures.

The LaHaye Fitness and Recreation Centre located on Liberty University's Lynchburg campus is a prime example. The large facility, which occupies approximately 165 000 square feet, houses five basketball courts, an indoor track, a weight room, group exercise classrooms, raquetball and volleyball courts, soccer fields, and a rock wall in addition to a lounge and cafe. More than just an athletics facility, the LaHaye Fitness

and Recreation Centre is a hub for social interaction that opens at 5 am and closes at 11:30 pm every day.

Every student enrolled at Liberty University is provided with an identification badge with embedded access control credentials to gain access to various Liberty facilities. The access control solution, provided by RS2, allows students to use one universal card throughout the campus, including LaHaye Fitness and Recreation Center. This centre is equipped with four lanes of Speed-lane 300 speed gates from Boon Edam to control and document the approximately 30 000 users who enter the facility every week.

OLD PROBLEMS EASILY SOLVED

Previously, Liberty students would hand their badge to a staff worker, who would swipe it for verification, and



then allow the student into the facility. The old process presented numerous challenges including the inability to adequately deny entry, expedite entry to the gym during busy hours and more. The new array of Speed-lane 300 speed gates alleviates all of those issues and more by providing three dedicated lanes for entry and one lane for egress.

“We can lock the speed gates, disable them, hold them open, grant access along with numerous other operational options, to keep traffic flowing while providing security,” said Samuel Seaborn, Associate Director, Operations, at Liberty University. “The speed gates integrate with Liberty’s access control system to monitor who is coming into the recreation centre and when, and help ensure that only students and people with proper access are allowed into the facility.”

With 30 000 average weekly users entering and exiting the facility, Liberty is already looking to expand the LaHaye Fitness and Recreation Centre with satellite facilities located around the campus. To maintain the level of safety throughout their campus, protect the university from liability issues, and integrate with their current

access control systems, Liberty hopes to outfit any new installations with Boon Edam speed gates, which have been well received by students and staff.

FAST TECHNICAL SUPPORT

“When they were installed, the students remarked on the futuristic design of the speed gates,” continued Seaborn. “Everyone adapted to them quickly, because they’re so easy to use.”

Liberty has also been happy with the service Boon Edam provides for maintenance and other issues. If there are any issues with the badge reader or if an internal component was malfunctioning, the integrator for Boon Edam products, Jamie Dalton at Mech-Elect, of Wake Forest, NC, has responded quickly.

“The Boon Edam speed gates are so simple to use, and they really help with traffic flow. In today’s environment, we’re even more concerned with properly protecting our students, and Boon Edam speed gates help us do that,” concludes Seaborn. “When we expand our recreational facilities, as well as other facilities, we’re definitely looking to Boon Edam for our entrances and exits.”



HOFSTRA UNIVERSITY STANDARDISES ON BOON EDAM SECURITY ENTRANCES

Located 25 miles east of New York City in Hempstead, Long Island, Hofstra University campus boasts 115 buildings on 240 acres, 1180 faculty members and over 7000 full-time undergraduate students. With so many students in a densely populated area of Long Island, Hofstra takes student safety quite seriously.

Before installing Boon Edam, student Resident Safety Representatives (RSR’s) monitored thousands of students entering the residential halls as they swiped ID cards to enter through sliding doors. Tailgating was far too common, especially with large groups, and the RSRs were forced to intervene and stop fellow students from unauthorised entry. This was an uncomfortable and potentially dangerous situation.

“Once we saw the safety benefits for the students and the positive difference the turnstiles made for our employees, we began incorporating them into our future plans.” - Bob McDonlad, Associate Director of Public Safety

The university decided to install full height turnstiles at entrances to residential halls and complexes to work with their existing access control system. “To date, seven turnstiles have been installed to cover seven residential towers”, Bob McDonald, Associate Director of Public Safety, explained. “Our employees appreciate the greater control and our parents feel much more comfortable.”

CHALLENGE

With 30 000 users every week, staff workers at Liberty’s Recreation Centre had difficulty managing entry and ensuring only authorised users could gain access.

SOLUTION

By installing four lanes of Speedlane 300 speed gates, staff workers could effectively control and document all users entering the facility while still being able to use the school’s identification badges.

BENEFITS

- Provides a high level of safety to students and staff by controlling access
- Integrates with current access control systems
- Ease of use allows students and staff to adapt quickly
- Eliminates bottlenecks of traffic during busy periods



ACCESS CONTROL SYSTEM INTEGRATION

Hofstra University uses Boon Edam’s full height turnstiles along with a card-swipe access control system to manage and monitor the access of students and guests into residence halls. Students swipe their HofstraCard ID and pass through a turnstile, one at a time. Guests must sign in with the RSR at the front desk before being allowed to enter. Using full height turnstiles ensures that students or guests cannot jump or crawl through to the secure side. Disabled students enter using their HofstraCard ID at a supervised automatic emergency exit door.

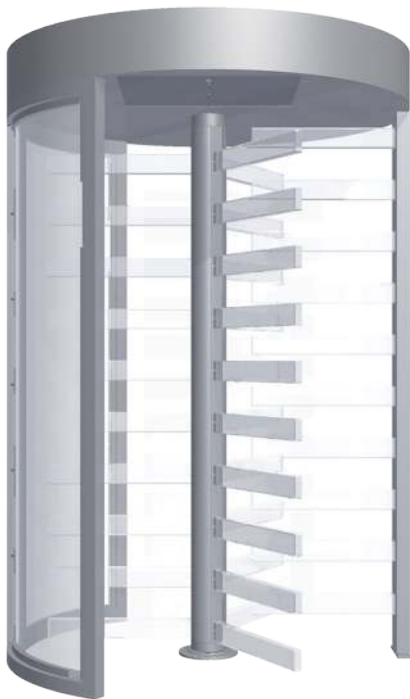
For entrances within residential complexes, Hofstra uses Boon Edam’s transparent, Turnlock 200EL full height turnstile to create a security entrance with an attractive, open appearance. The clear Lexan panels allow light to pass through the entrance while the rugged engineering handles the high throughput. “Our students really like the transparent look of these turnstiles,” said Resident Safety Coordinator Sasha Russell.

“Also, having these at our entrances makes it much easier for our RSRs—now they can focus on processing guests and other duties.”

PLANS FOR MORE

Due to the success of the Boon Edam entrances, McDonald and his team have plans to install Boon Edam turnstiles at all the remaining residence halls. This would then bring the total number of entrances covered to 11. “Once we saw the safety benefits for the students and the positive difference the turnstiles made for our employees, we began incorporating them into our future plans and budget,” said McDonald.

“These Boon Edam turnstiles are really helpful in deterring unlawful, illegal entries. They have been extremely helpful, I would say.”



CHALLENGE

Resident Safety Representatives (RSR’s) monitored hundreds of students entering the residential complex as they swiped ID cards to enter through sliding doors. Tailgating was common, especially with large groups, and the RSR’s would have to confront and intervene.

SOLUTION

Install full height turnstiles at entrances to halls and complexes to work with the existing access control system and significantly reduce tailgating.

BENEFITS

- Decreased tailgating
- High throughput
- Increased security with less intervention needed
- RSR’s can focus on signing in guests and other duties
- Parents impressed with the increased security



OUR REACH IS **GLOBAL.**

We have been in business for more than 140 years manufacturing premium aesthetic and security entrance solutions in the Netherlands, United States of America and China. We can confidently say that we cover every corner of the globe with subsidiary companies in major cities across the globe. Furthermore our global export division not only partner with our distributors, but also offer direct sales and service to every territory. This wide net allows us to have a strong global footprint as well as a personal grasp of local markets and their unique entry requirements.

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